ALL SPORT® 5000 SERIES CONTROL CONSOLE

OPERATION MANUAL

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Brookings, SD 57006-5128
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800.325.8766

DAKTRONICS

FCC Statement

Supplier Declaration of Conformity (SDoC)

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

Warning: The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

Industry Canada Regulatory Information

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Inquiries

Contact Daktronics with any questions regarding our product compliance.

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1 Introduction

This manual explains the operation of All Sport® 5000 series control consoles. For additional information regarding safety, installation, operation, or service, refer to the telephone numbers listed in **Daktronics Exchange and Repair & Return Programs (p.3)**.

Important Safeguards

- **Read and understand all instructions, both general and for specific sports.**
- **Always turn off and/or unplug the control equipment when it is not in use. Never yank the power cord to pull the plug from the outlet. Grasp the plug and pull to disconnect.**
- **Do not drop the control console or allow it to get wet.**
- **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 fire.
- **Do not let the power cord touch hot surfaces or hang over the edge of a table that would damage or cut the cord.**
- **If an extension cord is necessary, use a three-pronged, polarized cord. Arrange the cord with care so that it will not be tripped over or pulled out.**
- **Before using an extension cord, inspect the cable thoroughly and verify its compliance with local electric codes.**
- **Do not disassemble control equipment or electronic controls of the display; 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.

> **Note:** All Sport consoles feature an internal time delay 1/8 amp, 250 V fuse for 120 VAC models or 1/16 amp, 250 V fuse for 240 VAC models. In the unlikely event the fuse needs to be replaced, contact Daktronics Customer Service.

Specifications Label

Power specifications as well as product assembly 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 assembly number and the date manufactured available to ensure the request is serviced as quickly as possible.

Resources

Figure 2 illustrates a Daktronics drawing label. This manual refers to drawings by listing the last set of digits. In the example, the drawing would be referred to as **DWG-1007804**. All references to drawing numbers, appendices, figures, or other manuals are presented in bold typeface. Any drawings referenced in a particular section are listed at the beginning of it as shown below:

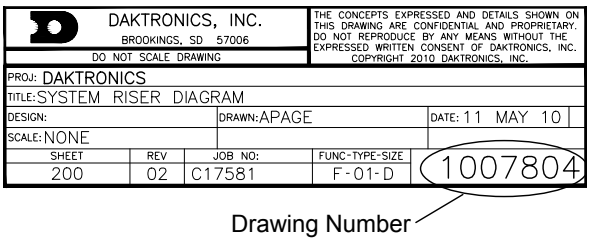


Figure 2: *Drawing Label*

Reference Drawing:

System Riser Diagram **DWG-1007804**

Daktronics identifies manuals by the DD or ED number located on the cover page.

Console Revision History

For a complete history of revisions to the console firmware, refer to **All Sport & OmniSport Revision Histories (DD3679410)**, available online at www.daktronics.com/manuals.

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 Manufactured/Installed: _____

Daktronics Customer ID Number: _____

To participate in the Exchange Program, follow these steps:

1. **Call Daktronics Customer Service.**

   United States & Canada: 1-800-DAK-TRON (325-8766)

   Outside the U.S. & Canada: +1-605-275-1040

2. **When the new exchange part is received, mail the old part to Daktronics.**

   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 Daktronics Customer Service.**

   United States & Canada: 1-800-DAK-TRON (325-8766)

   Outside the U.S. & Canada: +1-605-275-1040

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

5. **Ship to:**

   Daktronics Customer Service

   [Case #]

   201 Daktronics Drive, Dock E

   Brookings, SD 57006

Daktronics Warranty & Limitation of Liability

The Daktronics Warranty & Limitation of Liability is located at the end of this manual. The Warranty is independent of Extended Service agreements and is the authority in matters of service, repair, and display operation.

2 Basic Operation

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.

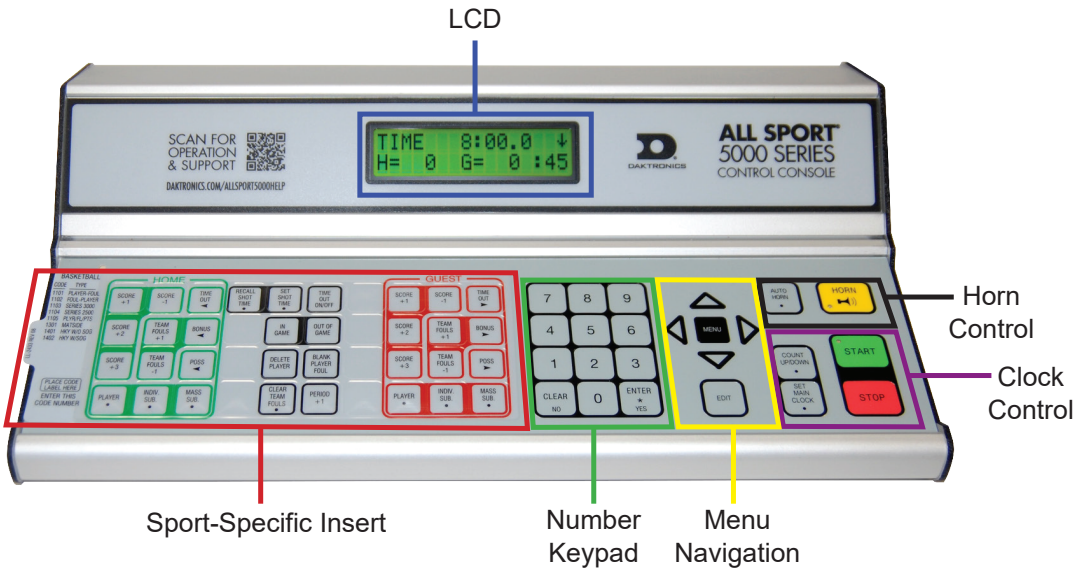


Figure 3: *All Sport 5000 Layout*

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 **Standard Keys (p.7)**. 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 keypad are enclosed in angle brackets (such as **<ENTER>**).

Sport Inserts

Sport inserts allow one 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 from **Appendix B** may be used until a replacement can be ordered. Print this page (if viewing digital copy) 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	
Curling	0G-1021630	
Event Counter	0G-58047	
Football	LL-2437	
Gymnastics	0G-207655	
Hockey/Lacrosse/Handball	LL-2436	
Lacrosse	0G-1084219	
Pitch and Speed	LL-2482	
Rugby	0G-712154	
Segment Timer	LL-2475	Not applicable
Soccer	LL-2440	
Strikeout	0G-163409	
Tennis	LL-2483	
Track	LL-2439	
Team Name (TNMC)	LL-2441	
Volleyball	LL-2434	
Water Polo	0G-178439	
Wrestling	LL-2435	

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.

Start Up

Use the 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 = current code	The **SELECT CODE** prompt lets the operator 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 YY = last channel number	If a new code is selected, and the radio option is installed, the console prompts for a broadcast group and channel. When Resume Game is used, the last selected settings are used. Press **<ENTER>** to accept the group and channel numbers, or press **<CLEAR>** to enter new numbers. Refer to **Setting Radio Channels (p.11)** for more information.

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**).

The **<CLEAR/NO>** key also acts as an escape during data entry. The number of key presses to escape depends on the step in the entry process (flashing asterisk or not).

Example 1: The operator presses the **<SET MAIN CLOCK>** key to adjust the game time.

- If no number key has been pressed yet, press the **<CLEAR/NO>** key once to escape.
- If any number key has been pressed, the **<CLEAR/NO>** key must be pressed twice to escape; the first press blanks the data on the LCD, and the second press escapes.

Example 2: The operator presses **<EDIT>** followed by a **<SCORE>** key to change the score.

- The **<CLEAR/NO>** key must always be pressed twice to escape.

Edit

Press the **<EDIT>** key followed by one of the increment or decrement keys for the desired field on the scoreboard to modify. Then simply enter the new value to display and press **<ENTER>** to accept.

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress. Refer to **Menu (p.15)** for more information.

Set Main Clock

Display	Action
MAIN CLOCK -SET CURR MM:SS.T *	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 using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
MAIN CLOCK -EDIT PERIOD MM:SS *	Press **<SET MAIN CLOCK>** two times to display the configured time for the main clock period length. To change the period length and set the main clock, enter the new time in minutes and seconds using the number pad, and then 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.T = minutes, seconds, tenths of a second

MM:SS = minutes, seconds

Display	Action
 MM:SS = minutes, seconds	Press **<SET MAIN CLOCK>** three times to display the configured time for break length. To change the break length and set the main clock, enter the new time in minutes and seconds using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
 MM:SS = minutes, seconds	Press **<SET MAIN CLOCK>** four times to display the configured time for overtime length. To change the overtime length and set the main clock, enter the new time in minutes and seconds using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
 MM:SS = minutes, seconds	Press **<SET MAIN CLOCK>** five times to display the configured time for pre-game length. To change the pre-game length and set the main clock, enter the new time in minutes and seconds using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.
 MM:SS = minutes, seconds	Press **<SET MAIN CLOCK>** six times to display the configured time for post-game length. To change the post-game length and set the main clock, enter the new time in minutes and seconds using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to clear changes and return to the game.

Note: To blank the game time while keeping the rest of the scores and statistics visible: Press **<SET MAIN CLOCK>**, any number key, **<CLEAR>**, and then **<ENTER>**.

Count Up/Down

Display	Action
	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.

Auto Horn

Display	Action
AUTO HORN- ON 1-ON, 2-OFF	Press **<1>** to select ON (default), or press **<2>** to select 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.

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.

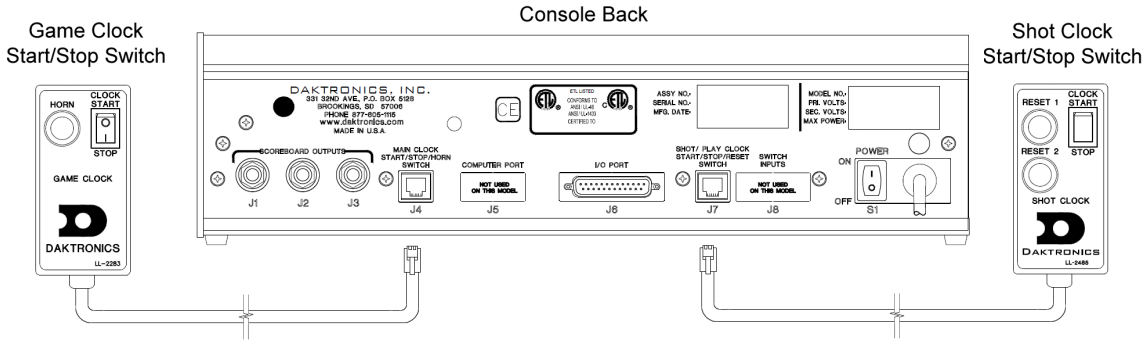


Figure 4: *Remote Start/Stop Switches*

Main Clock Control

The Main Clock Start/Stop switch plugs into **J4** on the back of the console (**Figure 4**). 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 4**). 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: Clock Console Operation (p.43)**, **Section 7: Basketball Operation (p.45)**, and/or **Water Polo Operation (p.137)** for sport-specific information about shot clock configurations.

Setting Radio Channels

Reference Drawings:

Channel Selection; Multiple Broadcast Group, Gen IV **DWG-203113**
Installation Details, Gen VI Channel Selection Guide **DWG-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 and region of radio receiver: Gen V receivers have 1–4, while Gen VI receivers have 1–8. Gen VI units sold internationally (Europe/Asia) only have groups 1–4.

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.

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

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

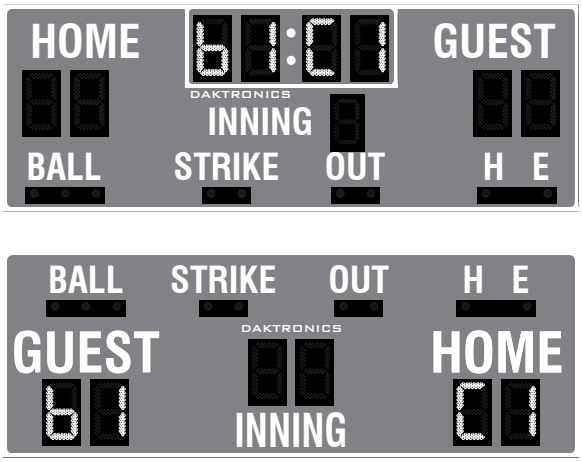


Figure 5: *Radio Settings in Clock or Score Digits*

> **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. 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.

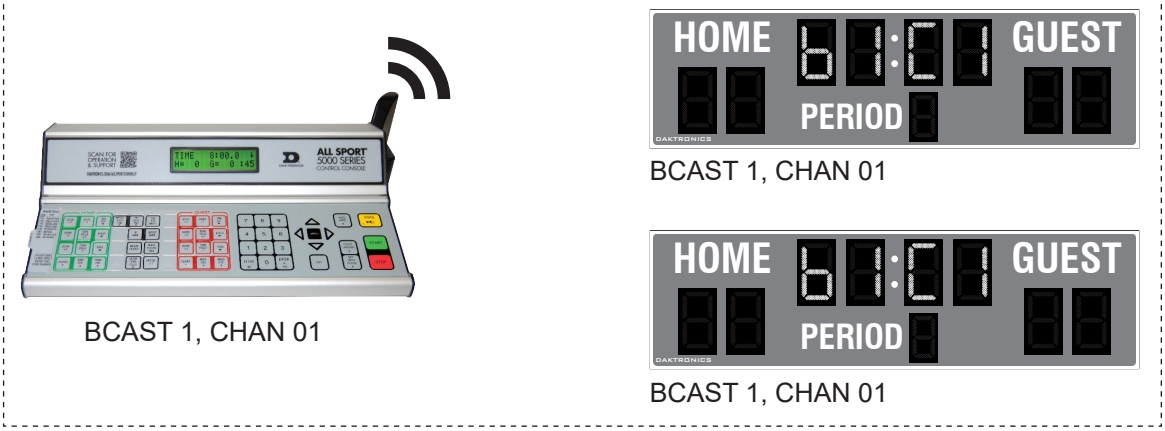


Figure 6: *Single Control Console*

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

The LCD will toggle between these 2 screens:
 	
`RADIO SETTINGS`
`BCAST X  CHAN YY`
 	
`ENTER TO ACCEPT`
`CLEAR TO MODIFY`
 	
`BCAST GROUP X*`
`RADIO CHAN  YY`
 	
X = broadcast group number
YY = channel number
	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.

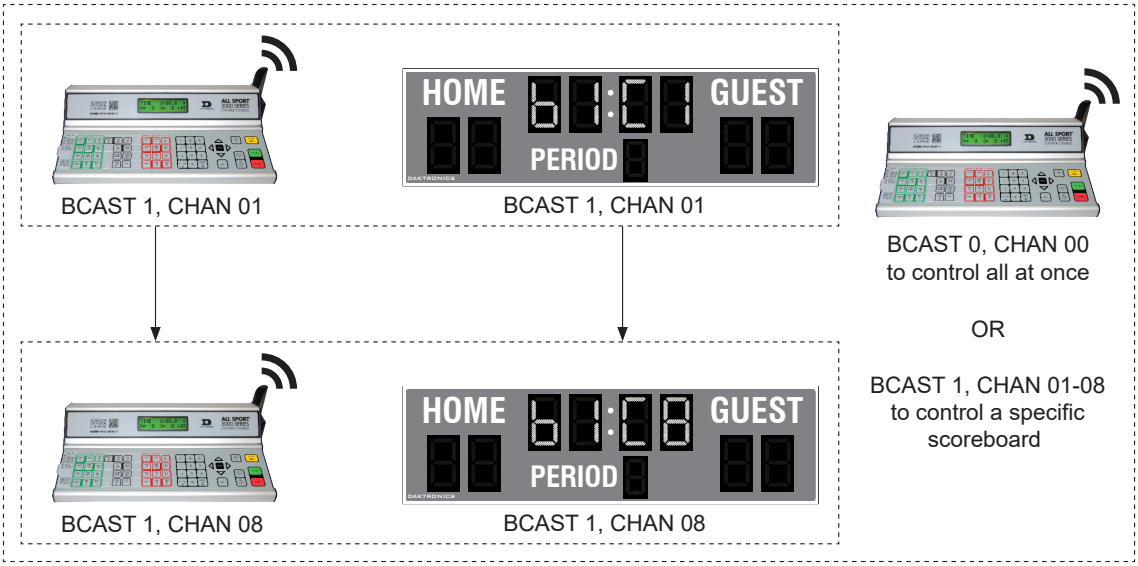


Figure 7: *Single Broadcast Group*

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

The LCD will toggle between these 2 screens:
 	
`RADIO SETTINGS`
`BCAST X  CHAN YY`
 	
`ENTER TO ACCEPT`
`CLEAR TO MODIFY`
 	
`BCAST GROUP X*`
`RADIO CHAN  YY`
 	
X = broadcast group number
YY = channel number
	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 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.

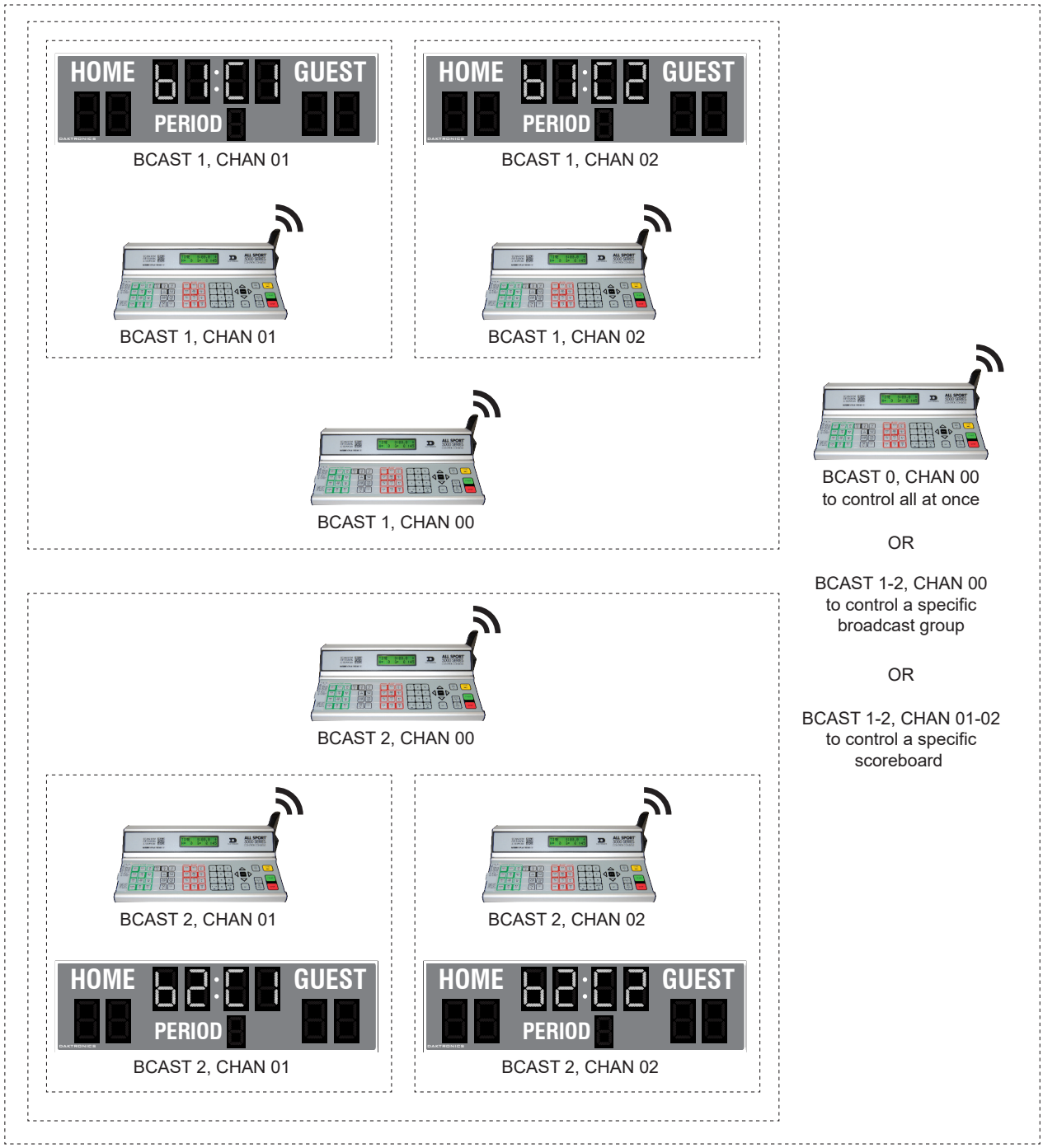


Figure 8: *Multiple Broadcast Group*

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.

RADIO SETTINGS
BCAST X CHAN YY

ENTER TO ACCEPT
CLEAR TO MODIFY

BCAST GROUP X*
RADIO CHAN YY

X = broadcast group number
YY = channel number</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>

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress. Menu settings common to most sport modes are shown below. Refer to individual sport mode sections for additional menus and settings.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

The **Dimming Menu** changes the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL(0-9): NN% NN = current setting NONE = **<0>** 50% = **<5>** 90% = **<1>** 40% = **<6>** 80% = **<2>** 30% = **<7>** 70% = **<3>** 20% = **<8>** 60% = **<4>** 10% = **<9>**	Press **<0>** (brightest) through **<9>** (dimmest) or use the left/right arrow keys to set the scoreboard digit dimming level. **Note:** The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Display Menu

Use the **Display Menu** 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 **<ENTER>** to select the Display submenu.
MENU-DISPLAY RUN SEGMENT TIMER? EXIT GAME ARE YOU SURE?	Press **<ENTER>** twice to exit the sport code and run the segment timer function. **Note:** The clock must be stopped to access the segment timer. Insert the SEGMENT TIMER (LL-2475) insert and refer to **Section 3: Segment Timer Operation (p.22)** for more information.
MENU- DISPLAY BLANK SCBD? PRESS ANY KEY TO RETURN TO GAME	Press **<ENTER>** to select the blank scoreboard feature. The scoreboard will go blank and wait for the operator to press any key to resume normal operation.
MENU-DISPLAY SYNC TO CHAN SYNC TO CHAN ON 1-ON, 2-OFF	Press **<ENTER>** 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 **<ENTER>** 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.
MENU- DISPLAY SET RTD OFFSET RTD OFFSET 0K 0 1=5 2=10 3=15	Press **<ENTER>** to set the RTD offset. 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 **<1>** to offset the RTD by 5000, **<2>** to offset by 10000, or **<3>** to offset by 15000. Press **<0>** to clear the offset.
MENU-DISPLAY RADIO TEST? EXIT GAME ARE YOU SURE?	Press **<ENTER>** followed by **<YES>** to exit the current game in progress and enter the radio diagnostics menu. Refer to **Radio Diagnostics (p.20)** for more information. **Note:** This setting is only available for consoles with a radio receiver installed.
MENU-DISPLAY RUN DOWNLOAD Y/N?	This menu is used to download and transfer field update files to certain scoreboard drivers. For more information, refer to **ED-18728** in **Appendix E**.

Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press **<ENTER>** to select the Time of Day (TOD) submenu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press **<1>** to display the time of day in 12 hour (default), or press **<2>** to display the time of day in 24 hour format.
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 number pad, and then press **<ENTER>**.
MENU-TIME OF DAY 1*GAME 2-TOD MENU-TIME OF DAY BLANK GAME DATA?	Press **<1>** to display the game clock (default), or press **<2>** to display the time of day on the scoreboard clock digits. If **2–TOD** is selected, press **<ENTER>** to blank all game data on the scoreboard except for the Time of Day digits, or press **<CLEAR>** to leave the game data visible.

Switch Output

The All Sport 5000 console has a relay switch that can be used to control external devices. The switch can be configured to operate under different clock or horn conditions. The default setting is **1-CLOCK= 0**.

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

The possible settings for the switch output are displayed below:

Display	Action
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 stays 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.

General Multi-Purpose Timer

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 **Standard Keys (p.7)**.

Segment Timer

Refer to **Section 3: Segment Timer Operation (p.22)** for details on accessing and operating the segment timer function.

Team Name Entry

Certain scoreboards may be equipped with Team Name Message Centers (TNMCs), LED matrix displays that show team names, abbreviations, or short messages.

The team name entry function is typically accessed by pressing the **<MENU>** key and navigating to the HOME or GUEST ROSTER submenu (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; 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 a 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 show 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

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
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, 16-HIGH characters have a one-column space between them. Press **<SHIFT>** followed by **<DOUBLE STROKE>** to insert two-column spaces between all characters. For one-column spaces, press **<SHIFT>** followed by **<SINGLE STROKE>**.

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
RADIO TEST -SIGNAL LEVEL SIGNAL LEVEL ANY KEY TO EXIT	Press **<ENTER>** to begin the signal level test, or press the down or up arrows to select another test. 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 MISSED PACKET ANY KEY TO EXIT	Press **<ENTER>** to begin the missed packet test, or press the down or up arrows to select another test. 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.**

3 Segment Timer Operation

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 **DWG-129357**

Refer to **Section 2: Basic Operation (p.5)** for information on how 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 scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

Segment Timer Overview

The segment timer is a multi-function timing system and has multiple purposes. Operation of the segment timer is determined by 99 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 (p.25)** to set the segment-stopping feature.

The **First Segment** 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 5 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 again based on the **<AUTO STOP>** setting.

The segment 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.

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.

Display	Action
MENU- MAIN ENTER DISPLAY MENU? MENU-DISPLAY RUN SEGMENT TIMER? EXIT GAME ARE YOU SURE?	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. Press **<YES>** to exit the sport code and run the segment timer program. The console will prompt to press **<YES>** a second time to avoid accidental exit from the sport program. Refer to **Segment Timer Keys (p.23)** for general segment timer operation instructions.

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 segment timing. 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.

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 desired time as described below.

Display	Action
SEGMENT: NN * TIME EDIT NN = current setting SEGMENT: NN TIME EDIT MM:SS* NN = current setting MM:SS = minutes, seconds	Press **<SEG. NO. • TIME •>** to set individual segment times. Enter the segment to be edited using the keypad, and then press **<ENTER>**. 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* NN = current setting	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.

Last Segment

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

Display	Action
LAST SEGMENT NN* NN = current setting	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.

Interval Time

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

Display	Action
INTERVAL TIME: MM:SS* MM:SS = minutes, seconds	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>**.

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 on the console only if **NO** is selected. **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
COPY: MM:SS * SEG XX TO YY 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
AUTO STOP AT EACH SEG Y/N*	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.
AUTO STOP AT LAST SEG *Y/N	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.

Edit

Current Segment

Display	Action
CURRENT SEGMENT: EDIT NN*	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>**.
NN = current setting	

Menu
Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Warning Time

Display	Action
WARNING TIME MM:SS* MM:SS = minutes, seconds	Enter the warning time in minutes and seconds, and then 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

Refer to **Dimming Menu (p.16)**.

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				

4 Baseball Operation

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:

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

Refer to **Section 2: Basic Operation (p.5)** for information on how to start up the console and use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing 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 scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

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:** This key is disabled when the **Auto Increment Inning** setting is enabled.

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.

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

- The **Auto Increment Inning** 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 Increment Inning** 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	Press the **<BATTER •>** key to enter the player number using the number pad, and then press **<ENTER>**.
AVERAGE N.NNN* N.NNN = current setting	Press the **<AVERAGE •>** key to enter the player's batting average using the number pad, and then press **<ENTER>**.

Ball Count +1, Strike Count +1, 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 Increment Pitches** 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>** once more 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>** once more 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. On some scoreboards, the **<ERROR •>** key can also display the player's position when the **Error Position** setting is on.

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).

Pressing the **<CLEAR HIT/ERROR>** key turns off the Hit and Error indicators and clears the digits (including fielder's choice).

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	Press the **<ERROR •>** key to enter the player's position number using the number pad, and then press **<ENTER>**. This prompt only appears when the **Error Position** setting is enabled.
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/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.
HOME AT BAT OFF	To turn off the at bat indicator, press the same **<AT BAT>** key a second time or press the opposite **<AT BAT>** key. The current status of the At Bat indicator is shown by the location of the arrow (>) on the main LCD screen.

Runs +1

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 +1, Errors +1, Left on Base +1

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 below.

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 Balls +1, Pitch Count Strikes +1, Foul Balls +1, In Play +1, Clear Pitch Count

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 below.

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.

Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

Inning +1

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

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

Runs +1

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>** followed by the appropriate **<RUNS +1>** key to display the current setting for the home or guest team. Enter the correct value using the number pad, and then press **<ENTER>**.
EDIT HOME RUNS INNING NN= XX NN = current inning XX = inning score	When the Score By Inning setting is ENABLED: Press **<EDIT>** followed by 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 select the inning to edit. Enter the correct value using the number pad, and then press **<ENTER>**. The game total is automatically updated. The LCD shows which key was pressed and the new value for the corresponding team.

Hits +1, Errors +1, Left on Base +1

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 below.

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

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up team names and other player information. **Home Roster** is used as an example below.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** to select the Roster submenu.
HOME- TEAM NAME _OME *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a team name of up to 15 characters and press **<ENTER>**.
HOME- TEAM ABBR _OME *	Type in a team abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the BASEBALL (LL-2438) insert to continue.**
PITCHER NUMBER HOME NN* NN = current setting	Enter the pitcher's jersey number using the number pad, and then press **<ENTER>**.

