All Sport® 5000 Series Control Console

Operation Manual

ED-11976 *Rev 26 – 22 October 2014*

DAKTRONICS

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DAKTRONICS

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DAKTRONICS, INC.

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Section 1: Introduction

This manual is designed to explain the operation of All Sport® 5000 Series control consoles. For additional information regarding the safety, installation, operation, or service of this system, refer to the telephone numbers listed in **Section 1.4**.

1.1 Important Safety Instructions

- Read and understand all instructions, both general and for specific sports.
- Do not drop the device or immerse it in water.
- This device shall not be exposed to dripping or splashing, and no objects filled with liquid shall be placed upon it.

  WARNING! To reduce the risk of fire or electric shock, do not expose this device to rain or moisture.

- Console may include internal battery backup, or external battery pack.

  CAUTION! DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE.

  WARNING! Do not expose batteries to excessive heat, such as direct sunlight or open fire.

- Never yank the power cord to pull the plug from the outlet. Grasp the plug and pull to disconnect.
- Do not let the power cord touch hot surfaces or hang over the edge of a table that could damage or cut the cord.
- If an extension cord is necessary, use a three-pronged polarized cord. Arrange the cord with care so that no one will trip over or pull it out.
- Before using an extension cord, inspect the cable thoroughly and verify its compliance with the local electric codes.
- Always turn off and unplug the control equipment when it is not in use.
- To avoid electrical shock, do not disassemble the control equipment or electronic controls of the display. Incorrect reassembly can cause electric shock and faulty operation or permanent damage to the circuits. Failure to follow this safeguard will make the warranty null and void.
- Inspect console for shipping damage such as rattles and dents, and verify that all equipment is included as itemized on the packing slip. Immediately report any problems to Daktronics; save all packing materials if exchange is necessary.

All Sport consoles receive external power through a standard 8' (2.44 m) long three-pronged power cord plugged into a 120 or 240 VAC grounded outlet. The outlet shall be installed near the console and easily accessible. Contact Daktronics for information on running an All Sport console via optional battery power pack.

1.2 Specifications Label

Power specifications as well as serial and model number information can be found on the rear of the console. Refer to **Figure 1**.

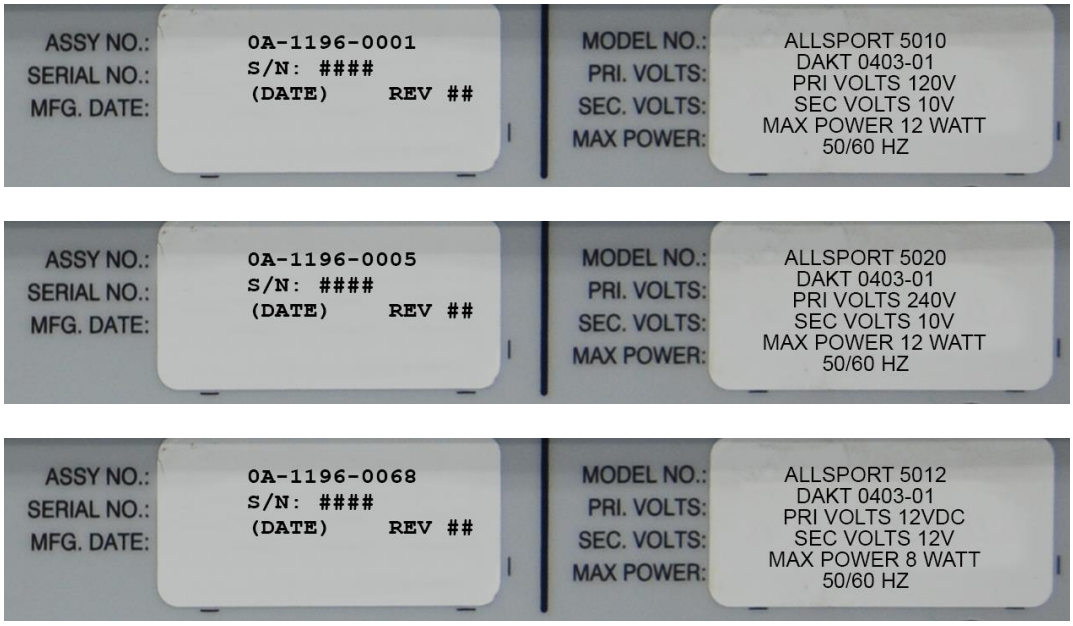


Figure 1: *Specifications Labels*

When calling Daktronics customer service, please have the model number, serial number, and the date the device became operational available to ensure the request is serviced as quickly as possible.

1.3 Resources

Figure 2 illustrates a Daktronics drawing label. The drawing number is located in the lower-right corner of a drawing. This manual refers to drawings by listing the last set of digits and the letter preceding them. In the example, the drawing would be referred to as **Drawing C-325405**.

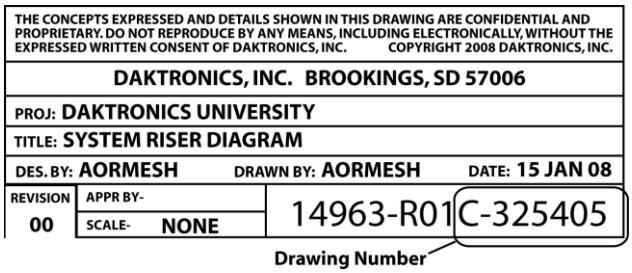


Figure 2: *Daktronics Drawing Label*

Reference Drawing:

System Riser Diagram.....**Drawing C-325405**

Daktronics identifies manuals by an ED or DD number located on the cover page of each manual. For example, this manual would be referred to as **ED-11976**.

1.4 Daktronics Exchange and Repair & Return Programs

Exchange Program

The Daktronics Exchange Program is a service for quickly replacing key components in need of repair. If a component fails, Daktronics sends a replacement part to the customer who, in turn, returns the failed component to Daktronics. This decreases equipment downtime. Customers who follow the program guidelines explained below will receive this service.

Before Contacting Daktronics

Identify these important numbers:

Assembly Number: _____
Job/Contract Number: _____
Date Installed: _____
Daktronics Customer ID Number: _____

To participate in the Exchange Program, follow these steps.

1. **Call Daktronics Customer Service.**

Market Description	Customer Service Number
Schools (including community/junior colleges), religious organizations, municipal clubs and community centers	877-605-1115
Universities and professional sporting events, live events for auditoriums and arenas	866-343-6018

2. **If the replacement part fixes the problem, send in the problem part being replaced.**
   - **a.** Package the old part in the same shipping materials in which the replacement part arrived.
   - **b.** Fill out and attach the enclosed UPS shipping document.
   - **c.** Ship the part to Daktronics.

3. **The defective or unused parts must be returned to Daktronics within 5 weeks of initial order shipment.**

   If any part is not returned within five (5) weeks, a non-refundable invoice will be presented to the customer for the costs of replenishing the exchange parts inventory with a new part.

   Daktronics reserves the right to refuse parts that have been damaged due to acts of nature or causes other than normal wear and tear.

Repair & Return Program

For items not subject to exchange, Daktronics offers a Repair & Return Program. To send a part for repair, follow these steps:

1. **Call or fax Daktronics Customer Service:**
   Refer to the appropriate market number in the chart listed on the previous page.
   Fax: 605-697-4444

2. **Receive a case number before shipping.**
   This expedites repair of the part.

3. **Package and pad the item carefully to prevent damage during shipment.**
   Electronic components, such as printed circuit boards, should be placed in an antistatic bag before boxing. Daktronics does not recommend using packing 'peanuts' when shipping.

4. **Enclose:**
   - name
   - address
   - phone number
   - the case number
   - a clear description of symptoms

Shipping Address

Daktronics Customer Service
[Case #]
201 Daktronics Drive, Dock E
Brookings, SD 57006

Daktronics Warranty and Limitation of Liability

The Daktronics Warranty and Limitation of Liability is located in **Appendix F**. The Warranty is independent of Extended Service agreements and is the authority in matters of service, repair, and display operation.

Section 2: Basic Operation

2.1 Console Operation

The console face consists of a 2-line by 16-character liquid crystal display (LCD), number/menu keypads, horn/clock controls with LED status indicators, and an area for a sport-specific insert. Refer to **Figure 3** to locate these components on the control console face.

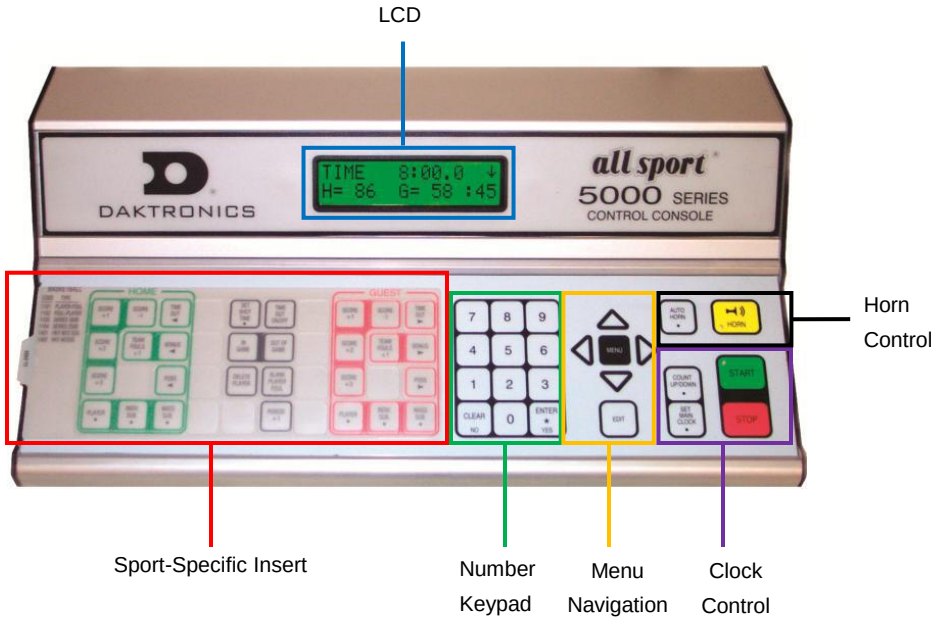


Figure 3: *All Sport® 5000 Layout*

In most cases, the top line of the LCD shows the main clock time, direction the clock is counting, and when the main horn is sounding, while the bottom line typically shows the HOME and GUEST team scores.

The standard fixed keys and functions on the right side of the console are explained in **Section 2.5**. All of the keys that pertain to a specific sport code insert are explained in detail in their respective sport section.

In addition, Quick References and Menu Flowcharts for the Standard Keys and many of the more common individual sports are provided in **Appendix D**.

Throughout this manual, the names or letters of keys on the keyboard are enclosed in angle brackets (such as **<ENTER>**).

2.2 Sport Inserts

Sport inserts allow a single console to control multiple sports. Select the proper insert from the chart below and slide it into the insert opening on the left side of the console until it stops. To remove a sport insert, pull on the tab that extends from the left side of the console.

If an insert is lost or damaged, a printed copy of the insert drawing, located in **Appendix B**, may be used until a replacement can be ordered. Print this page (if not available) and write the code number in the following table for all applicable sports.

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

Sport	Insert Number	Number Code
Baseball	LL-2438	
Basketball	LL-2433	
Boxing	0G-96892	
Cricket	0G-319507	
Cricket/Football	0G-315384	
Event Counter	0G-58047	
Football	LL-2437	
Hockey/Lacrosse/Handball	LL-2436	
Judo	0G-96891, 0G-98376	
Karate	0G-96890, 0G-98374	
Lacrosse	0G-1084219	
Pitch and Speed	LL-2482	
Rugby	0G-712154	
Segment Timer	LL-2475	Not applicable
Soccer	LL-2440	
Strikeout	0G-163409	
Tae kwon do	0G-96889, 0G-98375	
Tennis	LL-2483	
Track	LL-2439	
Team Name (TNMC)	LL-2441	
Volleyball	LL-2434	
Water Polo	0G-178439	
Wrestling	LL-2435	

Sport Insert Operation Concepts

A sport insert identifies the keys required for normal operation of a specific sport. In most cases, pressing a key immediately changes the scoreboard. Keys that require entry of additional information are marked by a dot. This additional information is usually a number followed by the **<ENTER>** key.

Keys with arrows activate an indicator (possession, bonus, etc.) on the scoreboard. The direction of the arrow selects the appropriate team (home or guest).

Some keys are labeled **+1, +2**, or **+3**. By pressing one of these keys once, the corresponding field on the scoreboard (such as score or period) "increments", or increases, by the amount printed on the key. A key with **-1** "decrements", or decreases, by one.

On most inserts, certain keys have been grouped together under the heading **Home** or **Guest**. These keys are **team** keys and work the same for both teams. They affect the statistics only for that one team. Keys not under one of these headings are **game** keys. They are general keys for the progress of the game (such as period or quarter). Other keys may be grouped in a similar way to emphasize that they work together.

2.3 Start Up

Use the rocker switch on the back of the console to turn it on, then follow the LCD screens:

Display	Action
AS-5000 VX.X.X ED-11544	The console performs a self-test when it is powered on. During the self-test, a message displays the version of the standard software loaded in the console. V = version number and revision number ED = standard software number
PREV CODE NNNN RESUME GAME? NNNN = last code selected	When the self-test completes, a prompt displays the code number for the last game played. This is useful when power to the console is lost during a game. Press **<YES>** to resume the last game stored in memory. The console is now ready for game operation. Press **<NO>** to start a new game or change to a different sport. The console will prompt for a new code number.
SELECT CODE CODE NNNN NNNN = last code selected	The SELECT CODE prompt allows users to accept the last code selected (shown on the second line) or enter a new code. To accept the code shown press **<ENTER>**. To select a new sport code: **1.** Get the code number from the sport insert or the section of the manual for that sport. **2.** Use the number keys to enter the new four-digit code. **3.** Press **<ENTER>**.
RADIO SETTINGS BCAST X CHAN YY X = last broadcast number used YY = last channel number used	If a new code is selected, and the radio option is installed, the console prompts for a channel. When Resume Game is used, the last channel selected is used. Press **<ENTER>** to accept the channel number or press **<CLEAR>** to enter a new channel number. Refer to **Section 2.4** for more information.

2.4 Setting Radio Channels

Reference Drawings:

Channel Selection; Multiple Broadcast Group, Gen IV.....**Drawing A-203113**
Installation Details, Gen VI Channel Selection Guide.....**Drawing A-1109870**

The radio receiver units used in Daktronics scoreboards have a channel (CHAN) switch that can be set from 1–8. The receivers also have a broadcast group (BCAST) setting. The broadcast group defines a group of radio receivers that "listen" to the channel selected on the channel switch as well as "listen" for data sent out on their broadcast channel.

> **Note:** The number of available broadcast groups varies depending on the generation of radio receiver: Gen V radio receivers have 1–4, while Gen VI radio receivers have 1–8.

Each radio receiver will accept data sent from the broadcast channel of its respective broadcast group, as well as data sent from the "Master Broadcast" channel. This is selected when the console is set to BCAST 0 and CHAN 00.

In this type of system, the receiver unit at the scoreboard must have the channel switch set to a specific channel. The operator must know which channel is selected in the scoreboard. The operator must then enter the specific channel when prompted during console startup.

To determine the settings of a scoreboard, first power it down and shut off any radio-equipped consoles in the area. Next, power the scoreboard back up and watch for the radio settings. The settings will appear as "**bX CY**" where **X** is the current broadcast group and **Y** is the current channel.

Figure 4: *Radio Settings in Clock Digits*

The settings are typically displayed in the clock digits (**Figure 4**) or Home and Guest score digits (**Figure 5**), depending on the scoreboard model.

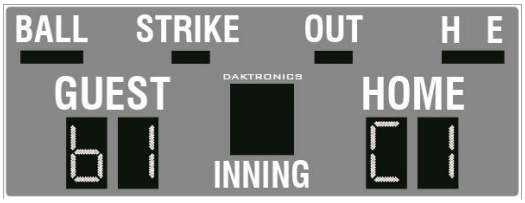


Figure 5: *Radio Settings in Score Digits*

The console automatically detects when a radio transmitter is installed and will prompt the user for transmitter settings after a valid sport code is entered.

> **Note:** If interference from a nearby Daktronics system is suspected, press **<CLEAR>** at the "RADIO SETTINGS" prompt to change the channel number.

There are three different radio scenarios that can be accommodated: a single controller system, a multiple controller system with a single broadcast group, and a multiple controller system with multiple broadcast groups. These scenarios are described on the following pages.

Single Controller System

In a single controller system (**Figure 6**), all radio receivers and all scoreboards receive signal from the same console at all times. The default channel and broadcast group settings on the receiver are not typically modified. An example of this type of system is a football field with a scoreboard in one or both end zones displaying the same information.

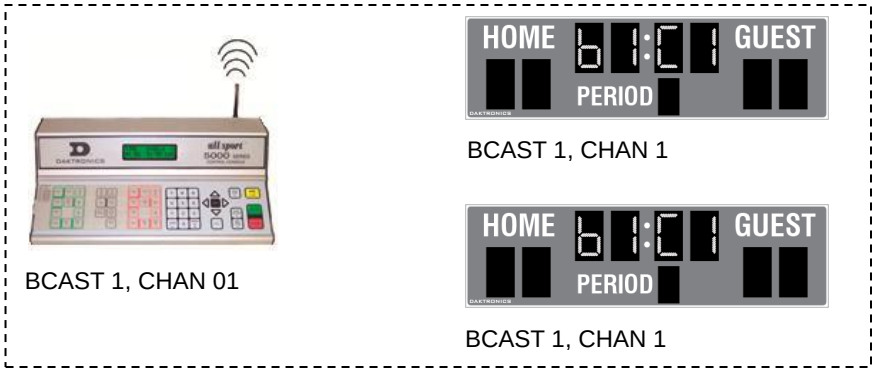


Figure 6: *Single Control Console*

Typically all single controller systems will use the default setting BCAST = 1, CHAN = 1. All radio receivers in the system must be set to the same values.

Display	Action
RADIO SETTINGS BCAST X CHAN YY ENTER TO ACCEPT CLEAR TO MODIFY The LCD will toggle between these 2 screens. BCAST GROUP 1* RADIO CHAN 01	The LCD shows the current radio settings along with a prompt to accept or modify these values. If the radio settings are correct press **<ENTER>**. If these values are incorrect press **<CLEAR>**, and the LCD at bottom left is shown, allowing edit of the channel or broadcast group setting. **Broadcast Group Setting** 1 Use this setting for all single controller systems. Use the number keys to edit this value and press **<ENTER>** to accept. The asterisk will move to the channel setting. **Channel Setting** 1-8 Edit the channel number to the desired value and press **<ENTER>** to accept. The CHAN switch on the receiver must match this value.

Multiple Controller System with Single Broadcast Group

In a multiple controller system with a single broadcast group (**Figure 7**), there may be one console for each scoreboard and/or one master controller that can run every scoreboard at one time or take control of a specific scoreboard. An example of this type of system is a softball complex with individual scoreboards on several different fields.

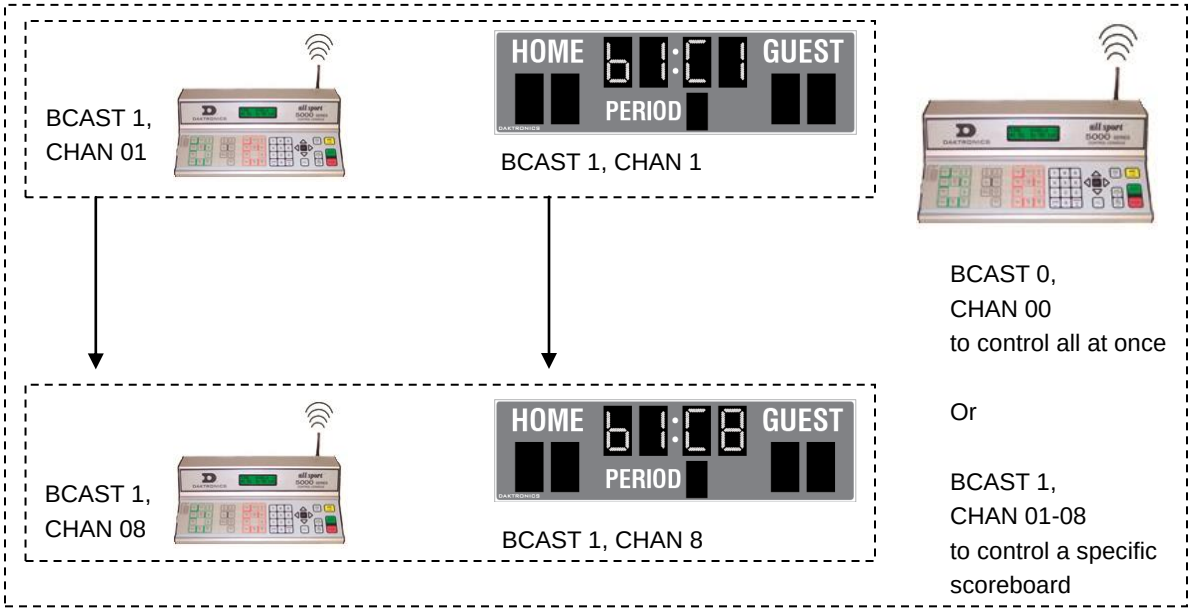


Figure 7: *Single Broadcast Group*

Multiple controller systems typically use Broadcast 1 and Channel 1 for the first controller and Channels 2-8 for all remaining controllers. All radio receivers in the system must be set to Broadcast 1 (BCAST 1).

Display	Action
`RADIO SETTINGS` `BCAST X  CHAN YY`	The LCD shows the current radio settings along with a prompt to accept or modify these values.
`ENTER TO ACCEPT` `CLEAR TO MODIFY`	If the radio settings are correct press **<ENTER>**.
The LCD will toggle between these 2 screens.	If these values are incorrect press **<CLEAR>**, and the LCD at bottom left is shown, allowing edit of the channel or broadcast group setting.
`BCAST GROUP 1*` `RADIO CHAN  01`	**Broadcast Group Setting** 1 Use this setting for all multiple controllers with single broadcast group setups. Use the number keys to edit this value and press **<ENTER>** to accept. The asterisk will move to the channel setting. **Channel Setting** 1-8 Edit the channel number to the desired value and press **<ENTER>** to accept. The CHAN switch on the receiver must match this value.

Multiple Controller with Multiple Broadcast Groups

In a multiple controller system with multiple broadcast groups (**Figure 8**), there are many consoles that control multiple scoreboards and/or scoreboard groups. The radio receiver inside the scoreboard is set to broadcast group 1–4 (Gen V) or 1–8 (Gen VI). By changing the console settings to the specific broadcast group address, a single console can control all scoreboards or specific groups of scoreboards. One example of this scenario is split court operation in basketball installations, where scoreboards are used to score multiple games at once, but can be grouped together to show one game if necessary.

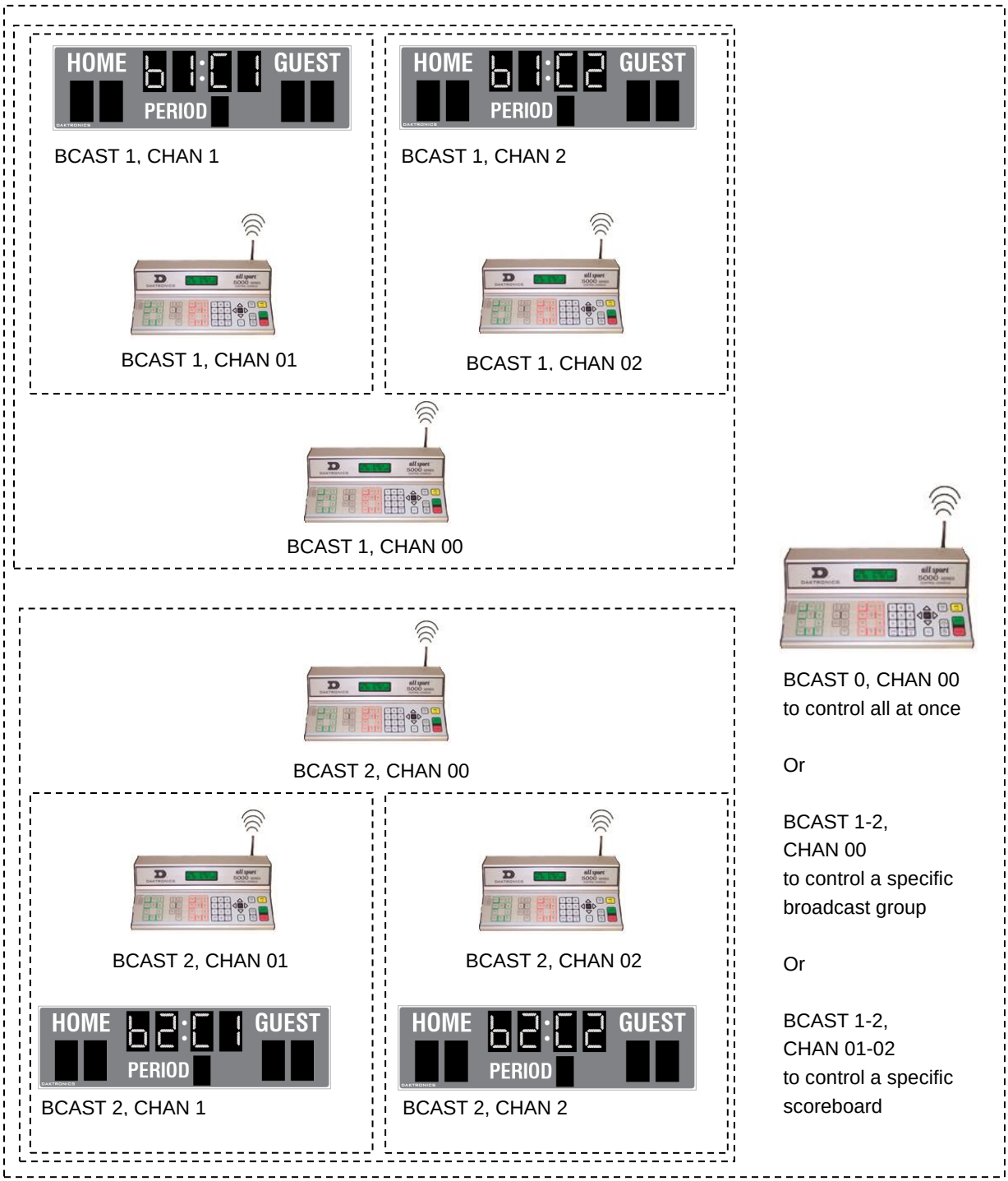
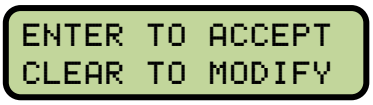


Figure 8: *Multiple Broadcast Group*

Typically, all multiple controller systems will use BCAST 1, CHAN 1 for the first controller in Broadcast Group 1 and BCAST 2, CHAN 1 for the first controller in Broadcast Group 2. All other consoles in a group are added sequentially.

<table>
<tr><th>Display</th><th>Action</th></tr>
<tr>
<td>



The LCD will toggle between these 2 screens.

</td>
<td>
The LCD shows the current radio settings along with a prompt to accept or modify these values.

If the radio settings are correct press <ENTER>.

If these values are incorrect press <CLEAR>, and the LCD at bottom left is shown, allowing edit of the channel or broadcast group setting.

Use the number keys to enter the desired broadcast group and press <ENTER> to accept. The asterisk will move to the channel setting.

Edit the channel number to the desired value and press <ENTER> to accept.
<table>
<tr><th>Broadcast Group</th><th>Channel Setting</th><th>Control Scoreboards</th></tr>
<tr><td>0</td><td>0</td><td>All Scoreboards</td></tr>
<tr><td rowspan="2">1</td><td>0</td><td>All in BCAST Group 1</td></tr>
<tr><td>1-8</td><td>Set to corresponding BCAST 1 Channel</td></tr>
<tr><td>↓</td><td>↓</td><td>↓</td></tr>
<tr><td rowspan="2">8*</td><td>0</td><td>All in BCAST Group 8</td></tr>
<tr><td>1-8</td><td>Set to corresponding BCAST 8 Channel</td></tr>
</table>
* Gen V radio receivers have only 4 groups; also, on broadcast groups 2 and 4, only channels 1-4 may be used.
</td>
</tr>
</table>

Radio Diagnostics

This menu is intended to help diagnose radio communication problems.

> **Note:** This menu was released in version 4.0.9 of the All Sport console. The scoreboard driver software supporting radio diagnostics was released in version 1.3.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	After the main clock has been stopped, press the **<MENU>** key and press the down or up arrows until the LCD at left is displayed. Press **<ENTER>** to enter the display menu.
MENU-DISPLAY RADIO TEST?	Press the down or up arrows until the LCD at left is displayed. Press **<ENTER>** to exit the current game in progress and enter the radio diagnostics menu.
EXIT GAME ARE YOU SURE?	**Note:** The console will prompt to press **<ENTER>** a second time to avoid accidental exit from the sport program.
RADIO TEST -SIGNAL LEVEL	Press **<ENTER>** to begin the signal level test, or press the down or up arrows to select another test.
SIGNAL LEVEL ANY KEY TO EXIT	This test sends a command to the radio receiver in the scoreboard to show its signal level on the first 2 clock digits*. The signal level can range from '00' (weakest) to '99' (strongest). The value of '00' would indicate there is no server in range. For scoreboards with 4-digit clocks, the 2 right clock digits* will also show the missed packet count during this test (see section below). Press any key to exit the test.
RADIO TEST -MISSED PACKET	Press **<ENTER>** to begin the missed packet test, or press the down or up arrows to select another test.
MISSED PACKET ANY KEY TO EXIT	This test sends a command to the radio receiver in the scoreboard to show the number of missed packets on the first 2 clock digits*. The missed packet count ranges from '00' to '99' and indicates the number of missed packets since the start of the test. Ideally, the number should be '00' to indicate no missing packets. A larger number indicates that there are some signal issues, either with signal level or noise interference. For scoreboards with 4-digit clocks, the 2 right clock digits* will also show the signal level during this test (see previous section). Press any key to exit the test.

Display	Action
RADIO TEST -RADIO CHAN BCAST X CHAN Y ANY KEY TO EXIT X = broadcast number Y = channel number	Press **<ENTER>** to begin the radio channel test, or press the down or up arrows to select another test. This test shows the current Broadcast Group and Channel number settings in the console. This test also sends a command to the radio receiver in the scoreboard to show the receiver's settings on the first 2 clock digits* by alternating between "bX" and "CY", where X is the current Broadcast Group and Y is the current Channel. Use this menu to verify the console and scoreboard radio settings. Press any key to exit the test.
RADIO TEST -SERVER VER SERVER VER X.Y ANY KEY TO EXIT X = firmware major number Y = firmware minor number	Press **<ENTER>** to begin the server test, or press the down or up arrows to select another test. This test shows the console's radio firmware version number. This test also sends a command to the radio receiver in the scoreboard to show the receiver's firmware version number on the first 2 clock digits* by alternating between "rX" and "_Y", where _ is a blank digit. For example, version 1.3 would display as "r1" followed by "_3". Press any key to exit the test.
RADIO TEST -EXIT TEST ?	Press **<ENTER>** to exit the radio diagnostics menu and return to the SELECT CODE prompt.

* Location of information displayed will vary on scoreboards without clocks.

2.5 Standard Keys

Start
<START> is used to start the main clock. The green LED on the **<START>** key is on while the main clock is running.

Stop
<STOP> is used to stop the main clock. The green LED on the **<START>** key is off while the main clock is stopped.

Enter/Yes
The **<ENTER/YES*>** key has two functions:

- Completes an action. As a reminder to press this key, an asterisk appears on the LCD.
- Serves as **<YES>** for input prompts (**Y**).

Clear/No
The **<CLEAR/NO>** key has two functions:

- Clears the LCD of numerical information.
- Serves as **<NO>** for input prompts. (**N**)

Edit
The **<EDIT>** key allows the user to select which field on the scoreboard to be edited (such as team score). After pressing the **<EDIT>** key, press one of the increment or decrement keys for the desired field on the scoreboard. Then simply enter the new value to display and press **<ENTER>** to accept.

Menu
The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. The left and right arrow keys enter and exit submenu lists for a specific menu item. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, or other allowed keys, exists the Menu function.

Set Main Clock

Display	Action
 MM:SS.T = minutes, seconds, tenths of a second	After the main clock has been stopped, press **<SET MAIN CLOCK>** to display the current time of the main clock. To change the time, enter the desired value on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
 MM:SS = minutes, seconds	Press **<SET MAIN CLOCK>** a second time or the down arrow key to display the configured time for the main clock period length. To accept the displayed period length press **<YES>**. To decline the selection of the period length press **<NO>**. To change the period length and set the main clock enter the new time in minutes and seconds on the number pad and press **<ENTER>**. **Note:** Pressing **<ENTER>** to select the period time as the main clock setting will increment the current period number if the clock value was previously zero. Press **<CLEAR>** twice to clear changes and return to the game.
 MM:SS = minutes, seconds	Press **<SET MAIN CLOCK>** a third time or the down arrow key to display the configured time for break length. To accept the break length press **<YES>**. To decline the selection of the break length press **<NO>**. To change the break length and set the main clock enter the new time in minutes and seconds on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.

Display	Action
 MM:SS = minutes, seconds	Press **<SET MAIN CLOCK>** a fourth time or the down arrow key to display the configured time for overtime length. To accept the overtime length press **<YES>**. To decline the selection of the overtime length press **<NO>.** To change the overtime length and set the main clock enter the new time in minutes and seconds on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
 MM:SS = minutes, seconds	Press **<SET MAIN CLOCK>** a fifth time or the down arrow key to display the configured time for pre-game length. To accept the pre-game length press **<YES>**. To decline the selection of the pre-game length press **<NO>**. To change the pre-game length and set the main clock enter the new time in minutes and seconds on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
 MM:SS = minutes, seconds	Press **<SET MAIN CLOCK>** a sixth time or the down arrow key to display the configured time for post-game length. To accept the post-game length press **<YES>**. To decline the selection of the post-game length press **<NO>**. To change the post-game length and set the main clock, enter the new time in minutes and seconds on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.

Count Up/Down

Display	Action
MAIN CLOCK- DOWN 1-UP 2-DOWN	After the main clock has been stopped, the direction of the clock can be set. Press **<1>** or **<2>** to select **UP** or **DOWN** (default). **Note:** The current direction of the main clock is shown on the top line of the LCD. The **<COUNT UP/DOWN>** function is disabled while the clock is already running.

Auto Horn

Display	Action
AUTO HORN- ON 1-ON, 2-OFF	Press **<1>** or **<2>** to select ON (default) or OFF. The amber LED on the **<HORN>** key is on when the Auto Horn feature is enabled. The LED is off when the Auto Horn feature is disabled and the horn is in Manual mode.

Manual Horn

Press **<HORN>** to sound the main horn. The horn sounds as long as the key is pressed.

2.6 Remote Start/Stop Controls

The All Sport® 5000 console lets additional operators control timing functions remotely using the Main Clock Start/Stop switch and the Shot Clock Start/Stop switch.

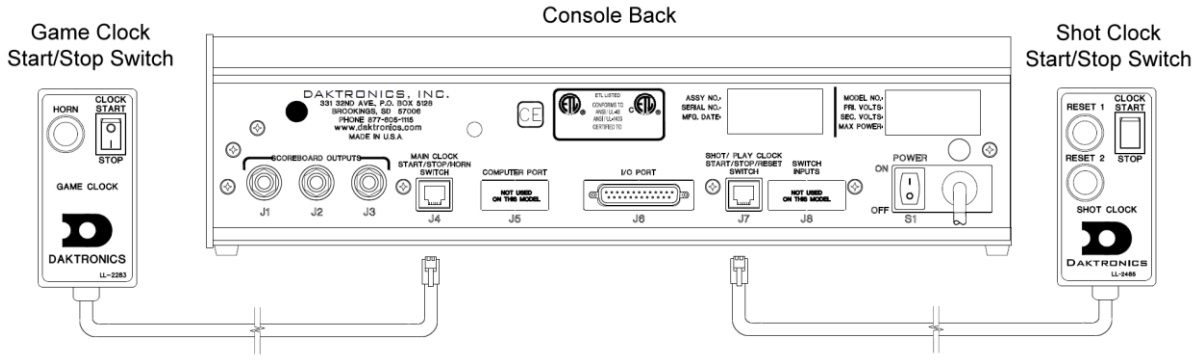


Figure 9: *Remote Start/Stop Switches*

Main Clock Control

The Main Clock Start/Stop switch plugs into **J4** on the back of the console (**Figure 9**). This unit has a rocker switch for clock start/stop and a button for horn. The horn button sounds the horn as long as the button is pressed.

Shot Clock Control

The Shot Clock Start/Stop switch plugs into **J7** on the back of the console (**Figure 9**). This unit has a rocker switch for Start/Stop and reset button(s). When a reset button is pressed, the shot clock timer is changed to the reset value and stops the timer from decrementing. The shot clock timer restarts when the reset button is released. In FIBA mode for basketball, holding either reset button will blank the shot clock. In independent mode, the switch starts and stops the shot clock timer when pushed, but does not stop when the main clock is stopped. When in synchronized mode, the shot clock timer will stop and start with the main clock switches only if it is running in the beginning.

Refer to **Section 6**, **Section 7**, and/or **Section 22** for sport-specific information about shot clock configurations.

2.7 General Multi-Purpose Timer Information

There is no insert for the Multi-Purpose Timer codes. Code 99 is used to operate the multi-purpose timer.

The Multi-Purpose Timer is a general timer used for 2, 4, and 6 digit time displays. The timer will count up or down through hours, minutes, and seconds. The information will shift on the 2 and 4 digit displays to show the most significant time values as the time changes. The Multi-Purpose Timer code is also used as a Time-of-Day code by accessing the Time of Day Menu through the Menu key. The Segment Timer may also be accessed using the Menu key.

Standard Keys

The keys that are used by the multi-purpose timer are **<START>**, **<STOP>**, **<SET MAIN CLOCK>**, **<COUNT UP/DOWN>**, **<AUTO HORN>**, **<MANUAL HORN>** and **<MENU>**. The key functions are explained in more detail in **Section 2.5**.

Accessing the Multi-Purpose Timer

Turn on the console, enter multi-purpose timer code "99" and press **<ENTER>**.

Press the **<MENU>** key and press the down or up arrows until this message is displayed:

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** to enter the Time of Day Menu.

Segment Timer

Refer to **Section 3** for details on accessing and operating the segment timer function.

2.8 Team Name Entry

Certain scoreboard models are equipped with Team Name Message Centers (TNMCs), small matrix displays that allow users to show team names, abbreviations, or other short messages.

The team name entry function is typically accessed by pressing the **<MENU>** key and navigating to the HOME or GUEST TEAM NAME option (refer to an individual sport section for more information).

The TEAM NAME insert (LL-2441) is used to enter the TNMC settings. For newer consoles, the Team Name insert is printed directly on the keypad, while for older consoles it will be necessary to swap the sport insert with a separate insert. The TEAM NAME insert has the following sections for controlling the appearance of the display:

WIDTH

Select the width (in pixels) of the TNMC from 16, 32, 48 or 64 columns. The default width is 48 columns long.

HEIGHT

Select the height (in pixels) of the TNMC from 7 or 8 rows. The default height is 8 rows high.

FONT

Select from Single Stroke or a Double Stroke (bold) font. The default font is single stroke. Each TNMC on a scoreboard (Home & Guest) may use different font settings to fit varying team name lengths. The tables below demonstrate the width (in pixels) of every character for each font setting:

TNMC Font	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Single Stroke - Standard	4	4	4	4	4	4	4	4	3	4	4	4	5	4	4	4	5	4	4	5	4	5	5	5	5	4
Single Stroke - Alternate Narrow*	3	3	3	3	3	3	4	3	1	3	4	3	5	4	3	3	5	3	3	3	3	5	5	5	3	4
Double Stroke - Standard	6	6	6	6	6	6	6	6	4	6	6	6	7	6	6	6	7	6	6	6	6	7	7	7	6	6
Double Stroke - Alternate Narrow*	5	5	5	5	4	4	6	5	2	5	6	4	7	6	5	5	7	5	5	4	5	7	7	7	6	6

*To access Alternate Narrow fonts, press the **<SHIFT>** key before pressing a letter key. A lowercase letter is shown on the LCD to represent the Alternate Narrow characters.

TNMC Font	1	2	3	4	5	6	7	8	9	0	&	'	,	-	.
Single Stroke - Standard	3	4	4	5	4	4	4	4	4	4	5	2	2	3	1
Double Stroke - Standard	4	6	6	7	6	6	6	6	6	6	5	3	3	3	2

The following character widths are for 16 High TNMCs:

TNMC Font	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Single Stroke - Standard	8	8	8	8	8	8	8	8	2	8	8	8	10	8	8	8	9	8	8	8	8	8	10	8	8	8
Single Stroke - Alternate Narrow*	6	6	6	6	6	6	6	6	2	6	6	6	8	7	6	6	7	6	6	6	6	6	8	6	6	6
Double Stroke - Standard	9	9	9	9	9	9	9	9	3	9	9	9	12	9	9	9	10	9	9	9	9	9	12	10	9	9
Double Stroke - Alternate Narrow*	7	7	7	7	7	7	7	7	2	7	7	6	9	7	7	7	7	7	7	6	7	7	9	8	8	7

*To access Alternate Narrow fonts, press the **<SHIFT>** key before pressing a letter key. A lowercase letter is shown on the LCD to represent the Alternate Narrow characters.

TNMC Font	1	2	3	4	5	6	7	8	9	0	&	'	,	-	.
Single Stroke - Standard	5	8	8	8	8	8	8	8	8	8	8	2	2	8	2
Double Stroke - Standard	6	9	9	9	9	9	9	9	9	9	9	4	4	8	3

Note: By default, characters have a one-column space between them. Press the **<SHIFT>** key before pressing the **<DOUBLE>** key to insert two-column spaces between all characters. To return to one-column spaces, press the **<SHIFT>** key before pressing the **<SINGLE>** key.

Section 3: Segment Timer Operations

Sport Insert: LL-2475 (Code 100 is for the dedicated Segment Timer)

The Sport Insert drawing is located in **Appendix B**. The **Quick Reference** is located in **Appendix D**.

Reference Drawings:
Insert, Segment Timer..... **Drawing A-129357**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

3.1 Segment Timer Overview

The segment timer is a multi-function timing system and has multiple purposes. Operation of the segment timer is determined by ninety-nine segments of pre-programmed length. The segment timer will count down starting at the segment number that is set as **First Segment**. When the first segment is completed, the timer will count the preset **Interval Time** and move on to the next segment. The timer will continue counting segments until the segment number that is set as **Last Segment** is complete. It then will reset to the segment saved as the **First Segment** and will either begin counting down or wait for the **<START>** key to be pressed depending on the **<AUTO STOP>** setting. Refer to **Auto Stop** in this section to set the segment-stopping feature.

The first and last segment values can be used to set up specific practice sessions. For example, the practice session for one sport could be programmed for five minute segments on segments 1-10 while another might use 10 minute segments on 11-20. Set the first segment and last segment values to the desired segment numbers for the session and the console will count down each of the segments in order. It may also be set to either stop on the last segment or loop back to the first segment segments again based on the **<AUTO STOP>** setting.

The segments values will be saved when the console is turned off and will be the same values regardless of the sport that was used to access the segment timer.

3.2 Accessing Segment Timer

Turn on the console. Enter the sport code used for the scoreboard in use and press **<ENTER>**. A list of sport codes can be found in **Appendix C**.

The segment timer program is accessed through the main menu of each individual sport. The **DISPLAY MENU** allows the user to start the segment timer. Press the **<MENU>** key and press the down or up arrows until the following message is displayed:

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	After the main clock has been stopped, press the **<MENU>** key and press the down or up arrows until the LCD at left is displayed. Press **<YES>** to enter the display menu.
MENU-DISPLAY RUN SEGMENT TIMER?	Press **<YES>** to exit the sport code and run the segment timer program.
EXIT GAME ARE YOU SURE?	The console will prompt the user to press **<YES>** a second time to avoid accidental exit from the sport program. Refer to **Section 3.4** for general segment timer operation instructions.

3.3 Accessing 2-Digit or 6-Digit Display Segment Timer

This code is only used for the two-digit or six-digit displays designed exclusively for timing displays. Enter code **100** after turning on the console to access the exclusive segment timer program. For scoreboards, enter the correct scoreboard code and use **<MENU>** to access the segment timer function.

3.4 Segment Timer Keys

Segment Number & Time

The **<SEG. NO. • TIME •>** key is used to edit the time of each segment. Select the segment to be edited, and enter the time desired as described below.

Display	Action
SEGMENT: XX * TIME EDIT XX = current setting	Press **<SEG. NO. • TIME •>** to set individual segment times. Enter the segment to be edited with the keypad and press **<ENTER>**.
SEGMENT: XX TIME EDIT MM:SS* XX = current setting MM:SS = minutes, seconds	Enter the time for the segment with the keypad. Press **<ENTER>** to accept the time and move to the next segment time. Press **<ENTER>** again to exit the function. Press the up or down arrow keys to move to the previous or next segment.

First Segment

This key sets the first segment in a range of segments to run when **<START>** is pressed.

Display	Action
FIRST SEGMENT NN*	Press **<FIRST SEGMENT •>** and enter the segment to be set as the first segment. Press **<ENTER>** to accept the time and exit the function. The console will be reset to the segment selected here when the **<RESET TO FIRST SEG>** key is pressed.
NN = current setting	

Last Segment

This key sets the last segment in a range of segments to run when **<START>** is pressed.

Display	Action
LAST SEGMENT NN*	Press **<LAST SEGMENT •>** and enter the segment to be set as the last segment. Press **<ENTER>** to accept the time and exit the function. After the segment set as the last segment is completed, the console will automatically reset to the segment saved as the first segment.
NN = current setting	

Interval Time

The interval time is the time between each segment. The interval time can be displayed on the Guest digits using the **<DISPLAY INTERVAL>** key.

Display	Action
INTERVAL TIME: MM:SS	Press **<INTERVAL TIME •>** to display the current value of interval time on the bottom line of the LCD. Edit the value of the interval time and press **<ENTER>**.
MM:SS = minutes, seconds	

Display Interval

This setting determines whether the interval count will be displayed on the scoreboard.

Display	Action
DISPLAY INTERVAL YES OR *NO?	Press **<DISPLAY INTERVAL>**. Press **<YES>** to display the interval time on the scoreboard. Press **<NO>** to disable interval time display. The interval time will be displayed only on the console if **NO** is selected.

Display	Action
	Note 1: Regardless of this setting, the value saved in interval time will be counted down between segments. Set the interval time to zero if no interval between segments is desired. **Note 2:** When the interval time is being displayed, the segment number on the scoreboard flashes to indicate that the time displayed is interval time.

Copy Range

This key sets a range of segments to a specific value.

Display	Action
 MM:SS = minutes, seconds XX = starting segment value YY = ending segment value	Press **<COPY RANGE •>** and enter the time desired. Press **<ENTER>** to move to the next field. Enter the first and last segments that will have this time. When the last segment in the copy range is set, the menu will be exited. Once completed, all segments from XX to YY (inclusive) will be set to the specified value.

Auto Stop

This key is the auto stop function of the console.

Note: To set the console to stop after the last segment in the series is completed, the auto stop at each segment setting must be set to **NO**.

Display	Action
	Press **<AUTO STOP>** to enter this menu. Press **<YES>** to set the console to stop after each segment is completed. Press **<START>** to proceed with the next segment. Press **<NO>** to set the console to automatically begin the next segment when each segment is completed. The console will prompt for the auto stop at last segment setting.
	Press **<YES>** to set the console to stop when the last segment has been completed. Press **<NO>** to set the console to start over at the first segment when the last segment is completed

Reset to First

Press **<RESET TO FIRST SEG>** to return to the first segment.

Note: This function is disabled while the clock is running.

Reset Current Segment

Press **<RESET CURRENT SEGMENT>** to reset the segment time to the value specified by the current segment. The segment number will remain at the current value.

Current Segment

Press **<CURRENT SEGMENT +1>** to move to the next segment.

3.5 Edit

Current Segment

Display	Action
CURRENT SEGMENT: EDIT NN* NN = current setting	Press **<EDIT>** followed by **<CURRENT SEGMENT + 1>** to display the current segment for editing. Enter the new value for the current segment number and press **<ENTER>**.

3.6 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys, exits the Menu function.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Warning Time

Display	Action
WARNING TIME MM:SS* MM:SS = minutes, seconds	Enter the warning time in minutes and seconds and press **<ENTER>**. Enter 00:00 for no warning time (default). When the warning time is reached, the segment number flashes until the main clock reaches zero.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Use the keypad or arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3	Custom 4
First Segment	1				
Last Segment	99				
Warning Timer	00:00				
Display Interval	No				
Auto Stop on Each Segment	No				
Auto Stop At Last Segment	Yes				

Section 4: Baseball Operations

Sport Insert: LL-2438

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**. The **Quick Reference** is located in **Appendix D**.

Reference Drawings:

Insert; LL-2438 A/S 5000, Baseball..... **Drawing A-125061**
Insert; LL-2441 A/S 5000, Team Name ..... **Drawing A-125290**
Block Diagrams, A/S 3000 or 5000 Outdoor Sports..... **Drawing A-124690**

Refer to the information in **Section 2** to start up the console and how to use the sport insert.

If an insert is lost or damaged, a copy of the insert drawings can be used until a replacement arrives.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

Write the correct code number here: | | | | |

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

4.1 Baseball Keys

Note: If game stats are being received from the Daktronics Scoring-Timing Interface (DSTI), the keys on the console will be disabled. The LCD displays the messages shown below when these keys are pressed. Refer to **ED-13009** for more information about DSTI.

Display	Action
STATS RECEIVED KEY DISABLED EXIT STATS MODE Y/N?	The key disabled message will display for one second and then the **<EXIT STATS>** message will display and wait for a **<YES>** or **<NO>** key. If the **<YES>** key is pressed, the stats data will be saved in the console, and the console will **<EXIT STATS>** mode until another stats packet is received. This will allow the operator to enter stats from the console if the connection to DSTI is lost.

Inning +1

Display	Action
INNING +1 NN NN = current setting	Press **<INNING +1>** to increment the current inning number. Note that this key is disabled when **Auto Increment Inning** is enabled (refer to **Section 4.4**).

Out +1

The current number of outs is displayed on the main LCD screen.

Press **<OUT +1>** to increment the current number of outs.

Press **<OUT +1>** to set the out value to 0 when the current value is 3.

Notes:

Refer to **Auto Increment Inning** (in **Section 4.4**).

The **<OUT +1>** key automatically increments the inning and resets the outs to 0 when:

- The Auto Inning Increment setting is on.
- The **Home** AT BAT indicator is on.
- The current number of outs is 3.

The **<OUT +1>** key turns on the **Home** AT BAT indicator when:

- The Auto Inning Increment setting is on.
- The **Guest** AT BAT indicator is on.
- The current number of outs is 3.

Batter, Average, Clear Batter/Average

The **<BATTER •>** and **<AVERAGE •>** keys are used to display the uniform number and batting average of the player currently at bat. Pressing the **<CLEAR BATTER/ AVERAGE>** key sets both batter and average to blank.

Display	Action
AT BAT NN* NN = current setting	When the **<BATTER •>** key is pressed, enter the number of the player and press **<ENTER>**.
AVERAGE N.NNN* N.NNN = current setting	When the **<AVERAGE •>** key is pressed enter the batting average of the player and press **<ENTER>**.

Ball Count, Strike Count, Clear Count

The **<BALL COUNT +1>** and **<STRIKE COUNT +1>** keys increment the Ball and Strike digits. Pressing the **<CLEAR COUNT>** key sets the both counts to zero.

When the Auto Pitch Increment setting is on, the **<BALL COUNT +1>** and **<STRIKE COUNT +1>** keys automatically increment the ball and strike **pitch** count data of the team that is not at bat (AT BAT indicator off).

If the Ball Count value is 4 when **<BALL COUNT +1>** is pressed the value is blanked out. Press **<BALL COUNT +1>** a second time to set the value to zero.

If the Strike Count value is 3 when **<STRIKE COUNT +1>** is pressed the value is blanked out. Press **<STRIKE COUNT +1>** a second time to set the value to zero.

Ball and strike pitch count data is not incremented when the **<BALL COUNT +1>** and **<STRIKE COUNT +1>** values are incremented to blank or zero.

Hit, Error, Fielder's Choice, Clear Hit/Error

The **<HIT>** and **<ERROR •>** keys are used to turn on the Hit or Error indicator or digits. The **<FIELDER'S CHOICE>** key is used to indicate the batter reached due to fielder's choice (an "F" will display in the hit/error digit). On some scoreboards, the **<ERROR •>** key can also display the player's position when the **Error Position** setting is on. Pressing the **<CLEAR HIT/ERROR>** key turns off the Hit and Error indicators and clears the digits (including fielder's choice). **<ERROR •>** is used as an example.

Display	Action
ERROR: ON ERROR: OFF	Press the **<ERROR •>** key to turn on the Error indicator or digits. Press the **<ERROR •>** key again to turn off the Error indicator or digits.
ERROR: POSITION NN NN = current setting	When the **<ERROR •>** key is pressed, enter the position number of the player and press **<ENTER>**. This prompt only appears when the **Error Position** in **Edit Settings** is on (see **Section 4.4**).
HIT: OFF ERROR: OFF	Press the **<CLEAR HIT/ERROR>** key to turn off the Hit and Error indicators and clear the digits. This also clears the fielder's choice.

At Bat

The **<AT BAT>** keys turn the home and guest at bat indicators on and off. It also clears the ball, strike, and out count and sets batter and average to blank when the **At Bat** is turned on.

Display	Action
HOME AT BAT ON	Press the home or guest **<AT BAT>** key to turn on the at bat indicator for that team. This display appears briefly.
HOME AT BAT OFF	To turn off the possession indicator, press the same **<AT BAT>** key a second time or press the opposite **<AT BAT>** key. This display appears briefly. The current status of the At Bat indicator is shown by the location of the arrow (**>**) on the main LCD screen.

Runs

The function of the **<RUNS +1>** key is determined by the Score By Inning setting. If Score By Inning is disabled, only the team total is incremented. If Score By Inning is enabled, both the team total and the total inning scores are incremented.

Display	Action
TEAM RUNS: +1 HOME NN NN = current setting	When the Score By Inning setting is **disabled**: Press the appropriate **<RUNS +1>** key to increment the total number of runs for the home or guest team. The LCD shows which key was pressed and the new value for the corresponding team.
RUNS HOME +1 INNING NN =XX NN = current inning XX = inning score	When the Score By Inning setting is **enabled**: Press the appropriate **<RUNS +1>** key to increment the number of runs by inning and the game total for the home or guest team. The game total is the sum of all inning scores. The LCD shows which key was pressed and the new value for the corresponding team.

Hits, Errors, Left on Base

The home and guest **<HITS +1>**, **<ERRORS +1>** and **<LEFT ON BASE +1>** keys are all used to increment their respective totals. **<HITS +1>** is used as an example.

Display	Action
HITS: +1 HOME NN NN = current setting	Press the appropriate key to increment statistics for the home or guest team. The LCD shows which key was pressed and the new value for the corresponding team.

Pitch Count, Foul Balls, In Play

The home and guest **<PITCH COUNT BALLS +1>**, **<PITCH COUNT STRIKES +1>**, **<FOUL BALLS +1>**, and **<IN PLAY +1>** keys are all used to increment the pitch count data of the team that is not at bat. **<FOUL BALLS +1>** is used as an example.

Display	Action
FOUL BALLS: +1 H.PITCHER NNN NNN = current setting	Press the appropriate key to increment statistics for the pitcher's team (home or guest). The LCD shows which key was pressed and the new value for the corresponding team.
CLEAR PITCHES HOME Y/N?	Press the appropriate **<CLEAR PITCH COUNT>** key followed by **<YES>** to remove all pitch count data for the selected team.

4.2 Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

Inning +1

Note: Do not use **<EDIT> <INNING +1>** to edit the Score By Inning. Use **<EDIT> <RUNS +1>**.

Display	Action
INNING EDIT NN* NN = current setting	Press **<EDIT>** followed by **<INNING +1>** to display the current setting. Enter the correct inning number on the number pad and press **<ENTER>**.

Runs

The way that **Runs** are edited is determined by the Score By Inning setting. If Score By Inning is disabled, only the team total can be edited. If Score By Inning is enabled, the total by inning can be edited and the team total is automatically updated.

Display	Action
TEAM RUNS: EDIT HOME NN* NN = current setting	When the Score By Inning setting is **disabled**: Press **<EDIT>** and the appropriate **<RUNS +1>** key to display the current setting for the home or guest team. Enter the correct number on the number pad and press **<ENTER>**.
EDIT HOME RUNS INNING NN= XX NN = current inning XX = inning score	When the Score By Inning setting is **enabled**: Press **<EDIT>** and the appropriate **<RUNS +1>** key to display the number of runs by inning for the home or guest team. Use the up and down arrow keys to scroll to the inning to be edited. Enter the correct number of runs on the number pad and press **<ENTER>**. The game total is automatically updated. The LCD shows which key was pressed and the new value for the corresponding team.

Hits, Errors, Left on Base

The home and guest **<HITS +1>**, **<ERRORS +1>** and **<LEFT ON BASE +1>** keys are all edited in the same way. **<HITS +1>** is used as an example.

Display	Action
HIT: EDIT HOME NN* NN = current setting	Press **<EDIT>** and the appropriate statistic key to display the current setting. Enter the correct number on the number pad and press **<ENTER>**.

4.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the Menu function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD. Press **<CLEAR>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.
HOME- TEAM NAME _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to fifteen (15) characters for the team name and press **<ENTER>**. **Reinsert the BASEBALL (LL-2438) insert to continue.**
HOME- TEAM ABBR _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to ten (10) characters for the team abbreviation and press **<ENTER>**. **Reinsert the BASEBALL (LL-2438) insert to continue.**
PITCHER NUMBER HOME NN* NN = current setting	Enter the pitcher's jersey number and press **<ENTER>** to go to the next menu selection.

Display	Action
CLEAR HOME PITCHES Y/N?	This function clears pitch count statistics and should only be used before the start of a game or when a new pitcher enters the game. Press **<YES>** to clear the in-game status and points for all players in the home roster. Press **<NO>** to decline the selection. Press the down arrow key to scroll to the next selection.

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.
MENU- DISPLAY BLANK SCBD?	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation. Press the down arrow key to scroll to the next selection.
PRESS ANY KEY TO RETURN TO GAME	

Display	Action
MENU-DISPLAY SYNC TO CHAN SYNC TO CHAN ON 1-ON, 2-OFF	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. **Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
MENU- DISPLAY CLOCK CAPTIONS CLOCK CAPTION- 1-ON, 2-OFF ON	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. Press the down arrow key to scroll to the next selection.
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD. Refer to **Section 4.4**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY 1*GAME 2-TOD MENU-TIME OF DAY BLANK GAME DATA?	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game. If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

4.4 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Main Clock

Note 1: The settings for the **Main Clock** are used with the **<SET MAIN CLOCK>** key.

Note 2: The period length is used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action
MAIN CLOCK-TIME PERIOD HH:MM:SS HH:MM:SS = hours, minutes, seconds	Enter the correct amount of time per period in hours, minutes, and seconds on the number pad and press **<ENTER>**. For example, 00:60:00 per game.

Error Position

On some scoreboards the **<ERROR>** key can also display the player's position when the **Error Position** setting is on.

Display	Action
ERROR POSITION *ON←-- --→OFF	Press the **left** arrow key if the scoreboard **can** display the player position, then press **<ENTER>**. Press the **right** arrow key if the scoreboard **cannot** display the player position, then press **<ENTER>**.

Auto Increment Pitches

When the **Auto Increment Pitches** setting is on and the AT BAT indicator for the batting team is on, the **<BALL COUNT +1>** and **<STRIKE COUNT +1>** keys automatically increment the Ball and Strike pitch count data of the team that is not at bat (AT BAT indicator off).

Display	Action
AUTO INCREMENT PITCHES Y/N? N*	Press **<YES>** to use the **<BALL COUNT +1>** and **<STRIKE COUNT +1>** keys to automatically increment the Ball and Strike pitch count data. Press **<NO>** to use the **<PITCH COUNT BALLS +1>** and **<PITCH COUNT STRIKES +1>** keys to manually increment the Ball and Strike pitch count data.

Auto Increment Inning

The **<OUT +1>** key automatically increments the inning and resets the outs to 0 when:

- The Auto Inning Increment setting is on.
- The **Home** AT BAT indicator is on.
- The current number of outs is 3.

The **<OUT +1>** key turns on the **Home** AT BAT indicator when:

- The Auto Inning Increment setting is on.
- The **Guest** AT BAT indicator is on.
- The current number of outs is 3.

Display	Action
AUTO INCREMENT INNING Y/N? N*	Press **<YES>** to automatically increment the inning. Press **<NO>** to disable this function.

Score by Inning

Some scoreboards display both the total score and the score by inning.

> **Note:** If the Score By Inning setting is not enabled, the **Inning Sequence** and **Display Innings** settings are not displayed.

Display	Action
SCORE BY INNING Y/N? N*	Press **<YES>** if the scoreboard displays the score by inning. Press **<NO>** if the scoreboard only displays the total score.

Inning Sequence

Use Inning Sequence when the number of innings played exceeds the number of innings that can be displayed on the scoreboard, if applicable.

Display	Action
INNING SEQUENCE SHIFT←-→BLANK*	Press the **left** arrow key to **shift** all of the inning numbers and scores left one digit then press **<ENTER>**. Press the **right** arrow key to blank all of the inning numbers and start a new set then press **<ENTER>**.

Select **SHIFT** when Real-Time Data (RTD) is used to display the inning numbers. **SHIFT** moves all of the inning numbers and scores left one digit. The innings and scores automatically shift when **<INNING +1>** is incremented and the inning number exceeds the number of displayed innings.

For example:

Inning	1 2 3 4 5 6 7 8 9	becomes	2 3 4 5 6 7 8 9 10
Score	0 0 1 0 2 0 0 0 0		0 1 0 2 0 0 0 0 _

Select **BLANK** when the inning numbers are in a fixed position using decals. **BLANK** starts a new set of inning numbers.

For example:

Inning	1 2 3 4 5 6 7 8 9	becomes	10 11 12 13 14 15 16 17 18
Score	0 0 1 0 2 0 0 0 0		_ _ _ _ _ _ _ _ _

Display Innings

Select the number of innings that the scoreboard can display, if applicable.

Display	Action
DISPLAY INNINGS SIZE NN NN = current setting	Enter the number of innings to be shown (up to 12) and then press **<ENTER>**.

At Bat, Time, Pitch Count

Select what information to show on the two AT BAT, TIME or PITCH COUNT digits.

Display	Action
TIME DISPLAY=N 0-AT BAT TIME DISPLAY=N 1-TIME TIME DISPLAY=N 2-PITCHES N = current setting	Pressing **<0>** will select “At Bat”. Pressing **<1>** will select “Time” (default). Pressing **<2>** will select “Pitches”. After making a selection, press **<ENTER>**.

H/E, At Bat, Pitch Count

Select what information to show on the two H/E, AT BAT, or PITCH COUNT digits.

Display	Action
H/E DISPLAY=N 0-PITCHES H/E DISPLAY=N 1-H/E H/E DISPLAY=N 2-AT BAT N = current setting	Pressing **<0>** will select “Pitches”. Pressing **<1>** will select “H/E” (default). Pressing **<2>** will select “At Bat”. After making a selection, press **<ENTER>**.

Switch Output

The All Sport® 5000 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK= 0.

To display the desired switch setting:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.

2. Press **<YES>** to select the new setting.

3. Press **<NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are displayed below:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED? N = current setting	The switch remains open at all times and any external devices are disabled.
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Period Length	60:00			
Error Position	On			
Auto Increment Pitches	No			
Auto Increment Inning	Yes			
Score by Inning	Yes			
Inning Sequence	Blank			
Display Inning	10			
2-Digit Time Display	1-Time			
2-Digit H/E Display	1-HIT/ERROR			
Switch Output	1-Clock = 0			

Section 5: Pitch & Speed Operations

Sport Insert: LL-2482 Code: 5500

The Sport Insert drawing is located in **Appendix B**. The Quick Reference is located in **Appendix D**.

Reference Drawings:

Insert; LL-2441 A/S 5000, Team Name ..... **Drawing A-125290**
Insert; LL-2482 A/S 5000, Pitch and Speed ..... **Drawing A-130895**
Speed Adjust Calculations, Radar Gun ..... **Drawing A-243741**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

5.1 General Pitch & Speed Information

The pitch and speed program interfaces with a JUGS® or STALKER® radar gun to provide pitch and speed information. The pitch type and speed can be displayed on a matrix display, while only the speed may be displayed on a fixed digit display.

For more information about radar gun setup, refer to the **Radar Gun Speed of Pitch Systems Configuration Manual (ED-12224)**, available online at www.daktronics.com/manuals.

5.2 Pitch & Speed Keys

Pitch Keys

Note: In Auto mode, the pitch keys are not used.

The keys on the left side of the keypad are used to select the type of pitch for manual display mode. In manual display mode, the console waits to send the received pitch speed until a pitch type key is pressed. Once a pitch type is selected, the pitch data is updated on the display and sent as Real-Time Data (RTD).

Display Speed

<DISPLAY SPEED> is used in manual mode to send the speed to the display as speed only (blank frame).

Blank Time

Display	Action
BLANK TIME MM:SS* MM:SS = minutes, seconds	Press **<BLANK TIME •>** to set length of time before speed and pitch data is blanked on the display. If this value is set at **00:00**, the speed and pitch data will be displayed continuously.

Speed

Display	Action
EDIT SPEED NNN* MPH NNN = current setting	The **<SPEED •>** key edits the value of speed that is displayed on the scoreboard. The value is edited as miles per hour or kilometers per hour depending on the current display setting.

Show MPH & Show KPH

The **<SHOW MPH>** key displays the current pitch speed in miles per hour.
The **<SHOW KPH>** key displays the current pitch speed in kilometers per hour.

Cycle MPH/KPH & Cycle KPH/MPH

These keys set the order that measurements of speed cycle on a fixed digit speed display.

The **<CYCLE MPH KPH>** key sets the console to display miles per hour 1st followed by kilometers per hour when a new pitch speed is received.

The **<CYCLE KPH MPH>** key displays kilometers per hour followed by miles per hour.

Cycle Time

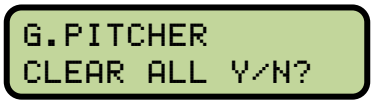
Display	Action
CYCLE TIME MM:SS* MM:SS = minutes, seconds	Press **<CYCLE TIME •>** to set the length of time each speed reading is displayed (MPH and KPH) before displaying the opposite reading. **Note:** If the console is set to cycle, a "Y" will be displayed next to "CYCLE" on the LCD menu. Press **<CYCLE MPH KPH>** or **<CYCLE KPH MPH>** to set console to cycle mode.

Pitch Count Keys (Home & Guest)

Pressing one of the pitch count keys will increment the value by one. To edit one of the values, use **<EDIT>** as described below.

Display	Action
H.PITCHER EDIT BALL: NNN* NNN = current setting	To edit one of the pitch count values (BALL, STRIKE, or OUT), press **<EDIT>** and then press the key of the item to be modified. The current value will be shown on the LCD. Enter the new value on the number pad and press **<ENTER>**.

Clear Pitch Count

Display	Action
	Press **<CLEAR PITCH COUNT •>** followed by **<YES>** to clear the pitch counts or **<NO>** to abort the operation.

Display Home/Guest Count

Pressing **<DISPLAY HOME COUNT>** or **<DISPLAY GUEST COUNT>** will send the RTD information with a specific frame number for Home or Guest. This frame number can be used to select the pitch count frame on a matrix display. The frame number is 19 for Home and 20 for Guest.

5.3 Edit

User-defined Keys

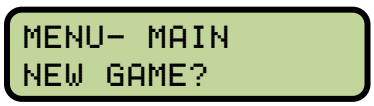
User-defined keys are only available in Manual Mode.

Display	Action
 N = current User number	Press **<EDIT>** then **<USER 1>**, **<USER 2>**, **<USER 3>**, or **<USER 4>** to type in the name of up to four user-defined pitch types. **The TEAM NAME (LL-2441) insert must be used to enter a user-defined pitch name.** Enter up to sixteen (16) characters for the user-defined pitch name and press **<ENTER>**. **Reinsert the PITCH & SPEED (LL-2482) insert to continue.**

5.4 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys, exits the Menu function.

New Game

Display	Action
	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport.

Display	Action
	Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Radar Gun Type

Display	Action
RADAR GUN TYPE SELECT	Press **<ENTER>** to select the appropriate radar gun type.
RADAR GUN TYPE JUGS * * current selection	Press the left or right arrow keys to select one of the following radar gun types, and then press **<ENTER>**. • JUGS • STALKER SPORT • STALKER PRO • CUSTOM
RADAR GUN TYPE CUSTOM ###000	If **CUSTOM** was selected, additional settings must be entered. Press the left or right arrow keys to select one of the following custom data formats, and then press **<ENTER>**. • ###000 • ###: • ### • ###00# • #### • ###.# **Note:** Formats with three #'s are speeds without tenths. Formats with four #'s are speeds with tenths.
RADAR GUN TYPE BAUD RATE 1200 *	Next, press the left or right arrow keys to set the BAUD RATE to 1200 or 9600, and then press **<ENTER>**.
RADAR GUN TYPE ROUND UP Y/N?	Finally, if a data format with tenths was selected, a prompt will ask if the speed should be rounded up. Press **<YES>** to round up, or press **<NO>** to not round up.

Speed Adjust Coefficient

Display	Action
SPEED ADJUST 0.NNNN NNNN = current setting	In some locations, the radar gun is mounted at an angle offset from the direct line of the pitch, resulting in a lower speed than actual. If this is the case, enter the cosine of the angle between the pitcher-catcher line and the radar gun. The console will adjust the speed received accordingly. Set the speed adjust coefficient to 0 if no speed adjustment is necessary.

Angle Offset	Coefficient
10°	0.9848
15°	0.9659
20°	0.9397
25°	0.9063
30°	0.866

Approximately every one hundredth from the coefficient will increase the speed by one mph.

