

**ALL SPORT® 1600 SERIES  
CONTROL CONSOLE**

OPERATION MANUAL

P1196

ED-12462  
Rev 15  
12 February 2018



**DAKTRONICS**

**Copyright © 2000-2018**

All rights reserved. While every precaution has been taken in the preparation of this manual, the publisher assumes no responsibility for errors or omissions. No part of this book covered by the copyrights hereon may be reproduced or copied in any form or by any means—graphic, electronic, or mechanical, including photocopying, taping, or information storage and retrieval systems—without written permission of the publisher.

*Daktronics trademarks are property of Daktronics, Inc. All other trademarks are property of their respective companies.*

# Table of Contents

<b>1 Introduction</b> .....	<b>1</b>	Score (+1/-1).....	17
Important Safeguards.....	1	Won (+1/-1).....	17
Specifications Label.....	2	Game (+1/-1).....	17
Resources.....	2	Reset Game Score.....	18
Console Revision History.....	2	New Game (Alt. Function).....	18
Daktronics Exchange and Repair & Return Programs.....	3	Dim (Alt. Function).....	18
Exchange Program.....	3	<b>5 Baseball Operation</b> .....	<b>19</b>
Repair & Return Program.....	4	Baseball Keys.....	19
Daktronics Warranty & Limitation of Liability.....	4	Score (+1/-1).....	19
<b>2 Basic Operation</b> .....	<b>5</b>	Hit.....	19
Console Operation.....	5	Error.....	19
Sport Inserts.....	6	Out +1.....	20
Start Up.....	7	Ball +1, Strike +1, Clear Ball/Strike.....	20
Standard Keys.....	7	Inning +1.....	20
Enter/Edit.....	7	Time, At Bat, P-Count, H/E (Alt. Functions).....	20
Clear/Alt.....	7	Time/At Bat.....	20
Remote Start/Stop Controls.....	8	Count Up/Down (Alt. Function).....	21
Game Clock Control.....	8	Start.....	21
Shot Clock Control.....	8	Stop.....	21
Battery Kit.....	8	Pitch (Alt. Function).....	21
Setting Radio Channels.....	9	New Game (Alt. Function).....	21
Single Controller System.....	10	Dim (Alt. Function).....	22
Multiple Controller System with Single Broadcast Group.....	11	<b>6 Shot/Play Clock &amp; Pitch Timer         Operation</b> .....	<b>23</b>
Multiple Controller with Multiple Broadcast Groups.....	12	Shot/Play Clock & Pitch Timer Keys.....	23
<b>3 Clock/Score Operation</b> .....	<b>14</b>	Set Reset 1, Set Reset 2, Set Time.....	23
Clock/Score Keys.....	14	Timer Reset 1.....	23
Score (+1/-1).....	14	Timer Reset 2.....	23
Auto Horn.....	14	Start.....	23
Manual Horn.....	14	Stop.....	23
Count Up/Down.....	14	Recall Shot Time (Shot Clock Mode Only).....	24
Set TOD (Alt. Function).....	15	Auto Horn.....	24
Set Time.....	15	Manual Horn.....	24
Start.....	15	Dim.....	24
Stop.....	15	<b>7 Segment Timer Operation</b> .....	<b>25</b>
Period +1.....	15	Segment Timer Information.....	25
New Game (Alt. Function).....	16	Segment Timer Keys.....	25
Dim (Alt. Function).....	16	Segment Number & Time.....	25
<b>4 Volleyball Operation</b> .....	<b>17</b>	First/Last Segment.....	26
Volleyball Keys.....	17	Current Segment +1.....	26
		Start.....	26

# Table of Contents

Stop .....	26	Relay Board Keys .....	34
Reset Current Segment .....	26	<b>11 Lap Counter Operation .....</b>	<b>35</b>
Reset to 1st Segment .....	26	Lap Counter Keys .....	35
Interval Time .....	26	Lap (+1/-1) .....	35
Warning Time .....	27	Manual Horn .....	35
Copy Range .....	27	<b>12 Field Events Operation .....</b>	<b>36</b>
Auto Stop .....	27	Field Events Keys .....	36
Auto Horn .....	27	Competitor .....	36
Manual Horn .....	27	Attempt .....	36
Set Time .....	28	Performance .....	36
Count Up/Down (Alt. Function) .....	28	Page Time .....	37
Dim (Alt. Function) .....	28	<b>13 Gymnastics Operation .....</b>	<b>38</b>
<b>8 Multipurpose Timer Operation .....</b>	<b>29</b>	Gymnastics Keys .....	38
Multipurpose Timer Information .....	29	Competitor .....	38
Multipurpose Timer Keys .....	29	Score .....	38
TOD/Game .....	29	Blank Display .....	38
Auto Horn .....	29	Dim .....	38
Manual Horn .....	29	<b>14 Squash Operation .....</b>	<b>39</b>
Count Up/Down .....	30	Squash Keys .....	39
Set Time .....	30	Game Score (+1/-1) .....	39
Start .....	30	Won (+1/-1) .....	39
Stop .....	30	Team Score (+1/-1) .....	39
Dim .....	30	Match Number .....	40
<b>9 Tennis Operation .....</b>	<b>31</b>	Reset Game Score .....	40
Tennis Keys .....	31	Dim (Alt. Function) .....	40
Serve .....	31	<b>15 Basketball Operation .....</b>	<b>41</b>
Game +1 .....	31	Basketball Keys .....	41
Point .....	31	Score (+1/+2) .....	41
Team Score (Alt. Function) .....	32	Score (+3/-1) (Alt. Functions) .....	41
Reset Game .....	32	Fouls +1 .....	41
Reset Match (Alt. Function) .....	32	Bonus (Alt. Function) .....	42
Tie Break .....	32	Possession .....	42
Set +1 .....	32	Period +1 .....	42
Manual Horn .....	32	Count Up/Down .....	42
Start .....	32	TOD (Alt. Function) .....	43
Stop .....	32	Set Time .....	43
Set Time .....	33	1/10 Sec (Alt. Function) .....	43
Count Up/Down (Alt. Function) .....	33	Start .....	43
TOD/Game .....	33	Stop .....	43
Dim (Alt. Function) .....	33	Auto Horn .....	44
<b>10 Relay Board Operation .....</b>	<b>34</b>	Manual Horn .....	44
Relay Board Information .....	34	New Game (Alt. Function) .....	44



# Table of Contents

Dim (Alt. Function).....	44
<b>A Reference Drawings .....</b>	<b>45</b>
<b>B Sport Inserts .....</b>	<b>55</b>
<b>C Sport Code Numbers.....</b>	<b>71</b>
Sport Code Output Table .....	71
Scoreboard Addresses.....	72
<b>D Daktronics Warranty and Limitation of Liability.....</b>	<b>75</b>

*This page intentionally left blank.*

# 1 Introduction

This manual explains the operation of All Sport® 1600 series control consoles. For additional information regarding the safety, installation, operation, or service of this system, 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 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.**

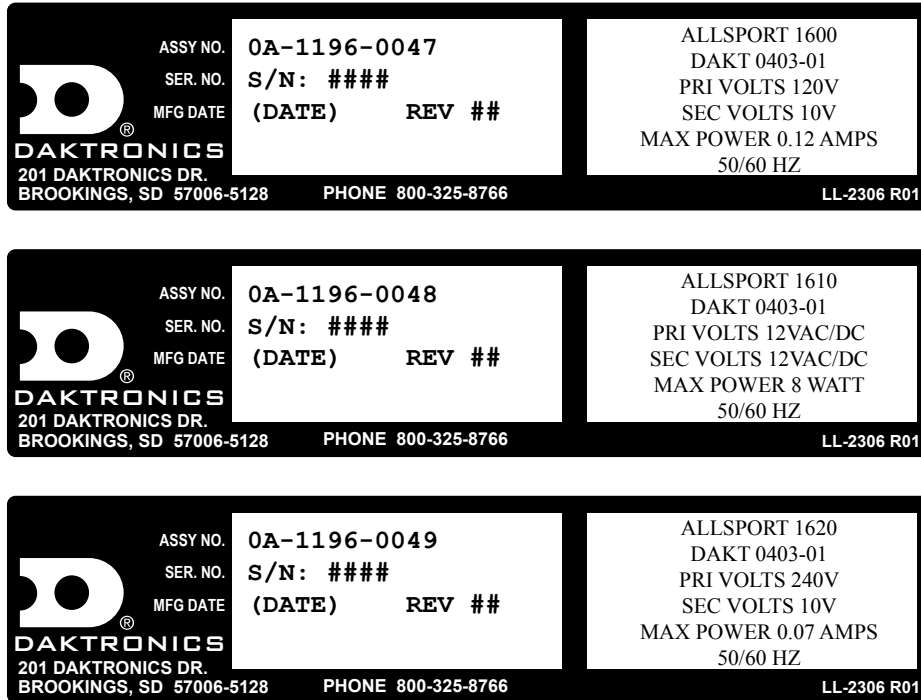
- **Do not let the power cord touch hot surfaces or hang over the edge of a table that would damage or cut the cord.**
- **If an extension cord is necessary, use a three-pronged, polarized cord. Arrange the cord with care so that it will not be tripped over or pulled out.**
- **Before using an extension cord, inspect the cable thoroughly and verify its compliance with the 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:** All Sport 1600 Spec 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:

<b>DAKTRONICS, INC.</b> BROOKINGS, SD 57006		<small>THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.</small>	
DO NOT SCALE DRAWING			
PROJ: DAKTRONICS			
TITLE: SYSTEM RISER DIAGRAM			
DESIGN:	DRAWN: APAGE		DATE: 11 MAY 10
SCALE: NONE			
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
200	02	C17581	F-01-D

Drawing Number

**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](http://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.**

Market Description	Customer Service Number
Schools (including community/junior colleges), religious organizations, municipal clubs, and community centers	877-605-1115 Fax: 605-697-4444
Universities and professional sporting events, live events for auditoriums, and arenas	866-343-6018 Fax: 605-697-4444

**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 or fax Daktronics Customer Service.**

Refer to the appropriate number in the chart on the previous page.

**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), an area for a sport-specific insert, and instructions for common operations. Refer to **Figure 3** to locate these components on the control console face.



**Figure 3:** All Sport 1600 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 keys and functions common to all sports 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.

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.

**Note:** The All Sport 1600 series control console is capable of running older, single driver baseball scoreboards and Glow Cube® portable displays, which were previously controlled with the 1000 and the 2500 series consoles.

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.

Sport	Insert Number	Code
Clock/Score	LL-2496	01 (81)
Volleyball	LL-2502	02 (82)
Baseball	LL-2500	03 (80, 83, 87)
Shot Clock	LL-2501	04 (84)
Play Clock	LL-2501	05 (85)
Segment Timer	LL-2498	06
Multipurpose Timer	LL-2499	07
Tennis	LL-2497	08
Relay Board	0G-139761	09
Lap Counter	0G-140230	10
Field Events Metric 1	0G-140229	11
Field Events Metric 2	0G-140229	12
Field Events Metric 3	0G-140229	13
Field Events Imperial	0G-140229	14
Gymnastics	0G-144810	15
Squash	0G-199192	16
Basketball	LL-2667	21 (88)

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 (such as **<SET TIME •>**). This additional information is usually a number followed by the **<ENTER\* >** key.


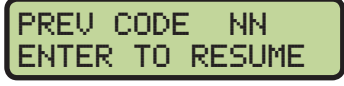
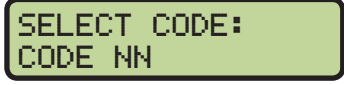

Some keys are labeled **+1**. By pressing one of these keys once, the corresponding field on the scoreboard (such as score or period) “increments”, or increases, by one. A key with **-1** “decrements”, or decreases, by one.

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
 <p>AS-1600 UX.X.X ED-12480</p>	<p>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.</p> <p>V = version number and revision number ED = standard software number</p>
 <p>PREV CODE NN ENTER TO RESUME</p> <p>NN = last code selected</p>	<p>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.</p> <p>Press <b>&lt;ENTER*&gt;</b> to resume the last game stored in memory. The console is now ready for game operation.</p> <p>Press <b>&lt;CLEAR&gt;</b> to start a new game or change to a different sport. The console will prompt for a new code number.</p>
 <p>SELECT CODE: CODE NN</p> <p>NN = current code</p>	<p>The <b>SELECT CODE</b> prompt lets the operator accept the last code selected (shown on the second line) or enter a new code.</p> <p>To accept the code shown, press <b>&lt;ENTER*&gt;</b>.</p> <p>To select a new sport code:</p> <ol style="list-style-type: none"> <li>1. Get the code number from the sport insert or the section of the manual for that sport.</li> <li>2. Use the number keys to enter the new two-digit code.</li> <li>3. Press <b>&lt;ENTER*&gt;</b>.</li> </ol>
 <p>RADIO SETTINGS BCAST X CHAN YY</p> <p>X = last broadcast number YY = last channel number</p>	<p>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.</p> <p>Press <b>&lt;ENTER*&gt;</b> to accept the group and channel numbers, or press <b>&lt;CLEAR&gt;</b> to enter new numbers.</p> <p>Refer to <b>Setting Radio Channels (p. 9)</b> for more information.</p>

## Standard Keys

### Enter/Edit

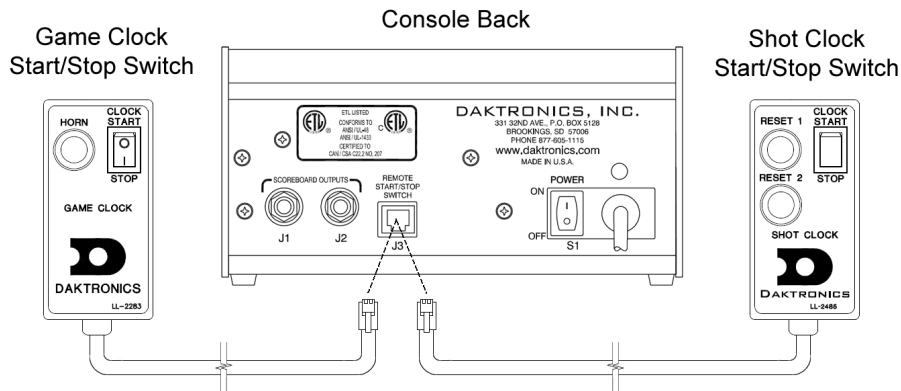
The **<ENTER\*>/<EDIT>** key has two main functions. When editing game data, pressing this key will accept the new data and exit the edit mode. If not in **Edit** mode, this key allows selection of the item to be edited, such as team score. After pressing the **<EDIT>** key, the operator then presses another key to edit the desired field on the scoreboard. The operator enters the new value to display using the number keys and then presses **<ENTER\*>** to accept.