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 home team pitcher's pitches thrown.

Display Menu
Refer to **Display Menu (p.16)** for more information.

Time of Day
Refer to **Time of Day (p.17)** for more information.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	From the Main Menu, select the **EDIT SETTINGS** submenu to modify the settings below.

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

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 using the number pad, and then press **<ENTER>**.

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, and then press **<ENTER>**. Press the **right** arrow key if the scoreboard cannot display the player position, and 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 function of the **<OUT +1>** key varies depending on this setting.

Display	Action
AUTO INCREMENT INNING Y/N? Y*	Press **<YES>** to enable the Auto Increment Inning function. • If the Home AT BAT indicator is on and the current number of outs is 3, pressing **<OUT +1>** will increment the inning and reset the outs to 0. • If the Guest AT BAT indicator is on and the current number of outs is 3, pressing **<OUT +1>** will turn on the Home AT BAT indicator. Press **<NO>** to disable this function.

Score by Inning

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

Display	Action
SCORE BY INNING Y/N? Y*	Press **<YES>** if the scoreboard is capable of displaying the score for each inning. Press **<NO>** if the scoreboard only displays the total score.

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

Inning Sequence

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

Display	Action
INNING SEQUENCE SHIFT←–→BLANK*	To shift all of the inning numbers and scores left one digit, press the left arrow key followed by **<ENTER>**. To blank all of the inning numbers and start a new set, press the right arrow key followed by **<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.

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.

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) using the number pad, 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

Refer to **Switch Output (p.18)** for more information.

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
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				

5 Pitch & Speed Operation

Sport Insert: LL-2482 (Code 5500)

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

Reference Drawings:

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

Refer to **Section 2: Basic Operation (p.5)** for information on how to start up the console and use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing until a replacement arrives.

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)** or the **Speed of Pitch Systems Setup Manual (DD3394576)**, both available online at www.daktronics.com/manuals.

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 will cycle on a fixed-digit display.

- The **<CYCLE MPH KPH>** key sets the console to display miles per hour first 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 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
G.PITCHER CLEAR ALL Y/N?	Press **<CLEAR PITCH COUNT •>** followed by **<YES>** to clear the pitch counts. Press **<NO>** to cancel 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.

Edit

User-Defined Keys

User-defined keys are only available in Manual Mode.

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

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Radar Gun Type

Display	Action
RADAR GUN TYPE SELECT	Press **<ENTER>** to select the appropriate radar gun type.
RADAR GUN TYPE JUGS *	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

Display	Action
RADAR GUN TYPE CUSTOM ###000 RADAR GUN TYPE BAUD RATE 1200 * RADAR GUN TYPE ROUND UP Y/N?	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 (JUGS) • ###: (STALKER SPORT Gen I and all Gen II models) • ### (STALKER PRO Gen I and all Gen II models) • ###00# (JUGS w/ tenths) • #### (STALKER SPORT Gen I and all Gen II models w/ tenths) • ###.# (STALKER PRO Gen I and all Gen II models w/ tenths) **Note:** Formats with three #'s are speeds without tenths. Formats with four #'s are speeds with tenths. Next, press the left or right arrow keys to set the BAUD RATE to 1200 or 9600, and then press **<ENTER>**. 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 **DWG-243741** in **Appendix A**.

Select Speed Range

Display	Action
SELECT RANGE SPEED: >NN MPH NN = current setting	This setting allows the operator to select a speed range that will be accepted from the radar gun. Enter the minimum speed using the number pad, and then press **<ENTER>**. Then enter the maximum speed and 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 operator 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 2nd indicator. Speeds greater than this will light the 3rd indicator. Enter the desired values, pressing **<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. Enter a value from 0–20 using the number pad, and then 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 the pitch speed.

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
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
32	Home Strike count x10
33	Home Strike count x1
34	Home Total Pitch count x100
35	Home Total Pitch count x10

Item #	Data
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 is 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)

Frame #	Pitch Type
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

6 Clock Console Operation

Sport Insert: 0G-136301

The Sport Insert drawing is located in **Appendix B**.

Reference Drawings:

Insert, Clock Console **DWG-136301**

Refer to **Section 2: Basic Operation (p.5)** for information on how to start up the console and use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing 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 scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

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:

1000 - Basketball Main Clock and Shot Clock

6000 - Football Main Clock and Shot Clock

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.

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.

Recall Shot Time

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

Menu

Refer to **Section 7: Basketball Operation (p.45)** for Basketball menu settings.

Refer to **Section 8: Football Operation (p.60)** for Football menu 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.

7 Basketball Operation

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

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing 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 scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

Basketball Keys

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. To accept the current shot clock time and return to the game, press **<ENTER>**. To edit the shot time, use the number pad to enter the new shot time in minutes and seconds, and then press **<ENTER>**. To discard the edited time, press **<CLEAR>** twice to clear the changes and return to the game.
SHOT CLOCK-EDIT RESET 1 MM:SS* MM:SS = minutes, seconds	Press **<SET SHOT TIME •>** two times to display the configured shot clock **Reset 1** time. To accept the shot clock **Reset 1** time and return to the game, press **<ENTER>**. To edit the shot clock **Reset 1** time, use the number pad to enter the new time in minutes and seconds, and then press **<ENTER>**. To discard the edited time, press **<CLEAR>** twice to clear the changes and return to the game. **Note:** The **Reset 1** value is set in the **EDIT SETTINGS** menu.

Display	Action
SHOT CLOCK-EDIT RESET 2 MM:SS* MM:SS = minutes, seconds	Press **<SET SHOT TIME •>** three times to display the configured shot clock **Reset 2** time. To accept the shot clock **Reset 2** time and return to the game, press **<ENTER>**. To edit the shot clock **Reset 2** time, use the number pad to enter the new time in minutes and seconds, and then press **<ENTER>**. To discard the edited time, press **<CLEAR>** twice to clear the changes and return to the game. **Note:** The **Reset 2** value is set in the **EDIT SETTINGS** menu.

Note: To blank the shot clock while keeping the rest of the scores and statistics visible: Press **<SET SHOT TIME>**, **<CLEAR>**, and then **<ENTER>**.

Recall Shot Time

Display	Action
SHOT CLOCK-MODE RECALL Y/N	Press **<RECALL SHOT TIME •>** followed by **<YES>** to recall the shot time that was remaining before the last shot clock reset was pressed. To cancel 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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-SELECT PARTIAL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** two times to display the configured time for partial time out length. To start the partial time out, press **<ENTER>**. To cancel the partial time out, press **<CLEAR>**.

Blank Player Foul

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

Period +1

Display	Action
PERIOD- +1 N N = current setting	Press **<PERIOD +1>** to increment the period number. **Note:** 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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-HOME PARTIAL N N = current setting	Press **<TIME OUT>** two times to display the number of partial time outs remaining. To start the partial time out, press **<ENTER>**. To cancel the partial time out, press **<CLEAR>**.
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 time outs or partial time outs remaining.

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 then press **<ENTER>**.

Display	Action
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/-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 then 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** menu are displayed on the LCD and available for selection.

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 two times to turn on the 2-shot bonus indicator for that team.
HOME BONUS OFF	Press the **<BONUS>** key three times 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.

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 PLAYER, IND SUB, and MASS SUB keys 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.

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 using the number pad, and then 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 by following the steps below. **1.** Use the up and down arrow keys to select the player from the list. **2.** Press **<IN GAME>** or **<OUT OF GAME>**. The **S** field on the display changes to show the player's current status. **3.** Use the left and right arrow keys to select the statistic to be changed. **4.** Enter the correct value for the selected statistic using the number pad, and then 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 then press **<DELETE PLAYER>**. Press **<YES>** to remove the player from the roster. Press **<NO>** to decline the deletion 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 using the number pad, and then press **<ENTER>**. Enter the jersey number of the player leaving the game using the number pad, and then press **<ENTER>**.
IND SUB- HOME SUB OK	This message is displayed if no errors are found.

Display	Action
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 using the number pad, and then press **<ENTER>** for each of the five players. Press **<CLEAR>** at any time to exit.
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 then 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 jersey number, and then press **<ENTER>**.

Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

Time Out

Note: Only the time outs configured in the **EDIT SETTINGS** menu 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 full time outs value using the number pad, and then 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 partial time outs value using the number pad, and then press **<ENTER>**.

Score (+1/+2/+3/-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 value using the number pad, and then press **<ENTER>**.

Team Fouls (+1/-1)

Display	Action
TEAM FOULS- EDIT HOME N* N = current setting	Press **<EDIT>** followed by a **<TEAM FOULS>** key for the home or guest team to display the current team foul setting. Enter the correct team fouls value using the number pad, and then press **<ENTER>**.

Period +1

Display	Action
PERIOD- EDIT N* N = current setting	Press **<EDIT>** followed by **<PERIOD +1>** to display the current period setting. Enter the correct period value using the number pad, and then 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 full time out time value using the number pad, and then 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 partial time out time value using the number pad, and then press **<ENTER>**.

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up team names and other player information. **Home Roster** is used as an example below.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** to select the Roster submenu.
HOME- TEAM NAME _OME *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a team name of up to 15 characters and press **<ENTER>**.
HOME- TEAM ABBR _OME *	Type in a team abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the BASKETBALL (LL-2433) insert to continue.**

Display	Action
MENU- HOME EDIT PLAYERS? MENU- HOME PLAYER 01 NN* NN = current setting	Press **<YES>** to assign jersey numbers for all players in the roster. Press **<NO>** 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 stats for all players in the team's roster. Press **<NO>** to cancel clearing the stats.

Display Menu
Refer to **Display Menu (p.16)** for more information.

Time of Day
Refer to **Time of Day (p.17)** for more information.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	From the Main Menu, select the **EDIT SETTINGS** submenu to modify the settings below.

Number of Periods

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

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

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 using the number pad, and then 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.
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 using the number pad, and then press **<ENTER>**.
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 using the number pad, and then press **<ENTER>**.

Shot Clock

Display	Action
SHOT CLOCK-MODE TENTH SECOND? N SHOW TENTHS AT: N 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).
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 using the number pad, and then 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 also 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.

Display	Action
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

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.

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

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 *	Enter the number of full time outs using the number pad, and then press **<ENTER>**.
N = current setting	
TIME OUTS- TIME FULL MM:SS*	Enter the amount of time for a full time out in minutes and seconds using the number pad, and then press **<ENTER>**.
MM:SS = minutes, seconds	
TIME OUTS- MODE WARNING MM:SS*	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 using the number pad, and then press **<ENTER>**.
MM:SS = minutes, seconds	
TIME OUTS- MODE PARTIAL N *	Enter the number of partial time outs using the number pad, and then press **<ENTER>**.
N = current setting	
TIME OUTS- TIME PARTIAL MM:SS*	Enter the amount of time for a partial time out in minutes and seconds using the number pad, and then press **<ENTER>**.
MM:SS = minutes, seconds	
TIME OUTS- MODE PRTL WARN MM:SS*	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 using the number pad, and then press **<ENTER>**.
MM:SS = minutes, seconds	
TIME OUTS-MODE SHOW ON MAIN? N	Press **<YES>** to display the time out time on the LCD and the clock digits of the scoreboard while the time out clock is active, or press **<NO>** to display the time out time on the LCD only.

Display	Action
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 the 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 scores 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, and then 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, and then 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 selects whether or not to show team fouls on line 6 of player stats panels. To display team fouls, press **<YES>**. To not display 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

Refer to **Switch Output (p.18)** for more information.

Blank Main Clock (Elam Ending)

Display	Action
MAIN CLOCK-MODE BLANK? DISABLED MAIN CLOCK-MODE BLANK? OVERTIME MAIN CLOCK-MODE BLANK? 4TH PER MAIN CLOCK-MODE BLANK? ALL PER	This setting will blank the main clock for scoreboard and Real-Time Data outputs during all or specific periods. The running clock, counting either up or down, is still visible on the LCD. **Note:** TV feed clock is **not** blanked when this feature is enabled. Use the left and right arrow keys to change the function: • **DISABLED:** No change to the main clock operation (default). • **OVERTIME:** Main clock scoreboard output and RTD fields 3 and 4 will blank on any period greater than the current Number of Periods (2 or 4) setting (3+ or 5+, respectively). **Note:** The **Shot Clock Auto Blank** feature will be ignored when the main clock is blank. Shot clock will continue to count down after main clock expires; if shot clock is allowed to expire, horn and light strips will still be triggered as configured. **Note:** With **Shot Clock Sync w/ Main** enabled, the main clock must still be started to run the shot clocks. **Note:** The default overtime period length is 5:00. If this time is allowed to expire, horn and light strips will still be triggered as configured. To avoid this, set the overtime length to a very high value, or set the main clock to count up. • **4TH PER:** Same behavior as above, but for any period greater than 3. • **ALL PER:** Main clock is always blank regardless of period.

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
Number of Periods	4				
Tenth of a Second	Yes				
Period Length	8:00				
Break Length	10:00				
Overtime Length	5:00				

Setting	Default	Custom 1	Custom 2	Custom 3	Custom 4
Pre-Game Length	20:00				
Post-Game Length	30:00				
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				
Blank Main Clock	Disabled				

8 Football Operation

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

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing 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 scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-SELECT PARTIAL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** two times to display the configured time for partial time out length. To start the partial time out, press **<ENTER>**. To cancel the partial time out, press **<CLEAR>**.

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** menu when a new code is selected.

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.

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	Press **<SET PLAY CLOCK •>** to display the current play clock time. To accept the current play clock time and return to the game, press **<YES>**. To edit the play clock time length and set the play clock, use the number pad to enter the new time in minutes and seconds, and then press **<ENTER>**. To discard the edited time, press **<CLEAR>** twice to clear the changes and return to the game.
 MM:SS = minutes, seconds	Press **<SET PLAY CLOCK •>** two times to display the configured play clock **Reset 1** time. To accept the play clock **Reset 1** time and return to the game, press **<YES>**. To edit the play clock **Reset 1** time, use the number pad to enter the new time in minutes and seconds, and then press **<ENTER>**. To discard the edited time, press **<CLEAR>** twice to clear the changes and return to the game.
 MM:SS = minutes, seconds	Press **<SET PLAY CLOCK •>** three times to display the configured play clock **Reset 2** time. To accept the play clock **Reset 2** time and return to the game, press **<YES>**. To edit the play clock **Reset 2** time, use the number pad to enter the new time in minutes and seconds, and then press **<ENTER>**. To discard the edited time, press **<CLEAR>** twice to clear the changes and return to the game.

Note: To blank the play clock while keeping the rest of the scores and statistics visible: Press **<SET PLAY CLOCK>**, **<CLEAR>**, and then **<ENTER>**.

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 (p.70)** is off, this function is disabled.

Display	Action
LAST DOWN RECALL Y/N	Press **<RECALL LAST DOWN>** followed by **<YES>** to restore the Ball On, Down, To Go, and Possession values of the previous play. Press **<NO>** to retain the new values that were 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
TO GO EDIT NN* NN = current setting	Enter the yards to go for a first down using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to cancel and return to the game.

Down +1

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

Penalty Flag

Display	Action
FLAG 10:23 ↓ B-21 D-2 T-7 →I	Press **<PENALTY FLAG>** to indicate a penalty on the play. "FLAG" will appear on the LCD (and as RTD field # 78). With **Auto Calculate (p.70)** enabled, 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 (p.70)** setting.

Display	Action
BALL ON NN* NN = current setting	**Auto Calculate DISABLED:** • Enter the field position (yard line) of the ball using the number pad, and then press **<ENTER>**. • Press **<CLEAR>** twice to cancel and return to the game. • Press **<CLEAR>** and **<ENTER>** to blank the Ball On, Down, and To Go sections of the scoreboard.
SIDE OF FIELD 1= ←-- 3= --→ BALL ON NN* BALL ON NN ←| DOWN X TO GO YY* 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 using the number pad, and then 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 select a field to edit. Enter the correct value using the number pad, and then press **<ENTER>**.
TO GO IS ZERO EDIT OR 1ST & 10	This message 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 using the number pad, and then press **<ENTER>**.
BALL ON NN ILLEGAL VALUE NN = current setting	This message 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 using the number pad, and then press **<ENTER>**. The **DOWN** is automatically set to 1, and the **TO GO** yards is set to 10.

First Down

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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-HOME PARTIAL N N = current setting	Press **<TIME OUT>** two times to display the number of partial time outs remaining. To start the partial time out, press **<ENTER>**. To cancel the partial time out, press **<CLEAR>**.
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 time outs or partial time outs remaining.

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 (p.70)** setting.

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.

Display	Action
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>**. Refer to **Ball On (p.63)** 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, 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.

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 using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to cancel 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	The 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 using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to cancel 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	The total passing yards displays briefly.

First Downs +1

Display	Action
HOME + 1 FIRST DOWNS NN NN = current setting	Press the appropriate home or guest **<FIRST DOWNS +1>** key to manually increment the number of first downs. Total first downs displays briefly.

Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

Time Out

Note: Only the time outs configured in the **EDIT SETTINGS** menu 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 full time outs value using the number pad, and then 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 partial time outs value using the number pad, and then 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 value using the number pad, and then 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 value using the number pad, and then 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 full time out time value using the number pad, and then 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 partial time out time value using the number pad, and then press **<ENTER>**.

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu
Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster
Use the **Home Roster** and **Guest Roster** menus to set up team names. **Home Roster** is used as an example below.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** to select the Roster submenu.
HOME- TEAM NAME _OME *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a team name of up to 15 characters and press **<ENTER>**.
HOME- TEAM ABBR _OME *	Type in a team abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the FOOTBALL (LL-2437) insert to continue.**

Display Menu
Refer to **Display Menu (p.16)** for more information.

Time of Day
Refer to **Time of Day (p.17)** for more information.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	From the Main Menu, select the **EDIT SETTINGS** submenu to modify the settings below.

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

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 using the number pad, and then 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.
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 using the number pad, and then press **<ENTER>**.
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 using the number pad, and then press **<ENTER>**.

Play Clock

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

- 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.
- 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-TIME RESET 1 MM:SS * MM:SS = minutes, seconds	Enter the correct amount of time for **Reset 1** in minutes and seconds using the number pad, and then press **<ENTER>**.
PLAY CLOCK-TIME RESET 2 MM:SS * MM:SS = minutes, seconds	Enter the correct amount of time for **Reset 2** in minutes and seconds using the number pad, and then press **<ENTER>**.
PLAY CLOCK RESET ON STOP? N	Press **<YES>** to automatically reset the play clock when the **<STOP>** button on the remote play clock control console is pressed, or press **<NO>** to disable this feature.

Time Outs

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.

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

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 using the number pad, and then 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 using the number pad, and then press **<ENTER>**.
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 using the number pad, and then press **<ENTER>**.
TIME OUTS- MODE PARTIAL N * N = current setting	Enter the number of partial time outs using the number pad, and then 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 using the number pad, and then press **<ENTER>**.
TIME OUTS-MODE SHOW ON MAIN? N	Press **<YES>** to display the time out time on the LCD and the clock digits of the scoreboard while the time out clock is active, or press **<NO>** to display the time out time on the LCD only.

Center Field Yard Line

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

Auto Calculate

Display	Action
BALL ON -MODE AUTO CALCULATE N	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
FIRST DOWN YARDS 1=10* 2=15	Press **<1>** to set the number of yards to first down at 10 yards . Press **<2>** to set the number of yards to first down at 15 yards.

Number of Downs

Display	Action
NUMBER OF DOWNS N* N = current setting	Enter the correct number of downs using the number pad, and then 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.

First Possession Ball On

Display	Action
1ST POS BALL ON YARDS NN * NN = current setting	Enter the desired yard line (from 1 to current Center Field value) using the number pad, and then press **<ENTER>**. **Note:** This value is used with the **Auto Calculate** function to set the Ball On value when team possession changes.

Switch Output

Refer to **Switch Output (p.18)** for more information.

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
Tenth of a Second	No				
Period Length	12:00				
Break Length	20:00				
Overtime Length	5:00				
Pre-Game Length	20:00				
Post-Game Length	30:00				
Play Clock Reset 1	0:40				
Play Clock Reset 2	0:25				
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				
First Pos Ball On	20				
Switch Output	1-Clock = 0				

9 Hockey/Lacrosse/Handball Operation

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

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing 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 scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

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.

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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-SELECT PARTIAL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** two times to display the configured time for partial time out length. To start the partial time out, press **<ENTER>**. To cancel the partial time out, press **<CLEAR>**.

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 Penalty, Major Penalty

The **<MINOR PENALTY>** and **<MAJOR PENALTY>** keys are used to enter the penalty time when **<PLAYER PENALTY>** is selected. Refer to **Player Penalty (p.75)**.

Period +1

Display	Action
PERIOD +1 N N = current setting	Press **<PERIOD +1>** to increment the period number. The current 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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-HOME PARTIAL N N = current setting	Press **<TIME OUT>** two times to display the number of partial time outs remaining. To start the partial time out, press **<ENTER>**. To cancel the partial time out, press **<CLEAR>**.

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 time outs or partial time outs remaining.

Player Penalty

Display	Action
HOME PLYR/PEN 1 PNN PN MM:SS 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 select the desired penalty, and then press **<ENTER>**. Enter the jersey number of the player with the penalty using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to cancel and return to the game.
	The default penalty time initially displayed is the minor penalty value as defined in the **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. **Note:** Press **<CLEAR>** if **<MINOR PENALTY>** or **<MAJOR PENALTY>** have been pressed too many times.

Set Main Clock

Display	Action
MAIN CLOCK -SET CURR MM:SS:T * 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 using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to cancel and return to the game.
ADJUST PENALTY TIMERS Y/N?	This message appears if there are penalty times and **<START>** has been pressed at least once after setting the period time. Press **<YES>** to adjust all penalty timers to the correct time based on the time entered for the main clock, or press **<NO>** to not change the penalty timers.

Recall Shot Time

Display	Action
	Press **<RECALL SHOT TIME>** followed by **<YES>** to recall the shot time that was remaining before the last shot clock reset was pressed. To cancel the recall, press **<NO>**.

Set Shot Time

Display	Action
 MM:SS = minutes, seconds	Press **<SET SHOT TIME>** to display the current shot clock time. To accept the current shot clock time and return to the game, press **<YES>**. To edit the shot time, use the number pad to enter the new shot time in minutes and seconds, and then press **<ENTER>**. To discard the edited time, press **<CLEAR>** twice to clear the changes and return to the game.
 MM:SS = minutes, seconds	Press **<SET SHOT TIME>** two times to display the configured shot clock **Reset 1** time. To accept the shot clock **Reset 1** time and return to the game, press **<YES>**. To edit the shot clock **Reset 1** time, use the number pad to enter the new time in minutes and seconds, and then press **<ENTER>**. To discard the edited time, press **<CLEAR>** twice to clear the changes and return to the game. **Note:** The **Reset 1** value is set in the **EDIT SETTINGS** menu.
 MM:SS = minutes, seconds	Press **<SET SHOT TIME>** three times to display the configured shot clock **Reset 2** time. To accept the shot clock **Reset 2** time and return to the game, press **<YES>**. To edit the shot clock **Reset 2** time, use the number pad to enter the new time in minutes and seconds, and then press **<ENTER>**. To discard the edited time, press **<CLEAR>** twice to clear the changes and return to the game. **Note:** The **Reset 2** value is set in the **EDIT SETTINGS** menu.

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 +/1 **<SCORE>**, **<SHOTS ON GOAL>**, **<SAVES>**, **<GROUND BALLS>***, and **<FACE OFFS DRAW CTRL>*** 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 value using the number pad, and then press **<ENTER>**. The LCD shows which key was pressed and the new value for 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 cancel 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 select the correct penalty, and then press **<ENTER>**. Press **<CLEAR>** to cancel and return to the game.

Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

Time Out

> **Note:** Only the time outs configured in the **EDIT SETTINGS** menu 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 full time outs value using the number pad, and then 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 partial time outs value using the number pad, and then 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 below.

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

Display	Action
TEAM SCORE- EDIT HOME NNN* NNN = current setting	Press **<EDIT>** and the appropriate statistic key for the home or guest team to display the current setting. Enter the correct value using the number pad, and then press **<ENTER>**.

Period +1

Display	Action
PERIOD- EDIT N* N = current setting	Press **<EDIT>** followed by **<PERIOD +1>** to display the current period setting. Enter the correct period value using the number pad, and then 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 full time out time value using the number pad, and then 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 partial time out time value using the number pad, and then press **<ENTER>**.

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up team names. **Home Roster** is used as an example below.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** to select the Roster submenu.
HOME- TEAM NAME _OME *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a team name of up to 15 characters and press **<ENTER>**.
HOME- TEAM ABBR _OME *	Type in a team abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the HOCKEY (LL-2436) insert to continue.**

Display Menu
Refer to **Display Menu (p.16)** for more information.

Time of Day
Refer to **Time of Day (p.17)** for more information.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	From the Main Menu, select the **EDIT SETTINGS** submenu to modify the settings below.

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

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 using the number pad, and then 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.
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 using the number pad, and then press **<ENTER>**.
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 using the number pad, and then press **<ENTER>**.

Number of Periods

Display	Action
NO. OF PERIODS=N 3 OR 4? N = current setting	The Number of Periods setting indicates whether the game consists of three or four periods. Press **<3>** or **<4>** on the number pad to select the desired 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 using the number pad, and then 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 also 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 using the number pad, and then press **<ENTER>**. The minor penalty time is used as the default when first entering the player penalty function.
PENALTY TIME MAJOR MM:SS* MM:SS = minutes, seconds	Enter the correct default time for a major penalty in minutes and seconds on the number pad and press **<ENTER>**.

Time Outs

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.

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

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 using the number pad, and then 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 using the number pad, and then press **<ENTER>**.
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 using the number pad, and then press **<ENTER>**.
TIME OUTS- MODE PARTIAL N * N = current setting	Enter the number of partial time outs using the number pad, and then 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 using the number pad, and then press **<ENTER>**.
TIME OUTS-MODE SHOW ON MAIN? N	Press **<YES>** to display the time out time on the LCD and the clock digits of the scoreboard while the time out clock is active, or 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 the 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

Refer to **Switch Output (p.18)** for more information.

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
Tenth of a Second	Yes				
No. of Periods	3				
Period Length	15:00				
Break Length	10:00				
Overtime Length	5:00				
Pre-Game Length	20:00				
Post-Game Length	30:00				
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				

10 Soccer Operation

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 **DWG-124690**
Insert; LL-2440 A/S 5000, Soccer **DWG-125215**
Insert; LL-2441 A/S 5000, Team Name **DWG-125290**

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing 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 scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

Game Clock – Counting Up with Preset Stop Times

Use the following setup to make the game clock count up and stop at preset times.

Display	Action
MAIN CLOCK- UP 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.

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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-SELECT PARTIAL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** two times to display the configured time for partial time out length. To start the partial time out, press **<ENTER>**. To cancel the partial time out, press **<CLEAR>**.

Half +1

Display	Action
HALF: +1 N N = current setting	Press **<HALF +1>** to increment the half number. The current half number displays 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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-HOME PARTIAL N N = current setting	Press **<TIME OUT>** two times to display the number of partial time outs remaining. To start the partial time out, press **<ENTER>**. To cancel the partial time out, press **<CLEAR>**.
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 time outs or partial time outs remaining.

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.

Shots on Goal, Saves, Corner Kicks, Fouls, Penalty Kicks

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 below.

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

Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

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 value using the number pad, and then 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 full time out time value using the number pad, and then 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 partial time out time value using the number pad, and then press **<ENTER>**.

Time Out

Note: Only the time outs configured in the **EDIT SETTINGS** menu 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 full time outs value using the number pad, and then 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 partial time outs value using the number pad, and then press **<ENTER>**.

Score (+1/-1)

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

Shots on Goal, Saves, Corner Kicks, Fouls, Penalty Kicks

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 below.

Display	Action
SAVES: EDIT HOME NN* NN = current setting	Press **<EDIT>** followed by the appropriate statistic key to display the current setting. Enter the correct value using the number pad, and then press **<ENTER>**.

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up team names. **Home Roster** is used as an example below.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** to select the Roster submenu.
HOME- TEAM NAME _OME *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a team name of up to 15 characters and press **<ENTER>**.
HOME- TEAM ABBR _OME *	Type in a team abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the SOCCER (LL-2440) insert to continue.**

Display Menu

Refer to **Display Menu (p.16)** for more information.

Time of Day

Refer to **Time of Day (p.17)** for more information.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	From the Main Menu, select the **EDIT SETTINGS** submenu to modify the settings below.

Main Clock

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

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 using the number pad, and then 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.
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 using the number pad, and then press **<ENTER>**.

Corner Kicks/Saves/Fouls

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

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.

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

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 using the number pad, and then 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 using the number pad, and then press **<ENTER>**.

Display	Action
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 using the number pad, and then press **<ENTER>**.
TIME OUTS- MODE PARTIAL N * N = current setting	Enter the number of partial time outs using the number pad, and then 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 using the number pad, and then press **<ENTER>**.
TIME OUTS-MODE SHOW ON MAIN? N	Press **<YES>** to display the time out time on the LCD and the clock digits of the scoreboard while the time out clock is active, or press **<NO>** to display the time out time on the LCD only.