Example: 0.9848 = 95mph
0.9748 = 96mph

For more exact calculations, refer to **Drawing A-243741** in **Appendix A**.

Select Speed Range

Display	Action
SELECT RANGE SPEED: >NN MPH NN = current setting	This setting allows the user to select a speed range that will be accepted from the radar gun. Type in the minimum speed and then press **<ENTER>**. Type in the maximum speed and the press **<ENTER>**. The default minimum speed setting is 0 MPH and the default maximum is 105 MPH.

Speed Indicator

Display	Action
SPEED INDICATOR 1ST NN* MPH SPEED INDICATOR 2ND NN* MPH NN= current setting	This setting allows the user to select the speed at which the three speed indicators should light. Speeds below the 1st setting will light the 1st indicator. Speeds equal to or greater than the 1st and less than the 2nd setting will light the second indicator. Speeds greater than this will logout the 3rd indicator. Enter the desired values and press **<ENTER>** after each is entered.

Auto Frame

Display	Action
AUTO FRAME # 01	This option sets the default frame number that is sent with a pitch when in Auto mode. Use the keypad to enter a value from 0-20 and press **<ENTER>**.

Display Mode

Display	Action
DISPLAY MODE *AUTO↔MANUAL	This setting determines when the pitch information received will be updated to fixed digit scoreboards and RTD. In Auto mode, the scoreboard/RTD is updated as soon as speed information is received from the radar gun. In Manual mode the console waits for one of the pitch keys to be pressed before updating with the new pitch speed. **Note:** In Auto mode the pitch keys are not used.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Cycle Time	00:05			
Blank Time	00:20			
Radar Gun Type	JUGS			
Speed Adjust Coefficient	0			
Min Speed	0			
Max Speed	105			
Display Mode	AUTO			

RTD Item Numbers

The Pitch and Speed function uses RTD item numbers to display pitch information. Items 23-25 will display either MPH or KPH depending on cycle and display settings.

Item #	Data
1	MPH x100
2	MPH x10
3	MPH x1
4-19	Pitch type text – 16 characters
20	KPH x100
21	KPH x10
22	KPH x1
23	MPH/KPH x100
24	MPH/KPH x10
25	MPH/KPH x1
26	MPH indicator
27	KPH indicator
28	Home Ball count x100
29	Home Ball count x10
30	Home Ball count x1
31	Home Strike count x100

Item #	Data
32	Home Strike count x10
33	Home Strike count x1
34	Home Total Pitch count x100
35	Home Total Pitch count x10
36	Home Total Pitch count x1
37	Home Strike Out count x100
38	Home Strike Out count x10
39	Home Strike Out count x1
40	Guest Ball count x100
41	Guest Ball count x10
42	Guest Ball count x1
43	Guest Strike count x100
44	Guest Strike count x10
45	Guest Strike count x1
46	Guest Total Pitch count x100
47	Guest Total Pitch count x10
48	Guest Total Pitch count x1
49	Guest Strike Out count x100
50	Guest Strike Out count x10
51	Guest Strike Out count x1
52	Speed Indicator #1 (Low)
53	Speed Indicator #2 (Med)
54	Speed Indicator #3 (High)

Frame Number and Pitch Types

The frame number sent with each RTD frame also represents the pitch type (for manual mode). The pitch types for each frame number are shown below. Standard RTD Port configuration: 1200 Baud Rate, 8 Data Bits, and No Parity for the Jugs or Stalker Sport gun type. Use a Baud Rate of 9600 for the Stalker Pro gun.

Frame #	Pitch Type
1	Curve Ball
2	Slider
3	Sinker
4	Change Up
5	Knuckle Ball
6	Fast Ball
7	Split Finger
8	Screw Ball
9	Breaking Ball
10	(Blank)
11	Other
12	User 1
13	Off Speed
14	User 2
15	User 3
16	Fork Ball
17	User 4
18	Palm Ball
19	Home Pitch Count
20	Guest Pitch Count

Section 6: Clock Console Operations

Sport Insert: 0G-136301

The Sport Insert drawing is located in **Appendix B**. The **Quick Reference** is located in **Appendix D**.

Reference Drawings:
Insert, Clock Console ..... **Drawing A-136301**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

Write the correct code number here: | | | | |

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

6.1 Clock Console Codes

The clock console is used to keep clock and timer information for basketball and football codes. The code numbers are listed below.

CODE:

1000 - Basketball Main Clock and Shot Clock
6000 - Football Main Clock and Shot Clock

6.2 Clock Console Keys

Timer Start

<TIMER START> starts the Shot Clock or Play Clock timer.

Note: In Basketball Mode, the main clock must be running in order to start the shot clock, unless the Sync to Main setting is disabled (see **Section 7.4**).

Timer Stop

<TIMER STOP> stops the Shot Clock or Play Clock timer.

Set Timer Time

Display	Action
Basketball Mode: SHOT CLOCK-EDIT CURR MM:SS* Football Mode: PLAY CLOCK-EDIT CURR MM:SS* MM:SS = minutes, seconds	**<SET TIMER TIME •>** sets the current time displayed on the shot clock or play clock timer.

Set Reset Time 1

Display	Action
Basketball Mode: SHOT CLOCK-EDIT RESET 1 MM:SS* Football Mode: PLAY CLOCK-EDIT RESET 1 MM:SS* MM:SS = minutes, seconds	**<SET RESET TIME 1 •>** sets the current Reset 1 value for the shot clock or play clock timer.

Set Reset Time 2

Display	Action
Basketball Mode: SHOT CLOCK-EDIT RESET 2 MM:SS* Football Mode: PLAY CLOCK-EDIT RESET 2 MM:SS* MM:SS = minutes, seconds	**<SET RESET TIME 2 •>** sets the current Reset 2 value for the shot clock or play clock timer.

Timer Reset 1

<TIMER RESET 1> Resets the play clock or shot clock to the Reset 1 value.

Timer Reset 2

<TIMER RESET 2> Resets the play clock or shot clock to the Reset 2 value.

> **Note:** The Timer Start, Timer Stop, Timer Reset 1 and Timer Reset 2 functions may be controlled with a remote start/stop reset switch (refer to **Section 2.6**).

Recall Shot Time

Display	Action
Basketball Mode Only: SHOT CLOCK-MODE RECALL Y/N	Press **<RECALL SHOT TIME>** to recall the shot time that was remaining before the last shot clock reset was pressed. To accept the recall press **<YES>**. To decline the recall press **<NO>**.

6.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys and other allowed keys, exits the Menu function.

Refer to **Section 7** for the Basketball Menu Key functions.
Refer to **Section 8** for the Football Menu Key functions.

6.4 Settings

Refer to **Section 7** for Basketball Settings.
Refer to **Section 8** for Football Settings.

> **Note:** Only settings that apply to the operation of the main clock or shot/play clocks will affect the operation of the clock console.

Section 7: Basketball Operations

Sport Insert: LL-2433

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**. The **Quick Reference** is located in **Appendix D**.

Reference Drawings:

Insert, Basketball, LL-2433 ..... **Drawing A-120121**
Block Diagram: AS5000 BB- VB and WR #1 ..... **Drawing A-124686**
Block Diagram: AS5000 BB- VB and WR #3 ..... **Drawing A-124688**
Insert; LL-2442 A/S 5000, Team Name ..... **Drawing A-125290**
Block Diagram- A/S 3000 or 5000 BB- VB and WR #2..... **Drawing A-125415**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

Write the correct code number here: | | | | |

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

7.1 Basketball Keys

Set Shot Time

Display	Action
SHOT CLOCK-EDIT CURR MM:SS*	Press **<SET SHOT TIME •>** to display the current shot clock time length.
MM:SS = minutes, seconds	To accept the current shot clock time length press **<YES>**.
	To decline the selection of the current shot clock time length press **<NO>**.
	Use the keypad to enter the new time in minutes and seconds and press **<ENTER>**.
	Press **<CLEAR>** twice to clear changes and return to the game.

Display	Action
SHOT CLOCK-EDIT RESET 1 MM:SS* MM:SS = minutes, seconds	Press **<SET SHOT TIME •>** a second time to display the configured time for shot clock **Reset 1** length. To accept the shot clock **Reset 1** length press **<YES>**. To decline the selection of the shot clock **Reset 1** length, press **<NO>**. Use the keypad to enter the new time in minutes and seconds and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game. **Note:** The configured time of shot clock is set using the **EDIT SETTINGS** function when a new code is selected.
SHOT CLOCK-EDIT RESET 2 MM:SS* MM:SS = minutes, seconds	Press **<SET SHOT TIME •>** a third time to display the configured time for shot clock **Reset 2** length. To accept the shot clock **Reset 2** length press **<YES>**. To decline the selection of the shot clock **Reset 2** length press **<NO>**. To change the shot clock **Reset 2** length and set the shot clock enter the new time in minutes and seconds on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game. **Note:** The configured time of shot clock is set using the **EDIT SETTINGS** function when a new code is selected.

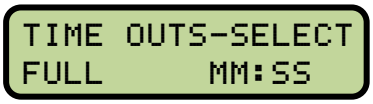
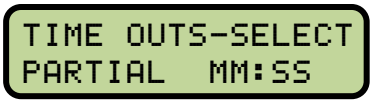
Recall Shot Time

Display	Action
SHOT CLOCK-MODE RECALL Y/N	Press **<RECALL SHOT TIME •>** to recall the shot time that was remaining before the last shot clock reset was pressed. To accept the recall press **<YES>**. To decline the recall press **<NO>**.

Time Out On/Off

<TIME OUT ON/OFF> stops and starts the time out clock. The length of both the full and partial time outs can also be changed when the time out clock is stopped.

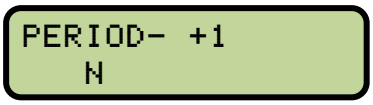
> **Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
 MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** to display the configured time for full time out length. To start the full time out press **<YES>**. To decline the selection of the full time out press **<NO>**.
 MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** a second time (or use the up and down arrow keys) to display the configured time for partial time out length. To start the partial time out press **<YES>**. To decline the selection of the partial time out press **<NO>**.

Blank Player Foul

Press **<BLANK PLAYER FOUL>** to blank the digits of the Player-Foul field of the scoreboard.

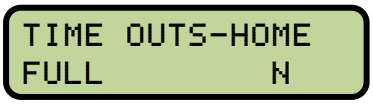
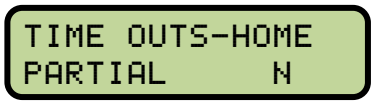
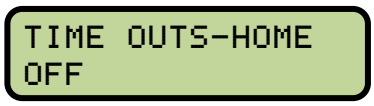
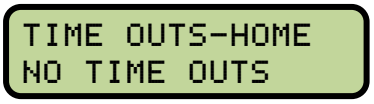
Period +1

Display	Action
 N = current setting	Press **<PERIOD +1>** to increment the period number. The full and partial time outs and team fouls are automatically reset at halftime.

Time Out

The home and guest **<TIME OUT>** keys are used to decrement the number of time outs remaining and start the time out clock. The scoreboard indicator is turned on when the type of time out is selected (full or partial). The scoreboard indicator is turned off when the time out clock expires or is stopped.

> **Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
 N = current setting	Press **<TIME OUT>** to display the number of full time outs remaining. To accept the full time out and start the time out clock press **<YES>**. To decline the selection of a full time out press **<NO>**.
 N = current setting	Press **<TIME OUT>** a second time (or use the up and down arrow keys) to display the number of partial time outs remaining. To accept the partial time out and start the time out clock press **<YES>**. To decline the selection of a partial time out press **<NO>**.
	To exit the running time out clock, press **<TIME OUT>**. This will turn the time out OFF.
	This message appears when there are no full or partial time outs left.

Score +1, +2, +3, -1

The home and guest **<SCORE +1>**, **<SCORE +2>**, and **<SCORE +3>** keys are used to increment the team score and the **<SCORE -1>** key is used to decrement the team score.

Display	Action
TEAM SCORE- +1 HOME NNN NNN = current setting	Press the appropriate score key to increment or decrement the score for the home or guest team. The LCD shows which key was pressed and the new value for the team score of the corresponding team.
TEAM SCORE- +1 HOME PLAYER NN* NN = current setting	If the program is configured to update the player points, this prompt displays asking for a player number. Enter the jersey number of the player who scored the points and press **<ENTER>**.
HOME PLAYER NN NOT FOUND, ADD? NN = current setting	If the player is not in the roster, this prompt asks if the player should be added. Press **<YES>** to add the player to the roster and credit the points to that player. Press **<NO>** to decline the entry of the player number.
HOME PLAYER NN ROSTER FULL NN = current setting	This message displays when the answer to the previous prompt is **YES** and the roster is full.
HOME PLAYER NN POINTS XX NN = player number XX = player points	The player's jersey number and number of points display if the player was found in the game or correctly added to the roster.

Team Fouls +1

Display	Action
TEAM FOULS- +1 HOME NN NN = current setting	Press the home or guest **<TEAM FOULS +1>** key to increment the number of team fouls for the corresponding team. The number of team fouls stop incrementing at the number of fouls configured for the 1-on-1 or 2-shot bonus.
TEAM FOULS- +1 HOME PLAYER NN* NN = current setting	If the program is configured to update the player fouls, this prompt displays asking for a player number. Enter the jersey number of the player who made the foul and press **<ENTER>**.
HOME PLAYER NN NOT FOUND, ADD? NN = current setting	If the player is not in the roster, this prompt asks if the player should be added. Press **<YES>** to add the player to the roster and credit the foul to that player. Press **<NO>** to decline the entry of the player number.
HOME PLAYER NN ROSTER FULL NN = current setting	This message displays when the answer to the previous prompt is **YES** and the roster is full.
HOME PLAYER NN FOULS XX NN = player number XX = player fouls	The player's jersey number and the number of fouls display if the player was found in the game or correctly added to the roster. **Note:** If a player number is not entered, the fouls will not be displayed.

Bonus

Note: Only the types of bonuses that are configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection (see **Section 7.4**).

Display	Action
HOME BONUS 1-ON-1	Press the home or guest **<BONUS>** key to turn on the 1-on-1 bonus indicator for that team.
HOME BONUS 2-SHOT	Press the home or guest **<BONUS>** key a second time to turn on the 2 shot bonus indicator for that team.

Display	Action
HOME BONUS OFF	Press the **<BONUS>** key a third time to turn off both indicators.

Possession

Display	Action
HOME POSSESSION ON	Press the home or guest **<POSS>** key to turn on the possession indicator for that team.
HOME POSSESSION OFF	To turn off the possession indicator, press the same **<POSS>** key a second time, or press the opposite **<POSS>** key once.

In Game/Out of Game

The **<IN GAME>** and **<OUT OF GAME>** keys are only functional when the Home or Guest **<PLAYER>** key has been pressed (see **Player** below).

Delete Player

The **<DELETE PLAYER>** key is only functional when the Home or Guest **<PLAYER>** key has been pressed (see **Player** below).

Player

Note: If player stats are being received from the Daktronics Scoring-Timing Interface (DSTI) the PLAYER, IND SUB and MASS SUB keys will be disabled. The LCD displays the messages below when these keys are pressed. Refer to **ED-13009** for more information about DSTI.

Display	Action
STATS RECEIVED KEY DISABLED EXIT STATS MODE Y/N?	The key disabled message will display for one second and then the **<EXIT STATS>** message will display and wait for a **<YES>** or **<NO>** key. If the **<YES>** key is pressed, stats data will be saved in the console and the console will **<EXIT STATS>** mode until another stats packet is received. This will allow the operator to enter player stats from the console if the DSTI connection is lost.

Display	Action
HOME PLAYER NN* NN = current setting	When the home or guest **<PLAYER •>** key is pressed, this prompt asks the jersey number of the player to be edited. Enter the jersey number on the number pad and press **<ENTER>**.
HOME PLAYER NN NOT FOUND, ADD? NN = current setting	If the player is not in the roster, this prompt asks if the player should be added. Press <**YES**> to add the player to the roster. Press <**NO**> to decline the entry of the player number.
HOME PLAYER NN ROSTER FULL NN = current setting	This message displays when the answer to the previous prompt is **YES** and the roster is full.
HOME PLAYER NN S-I F-X* P-YY NN = player number S-I = **in** game S-O = **out** of game X = number of **fouls** YY = number of **points**	If the player is found, the player's game status and statistics can be changed. **To change a player's game status:** **1.** Use the up and down arrow keys to select the player from the list. **2.** Press **<IN GAME>** or **<OUT OF GAME>**. **3.** The **S** field on the display changes to show the player's current status. **To change a player's statistics:** **1.** Use the up and down arrow keys to select the player from the list. **2.** Use the left and right arrow keys to select the statistic to be changed. **3.** Enter the correct number for the selected statistic on the number pad and press **<ENTER>**. Press **<CLEAR>** to exit the menu and return to the game.

Display	Action
HOME PLAYER NN DELETE PLAYER? NN = current setting	To delete an incorrect player from the roster use the up and down arrow keys to select the player from the list and press **<DELETE PLAYER>**. Press **<YES>** to remove the player from the roster. Press **<NO>** to decline the deletion process and return to the game.

Individual Substitution

Display	Action
IND SUB- HOME NN* in for XX NN = sub player XX = in game player	When the home or guest **<INDIV. SUB. •>** key is pressed, this prompt asks the jersey number of the player entering and leaving the game. Enter the jersey number of the player entering the game on the number pad and press **<ENTER>**. Enter the jersey number of the player leaving the game on the number pad and press **<ENTER>**.
IND SUB- HOME SUB OK	This message is displayed if no errors are found.
IND SUB- HOME SUB NOT MADE	This message is displayed for the following reasons: • The player going into the game is already marked as in. • The player coming out of the game is not marked as in.
NOT FOUND, ADD? NN* in for NN = current setting	This message is displayed if the player going in the game is not found in the roster. Press **<YES>** to add the player to the roster. Otherwise, press **<NO>** followed by **<INDIV. SUB. •>** to try entering the sub again.
IND SUB- HOME NOT FOUND NN NN = current setting	This message is displayed if the player going out of the game is not found in the roster. Press **<INDIV. SUB. •>** to try entering the sub again.

Mass Substitution

Display	Action
MASS SUB-HOME PLAYER 1 NN * NN = current setting	After the home or guest **<MASS SUB. •>** key is pressed, the LCD will display a message asking for the first of five player numbers that are going into the game. Enter the jersey number on the number pad and press **<ENTER>** for each of the five players. Press **<CLEAR>** at any time to exit the Mass Substitution function.
MASS SUB-HOME SUB OK	This message is displayed if no errors are found.
MASS SUB-HOME DUPLICATE NN NN = current setting	This message displays for each duplicate jersey number found for the five players going into the game. Press **<YES>** to correct the jersey number. Enter the correct jersey number and press **<ENTER>**.
NOT FOUND, ADD? PLAYER 1 NN NN = current setting	This message displays for each player not found in the roster. Press **<YES>** to add the jersey number. Press **<NO>** to ignore and select another jersey number. Enter the correct jersey number and press **<ENTER>**.

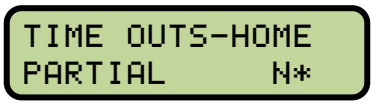
7.2 Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

Time Out

Note: Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-HOME FULL N* N = current setting	Press **<EDIT>** followed by **<TIME OUT>** for the home or guest team to display the current setting of full time outs. Enter the correct number of full time outs on the number pad and press **<ENTER>**.

Display	Action
 N = current setting	After accepting or rejecting the number of full time outs, the number of partial time outs is displayed. Enter the correct number of partial time outs on the number pad and press **<ENTER>**.

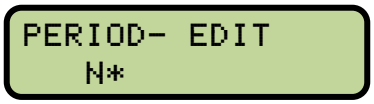
Score +1, +2, +3, -1

Display	Action
 NNN = current setting	Press **<EDIT>** and any of the **SCORE** keys for the home or guest team to display the current team score setting. Enter the correct team score on the number pad and press **<ENTER>**.

Team Fouls +1

Display	Action
 N = current setting	Press **<EDIT>** followed by **<TEAM FOULS>** for the home or guest team to display the current team foul setting. Enter the correct number of team fouls on the number pad and press **<ENTER>**.

Period +1

Display	Action
 N = current setting	Press **<EDIT>** followed by **<PERIOD +1>** for the home or guest team to display the period setting. Enter the correct period number on the number pad and press **<ENTER>**.

Time Out On/Off

Display	Action
TIME OUTS-EDIT FULL MM:SS* MM:SS = minutes, seconds	Press **<EDIT>** followed by **<TIME OUT ON/OFF>** to display the current time setting for full time outs. Enter the correct time on the number pad and press **<ENTER>**.
TIME OUTS-EDIT PARTIAL MM:SS* MM:SS = minutes, seconds	After accepting or rejecting the full time outs time setting, the partial time outs time setting is displayed. Enter the correct time on the number pad and press **<ENTER>**.

7.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys, exits the Menu function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD. Press **<CLEAR>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.
HOME- TEAM NAME _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to fifteen (15) characters for the team name and press **<ENTER>**. **Insert the BASKETBALL (LL-2433) insert to continue.**

Display	Action
HOME- TEAM ABBR _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to ten (10) characters for the team abbreviation and press **<ENTER>**. **Insert the BASKETBALL (LL-2433) insert to continue.**
MENU- HOME EDIT PLAYERS?	Press **<YES>** to assign the jersey numbers for all the players in the roster. Press **<NO>** or the left arrow key to exit the submenu and return to the Main menu.
MENU- HOME PLAYER 01 NN* NN = current setting	Once Edit Players is selected, enter the jersey number for that player from the official roster and press **<ENTER>**. The next player is shown on the LCD. Continue entering the jersey numbers for up to 15 players. Press **<CLEAR>** to advance to the next option.
MENU- HOME CLEAR STATS?	This function clears all game statistics and should only be used before the start of a game. Press **<YES>** to clear the in-game stats for all players in the team roster. Press **<NO>** to decline the selection.

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.

Display	Action
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.
MENU- DISPLAY BLANK SCBD?	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation.
PRESS ANY KEY TO RETURN TO GAME	Press the down arrow key to scroll to the next selection.
MENU-DISPLAY SYNC TO CHAN	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off.
SYNC TO CHAN ON 1-ON, 2-OFF	**Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
MENU- DISPLAY CLOCK CAPTIONS	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off.
CLOCK CAPTION- 1-ON, 2-OFF ON	Press the down arrow key to scroll to the next selection.

Display	Action
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD. Refer to **Section 7.4**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.

Display	Action
MENU-TIME OF DAY 1*GAME 2-TOD	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

7.4 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Number of Periods

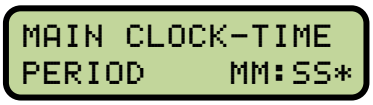
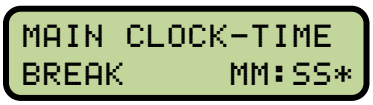
Display	Action
NO. OF PERIODS=N 2 OR 4?	The No. of Periods indicates whether the game consists of two halves or four quarters Press **<2>** or **<4>** on the number pad to choose the desired number of periods.
N = current setting	

Main Clock

Note 1: The settings for the **Main Clock** are used with the **<SET MAIN CLOCK>** key.

Note 2: The period, break and overtime lengths are used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action
MAIN CLOCK-MODE TENTH SECOND? Y	When the main clock is set to count down and tenths of a second is selected, the main clock displays in tenths of a second remaining when the time is below one minute. Press **<YES>** to set the main clock to display tenths of a second. Press **<NO>** to display whole seconds.

Display	Action
 MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press **<ENTER>**. For example, 20:00 per half or 8:00 per quarter **Note:** Pressing **<ENTER>** to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.
 MM:SS = minutes, seconds	Set the amount of time between periods. Enter the correct amount of time for break length in minutes and seconds on the number pad and press **<ENTER>**. For example, 1:00
 MM:SS = minutes, seconds	Set the amount of time for the overtime periods. Enter the correct amount of time for overtime periods in minutes and seconds on the number pad and press **<ENTER>**. For example, 5:00

Shot Clock

Display	Action
    N = current setting	This setting allows a shot clock to display tenths of a second (**NBA shot clocks only**). Press **<YES>** to set ON or press **<NO>** to set OFF. If **YES** is selected, a prompt will ask to enter a value for when to show the tenths. The tenths digit and a period will display when the shot time is below the set value. Enter a value of **<0>** to **<9>** and press **<ENTER>** (use “0” for 10 seconds).

Display	Action
SHOT CLOCK-TIME RESET 1 MM:SS* SHOT CLOCK-TIME RESET 2 MM:SS* MM:SS = minutes, seconds	This setting is used for the **<RESET>** button on the remote shot clock control console. **Note:** The current setting for the **<RESET>** time displays on the LCD until the first number key is pressed. Enter the correct amount of reset time in minutes and seconds on the number pad and press **<ENTER>**. For example, 00:45
SHOT CLOCK-MODE SYNC W/ MAIN? Y	Press **<YES>** to synchronize the shot clock with the main clock. If **<STOP>** for the main clock is pressed while the main and shot clocks are running, the shot clock stops. The shot clock restarts when **<START>** is pressed for the main clock. Press **<NO>** to allow the shot clock to run independently of the main clock. The shot clock starts and stops only with the switch on the remote shot clock control console.
SHOT CLOCK-MODE AUTO BLANK? Y	Press **<YES>** to blank the shot clock time when the shot clock time is greater than or equal to the main clock time. The shot clock is reset and stopped when the display is blanked to eliminate inadvertent sounding of shot clock horn. Press **<NO>** to display the shot clock time at all times.

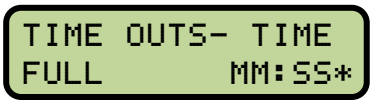
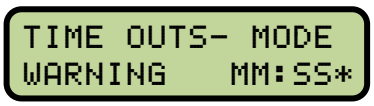
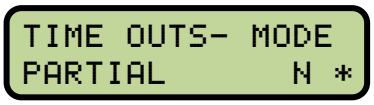
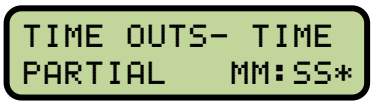
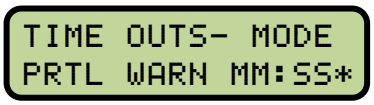
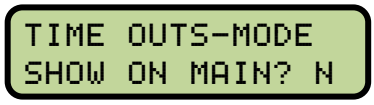
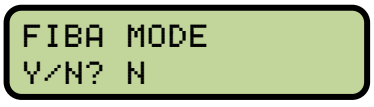
Time Outs

Note 1: If a full or partial time out is not needed for the HOME or GUEST **<TIME OUT>** keys, enter zero for the number of time outs.

Note 2: If a full or partial time out is not needed for **<TIME OUT ON/OFF>**, enter zero for the time.

Note 3: The number for each type of time out must be manually entered for an overtime period using the **<EDIT> <TIME OUT>** key sequence for each team.

Display	Action
TIME OUTS- MODE FULL N * N = current setting	Enter the number of full time outs on the number pad and press **<ENTER>**.

Display	Action
 MM:SS = minutes, seconds	Enter the amount of time for a full time out in minutes and seconds on the number pad and press **<ENTER>**. For example, 1:00
 MM:SS = minutes, seconds	A warning horn can be configured to signal the end of a full time out. While the time out clock is counting down, the horn will sound for one second when the warning time is reached. Enter a zero for the time to disable the warning horn. Enter the time in minutes and seconds on the number pad and press **<ENTER>**.
 N = current setting	Enter the number of partial time outs on the number pad and press **<ENTER>**.
 MM:SS = minutes, seconds	Enter the amount of time for a partial time out in minutes and seconds on the number pad and press **<ENTER>**. For example, 00:20
 MM:SS = minutes, seconds	A warning horn can be configured to signal the end of a partial time out. While the time out clock is counting down, the horn will sound for one second when the warning time is reached. Enter a zero for the time to disable the warning horn. Enter the time in minutes and seconds on the number pad and press **<ENTER>**.
	Press **<YES>** to display the time out time on the LCD and the main clock digits of the scoreboard while the time out clock is active. Press **<NO>** to display the time out time on the LCD only.
	Press **<YES>** to enable FIBA mode (international rules). This will display number of time outs taken on the scoreboard. At the beginning of a new game, time outs will start at 0 and increment as they are taken, up to the max configured value. Press **<NO>** to show time outs remaining on the scoreboard.

Team Score

Display	Action
TEAM SCORE- MODE UPDATE PLAYER? Y	**This feature must be enabled for statistics displays.** Press **<YES>** to allow entry of a player number after the home or guest team score are incremented or decremented. Press **<NO>** to prevent entry of a player number.

Team Fouls

Display	Action
TEAM FOULS- MODE UPDATE PLAYER? Y	**This feature must be enabled for statistics displays.** Press **<YES>** to allow entry of a player number after the home or guest team fouls are incremented or decremented. Press **<NO>** to prevent entry of a player number.
TEAM FOULS- MODE 1-ON-1 BONUS N * N = current setting	Enter the number of team fouls permitted before the 1-on-1 bonus applies on the number pad and press **<ENTER>**. The home and guest team fouls stop incrementing at this number unless the 2-shot bonus is enabled. Enter zero to disable this feature.
TEAM FOULS- MODE 2 SHOT BONUS NN* NN = current setting	Enter the number of team fouls permitted before the 2-shot bonus applies on the number pad and press **<ENTER>**. Enter zero to disable this feature.

Select Captions

Display	Action
SELECT CAPTIONS ON 1← →2 OFF	This menu option allows for the controlled backlit captions to be turned ON/OFF. Press the **<1>** key to select ON and OFF for captions controlled by control #1. Press the **<2>** key to select ON and OFF for captions controlled by control #2.

Select Team Foul Display

Display	Action
TEAM FOULS SHOW ON STATS? Y	This menu option allows the selection of showing team fouls on line 6 of the player stats panel. To accept display of team fouls, press **<YES>**. To decline display of team fouls, press **<NO>**.

Score by Quarter

Display	Action
SCORE BY QUARTER Y/N? N	This feature allows for scores to be recorded by quarter. This data is available on the RTD output. Press **<YES>** to score by quarter or press **<NO>** to not score by quarter. **Note:** If this feature is enabled, all scores are edited by quarter. Use this function only when needed.

Switch Output

The All Sport® 5000 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK= 0.

To display the desired switch setting:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.
2. Press **<YES>** to select the new setting.
3. Press **<NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED? N = current setting	The switch remains open at all times and any external devices are disabled.

Setting	Result
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Number of Periods	4			
Tenth of a Second	Yes			
Period Length	8:00			
Break Length	10:00			
Overtime Length	5:00			
Shot Clock Tenth Sec.	No			
Shot Clock Reset 1	0:45			
Shot Clock Reset 2	0:30			
Sync Shot with Main	Yes			
Shot Clock Auto Blank	Yes			
Full Time Outs	3			
Full Time Out	1:00			
Time Out Warning	0:00			
Partial Time Outs	2			
Partial Time Out	00:20			
Partial Time Out Warn	0:00			
Show on Main	No			
Update Player Score	No			
Update Player Fouls	Yes			
1-on-1 Bonus	7			
2-Shot Bonus	10			
Select Captions	1-ON			
Show Fouls on Stats	No			
Score by Quarter	No			
Switch Output	1-Clock = 0			

Section 8: Football Operations

Sport Insert: LL-2437

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**. The **Quick Reference** is located in **Appendix D**.

Reference Drawings:

Insert; LL-2437 A/S 5000, Football..... **Drawing A-122652**
Block Diagrams, A/S 3000 or 5000 Outdoor Sports..... **Drawing A-124690**
Insert; LL-2441 A/S 5000, Team Name ..... **Drawing A-125290**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

Write the correct code number here: | | | | |

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

8.1 Football Keys

Time Out On/Off

<TIME OUT ON/OFF> stops and starts the time out clock. The length of both the full and partial time outs can also be changed when the time out clock is stopped.

> **Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-SELECT FULL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** to display the configured time for full time out length. To start the full time out press **<YES>**. To decline the selection of the full time out press **<NO>**.

Display	Action
TIME OUTS-SELECT PARTIAL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** a second time (or use the up and down arrow keys) to display the configured time for partial time out length. To start the partial time out press **<YES>**. To decline the selection of the partial time out press **<NO>**.

Set Play Clock

The **SET PLAY CLOCK** setting is used by the remote play clock console. The configured play clock times are set using the **EDIT SETTINGS** function when a new code is selected.

Note 1: When **RESET ON STOP** is set to yes (**Y**) the **STOP** switch automatically resets the play clock using the **RESET 1** time and the **RESET** button uses the **RESET 2** time.

Note 2: When **RESET ON STOP** is set to no (**N**) the **STOP** switch does not reset the play clock and the **RESET** button uses the **RESET 1** time.

Display	Action
PLAY CLOCK-EDIT CURR MM:SS * MM:SS = minutes, seconds	Press **<SET PLAY CLOCK •>** to display the configured time for overtime length. To accept the play clock time length, press **<YES>**. To decline the selection of the play clock time length, press **<NO>**. To change the play clock time length and set the play clock, enter the new time in minutes and seconds on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
PLAY CLOCK-EDIT RESET 1 MM:SS * MM:SS = minutes, seconds	Press **<SET PLAY CLOCK •>** a second time to display the configured time for Reset 1 length. To accept the play clock Reset 1 length, press **<YES>**. To decline the selection of the play clock Reset 1 length press **<NO>**. To change the play clock Reset 1 length and set the play clock, enter the new time in minutes and seconds on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.

Display	Action
PLAY CLOCK-EDIT RESET 2 MM:SS * MM:SS = minutes, seconds	Press **<SET PLAY CLOCK •>** a third time to display the configured time for Reset 2 length. To accept the play clock Reset 2 length, press **<YES>**. To decline the selection of the play clock Reset 2 length, press **<NO>**. To change the play clock Reset 2 length and set the play clock, enter the new time in minutes and seconds on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.

Recall Last Down

The **<RECALL LAST DOWN>** key is used to re-display the Ball On, Down, To Go, and Possession values of the previous play if a new value has been incorrectly entered. If Auto Calculate is off, this function is disabled (see **Section 8.4**).

Display	Action
LAST DOWN RECALL Y/N	Press **<RECALL LAST DOWN>** to redisplay the Ball On, Down, To Go, and Possession values of the previous play. Press **<YES>** to use the previous values. Press **<NO>** to use the values that were just entered.

Quarter +1

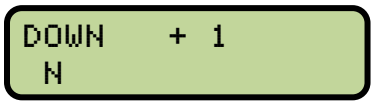
Display	Action
QUARTER-+1 N N = current setting	Press **<QUARTER +1>** to increment the quarter number. The full time outs are automatically reset at halftime. **Note:** When the quarter number increments to 2 or 4 and Auto Calculate is enabled, the play direction is changed. The ←I or I→ symbol shows the current play direction.

Yards To Go

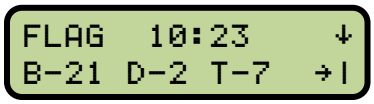
The **<YARDS TO GO •>** key is used to manually enter how many yards are needed to reach the next first down from the current yard line.

Display	Action
 NN = current setting	Enter the number of yards to go for a first down and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.

Down +1

Display	Action
 N = current setting	Press **<DOWN +1>** to manually increment the down number. A prompt showing down number displays briefly.

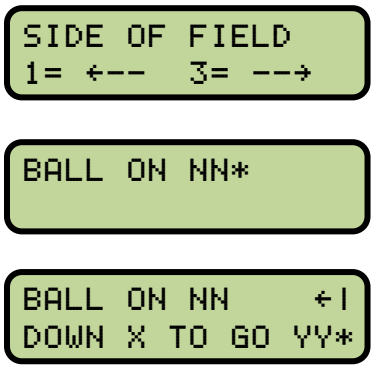
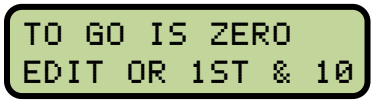
Penalty Flag

Display	Action
	Press **<PENALTY FLAG>** to indicate a penalty on the play. "FLAG" will appear on the LCD (and as RTD field # 78). With Auto Calculate enabled (see **Section 8.4**), the down will not increment if **<PENALTY FLAG>** is pressed before pressing **<BALL ON>**. Clear the penalty flag by pressing the key again, or entering the ball on settings.

Ball On

The **<BALL ON •>** key is used to manually enter the field position (yard line) of the ball. Changing the ball on will vary depending on the Auto Calculate setting (see **Section 8.4**).

Display	Action
 NN = current setting	**Auto Calculate Disabled:** Enter the field position (yard line) of the ball and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game. Press **<CLEAR>** and **<ENTER>** to blank the Ball On, Down, and To Go sections of the scoreboard.

Display	Action
 NN = current ball on setting X = current down setting YY = current to go setting	**Auto Calculate Enabled:** Select the current side of field for ball placement: • Press **<1>** or the left arrow to set side of field to left. • Press **<3>** or the right arrow to set side of field to right. Enter the field position (yard line) of the ball and press **<ENTER>**. **DOWN** and **TO GO** must be manually updated at this time. To accept the current settings, press **<YES>**. To decline the selection of the current settings, press **<NO>**. Use the arrow keys to scroll to select a field to edit. Enter the correct value on the number pad and press **<ENTER>**.
	This prompt displays briefly if the **TO GO** value is zero. If the number of yards to go is actually zero, press the **<FIRST DOWN>** key. If a short distance remains, enter the correct **TO GO** value and press **<ENTER>**.
 NN = current setting	**ILLEGAL VALUE** displays when the **BALL ON** value is greater than the **CENTER FIELD** value entered in the settings menu. Enter the correct field position (yard line) of the ball and press **<ENTER>**. The down is automatically set to **1** and the To Go yards set to **10**.

First & 10

The **<FIRST DOWN>** key is used to set the down to 1 and yards to go to 10. If Auto Calculate is on, this key is disabled and the **<BALL ON •>** key is used to set the values.

Time Out

The home and guest **<TIME OUT>** keys are used to decrement the number of time outs remaining and start the time out clock. The scoreboard indicator is turned on when the type of time out is selected (full or partial). The scoreboard indicator is turned off when the time out clock expires or is stopped.

> **Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-HOME FULL N N = current setting	Press **<TIME OUT>** to display the number of full time outs remaining. To accept the full time out and start the time out clock press **<YES>**. To decline the selection of a full time out press **<NO>**.
TIME OUTS-HOME PARTIAL N N = current setting	Press **<TIME OUT>** a second time (or use the up and down arrow keys) to display the number of partial time outs remaining. To accept the partial time out and start the time out clock press **<YES>**. To decline the selection of a partial time out press **<NO>**.
TIME OUTS-HOME OFF	To exit the running time out clock, press **<TIME OUT>**. This will turn the time out OFF.
TIME OUTS-HOME NO TIME OUTS	This message appears when there are no full or partial time outs left.

Score +1, +2, +3, +6, -1

The home and guest **<SCORE +1>**, **<SCORE +2>**, **<SCORE +3>** and **<SCORE +6>** keys are used to increment the team score and the **<SCORE -1>** key is used to decrement the team score. These keys will also blank the BALL ON, DOWN, and TO GO values when pressed.

Display	Action
TEAM SCORE- +1 HOME NNN NNN = current setting	Press the appropriate score key to increment or decrement the score for the home or guest team. The LCD shows which key was pressed and the new value for the team score of the corresponding team.

Possession

The **<POSS>** keys turn the home and guest possession indicators on and off. Changing the possession will vary depending on the Auto Calculate setting (see **Section 8.4**).

Display	Action
HOME POSSESSION ON	**Auto Calculate Disabled:** Press the home or guest **<POSS>** key to turn on the possession indicator for that team.
HOME POSSESSION OFF	To turn off the possession indicator, press the same **<POSS>** key a second time or press the opposite **<POSS>** key.
HOME POSSESSION ON PLAY DIRECTION 1= ←-- 3= --→ SIDE OF FIELD 1= ←-- 3= --→	**Auto Calculate Enabled:** Press the home or guest **<POSS>** key to turn on the possession indicator for that team. Select the direction of play for the current series of downs: • Press **<1>** or left arrow to set direction from right to left. • Press **<3>** or right arrow to set direction from left to right. Select the current side of field for ball placement: • Press **<1>** or left arrow to set side of field to left. • Press **<3>** or right arrow to set side of field to right.
BALL ON NN* NN = current setting	Enter the field position (yard line) of the ball and press **<ENTER>**. See **Ball On** section above for more information.

Note: If player stats are being received from the Daktronics Scoring-Timing Interface (DSTI) the YARDS RUSHING/PASSING keys will be disabled. The LCD displays the messages below when these keys are pressed. Refer to **ED-13009** for more information about DSTI.

Display	Action
STATS RECEIVED KEY DISABLED EXIT STATS MODE Y/N?	The key disabled message will display for one second and then the **<EXIT STATS>** message will display and wait for a **<YES>** or **<NO>** key. If the **<YES>** key is pressed, stats data will be saved in the console and the console will **<EXIT STATS>** mode until another stats packet is received. This will allow the operator to enter player stats from the console if the DSTI connection is lost.

Yards Rushing

Press **<YARDS RUSHING •>** to manually enter the number of rushing yards gained or lost on a play.

Display	Action
RUSHING -HOME YARDS NN* NN = current setting	Enter the number of rushing yards gained or lost on a play and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
RUSHING -HOME 1=GAIN 3=LOSS	Select whether to add or subtract from total rushing yards: • Press **<1>** for a gain. • Press **<3>** for a loss.
RUSHING -HOME YRDS TOTAL NNN NNN = current setting	A prompt showing total rushing yards displays briefly.

Yards Passing

Press **<YARDS PASSING •>** to manually enter the number of passing yards gained or lost on a play.

Display	Action
PASSING -HOME YARDS NN* NN = current setting	Enter the number of passing yards gained or lost on a play and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
PASSING -HOME 1=GAIN 3=LOSS	Select whether to add or subtract from total passing yards: • Press **<1>** for a gain. • Press **<3>** for a loss.
PASSING -HOME YRDS TOTAL NNN NNN = current setting	A prompt showing total passing yards displays briefly.

First Downs +1

Display	Action
HOME + 1 FIRST DOWNS NN NN = current setting	Press **<FIRST DOWNS +1>** to manually increment the number of first downs. A prompt showing total first downs displays briefly.

8.2 Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

Time Out

Note: Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-HOME FULL N* N = current setting	Press **<EDIT>** followed by **<TIME OUT>** for the home or guest team to display the current setting of full time outs remaining. Enter the correct number of full time outs on the number pad and press **<ENTER>**.
TIME OUTS-HOME PARTIAL N* N = current setting	After accepting or rejecting the number of full time outs, the number of partial time outs is displayed. Enter the correct number of partial time outs on the number pad and press **<ENTER>**.

Score +1, +2, +3, +6, -1

Display	Action
TEAM SCORE- EDIT HOME NNN* NNN = current setting	Press **<EDIT>** and any of the **SCORE** keys for the home or guest team to display the current team score setting. Enter the correct team score on the number pad and press **<ENTER>**.

Quarter +1

Display	Action
QUARTER-EDIT N* N = current setting	Press **<EDIT>** followed by **<QUARTER +1>** to display the current quarter setting. Enter the correct quarter number on the number pad and press **<ENTER>**. The full time outs may be reset.

Time Out On/Off

Display	Action
TIME OUTS-EDIT FULL MM:SS* MM:SS = minutes, seconds	Press **<EDIT>** followed by **<TIME OUT ON/OFF>** to display the current time setting for full time outs. Enter the correct time on the number pad and press **<ENTER>**.
TIME OUTS-EDIT PARTIAL MM:SS* MM:SS = minutes, seconds	After accepting or rejecting the full time outs time setting, the partial time outs time setting is displayed. Enter the correct time on the number pad and press **<ENTER>**.

8.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the Menu function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD. Press **<CLEAR>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Display	Action
HOME- TEAM NAME _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to fifteen (15) characters for the team name and press **<ENTER>**. **Reinsert the FOOTBALL (LL-2437) insert to continue.**
HOME- TEAM ABBR _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to ten (10) characters for the team abbreviation and press **<ENTER>**. **Reinsert the FOOTBALL (LL-2437) insert to continue.**

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.

Display	Action
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.
MENU- DISPLAY BLANK SCBD?	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation.
PRESS ANY KEY TO RETURN TO GAME	Press the down arrow key to scroll to the next selection.
MENU-DISPLAY SYNC TO CHAN	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off.
SYNC TO CHAN ON 1-ON, 2-OFF	**Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
MENU- DISPLAY CLOCK CAPTIONS	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off.
CLOCK CAPTION- 1-ON, 2-OFF ON	Press the down arrow key to scroll to the next selection.

Display	Action
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD. Refer to **Section 8.4**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.

Display	Action
MENU-TIME OF DAY 1*GAME 2-TOD	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

8.4 Settings

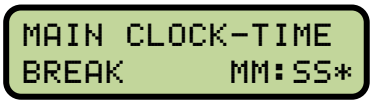
The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Main Clock

Note 1: The settings for the Main Clock are used with the **<SET MAIN CLOCK>** key.

Note 2: The period, break, and overtime lengths are used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action
MAIN CLOCK-MODE TENTH SECOND? Y	When the main clock is set to count down and tenths of a second is selected, the main clock displays in tenths of a second remaining when the time is below one minute. Press **<YES>** to set the main clock to display tenths of a second. Press **<NO>** to display whole seconds.
MAIN CLOCK-TIME PERIOD MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press **<ENTER>**. For example, 12:00 per quarter. **Note:** Pressing **<ENTER>** to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.

Display	Action
 MM:SS = minutes, seconds	Set the amount of time between periods. Enter the correct amount of time for break length in minutes and seconds on the number pad and press **<ENTER>**. For example, 20:00.
 MM:SS = minutes, seconds	Set the amount of time for the overtime periods. Enter the correct amount of time for overtime periods in minutes and seconds on the number pad and press **<ENTER>**. For example, 5:00.

Play Clock

The **PLAY CLOCK** setting is used by the remote play clock console.

Note 1: When **RESET ON STOP** is set to yes (**Y**) the **STOP** switch automatically resets the play clock using the **RESET 1** time and the **RESET** button uses the **RESET 2** time.

Note 2: When **RESET ON STOP** is set to no (**N**) the **STOP** switch does not reset the play clock and the **RESET** button uses the **RESET 1** time.

Display	Action
 MM:SS = minutes, seconds	Enter the correct amount of reset time in minutes and seconds on the number pad and press **<ENTER>**. For example, 00:25.
 MM:SS = minutes, seconds	Enter the correct amount of reset time in minutes and seconds on the number pad and press **<ENTER>**. For example, 00:40.
	Press **<YES>** to automatically reset the play clock when the **<STOP>** button on the remote play clock control console is pressed. Press **<NO>** to disable this feature.

Time Outs

Note 1: If a full or partial time out is not needed for the HOME or GUEST **<TIMEOUT>** keys, enter zero for the number of time outs.

Note 2: If a full or partial time out is not needed for **<TIME OUT ON/OFF>**, enter zero for the time.

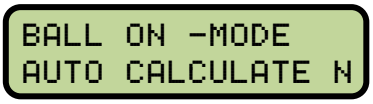
Note 3: The number for each type of time out must be manually entered for an overtime period using the **<EDIT><TIMEOUT>** key sequence for each team.

Display	Action
TIME OUTS- MODE FULL N * N = current setting	Enter the number of full time outs on the number pad and press **<ENTER>**.
TIME OUTS- TIME FULL MM:SS* MM:SS = minutes, seconds	Enter the amount of time for a full time out in minutes and seconds on the number pad and press **<ENTER>**. For example, 0:30
TIME OUTS- MODE WARNING MM:SS* MM:SS = minutes, seconds	A warning horn can be configured to signal the end of a full time out. While the time out clock is counting down, the horn will sound for one second when the warning time is reached. Enter a zero for the time to disable the warning horn. Enter the time in minutes and seconds on the number pad and press **<ENTER>**.
TIME OUTS- MODE PARTIAL N * N = current setting	Enter the number of partial time outs on the number pad and press **<ENTER>**.
TIME OUTS- TIME PARTIAL MM:SS* MM:SS = minutes, seconds	Enter the amount of time for a partial time out in minutes and seconds on the number pad and press **<ENTER>**. For example, 00:20
TIME OUTS-MODE SHOW ON MAIN? N	Press **<YES>** to display the time out time on the LCD and the main clock digits of the scoreboard while the time out clock is active. Press **<NO>** to display the time out time on the LCD only.

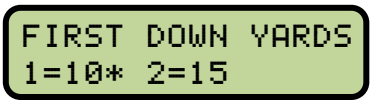
Center of Field Yard Line

Display	Action
 NN = current setting	Enter the value of the correct center field yard line on the number pad and press **<ENTER>**. **Note:** This value is used with the Auto Calculate function to calculate Ball On and To Go values the center of the field is crossed.

Auto Calculate

Display	Action
	Press **<YES>** to enable the Auto Ball On - To Go calculation. The number of yards to go and the correct down are automatically calculated and displayed. Press **<NO>** to disable this feature and manually enter the down and the number of yards to go.

First Down Yards

Display	Action
	Press **<1>** to set the number of yards to first down at 10 yards (default). Press **<2>** to set the number of yards to first down at 15 yards.

Number of Downs

Display	Action
 N = current setting	Enter the correct number of downs on the number pad and press **<ENTER>**.

Select Captions

Display	Action
SELECT CAPTIONS ON 1←- -→ 2 OFF	This menu option allows for the controlled backlit captions to be turned ON/OFF. Press the **<1>** key to select ON and OFF for captions controlled by control #1. Press the **<2>** key to select ON and OFF for captions controlled by control #2.

Score by Quarter

Display	Action
SCORE BY QUARTER Y/N? N	This feature allows for scores to be recorded by quarter. This data is available on the RTD output. Press **<YES>** to score by quarter or press **<NO>** to not score by quarter. **Note:** If this feature is enabled, all scores are edited by quarter. Use this function only when needed.

Switch Output

The All Sport® 5000 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK= 0.

To display the desired switch setting:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.

2. Press **<YES>** to select the new setting.

3. Press **<NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED? N = current setting	The switch remains open at all times and any external devices are disabled.

Setting	Result
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Tenth of a Second	No			
Period Length	12:00			
Break Length	20:00			
Overtime Length	5:00			
Play Clock Reset 1	0:25			
Play Clock Reset 2	0:40			
Play Clock Reset On Stop	No			
Full Time Outs	3			
Full Time Out	1:00			
Time Out Warning	0:00			
Partial Time Outs	0			
Partial Time Out	0:00			
Show on Main	No			
Center of Field	50			
Auto Calculate	No			
First Down Yards	10			
Number of Downs	4			
Select Captions	1-ON			
Score by Quarter	No			
Switch Output	1-Clock = 0			

Section 9: Hockey/Lacrosse/Handball Operations

Sport Inserts: **LL-2436 – Hockey/Lacrosse/Handball**
0G-1084219 – Custom Lacrosse

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**. The **Quick Reference** is located in **Appendix D**.

Reference Drawings:

Insert; LL-2436, Hockey/Handball/Lacrosse ..... **Drawing A-124218**
Block Diagram, A/S 3000 or 5000 Hockey..... **Drawing A-124689**
Insert; LL-2441 A/S 5000, Team Name ..... **Drawing A-125290**
Insert; Custom Lacrosse ..... **Drawing A-1084219**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

Write the correct code number here: | | | | |

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

9.1 Shots on Goal Console Operation

Enter code 4000 to use the console as a shots-on-goal console. All keys other than **<SHOTS ON GOAL +1>** and **<SHOTS ON GOAL -1>** will be disabled.

9.2 Hockey/Lacrosse/Handball Keys

Time Out On/Off

<TIME OUT ON/OFF> stops and starts the time out clock. The length of both the full and partial time outs can also be changed when the time out clock is stopped.

Note: Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-SELECT FULL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** to display the configured time for full time out length. To start the full time out press **<YES>**.

Display	Action
	To decline the selection of the full time out press **<NO>**.
TIME OUTS-SELECT PARTIAL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** a second time (or use the up and down arrow keys) to display the configured time for partial time out length. To start the partial time out press **<YES>**. To decline the selection of the partial time out press **<NO>**.

Enable Penalty Clocks

Press **<ENABLE PENALTY CLOCKS>** to allow the penalty clocks to count when the main clock is on.

Disable Penalty Clocks

Press **<DISABLE PENALTY CLOCKS>** to disable the penalty clocks from counting when the main clock is on.

Minor/Major Penalty

The **<MINOR PENALTY>** and **<MAJOR PENALTY>** are used to enter the penalty time when **<PLAYER PENALTY>** is selected. Refer to **Player Penalty**.

Period +1

Display	Action
PERIOD +1 N N = current setting	Press **<PERIOD +1>** to increment the period number. A prompt showing period number displays briefly.

Penalty

Display	Action
HOME PENALTY ON	Press the home or guest **<PENALTY>** key, to turn on the penalty indicator for that team.
HOME PENALTY OFF	To turn off the penalty indicator, press the same **<PENALTY>** key a second time.

Time Out

The home and guest **<TIME OUT>** keys are used to decrement the number of time outs remaining and start the time out clock. The scoreboard indicator is turned on when the type of time out is selected (full or partial). The scoreboard indicator is turned off when the time out clock expires or is stopped.

> **Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-HOME FULL N N = current setting	Press **<TIME OUT>** to display the number of full time outs remaining. To accept the full time out and start the time out clock press **<YES>**. To decline the selection of a full time out press **<NO>**.
TIME OUTS-HOME PARTIAL N N = current setting	Press **<TIME OUT>** a second time (or use the up and down arrow keys) to display the number of partial time outs remaining. To accept the partial time out and start the time out clock press **<YES>**. To decline the selection of a partial time out press **<NO>**.
TIME OUTS-HOME OFF	To exit the running time out clock, press **<TIME OUT>**. This will turn the time out OFF.
TIME OUTS-HOME NO TIME OUTS	This message appears when there are no full or partial time outs left.

Player Penalty

Display	Action
 NN = player number MM:SS = minutes, seconds	Press **<PLAYER PENALTY •>** to add a new penalty or edit an existing penalty for the home or guest team. To edit an existing penalty, use the up and down arrow keys to scroll to the desired penalty and press **<ENTER>**. Enter the jersey number of the player with the penalty on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
	The default penalty time initially displayed is the minor penalty value that was entered in **Settings.** Enter the penalty time by pressing the **<MINOR PENALTY>** or **<MAJOR PENALTY>** keys or use the number pad to enter the correct penalty time and then press **<ENTER>.** Pressing **<MINOR PENALTY>** or **<MAJOR PENALTY>** additional times will add the configured time for that penalty with each press. Press **<CLEAR>** if **<MINOR PENALTY>** or **<MAJOR PENALTY>** are pressed too many times.

Set Main Clock

Display	Action
 MM:SS.T = minutes, seconds, tenths of a second	After the main clock has been stopped, press **<SET MAIN CLOCK>** to display the current time of the main clock. To change the time, enter the desired time on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.

Display	Action
ADJUST PENALTY TIMERS Y/N?	If there are penalty times and **<START>** has been pressed at least once after setting the period time, the **Adjust Penalty** timers question will be displayed. A **<YES>** response will adjust all penalty timers to the correct time based on the time entered for the main clock. A **<NO>** response will not change the penalty timers.

Recall Shot Time

Display	Action
SHOT CLOCK-MODE RECALL Y/N	Press **<RECALL SHOT TIME>** to recall the shot time that was remaining before the last shot clock reset was pressed. To accept the recall press **<YES>**. To decline the recall press **<NO>**.

Set Shot Time

Display	Action
SHOT CLOCK-EDIT CURR MM:SS* MM:SS = minutes, seconds	Press **<SET SHOT TIME>** to display the current shot clock time length. To accept the current shot clock time length press **<YES>**. To decline the selection of the current shot clock time length press **<NO>**. Use the keypad to enter the new time in minutes and seconds and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
SHOT CLOCK-EDIT RESET 1 MM:SS* MM:SS = minutes, seconds	Press **<SET SHOT TIME>** a second time to display the configured time for shot clock **Reset 1** length. To accept the shot clock **Reset 1** length press **<YES>**. To decline the selection of the shot clock **Reset 1** length, press **<NO>**. Use the keypad to enter the new time in minutes and seconds and press **<ENTER>**.

Display	Action
	Press **<CLEAR>** twice to clear changes and return to the game. **Note:** The configured time of shot clock is set using the **EDIT SETTINGS** function when a new code is selected.
SHOT CLOCK-EDIT RESET 2 MM:SS* MM:SS = minutes, seconds	Press **<SET SHOT TIME>** a third time to display the configured time for shot clock **Reset 2** length. To accept the shot clock **Reset 2** length press **<YES>**. To decline the selection of the shot clock **Reset 2** length press **<NO>**. To change the shot clock **Reset 2** length and set the shot clock enter the new time in minutes and seconds on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game. **Note:** The configured time of shot clock is set using the **EDIT SETTINGS** function when a new code is selected.

Auto Horn Interval Timer

The Auto Horn Interval Timer function can be used to automatically sound the horn at regular intervals, for instance, to indicate player substitutions.

Display	Action
AUTO HORN- ON 1-ON, 2-OFF	Press **<AUTO HORN •>** followed by **<1>** to ensure the auto horn is enabled. With the auto horn disabled, it will not be possible to enable the interval timer.
HORN-INTERVAL 1-ON, 2-OFF OFF HORN-INTERVAL TIME =M M = minutes	Press **<1>** again to enable the interval timer. Enter a number **<1>** through **<5>** to set the time in minutes that the horn will sound. When the interval timer is active, a lowercase “i” will appear on the main LCD display next to the clock direction arrow.

Score, Shots on Goal, Saves, Ground Balls & Face Offs

The home and guest **<SCORE +1, -1>**, **<SHOTS ON GOAL +1, -1>**, **<SAVES +1, -1>**, **<GROUND BALLS +1, -1>***, and **<FACE OFFS DRAW CTRL +1, -1>*** keys are all used to increment and decrement their respective totals. **<SCORE +1>** is used as an example.

* Only available with codes shown on insert 0G-1084219

Display	Action
TEAM SCORE- +1 HOME NNN NNN = current setting	Press the appropriate key to increment or decrement the total for the home or guest team. Enter the correct number on the number pad and press **<ENTER>**. The LCD shows which key was pressed and the new value for the team score of the corresponding team.

Clear All Penalties

Press **<CLEAR ALL PENALTIES •>** to delete all of the penalties for the home or guest team.

Display	Action
HOME PLYR/PEN CLEAR ALL Y/N?	Press **<YES>** to clear the penalties for all players in the roster. Press **<NO>** to decline the selection and return to the game.

Delete Penalty

Press **<DELETE PENALTY •>** to delete a single penalty for the home or guest team.

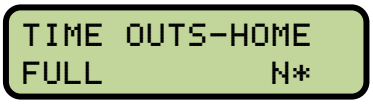
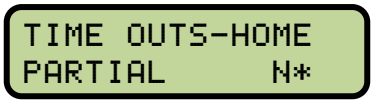
Display	Action
HOME DEL PEN? 1 PNN PN MM:SS NN = current setting MM:SS = minutes, seconds	Use the up and down arrow keys to scroll to the correct penalty and press **<ENTER>**. Press **<CLEAR>** to decline the selection and return to the game.

9.3 Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

Time Out

Note: Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
 N = current setting	Press **<EDIT>** followed by **<TIME OUT>** for the home or guest team to display the current setting of full time outs remaining. Enter the correct number of full time outs on the number pad and press **<ENTER>**.
 N = current setting	After accepting or rejecting the number of full time outs, the number of partial time outs is displayed. Enter the correct number of partial time outs on the number pad and press **<ENTER>**.

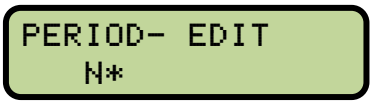
Score, Shots on Goal, Saves, Ground Balls & Face Offs

The home and guest **<SCORE +1, -1>**, **<SHOTS ON GOAL +1, -1>**, **<SAVES +1, -1>**, **<GROUND BALLS +1, -1>***, and **<FACE OFFS DRAW CTRL +1, -1>*** keys are all edited in the same way. **<SCORE +1>** is used as an example.

* Only available with codes shown on insert 0G-1084219

Display	Action
 NNN = current setting	Press **<EDIT>** and the appropriate statistic key to display the current setting. Enter the correct number on the number pad and press **<ENTER>**.

Period +1

Display	Action
 N = current setting	Press **<EDIT>** followed by **<PERIOD +1>** to display the current period setting. Enter the correct quarter number on the number pad and press **<ENTER>**. The full time outs are reset.

Time Out On/Off

Display	Action
 MM:SS = minutes, seconds	Press **<EDIT>** followed by **<TIME OUT ON/OFF>** to display the current time setting for full time outs. Enter the correct time on the number pad and press **<ENTER>**.

Display	Action
TIME OUTS-EDIT PARTIAL MM:SS* MM:SS = minutes, seconds	After accepting or rejecting the full time outs time setting, the partial time outs time setting is displayed. Enter the correct time on the number pad and press **<ENTER>**.

9.4 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the Menu function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection.

Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is an example.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD. Press **<CLEAR>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.
HOME- TEAM NAME _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to fifteen (15) characters for the team name and press **<ENTER>**. **Reinsert the HOCKEY (LL-2436) insert to continue.**

Display	Action
HOME- TEAM ABBR _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to ten (10) characters for the team abbreviation and press **<ENTER>**. **Reinsert the HOCKEY (LL-2436) insert to continue.**

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.

Display	Action
MENU- DISPLAY BLANK SCBD? PRESS ANY KEY TO RETURN TO GAME	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY SYNC TO CHAN SYNC TO CHAN ON 1-ON, 2-OFF	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. **Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
MENU- DISPLAY CLOCK CAPTIONS CLOCK CAPTION- 1-ON, 2-OFF ON	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. Press the down arrow key to scroll to the next selection.
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD. Refer to **Section 9.5**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY 1*GAME 2-TOD MENU-TIME OF DAY BLANK GAME DATA?	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game. If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

9.5 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Main Clock

Note 1: The settings for the Main Clock are used with the **<SET MAIN CLOCK>** key.

Note 2: The period, break, and overtime lengths are used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action
MAIN CLOCK-MODE TENTH SECOND? Y	When the main clock is set to count down and tenths of a second is selected, the main clock displays in tenths of a second remaining when the time is below one minute. Press **<YES>** to set the main clock to display tenths of a second. Press **<NO>** to display whole seconds.
MAIN CLOCK-TIME PERIOD MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press **<ENTER>**. For example, 15:00 per period. **Note:** Pressing **<ENTER>** to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.
MAIN CLOCK-TIME BREAK MM:SS* MM:SS = minutes, seconds	Set the amount of time between periods. Enter the correct amount of time for break length in minutes and seconds on the number pad and press **<ENTER>**. For example, 10:00.
MAIN CLOCK-TIME OVERTIME MM:SS* MM:SS = minutes, seconds	Set the amount of time for the overtime periods. Enter the correct amount of time for overtime periods in minutes and seconds on the number pad and press **<ENTER>**. For example, 5:00.

Number of Periods

Display	Action
NO. OF PERIODS=N 3 OR 4? N = current setting	Set the number of periods: • Press the <**3**> key to select 3 periods. • Press the <**4**> key to select 4 periods. Press **<ENTER>** to set the number of periods.

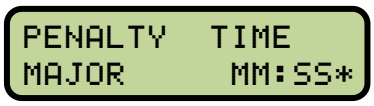
Shot Clock

Display	Action
SHOT CLOCK-TIME RESET 1 MM:SS* SHOT CLOCK-TIME RESET 2 MM:SS* MM:SS = minutes, seconds	This setting is used for the **<RESET>** button on the remote shot clock control console. **Note:** The current setting for the **<RESET>** time displays on the LCD until the first number key is pressed. Enter the correct amount of reset time in minutes and seconds on the number pad and press **<ENTER>**.
SHOT CLOCK-MODE SYNC W/ MAIN? Y	Press **<YES>** to synchronize the shot clock with the main clock. If **<STOP>** for the main clock is pressed while the main and shot clocks are running, the shot clock stops. The shot clock restarts when **<START>** is pressed for the main clock. Press **<NO>** to allow the shot clock to run independently of the main clock. The shot clock starts and stops only with the switch on the remote shot clock control console.
SHOT CLOCK-MODE AUTO BLANK? Y	Press **<YES>** to blank the shot clock time when the shot clock time is greater than or equal to the main clock time. The shot clock is reset and stopped when the display is blanked to eliminate inadvertent sounding of shot clock horn. Press **<NO>** to display the shot clock time at all times.

Penalty Times

Default times can be set for the minor and major penalty keys. The minor penalty time is used as the default when first entering the player penalty function.

Display	Action
PENALTY TIME MINOR MM:SS* MM:SS = minutes, seconds	Enter the correct default time for a minor penalty in minutes and seconds on the number pad and press **<ENTER>**. For example, 02:00. The minor penalty time is used as the default when first entering the player penalty function.

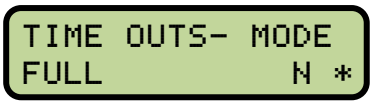
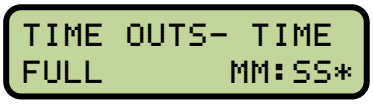
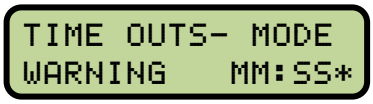
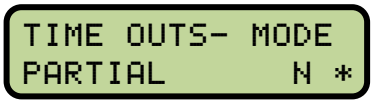
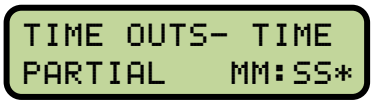
Display	Action
 MM:SS = minutes, seconds	Enter the correct default time for a major penalty in minutes and seconds on the number pad and press **<ENTER>**. For example, 05:00.

Time Outs

Note 1: If a full or partial time out is not needed for the HOME or GUEST **<TIMEOUT>** keys, enter zero for the number of time outs.

Note 2: If a full or partial time out is not needed for **<TIME OUT ON/OFF>**, enter zero for the time.

Note 3: The number for each type of time out must be manually entered for an overtime period using the **<EDIT><TIMEOUT>** key sequence for each team.

Display	Action
 N = current setting	Enter the number of full time outs on the number pad and press **<ENTER>**.
 MM:SS = minutes, seconds	Enter the amount of time for a full time out in minutes and seconds on the number pad and press **<ENTER>**. For example, 1:00
 MM:SS = minutes, seconds	A warning horn can be configured to signal the end of a full time out. While the time out clock is counting down, the horn will sound for one second when the warning time is reached. Enter a zero for the time to disable the warning horn. Enter the time in minutes and seconds on the number pad and press **<ENTER>**.
 N = current setting	Enter the number of partial time outs on the number pad and press **<ENTER>**.
 MM:SS = minutes, seconds	Enter the amount of time for a partial time out in minutes and seconds on the number pad and press **<ENTER>**. For example, 00:20

Display	Action
TIME OUTS-MODE SHOW ON MAIN? N	Press **<YES>** to display the time out time on the LCD and the main clock digits of the scoreboard while the time out clock is active. Press **<NO>** to display the time out time on the LCD only.
FIBA MODE Y/N? N	Press **<YES>** to enable FIBA mode (international rules). This will display number of time outs taken on the scoreboard. At the beginning of a new game, time outs will start at 0 and increment as they are taken, up to the max configured value. Press **<NO>** to show time outs remaining on the scoreboard.

Select Captions

Display	Action
SELECT CAPTIONS ON 1←- -→ 2 OFF	This menu option allows for the controlled backlit captions to be turned ON/OFF. Press the **<1>** key to select ON and OFF for captions controlled by control #1. Press the **<2>** key to select ON and OFF for captions controlled by control #2.

Switch Output

The All Sport® 5000 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK= 0. To display the desired switch setting:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.

2. Press **<YES>** to select the new setting.

3. Press **<NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED? N = current setting	The switch remains open at all times and any external devices are disabled.

Setting	Result
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Tenth of a Second	Yes			
No. of Periods	3			
Period Length	15:00			
Break Length	10:00			
Overtime Length	5:00			
Shot Reset 1	0:45			
Shot Reset 2	0:30			
Sync Shot with Main	Yes			
Auto Blank Shot Clock	Yes			
Minor Penalty	2:00			
Major Penalty	5:00			
Full Time Outs	1			
Full Time Out	1:00			
Time Out Warning	0:00			
Partial Time Outs	0			
Partial Time Out	0:00			
Show on Main	No			
Select Captions	1-ON			
Switch Output	1-Clock = 0			

Section 10: Soccer Operations

Sport Insert: LL-2440

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**. The **Quick Reference** is located in **Appendix D**.

Reference Drawings:

Block Diagrams, A/S 3000 or 5000 Outdoor Sports..... **Drawing A-124690**
Insert; LL-2440 A/S 5000, Soccer ..... **Drawing A-125215**
Insert; LL-2441 A/S 5000, Team Name ..... **Drawing A-125290**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

Write the correct code number here: | | | | |

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

10.1 Game Clock – Counting Up with Preset Stop Times

The following setup may be used to make the game clock count up and stop at preset times.

Display	Action
MAIN CLOCK- DOWN 1-UP 2-DOWN	After entering the correct sport code, start a new game and press **<COUNT UP/DOWN>** followed by **<1>** to count up.
MAIN CLOCK -EDIT PERIOD 45:00 *	***First Half*** Press **<SET MAIN CLOCK>** twice. Using the number pad, set the PERIOD time to "45:00", and then press **<ENTER>**. Press **<START>** and the clock counts up from 0:00 to 45:00.
MAIN CLOCK -EDIT PERIOD 90:00 * MAIN CLOCK -SET CURR 45:00 *	***Second Half*** Press **<SET MAIN CLOCK>** twice. Using the number pad, set the PERIOD time to "90:00", and then press **<ENTER>**. Press **<SET MAIN CLOCK>** once. Using the number pad, set the current time to "45:00", and then press **<ENTER>**. Press **<START>** and the clock counts up from 45:00 to 90:00.

10.2 Soccer Keys

Time Out On/Off

<TIME OUT ON/OFF> stops and starts the time out clock. The length of both the full and partial time outs can also be changed when the time out clock is stopped.

> **Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-SELECT FULL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** to display the configured time for full time out length. To start the full time out press **<YES>**. To decline the selection of the full time out press **<NO>**.
TIME OUTS-SELECT PARTIAL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** a second time (or use the up and down arrow keys) to display the configured time for partial time out length. To start the partial time out press **<YES>**. To decline the selection of the partial time out press **<NO>**.