### Clear/Alt

The **<CLEAR>/<ALT>** key has two main functions. When editing game data, pressing this key will clear the data being edited or, if pressed twice, will exit the edit mode. When not in **Edit** mode, pressing this key followed by a key with an alternate function will initiate the secondary function.

## Remote Start/Stop Controls

The All Sport 1600 console lets additional operators control timing functions remotely using the Game Clock Start/Stop switch and the Shot Clock Start/Stop switch.



**Figure 4:** Remote Start/Stop Switches

### Game Clock Control

The Game Clock Start/Stop switch plugs into **J3** 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 also plugs into **J3** 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.

Refer to **Section 6: Shot/Play Clock & Pitch Timer Operation (p. 23)** for more information about shot/play clock & pitch timer configurations.

## Battery Kit

### Reference Drawings:

- Rear View, A/S 1600 Connector Assignments.....**Drawing A-139548**
- All Sport Battery Kit Option .....**Drawing A-139990**

Refer to **DWG-139548** for an overview of the All Sport 1600 series console layouts and connectors. For the battery-operated model, **DWG-139990** details the connection options for power and charging.

# 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.

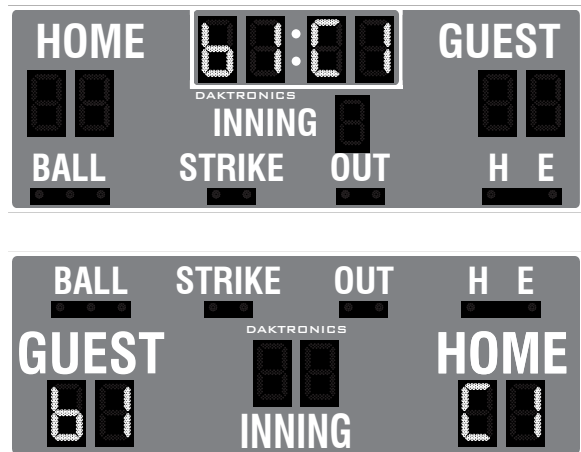
Each radio receiver will accept data sent from the broadcast channel of its respective broadcast group, as well as data sent from the “Master Broadcast” channel. This is selected when the console is set to BCAST 0 and CHAN 00.

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.



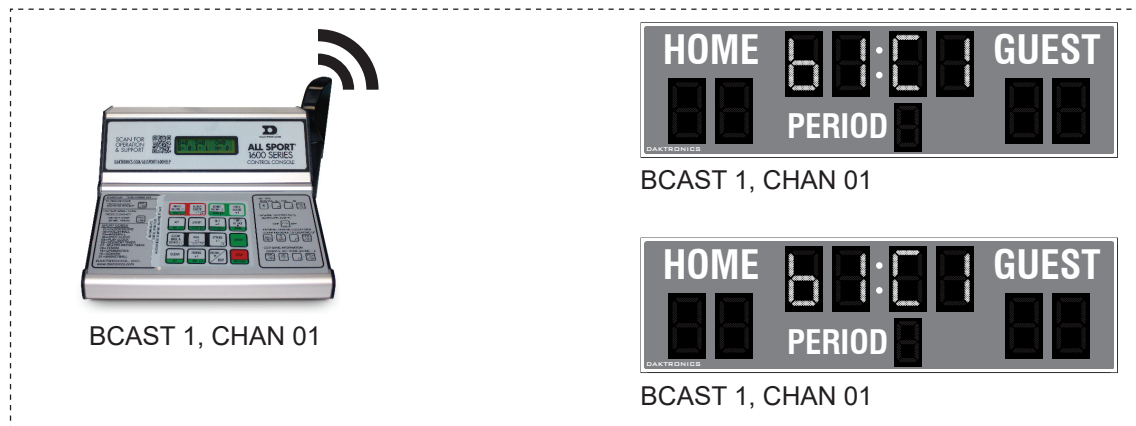
**Figure 5:** Radio Settings in Clock or Score Digits

**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.



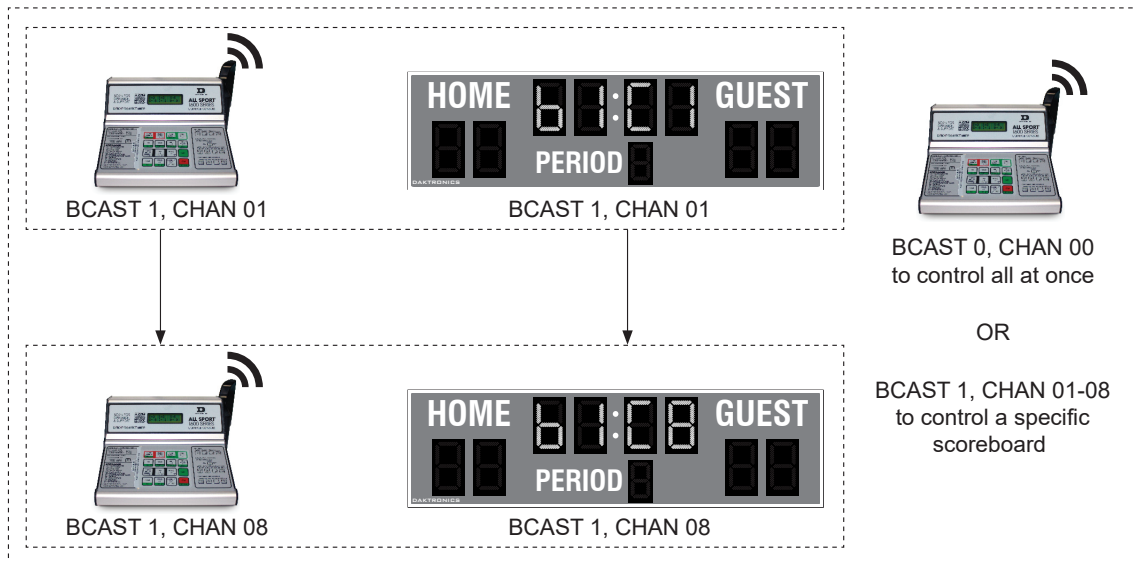
**Figure 6:** Single Control Console

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
<p>The LCD will toggle between these 2 screens:</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>RADIO SETTINGS BCAST X CHAN YY</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>ENTER TO ACCEPT CLEAR TO MODIFY</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>BCAST GROUP X* RADIO CHAN YY</p> </div> <p>X = broadcast group number YY = channel number</p>	<p>The LCD shows the current radio settings along with a prompt to accept or modify these values.</p> <p>If the radio settings are correct press <b>&lt;ENTER*&gt;</b>.</p> <p>If these values are incorrect, press <b>&lt;CLEAR&gt;</b>, and the LCD at bottom left is shown, allowing edit of the channel or broadcast group setting.</p> <p><b>Broadcast Group Setting</b>  <b>[1]</b> Use this setting for all single controller systems. Use the number keys to edit this value and press <b>&lt;ENTER*&gt;</b> to accept. The asterisk will move to the channel setting.</p> <p><b>Channel Setting</b>  <b>[1-8]</b> Edit the channel number to the desired value and press <b>&lt;ENTER*&gt;</b> to accept. The CHAN switch on the receiver must match this value.</p>

## 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.



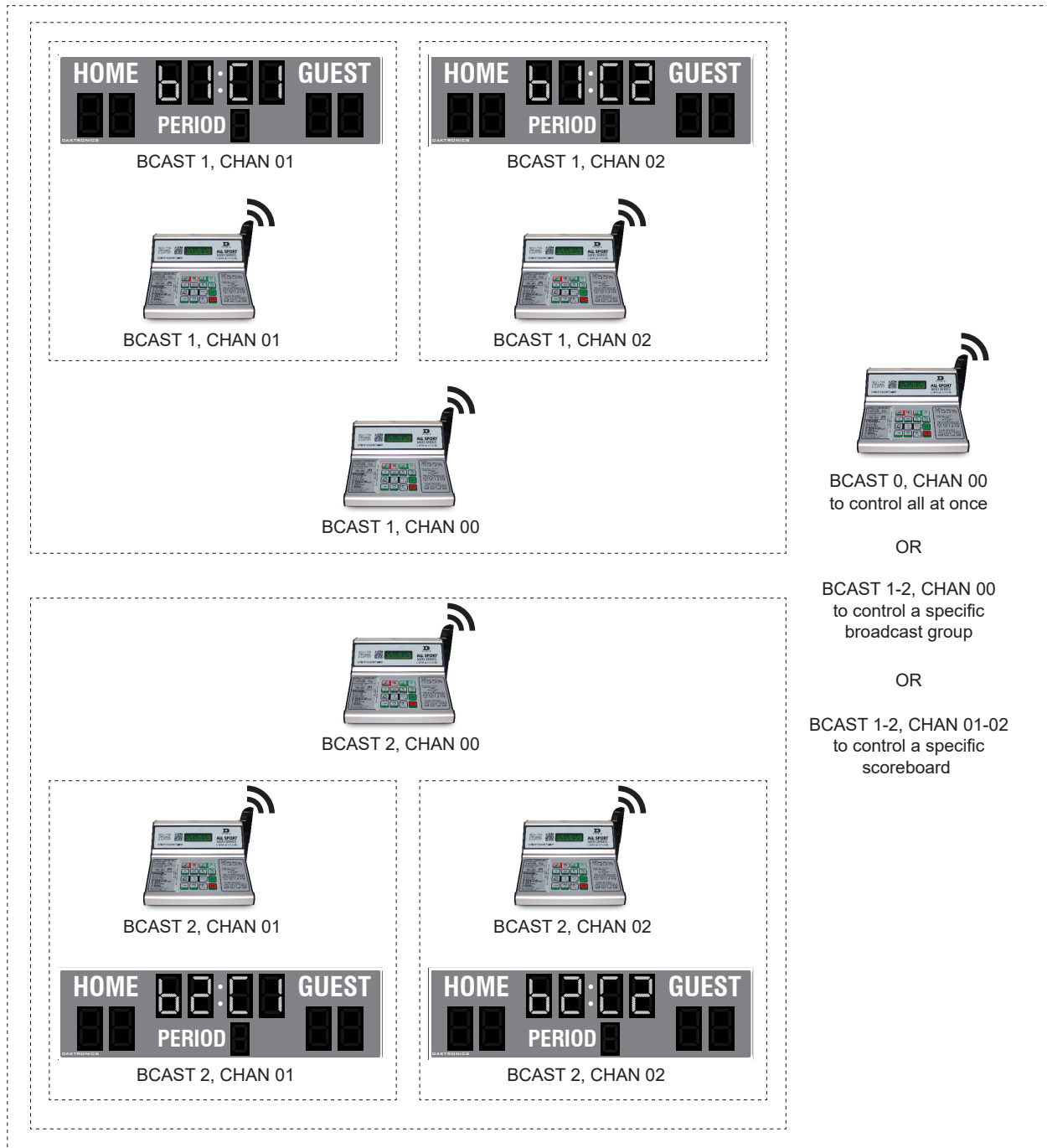
**Figure 7:** Single Broadcast Group

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
<p>The LCD will toggle between these 2 screens:</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>RADIO SETTINGS BCAST X CHAN YY</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>ENTER TO ACCEPT CLEAR TO MODIFY</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>BCAST GROUP X* RADIO CHAN YY</p> </div> <p>X = broadcast group number YY = channel number</p>	<p>The LCD shows the current radio settings along with a prompt to accept or modify these values.</p> <p>If the radio settings are correct press <b>&lt;ENTER*&gt;</b>.</p> <p>If these values are incorrect, press <b>&lt;CLEAR&gt;</b>, and the LCD at bottom left is shown, allowing edit of the channel or broadcast group setting.</p> <p><b>Broadcast Group Setting</b>  <b>[1]</b> Use this setting for all multiple controllers with single broadcast group setups. Use the number keys to edit this value and press <b>&lt;ENTER*&gt;</b> to accept. The asterisk will move to the channel setting.</p> <p><b>Channel Setting</b>  <b>[1-8]</b> Edit the channel number to the desired value and press <b>&lt;ENTER*&gt;</b> to accept. The CHAN switch on the receiver must match this value.</p>

## 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.

Display	Action																			
<p>The LCD will toggle between these 2 screens.</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">           RADIO SETTINGS            BCAST X CHAN YY         </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">           ENTER TO ACCEPT            CLEAR TO MODIFY         </div> <div style="border: 1px solid black; padding: 5px;">           BCAST GROUP X*            RADIO CHAN YY         </div> <p>X = broadcast group number            YY = channel number</p>	<p>The LCD shows the current radio settings along with a prompt to accept or modify these values.</p> <p>If the radio settings are correct press <b>&lt;ENTER*&gt;</b>.</p> <p>If these values are incorrect, press <b>&lt;CLEAR&gt;</b>, and the LCD at bottom left is shown, allowing edit of the channel or broadcast group setting.</p> <p>Use the number keys to enter the desired broadcast group and press <b>&lt;ENTER*&gt;</b> to accept. The asterisk will move to the channel setting.</p> <p>Edit the channel number to the desired value and press <b>&lt;ENTER*&gt;</b> to accept.</p> <table border="1" data-bbox="678 810 1408 1222"> <thead> <tr> <th>Broadcast Group</th> <th>Channel Setting</th> <th>Control Scoreboards</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>* Gen V radio receivers have only 4 groups; also, on broadcast groups 2 and 4, only channels 1-4 may be used.</p>	Broadcast Group	Channel Setting	Control Scoreboards	0	0	All Scoreboards	1	0	All in BCAST Group 1	1-8	Set to corresponding BCAST 1 Channel	↓	↓	↓	8*	0	All in BCAST Group 8	1-8	Set to corresponding BCAST 8 Channel
Broadcast Group	Channel Setting	Control Scoreboards																		
0	0	All Scoreboards																		
1	0	All in BCAST Group 1																		
	1-8	Set to corresponding BCAST 1 Channel																		
↓	↓	↓																		
8*	0	All in BCAST Group 8																		
	1-8	Set to corresponding BCAST 8 Channel																		

### 3 Clock/Score Operation

**Sport Insert:** LL-2496 – Code 01 (81)

The Sport Insert drawing is located in **Appendix B**. The Riser Diagram drawing is located in **Appendix A**.