Penalty/TOL

Display	Action
DISPLAY MODE PENALTY* TOL	Select whether or not to display the penalty or TOL on the penalty digits. Use the left/right arrow keys or any number key to change the selection, and then press **<ENTER>**.

Switch Output

Refer to **Switch Output (p.18)** for more information.

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
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				

11 Tennis Operation

Sport Insert: LL-2483

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

Reference Drawings:

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

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing 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 scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

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

Games Won +1

Display	Action
GAMES WON + 1 SET N TOP XX 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 +1

Display	Action
SETS WON + 1 TOP N 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.

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

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.

Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

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. Enter the correct point value using the number pad, and then press **<ENTER>**.

Games Won

Display	Action
GAMES WON EDIT SET N TOP XX * N = current set XX = games won	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, and then press **<ENTER>**.

Set +1

Display	Action
SET EDIT N* N = current setting	Press **<EDIT>** followed by **<SET +1>** to edit the current set number. Enter the correct set value using the number pad, and then press **<ENTER>**.

Match Number +1

Display	Action
MATCH- EDIT NNNN* NNNN = current setting	Press **<EDIT>** followed by **<MATCH NUMBER +1>** to edit the current match number. Enter the correct match value using the number pad, and then press **<ENTER>**.

Matches Won +1

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. Enter the correct matches won value using the number pad, and then press **<ENTER>**.

Sets Won +1

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 selected team. Enter the correct sets won value using the number pad, and then press **<ENTER>**.

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

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 below.

Display	Action
MENU- ROSTER SELECT TOP 1	Use the left/right arrow keys to select **Top 1**, **Top 2**, **Bot 1**, or **Bot 2**, and then press **<ENTER>**. Press **<CLEAR>** to cancel and resume the game in progress.

Display	Action
TOP - TEAM NAME _OP NAME1 *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a name of up to 15 characters and press **<ENTER>**. **Reinsert the TENNIS (LL-2483) insert to continue.**

Display Menu
Refer to **Display Menu (p.16)** for more information.

Time of Day
Refer to **Time of Day (p.17)** for more information.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	From the Main Menu, select the **EDIT SETTINGS** submenu to modify the settings below.

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

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 using the number pad, and then press **<ENTER>**

Switch Output
Refer to **Switch Output (p.18)** for more information.

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
Main Clock Period Length	00:00				
Switch Output	1-Clock = 0				

12 Track Operation

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 **DWG-124690**
Insert; LL-2439 A/S 5000, Track **DWG-125094**
Insert; LL-2441 A/S 5000, Team Name **DWG-125290**

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing 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: | | | | |

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 type setting 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 interfaces 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 these timers must be set to 9600.

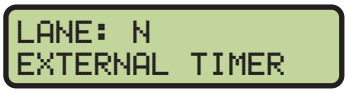
If the code number for a scoreboard is unknown, refer to **Appendix C**. If the scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

Track Keys

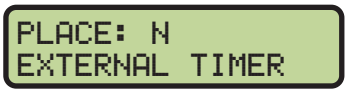
Reset

Display	Action
TIME MM:SS.TH ↑ RESET CLOCK Y/N? 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 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 Score, Guest 1 Score

Display	Action
 NNN = current setting	Press **<HOME SCORE •>** or **<GUEST 1 SCORE •>**, enter the new value of score for the particular team using the number pad, and then press **<ENTER>**. The LCD shows which key was pressed and the new value for the team score of the corresponding team.

Guest 2 Score (Event), Guest 3 Score (Heat)

Note: The function of the **<GUEST 2 SCORE (EVENT) •>** and **<GUEST 3 SCORE (HEAT) •>** keys depends on the **GUEST 2, 3 VALUE** in the **EDIT SETTINGS** menu.

Display	Action
 NNN = current setting	If the **GUEST 2, 3 VALUE** is set to **EVNT/HT** AND the manual timing code is selected, the LCD will display the current event number when **<GUEST 2 SCORE (EVENT) •>** is pressed or the current heat number when **<GUEST 3 SCORE (HEAT) •>** is pressed. Enter the new value using the number pad, and then press **<ENTER>**.

Display	Action
EVENT: NNN EXTERNAL TIMER NNN = current setting	This message is displayed on the LCD if the **GUEST 2, 3 VALUE** is set to **EVNT/HT** AND an external timer code is selected. **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 VALUE** to **SCORE**.
TEAM SCORE: EDIT GUEST 2 NNN* NNN = current setting	If the **GUEST 2, 3 VALUE** is set to **SCORE** AND the manual timing code is selected, the LCD will display the current guest score when **<GUEST 2 SCORE (EVENT) •>** or **<GUEST 3 SCORE (HEAT) •>** is pressed. Enter the new value using the number pad, and then 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 teams. The LCD shows which key was pressed and the new value for the team score of the corresponding team. **Note:** If the **GUEST 2, 3 VALUE** is set to **EVNT/HT** AND the manual timing code is selected, pressing **<SCORE +1>** will increment the event/heat number.

Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

Score

Display	Action
TEAM SCORE-EDIT HOME NNN* NNN = current settings	Press **<EDIT>** followed by any **<SCORE +1>** key to display the current team score setting. Enter the correct team score using the number pad, and then press **<ENTER>**. **Note:** If the **GUEST 2, 3 VALUE** is set to **EVNT/HT** AND the manual timing code is selected, pressing **<EDIT>** followed by the respective **<SCORE +1>** will edit the event/heat number.

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up team names. **Home Roster** is used as an example below.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** to select the Roster submenu.
HOME- TEAM NAME _OME *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a team name of up to 15 characters and press **<ENTER>**.
HOME- TEAM ABBR _OME *	Type in a team abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the TRACK (LL-2439) insert to continue.**

Display Menu

Refer to **Display Menu (p.16)** for more information.

Time of Day

Refer to **Time of Day (p.17)** for more information.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	From the Main Menu, select the **EDIT SETTINGS** submenu to modify the settings below.

Guest 2 Score (Event), Guest 3 Score (Heat) Key Function

Display	Action
GUEST 2,3 VALUE SCORE↔EVNT/HT	This determines the function of the **<GUEST 2 SCORE (EVENT) •>** or **<GUEST 3 SCORE (HEAT) •>** keys. When **EVNT/HT** is selected, the scoreboard will display event/heat information. If an external timer code is selected, the keys will be disabled. When **SCORE** is selected, the scoreboard will display scores for Guest 2 and Guest 3. Scores are set using their respective keys. Press the left/right arrow keys to change the setting, and then press **<ENTER>**. **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

Refer to **Switch Output (p.18)** for more information.

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
Guest 2,3 Value	EVNT/HT				
Switch Output	1-Clock = 0				

13 Volleyball Operation

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

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing 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 scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-SELECT PARTIAL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** two times to display the configured time for partial time out length. To start the partial time out, press **<ENTER>**. To cancel the partial time out, press **<CLEAR>**.

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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-HOME PARTIAL N N = current setting	Press **<TIME OUT>** two times to display the number of partial time outs remaining. To start the partial time out, press **<ENTER>**. To cancel the partial time out, press **<CLEAR>**.
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 time outs or partial time outs remaining.

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 below.

Display	Action
SET NO: +1 N 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
TEAM 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.

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 below.

Display	Action
SETS WON: +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.

Aces +1, Kills +1, Blocks +1, Digs +1

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 below.

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 using the number pad, and then 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 indicator for that team.

Display	Action
HOME SERVE OFF	To turn off the indicator, press the same **<SERVE>** key a second time, or press the opposite **<SERVE>** 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.

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 PLAYER, IND SUB, and MASS SUB keys 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.
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 using the number pad, and then 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.

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 by following the steps below. **1.** Use the up and down arrow keys to select the player from the list. **2.** Press **<IN GAME>** or **<OUT OF GAME>**. The **S** field on the display changes to show the player's current status. **3.** Use the left and right arrow keys to select the statistic to be changed. The display shifts to show all of the statistic fields. **4.** Enter the correct value for the selected statistic using the number pad, and then 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 then press **<DELETE PLAYER>**. Press **<YES>** to remove the player from the roster. Press **<NO>** to decline the deletion 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 using the number pad, and then press **<ENTER>**. Enter the jersey number of the player leaving the game using the number pad, and then 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.

Display	Action
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 using the number pad, and then press **<ENTER>** for each of the five players. Press **<CLEAR>** at any time to exit.
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 then 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 jersey number, and then press **<ENTER>**.

Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

Time Out

Note: Only the time outs configured in the **EDIT SETTINGS** menu 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 full time outs value using the number pad, and then 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 partial time outs value using the number pad, and then press **<ENTER>**.

Score (+1/-1)

Display	Action
TEAM SCORE: EDIT HM CURR: NNN* 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 value using the number pad, and then press **<ENTER>**.

Match Number +1, Sets +1

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

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 value using the number pad, and then 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 below.

Display	Action
SETS WON: EDIT HOME NN* NN = current setting	Press **<EDIT>** followed by the appropriate statistic key to display the current setting. Enter the correct value using the number pad, and then press **<ENTER>**.

Aces +1, Kills +1, Blocks +1, Digs +1

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 below.

Display	Action
ACES: EDIT HOME NNN* NNN = current setting	Press **<EDIT>** followed by the appropriate statistic key to display the current setting. Enter the correct value using the number pad, and then 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 full time out time value using the number pad, and then 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 partial time out time value using the number pad, and then press **<ENTER>**.

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up team names and other player information. **Home Roster** is used as an example below.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** to select the Roster submenu.
HOME- TEAM NAME _OME *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a team name of up to 15 characters and press **<ENTER>**.

Display	Action
HOME- TEAM ABBR _OME *	Type in a team abbreviation of up to 10 characters 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 jersey numbers for all players in the roster. Press **<NO>** 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 stats for all players in the team's roster. Press **<NO>** to cancel clearing the stats.

Display Menu
Refer to **Display Menu (p.16)** for more information.

Time of Day
Refer to **Time of Day (p.17)** for more information.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	From the Main Menu, select the **EDIT SETTINGS** submenu to modify the settings below.

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

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.

Display	Action
MAIN CLOCK-TIME PERIOD MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds using the number pad, and then 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.
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 using the number pad, and then press **<ENTER>**.

Time Outs

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.

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

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 using the number pad, and then 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 using the number pad, and then press **<ENTER>**.
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 using the number pad, and then press **<ENTER>**.
TIME OUTS- MODE PARTIAL N * N = current setting	Enter the number of partial time outs using the number pad, and then 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 using the number pad, and then press **<ENTER>**.
TIME OUTS-MODE SHOW ON MAIN? N	Press **<YES>** to display the time out time on the LCD and the clock digits of the scoreboard while the time out clock is active, or press **<NO>** to display the time out time on the LCD only.

Display	Action
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 the 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 shown on the statistic displays. Only two of the four statistics can be selected for display at any given time.

- **User Def 1** displays the statistics in the Foul digits.
- **User Def 2** displays the statistics in the Points 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/right arrow keys to scroll to **ACES**. • Press **<2>** or use the left/right arrow keys to scroll to **KILLS**. • Press **<3>** or use the left/right arrow keys to scroll to **BLOCKS**. • Press **<4>** or use the left/right arrow keys to scroll to **DIGS**. Press **<ENTER>** to display the selected stat on the scoreboard. Press **<CLEAR>** to cancel and return to the game.

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

Refer to **Switch Output (p.18)** for more information.

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
Tenth of a Second	No				
Period Length	60:00				
Break Length	3:00				
Pre-Game Length	20:00				
Post-Game Length	30:00				
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				

14 Wrestling Operation

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 ..... **DWG-124686**
Block Diagram: AS5000 BB- VB and WR #3 ..... **DWG-124688**
Insert; LL-2435 A/S 5000, Wrestling **DWG-124701**
Insert; LL-2441 A/S 5000, Team Name **DWG-125290**
Block Diagram- A/S 3000 or 5000 BB- VB and WR #2 ..... **DWG-125415**

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing 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 scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

Wrestling Keys

Match Number +1

Display	Action
MATCH- +1 NNN NNN = current setting	Press **<MATCH +1>** to increment the match number. The match number displays briefly.
WEIGHT CLASS 01 NNN NNN = weight class	If weight classes are enabled, a prompt to select a weight class will be shown on the LCD. Use the arrow keys to select a weight class, and then 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. The 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 using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to cancel 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 to display the configured time for each clock period. 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 using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to cancel and return to the game.

Home Advantage, Guest Advantage, Stop Advantage Clock

Display	Action
TIME M:SS ↓ AD TM M:SS.T >G 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 still shows <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. Total score displays 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 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
 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 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
 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.

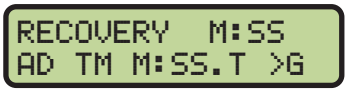
Reset Match

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 enabled, it will ask for the winner. Use the arrow keys to select HOME or GUEST, and then press **<ENTER>**. Enter the points for the win, and then 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 the 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 a 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.

Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

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 using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to cancel and return to the 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 using the number pad, and then press **<ENTER>**. Press **<CLEAR>** twice to cancel and return to the game.

Blood Time

Display	Action
BLOOD TIME HOME MM:SS* MM:SS.T = minutes, seconds, tenths of a second	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 using the number pad, and then press the **<ENTER>** key.

Injury Time

Display	Action
INJURY TIME HOME MM:SS* MM:SS.T = minutes, seconds, tenths of a second	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 using the number pad, and then press the **<ENTER>** key.

Match Number, Period, Team Score, Match Score

The home and guest **<MATCH NUMBER>**, **<PERIOD>**, **<TEAM SCORE>**, and **<MATCH SCORE>** keys are all edited in the same way. **<TEAM SCORE +1>** is used as an example below.

Display	Action
TEAM SCORE- EDIT HOME NNN* NNN = current setting	Press **<EDIT>** followed by the appropriate statistic key to display the current setting. Enter the correct value using the number pad, and then press **<ENTER>**.

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up team names. **Home Roster** is used as an example below.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** to select the Roster submenu.
HOME- TEAM NAME _OME *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a team name of up to 15 characters and press **<ENTER>**.
HOME- TEAM ABBR _OME *	Type in a team abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the WRESTLING (LL-2435) insert to continue.**

Weight Class

Use the **WEIGHT CLASS** menu to enter the weight class values.

Display	Action
MENU- MAIN ENTER WEIGHT CLASS	Press **<ENTER>** to select the Weight Class submenu.
WEIGHT CLASS 01*NNN WIN WEIGHT CLASS 01 NNN* WIN WEIGHT CLASS 01 NNN WIN*HX WEIGHT CLASS 01 NNN WIN HX* 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/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 then 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 then press **<ENTER>**. Enter the score for the winner, and then press **<ENTER>**.

Display Menu

Refer to **Display Menu (p.16)** for more information.

Time of Day

Refer to **Time of Day (p.17)** for more information.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	From the Main Menu, select the **EDIT SETTINGS** submenu to modify the settings below.

Main Clock

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

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-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 using the number pad, and then 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.

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
BLOOD TIME RESET MM:SS* MM:SS = minutes, seconds	Enter the cumulative time for blood time outs in minutes and seconds using the number pad, and then press **<ENTER>**.
INJURY TIME RESET MM:SS* MM:SS = minutes, seconds	Enter the cumulative time for injury time outs in minutes and seconds using the number pad, and then press **<ENTER>**.
BLOOD/INJURY SHOWN ON MAIN? N	Press **<YES>** to display the blood, injury, and recovery times on the LCD and the main clock digits of the scoreboard while the blood, injury, or recovery clock is active. Press **<NO>** to display the times 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 whenever a recovery clock is activated.

Display	Action
RECOVERY TIME RESET MM:SS* MM:SS = minutes, seconds	Enter the time for recovery time outs in minutes and seconds using the number pad, and then 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.

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 = current setting	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

Refer to **Switch Output (p.18)** for more information.

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
Tenth of a Second	No				
Period Length	3:00				
Period 2 Length	3:00				
Period 3 Length	3:00				
Period 4 Length	3:00				
Period 5 Length	3:00				
Period 6 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				

15 Event Counter Operation

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 ..... **DWG-58047**

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing until a replacement arrives.

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.

Day and Time Event Countdown Codes

Display	Action
DAYS NNN HH:MM:SS.T ↓ DAYS NNN HH:MM:SS.T ↑ NNN = current value HH:MM:SS.T = hours, minutes, seconds, tenths of a second	If set to count down, the number of days, hours, minutes, seconds, and tenths of a second remaining until the event occurs are shown on the main LCD screen. If set to count up, the number of days, hours, minutes, seconds, and tenths of a second elapsed since the event occurred are shown on the main LCD screen.

Value/Days

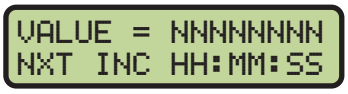
Display	Action
 NNN = current value	Press **<VALUE/DAYS •>**, enter the number of days for countdown (0 – 999) using the number pad, and then press **<ENTER>**.

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.

Time Based Counting Codes

Display	Action
 NNNNNNNN = 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
 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
 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
 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.

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 NNNNNNNN = 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.

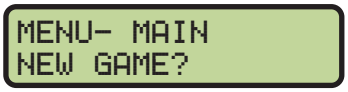
Decrement Value

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.

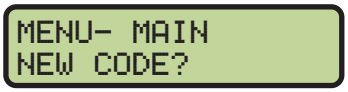
Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

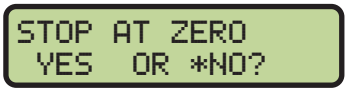
Display	Action
	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Stop at Zero

The following setting is only displayed in the Day and Time Event Countdown and Time Based Counter codes.

Display	Action
	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.

16 Boxing Operation

Sport Insert: 0G-96892 (Code 0291)

The Sport and Team Name Insert drawings are located in **Appendix B**.

Reference Drawings:

Insert, Boxing Code 291 ..... **DWG-96892**
Insert; LL-2441 A/S 5000, Team Name **DWG-125290**

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing until a replacement arrives.

Boxing Keys

Set Round Time/Set Rest Time

<SET ROUND TIME •> and **<SET REST TIME •>** have similar functions. **<SET ROUND TIME •>** is used as an example below.

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* NN = current setting	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.

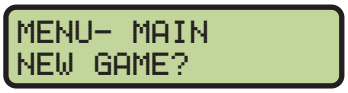
Round Number +1

Display	Action
ROUND- +1 NN NN = current setting	Press **<ROUND NUMBER +1>** to increment the current round number by one.

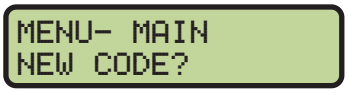
Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up competitor names. **Home Roster** is used as an example below.

Display	Action
	Press **<ENTER>** to select the Roster submenu.
	Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings. Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a name of up to 15 characters and press **<ENTER>**.
	Type in an abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the BOXING (0G-96892) insert to continue.**

Display Menu

Refer to **Display Menu (p.16)** for more information.

Time of Day

Refer to **Time of Day (p.17)** for more information.

Auto Time

Use the Auto Time option 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
	Press **<1>** to turn ON the Auto Time selection. Press **<2>** to turn OFF the Auto Time selection.

Edit Settings

Though the **<EDIT>** key is not disabled for this sport code, the buttons available on the insert may be used to edit the values.

17 Strikeout Count Operation

Sport Insert: 0G-163409 (Code 5099)

The Sport Insert drawing is located in **Appendix B**.

Reference Drawings:

Insert; Strike Outs **DWG-163409**

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing until a replacement arrives.

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: EDIT 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

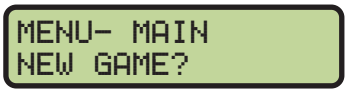
The display control keys will send the selected frame command through the RTD port. Pressing these keys will initiate the display of that frame on the Venus matrix control system. The frames will be sent as Enhanced RTD Fields and have the following protocols: 19200 baud, 8 data bits, and no parity. The frame number for each of the keys is listed on the following page:

<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)

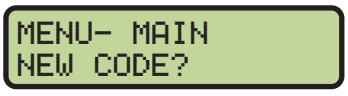
Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

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 and return to the game.

18 Cricket Operation

Sport Insert: 0G-319507 (Code 5598)

The Sport and Team Name Insert drawings are located in **Appendix B**.

Reference Drawings:

Insert; LL-2441 A/S 5000, Team Name **DWG-125290**
Insert; Cricket, A/S 5000 Series **DWG-319507**

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing until a replacement arrives.

Cricket Competitor Status

Display	Action
A-XX T- 0 B-XX NN W-0 OV-40 NN NN = batsman numbers XX = batsman scores	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-.

Cricket Keys

Wickets, Overs, Extras

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* NNN = 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* NN = 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
BOWLER A NN* 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
LAST MAN NNN* 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 setting	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 setting	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
 NNN = current setting	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.

Team Out/Declare

Display	Action
	Press the **<TEAM OUT/DECLARE>** key when the team is out or if they want to declare the end of their inning. Press **<YES>** to declare the team out. Press **<NO>** 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.

Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

Wickets, Overs, Extras

The +/- **<WICKETS>**, **<OVERS>**, and **<EXTRAS>** keys are edited in the same way. **<OVERS +1>** is used as an example below.

Display	Action
OVERS: EDIT NNN* NNN = current setting	Press **<EDIT>** followed by the appropriate statistic key to edit. Enter the correct value using the number pad, and then press **<ENTER>**.

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up team names. **Home Roster** is used as an example below.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** to select the Roster submenu.

Display	Action
HOME- TEAM NAME _OME *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a name of up to 15 characters and press **<ENTER>**.
HOME- TEAM ABBR _OME *	Type in an abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the CRICKET (0G-319507) insert to continue.**

Inning Settings

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

Refer to **Time of Day (p.17)** for more information.

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
Overs per inning	40				

19 Water Polo Operation

Sport Insert: 0G-178439 (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..... **DWG-124689**
Insert; LL-2441 A/S 5000, Team Name..... **DWG-125290**
Insert; A/S 5000, Water Polo..... **DWG-178439**

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing until a replacement arrives.

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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.

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.

Period +1

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

Shot Time

Display	Action
SHOT CLOCK-EDIT CURR MM:SS* MM:SS = minutes, seconds	Press **<SHOT TIME •>** to display the current shot clock time. To accept the current shot clock time and return to the game, press **<YES>**. To edit the shot time, use the number pad to enter the new shot time in minutes and seconds, and then press **<ENTER>**. To discard the edited time, press **<CLEAR>** twice to clear the changes and return to the game.
SHOT CLOCK-EDIT RESET 1 MM:SS* MM:SS = minutes, seconds	Press **<SHOT TIME •>** two times to display the configured shot clock **Reset 1** time. To accept the shot clock **Reset 1** time and return to the game, press **<YES>**. To edit the shot clock **Reset 1** time, use the number pad to enter the new time in minutes and seconds, and then press **<ENTER>**. To discard the edited time, press **<CLEAR>** twice to clear the changes and return to the game. **Note:** The **Reset 1** value is set in the **EDIT SETTINGS** menu.
SHOT CLOCK-EDIT RESET 2 MM:SS* MM:SS = minutes, seconds	Press **<SHOT TIME •>** three times to display the configured shot clock **Reset 2** time. To accept the shot clock **Reset 2** time and return to the game, press **<YES>**. To edit the shot clock **Reset 2** time, use the number pad to enter the new time in minutes and seconds, and then press **<ENTER>**. To discard the edited time, press **<CLEAR>** twice to clear the changes and return to the game. **Note:** The **Reset 2** value is set in the **EDIT SETTINGS** menu.

Recall Shot Time

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

Score (+1/-1)

Display	Action
TEAM SCORE- +1 HOME NNN NNN = current setting	Press the appropriate score key to increment or decrement the total score for the home or guest team. The LCD shows which key was pressed and the new value for 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 time out is selected. 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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-HOME PARTIAL N N = current setting	If any number of partial time outs are configured, pressing **<TIME OUT>** two times will display the number of partial time outs remaining. To start the partial time out, press **<ENTER>**. To cancel the partial time out, press **<CLEAR>**.
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 time outs remaining.

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. Using 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
	Using the number pad, enter the penalty number of this penalty, and then press **<ENTER>**.

Delete Penalty

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

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

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 cancel and return to the game.

Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

Time Out

Note: Only the time outs configured in the **EDIT SETTINGS** menu 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 full time outs value using the number pad, and then 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 partial time outs value using the number pad, and then press **<ENTER>**.

Score (+1/-1)

The home and guest **<SCORE>** keys are all edited in the same way. **<SCORE +1>** is used as an example below.

Display	Action
TEAM SCORE- EDIT HOME NNN* NNN = current setting	Press **<EDIT>** and the appropriate **SCORE** key for the home or guest team to display the current setting. Enter the correct value using the number pad, and then press **<ENTER>**.

Period +1

Display	Action
PERIOD- EDIT N* N = current setting	Press **<EDIT>** followed by **<PERIOD +1>** to display the current period setting. Enter the correct period value using the number pad, and then 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 full time out time value using the number pad, and then 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 partial time out time value using the number pad, and then press **<ENTER>**.

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up team names. **Home Roster** is used as an example below.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** to select the Roster submenu.
HOME- TEAM NAME _OME *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a team name of up to 15 characters and press **<ENTER>**.
HOME- TEAM ABBR _OME *	Type in a team abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the WATER POLO (0G-178439) insert to continue.**

Display Menu

Refer to **Display Menu (p.16)** for more information.

Time of Day

Refer to **Time of Day (p.17)** for more information.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	From the Main Menu, select the **EDIT SETTINGS** submenu to modify the settings below.

Main Clock

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

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 using the number pad, and then 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.
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 using the number pad, and then press **<ENTER>**.
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 using the number pad, and then press **<ENTER>**.

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 using the number pad, and then 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 also 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.
SHOT CLOCK-MODE 0= STOPS MAIN N	Press **<YES>** to stop the main clock when the shot clock time equals 0. Press **<NO>** to keep the main clock running when shot time equals 0.

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 using the number pad, and then press **<ENTER>**. The penalty time is used as the default when pressing the **<PLAYER PENALTY START •>** key.

Time Outs

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

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

The number of time outs 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 using the number pad, and then 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 using the number pad, and then press **<ENTER>**.
TIME OUTS-MODE SHOW ON MAIN? N	Press **<YES>** to display the time out time on the LCD and the clock digits of the scoreboard while the time out clock is active, or 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

Refer to **Switch Output (p.18)** for more information.

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
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				
0= Stops Main	No				
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				

20 Rugby Operation

Sport Insert: **0G-712154 (Code 6690 = Union)**
(Code 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 **DWG-124690**
Insert; LL-2442 A/S 5000, Team Name **DWG-125290**
Insert; Rugby **DWG-712154**

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing until a replacement arrives.

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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-SELECT PARTIAL MM:SS MM:SS = minutes, seconds	Press **<TIME OUT ON/OFF>** two times to display the configured time for partial time out length. To start the partial time out, press **<ENTER>**. To cancel the partial time out, press **<CLEAR>**.

Half +1

Display	Action
PERIOD- +1 N N = current setting	Press **<HALF +1>** to increment the half number. The period number displays 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** menu 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 **<ENTER>**. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-HOME PARTIAL N N = current setting	Press **<TIME OUT>** two times to display the number of partial time outs remaining. To start the partial time out, press **<ENTER>**. To cancel the partial time out, press **<CLEAR>**.
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 time outs or partial time outs remaining.

Try, Conversion, Drop Goal, Penalty Goal

The +/- **<TRY>**, **<CONVERSION>**, **<DROP GOAL>**, and **<PENALTY GOAL>** keys are all used to increment or decrement their respective statistics. **<TRY +1>** is used as an example below.

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

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.

Statistic Keys	Points Added/Subtracted	
	Union	League
Try	5	4
Conversion	2	
Drop Goal	3	1
Penalty Goal	3	2

Tackles (+1/-1)

Display	Action
TACKLES +1 N N = current setting	Press the appropriate tackle key to increment or decrement the tackle number. The LCD shows which key was pressed and the new value.

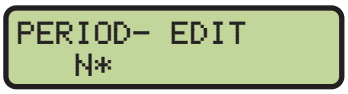
Reset Tackles

Display	Action
	Press **<RESET TACKLES>** to set the current number of tackles back to the **Start Tackles** value. The LCD shows this key was pressed.

Edit

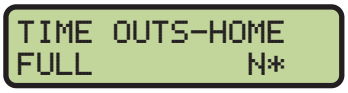
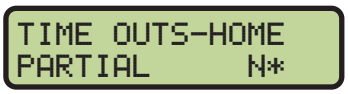
Press **<EDIT>** followed by one of the keys below to quickly edit the value.

Half +1

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

Time Out

Note: Only the time outs configured in the **EDIT SETTINGS** menu 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. Enter the correct full time outs value using the number pad, and then 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 partial time outs value using the number pad, and then 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 full time out time value using the number pad, and then press **<ENTER>**.
 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 partial time out time value using the number pad, and then press **<ENTER>**.

Try, Conversion, Drop Goal, Penalty Goal

The home and guest +/- **<TRY>**, **<CONVERSION>**, **<DROP GOAL>**, and **<PENALTY GOAL>** keys are edited the same way. **<TRY +1>** is used as an example below.

Display	Action
TRY EDIT HOME NN*	Press **<EDIT>** followed by the appropriate statistic key to display the current setting. Enter the correct value using the number pad, and then press **<ENTER>**. The score will be adjusted accordingly.
NNN = current setting	

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up team names. **Home Roster** is used as an example below.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** to select the Roster submenu.
HOME- TEAM NAME _OME *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a team name of up to 15 characters and press **<ENTER>**.