Half +1

Display	Action
HALF: +1 N N = current setting	Press **<HALF +1>** to increment the half number. A prompt showing half number will display briefly.

Time Out

The home and guest **<TIME OUT>** keys are used to decrement the number of time outs remaining and start the time out clock. The scoreboard indicator is turned on when the type of time out is selected (full or partial). The scoreboard indicator is turned off when the time out clock expires or is stopped.

> **Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-HOME FULL N N = current setting	Press **<TIME OUT>** to display the number of full time outs remaining. To accept the full time out and start the time out clock press **<YES>**. To decline the selection of a full time out press **<NO>**.
TIME OUTS-HOME PARTIAL N N = current setting	Press **<TIME OUT>** a second time (or use the up and down arrow keys) to display the number of partial time outs remaining. To accept the partial time out and start the time out clock press **<YES>**. To decline the selection of a partial time out press **<NO>**.
TIME OUTS-HOME OFF	To exit the running time out clock, press **<TIME OUT>**. This will turn the time out OFF.
TIME OUTS-HOME NO TIME OUTS	This message appears when there are no full or partial time outs left.

Score +1, -1

The home and guest **<SCORE +1>** and **<SCORE -1>** keys are used to increment and decrement the team score.

Display	Action
TEAM SCORE: +1 HOME NNN NNN = current setting	Press the appropriate score key to increment or decrement the score for the home or guest team. The LCD shows which key was pressed and the new value for the team score of the corresponding team.

Other Increment and Decrement Keys

The home and guest **<SHOTS ON GOAL +1, -1>**, **<SAVES +1, -1>**, **<CORNER KICKS +1, -1>**, **<FOULS +1, -1>**, and **<PENALTY KICKS +1, -1>** keys are all entered in the same way. **<SAVES +1>** is used as an example.

Display	Action
SAVES: +1 HOME NN NNN = current setting	Press the appropriate key to increment/decrement the statistics for the home or guest team. For example, **<SAVES +1>**. The LCD shows which key was pressed and the new value for the corresponding team.

10.3 Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

Half +1

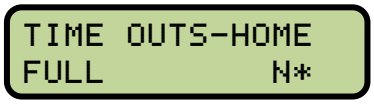
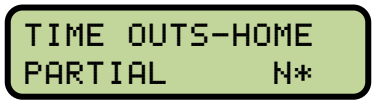
Display	Action
HALF: EDIT N* N = current setting	Press **<EDIT>** followed by **<HALF +1>** to display the current half setting. Enter the correct half number on the number pad and press **<ENTER>**. The full time outs are reset.

Time Out On/Off

Display	Action
TIME OUTS-EDIT FULL MM:SS* MM:SS = minutes, seconds	Press **<EDIT>** followed by **<TIME OUT ON/OFF>** to display the current time setting for full time outs. Enter the correct time on the number pad and press **<ENTER>**.
TIME OUTS-EDIT PARTIAL MM:SS* MM:SS = minutes, seconds	After accepting or rejecting the full time outs time setting, the partial time outs time setting is displayed. Enter the correct time on the number pad and press **<ENTER>**.

Time Out

Note: Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
 N = current setting	Press **<EDIT>** followed by **<TIME OUT>** for the home or guest team to display the current setting of full time outs remaining. Enter the correct number of full time outs on the number pad and press **<ENTER>**.
 N = current setting	After accepting or rejecting the number of full time outs, the number of partial time outs is displayed. Enter the correct number of partial time outs on the number pad and press **<ENTER>**.

Score +1, -1

Display	Action
 NNN = current setting	Press **<EDIT>** and either of the **SCORE** keys for the home or guest team to display the current team score setting. Enter the correct team score on the number pad and press **<ENTER>**.

Other Increment and Decrement Keys

The home and guest **<SHOTS ON GOAL +1, -1>**, **<SAVES +1, -1>**, **<CORNER KICKS +1, -1>**, **<FOULS +1, -1>**, and **<PENALTY KICKS +1, -1>** keys are all edited in the same way. **<SAVES +1>** is used as an example.

Display	Action
 NNN = current setting	Press **<EDIT>** and the appropriate statistic key to display the current setting. For example, **<SAVES +1>**. Enter the correct number on the number pad and press **<ENTER>**.

10.4 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the **Menu** function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

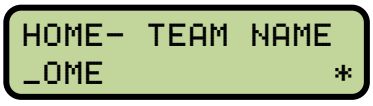
The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection.

Display	Action
60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	**Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
	Press **<ENTER>** or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD. Press **<CLEAR>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.
	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to fifteen (15) characters for the team name and press **<ENTER>**. **Reinsert the SOCCER (LL-2440) insert to continue.**
	The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings. The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry.

Display	Action
	Enter up to ten (10) characters for the team abbreviation and press **<ENTER>**. **Reinsert the SOCCER (LL-2440) insert to continue.**

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.
MENU- DISPLAY BLANK SCBD?	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation. Press the down arrow key to scroll to the next selection.
PRESS ANY KEY TO RETURN TO GAME	

Display	Action
MENU-DISPLAY SYNC TO CHAN SYNC TO CHAN ON 1-ON, 2-OFF	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. **Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
MENU- DISPLAY CLOCK CAPTIONS CLOCK CAPTION- 1-ON, 2-OFF ON	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. Press the down arrow key to scroll to the next selection.
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Edit Settings submenu and show the first prompt on the LCD. Refer to **Section 10.5**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY 1*GAME 2-TOD	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

10.5 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Main Clock

Note 1: The settings for the Main Clock are used with the **<SET MAIN CLOCK>** key.

Note 2: The period and break lengths are used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action
MAIN CLOCK-MODE TENTH SECOND? Y	When the main clock is set to count down and tenths of a second is selected, the main clock displays in tenths of a second remaining when the time is below one minute. Press **<YES>** to set the main clock to display tenths of a second. Press **<NO>** to display whole seconds.
MAIN CLOCK-TIME PERIOD MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press **<ENTER>**. For example, 45:00 per period. **Note:** Pressing **<ENTER>** to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.
MAIN CLOCK-TIME BREAK MM:SS* MM:SS = minutes, seconds	Set the amount of time between periods. Enter the correct amount of time for break length in minutes and seconds on the number pad and press **<ENTER>**. For example, 10:00.

Corner Kicks/Saves/Fouls

Select whether to display corner kicks, saves, or fouls on the scoreboard.

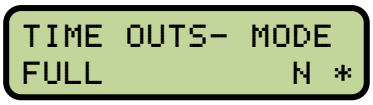
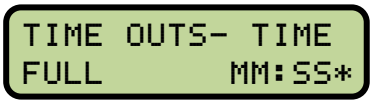
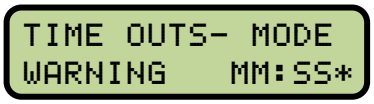
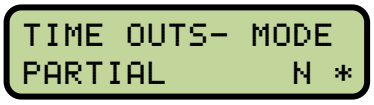
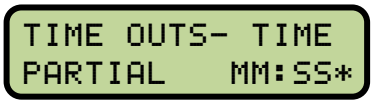
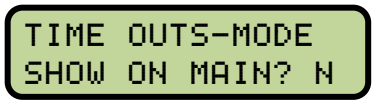
Display	Action
CORNER,SAVE,FOUL 1-* 2- 3-	Press **<1>**, **<2>**, or **<3>** to display **Corner Kicks** (default), **Saves**, or **Fouls** on the scoreboard.

Time Outs

Note 1: If a full or partial time out is not needed for the HOME or GUEST **<TIME OUT>** keys, enter zero for the number of time outs.

Note 2: If a full or partial time out is not needed for **<TIME OUT ON/OFF>**, enter zero for the time.

Note 3: The number for each type of time out must be manually entered for an overtime period using the **<EDIT> <TIME OUT>** key sequence for each team.

Display	Action
 N = current setting	Enter the number of full time outs on the number pad and press **<ENTER>**.
 MM:SS = minutes, seconds	Enter the amount of time for a full time out in minutes and seconds on the number pad and press **<ENTER>**. For example, 1:00
 MM:SS = minutes, seconds	A warning horn can be configured to signal the end of a full time out. While the time out clock is counting down, the horn will sound for one second when the warning time is reached. Enter a zero for the time to disable the warning horn. Enter the time in minutes and seconds on the number pad and press **<ENTER>**.
 N = current setting	Enter the number of partial time outs on the number pad and press **<ENTER>**.
 MM:SS = minutes, seconds	Enter the amount of time for a partial time out in minutes and seconds on the number pad and press **<ENTER>**. For example, 00:20
	Press **<YES>** to display the time out time on the LCD and the main clock digits of the scoreboard while the time out clock is active. Press **<NO>** to display the time out time on the LCD only.

Penalty/TOL

Display	Action
	This selection allows the operator to decide whether or not to display the penalty or TOL on the penalty digits. Use the right or left arrow keys or any number key to change the selection, and then press **<ENTER>**.

Switch Output

The All Sport® 5000 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK= 0.

To display the desired switch setting:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.

2. Press **<YES>** to select the new setting.

3. Press **<NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED? N = current setting	The switch remains open at all times and any external devices are disabled.
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Tenth of a Second	No			
Period Length	45:00			
Break Length	10:00			
Corner/Save/Fouls	1-CORNER			
Full Time Outs	2			
Full Time Out	1:00			
Time Out Warning	0:00			
Partial Time Outs	0			
Partial Time Out	00:00			
Show on Main	No			
Penalty/TOL Display	1-PENALTY			
Switch Output	1-Clock = 0			

Section 11: Tennis Operations

Sport Insert: LL-2483

The Sport and Team Name Insert drawings are located in **Appendix B**. The System Riser drawing is located in **Appendix A**.

Reference Drawings:

Insert; LL-2441 A/S 5000, Team Name ..... **Drawing A-125290**
Insert; LL-2483 A/S 5000, Tennis ..... **Drawing A-131274**
System Riser; Tennis; Single Court w/ TNMC, AS 5000 ..... **Drawing A-177098**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

Write the correct code number here: | | | | |

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

11.1 Tennis Keys

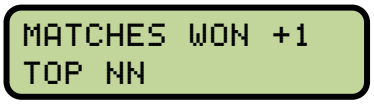
Serve

Display	Action
TOP SERVE ON	Press **<SERVE>** to turn the serve indicators on or off for the respective side. Press the same **<SERVE>** key again or the opposite side **<SERVE>** key to disable the serve indicator.

Doubles Serve

Display	Action
TOP SERVE 2ND ON	Press **<DOUBLES SERVE>** to turn the serve indicators on or off for the second player for the respective side. Press the same **<DOUBLES SERVE>** key again to disable the second player serve indicator.

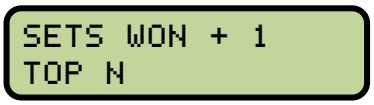
Matches Won +1

Display	Action
 NN = current setting	Press **<MATCHES WON +1>** to increment the matches won for the respective side.

Games Won

Display	Action
 N = current set XX = current score	Press **<GAMES WON +1>** to increment the number of games won in the current set for the respective side.

Sets Won

Display	Action
 N = current setting	Press **<SETS WON +1>** to increment the number of sets won in the current match for the respective side.

Point

The **<POINT>** key increments the point value for the respective side. If Tie Break scoring mode is selected, the points will increment by 1. Otherwise, the points will increment as 15, 30, 40 AD or GM. The current point values will be instantly updated on the LCD.

Advantage

The advantage key sets an advantage score for the chosen side. The score digits for this side will display **AD.** The opposite side score will display dashes (- -).

Note: The **<ADVANTAGE>** key is disabled when Tie Break scoring mode is selected.

Deuce

The **<DEUCE>** key sets the scores for both sides to 40.

Note: The **<DEUCE>** key is disabled when Tie Break scoring mode is selected.

Tie Break

The **<TIE BREAK>** key sets the mode of scoring to Tie Break mode. In Tie Break scoring mode, points for each player are incremented by one when the **<POINTS>** key is pressed.

Note 1: Tie Break scoring mode may only be selected when both player point values are 0.

Note 2: To change scoring mode back to normal, use the Reset Game Score function.

Reset Match

Display	Action
TOP=NN BOT= NN RESET MATCH? Y/N NN = current settings	Press **<RESET MATCH>** followed by **<ENTER>** to reset the current match. All set scores and current game score will be cleared and the set number will be set to 1.

Reset Game Score

Press **<RESET GAME SCORE>** to instantly reset both point values for the current game.

Match Number +1

Display	Action
MATCH- + 1 NNNN NNNN = current setting	Press **<MATCH NUMBER +1>** to increment the current match number.

Set +1

Press **<SET +1>** to increment the current set number. The new set number and new set games won values will be instantly updated on the LCD.

11.2 Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields.
Press **<EDIT>** and the key for the field to be edited.

Points

Display	Action
TOP=NN* BOT=NN EDIT TOP NN = current settings	Press **<EDIT>** followed by **<POINT>** to set the point value for the respective side.

Games Won

Display	Action
GAMES WON EDIT SET N TOP XX * N = current set XX = current score	Press **<EDIT>** followed by **<GAMES WON +1>** to edit the number of games won in the current set for the correct side. Press the up or down arrow keys to move through the games won for sets other than the current set. Press the number keys to edit any of the games won values.

Set +1

Display	Action
SET EDIT N* N = current setting	Press **<EDIT>** followed by **<SET>** to edit the current set number.

Match Number +1

Display	Action
MATCH- EDIT NNNN* NNNN = current setting	Press **<EDIT>** followed by **<MATCH NUMBER +1>** to edit the current match number.

Matches Won

Display	Action
MATCHES WON EDIT TOP NN* NN = current setting	Press **<EDIT>** followed by **<MATCHES WON +1>** to edit the current matches won for the selected team.

Sets Won

Display	Action
SETS WON EDIT TOP N* N = current setting	Press **<EDIT>** followed by **<SETS WON +1>** to edit the current sets won for the respective side.

11.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys, exits the Menu function.

Use the **MENU** function at the start of each new game to edit the Top and Bottom Rosters.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

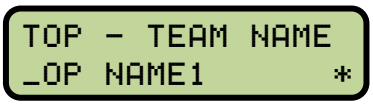
The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection.

Display	Action
40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	**Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Top & Bottom Names

Top and bottom names for 1 or 2 players are entered in the same way. **Top 1** is used as an example.

Display	Action
	Press **<YES>** or the right or left arrow key to select the **Top 1**, **Top 2**, **Bot 1**, or **Bot 2** submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the Menu Press the down arrow key to scroll to the next selection.
	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to fifteen (15) characters for the name and press **<ENTER>** **Reinsert the TENNIS (LL-2483) insert to continue.**

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.

Display	Action
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.
MENU- DISPLAY BLANK SCBD?	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation.
PRESS ANY KEY TO RETURN TO GAME	Press the down arrow key to scroll to the next selection.
MENU-DISPLAY SYNC TO CHAN	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off.
SYNC TO CHAN ON 1-ON, 2-OFF	**Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
MENU- DISPLAY CLOCK CAPTIONS	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off.
CLOCK CAPTION- 1-ON, 2-OFF ON	Press the down arrow key to scroll to the next selection.

Display	Action
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD. Refer to **Section 11.4**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.

Display	Action
MENU-TIME OF DAY 1*GAME 2-TOD	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

11.4 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Main Clock

Note 1: The settings for the Main Clock are used with the **<SET MAIN CLOCK>** key.

Note 2: The period length is used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action
MAIN CLOCK-TIME PERIOD HH:MM:SS*	Enter the correct amount of time per period in minutes and seconds on the number pad and press **<ENTER>**.
HH:MM:SS = hours, minutes, seconds	For example, 20:00 per period.

Switch Output

The All Sport® 5000 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK= 0.

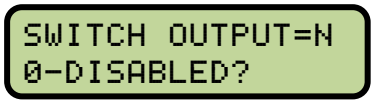
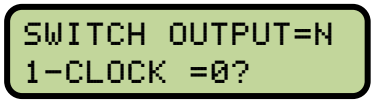
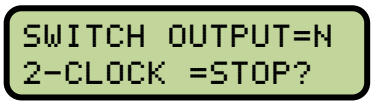
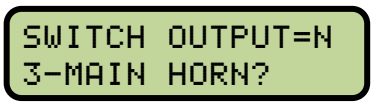
To display the desired switch settings:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.

2. Press **<YES>** to select the new setting.

3. Press **<NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for switch output are as follows:

Setting	Result
 N = current setting	The switch remains open at all times and any external devices are disabled.
 N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
 N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
 N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Main Clock Period Length	00:00			
Switch Output	1-Clock = 0			

Section 12: Track Operations

Sport Insert: LL-2439

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**. The **Quick Reference** is located in **Appendix D**.

Reference Drawings:

Block Diagrams, A/S 3000 or 5000 Outdoor Sports..... **Drawing A-124690**
Insert; LL-2439 A/S 5000, Track ..... **Drawing A-125094**
Insert; LL-2441 A/S 5000, Team Name ..... **Drawing A-125290**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing located at the end of this section can be used until a replacement can be ordered.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

Write the correct code number here: | | | | |

Notes: The four-digit code displayed is the code that is currently selected. Code 8601 is the code for manual data input.

External Timer Codes 8602 - 8604

- External timers must have specific Baud rates entered into the Venus® 7000 computer when using RTD information. The different rates are noted with each external timer.
- Code 8602 is for interfacing with the PowerTime timer. The Scoreboard typesetting in the PowerTime under initialization/scoreboard/type must be set to multi-line and 1. The Baud rate must be changed to 9600 in the Venus® 7000 computer.
- Code 8603 is for interfacing with the OmniSport® 1000 or OmniSport 6000. The "Current Loop Scoreboard Setting" under Setup / Comm. Ports on the OmniSport 6000 must be set to "SW-87/89, MS-167/169" if code 8603 is used with the OmniSport 6000 track timing program. The baud rate must be set to 12800 Baud in the Venus® 7000 computer.
- Code 8604 is for interfacing with *Hawkeye* or *Finish Lynx* timers.
  The Baud rate for the *Hawkeye* and *Finish Lynx* timers must be set to 9600.

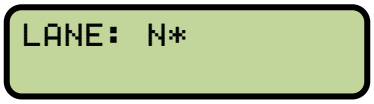
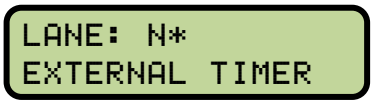
If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

12.1 Track Keys

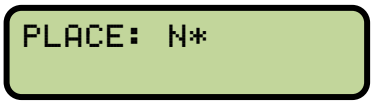
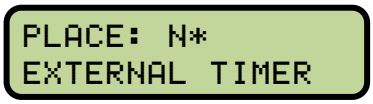
Reset

Display	Action
 MM:SS.TH = minutes, seconds, tenths of a second, hundredths of a second	Press **<RESET •>** followed by **<ENTER>** to reset the main clock. **Note:** The **<RESET •>** function is disabled while the clock is running and also when an external timer code is selected.

Lane

Display	Action
 N = current setting	Press **<LANE •>** to set the value of the lane digits on the scoreboard.
 N = current setting	This message is displayed when an external timer code is selected. Use the external timer to modify the value.

Place

Display	Action
 N = current setting	Press **<PLACE •>** to set the place of the runner in the lane specified on the scoreboard.
 N = current setting	This message is displayed when an external timer code is selected. Use the external timer to modify the value.

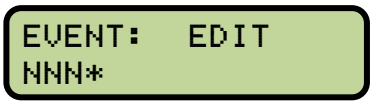
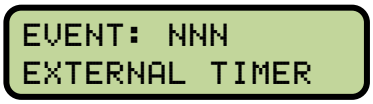
Home & Guest 1 Score

The Home and Guest 1 Score keys are used to modify the value of home or guest team score.

Display	Action
 NNN = current setting	Enter the new value of score for the particular team and press **<ENTER>**. The LCD shows which key was pressed and the new value for the team score of the corresponding team.

Guest 2 & Guest 3 Score (Event/Heat)

The function of the Guest 2 and Guest 3 score keys depends on the **GUEST 2, 3 VALUE** in **EDIT SETTINGS**. Refer to **Section 12.4**.

Display	Action
 NNN = current setting	If the value of Guest 2 and 3 in the settings menu is set to event/heat, **and** the manual timing code is selected, the LCD will display the current event or heat number. Enter the new value and press **<ENTER>**. The Event Value is modified by the Guest 2 key and the Heat Value is modified by the Guest 3 key.
 NNN = current setting	This message is displayed on the LCD if an external timer code is selected **and** the value of Guest 2 and 3 in the settings menu is set to event/heat. **Note:** The event or heat value will be automatically updated to correspond with the external timer value if an external timer code is selected. Use the external timer to modify these values. To enter event heat information on the scoreboard without updates from the external timer, change the Guest 2, 3 setting in the settings menu to **SCORE**.
 NNN = current setting	If the value of Guest 2 and 3 in the settings menu is set to score, the LCD will display the current value of score for the corresponding team. Enter the new value and press **<ENTER>**.

Score +1

The Home and Guest 1, 2 and 3 **<SCORE +1>** keys are used to increment the team score.

Display	Action
TEAM SCORE: + HOME NNN NNN = current setting	Press the appropriate score key to increment or decrement the score for the home or guest team. The LCD shows which key was pressed and the new value for the team score of the corresponding team. **Note:** If the value of Guest 2 and 3 in the settings menu is set to event/heat, and the manual timing code is selected, pressing **<SCORE +1>** will increment the event/heat number.

12.2 Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

Score +1

Display	Action
TEAM SCORE-EDIT HOME NNN* NNN = current setting	Press **<EDIT>** followed by any **<SCORE +1>** key to display the current team score setting. Enter the correct team score on the number pad and press **<ENTER>**. **Note:** If the value of Guest 2 and 3 in the settings menu is set to event/heat, and the manual timing code is selected, pressing **<EDIT>** followed by the respective **<SCORE +1>** will increment the event/heat number.

12.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the Menu function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD. Press **<CLEAR>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.
HOME- TEAM NAME _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to fifteen (15) characters for the team name and press **<ENTER>**. **Reinsert the TRACK (LL-2439) insert to continue.**
HOME- TEAM ABBR _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to ten (10) characters for the team abbreviation and press **<ENTER>**. **Reinsert the TRACK (LL-2439) insert to continue.**

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.
MENU- DISPLAY BLANK SCBD?	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation. Press the down arrow key to scroll to the next selection.
PRESS ANY KEY TO RETURN TO GAME	
MENU-DISPLAY SYNC TO CHAN	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. **Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
SYNC TO CHAN ON 1-ON, 2-OFF	

Display	Action
MENU- DISPLAY CLOCK CAPTIONS CLOCK CAPTION- 1-ON, 2-OFF ON	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. Press the down arrow key to scroll to the next selection.
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD. Refer to **Section 12.4**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.

Display	Action
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY 1*GAME 2-TOD	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

12.4 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Guest 2 and Guest 3 key function

Display	Action
GUEST 2,3 VALUE SCORE↔EVNT/HT	This determines the function of the Guest 2 and Guest 3 keys. When the value is set to **EVNT/HT**, the scoreboard will display event/heat information. If an external timer code is selected, the Guest 2 and Guest 3 keys will be disabled and event/heat information will be taken from the external timer. When the value is set to **SCORE**, the scoreboard will display scores for guests 2 and 3 on the scoreboard. The scores will be obtained from the Guest 2 and Guest 3 keys on the keypad. Press the left or right arrow key to change the value to score or event/heat respectively. **Note:** If **EVNT/HT** is selected, the Event/Heat value will be updated automatically when an external timer code is used. Use the **SCORE** setting if the values should not be updated externally in an external timer code.

Switch Output

The All Sport® 5000 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK= 0.

To display the desired switch setting:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.

2. Press **<YES>** to select the new setting.

3. Press **<NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED? N = current setting	The switch remains open at all times and any external devices are disabled.
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Guest 2,3 Score or Event/Heat	Event/Heat			
Switch Output	1-Clock = 0			

Section 13: Volleyball Operations

Sport Insert: LL-2434

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**. The **Quick Reference** is located in **Appendix D**.

Reference Drawings:

Block Diagram: AS5000 BB- VB and WR #1 ..... **Drawing A-124686**
Block Diagram: AS5000 BB- VB and WR #3 ..... **Drawing A-124688**
Insert; LL-2434 A/S 5000, Volleyball ..... **Drawing A-125055**
Insert; LL-2441 A/S 5000, Team Name ..... **Drawing A-125290**
Block Diagram- A/S 3000 or 5000 BB- VB and WR #2..... **Drawing A-125415**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

Write the correct code number here: | | | | |

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

13.1 Volleyball Keys

Time Out On/Off

<TIME OUT ON/OFF> stops and starts the time out clock. The length of both the full and partial time outs can also be changed when the time out clock is stopped.

> **Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-SELECT FULL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** to display the configured time for full time out length. To start the full time out press **<YES>**. To decline the selection of the full time out press **<NO>**.

Display	Action
TIME OUTS-SELECT PARTIAL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** a second time (or use the up and down arrow keys) to display the configured time for partial time out length. To start the partial time out press **<YES>**. To decline the selection of the partial time out press **<NO>**.

Time Out

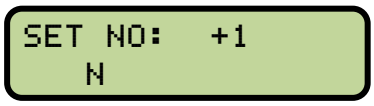
The home and guest **<TIME OUT>** keys are used to decrement the number of time outs remaining and start the time out clock. The scoreboard indicator is turned on when the type of time out is selected (full or partial). The scoreboard indicator is turned off when the time out clock expires or is stopped.

> **Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-HOME FULL N N = current setting	Press **<TIME OUT>** to display the number of full time outs remaining. To accept the full time out and start the time out clock press **<YES>**. To decline the selection of a full time out press **<NO>**.
TIME OUTS-HOME PARTIAL N N = current setting	Press **<TIME OUT>** a second time (or use the up and down arrow keys) to display the number of partial time outs remaining. To accept the partial time out and start the time out clock press **<YES>**. To decline the selection of a partial time out press **<NO>**.
TIME OUTS-HOME OFF	To exit the running time out clock, press **<TIME OUT>**. This will turn the time out OFF.
TIME OUTS-HOME NO TIME OUTS	This message appears when there are no full or partial time outs left.

Match Number +1, Sets +1

The **<MATCH NUMBER +1>** and **<SETS +1>** keys are both used to increment their respective totals. **<SETS +1>** is used as an example.

Display	Action
 N = current setting	Press the appropriate key to increment statistics for the home or guest team. The LCD shows which key was pressed and the new value for the corresponding team.

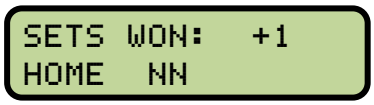
Score +1, -1

The home and guest **<SCORE +1>** and **<SCORE -1>** keys are used to increment and decrement the team score.

Display	Action
 NN = current setting	Press the appropriate score key to increment or decrement the score for the home or guest team. The LCD shows which key was pressed and the new value for the team score of the corresponding team.

Sets Won +1, Subs +1

The **<SETS WON +1>** and **<SUBS +1>** keys are both used to increment their respective totals. **<SETS WON +1>** is used as an example.

Display	Action
 NN = current setting	Press the appropriate key to increment statistics for the home or guest team. The LCD shows which key was pressed and the new value for the corresponding team.

Aces, Kills, Blocks, and Digs

The home and guest **<ACES +1>**, **<KILLS +1>**, **<BLOCKS +1>,** and **<DIGS +1>** keys are all used to increment their respective totals. **<ACES +1>** is used as an example.

Display	Action
ACES: +1 HOME NNN NNN = current setting	Press the appropriate key to increment statistics for the home or guest team. The LCD shows which key was pressed and the new value for the corresponding team.
ACES: +1 HOME PLAYER NN* NN = current setting	If the program is configured to update the player stats, this prompt displays asking for a player number. Enter the jersey number of the player who made the play and press **<ENTER>**.
HOME PLAYER NN NOT FOUND, ADD? NN = current setting	If the player is not in the roster, this prompt asks if the player should be added. Press **<YES>** to add the player to the roster and credit the play to that player. Press **<NO>** to decline the entry of the player number.
HOME PLAYER NN ROSTER FULL NN = current setting	This message displays when the answer to the previous prompt is **YES** and the roster is full.
HOME PLAYER NN ACES XX NN = player number XX = current stat value	The player's jersey number and stats display if the player was found in the game or correctly added to the roster.

Serve

Display	Action
HOME SERVE ON	Press the home or guest **<SERVE>** key, to turn on the possession indicator for that team.
HOME SERVE OFF	To turn off the possession indicator, press the same **<SERVE>** key a second time or press the opposite **<SERVE>** key.

In Game/Out of Game

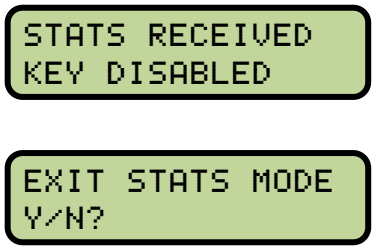
The **<IN GAME>** and **<OUT OF GAME>** keys are only functional when the Home or Guest **<PLAYER>** key has been pressed.

Delete Player

The **<DELETE PLAYER>** key is only functional when the Home or Guest **<PLAYER>** key has been pressed.

Player

Note: If player stats are being received from the Daktronics Scoring-Timing Interface (DSTI), the keys PLAYER, IND SUB, and MASS SUB will be disabled. The LCD will display the messages shown below when these keys are pressed. Refer to **ED-13009** for more information about DSTI.

Display	Action
	The key disabled message will display for one second and then the **<EXIT STATS>** message will display and wait for a **<YES>** or **<NO>** key. If the **<YES>** key is pressed, stats data will be saved in the console and the console will **<EXIT STATS>** mode until another stats packet is received. This will allow the operator to enter player stats from the console if the DSTI connection is lost.
 NN = current setting	When the home or guest **<PLAYER •>** key is pressed, this prompt asks the jersey number of the player to be edited. Enter the jersey number on the number pad and press **<ENTER>**.
 NN = current setting	If the player is not in the roster, this prompt asks if the player should be added. Press <**YES**> to add the player to the roster. Press <**NO**> to decline the entry of the player number.
 NN = current setting	This message displays when the answer to the previous prompt is **YES** and the roster is full.

Display	Action
HOME PLAYER NN S-I A-XX* K-YY NN = player number S-I = **in** game S-O = **out** of game XX = number of **aces** YY = number of **kills** HOME PLAYER NN S-I B-XX* D-YY XX = number of **blocks** YY = number of **digs**	If the player is found, the player's game status and statistics can be changed. **To change a player's game status:** **1.** Use the up and down arrow keys to select the player from the list. **2.** Press **<IN GAME>** or **<OUT OF GAME>**. **3.** The **S** field on the display changes to show the player's current status. **To change a player's statistics:** **1.** Use the up and down arrow keys to select the player from the list. **2.** Use the left and right arrow keys to select the statistic to be changed. The display shifts to show all of the statistic fields. **3.** Enter the correct number for the selected statistic on the number pad and press **<ENTER>**. Press **<CLEAR>** to exit the menu and return to the game.
HOME PLAYER NN DELETE PLAYER? NN = current setting	To delete an incorrect player from the roster use the up and down arrow keys to select the player from the list and press **<DELETE PLAYER>**. Press **<YES>** to remove the player from the roster. Press **<NO>** to decline the deletion process and return to the game.

Individual Substitution

Display	Action
IND SUB- HOME NN* in for XX NN = sub player XX = in game player	When the home or guest **<INDIV. SUB. •>** key is pressed, this prompt asks the jersey number of the player entering and leaving the game. Enter the jersey number of the player entering the game on the number pad and press **<ENTER>**. Enter the jersey number of the player leaving the game on the number pad and press **<ENTER>**.

Display	Action
IND SUB- HOME SUB OK	This message is displayed if no errors are found.
IND SUB- HOME SUB NOT MADE	This message is displayed for the following reasons: • The player going into the game is already marked as in. • The player coming out of the game is not marked as in.
NOT FOUND, ADD? NN* in for NN = current setting	This message is displayed if the player going in the game is not found in the roster. Press **<YES>** to add the player to the roster. Otherwise, press **<NO>** followed by **<INDIV. SUB. •>** to try entering the sub again.
IND SUB- HOME NOT FOUND NN NN = current setting	This message is displayed if the player going out of the game is not found in the roster. Press **<INDIV. SUB. •>** to try entering the sub again.

Mass Substitution

Display	Action
MASS SUB-HOME PLAYER 1 NN * NN = current setting	After the home or guest **<MASS SUB. •>** key is pressed, the LCD will display a message asking for the first of six player numbers that are going into the game. Enter the jersey number on the number pad and press **<ENTER>** for each of the six players. Press **<CLEAR>** at any time to exit the Mass Substitution function.
MASS SUB-HOME SUB OK	This message is displayed if no errors are found.
MASS SUB-HOME DUPLICATE NN NN = current setting	This message displays for each duplicate jersey number found for the six players going into the game. Press **<YES>** to correct the jersey number. Enter the correct jersey number and press **<ENTER>**.

Display	Action
NOT FOUND, ADD? PLAYER 1 NN NN = current setting	This message displays for each player not found in the roster. Press **<YES>** to add the jersey number. Press **<NO>** to ignore and select another jersey number. Enter the correct jersey number and press **<ENTER>**.

13.2 Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

Match Number +1, Sets +1

The **<MATCH NUMBER +1>**and **<SETS +1>** keys are edited in the same ways. **<SETS +1>** is used as an example.

Display	Action
SET NO: EDIT N* N = current setting	Press **<EDIT>** followed by the appropriate statistic key to display the current setting. Enter the correct number on the number pad and press **<ENTER>**.

Time Out

Note: Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

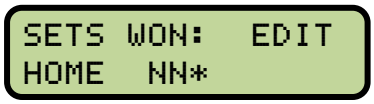
Display	Action
TIME OUTS-HOME FULL N* N = current setting	Press **<EDIT>** followed by **<TIME OUT>** for the home or guest team to display the current setting of full time outs remaining. Enter the correct number of full time outs on the number pad and press **<ENTER>**.
TIME OUTS-HOME PARTIAL N* N = current setting	After accepting or rejecting the number of full time outs, the number of partial time outs is displayed. Enter the correct number of partial time outs on the number pad and press **<ENTER>**.

Score +1, -1

Display	Action
 NNN = current setting	Press **<EDIT>** and either of the **SCORE** keys for the home or guest team to display the current team score setting. Enter the correct team score on the number pad and press **<ENTER>**.

Sets Won +1, Subs +1

The home and guest **<SETS WON +1>** and **<SUBS +1>** keys are both edited in the same way. **<SETS WON +1>** is used as an example.

Display	Action
 N = current setting	Press **<EDIT>** followed by the appropriate statistic key to display the current setting. Enter the correct number of games won on the number pad and press **<ENTER>**.

Aces, Kills, Blocks, and Digs

The home and guest **<ACES +1>**, **<KILLS +1>**, **<BLOCKS +1>**, and **<DIGS +1>** keys are all edited in the same way. **<ACES +1>** is used as an example.

Display	Action
 NNN = current setting	Press **<EDIT>** followed by the appropriate statistic key to display the current setting. Enter the correct number on the number pad and press **<ENTER>**.

Time Out On/Off

Display	Action
 MM:SS = minutes, seconds	Press **<EDIT>** followed by **<TIME OUT ON/OFF>** to display the current time setting for full time outs. Enter the correct time on the number pad and press **<ENTER>**.

Display	Action
TIME OUTS-EDIT PARTIAL MM:SS* MM:SS = minutes, seconds	After accepting or rejecting the full time outs time setting, the partial time outs time setting is displayed. Enter the correct time on the number pad and press **<ENTER>**.

13.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the Menu function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD. Press **<CLEAR>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.
HOME- TEAM NAME _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to fifteen (15) characters for the team name and press **<ENTER>**. **Reinsert the VOLLEYBALL (LL-2434) insert to continue.**

Display	Action
HOME- TEAM ABBR _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to ten (10) characters for the team abbreviation and press **<ENTER>**. **Reinsert the VOLLEYBALL (LL-2434) insert to continue.**
MENU- HOME EDIT PLAYERS? MENU- HOME PLAYER 01 NN* NN = current setting	Press **<YES>** to assign the jersey numbers for all the players in the roster. Press **<NO>** or the left arrow key to exit the submenu and return to the Main menu. Once Edit Players is selected, enter the jersey number for that player from the official roster and press **<ENTER>**. The next player is shown on the LCD. Continue entering the jersey numbers for up to 15 players. Press **<CLEAR>** to advance to the next option.
MENU- HOME CLEAR STATS?	This function clears all game statistics and should only be used before the start of a game. Press **<YES>** to clear the in-game stats for all players in the home roster. Press **<NO>** to decline the selection.

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.

Display	Action
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.
MENU- DISPLAY BLANK SCBD?	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation.
PRESS ANY KEY TO RETURN TO GAME	Press the down arrow key to scroll to the next selection.
MENU-DISPLAY SYNC TO CHAN	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off.
SYNC TO CHAN ON 1-ON, 2-OFF	**Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
MENU- DISPLAY CLOCK CAPTIONS	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off.
CLOCK CAPTION- 1-ON, 2-OFF ON	Press the down arrow key to scroll to the next selection.

Display	Action
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD. Refer to **Section 13.4**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.

Display	Action
MENU-TIME OF DAY 1*GAME 2-TOD	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

13.4 Settings

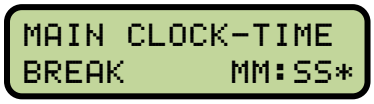
The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Main Clock

Note 1: The settings for the Main Clock are used with the **<SET MAIN CLOCK>** key.

Note 2: The period and break lengths are used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

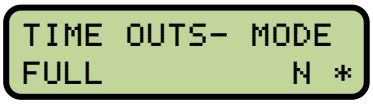
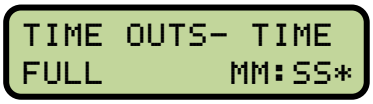
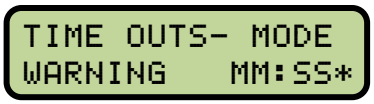
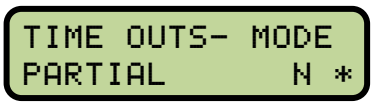
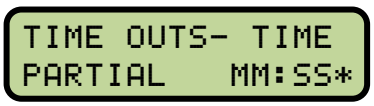
Display	Action
MAIN CLOCK-MODE TENTH SECOND? Y	When the main clock is set to count down and tenths of a second is selected, the main clock displays in tenths of a second remaining when the time is below one minute. Press **<YES>** to set the main clock to display tenths of a second. Press **<NO>** to display whole seconds.
MAIN CLOCK-TIME PERIOD MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press **<ENTER>**. For example, 60:00 per game **Note:** Pressing **<ENTER>** to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.

Display	Action
 MM:SS = minutes, seconds	Set the amount of time between periods. Enter the correct amount of time for break length in minutes and seconds on the number pad and press **<ENTER>**. For example, 3:00

Time Outs

Note 1: If a full or partial time out is not needed for the HOME or GUEST **<TIME OUT>** keys, enter zero for the number of time outs.

Note 2: If a full or partial time out is not needed for **<TIME OUT ON/OFF>**, enter zero for the time.

Display	Action
 N = current setting	Enter the number of full time outs on the number pad and press **<ENTER>**.
 MM:SS = minutes, seconds	Enter the amount of time for a full time out in minutes and seconds on the number pad and press **<ENTER>**. For example, 0:30
 MM:SS = minutes, seconds	A warning horn can be configured to signal the end of a full time out. While the time out clock is counting down, the horn will sound for one second when the warning time is reached. Enter a zero for the time to disable the warning horn. Enter the time in minutes and seconds on the number pad and press **<ENTER>**.
 N = current setting	Enter the number of partial time outs on the number pad and press **<ENTER>**.
 MM:SS = minutes, seconds	Enter the amount of time for a partial time out in minutes and seconds on the number pad and press **<ENTER>**. For example, 00:20

Display	Action
TIME OUTS-MODE SHOW ON MAIN? N	Press **<YES>** to display the time out time on the LCD and the main clock digits of the scoreboard while the time out clock is active. Press **<NO>** to display the time out time on the LCD only.
FIBA MODE Y/N? N	Press **<YES>** to enable FIBA mode (international rules). This will display number of time outs taken on the scoreboard. At the beginning of a new game, time outs will start at 0 and increment as they are taken, up to the max configured value. Press **<NO>** to show time outs remaining on the scoreboard.

Team Stats

Display	Action
TEAM STATS-MODE UPDATE PLAYER? Y	**This feature must be enabled for statistics displays.** Press **<YES>** to allow entry of a player number after the home or guest team aces, kills, blocks or digs are incremented or decremented. Press **<NO>** to prevent entry of a player number.

User Def 1 & User Def 2

User Def 1 and **User Def 2** are used to define which statistics (aces, kills, blocks or digs) are displayed on the scoreboard. Only two of the four statistics can be selected to display on the statistics displays for the individual players in the game.

- **User Def 1** displays the statistics in the Team Score digits.
- **User Def 2** displays the statistics in the Player/Foul digits.

User Def 1 and **User Def 2** are entered in the same way. **User Def 1** is used as an example.

Display	Action
USER DEF 1=N 1-ACES USER DEF 1=N 2-KILLS USER DEF 1=N 3-BLOCKS USER DEF 1=N 4-DIGS N = current setting	• Press <**1**> or use the left and right arrow keys to scroll to **ACES**. • Press <**2**> or use the left and right arrow keys to scroll to **KILLS**. • Press <**3**> or use the left and right arrow keys to scroll to **BLOCKS**. • Press <**4**> or use the left and right arrow keys to scroll to **DIGS**. Press <**YES**> to display the selected stat on the scoreboard. Press <**NO**> to decline the selection and return to the game. Press the down arrow key to scroll to the next selection.

Select Captions

Display	Action
SELECT CAPTIONS ON 1←- -→ 2 OFF	This menu option allows for the controlled backlit captions to be turned ON/OFF. Press the **<1>** key to select ON and OFF for captions controlled by control #1. Press the **<2>** key to select ON and OFF for captions controlled by control #2.

Switch Output

The All Sport® 5000 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK= 0.

To display the desired switch setting:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.

2. Press **<YES>** to select the new setting.

3. Press **<NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED? N = current setting	The switch remains open at all times and any external devices are disabled.
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.

Setting	Result
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Tenth of a Second	No			
Period Length	60:00			
Break Length	3:00			
Full Time Outs	2			
Full Time Out	0:30			
Time Out Warning	0:00			
Partial Time Outs	0			
Partial Time Out	0:00			
User Def 1	Aces			
User Def 2	Kills			
Update Player	No			
Select Captions	1-ON			
Switch Output	1-Clock = 0			

Section 14: Wrestling Operations

Sport Insert: LL-2435

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**. The **Quick Reference** is located in **Appendix D**.

Reference Drawings:

Block Diagram: AS5000 BB- VB and WR #1 ..... **Drawing A-124686**
Block Diagram: AS5000 BB- VB and WR #3 ..... **Drawing A-124688**
Insert; LL-2435 A/S 5000, Wrestling ..... **Drawing A-124701**
Insert; LL-2441 A/S 5000, Team Name ..... **Drawing A-125290**
Block Diagram- A/S 3000 or 5000 BB- VB and WR #2..... **Drawing A-125415**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

Write the correct code number here: | | | | |

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

14.1 Wrestling Keys

Match Number +1

Display	Action
MATCH-+1 NNN NNN = current setting	Press **<MATCH +1>** to increment the match number. A prompt showing match number displays briefly.
WEIGHT CLASS 01 NNN NNN = weight class	If weight classes are selected, a prompt to select a weight class will be shown on the LCD. Use the arrow keys to select a weight class and press **<ENTER>**. The weight class displays in the Match digits.

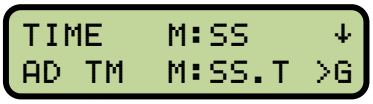
Period +1

Display	Action
PERIOD- +1 N N = current setting	Press **<PERIOD +1>** to increment the quarter number. A prompt showing period number displays briefly. The period time will be set to the configured period time if the current time is at zero. There are 5 configured period times and the time will be set based on the current period number. If the current time was set before the **<PERIOD +1>** key is pressed, the time will not be adjusted.

Set Main Clock (Period Times)

Display	Action
MAIN CLOCK -SET CURR MM:SS* MM:SS = minutes, seconds	After the main clock has been stopped, press **<SET MAIN CLOCK>** to display the current time of the main clock. To change the time, enter the desired time on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
MAIN CLOCK -EDIT PERIOD MM:SS* MAIN CLOCK -EDIT PER 2 MM:SS* MAIN CLOCK -EDIT PER 3 MM:SS* MAIN CLOCK -EDIT PER 4 MM:SS* MAIN CLOCK -EDIT PER 5 MM:SS* MM:SS = minutes, seconds	Press **<SET MAIN CLOCK>** a second, third, fourth, fifth or sixth time or the down arrow key to display the configured time for each clock period length. To accept the displayed period length press **<YES>**. To decline the selection of the period length press **<NO>**. To change the period length and set the main clock enter the new time in minutes and seconds on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.

Home Advantage, Guest Advantage, Stop Advantage Clock

Display	Action
 M:SS = minutes, seconds (main clock) M:SS.T = minutes, seconds, tenths of a second (advantage timer) G or H = guest or home	The main clock must be running to use the advantage timer. Press the **<HOME (GREEN) ADVANTAGE> or <GUEST (RED) ADVANTAGE>** key to start the advantage timer for the competitor that has control of the match. The competitor that has the net (most) advantage time is shown on the LCD display (<H or >G). The timer (AD TM on the display) counts up or down depending on which competitor is in control (last advantage key pressed) and which competitor has the net (most) advantage time. For example: If the home competitor is the first to control the match, press **<HOME (GREEN) ADVANTAGE>**. The display shows <H and the timer (AD TM) counts up. When the guest competitor gains control, press **<GUEST (RED) ADVANTAGE>**. The display continues to show <H (because home still has the net advantage) but the timer (AD TM) counts down. The timer continues to count down until the **<HOME (GREEN) ADVANTAGE>** is pressed again or the timer reaches zero. If zero is reached, the display shows >G (which now has the net advantage) and the timer counts up. Press the **<STOP ADVANTAGE CLOCK>** key to stop the advantage timer when neither competitor is in control.

Team Score +1, -1

Display	Action
 NNN = current setting	Press **<SCORE +1>** or **<SCORE -1>** to increment or decrement the home or guest team score. A prompt showing total score will display briefly. Pressing a **<TEAM SCORE>** key will cause the team scores to show up on the LCD (TM will show on the LCD to indicate this). Pressing a **<MATCH SCORE>** key will cause the match scores to show on the LCD (MAT will show up on the LCD to indicate this).

Match Score +1, +2, +3, -1

The home and guest **<MATCH SCORE +1>**, **<MATCH SCORE +2>**, and **<MATCH SCORE +3>** keys are used to increment the team score and the **<MATCH SCORE -1>** key is used to decrement the team score.

Display	Action
MATCH SCORE- +1 HOME NN NN = current setting	Press the appropriate score key to increment or decrement the score for the home or guest team. The LCD shows which key was pressed and the new value for the team score of the corresponding team. Pressing a **<MATCH SCORE>** key will cause the match scores to show on the LCD (MAT will show up on the LCD to indicate this). Pressing a **<TEAM SCORE>** key will cause the team scores to show up on the LCD (TM will show on the LCD to indicate this).

Start/Stop Injury Time

Display	Action
H INJURY M:SS AD TM M:SS.T H< M:SS = minutes, seconds (injury timer) M:SS.T = minutes, seconds, tenths of a second (advantage timer) G or H = guest or home	The maximum allowed injury time is set for each competitor at the beginning of a match and reset to this time when the Reset Match function is performed. When enabled, the injury times are displayed in the main clock digits and the corresponding (home or guest) match score digits flash. The main clock must be stopped to use the injury timer. Press **<START INJURY TIME>** to start the injury timer for the home or guest competitor. The injury timer counts down from the maximum allowed time until **<STOP INJURY TIME>** is pressed or 0:00 is reached. The injury time is shown on the LCD display with H for home or G for guest. Press the **<STOP INJURY TIME>** key to stop the injury timer and return the period time to the main clock digits. A key press is required before the main clock digits return to period time. This gives the coach time to see how much injury time remains.

Reset Match

Display	Action
RESET MATCH? Y/N	Press **<YES>** to clear all of the data for the last match or the match in progress and begin a new individual match. Press **<NO>** to resume the match in progress using the current data and exit the Menu.
SELECT WIN HOME *	If weight classes are selected, it will ask for the winner. Use the arrow keys to select HOME or GUEST, and press **<ENTER>**. Enter the points for the win, and press **<ENTER>**.
TOD HH:MM:SS ET M:SS H N G X HH:MM:SS = hours, minutes, seconds (Time of day) M:SS = minutes, seconds (elapsed time) N = home score X = guest score	The console will display the time of day, elapsed time of match, and points scored in the match. This will display until a key is pressed.

Start/Stop Blood Time

Display	Action
G BLOOD M:SS AD TM M:SS.T >G M:SS = minutes, seconds (blood timer) M:SS.T = minutes, seconds, tenths of a second (advantage timer) G or H = guest or home	The maximum allowed blood time is set for each competitor at the beginning of a match and reset to this time when the Reset Match function is performed. When enabled, the blood times are displayed in the main clock digits and the corresponding (home or guest) match score digits flash. The main clock must be stopped to use the blood timer. Press **<START BLOOD TIME>** to start the blood timer for the home or guest competitor. The injury/blood timer counts down from the maximum allowed time until **<STOP BLOOD TIME>** is pressed or 0:00 is reached. The blood time is shown on the LCD display with H for home or G for guest. Press the **<STOP BLOOD TIME>** key to stop the blood timer and return the period time to the main clock digits. A key press is required before the main clock digits return to period time. This gives the coach time to see how much blood time remains.

Start/Stop Recovery Time

Display	Action
 M:SS = minutes, seconds (recovery timer) M:SS.T = minutes, seconds, tenths of s second (advantage timer) G or H = guest or home	The recovery time is set to the configured recovery time for each competitor when the **<START HOME RECOVERY>** or **<START GUEST RECOVERY>** keys are pressed. When enabled, the recovery times are displayed in the main clock digits and the corresponding (home or guest) match score digits flash. The main clock must be stopped to use the recovery timer. After pressing a start recovery key for the home or guest competitor, the recovery timer counts down from the maximum allowed time until **<STOP RECOVERY TIME>** is pressed or 0:00 is reached. Press **<STOP RECOVERY TIME>** to stop the recovery timer and return the period time to the main clock digits.

14.2 Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

Home Advantage

Display	Action
 MM:SS.T = minutes, seconds, tenths of a second	Press **<EDIT>** followed by **<HOME (GREEN) ADVANTAGE>** to display the current advantage time for the home competitor. Enter the advantage time for the home competitor on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to game.

Guest Advantage

Display	Action
 MM:SS.T = minutes, seconds, tenths of a second	Press **<EDIT>** followed by **<GUEST (RED) ADVANTAGE>** to display the current advantage time for the guest competitor. Enter the advantage time for the guest competitor on the number pad and press **<ENTER>**. Press <**CLEAR**> twice to clear changes and return to game.

Blood Time

Display	Action
BLOOD TIME HOME MM:SS* MM:SS = current setting	Press **<EDIT>** followed by either **BLOOD TIME** key for the home or guest team to display the current blood time setting. Enter the maximum allowed blood time in minutes and seconds on the number pad and press the **<ENTER>** key. For example, 5:00.

Injury Time

Display	Action
INJURY TIME HOME MM:SS* MM:SS = current setting	Press **<EDIT>** followed by either **INJURY TIME** key for the home or guest team to display the current injury time setting. Enter the maximum allowed injury time in minutes and seconds on the number pad and press the **<ENTER>** key. For example, 5:00.

Match Number, Period, Team Score and Match Score

The home and guest **<MATCH NUMBER +1>**, **<PERIOD +1>**, **<TEAM SCORE+1, -1>**, and **<MATCH SCORE +1, +2, +3, -1>** keys are all edited in the same way. **<TEAM SCORE +1>** is used as an example.

Display	Action
TEAM SCORE- EDIT HOME NNN NNN = current setting	Press **<EDIT>** and the appropriate statistic key to display the current setting. For example, **<TEAM SCORE +1, -1>**. Enter the correct number on the number pad and press **<ENTER>**.

14.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys, exits the Menu function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

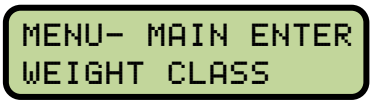
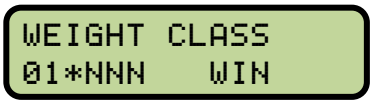
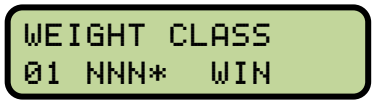
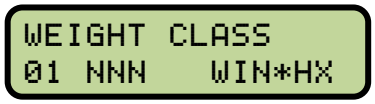
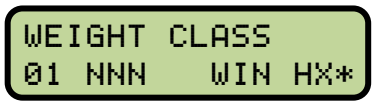
Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD. Press **<CLEAR>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.
HOME- TEAM NAME _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to fifteen (15) characters for the team name and press **<ENTER>**. **Reinsert the WRESTLING (LL-2435) insert to continue.**
HOME- TEAM ABBR _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to ten (10) characters for the team abbreviation and press **<ENTER>**. **Reinsert the WRESTLING (LL-2435) insert to continue.**

Weight Class

The **WEIGHT CLASS MENU** allows the user to enter the weight class values.

Display	Action
	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.
    NNN = current weight setting G or H = guest or home X = current games won	A total of 14 weight classes may be entered. Use the up and down arrow keys to select the index of the weight class to edit, and press **<ENTER>**. Enter a new value for the weight class and press **<ENTER>**. Set the winner of this weight class. This is used mainly for editing a winner that was set to the wrong side. Use the arrow keys to select H or G as the winner and press **<ENTER>**. Enter the score for the winner and press **<ENTER>**. Press **<CLEAR>** or **<MENU>** to exit from the weight class settings.

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.

Display	Action
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.
MENU- DISPLAY BLANK SCBD?	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation.
PRESS ANY KEY TO RETURN TO GAME	Press the down arrow key to scroll to the next selection.
MENU-DISPLAY SYNC TO CHAN	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off.
SYNC TO CHAN ON 1-ON, 2-OFF	**Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
MENU- DISPLAY CLOCK CAPTIONS	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off.
CLOCK CAPTION- 1-ON, 2-OFF ON	Press the down arrow key to scroll to the next selection.

Display	Action
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD. Refer to **Section 14.4**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.

Display	Action
MENU-TIME OF DAY 1*GAME 2-TOD	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

14.4 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Main Clock

Note 1: The settings for the **Main Clock** are used with the **<SET MAIN CLOCK>** key.

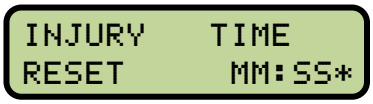
Note 2: The period, break, and overtime lengths are used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action
MAIN CLOCK-MODE TENTH SECOND? Y	When the main clock is set to count down and tenths of a second is selected, the main clock displays in tenths of a second remaining when the time is below one minute. Press **<YES>** to set the main clock to display tenths of a second. Press **<NO>** to display whole seconds.
MAIN CLOCK-TIME PERIOD MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press **<ENTER>**. For example, 3:00 per period. **Note:** Pressing **<ENTER>** to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.

Blood/Injury Time

The maximum allowed blood and injury times are set for each competitor at the beginning of a match and reset to these times when the Reset Match function is performed.

When enabled, the blood and injury times are displayed in the main clock digits and the corresponding (home or guest) match score digits flash.

Display	Action
 MM:SS = current setting	Enter the cumulative time for blood time outs in minutes and seconds on the number pad and press **<ENTER>**. For example, 5:00.
 MM:SS = current setting	Enter the cumulative time for injury time outs in minutes and seconds on the number pad and press **<ENTER>**. For example, 2:00.
	Press **<YES>** to display the blood/injury times on the LCD and the main clock digits of the scoreboard while the blood/injury clock is active. Press **<NO>** to display the time out time on the LCD only.

Recovery Time

The maximum allowed recovery times are set for each competitor at the beginning of a match and reset to these times when the Reset Match function is performed.

Display	Action
 MM:SS = minutes, seconds	Enter the cumulative time for recovery time outs in minutes and seconds on the number pad and press **<ENTER>**. For example, 2:00.

Select Captions

Display	Action
	This menu option allows for the controlled backlit captions to be turned ON/OFF. Press the **<1>** key to select ON and OFF for captions controlled by control #1. Press the **<2>** key to select ON and OFF for captions controlled by control #2.

Weight Class

Display	Action
WEIGHT CLASS ON Y/N? -OFF	This setting allows the use of weight classes. Press **<YES>** to use weight classes, or press **<NO>** to select not to use weight classes.

Display Lines for Weight Class

Display	Action
# OF DISP LINES N N = number of lines	This setting represents the number of lines used on the stat panel displays. It can only be set to 5 or 6. Press the **<5>** or **<6>** key and then **<ENTER>**.

Display Team Score

Display	Action
DISPLAY NO TEAM SCORE Y/N?	This menu option allows for selection of having the Team Score display on the Matside advantage/team score module. If set to display it will show team score after the match is reset until an advantage time is started. Press **<YES>** to select display ON. Press **<NO>** to select display OFF.

Switch Output

The All Sport® 5000 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK= 0.

To display the desired switch setting:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.

2. Press **<YES>** to select the new setting.

3. Press **<NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED? N = current setting	The switch remains open at all times and any external devices are disabled.
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Tenth of a Second	No			
Period Length	3:00			
Blood Time	5:00			
Injury Time	2:00			
Blood Show on Main	No			
Recovery Time	2:00			
Select Captions	1-ON			
Weight Class On	No			
# of Display Lines	6			
Display Team Score	No			
Switch Output	1-Clock = 0			

Section 15: Event Counter

Sport Insert: 0G-58047

The Sport Insert drawing is located in **Appendix B**. The **Quick Reference** is located in **Appendix D**.

Reference Drawings:
Insert, Event Counter Codes 371-376..... **Drawing A-58047**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

15.1 General Event Counter Information

Note: The All Sport® 5000 uses Enhanced RTD with Venus® 4600 / 7000 codes

The Event Counter program is made up of six codes used to display information about external events. The codes used for the event counter are shown below.

Day and Time Event Countdown Codes
- Standard RTD (with tenths) 370
- Venus 1500 RTD 371
- Venus 4600/7000 Enhanced RTD 372

Time Based Counter Codes
- Venus 1500 RTD 373
- Venus 4600/7000 Enhanced RTD 374

External Input Counter Codes
- Venus 1500 RTD 375
- Venus 4600/7000 Enhanced RTD 376

RTD port settings are 19200 Baud, 8 data bits, and no parity for both RTD types.

15.2 Day and Time Event Countdown Codes

Display	Action
DAYS NNN HH:MM:SS.T ↓	If set to count down, the number of days, hours, minutes, and seconds remaining until the event occurs are shown on the main LCD screen.
DAYS NNN HH:MM:SS.T ↑	If set to count up, the number of days, hours, minutes, and seconds elapsed since the event occurred are shown on the main LCD screen.
HH:MM:SS.T = hours, minutes, seconds, tenths of a second	

Value/Days

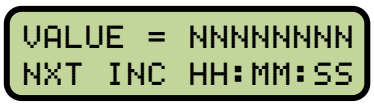
Display	Action
 NNN = current value	Press the **<VALUE/DAYS •>** key. Enter the number of days for countdown (**0 – 999**) using the number pad.

Use the **<SET MAIN CLOCK>** key to set the time to be counted.

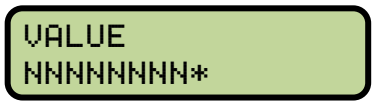
Press **<START>** to start the main clock. If the console is set to count down, the time and day values decrements until 0 days, 00:00:00.0 time. The console then begins counting up and counts the days and time that have elapsed since the event occurred. If the console is set to count up, the timer begins at 0 days, 00:00:00.0 time and continues until **<STOP>** is pressed.

Note: If the console is set to stop at zero, the clock will not begin counting up until the **<START>** key is pressed again.

15.3 Time Based Counting Codes

Display	Action
 NNNNNNN = current value HH:MM:SS = hours, minutes, seconds	The current value is shown on the top line of the LCD. The time remaining until the next increment (or decrement) is shown on the bottom line.

Value/Days

Display	Action
 NNNNNNN = current value	Press **<VALUE/DAYS •>** to begin counting from the entered initial value. The value can be up to eight digits.

Increment Value

Display	Action
INCREMENT VALUE NNNN* NNNN = current value	Press **<INCREMENT VALUE •>** to set the increment value. The increment value will be added to the total value after each time interval.

Decrement Value

Display	Action
DECREMENT VALUE NNNN* NNNN = current value	Press **<DECREMENT VALUE •>** to set the decrement value. The decrement value will be subtracted from the total value each time interval if the increment value is **0**.

Time Interval

Display	Action
INTERVAL HH:MM:SS* HH:MM.SS = hours, minutes, seconds	Press **<TIME INTERVAL •>** to set the interval time between each increment or decrement. **Note:** The clock must be stopped to set the time interval.

When **<START>** is pressed to start the main clock, the controller counts down the time interval to 00:00:00 and adjusts the initial value by the increment or decrement value. The interval time resets and the cycle will repeat until **<STOP>** is pressed.

15.4 External Input Counting Codes

The External Input Counter counts the occurrences of external switch inputs starting at the initial value.

Display	Action
VALUE = NNNNNNNN EXT INPUT MODE NNNNNNN = current value	The current value is shown on the top line of the LCD.

Value/Days

Display	Action
VALUE NNNNNNNN* NNNNNNNN = current value	Press **<VALUE/DAYS •>** to begin counting from the entered initial value. The value can be up to eight digits.

Increment Value

Display	Action
INCREMENT VALUE NNNN* NNNN = current value	Press **<INCREMENT VALUE •>** to set the increment value. This value is added to the total value each time an external switch input 1 is detected from the J4 input.

Decrement Value

Display	Action
DECREMENT VALUE NNNN* NNNN = current value	Press **<DECREMENT VALUE •>** to set the decrement value. This value is subtracted from the total value each time an external switch input 2 is detected from the J4 input.

15.5 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the Menu function.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Stop at Zero

The following setting is only displayed in the Day and Time Event Countdown and Time Based Counter codes.

Display	Action
STOP AT ZERO YES OR *NO?	Press **<YES>** to stop the console when zero days and zero time occurs. Press **<NO>** to set the console to start counting time elapsed since the event occurs.

Section 16: Karate Operations

Sport Inserts: **0G-96890 Red/White Code 282**
0G-98374 White/Red Code 285

The Sport Insert drawing is located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**.

Reference Drawings:
Insert, Karate Code 282 ..... **Drawing A-96890**
Custom Insert, Karate Code 285..... **Drawing A-98374**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

16.1 Karate Keys

W (Wazaari)

Display	Action
WHITE W +1 N N = current setting	Press **<W +1>** to increment and **<W -1>** to decrement the Wazaari value for the selected competitor.

H (Hansoku)

Display	Action
WHITE H +1 N N = current setting	Press **<H +1>** to increment and **<H -1>** to decrement the Hansoku for the selected opponent.

M (Mubobi)

Display	Action
WHITE M +1 N N = current setting	Press **<M +1>** to increment and **<M -1>** to decrement the Mubobi value for the selected competitor

J (Jogai)

Display	Action
WHITE J +1 N N = current setting	Press **<J +1>** to increment and **<J -1>** to decrement the Jogai value for the selected competitor

Win

Display	Action
WHITE WIN ON	Press **<WIN>** to turn on the Win indicator for the selected opponent. Press either **<WIN>** key to turn it off.

16.2 Edit

W, H, M, J

The W, H, M and J values are edited in the same way. **<W +1>** is shown as an example.

Display	Action
WHITE W EDIT N* N = current setting	Press **<EDIT>** followed by the appropriate key to edit the value. Enter the correct value using the number pad and then press **<ENTER>**.

16.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the Menu function.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu.

Display	Action
	Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN%	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.
NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY RUN SEGMENT TIMER? EXIT GAME ARE YOU SURE?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection. **This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.
MENU- DISPLAY BLANK SCBD? PRESS ANY KEY TO RETURN TO GAME	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY SYNC TO CHAN SYNC TO CHAN ON 1-ON, 2-OFF	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. **Note:** This setting should remain ON unless instructed by Daktronics to turn it off.

Display	Action
MENU- DISPLAY CLOCK CAPTIONS CLOCK CAPTION- 1-ON, 2-OFF ON	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. Press the down arrow key to scroll to the next selection.
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD. Refer to **Section 16.4**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.

Display	Action
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY 1*GAME 2-TOD	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

16.4 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Main Clock

Note 1: The settings for the **Main Clock** are used with the **<SET MAIN CLOCK>** key.

Note 2: The period length is used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action
MAIN CLOCK-TIME PERIOD MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press **<ENTER>**. For example, 5:00. **Note:** Pressing **<ENTER>** to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.

Switch Output

The All Sport® 5000 console has a relay that can be used to run a number of different devices. The relay can be configured to operate under different settings. The default setting is 1-CLOCK= 0.

To display the desired relay settings:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.

2. Press **<YES>** to select the new setting.

3. Press **<NO>** or the down arrow key to leave the relay setting and display the next prompt.

The possible settings for relay output are as follows:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED? N = current setting	The switch remains open at all times and any external devices are disabled.
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Sttings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Period Length	5:00			
Switch Output	1-Clock = 0			

Section 17: Tae Kwon Do Operations

Sport Insert: **0G-96889 Red/White Code 283**
0G-98375 White/Red Code 286

The Sport Insert drawing is located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**.

Reference Drawings:
Insert, Tae Kwon Do Code 283 ..... **Drawing A-96889**
Custom Insert, Tae Kwon Do Code 286 ..... **Drawing A-98375**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

17.1 Tae kwon do Keys

D

Display	Action
WHITE D +1 N N = current setting	Press **<D +1>** to increment and **< D -1>** to decrement the points value for the selected competitor.

Gamjeom (G)

Display	Action
WHITE G +1 N N = current setting	Press **<G +1>** to increment and **<G -1>** to decrement the penalty count for the selected opponent.

Kyong-go (K)

Display	Action
WHITE K +1 N N = current setting	Press **<K +1>** to increment and **<K -1>** to decrement the ½ point deduction warnings for the selected opponent.

Win

Display	Action
WHITE WIN ON	Press **<WIN>** to turn on the Win indicator for the selected opponent. Press either **<WIN>** key to turn it off.

√

Display	Action
WHITE CHECK ON	Press **<√>** to turn on the check indicator for the selected opponent. Press either **<√>** key to turn it off.

Total On/Off

Press **<TOTAL ON/OFF>** to set the total point scoring on or off. The total points for each competitor are calculated from scoring for all rounds.

The score is calculated as follows:

D(points) – G(penalties) – ½K(warnings) = Total Score

Weight Class

Display	Action
WEIGHT CLASS NN*	Press **<WEIGHT CLASS>** to set weight class shown on the display. Enter the correct value on the number pad and then press **<ENTER>**.
NN = current setting	

Round Length

Display	Action
ROUND LENGTH MM:SS*	Press **<ROUND LENGTH •>** to set the length of the round. Enter the correct time on the number pad and then press **<ENTER>**.
MM:SS = minutes, seconds	

Rest Length

Display	Action
REST LENGTH MM:SS* MM:SS = minutes, seconds	Press **<REST LENGTH •>** to set the length of the rest period. Enter the correct value on the number pad and then press **<ENTER>**. The rest length is automatically counted down after the round time expires.

Round Number

Display	Action
ROUND NUMBER NN* NN = current setting	Press **<ROUND NO. •>** to set the current round number. Enter the correct value on the number pad and then press **<ENTER>**. The round number will be automatically incremented at the end of each rest period.

17.2 Edit

D,G,K

The D, G, and K values are edited in the same way. **<D +1>** is shown as an example.

Display	Action
WHITE D EDIT N* N = current setting	Press **<EDIT>** followed by the appropriate key to edit the value. Enter the correct value using the number pad and then press **<ENTER>**.

17.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the Menu function.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Reset Round

Display	Action
MENU- MAIN RESET ROUND?	Press **<YES>** reset the main clock to the round length value. **Note:** This function is disabled when the clock is running. Press the down arrow key to scroll to the next selection.

Reset Rest

Display	Action
MENU- MAIN RESET ROUND?	Press **<YES>** reset the main clock to the configured rest length value. **Note:** This function is disabled when the clock is running. Press the down arrow key to scroll to the next selection.

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.

Display	Action
MENU- DISPLAY BLANK SCBD? PRESS ANY KEY TO RETURN TO GAME	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY SYNC TO CHAN SYNC TO CHAN ON 1-ON, 2-OFF	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. **Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
MENU- DISPLAY CLOCK CAPTIONS CLOCK CAPTION- 1-ON, 2-OFF ON	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. Press the down arrow key to scroll to the next selection.
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD. Refer to **Section 17.4**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY 1*GAME 2-TOD	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

17.4 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Auto/Manual Timing

Display	Action
TIMING MODE *AUTO←→MANUAL	Press the left or right arrow keys to select automatic or manual timing respectively. In automatic timing mode, the round length value will be loaded into the main clock and automatically started when the rest length expires. In manual mode, the console will wait for a **<START>** key press to start the round time.

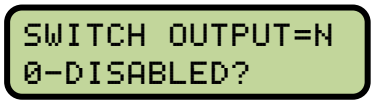
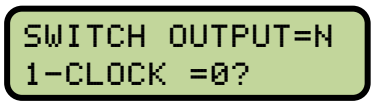
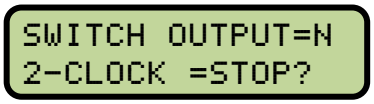
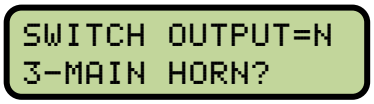
Switch Output

The All Sport® 5000 console has a relay that can be used to run a number of different devices. The relay can be configured to operate under different settings. The default setting is 1-CLOCK= 0.

To display the desired relay settings:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.
2. Press **<YES>** to select the new setting.
3. Press **<NO>** or the down arrow key to leave the relay setting and display the next prompt.