**Reference Drawings:**

- Insert; LL-2496 A/S 1600, Clock/Score..... **DWG-139419**
- System Riser Diagram, Indoor/Outdoor A/S 1600 ..... **DWG-139544**



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.

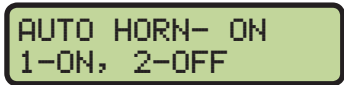
If the code number for a scoreboard is unknown, refer to **Appendix C**. If the scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

### Clock/Score Keys

#### Score (+1/-1)

Display	Action
 <p>TEAM SCORE: +1 HOME NN</p> <p>NN = current setting</p>	<p>Press the home/guest <b>&lt;SCORE +1&gt;</b> key to increase the team score, or press the <b>&lt;SCORE -1&gt;</b> key to decrease the team score.</p> <p>The LCD shows which key was pressed and the new value.</p>
 <p>TEAM SCORE: EDIT HOME NN *</p> <p>NN = current setting</p>	<p>Press <b>&lt;EDIT&gt;</b> followed by any score key to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>


#### Auto Horn

Display	Action
 <p>AUTO HORN- ON 1-ON, 2-OFF</p>	<p>Press <b>&lt;AUTO HORN •&gt;</b>, and then press <b>&lt;1&gt;</b> to select ON (default), or press <b>&lt;2&gt;</b> to select OFF.</p>

#### Manual Horn



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

#### Count Up/Down



Display	Action
 <p>MAIN CLOCK- DOWN 1-UP 2-DOWN</p>	<p>After the main clock has been stopped, the direction of the clock can be set.</p> <p>Press <b>&lt;COUNT UP/DN •&gt;</b> followed by <b>&lt;1&gt;</b> or <b>&lt;2&gt;</b> to select <b>UP</b> or <b>DOWN</b> (default).</p> <p><b>Note:</b> The current direction of the main clock is shown on the top line of the LCD.</p>



## Set TOD (Alt. Function)

Display	Action
	<p>Press <b>&lt;ALT&gt;</b> followed by <b>&lt;SET TOD&gt;</b> to set and enable the Time of Day (TOD) clock.</p> <p>Press <b>&lt;1&gt;</b> to display the time of day in 12 hour (default), or press <b>&lt;2&gt;</b> to display the time of day in 24 hour format.</p>
 <p>HH:MM:SS = hours, minutes, seconds</p>	<p>Enter the time of day in hours, minutes, and seconds using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>The main LCD shows the running time of day on the top line. To disable the time of day clock and return to the game time, press <b>&lt;ALT&gt;</b> followed by <b>&lt;SET TOD&gt;</b> again.</p>

## Set Time

Display	Action
 <p>MM:SS = minutes, seconds</p>	<p>After the main clock has been stopped, press <b>&lt;SET TIME •&gt;</b> to display the current time of the main clock.</p> <p>To change the current clock time, enter the new time in minutes and seconds using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>Press <b>&lt;CLEAR&gt;</b> twice to cancel and return to the game.</p>
 <p>MM:SS = minutes, seconds</p>	<p>To display the configured period length, press <b>&lt;SET TIME •&gt;</b> a second time. To accept the period length as the new clock time, press <b>&lt;ENTER*&gt;</b>. To decline the selection of the period length, press <b>&lt;CLEAR&gt;</b>.</p> <p>To change the period length and set the main clock, enter the new time in minutes and seconds using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>Press <b>&lt;CLEAR&gt;</b> twice to cancel and return to the game.</p>

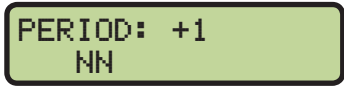
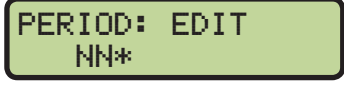
## Start

Press **<START>** to start the main clock.

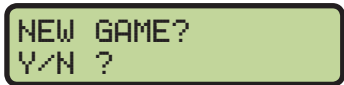
## Stop

Press **<STOP>** to stop the main clock.

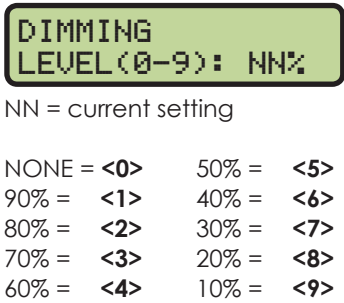
## Period +1

Display	Action
 <p>NN = current setting</p>	<p>Press <b>&lt;PERIOD +1&gt;</b> to increment the current period.</p> <p>The new period number displays briefly.</p>
 <p>NN = current setting</p>	<p>Press <b>&lt;EDIT&gt;</b> followed by <b>&lt;PERIOD +1&gt;</b> to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

## New Game (Alt. Function)

Display	Action
	<p>Press &lt;ALT&gt; followed by &lt;NEW GAME&gt;.</p> <p>Press &lt;ENTER*&gt; to reset the current game information, or press &lt;CLEAR&gt; to cancel and return to the game.</p>

## Dim (Alt. Function)

Display	Action
	<p>Press &lt;ALT&gt; followed by &lt;DIM&gt; to access the scoreboard dimming menu.</p> <p>Press &lt;0&gt; (brightest) through &lt;9&gt; (dimmest) to set the scoreboard digit dimming level. Press &lt;ENTER*&gt; to save.</p> <p><b>Note:</b> The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.</p>

## 4 Volleyball Operation

**Sport Insert:** LL-2502 – Code 02 (82)

The Sport Insert drawing is located in **Appendix B**. The Riser Diagram drawing is located in **Appendix A**.

**Reference Drawings:**

- Insert; LL-2502 A/S 1600, Volleyball ..... **DWG-139482**
- System Riser Diagram, Indoor/Outdoor A/S 1600 ..... **DWG-139544**



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.

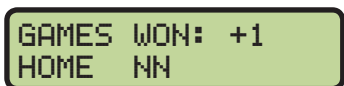

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

### Volleyball Keys

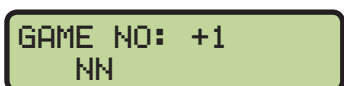
#### Score (+1/-1)

Display	Action
 <p>TEAM SCORE: +1 HOME NN</p> <p>NN = current setting</p>	<p>Press the home/guest <b>&lt;SCORE +1&gt;</b> key to increase the team score, or press the <b>&lt;SCORE -1&gt;</b> key to decrease the team score.</p> <p>The LCD shows which key was pressed and the new value.</p>
 <p>TEAM SCORE: EDIT HOME NN *</p> <p>NN = current setting</p>	<p>Press <b>&lt;EDIT&gt;</b> followed by any score key to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

#### Won (+1/-1)

Display	Action
 <p>GAMES WON: +1 HOME NN</p> <p>NN = current setting</p>	<p>Press the home/guest <b>&lt;WON +1&gt;</b> key to increase the games won, or press the <b>&lt;WON -1&gt;</b> key to decrease the games won.</p> <p>The LCD shows which key was pressed and the new value.</p>
 <p>GAMES WON: EDIT HOME NN*</p> <p>NN = current setting</p>	<p>Press <b>&lt;EDIT&gt;</b> followed by either won key to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

#### Game (+1/-1)

Display	Action
 <p>GAME NO: +1 NN</p> <p>NN = current setting</p>	<p>Press the <b>&lt;GAME +1&gt;</b> or <b>&lt;GAME -1&gt;</b> key to set the current game number.</p> <p>The LCD shows which key was pressed and the new value.</p>

Display	Action
<p>GAME NO: EDIT NN*</p> <p>NN = current setting</p>	<p>Press <b>&lt;EDIT&gt;</b> followed by either game key to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

### Reset Game Score

Press **<RESET GAME SCORE>** to reset both home and guest scores to zero. This key is used to clear the Game Score fields at the beginning of each match.

### New Game (Alt. Function)

Display	Action
<p>NEW GAME? Y/N ?</p>	<p>Press <b>&lt;ALT&gt;</b> followed by <b>&lt;NEW GAME&gt;</b>.</p> <p>Press <b>&lt;ENTER*&gt;</b> to reset the current game information, or press <b>&lt;CLEAR&gt;</b> to cancel and return to the game.</p>

### Dim (Alt. Function)

Display	Action
<p>DIMMING LEVEL(0-9): NN%</p> <p>NN = current setting</p> <p>NONE = <b>&lt;0&gt;</b>      50% = <b>&lt;5&gt;</b>  90% = <b>&lt;1&gt;</b>      40% = <b>&lt;6&gt;</b>  80% = <b>&lt;2&gt;</b>      30% = <b>&lt;7&gt;</b>  70% = <b>&lt;3&gt;</b>      20% = <b>&lt;8&gt;</b>  60% = <b>&lt;4&gt;</b>      10% = <b>&lt;9&gt;</b></p>	<p>Press <b>&lt;ALT&gt;</b> followed by <b>&lt;DIM&gt;</b> to access the scoreboard dimming menu.</p> <p>Press <b>&lt;0&gt;</b> (brightest) through <b>&lt;9&gt;</b> (dimmiest) to set the scoreboard digit dimming level. Press <b>&lt;ENTER*&gt;</b> to save.</p> <p><b>Note:</b> The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.</p>

## 5 Baseball Operation

**Sport Insert:** LL-2500  
**Without Clock – Code 03 (80/83/87)**  
**With Clock – Code 23**

The Sport Insert drawing is located in **Appendix B**. The Riser Diagram drawing is located in **Appendix A**.

### Reference Drawings:

Insert; LL-2500 A/S 1600, Baseball..... **DWG-139491**  
 System Riser Diagram, Indoor/Outdoor A/S 1600 ..... **DWG-139544**



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.


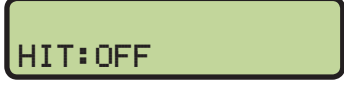
If the code number for a scoreboard is unknown, refer to **Appendix C**. If the scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

## Baseball Keys

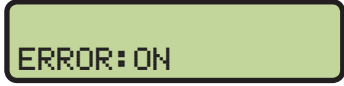

### Score (+1/-1)

Display	Action
 NN = current setting	Press the home/guest <b>&lt;SCORE +1&gt;</b> key to increase the team score, or press the <b>&lt;SCORE -1&gt;</b> key to decrease the team score.  The LCD shows which key was pressed and the new value.
 NN = current setting	Press <b>&lt;EDIT&gt;</b> followed by any score key to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b> .

### Hit

Display	Action
 	Press <b>&lt;HIT&gt;</b> to turn on the hit indicator or digits. Press <b>&lt;HIT&gt;</b> again to turn off the hit indicator or digits.  The hit status displays briefly.  <b>Note:</b> When hit is already on, pressing <b>&lt;ERROR&gt;</b> will turn it off.

### Error

Display	Action
 	Press <b>&lt;ERROR&gt;</b> to turn on the error indicator or digits. Press <b>&lt;ERROR&gt;</b> again to turn off the error indicator or digits.  The error status displays briefly.  <b>Note:</b> When error is already on, pressing <b>&lt;HIT&gt;</b> will turn it off.

## Out +1

Press **<OUT +1>** to increment the current number of outs. The new out number appears immediately on the top line of the LCD.

Display	Action
<p>OUT: EDIT N*</p> <p>N = current setting</p>	<p>Press <b>&lt;EDIT&gt;</b> followed by <b>&lt;OUT +1&gt;</b> to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

## Ball +1, Strike +1, Clear Ball/Strike

Press **<BALL +1>** or **<STRIKE +1>** to increment the pitch types. Press **<CLEAR BALL & STRIKE>** to immediately reset both values to 0.

**Note:** If the ball value is 4 when **<BALL +1>** is pressed, the value is blanked out.  
If the strike value is 3 when **<STRIKE +1>** is pressed, the value is blanked out.

## Inning +1

Display	Action
<p>INNING +1 NN</p> <p>NN = current setting</p>	<p>Press <b>&lt;INNING +1&gt;</b> to increment the current inning.</p> <p>The new inning number displays briefly.</p>
<p>INNING: EDIT NN*</p> <p>NN = current setting</p>	<p>Press <b>&lt;EDIT&gt;</b> followed by <b>&lt;INNING +1&gt;</b> to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

## Time, At Bat, P-Count, H/E (Alt. Functions)

Press **<ALT>** followed by a key below to select what is displayed on the scoreboard.

- **<TIME>** shows two digits of time.
- **<AT BAT>** shows the player At Bat number.
- **<P-COUNT>** shows the pitch count of the current pitcher.
- **<H/E>** shows an "H" or an "E" when **<HIT>** or **<ERROR>** is pressed.

## Time/At Bat

If the console is set to show TIME, the **<TIME/AT BAT •>** key operates as shown below.