Display	Action
HOME- TEAM ABBR _OME *	Type in a team abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the RUGBY (0G-712154) insert to continue.**

Display Menu
Refer to **Display Menu (p.16)** for more information.

Time of Day
Refer to **Time of Day (p.17)** for more information.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	From the Main Menu, select the **EDIT SETTINGS** submenu to modify the settings below.

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

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 using the number pad, and then 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.
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 using the number pad, and then press **<ENTER>**.
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 using the number pad, and then press **<ENTER>**.

Start/Max Tackles

Display	Action
START TACKLES N N = current setting	Press **<0>** (default) or **<1>** to set the number of start tackles. Press **<ENTER>** to move to the next menu.
MAX TACKLES N* N = current setting	Use the number pad to set the maximum number of tackles, from 2 to 9, and then press **<ENTER>**.

Switch Output

Refer to **Switch Output (p.18)** for more information.

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
Tenth of a Second	No				
Period Length	12:00				
Break Length	20:00				
Overtime Length	5:00				
Start Tackles	0				
Max Tackles	5				
Switch Output	1-Clock = 0				

21 Australian Rules Football/Cricket Operation

Sport Insert: 0G-315384 (Code 6699 = Australian Rules Football)
(Code 5699 = Cricket)

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 **DWG-124690**
Insert; LL-2442 A/S 5000, Team Name **DWG-125290**
Insert; Cricket/Football **DWG-315384**

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing until a replacement arrives.

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, Super Goals, Behinds

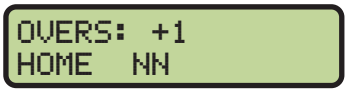
The +/- **<GOALS>**, **<SUPER GOALS>**, and **<BEHINDS>** keys are all used to increment or decrement their respective statistics as well as the total score. **<GOALS +1>** is used as an example below.

Display	Action
GOALS +1 HOME NN NN = current setting	Press the appropriate key to increment or decrement statistics for the home or guest team. The LCD shows which key was pressed and the new value for the corresponding team. The total score updates with a different number of points depending on the key pressed, as described below: • Goal = 6 points • Super Goal = 9 points • Behind = 1 point

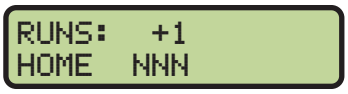
Cricket Keys

Overs, Wickets

The +/- **<OVERS>** and **<WICKETS>** keys are all used to increment or decrement their respective statistics. **<OVERS +1>** is used as an example below.

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

Runs

Display	Action
 NNN = current setting	Press **<RUNS +1>**, **<RUNS +4>**, or **<RUNS +6>** to increment the total number of runs for the home or guest team by the value shown on the key. 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
 	Press **<CLEAR OVERS>** or **<CLEAR WICKETS>** for the home or guest team followed by **<YES>** to clear the overs or wickets values, respectively.

Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

Goals, Super Goals, Behinds, Overs, Wickets, Runs

The home and guest +/- **<GOALS>**, **<SUPER GOALS>**, and **<BEHINDS>** keys (Australian Rules Football) and **<OVERS>**, **<WICKETS>**, and **<RUNS>** keys (Cricket) are edited the same way. **<GOALS +1>** is shown as an example below.

Display	Action
 NN = current setting	Press **<EDIT>** followed by the appropriate statistic key to display the current setting. Enter the correct value using the number pad, and then press **<ENTER>**.

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up team names. **Home Roster** is used as an example below.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** to select the Roster submenu.
HOME- TEAM NAME _OME *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a team name of up to 15 characters and press **<ENTER>**.
HOME- TEAM ABBR _OME *	Type in a team abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the CRICKET/FOOTBALL (0G-315384) insert to continue.**

Display Menu (Australian Rules Football Only)

Refer to **Display Menu (p.16)** for more information.

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.

Time of Day
Refer to **Time of Day (p.17)** for more information.

Edit Settings (Australian Rules Football Only)

Display	Action
MENU- MAIN EDIT SETTINGS?	From the Main Menu, select the **EDIT SETTINGS** submenu to modify the settings below.

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

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 using the number pad, and then 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.
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 using the number pad, and then press **<ENTER>**.
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 using the number pad, and then press **<ENTER>**.

Switch Output
Refer to **Switch Output (p.18)** for more information.

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
Innings Setting (Cricket Only)	40				
Tenth of a Second	No				
Period Length	12:00				
Break Length	20:00				
Overtime Length	5:00				
Switch Output	1-Clock = 0				

22 Curling Operation

Sport Insert: 0G-1021630 (Code 4501)

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: AS5000 BB- VB and WR #1 ..... **DWG-124686**
Insert; LL-2442 A/S 5000, Team Name **DWG-125290**
Insert; 0G-1021630, A/S 5000, Curling **DWG-1021630**

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing until a replacement arrives.

Display	Action
X Y MM:SS END X R→MM:SS Z MM:SS = minutes, seconds X = total score Z = end number 201•••••••• Y 010H••••••• R	After entering the curling code, the main LCD shows the total score and time for each team, the current end number, and an arrow to indicate the team that is throwing. Press the down arrow key to show the scores for the current end and all previous ends on the LCD. An "H" indicates the team with the last rock, or "hammer". The LCD will return to the main prompt after about 2 seconds.

Curling Keys

End (+1/-1)

Display	Action
4 Y 63:00 END 2 R→61:00 3	Press **<END +1>** to increment the end number. The team throwing and hammer are then set from the team score for that end. Press **<END -1>** to decrement the end number. The end number is always visible on the main LCD, except when break and time out clocks are counting down.

1ST Up/Hammer Select

Display	Action
PRESS ENTER TO TOGGLE TEAM UP	Press the **<1ST UP/HAMMER SELECT>** key to allow the selection of the team up. Pressing **<ENTER>** will toggle the select to the other team and the hammer will also switch. Pressing **<CLEAR>** will exit and not change the team selected. This key will only function before the start of a game.

Team Start

Press the Yellow or Red **<TEAM START>** key to start that team's clock counting and set that team's indicator as the throwing team.

Stop

Press the Yellow or Red **<STOP>** key to stop that team's game clock from counting.

Time Out

The Yellow and Red **<TIME OUT>** keys are used to decrement the number of time outs remaining and start the time out clock.

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

Display	Action
TIME OUTS-YELLOW FULL? N N = current setting 4 Y 63:00 T.O. 2 R→61:00 M:SS M:SS = minutes, seconds	Press **<TIME OUT>** to display the number of full time outs remaining. The number of full time outs will show when the end number is less than or equal to the configured number of ends as set in the **EDIT SETTINGS** Menu. To accept the full time out and start the time out clock, press **<ENTER>**. Full time out decrements, and the time out clock appears on the LCD. To cancel the full time out, press **<CLEAR>**.
TIME OUTS-YELLOW OFF	To exit the running time out clock, press **<TIME OUT>**. This will turn the time out OFF.
TIME OUTS-YELLOW EXTRA? N N = current setting 7 Y 3:00 T.O. 10 R→ 1:00 M:SS M:SS = minutes, seconds	The number of extra time outs will show when in an extra end of the game. To accept the extra time out and start the time out clock, press **<ENTER>**. Extra time out decrements, and the time out clock appears on the LCD. To cancel the extra time out press **<CLEAR>**.
TIME OUTS-YELLOW NO TIME OUTS	This message appears when there are no time outs remaining.

Set Main Clock

Display	Action
TIME EDIT PERIOD MM:SS* MM:SS = minutes, seconds SET CLOCK Y/N? PERIOD 73:00	After any running clock has been stopped, press **<SET MAIN CLOCK>** to display the period, practice, and extra time settings for the main clock. Each press of the key will cycle to the next setting. To change the times, enter the desired time using the number pad, and then press **<ENTER>**. A prompt asking if the clock should be set will appear. Press **<YES>** to change clocks. Press **<CLEAR>** twice to cancel and return to the game.

Set Time

Display	Action
TIME EDIT YELLOW CURR MM:SS* MM:SS = minutes, seconds	Press **<SET TIME •>** for Yellow or Red and the LCD will show the current time and allow that team's time to be adjusted. Enter the correct time using the number pad and press **<ENTER>**. Press **<CLEAR>** twice to exit and leave the time unchanged.

Score (+1/-1)

Display	Action
1•••••••••• Y 0•••••••••• R	Press the appropriate **<SCORE +1>** or **<SCORE -1>** key for the Yellow or Red team to increment or decrement the total score, respectively. Incrementing a team score will set the other team to 0. The score can be incremented from 1 – 8, and after 8 presses, both team scores return to blank. The "H" (hammer) will only show when the scores in the current end are blank. The LCD briefly shows the new value for the team score, along with both teams' scores for each end.

Extra Break Start, Halftime Break Start, Break Start

Display	Action
4 Y 63:00 BREAK 2 R→61:00 M:SS MM:SS = minutes, seconds	Press **<EXTRA BREAK START>**, **<HALFTIME BREAK START>**, or **<BREAK START>** to begin countdown of the appropriate type of break timer, and it will show on the LCD. Different break times are set from the **EDIT SETTINGS** Menu. Press any break key again to stop and remove the break clock.

Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

Time Out

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

Display	Action
TIME OUTS–YELLOW FULL N* N = current setting	Press **<EDIT>** followed by **<TIME OUT>** for the Yellow or Red team to display the current setting of full time outs remaining. Enter the correct full time outs value using the number pad, and then press **<ENTER>**.

Display	Action
TIME OUTS-YELLOW EXTRA N* N = current setting	After accepting or rejecting the number of full time outs, the number of extra time outs is displayed. Enter the correct extra time outs value using the number pad, and then press **<ENTER>**.

Score (+1/-1)

Display	Action
TEAM SCORE: EDIT YELLOW N * N = current setting	Press **<EDIT>** followed by the appropriate score key to allow the current end score to be adjusted. Enter the correct value using the number pad, and then press **<ENTER>**.

Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
MENU- MAIN NEW CODE?	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home (Yellow) Roster, Guest (Red) Roster

Use the **Home (Yellow) Roster** and **Guest (Red) Roster** menus to set up team names. **Home (Yellow) Roster** is used as an example below.

Display	Action
MENU- ROSTER SELECT HOME	Press **<ENTER>** to select the Roster submenu.

Display	Action
HOME- TEAM NAME _OME *	**Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.** Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a team name of up to 15 characters and press **<ENTER>**.
HOME- TEAM ABBR _OME *	Type in a team abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the CURLING (0G-1021630) insert to continue.**

Display Menu
Refer to **Display Menu (p.16)** for more information.

Time of Day
Refer to **Time of Day (p.17)** for more information.

Edit Settings

Display	Action
MENU- MAIN EDIT SETTINGS?	From the Main Menu, select the **EDIT SETTINGS** submenu to modify the settings below.

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

Display	Action
TIME EDIT PERIOD MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds using the number pad, and then press **<ENTER>**.
TIME EDIT PRACTICE MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time for practice in minutes and seconds using the number pad, and then press **<ENTER>**.
TIME EDIT EXTRA MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time for extra ends in minutes and seconds using the number pad, and then press **<ENTER>**.
TIME EDIT BREAK MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time for a break in minutes and seconds using the number pad, and then press **<ENTER>**.

Display	Action
TIME EDIT HF BREAK MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time for a halftime break in minutes and seconds using the number pad, and then press **<ENTER>**.
TIME EDIT EX BREAK MM:SS* MM:SS = minutes, seconds	Enter the correct amount of time for an extra break in minutes and seconds using the number pad, and then press **<ENTER>**.

Show Break Time

Display	Action
BREAK TIME SHOW ON MAIN? Y	Press **<YES>** to show the break time on the scoreboard in the clock digits. Press **<NO>** to ensure the break time does not show in the scoreboard clock digits.

Show Hammer

Display	Action
HAMMER DISPLAY SHOW ON MAIN?	Press **<YES>** to show the hammer indicator (H) on the scoreboard. The "H" will show in the current end team score digit for the team that has the hammer. Press **<NO>** to ensure the hammer indicator (H) does not show on the scoreboard.

Time Outs

If a full or extra time out is not needed for the Yellow or Red **<TIME OUT>** keys, enter zero for the number of time outs.

Display	Action
TIME OUTS- MODE FULL N * N = current setting	Enter the number of full time outs using the number pad, and then 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 using the number pad, and then press **<ENTER>**.
TIME OUTS- MODE EXTRA N * N = current setting	Enter the number of extra time outs using the number pad, and then press **<ENTER>**.
TIME OUTS- TIME EXTRA MM:SS* MM:SS = minutes, seconds	Enter the amount of time for an extra time out in minutes and seconds using the number pad, and then press **<ENTER>**.

Game Ends

Display	Action
GAME ENDS= NN 1=8 2=10 NN = current setting	Press **<1>** to select 8 ends per game. Press **<2>** to select 10 ends per game (default). This setting selects which time out is used, full or extra.

Switch Output

Refer to **Switch Output (p.18)** for more information.

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
Period Length	73:00				
Practice Length	10:00				
Extra Length	10:00				
Break Length	1:00				
Half Break	5:00				
Extra Break	3:00				
Show Break	Yes				
Show Hammer	Yes				
Full Time Outs	2				
Full Time Out	1:00				
Extra Time Outs	1				
Extra Time Out	1:00				
Game Ends	10				
Switch Output	1-Clock = 0				

23 Gymnastics Operation

Sport Insert: 0G-207655 (Code 0015)

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: AS5000 BB- VB and WR #1 ..... **DWG-124686**
Insert; LL-2441 A/S 5000, Team Name **DWG-125290**
Insert; Custom Gymnastics, A/S 5000 ..... **DWG-207655**

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing until a replacement arrives.

Gymnastics Keys

Competitor

The **<COMPETITOR •>** key is used to enter the competitor number.

Display	Action
COMPETITOR NNN*	Press **<COMPETITOR •>** to display the current competitor number. Enter the desired value using the number pad, and then press **<ENTER>**.
NNN = current setting	

Score

Display	Action
SCORE NN.NNN*	Press **<SCORE •>** to display the score for the current competitor. Enter the desired value using the number pad, and then press **<ENTER>**.
NN.NNN = current setting	

Blank Display

Press the **<BLANK DISPLAY>** key to blank the competitor number and score information. This key will blank the information on the scoreboard and in the console.

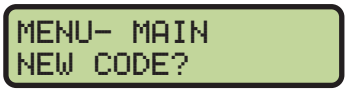
Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

New Game

Display	Action
MENU- MAIN NEW GAME?	Press **<ENTER>** to clear all data for the current game in progress and begin a new game.

New Code

Display	Action
	Press **<ENTER>** to switch to a different sport code through the **SELECT CODE** prompt. Refer to **Start Up (p.7)** for more information on sport codes.

Dimming Menu

Refer to **Dimming Menu (p.16)**.

Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up team names. **Home Roster** is used as an example below.

Display	Action
	Press **<ENTER>** to select the Roster submenu.
	Insert the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings. Use the **<COLUMNS>**, **<ROWS>**, and **<STROKE>** keys to select the **WIDTH**, **HEIGHT**, and **FONT** of the TNMC. The TNMC is updated after each selection is completed. Refer to **Team Name Entry (p.19)** for more information. Type in a team name of up to 15 characters and press **<ENTER>**.
	Type in a team abbreviation of up to 10 characters and press **<ENTER>**. **Reinsert the GYMNASTICS (0G-207655) insert to continue.**

Display Menu

Refer to **Display Menu (p.16)** for more information.

Time of Day

Refer to **Time of Day (p.17)** for more information.

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A Reference Drawings

Refer to **Resources (p.2)** for information regarding how to read the drawing number. Any contract-specific drawings take precedence over the general drawings.

Reference Drawings:

Rear View, A/S 5010 Connector Assignments **DWG-102142**
Block Diagram: AS5000 BB- VB and WR #1 ..... **DWG-124686**
Block Diagram: AS5000 BB- VB and WR #3 ..... **DWG-124688**
Block Diagram, A/S 3000 or 5000 Hockey **DWG-124689**
Block Diagrams, A/S 3000 or 5000 Outdoor Sports **DWG-124690**
A/S5000 Track w/OmniSport Timer **DWG-125039**
Schematic; Dual 1/4" Phone J-Box w/Shunt Jack **DWG-125316**
Block Diagram- A/S 3000 or 5000 BB- VB and WR #2 ..... **DWG-125415**
All Sport 5000, 25pin PCB J-Box Wiring **DWG-125416**
Block Diagram: A/S 3000 or 5000 BB- VB and WR #4 ..... **DWG-125417**
All Sport 5000 Current Loop Output Specifications **DWG-128429**
System Riser; Tennis; Single Court w/ TNMC, AS 5000 ..... **DWG-177098**
Channel Selection; Multiple Broadcast Group, Gen IV **DWG-203113**
Speed Adjust Calculations, Radar Gun **DWG-243741**
Installation Details, Gen VI Channel Selection Guide **DWG-1109870**

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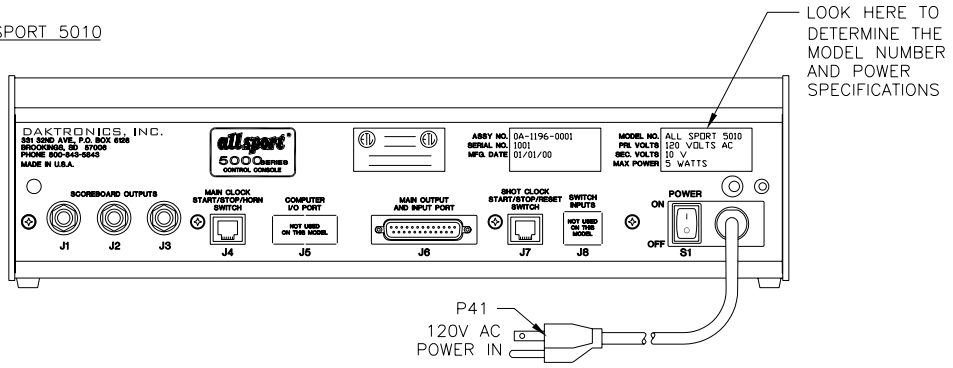
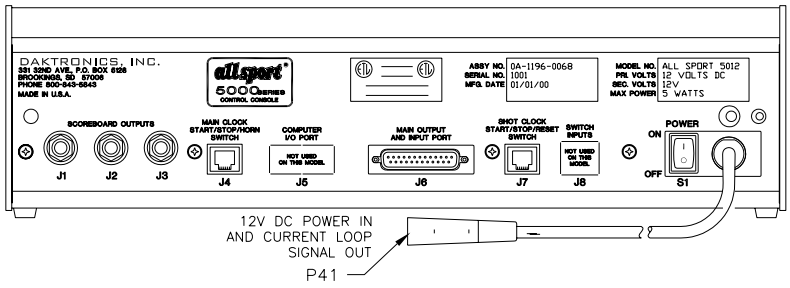
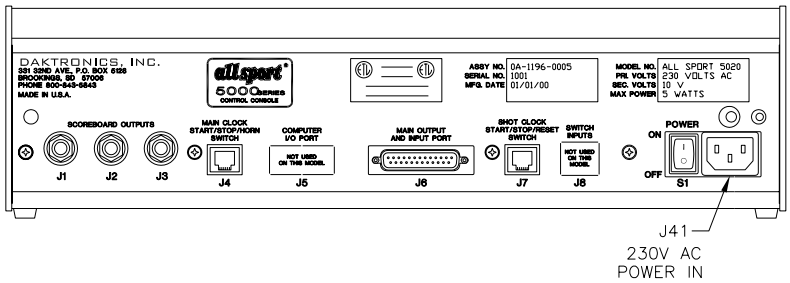
ALL SPORT 5010



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

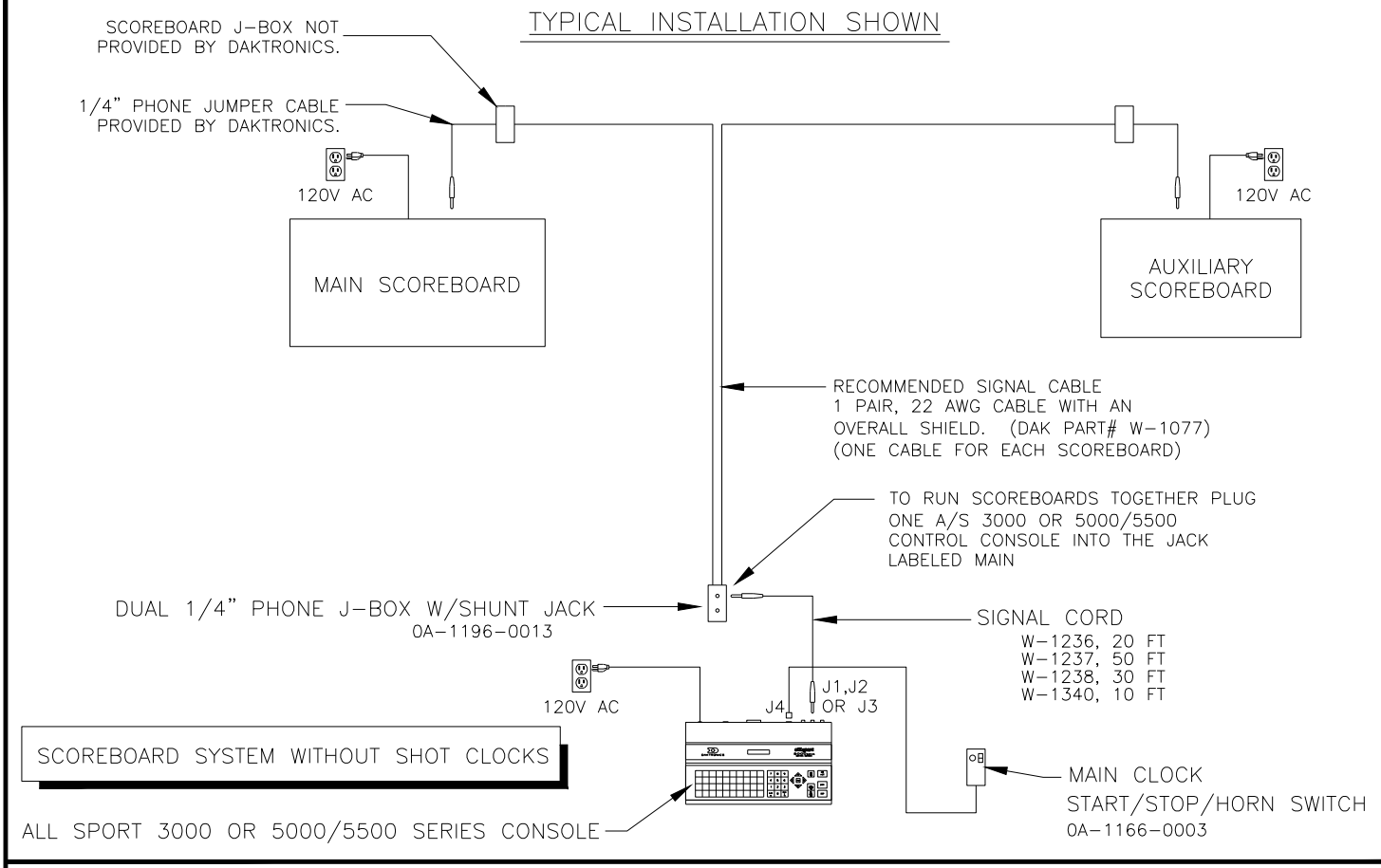
REVISION

APPR. BY:

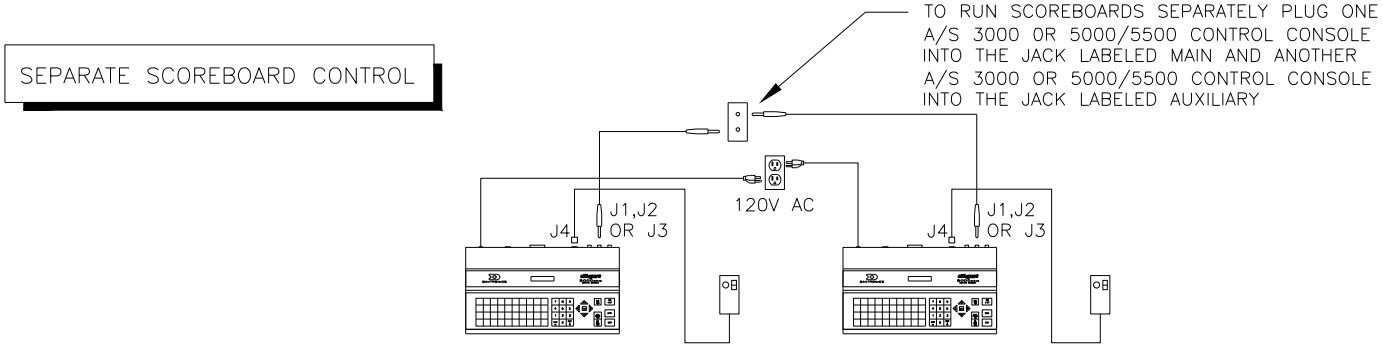
SCALE: 1=4

1196-R04A-102142

TYPICAL INSTALLATION SHOWN

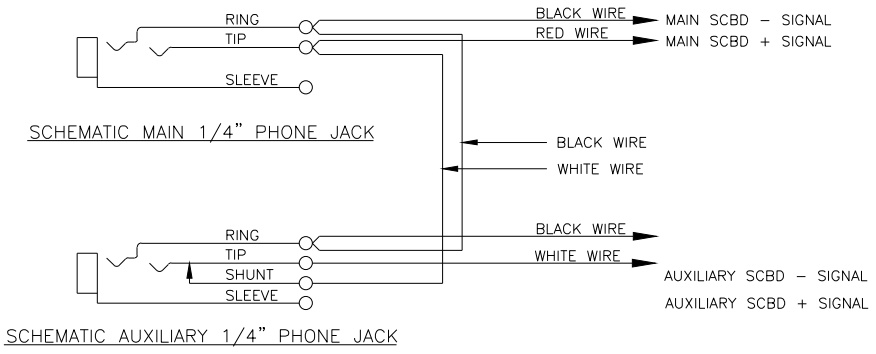


SEPARATE SCOREBOARD CONTROL



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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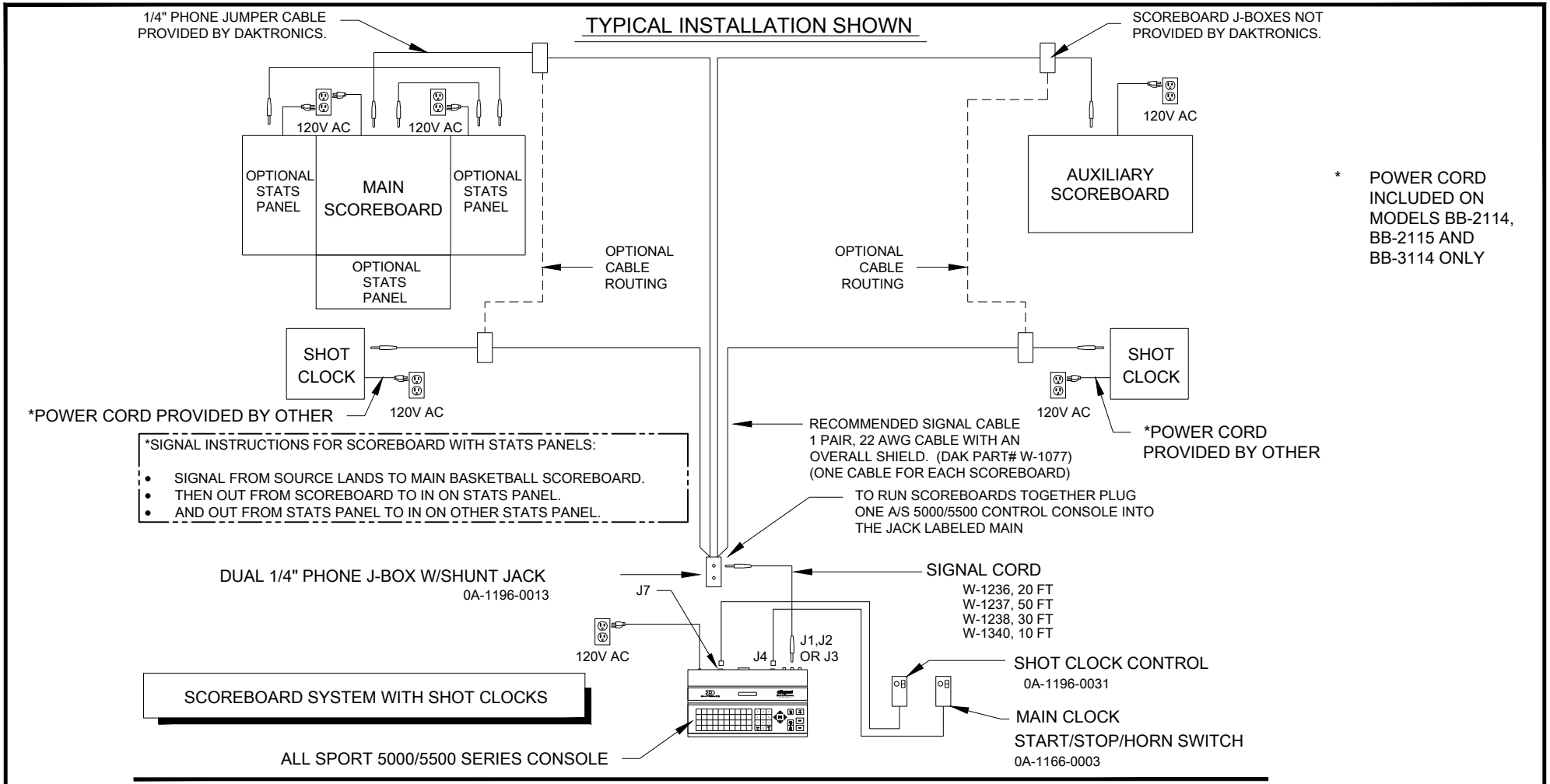
PROJ: ALL SPORT 5000/5500
TITLE: BLOCK DIAGRAM: AS5000 BB- VB AND WR #1
DESIGN: | DRAWN: E BRAVEK | DATE: 29 NOV 99
SCALE: NONE