The possible settings for relay output are as follows:

Setting	Result
 N = current setting	The switch remains open at all times and any external devices are disabled.
 N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
 N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
 N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Auto/Manual Timing	Auto			
Round Length (accessed by key)	3:00			
Rest Length (accessed by key)	1:00			
Switch Output	1-Clock =0			

Section 18: Judo Operations

Sport Insert: **0G-96891 Blue/White Code 281**
0G-98376 White/Blue Code 284

The Sport Insert drawing is located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**.

Reference Drawings:
Insert, Judo Code 281 ..... **Drawing A-96891**
Custom Insert, Judo Code 284 ..... **Drawing A-98376**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

18.1 Judo Competitor Status

Display	Action
TIME MM:SS ↓ WYK N++ WYK N++ MM:SS = minutes, seconds W = waza ari score position Y = yuko score position K = koka score position N = penalty character position + + = medical exam positions	The bottom line of the LCD will either display the Osaekomi time, the medical time, or the competitor status during the operation of the console in this mode. When competitor status is displayed, it will show from left to right the one digit score (waza ari, yuko, koka), one character for penalties (K, C, S) and two possible medical exam indicators (+, +). This information is repeated for the other competitor. The data will be displayed on the LCD from left to right according to the code entered into the All Sport 5000 console: Blue-White (Code 281) or White-Blue (Code 284).

18.2 Judo Keys

White and Blue Osaekomi

Display	Action
   MM:SS = minutes, seconds	Press **<WHITE OSAEKOMI>** or **<BLUE OSAEKOMI>** to start the Osaekomi timer for the respective competitor. The timer displays on the corresponding opponents side of the scoreboard. The Osaekomi timer counts up to the time configured as Ippon time and sounds the horn unless the selected opponent's Waza ari is non-zero. If the latter condition is true, the Osaekomi Timer stops at the configured Waza ari time and sounds the horn.

Set Osaekomi

Display	Action
 MM:SS = minutes, seconds	Press **<SET WHITE OSAEKOMI •>** or **<SET BLUE OSAEKOMI •>** to set the Osaekomi time for the respective competitor. **Note:** This key is disabled while the Osaekomi timer is running. The Osaekomi time displays on the bottom line of the LCD.

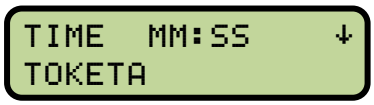
Sono-Mama

Display	Action
   MM:SS = minutes, seconds	Press **<SONO-MAMA>** to stop the Osaekomi and main clock and disable the **<START>** key. The values of Osaekomi and main clock are held until the **<YOSHI>** key is pressed to resume. **Note:** An "S" appears next to the Osaekomi time on the bottom line of the LCD to show the current Sono-Mama state.

Yoshi

Display	Action
 MM:SS = minutes, seconds	Press **<YOSHI>** to restart the Osaekomi and main clock if they were previously running and stopped by the **<SONO-MAMA>** key. The clocks continue counting from the values on the scoreboard when the timers were stopped. **Note:** This key is disabled when a Sono-Mama is not currently selected.

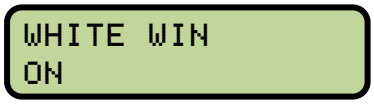
Toketa

Display	Action
 MM:SS = minutes, seconds	Press **<TOKETA>** to stop the Osaekomi timer. Osaekomi time starts from zero the next time the **<WHITE OSAEKOMI>** or **<BLUE OSAEKOMI>** keys are pressed.

Clear

Display	Action
 MM:SS = minutes, seconds	Press **<CLEAR>** to clear the Osaekomi time from both opponents' sides of the scoreboard. **Note:** This key is disabled if the Osaekomi timer is running or if the Osaekomi timer is currently on.

Win

Display	Action
	Press **<WIN>** to turn on the Win indicator for the selected opponent. Press either **<WIN>** key to turn it off.

Ippon

Display	Action
WHITE IPPON ON	Press **<IPPON>** to light the Ippon indicator and flash the Winner indicator for the selected opponent. The opponent's Winner and Ippon indicators are cleared.

Medical Exam

Display	Action
WHITE MEDICAL 1 ON TIME MM:SS ↓ MEDICAL W MM:SS MM:SS = minutes, seconds WHITE MEDICAL TIMER OFF WHITE MEDICAL MAX MEDICAL	There are two **<MEDICAL EXAM>** keys on the console. The first press of **<MEDICAL EXAM>** turns on the indicator for the selected opponent and starts the medical timer. The timer will display in the Osaekomi digits and the medical indicator flashes while the timer is running to indicate it is medical time. Pressing **<MEDICAL EXAM>** a second time will stop the timer if it is running. If the timer is not running, it will turn on the second indicator and start the timer. Once both medical indicators are turned on, pressing **<MEDICAL EXAM>** will not allow the medical timer to start. The LCD screen will show "Max Medical" when the key is pressed. Pressing the other **<MEDICAL EXAM>** key while the timer is running will switch the indicator and the timer to the corresponding side of the display and the timer will continue.

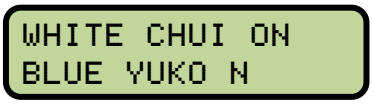
Keikoku

Display	Action
WHITE KEIK ON BLUE WAZAARI N N = current setting	Press **<KEIKOKU ON/OFF>** to light the corresponding penalty indicator and increment the opposing player's Waza ari by one. Pressing **<KEIKOKU ON/OFF>** a second time clears the penalty indicator and decrements the opposing player's Waza ari by one. The LCD shows the current indicator status and the new Waza ari value for the opposing player. **Note:** Any other penalties (Chui or Shido) for the selected player are cleared when a Keikoku penalty is assessed. Corresponding Yuko and Koka opponent values are also decremented.

Waza ari

Display	Action
 N = current setting	Press **<WAZA ARI +1>** to increment and **<WAZA ARI -1>** to decrement the selected opponent's Wazaari value. Wazaari values can be 0-2.

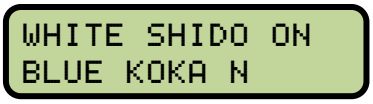
Chui

Display	Action
 N = current setting	Press **<CHUI ON/OFF>** to light the corresponding penalty indicator and increment the opposing player's Yuko by one. Pressing **<CHUI ON/OFF>** a second time clears the penalty indicator and decrements the opposing player's Yuko by one. The LCD shows the current indicator status and the new Yuko value for the opposing player. **Note:** Any other penalties (Keikoku or Shido) for the selected player are cleared when a Chui penalty is assessed. Corresponding Wazaari and Koka opponent values are decremented.

Yuko

Display	Action
 N = current setting	Press **<YUKO +1>** to increment and **<YUKO -1>** to decrement the selected opponent's Yuko value. Yuko values can be 0-9.

Shido

Display	Action
 N = current setting	Press **<SHIDO ON/OFF>** to light the corresponding penalty indicator and increment the opposing player's Koka by one. Pressing **<SHIDO ON/OFF>** a second time clears the penalty indicator and decrements the opposing player's Koka by one. The LCD shows the current indicator status and the new Koka value for the opposing player. **Note:** Any other penalties (Keikoku or Chui) for the selected player are cleared when a Shido penalty is assessed. Corresponding Wazaari and Yuko opponent values are decremented.

Koka

Display	Action
 N = current setting	Press **<KOKA +1>** to increment and **<KOKA -1>** to decrement the selected opponent's Koka value. Koka values can be 0-9.

18.3 Edit

Yuko/Koka

The **Yuko** and **Koka** values are edited in the same way. **<YUKO +1>** is shown as an example.

Display	Action
 N = current setting	Press **<EDIT>** followed by the appropriate key to edit the value. Enter the correct value using the number pad and then press **<ENTER>**.

Medical Exam

Display	Action
 N = current setting	Press **<EDIT>** followed by **<MEDICAL EXAM>** to edit the value for the respective competitor. Enter the correct value using the number pad and then press **<ENTER>**.

18.4 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the Menu function.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY RUN SEGMENT TIMER? EXIT GAME ARE YOU SURE?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection. **This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.
MENU- DISPLAY BLANK SCBD? PRESS ANY KEY TO RETURN TO GAME	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY SYNC TO CHAN SYNC TO CHAN ON 1-ON, 2-OFF	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. **Note:** This setting should remain ON unless instructed by Daktronics to turn it off.

Display	Action
MENU- DISPLAY CLOCK CAPTIONS CLOCK CAPTION- 1-ON, 2-OFF ON	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. Press the down arrow key to scroll to the next selection.
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD. Refer to **Section 18.5**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.

Display	Action
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY 1*GAME 2-TOD	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

18.5 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Main Clock

Display	Action
MAIN CLOCK-TIME PERIOD MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press **<ENTER>**. For example, 4:00. **Note:** Pressing **<ENTER>** to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.

Wazaari Time

Display	Action
OSAEKOMI LIMIT WAZAARI TIME:SS* SS = seconds	This function sets the configured Wazaari limit for the Osaekomi Timer. This is the value at which the Osaekomi Timer will stop if the selected opponents Wazaari is 1 or greater.

Ippon Time

Display	Action
OSAEKOMI LIMIT IPPON TIME:SS* SS = seconds	This function sets the configured Ippon time for the Osaekomi Timer. The Osaekomi Timer stops at this value by default.

Medical Time

Display	Action
MEDICAL TIME MM:SS* MM:SS = minutes, seconds	This function sets the configured time for a medical exam. The time can be set up to 99 seconds. Setting the time to 0:00 will disable the timing function of the medical exam key.

Switch Output

The All Sport® 5000 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK= 0.

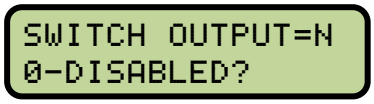
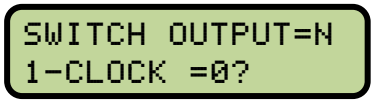
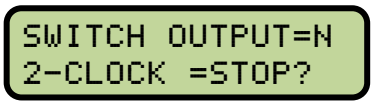
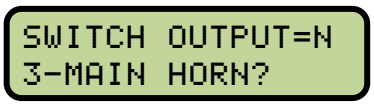
To display the desired switch setting:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.

2. Press **<YES>** to select the new setting.

3. Press **<NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
 N = current setting	The switch remains open at all times and any external devices are disabled.
 N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
 N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
 N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Main Clock Period Length	4:00			
Wazaari Time	20			
Ippon Time	25			
Medical Time	0:60			
Switch Output	1-Clock = 0			

Section 19: Boxing Operations

Sport Insert: 0G-96892 Boxing Code: 0291

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**.

Reference Drawings:
Insert, Boxing Code 291 ..... **Drawing A-96892**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

19.1 Boxing Keys

Set Round Time/Set Rest Time

<SET ROUND TIME •> and **<SET REST TIME •>** have similar functions and are described by the table below. In the LCD below, **<SET ROUND TIME •>** is used as an example.

Display	Action
ROUND TIME TIME MM:SS * MM:SS = minutes, seconds	Press **<SET ROUND TIME •>** or **<SET REST TIME •>** to set the value for the respective time. Enter the correct value using the number pad and then press **<ENTER>**. Press **<CLEAR>** twice to cancel and resume the match.

Maximum Round Number

Display	Action
MAX ROUND: EDIT NN* NN = current setting	**<MAXIMUM ROUND NUMBER •>** sets the value for the maximum number of rounds in the match. Enter the correct value using the number pad and then press **<ENTER>**. Press **<CLEAR>** twice to cancel and resume the match.

Round Number

Display	Action
ROUND- EDIT NN*	Press **<ROUND NUMBER •>** to set the value for the current round. Enter the correct value using the number pad and then press **<ENTER>**. Press **<CLEAR>** twice to cancel and resume the match.
NN = current setting	

Round Number +1

Display	Action
ROUND- +1 NN	Press **<ROUND NUMBER +1>** to increment the current round number by one.
NN = current setting	

19.2 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys, exits the Menu function.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu.

Display	Action
	Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD. Press **<CLEAR>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.
HOME- TEAM NAME _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed.

Display	Action
	Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to fifteen (15) characters for the team name and press **<ENTER>**. **Reinsert the Boxing (0G-96892) insert to continue.**
HOME- TEAM ABBR _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to ten (10) characters for the team abbreviation and press **<ENTER>**. **Reinsert the Boxing (0G-96892) insert to continue.**

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.

Display	Action
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.
MENU- DISPLAY BLANK SCBD?	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation.
PRESS ANY KEY TO RETURN TO GAME	Press the down arrow key to scroll to the next selection.
MENU-DISPLAY SYNC TO CHAN	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off.
SYNC TO CHAN ON 1-ON, 2-OFF	**Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
MENU- DISPLAY CLOCK CAPTIONS	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off.
CLOCK CAPTION- 1-ON, 2-OFF ON	Press the down arrow key to scroll to the next selection.

Display	Action
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Auto Time

The Auto Time option allows the user to choose automatic time transitions. If turned ON, the time will automatically switch between round and rest time. If OFF is selected, this change must be done manually. ON is the default and is recommended.

Display	Action
AUTO TIME ON 1-ON, 2-OFF	Press **<1>** to turn ON the Auto Time selection. Press **<2>** to turn OFF the Auto Time selection. Press the down arrow to scroll to the next selection. Press **<CLEAR>** to leave the menu.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.

Display	Action
MENU-TIME OF DAY 1*GAME 2-TOD	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

19.3 Edit

Though the **<EDIT>** key is not disabled for this sport code, the buttons available on the insert are able to edit the settings simply by pressing them.

Section 20: Strikeout Count Operations

Sport Insert: 0G-163409 Strikeout Count Code: 5099

The Sport Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**.

Reference Drawings:
Insert; Strike Outs ..... **Drawing A-163409**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

20.1 Strikeout Keys

Season Strikeouts

Display	Action
TOTAL: EDIT NNNN*	Press **<SEASON STRIKEOUTS •>** to set the value for the season total strikeouts. Enter the correct value using the number pad and then press **<ENTER>**.
NNNN = current setting	

Game Strikeouts

Display	Action
CUR VALUE: EDIT NNN*	Press **<GAME STRIKEOUTS •>** to set the value for the current game strikeouts. Enter the correct value using the number pad and then press **<ENTER>**.
NNN = current setting	

Strikeouts +1, -1

Display	Action
CUR VALUE: +1 NNN	Press **<STRIKEOUTS +1>** to increment and **<STRIKEOUTS -1>** to decrement the strikeout count for the game and season by one. The selected frame for the game strikeout count is sent through the RTD port each time the key is pressed.
NNN = current setting	

Display Control Keys

The display control keys will send the selected frame command through the RTD port. Pressing these keys will initiate the display of that frame on the Venus® matrix control system. The frames will be sent as Enhanced RTD Fields and have the following protocols: 19200 baud, 8 data bits, and no parity. The frame number for each of the keys is listed below:

<CLEAR DISPLAY> ----------Frame 1
<RUN PROMO 1> ----------Frame 2
<RUN PROMO 2> ----------Frame 3
<RUN PROMO 3> ----------Frame 4
<RUN PROMO 4> ----------Frame 5
<RUN PROMO 5> ----------Frame 6
<RUN PROMO 6> ----------Frame 7
<RUN PROMO 7> ----------Frame 8
<RUN PROMO 8> ----------Frame 9
<RUN PROMO 9> ----------Frame 10
<RUN PROMO 10>----------Frame 11
<RUN PROMO 11>----------Frame 12
<RUN PROMO 12>----------Frame 13
<RUN PROMO 13>----------Frame 14
<RUN PROMO 14>----------Frame 15
<RUN PROMO 15>----------Frame 16
<RUN PROMO 16>----------Frame 17
<RUN PROMO 17>----------Frame 18
<RUN PROMO 18>----------Frame 19
<RUN PROMO 19>----------Frame 20
<DISPLAY STRIKEOUTS>----------Frame 21 + the strikeout count
(example: 0 strikeouts = Frame 21)
1 strikeout = Frame 22)
2 strikeouts = Frame 23)

20.2 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the Menu function.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

20.3 Edit

Strikeouts +1, -1

Pressing **<EDIT>** followed by <**STRIKEOUTS +1**> or <**STRIKEOUTS -1**> presents the same editing opportunity as pressing **<GAME STRIKEOUTS •>**. Enter the correct value using the number pad and then press **<ENTER>**. Press **<CLEAR>** to cancel the selection and return to the game in progress.

Section 21: Cricket Operations

Sport Insert: 0G-319507 Cricket Code: 5598

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**.

Reference Drawings:
Insert; Cricket, A/S 5000 Series ..... **Drawing A-319507**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

21.1 Cricket Competitor Status

Display	Action
A-XX T- 0 B-XX NN W-0 OV-40 NN NN = batsman number XX = batsman score	The score for batsman A and B is shown by the A- and B- text, with the batsman number shown below them. The total score for the team is shown by T- and wickets and overs are shown by W- and OV-.

21.2 Cricket Keys

Wickets (+1,-1), Overs (+1,-1), Extras (+1,-1)

The **<WICKETS +1>**, **<OVERS +1>**, and **<EXTRAS +1>** keys are used to increment their respective totals. The **–1** keys are used for correcting a wrong value.

Display	Action
WICKETS: +1 NN OVERS: +1 NNN EXTRA RUNS: +1 NN NN/NNN = current setting	Press **<WICKETS +1>**, **<OVERS +1>**, or **<EXTRAS +1>** to increment their respective totals. The LCD shows which key was pressed and the new value. The Extras +1, -1 keys will also increment and decrement from the total score When the **<WICKETS +1>** key is pressed, it will transfer the total score to the Last Wicket and also transfer the Batsman score of the Batsman selected as facing to the Last Man. Make sure the facing selection is set for the Batsman that is to be out.

Batsman Score

Display	Action
BAT A RUNS: EDIT NNN* N = current setting	Press **<BATSMAN SCORE •>** to edit the score for that batsman. Enter the correct value using the number pad and then press **<ENTER>**.

Batsman Number

Display	Action
BATSMAN A NN* N = current setting	Press **<BATSMAN NUMBER •>** to edit the uniform number of the batsman currently in the game. Enter the correct value using the number pad and then press **<ENTER>**.

Batsman Facing

Display	Action
BATSMAN A FACING ON	Press **<BATSMAN FACING>** to turn on the facing indicator for that batsman. This display appears briefly and then an arrow shows up next to the batsman score on the LCD.

Score +1, +4, +6, -1

Display	Action
BAT A RUNS: +1 NNN NNN = current setting	Press the appropriate **<SCORE +1>**, **<SCORE +4>**, or **<SCORE +6>** key to increment the total number of runs for the batsman. Press the **<SCORE -1>** to decrement the batsman score. The LCD shows which key was pressed and the new value for the corresponding player. These keys will also increment and decrement from the total score.

Bowler A Info, Bowler B Info

Display	Action
 NN = current setting	Press the appropriate **<BOWLER A INFO •>** or **<BOWLER B INFO •>** key to enter information about the bowlers. Enter the correct value using the number pad and then press **<ENTER>**.

Last Man

Display	Action
 NNN = current setting	Press the **<LAST MAN •>** key to enter or edit score for the last man that was out. Enter the correct value using the number pad and then press **<ENTER>**.

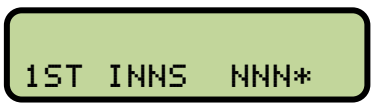
Last Wicket

Display	Action
 NNN = current setting	Press the **<LAST WICKET •>** key to enter or edit score that was shown at the last wicket. Enter the correct value using the number pad and then press **<ENTER>**.

Runs Reqd

Display	Action
 NNN = current value	Press the **<RUNS REQD •>** key to enter or edit the value for runs required to win. Enter the correct value using the number pad and then press **<ENTER>**.

1st Inns

Display	Action
 NNN = current value	Press the **<1ST INNS •>** key to enter or edit the value for the number of 1st inning runs. Enter the correct value using the number pad and then press **<ENTER>**.

Total

Display	Action
TOTAL SCORE NNN*	Press the **<TOTAL •>** key to enter or edit the value for the total team runs. Enter the correct value using the number pad and then press **<ENTER>**. The Batsman Score keys (+1, +4, +6,-1) and the Extra keys (+1,-1) will also increment/decrement to the total score.
NNN = current value	

Team Out/Declare

Display	Action
OUT/DECLARE Y/N?	Press the **<TEAM OUT/DECLARE>** key when the team is out or if they want to declare the end of their inning. Press **<NO>** to declare the team out. Press **<YES>** to not declare the team out.

If the team is set out, the total score will be copied to the 1st Inns value, and the Runs required will be set to the current total Score +1. The Wickets will be set to 0 and all other scores will be set to blank.

Umpire Light

Press the **<UMPIRE LIGHT>** key to turn on the umpire light. The light will stay on until the key is released.

21.3 Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

Wickets +1/-1, Overs +1/-1, Extras +1/-1

The **<WICKETS +1/-1>**, **<OVERS +1/-1>**, and **<EXTRAS +1/-1>** keys are edited in the same way. **<OVERS +1/-1>** is used as an example.

Display	Action
OVERS: EDIT NNN*	Press **<EDIT>** followed by the appropriate statistic key to edit. Enter the correct value using the number pad and then press **<ENTER>**.
NNN = current setting	

21.4 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the Menu function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

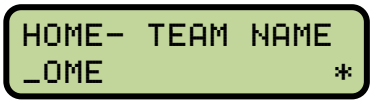
Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
	Press **<ENTER>** or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD. Press **<CLEAR>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.
	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to fifteen (15) characters for the team name and press **<ENTER>**. **Reinsert the Cricket (0G-319507) insert to continue.**
	The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings. The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to ten (10) characters for the team abbreviation and press **<ENTER>**. **Reinsert the Cricket (0G-319507) insert to continue.**

Inning Settings Menu

The **INNING SETTINGS MENU** sets the default number of overs in an inning.

Display	Action
INNING SETTINGS OVERS: NN* NN = current setting	Enter the correct value using the number pad and then press **<ENTER>**.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY 1*GAME 2-TOD	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Overs per inning	40			

Section 22: Water Polo Operations

Sport Insert: 0G-178439 Water Polo Code: 4498

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**.

Reference Drawings:

Block Diagram, A/S 3000 or 5000 Hockey..... **Drawing A-124689**
Insert; LL-2441 A/S 5000, Team Name ..... **Drawing A-125290**
Insert; A/S 5000, Water Polo..... **Drawing A-178439**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

22.1 Water Polo Keys

Time Out On/Off

<TIME OUT ON/OFF> stops and starts the time out clock. The length of the full time outs can also be changed when the time out clock is stopped.

> **Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-SELECT FULL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** to display the configured time for full time out length. To start the full time out press **<YES>**. To decline the selection of the full time out press **<NO>**.

Penalty Time

Display	Action
PENALTY TIME SET MM:SS* MM:SS = minutes, seconds	Press **<PENATLY TIME •>** to set the penalty time. Enter the correct value using the number pad and then press **<ENTER>**.

Enable Penalty Clocks

Press **<ENABLE PENALTY CLOCKS>** to allow the penalty clocks to count when the main clock is on. The LCD will display "EN" in the lower-right corner.

Disable Penalty Clocks

Press **<DISABLE PENALTY CLOCKS>** to disable the penalty clocks from counting when the main clock is on. The LCD will display "DS" in the lower-right corner.

Shot Time

Display	Action
SHOT CLOCK-EDIT CURR MM:SS* MM:SS = minutes, seconds	Press **<SHOT TIME •>** to display the current shot clock time length. To accept the current shot clock time length press **<YES>**. To decline the selection of the current shot clock time length press **<NO>**. Use the keypad to enter the new time in minutes and seconds and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
SHOT CLOCK-EDIT RESET 1 MM:SS* MM:SS = minutes, seconds	Press **<SHOT TIME •>** a second time to display the configured time for shot clock **Reset 1** length. To accept the shot clock **Reset 1** length press **<YES>**. To decline the selection of the shot clock **Reset 1** length, press **<NO>**. Use the keypad to enter the new time in minutes and seconds and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game. **Note:** The configured time of shot clock is set using the **EDIT SETTINGS** function when a new code is selected.

Display	Action
SHOT CLOCK-EDIT RESET 2 MM:SS* MM:SS = minutes, seconds	Press **<SHOT TIME •>** a third time to display the configured time for shot clock **Reset 2** length. To accept the shot clock **Reset 2** length press **<YES>**. To decline the selection of the shot clock **Reset 2** length press **<NO>**. To change the shot clock **Reset 2** length and set the shot clock enter the new time in minutes and seconds on the number pad and press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game. **Note:** The configured time of shot clock is set using the **EDIT SETTINGS** function when a new code is selected.

Recall Shot Time

Display	Action
SHOT CLOCK-MODE RECALL Y/N	Press **<RECALL SHOT TIME •>** to recall the shot time that was remaining before the last shot clock reset was pressed. To accept the recall press **<YES>**. To decline the recall press **<NO>**.

Period +1

Display	Action
PERIOD- +1 N N = current setting	Press **<PERIOD +1>** to increment the period number. A prompt showing period number displays briefly.

Score

The home and guest **<SCORE +1>** keys are used to increment the team score and the **<SCORE -1>** key is used to decrement the team score.

Display	Action
TEAM SCORE- +1 HOME NNN NNN = current setting	Press the appropriate score key to increment or decrement the score for the home or guest team. The LCD shows which key was pressed and the new value for the team score of the corresponding team.

Time Out

The home and guest **<TIME OUT>** keys are used to decrement the number of time outs remaining and start the time out clock. The scoreboard indicator is turned on when the type of time out is selected (full or partial). The scoreboard indicator is turned off when the time out clock expires or is stopped.

> **Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-HOME FULL N N = current setting	Press **<TIME OUT>** to display the number of full time outs remaining. To accept the full time out and start the time out clock press **<YES>**. To decline the selection of a full time out press **<NO>**.
TIME OUTS-HOME PARTIAL N N = current setting	Press **<TIME OUT>** a second time (or use the up and down arrow keys) to display the number of partial time outs remaining. To accept the partial time out and start the time out clock press **<YES>**. To decline the selection of a partial time out press **<NO>**.
TIME OUTS-HOME OFF	To exit the running time out clock, press **<TIME OUT>**. This will turn the time out OFF.

Display	Action
TIME OUTS-HOME NO TIME OUTS	This message appears when there are no full or partial time outs left.

Player Penalty Start

Display	Action
HOME PLYR/PEN PLAYER NN* NN = current setting	Press **<PLAYER PENALTY START •>** to start a new penalty time for the home or guest team. The penalty time will start to count immediately. On the number pad, enter the jersey number of the player with the penalty, and then press **<ENTER>**.

HOME PLYR/PEN
PENALTY #N*
N = current setting
	On the number pad, enter the penalty number of this penalty, and then press **<ENTER>**.

Delete Penalty

Display	Action
HOME DEL PEN? 1PNN PNMM:SS #1 NN = player number MM:SS = minutes, seconds	Press **<DELETE PENALTY •>** to delete a single penalty for the home or guest team. Use the up and down arrow keys to scroll to the correct penalty and press **<ENTER>**. Press **<CLEAR>** to decline the selection and return to the game.

Clear All Penalties

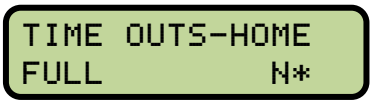
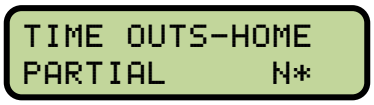
Display	Action
HOME PLYR/PEN CLEAR ALL Y/N?	Press **<CLEAR ALL PENALTIES •>** to delete all of the penalties for the home or guest team. Press **<YES>** to clear the penalties for all players in the roster. Press **<NO>** to decline the selection and return to the game.

22.2 Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

Time Out

Note: Only the time outs configured in the EDIT SETTINGS function are displayed on the LCD and available for selection.

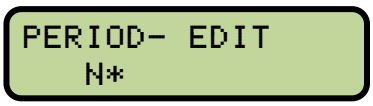
Display	Action
 N = current setting	Press **<EDIT>** followed by **<TIME OUT>** for the home or guest team to display the current setting of full time outs remaining. Enter the correct number of full time outs on the number pad and press **<ENTER>**.
 N = current setting	After accepting or rejecting the number of full time outs, the number of partial time outs is displayed. Enter the correct number of partial time outs on the number pad and press **<ENTER>**.

Score

The home and guest **<SCORE +1, -1>** keys are all edited in the same way.

Display	Action
 NNN = current setting	Press **<EDIT>** and any of the **SCORE** keys for the home or guest team to display the current team score setting. Enter the correct team score on the number pad and press **<ENTER>**.

Period +1

Display	Action
 N = current setting	Press **<EDIT>** followed by **<PERIOD +1>** to display the current period setting. Enter the correct number on the number pad and press **<ENTER>**. The full time outs are reset.

Time Out On/Off

Display	Action
TIME OUTS-EDIT FULL MM:SS* MM:SS = minutes, seconds	Press **<EDIT>** followed by **<TIME OUT ON/OFF>** to display the current time setting for full time outs. Enter the correct time on the number pad and press **<ENTER>**.
TIME OUTS-EDIT PARTIAL MM:SS* MM:SS = minutes, seconds	After accepting or rejecting the full time outs time setting, the partial time outs time setting is displayed. Enter the correct time on the number pad and press **<ENTER>**.

22.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys, exits the Menu function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu.

Display	Action
	Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD. Press **<CLEAR>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.
HOME- TEAM NAME _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed.

Display	Action
	Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to fifteen (15) characters for the team name and press **<ENTER>**. **Reinsert the WATER POLO (0G-178439) insert to continue.**
	The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings. The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to ten (10) characters for the team abbreviation and press **<ENTER>**. **Reinsert the WATER POLO (0G-178439) insert to continue.**

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.

Display	Action
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.
MENU- DISPLAY BLANK SCBD?	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation. Press the down arrow key to scroll to the next selection.
PRESS ANY KEY TO RETURN TO GAME	
MENU-DISPLAY SYNC TO CHAN	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. **Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
SYNC TO CHAN ON 1-ON, 2-OFF	
MENU- DISPLAY CLOCK CAPTIONS	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. Press the down arrow key to scroll to the next selection.
CLOCK CAPTION- 1-ON, 2-OFF ON	

Display	Action
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the settings submenu and show the first prompt on the LCD. Refer to **Section 22.4**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.

Display	Action
MENU-TIME OF DAY 1*GAME 2-TOD	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

22.4 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Main Clock

Note 1: The settings for the Main Clock are used with the **<SET MAIN CLOCK>** key.

Note 2: The period, break, and overtime lengths are used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action
MAIN CLOCK-MODE TENTH SECOND? Y	When the main clock is set to count down and tenths of a second is selected, the main clock displays in tenths of a second remaining when the time is below one minute. Press **<YES>** to set the main clock to display tenths of a second. Press **<NO>** to display whole seconds.
MAIN CLOCK-TIME PERIOD MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press **<ENTER>**. For example, 15:00 per period. **Note:** Pressing **<ENTER>** to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.

Display	Action
MAIN CLOCK-TIME BREAK MM:SS* MM:SS = minutes, seconds	Set the amount of time between periods. Enter the correct amount of time for break length in minutes and seconds on the number pad and press **<ENTER>**. For example, 10:00
MAIN CLOCK-TIME OVERTIME MM:SS* MM:SS = minutes, seconds	Set the amount of time for the overtime periods. Enter the correct amount of time for overtime periods in minutes and seconds on the number pad and press **<ENTER>**. For example, 5:00

Shot Clock

Display	Action
SHOT CLOCK-TIME RESET 1 MM:SS* MM:SS = minutes, seconds	This setting is used for the **<RESET>** button on the remote shot clock control console. **Note:** The current setting for the **<RESET>** time displays on the LCD until the first number key is pressed. Enter the correct amount of reset time in minutes and seconds on the number pad and press **<ENTER>**. For example, 00:35
SHOT CLOCK-MODE SYNC W/ MAIN? Y	Press **<YES>** to synchronize the shot clock with the main clock. If **<STOP>** for the main clock is pressed while the main and shot clocks are running, the shot clock stops. The shot clock restarts when **<START>** is pressed for the main clock. Press **<NO>** to allow the shot clock to run independently of the main clock. The shot clock starts and stops only with the switch on the remote shot clock control console.
SHOT CLOCK-MODE AUTO BLANK? Y	Press **<YES>** to blank the shot clock time when the shot clock time is greater than or equal to the main clock time. The shot clock is reset and stopped when the display is blanked to eliminate inadvertent sounding of shot clock horn. Press **<NO>** to display the shot clock time at all times.

Penalty Time

Default times can be set for the penalty keys.

Display	Action
PENALTY TIME SET MM:SS* MM:SS = minutes, seconds	Enter the correct default time for a penalty in minutes and seconds on the number pad and press the **<ENTER>** key. For example, 0:20. The penalty time is used as the default when pressing the player penalty start function.

Time Outs

Note 1: If a full or partial time out is not needed for the HOME or GUEST **<TIME OUT>** keys, enter zero for the number of time outs.

Note 2: If a full or partial time out is not needed for **<TIME OUT ON/OFF>,** enter zero for the time.

Note 3: The number for each type of time out must be manually entered for an overtime period using the **<EDIT> <TIME OUT>** key sequence for each team.

Display	Action
TIME OUTS- MODE FULL N * N = current setting	Enter the number of full time outs on the number pad and press **<ENTER>**.
TIME OUTS- TIME FULL MM:SS* MM:SS = minutes, seconds	Enter the amount of time for a full time out in minutes and seconds on the number pad and press **<ENTER>**. For example, 1:00
TIME OUTS-MODE SHOW ON MAIN? N	Press **<YES>** to display the time out time on the LCD and the main clock digits of the scoreboard while the time out clock is active. Press **<NO>** to display the time out time on the LCD only.

Shot Clock Horn

Display	Action
HORN-COMBINED SET IND? Y/N HORN-INDEPENDENT SET COMB? Y/N	The LCD will show if the shot clock horn is set for Combined or Independent. If Combined, press **<YES>** to set the shot clock horn to sound separately without the main horn. If Independent, press **<YES>** to set the shot clock horn to sound the main horn at the same time. Press **<NO>** to leave the setting as it is.

Switch Output

The All Sport® 5000 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK= 0.

To display the desired switch setting:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.

2. Press **<YES>** to select the new setting.

3. Press **<NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED? N = current setting	The switch remains open at all times and any external devices are disabled.
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.

Setting	Result
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Tenth of a Second	Yes			
Period Length	15:00			
Break Length	10:00			
Overtime Length	5:00			
Shot Reset 1	0:35			
Sync Shot with Main	Yes			
Auto Blank	Yes			
Penalty Time	0:20			
Full Time Outs	1			
Full Time Out	1:00			
Time Out Show on Main	No			
Horn Ind./Comb.	INDEPENDENT			
Switch Output	1-Clock = 0			

Section 23: Rugby Operations

Sport Insert: 0G-712154 Rugby Code: 6690 (Union) or 6691 (League)

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**.

Reference Drawings:

Block Diagrams, A/S 3000 or 5000 Outdoor Sports..... **Drawing A-124690**
Insert; LL-2442 A/S 5000, Team Name ..... **Drawing A-125290**
Insert; Rugby..... **Drawing A-712154**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

Write the correct code number here: | | | | |

23.1 Rugby Keys

Time Out On/Off

<TIME OUT ON/OFF> stops and starts the time out clock. The length of both the full and partial time outs can also be changed when the time out clock is stopped.

> **Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-SELECT FULL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** to display the configured time for full time out length. To start the full time out press **<YES>**. To decline the selection of the full time out press **<NO>**.

Display	Action
TIME OUTS-SELECT PARTIAL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** a second time (or use the up and down arrow keys) to display the configured time for partial time out length. To start the partial time out press **<YES>**. To decline the selection of the partial time out press **<NO>**.

Half +1

Display	Action
PERIOD- +1 N N = current setting	Press **<HALF +1>** to increment the half number. A prompt showing period number will display briefly.

Time Out

The home and guest **<TIME OUT>** keys are used to decrement the number of time outs remaining and start the time out clock. The scoreboard indicator is turned on when the type of time out is selected (full or partial). The scoreboard indicator is turned off when the time out clock expires or is stopped.

Note: Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-HOME FULL N N = current setting	Press **<TIME OUT>** to display the number of full time outs remaining. To accept the full time out and start the time out clock press **<YES>**. To decline the selection of a full time out press **<NO>**.
TIME OUTS-HOME PARTIAL N N = current setting	Press **<TIME OUT>** a second time (or use the up and down arrow keys) to display the number of partial time outs remaining. To accept the partial time out and start the time out clock press **<YES>**. To decline the selection of a partial time out press **<NO>**.

Display	Action
TIME OUTS-HOME OFF	To exit the running time out clock, press **<TIME OUT>**. This will turn the time out OFF.
TIME OUTS-HOME NO TIME OUTS	This message appears when there are no full or partial time outs left.

Note: Tries, drop goals, and penalty goals all have different point values based on whether the current sport code is set to Union (6690) or League (6691) scoring.

Try +1, -1

The home and guest **<TRY +1>** and **<TRY -1>** keys are used to increment and decrement the number of tries awarded.

Display	Action
TRY +1 HOME NN NN = current setting	Press the appropriate try key to increment or decrement the number of tries for the home or guest team. Adding a try will increment the team score by five (5) points for Union or by four (4) points for League. The LCD shows which key was pressed and the new value for the team score of the corresponding team.

Conversion +1, -1

The home and guest **<CONVERSION +1>** and **<CONVERSION -1>** keys are used to increment and decrement the number of conversions awarded.

Display	Action
CONVERSION +1 HOME NN NN = current setting	Press the appropriate conversion key to increment or decrement the number of conversions for the home or guest team. Adding a conversion will increment the team score by two (2) points for both Union and League scoring. The LCD shows which key was pressed and the new value for the score of the corresponding team.

Drop Goal +1, -1

The home and guest **<DROP GOAL +1>** and **<DROP GOAL -1>** keys are used to increment and decrement the number of drop goals awarded.

Display	Action
DROP GOAL +1 HOME NN NN = current setting	Press the appropriate drop goal key to increment or decrement the number of drop goals for the home or guest team. Adding a drop goal will increment the team score by three (3) points for Union or by one (1) point for League. The LCD shows which key was pressed and the new value for the score of the corresponding team.

Penalty Goal +1, -1

The home and guest **<PENALTY GOAL +1>** and **<PENALTY GOAL -1>** keys are used to increment and decrement the number of penalty goals awarded.

Display	Action
PENALTY GOAL +1 HOME NN NN = current setting	Press the appropriate penalty goal key to increment or decrement the number of penalty goals for the home or guest team. Adding a penalty goal will increment the team score by three (3) points for Union or by two (2) points for League. The LCD shows which key was pressed and the new value for the score of the corresponding team.

Tackles +1, -1

The **<TACKLES +1>** and **<TACKLES -1>** keys are used to set the current tackle number.

Display	Action
TACKLES +1 N N = current setting	Press the appropriate tackle key to increment or decrement the tackle number. The tackle number ranges from 1 to 6. The LCD shows which key was pressed and the new value.

23.2 Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

Half +1

Display	Action
PERIOD- EDIT N* N = current setting	Press **<EDIT>** followed by **<HALF +1>** to display the current period setting. Enter the correct half number on the number pad and press **<ENTER>**. The full time outs are reset.

Time Out On/Off

Display	Action
TIME OUTS-EDIT FULL MM:SS* MM:SS = minutes, seconds	Press **<EDIT>** followed by **<TIME OUT ON/OFF>** to display the current time setting for full time outs. Enter the correct time on the number pad and press **<ENTER>**.
TIME OUTS-EDIT PARTIAL MM:SS* MM:SS = minutes, seconds	After accepting or rejecting the full time outs time setting, the partial time outs time setting is displayed. Enter the correct time on the number pad and press **<ENTER>**.

Time Out

Note: Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-HOME FULL N* N = current setting	Press **<EDIT>** followed by **<TIME OUT>** for the home or guest team to display the current setting of full time outs. Enter the correct number of full time outs on the number pad and press **<ENTER>**.

Display	Action
TIME OUTS-HOME PARTIAL N* N = current setting	After accepting or rejecting the number of full time outs, the number of partial time outs is displayed. Enter the correct number of partial time outs on the number pad and press **<ENTER>**.

Try +1, -1

Display	Action
TRY EDIT HOME NN* NN = current setting	Press **<EDIT>** and either of the **TRY** keys for the home or guest team to display the current number of tries. Enter the correct number of tries on the number pad and press **<ENTER>**. The score will be adjusted accordingly.

Conversion +1/-1, Drop Goal +1/-1, Penalty Goal +1/-1

The home and guest **<CONVERSION +1, -1>**, **<DROP GOAL +1, -1>**, and **<PENALTY GOAL +1, -1>** keys are edited the same way.

Display	Action
CONVERSION EDIT HOME NN* NN = current setting	Press **<EDIT>** and the appropriate statistic key to display the current setting. For example, **<CONVERSION +1, -1>**. Enter the correct number on the number pad and press **<ENTER>**.

23.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the **Menu** function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport.

Display	Action
	Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

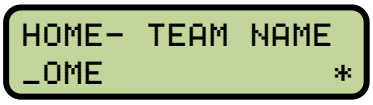
Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
	Press **<ENTER>** or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD. Press **<CLEAR>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.
	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to fifteen (15) characters for the team name and press **<ENTER>**. **Reinsert the RUGBY (0G-712154) insert to continue.**
	The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings. The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to ten (10) characters for the team abbreviation and press **<ENTER>**. **Reinsert the RUGBY (0G-712154) insert to continue.**

Display Menu

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.
MENU- DISPLAY BLANK SCBD?	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation. Press the down arrow key to scroll to the next selection.
PRESS ANY KEY TO RETURN TO GAME	
MENU-DISPLAY SYNC TO CHAN	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. **Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
SYNC TO CHAN ON 1-ON, 2-OFF	

Display	Action
MENU- DISPLAY CLOCK CAPTIONS CLOCK CAPTION- 1-ON, 2-OFF ON	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. Press the down arrow key to scroll to the next selection.
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Edit Settings submenu and show the first prompt on the LCD. Refer to **Section 23.4**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.

Display	Action
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY 1*GAME 2-TOD MENU-TIME OF DAY BLANK GAME DATA?	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game. If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

23.4 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Main Clock

Note 1: The settings for the Main Clock are used with the **<SET MAIN CLOCK>** key.

Note 2: The period, break, and overtime lengths are used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action
MAIN CLOCK-MODE TENTH SECOND? Y	When the main clock is set to count down and tenths of a second is selected, the main clock displays in tenths of a second remaining when the time is below one minute. Press **<YES>** to set the main clock to display tenths of a second. Press **<NO>** to display whole seconds.

Display	Action
MAIN CLOCK-TIME PERIOD MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press **<ENTER>**. For example, 20:00 per half or 8:00 per quarter **Note:** Pressing **<ENTER>** to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.
MAIN CLOCK-TIME BREAK MM:SS* MM:SS = minutes, seconds	Set the amount of time between periods. Enter the correct amount of time for break length in minutes and seconds on the number pad and press **<ENTER>**. For example, 1:00
MAIN CLOCK-TIME OVERTIME MM:SS* MM:SS = minutes, seconds	Set the amount of time for the overtime periods. Enter the correct amount of time for overtime periods in minutes and seconds on the number pad and press **<ENTER>**. For example, 5:00

Switch Output

The All Sport® 5000 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK= 0. To display the desired switch setting:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.

2. Press **<YES>** to select the new setting.

3. Press **<NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED? N = current setting	The switch remains open at all times and any external devices are disabled.

Setting	Result
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Tenth of a Second	No			
Period Length	12:00			
Break Length	20:00			
Overtime Length	5:00			
Switch Output	1-Clock = 0			

Section 24: Australian Rules Football/Cricket Operations

Sport Insert: **0G-315384** **Australian Rules Football Code:** **6699**
Cricket Code: **5699**

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**.

Reference Drawings:

Block Diagrams, A/S 3000 or 5000 Outdoor Sports..... **Drawing A-124690**
Insert; LL-2442 A/S 5000, Team Name ..... **Drawing A-125290**
Insert; Cricket/Football ..... **Drawing A-315384**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

Write the correct code number here: | | | | |

24.1 Australian Rules Football Keys

Red On/Off, Green On/Off

The **<RED ON/OFF>** and **<GREEN ON/OFF>** keys set the substitution status.

Display	Action
RED INDICATOR ON RED INDICATOR OFF	Press **<RED ON/OFF>** once to turn on the red indicator; press it again to turn off the red indicator.
GREEN INDICATOR ON GREEN INDICATOR OFF	Press **<GREEN ON/OFF>** once to turn on the green indicator; press it again to turn off the green indicator.

Goals +1, -1

The home and guest **<GOALS +1>** and **<GOALS -1>** keys are used to increment and decrement the number of goals scored.

Display	Action
GOALS +1 HOME NN NN = current setting	Press the appropriate try key to increment or decrement the number of goals for the home or guest team. Adding a goal will increment the Total team score by six (6) points. The LCD shows which key was pressed and the new value for the team score of the corresponding team.

Super Goals +1, -1

The home and guest **<SUPER GOALS +1>** and **<SUPER GOALS -1>** keys are used to increment and decrement the number of super goals scored.

Display	Action
SUPER GOALS +1 HOME NN NN = current setting	Press the appropriate try key to increment or decrement the number of super goals for the home or guest team. Adding a super goal will increment the Total team score by nine (9) points. The LCD shows which key was pressed and the new value for the team score of the corresponding team.

Behinds +1, -1

The home and guest **<BEHINDS +1>** and **<BEHINDS -1>** keys are used to increment and decrement the number of behinds scored.

Display	Action
BEHINDS +1 HOME NN NN = current setting	Press the appropriate conversion key to increment or decrement the number of behinds for the home or guest team. Adding a behind will increment the Total team score by one (1) point. The LCD shows which key was pressed and the new value for the score of the corresponding team.

24.2 Cricket Keys

Overs +1/-1, Wickets +1/-1

The **<OVERS +1>** and **<WICKETS +1>** keys are used to increment their respective totals. The **–1** keys are used for correcting a wrong value.

Display	Action
OVERS: +1 HOME NN WICKETS: +1 HOME NN NN = current setting	Press **<OVERS +1>** or **<WICKETS +1>** for the home or guest team to increment their respective totals. The LCD shows which key was pressed and the new value.

Runs +1, +4, +6, -1

Display	Action
RUNS: +1 HOME NNN NNN = current setting	Press the appropriate **<RUNS +1>**, **<RUNS +4>**, or **<RUNS +6>** key to increment the total number of runs for the home or guest team. Press the **<RUNS -1>** to decrement the number of runs for the home or guest team. The LCD shows which key was pressed and the new value for the corresponding player.

Clear Runs/Clear Wickets

Display	Action
CLEAR HOME OVERS: Y/N? CLEAR HOME WICKETS: Y/N?	Press **<CLEAR OVERS>** or **<CLEAR WICKETS>** for the home or guest team followed by **<YES>** to clear the overs or wickets values, respectively.

24.3 Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

Goals, Behinds, Overs, Wickets, Runs

The home and guest Goals/Behinds keys (Australian Football) and Overs/Wickets/Runs keys (Cricket) are edited the same way. Goals is shown as an example.

Display	Action
GOALS EDIT HOME NN* NN = current setting	Press **<EDIT>** and the appropriate statistic key to display the current setting. Enter the correct number on the number pad and press **<ENTER>**.

24.4 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the **Menu** function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<YES>** to clear all of the program data for the last game played or the game in progress and begin running the selected sport. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<YES>** to enter a new code using the **SELECT CODE** prompt. Refer to **Section 2.3** for more information on codes. Press **<NO>** to resume the game in progress using the current data and exit the Menu.

Display	Action
	Press the down arrow key to scroll to the next selection.

Dimming Menu

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN% NN = current level NONE = bright **<0>** 90% = **<1>** 80% = **<2>** 70% = **<3>** 60% = **<4>** 50% = **<5>** 40% = **<6>** 30% = **<7>** 20% = **<8>** 10% = **<9>**	Press **<0>** through **<9>** or use the arrow keys to select the intensity for the digits on the scoreboard. Press **<NO>** to resume the game in progress using the current data, and exit the Menu. Press the down arrow key to scroll to the next selection. **Note:** Incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD. Press **<CLEAR>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.
HOME- TEAM NAME _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry.

Display	Action
	Enter up to fifteen (15) characters for the team name and press **<ENTER>**. **Reinsert the CRICKET/FOOTBALL (0G-315384) insert to continue.**
HOME- TEAM ABBR _OME *	**The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.** The TNMC is updated after each selection is completed. Use the **COLUMNS, ROWS** and **STROKE** keys to select the **WIDTH, HEIGHT** and **FONT** of the TNMC. Refer to **Section 2.8** for more information about team name entry. Enter up to ten (10) characters for the team abbreviation and press **<ENTER>**. **Reinsert the CRICKET/FOOTBALL (0G-315384) insert to continue.**

Display Menu (Australian Football Only)

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press **<YES>** to select the Display submenu and show the first prompt on the LCD. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY RUN SEGMENT TIMER?	**Note:** The segment timer function is disabled while the clock is running. Press **<YES>** to exit the sport code and run the segment timer program. Press **<NO>** or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	**This prompt confirms that the user wants to exit the sport code and enter the segment timer.** **Note:** The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings. Refer to **Section 3** for more information on the segment timer.

Display	Action
MENU- DISPLAY BLANK SCBD? PRESS ANY KEY TO RETURN TO GAME	Press **<YES>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation. Press the down arrow key to scroll to the next selection.
MENU-DISPLAY SYNC TO CHAN SYNC TO CHAN ON 1-ON, 2-OFF	Press **<YES>** to view or set the radio sync to channel setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. **Note:** This setting should remain ON unless instructed by Daktronics to turn it off.
MENU- DISPLAY CLOCK CAPTIONS CLOCK CAPTION- 1-ON, 2-OFF ON	Press **<YES>** to view or set the clock caption setting. The LCD will show if the setting is ON or OFF. Press **<1>** to turn it on, or press **<2>** to turn it off. Press the down arrow key to scroll to the next selection.
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament). Press **<YES>** to set the RTD offset. Press **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.

Settings (Australian Football Only)

Display	Action
MENU- MAIN EDIT SETTINGS?	Press **<YES>** or the right or left arrow key to select the Edit Settings submenu and show the first prompt on the LCD. Refer to **Section 23.4**. Press **<NO>** to resume the game in progress using the current data and exit the Menu. Press the down arrow key to scroll to the next selection.

Inning Settings (Cricket Only)

Display	Action
INNING SETTINGS OVERS: NN* NN = current setting	Use the keypad to enter the desired value, and then press **<ENTER>** to save the new setting. Default = 40

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<YES>** or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD. Press **<NO>** to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** or **<2>** to display the time of day in 12 hour (default) or 24 hour format. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY TOD HH:MM:SS* HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press **<ENTER>**. Press **<ENTER>** or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY 1*GAME 2-TOD MENU-TIME OF DAY BLANK GAME DATA?	Press **<1>** or **<2>** to display the game clock (default) or the time of day clock on the scoreboard. Press the down arrow key to exit the Menu and return to the game. If 2-TOD is selected this message will be displayed. Press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits.

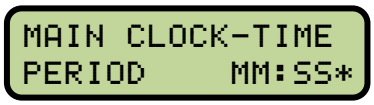
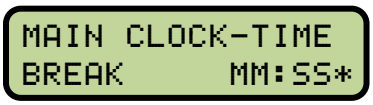
24.5 Settings (Australian Football Only)

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

Main Clock

Note 1: The settings for the Main Clock are used with the **<SET MAIN CLOCK>** key.

Note 2: The period, break, and overtime lengths are used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action
	When the main clock is set to count down and tenths of a second is selected, the main clock displays in tenths of a second remaining when the time is below one minute. Press **<YES>** to set the main clock to display tenths of a second. Press **<NO>** to display whole seconds.
 MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press **<ENTER>**. For example, 20:00 per half or 8:00 per quarter **Note:** Pressing **<ENTER>** to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.
 MM:SS = minutes, seconds	Set the amount of time between periods. Enter the correct amount of time for break length in minutes and seconds on the number pad and press **<ENTER>**. For example, 1:00
 MM:SS = minutes, seconds	Set the amount of time for the overtime periods. Enter the correct amount of time for overtime periods in minutes and seconds on the number pad and press **<ENTER>**. For example, 5:00

Switch Output

The All Sport® 5000 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK= 0. To display the desired switch setting:

1. Press the number (**0, 1, 2, 3**) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.
2. Press **<YES>** to select the new setting.
3. Press **<NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED? N = current setting	The switch remains open at all times and any external devices are disabled.
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered. In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when **<HORN>** is pressed.

Default Settings

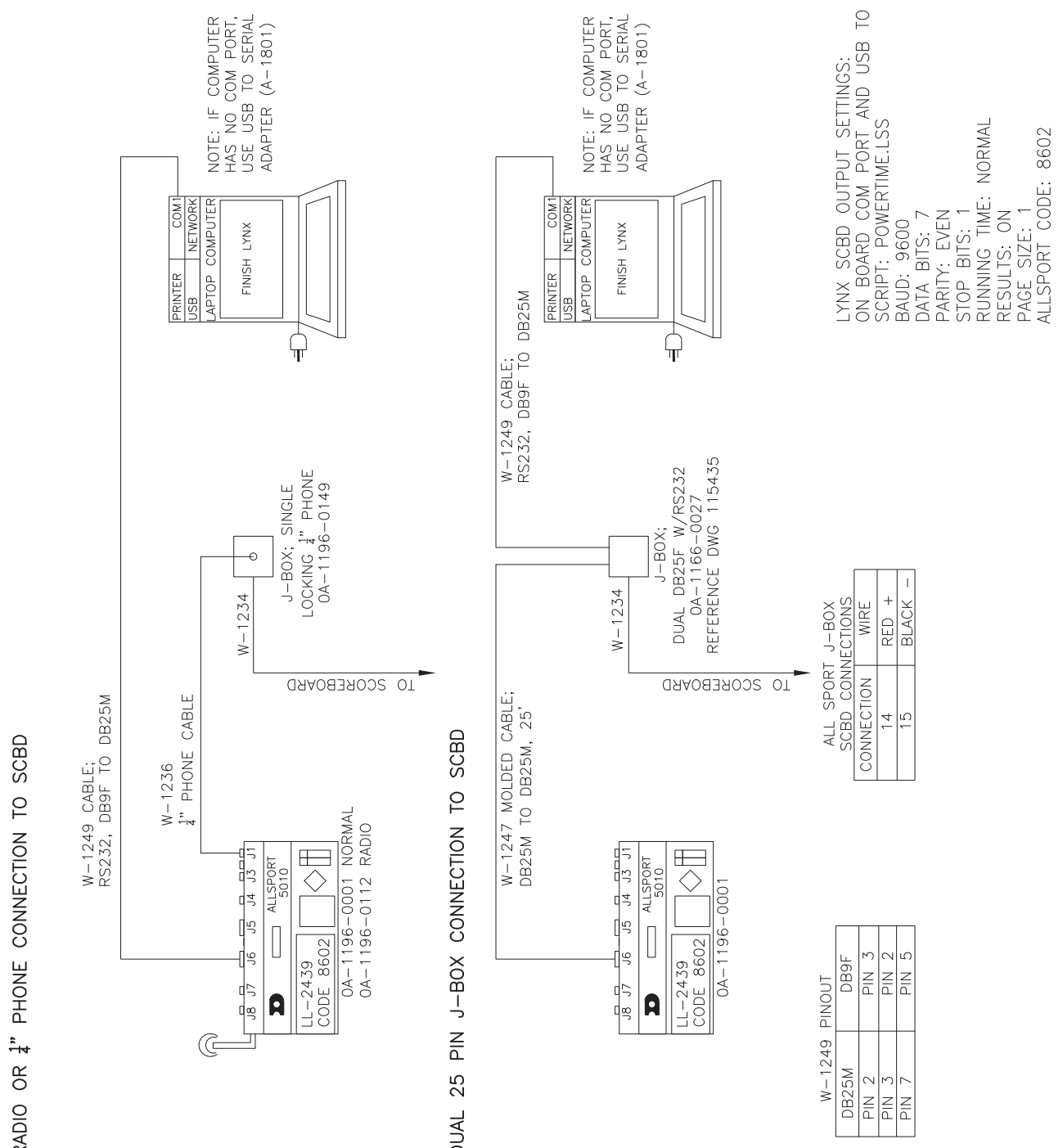
Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Tenth of a Second	No			
Period Length	12:00			
Break Length	20:00			
Overtime Length	5:00			
Switch Output	1-Clock = 0			

Appendix A: Reference Drawings

Drawing Title	*Drawing Number*
Track/Football SCBD w/ Finish Lynx & All Sport 5000	**A-95152**
Track/Football SCBD w/ Finish Lynx, in Field	**A-95153**
Track/Football SCBD w/ Finish Lynx, in Press Box	**A-95154**
Rear View, A/S 5010 Connector Assignments	**A-102142**
Block Diagram: AS5000 BB- VB and WR #1	**A-124686**
Block Diagram: AS5000 BB- VB and WR #3	**A-124688**
Block Diagram, A/S 3000 or 5000 Hockey	**A-124689**
Block Diagrams, A/S 3000 or 5000 Outdoor Sports	**A-124690**
A/S5000 Track w/OmniSport Timer	**A-125039**
Schematic; Dual 1/4" Phone J-Box w/Shunt Jack	**A-125316**
Block Diagram- A/S 3000 or 5000 BB- VB and WR #2	**A-125415**
All Sport 5000, 25pin PCB J-Box Wiring	**A-125416**
Block Diagram: A/S 3000 or 5000 BB- VB and WR #4	**A-125417**
System Riser; Tennis; Single Court w/ TNMC, AS 5000	**A-177098**
Channel Selection; Multiple Broadcast Group, Gen IV	**A-203113**
Speed Adjust Calculations, Radar Gun	**A-243741**
Installation Details, Gen VI Channel Selection Guide	**A-1109870**

TRACK/FOOTBALL SCBD WITH FINISH LYNX AND ALL SPORT 5000



REV	DATE:		BY:	
04	23 NOV 10	UPDATED DRAWING TO BE MORE UNIVERSAL, USE ALL SPORT 5000, AND ONLY INCLUDE POWERTIME SCRIPT	AMG	
03	04 OCT 07	ADDED POWERTIME SCRIPT FOR WHEN USING USB TO 9 PIN ADAPTER	SAL	
02	05 SEP 01	CHANGED TEXT	GWS	
01	15 SEP 98	ADDED LYNX SCBD OUTPUT SETTINGS	CJB	

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PROJ: TRACK SYSTEM RISER DIAGRAM OPTION #3
TITLE: TRACK/FOOTBALL SCBD W/ FINISH LYNX & ALL SPORT 5000
DESIGN: | DRAWN: AGORDER | DATE: 07-28-97
SCALE: 1=1

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	
	04	P1125	P-08-A	95152

TRACK SYSTEM RISER DIAGRAM

TRACK/FOOTBALL SCBD W/ FINISH LYNX

TYPICAL INTERFACE EQUIPMENT NEEDED:

QTY

1 SIGNAL CONVERTER (0A-1065-0173)
1 J-BOX (0A-1009-0038)
1 CABLE (W-1236)
1 CABLE (W-1267)

STANDS

LYNX SCBD OUTPUT SETTINGS:

SETTINGS WHEN USING 9 PIN COM PORT	OR	SETTINGS WHEN USING USB TO 9 PIN ADAPTOR
SCRIPT: ALLSPORT.LSS		SCRIPT: POWERTIME.LSS
BAUD: 12,800		BAUD: 9600
DATA BITS: 8		DATA BITS: 7
PARITY: EVEN		PARITY: EVEN
STOP BITS: 2		STOP BITS: 1
RUNNING TIME: NORMAL		RUNNING TIME: NORMAL
RESULTS: ON		RESULTS: ON
PAGE SIZE: 1		PAGE SIZE: 1
ALLSPORT CODE: 8604		ALLSPORT CODE: 8602

REV	DATE:		BY:
05	27 NOV 13	UPDATED BORDER, TITLE BLOCK, REVISION BLOCKS	ACB
REV	DATE:		BY:
04	04 OCT 07	ADDED POWERTIME SCRIPT WHEN USING A USB TO 9 PIN ADAPTOR CABLE	SAL
REV	DATE:		BY:
03	15 SEP 03	CHANGED SIGNAL CONVERTER DRAWING TO SHOW JACK NUMBERS AND PINS.	LWS
REV	DATE:		BY:
02	05SEP01	CHANGED SOME TEXT	GWS
REV	DATE:		BY:
01	15 SEP 98	ADDED LYNX SCBD OUTPUT SETTINGS	CJB

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PROJ: TRACK SYSTEM RISER DIAGRAM OPTION #1

TITLE: TRACK/FOOTBALL SCBD W/ FINISH LYNX- IN FIELD

DESIGN:

DRAWN: JWHITAK

DATE: 07-28-97

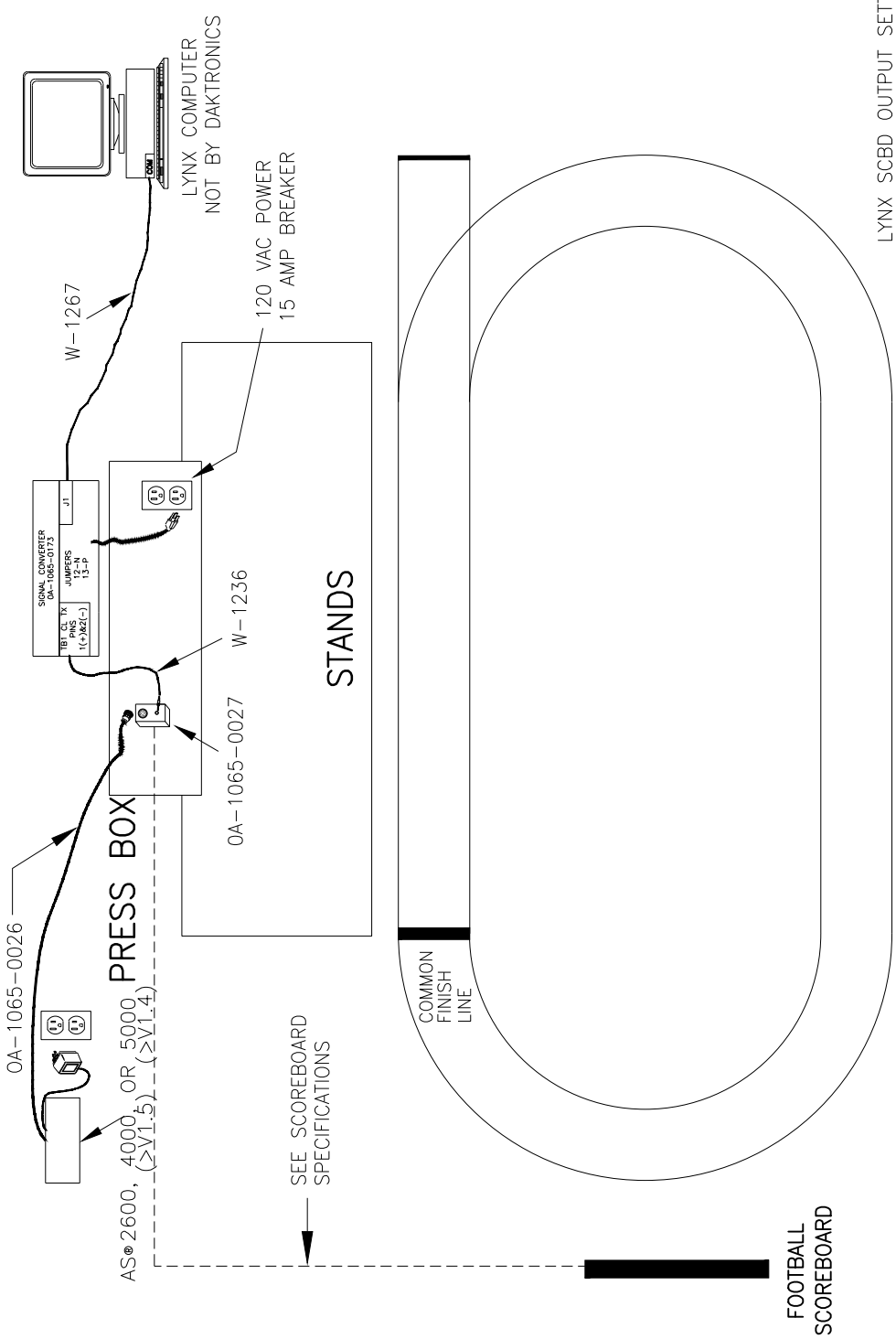
SCALE: 1=1

SHEET	REV	JOB NO:	FUNC - TYPE - SIZE
	05	P1125	P - 08 - A

95153

TRACK SYSTEM RISER DIAGRAM

TRACK/FOOTBALL SCBD W/ FINISH LYNX



LYNX SCBD OUTPUT SETTINGS:

SETTINGS WHEN USING 9 PIN COM PORT		SETTINGS WHEN USING USB TO 9 PIN ADAPTOR
SCRIPT: ALLSPORT.LSS		SCRIPT: POWERTIME.LSS
BAUD: 12,800		BAUD: 9600
DATA BITS: 8		DATA BITS: 7
PARITY: EVEN		PARITY: EVEN
STOP BITS: 2		STOP BITS: 1
RUNNING TIME: NORMAL		RUNNING TIME: NORMAL
RESULTS: ON		RESULTS: ON
PAGE SIZE: 1		PAGE SIZE: 1
ALLSPORT CODE: 8604	OR	ALLSPORT CODE: 8602

TYPICAL INTERFACE EQUIPMENT NEEDED:

QTY	
1	SIGNAL CONVERTER (OA-1065-0173)
1	J-BOX (OA-1065-0027)
1	CABLE (W-1236)
1	CABLE (W-1267)

REV	DATE:		BY:	
06	27 NOV 13	UPDATED BORDER, TITLE BLOCK, REVISION BLOCK	ACB	
05	04 OCT 07	ADDED POWERTIME SCRIPT FOR WHEN USING A USB TO 9 PIN ADAPTOR	SAL	
04	15 SEP 03	CHANGED SIGNAL CONVERTER DRAWING TO SHOW JACK NUMBERS AND PINS.	LWS	
03	6 JUNE 01	ADDED AS 5000 OPTION	JDB	
02	15 SEP 98	ADDED LYNX SCBD OUTPUT SETTINGS	CJB	
01	26 JUNE 98	REVISED PART NUMBERS.	HBB	

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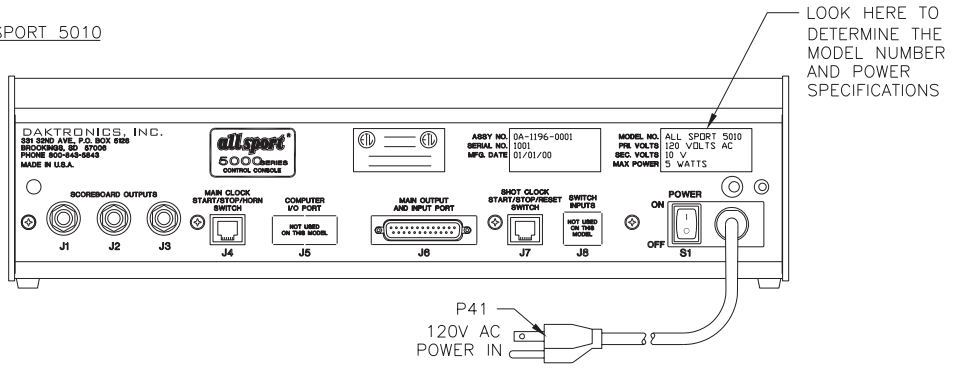
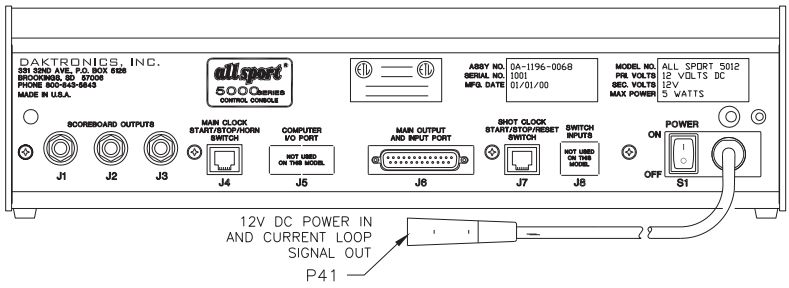
PROJ: TRACK SYSTEM RISER DIAGRAM OPTION #2
TITLE: TRACK/FOOTBALL SCBD W/ FINISH LYNX- IN PRESS BOX
DESIGN: | DRAWN: JWHITAK | DATE: 07-28-97
SCALE: 1=1

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	
	06	P1125	P - 08 - A	95154

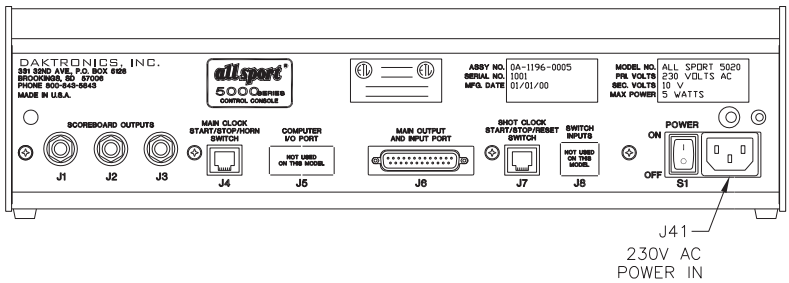
ALL SPORT 5010



ALL SPORT 5012



ALL SPORT 5020



J1–J3 – OUTPUT #1–#3

CONTACT	FUNCTION
TIP	CURRENT LOOP OUTPUT 1 +
RING	CURRENT LOOP OUTPUT 1 –
SHAFT	GND

J4 – START/STOP/HORN

PIN #	FUNCTION
1	SWITCH INPUT 2 –
2	SWITCH INPUT 1 –
3	RELAY OUTPUT –
4	RELAY OUTPUT +
5	SWITCH INPUT 1 +
6	SWITCH INPUT 2 +