Display	Action
<p>MAIN CLOCK -SET: CURR HH:MM:SS*</p> <p>HH:MM:SS = hours, minutes, seconds</p>	<p>After the main clock has been stopped, press <b>&lt;TIME/AT BAT •&gt;</b> to display the current time of the main clock.</p> <p>To change the current clock time, enter the new time in hours, minutes, and seconds using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>Press <b>&lt;CLEAR&gt;</b> twice to cancel and return to the game.</p>

Display	Action
<p>HH:MM:SS = hours, minutes, seconds</p>	<p>To display the configured period length, press <b>&lt;TIME/AT BAT •&gt;</b> a second time. To accept the period length as the new clock time, press <b>&lt;ENTER*&gt;</b>. To decline the selection of the period length, press <b>&lt;CLEAR&gt;</b>.</p> <p>To change the period length and set the main clock, enter the new time in minutes and seconds using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>Press <b>&lt;CLEAR&gt;</b> twice to cancel and return to the game.</p>

If the console is set to show AT BAT, the **<TIME/AT BAT •>** key operates as shown below.

Display	Action
<p>NN = current setting</p>	<p>Press <b>&lt;TIME/AT BAT •&gt;</b>, enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

## Count Up/Down (Alt. Function)

Display	Action
	<p>After the main clock has been stopped, the direction of the clock can be set.</p> <p>Press <b>&lt;ALT&gt;</b> followed by <b>&lt;UP/DN •&gt;</b> followed by <b>&lt;1&gt;</b> or <b>&lt;2&gt;</b> to select <b>UP</b> or <b>DOWN</b> (default).</p> <p><b>Note:</b> The current direction of the main clock is shown on the top line of the LCD.</p>

### Start

Press **<START>** to start the main clock.

### Stop

Press **<STOP>** to stop the main clock.

## Pitch (Alt. Function)

Display	Action
<p>NNN = current setting</p>	<p>Press <b>&lt;ALT&gt;</b> followed by the home or guest <b>&lt;PITCH&gt;</b> key to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

## New Game (Alt. Function)

Display	Action
	<p>Press <b>&lt;ALT&gt;</b> followed by <b>&lt;NEW GAME&gt;</b>.</p> <p>Press <b>&lt;ENTER*&gt;</b> to reset the current game information, or press <b>&lt;CLEAR&gt;</b> to cancel and return to the game.</p>

## Dim (Alt. Function)

Display	Action										
<div data-bbox="298 260 634 338" style="border: 1px solid black; padding: 2px; background-color: #d3d3d3;">           DIMMING            LEVEL(0-9): NN%         </div> <p data-bbox="293 348 526 380">NN = current setting</p> <table data-bbox="293 411 626 558"> <tr> <td>NONE = &lt;0&gt;</td> <td>50% = &lt;5&gt;</td> </tr> <tr> <td>90% = &lt;1&gt;</td> <td>40% = &lt;6&gt;</td> </tr> <tr> <td>80% = &lt;2&gt;</td> <td>30% = &lt;7&gt;</td> </tr> <tr> <td>70% = &lt;3&gt;</td> <td>20% = &lt;8&gt;</td> </tr> <tr> <td>60% = &lt;4&gt;</td> <td>10% = &lt;9&gt;</td> </tr> </table>	NONE = <0>	50% = <5>	90% = <1>	40% = <6>	80% = <2>	30% = <7>	70% = <3>	20% = <8>	60% = <4>	10% = <9>	<p data-bbox="677 254 1338 312">Press &lt;ALT&gt; followed by &lt;DIM&gt; to access the scoreboard dimming menu.</p> <p data-bbox="677 344 1317 403">Press &lt;0&gt; (brightest) through &lt;9&gt; (dimmiest) to set the scoreboard digit dimming level. Press &lt;ENTER*&gt; to save.</p> <p data-bbox="677 434 1382 522"><b>Note:</b> The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.</p>
NONE = <0>	50% = <5>										
90% = <1>	40% = <6>										
80% = <2>	30% = <7>										
70% = <3>	20% = <8>										
60% = <4>	10% = <9>										



## 6 Shot/Play Clock & Pitch Timer Operation

**Sport Insert:** LL-2501  
**Shot Clock – Code 04 (84)**  
**Play Clock/Pitch Timer – Code 05 (85)**

The Sport Insert drawing is located in **Appendix B**. The Riser Diagram drawing is located in **Appendix A**.

### Reference Drawings:

System Layout - Independent Shot Clock System..... **DWG-139547**  
 Insert; LL-2501 A/S 1600, Shot/Play Clock..... **DWG-139889**

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.

## Shot/Play Clock & Pitch Timer Keys

### Set Reset 1, Set Reset 2, Set Time

Display	Action
	<p><b>Note:</b> The example shows operation in Play Clock mode.</p> <p><b>&lt;SET RESET 1 •&gt;</b> sets the Reset 1 value for the shot clock, play clock, or pitch timer.</p> <p><b>&lt;SET RESET 2 •&gt;</b> sets the Reset 2 value for the shot clock, play clock, or pitch timer.</p> <p><b>&lt;SET TIME •&gt;</b> sets the current time for the shot clock, play clock, or pitch timer.</p>
<p>MM:SS = minutes, seconds</p>	
	<p><b>Reset on Stop (Play Clock mode only)</b></p> <p>After editing the RESET 1 time, the console will ask whether or not to reset the time after pressing <b>&lt;STOP&gt;</b>. Typically, YES will only be selected when using remote start/stop sideline kits that have just one RESET button.</p>

### Timer Reset 1

Press **<TIMER RESET 1>** to reset the timer to the Reset 1 time and to show the Reset 1 time value on the display.

### Timer Reset 2

Press **<TIMER RESET 2>** to reset the timer to the Reset 2 time and to show the Reset 2 time value on the display.

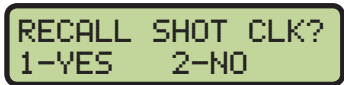
### Start

Press **<START>** to start the main clock.

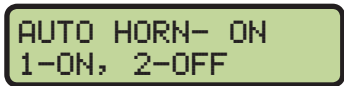
### Stop

Press **<STOP>** to stop the main clock.

## Recall Shot Time (Shot Clock Mode Only)

Display	Action
	Press <RECALL SHOT TIME> followed by <1> to undo an accidental shot clock reset. This will change the clock to the value it would display if the previous reset was not executed. Press <2> to leave the shot clock time as is.

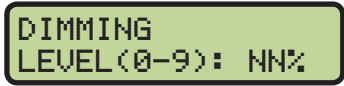
## Auto Horn

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

## Manual Horn

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

## Dim

Display	Action
 <p>NN = current setting</p> <p>NONE = &lt;0&gt;      50% = &lt;5&gt;            90% = &lt;1&gt;      40% = &lt;6&gt;            80% = &lt;2&gt;      30% = &lt;7&gt;            70% = &lt;3&gt;      20% = &lt;8&gt;            60% = &lt;4&gt;      10% = &lt;9&gt;</p>	Press <DIM> to access the scoreboard dimming menu.  Press <0> (brightest) through <9> (dimkest) to set the scoreboard digit dimming level. Press <ENTER*> to save.  <b>Note:</b> The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

Refer to **Remote Start/Stop Controls (p. 8)** for information on using remote start/stop switches for shot/play clock and pitch timer functions.

# 7 Segment Timer Operation

**Sport Insert:** LL-2498 – Code 06

The Sport Insert drawing is located in **Appendix B**. The Riser Diagram drawing is located in **Appendix A**.

**Reference Drawings:**

- Insert; LL-2498 A/S 1600, Segment Timer..... **DWG-139492**
- System Riser Diagram, Indoor/Outdoor A/S 1600 ..... **DWG-139544**

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 Information

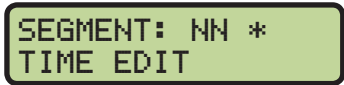
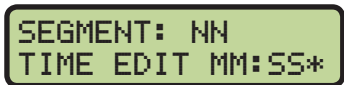
The segment timer is used to time events such as practice sessions. Operation of the segment timer is determined by 40 segments of pre-programmed length. The segment timer will count down starting at the segment number that is set as **First Segment**. When the first segment is completed, the timer will 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. 27)** 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 segments 11–20. Set the **First Segment** and **Last Segment** values to the desired segment numbers for the session, and the console will count down each of the segments in order. It may also be set to either stop on the last segment or loop back to the first segment segments, again based on the **<AUTO STOP>** setting.

The segment values will be saved when the console is turned off.

## Segment Timer Keys

### Segment Number & Time

Display	Action
 <p>NN = current setting</p>	<p>Press <b>&lt;SEG NO • TIME •&gt;</b> to set individual segment times.</p> <p>Enter the segment to be edited using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>
 <p>NN = current setting MM:SS = minutes, seconds</p>	<p>Enter the time for the segment using the number keys. Press <b>&lt;ENTER*&gt;</b> to move to the next segment time.</p> <p>Press <b>&lt;ENTER*&gt;</b> again to exit the function.</p>

## First/Last Segment

Display	Action
<p>XX = current first segment value YY = current last segment value</p>	<p>Press <b>&lt;FIRST/LAST SEG&gt;</b>, use the number keys to enter the segment to be set as the first segment, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>Use the number keys to enter the segment to be set as the last segment, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>The console will be reset to the segment selected here when the <b>&lt;RESET TO 1ST SEG&gt;</b> key is pressed. After the segment set as the last segment is completed, the console will automatically reset to the segment saved as the first segment.</p>

## Current Segment +1

Press **<CURRENT SEGMENT +1>** to move to the next segment. The new segment number appears immediately on the top line of the LCD.

Display	Action
<p>NN = current setting</p>	<p>Press <b>&lt;EDIT&gt;</b> followed by <b>&lt;CURRENT SEGMENT +1&gt;</b> to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

## Start

Press **<START>** to start the main clock.

## Stop

Press **<STOP>** to stop the main clock.

## Reset Current Segment

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

## Reset to 1st Segment

Press **<RESET TO 1ST SEG>** to return to the first segment.

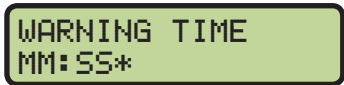
**Note:** This function is disabled while the clock is running.

## Interval Time

The interval time is the time between each segment.

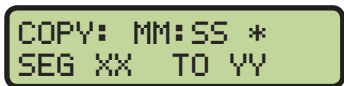
Display	Action
<p>MM:SS = minutes, seconds</p>	<p>Press <b>&lt;INTERVAL TIME •&gt;</b> to display the current value of interval time. Edit the value of the interval time using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

## Warning Time

Display	Action
 <p>MM:SS = minutes, seconds</p>	<p>When the warning time is reached, the segment number flashes until the main clock reaches zero.</p> <p>Press <b>&lt;WARNING TIME •&gt;</b>, enter the time in minutes and seconds using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>Enter 00:00 for no warning time (default).</p>



## Copy Range

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

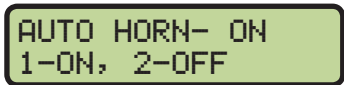
Display	Action
 <p>MM:SS = minutes, seconds XX = starting segment value YY = ending segment value</p>	<p>Press <b>&lt;COPY RANGE •&gt;</b> and enter the time desired. Press <b>&lt;ENTER*&gt;</b> to move to the next field. Enter the first and last segments that will have this time. When the last segment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

## Auto Stop

**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
	<p>Press <b>&lt;AUTO STOP&gt;</b> to enter this menu.</p> <ul style="list-style-type: none"> <li>Press <b>&lt;1&gt;</b> to set the console to stop after each segment is completed.</li> <li>Press <b>&lt;2&gt;</b> to set the console to automatically begin the next segment when each segment is completed.</li> </ul>
	<p>If Stop at Each Segment is set to <b>NO</b>, the console will then prompt for the Stop at Last Segment setting.</p> <ul style="list-style-type: none"> <li>Press <b>&lt;1&gt;</b> to set the console to stop when the last segment has been completed.</li> <li>Press <b>&lt;2&gt;</b> to set the console to start over at the first segment when the last segment is completed.</li> </ul>



## Auto Horn

Display	Action
	<p>Press <b>&lt;AUTO HORN •&gt;</b>, and then press <b>&lt;1&gt;</b> to select ON (default), or press <b>&lt;2&gt;</b> to select OFF.</p>

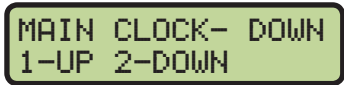
## Manual Horn

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

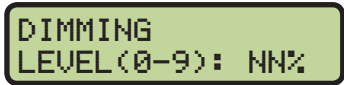
## Set Time

Display	Action
 <p>MM:SS = minutes, seconds</p>	<p>Press <b>&lt;SET TIME •&gt;</b> to display the current time of the main clock.</p> <p>To change the current clock time, enter the new time in minutes and seconds using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>Press <b>&lt;CLEAR&gt;</b> twice to cancel and return to the game.</p>
 <p>NN = current setting MM:SS = minutes, seconds</p>	<p>To display each segment time, continue pressing <b>&lt;SET TIME •&gt;</b>.</p> <p>Enter the new segment time in minutes and seconds using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>Press <b>&lt;CLEAR&gt;</b> twice to cancel and return to the game.</p>

## Count Up/Down (Alt. Function)

Display	Action
	<p>After the main clock has been stopped, the direction of the clock can be set.</p> <p>Press <b>&lt;ALT&gt;</b> followed by <b>&lt;COUNT UP/DN •&gt;</b> followed by <b>&lt;1&gt;</b> or <b>&lt;2&gt;</b> to select <b>UP</b> or <b>DOWN</b> (default).</p> <p><b>Note:</b> The current direction of the main clock is shown on the top line of the LCD.</p>

## Dim (Alt. Function)

Display	Action
 <p>NN = current setting</p> <p>NONE = <b>&lt;0&gt;</b>      50% = <b>&lt;5&gt;</b>            90% = <b>&lt;1&gt;</b>      40% = <b>&lt;6&gt;</b>            80% = <b>&lt;2&gt;</b>      30% = <b>&lt;7&gt;</b>            70% = <b>&lt;3&gt;</b>      20% = <b>&lt;8&gt;</b>            60% = <b>&lt;4&gt;</b>      10% = <b>&lt;9&gt;</b></p>	<p>Press <b>&lt;ALT&gt;</b> followed by <b>&lt;DIM&gt;</b> to access the scoreboard dimming menu.</p> <p>Press <b>&lt;0&gt;</b> (brightest) through <b>&lt;9&gt;</b> (dimpest) to set the scoreboard digit dimming level. Press <b>&lt;ENTER*&gt;</b> to save.</p> <p><b>Note:</b> The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.</p>

## 8 Multipurpose Timer Operation

**Sport Insert:** LL-2499 – Code 07

The Sport Insert drawing is located in **Appendix B**. The Riser Diagram drawing is located in **Appendix A**.