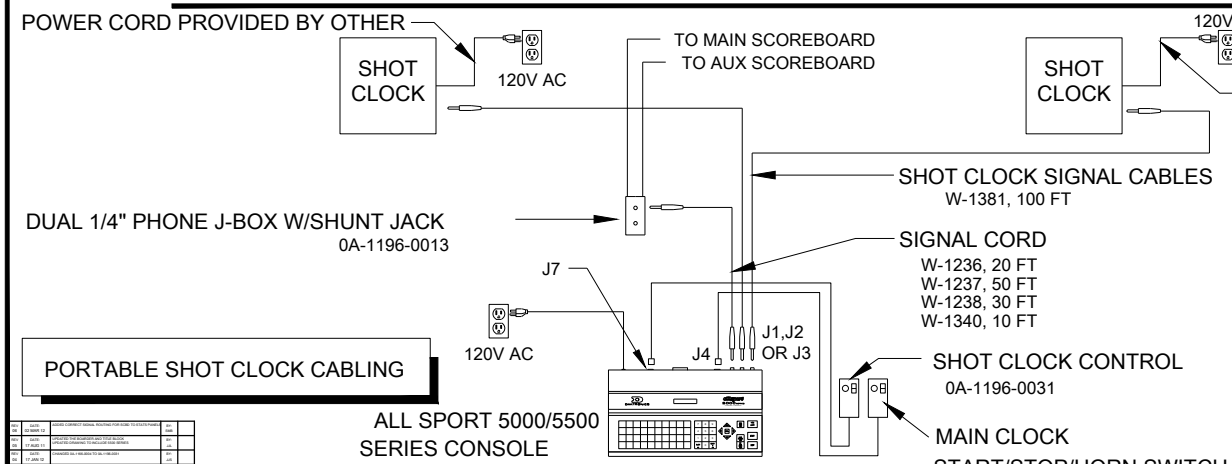
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	
	02	P1196	R-04-A	124686

TYPICAL INSTALLATION SHOWN



SCOREBOARD SYSTEM WITH SHOT CLOCKS

* POWER CORD INCLUDED ON MODELS BB-2114, BB-2115 AND BB-3114 ONLY



PORTABLE SHOT CLOCK CABLING

REV	DATE:		BY:	
09	09 MAY 22	AMENDED NOTE TO SAY BB-2114/BB-3114/BB-2115 INCLUDE POWER CORDS	TBS	
08	15 APR 19	ADDED NOTE THAT BB-2114/BB-3114 INCLUDE POWER CORDS	KDM	
07	28 NOV 18	ADDED NOTE THAT SHOT CLOCK POWER CORDSD ARE PROVIDED BY OTHER	KDM	

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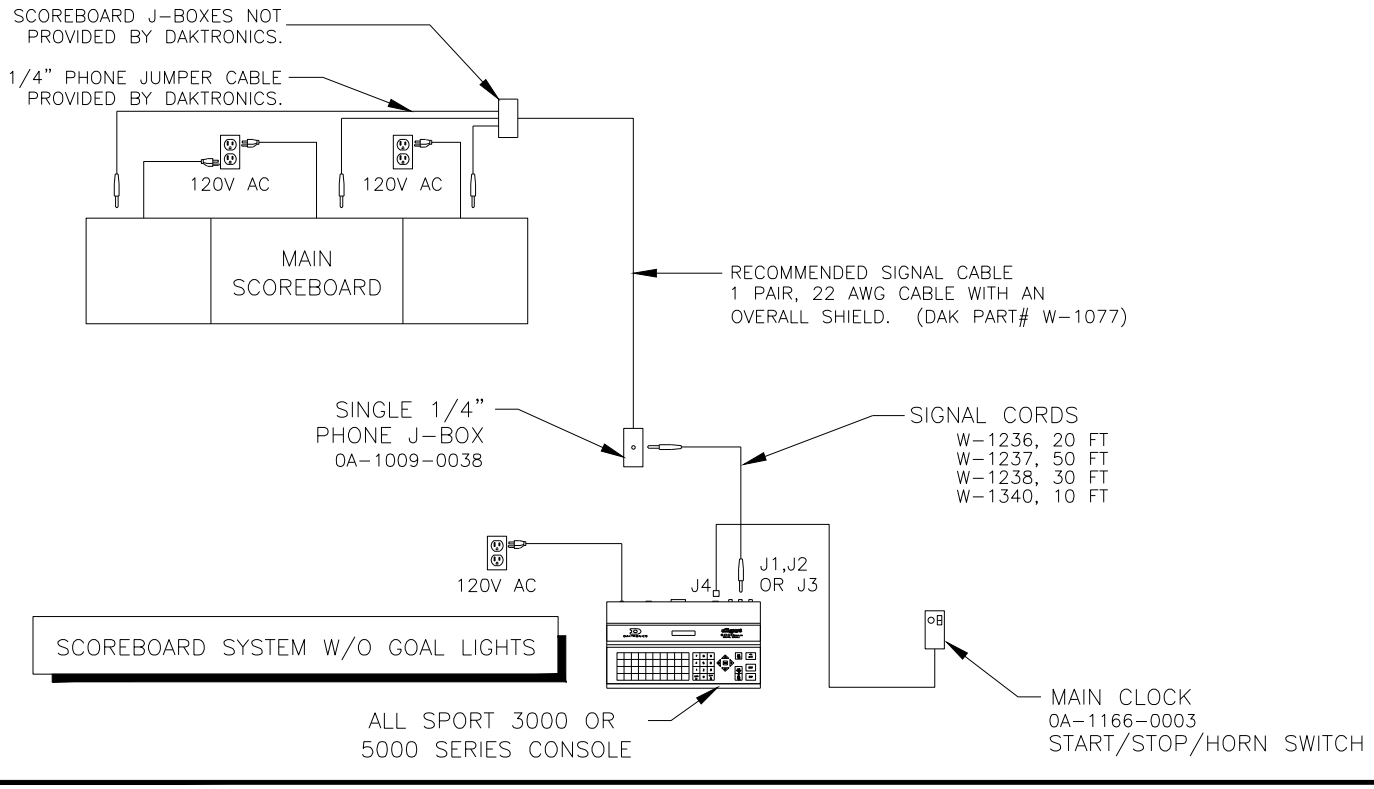
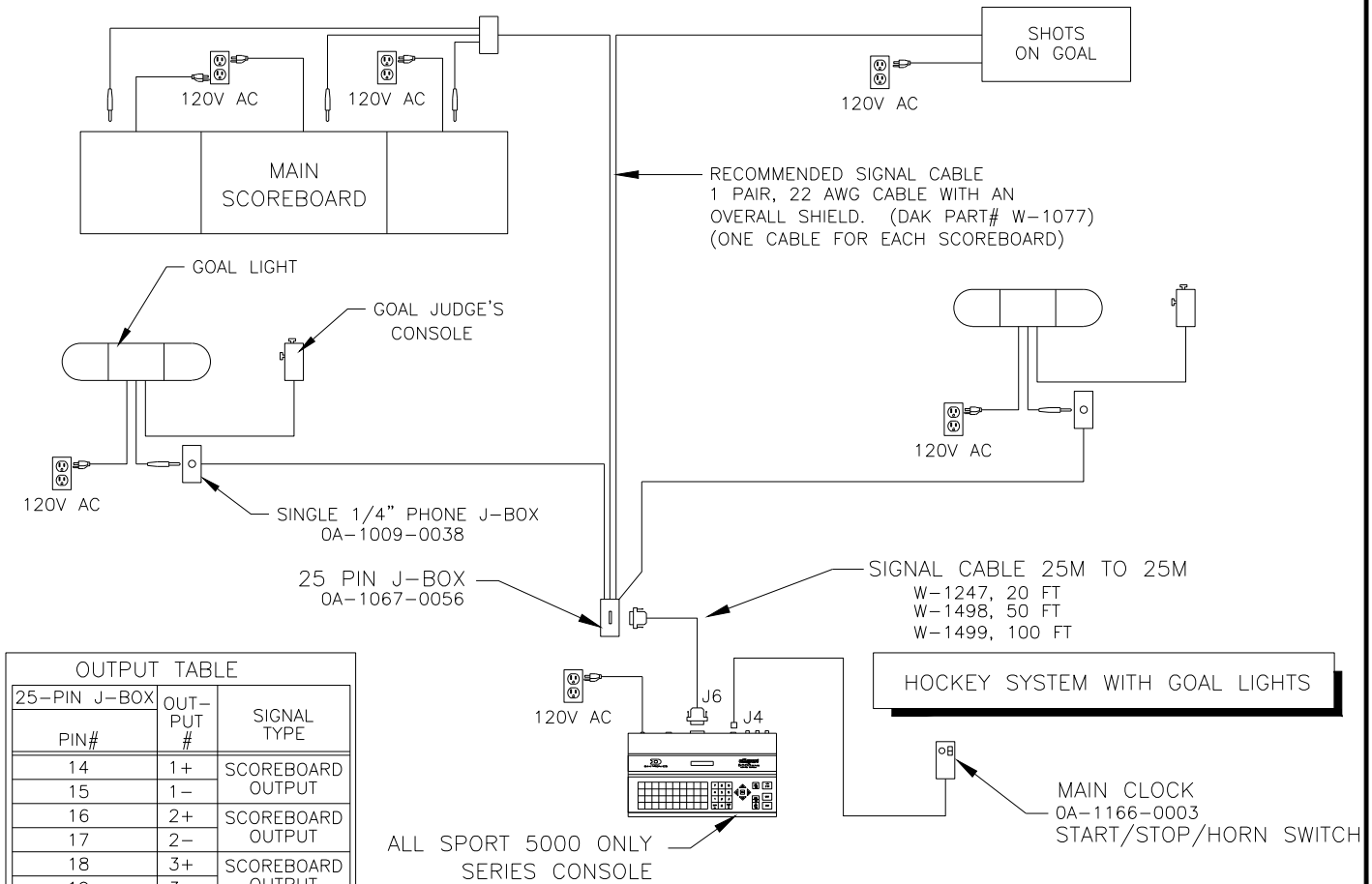
THIRD ANGLE PROJECTION

PROJECT:	ALLSPORT 5000/5500		
TITLE:	BLOCK DIAGRAM: AS5000 BB- VB AND WR #3		
DATE:	29 NOV 99	DIM UNITS: INCHES [MILLIMETERS]	SHEET / REV
SCALE:	NONE	DO NOT SCALE DRAWING	09
DESIGN:		JOB NO. / FUNC - TYPE - SIZE	
DRAWN:	E BRAVEK	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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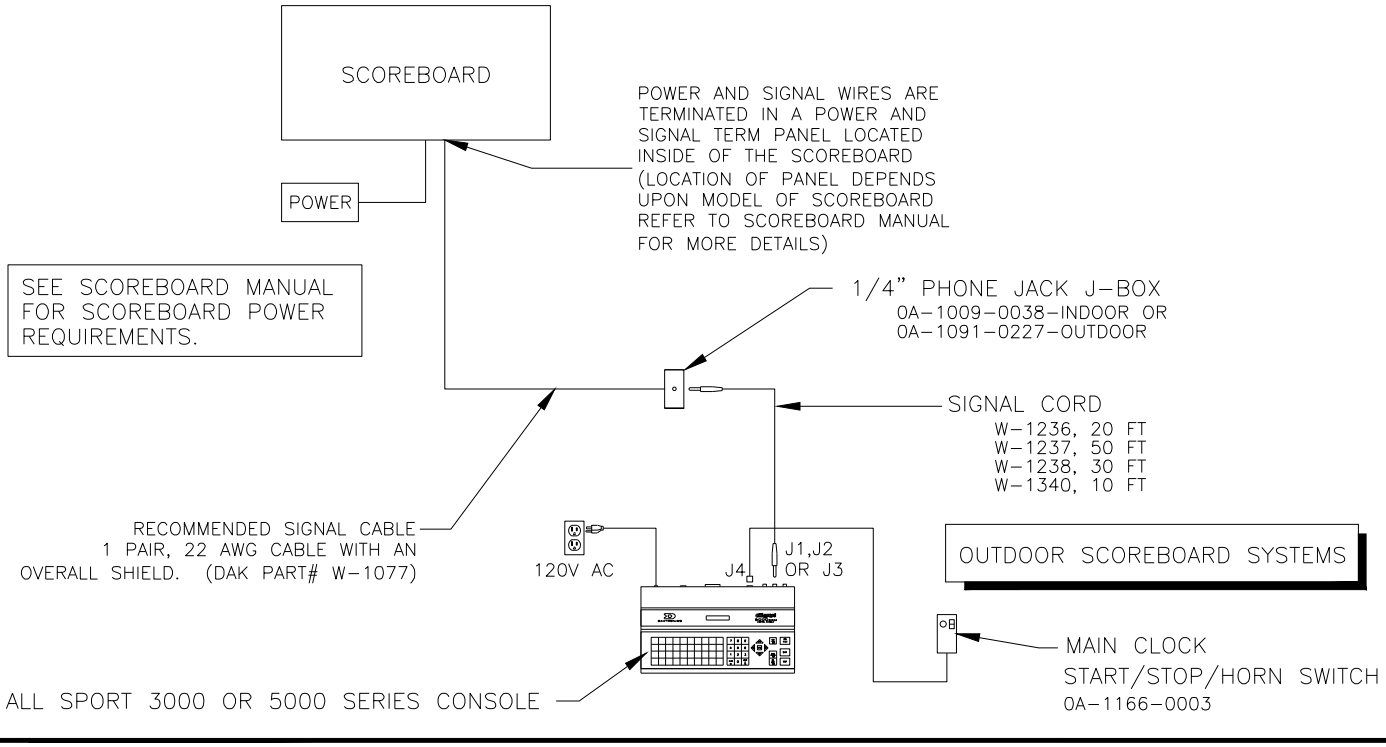
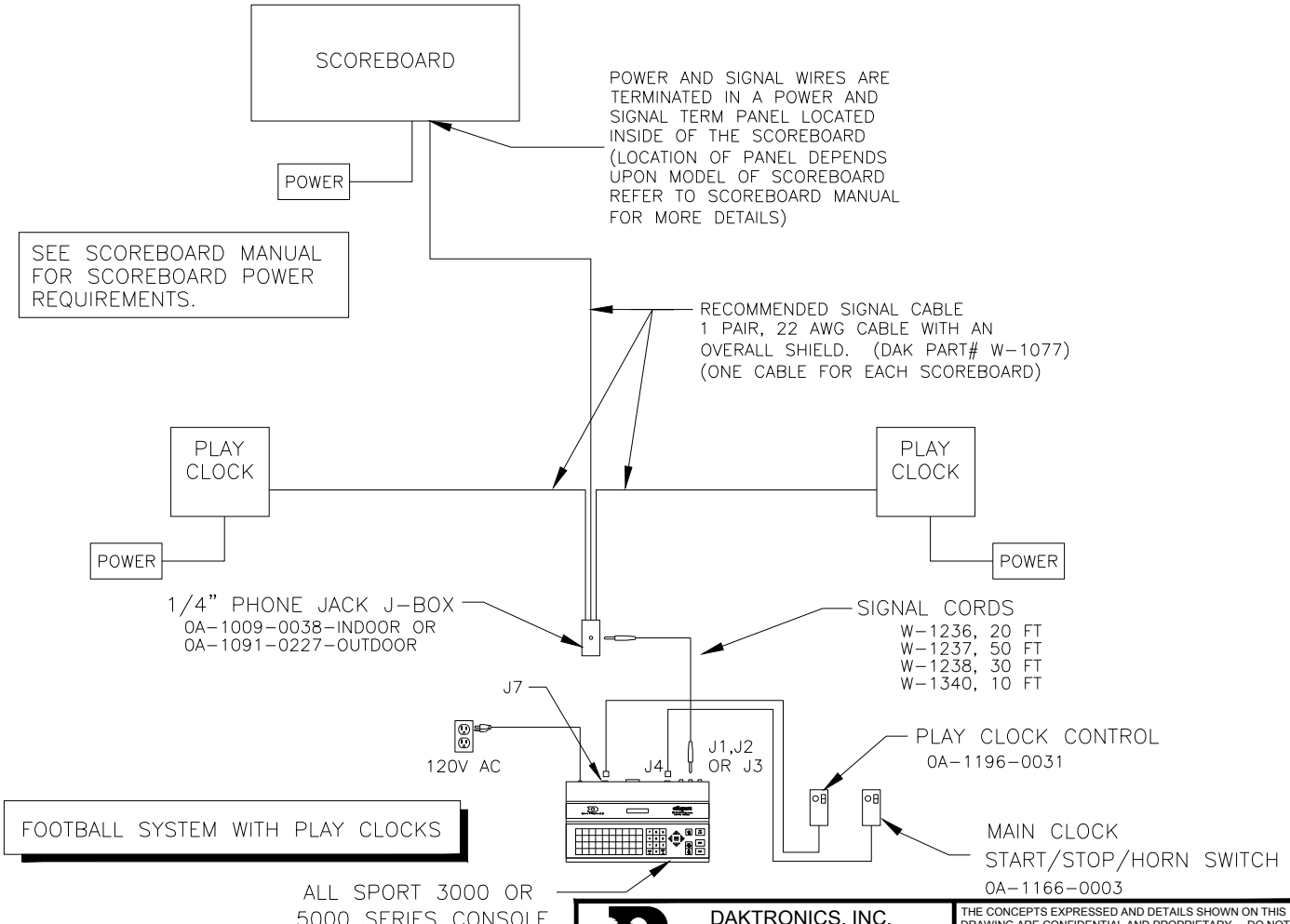
PROJ: ALL SPORT 5000
TITLE: BLOCK DIAGRAM: A/S5000 HOCKEY
DESIGN: | DRAWN: E BRAVEK | DATE: 29 NOV 99
SCALE: NONE

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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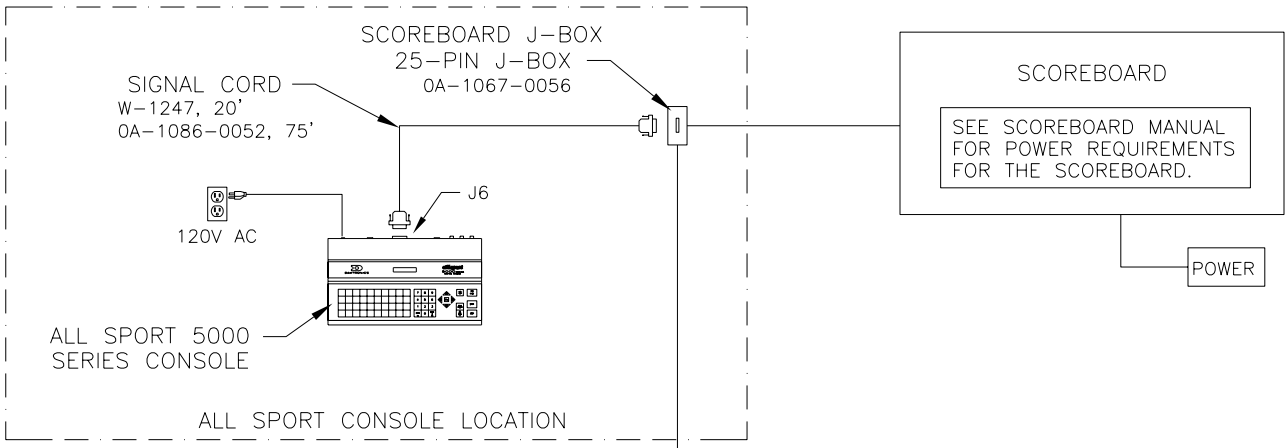
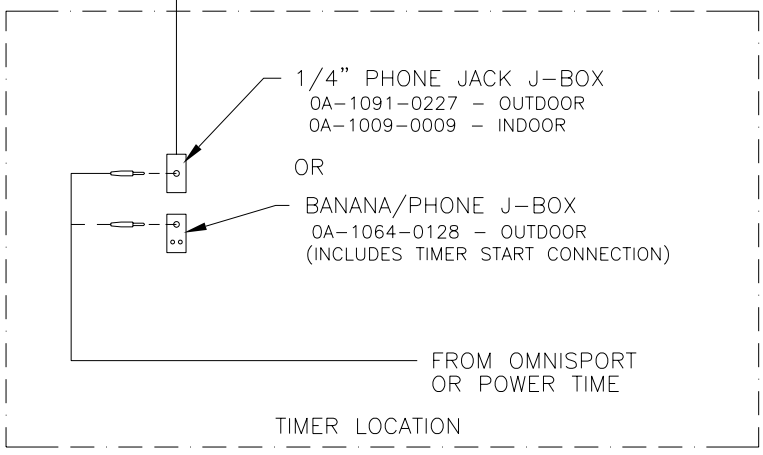
PROJ: ALL SPORT 5000
TITLE: BLOCK DIAGRAMS- A/S 3000 OR 5000 OUTDOOR SPORTS
DESIGN: | DRAWN: E BRAVEK | DATE: 30 NOV 99
SCALE: NONE

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	
	04	P1196	R - 04 - A	124690



OUTPUTS TO SCOREBOARD

25-PIN J-BOX PIN#	OUTPUT #	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

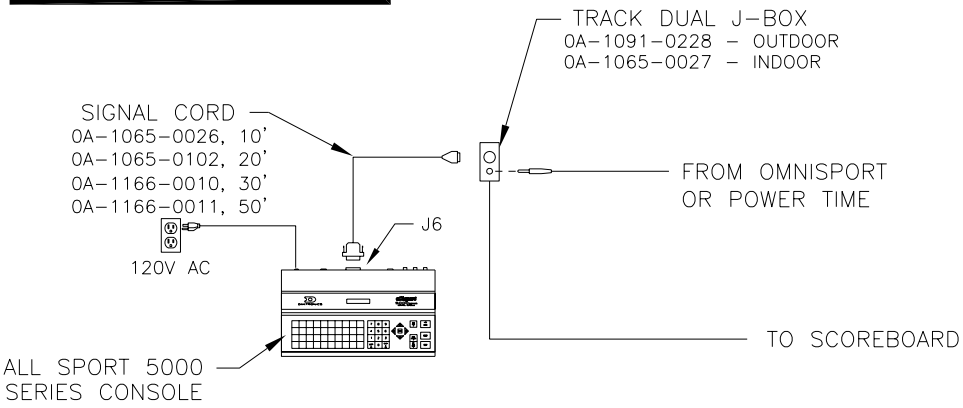
USE THIS SETUP IF THE OMNI SPORT AND ALL SPORT CONSOLE ARE TO BE AT SEPARATE LOCATIONS

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	OUTPUT #	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

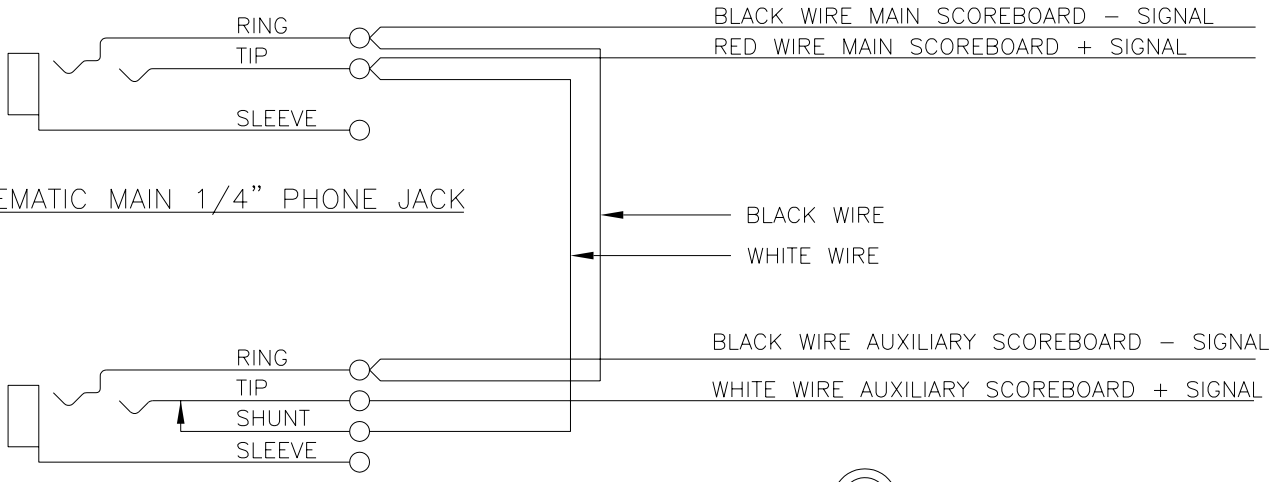
TITLE: A/S5000 TRACK W/OMNISPORT TIMER

DES. BY: DRAWN BY: E BRAVEK DATE: 06 DEC 99

REVISION APPR. BY:

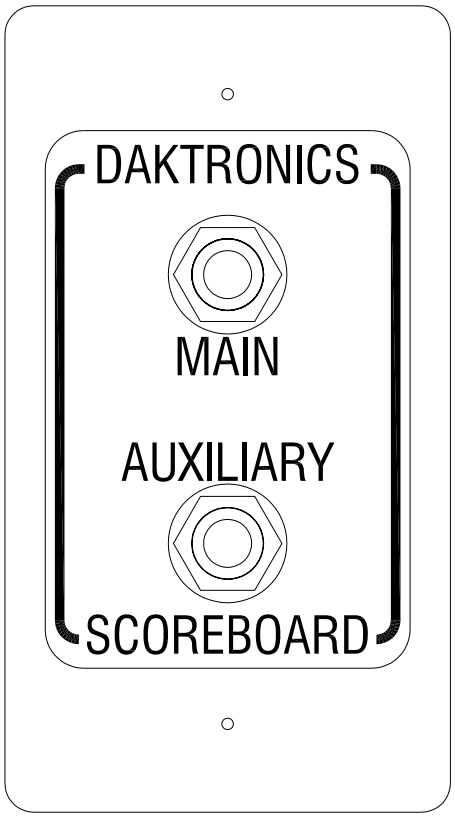
SCALE: NONE

1196-R04A-125039

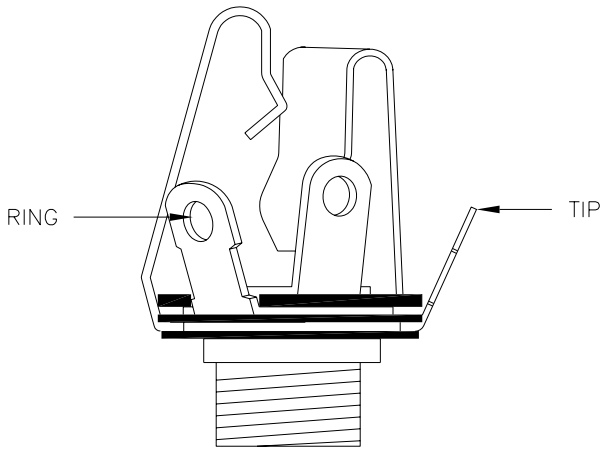


SCHEMATIC MAIN 1/4" PHONE JACK

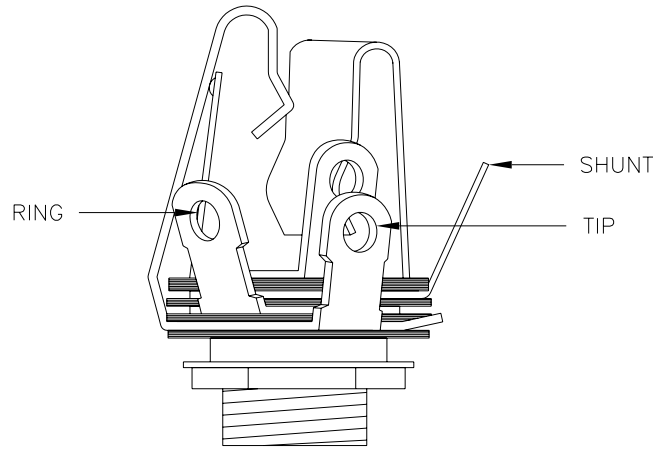
SCHEMATIC AUXILIARY 1/4" PHONE JACK



0A–1196–0013



MAIN
PHONE JACK
J–1003



AUXILIARY
PHONE JACK
J–1131

REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006

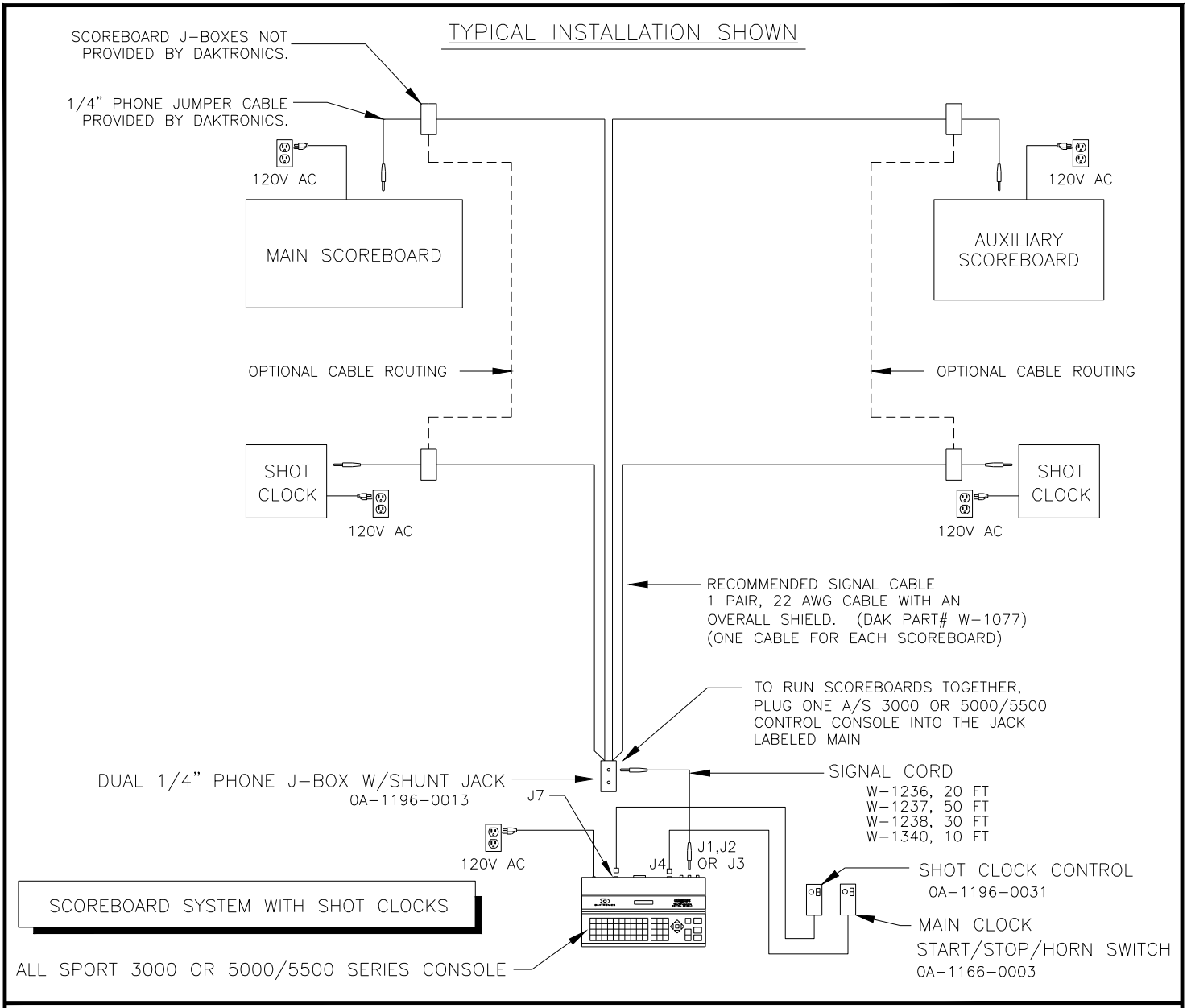
PROJ:

TITLE: SCHEMATIC; DUAL 1/4" PHONE J–BOX W/SHUNT JACK

DES. BY: E BRAVEK DRAWN BY: E BRAVEK DATE: 15 DEC 99

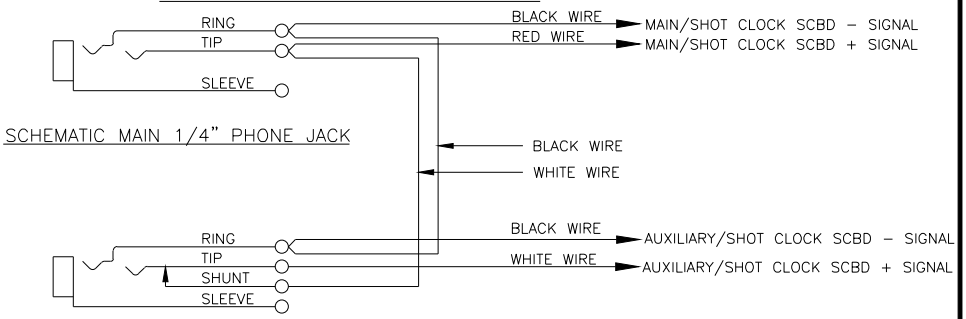
REVISION 00 | APPR. BY: | SCALE: NONE

1196-R03A-125316



0A-1196-0013 J-BOX

TYPICAL 0A-1196-0013 J-BOX WIRING



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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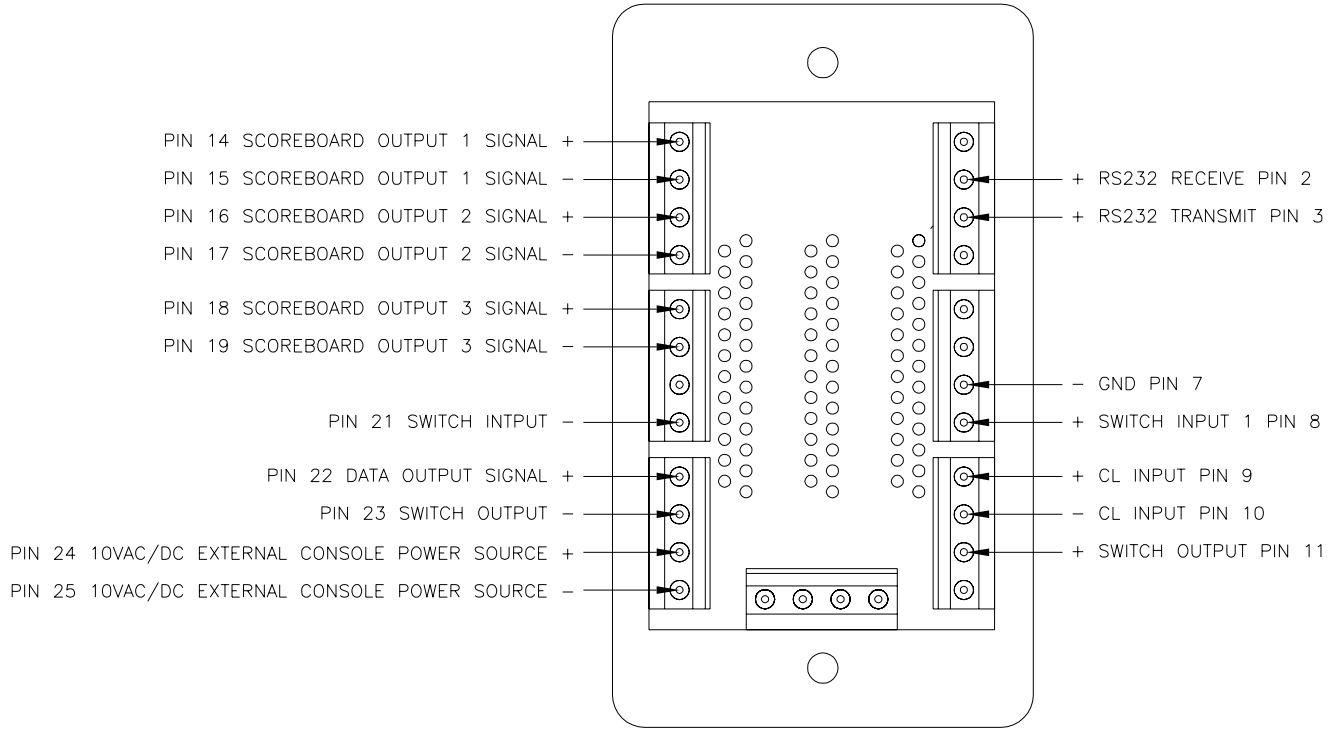
PROJ: ALL SPORT 5000/5500
TITLE: BLOCK DIAGRAM- A/S 3000 OR 5000 BB- VB AND WR #2
DESIGN: | DRAWN: E BRAVEK | DATE: 15 DEC 99
SCALE: NONE

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.

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:

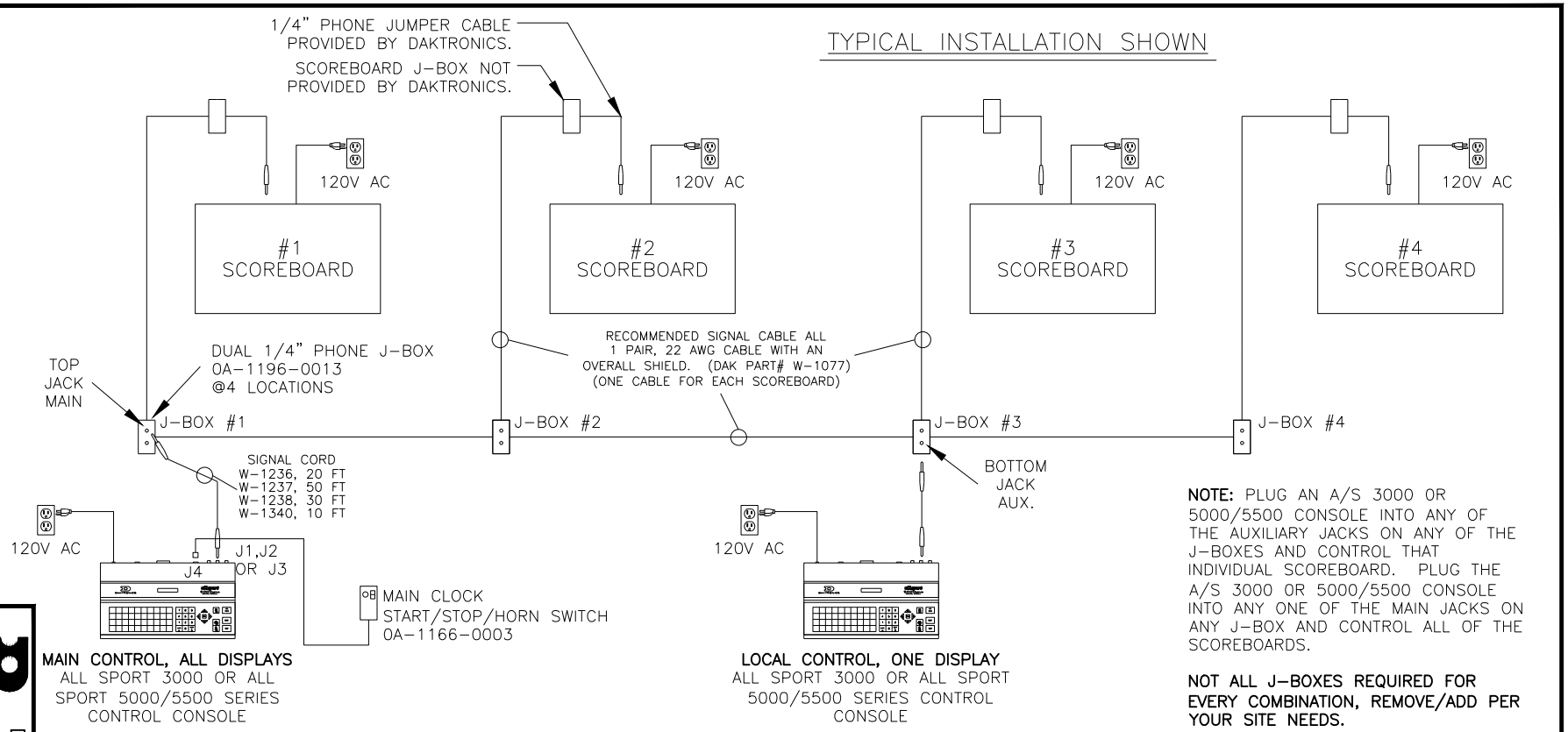
SCALE: 1=3

REVISION

1196-R01A-125416

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

TYPICAL INSTALLATION SHOWN

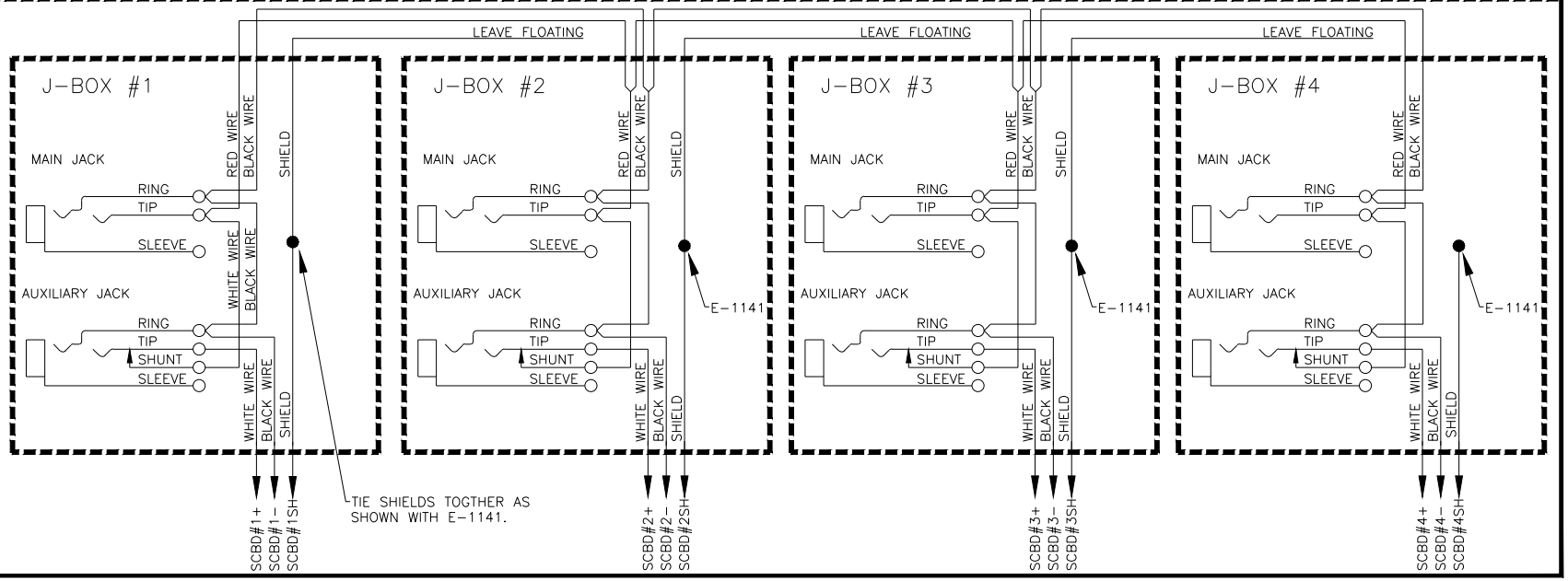


MAIN CONTROL, ALL DISPLAYS
ALL SPORT 3000 OR ALL SPORT 5000/5500 SERIES CONTROL CONSOLE

LOCAL CONTROL, ONE DISPLAY
ALL SPORT 3000 OR ALL SPORT 5000/5500 SERIES CONTROL CONSOLE

NOTE: PLUG AN A/S 3000 OR 5000/5500 CONSOLE INTO ANY OF THE AUXILIARY JACKS ON ANY OF THE J-BOXES AND CONTROL THAT INDIVIDUAL SCOREBOARD. PLUG THE A/S 3000 OR 5000/5500 CONSOLE INTO ANY ONE OF THE MAIN JACKS ON ANY J-BOX AND CONTROL ALL OF THE SCOREBOARDS.

NOT ALL J-BOXES REQUIRED FOR EVERY COMBINATION, REMOVE/ADD PER YOUR SITE NEEDS.



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BROOKINGS, SD 57006

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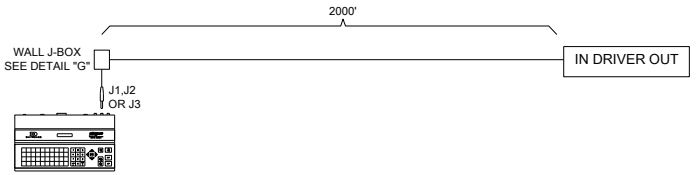
PROJ: ALL SPORT 5000/5500
TITLE: BLOCK DIAGRAM: A/S 3000 OR 5000 BB- VB AND WR #4
DESIGN: EBRAVEK
DRAWN: EBRAVEK
DATE: 24 JAN 00
SCALE: NONE

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	04	P1196	R-01-A

12541 7

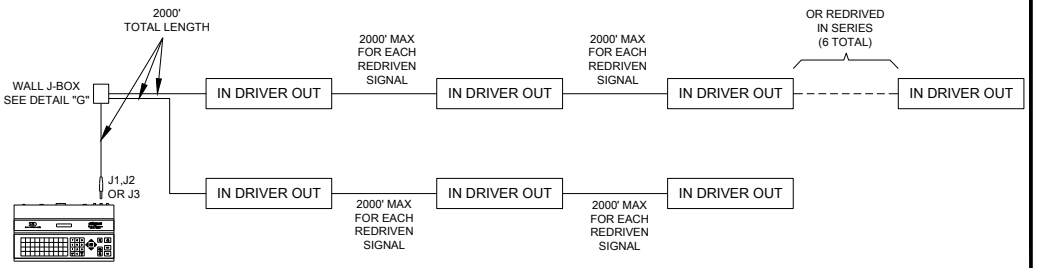
DETAIL "A"

RECOMMENDED MAXIMUM CABLE LENGTH WITH ONE RUN AS SHOWN = 2000'



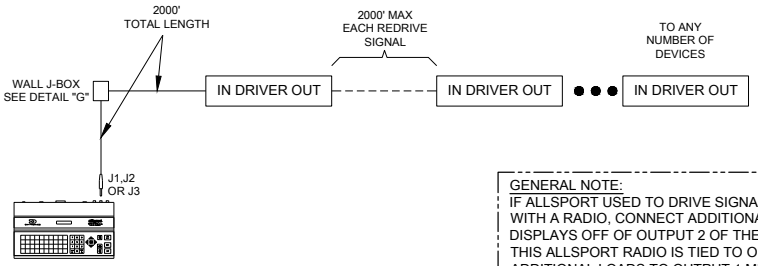
DETAIL "B"

RECOMMENDED MAXIMUM CABLE LENGTH WITH COMBINATION OF TWO RUNS
FROM EITHER THE ALL SPORT 5000 OUTPUT OR ONE OUTPUT WITH 6 DRIVERS. REDRIVE CIRCUIT AS SHOWN = 2000'
MAXIMUM REDRIVES ALLOWED: 6 FOR CLOCK DISPLAYS ALL LOCATED WITHIN THE SAME AREA, I.E. STADIUM OR ARENA



DETAIL "C"

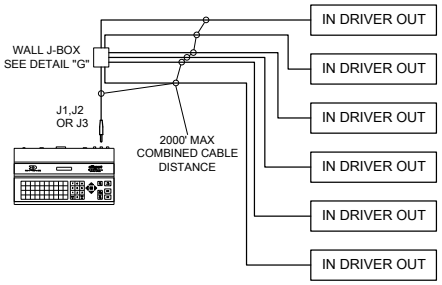
RECOMMENDED MAXIMUM CABLE LENGTH WITH
FROM EITHER THE ALL SPORT 5000 OUTPUT OR DRIVER REDRIVE CIRCUIT AS SHOWN = 2000'
MAXIMUM REDRIVES ALLOWED: TO ANY NUMBER OF DEVICES WHILE UTILIZING SIGNAL IN/OUT REDRIVE
FOR LOCKER ROOM CLOCK ONLY



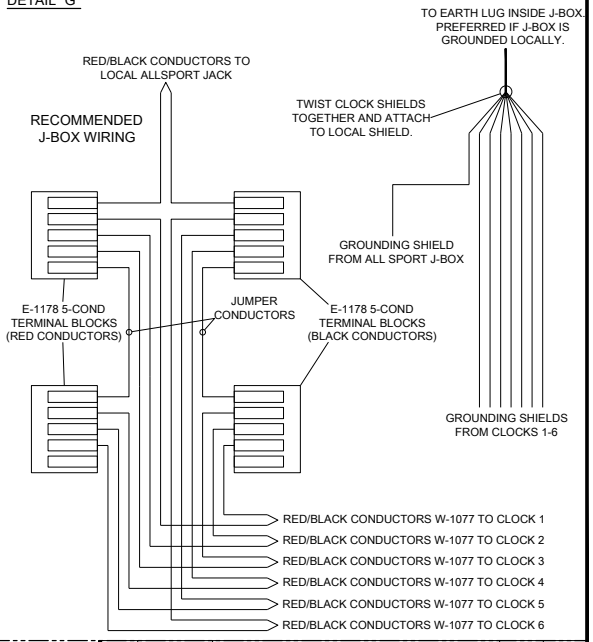
GENERAL NOTE:
IF ALLSPORT USED TO DRIVE SIGNAL IS EQUIPPED WITH A RADIO, CONNECT ADDITIONAL HARD WIRED DISPLAYS OFF OF OUTPUT 2 OF THE ALLSPORT. THIS ALLSPORT RADIO IS TIED TO OUTPUT 1. SO ADDITIONAL LOADS TO OUTPUT 1 MUST TO LIMITED.

DETAIL "D"

RECOMMENDED MAXIMUM PARALLEL LOADS ON REDRIVE
CIRCUIT OR ALL SPORT 5000 OUTPUT = 6 PARALLEL LOADS



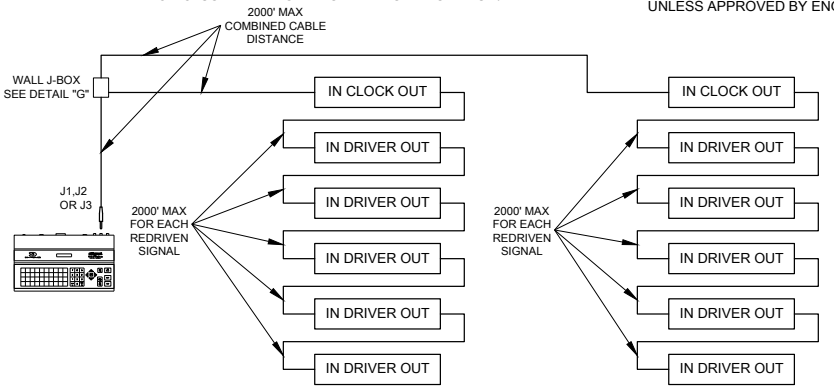
DETAIL "G"



DETAIL "E"

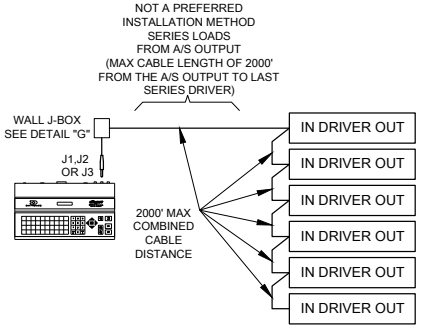
RECOMMENDED MAXIMUM PARALLEL LOADS ON REDRIVE CIRCUIT
OR ALL SPORT 5000 OUTPUT = 6 PARALLEL LOADS
FOR CLUSTERED DISPLAYS IN THE SAME STADIUM/ARENA

SIGNAL TO MULTI DRIVER DISPLAYS SHOULD ALWAYS TERMINATE TO THE CLOCK SECTION UNLESS APPROVED BY ENGINEER



DETAIL "F"

RECOMMENDED MAXIMUM PARALLEL LOADS ON ALL
SPORT 5000 OUTPUT = 6 SERIES LOADS



REV	DATE:		BY:
03	18 OCT 21	ADDED J-BOX DETAIL "G", SWAPPED CONTENTS OF DETAIL "E" AND DETAIL "F". ADDED A WALL J-BOX IN EACH DETAIL.	TJP
REV	DATE:		BY:
02	20 APR 17	UPDATED DETAIL B AND D ADDED DETAIL C, E & F	MTR

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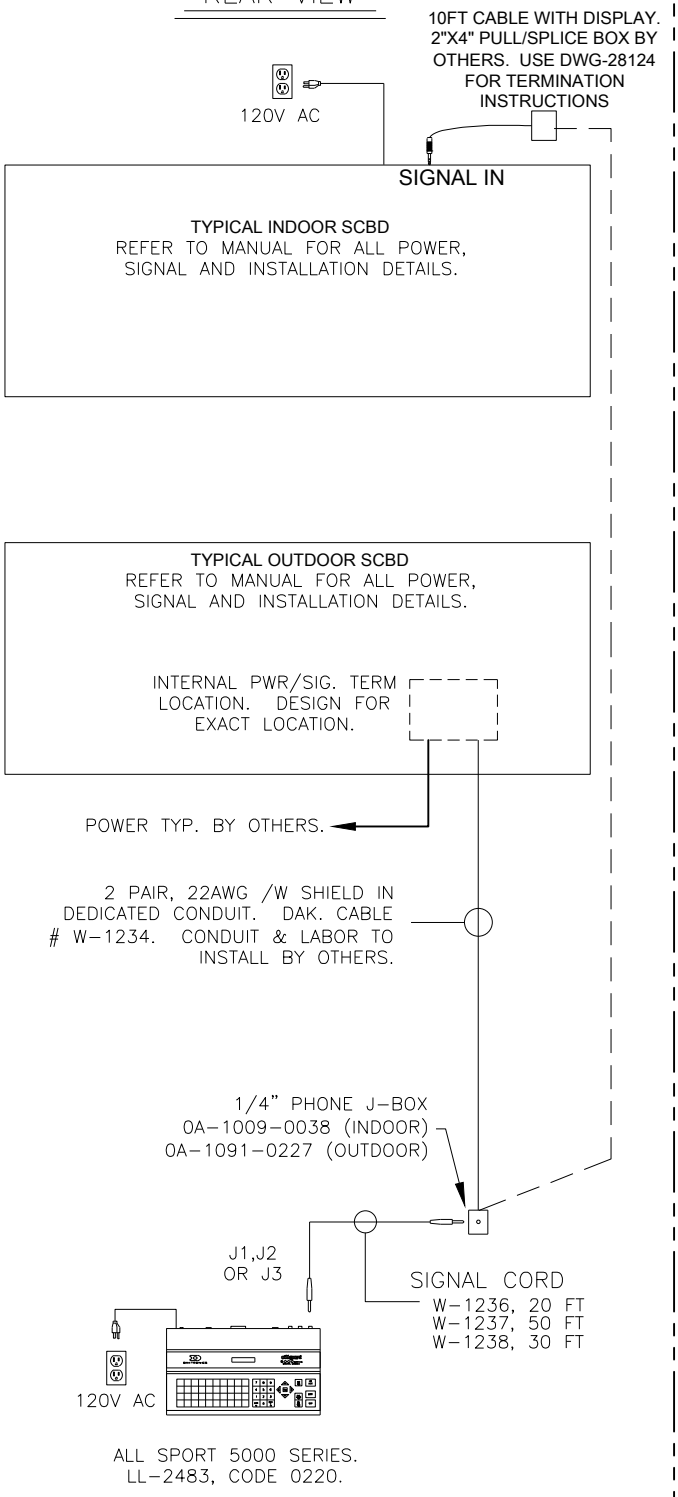
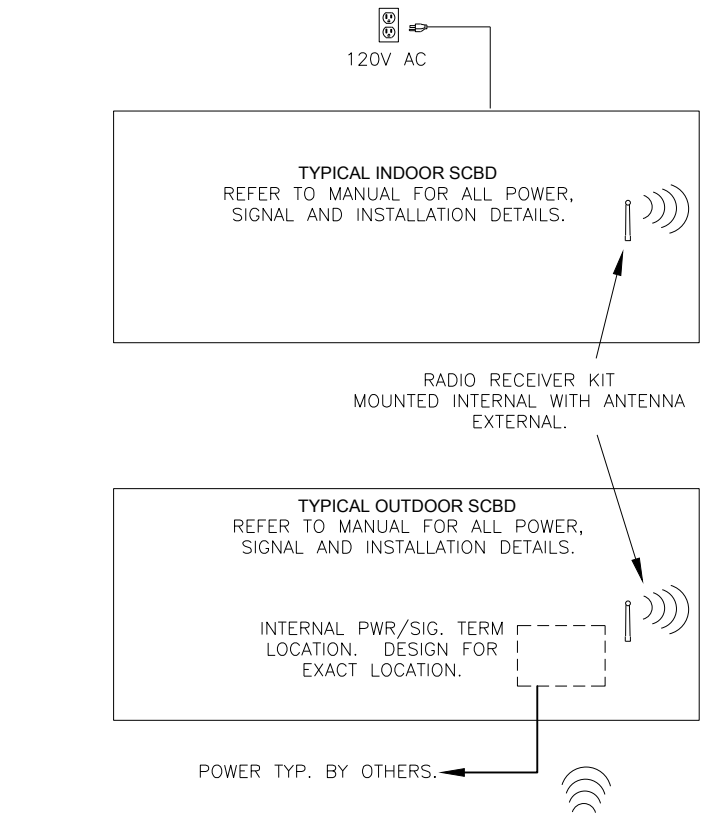
THIRD ANGLE PROJECTION