J6 – MAIN PORT

PIN #	FUNCTION
1	EARTH
2	RS232 RECEIVE +
3	RS232 TRANSMIT +
4	NOT USED
5	NOT USED
6	NOT USED
7	C. L. OUTPUT 4 –/RS232 GND
8	SWITCH INPUT 1 +
9	CURRENT LOOP INPUT +
10	CURRENT LOOP INPUT –
11	RELAY OUTPUT +
12	NOT USED
13	NOT USED
14	CURRENT LOOP OUTPUT 1 +
15	CURRENT LOOP OUTPUT 1 –
16	CURRENT LOOP OUTPUT 2 +
17	CURRENT LOOP OUTPUT 2 –
18	CURRENT LOOP OUTPUT 3 +
19	CURRENT LOOP OUTPUT 3 –
20	NOT USED
21	SWITCH INPUT 1 –
22	CURRENT LOOP OUTPUT 4 +
23	RELAY OUTPUT –
24	10V AC/DC INPUT–P
25	10V AC/DC INPUT–N

J7 – SHOT/PLAY CLOCK

PIN #	FUNCTION
1	SWITCH INPUT 5 –
2	SWITCH INPUT 4 –
3	SWITCH INPUT 3 –
4	SWITCH INPUT 3 +
5	SWITCH INPUT 4 +
6	SWITCH INPUT 5 +

FOR STANDARD CODES, THESE FUNCTIONS ARE USUALLY ASSIGNED TO THE FOLLOWING TASKS:

FUNCTION	USUAL TASK
SW IN 1	MAIN CLOCK STOP/START
SW IN 2	MAIN CLOCK HORN
SW IN 3	NOT USED
SW IN 4	SHOT/PLAY CLOCK STOP
SW IN 5	SHOT/PLAY CLOCK RESET
SW OUT	CLOCK STOP OUT
CL OUT 1	SCOREBOARD OUTPUT
CL OUT 2	SCOREBOARD OUTPUT
CL OUT 3	SCOREBOARD OUTPUT
CL OUT 4	DATA STREAM

ALL SPORT 5000 SERIES MODELS

MODEL #	FUNCTION
5010	120V, STANDARD PROGRAMMING
5020	230V, STANDARD PROGRAMMING

REV.	DATE	DESCRIPTION	BY	APPR.
3	05 OCT 01	ADDED A/S 5012 TO LAYOUT CHANGED DWG SCALE FROM 1=3 TO 1=4	NW	
2	24 APR 99	CHANGED TO BE FOR A/S 5010 CONSOLES ONLY	EB	
1	13 APR 99	ADDED J10 ADDED A/S 5010 LAYOUT	EB	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: ALL SPORT 5000 SERIES CONSOLES

TITLE: REAR VIEW, A/S 5010 CONNECTOR ASSIGNMENTS

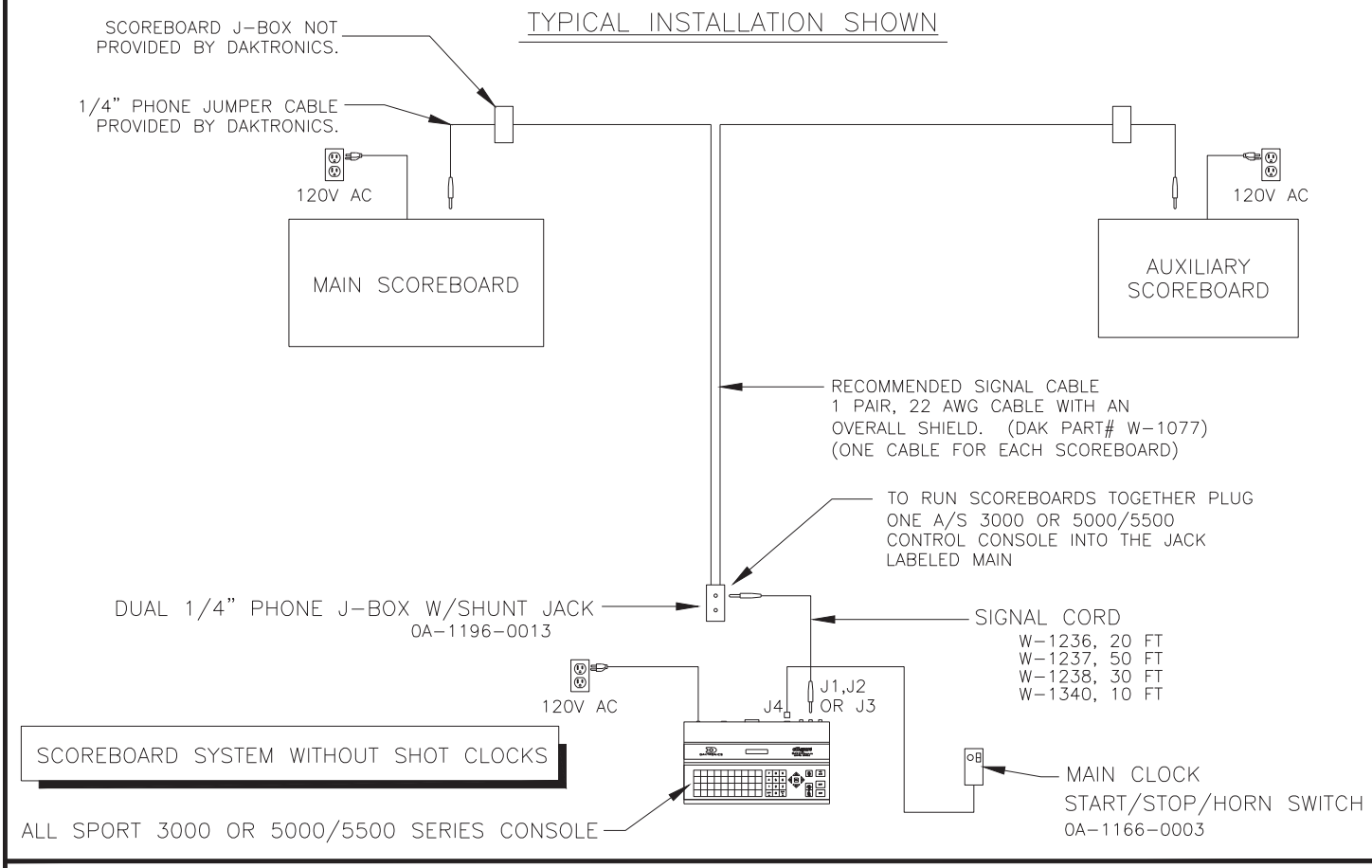
DES. BY: EBRAVEK DRAWN BY: EBRAVEK DATE: 27APR98

REVISION APPR. BY:

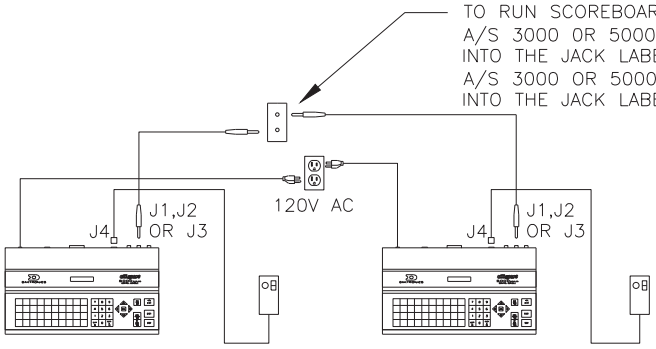
SCALE: 1=4

1196-R04A-102142

TYPICAL INSTALLATION SHOWN

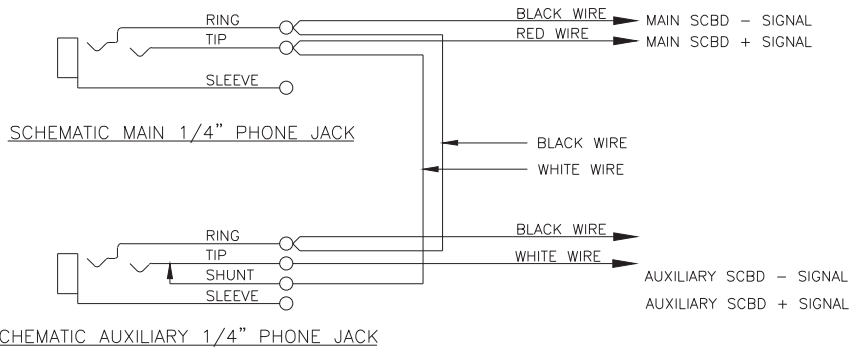


SEPARATE SCOREBOARD CONTROL



0A-1196-0013 J-BOX

TYPICAL 0A-1196-0013 J-BOX WIRING



REV	DATE:		BY:
02	17 AUG 11	UPDATED THE BOARDER AND TITLE BLOCK UPDATED TEXT TO INCLUDE 5500 SERIES	JJL
01	26 APR 00	ADDED A/S 3000	DKD

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BROOKINGS, SD 57006
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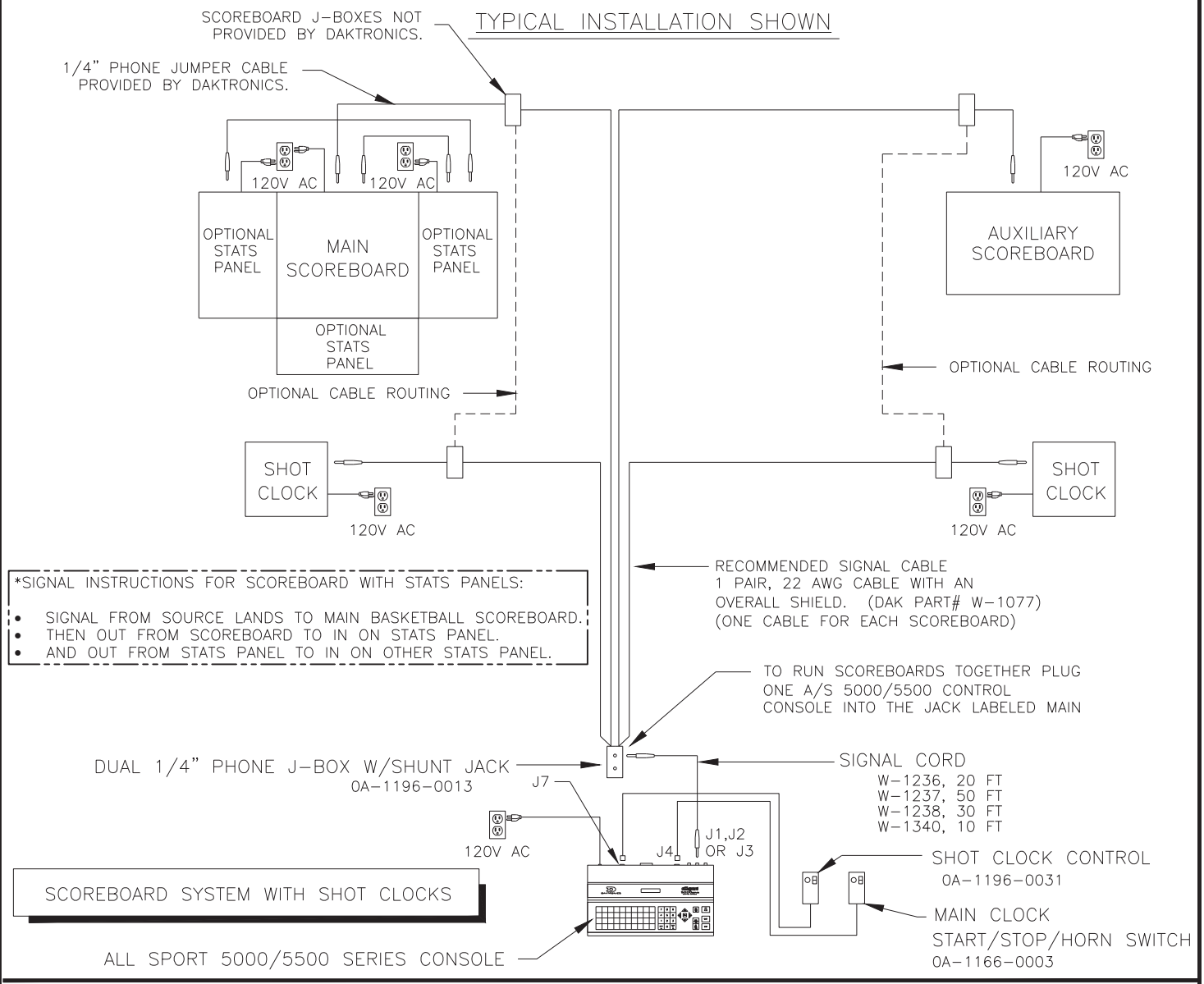
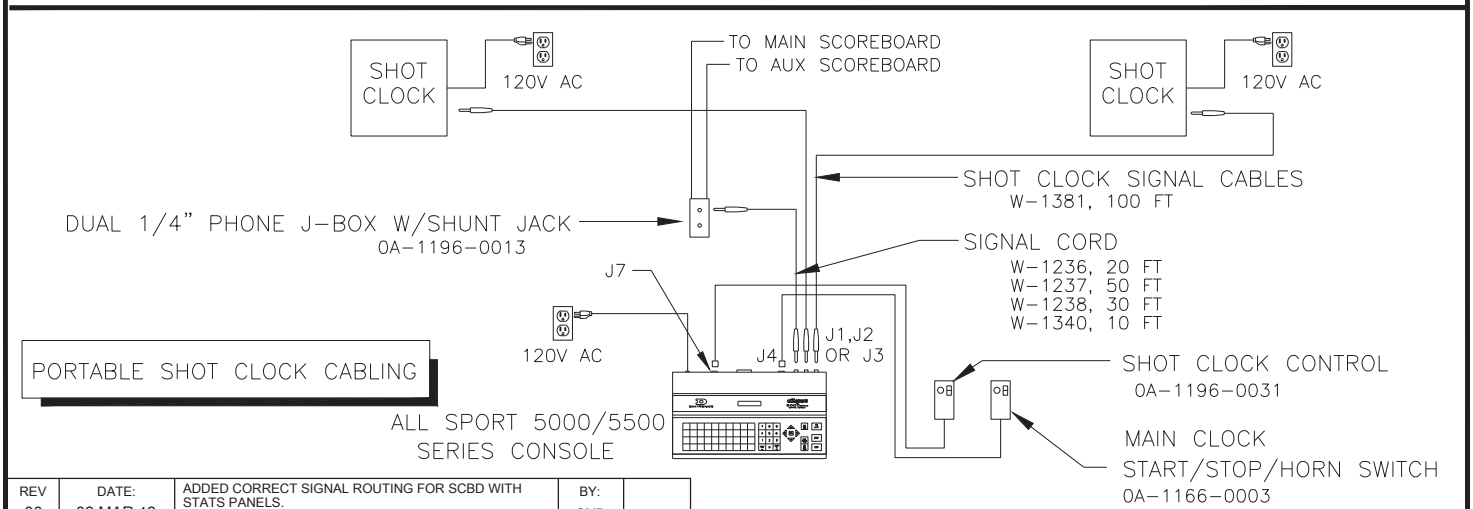
PROJ: ALL SPORT 5000/5500
TITLE: BLOCK DIAGRAM: AS5000 BB- VB AND WR #1
DESIGN:
DRAWN: E BRAVEK
DATE: 29 NOV 99
SCALE: NONE

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	
	02	P1196	R-04-A	124686





REV	DATE:		BY:	
06	02 MAR 12	ADDED CORRECT SIGNAL ROUTING FOR SCBD WITH STATS PANELS.	SMB	
REV	DATE:		BY:	
5	17 AUG 11	UPDATED THE BOARDER AND TITLE BLOCK. UPDATED DRAWING TO INCLUDE 5500 SERIES	JJL	
4	17 JAN 02	CHANGED 0A-1166-0004 TO 0A-1196-0031	JJS	
3	06 SEP 01	ADDED BOTTOM OPTIONAL STATS PANEL TO MAIN BOARD, AND ADDED SIGNAL CABLES TO AND FROM OPTIONAL STATS PANELS.	NW	
2	14 DEC 00	ADDED 120VAC TO SIDE BOARDS OF MAIN SCOREBOARD	NSW	
1	29 DEC 99	ADDED SHOT CLOCK REMOTE START/STOP TO TOP A/S5000 CONTROLLER	EB	

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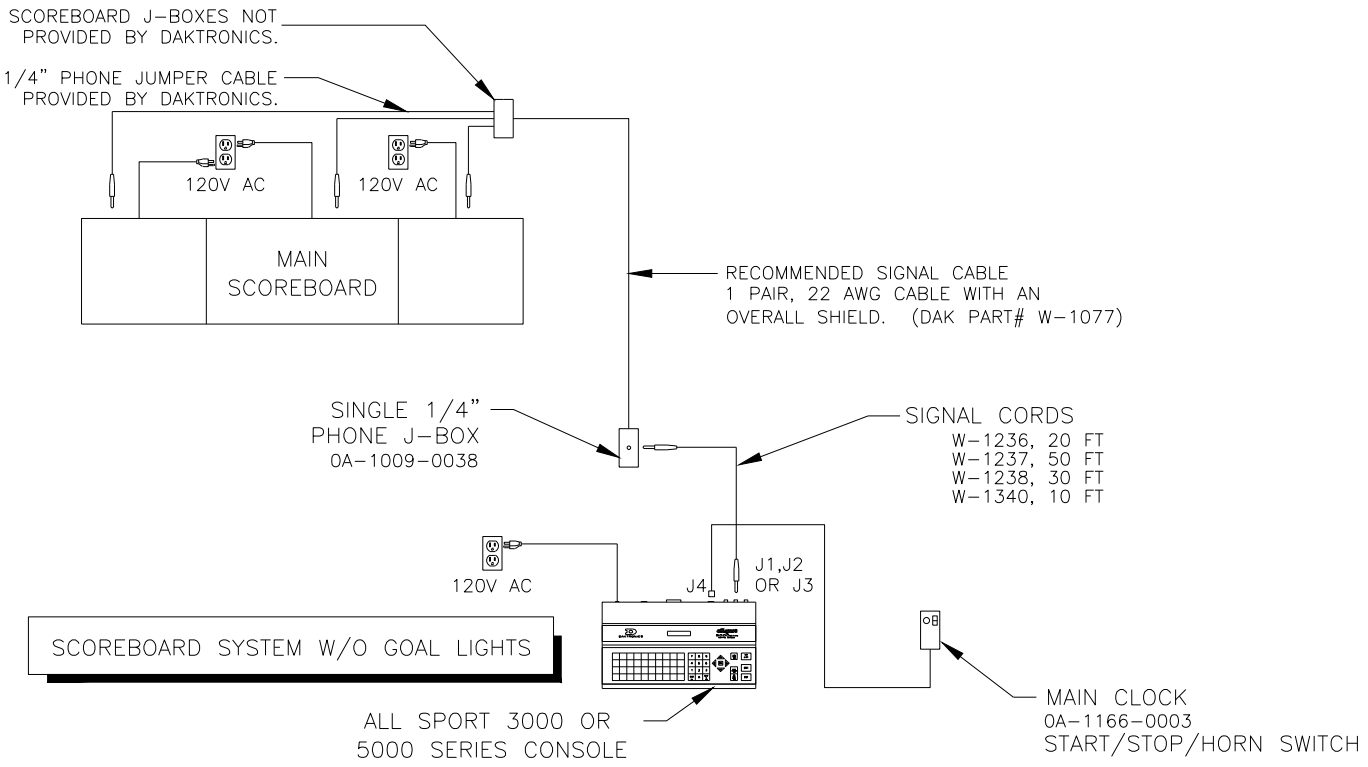
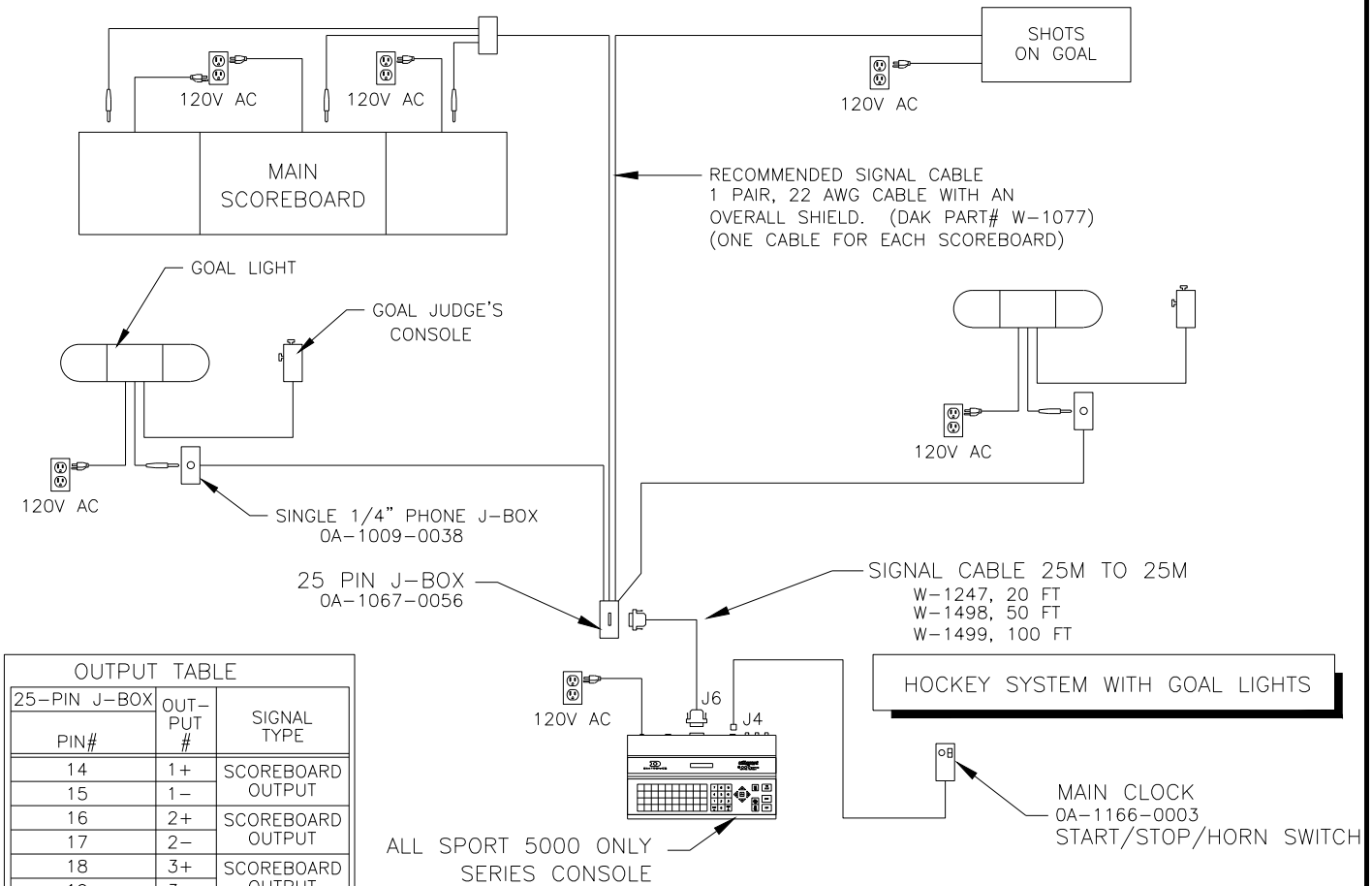
PROJ: ALL SPORT 5000/5500
TITLE: BLOCK DIAGRAM: AS5000 BB- VB AND WR #3
DESIGN:
DRAWN: E BRAVEK
DATE: 29 NOV 99
SCALE: NONE

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	
	06	P1196	R-04-A	124688





OUTPUT TABLE

25-PIN J-BOX PIN#	OUTPUT #	SIGNAL TYPE
14	1+	SCOREBOARD OUTPUT
15	1-	
16	2+	SCOREBOARD OUTPUT
17	2-	
18	3+	SCOREBOARD OUTPUT
19	3-	
11	+	GOAL LIGHTS
23	-	

REV	DATE:		BY:
02	28 NOV 12	UPDATED PART NUMBERS	KZB
01	26 APR 00	ADDED A/S 3000	DKD

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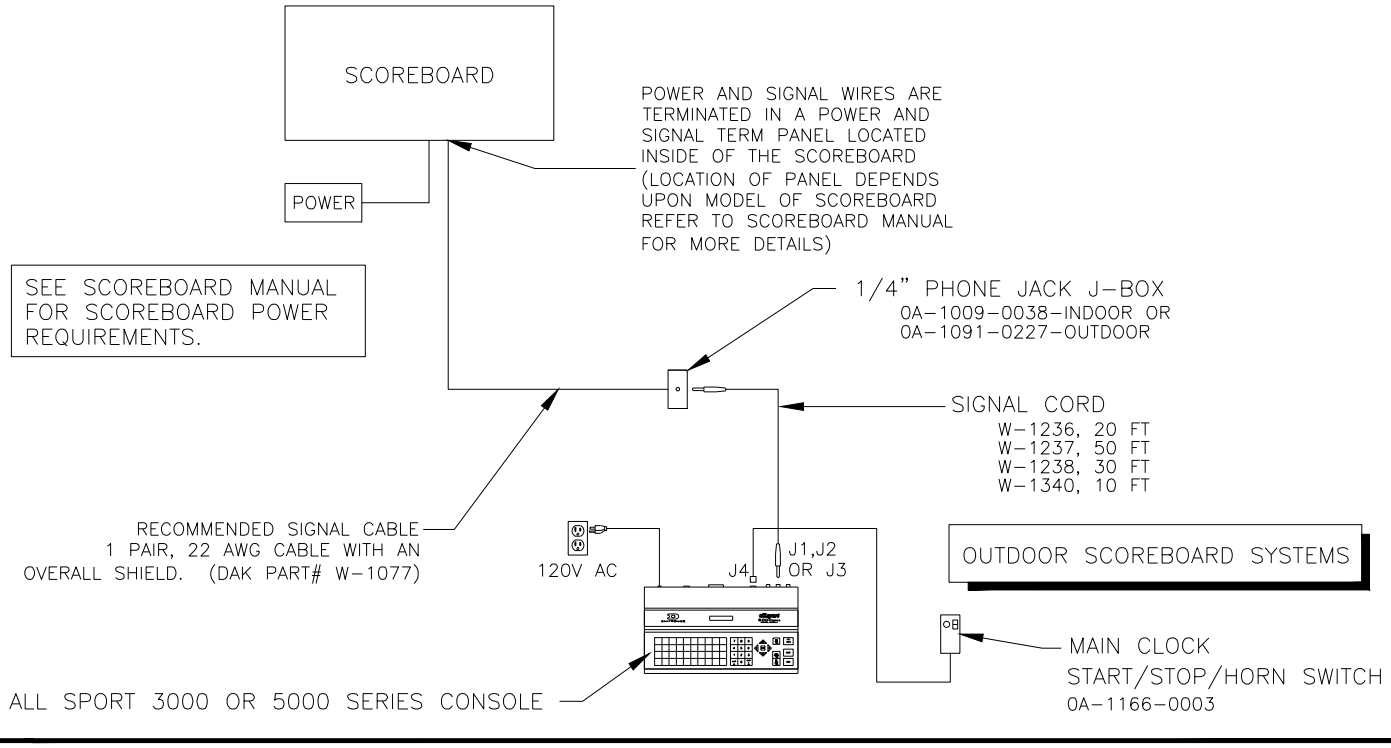
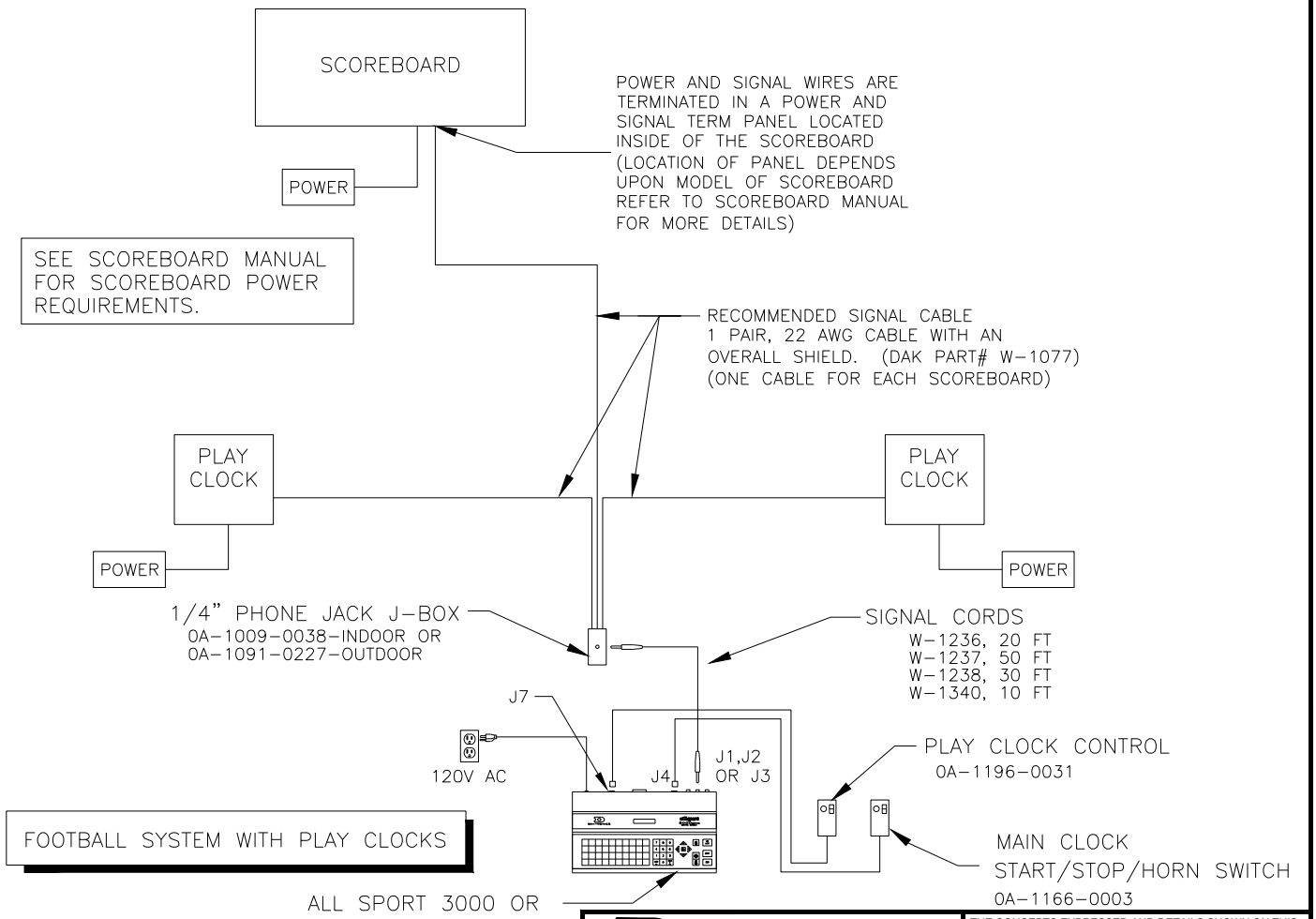
PROJ: ALL SPORT 5000
TITLE: BLOCK DIAGRAM: A/S5000 HOCKEY
DESIGN: | DRAWN: E BRAVEK | DATE: 29 NOV 99
SCALE: NONE

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	
	02	P1196	R - 04 - A	124689





REV	DATE:		BY:	
04	27 NOV 13	UPDATED BOARDER, TITLE BLOCK, REVISION BLOCK	ACB	
03	17 JAN 02	CHANGED 0A-1166-4 TO 0A-1196-31	JJS	
02	11 MAY 00	CHANGED TO REPRESENT ALL OUTDOOR SPORTS	EB	
01	26 APR 00	ADDED A/S 3000	DKD	

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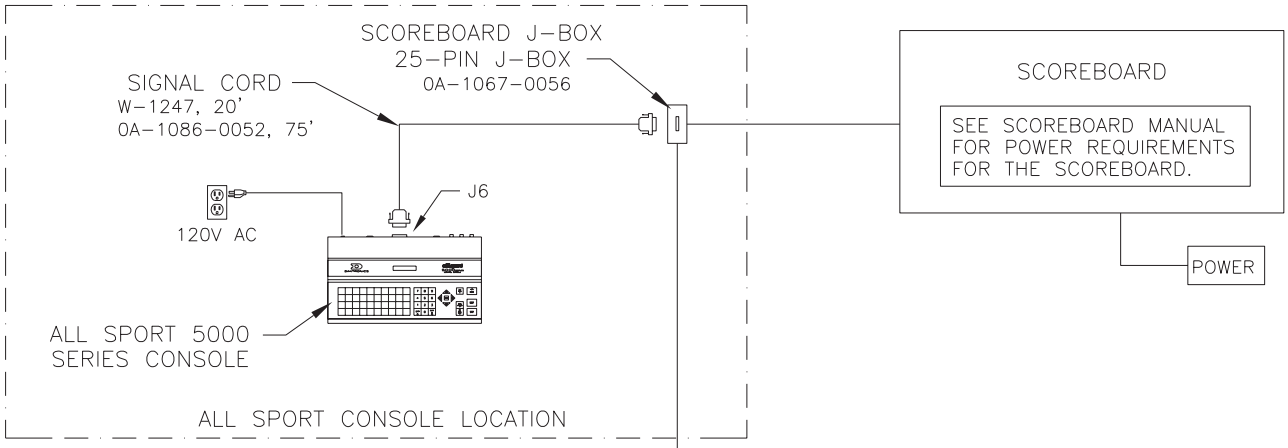
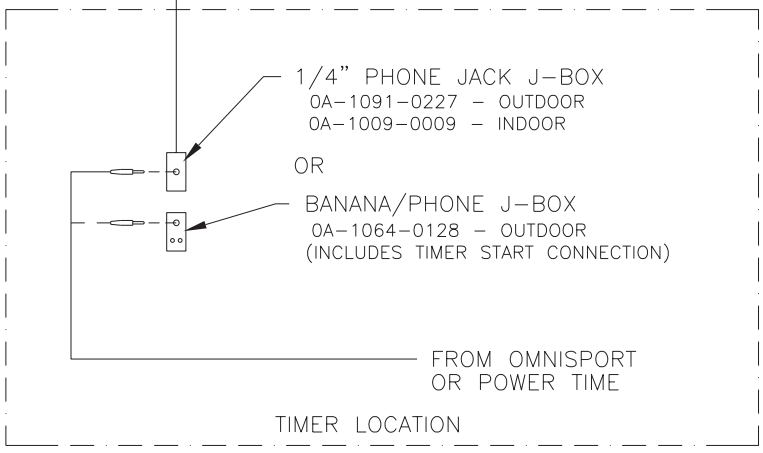
PROJ: ALL SPORT 5000
TITLE: BLOCK DIAGRAMS- A/S 3000 OR 5000 OUTDOOR SPORTS
DESIGN: | DRAWN: E BRAVEK | DATE: 30 NOV 99
SCALE: NONE

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	
	04	P1196	R - 04 - A	124690



OUTPUTS TO SCOREBOARD

25-PIN J-BOX PIN#	OUT-PUT #	SIGNAL TYPE
14	1+	SCOREBOARD OUTPUT
15	1-	
16	2+	SCOREBOARD OUTPUT
17	2-	
18	3+	SCOREBOARD OUTPUT
19	3-	



2-WIRE CONNECTION BETWEEN J-BOXES BRINGS TIMER DATA FROM TIMER TO ALLSPORT CONSOLE.

SCOREBOARD J-BOX PIN#	TIMER J-BOX WIRE COLOR
9	RED
10	BLACK

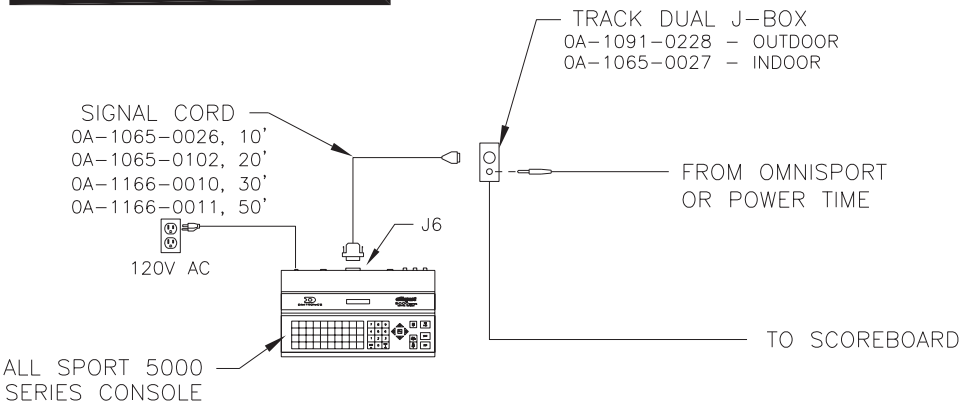
USE THIS SETUP IF THE OMNI SPORT AND ALL SPORT CONSOLE ARE TO BE AT SEPARATE LOCATIONS

FOR OMNISPORT 1000 CONNECTIONS REFER TO ED-5954.

FOR OMNISPORT 6000 CONNECTIONS REFER TO ED-8724.

FOR POWER TIME CONNECTIONS REFER TO ED-11269

USE THIS SETUP IF THE TIMER AND ALL SPORT CONSOLE ARE LOCATED TOGETHER.



OUTPUTS TO SCOREBOARD

16-PIN J-BOX PIN#	WIRE COLOR	OUT-PUT #	SIGNAL TYPE
1	RED	1+	SCOREBOARD OUTPUT
2	BLACK	1-	
3	WHITE	2+	SCOREBOARD OUTPUT
4	GREEN	2-	
5	ORANGE	3+	SCOREBOARD OUTPUT
6	BLUE	3-	

REV.	DATE	DESCRIPTION	BY	APPR.
1	6 MAR 01	ADDED TEXT CONCERNING THE POWER TIME	NW	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: ALL SPORT 5000

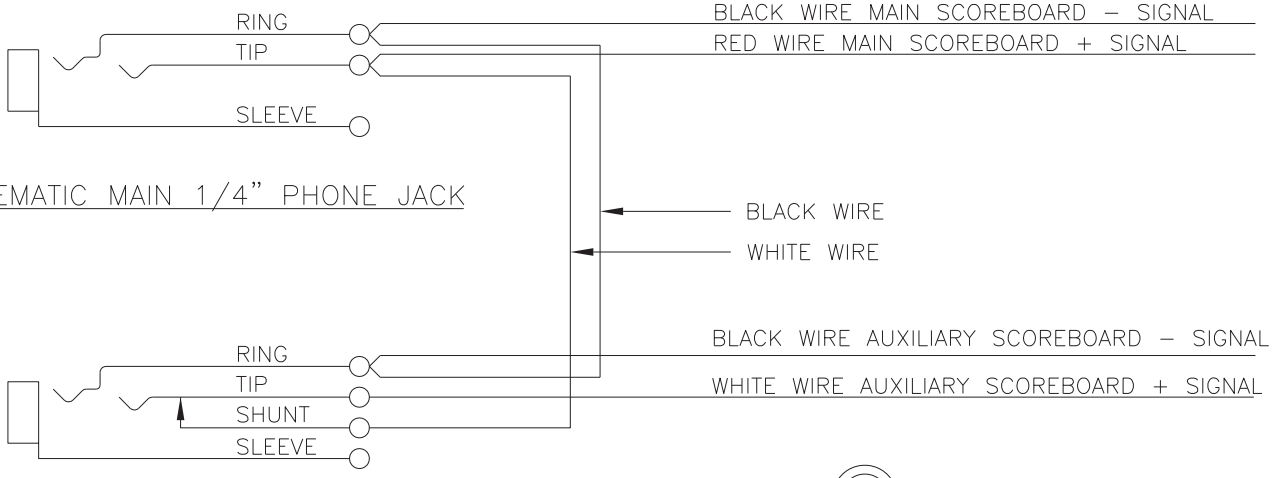
TITLE: A/S5000 TRACK W/OMNISPORT TIMER

DES. BY: DRAWN BY: E BRAVEK DATE: 06 DEC 99

REVISION APPR. BY:

SCALE: NONE

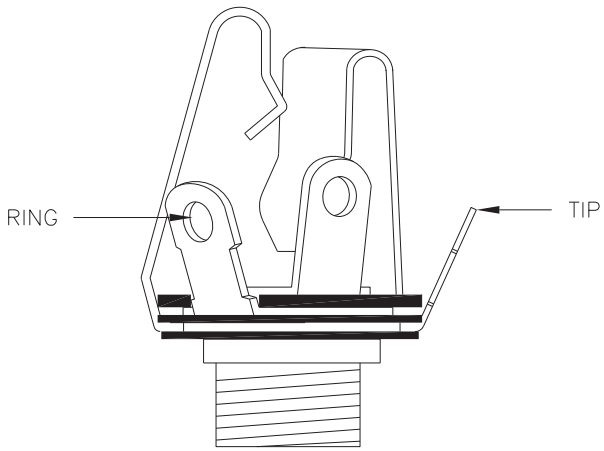
1196-R04A-125039



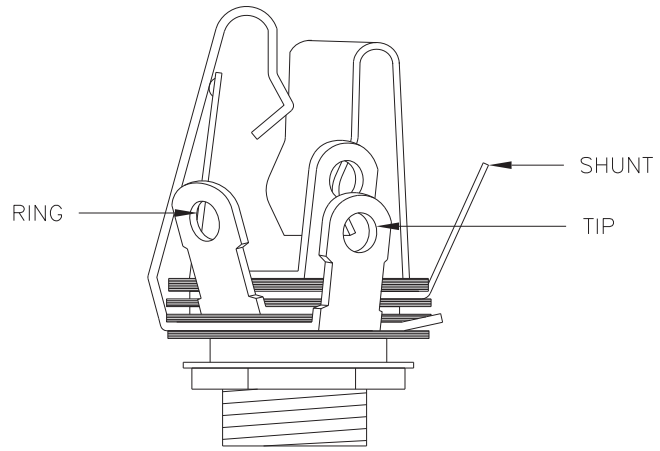
SCHEMATIC MAIN 1/4" PHONE JACK

SCHEMATIC AUXILIARY 1/4" PHONE JACK

0A–1196–0013



MAIN
PHONE JACK
J–1003



AUXILIARY
PHONE JACK
J–1131

REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

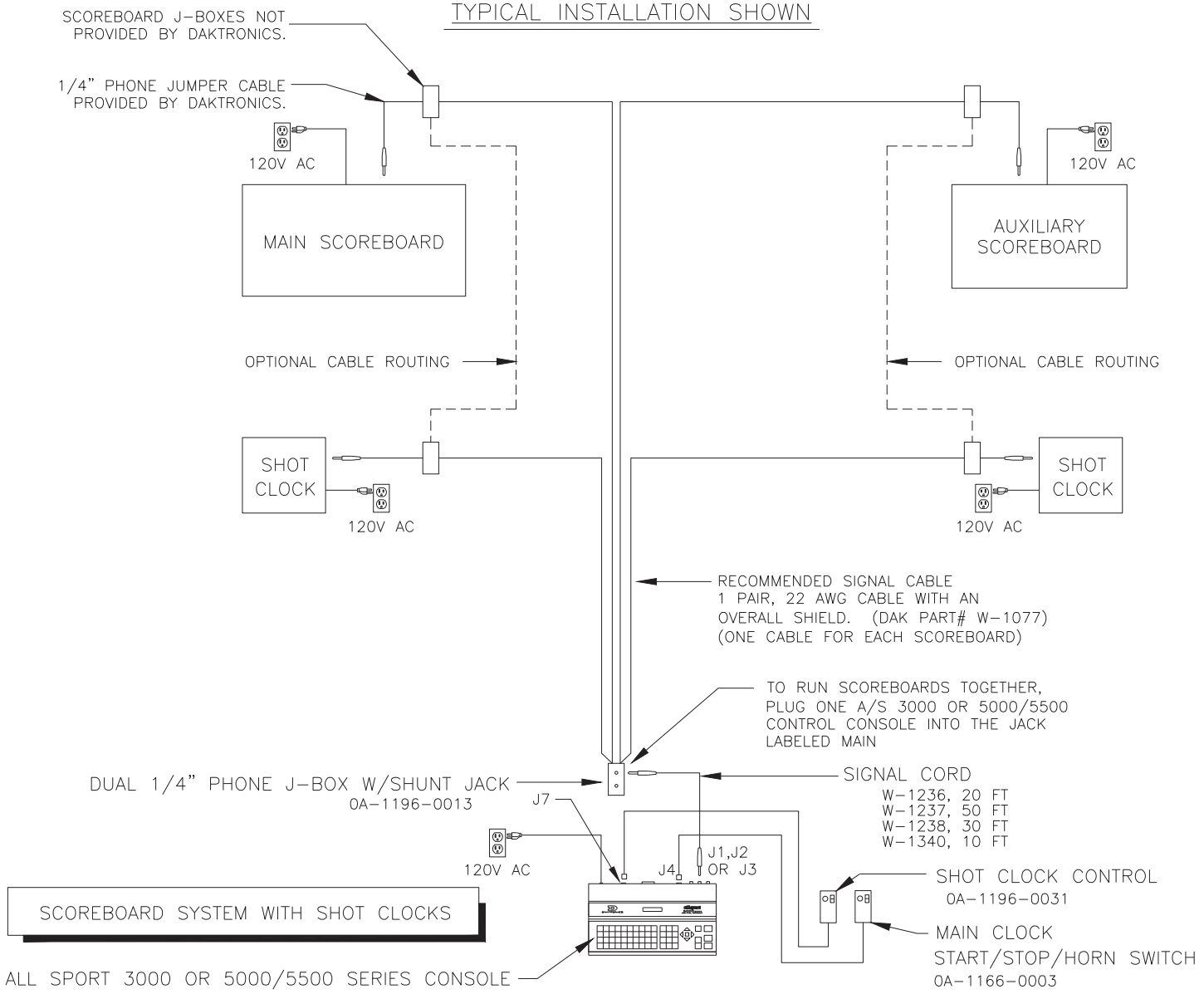
TITLE: SCHEMATIC; DUAL 1/4" PHONE J–BOX W/SHUNT JACK

DES. BY: E BRAVEK DRAWN BY: E BRAVEK DATE: 15 DEC 99

REVISION 00 | APPR. BY: | SCALE: NONE

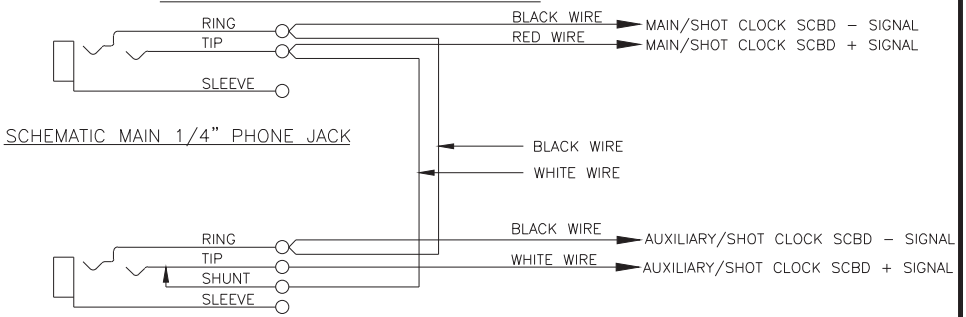
1196-R03A-125316

TYPICAL INSTALLATION SHOWN



0A-1196-0013 J-BOX

TYPICAL 0A-1196-0013 J-BOX WIRING



SCHEMATIC MAIN 1/4" PHONE JACK

SCHEMATIC AUXILIARY 1/4" PHONE JACK

REV	DATE:		BY:
04	24 AUG 11	UPDATED TEXT TO INCLUDE 5500 SERIES UPDATED TITLE BLOCK	JJL
3	17 JAN 02	CHANGED 0A-1166-4 TO 0A-1196-31	JJS
02	26 APR 00	ADDED A/S 3000	DKD
1	29 DEC 99	ADDED SHOT CLOCK REMOTE START STOP TO A/S 5000 CONTROLLER	EB

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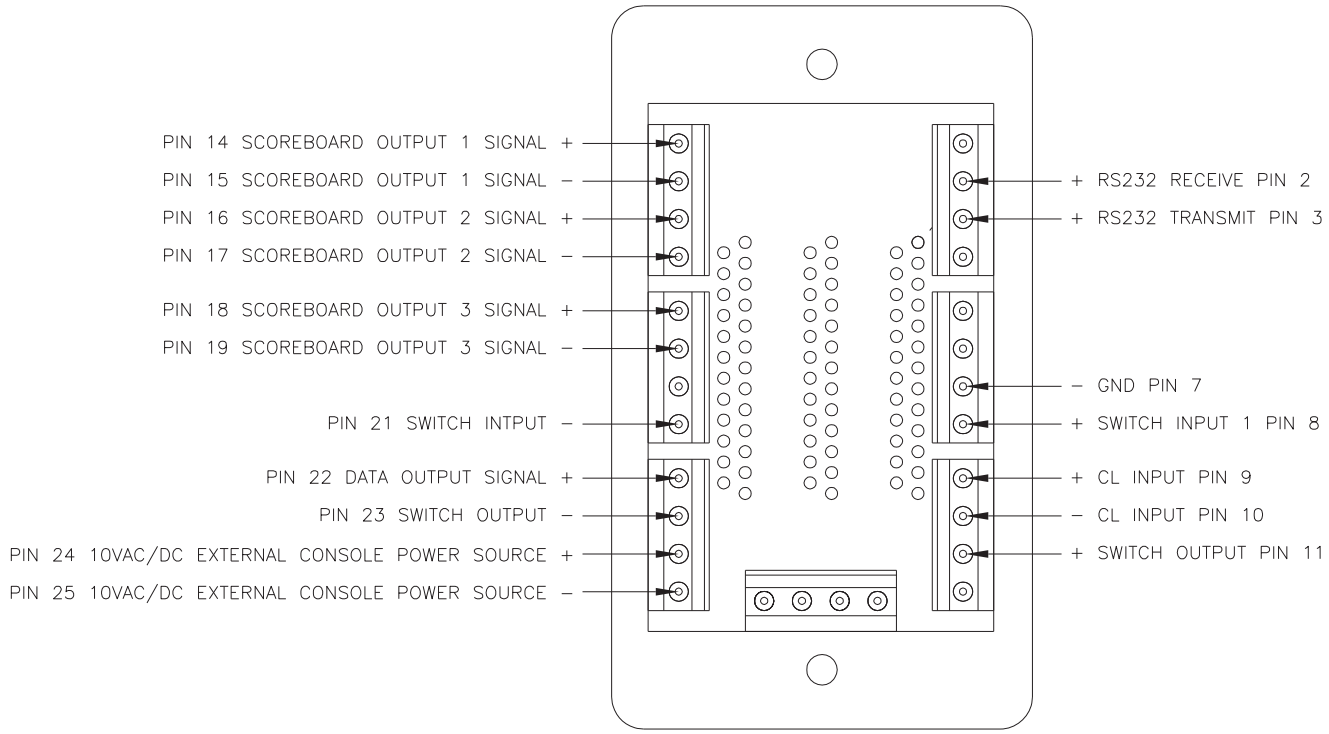
PROJ: ALL SPORT 5000/5500
TITLE: BLOCK DIAGRAM- A/S 3000 OR 5000 BB- VB AND WR #2
DESIGN:
DRAWN: E BRAVEK
DATE: 15 DEC 99
SCALE: NONE

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	
	04	P1196	R-04-A	125415

STRIP 1/4" OF INSULATION OFF OF EACH WIRE.

INSERT WIRE IN THE CORRECT POSTION.

USING A SMALL FLAT HEAD SCREW DRIVER TIGHTEN THE TERMINAL BLOCK TILL WIRE IS HELD IN PLACE. MAKE SURE TO NOT HAVE ANY EXCESS UNINSULATED WIRE STICKING OUT OF TERMINAL. BLOCK POSITION



REAR VIEW OF J–BOX
FACEPLATE

REV.	DATE	DESCRIPTION	BY	APPR.

REVISION

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

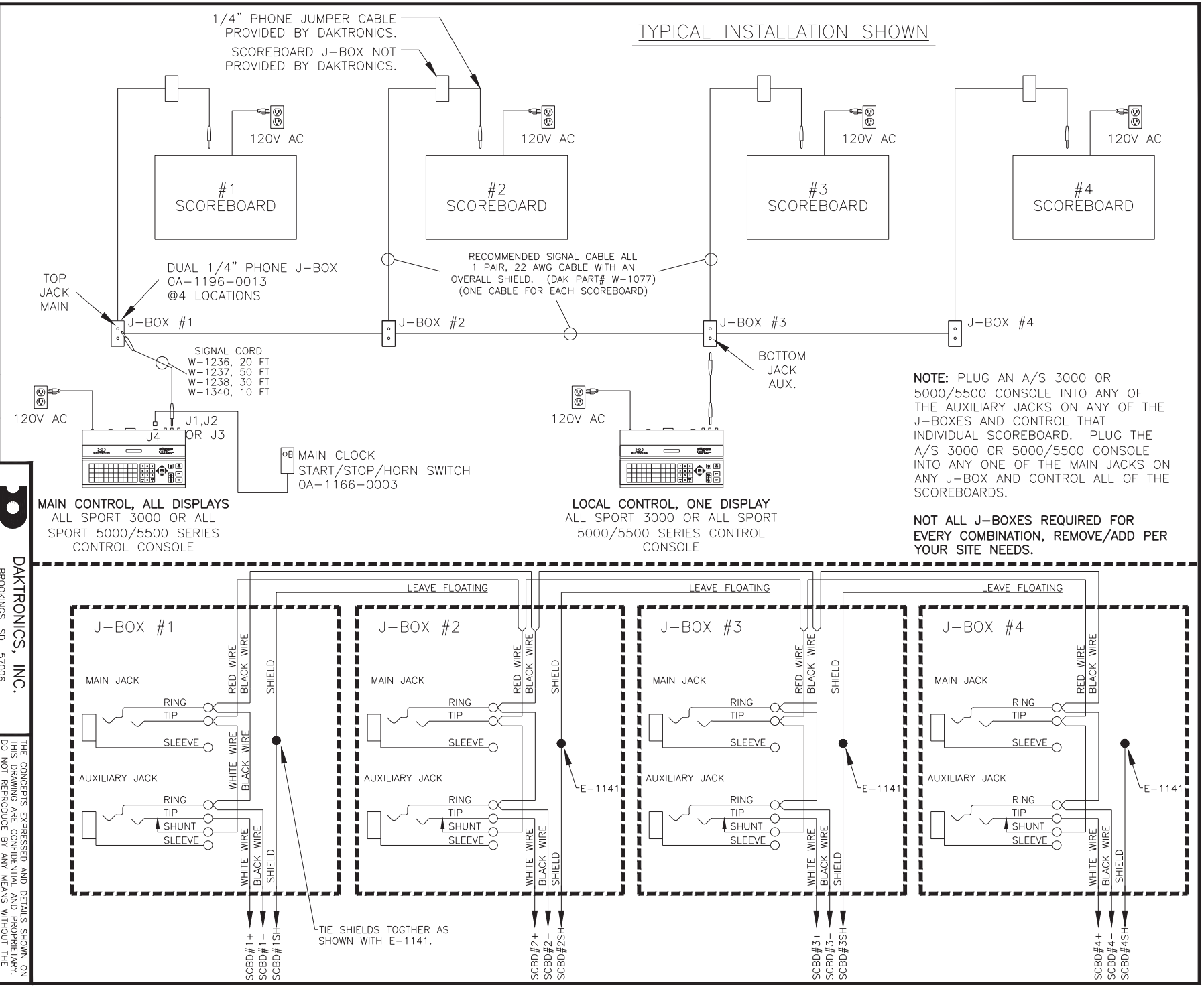
TITLE: ALL SPORT 5000, 25PIN PCB J–BOX WIRING

DES. BY: EBRAVEK DRAWN BY: EBRAVEK DATE: 15 DEC 99

APPR. BY:

SCALE: 1=3

1196-R01A-125416



REV	DATE	DESCRIPTION	BY
04	24 AUG 11	UPDATED DRAWING TO INCLUDE 5500 SERIES UPDATED TITLE BLOCK	JJL
03	18 DEC 08	UPDATED DRAWING WITH PROPER SHIELDING	DKD
02	31 JAN 07	UPDATED DRAWING TO SHOW SECOND ALL SPORT	MWM
01	26 APR 00	ADDED A/S 3000	DKD

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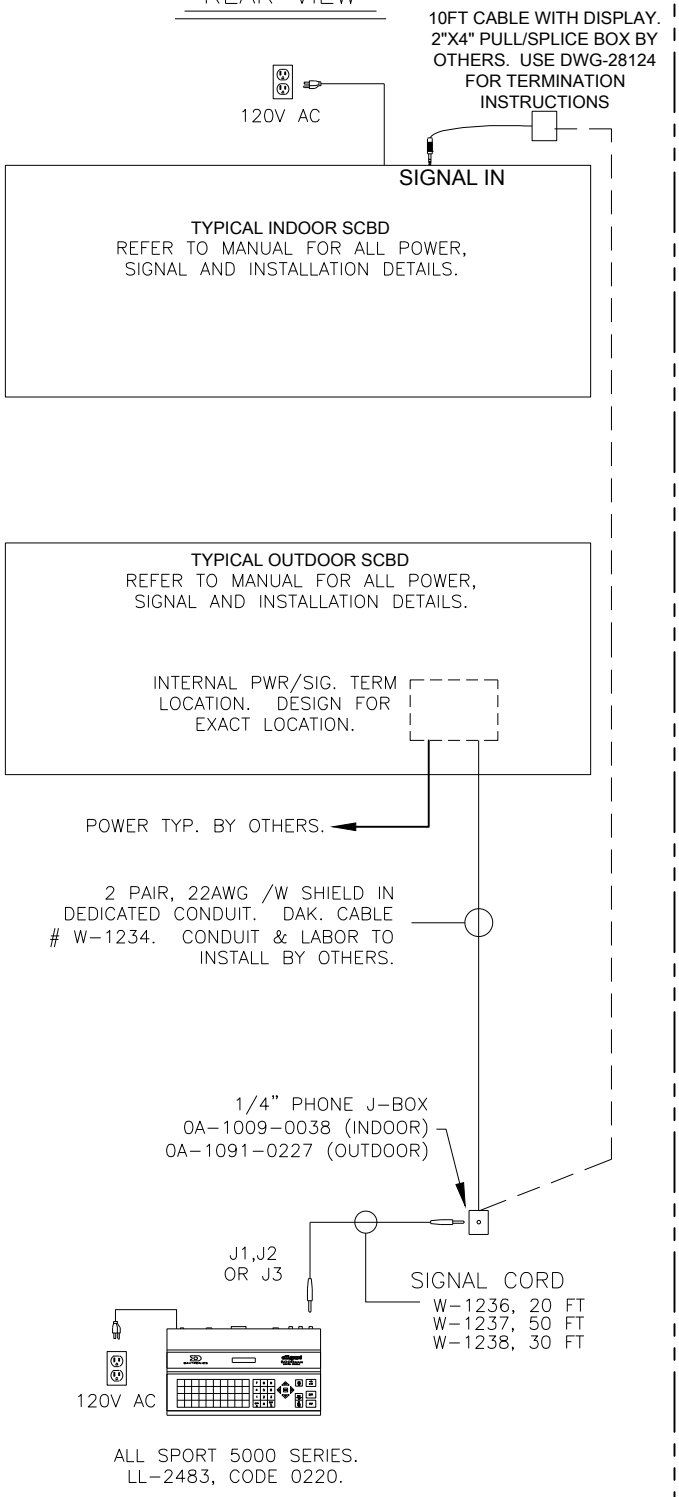
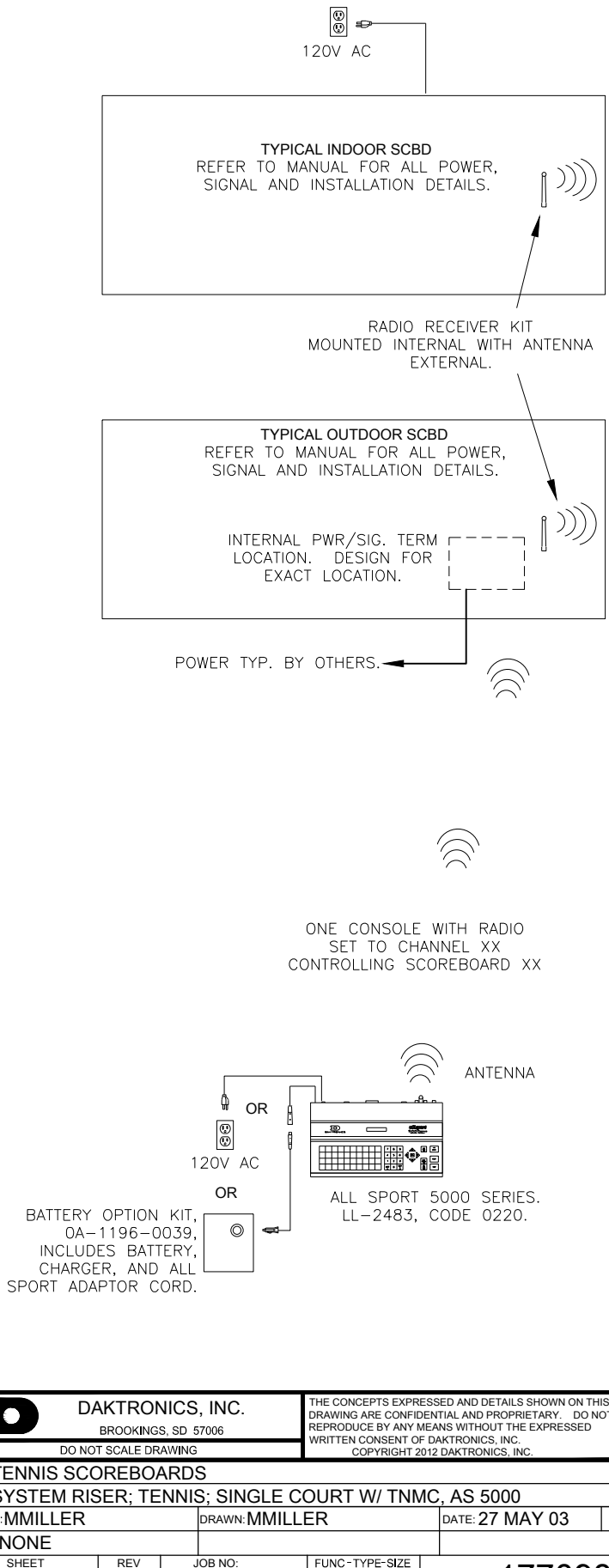
PROJ: ALL SPORT 5000/5500
TITLE: BLOCK DIAGRAM: A/S 3000 OR 5000 BB- VB AND WR #4
DESIGN: EBRAVEK
DRAWN: EBRAVEK
DATE: 24 JAN 00
SCALE: NONE
SHEET
REV: 04
JOB NO: P1196
FUNC-TYPE-SIZE: R-01-A
12541 7

WIRE COMMUNICATION
REAR VIEW



RADIO COMMUNICATION
REAR VIEW



REV	DATE:		BY:	
03	26 SEP 12	UPDATED BOARD AND TITLE BLOCK REMOVED PART NUMBER FROM THE RADIO RECIEVER TAG SO WE CAN USE MORE GENERATIONS	MWM	
02	23AUG05	REMOVED ALL SPORT 1600 SERIES CONTOLLER CHANGED NAME OF DRAWING	TAJ	
01	28 MAY 03	SEPERATED THE WIRE AND THE RADIO ILLUSTRATIONS.	MWM	

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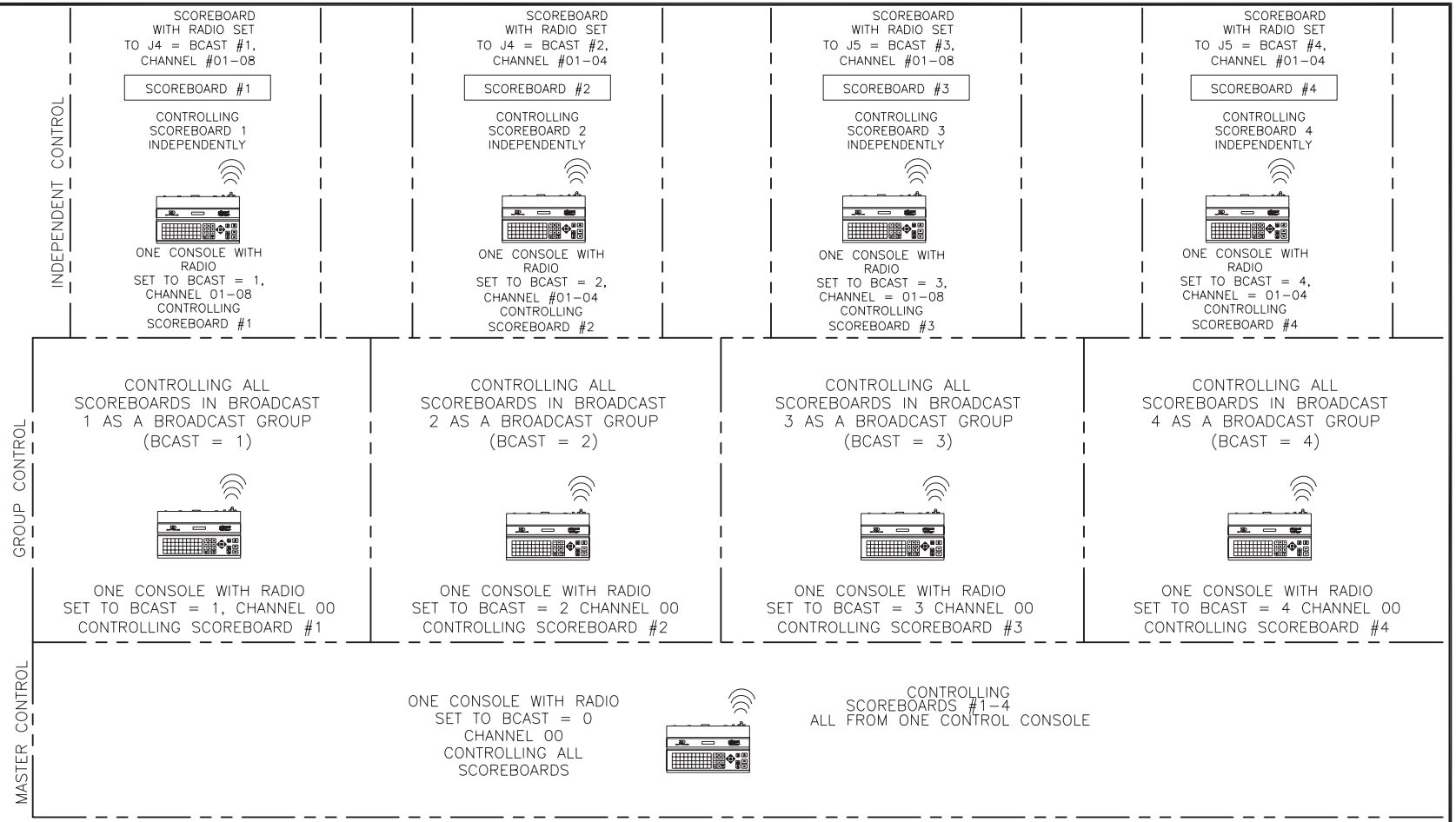
PROJ: TENNIS SCOREBOARDS
TITLE: SYSTEM RISER; TENNIS; SINGLE COURT W/ TNMC, AS 5000
DESIGN: MMILLER | DRAWN: MMILLER | DATE: 27 MAY 03
SCALE: NONE

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	
	03	P1164	R-01-A	177098



ADVANCED SETUP CONFIGURATIONS: INDEPENDENT SCOREBOARDS, GROUPED SCOREBOARDS, OR OVERALL MASTER CONTROLLED SCOREBOARDS.

A TYPICAL SCENARIO FOR THIS SETUP IS A BASKETBALL COURT THAT CAN BE RUN IN FULL COURT AND HALF COURT SETUP. THE INFORMATION BELOW WILL APPLY TO ANY SET OF SCOREBOARDS THAT NEED TO HAVE MULTIPLE CONTROL OPTIONS.

EACH SCOREBOARD RADIO RECEIVER WILL NEED TO BE SETUP; THERE ARE 4 BROADCAST GROUPS THAT CAN BE USED, BROADCAST 1 AND 3 CAN USE UP TO 8 CHANNELS (1–8), BROADCAST 2 AND 4 CAN USE UP TO 4 CHANNELS (1–4). J4 AND J5 ARE USED TO SELECT THE BROADCAST GROUP. J4 IS USED TO SELECT BROADCAST GROUPS 1 AND 2. J5 IS USED TO SELECT BROADCAST GROUP 3 AND 4. USE THE ROTARY DIAL ON THE RADIO TO SELECT THE CHANNEL. REFER TO DRAWING 1110–R01A–203543 OR 1110–R01A–203542 FOR BROADCAST AND CHANNEL SETTING INSTRUCTIONS.

FOR ALL SCOREBOARDS IN ONE BROADCAST GROUP, SET J4 OR J5 OF THE RADIO TO THE DESIRED BROADCAST GROUP (1–4) AND SET THE CHANNEL NUMBER TO THE CORRESPONDING SCOREBOARD CHANNEL. IT MAY BE NECESSARY TO CHANGE THE CHANNEL ON THE SCOREBOARD, IF A CHANNEL OTHER THAN WHAT IS SET IS NEEDED (REFER TO DRAWING 1110–R01A–203543 OR 1110–R01A–203542 FOR SCOREBOARD CHANNEL SETTING INSTRUCTIONS). EACH RADIO WITHIN THE SAME BROADCAST GROUP MUST BE SET TO A DIFFERENT CHANNEL NUMBER FROM 1–8 FOR GROUPS 1 AND 3 (CHANNELS 1–4 FOR BROADCAST GROUPS 2 AND 4).

MASTER CONTROL
TO RUN ALL SCOREBOARDS AT ONCE; SET THE CONTROL CONSOLE TO BCAST = 0, CHANNEL = 00.