### Reference Drawings:

Insert; LL-2499 A/S 1600, Multipurpose Timer ..... **DWG-139487**  
 System Riser Diagram, Indoor/Outdoor A/S 1600 ..... **DWG-139544**

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.



### Multipurpose Timer Information

The sport insert for the multipurpose timer is LL-2499, and Code 07 is used to run the timer. The timer is a general timer used for two-, four-, and six-digit time displays. The timer counts up or down through hours, minutes, and seconds. The information shifts on the two- and four-digit displays to show the most significant time values as the time changes.

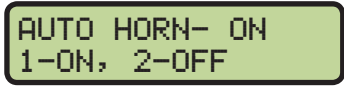
### Multipurpose Timer Keys

#### TOD/Game

The **<TOD/GAME •>** key toggles the console between displaying game time or time of day (TOD) and allows the operator to change the time of day.

Display	Action
	Press <b>&lt;TOD/GAME •&gt;</b> to set and enable the Time of Day (TOD) clock.  Press <b>&lt;1&gt;</b> to display the time of day in 12 hour (default), or press <b>&lt;2&gt;</b> to display the time of day in 24 hour format.
 <p>HH:MM:SS = hours, minutes, seconds</p>	Enter the time of day in hours, minutes, and seconds using the number keys, and then press <b>&lt;ENTER*&gt;</b> .  The main LCD shows the running time of day on the top line. To disable the time of day clock and return to the game time, press <b>&lt;TOD/GAME •&gt;</b> again.


#### Auto Horn

Display	Action
	Press <b>&lt;AUTO HORN •&gt;</b> , and then press <b>&lt;1&gt;</b> to select ON (default), or press <b>&lt;2&gt;</b> to select OFF.



#### Manual Horn

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

## Count Up/Down

Display	Action
 <p>MAIN CLOCK- DOWN 1-UP 2-DOWN</p>	<p>After the main clock has been stopped, the direction of the clock can be set.</p> <p>Press <b>&lt;COUNT UP/DN •&gt;</b> followed by <b>&lt;1&gt;</b> or <b>&lt;2&gt;</b> to select <b>UP</b> or <b>DOWN</b> (default).</p> <p><b>Note:</b> The current direction of the main clock is shown on the top line of the LCD.</p>

## Set Time

Display	Action
 <p>MAIN CLOCK -SET: CURR MM:SS*</p> <p>MM:SS = minutes, seconds</p>	<p>After the main clock has been stopped, press <b>&lt;SET TIME •&gt;</b> to display the current time of the main clock.</p> <p>To change the current clock time, enter the new time in minutes and seconds using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>Press <b>&lt;CLEAR&gt;</b> twice to cancel and return to the game.</p>
 <p>MAIN CLOCK -EDIT PERIOD MM:SS*</p> <p>MM:SS = minutes, seconds</p>	<p>To display the configured period length, press <b>&lt;SET TIME •&gt;</b> a second time. To accept the period length as the new clock time, press <b>&lt;ENTER*&gt;</b>. To decline the selection of the period length, press <b>&lt;CLEAR&gt;</b>.</p> <p>To change the period length and set the main clock, enter the new time in minutes and seconds using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>Press <b>&lt;CLEAR&gt;</b> twice to cancel and return to the game.</p>

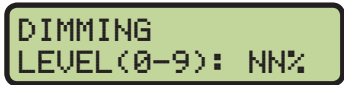
## Start

Press **<START>** to start the main clock.

## Stop

Press **<STOP>** to stop the main clock.

## Dim

Display	Action
 <p>DIMMING LEVEL(0-9): NN%</p> <p>NN = current setting</p> <p>NONE = &lt;0&gt;    50% = &lt;5&gt; 90% = &lt;1&gt;    40% = &lt;6&gt; 80% = &lt;2&gt;    30% = &lt;7&gt; 70% = &lt;3&gt;    20% = &lt;8&gt; 60% = &lt;4&gt;    10% = &lt;9&gt;</p>	<p>Press <b>&lt;DIM&gt;</b> to access the scoreboard dimming menu.</p> <p>Press <b>&lt;0&gt;</b> (brightest) through <b>&lt;9&gt;</b> (dimmiest) to set the scoreboard digit dimming level. Press <b>&lt;ENTER*&gt;</b> to save.</p> <p><b>Note:</b> The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.</p>



## 9 Tennis Operation

**Sport Insert:** LL-2497 – Code 08

The Sport Insert drawing is located in **Appendix B**. The Riser Diagram drawing is located in **Appendix A**.

### Reference Drawings:

Insert; LL-2497 A/S 1600, Tennis ..... **DWG-139494**  
 System Riser Diagram, Indoor/Outdoor A/S 1600 ..... **DWG-139544**



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.

## Tennis Keys

### Serve

Display	Action
	Press the Top/Bottom <b>&lt;SERVE&gt;</b> key to turn the serve indicator on or off for the respective player/team.  <b>Note:</b> When one serve indicator is already on, pressing the opposite <b>&lt;SERVE&gt;</b> key will turn it off.
	

### Game +1

Display	Action
 <p>X = current set                      NN = games won</p>	Press the Top/Bottom <b>&lt;GAME +1&gt;</b> key to increment the number of games won in the current set for the respective player/team.  The LCD shows which key was pressed and the new value.
 <p>X = current set                      NN = games won</p>	

### Point

Press the Top/Bottom **<POINT>** key to increment the point value for the respective player/team. The points will increment as 15, 30, 40 AD or GA. If **Tie Break** scoring mode is selected, the points will increment by 1. The new point numbers appear immediately on the top line of the LCD.

Display	Action
<p>TOP=NN* BOT=XX EDIT TOP</p> <p>NN = top score XX = bottom score</p>	<p>Press <b>&lt;EDIT&gt;</b> followed by the Top/Bottom <b>&lt;POINT&gt;</b> key to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p> <p><b>Note:</b> Points may not be edited when in <b>Tie Break</b> mode.</p>

## Team Score (Alt. Function)

Display	Action
<p>MATCHES WON EDIT TOP NN*</p> <p>NN = current setting</p>	<p>Press <b>&lt;ALT&gt;</b> followed by the Top/Bottom <b>&lt;TEAM&gt;</b> key to display the matches won. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

## Reset Game

Press **<RESET GAME>** to immediately reset the player points for the current game.

## Reset Match (Alt. Function)

Display	Action
<p>RESET MATCH? ENTER TO ACCEPT</p>	<p>Press <b>&lt;ALT&gt;</b> followed by <b>&lt;MATCH&gt;</b>. Press <b>&lt;ENTER*&gt;</b> to reset the current match, or press <b>&lt;CLEAR&gt;</b> to cancel.</p> <p>All set scores and the current game score will be cleared, and the set number will be set to 1.</p>

## Tie Break

Press **<TIE BREAK>** to set the mode of scoring to **Tie Break** mode. In **Tie Break** scoring mode, player points increase by one with each press of the **<POINTS>** key.

**Note:** Tie Break scoring mode may only be selected when both player point values are 0. To change scoring mode back to normal, press the **<RESET GAME>** key.

## Set +1

Press **<SET +1>** to increment the current set number. The new set number appears immediately on the bottom line of the LCD.

Display	Action
<p>SET: EDIT N*</p> <p>N = current setting</p>	<p>Press <b>&lt;EDIT&gt;</b> followed by <b>&lt;SET +1&gt;</b> to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

## Manual Horn

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


## Start

Press **<START>** to start the main clock.

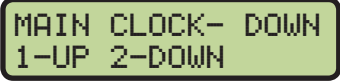
## Stop

Press **<STOP>** to stop the main clock.

## Set Time

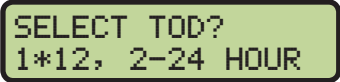
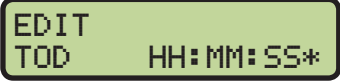
Display	Action
 <p>MM:SS = minutes, seconds</p>	<p>After the main clock has been stopped, press <b>&lt;SET TIME •&gt;</b> to display the current time of the main clock.</p> <p>To change the current clock time, enter the new time in minutes and seconds using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>Press <b>&lt;CLEAR&gt;</b> twice to cancel and return to the game.</p>

## Count Up/Down (Alt. Function)

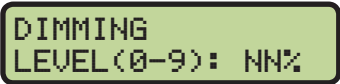
Display	Action
	<p>After the main clock has been stopped, the direction of the clock can be set.</p> <p>Press <b>&lt;ALT&gt;</b> followed by <b>&lt;UP/DN •&gt;</b> followed by <b>&lt;1&gt;</b> or <b>&lt;2&gt;</b> to select <b>UP</b> or <b>DOWN</b> (default).</p> <p><b>Note:</b> The current direction of the main clock is shown on the top line of the LCD.</p>

## TOD/Game

The **<TOD/GAME •>** key toggles the console between displaying game time or time of day (TOD) and allows the operator to change the time of day.

Display	Action
	<p>Press <b>&lt;TOD/GAME •&gt;</b> to set and enable the Time of Day (TOD) clock.</p> <p>Press <b>&lt;1&gt;</b> to display the time of day in 12 hour (default), or press <b>&lt;2&gt;</b> to display the time of day in 24 hour format.</p>
 <p>HH:MM:SS = hours, minutes, seconds</p>	<p>Enter the time of day in hours, minutes, and seconds using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p> <p>To disable the time of day clock and return to the game time, press <b>&lt;TOD/GAME •&gt;</b> again.</p>

## Dim (Alt. Function)

Display	Action
 <p>NN = current setting</p> <p>NONE = <b>&lt;0&gt;</b>    50% = <b>&lt;5&gt;</b>            90% = <b>&lt;1&gt;</b>    40% = <b>&lt;6&gt;</b>            80% = <b>&lt;2&gt;</b>    30% = <b>&lt;7&gt;</b>            70% = <b>&lt;3&gt;</b>    20% = <b>&lt;8&gt;</b>            60% = <b>&lt;4&gt;</b>    10% = <b>&lt;9&gt;</b></p>	<p>Press <b>&lt;ALT&gt;</b> followed by <b>&lt;DIM&gt;</b> to access the scoreboard dimming menu.</p> <p>Press <b>&lt;0&gt;</b> (brightest) through <b>&lt;9&gt;</b> (dimmiest) to set the scoreboard digit dimming level. Press <b>&lt;ENTER*&gt;</b> to save.</p> <p><b>Note:</b> The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.</p>

# 10 Relay Board Operation

**Sport Insert: 0G-139761 – Code 09**

The Sport Insert drawing is located in **Appendix B**. The Riser Diagram drawing is located in **Appendix A**.

**Reference Drawings:**

- Insert, 0G-139761; A/S1600 Relay Board ..... **DWG-139761**
- System Riser Diagram, Indoor/Outdoor A/S 1600 ..... **DWG-139544**

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.

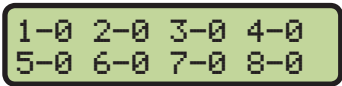
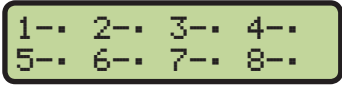
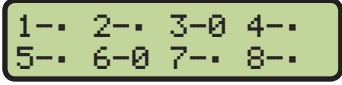
## Relay Board Information

The relay board consists of eight relays that can be used to control loads of up to 10 amps at 120 VAC per relay.

The LCD on the console will indicate which relays are ON by displaying a 0 (zero) by the number of that relay. Relays that are OFF will have a “.” by the number.

Making a list of what each relay number is controlling will make it easy to tell from the LCD if a specific item is ON or OFF.

## Relay Board Keys

Display	Action
	Press <b>&lt;ALL ON&gt;</b> to turn on all relays.
	Press <b>&lt;ALL OFF&gt;</b> to turn on all relays.
	<p>Press any key <b>&lt;1&gt;</b> through <b>&lt;8&gt;</b> once to turn on the respective relay. Press the same key a second time to turn off the relay.</p> <p>In the example at left, only relays 3 and 6 are set to on, while all of the other relays are set to off.</p>

# 11 Lap Counter Operation

**Sport Insert:** 0G-140230 – Code 10

The Sport Insert drawing is located in **Appendix B**. The Riser Diagram drawing is located in **Appendix A**.

**Reference Drawings:**

- System Riser Diagram, Indoor/Outdoor A/S 1600 ..... **DWG-139544**
- Insert, 0G-140230, A/S 1600 Lap Counter..... **DWG-140230**

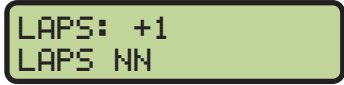

Refer to **Section 2: Basic Operation (p. 5)** for information on how to start up the console and use the sport insert.

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.