PROJECT:			
TITLE:	ALL SPORT 5000 CURRENT LOOP OUTPUT SPECIFICATIONS		
DATE: 26 FEB 00	DIM UNITS: INCHES [MILLIMETERS]	SHEET	REV
SCALE:	DO NOT SCALE DRAWING		03
DESIGN:	JOB NO.	FUNC - TYPE - SIZE	128429
DRAWN: EBRAVEK	P1196	R - 01 - B	

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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BROOKINGS, SD 57006
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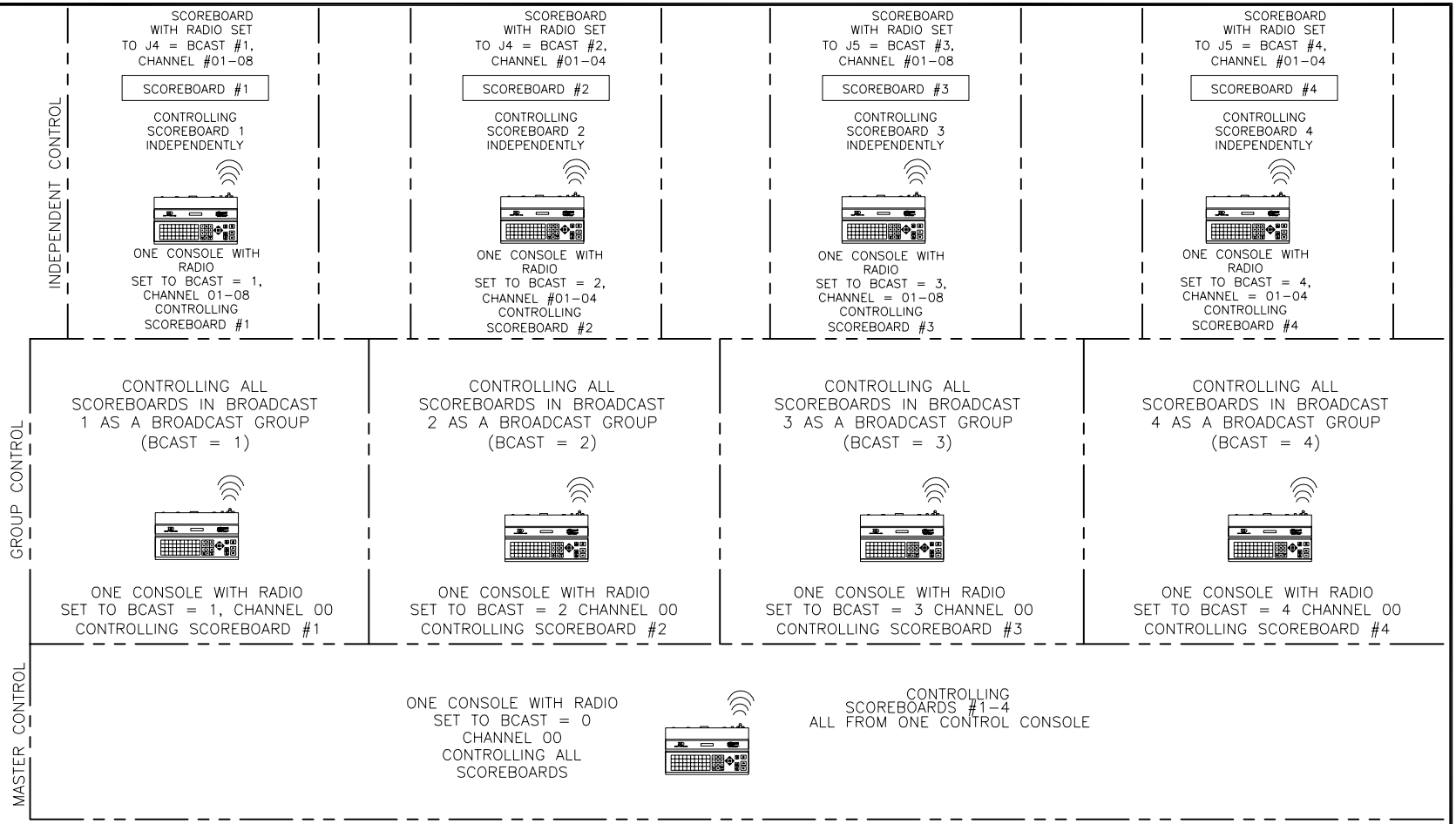
PROJ: TENNIS SCOREBOARDS
TITLE: SYSTEM RISER; TENNIS; SINGLE COURT W/ TNMC, AS 5000
DESIGN: MMILLER | DRAWN: MMILLER | DATE: 27 MAY 03
SCALE: NONE

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

REVISION APPR. BY: MMILLER SCALE: NONE

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.

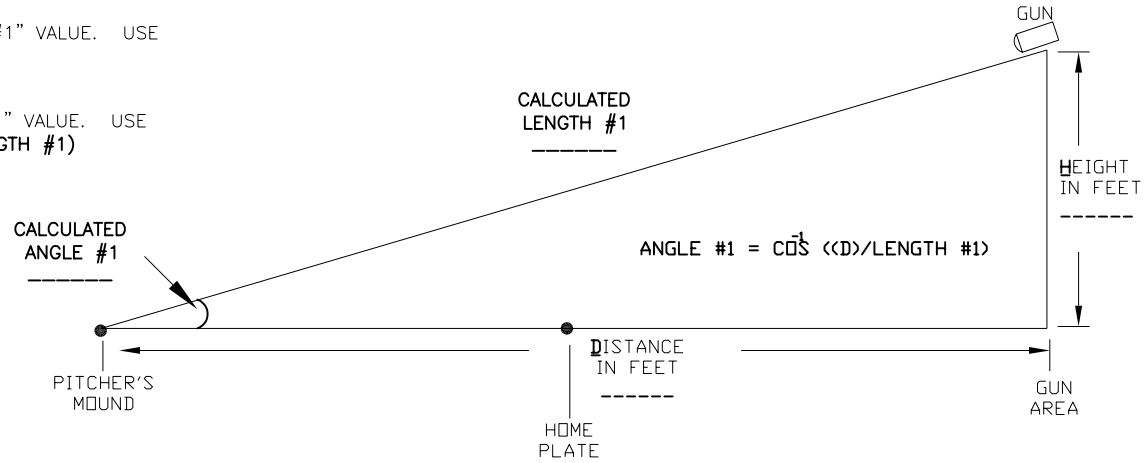
A CALCULATOR WITH ABILITY TO DO SIN, COS, TAN IS REQUIRED.
DO ALL CALCULATIONS TO .XXXX VALUES.

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 $= \sqrt{D^2 + H^2}$

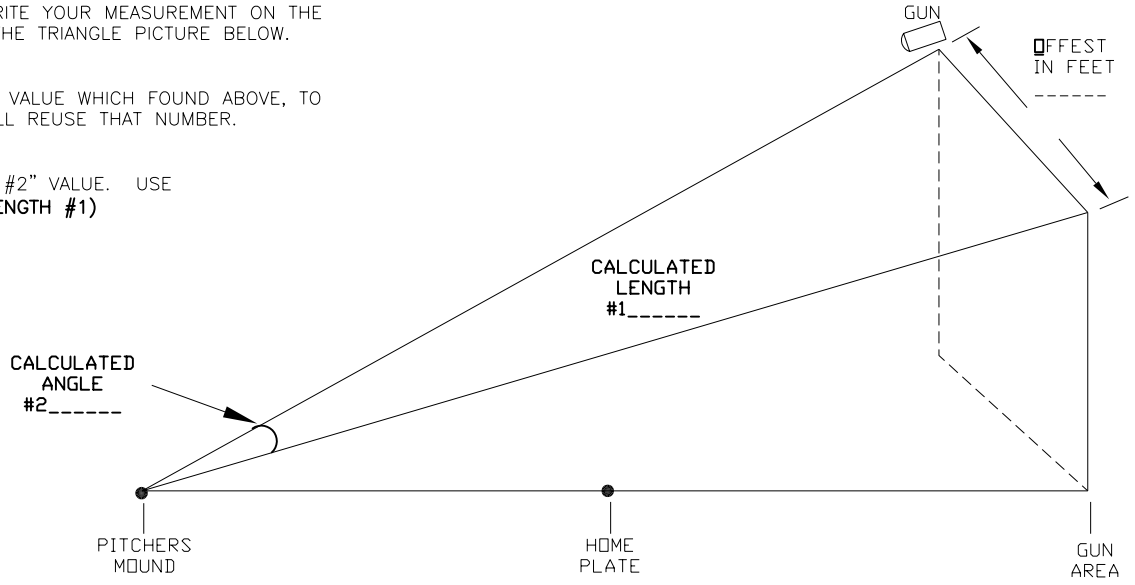
STEP 4.
CALCULATE THE "ANGLE #1" VALUE. USE
ANGLE #1 = COS^{-1}(D/LENGTH #1)



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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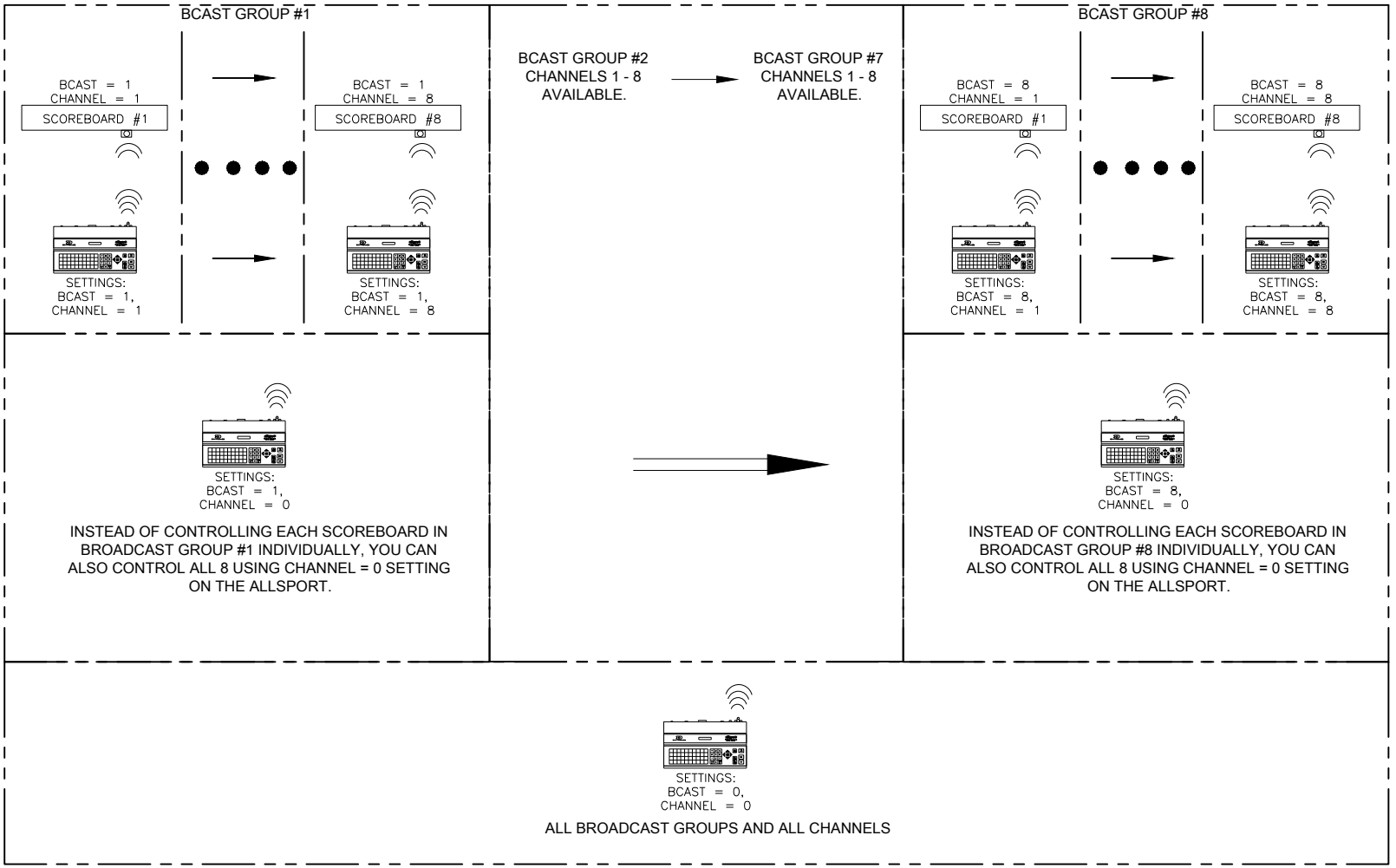
PROJ:

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

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B Sport Inserts

Refer to **Resources (p.2)** for information regarding how to read the drawing number.

Reference Drawings:

Insert; Event Counter Codes 371-376 ..... **DWG-58047**
Insert; Boxing Code 291 ..... **DWG-96892**
Insert, Basketball, LL-2433 ..... **DWG-120121**
Insert; LL-2437 A/S 5000, Football **DWG-122652**
Insert; LL-2436, Hockey/Handball/Lacrosse **DWG-124218**
Insert; LL-2435 A/S 5000, Wrestling **DWG-124701**
Insert; LL-2434 A/S 5000, Volleyball **DWG-125055**
Insert; LL-2438 A/S 5000, Baseball **DWG-125061**
Insert; LL-2439 A/S 5000, Track **DWG-125094**
Insert; LL-2440 A/S 5000, Soccer **DWG-125215**
Insert; LL-2441 A/S 5000, Team Name **DWG-125290**
Insert; LL-2475 A/S 5000, Segment Timer **DWG-129357**
Insert; LL-2482 A/S 5000, Pitch and Speed **DWG-130895**
Insert; LL-2483 A/S 5000, Tennis **DWG-131274**
Insert, Smart Clock Codes 1000, 6000 ..... **DWG-136301**
Insert; Strike Outs **DWG-163409**
Insert; A/S 5000, Water Polo **DWG-178439**
Insert; Custom Gymnastics, A/S 5000 ..... **DWG-207655**
Insert; Cricket/Football **DWG-315384**
Insert; Cricket, A/S 5000 Series **DWG-319507**
Insert; Rugby **DWG-712154**
Insert; 0G-1021630, A/S 5000, Curling **DWG-1021630**
Insert; Custom Lacrosse **DWG-1084219**

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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

OG-59047 REV. 2

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 OG-58047.	AVB	AVB
1	26 OCT 98	ADDED CODE 377	DDL	

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

BOXING

CODE 291

96892 REV. 1

REV.	DATE	DESCRIPTION	BY	APPR.
1	11 APR 01	CHANGED PART NUMBER FROM LL-2347 TO 0C-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.
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	BY:
06	12 AUG 05	ADDED PENALTY FLAG KEY ADDED CODE 6612	DJU
REV	DATE:	ADDED CODE 6402 FB>HK	BY:
05	07 FEB 01	PLACED ALL CODES IN NUMERICAL ORDER	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

122652

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

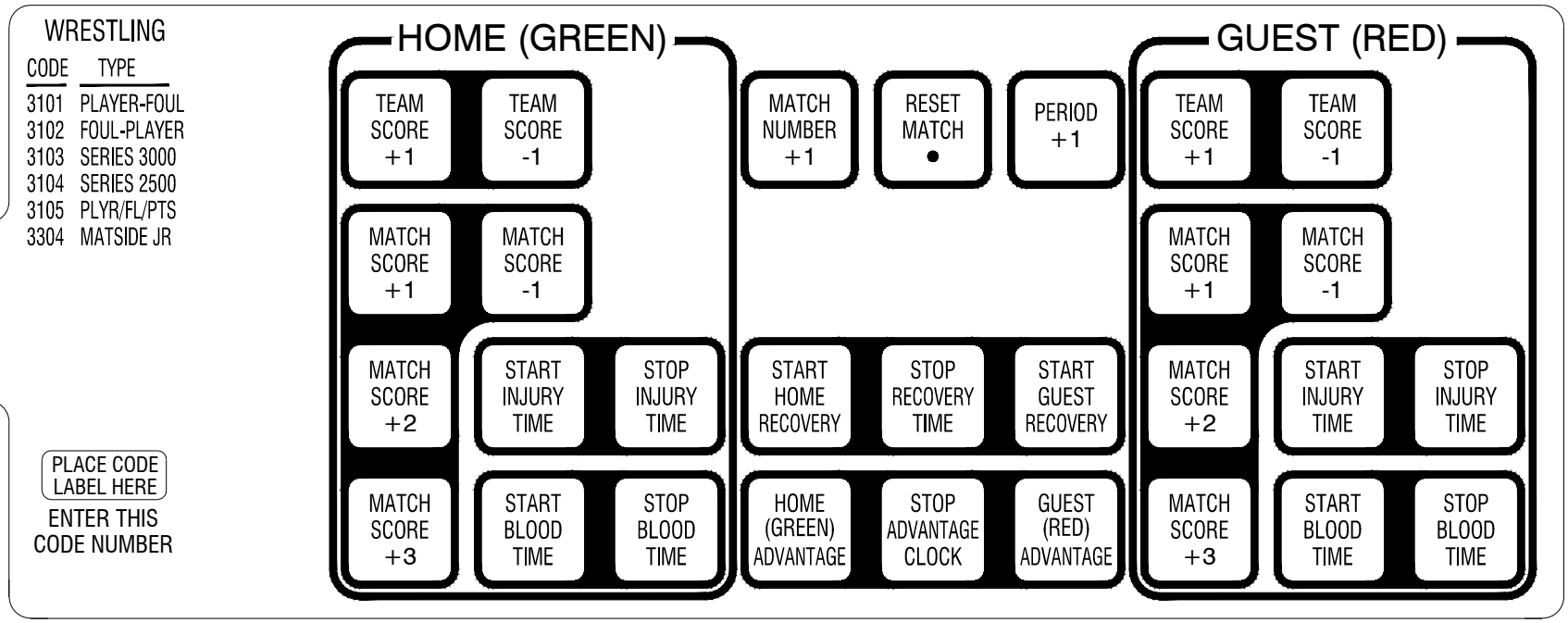
DES. BY: AVB DRAWN BY: A VANBEMMEL DATE: 18 NOV 99

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
03	26 JULY 00	ADDED CODE 3105 PLYR/FL/PTS	EB
02	27 DEC 99	ADDED CODE LABEL LOCATION	EB
01	06 DEC 99	ADDED CODE NUMERS	EB

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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

124701

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:	ADDED CODE LABEL LOCATION	BY:
01	27 DEC 99		EB

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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

REV	DATE:	ADDED FIELDER'S CHOICE KEY	BY:
05	30 NOV 12		DJU
REV	DATE:	UPDATED LL TEXT TO REV 04	BY:
04	29 JUL 10		DJU
REV	DATE:	ADDED CLEAR PITCH COUNT CONTROLS	BY:
03	21 MAY 07		JMC

REV	DATE:	ADDED CLEAR BATTER / AVERAGE KEY	BY:
02	17 MAR 06		DJU
REV	DATE:	ADDED CODE LABEL LOCATION	BY:
01	27 DEC 99		EB

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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: 05
JOB NO: P1196
FUNC-TYPE-SIZE: E-07-A

125061

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
REV	DATE:		BY:
03	26 JULY 00	ADDED CODE 7711	EB
REV	DATE:		BY:
02	14 MAR 00	ADDED CODE 7604	EB
REV	DATE:		BY:
01	27 DEC 99	ADDED CODE LABEL LOCATION. ADDED CODE 7601	EB

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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	JOB NO:	FUNC-TYPE-SIZE
	04	P1196	E-07-A

125215

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REV	DATE:		BY:
01	11 FEB 08	ADDED "&" SYMBOL TO INSERT	JMC

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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

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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:		BY:
01	26 JULY 99	ADDED CODE 100 DEDICATED SEGMENT TIMER	EB

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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

129357

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

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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

REV	DATE:	ADDED PRO CODE. ADDED SETS WON +1 AND DOUBLES SERVE KEYS.	BY:
01	12 MAY 03		CJB

LL-2483, REV 02

TENNIS

CODE	TYPE
0220	STANDARD
0221	PRO

PLACE CODE LABEL HERE

ENTER THIS CODE NUMBER

TOP

MATCHES WON +1 | SERVE | GAMES WON +1 | POINT | ADVANTAGE

SETS WON +1 | DOUBLES SERVE

BOTTOM

MATCHES WON +1 | SERVE | GAMES WON +1 | POINT | ADVANTAGE

SETS WON +1 | DOUBLES SERVE

DEUCE | TIE BREAK

RESET MATCH

RESET GAME SCORE

MATCH NUMBER +1

SET +1

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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

131274

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

REVISION APPR. BY:

SCALE: 1=1

1196-E07A-163409

WATER POLO
CODE: 4498

06-178439, REV 00

HOME

SCORE +1 | SCORE -1 | TIME OUT ◀

PLAYER PENALTY START ● | DELETE PENALTY ● | CLEAR ALL PENALTIES ●

PENALTY TIME ● | TIME OUT ON/OFF

ENABLE PENALTY CLOCKS | DISABLE PENALTY CLOCKS

RECALL SHOT TIME ● | SHOT TIME ●

PERIOD +1

GUEST

SCORE +1 | SCORE -1 | TIME OUT ◀

PLAYER PENALTY START ● | DELETE PENALTY ● | CLEAR ALL PENALTIES ●

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

GYMNASTICS

CODE

0015

COMPETITOR

BLANK DISPLAY

SCORE

06-207655

REV.	DATE	DESCRIPTION	BY	APPR.

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DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: INSERT; CUSTOM GYMNASTICS, A/S 5000

DES. BY:

DRAWN BY: DULSCHM

DATE: 10 AUG 04

REVISION 00

APPR. BY:

SCALE: 1 = 1

1196-E07A-207655

OG-315384 REV 01

DAKTRONICS, INC.
BROOKINGS, SD 57006

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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

REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006

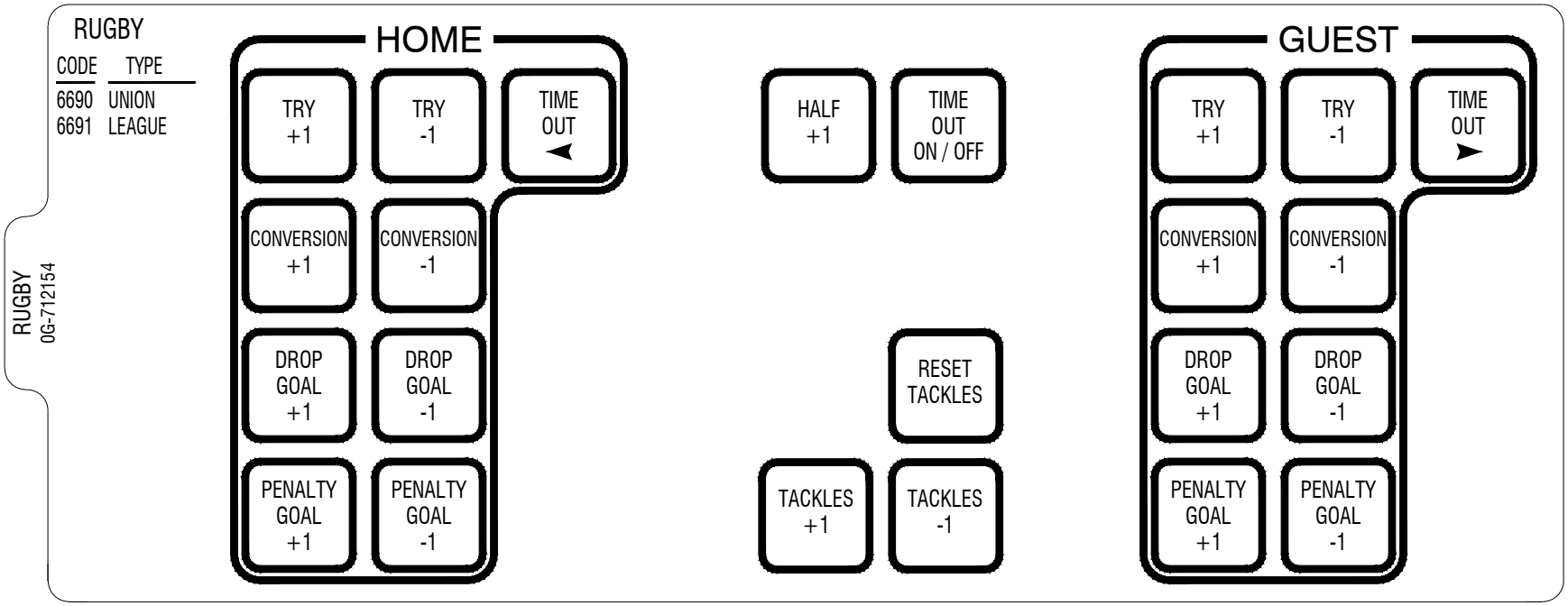
PROJ:

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:	
03	30 JAN 18	PER CN-49064, ADDED "RESET TACKLES" BUTTON	KDD	
02	03 JAN 13	ADDED HOME AND GUEST BOARDERS	DJU	
01	12 DEC 12	ADDED TACKLES KEYS	CRV	

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THIRD ANGLE PROJECTION

PROJECT:				
TITLE:	INSERT; RUGBY			
DATE: 25 SEP 08	DIM UNITS: INCHES [MILLIMETERS]		SHEET	REV
SCALE: 1 = 1	DO NOT SCALE DRAWING			03
DESIGN: BCARSRU	JOB NO.	FUNC - TYPE - SIZE	712154	
DRAWN: DULSCHM	P1192	R - 08 - A		

CURLING

CODE TYPE

4501

OG-1021630 REV 00

PLACE CODE LABEL HERE

ENTER THIS CODE NUMBER

YELLOW

SCORE +1	SCORE -1	TIME OUT ◄
		SET TIME •
TEAM START ◄		STOP

	EXTRA BREAK START
1ST UP/ HAMMER SELECT	HALFTIME BREAK START
	BREAK START
END +1	END -1

RED

SCORE +1	SCORE -1	TIME OUT ►
		SET TIME •
TEAM START ►		STOP

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BROOKINGS, SD 57006

DO NOT SCALE DRAWING

PROJ:

TITLE: INSERT; OG-1021630, A/S 5000, CURLING

DESIGN: BCARSRUD

DRAWN: CDAILY

DATE: 26 AUG 10

SCALE: 1=1

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	00	P1196	E-07-A

1021630

LACROSSE

CODE	TYPE
9423	CUSTOM

PLACE CODE LABEL HERE

ENTER THIS CODE NUMBER

0G-1084219 R01

HOME

SCORE +1	SCORE -1	TIME OUT ◄	RECALL SHOT TIME	SET SHOT TIME	TIME OUT ON / OFF
SHOTS ON GOAL +1	SHOTS ON GOAL -1	GROUND BALLS +1	GROUND BALLS -1	ENABLE PENALTY CLOCKS	DISABLE PENALTY CLOCKS
SAVES +1	SAVES -1	FACE OFFS DRAW CTRL +1	FACE OFFS DRAW CTRL -1	MINOR PENALTY	MAJOR PENALTY
PLAYER PENALTY •	DELETE PENALTY •	CLEAR ALL PENALTIES •			PERIOD +1

GUEST

SCORE +1	SCORE -1	TIME OUT ►			
SHOTS ON GOAL +1	SHOTS ON GOAL -1	GROUND BALLS +1	GROUND BALLS -1		
SAVES +1	SAVES -1	FACE OFFS DRAW CTRL +1	FACE OFFS DRAW CTRL -1		
PLAYER PENALTY •	DELETE PENALTY •	CLEAR ALL PENALTIES •			

REV	DATE:	ADDED "DRAW CTRL" TEXT TO "FACE OFFS" KEYS	BY:
01	31 MAY 12		DJU

DAKTRONICS, INC.
BROOKINGS, SD 57006
DO NOT SCALE DRAWING

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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

10842 19

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C Sport Code Numbers

Indoor Scoreboard Models

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 + Col 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 + Col 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
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 + Col 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]		

Model	Address	Basketball	Volleyball	Wrestling	Hockey	Football
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	
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	4105	6105

Model	Address	Basketball	Volleyball	Wrestling	Hockey	Football
MS-2126	17	1101	2101	3101	4105	6105
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	4401	
SD-2102	23,24,25,26	1101, 1102	2101	3101	4401	
SD-2103	23, 27, 24, 25, 28, 26	1101, 1102	2101	3101	4401	
SD-2104	23, 24, 25, 26, 27, 28	1101, 1102	2101	3101	4401	
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 + Col 1-4	All	All	All	All	All
TI-2002	1 + Col 1-4	All	All	All	All	All
TI-2003	2	All				All
TI-2007	1 + Col 1-4	All	All	All	All	All
TI-2010	2	All				All
TI-2011	1 + Col 1-4	All	All	All	All	All
TI-2013	1 + Col 1-4	All	All	All	All	All
TI-2014	2 + Col 1-4	All				All
TI-2015	2	All				All
TI-2019	1	All	All	All	All	All
TI-2031	1 + Col 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	Address	Basketball	Volleyball	Wrestling	Hockey	Football
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 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 4100	13	1103, 1104	2103, 2104	3103, 3104	4103, 4104	6103, 6104