GROUP CONTROL
TO RUN ALL SCOREBOARDS IN BROADCAST GROUP 1 AT ONCE SET THE CONTROL CONSOLE TO BCAST = 1, CHANNEL = 00
TO RUN ALL SCOREBOARDS IN BROADCAST GROUP 2 AT ONCE SET THE CONTROL CONSOLE TO BCAST = 2, CHANNEL = 00
TO RUN ALL SCOREBOARDS IN BROADCAST GROUP 3 AT ONCE SET THE CONTROL CONSOLE TO BCAST = 3, CHANNEL = 00
TO RUN ALL SCOREBOARDS IN BROADCAST GROUP 4 AT ONCE SET THE CONTROL CONSOLE TO BCAST = 4, CHANNEL = 00

INDEPENDENT CONTROL
TO RUN EACH SCOREBOARD INDEPENDENTLY, SET THE CONTROL CONSOLE TO THE APPROPRIATE BROADCAST GROUP (BCAST = 1–4), AND THEN SET THE CHANNEL TO THE SCOREBOARD CHANNEL. EX. TO RUN SCOREBOARD #3 IN THE SETUP ILLUSTRATED ABOVE, SET THE CONTROL CONSOLE TO BCAST = 3, CHANNEL = 01.

REV.	DATE	DESCRIPTION	BY	APPR.
00				

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DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: ALL SPORT RADIO

TITLE: CHANNEL SELECTION; MULTIPLE BROADCAST GROUP, GEN IV

DES. BY: RTAGTOW DRAWN BY: RTAGTOW DATE: 26 JAN 04

APPR. BY: MMILLER SCALE: NONE

REVISION

1110-R01A-203113

THIS IS A STEP BY STEP EXPLANATION USING GEOMETRY TO CALCULATE THE "SPEED ADJUST" VALUE IN THE MENU OF THE ALL SPORT PITCH AND SPEED PROGRAM, CODE 5500.

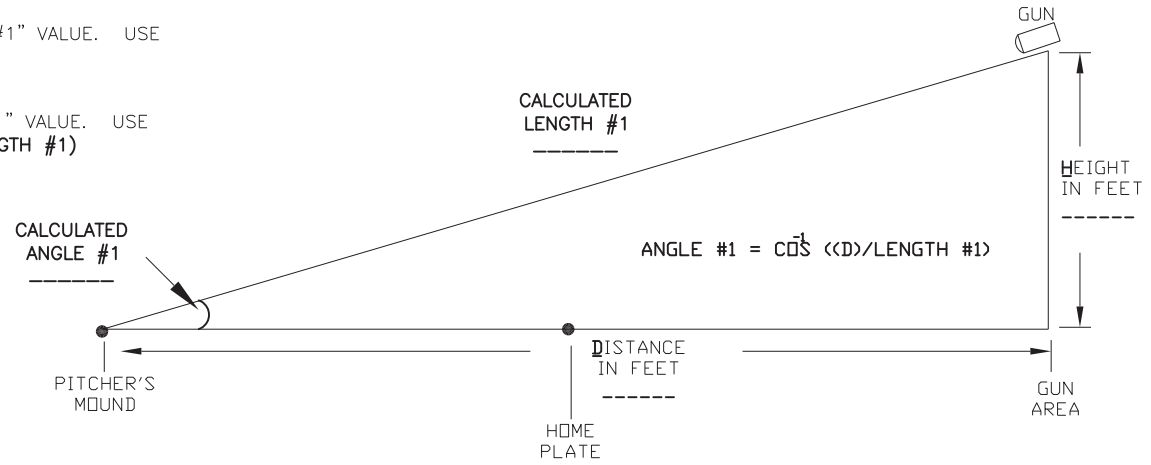
A CALCULATOR WITH ABILITY TO DO SIN, COS, TAN IS REQUIRED.
DO ALL CALCULATIONS TO .XXXX VALUES.

STEP 1.
MEASURE, IN FEET, DISTANCE FROM PITCHER'S MOUND STRAIGHT BACK, PAST HOME PLATE TO THE AREA WHERE GUN IS. WRITE YOUR MEASUREMENT ON THE _____ PROVIDED ON THE TRIANGLE PICTURE BELOW.

STEP 2.
MEASURE, IN FEET, HOW HIGH THE GUN IS OFF THE GROUND. WRITE YOUR MEASUREMENT ON THE _____ PROVIDED ON THE TRIANGLE PICTURE BELOW.

STEP 3.
CALCULATE THE "LENGTH #1" VALUE. USE
LENGTH #1 = $\sqrt{D^2 + H^2}$

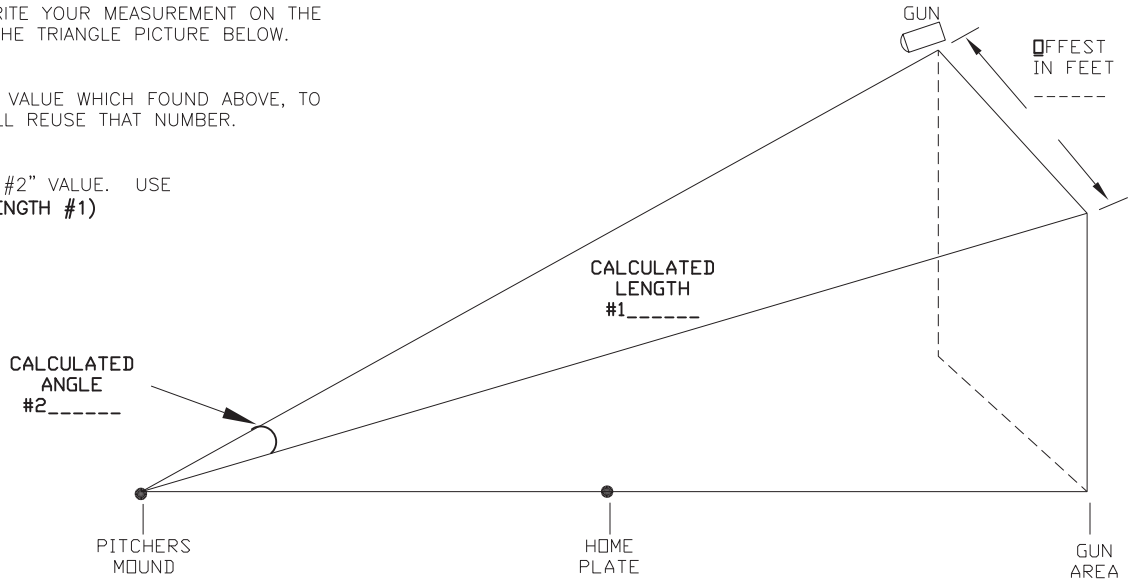
STEP 4.
CALCULATE THE "ANGLE #1" VALUE. USE
ANGLE #1 = COS^{-1}(D/LENGTH #1)



STEP 5.
MEASURE, IN FEET, HOW FAR OVER THE GUN IS "OFFSET" FROM HOME PLATE. WRITE YOUR MEASUREMENT ON THE _____ PROVIDED ON THE TRIANGLE PICTURE BELOW.

STEP 6.
COPY THE "LENGTH #1" VALUE WHICH FOUND ABOVE, TO THIS PICTURE. YOU WILL REUSE THAT NUMBER.

STEP 7.
CALCULATE THE "ANGLE #2" VALUE. USE
ANGLE #2 = TAN^{-1}(O/LENGTH #1)



STEP 8.
ADD CALCULATED ANGLE #1 TO CALCULATED ANGLE #2.
ENTER VALUE HERE _____

STEP 7.
CALCULATE SPEED ADJUST VALUE. USE
SPEED ADJUST VALUE = COS(ANGLE #1 + ANGLE #2).

CALCULATIONS SHOWN WILL NOT BE 100% EXACT. ADDITIONAL ADJUSTMENTS CAN BE MADE AS REQUIRED. *** THE LOWER THE NUMBER, THE FASTER SPEED THE GUN READS. ALL ADJUSTMENTS SHOULD BE DONE AT .00XX LEVEL. ***

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PROJ:

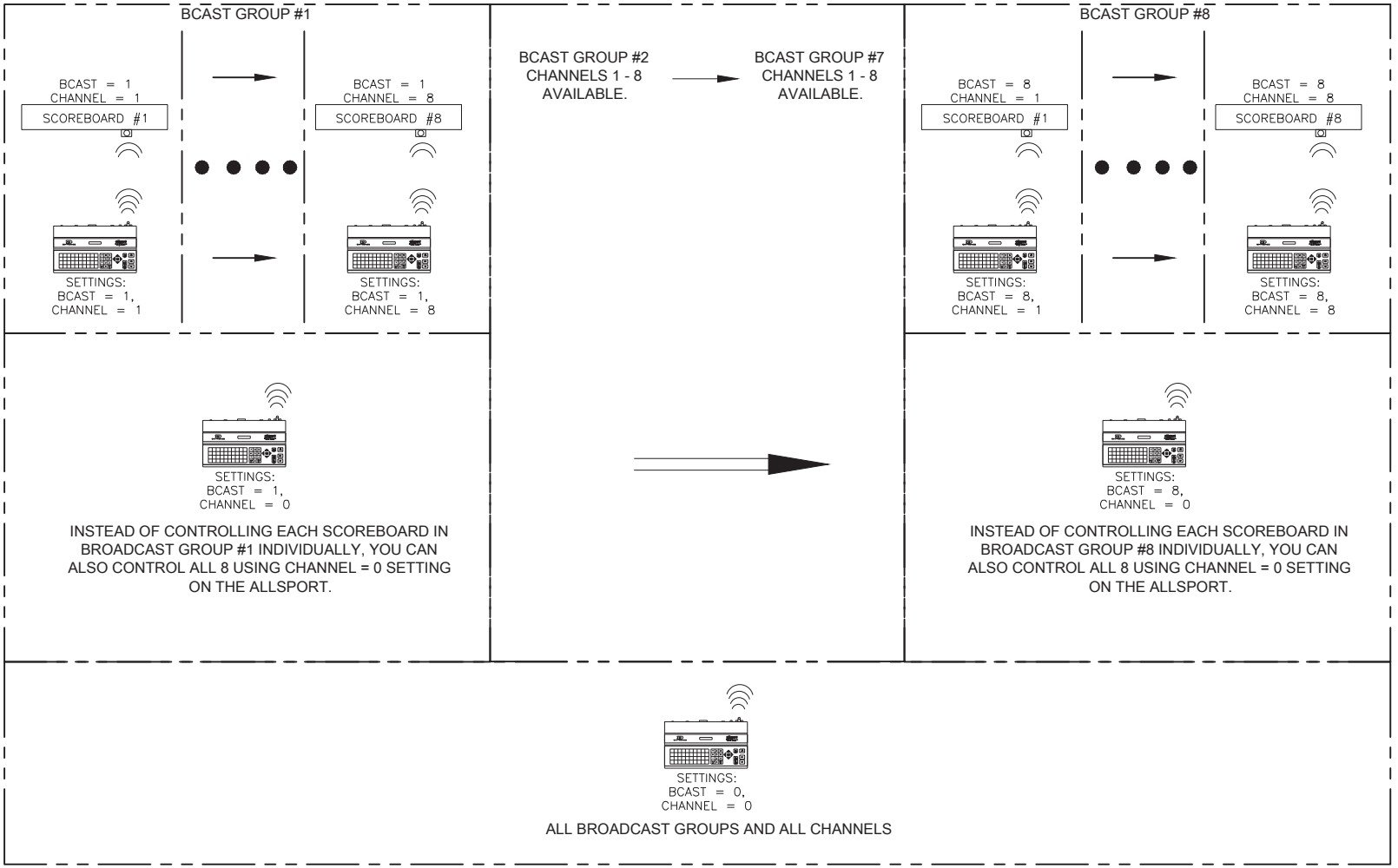
TITLE: SPEED ADJUST CALCULATIONS, RADAR GUN

DES. BY: DRAWN BY: AHOWARD DATE: 31 MAY 05

REVISION 01 | APPR. BY: | SCALE: NONE

1196-R08A-243741

REV.	DATE	DESCRIPTION	BY	APPR.
01	18 JUL 05	UPDATED ANGLE # 1 MODIFIED TEXT	CMG	



ADVANCED SETUP CONFIGURATIONS:

- 1 CONSOLE HAS 64 CHANNELS. USING IT AS A MASTER CONTROL:
  - *RUNS ALL SCOREBOARDS AT ONCE
  - *CONSOLE RADIO SETTING: BCAST = 0, CHANNEL = 0

- 1 CONSOLE CAN ALSO CONTROL JUST 8 CHANNELS IN A SELECTED GROUP. GROUP CONTROL:
  - *RUNS ALL SCOREBOARDS ASSIGNED TO BCAST X AND CHANNELS 1 - 8. X COULD BE BCAST GROUP 1, OR 2, OR... 8
  - *CONSOLE RADIO SETTING: BCAST = X, CHANNEL = 0. X COULD BE BCAST GROUP 1, OR 2, OR... 8

- 1 CONSOLE CAN ALSO CONTROL JUST 1 CHANNEL IN A SELECTED GROUP. INDIVIDUAL CONTROL:
  - *RUNS ALL SCOREBOARDS ASSIGNED TO BCAST X AND CHANNEL Y. X COULD BE BCAST GROUP 1, OR 2, OR.. 8. Y COULD BE CHANNEL 1, OR 2, OR.... 8
  - *CONSOLE RADIO SETTING: BCAST = X, CHANNEL = Y. X COULD BE BCAST GROUP 1, OR 2, OR.. 8. Y COULD BE CHANNEL 1, OR 2, OR.... 8

NOTE: TO FIND THE SCOREBOARD RADIO SETTING:
- MAKE SURE THE CONSOLE IS TURNED OFF.
- CYCLE POWER TO THE SCOREBOARD
- WATCH THE DIGITS AS THE SCOREBOARD BOOTS UP. YOU WILL SEE A B X AND C Y APPEAR ON THE DIGITS.

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PROJ: RADIO LINK, GEN VI

TITLE: INSTALLATION DETAILS, GEN VI CHANNEL SELECTION GUIDE

DESIGN: JCOSE | DRAWN: MMILLER | DATE: 14 AUG 12

SCALE: NONE

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	00	P1110	F - 01 - A

1109870

Appendix B: Sport Inserts

Drawing Title	*Drawing Number*
Insert; Event Counter Codes 371-376	**A-58047**
Insert; Tae Kwan Do Code 283	**A-96889**
Insert; Karate Code 282	**A-96890**
Insert; Judo Code 281	**A-96891**
Insert; Boxing Code 291	**A-96892**
Custom Insert, Karate Code 285	**A-98374**
Custom Insert, Tae Kwan Do Code 286	**A-98375**
Custom Insert, Judo Code 284	**A-98376**
Insert, Basketball, LL-2433	**A-120121**
Insert; LL-2437 A/S 5000, Football	**A-122652**
Insert; LL-2436, Hockey/Handball/Lacrosse	**A-124218**
Insert; LL-2435 A/S 5000, Wrestling	**A-124701**
Insert; LL-2434 A/S 5000, Volleyball	**A-125055**
Insert; LL-2438 A/S 5000, Baseball	**A-125061**
Insert; LL-2439 A/S 5000, Track	**A-125094**
Insert; LL-2440 A/S 5000, Soccer	**A-125215**
Insert; LL-2441 A/S 5000, Team Name	**A-125290**
Insert; LL-2475 A/S 5000, Segment Timer	**A-129357**
Insert; LL-2482 A/S 5000, Pitch and Speed	**A-130895**
Insert; LL-2483 A/S 5000, Tennis	**A-131274**
Insert, Smart Clock Codes 1000, 6000	**A-136301**
Insert; Strike Outs	**A-163409**
Insert; A/S 5000, Water Polo	**A-178439**
Insert; Cricket/Football	**A-315384**
Insert; Cricket, A/S 5000 Series	**A-319507**
Insert; Rugby	**A-712154**
Insert; Custom Lacrosse	**A-1084219**

REV.	DATE	DESCRIPTION	BY	APPR.
03	06 JUN 07	ADDED 370 TIME DAY /TENTHS STANDAR RTD	JH	
2	29 JUL 99	CHANGED PART NUMBER FROM LL-2369 TO 06-58047.	AVB	AVB
1	26 OCT 98	ADDED CODE 377	DDL	

EVENT COUNTER

CODE	FUNCTION
370	DAY AND TIME/WITH TENTHS (STANDARD RTD)
371	DAY AND TIME (VENUS 1500)
372	DAY AND TIME (STANDARD RTD)
373	TIME BASED (VENUS 1500)
374	TIME BASED (STANDARD RTD)
375	EXTERNAL INPUT (VENUS 1500)
376	EXTERNAL INPUT (STANDARD RTD)
377	CUSTOM

06-58047 REV. 2

INCREMENT VALUE

TIME INTERVAL

DECREMENT VALUE

VALUE/ DAYS

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: INSERT, EVENT COUNTER CODES 371-376

DES. BY: AVB DRAWN BY: A VANBEMMEL DATE: 18 FEB 98

REVISION 03 APPR. BY:

SCALE: 1=1

1166-R08A-58047

TAE KWON DO
CODE 283

00-96889 REV 1

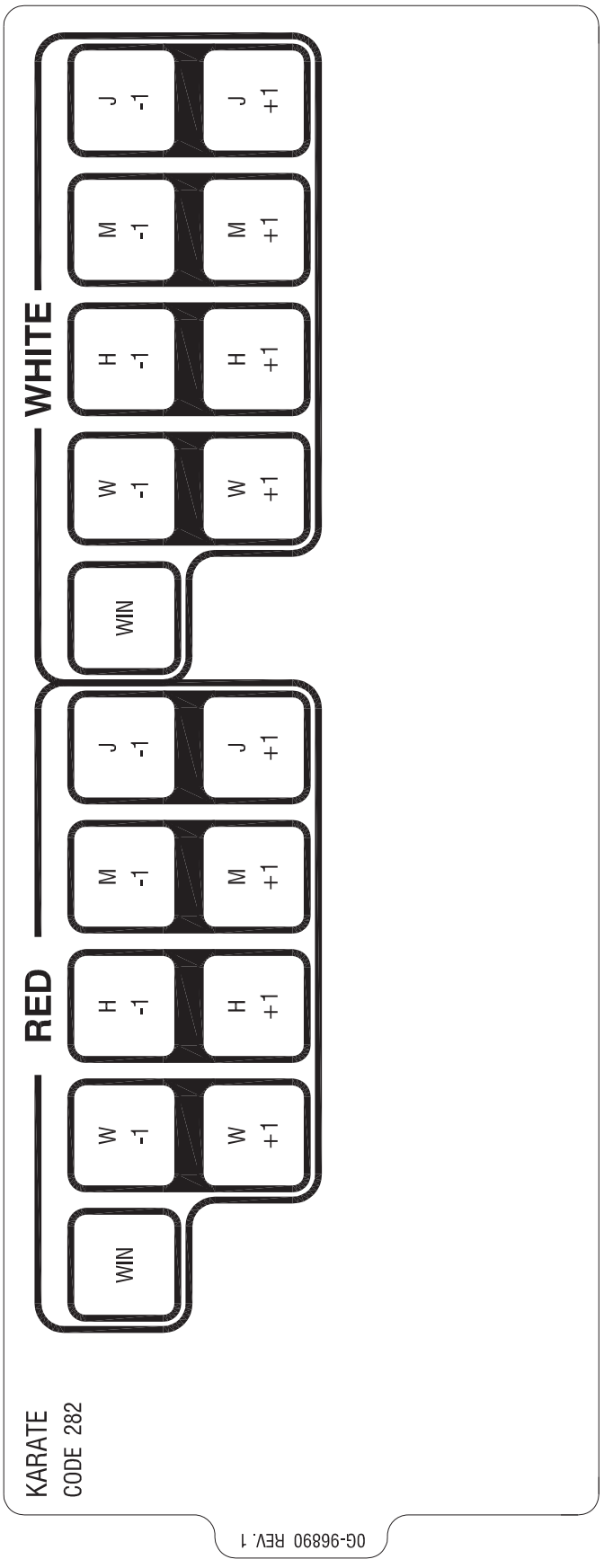
REV.	DATE	DESCRIPTION	BY	APPR.
01	01 JUL 99	CHANGED PART NUMBER TO 0G-96889	AVB	AVB

REVISION

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:
TITLE: INSERT, TAE KWON DO CODE 283
DES. BY: AVB DRAWN BY: A VANBEMMEL DATE: 26 SEP 97
APPR. BY:
SCALE: 1=1

1166-R08A-96889



REV.	DATE	DESCRIPTION	BY	APPR.
1	19 JUN 00	CHANGED PART NUMBER TO FROM LL-2345 TO 0G-96890.	AVB	AVB

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

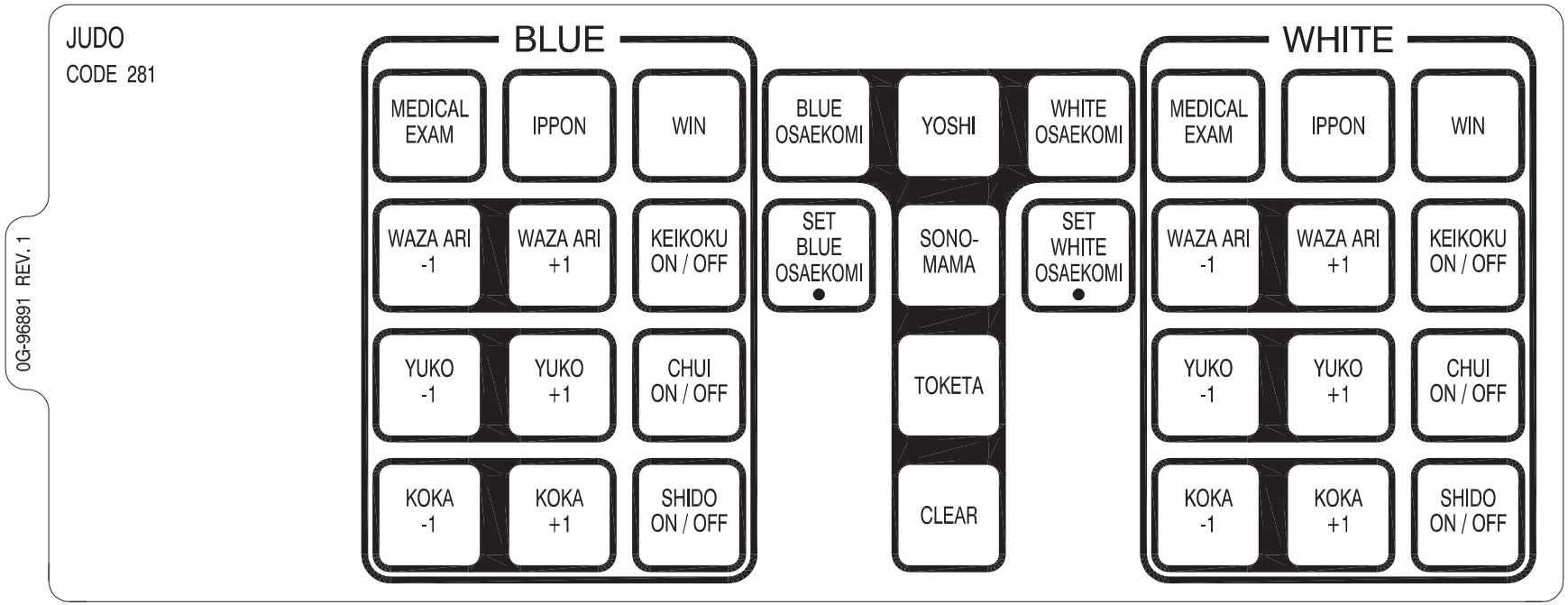
TITLE: INSERT, KARATE CODE 282

DES. BY: AVB DRAWN BY: A VANBEMMEL DATE: 26 SEP 97

REVISION APPR. BY:

SCALE: 1=1

1166-R08A-96890



REV.	DATE	DESCRIPTION	BY	APPR.
1	21 SEP 99	CHG TEXT "RED" TO "BLUE" CHG PART NO. FROM LL-2346 TO 0G-96891	AVB	AVB

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: INSERT, JUDO CODE 281

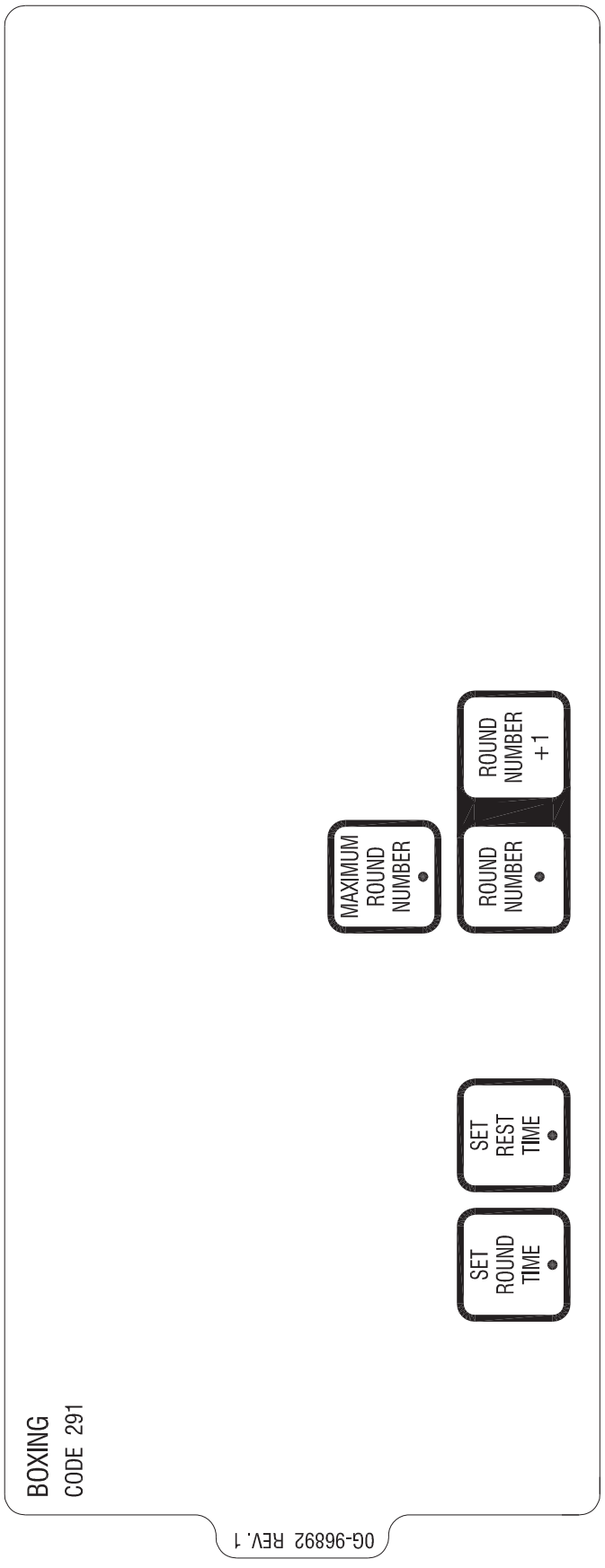
DES. BY: AVB DRAWN BY: A VANBEMMEL DATE: 26 SEP 97

REVISION

APPR. BY:

SCALE: 1=1

1166-R08A-96891



REV.	DATE	DESCRIPTION	BY	APPR.
1	11 APR 01	CHANGED PART NUMBER FROM LL-2347 TO 0G-96892	AVB	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

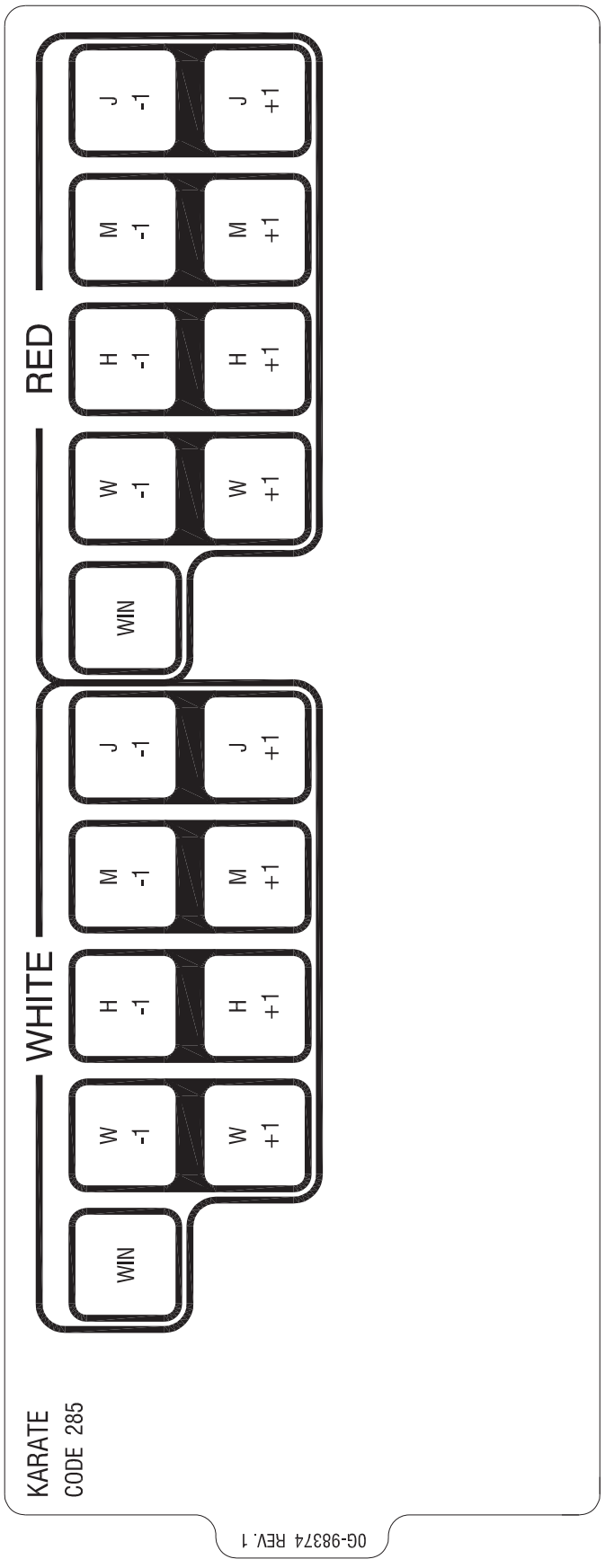
TITLE: INSERT, BOXING CODE 291

DES. BY: AVB DRAWN BY: A VANBEMMEL DATE: 26 SEP 97

REVISION APPR. BY:

SCALE: 1=1

1166-R08A-96892



REV.	DATE	DESCRIPTION	BY	APPR.
1	19 JUN 00	CHANGED PART NUMBER TO 0G-98374	AVB	AVB

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

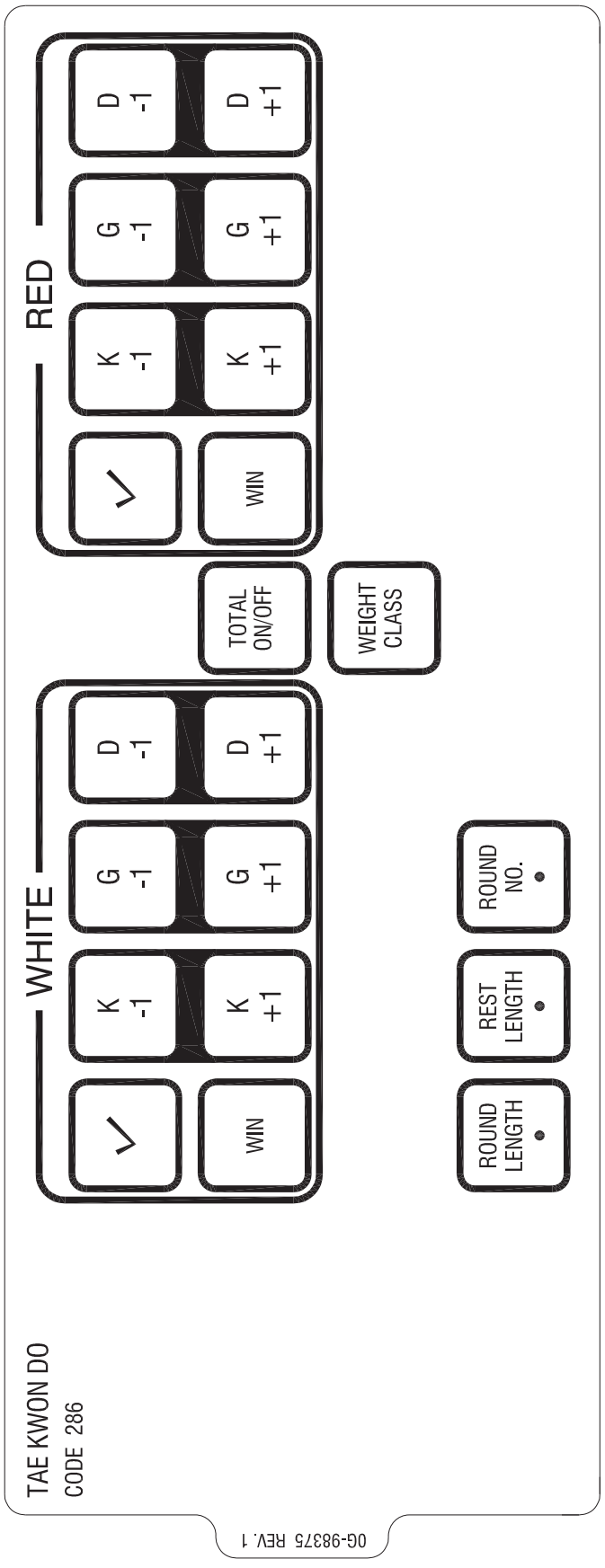
TITLE: CUSTOM INSERT, KARATE CODE 285

DES. BY: AVB DRAWN BY: D DELEEUW DATE: 11 NOV 97

REVISION APPR. BY:

SCALE: 1=1

1166-R08A-98374



REV.	DATE	DESCRIPTION	BY	APPR.
1	19 JUN 00	CHANGED PART NUMBER TO 0G-98375	AVB	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: CUSTOM INSERT, TAE KWON DO CODE 286

DES. BY: AVB DRAWN BY: D DELEEUW DATE: 11 NOV 97

REVISION APPR. BY:

SCALE: 1=1

1166-R08A-98375

JUDO
CODE 284

0G-98376 REV. 1

REV.	DATE	DESCRIPTION	BY	APPR.
1	16 NOV 99	CHANGED RED TO BLUE CHANGED PART NUMBER TO 0G-98376	AVB	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: CUSTOM INSERT, JUDO CODE 284

DES. BY: AVB DRAWN BY: D DELEEUW DATE: 11 NOV 97

REVISION APPR. BY:

SCALE: 1=1

1166-R08A-98376

REV.	DATE	DESCRIPTION	BY	APPR.
07	30 MAR 04	ADDED CODE 1301 MATSIDE	RDS	
06	24 FEB 04	UPDATED REVISION TEXT TO MATCH SPEC DWG	DJU	
05	19 FEB 04	ADDED CLEAR TEAM FOULS KEY	DJU	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: ALL SPORT 5000 SERIES CONSOLE

TITLE: INSERT, BASKETBALL, LL-2433

DES. BY: AVB DRAWN BY: A VANBEMMEL DATE: 11 AUG 99

REVISION 07

APPR. BY:

SCALE: 1=1

1196-E07A-120121

REV	DATE:	REVISED CODE LIST ORDER	BY:
07	09 FEB 10		DJU
REV	DATE:	CHANGED FIRST & 10 KEY TO FIRST DOWN ADDED PENALTY FLAG KEY	BY:
06	12 AUG 05	ADDED CODE 6612	DJU
REV	DATE:	ADDED CODE 6402 FB>HK PLACED ALL CODES IN NUMERICAL ORDER	BY:
05	07 FEB 01		NW

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PROJ: ALL SPORT 5000 SERIES CONSOLE
TITLE: INSERT; LL-2437 A/S 5000, FOOTBALL
DESIGN: AVB
DRAWN: A VANBEMMEL
DATE: 07 OCT 99
SCALE: 1=1
SHEET
REV: 07
JOB NO: P1196
FUNC-TYPE-SIZE: E-07-A

12652

REV.	DATE	DESCRIPTION	BY	APPR.
9	30 MAR 04	REMOVED CODE 4101 ADDED CODE 4102	RDS	
8	6 MAY 03	ADDED BACK SIDE PRINTING OF SEGMENT TIMER. BACK SIDE PRINTED PER DRAWING A-187890	CJB	
7	24 SEP 02	ADDED CODES 4601, 4602, 4701, AND 4702	CJB	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: ALL SPORT 5000 SERIES CONSOLE

TITLE: INSERT; LL-2436, HOCKEY/HANDBALL/LACROSSE

DES. BY: AVB DRAWN BY: A VANBEMMEL DATE: 18 NOV 99

REVISION 09

APPR. BY:

SCALE: 1=1

1196-E07A-124218

LL-2435 REV 04

REV	DATE:		BY:
04	17 MAR 06	ADDED RECOVERY TIME KEYS	DJU
REV	DATE:		BY:
03	26 JULY 00	ADDED CODE 3105 PLYR/FL/PTS	EB
REV	DATE:		BY:
02	27 DEC 99	ADDED CODE LABEL LOCATION	EB
REV	DATE:		BY:
01	06 DEC 99	ADDED CODE NUMERS	EB

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BROOKINGS, SD 57006
DO NOT SCALE DRAWING

PROJ: ALL SPORT 5000 SERIES CONSOLE
TITLE: INSERT; LL-2435 A/S 5000, WRESTLING
DESIGN: AVB
DRAWN: A VANBEMMEL
DATE: 19 NOV 99
SCALE: 1=1

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	04	P1196	E-07-A

12470 1

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REV	DATE:		BY:
05	16 JAN 12	ADDED "SUBS +1" KEYS TO HOME AND GUEST SECTIONS. EDITED SECTION OUTLINES	DJU
04	09 FEB 10	CHANGED GAMES TEXT TO SET	DJU
03	30 MAR 03	ADDED CODE 2301 MATSIDE	RDS
02	26 JULY 00	ADDED CODE 2105 PLYR/FL/PTS	EB

REV	DATE:		BY:
01	27 DEC 99	ADDED CODE LABEL LOCATION	EB

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DO NOT SCALE DRAWING

PROJ: ALL SPORT 5000 SERIES CONSOLE
TITLE: INSERT; LL-2434 A/S 5000, VOLLEYBALL
DESIGN: EB
DRAWN: E BRAVEK
DATE: 06 DEC 99
SCALE: 1=1
SHEET
REV: 05
JOB NO: P1196
FUNC-TYPE-SIZE: E-07-A

125055

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REV	DATE:		BY:
05	30 NOV 12	ADDED FIELDER'S CHOICE KEY	DJU
REV	DATE:		BY:
04	29 JUL 10	UPDATED LL TEXT TO REV 04	DJU
REV	DATE:		BY:
03	21 MAY 07	ADDED CLEAR PITCH COUNT CONTROLS	JMC

REV	DATE:		BY:
02	17 MAR 06	ADDED CLEAR BATTER / AVERAGE KEY	DJU
REV	DATE:		BY:
01	22 DEC 99	ADDED CODE LABEL LOCATION	EB

DAKTRONICS, INC.
BROOKINGS, SD 57006

DO NOT SCALE DRAWING

PROJ: ALL SPORT 5000 SERIES CONSOLE
TITLE: INSERT; LL-2438 A/S 5000, BASEBALL
DESIGN: EB
DRAWN: E BRAVEK
DATE: 06 DEC 99
SCALE: 1=1

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	05	P1196	E-07-A

125061

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TRACK

CODE	TYPE
8601	MANUAL TIMING
8602	OMEGA-TIMERS
8603	OMNISPORT TIMERS
8604	HAWKEYE/FINISH LYNX RUNNING TIME RTD

LL-2439

PLACE CODE LABEL HERE

ENTER THIS CODE NUMBER

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PROJ: ALL SPORT 5000

TITLE: INSERT; LL-2439 A/S 5000, TRACK

DESIGN: EB

DRAWN: E BRAVEK

DATE: 02 MAR 00

SCALE: 1=1

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	00	P1196	E-07-A

125094

REV	DATE:		BY:
04	19 FEB 02	ADDED FOULS BOTTONS	JJS
03	26 JULY 00	ADDED CODE 7711	EB
02	14 MAR 00	ADDED CODE 7604	EB
01	27 DEC 99	ADDED CODE LABEL LOCATION. ADDED CODE 7601	EB

DAKTRONICS, INC.
BROOKINGS, SD 57006
DO NOT SCALE DRAWING

PROJ: ALL SPORT 5000
TITLE: INSERT; LL-2440 A/S 5000, SOCCER
DESIGN: EB
DRAWN: E BRAVEK
DATE: 09 DEC 99
SCALE: 1=1
SHEET
REV: 04
JOB NO: P1196
FUNC-TYPE-SIZE: E-07-A

125215

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REV	DATE:		BY:
01	11 FEB 08	ADDED "&" SYMBOL TO INSERT	JMC

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DAKTRONICS, INC.
BROOKINGS, SD 57006

DO NOT SCALE DRAWING

PROJ: ALL SPORT 5000

TITLE: INSERT; LL-2441 A/S 5000, TEAM NAME

DESIGN: EB

DRAWN: E BRAVEK

DATE: 13 DEC 99

SCALE: 1=1

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	01	P1196	E-07-A

125290

SEGMENT TIMER

ACCESS THROUGH MENU
FROM WITHIN SPORT CODE

PRESS [MENU]

PRESS ▽ UNTIL

DISPLAY MENU?

PRESS [ENTER YES]

SEGMENT TIMER Y/N

PRESS [ENTER YES]

DEDICATED SEGMENT TIMER

CODE 100

FIRST SEGMENT •

LAST SEGMENT •

AUTO STOP

CURRENT SEGMENT +1

RESET CURRENT SEGMENT

RESET TO FIRST SEG

INTERVAL TIME •

SEG. NO. • TIME •

COPY RANGE •

DISPLAY INTERVAL

LL-2475 REV 01

REV	DATE:	ADDED CODE 100 DEDICATED SEGMENT TIMER	BY:
01	26 JULY 99		EB

DAKTRONICS, INC.
BROOKINGS, SD 57006

DO NOT SCALE DRAWING

PROJ: ALL SPORT 5000

TITLE: INSERT; LL-2475 A/S 5000, SEGMENT TIMER

DESIGN: EB

DRAWN: E BRAVEK

DATE: 21 MAR 00

SCALE: 1=1

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	01	P1196	E-07-A

12935 7

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REV	DATE:		BY:
02	20 JUN 01	SWITCHED POSITION OF THE GUEST AND HOME COLUMNS TO MATCH SOFTWARE	NW
REV	DATE:		BY:
01	31 MAY 01	ADDED HOME AND GUEST COLUMNS WITH FOUR NEW KEYS AND ALSO ADDED "DISPLAY GUEST COUNT" AND "DISPLAY HOME COUNT" KEYS.	NSW

DAKTRONICS, INC.
BROOKINGS, SD 57006

DO NOT SCALE DRAWING

PROJ: ALL SPORT 5000

TITLE: INSERT; LL-2482 A/S 5000, PITCH AND SPEED

DESIGN: EB | DRAWN: EBRAVEK | DATE: 13 APR 00

SCALE: 1=1

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	02	P1196	E-07-A

130895

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REV	DATE:	ADDED PRO CODE, ADDED SETS WON +1 AND DOUBLES SERVE KEYS.	BY:
01	12 MAY 03		CJB

DAKTRONICS, INC.
BROOKINGS, SD 57006
DO NOT SCALE DRAWING

PROJ: ALL SPORT 5000
TITLE: INSERT; LL-2483 A/S 5000, TENNIS
DESIGN: EB
DRAWN: E BRAVEK
DATE: 25 APR 00
SCALE: 1=1

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	01	P1196	E-07-A

13274

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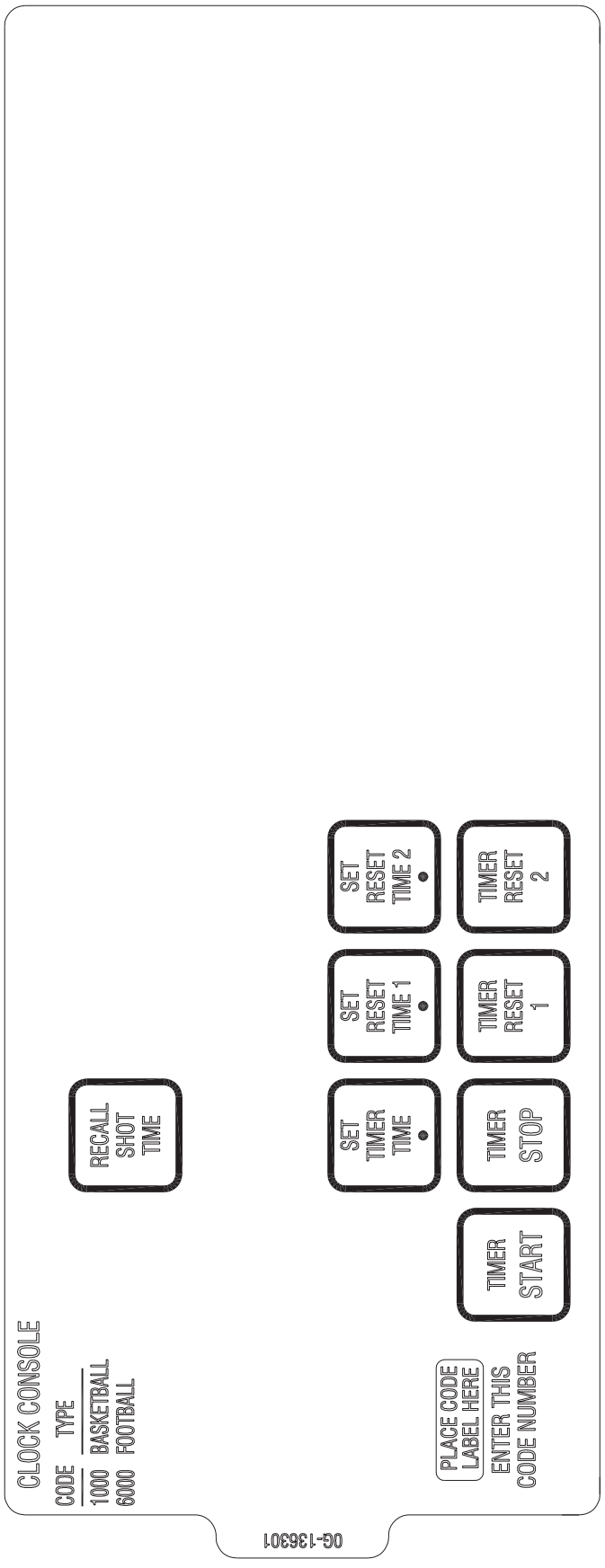

REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: ALL SPORT 5000 SERIES CONSOLE

TITLE: INSERT, SMART CLOCK CODES 1000, 6000

DES. BY: EB DRAWN BY: EBRAVEK DATE: 25 AUG 00

REVISION | APPR. BY: | SCALE: 1=1

1196-E07A-136301

REV.	DATE	DESCRIPTION	BY	APPR.
01	16 APR 02	ADDED PROMOS 10-19	JJS	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: ALL SPORT 5000

TITLE: INSERT; STRIKE OUTS

DES. BY: JSPAHR DRAWN BY: JSPAHR DATE: 27 FEB 02

APPR. BY:

SCALE: 1=1

REVISION

1196-E07A-163409

WATER POLO
CODE: 4498

06-17843-99, REV 00

REV.	DATE	DESCRIPTION	BY	APPR.

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DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: INSERT; A/S 5000, WATER POLO

DES. BY:

DRAWN BY: CBRECZI

DATE: 13 NOV 02

REVISION

APPR. BY:

SCALE: 1=1

1196-E07A-178439

00 315384 REV 01

REV	DATE:	ADDED SUPER GOALS KEYS	BY:
01	12 DEC 12		CRV

DAKTRONICS, INC.
BROOKINGS, SD 57006

DO NOT SCALE DRAWING

PROJ: ALL SPORT 5000 SERIES CONSOLE

TITLE: INSERT: CRICKET/FOOTBALL

DESIGN: KZB | DRAWN: KBIERBA | DATE: 06 AUG 07

SCALE: 1=1

SHEET	REV	JOB NO:	FUNC - TYPE - SIZE
	01	P1196	E - 07 - A

315384

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REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: INSERT; CRICKET, A/S 5000 SERIES

DES. BY: JCOSE DRAWN BY: JCOSE DATE: 12 SEP 07

REVISION 00 APPR. BY:

SCALE: 1=1

1196-E07A-319507

REV	DATE:		BY:
02	03 JAN 13	ADDED HOME AND GUEST BOARDERS	DJU
REV	DATE:		BY:
01	12 DEC 12	ADDED TACKLES KEYS	CRV

DAKTRONICS, INC.
BROOKINGS, SD 57006
DO NOT SCALE DRAWING

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PROJ:

TITLE: INSERT; RUGBY

DESIGN: BCARSRU | DRAWN: DULSCHM | DATE: 25 SEP 08

SCALE: 1 = 1

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	02	P1192	R - 08 - A

712154

REV	DATE:		BY:
01	31 MAY 12	ADDED "DRAW CTRL" TEXT TO "FACE OFFS" KEYS	DJU

PROJ:

TITLE: INSERT; CUSTOM LACROSSE

DESIGN:, DRAWN: DULSCHM DATE: 13 FEB 12

SCALE: 1 = 1

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	01	P1196	E-07-A

1084219

DAKTRONICS, INC.
BROOKINGS, SD 57006

DO NOT SCALE DRAWING

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Appendix C: Sport Code Numbers

Drawing Title	*Drawing Number*
Address Table, 1 through 128	**A-115078**
Address Table, 129 through 255	**A-115079**
Protocol Table, 1 through 15	**A-115081**
4 Column LED Driver II; Specifications	**A-123783**
Relay Driver; Specifications	**A-123791**
A/S 5000 Capable TNMC Shift Card; Specifications	**A-123794**
Layout; 16 Column Driver III	**A-123940**
Layout; 8 Column Driver III	**A-123941**
All Sport 5000 Current Loop Output Specifications	**A-128429**
16 Column LED Driver II Specifications	**A-126174**
Driver; Cl, 16 Digit w/Charger	**A-145791**
Specifications; LED Driver IV, 16 Col	**A-288137**

Notes:

- All scoreboards are controlled by a 16 column LED, incandescent, or glow cube driver except where noted by the column numbers to configure for a 4 column LED or an 8 column incandescent driver.
- Use drawings A-115078 and A-115079 when setting the address for a 16 column LED or incandescent driver.
- Use drawing A-123783 for a 4 column LED driver and drawing A-123941 for an 8 column incandescent driver when setting the address and column numbers.
- Use drawing A-145791 for a 16 column glow cube driver when setting the address and protocol numbers.

C.1 Indoor Model Numbers

Model	Address	Basketball	Volleyball	Wrestling	Hockey	Football
BB-114	17	1105	2105	3105	4105	6105
BB-1113	12	1101,1102	2101	3101,3102		
BB-1813	12	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2014	1 + Columns 5-8	All				All
BB-2015	1	All	All [4]	All [4]	All [4]	All
BB-2021	12	1101,1102	2101	3101,3102		
BB-2023	1	All	All [4]	All [4]	All [4]	All
BB-2025	12	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2026	1 + Columns 5-8	All				All
BB-2027	12	1101,1102	2101	3101,3102		
BB-2028	12	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2029	1	All	All [4]	All [4]	All [4]	All
BB-2031	13	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2032	13	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2033	1	All	All [4]	All [4]	All [4]	All
BB-2039	12	1101,1102	2101	3101,3102		
BB-2041	12,14	1105	2105	3105	4105	6105
BB-2042	12,14	1105	2105	3105	4105	6105
BB-2046	12,14	1105	2105	3105	4105	6105
BB-2047	12,14	1105	2105	3105	4105	6105

Model	Address	Basketball	Volleyball	Wrestling	Hockey	Football
BB-2101	17	1105	2105	3105	4105	6105
BB-2102	17	1105	2105	3105	4105	6105
BB-2103	17	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2104	17	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2105	17	1105	2105	3105	4105	6105
BB-2106	17	1105	2105	3105	4105	6105
BB-2107	17	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2108	17	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2109	1	All	All [4]	All [4]	All [4]	All
BB-2111	1	All	All [4]	All [4]	All [4]	All
BB-2112	17	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2114	1 + Columns 5-8	All				All
BB-2115	1	All	All [4]	All [4]	All [4]	All
BB-2116	17	1105	2105	3105	4105	6105
BB-2117	14	1105	2105	3105	4105	6105
BB-2119	17	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2120	14	1105	2105	3105	4105	6105
BB-2121	17	1105	2105	3105	4105	6105
BB-2122	17	1105	2105	3105	4105	6105
BB-2123	17,14	1105	2105	3105	4105	6105
BB-2124	17,14	1105	2105	3105	4105	6105
BB-2125	17	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2126	17	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2127	14	1105	2105	3105	4105	6105
BB-2128	1	All	All [4]	All [4]	All [4]	All
BB-2129	1	All	All [4]	All [4]	All [4]	All
BB-2130	1	All	All [4]	All [4]	All [4]	All
BB-2131	1	All	All [4]	All [4]	All [4]	All
BB-2132	1	All	All [4]	All [4]	All [4]	All
BB-2137	n/a	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2142	17	1101	2101	3101	4105	6105
BB-2145	17	1101	2101	3101	4105	6105
BB-2146	17	1101	2101	3101	4105	6105
BB-2147	17	1101	2101	3101	4105	6105
BB-2153	17	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2154	17	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2155	17	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-2156	17	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
BB-4413	12	1101,1102	2101	3101,3102		
BB-7213	12	1101,1102 [1]	2101,2111 [2]	3101,3102 [3]		
FP-15	21,22	1101,1102	2101,2111			
FP-257	23,24,25,26	1101,1102	2101,2111	3101		
H-213	n/a				4402	
H-413	74				4401,4402	
H-613	72,73				4401,4402	

Model	Address	Basketball	Volleyball	Wrestling	Hockey	Football
H-1013	72,73				4401,4402	
H-2020	71	1402	2402		4401,4402	
H-2021	71,72,73				4401,4402	
H-2022	71,72,73				4401,4402	
H-2023	71,72,73	1402	2402		4402	
H-2024	71,72,73	1402	2402		4402	
H-2025	71,72				4401	
H-2026	71,72				4401	
H-2030	71,72,73				4401,4402	
H-2031	71,72,73				4401,4402	
H-2101	71	1401,1402	2401,2402		4401,4402	
H-2102	72 or 73	1401,1402	2401,2402		4401,4402	
H-2103	n/a	1402	2402		4402	
H-2104	71,72,73	1402	2402		4402	
H-2105	71,72,73	1402	2402		4402	
H-2106	71,72,73	1402	2402		4401,4402	
H-2107	71,72,73	1402	2402		4401,4402	
H-2108	71,72,73				4401,4402	
H-2109	71,72,73				4401,4402	
H-2111	71	1401,1402	2401,2402		4401,4402	
H-2112	71	1401,1402	2401,2402		4401,4402	
H-2114	74	1401,1402	2401,2402		4401,4402	
H-2115	72,73				4401,4402	
MS-2016	13	1103	2103	3103	4103	6103
MS-2026	17	1101	2101	3101	4101	6101
SD-2001	23,24,25,26	1101,1102	2101	3101		
SD-2002	23,24,25,26,27,28	1101,1102	2101	3101		
SD-2003	15		2105	3105	4105	
SD-2004	14	1105	2105	3105	4105	6105
SD-2101	23,24,25,26	1101,1102	2101	3101		
SD-2102	23,24,25,26	1101,1102	2101	3101		
SD-2103	23,24,25,26,27,28	1101,1102	2101	3101		
SD-2104	23,24,25,26,27,28	1101,1102	2101	3101		
SD-2105	21,22	1101,1102	2101,2111			
SD-2106	15		2105	3105	4105	
SD-2107	15		2105	3105	4105	
ST-2000	17	1101	2101	3101	4105	6105
ST-2001	17	1101	2101	3101	4105	6105
TI-413	1 + Columns 1-4	All	All	All	All	All
TI-2002	1 + Columns 1-4	All	All	All	All	All
TI-2003	2	All				All
TI-2007	1 + Columns 1-4	All	All	All	All	All
TI-2010	2	All				All

Model	Address	Basketball	Volleyball	Wrestling	Hockey	Football
TI-2011	1 + Columns 1-4	All	All	All	All	All
TI-2013	1 + Columns 1-4	All	All	All	All	All
TI-2014	2 + Columns 1-4	All				All
TI-2015	2	All				All
TI-2019	1	All	All	All	All	All
TI-2031	1 + Columns 1-4	All	All	All	All	
TI-2101	1	All	All	All	All	All
TI-2102	4	All	All	All	All	All
TI-2103	97	All	All	All	All	All
TI-2200	1	All	All	All	All	All
VB-2001	12		2105			
VB-2002	15		2105			
VB-2101	17		2105			
WR-2024	104	1301	2301	3304		
WR-2025	104	1301	2301	3304		
WR-2026	104	1301	2301	3304		
WR-2027	n/a	1301	2301	3304		
WR-2028	n/a	1301	2301	3304		
WR-2029	n/a	1301	2301	3304		
WR-2101	104	1301	2301	3304		
WR-2102	104	1301	2301	3304		
WR-2103	104	1301	2301	3304		
WR-2104	n/a	1301	2301	3304		
WR-2105	n/a	1301	2301	3304		
WR-2106	n/a	1301	2301	3304		
Model #2510	13,29,30	1104	2104	3104	4104	6104
Model #2520	13	1104	2104	3104	4104	6104
Model #2530	13,31,32	1104	2104	3104	4104	6104
Model #3030	13,23,24,25,26	1103	2103	3103	4103	6103
Model #3040	13,23,24,25,26	1103	2103	3103	4103	6103
Model #3050	13,23,24,25,26	1103	2103	3103	4103	6103
Model #3510	TBD	TBD	TBD	TBD	TBD	TBD
Model #3520	TBD	TBD	TBD	TBD	TBD	TBD
Model #3530	TBD	TBD	TBD	TBD	TBD	TBD
Model #4010	13	1103,1104	2103,2104	3103,3104	4103,4104	6103,6104
Model #4020	13	1103,1104	2103,2104	3103,3104	4103,4104	6103,6104
Model #4030	13	1103,1104	2103,2104	3103,3104	4103,4104	6103,6104
Model #4040	13	1103,1104	2103,2104	3103,3104	4103,4104	6103,6104
Model #4050	13	1103,1104	2103,2104	3103,3104	4103,4104	6103,6104
Model #4060	13	1103,1104	2103,2104	3103,3104	4103,4104	6103,6104
Model #4070	13	1103,1104	2103,2104	3103,3104	4103,4104	6103,6104
Model #4080	13	1103,1104	2103,2104	3103,3104	4103,4104	6103,6104

Model	Address	Basketball	Volleyball	Wrestling	Hockey	Football
Model #4100	13	1103,1104	2103,2104	3103,3104	4103,4104	6103,6104
Model #4110	TBD	TBD	TBD	TBD	TBD	TBD
Model #4510	TBD	TBD	TBD	TBD	TBD	TBD
Model #4520	TBD	TBD	TBD	TBD	TBD	TBD
Model #4530	TBD	TBD	TBD	TBD	TBD	TBD

Notes:

1. Code 1101 is Player-Foul and code 1102 is Foul-Player
2. Code 2101 is Game Number & Match Number and code 2111 is Game Number only
3. Code 3101 is Match Number and code 3102 is Advantage Time
4. Game Clock only

C.2 Outdoor Model Numbers

Model	Address	Baseball	Football	Soccer	Track	Lacrosse
BA-515	61 + Columns 1-8	5501				
BA-518	61 + Columns 1-8	5501				
BA-618	61 + Columns 1-8	5501				
BA-624	61 + Columns 1-8	5501				
BA-718	62 + Columns 1-8	5501				
BA-1018	12	5501				
BA-1518	63	5501				
BA-1524	63	5501				
BA-2001	67,68,69	5501				
BA-2002	67,68,69	5501				
BA-2004	72,70,71	5501				
BA-2005	72,70,71	5501				
BA-2006	11,64,65,66	5500 & 5501 [3]				
BA-2007	11,64,65,66	5500 & 5501 [3]				
BA-2008	11,67,68,69	5500 & 5501 [3]				
BA-2009	11,67,68,69	5500 & 5501 [3]				
BA-2010	61	5501				
BA-2011	11,67,68,69	5500 & 5501 [3]				
BA-2012	61	5501				
BA-2013	1, 1, 64,65,66	5500 & 5501 [3]				
BA-2014	72,70,71	5501				
BA-2017	61	5501				
BA-2018	1, 64,65,66	5501				
BA-2019	72,70,71	5501				
BA-2022	64,70	5501				
BA-2023	3	5501				
BA-2024	3	5501				
BA-2025	72,70,71	5501				
BA-2026	72,70,71	5501				
BA-2027	72,70,71,1	5500 & 5501 [3]				
BA-2028	72,70,71,1	5500 & 5501 [3]				
BA-2029	72,70,71,1	5500 & 5501 [3]				

Model	Address	Baseball	Football	Soccer	Track	Lacrosse
BA-2030	72,70,71	5501				
BA-2125	70,71,72	5501				
BA-2127	72,70,71,1	5500 & 5501 [3]				
BA-2515	61	5501				
BA-2518	61	5501				
BA-2618	61	5501				
BA-2715	62	5501				
BA-2718	62	5501				
BA-2515-31	61	5501				
BA-2618-31	61	5501				
BA-2715-31	62	5501				
BA-2718-31	62	5501				
BA-3718	64,65,66	5501				
BA-3724	64,65,66	5501				
FB-824	11		6601	7601		4601
FB-1424	12	5601,5602 [1]	6601	7601		4601
FB-1430	12	5601,5602 [1]	6601	7601		4601
FB-1524	12	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-1530	12	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-1624	15,16	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-1630	15,16	5601,5602 [1]	6601	7601		4601
FB-1630L	15,16	5601,5602 [1]	6601	7601		4601
FB-1730	15,16	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-1830	15,16	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-1830L	15,16	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-2001	15,16	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-2002	15,16	5601,5602 [1]	6601	7601		4601
FB-2003	15,16	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-2004	15,16	5601,5602 [1]	6601	7601		4601
FB-2005	11		6601	7601		4601
FB-2018	15,19	5601,5602 [1]	6601	7601		4601
FB-2019	15,19	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-2020	15,19	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-2021	15,19	5601,5602 [1]	6601	7601		4601
FB-2022	15,19	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-2023	15,19	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-2024	15,19	5601,5602 [1]	6601	7601		4601
FB-2025	15,19	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-2026	15,19	5601,5602 [1]	6601	7601		4601
FB-2027	15,19	5601,5602 [1]	6601	7601	8601 [2]	4601
FB-2028	32, 19 (top & bottom)	5601,5602 [1]	6601	7601		4601
FB-2350	12,15		6601	7601		4601
FB-2100	TBD	TBD	TBD	TBD	TBD	TBD
FB-2110	TBD	TBD	TBD	TBD	TBD	TBD
FB-2120	TBD	TBD	TBD	TBD	TBD	TBD
FB-2130	TBD	TBD	TBD	TBD	TBD	TBD

Model	Address	Baseball	Football	Soccer	Track	Lacrosse
FB-2140	TBD	TBD	TBD	TBD	TBD	TBD
FB-2150	TBD	TBD	TBD	TBD	TBD	TBD
FB-2160	TBD	TBD	TBD	TBD	TBD	TBD
FB-2170	TBD	TBD	TBD	TBD	TBD	TBD
FB-2180	21,22,23		6611			
FB-2190	TBD	TBD	TBD	TBD	TBD	TBD
FB-2200	TBD	TBD	TBD	TBD	TBD	TBD
FB-2210	TBD	TBD	TBD	TBD	TBD	TBD
FB-2220	TBD	TBD	TBD	TBD	TBD	TBD
FB-2230	TBD	TBD	TBD	TBD	TBD	TBD
FB-2240	TBD	TBD	TBD	TBD	TBD	TBD
FB-2300	TBD	TBD	TBD	TBD	TBD	TBD
FB-2310	TBD	TBD	TBD	TBD	TBD	TBD
FB-2320	TBD	TBD	TBD	TBD	TBD	TBD
FB-2330	TBD	TBD	TBD	TBD	TBD	TBD
FB-2250	TBD	TBD	TBD	TBD	TBD	TBD
FB-2260	TBD	TBD	TBD	TBD	TBD	TBD
FB-2270	TBD	TBD	TBD	TBD	TBD	TBD
FB-2280	TBD	TBD	TBD	TBD	TBD	TBD
FB-2290	TBD	TBD	TBD	TBD	TBD	TBD
FB-2360	TBD	TBD	TBD	TBD	TBD	TBD
FB-2370	TBD	TBD	TBD	TBD	TBD	TBD
FB-2380	TBD	TBD	TBD	TBD	TBD	TBD
FB-25XX & FB-26XX Modular Scoreboards	Clock: 15 Home/Guest Score; Down/To Go; & Ball On/QTR: 19	5601	6601	7601	8601 [2]	4601
FB-4005	11		6601	7601		4601
FB-4005-31	11		6601	7601		4601
SO-824	11		6601	7701		4701
SO-918	11	5601	6601	7701		4701
SO-1424	12	5601,5602 [1]	6601	7701		4701
SO-1624	13,14	5601,5602 [1]	6601	7701		4701
SO-1830	15,16		6601	7701		4701
SO-1830L	15,16		6601	7701		4701
SO-1930	15,16		6601	7701	8601 [2]	4701
SO-2008	17	5601,5602 [1]	6601	7601		4701
SO-2009	11	5601	6601	7701		4701
SO-2010	11	5601	6601	7701		4701
SO-2011	11,17			7711		
SO-2013	13,14	5601	6601	7701		4701
SO-2018	15,19	5601,5602 [1]	6601	7601		4601
SO-2019	15,19	5601,5602 [1]	6601	7701		4701
SO-2021	15,19	5601,5602 [1]	6601	7701		4701
SO-2022	15,19	5601,5602 [1]	6601	7701	8601 [2]	4701
SO-2023	15,19	5601,5602 [1]	6601	7701	8601 [2]	4701
SO-2030	15,16		6601	7701	8601 [2]	4701

Model	Address	Baseball	Football	Soccer	Track	Lacrosse
SO-2031	11,17			7711		
SO-2043	28, 29			7711		
SO-2918	11	5601	6601	7701		4701
SO-2918-31	11	5601	6601	7701		4701
MS-915	11	5601	6601	7601		4601
MS-918	11	5601	6601	7601		4601
MS-2002	11	5601	6601	7601		4601
MS-2003	11	5601	6601	7601		4601
MS-2004	74,75					4601
MS-2006	11	5601	6601	7601		4601
MS-2009	72,71, 73(WHT)		6601	7601		4601
MS-2011	11	5601	6601	7601		4601
MS-2012	74,75					4601
MS-2014	71,72,73		6601	7601		4601
MS-2015	71		6601	7601		4601
MS-2016			6103			4103
MS-2017	TBD	TBD	TBD	TBD	TBD	TBD
MS-2018	71,72,73		6601	7601		4601
MS-2024	72,73,71		6402	7601		4601
MS-2025	11		6601	7601		4601
MS-2026	17		6103			4103
MS-2118	71,72		6601	7601		4601
MS-2918	72,73,71		6601	7601		4601
MS-3918	11	5501				
MS-3918-31	11	5501	6601	7601	8601	4601
TI-218	2		All			All
TI-418	1	All	All	All	All	All
TI-2002	1 + Columns 1-4	All	All	All	All	All
TI-2003	2		All			All
TI-2007	1 + Columns 1-4	All	All	All	All	All
TI-2010	2		All			All
TI-2011	1 + Columns 1-4	All	All	All	All	All
TI-2013	1 + Columns 1-4	All	All	All	All	All
TI-2014	2 + Columns 1-4		All			All
TI-2015	2		All			All
TI-2019	1	All	All	All	All	All
TI-2032	1	All	All	All	All	All
TI-2101	1	All	All	All	All	All

Notes:

1. Code 5601 is With Clock and code 5602 is Without Clock.
2. To receive data from an external timer substitute code 8602 for the Omega PowerTime, and code 8603 for the Daktronics Omni Sport 1000/6000.
3. Requires two (2) consoles to operate scoreboard.