## Lap Counter Keys

### Lap (+1/-1)

Display	Action
 <p>NN = current setting</p>	<p>Press the <b>&lt;LAP +1&gt;</b> or <b>&lt;LAP -1&gt;</b> key to increase or decrease the current lap number.</p> <p>The LCD shows which key was pressed and the new value.</p>
 <p>NN = current setting</p>	<p>Press <b>&lt;EDIT&gt;</b> followed by either lap key to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

### Manual Horn

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

# 12 Field Events Operation

**Sport Insert:** 0G-140229  
**Metric 1:** Discus, Hammer, Javelin (Code 11)  
**Metric 2:** Long/Triple Jump, Shot Put (Code 12)  
**Metric 3:** High Jump, Pole Vault (Code 13)  
**Imperial (Code 14)**

The Sport Insert drawing is located in **Appendix B**. The Riser Diagram drawing is located in **Appendix A**.

**Reference Drawings:**

System Riser Diagram, Indoor/Outdoor A/S 1600 ..... **DWG-139544**  
 Insert, 0G-140229; A/S 1600 Field Event Board ..... **DWG-140229**

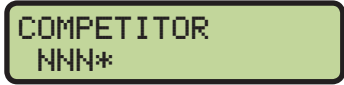
Refer to **Section 2: Basic Operation (p. 5)** for information on how to start up the console and use the sport insert.

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.

## Field Events Keys


### Competitor

Display	Action
 NNN = current setting	Press <b>&lt;COMPETITOR •&gt;</b> to display the current competitor number. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b> .

### Attempt

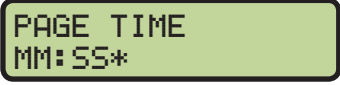
Display	Action
 N = current setting	Press <b>&lt;ATTEMPT •&gt;</b> to display the current attempt number. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b> .

### Performance

Display	Action
 NNN.NN = performance X = current attempt YYY = competitor number	Press <b>&lt;PERFORMANCE •&gt;</b> to allow edit of the performance on the top line of the LCD. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b> .  <b>Note:</b> For Metric Codes 11, 12 and 13, the value entered for performance will be converted to imperial, and the metric and imperial values will be cycled on the display, based on the Page Time. For Imperial Code 14, the value will be displayed only in imperial format.

## Page Time

The Page Time determines how long to wait when cycling between metric performance and imperial performance.

Display	Action
 <p>PAGE TIME MM:SS*</p> <p>MM:SS = minutes, seconds</p>	<p>Press &lt;PAGE TIME •&gt; to display the current page time. Enter the desired value using the number keys, and then press &lt;ENTER*&gt;.</p> <p><b>Note:</b> If the page time is set to 0, the performance number will not be converted, and the display will not change.</p>

# 13 Gymnastics Operation

**Sport Insert:** 0G-144810 – Code 15

The Sport Insert drawing is located in **Appendix B**. The Riser Diagram drawing is located in **Appendix A**.

**Reference Drawings:**

- System Riser Diagram, Indoor/Outdoor A/S 1600 ..... **DWG-139544**
- Insert; A/S 1600 Gymnastics..... **DWG-144810**

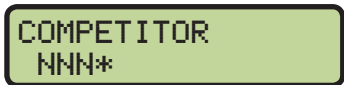
Refer to **Section 2: Basic Operation (p. 5)** for information on how to start up the console and use the sport insert.

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.

## Gymnastics Keys

### Competitor

Display	Action
 <p>NNN = current setting</p>	Press <b>&lt;COMPETITOR •&gt;</b> to display the current competitor number. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b> .

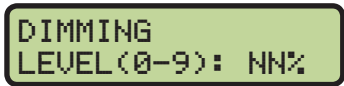
### Score

Display	Action
 <p>NN.NNN = current setting</p>	Press <b>&lt;SCORE •&gt;</b> to display the score for the current competitor. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b> .

### 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.

### Dim

Display	Action
 <p>NN = current setting</p> <p>NONE = &lt;0&gt;    50% = &lt;5&gt;            90% = &lt;1&gt;    40% = &lt;6&gt;            80% = &lt;2&gt;    30% = &lt;7&gt;            70% = &lt;3&gt;    20% = &lt;8&gt;            60% = &lt;4&gt;    10% = &lt;9&gt;</p>	Press <b>&lt;DIM&gt;</b> to access the scoreboard dimming menu.  Press <b>&lt;0&gt;</b> (brightest) through <b>&lt;9&gt;</b> (dimmiest) to set the scoreboard digit dimming level. Press <b>&lt;ENTER*&gt;</b> to save.  <b>Note:</b> The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.



# 14 Squash Operation

**Sport Insert:** 0G-199192 – Code 16

The Sport Insert drawing is located in **Appendix B**. The Riser Diagram drawing is located in **Appendix A**.

**Reference Drawings:**

- System Riser Diagram, Indoor/Outdoor A/S 1600 ..... **DWG-139544**
- Insert; 0G-199192; A/S 1600 Squash ..... **DWG-199192**

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.

## Squash Keys


### Game Score (+1/-1)

Press the home/guest **<GAME SCORE +1>** or **<GAME SCORE -1>** key to increase or decrease the game score for the team. The new score appears immediately on the top line of the LCD.


Display	Action
 <p>NN = current setting</p>	Press <b>&lt;EDIT&gt;</b> followed by any game score key to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b> .


### Won (+1/-1)

Press the home/guest **<WON +1>** or **<WON -1>** key to increase or decrease the games won for the team. The new value appears immediately on the bottom line of the LCD.

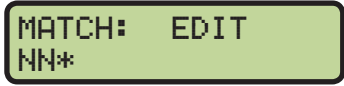
Display	Action
 <p>NN = current setting</p>	Press <b>&lt;EDIT&gt;</b> followed by any won key to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b> .

### Team Score (+1/-1)

Display	Action
 <p>NN = current setting</p>	<p>Press the home/guest <b>&lt;TEAM SCORE +1&gt;</b> key to increase the team score, or press the <b>&lt;TEAM SCORE -1&gt;</b> key to decrease the team score.</p> <p>The LCD shows which key was pressed and the new value.</p>

Display	Action
 <p>TEAM SCORE: EDIT HOME NN *</p> <p>NN = current setting</p>	<p>Press &lt;EDIT&gt; followed by any team score key to display the current setting. Enter the correct value using the number keys, and then press &lt;ENTER*&gt;.</p>

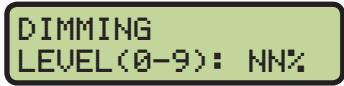
## Match Number

Display	Action
 <p>MATCH: EDIT NN*</p> <p>NN = current setting</p>	<p>Press &lt;MATCH NUMBER •&gt; to display the current setting. Enter the correct value using the number keys, and then press &lt;ENTER*&gt;.</p>

## Reset Game Score

Press <RESET GAME SCORE> to reset both home and guest scores to 0. This key is used to clear the Game Score fields at the beginning of each game.

## Dim (Alt. Function)

Display	Action
 <p>DIMMING LEVEL(0-9): NN%</p> <p>NN = current setting</p> <p>NONE = &lt;0&gt;      50% = &lt;5&gt; 90% = &lt;1&gt;      40% = &lt;6&gt; 80% = &lt;2&gt;      30% = &lt;7&gt; 70% = &lt;3&gt;      20% = &lt;8&gt; 60% = &lt;4&gt;      10% = &lt;9&gt;</p>	<p>Press &lt;ALT&gt; followed by &lt;DIM&gt; to access the scoreboard dimming menu.</p> <p>Press &lt;0&gt; (brightest) through &lt;9&gt; (dimmest) to set the scoreboard digit dimming level. Press &lt;ENTER*&gt; to save.</p> <p><b>Note:</b> The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.</p>

# 15 Basketball Operation

**Sport Insert:** LL-2667 – Code 21 (88)

The Sport Insert drawing is located in **Appendix B**. The Riser Diagram drawing is located in **Appendix A**.

**Reference Drawings:**

- System Riser Diagram, Indoor/Outdoor A/S 1600 ..... **DWG-139544**
- Insert: LL-2667- A/S Basketball- Code 21 ..... **DWG-303302**



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.

## Basketball Keys



### Score (+1/+2)

Display	Action
 <p>TEAM SCORE: +1 HOME NNN</p> <p>NNN = current setting</p>	<p>Press the home/guest <b>&lt;SCORE +1&gt;</b> or <b>&lt;SCORE +2&gt;</b> key to increase the team score by the value printed on the key.</p> <p>The LCD shows which key was pressed and the new value.</p>
 <p>TEAM SCORE: EDIT HOME NNN*</p> <p>NNN = current setting</p>	<p>Press <b>&lt;EDIT&gt;</b> followed by any score key to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

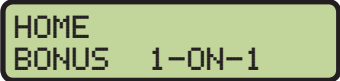


### Score (+3/-1) (Alt. Functions)

Display	Action
 <p>TEAM SCORE: +3 HOME NNN</p> <p>NNN = current setting</p>	<p>Press <b>&lt;ALT&gt;</b> followed by the home/guest <b>&lt;SCORE +3&gt;</b> key to increase the team score, or the <b>&lt;SCORE -1&gt;</b> key to decrease the team score.</p> <p>The LCD shows which key was pressed and the new value.</p>

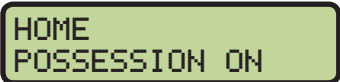

### Fouls +1

Display	Action
 <p>FOULS 1 HOME NN</p> <p>NN = current setting</p>	<p>Press the home/guest <b>&lt;FOULS +1&gt;</b> key to increase the number of team fouls.</p> <p>The LCD shows which key was pressed and the new value.</p>
 <p>FOULS EDIT HOME NN*</p> <p>NN = current setting</p>	<p>Press <b>&lt;EDIT&gt;</b> followed by any fouls key to display the current setting. Enter the correct value using the number keys, and then press <b>&lt;ENTER*&gt;</b>.</p>

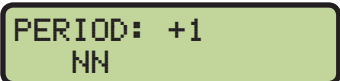
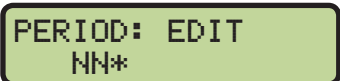
## Bonus (Alt. Function)

Display	Action
	Press <ALT> followed by the home/guest <BONUS> key to turn on the 1-ON-1 bonus light.
	Press <ALT> followed by the same <BONUS> key a second time to turn on the 2 SHOT bonus light.
	Press <ALT> followed by the same <BONUS> key a third time to turn on the bonus light OFF.

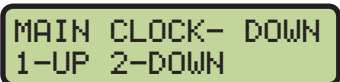
## Possession

Display	Action
	Press <POSS> to light the appropriate indicator. Each press will turn the other possession light on.  The possession status displays briefly.
	

## Period +1



Display	Action
 <p>NN = current setting</p>	Press <PERIOD +1> to increment the current period.  The new period number displays briefly.
 <p>NN = current setting</p>	Press <EDIT> followed by <PERIOD +1> to display the current setting. Enter the correct value using the number keys, and then press <ENTER*>.

## Count Up/Down



Display	Action
	<p>After the main clock has been stopped, the direction of the clock can be set.</p> <p>Press &lt;COUNT UP/DN •&gt; followed by &lt;1&gt; or &lt;2&gt; to select <b>UP</b> or <b>DOWN</b> (default).</p> <p><b>Note:</b> The current direction of the main clock is shown on the top line of the LCD.</p>

## TOD (Alt. Function)


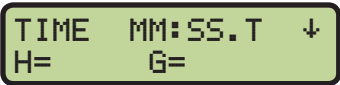
The <TOD> key toggles the console between displaying game time or time of day (TOD) and allows the operator to change the time of day.

Display	Action
 <p>SELECT TOD? 1*12, 2-24 HOUR</p>	<p>Press &lt;ALT&gt; followed by &lt;TOD&gt; to set and enable the Time of Day (TOD) clock.</p> <p>Press &lt;1&gt; to display the time of day in 12 hour (default), or press &lt;2&gt; to display the time of day in 24 hour format.</p>
 <p>EDIT TOD      HH:MM:SS*</p> <p>HH:MM:SS = hours, minutes, seconds</p>	<p>Enter the time of day in hours, minutes, and seconds using the number keys, and then press &lt;ENTER*&gt;.</p> <p>To disable the time of day clock and return to the game time, press &lt;ALT&gt; followed by &lt;TOD&gt; again.</p>

## Set Time

Display	Action
 <p>MAIN CLOCK -SET: CURR      MM:SS*</p> <p>MM:SS = minutes, seconds</p>	<p>After the main clock has been stopped, press &lt;SET TIME •&gt; to display the current time of the main clock.</p> <p>To change the current clock time, enter the new time in minutes and seconds using the number keys, and then press &lt;ENTER*&gt;.</p> <p>Press &lt;CLEAR&gt; twice to cancel and return to the game.</p>
 <p>MAIN CLOCK -EDIT PERIOD MM:SS*</p> <p>MM:SS = minutes, seconds</p>	<p>To display the configured period length, press &lt;SET TIME •&gt; a second time. To accept the period length as the new clock time, press &lt;ENTER*&gt;. To decline the selection of the period length, press &lt;CLEAR&gt;.</p> <p>To change the period length and set the main clock, enter the new time in minutes and seconds using the number keys, and then press &lt;ENTER*&gt;.</p> <p>Press &lt;CLEAR&gt; twice to cancel and return to the game.</p>

## 1/10 Sec (Alt. Function)

Display	Action
 <p>TIME    MM:SS    ↓ H=        G=</p> <p>MM:SS = minutes, seconds</p>	<p>Press &lt;ALT&gt; followed by &lt;1/10 SEC&gt; to toggle showing 1/10 of a second on the main clock.</p> <p>The top line of the LCD immediately updates to show the extra tenth of a second.</p>
 <p>TIME    MM:SS.T   ↓ H=        G=</p> <p>MM:SS.T = minutes, seconds, tenths of a second</p>	

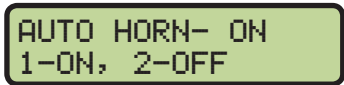
## Start

Press <START> to start the main clock.