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

Outdoor Scoreboard Models

Model	Address	Baseball	Football	Soccer	Track	Lacrosse
BA-515	61 + Col 1-8	5501				
BA-518	61 + Col 1-8	5501				
BA-618	61 + Col 1-8	5501				
BA-624	61 + Col 1-8	5501				
BA-718	62 + Col 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				

Model	Address	Baseball	Football	Soccer	Track	Lacrosse
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]				
BA-2030	72, 70, 71	5501				
BA-2031	3	5501				
BA-2032	60	5501				
BA-2033	3	5501				
BA-2034	3	5501				
BA-2035	3	5501				
BA-2125	72, 70, 71	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-3718	64, 65, 66	5501				
BA-3724	64, 65, 66	5501				
FB-824	11		6601	7601		4602
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-1730	15, 16	5601, 5602 [1]	6601	7601	8601 [2]	4601
FB-1830	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, 4602 [4]
FB-2019	15, 19	5601, 5602 [1]	6601	7601	8601 [2]	4601, 4602 [4]
FB-2020	15, 19	5601, 5602 [1]	6601	7601	8601 [2]	4601, 4602 [4]
FB-2021	15, 19	5601, 5602 [1]	6601	7601		4601, 4602 [4]
FB-2022	15, 19	5601, 5602 [1]	6601	7601	8601 [2]	4601, 4602 [4]

Model	Address	Baseball	Football	Soccer	Track	Lacrosse
FB-2023	15, 19	5601, 5602 [1]	6601	7601	8601 [2]	4601, 4602 [4]
FB-2024	15, 19	5601, 5602 [1]	6601	7601		4601, 4602 [4]
FB-2025	15, 19	5601, 5602 [1]	6601	7601	8601 [2]	4601, 4602 [4]
FB-2026	15, 19	5601, 5602 [1]	6601	7601		4601, 4602 [4]
FB-2027	15, 19	5601, 5602 [1]	6601	7601	8601 [2]	4601, 4602 [4]
FB-2028	Top = 15 (Pre-5/2016 Red/Amb: 32 White: 12) Bottom = 19	5601, 5602 [1]	6601	7601		4601, 4602 [4]
FB-2350	12, 15		6601	7601		4601, 4602 [4]
FB-2180	21, 22, 23		6611			
FB-25XX & FB-26XX Modular Scoreboard	Clock Section: 15 All other Sections: 19	5601	6601	7601	8601 [2]	4601, 4602 [4]
FB-27XX Hybrid Scoreboard	15	5601, 5602 [1]	6601	7601	8601 [2]	4601, 4602 [4]
FB-4005	11		6601	7601		4602
SO-824	11		6601	7701		4702
SO-918	11	5601	6601	7701		4702
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-1930	15, 16		6601	7701	8601 [2]	4701
SO-2008	17	5601, 5602 [1]	6601	7601		4702
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, 4702 [4]
SO-2018	15, 19	5601, 5602 [1]	6601	7601		4601, 4602 [4]
SO-2019	15, 19	5601, 5602 [1]	6601	7701		4701, 4702 [4]
SO-2021	15, 19	5601, 5602 [1]	6601	7701		4701, 4702 [4]
SO-2022	15, 19	5601, 5602 [1]	6601	7701	8601 [2]	4701, 4702 [4]
SO-2023	15, 19	5601, 5602 [1]	6601	7701	8601 [2]	4701, 4702 [4]
SO-2030	15, 16		6601	7701	8601 [2]	4701
SO-2031	11, 17			7711		
SO-2043	28, 29			7711		
SO-2918	11	5601	6601	7701		4702
MS-915	11	5601	6601	7601		4602
MS-918	11	5601	6601	7601		4602
MS-2002	11	5601	6601	7601		4602
MS-2003	11	5601	6601	7601		4601
MS-2004	74, 75					4601, 4602 [4]
MS-2006	11	5601	6601	7601		4602
MS-2009	72, 71, (73 - white only)		6601	7601		4601, 4602 [4]
MS-2011	11	5601	6601	7601		4601

Model	Address	Baseball	Football	Soccer	Track	Lacrosse
MS-2012	74, 75					4601, 4602 [4]
MS-2014	71, 72, 73		6601	7601		4601
MS-2015	71		6601	7601		4601
MS-2016	13		6103			4103
MS-2017	17		6601			4601
MS-2018	71, 72, 73		6601	7601		4601
MS-2024	72, 73, 71		6402	7601		4602
MS-2025	11		6601	7601		4601, 4602 [4]
MS-2026	17		6105			4102
MS-2027	15,71,72,73		6601	7601	8601 [2]	4601, 4602 [4]
MS-2028	71		6601	7601		4601, 4602 [4]
MS-2029	15, 71		6601	7601	8601 [2]	4601, 4602 [4]
MS-2030	71		6601	7601		4601, 4602 [4]
MS-2031	72, 73, 71		6601	7601		4601, 4602 [4]
MS-2032	71		6601	7601		4601, 4602 [4]
MS-2118	71, 72		6601	7601		4601
MS-2126	17		6105			4102
MS-2918	72, 73, 71		6601	7601		4602
MS-3918	11	5501	6601	7601		4602
TI-218	2		All			All
TI-418	1	All	All	All	All	All
TI-2002	1 + Col 1-4	All	All	All	All	All
TI-2003	2		All			All
TI-2007	1 + Col 1-4	All	All	All	All	All
TI-2010	2		All			All
TI-2011	1 + Col 1-4	All	All	All	All	All
TI-2013	1 + Col 1-4	All	All	All	All	All
TI-2014	2 + Col 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-2033	2, 1	All	All	All	All	All
TI-2034	1	All	All	All	All	All
TI-2035	1	All	All	All	All	All

Notes:

1. Code 5601 is With Clock; Code 5602 is Without Clock.
2. To receive data from an external timer, substitute code 8602 for the Omega PowerTime or code 8603 for the Daktronics OmniSport 1000/6000.
3. Requires two (2) consoles to operate scoreboard.
4. Codes 4601 and 4701 count 2 penalty times (hockey); Codes 4602 and 4702 count 3 penalty times (lacrosse).

Miscellaneous Scoreboard Models

Model	Address	Sport/Function	Code
CR-2001	11	Cricket	5599
CR-2002	12	Cricket	5598
CR-2003	12, 13	Cricket	5598

Model	Address	Sport/Function	Code
CR-2009	12, 13	Cricket	5598
FB-2030	1, 10	Cricket	5699
FB-3010	10, 1	Cricket	5699
CU-2001	11, 12	Curling	4501
BA-2003	11	Pitch & Speed	5500
CT-2001	1	Pitch & Speed	5500
CT-2002	1	Pitch & Speed	5500
CT-2003	1 + Col 1-4	Pitch & Speed	5500
CT-2004	1 + Col 1-4	Pitch & Speed	5500
CT-2005	1	Pitch & Speed	5500
CT-2009	1 + Col 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 + Col 1-4	Event Timer	372, 374, 376
CT-2004	1 + Col 1-4	Event Timer	372, 374, 376
CT-2005	1	Event Timer	372, 374, 376
CT-2006	1 + Col 1-4	Event Timer	372, 374, 376
CT-2007	1 + Col 1-4	Event Timer	372, 374, 376
CT-2008	1 + Col 1-4	Event Timer	372, 374, 376
CT-2009	1 + Col 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 + Col 5-8	Multi-Purpose Timer	99
TI-413	1 + Col 1-4	Multi-Purpose Timer	99
TI-418	1 + Col 1-4	Multi-Purpose Timer	99
TI-2002	1 + Col 1-4	Multi-Purpose Timer	99
TI-2003	2	Multi-Purpose Timer	99
TI-2006	22	Multi-Purpose Timer	99
TI-2007	1 + Col 1-4	Multi-Purpose Timer	99
TI-2009	22	Multi-Purpose Timer	99
TI-2010	2 + Col 1-4	Multi-Purpose Timer	99
TI-2011	1 + Col 1-4	Multi-Purpose Timer	99
TI-2013	1 + Col 1-4	Multi-Purpose Timer	99
TI-2014	2 + Col 1-4	Multi-Purpose Timer	99
TI-2015	2 + Col 1-4	Multi-Purpose Timer	99
TI-2019	1 + Col 1-4	Multi-Purpose Timer	99
TI-2020	22	Multi-Purpose Timer	99
TI-2024	2 + Col 1-4	Multi-Purpose Timer	99
TI-2028	1 + Col 1-4	Multi-Purpose Timer	99

Model	Address	Sport/Function	Code
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-2018	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 + Col 1-4	Segment Timer	100
TI-2012	1	Segment Timer	100
TI-2015	2 + Col 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, TN-2609	11	Tennis	220
TN-2503, TN-2603	11	Tennis	220
TN-2504, TN-2604	11	Tennis	220
TN-2505, TN-2605	20	Tennis	220
TN-2560, TN-2650	20, 11, 12, 13, 14, 15, 16	Tennis	220
TN-2561, TN-2651	20, 11, 12, 13, 14, 15, 16	Tennis	220
TN-2562, TN-2652	20, 11, 12, 13, 14, 15, 16	Tennis	220
TN-2563, TN-2653	20, 11, 12, 13, 14, 15, 16	Tennis	220
TN-2654, TN-2655	20, 11, 12, 13, 14, 15, 16	Tennis	220

Model	Address	Sport/Function	Code
WR-2021	101	Judo	281 or 284
WR-2022	102	Karate	282 or 285
WR-2023	103	Tae Kwon Do	283 or 286
WR-2101	104	Gymnastics	15
WR-2102	104	Gymnastics	15
WR-2103	104	Gymnastics	15
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 – Team Abbrev.	222	Team Abbreviation	
TNMC – PLR/FL/PTS	223		

1. Code 8000 is available on the All Sport 5100 console only.

Custom Indoor Facility

Site	Contract	Basketball	Volleyball	Wrestling	Hockey	Football
Belgrade Arena Custom handball (3 pen)*		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	C10617	9105	9205		9405	9605
SE Texas Entertainment	C10713					
Tyson/IBP Events Center	C10976					
University of South Dakota		9107	9207	9307(resv)		9607
Brigham Young Univ. Custom contract retrofit		9108				
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	

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			

5000 Series Codes that replace 2500 Series Codes

Sport	2500 Code	Models	5000 Code
Baseball/Softball	31 w/clock	MS-9, MS-918	531
	32 w/clock	FB-1424, FB-1524, FB-1430, FB-1530	532
	33 wo/clock	FB-1424, FB-1524, FB-1430, FB-1530	533
	35 wo/clock	BA-15	535
	37 wo/clock	BA-5, BA-6	537
	44 w/clock	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

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D Quick Reference

All Sport 5000 Standard Keys

Refer to **Standard Keys (p.7)** for 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 key is pressed.
- **<AUTO HORN>** sets the horn to automatically sound when a period end is reached. The yellow **<HORN>** LED 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>** repeatedly 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 score or statistic values. Press **<EDIT>** followed by the desired button to be edited. Refer to the specific sport section for all edit key functions.

Segment Timer

Refer to **Section 3: Segment Timer Operation (p.22)** for 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 first segment value.
- 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

Refer to **Section 4: Baseball Operation (p.27)** for 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 current batter's count.
- **<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 **EDIT SETTINGS** menu.

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 team's pitcher.

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>**, and **<LEFT ON BASE +1>** increment the team totals.

Team Runs

- **<RUNS+1>** increments team runs.
- Team Runs are scored by total or by inning per 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>**, and **<IN PLAY +1>**

Basketball

Refer to **Section 7: Basketball Operation (p.45)** for 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 **Team Score – Update Player** setting in the **EDIT SETTINGS** menu.

Team Fouls

- **<TEAM FOULS +1>** and **<TEAM FOULS -1>** increment and decrement the total fouls.
- **<BLANK PLAYER FOUL>** blanks the displayed player-foul digits.
- The console may ask for a player number depending on the **Team Score – Update Player** setting in the **EDIT SETTINGS** menu.

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 scoreboard depending on the **Time Outs – Show on Main** setting in the **EDIT SETTINGS** menu.

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 edit of the reset value of the shot clock timer.

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 an in-game player.
- **<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>**, and **<PERIOD +1>**

Football

Refer to **Section 8: Football Operation (p.60)** for 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>**, **<+2>**, **<+3>**, **<+6>**, and **<-1>** increment and decrement team score.

Quarter

- **<QUARTER +1>** increments the quarter number.

Ball On

- **<BALL ON>** edits the current Ball On location.
- If the **Ball On Auto Calculate** setting in the **EDIT SETTINGS** menu 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 **Ball On Auto Calculate** setting 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 Yards to go value to 10 for a first down.

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 scoreboard depending on the **Time Outs – Show on Main** setting in the **EDIT SETTINGS** menu.

Possession

- **<POSS>** turns the possession indicators on or off for the respective team.
- If the **Ball On Auto Calculate** setting 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/third time allows edit of the play clock reset values.

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 their respective values: **<SCORE +1>**, **<SCORE -1>**, **<SCORE +2>**, **<SCORE +3>**, **<SCORE +6>**, **<FIRST DOWNS +1>**, **<QUARTER +1>**, **<DOWN +1>**, **<TIME OUT>**, and **<TIME OUT ON/OFF>**

Hockey/Lacrosse/Handball

Refer to **Section 9: Hockey/Lacrosse/Handball Operation (p.73)** for 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

- **<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 scoreboard depending on the **Time Outs – Show on Main** setting in the **EDIT SETTINGS** menu.

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/Draw Controls

- **<FACE OFFS DRAW CTRL +1>** and **<FACE OFFS DRAW CTRL -1>** increment and decrement the team face offs/draw controls (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>** and **<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 their respective values: **<SCORE +1>**, **<SCORE -1>**, **<SHOTS ON GOAL +1>**, **<SHOTS ON GOAL -1>**, **<SAVES +1>**, **<SAVES -1>**, **<PERIOD +1>**, **<TIME OUT ON/OFF>**, and **<TIME OUT>**

Soccer

Refer to **Section 10: Soccer Operation (p.84)** for 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

- **<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 scoreboard depending on the **Time Outs – Show on Main** setting in the **EDIT SETTINGS** menu.

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 their respective values: **<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>**, and **<TIME OUT>**

Track

Refer to **Section 12: Track Operation (p.96)** for 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 **Guest 2,3 Value** setting in the **EDIT SETTINGS** menu is set to **Score**.

Reset

- **<RESET>** resets the main clock. This only applies to the manual input 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 **Guest 2,3 Value setting** is set to **Event/Heat.**
- The event value will be overwritten if console is connected to an external timer.

Heat

- **<GUEST 3 SCORE/HEAT>** edits the current heat value if the **Guest 2,3 Value setting** is set to **Event/Heat.**
- The heat value will be overwritten if console is connected to an external timer.

Edit Key Function

- Press **<EDIT>** followed by **<SCORE +1>** to edit the current team score value.

Volleyball

Refer to **Section 13: Volleyball Operation (p.101)** for 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. Game scores will be reset to zero for the start of the next game. Press **<EDIT><SETS +1>** to recover 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 **Team Stats – Update Player** setting in the **EDIT SETTINGS** menu.
- Team statistics will be displayed based on the setting of **User Defined** settings for scoreboards displaying two of the stats.

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 scoreboard depending on the **Time Outs – Show on Main** setting in the **EDIT SETTINGS** menu.

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 an in-game player.
- **<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 their respective values: **<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>**, and **<SUBS +1>**
- Pressing the up or down arrow keys after pressing **<EDIT><SCORE+1>** scrolls through the game scores for the selected team.

Wrestling

Refer to **Section 14: Wrestling Operation (p.113)** for 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 **EDIT SETTINGS** menu

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 their respective values: **<TEAM SCORE +1>**, **<TEAM SCORE -1>**, **<MATCH SCORE +1>**, **<MATCH SCORE -1>**, **<MATCH NUMBER>**, **<PERIOD +1>**, **<TIME OUT>**, and **<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.

E Supplementary Documents

Supplementary Documents
Scoreboard Driver Bootload Update Procedure.....**ED-18728**

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Scoreboard Driver Bootload Update Procedure

Some scoreboard drivers feature a "bootloader" that allows firmware updates to be performed in the field using a computer and an All Sport 5000 or an All Sport 5500 (ColorSmart) control console. The console acts as a signal converter between the computer and the scoreboard network.

Requirements

Software Versions

- The All Sport 5000 must have software version 4.1.5 or later.
- The All Sport 5500 must have software version 1.0.5 or later.
- The 16 column MultiCast driver (0P-1388-0100) must have software version 1.3 or later.
- The Gyrus driver (0A-1782-0100) must have software version 1.3 or later. Also note:
  - Gyrus driver address must be non-zero.
  - Gyrus driver will not bootload if running Power-On Diagnostics (FF).
  - Gyrus drivers must be running from Multi-Drop protocol and will not bootload while running in any of the other following protocols:
    – Multi-Line
    – Colorado Timing Systems
    – Omega

Equipment

- Computer with internet access and a 9-pin serial port [or USB-to-Serial adaptor (part # A-2221)]
- 9-pin to 9-pin serial cable (part # W-1267) or 9-pin to 25-pin serial cable (part # W-1249)

Instructions

1. Make sure that the All Sport console has a version of firmware that supports bootloading (see **Requirements** above). If it does not, contact customer service to request an All Sport PROM update.
2. Make sure the scoreboard driver has a version of firmware that supports bootloading by cycling the scoreboard power and observing the power up sequence. An "rx.x" message will be displayed, where "x.x" is the version number. If the version number is under 1.3, the drivers will have to be updated with a programming board or exchanged for newer versions.
3. Download the DakLoader program and the Field Update file:
   a. On a computer with internet access, open a web browser and go to: http://dakfiles.daktronics.com/downloads/Sports_Products/Bootloader/
   b. Click on the "DakLoader2.exe" file, and **Save** it to the Desktop.
   c. Click on the specific "Driver Update Files" directory, either "MultiCast" or "Gyrus".
   d. Click on the "16 col driver" directory.
   e. Click on the compressed ".zip" file, and **Save** it to the Desktop as well.
      – **MultiCast Drivers:** "ED-16327_Mcast16.zip"
      – **Gyrus Drivers:** "DD-2929930_Gyrus_vX_Y.zip" (X_Y = latest version number)
   f. Unzip the downloaded file to obtain the ".fud" (**F**ield **U**p**D**ate) file.

NOTE FOR GYRUS DRIVERS:
The proper Field Update File to unzip depends on the firmware of the All Sport 5000 console. Power on the console, and identify the firmware version during boot-up.

- Version 4.1.5: Unzip the FUD file in the "AllSport_v4_1_5_compatible" folder.
- Version 4.1.6+: Unzip the FUD file in the "AllSport_v4_1_6_plus_compatible" folder.

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4. Enter code "0001" into the All Sport console. Remove any sport insert over the console's keypad, and press **<T>** or **<G>** to send rotating rows or rotating columns test command to the scoreboard.

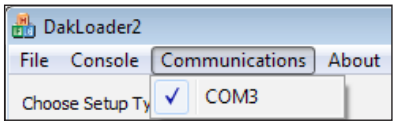
5. Connect the computer to the All Sport 5000 or 5500:

   - If the All Sport console has the **J5 COMPUTER PORT** option loaded, connect this port to the computer using a standard 9-pin serial cable.
   - If the All Sport console has the **J6 I/O PORT** option loaded, connect this port to the computer using a 9-pin to 25-pin serial cable.

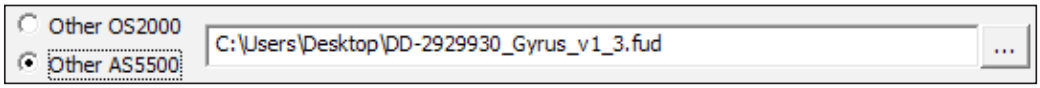
   > **Note:** If the computer does not have a 9-pin serial port, a USB-to-serial adaptor will be required.

6. Open the DakLoader2 program that was saved to the Desktop in **step 3b**.

7. Click on the **Communications** menu, and verify the appropriate **COM#** port is selected:



8. Select **Other AS5500**, and then click the **[…]** button to browse to the Field Update file that was extracted from the zip file in **step 3f**:



9. Click **Update**. The *Status* window will now show:
"Waiting for the update process to start on the AllSport."

10. Start the update process on the All Sport console:

    a. On the All Sport console, press **<MENU>** and then press **<ENTER>** to select a New Code. Enter a valid sport code other than 0001.

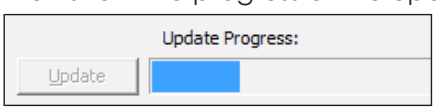
    b. Press **<MENU>** again. Use the arrow keys to navigate to "MENU- MAIN ENTER DISPLAY MENU?" and then press **<ENTER>**.

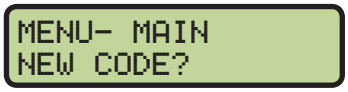
    c. Use the arrow keys to navigate to "MENU-DISPLAY RUN DOWNLOAD Y/N?" and then press **<ENTER>**.

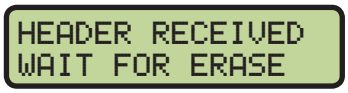
    d. The All Sport LCD should immediately show "HEADER RECEIVED WAIT FOR ERASE", and the *Status* window in the DakLoader program should show "Sending field update…

    > **Note:** If the process does not start, check the serial cable connection and the COM port selection in the DakLoader program. The All Sport will time out after 20 seconds and allow the process to be tried again.

    e. There will be a delay of a few seconds while the All Sport sends a command to the scoreboard network instructing all drivers to erase their firmware. Both the All Sport and the DakLoader program will then show the progress of the update:







11. Monitor the status of the update on the scoreboard:

a. Supported drivers will display the status codes in the table below on their first 2 columns (typically the first 2 clock digits or Home/Guest score digits if there is no clock):

Status Code	Meaning
bA	Bootload mode entered, looking for an active communication channel
bb	Communication channel found, waiting for Download Firmware command
bC	Download Firmware command received, erasing memory
bd	Memory erased, receiving new firmware file
bE	Bootload successful, waiting for command to exit bootloader
b1	Command fail: version specified in header is older than current version
b2	Command fail: ED number specified in header doesn't match current ED
b3	Command fail: bad command checksum
b4	Command fail: timeout (*Unused*)
b5	Flash erase failed
b6	Bad hex record checksum
b7	Unrecognized hex record type
b8	Hex file receive timeout
b9	Hex programming error (*Gyrus Driver Only*)

b. When the entire update file has been transmitted, the All Sport will show "FILE TRANSFERRED RETRY Y/N?" and the DakLoader2 program *Status* window will show "Field update compete. Waiting for retry or stop..."

- If there are any supported drivers on the network that do not show the "bE" status code, press **<ENTER>** on the All Sport console to retry the update. Only those drivers that failed the first attempt will now receive the update.
- If all drivers updated successfully, press **<CLEAR>** on the All Sport console to return to normal operation. The console will indicate to the network that the update process is complete and all drivers will exit the bootload mode.

DO NOT UNPLUG OR POWER OFF THE ALL SPORT UNTIL IT HAS RETURNED TO NORMAL OPERATION!

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F Daktronics Warranty and Limitation of Liability

This section includes the Daktronics Warranty & Limitation of Liability statement (SL-02374).

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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 and End User agree 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 (the "End User", which may also be the Purchaser) 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 End User 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 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 End User DDP Daktronics designated facility per Incoterms® 2020. If returned Equipment is repaired or replaced under the terms of this Warranty, Daktronics will prepay ground transportation charges back to End User and shall ship such items DDP End User's designated facility per Incoterms® 2020; otherwise, End User shall pay transportation charges to return the Equipment back to the End User and such Equipment shall be shipped Ex Works Daktronics designated facility per Incoterms® 2020. All returns must be pre-approved by Daktronics before shipment. Daktronics shall not be obligated to pay freight for any unapproved return. End User 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. Unless otherwise expressly provided, this Warranty does not impose any duty or liability upon Daktronics for partial LED pixel degradation. Notwithstanding the foregoing, in no event does this Warranty include LED pixel degradation caused by UV light. This Warranty does not 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, OR ACCURACY OR QUALITY OF DATA. OTHER ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY DAKTRONICS, ITS AGENTS OR EMPLOYEES, SHALL NOT 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

This Warranty does not impose any duty or liability upon Daktronics for any:

A. 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, End User assumes all risk of loss or damage, agrees to use any shipping containers that might be provided by Daktronics, and to ship the Equipment in the manner prescribed by Daktronics;

B. damage caused by: (i)the improper handling, installation, adjustment, use, repair, or service of the Equipment, or (ii) any physical damage which includes, but is not limited to, missing, broken, or cracked components resulting from non-electrical causes;

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altered, scratched, or fractured electronic traces; missing or gauged solder pads; cuts or clipped wires; crushed, cracked, punctured, or bent circuit boards; or tampering with any electronic connections, provided that such damage is not caused by 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) improper power including, without limitation, 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;

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. 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 End User and are not part of the contract of sale;

G. 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. replenishment of spare parts. In the event the Equipment was purchased with a spare parts package, the parties acknowledge and agree that the spare parts package is designed to exhaust over the life of the Equipment, and as such, the replenishment of the spare parts package is not included in the scope of this Warranty;

I. security or functionality of the End User's network or systems, or anti-virus software updates;

J. performance of preventive maintenance;

K. 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;

L. incorporation of accessories, attachments, software or other devices not furnished by Daktronics; or

M. paint or refinishing the Equipment or furnishing material for this purpose.

3. **Limitation of Liability**

A. 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.

B. 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 claims asserting or based on (a) loss of use of the facility or equipment; lost business, revenues, or profits; loss of goodwill; failure or increased cost of operations; loss, damage or corruption of data; loss resulting from system or service failure, malfunction, incompatibility, or breaches in system security; or (b) 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, injury to property or any damages or sums paid 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

C. In no event shall Daktronics be liable 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. The End User'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

A. The Warranty contained herein extends only to the 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; Election of Remedies

A. 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. The parties consent to the application of the laws of the State of South Dakota to govern, interpret, and enforce each of the parties' 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.

B. Any dispute, controversy or claim arising from or related to this Warranty, the parties shall first attempt to settle through negotiations. In the event that no resolution is reached, then such dispute, controversy, or claim shall be resolved by final and binding arbitration under the Rules of Arbitration of the International Chamber of Commerce. The language of the arbitration

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shall be English. The place of the arbitration shall be Sioux Falls, SD. A single arbitrator selected by the parties shall preside over the proceeding. If a single arbitrator cannot be agreed upon by the parties, each party shall select an arbitrator, and those arbitrators shall confer and agree on the appointed arbitrator to adjudicate the arbitration. The arbitrator shall have the power to grant any provisional or final remedy or relief that it deems appropriate, including conservatory measures and an award of attorneys' fees. The arbitrator shall make its decisions in accordance with applicable law. By agreeing to arbitration, the Parties do not intend to deprive any court of its jurisdiction to issue a pre-arbitral injunction, pre-arbitral attachment, or other order in aid of arbitration proceedings and the enforcement of any award. Without prejudice to such provisional remedies as may be available under the jurisdiction of a court, the arbitrator shall have full authority to grant provisional remedies and to direct the Parties to request that any court modify or vacate any temporary or preliminary relief issued by such court, and to award damages for the failure of any Party to respect the arbitrator's orders to that effect.

6. Availability of Extended Service Agreement

A. For End User's protection, in addition to that afforded by the warranties set forth herein, End User 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).

Additional Terms applicable to sales outside of the United States

The following additional terms apply **only** where the installation site of the Equipment is located outside of the United States of America.

1. In the event that the installation site of the Equipment is in a country other than the U.S.A., then, notwithstanding Section 5 of the Warranty, where the selling entity is the entity listed in Column 1, then the governing law of this Warranty is the law of the jurisdiction listed in the corresponding row in Column 2 without regard to its conflict of law principles. Furthermore, if the selling entity is an entity listed in Column 1, then the place of arbitration is listed in the corresponding row in Column 3.

Column 1 (Selling Entity)	Column 2 (Governing Law)	Column 3 (Location of Arbitration)
Daktronics, Inc.	The state of Illinois	Chicago, IL, U.S.A.
Daktronics Canada, Inc.	The Province of Ontario, Canada	Toronto, Ontario, Canada
Daktronics UK Ltd.	England and Wales	Bristol, UK
Daktronics GmbH	The Federal Republic of Germany	Wiesbaden, Germany
Daktronics Hong Kong Limited	Hong Kong, Special Administrative Region of the P.R.C.	Hong Kong SAR
Daktronics Shanghai Co., Ltd.	The Peoples Republic of China	Shanghai, P.R.C.
Daktronics France, SARL	France	Paris, France
Daktronics Japan, Inc.	Japan	Tokyo, Japan
Daktronics International Limited	Macau, Special Administrative Region of the P.R.C.	Macau SAR
Daktronics Australia Pad Ltd	Australia	Sydney, Australia
Daktronics Singapore Pte. Ltd	Singapore	Singapore
Daktronics Brazil LTDA	Brazil	São Paulo, Brazil
Daktronics Spain S.L.U.	Spain	Madrid, Spain
Daktronics Belgium N. V	Belgium	Kruibeke, Belgium
Daktronics Ireland Co. Ltd.	Ireland	Dublin, Ireland

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