C.3 Miscellaneous Model Numbers

Model	Address	Sport	Code
CR-2001	11	Cricket	5599
CR-2002	12	Cricket	5598
CR-2003	12,13	Cricket	5598
CR-2009	12,13	Cricket	5598
FB-2030	1, 10	Cricket	5699
FB-3010	10, 1	Cricket	5699
BA-2003	11	Pitch & Speed	5500
CT-2001	1	Pitch & Speed	5500
CT-2002	1	Pitch & Speed	5500
CT-2003	1 + Columns 1-4	Pitch & Speed	5500
CT-2004	1 + Columns 1-4	Pitch & Speed	5500
CT-2005	1	Pitch & Speed	5500
CT-2009	1 + Columns 1-4	Pitch & Speed	5500
TI-2003	2	Pitch & Speed	5500
CT-2001	1	Event Timer	372,374,376
CT-2002	1	Event Timer	372,374,376
CT-2003	1 + Columns 1-4	Event Timer	372,374,376
CT-2004	1 + Columns 1-4	Event Timer	372,374,376
CT-2005	1	Event Timer	372,374,376
CT-2006	1 + Columns 1-4	Event Timer	372,374,376
CT-2007	1 + Columns 1-4	Event Timer	372,374,376
CT-2008	1 + Columns 1-4	Event Timer	372,374,376
CT-2009	1 + Columns 1-4	Event Timer	372,374,376
FB-2030	1, 10	Australian Football	6699
FB-3010	10, 1	Australian Football	6699
MS-2007	10	Rugby	7701
BB-2014	1 + Columns 5-8	Multi-Purpose Timer	99
TI-413	1 + Columns 1-4	Multi-Purpose Timer	99
TI-418	1 + Columns 1-4	Multi-Purpose Timer	99
TI-2002	1 + Columns 1-4	Multi-Purpose Timer	99
TI-2003	2	Multi-Purpose Timer	99
TI-2006	22	Multi-Purpose Timer	99
TI-2007	1 + Columns 1-4	Multi-Purpose Timer	99
TI-2009	22	Multi-Purpose Timer	99
TI-2010	2 + Columns 1-4	Multi-Purpose Timer	99
TI-2011	1 + Columns 1-4	Multi-Purpose Timer	99
TI-2013	1 + Columns 1-4	Multi-Purpose Timer	99
TI-2014	2 + Columns 1-4	Multi-Purpose Timer	99
TI-2015	2 + Columns 1-4	Multi-Purpose Timer	99
TI-2019	1 + Columns 1-4	Multi-Purpose Timer	99
TI-2020	22	Multi-Purpose Timer	99

Model	Address	Sport	Code
TI-2024	2 + Columns 1-4	Multi-Purpose Timer	99
TI-2028	1 + Columns 1-4	Multi-Purpose Timer	99
TI-2102	4	Multi-Purpose Timer	99
TI-2200	1	Multi-Purpose Timer	99
RO-2002	11	Rodeo	8000 $_1$
RO-2005	11	Rodeo	8000 $_1$
RO-2006	11	Rodeo	8000 $_1$
RO-2008	12	Rodeo	8000 $_1$
RO-2009	12	Rodeo	8000 $_1$
RO-2010	12	Rodeo	8000 $_1$
RO-2011	12	Rodeo	8000 $_1$
RO-7002	12	Rodeo	8000 $_1$
BB-2015	1	Segment Timer	100
FB-2340	1	Segment Timer	100
TI-2010	2 + Columns 1-4	Segment Timer	100
TI-2012	1	Segment Timer	100
TI-2015	2 + Columns 1-4	Segment Timer	100
BB-114	17	Tennis	220
BB-2041	12,14	Tennis	220
BB-2042	12,14	Tennis	220
BB-2046	12,14	Tennis	220
BB-2047	12,14	Tennis	220
BB-2101	17	Tennis	220
BB-2102	17	Tennis	220
BB-2105	17	Tennis	220
BB-2106	17	Tennis	220
BB-2116	17	Tennis	220
BB-2117	14	Tennis	220
BB-2121	17	Tennis	220
BB-2122	17	Tennis	220
BB-2123	17,14	Tennis	220
BB-2124	17,14	Tennis	220
TN-2007	11	Tennis	220
TN-2008	11	Tennis	220
TN-2009	74	Tennis	220
TN-2016	11	Tennis	220
TN-2501; TN-2601	11	Tennis	220
TN-2503; TN-2603	11	Tennis	220
TN-2504; TN-2604	11	Tennis	220
TN-2505; TN-2605	74	Tennis	220
WR-2021	101	Judo	281 or 284
WR-2022	102	Karate	282 or 285
WR-2023	103	Tae Kwon Do	283 or 286

Model	Address	Sport	Code
Game/Shot Clock Console	1,2	Basketball	1000
Game/Play Clock Console	1,2	Football	6000
Shots On Goal Console	74	Hockey	4000
See Table for Indoor Models	1,2,12,13,17	Boxing	291
Relay Driver	220		
TNMC – Home/Guest Team Name	221 231 (16 High, Home) 232 (16 High, Guest)	Team Name	
TNMC – Home/Guest Team Abbrev.	222	Team Abbreviation	
TNMC – Player-Foul-Points Caption	223		

Note: Code 8000 is available on the All Sport 5100 console only.

C.4 Custom Indoor Facility

Site	Contract	Basketball	Volleyball	Wrestling	Hockey	Football
Belgrade Arena		9100	9200	9300	9400 9409	
American Airlines Center	C9443	9101			9401	9601
Resch Center	C10014	9102	9202	9302	9402	9602
Bismark Civic Center	C10379	9104				
Coliseo De Puerto Rico SE Texas Entertainment Tyson/IBP Events Center	C10617 C10713 C10976	9105	9205		9405	9605
University of South Dakota		9107	9207	9307(resv)		9607
Brigham Young Univ. Custom contract retrofit		9108				
Belgrade Arena (see above) Custom handball (3 pen)					9409	
Georgia Dome	C13404	9111	9211			
Madison Square Garden	C14199	9112		Boxing 9901	9412	
Wright State SVO 313227	C7933	9115	9215	9315	9415	
Harbour Station Custom contract retrofit	C5272	9116			9416	
University of Idaho	C6371	9117	9217	9317		9617
E-Center		9118			9418	9618
Bradley Center		9119			9419	9619
University of Alabama	C16843	9120	9220			
Colorado University	C17773	9121	9221	9321		
American Bank Center	C11590	9122			9422	
University of Vermont	C19321				9423 9424	

C.5 Custom Outdoor Facility

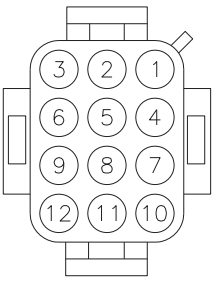
Site	Contract	Baseball	Football	Soccer	Track	Lacrosse
SUNY Cortland	C10032		9603	9703		9403
3COM Park	C11471		9606			
University of South Carolina Custom contract retrofit	SVO 238271		9610			
Georgia Dome	C13404		9611			
Tottenham	C7911			9714		
University of Idaho	C6371		9617			
University of Louisiana	SVO 334418		9618			
E-Center	C16234		9518			9418
Bradley Center	C12541		9619			9419
American Bank Center	C11590		9622			9422
University of Vermont	C19321			9723 9724		9423 9424
Green Bay	SO 157515		9625			

C.6 5000 Series Codes that replace 2500 Series Codes

Sport	2500 Code	Models	5000 Code
Baseball/Softball	31 w/clk	MS-9, MS-918	531
	32 w/clk	FB-1424, FB-1524, FB-1430, FB-1530	532
	33 wo/clk	FB-1424, FB-1524, FB-1430, FB-1530	533
	35 wo/clk	BA-15	535
	37 wo/clk	BA-5, BA-6	537
	44 w/clk	BA-718	544
Basketball	03	BB-18, BB-11, BB-2021, BB-2025	103
	04	BB-18A	104
	10	PCS4	---
	11	BB-87, BB-10, BB-17	111
	12	BB-17A	112
Football	20	FB-8	620
	22	FB-14, FB-15	622
	25	MS-9, MS-918	625
Hockey	61	H-8	461
Soccer	65	FB-8, SO-8	765
	66	MS-918	766
	67	SO-1424, FB-1424	767
Time of Day	99	All boards with clock on 1-4	199
Volleyball	71	BB-17, B17A	271
	72	VB-87	---
	73	BB-18m BB18A, BB-2021, BB-2025	273
Wrestling	51	BB-17	351
	52	BB-17A	352
	53	BB-18, BB-2021, BB-2025	353
	54	BB-18A	354

KEY: 0 = WIRE NOT CONNECTED 1 = WIRE IS CONNECTED

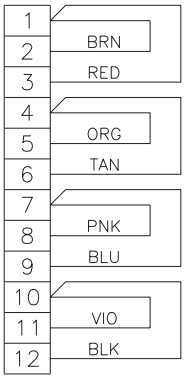
DECIMAL ADDRESS	PIN 12	PIN 11	PIN 9	PIN 8	PIN 6	PIN 5	PIN 3	PIN 2
1	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	1	0
3	0	0	0	0	0	0	1	1
4	0	0	0	0	0	1	0	0
5	0	0	0	0	0	1	0	1
6	0	0	0	0	0	1	1	0
7	0	0	0	0	0	1	1	1
8	0	0	0	0	1	0	0	0
9	0	0	0	0	1	0	0	1
10	0	0	0	0	1	0	1	0
11	0	0	0	0	1	0	1	1
12	0	0	0	0	1	1	0	0
13	0	0	0	0	1	1	0	1
14	0	0	0	0	1	1	1	0
15	0	0	0	0	1	1	1	1
16	0	0	0	1	0	0	0	0
17	0	0	0	1	0	0	0	1
18	0	0	0	1	0	0	1	0
19	0	0	0	1	0	0	1	1
20	0	0	0	1	0	1	0	0
21	0	0	0	1	0	1	0	1
22	0	0	0	1	0	1	1	0
23	0	0	0	1	0	1	1	1
24	0	0	0	1	1	0	0	0
25	0	0	0	1	1	0	0	1
26	0	0	0	1	1	0	1	0
27	0	0	0	1	1	0	1	1
28	0	0	0	1	1	1	0	0
29	0	0	0	1	1	1	0	1
30	0	0	0	1	1	1	1	0
31	0	0	0	1	1	1	1	1
32	0	0	1	0	0	0	0	0
33	0	0	1	0	0	0	0	1
34	0	0	1	0	0	0	1	0
35	0	0	1	0	0	0	1	1
36	0	0	1	0	0	1	0	0
37	0	0	1	0	0	1	0	1
38	0	0	1	0	0	1	1	0
39	0	0	1	0	0	1	1	1
40	0	0	1	0	1	0	0	0
41	0	0	1	0	1	0	0	1
42	0	0	1	0	1	0	1	0
43	0	0	1	0	1	0	1	1
44	0	0	1	0	1	1	0	0
45	0	0	1	0	1	1	0	1
46	0	0	1	0	1	1	1	0
47	0	0	1	0	1	1	1	1
48	0	0	1	1	0	0	0	0
49	0	0	1	1	0	0	0	1
50	0	0	1	1	0	0	1	0
51	0	0	1	1	0	0	1	1
52	0	0	1	1	0	1	0	0
53	0	0	1	1	0	1	0	1
54	0	0	1	1	0	1	1	0
55	0	0	1	1	0	1	1	1
56	0	0	1	1	1	0	0	0
57	0	0	1	1	1	0	0	1
58	0	0	1	1	1	0	1	0
59	0	0	1	1	1	0	1	1
60	0	0	1	1	1	1	0	0
61	0	0	1	1	1	1	0	1
62	0	0	1	1	1	1	1	0
63	0	0	1	1	1	1	1	1
64	0	1	0	0	0	0	0	0
65	0	1	0	0	0	0	0	1
66	0	1	0	0	0	0	1	0
67	0	1	0	0	0	0	1	1
68	0	1	0	0	0	1	0	0
69	0	1	0	0	0	1	0	1
70	0	1	0	0	0	1	1	0
71	0	1	0	0	0	1	1	1
72	0	1	0	0	1	0	0	0
73	0	1	0	0	1	0	0	1
74	0	1	0	0	1	0	1	0
75	0	1	0	0	1	0	1	1
76	0	1	0	0	1	1	0	0
77	0	1	0	0	1	1	0	1
78	0	1	0	0	1	1	1	0
79	0	1	0	0	1	1	1	1
80	0	1	0	1	0	0	0	0
81	0	1	0	1	0	0	0	1
82	0	1	0	1	0	0	1	0
83	0	1	0	1	0	0	1	1
84	0	1	0	1	0	1	0	0
85	0	1	0	1	0	1	0	1
86	0	1	0	1	0	1	1	0
87	0	1	0	1	0	1	1	1
88	0	1	0	1	1	0	0	0
89	0	1	0	1	1	0	0	1
90	0	1	0	1	1	0	1	0
91	0	1	0	1	1	0	1	1
92	0	1	0	1	1	1	0	0
93	0	1	0	1	1	1	0	1
94	0	1	0	1	1	1	1	0
95	0	1	0	1	1	1	1	1
96	0	1	1	0	0	0	0	0
97	0	1	1	0	0	0	0	1
98	0	1	1	0	0	0	1	0
99	0	1	1	0	0	0	1	1
100	0	1	1	0	0	1	0	0
101	0	1	1	0	0	1	0	1
102	0	1	1	0	0	1	1	0
103	0	1	1	0	0	1	1	1
104	0	1	1	0	1	0	0	0
105	0	1	1	0	1	0	0	1
106	0	1	1	0	1	0	1	0
107	0	1	1	0	1	0	1	1
108	0	1	1	0	1	1	0	0
109	0	1	1	0	1	1	0	1
110	0	1	1	0	1	1	1	0
111	0	1	1	0	1	1	1	1
112	0	1	1	1	0	0	0	0
113	0	1	1	1	0	0	0	1
114	0	1	1	1	0	0	1	0
115	0	1	1	1	0	0	1	1
116	0	1	1	1	0	1	0	0
117	0	1	1	1	0	1	0	1
118	0	1	1	1	0	1	1	0
119	0	1	1	1	0	1	1	1
120	0	1	1	1	1	0	0	0
121	0	1	1	1	1	0	0	1
122	0	1	1	1	1	0	1	0
123	0	1	1	1	1	0	1	1
124	0	1	1	1	1	1	0	0
125	0	1	1	1	1	1	0	1
126	0	1	1	1	1	1	1	0
127	0	1	1	1	1	1	1	1
128	1	0	0	0	0	0	0	0

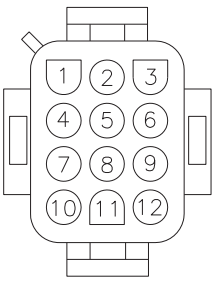


ADDRESS PLUG
WIRE SIDE

WIRING DIAGRAM

ADDRESS PLUG
WITH ALL WIRES
CONNECTED





BOTTOM VIEW

REV.	DATE	DESCRIPTION	BY	APPR.
01	08 MAR 05	ADDED BOTTOM VIEW	KQB	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: ADDRESS TABLE, 1 THROUGH 128

DES. BY: AVB DRAWN BY: A VANBEMMEL DATE: 28 APR 99

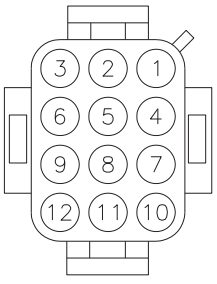
REVISION 01 APPR. BY:

SCALE: NONE

1150-R04A-115078

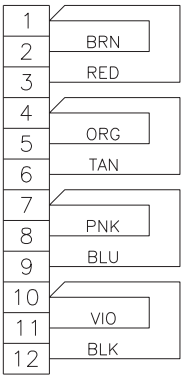
KEY: 0 = WIRE NOT CONNECTED 1 = WIRE IS CONNECTED

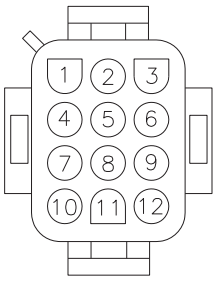
DECIMAL ADDRESS	PIN 12	PIN 11	PIN 9	PIN 8	PIN 6	PIN 5	PIN 3	PIN 2
129	1	0	0	0	0	0	0	1
130	1	0	0	0	0	0	1	0
131	1	0	0	0	0	0	1	1
132	1	0	0	0	0	1	0	0
133	1	0	0	0	0	1	0	1
134	1	0	0	0	0	1	1	0
135	1	0	0	0	0	1	1	1
136	1	0	0	0	1	0	0	0
137	1	0	0	0	1	0	0	1
138	1	0	0	0	1	0	1	0
139	1	0	0	0	1	0	1	1
140	1	0	0	0	1	1	0	0
141	1	0	0	0	1	1	0	1
142	1	0	0	0	1	1	1	0
143	1	0	0	0	1	1	1	1
144	1	0	0	1	0	0	0	0
145	1	0	0	1	0	0	0	1
146	1	0	0	1	0	0	1	0
147	1	0	0	1	0	0	1	1
148	1	0	0	1	0	1	0	0
149	1	0	0	1	0	1	0	1
150	1	0	0	1	0	1	1	0
151	1	0	0	1	0	1	1	1
152	1	0	0	1	1	0	0	0
153	1	0	0	1	1	0	0	1
154	1	0	0	1	1	0	1	0
155	1	0	0	1	1	0	1	1
156	1	0	0	1	1	1	0	0
157	1	0	0	1	1	1	0	1
158	1	0	0	1	1	1	1	0
159	1	0	0	1	1	1	1	1
160	1	0	1	0	0	0	0	0
161	1	0	1	0	0	0	0	1
162	1	0	1	0	0	0	1	0
163	1	0	1	0	0	0	1	1
164	1	0	1	0	0	1	0	0
165	1	0	1	0	0	1	0	1
166	1	0	1	0	0	1	1	0
167	1	0	1	0	0	1	1	1
168	1	0	1	0	1	0	0	0
169	1	0	1	0	1	0	0	1
170	1	0	1	0	1	0	1	0
171	1	0	1	0	1	0	1	1
172	1	0	1	0	1	1	0	0
173	1	0	1	0	1	1	0	1
174	1	0	1	0	1	1	1	0
175	1	0	1	0	1	1	1	1
176	1	0	1	1	0	0	0	0
177	1	0	1	1	0	0	0	1
178	1	0	1	1	0	0	1	0
179	1	0	1	1	0	0	1	1
180	1	0	1	1	0	1	0	0
181	1	0	1	1	0	1	0	1
182	1	0	1	1	0	1	1	0
183	1	0	1	1	0	1	1	1
184	1	0	1	1	1	0	0	0
185	1	0	1	1	1	0	0	1
186	1	0	1	1	1	0	1	0
187	1	0	1	1	1	0	1	1
188	1	0	1	1	1	1	0	0
189	1	0	1	1	1	1	0	1
190	1	0	1	1	1	1	1	0
191	1	0	1	1	1	1	1	1
192	1	1	0	0	0	0	0	0
193	1	1	0	0	0	0	0	1
194	1	1	0	0	0	0	1	0
195	1	1	0	0	0	0	1	1
196	1	1	0	0	0	1	0	0
197	1	1	0	0	0	1	0	1
198	1	1	0	0	0	1	1	0
199	1	1	0	0	0	1	1	1
200	1	1	0	0	1	0	0	0
201	1	1	0	0	1	0	0	1
202	1	1	0	0	1	0	1	0
203	1	1	0	0	1	0	1	1
204	1	1	0	0	1	1	0	0
205	1	1	0	0	1	1	0	1
206	1	1	0	0	1	1	1	0
207	1	1	0	0	1	1	1	1
208	1	1	0	1	0	0	0	0
209	1	1	0	1	0	0	0	1
210	1	1	0	1	0	0	1	0
211	1	1	0	1	0	0	1	1
212	1	1	0	1	0	1	0	0
213	1	1	0	1	0	1	0	1
214	1	1	0	1	0	1	1	0
215	1	1	0	1	0	1	1	1
216	1	1	0	1	1	0	0	0
217	1	1	0	1	1	0	0	1
218	1	1	0	1	1	0	1	0
219	1	1	0	1	1	0	1	1
220	1	1	0	1	1	1	0	0
221	1	1	0	1	1	1	0	1
222	1	1	0	1	1	1	1	0
223	1	1	0	1	1	1	1	1
224	1	1	1	0	0	0	0	0
225	1	1	1	0	0	0	0	1
226	1	1	1	0	0	0	1	0
227	1	1	1	0	0	0	1	1
228	1	1	1	0	0	1	0	0
229	1	1	1	0	0	1	0	1
230	1	1	1	0	0	1	1	0
231	1	1	1	0	0	1	1	1
232	1	1	1	0	1	0	0	0
233	1	1	1	0	1	0	0	1
234	1	1	1	0	1	0	1	0
235	1	1	1	0	1	0	1	1
236	1	1	1	0	1	1	0	0
237	1	1	1	0	1	1	0	1
238	1	1	1	0	1	1	1	0
239	1	1	1	0	1	1	1	1
240	1	1	1	1	0	0	0	0
241	1	1	1	1	0	0	0	1
242	1	1	1	1	0	0	1	0
243	1	1	1	1	0	0	1	1
244	1	1	1	1	0	1	0	0
245	1	1	1	1	0	1	0	1
246	1	1	1	1	0	1	1	0
247	1	1	1	1	0	1	1	1
248	1	1	1	1	1	0	0	0
249	1	1	1	1	1	0	0	1
250	1	1	1	1	1	0	1	0
251	1	1	1	1	1	0	1	1
252	1	1	1	1	1	1	0	0
253	1	1	1	1	1	1	0	1
254	1	1	1	1	1	1	1	0
255	1	1	1	1	1	1	1	1



ADDRESS PLUG
WIRE SIDE

WIRING DIAGRAM
ADDRESS PLUG
WITH ALL WIRES
CONNECTED





BOTTOM VIEW

REV.	DATE	DESCRIPTION	BY	APPR.
01	08 MAR 05	ADDED BOTTOM VIEW	KQB	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: ADDRESS TABLE, 129 THROUGH 255

DES. BY: AVB DRAWN BY: A VANBEMMEL DATE: 28 APR 99

REVISION 01 APPR. BY:

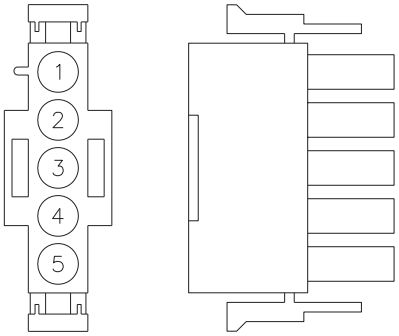
SCALE: NONE

1150-R04A-115079

PROTOCOL ADDRESS TABLE

DECIMAL ADDRESS	PIN 5	PIN 4	PIN 3	PIN 2	BINARY ADDRESS
1	0	0	0	1	
2	0	0	1	0	
3	0	0	1	1	
4	0	1	0	0	
5	0	1	0	1	
6	0	1	1	0	
7	0	1	1	1	

KEY:
0 = WIRE NOT CONNECTED
1 = WIRE IS CONNECTED



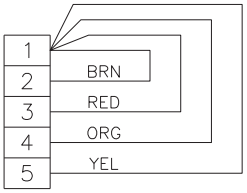
PROTOCOL PLUG
WIRE SIDE

SIDE VIEW

TIME OF DAY ENABLE

	PIN 5	PIN 4	PIN 3	PIN 2
8	1	0	0	0

WIRING DIAGRAM
PROTOCOL PLUG WITH ALL WIRES CONNECTED



PROTOCOL ADDRESS NUMBER	PROTOL FUNCTION
1	DAKTRONICS / OMEGA MULTILINE SWIM
2	CTS MULTILINE SWIM
3–7	NOT DEFINED
8	STAND ALONE TIME OF DAY ENABLE

REV.	DATE	DESCRIPTION	BY	APPR.
01	29 DEC 99	ADDED TOD ENABLE ADDRESS 8	EB	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: PROTOCOL TABLE, 1 THROUGH 15

DES. BY: AVB DRAWN BY: A VANBEMMEL DATE: 28 APR 99

REVISION 01 APPR. BY:

SCALE: NONE

1150-R04A-115081

KEY: 0 = WIRE NOT CONNECTED 1 = WIRE IS CONNECTED TO ANY GROUND PIN (1,4,7,10)

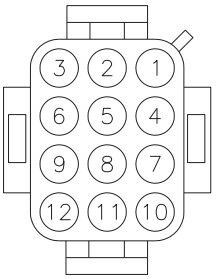
J19 ADDRESS AND COLUMN SELECT JACK

DECIMAL ADDRESS	PIN 8	PIN 6	PIN 5	PIN 3	PIN 2
1	0	0	0	0	1
2	0	0	0	1	0
3	0	0	0	1	1
4	0	0	1	0	0
5	0	0	1	0	1
6	0	0	1	1	0
7	0	0	1	1	1
8	0	1	0	0	0
9	0	1	0	0	1
10	0	1	0	1	0
11	0	1	0	1	1
12	0	1	1	0	0
13	0	1	1	0	1
14	0	1	1	1	0
15	0	1	1	1	1
16	1	0	0	0	0

DECIMAL ADDRESS	PIN 8	PIN 6	PIN 5	PIN 3	PIN 2
17	1	0	0	0	1
18	1	0	0	1	0
19	1	0	0	1	1
20	1	0	1	0	0
21	1	0	1	0	1
22	1	0	1	1	0
23	1	0	1	1	1
24	1	1	0	0	0
25	1	1	0	0	1
26	1	1	0	1	0
27	1	1	0	1	1
28	1	1	1	0	0
29	1	1	1	0	1
30	1	1	1	1	0
31	1	1	1	1	1

TIME OF DAY SELECT	PIN 9
DISABLE	0
ENABLE	1

COLUMN SELECT	PIN 12	PIN 11
COLUMNS 5-8	0	0
COLUMNS 1-4	0	1
COLUMNS 9-12	1	0
COLUMNS 13-16	1	1



ADDRESS PLUG
WIRE SIDE

WIRING DIAGRAM
ADDRESS PLUG
WITH ALL WIRES
CONNECTED

J17 MAIN	
PIN	FUNCTION
1	SIG–P
2	SIG–N
3	GND–N
4	CLOUT–P
5	CLOUT–N
6	16VAC–N
7	GND–N
8	EARTH–N
9	16VAC–P
10	GND–N
11	SWIN–P
12	SWIN–N

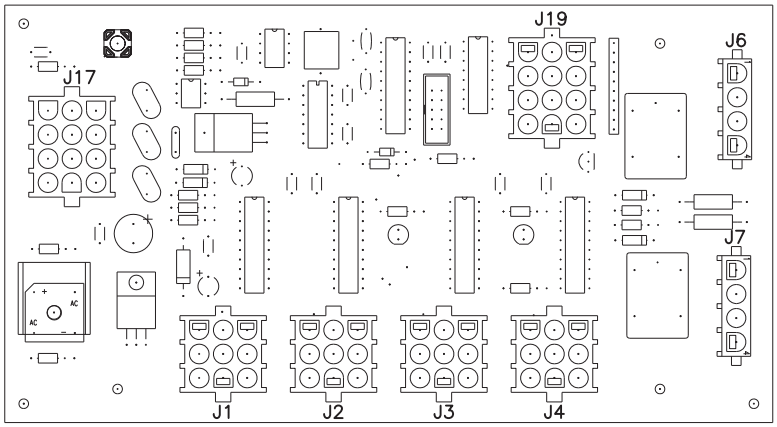
J1–4 DIGIT	
PIN	FUNCTION
1	SEGC–N
2	SEGB–N
3	SEGA–N
4	SEGF–N
5	SEGE–N
6	SEGD–N
7	+VCC–P
8	SEGH–N
9	SEGG–N

J19 ADDRESS	
PIN	FUNCTION
1	GND–N
2	ADD0–N
3	ADD1–N
4	GND–N
5	ADD2–N
6	ADD3–N
7	GND–N
8	ADD4–N
9	ADD5–N
10	GND–N
11	COLS1–N
12	COLS2–N

J6 RELAY	
PIN	FUNCTION
1	HORNOUT–N
2	AUXOUT–N
3	120SW–P
4	120SW–N

J7 RELAY	
PIN	FUNCTION
1	N/C
2	AUXOUT–N
3	120SW–P
4	120SW–N

0P–1150–0130 UNCOATED OR 0P–1150–0131
COATED 4 COLUMN LED DRIVER II



NOTE
–WITH NO ADDRESS PINS SELECTED THE DRIVER WILL DEFAULT TO A/S 4000 PROTOCOL

–COLUMN SELECT PINS WORK FOR EITHER A/S 4000 OR A/S 5000 PROTOCOL

–DRIVER WILL DEFAULT TO COLUMNS 5–8

–GREEN LED INDICATES THE DRIVER HAS POWER

–RED LED WILL BE ON OR BLINKING WHEN THE DRIVER IS RECEIVING SIGNAL

–REDRIVE CIRCUIT IS PROCESSOR REFRESHED (REFER TO DWG A–128429 FOR FURTHER INFORMATION ON THE CURRENT LOOP REDRIVE CIRCUIT SPECIFICATIONS)

	COLUMN SELECT 0 NO JUMPER CONNECTIONS				COLUMN SELECT 1 CONNECT J19 PIN 10 TO 11				COLUMN SELECT 2 CONNECT J19 PIN 10 TO 12				COLUMN SELECT 3 CONNECT J19 10 TO 11&12			
DATA INPUT DIGIT NUMBER	5	6	7	8	1	2	3	4	9	10	11	12	13	14	15	16
DIGIT OUTPUT CONNECTOR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

ALSO, COLUMN SELECT #1 MAKES THESE CHANGES:
INPUT DATA DIGIT 5, SEGMENT H
IS SENT TO DIGIT OUTPUT NO. 1, SEGMENT H.
INPUT DATA DIGIT 9, SEGMENT H
IS SENT TO DIGIT OUTPUT NO. 2, SEGMENT H.

REV.	DATE	DESCRIPTION	BY	APPR.
3	21 DEC 00	ADDED HORN SEGMENT INFORMATION	EB	
2	2 OCT 00	CHANGED TIME OF DAY ENABLE TO DISABLE (0) AND ENABLE (1)	NSW	
1	29 SEP 00	REMOVED "STAND ALONE" FROM WORDING FOR TIME OF DAY ENABLE.	AVB	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: 4 COLUMN LED DRIVER II; SPECIFICATIONS

DES. BY: EB DRAWN BY: E BRAVEK DATE: 08 NOV 99

REVISION 03 APPR. BY:

SCALE: NONE

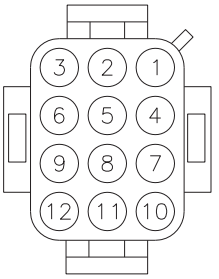
1150-R04A-123783

KEY: 0 = WIRE NOT CONNECTED 1 = WIRE IS CONNECTED TO ANY GROUND PIN (1,4,7,10)

J19 ADDRESS AND COLUMN SELECT JACK

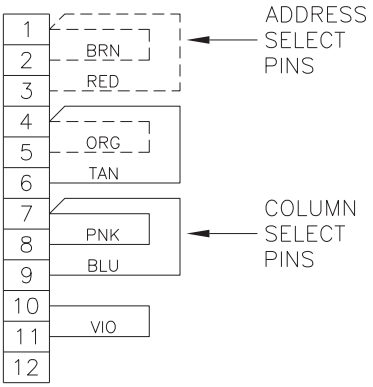
SWITCH S1 COLUMN SELECT		OR	JACK J19 COLUMN SELECT	PIN 11	PIN 9	PIN 8	PIN 6
COLUMN 1	0		COLUMN 1	0	0	0	0
COLUMN 2	1		COLUMN 2	0	0	0	1
COLUMN 3	2		COLUMN 3	0	0	1	0
COLUMN 4	3		COLUMN 4	0	0	1	1
COLUMN 5	4		COLUMN 5	0	1	0	0
COLUMN 6	5		COLUMN 6	0	1	0	1
COLUMN 7	6		COLUMN 7	0	1	1	0
COLUMN 8	7		COLUMN 8	0	1	1	1
COLUMN 9	8		COLUMN 9	1	0	0	0
COLUMN 10	9		COLUMN 10	1	0	0	1
COLUMN 11	A		COLUMN 11	1	0	1	0
COLUMN 12	B		COLUMN 12	1	0	1	1
COLUMN 13	C		COLUMN 13	1	1	0	0
COLUMN 14	D		COLUMN 14	1	1	0	1
COLUMN 15	E		COLUMN 15	1	1	1	0
COLUMN 16	F		COLUMN 16	1	1	1	1
				PIN 11	PIN 9	PIN 8	PIN 6

ADDRESS SELECT	PIN 5	PIN 3	PIN 2
12.8K PROTOCOL	0	0	0
19.2K PROTOCOL/1 (220)	0	0	1
NOT USED	0	1	0
NOT USED	0	1	1
NOT USED	1	0	0
NOT USED	1	0	1
NOT USED	1	1	0
UART RELAY EMULATION	1	1	1
	PIN 5	PIN 3	PIN 2



ADDRESS PLUG
WIRE SIDE

WIRING DIAGRAM
ADDRESS PLUG
WITH ALL WIRES
CONNECTED



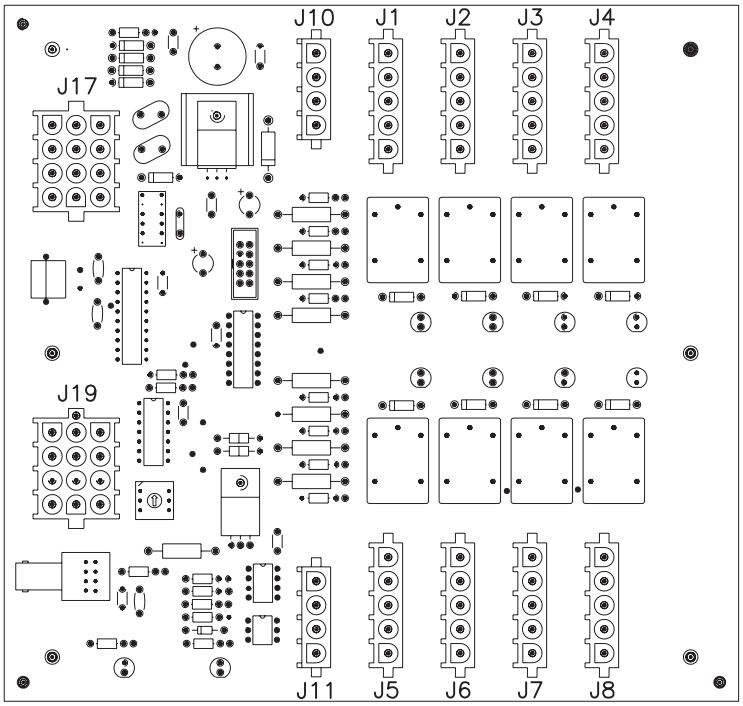
J17 MAIN	
PIN	FUNCTION
1	SIG–P
2	SIG–N
3	GND–N
4	CLOUT–P
5	CLOUT–N
6	16VAC–N
7	GND–N
8	N/C
9	16VAC–P
10	N/C
11	N/C
12	N/C

J10–11	
PIN	FUNCTION
1	NEUT–N
2	NEUT–N
3	HOT–P
4	HOT–P

J1–8	
PIN	FUNCTION
1	NEUT–N
2	HOT–P
3	COM–N
4	NC–P
5	NO–P

J19 ADDRESS	
PIN	FUNCTION
1	GND–N
2	ADD0–N
3	ADD1–N
4	GND–N
5	ADD2–N
6	COLS1–N
7	GND–N
8	COLS2–N
9	COLS3–N
10	GND–N
11	COLS4–N
12	NC

0P–1150–0097 CL INPUT OR 0P–1150–0101 FIBER OPTIC INPUT RELAY DRIVER II



NOTES

–WITH NO ADDRESS PINS SELECTED THE DRIVER WILL DEFAULT TO 12.8K PROTOCOL

–COLUMN SELECT WORKS FOR EITHER 12.8K OR 19.2K PROTOCOL

–# (###) THE NUMBER IN PARENTHESIS IS THE ADDRESS OF THE DATA RECEIVED FROM THE A/S 5000 SERIES CONSOLE
–# (###) THE NUMBER BEFORE THE PARENTHESIS IS THE PHYSICAL ADDRESS SET BY THE JUMPERS ON THE J19 ADDRESS PINS

–DRIVER DEFAULT IS COLUMN 1

–GREEN LED INDICATES THE DRIVER HAS POWER.

–RED LED WILL BE ON OR BLINKING WHEN THE CARD IS RECEIVING SIGNAL.

–REDRIVE CIRCUIT IS PROCESSOR REFRESHED (REFER TO DWG A–128429 FOR FURTHER INFORMATION ON THE CURRENT LOOP REDRIVE CIRCUIT SPECIFICATIONS)

REV.	DATE	DESCRIPTION	BY	APPR.
1	2 OCT 00	UPDATED NOTES SECTION	NSW	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: RELAY DRIVER; SPECIFICATIONS

DES. BY: EB DRAWN BY: E BRAVEK DATE: 08 NOV 99

REVISION 01 APPR. BY:

SCALE: NONE

1150-R04A-123791

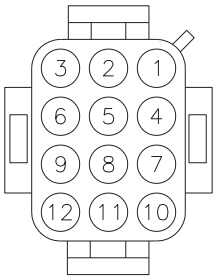
KEY: 0 = WIRE NOT CONNECTED 1 = WIRE IS CONNECTED TO ANY GROUND PIN (4,7,10)

J4 ADDRESS AND NAME SWAP SELECT JACK

SEE NOTE BELOW →

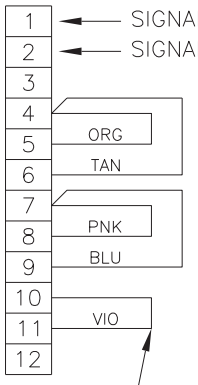
DECIMAL ADDRESS	PIN 9	PIN 8	PIN 6	PIN 5
1 (221)	0	0	0	1
2 (222)	0	0	1	0
3 (223)	0	0	1	1
4 (224)	0	1	0	0
5 (225)	0	1	0	1
6 (226)	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

NAME SELECT	PIN 11
BOTH HOME & GUEST	0
HOME/GUEST ONLY	1



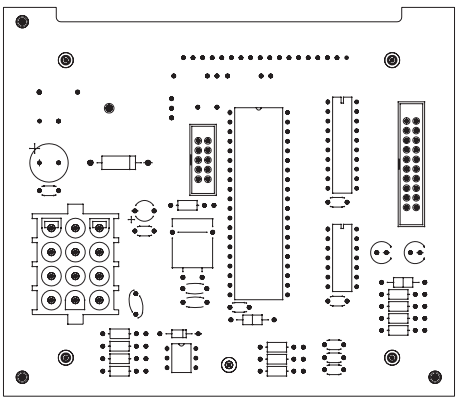
ADDRESS PLUG
WIRE SIDE

WIRING DIAGRAM
ADDRESS PLUG WITH ALL WIRES CONNECTED

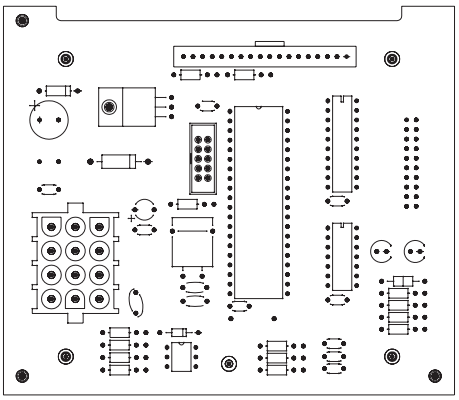


TEAM NAME SWAP PINS 10−11

OP−1176−0011; 1 1/2" & 2 1/2"
OUTDOOR TEAM NAME MESSAGE CENTER SHIFT CARD



OP−1150−0132; 1" & 3/4"
INDOOR INCANDESCENT AND LED TEAM NAME MESSAGE, CENTER SHIFT CARD



NOTES

−WITH NO ADDRESS PINS SELECTED THE TNMC SHIFT CARD WILL DEFAULT TO A/S 4000 PROTOCOL

−NAME SWAP PIN WORKS FOR EITHER A/S 4000 OR A/S 5000 PROTOCOL

−# (###) THE NUMBER IN PARENTHESIS IS THE ADDRESS OF THE DATA RECEIVED FROM THE A/S 5000 SERIES CONSOLE
−# (###) THE NUMBER BEFORE THE PARENTHESIS IS THE PHYSICAL ADDRESS SET BY THE JUMPERS ON THE J4 ADDRESS PINS

−CARD RECEIVES POWER FROM THE MODULE THAT IT IS PLUGGED INTO.

−GREEN LED INDICATES THAT THE CARD HAS POWER

−RED LED WILL BE ON OR BLINKING WHEN THE CARD IS RECEIVING SIGNAL.

−OP−1176−0011, OUTDOOR TEAM NAME CARD SHIFTS FROM LEFT TO RIGHT (HOME SIDE TO GUEST SIDE) NAME SWAP PIN CHANGES CARD FROM DEFAULTING TO HOME TO DEFAULTING TO GUEST SIDE DATA.

−OP−1150−0132, INDOOR TEAM NAME CARD SHIFTS FROM RIGHT TO LEFT (GUEST SIDE TO HOME SIDE), NAME SWAP PIN CHANGES CARD FROM DEFAULTING TO GUEST TO DEFAULTING TO HOME SIDE DATA.

REV.	DATE	DESCRIPTION	BY	APPR.
01	2 OCT 00	EDITED TEXT "HOME ONLY" TO "HOME/GUEST ONLY"	NSW	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

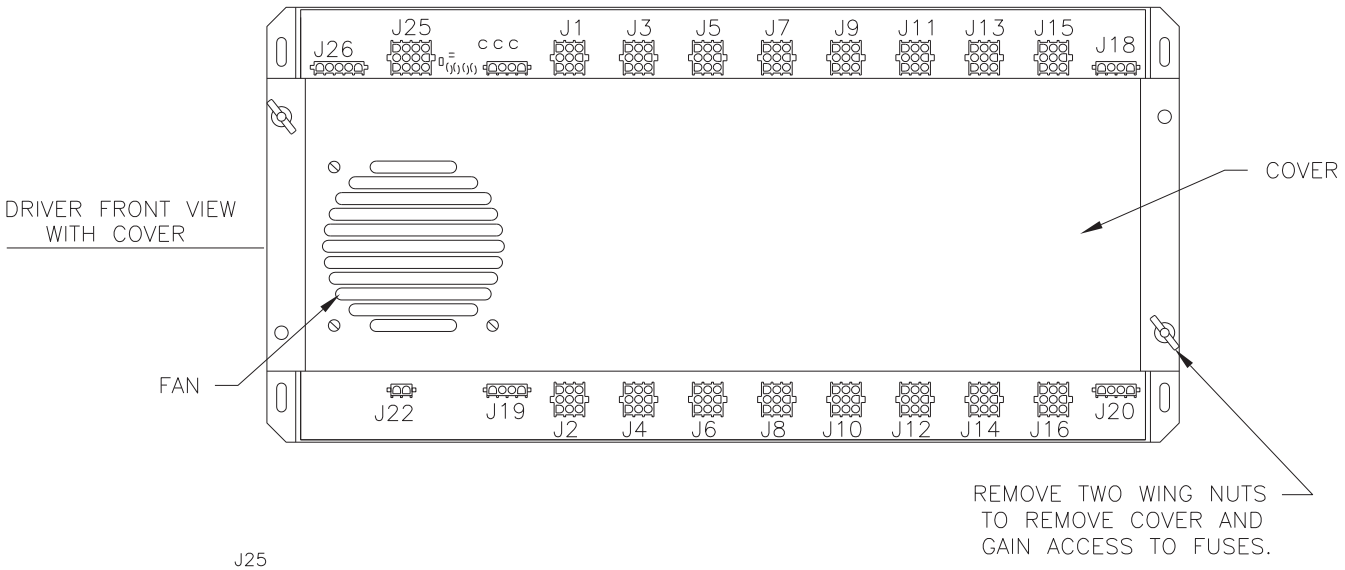
TITLE: A/S 5000 CAPABLE TNMC SHIFT CARD; SPECIFICATIONS

DES. BY: EB DRAWN BY: E BRAVEK DATE: 08 NOV 99

REVISION 01 APPR. BY:

SCALE: NONE

1150-R04A-123794



J25

PIN	FUNCTION	PIN	FUNCTION
1	GND	7	GND
2	ADDR 0 –	8	ADDR 4 –
3	ADDR 1 –	9	ADDR 5 –
4	GND	10	GND
5	ADDR 2 –	11	ADDR 6 –
6	ADDR 3 –	12	CLMN SWAP

DS1–RX
DS2–PWR
DS3–STATUS

J1 – J16

PIN	FUNCTION
1	SEG C
2	SEG B
3	SEG A
4	SEG F
5	SEG E
6	SEG D
7	COMMON
8	SEG H
9	SEG G

J17

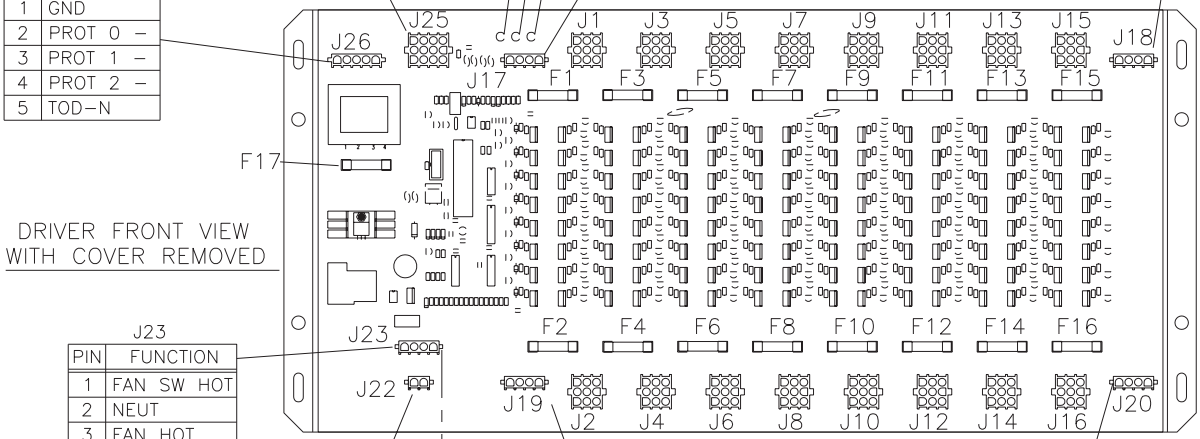
PIN	FUNCTION
1	SIG IN +
2	SIG IN –
3	SIG OUT +
4	SIG OUT –

J18

PIN	FUNCTION
1	LAMP NEUT
2	LAMP NEUT
3	LAMP HOT 1, 3, 5, 7
4	LAMP HOT 2, 4, 6, 8

J26

PIN	FUNCTION
1	GND
2	PROT 0 –
3	PROT 1 –
4	PROT 2 –
5	TOD–N



J23

PIN	FUNCTION
1	FAN SW HOT
2	NEUT
3	FAN HOT
4	NEUT

J22

PIN	FUNCTION
1	NORM OPEN
2	COMMON

PLUG FROM FAN IN COVER
CONNECTS TO J23

J19

PIN	FUNCTION
1	NEUTRAL
2	NEUTRAL
3	120V HOT
4	120V HOT

J20

PIN	FUNCTION
1	LAMP NEUT
2	LAMP NEUT
3	LAMP HOT 9,11,13,15
4	LAMP HOT 10,12,14,16

F1 THRU F16 ARE TYPE AGC–10, DAKTRONICS PART NUMBER F–1006.
F17 ARE TYPE AGC–1/2, DAKTRONICS PART NUMBER F–1000

REV.	DATE	DESCRIPTION	BY	APPR.
5	17 JAN 02	CHANGED ADD 7 TO CLMN SWAP ON J25	JJS	
4	2 OCT 00	CHANGED J25 & J26 TEXT –5 V TO GND	NSW	
3	29 SEP 00	CORRECTED J25 TABLE. CHANGED J26 TABLE PIN 5 FROM PROT 3 TO T.O.D.	AVB	
2	2 JUNE 00	CORRECTED J26 PINOUT TABLE	EB	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

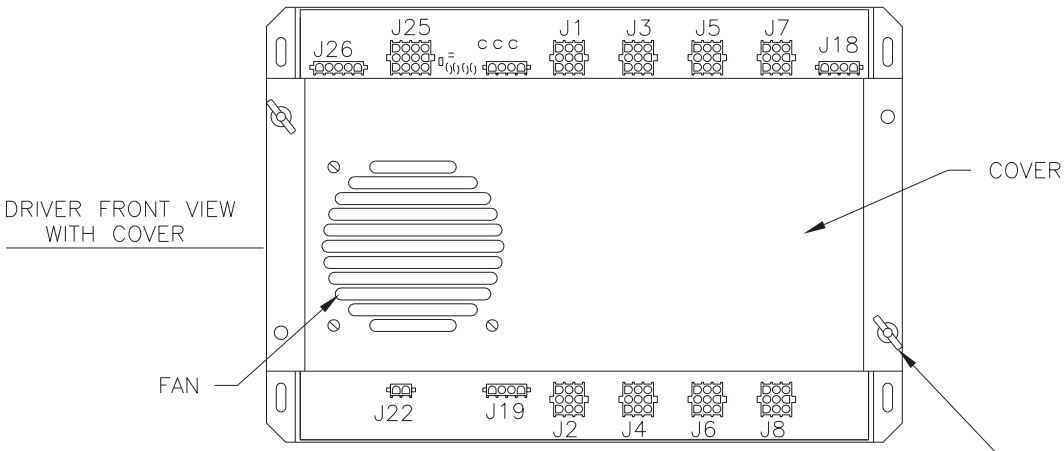
TITLE: LAYOUT; 16 COLUMN DRIVER III

DES. BY: EB DRAWN BY: EB DATE: 11 NOV 99

REVISION APPR. BY:

SCALE: 1=5

1033-R04A-123940



J25

PIN	FUNCTION	PIN	FUNCTION
1	GND	7	GND
2	ADDR 0 –	8	ADDR 4 –
3	ADDR 1 –	9	ADDR 5 –
4	GND	10	GND
5	ADDR 2 –	11	ADDR 6 –
6	ADDR 3 –	12	CLMN SWAP

DS1–RX
DS2–PWR
DS3–STATUS

J17

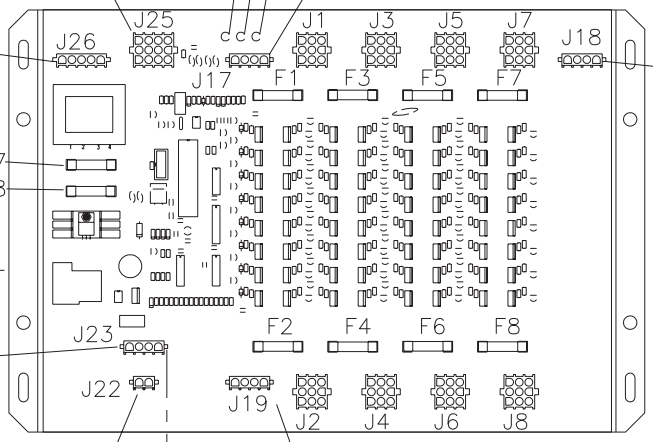
PIN	FUNCTION
1	SIG IN +
2	SIG IN –
3	SIG OUT +
4	SIG OUT –

J1 – J8

PIN	FUNCTION
1	SEG C
2	SEG B
3	SEG A
4	SEG F
5	SEG E
6	SEG D
7	COMMON
8	SEG H
9	SEG G

J26

PIN	FUNCTION
1	GND
2	PROT 0 –
3	PROT 1 –
4	PROT 2 –
5	TOD–N



J18

PIN	FUNCTION
1	LAMP NEUT
2	LAMP NEUT
3	LAMP HOT 1, 3, 5, 7
4	LAMP HOT 2, 4, 6, 8

DRIVER FRONT VIEW
WITH COVER REMOVED

J23

PIN	FUNCTION
1	FAN SW HOT
2	NEUT
3	FAN HOT
4	NEUT

J22

PIN	FUNCTION
1	NORM OPEN
2	COMMON

PLUG FROM FAN IN COVER
CONNECTS TO J23

J19

PIN	FUNCTION
1	NEUTRAL
2	NEUTRAL
3	120V HOT
4	120V HOT

F1 THRU F8 ARE TYPE AGC–10, DAKTRONICS PART NUMBER F–1006.
F17 THRU F18 ARE TYPE AGC–1/2, DAKTRONICS PART NUMBER F–1000

REV.	DATE	DESCRIPTION	BY	APPR.
4	2 OCT 00	CHANGED J25 & J26 TEXT –5 V TO GND	NSW	
3	29 SEP 00	CORRECTED J25 TABLE. CHANGED J26 TABLE PIN 5 FROM PROT 3 TO T.O.D.	AVB	
2	2 JUNE 00	CORRECTED J26 PINOUT TABLE	EB	
1	30 NOV 99	REMOVED DIMMING HEADER AND TABLE	EB	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: LAYOUT; 8 COLUMN DRIVER III

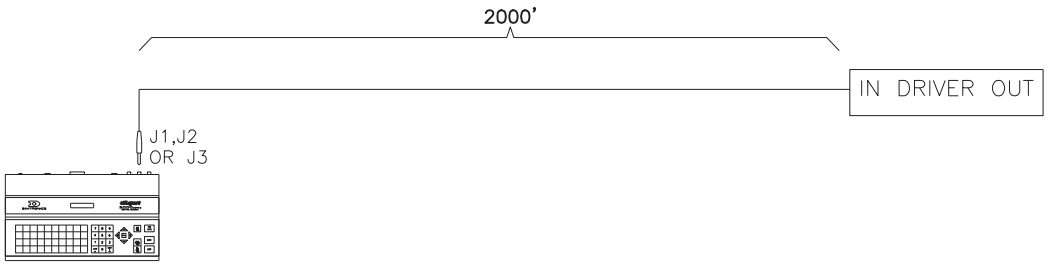
DES. BY: EB DRAWN BY: EB DATE: 11 NOV 99

REVISION APPR. BY:

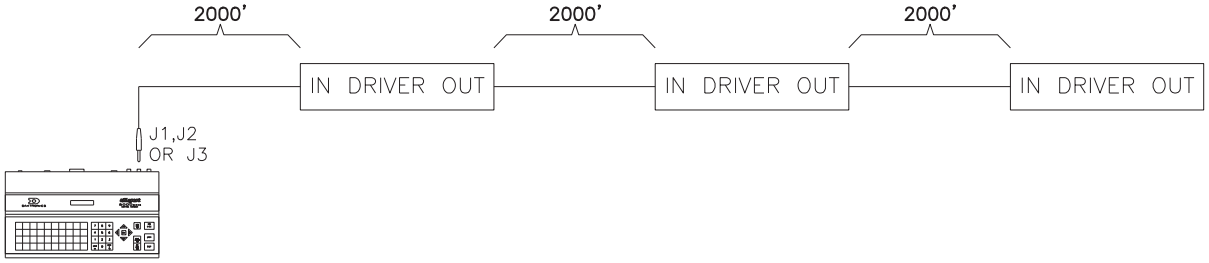
SCALE: 1=5

1033-R04A-123941

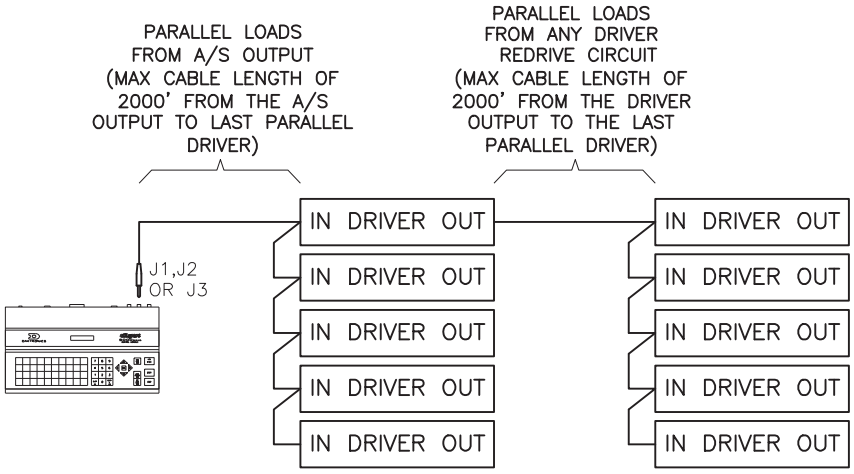
RECOMMENDED MAXIMUM CABLE LENGTH WITH ONE RUN AS SHOWN = 2000'



RECOMMENDED MAXIMUM CABLE LENGTH WITH COMBINATION OF TWO RUNS
FROM EITHER THE ALL SPORT 5000 OUTPUT OR DRIVER REDRIVE CIRCUIT AS SHOWN = 2000'
MAXIMUM REDRIVES ALLOWED: 10



RECOMMENDED MAXIMUM PARALLEL LOADS ON REDRIVE CIRCUIT OR ALL SPORT 5000 OUTPUT = 5 PARALLEL LOADS
MAXIMUM 2 STACKS WITH REDRIVES



DAKTRONICS, INC.
BROOKINGS, SD 57006

DO NOT SCALE DRAWING

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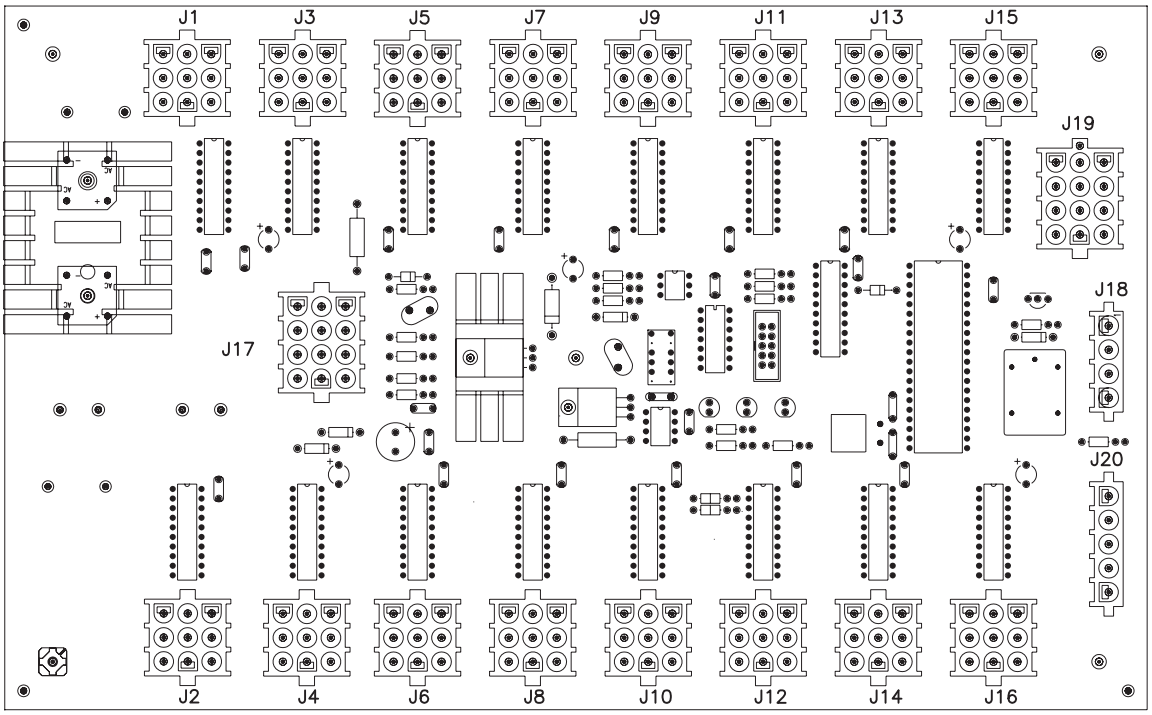
PROJ:				
TITLE: ALL SPORT 5000 CURRENT LOOP OUTPUT SPECIFICATIONS				
DESIGN:	DRAWN: EBRAVEK		DATE: 26 FEB 00	
SCALE:				
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	128429
	01	P1196	R-01-A	

OP-1150-0126 UNCOATED OR 0P-1150-0127 COATED
16 COLUMN LED DRIVER II



J17 MAIN	
PIN	FUNCTION
1	SIG-P
2	SIG-N
3	SIG2-P
4	CLOUT-P
5	CLOUT-N
6	16VAC-N
7	GND-N
8	EARTH-N
9	16VAC-P
10	GND-N
11	+VDD-P
12	+VBB-P

J1-16 DIGIT	
PIN	FUNCTION
1	SEGC-N
2	SEGB-N
3	SEGA-N
4	SEGF-N
5	SEGE-N
6	SEGD-N
7	+VCC-P
8	SEGH-N
9	SEGG-N

J19 ADDRESS	
PIN	FUNCTION
1	GND-N
2	ADD0-N
3	ADD1-N
4	GND-N
5	ADD2-N
6	ADD3-N
7	GND-N
8	ADD4-N
9	ADD5-N
10	GND-N
11	ADD6-N
12	ADD7-N

J18 RELAY	
PIN	FUNCTION
1	HORNOUT-N
2	AUXOUT-N
3	120SW-P
4	120SW-N

J20 PROTOCOL	
PIN	FUNCTION
1	GND-N
2	PR0-N
3	PR1-N
4	PR2-N
5	TOD-N

NOTE
-WITH NO ADDRESS PINS SELECTED THE DRIVER WILL DEFAULT TO A/S 4000 PROTOCOL

-GREEN LED INDICATES THE DRIVER HAS POWER

-RED LED WILL BE ON OR BLINKING WHEN THE DRIVER IS RECEIVING SIGNAL

-AMBER LED INDICATES LED DRIVER STATUS, LED WILL BE BLINKING TO INDICATE THAT THE DRIVER IS RUNNING, IF THE LED IS OFF OR ON SOLID ALL OF THE TIME, THEN THE DRIVERS CPU IS NOT FUNCTIONING AND MAY NEED TO BE RESET OR REPLACED.

-REFER TO DRAWINGS A-115078 & A-115079 FOR J19 ADDRESS SETTINGS FOR THIS DRIVER.

-REFER TO DRAWING A-115081 FOR J20 PROTOCOL SETTINGS FOR THIS DRIVER.

-REDRIVE CIRCUIT IS PROCESSOR REFRESHED (REFER TO DWG A-128429 FOR FURTHER INFORMATION ON THE CURRENT LOOP REDRIVE CIRCUIT SPECIFICATIONS)

REV.	DATE	DESCRIPTION	BY	APPR.
01	2 OCT 00	UPDATED NOTES SECTION	NSW	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: 16 COLUMN LED DRIVER II SPECIFICATIONS

DES. BY: EB DRAWN BY: EBRAVEK DATE: 11 JAN 00

REVISION 01 APPR. BY: SCALE: 1=2

1150-R07A-126174

KEY: 0 = WIRE NOT CONNECTED 1 = WIRE IS CONNECTED TO ANY GROUND PIN (1,4,7,10)

J19 ADDRESS AND COLUMN SELECT JACK

DECIMAL ADDRESS	PIN 9	PIN 8	PIN 6	PIN 5	PIN 3	PIN 2
1	0	0	0	0	0	1
2	0	0	0	0	1	0
3	0	0	0	0	1	1
4	0	0	0	1	0	0
5	0	0	0	1	0	1
6	0	0	0	1	1	0
7	0	0	0	1	1	1
8	0	0	1	0	0	0
9	0	0	1	0	0	1
10	0	0	1	0	1	0
11	0	0	1	0	1	1
12	0	0	1	1	0	0
13	0	0	1	1	0	1
14	0	0	1	1	1	0
15	0	0	1	1	1	1
16	0	1	0	0	0	0

DECIMAL ADDRESS	PIN 9	PIN 8	PIN 6	PIN 5	PIN 3	PIN 2
17	0	1	0	0	0	1
18	0	1	0	0	1	0
19	0	1	0	0	1	1
20	0	1	0	1	0	0
21	0	1	0	1	0	1
22	0	1	0	1	1	0
23	0	1	0	1	1	1
24	0	1	1	0	0	0
25	0	1	1	0	0	1
26	0	1	1	0	1	0
27	0	1	1	0	1	1
28	0	1	1	1	0	0
29	0	1	1	1	0	1
30	0	1	1	1	1	0
31	0	1	1	1	1	1
32	1	0	0	0	0	0

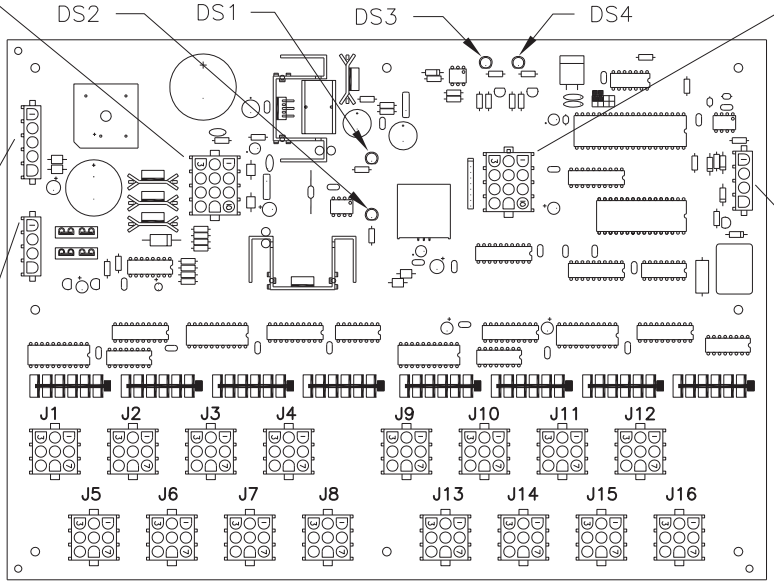
DECIMAL ADDRESS	PIN 9	PIN 8	PIN 6	PIN 5	PIN 3	PIN 2
33	1	0	0	0	0	1
34	1	0	0	0	1	0
35	1	0	0	0	1	1
36	1	0	0	1	0	0
37	1	0	0	1	0	1
38	1	0	0	1	1	0
39	1	0	0	1	1	1
40	1	0	1	0	0	0
41	1	0	1	0	0	1
42	1	0	1	0	1	0
43	1	0	1	0	1	1
44	1	0	1	1	0	0
45	1	0	1	1	0	1
46	1	0	1	1	1	0
47	1	0	1	1	1	1
48	1	1	0	0	0	0

DECIMAL ADDRESS	PIN 9	PIN 8	PIN 6	PIN 5	PIN 3	PIN 2
49	1	1	0	0	0	1
50	1	1	0	0	1	0
51	1	1	0	0	1	1
52	1	1	0	1	0	0
53	1	1	0	1	0	1
54	1	1	0	1	1	0
55	1	1	0	1	1	1
56	1	1	1	0	0	0
57	1	1	1	0	0	1
58	1	1	1	0	1	0
59	1	1	1	0	1	1
60	1	1	1	1	0	0
61	1	1	1	1	0	1
62	1	1	1	1	1	0
63	1	1	1	1	1	1

PROTOCOL SELECT

	PIN 12	PIN 11
1	0	1
2	1	0
3	1	1

DS1– POWER (GREEN)
DS2– CHARGE (RED)
DS3– VBB LOW (RED)
DS4– OPERATE (AMBER)



J17

FUNCTION	PIN
CL SIG–P	1
CL SIG–N	2
GND–N	3
CL OUT–P	4
CL OUT–N	5
POWER SW–P	6
+12CONS–P	7
GNDCONS–N	8
POWER SW–N	9
485 SIG–P	10
485 SIG–N	11
GND–N	12

J19

FUNCTION	PIN
GND–N	1
ADD0–N	2
ADD1–N	3
GND–N	4
ADD2–N	5
ADD3–N	6
GND–N	7
ADD4–N	8
ADD5–N	9
GND–N	10
PR0–N	11
PR1–N	12

J21

FUNCTION	PIN
12.6VAC–P	1
N/C	2
12.6VAC–N	3
+12HORN–P	4
GNDHORN–N	5

J18

FUNCTION	PIN
SW–P	1
SROW–P	2
SW–N	3
COL–N	4

J20

FUNCTION	PIN
INTBATT–P	1
INTBATT–N	2
EXTBATT–P	3
EXTBATT–N	4

JUMPER	FUNCTION
W1	TEST
W2	BAUD RATE
W3	
W4	INVERT
W5	RS–485
W6	CURRENT LOOP

NOTE
–WITH NO ADDRESS OR PROTOCOL PINS SELECTED THE DRIVER WILL DEFAULT TO A/S 4000 PROTOCOL

–WITH ADDRESS PINS ONLY THE DRIVER WILL DEFAULT TO A/S 5000 PROTOCOL.

–GREEN LED INDICATES THE DRIVER HAS POWER

–AMBER LED INDICATES DRIVER STATUS. LED WILL BE BLINKING IF DRIVER IS RUNNING.

REV.	DATE	DESCRIPTION	BY	APPR.
1	12 APR 01	CHANGED ADD1–0 TO ADD1–N ON J–19	NW	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: DRIVER; CL, 16 DIGIT W/CHARGER

DES. BY: DRAWN BY: NWRIEDT DATE: 09 MAR 01

REVISION APPR. BY:

SCALE: NONE

1066-R04A-145791

LED DRIVER IV
0P-1192-0383, 16 COL
0P-1192-0384, 16 COL, AC

J1-16 DIGIT JACKS

PIN	FUNCTION
1	SEGC-N
2	SEGB-N
3	SEGA-N
4	SEGF-N
5	SEGE-N
6	SEGD-N
7	+VBB-P
8	SEGH-N
9	SEGG-N

J17 PWR/SIG

PIN	FUNCTION
1	SIG-P
2	SIG-N (232-IN)
3	SIG 2-P(232-GND)
4	CLOUT-P
5	CLOUT-N
6	16VAC-N
7	GND-N
8	EARTH-N
9	16VAC-P
10	GND-N
11	+VDD-P
12	+VBB-P

J22 RC-100 RADIO

PIN	FUNCTION
1	+UNREG-P
2	GND-N
3	GND-N
4	RX_INPUT-P

J21 2.4GHz RADIO

PIN	FUNCTION
1	+UNREG-P
2	GND-N
3	GND-N
4	RX_INPUT-P

J23 PROGRAM

PIN	FUNCTION
1	DATA
2	/RESET
3	N/C
4	GND-N
5	CLK
6	GND-N
7	N/C
8	+5V-P
9	N/C
10	+5V-P

REFER TO DWGS
A-115078 & A-115079
FOR ADDRESS SETTINGS

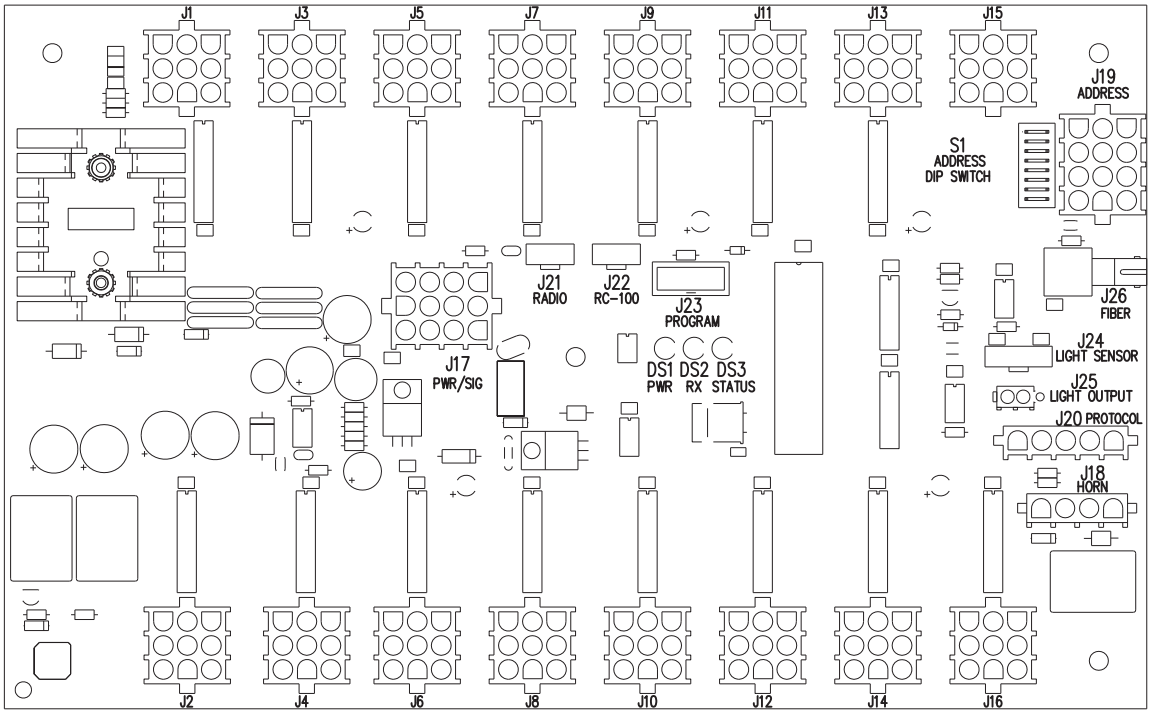
J19 ADDRESS

PIN	FUNCTION
1	GND-N
2	ADD0-N
3	ADD1-N
4	GND-N
5	ADD2-N
6	ADD3-N
7	GND-N
8	ADD4-N
9	ADD5-N
10	GND-N
11	ADD6-N
12	ADD7-N

REFER TO DWGS
A-290261 & A-290689

S1 ADDRESS DIP SWITCH PACKAGE

SW #	FUNCTION
1	ADD0
2	ADD1
3	ADD2
4	ADD3
5	ADD4
6	ADD5
7	ADD6
8	ADD7



J26 FIBER RX

PIN	FUNCTION
1	N/C
2	+5V-P
3	GND-N
4	N/C
5	N/C
6	RX_INPUT-P
7	GND-N
8	N/C

J24 LIGHT SENSOR

PIN	FUNCTION
1	LIGHT_IN-P
2	LIGHT_IN-N
3	+5V-P
4	GND-N
5	GND-N
6	N/C

J25 LIGHT OUT- NEXT DRIVER

PIN	FUNCTION
1	LIGHT_OUT-P
2	LIGHT_OUT-N

REFER TO DWG A-115081
FOR PROTOCAL SETTINGS

J20 PROTOCOL

PIN	FUNCTION
1	GND-N
2	PR0-N
3	PR1-N
4	PR2-N
5	PR3-N (TOD)

J18 HORN

PIN	FUNCTION
1	HORNOUT-N
2	AUXOUT-N
3	120SW-P
4	120SW-N

NOTES:

-WITH NO ADDRESS SELECTED, DRIVER WILL DEFAULT TO A/S 4000 PROTOCOL.
-GREEN LED DS1 INDICATES THAT THE DRIVER HAS POWER.
-RED LED DS2 WILL FLICKER WHEN THE DRIVER RECEIVES SIGNAL.
-AMBER LED DS3 WILL BLINK WHEN THE DRIVER IS RUNNING.
-IF DS3 IS ON OR OFF CONTINUOUSLY THE MICROCONTROLLER IS NOT WORKING.
-REFER TO DRAWING A-128429 FOR CURRENT LOOP REDRIVE SPECIFICATIONS.
-REFER TO DRAWING A-115081 FOR J20 PROTOCOL SETTINGS.
-REFER TO DRAWINGS A-115078,115079 FOR J19 ADDRESS SETTINGS.