## Stop

Press <STOP> to stop the main clock.

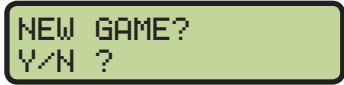
## Auto Horn

Display	Action
	Press <b>&lt;AUTO HORN •&gt;</b> , and then press <b>&lt;1&gt;</b> to select ON (default), or press <b>&lt;2&gt;</b> to select OFF.

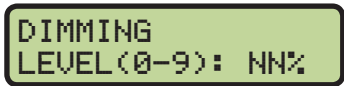
## Manual Horn

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

## New Game (Alt. Function)

Display	Action
	Press <b>&lt;ALT&gt;</b> followed by <b>&lt;NEW GAME&gt;</b> .  Press <b>&lt;ENTER*&gt;</b> to reset the current game information, or press <b>&lt;CLEAR&gt;</b> to cancel and return to the game.

## Dim (Alt. Function)

Display	Action
 <p>           NN = current setting             NONE = <b>&lt;0&gt;</b>    50% = <b>&lt;5&gt;</b>            90% = <b>&lt;1&gt;</b>    40% = <b>&lt;6&gt;</b>            80% = <b>&lt;2&gt;</b>    30% = <b>&lt;7&gt;</b>            70% = <b>&lt;3&gt;</b>    20% = <b>&lt;8&gt;</b>            60% = <b>&lt;4&gt;</b>    10% = <b>&lt;9&gt;</b> </p>	Press <b>&lt;ALT&gt;</b> followed by <b>&lt;DIM&gt;</b> to access the scoreboard dimming menu.  Press <b>&lt;0&gt;</b> (brightest) through <b>&lt;9&gt;</b> (dimkest) to set the scoreboard digit dimming level. Press <b>&lt;ENTER*&gt;</b> to save.  <b>Note:</b> The incremental dim levels pertain only to outdoor LED products. Indoor LED and incandescent products only support one level of dimming at 50%.

# A Reference Drawings

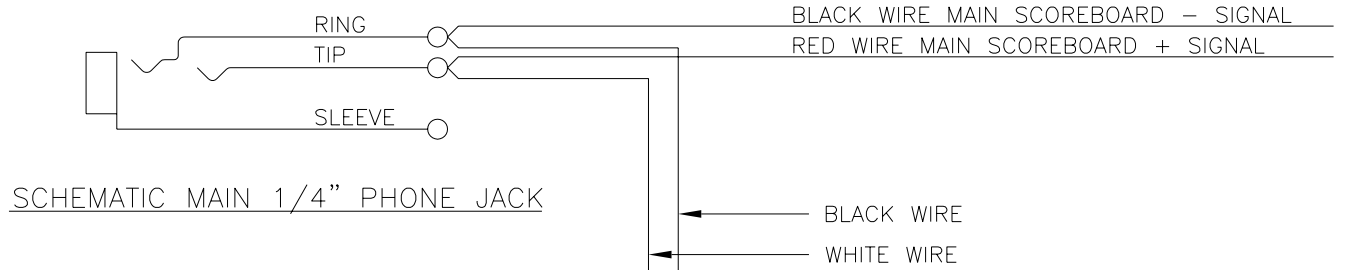
Refer to **Resources (p. 2)** for information regarding how to read the drawing number. Any contract-specific drawings take precedence over the general drawings.

## Reference Drawings:

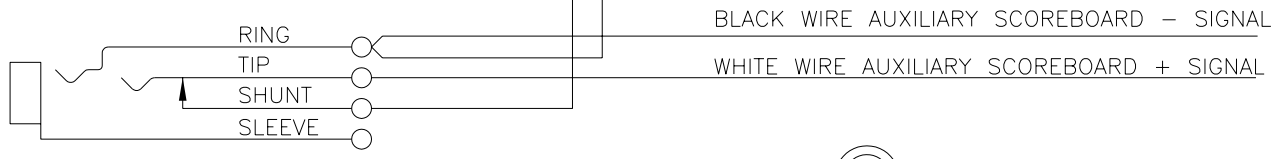
Schematic; Dual 1/4" Phone J-Box w/Shunt Jack.....	<b>DWG-125316</b>
System Riser Diagram; Indoor/Outdoor A/S 1600 .....	<b>DWG-139544</b>
System Layout - Independent Shot Clock System .....	<b>DWG-139547</b>
Rear View, A/S 1600 Connector Assignments.....	<b>DWG-139548</b>
All Sport Battery Kit Option .....	<b>DWG-139990</b>
Channel Selection; Multiple Broadcast Group, Gen IV .....	<b>DWG-203113</b>
Installation Details, Gen VI Channel Selection Guide.....	<b>DWG-1109870</b>

*This page intentionally left blank.*

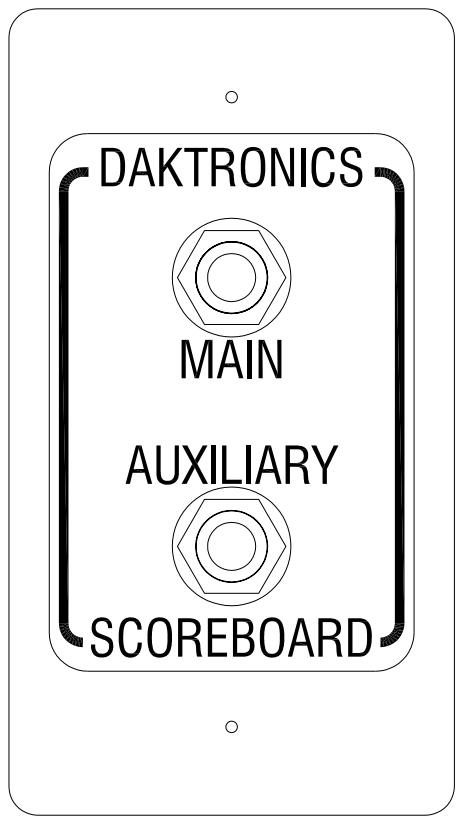




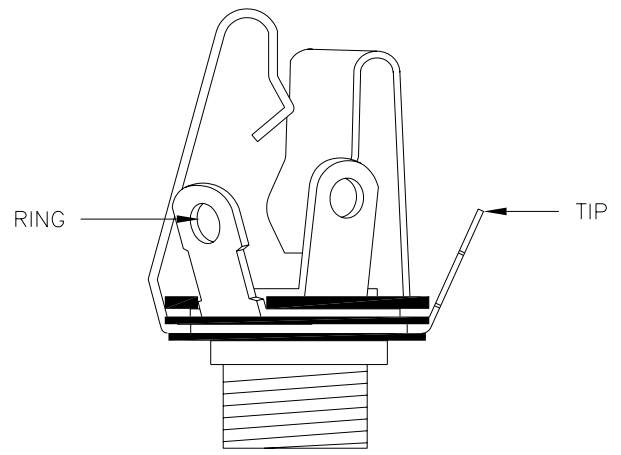
SCHEMATIC MAIN 1/4" PHONE JACK



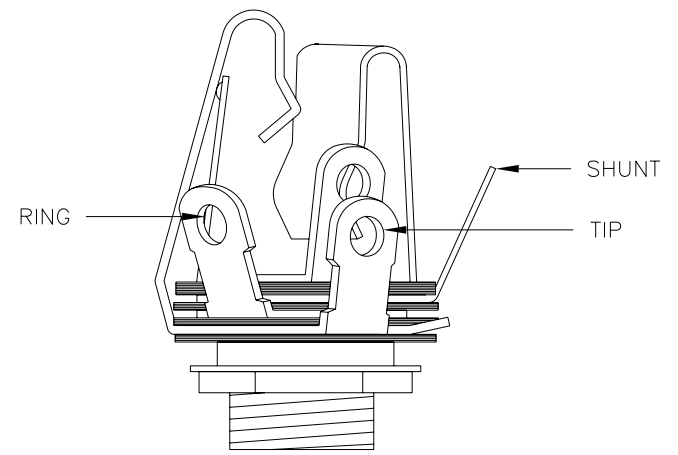
SCHEMATIC AUXILIARY 1/4" PHONE JACK



0A-1196-0013



MAIN  
PHONE JACK  
J-1003

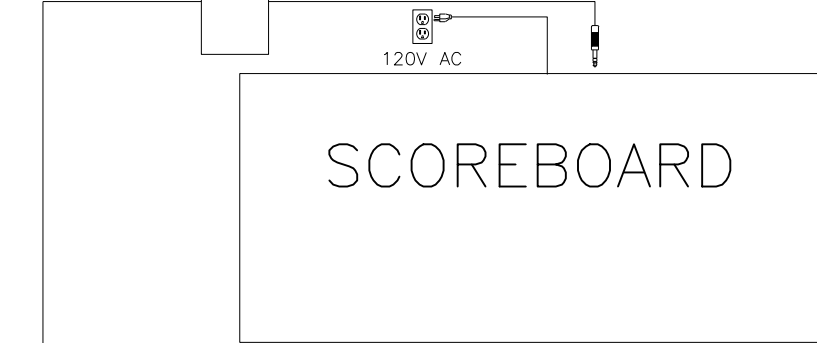


AUXILIARY  
PHONE JACK  
J-1131

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	APPR. BY:	1196-R03A-125316	
00	SCALE: NONE		

REV.	DATE	DESCRIPTION	BY	APPR.

J-BOX BY CUSTOMER



SCOREBOARD

PIN	COLOR	FUNCTION
TIP	RED	SIGNAL +
RING	BLK	SIGNAL -

1, 1 PAIR 22 AWG  
SIGNAL CABLE

INDOOR J-BOX  
OA-1009-0038

SIGNAL CORD

W-1340, 10'  
W-1236, 20'  
W-1238, 30'  
W-1237, 50'

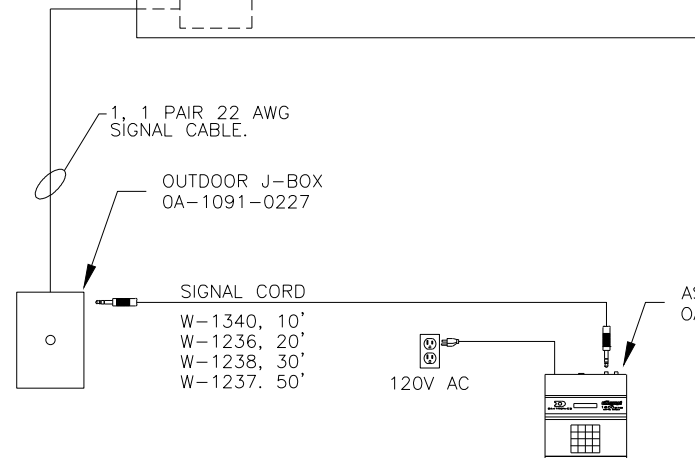
120V AC

AS1600 (120VAC)  
OA-1196-0047

INDOOR

SCOREBOARD

INTERNAL  
TERMINATION  
PANEL



PIN	COLOR	FUNCTION
TIP	RED	SIGNAL +
RING	BLK	SIGNAL -

1, 1 PAIR 22 AWG  
SIGNAL CABLE

OUTDOOR J-BOX  
OA-1091-0227

SIGNAL CORD

W-1340, 10'  
W-1236, 20'  
W-1238, 30'  
W-1237, 50'

120V AC

AS1600 (120VAC)  
OA-1196-0047

OUTDOOR



**DAKTRONICS, INC.**  
BROOKINGS, SD 57006

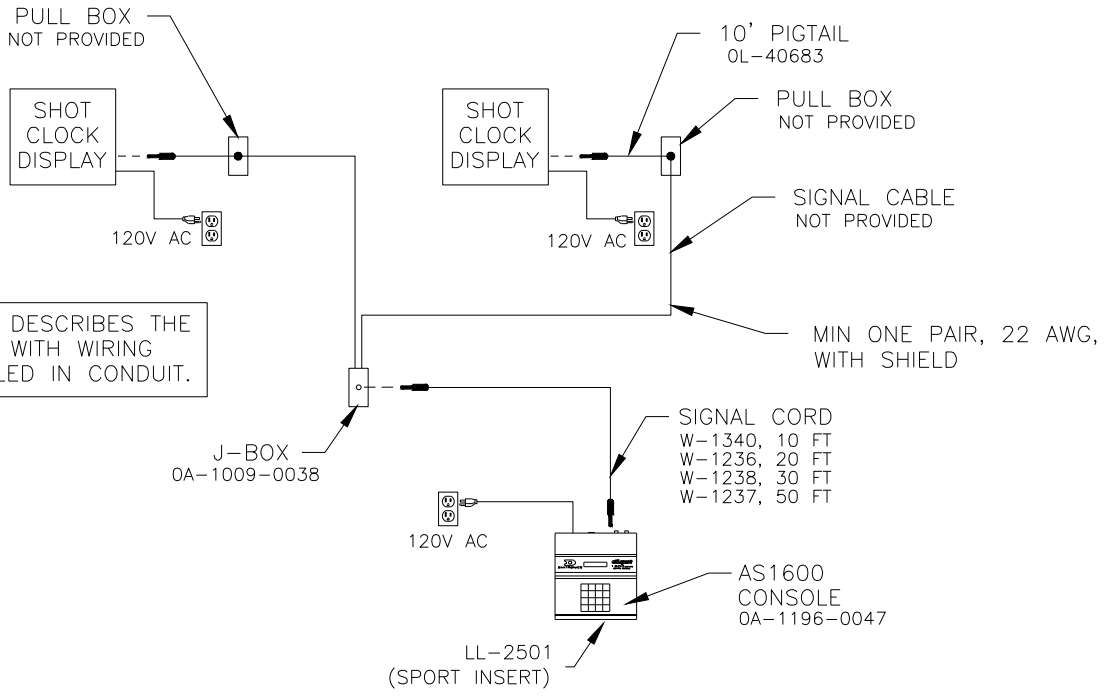
THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.