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REV.	DATE	DESCRIPTION	BY	APPR.
02	30 NOV 06	ADDED ADDRESS SWITCH S1 TO DRAWING	DJU	
01	26 OCT 06	RESIZED TEXT SO THAT IT WAS EASIER TO READ, AND CLARIFIED FUNCTIONS OF EACH JACK.	AFL	

PROJ:
TITLE: SPECIFICATIONS; LED DRIVER IV, 16 COL
DES. BY: DRAWN BY: DULSCHM DATE: 09 OCT 06
REVISION 02 APPR. BY:
SCALE: 1 = 2
1192-R04A-288137

Appendix D: Quick Reference

All Sport 5000 Standard Keys

Note: Refer to **Section 2.5 Standard Keys** for more detailed operating instructions**.**

Start/Stop Clock

- **<START>** and **<STOP>** control the function of the main clock. The green LED on the **<START>** button is illuminated when the clock is running.

Horn

- **<HORN>** sounds the main horn. The horn sounds for as long as the horn key is pressed.
- **<AUTO HORN>** sets the horn to automatically sound when a period end is reached. The yellow LED on the **<HORN>** is illuminated when the auto horn setting is **ON**.

Clock Direction

- **<COUNT UP/DOWN>** sets the direction of the main clock. The clock direction is shown in the upper right corner of the LCD.
- This key is disabled while the clock is running.

Set Main Clock

- The first press of the **<SET MAIN CLOCK>** edits the current main clock value.
- Press the **<SET MAIN CLOCK>** repetitively to edit the configured period, break, and overtime length.
- Press **<ENTER>** at any of the displayed clock values to load that value into the main clock.
- This key is disabled while the clock is running.

Edit Key

- **<EDIT>** is used to edit sport values. Press **<EDIT>** followed by the desired score or other data to be edited. Refer to the specific sport documentation for the edit key function.

Segment Timer

Note: Refer to **Section: 3 Segment Timer** for more detailed operating instructions.

First and Last Segment

- **<FIRST SEGMENT>** and **<LAST SEGMENT>** set the range of segments to be used.

Auto Stop

- **<AUTO STOP>** sets the console to stop at the end of each segment or at the end of the last segment.

Current Segment

- **<CURRENT SEGMENT +1>** increments the current segment value

Reset

- **<RESET CURRENT SEGMENT>** sets the segment time to the current segment value and stops the clock.
- **<RESET TO FIRST SEG>** sets the segment number and time to the value of the first segment
  This key is disabled while the clock is running.

Interval

- **<INTERVAL TIME>** sets the interval time.
- **<DISPLAY INTERVAL>** sets the console to display interval time between segments.

Segment Time Editing

- **<SEG. NO. TIME>** allows the time for a specified segment to be edited. Once the segment time is edited, pressing the up or down arrow key scrolls through the segment times and allows any other segments to be edited.
- **<COPY RANGE>** copies a time value to a range of segments.

Edit Key Function

- Press **<EDIT>** followed by **<CURRENT SEGMENT +1>** to edit the current segment value.

Baseball

Note: Refer to **Section 4: Baseball Operations** for more detailed operating instructions.

Start-Up

- Turn the Power Switch **ON**.
- At the **Resume Game? Y/N** prompt:
- Press **<ENTER /YES>** to resume the game where last shut off.

or

- Press **<Clear/NO>** to enter a new sport code number.

At Bat

- **<AT BAT>** turns the at bat indicators on or off.

Batter Number

- **<BATTER>** edits the current batter number.

Batter Average

- **<AVERAGE>** edits the current batter average.

Inning Number

- **<INNING+1>** increments the current inning number.

Outs

- **<OUTS+1>** increments the number of outs for the current team at bat.

Ball and Strike Count

- **<BALL COUNT +1>** and **<STRIKE COUNT +1>** increment the count for the current batter.
- **<CLEAR COUNT>** clears the count.
- To increment the ball and strike count for the pitcher automatically with **<BALL COUNT +1>** and **<STRIKE COUNT +1>**, use the **Auto Increment Pitches** setting in the **Menu** under **Edit Settings**.

Pitch Count Balls, Pitch Count Strikes, Foul Balls, In Play

- **<PITCH COUNT STRIKES +1>**, **<PITCH COUNT BALLS +1>**, **<FOUL BALLS +1>**, and **<IN PLAY +1>** keys increment the total of each type of pitch for the respective team pitcher.
- These keys **DO NOT** increment the ball and strike count. See **Ball and Strike Count** above.
- **<CLEAR PITCH COUNT>** will clear all pitch count types for the respective team's pitcher.
- To increment the ball and strike count for the pitcher automatically with **<BALL COUNT +1>** and **<STRIKE COUNT +1>**, use the **Auto Increment Pitches** setting in the **Menu** under **Edit Settings**.

Hit and Error Indicators/Digits

- **<HIT>** or **<ERROR>** turn on or off their respective scoreboard indicators.
- The **<ERROR>** key may also prompt for an error position depending on the **Error Position** setting
- The total Team Hits and Errors are modified using the **<HITS +1>** and **<ERRORS +1>** keys. See **Team Hits, Errors, Left On Base** below.

Team Hits, Errors, Left On Base

- **<HITS +1>**, **<ERRORS +1>**, **<LEFT ON BASE +1>** increment their respective team totals.

Team Runs

- **<RUNS+1>** increments team runs.
- Team Runs are scored by total or by inning depending on the **Score by Inning** setting.

Edit Key Function

- Press **<EDIT>** followed by any of the following keys to edit their respective values. **<RUNS +1>, <INNING +1>, <OUTS +1>, <HITS +1>, <ERRORS +1>, <LEFT ON BASE +1>, <PITCH COUNT STRIKES +1>, <PITCH COUNT BALLS +1>, <FOUL BALLS +1>, <IN PLAY +1>**

Basketball

Note: Refer to **Section 7: Basketball Operations** for more detailed operating instructions.

Start-Up

- Turn the Power Switch **ON**.
- At the **Resume Game? Y/N** prompt:
- Press **<ENTER /YES>** to resume the game where last shut off.

or

- Press **<Clear/NO>** to enter a new sport code number.

Team Score

- **<SCORE +1>, <SCORE +2>, <SCORE +3>** and **<SCORE -1>** increment and decrement the team score.
- The console may ask for a player number depending on the setting of **Team Score – Update Player** in the **Menu** under **Edit Settings.**

Team Fouls

- **<TEAM FOULS +1>** and **<TEAM FOULS -1>** increment and decrement the total team fouls.
- **<BLANK PLAYER FOUL>** blanks the displayed player-foul digits.
- The console may ask for a player number depending on the setting of **Team Score – Update Player** in the **Menu** under **Edit Settings.**

Time Out

- **<TIME OUT>** displays the number of full (1st press) or partial (2nd press) timeouts (if applicable.) Press enter to take a time out for the selected team.
- **<TIME OUT ON/OFF>** selects a full (1st press) or partial (2nd press) time out and starts the time out clock.
- The time out clock may be displayed on the main scoreboard depending on the **Time Outs – Show on Main** setting in the **Menu** under **Edit Settings**.

Possession

- **<POSS>** turns the possession indicators on or off for the respective team.

Bonus

- **<BONUS>** turns the 1-on-1 bonus indicators or 2-shot bonus indicators on or off.

Period

- **<PERIOD +1>** increments the period value.

Shot Clock Time

- **<SET SHOT TIME>** changes the current value of the shot clock timer. Pressing **<SET SHOT TIME>** a second time allows the reset value of the shot clock timer to be edited.

Player Roster Keys

- **<PLAYER>** selects the player number for statistics edit. Pressing **<IN GAME>** or **<OUT OF GAME>** within the player statistics edit screen changes the status of the player selected. Press the arrow keys to edit the foul or points values for the chosen player. Press the up or down arrow keys to move to a different player.
- **<DELETE PLAYER>** deletes the selected player from the roster.

Player Substitution

- **<INDIV. SUB>** substitutes a player currently out of the game for a player who is in the game.
- **<MASS SUB>** substitutes five players who are currently out of the game for all of the in-game players.

Edit Key Function

- Press **<EDIT>** followed by any of the following keys to edit their respective values. **<TIME OUT>, <TIME OUT ON/OFF>, <SCORE +1>, <SCORE +2>, <SCORE +3>, <SCORE -1>, <TEAM FOULS +1>, <PERIOD +1>**

Football

Note: Refer to **Section 8: Football Operations** for more detailed operating instructions**.**

Start-Up

- Turn the Power Switch **ON**.
- At the **Resume Game? Y/N** prompt:
- Press **<ENTER /YES>** to resume the game where last shut off.

or

- Press **<Clear/NO>** to enter a new sport code number.

Team Score

- **<SCORE +1>**, **<SCORE +2>**, **<SCORE +3>**, **<SCORE +6>**, and **<SCORE -1>** increment and decrement the team score.

Quarter

- **<QUARTER +1>** increments the quarter number.

Ball On

- **<BALL ON>** edits the current **Ball On** location.
- If the setting of **Ball On Auto Calculate** in **Edit Settings** is yes, the console will calculate **Down** and **Yards To Go** values from the **Ball On** value.
- When **<BALL ON>** is pressed, the console will prompt for side of field, and then display the **Down** and **Yards To Go** values for verification.

Down

- **<DOWN+1>** increments the down number.
- **<RECALL LAST DOWN>** only functions when the setting of **Ball On Auto Calculate** is yes. It will recall the **Ball On**, **Down**, and **Yards To Go** values of the previous play.

Yards To Go

- **<YARDS TO GO>** edits the current setting.

First and 10

- **<FIRST & 10>** sets the **Down** value to 1 and the **Yards to go** value to 10 for a first down.

Time Out

- The first press of **<TIME OUT>** displays the number of full time outs for the selected team. The second press displays the number of partial timeouts (if applicable.) Press enter to take a time out for the selected team.
- The **<TIME OUT ON/OFF>** selects a full (1st press) or partial (2nd press) time out and starts the time out clock.
- The time out clock may be displayed on the main scoreboard using the **Time Outs Show on Main** setting in the **Menu** under **Edit Settings**.

Possession

- **<POSS>** turns the possession indicators on or off for the respective team.
- If the setting of **Ball On Auto Calculate** is yes, the console will prompt for the play direction to calculate down and yards to go values. Press **1** or **3** to indicate the new play direction.

Play Clock Time

- **<SET PLAY CLOCK>** changes the current value of the play clock timer. Pressing **<SET PLAY CLOCK>** a second or third time allows the reset values of the play clock timer to be edited.

Team Statistics

- **<YARDS RUSHING>** and **<YARDS PASSING>** edit their respective team total.
- **<FIRST DOWNS +1>** increments the number of first downs for the respective team.

Edit Key Function

- Press **<EDIT>** followed by any of the following keys to edit the respective value **<SCORE +1>, <SCORE -1>, <SCORE +2>, <SCORE +3>, <SCORE +6>, <FIRST DOWNS +1>, <QUARTER +1>, <DOWN +1>, <TIME OUT>, <TIME OUT ON/OFF>**

Hockey/Lacrosse/Handball

Note: Refer to **Section 9: Hockey/Lacrosse/Handball Operations** for more detailed operating instructions**.**

Start-Up

- Turn the Power Switch **ON**.
- At the **Resume Game? Y/N** prompt:
- Press **<ENTER/YES>** to resume the game where last shut off.

or

- Press **<CLEAR/NO>** to enter a new sport code number.

Team Score

- **<SCORE +1>** and **<SCORE -1>** increment and decrement the team score.

Time Out

- The first press of **<TIME OUT>** displays the number of full time outs for the selected team. The second press displays the number of partial timeouts (if applicable.) Press enter to take a time out for the selected team.
- The **<TIME OUT ON/OFF>** selects a full (1st press) or partial (2nd press) time out and starts the time out clock.
- The time out clock may be displayed on the main scoreboard using the **Time Outs Show on Main** setting in the **Menu** under **Edit Settings**.

Period

- **<PERIOD+1>** increments the current period number.

Shots on Goal

- **<SHOTS ON GOAL +1>** and **<SHOTS ON GOAL -1>** increment and decrement the team shots on goal.

Ground Balls

- **<GROUND BALLS +1>** and **<GROUND BALLS -1>** increment and decrement the team ground balls. (Only available with codes shown on insert 0G-1084219)

Face Offs

- **<FACE OFFS DRAW CTRL +1>** and **<FACE OFFS DRAW CTRL -1>** increment and decrement the team face offs. (Only available with codes shown on insert 0G-1084219)

Saves

- **<SAVES +1>** and <**SAVES -1>** increment and decrement the team goalie saves.

Penalty

- **<PENALTY>** turns on or off the penalty indicators for the selected team.
- **<PLAYER PENALTY>** sets the player number and penalty time for the selected team.
- **<MAJOR PENALTY>**, **<MINOR PENALTY>** set the penalty length to the configured values.
- **<DELETE PLAYER PENALTY>** deletes a player-penalty time. Each press scrolls through the list of player and penalty times for the selected team.
- **<CLEAR ALL PENALTIES>** deletes all player-penalty times for the selected team.

- **<ENABLE PENALTY CLOCKS>** and **<DISABLE PENALTY CLOCKS>** control the automatic decrement of the penalty clocks with the main clock. The current status is shown as an **EN** or **DS** in the bottom right corner of the LCD screen.

Edit Key Function

- Press **<EDIT>** followed by any of the following keys to edit the respective value **<SCORE +1>**, **<SCORE -1>, <SHOTS ON GOAL +1>, <SHOTS ON GOAL -1>, <SAVES +1>, <SAVES -1>, <PERIOD +1>, <TIME OUT ON/OFF>, <TIME OUT>**

Soccer

Note: Refer to **Section 10: Soccer Operations** for more detailed operating instructions**.**

Start-Up

- Turn the Power Switch **ON**.
- At the **Resume Game? Y/N** prompt:
- Press **<ENTER /YES>** to resume the game where last shut off.

or

- Press **<Clear/NO>** to enter a new sport code number.

Team Score

- **<SCORE +1>** and **<SCORE -1>** increment and decrement the team score.

Time Out

- The first press of **<TIME OUT>** displays the number of full time outs for the selected team. The second press displays the number of partial timeouts (if applicable.) Press enter to take a time out for the selected team.
- The **<TIME OUT ON/OFF>** selects a full (1st press) or partial (2nd press) time out and starts the time out clock.
- The time out clock may be displayed on the main scoreboard depending on the **Time Outs – Show on Main** setting in the **Menu** under **Edit Settings**.

Half

- **<HALF +1>** increments the current half number.

Shots on Goal

- **<SHOTS ON GOAL +1>** and **<SHOTS ON GOAL -1>** increment and decrement the team shots on goal.

Saves

- **<SAVES +1>** and **<SAVES -1>** increment and decrement the team goalie saves.

Penalty Kicks

- **<PENALTY KICKS +1>** and **<PENALTY KICKS -1>** increment and decrement the team penalty kicks.

Corner Kicks

- **<CORNER KICKS +1>** and **<CORNER KICKS -1>** increment and decrement the team corner kicks.

Fouls

- **<FOULS +1>** and **<FOULS -1>** increment and decrement the team fouls.

Edit Key Function

- Press **<EDIT>** followed by any of the following keys to edit the respective value **<SCORE +1>, <SCORE -1>, <SHOTS ON GOAL +1>, <SHOTS ON GOAL -1>, <SAVES +1>, <SAVES -1>, <HALF +1>, <PENALTY KICKS +1>, <PENALTY KICKS -1>, <CORNER KICKS +1>, <CORNER KICKS -1>, <TIME OUT ON/OFF>,<TIME OUT>**

Track

Note: Refer to **Section 12: Track Operations** for more detailed operating instructions.

Start-Up

- Turn the Power Switch **ON**.
- At the **Resume Game? Y/N** prompt:
- Press **<ENTER /YES>** to resume the game where last shut off.

or

- Press **<Clear/NO>** to enter a new sport code number.

Team Score

- **<SCORE +1>**, and score keys for home and guest 1 increment and edit the team total score.
- The **Guest 2** and **Guest 3** score keys can also edit team scores if the setting of **Guest 2,3 Value** is **Score**.

Reset

- **<RESET>** resets the main clock. This only applies to the manual input code (code 8601.)

Place

- **<PLACE>** edits the current place value.

Lane

- **<LANE>** edits the current lane value.

Events

- **<GUEST 2 SCORE/EVENT>** edits the current event value if the setting of **Guest 2,3 Value** is **Event/Heat.**
- The event value will be overwritten if the console is connected to an external timer.

Heat

- **<GUEST 3 SCORE/HEAT>** edits the current heat value if the setting of **Guest 2,3 Value** is **Event/Heat**.
- The heat value will be overwritten if the console is connected to an external timer.

Edit Key Function

- Press **<EDIT>** followed by **<SCORE +1>** to edit the current team score value.

Volleyball

Note: Refer to **Section 13: Volleyball Operations** for more detailed operating instructions.

Start-Up

- Turn the Power Switch **ON**.
- At the **Resume Game? Y/N** prompt:
- Press **<ENTER /YES>** to resume the game where last shut off.

or

- Press **<Clear/NO>** to enter a new sport code number.

Team Score

- **<SCORE +1>** and **<SCORE -1>** increment and decrement the team score.

Sets Won

- **<SETS WON +1>** increments the number of games won for the respective team.

Serve

- **<SERVE>** turns the serve indicators on or off for the respective team.

Set and Match Number

- **<SETS +1>** increments the game number. The current game number is shown in the bottom right corner of the LCD. Game scores will be reset to zero for the start of the next game. Press **<EDIT><SETS +1>** to recover the previous game scores.
- **<MATCH NUMBER +1>** increments the match number.

Aces, Blocks, Kills, Digs

- **<ACES +1>, <BLOCKS +1>, <KILLS +1>** and **<DIGS +1>** increment their respective team totals.
- The console may ask for a player number depending on the setting of **Team Stats – Update Player** in **Edit Settings**.
- Team statistics will be displayed based on the setting of **User Defined** settings for scoreboards displaying two of the stats.

Time Out

- The first press of **<TIME OUT>** displays the number of full time outs for the selected team. The second press displays the number of partial timeouts (if applicable.) Press enter to take a time out for the selected team.
- The **<TIME OUT ON/OFF>** selects a full (1st press) or partial (2nd press) time out and starts the time out clock.
- The time out clock may be displayed on the main scoreboard depending on the **Time Outs – Show on Main** setting in the **Menu** under **Edit Settings**.

Player Roster Keys

- **<PLAYER>** selects the player number for statistics edit. Pressing **<IN GAME>** or **<OUT OF GAME>** within the player statistics edit screen changes the status of the player selected. Press the left and right arrow keys to edit the aces, kills, blocks, and digs for the selected player. Press up or down arrow keys to move to a different player.
- **<DELETE PLAYER>** deletes the selected player from the roster.

Player Substitution

- **<INDIV. SUB>** substitutes a player currently out of the game for a player who is in the game.
- **<MASS SUB>** substitutes six players who are currently out of the game for all of the in-game players.
- **<SUBS +1>** increments the number of substitutions taken.

Edit Key Function

- Press **<EDIT>** followed by any of the following keys to edit the respective value **<SCORE +1>, <SCORE -1>, <ACES +1>, <BLOCKS +1>, <KILLS +1>, <DIGS +1>, <TIME OUT>, <TIME OUT ON/OFF>, <SETS WON +1>, <MATCH NUMBER +1>, <SETS +1>, <SUBS +1>**
- Pressing the up or down arrow keys after pressing **<EDIT><SCORE+1>** scrolls through the game scores for the selected team.

Wrestling

Note: Refer to **Section 14: Wrestling Operations** for more detailed operating instructions**.**

Start-Up

- Turn the Power Switch **ON**.
- At the **Resume Game? Y/N** prompt:
- Press **<ENTER /YES>** to resume the game where last shut off.

or

- Press **<Clear/NO>** to enter a new sport code number.

Team Score

- <SCORE+1> and <SCORE-1> increment and decrement the team score.
- **<MATCH SCORE +1>**, **<MATCH SCORE +2>**, **<MATCH SCORE +3>**, and **<MATCH SCORE -1>** increment and decrement the match score.

Match Number

- **<MATCH NUMBER +1>** increments the match number.
- **<RESET MATCH>** resets the match score and sets match time to the configured Period length.

Period

- **<PERIOD +1>** increments the period number.

Injury and Blood Time

- **<START INJURY TIME>, <STOP INJURY TIME>, <START BLOOD TIME>**, and **<STOP BLOOD TIME>** control the injury and blood time out timers.
- The Blood and Injury time can be displayed on the scoreboard using the Blood/Injury Show on Main setting in the Menu under Edit Settings.

Advantage Time

- **<HOME (GREEN) ADVANTAGE>**, **<GUEST (RED) ADVANTAGE>**, and **<STOP ADVANTAGE CLOCK>** are used to control the advantage timer. Press the team advantage key to set the clock to decrease the opposing team advantage time or increase the selected team advantage time. Press the **<STOP ADVANTAGE CLOCK>** to stop the advantage timer.

Edit Key Function

- Press **<EDIT>** followed by any of the following keys to edit the respective value **<TEAM SCORE +1>**, **<TEAM SCORE -1>**, **<MATCH SCORE +1>**, **<MATCH SCORE -1>**, **<MATCH NUMBER>**, **<PERIOD +1>**, **<TIME OUT>, <TIME OUT ON/OFF>**
- Pressing **<EDIT>** and **<START INJURY TIME>**, **<STOP INJURY TIME>**, **<START BLOOD TIME>**, or **<STOP BLOOD TIME>** while the time-out clock is stopped will edit the current value of the respective timer.

Appendix E: Console Revision History

Version 1.0 *Release Date: 3 January 2000*

- Initial software release

Version 1.0.1 *Release Date: 11 January 2000*

- Fixed the clock =0 indicator (period end) so it will update when count up/down is changed
- Made the shot clock not blank when the clock is set to count up
- The time-of-day (TOD) clock only works with 60Hz, made so it will work with 50Hz power also. This includes having it count this in the tenths/hundredths field so the TOD will be in sync with the driver time
- The timeout ON/OFF key does not allow for a cold key exit once it is in edit of the time
- Increase the refresh rate of the drivers
- When set to TOD display, the TOD was not being sent out on RTD
- Modified the soccer and baseball settings function to check if it is called while in the game or before the game for certain settings that change what is displayed on the scoreboards
- Add code 0000 to do keyboard test and LCD test
- Add indication of console running from battery backup. Add message at console power up to indicate that AC power was not connected. Add message to LCD and sound beeper when AC power lost
- Make shot/play clock horn turn off with reset operation
- Make TOD in 24-hour format so it does not shift to mm:ss when hrs are zero
- Make the set TOD packet so it will still send when the same TOD is set in

Version 1.0.2 *Release Date: 12 January 2000*

- Added output tables for BB-2031_PLF and BB-2031_FPL, these tables were added to codes 1101 and 1102 and replaced the BB-3000 output on address 13

Version 1.0.3 *Release Date: 21 January 2000*

- Made change to RAM test in production test
- Added output tables for a BB-2031, these tables were added to codes 2101 and 2111 in volleyball and codes 3101 & 3102 in wrestling and replaced the BB-3000 output on address 13

Version 1.0.4 *Release Date: 7 February 2000*

- Revised wrestling advantage time to not start with clock start if the advantage clock was previously stopped
- Added flashing of player stats in basketball and volleyball
- Removed the delete players option in home and guest roster for basketball and volleyball
- Removed the edit settings question at power up
- Removed the new game question when the code entered is the same as the previous code that was used
- Changed menu so that arrow keys will wrap around back to the start of the menu items
- Moved the switch output selection to the end of the settings function

- Revised the player edit function in basketball and volleyball to exit the routine when **<ENTER>** is pressed

Version 1.0.5 *Release Date: 7 March 2000*

- Track sport added
- Test code 0001 added
- Set TOD to 12:00 when start up so operators will set new time
- Added caption control to basketball, volleyball, football, wrestling, and hockey
- Added codes for the 2500 series basketball boards
- Added previous game scores to volleyball for display on the 2500 series basketball board
- Added player-fouls-points (PLY FL PTS) captions for the 3000 and 2500 series basketball boards. The captions will be added to basketball, hockey, volleyball, wrestling, and football (arena)
- Changed player rosters to not allow duplicate numbers to be entered
- Changed individual substitution and mass substitution to allow add of player number to roster if not found
- Changed the LCD in basketball to display the shot time
- Added team fouls –1 function in basketball
- Removed the no AC power warning message at power up
- Added flashing of player number in basketball and volleyball

Version 1.0.6 *Release Date: 17 March 2000*

- Added segment timer program
- Added lacrosse code
- Changed menu in each sport to include "display menu" subroutine

Version 1.1.0 *Release Date: 2 May 2000*

- Added pitch and speed code 5500 for Jugs and Stalker guns
- Added tennis code 220 for standard tennis board
- Added a scoreboard blank feature to the display menu
- Added blank capability to the remainder of scoreboard digits in the TOD menu for outdoor applications
- The time out timer is blanked and the RTD sent when the timer is stopped
- Formatted the specific TOD RTD item numbers as hh:mm:ss
- Add PLR F PTS captions team name message center (TNMC) for the BB-3000 series scoreboard
- Made the captions 1 and 2 control work on the sports of basketball, hockey, volleyball, wrestling, and football on column 3 of address 220
- Added auto increment to period when the period time set is used and the clock value was at 0:00
- Added auto increment of inning to baseball and the ability to turn the auto increment on/off
- When the inning is incremented it also sets the current team score to 0 if blank and changes the at bat indicator

Version 1.1.1 *Release Date: 10 May 2000*

- Corrected error in BB-2041 driver 2 driver table in basketball player-foul-points, points x10 column 7. This error will only be found in release 1.1.0
- Added scoreboard test program, code 0002

Version 1.2.0 *Release Date: 01 August 2000*

- Added event counter codes 371-376
- Added judo codes 281 and 284
- Added karate codes 282 and 285
- Added tae kwon do codes 283 and 286
- Added multi-purpose timer code 100
- Added dedicated segment timer code 99
- Added auto racing codes 301, 333, 336, 401, 433, 995
- Added a configurable warning time to segment timer program
- Added clock console codes in basketball (1000) and football (6000)
- Added shots-on-goal console code in hockey (4000)
- Fixed "ball on" function to exit when a key was pressed after an illegal key value
- Fixed problem with hockey shots-on-goal and home player 1 penalty number
- Fixed dimming problem causing scoreboard to blank when dim level was changed
- Added momentary relay closure setting for analog clock operation in soccer codes
- Added a RTD heartbeat clock packet, changed routine to update clock RTD once per second when counting down
- Modified routines to accept a clear key press and blank scoreboard data
- Modified blank shot setting routine to update shot clock when setting was changed
- Fixed basketball initialize routine to copy shot clock default on a new game and not on a resume
- Added a second configurable timer reset switch in basketball and football
- Modified set play clock and set shot clock functions to start over at the first step when a new key was pressed
- Added H-413 shots-on-goal scoreboard to all hockey codes
- Modified roster functions to send only changed RTD item fields
- Added codes 1401 and 1402 to basketball program and codes 2401, 2402 to volleyball
- Modified initialize routine to leave the TOD clock at its preset value when a new game is selected

Version 1.2.1 *Release Date: 30 August 2000*

- Corrected team name centering problem with odd length team names being off by one column
- Changed the multipurpose timer default dimming level to 0 (full brightness)
- Shifted characters r and y were reduced to 3 columns for TNMCs
- Added a manual horn button function to test code 0001

Version 1.3.0 *Release Date: 24 October 2000*

- Modified multi-purpose timer to have TOD display on a 6 digit clock output
- Changed initialize in basketball so heartbeat packet will be sent
- Modified pitch and speed routines to accept a faster pitch speed within 2 seconds of first reading
- Modified auto racing code to use driver name from ChronX for RTD display purposes
- Made several changes to RTD output table
- Modified sport menus to have the display dim selection in the main menu after New Code

Version 1.3.1 *Release Date: 10 January 2001*

- Changed auto racing to ignore any commas in alpha fields (field separators)

- Add power-on caption control to address 23,24,25 in football to column 16 of each for code 6611
- Change auto racing to default to show current lap in manual codes
- Change auto racing to display lap in race mode and display lap time in qualify mode
- Change test code to fix the problem of manual horn key causing the rotating column and row to stop
- Add output for TI-218 in basketball at address 2
- Fix wrestling adv time problem of switching adv indicator when adv time reaches the main clock period time setting
- Modify wrestling scoreboard test to display red and green on LCD instead of home and guest
- Fix wrestling new game problem of not turning off the adv time clock so when the main clock is started, the adv time starts counting down
- Correct the problem of the period end time not being saved on a loss of power and then resume game

Version 1.4.0 *Release Date: 2 February 2001*

- Fixed the scoreboard test program for auto racing boards to not blank the clock section
- Added a scoreboard test function for MS-2001 when code 02 is entered without a previous sport code
- Added a new code 6402 for football on hockey 2024 boards
- Changed auto racing pylon scoreboard outputs for pos 41-45 to use the correct RTD item numbers and display the correct information

Version 1.4.1 *Release Date: 1 March 2001*

- Add outputs for a new MS-2009 to soccer and to football
- Add basketball and hockey codes for use at the American Airlines Center in Dallas codes 9101 (basketball) and 9401 (hockey)
- Add outputs for SO-2008 to soccer (Code 7601) and football (code 6601) and hockey/lacrosse (code 4601)
- Add x100 team score segments to hockey boards with address 71 to basketball codes 1401 and 1402 and to hockey codes 4401 and 4402 for testing purpose

Version 1.4.2 *Release Date: 12 April 2001*

- Added a menu option to baseball to allow a 2 digit time or at bat to be displayed in the at bat section of the output. This is done for a new model of scoreboard BA-2005
- Added a minimum speed selection for radar gun on pitch and speed
- Corrected problem with speed of pitch not working with Stalker® radar gun when gun is set for whole digit and no tenths
- Added a medical timer so it will count beyond the end of a period
- Fixed judo osaekomi timer so it will count beyond the end of a period
- Added address 22 for 6 digit time on the TI-2006 to the multi-purpose timer
- Added an output for SO-1830, 1930 to code 4601 hockey/lacrosse for use in lacrosse that will show period on the home penalty digit

Version 1.4.3 *Release Date: 8 June 2001*

- Added a new address 17 for Tuff Sport™ basketball boards to codes for basketball, volleyball, wrestling, hockey, and football
- Added 16 column caption on address 223 for Kemper Arena to codes 1103, 2103, 3103, 4103 and 6103

- Fixed the judo medical timer so if set to time of 0:00 would disable the medical timer when the medical exam key is pressed
- Added to judo to show the score, penalty, and medical status on the second line of the LCD
- Added pitch count keys to pitch and speed code

Version 1.4.4 *Release Date: 26 July 2001*

- Added alternative driver tables for reverse of white-blue to judo, karate, tae kwon do, at driver address 109,110,111
- Change radio channel limit to 75 channels
- Added address 15,16 to football code 6611
- Added the select frame # response to DSTI (to indicate sport) for hockey, soccer, baseball, and wrestling

Version 1.5.0 *Release Date: 26 October 2001*

- Made hockey penalty times to shift up to the top position on the scoreboard
- Changed to allow adjustment of penalty times after setting the main clock
- Added SO-1624 address 13,14 to hockey code 4601
- Add team name address 221 to code 8604 for track
- Moved the at bat for baseball on FB-1630/SO-1830 from 5,6 to 3,4
- Changed segment timer so it can count up
- Changed the displays for American Airlines to show full timeouts on the main scoreboard and full-partial timeouts on the auxiliary displays
- Changed the main hockey console so it would keep the SOG keys active after data is received from the SOG console
- Added a second H-segment for colons on penalty time to the sec 1 digit, in hockey for FP-25 displays
- Changed the DSTI interface so it would not send back data it received but only update the scoreboards
- Added boxing code 291 for BB-3000 scoreboards
- Added the driver data for a BA-2010 to the BA-5 driver at address 61
- Added the driver data for FB-2005 to FB-8 driver at address 11
- Added 32 column captions for BB-3000 boards for TMFLS/TOL at address 225
- Changed delete of penalty time in hockey so it will scroll penalty time 2 up instead of bringing in time from penalty time 3

Version 1.5.1 *Release Date: 27 December 2001*

- Fixed the timeout indicators so they will clear when the main clock is started
- Changed the timeout function so it will turn on the indicator but not the timeout time when the configured time is set to zero
- Fixed the track code running time output address 22 so the colon will light when the colon is on in the RTD data
- Added address 2 to all auto racing codes for LC230 and LC218 displays (except lane timer 303)
- Default segment timer for 5 minutes

Version 1.5.2 *Release Date: 6 March 2002*

- Added shot clock timing to hockey/lacrosse
- Added pen/fouls display selection in addition to SOG and saves in soccer
- Added code 4499 for paint ball that uses hockey insert but has 3 penalty times that count

- In basketball, added team fouls display on line 6 of player fouls stats and made its display configurable
- Added a fixed width font conversion for auto racing in a new code (334)
- Added code 5099 for the strikeout count controller

Version 1.5.3 *Release Date: 10 April 2002*

- Made rodeo timer able to edit now up time in timed events mode without adjusting each of the individual timers
- Corrected ½ point scoring setting in rodeo at power up, setting was opposite of what it said
- Change the scoreboard ON/OFF key function in rodeo so the scoreboard automatically turns back on at the start of the next competitor or at reset
- Added arena football code 9601 to American Airlines
- Added full and partial timeouts to BB-2046
- Switched SOG and SAVES position on the BB-2046 as requested (by scoreboard design)
- Resume game does not restore TOD clock correctly in hockey. Made all sports go to game clock on a new game or resume
- Added code 555 for Compulink interface for drag racing displays

Version 1.5.4 *Release Date: 2 May 2002*

- Made the player number entry for fouls and points (in basketball) skip past the timer delay if a key is pressed before it expires
- Adjust the dimming levels to add dim levels of 1-9
- Added codes for Resch Center
- Add new promo keys for the strikeout console used at Shea Stadium
- Added code 5599 for the sport of cricket
- Added sending of code number, model, and version number for TrueTime support. It was added to the multidrop and RTD outputs
- Made boxing not count a time of 0 in the interval time. An interval time of 0 is treated as if there were no automatic timing and stops at the next round
- Added codes for SUNY at Cortland 9403, 9603, 9703
- Added hustle board stats to basketball codes 1103, 1104, 1105. This is on address 35 and includes rebounds, blocks, assists, steals
- Added code 7611 to soccer for 4 column/digit clocks

Version 1.5.5 *Release Date: 23 October 2002*

- Made football code 6103 blank the total yards if rushing and passing yards are blank
- Added a segment for power-on/sponsor panel in basketball on address 35 segment 11-H and to address 17 segment 15-H
- Fixed the lock-up problem in receive of stats in basketball and hockey
- Made baseball so it could shift inning scores by 9
- Made wrestling show team score and match score based on the last score accessed
- Added general stats to football for address 28 in code 6611 for the Fargodome
- Changed the default mode to race mode in auto racing
- Made codes 6000 and 1000 update the time on the display after doing a set time
- Added code 4701 and made it identical to code 4601. Made code 4601 to work for football boards
- Added code 4602 and 4702 to have 3 penalty timers counting for lacrosse
- Fixed the problem with mass-sub in volleyball
- Added down labels 1st, 2nd, 3rd, 4th to football

- Fixed the problem of team fouls that are displayed on the 6th line of a stats panel being blanked by player stats functions
- Changed the SO-2031 soccer output to show fouls instead of penalties
- Modified scoreboards output so the driver packets are made before sending to lighten the load on interrupt overhead. Also made it so it only sends the data up to the point where the driver data has not changed

Version 1.5.8 *Release Date: 03 December 2002*

- Corrected a problem that caused the broadcast blank data not to be sent on power up
- Corrected a problem with the team name message centers being sent the wrong amount of data on a refresh packet
- Corrected the problem with test code 0001, blank display, and scoreboard address test so they are all now working correctly

Version 2.0.0 *Release Date: 15 January 2003*

- Added Water Polo code 4498
- Added address 17 to hockey codes 4401,4402 and to basketball codes 1401,1402
- Added scores by quarter for basketball
- Added scores by quarter for football
- Made rushing and passing yards work with negative numbers
- Fixed the receive of MDP from clock console in football and hockey
- Removed period key from boxing
- Made colon for adv time in wrestling test code blank
- Added shot clock test to water polo and hockey
- Made increment of period in set time so it would blank the quarter score if scoring by quarter
- Added time-outs-left (TOL) to column 15 of the rushing/passing stats boards in football
- Added segment E (col 8) to the colon of address 22 for the multi-purpose timer
- Added broadcast group and channel selection for the Gen IV radios

Version 2.0.1 *Release Date: 12 May 2003*

- Added checks in the verify configuration that checks to see that all clock precision settings are valid
- Added address 17 to 6402 for arena football
- Added address 17 to code 220 for tennis
- Added a wrestling code to the custom codes for the Resch Center
- Added 2 digit time to address 61 (columns 12,13) in code 5501 for baseball for the model BA-2012
- Fixed the radio channel select to work for Gen IV radios after exit from the production test
- Changed receive of DakStats® information so there is not a scoreboard update done unless the information has changed from previous data
- Added address 223 for ply/fl/pts to 4401 and 4402 and also to volleyball
- Fixed the shot clock when not set for blanking so it will count down when shot time is less than the game time
- Added code 221 for tennis models TN-2010 and TN-2011

Version 2.0.2 *Release Date: 29 May 2003*

- Added period/quarter/game caption to custom codes 9102, 9202, 9302, 9402, 9602
- Added an option to rodeo code 8000 in scored events to have the horn still sound after the horn time period after the timer has been stopped
- Added a football mode to the MS-2009 and MS-2118 on address 71,72,73

Version 2.0.3 *Release Date: 3 June 2003*

- Changed auto racing codes to not zero blank the car numbers that are displayed.
- Fixed the 4 digit display on older CH-xxxx boards to update the lap # automatically when received from AMB.

Version 2.0.4 *Release Date: 6 June 2003*

- Fixed the receive of data from DSTI to update when only 1 byte of data is received.

Version 2.0.5 *Release Date: 25 August 2003*

- Added code 556 for C33 interface
- Added code 399 for rowing controller
- Added weight class with H/G points for win on player foul stat panels to wrestling
- Added code 8610 for 8-lane track timing
- Added configuration to soccer for display of TOL or penalty
- Changed hockey so penalty does not turn off opposite penalty
- Added a second segment for colon on penalty time to address 29, 30, 31, 32 in code 4104
- Added address 11 to codes 9105, 9405, 9205
- Changed auto racing to fix lockup problem when odd numbered start position is set in variable position pylon

Version 2.0.6 *Release Date: 20 November 2003*

- Changed segment timer so it sends the segment number out on RTD output
- Fixed wrestling code 3304 so the segment number will show on match score
- Added captions for PERIOD/QUARTER/GAME to codes 9105,9405,9205, & 9605
- Added advantage time to foul/points on address 14 for code 3102
- Added the ability to show at bat/time on the AT BAT digits on a BA-3718
- Added address 71 to code 7711 for soccer
- Set football default to auto horn off
- Fixed auto racing codes so the scoreboard does not stop updating

Version 2.0.7 *Release Date: 30 March 2004*

- Added a mode for baseball on the SO-2008
- Added team name captions for MS-2009
- Fixed the test code for soccer so it will test the penalty/TOL section
- Added flashing of a player fouls and points when they are received from the DSTI
- Added generic stats for basketball so DSTI can display three points shots
- If the weight classes are turned off in wrestling, made the stat panels go blank
- Fixed team fouls on stats panels for line 6, guest side did not show on power up or resume game
- Added a key to basketball to clear team fouls
- Added the period text messages and period descriptions
- Added team name captions for FB-2002 for football, soccer, and lacrosse
- Added speed-of-pitch indicators for mild, medium, and hot levels

- Added circle K indicators to speed-of-pitch and also to promo display codes
- Added match elapsed time to wrestling, and show it and time of day on reset of a match
- Added a code to basketball (code 1301) to run the WR-2024 board
- Added a code to volleyball (code 2301) to run the WR-2024 board
- Added a code to gymnastics (code 0015) to run on the WR-2024 board
- Added a segment timer for home/guest partial team fouls on relay driver at address 220
- Added a code (4102) for handball/lacrosse for counting three penalty times on basketball boards
- Fixed RTD text field for Guest Penalty from Possess to Penalty

Version 2.0.8 *Release Date: 16 August 2004*

- Added address 14 to hockey codes for hockey boards and basketball codes for hockey boards
- Added a two second delay after stop of the blood/injury time before it goes back to match time
- Added a new code(6612) for four col/digit on football
- Added a new address for football (Address 18) for the FB-2007
- Made a new code (code 7702) for soccer to count over 99 minutes for European market
- Fixed basketball receive of generic stats from DSTI
- Added partial time-outs display segments on address 23 and 25 in basketball
- Fixed code 300 so the lap time shows on the old CH14-xx displays
- Added custom code 9606 for the San Francisco 49ers football board
- Added code 9100 for BB-2139 basketball board with 12 electronic player name captions
- Added period digit to soccer for a new SO-2013 board to address 14 (uses addresses 13 and 14) and also to hockey/lacrosse address 14
- Added power-on caption segments to the BB stats addresses 36 and 37
- Added save of baseball/basketball RTD to GIP when exit of stats mode is done. This allows for recovery of current game data if stats feed is lost

Version 2.0.9 *Release Date: 25 October 2004*

- Added captions for H/G WEIGHT to wrestling and set correct captions for codes 3101 to 3105
- Fixed the clear stats function in volleyball so it updates after the clear and does not take players out of the game
- Changed the score of +1, +3, +6 in football so that it will blank ball on, down, to go
- Added team name abbreviations (address 222) for the main sports
- Fixed electronic team name captions for USD by adding a code for basketball, football, and volleyball that supported an outdoor controller that shifts left to right
- Fixed the tennis team name captions top and bottom so the length can be set
- Added custom code (9108) for Brigham Young University for a retrofit of their old board

Version 2.1.0 *Release Date: 02 February 2005*

- Added a code for running wrestling on a hockey and basketball board combo, (H-2104, BB-2124) with the codes 3401 and 3402
- Added a code for field hockey that would do 3 penalty timers for H-2104, on code 4603,4703
- Corrected the message in baseball menu from error position on-off, to position

- Added a period text description code for two console operation in basketball and football
- Added two new driver addresses with three penalty timers in water polo
- Fixed problem in wrestling with Reset Match key, any cold key would lock it up for several key strokes
- Changed to add the weight class scores to get the total team score for the meet, if using weight classes
- Added player names to volleyball and penalty times to hockey/handball for the European board codes 9200 and 9400. Added code 9409 for handball with three penalty times
- Added display codes D7 and D8 to the compulink interface (code 555) for left and right KPH

Version 2.1.1 *Release Date: 10 March 2005*

- Added a code for running wrestling on a hockey and basketball board combo, (H-2104, BB-2124) with the codes 3401 and 3402
- Added error x10 digits for home and guest to baseball on address 68 and 69
- Changed water polo so the horn command bit will be sent with the shot clock horn
- Added address 23,24,25,26 to codes 1401, 4401, 3401, 2401 and 6402
- Added extra addresses to volleyball, football, and soccer for All Sport CG

Version 2.1.2 *Release Date: 15 May 2005*

- Added PLY/FL/PTS captions (addr 223) to the codes 9100, 9200 of basketball and volleyball
- Added quarter score outputs for football to address 29 of code 6611
- Fixed 8-lane track output to show lane # on address 12, it had the wrong rtd item #
- Added a time into period for hockey to be shown when the stop key is pressed and when arrow keys are pressed

Version 2.1.3 *Release Date: 9 August 2005*

- Made the clock count up operate so the clock will shift and show tenths for the first minute. This was done for the NBA.
- Added a test in soccer for fouls selection on the SO-2031.
- Added a configuration for 6-man football that will cause the 1st and ten key to do a 1st and 15 instead. This would be used in auto calculate as well.
- Added a penalty flag key for use with ball on in the auto calculate mode.
- Added a configuration for the number of downs.
- Added a MS-2013 output to Water Polo.

Version 2.1.4 *Release Date: 29 September 2005*

- Added addresses for smaller standard boards to 7611.
- Fixed the football TOL reset in quarter and Set Time so that TOL will update on the scoreboard.
- Fixed the RTD output in football when receiving from a smart clock console.
- Added a code to handle University of South Carolina Retrofit. Code 9610
- Added address 222 to code 1301 for basketball. This is for Allsport CG.
- Added address 221, 222 to code 6604 for football. This is for Allsport CG.
- Added address 14 to code 2111 and 2112 for volleyball. This is for Allsport CG.

Version 2.1.5 *Release Date: 5 January 2006*

- Fixed the problem in football in autocalculate where the Ball on - Down - To Go are all blank after a score is made and the console locks up.
- Fixed the Team score update on matside junior scoreboard after reset match and points are awarded.
- Fixed Tenths of a second on the scoreboard occasionally skipping (does not lose time, just misses on scoreboard) when data from DSTI comes in. Revised how data is received and removed from serial buffer.
- Fixed code 1000 for clock console so set shot time updates on the display after the time is set.
- In code 1000 and 6000 the reset 1 and 2 switches were made to reset and hold the time until the switch is released.

Version 2.1.6 *Release Date: 20 January 2006*

- Added code 0557 for PortaTree.

Version 2.1.7 *Release Date: 24 March 2006*

- Added a warning time horn for a partial timeout using the full timeout warning time
- Made a menu option to select if the team score is shown on team score/adv time section of the matside board
- Added new address to baseball for a 2 driver inning board, model BA-2022
- Changed the Mass Sub function in basketball so that it will not exit if you answer NO to the question of add player
- Fixed the Wrestling advantage time edit so if the advantage time is set to 0:00 for one team and then started for the other team it will count correctly
- Added custom code 0091 to replace an existing 2400 time of day console
- Added support for receive of DSTI data in Hockey code
- Changed baseball code to clear ball, strike, outs at top and bottom of inning, and clear of batter and average
- Added a key to clear the batter number and batter average
- Changed entering of average in baseball, so the value is padded with leading 0's
- Added recovery time keys to wrestling
- Changed wrestling so the blood/injury times remain on the display until a key is pressed

Version 2.1.8 *Release Date 26 May 2006*

- Added address for FB-2007 to soccer , football and baseball
- Fixed speed pitch so the stalker sport gun will work
- Added a team name caption for PERIOD/HALF to soccer codes, for Atlanta.
- Fixed problem with team name edit in tennis for the second name
- Made baseball auto increment of innings update the period text as well
- Made the outs +1 key clear ball, strike, batter and average when it switches sides

Version 2.1.9 *Release Date 09 August 2006*

- Fixed a problem with some consoles that will not run test code 0000 in production
- 2. Added address 24 and 25 to code 6604 and 7604
- 3. Added possession indicators (full col) to address 16 in football codes

Version 2.2.0 *Release Date 08 January 2007*

- Changed code 9101 to make the dash on full and partial timeouts to always be on
- Also added team abbrev to the code, address 222
- Added a code 9111 for Georgia Dome

- Added a QUARTER caption for football in code 6601, to match the HALF caption in soccer
- Added a countdown timer code 370 that has an output with days and time (with tenths of sec)
- Added captions for baseball codes 5601 and 5602 to match the captions in football and soccer on address 226
- Added a separate warning time for the partial time outs in basketball
- Fixed the advantage time in wrestling to update the home and guest advantage areas after an edit. Also fixed the adv time when it was edited to blank or zero so it would count right, it was counting almost 2 sec before it went to 1

Version 2.2.1 *Release Date: 23 May 2007*

- Changed the way speed pitch data is read. There was a problem if radar guns were switched that the next speed would be missed
- Fixed the half TNMC caption in soccer codes, it was not correctly positioned
- Added address 19 for the new FB-2018 and SO-2018 boards to football, soccer, hockey, baseball, and track
- Added pitch count output to address 3 and to H/E digits on address 64, 65, 67

Version 2.2.2 *Release Date: 21 June 2007*

- Fixed the scoreboard test for baseball HE digits after pitch count was added to these digits in the last version
- Added custom codes for Madison Square Garden 9112, 9412, 9901
- Added a selection for showing laps-to-go in the autorace code 333
- Added an output (addr 10) for 6 digit time displays in autoracing
- Added an alt_seg_rtd to football, basketball, and hockey, for the segment # to show on shot/play clock digits
- Changed the autorace function getDatCarNum to set the car # blank if it gets a space or something other than a number

Version 2.2.3 *Release Date: 23 August 2007*

- Fixed so the code, model, and version number are sent when a new code or resume code is done.
- Fixed wrestling weight classes in position 1 and 2 to display correctly when set for a 5 line display and when selected for showing lines 13 and 14.
- Added code for Australian football and cricket. Code 6699-FB and 5699-CR.
- Fixed a bug in edit of quarter scores in football and basketball. Locks up if a cold key is pressed when waiting for quarter # entry.
- Changed baseball to show time/atbat/pitch on time digits and show HE/atbat/pitch on the HE digits.
- Added TSI interface code 558 to drag race timing codes.

Version 2.2.4 *Release Date: 05 September 2007*

- Made a change to hockey so SOG console input will override DSTI input, and DSTI will resume on loss of SOG input.

Version 2.2.5 *Release Date: 17 October 2007*

- Added cricket code 5598 for a replacement to the AS3000 cricket code.
- Added code 5590 for the CR-2004 cricket board to be used as a test mode only.
- Added the old 12.8k baud addressable driver protocol that was in the AS3000.
- Added a test code for multiple court tennis displays that will test all addresses.

- Removed the Saves caption and data from code 9412 for Madison Square Garden.

Version 2.2.6 *Release Date: 31 October 2007*

- Modified hockey receive of DSTI so it will resend SOG on the RTD if it has changed.
- Added custom soccer code 9714 for Tottenham, C#7911.
- Added address 20 and 230 to code 229 for tennis test code.
- Added address 35, 36, 37 to code 9105 for hustle stats.

Version 2.2.7 *Release Date: 11 February 2008*

- Added more period time settings to wrestling. Periods 6, 7, 8, 9 were added.
- Added testing for a lane, place, time module to the track testing code.
- Added the & symbol on a shift key for team name.
- Added a test code for the 12.8 protocol codes.
- Fixed the volleyball indv. Sub for new player, did not work until after the player is added.
- Added Custom code for retrofit for Wright State Univ.

Version 2.2.8 *Release Date: 11 April 2008*

- Added custom BB (9116) and HK (9416) codes for Harbour Station.
- Added a test function in the test code 0001 for para-mutual displays.
- Changed output for MS-2009 display so the Ckicks digits can be set to show Saves.
- Added addresses 24,26 to code 3105 so the stats panels 2nd driver will have signal.
- Added a segment output to control the top colon dot for TOD in code 300 of Autorace.

Version 2.2.9 *Release Date: 8 August 2008*

- Changed SetTime so the period number will not increment if Pregame time had counted down and the period is currently set as number one.
- Added a scoreboard test to football for play clock.
- Added custom code for Univ of Idaho.
- Fixed Clear Batter/Average function in baseball so it will update on the display.
- Made the Time/At Bat combo digits configuration change to At Bat when a valid DSTI packet is received.
- Added electronic TNMC for FB, SC, LC, BA for football boards model 2024 thru 2027.
- Adjusted TNMC messages on the MS-2009 to fit in 4 separate 32 column captions.
- Added a mode to receive MDP data on COM1 and retransmit the data on the radio port so the AllSport can be used as a radio link to scoreboards.

Version 2.3.0 *Release Date: 11 November 2008*

- Adjust code for TSI interface (code 558) so it does not ignore packets that have too high of intensity values. Also fixed so the decimal point does not blank with a value of zero in x.1 digit.
- Added codes for Rugby Union 6690 and League 6691.
- Added batter position digits for NY Yankees, and fonts to support them.
- Added custom code for University of Louisiana (code 9618).
- Added address 17 to code 9402, 9102 for use at Rapid City Arena.
- Added selection of separate shot clock horn in water polo.

Version 2.3.1 *Release Date: 4 February 2009*

- Fixed Timeout ON/OFF key so partial timeout warning time is set in for compare.

- Added reset of timeouts at Game +1, set to configured number of full timeouts for each side.
- Added a code (355) to run the Matside WR-2025 on the old 12.8k addressable protocol.
- Fixed wrestling advantage timer so it does not count down from zero if sides are switched at the zero count.
- Added custom codes for E-Center upgrade.

Version 2.3.2 *Release Date: 22 May 2009*

- Added a custom code for New York Yankees for receiving stats, (except for ball, strike, out) which need to work from the console.
- Changed pitch speed type names to the correct spellings.
- Added code 7612 for soccer to align with 6612.
- Made the user pitch type text configurable.
- Added period digit to address 19 in soccer, lacrosse.

Version 2.3.3 *Release Date: 30 September 2009*

- Added code 9119, 9419, 9619 for Bradley Center.
- Added basketball code 9120 for University of Alabama.
- Made a change to the receive of MDP data in code 5900 to correct a problem with momentary swapping of bytes in the data received.
- Added an output for shot clock =0 in basketball on output 7-D in address 1. This was for the NBA light strips.
- Added an interval horn timer in hockey.
- Fixed a bug with set time that did not increment the period from 3 to 4.
- Added volleyball code 9220 for University of Alabama at Birmingham.

Version 2.3.5 *Release Date: 24 November 2009*

- Fixed hockey interval timer horn output to do both segment and horn bit.
- Added receive of player names to codes 9120 and 9220.
- Added colons to penalty time output in hockey for the Bradley Center.
- Changed hockey 'PLY PENALTY', tnmc caption to 'PLR PENALTY' for Bradley Center in code 9419.
- Added address 14 and 17 to BB,VB,WR,FB for use by AllSport CG at Idaho State.
- Fixed game clock tenths skipping problem on stat console when receiving smart clock data and the shot horn or the main horn sound.

Version 2.3.6 *Release Date: 18 March 2010*

- Fixed the wrestling weight class RTD output for positions 13 and 14 so they will output the points for the winner.
- Improved on the latency between the period clock "end of period" and the stopping of the advantage timer clock in wrestling.
- Changed volleyball games and games won to sets and sets won.
- Menu for radio sync-to-channel added.

Version 2.3.7 *Release Date: 21 October 2010*

- Added custom squash code 2901 for Qatar.
- Fixed electronic captions for soccer on MS-2009 to show saves, ckicks, or fouls.
- Added custom bike racing code for Indiana.
- Added 32 items of stats in baseball.
- Added custom football code for E-Center.

- Added custom code for Colorado State Univ C17773.
- Added curling as standard code number 4501.
- Added custom code for 8 digit time in track codes 8790 & 8791 and also soccer code 7791.
- Added max speed setting in speed pitch for accepting received speeds.

Version 4.0.0 *Release Date: 30 March 2011*

- Added an offset selection for RTD output.
- Added standard code (4611) for Hockey at Heinz Field.
- Add custom code for American Bank Center codes 9122, 9422, 9622.
- Changed baseball configuration score by inning default to Yes.
- Added addresses 71 and 72 for new baseball board BA-2025 – BA-2029.
- Added address 28 and 29 for new soccer board SO-2043.
- Added address 32 for new football board FB-2028.
- Added custom code for Rose Bowl football code 9623.
- Fixed the Clear Hit/Error function to set RTD to space (20hex) and not blank.
- Added code for the use of serial eeprom as non-volatile memory, to replace nvram.
- Fixed problem of scoreboard outputs not working after going from an old 12.8k baud code to (Menu New Code) and then running any MDP code.

Version 4.0.1 *Release Date: 27 May 2011*

- Added RTD items for team name possession in football codes.
- Added a test code (code 201) for swim module testing.

Version 4.0.2 *Release Date: 2 August 2011*

- Added a tenths of second selection for the shot clock operation.
- Fixed a problem with the receive of smart clock data in basketball and football.
- Fixed code 9200 for player names not showing in the RTD output.
- Added drive chart data for FB, which includes possession, drive direction, side of field, and ball on.

Version 4.0.3 *Release Date: 27 February 2012*

- Changed shot clock RTD to only update when changes happen, not always every 0.1 sec.
- Added address 222 to the sports FB, BB, and VB for USD code 9607.
- Changed radio broadcast group settings to allow for 8 groups.
- Added team substitution key for volleyball to track team substitutions.
- Used the update player/foul and player/point settings to determine if DSTI should update the common area for player/fouls.
- Added lacrosse custom code for Univ of Vermont.

Version 4.0.4 *Release Date: 15 June 2012*

- Added address 19 to code 9610.
- Added address 20 to tennis codes.
- Added support for 16 high 34mm team name display.
- Set auto inning increment off in baseball 5519 custom code.
- Added electronic captions for basketball board BB-2153 for BB, VB, and WR.
- Added custom code for Green Bay, with 2 digit period in football.

Version 4.0.5 *Release Date: 4 January 2013*

- Added Super Goals keys to Australian football code 6699.
- Added Tackles keys to Rugby code 6690 and 6691.
- Added fielder's choice to baseball, for use in C20390 for Japan.
- Added additional radar gun config choices.
- Added possession ind (on full column) and score to address 19 in football for new poss indicators that use a full column to run.

Version 4.0.6 *Release Date: 11 February 2013*

- Updated ram test for production test.
- In hockey changed the edit of penalty player # so it would not adjust the time when Enter is pressed on the time section.
- Fixed the wrestling Reset Match key so period text would update when it was pressed.

Version 4.0.7 *Release Date: 14 August 2013*

- Fixed problem of a DC run console in pitch speed code 5500 sending standard and Enhanced RTD because of TOD increment in 100 hz interrupt.
- Added address 232 to Scoreboard test code 0002, so the All On test displays on 16x80 guest TNMC.
- Change electronic caption text in hockey for MS-2009 from PLY to PLAYER.
- Added custom codes with French captions for Football boards.
- Added 16x80 TNMC to baseball code 5501.

Version 4.0.8 *Release Date: 17 January 2014*

- Added 'C' to the F on the two fixed digits display for baseball to better indicate fielders choice
- Added 16x80 TNMC to soccer codes
- Added a fix for 60hz detect, to resolve noise issues on power input
- Added fix to filter noise out on 60hz interrupt, to correct TOD error
- Added address 19, electronic captions addr 227, and 16 hi team name addr 231-232 to eight lane track code.
- Added shot clock output to columns 9, 10 on address 1 for indoor football and lacrosse, to be compatible with clear shot clocks with tenths digit.

Version 4.0.9 *Release Date: 3-26-2014*

- Added radio diagnostics menu to the display menu for all codes.
- Added a period caption to lacrosse codes 4601 and 4603 for MS-2918 boards.
- Added address 17 to codes 9423 and 9424 for lacrosse sport on the SO-2011.

Version 4.1.0 *Release Date: 8-18-2014*

- Added outputs for SO-2043 to the output in Rugby code 6690.
- Added an Inning caption to baseball codes 5501, 5601 and 5602 for MS-2918 boards.
- Added outputs for clock=0 to 1-h and game horn to 2-h for address 1 in bb,hk,vb and wr.
- Changed football so play clock reset 1 config value gets set in the play clock on new game.
- Added penalty indicators on 10-E,F to address 71 in code 4601 to match 6601, for adding to MS-2009.
- Added a FIBA setting in bb, hk, and vb to allow for time outs taken and for blanking shot clock when reset button is pressed.

Appendix F: Daktronics Warranty and Limitation of Liability

DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

This Warranty and Limitation of Liability (the "Warranty") sets forth the warranty provided by Daktronics with respect to the Equipment. By accepting delivery of the Equipment, Purchaser agrees to be bound by and accept these terms and conditions. Unless otherwise defined herein, all terms within the Warranty shall have the same meaning and definition as provided elsewhere in the Agreement.

DAKTRONICS WILL ONLY BE OBLIGATED TO HONOR THE WARRANTY SET FORTH IN THESE TERMS AND CONDITIONS UPON RECEIPT OF FULL PAYMENT FOR THE EQUIPMENT.

1. **Warranty Coverage**

A. Daktronics warrants to the original end-user that the Equipment will be free from Defects (as defined below) in materials and workmanship for a period of one (1) year (the "Warranty Period"). The Warranty Period shall commence on the earlier of: (i) four weeks from the date that the Equipment leaves Daktronics' facility; or (ii) Substantial Completion as defined herein. The Warranty Period shall expire on the first anniversary of the commencement date.

"Substantial Completion" means the operational availability of the Equipment to the Purchaser in accordance with the Equipment's specifications, without regard to punch-list items, or other non-substantial items which do not affect the operation of the Equipment.

B. Daktronics' obligation under this Warranty is limited to, at Daktronics' option, replacing or repairing, any Equipment or part thereof that is found by Daktronics not to conform to the Equipment's specifications. Unless otherwise directed by Daktronics, any defective part or component shall be returned to Daktronics for repair or replacement. This Warranty does not include on-site labor charges to remove or install these components. Daktronics may, at its option, provide on-site warranty service. Daktronics shall have a reasonable period of time to make such replacements or repairs and all labor associated therewith shall be performed during regular working hours. Regular working hours are Monday through Friday between 8:00 a.m. and 5:00 p.m. at the location where labor is performed, excluding any holidays observed by either Purchaser or Daktronics.

C. Daktronics shall pay ground transportation charges for the return of any defective component of the Equipment. All such items shall be shipped by Purchaser DDP Daktronics; designated facility. If returned Equipment is repaired or replaced under the terms of this warranty, Daktronics will prepay ground transportation charges back to Purchaser and shall ship such items DDP Purchaser's designated facility; otherwise, Purchaser shall pay transportation charges to return the Equipment back to the Purchaser and such Equipment shall be shipped Ex Works Daktronics designated facility. All returns must be pre-approved by Daktronics before shipment. Daktronics shall not be obligated to pay freight for any unapproved return. Purchaser shall pay any upgraded or expedited transportation charges.

D. Any replacement parts or Equipment will be new or serviceably used, comparable in function and performance to the original part or Equipment, and warranted for the remainder of the Warranty Period. Purchasing additional parts or Equipment from the Seller does not extend the Warranty Period.

E. Defects shall be defined as follows. With regard to the Equipment (excepting LEDs), a "Defect" shall refer to a material variance from the design specifications that prohibit the Equipment from operating for its intended use. With respect to LEDs, "Defects" are defined as LED pixels that cease to emit light. The limited warranty provided by Daktronics does not impose any duty or liability upon Daktronics for partial LED pixel degradation nor does the limited warranty provide for the replacement or installation of communication methods including but not limited to, wire, fiber optic cable, conduit, trenching, or for the purpose of overcoming local site interference radio equipment substitutions.

EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS WARRANTY, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, DAKTRONICS DISCLAIMS ANY AND ALL OTHER PROMISES, REPRESENTATIONS AND WARRANTIES APPLICABLE TO THE EQUIPMENT AND REPLACES ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACTY OR QUALITY OF DATA. NO ORAL OR WRITTEN INFORMATION, OR ADVICE GIVEN BY THE COMPANY, ITS AGENTS OR EMPLOYEES, SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS LIMITED WARRANTY.

THIS LIMITED WARRANTY IS NOT TRANSFERABLE.

2. Exclusion from Warranty Coverage

The limited warranty provided by Daktronics does not impose any duty or liability upon Daktronics for:

A. Any damage occurring, at any time, during shipment of Equipment unless otherwise provided for in the Agreement. When returning Equipment to Daktronics for repair or replacement, Purchaser assumes all risk of loss or damage, and agrees to use any shipping containers that might be provided by Daktronics and to ship the Equipment in the manner prescribed by Daktronics;

B. Any damage caused by the improper installation, adjustment, repair or service of the Equipment by anyone other than personnel of Daktronics or its authorized repair agents;

C. Damage caused by the failure to provide a continuously suitable environment, including, but not limited to: (i) neglect or misuse, (ii) a failure or sudden surge of electrical power, (iii) improper air conditioning, humidity control, or other environmental conditions outside of the Equipment's technical specifications such as extreme temperatures, corrosives and metallic pollutants, or (iv) any other cause other than ordinary use;

D. Damage caused by fire, flood, earthquake, water, wind, lightning or other natural disaster, strike, inability to obtain materials or utilities, war, terrorism, civil disturbance or any other cause beyond Daktronics' reasonable control;

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E. Failure to adjust, repair or replace any item of Equipment if it would be impractical for Daktronics personnel to do so because of connection of the Equipment by mechanical or electrical means to another device not supplied by Daktronics, or the existence of general environmental conditions at the site that pose a danger to Daktronics personnel;

F. Any statements made about the product by any salesperson, dealer, distributor or agent, unless such statements are in a written document signed by an officer of Daktronics. Such statements as are not included in a signed writing do not constitute warranties, shall not be relied upon by Purchaser and are not part of the contract of sale;

G. Any damage arising from the use of Daktronics products in any application other than the commercial and industrial applications for which they are intended, unless, upon request, such use is specifically approved in writing by Daktronics;

H. Any performance of preventive maintenance;

J. Third-party systems and other ancillary equipment including without limitation front-end video control systems, audio systems, video processors and players, HVAC equipment, batteries and LCD screens;

K. Incorporation of accessories, attachments, software or other devices not furnished by Daktronics; or

L. Paint or refinishing the Equipment or furnishing material for this purpose.

3. Limitation of Liability

Daktronics shall be under no obligation to furnish continued service under this Warranty if alterations are made to the Equipment without the prior written approval of Daktronics.

It is specifically agreed that the price of the Equipment is based upon the following limitation of liability. In no event shall Daktronics (including its subsidiaries, affiliates, officers, directors, employees, or agents) be liable for any special, consequential, incidental or exemplary damages arising out of or in any way connected with the Equipment or otherwise, including but not limited to damages for lost profits, cost of substitute or replacement equipment, down time, lost data, injury to property or any damages or sums paid by Purchaser to third parties, even if Daktronics has been advised of the possibility of such damages. The foregoing limitation of liability shall apply whether any claim is based upon principles of contract, tort or statutory duty, principles of indemnity or contribution, or otherwise.

In no event shall Daktronics be liable to Purchaser or any other party for loss, damage, or injury of any kind or nature arising out of or in connection with this Warranty in excess of the purchase price of the Equipment actually delivered to and paid for by the Purchaser. The Purchaser's remedy in any dispute under this Warranty shall be ultimately limited to the Purchase Price of the Equipment to the extent the Purchase Price has been paid.

4. Assignment of Rights

The Warranty contained herein extends only to the original end-user (which may be the Purchaser) of the Equipment and no attempt to extend the Warranty to any subsequent user-transferee of the Equipment shall be valid or enforceable without the express written consent of Daktronics.

5. Governing Law

The rights and obligations of the parties under this warranty shall not be governed by the provisions of the United Nations Convention on Contracts for the International Sales of Goods of 1980. Both parties consent to the application of the laws of the State of South Dakota to govern, interpret, and enforce all of Purchaser and Daktronics rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Warranty, without regard to conflict of law principles.

6. Availability of Extended Service Agreement

For Purchaser's protection, in addition to that afforded by the warranties set forth herein, Purchaser may purchase extended warranty services to cover the Equipment. The Extended Service Agreement, available from Daktronics, provides for electronic parts repair and/or on-site labor for an extended period from the date of expiration of this warranty. Alternatively, an Extended Service Agreement may be purchased in conjunction with this warranty for extended additional services. For further information, contact Daktronics Customer Service at 1-800-DAKTRONics (1-800-325-8766).

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