DO NOT SCALE DRAWING

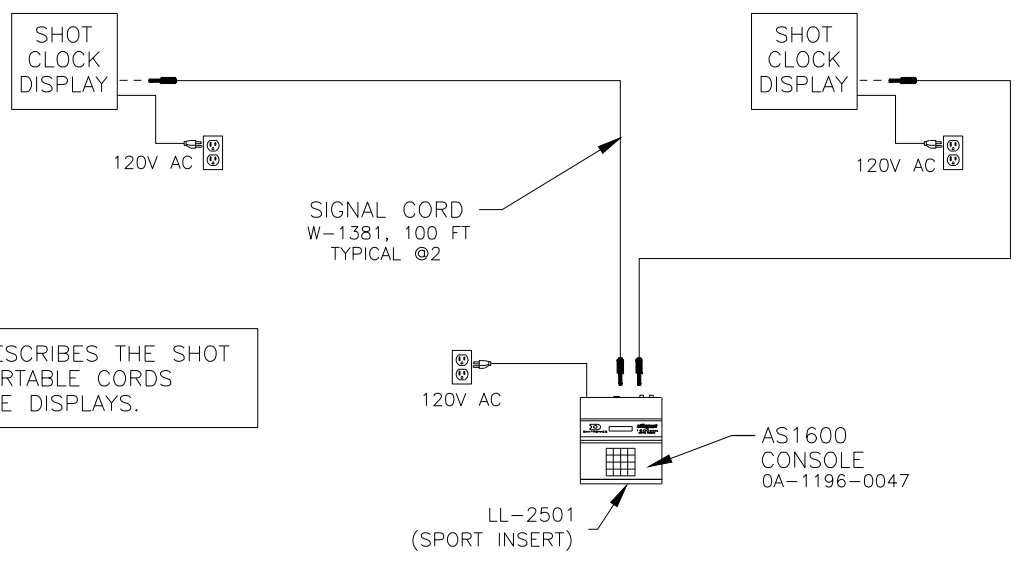
REV	DATE	DESCRIPTION	BY
04	02 DEC 10	UPDATED TITLE BLOCK AND BORDER	SJC
03	04 MAR 04	REPLACED OA-166-0024 WITH OA-1091-0227	RT
02	11 OCT 01	CHANGED OUTDOOR J-BOX TO AN OA-1166-0024.	NW
01	27 APR 01	CHANGED AS1600 PART # FROM 0P TO OA	JDB


PROJ:			
TITLE: SYSTEM RISER DIAGRAM: INDOOR/OUTDOOR A/S 1600			
DESIGN: HBONER		DRAWN: NWRIEDT	
SCALE: 1 = 1			
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	04	P1196	R-01-A
			139544

THIS BLOCK DIAGRAM DESCRIBES THE SHOT CLOCK SYSTEM WITH WIRING PERMANENTLY INSTALLED IN CONDUIT.



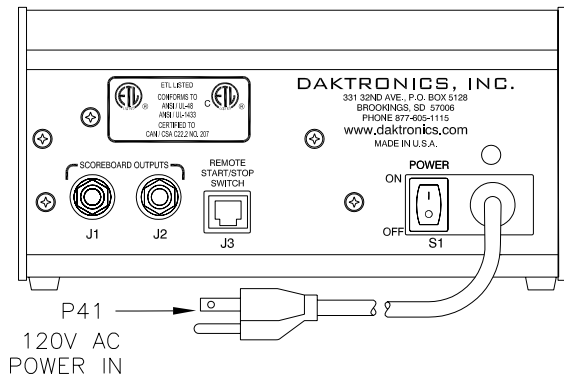
THIS BLOCK DIAGRAM DESCRIBES THE SHOT CLOCK SYSTEM WITH PORTABLE CORDS CARRYING SIGNAL TO THE DISPLAYS.



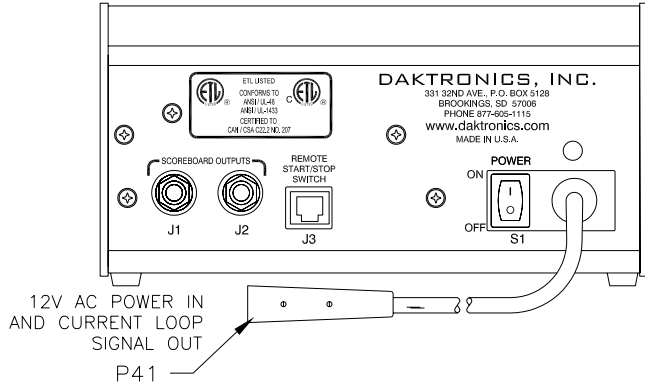
 <b>DAKTRONICS, INC.</b> BROOKINGS, SD 57006		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2012 DAKTRONICS, INC.	
DO NOT SCALE DRAWING			
PROJ: ALL SPORT 5000			
TITLE: SYSTEM LAYOUT- INDEPENDENT SHOT CLOCK SYSTEM			
DESIGN: AVB	DRAWN: NWRIEDT	DATE: 5 OCT 00	
SCALE: NONE			
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	01	P1196	R-04-A
			139547

REV	DATE:	UPDATED TEXT FROM 24 AWG TO MIN ONE PAIR, 22 AWG, WITH SHIELD. UPDATED BORDER AND TITLE BLOCK.	BY:	
01	02 FEB 12		JJL	

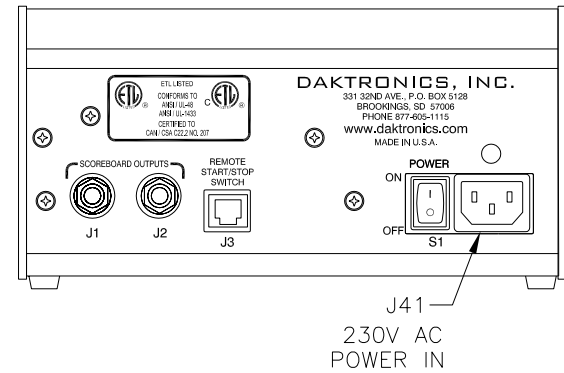
ALL SPORT 1600



ALL SPORT 1610



ALL SPORT 1620



J1-J2 - OUTPUT #1-#2

CONTACT	FUNCTION
TIP	CURRENT LOOP OUTPUT 1 +
RING	CURRENT LOOP OUTPUT 1 -
SHAFT	GND

ALL SPORT 1600 SERIES MODELS

MODEL #	FUNCTION
1600	120V, STANDARD PROGRAMMING
1610	12V, STANDARD PROGRAMMING
1620	230V, STANDARD PROGRAMMING

J3 - 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 +

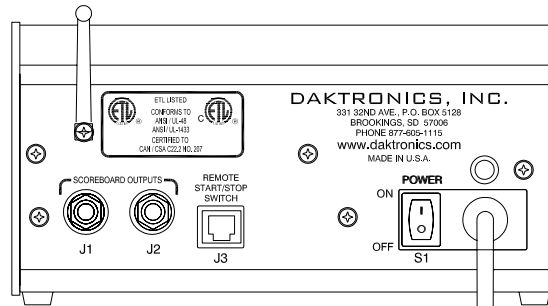
A/S 1610 P41-PWR IN/SIGNAL OUT

PIN #	FUNCTION
1	CL SIGNAL +
2	CL SIGNAL -
3	12 VAC-P
4	12 VAC-N

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: ALL SPORT 1600 SERIES CONSOLES			
TITLE: REAR VIEW, A/S 1600 CONNECTOR ASSIGNMENTS			
DES. BY: EBRAVEK		DRAWN BY: NWRIEDT	
DATE: 19 OCT 00			
REVISION	APPR. BY:	1196-R04A-139548	
00	SCALE: 1=3		

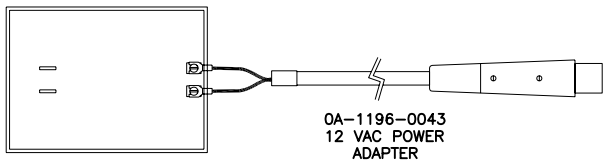
REV.	DATE	DESCRIPTION	BY	APPR.

ALL SPORT 1610R5 SHOWN



OTHER 12V MODELS AVAILABLE

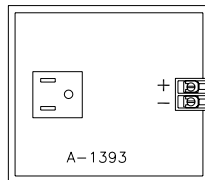
- A/S 1610
- A/S 3110
- A/S 3110R5
- A/S 5012
- A/S 5012R5



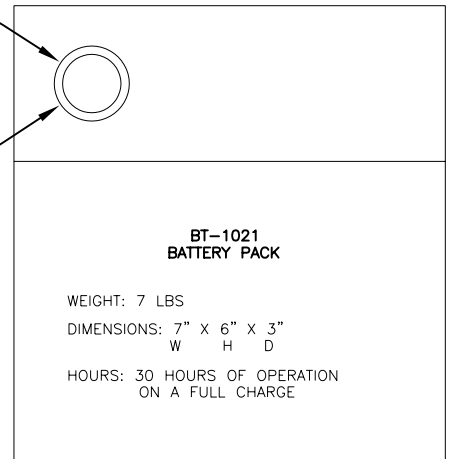
OA-1196-0043  
12 VAC POWER  
ADAPTER

POWER IN

PLUG IN EITHER THE 12VAC ADAPTER OR  
DIRECTLY INTO THE BATTERY PACK TO  
POWER THE CONSOLE



OA-1196-0044  
SMART BATTERY  
CHARGER ASSEMBLY  
SEE NOTE



BT-1021  
BATTERY PACK

WEIGHT: 7 LBS  
DIMENSIONS: 7" X 6" X 3"  
                  W    H    D  
HOURS: 30 HOURS OF OPERATION  
          ON A FULL CHARGE

- OA-1196-0039 BATTERY KIT INCLUDES
- OA-1196-0043 @1, 12 VAC ADAPTER CABLE
  - OA-1196-0044 @1, SMART CHARGER ASSEMBLY.
  - BT-1021 @1, BATTERY PACK

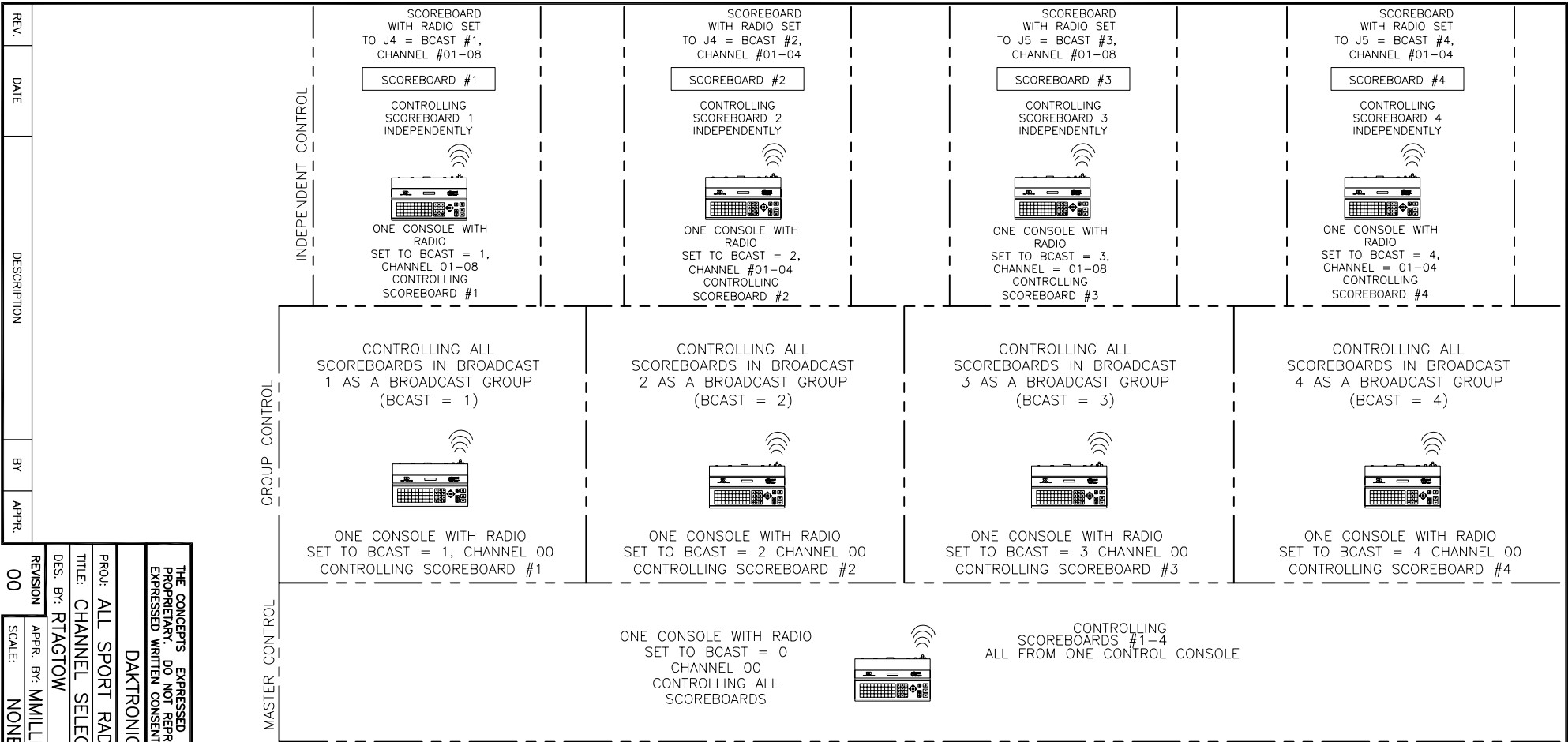
**NOTE:**

OLD CHARGER THAT USED 12 VOLT ASSESSORY (CIGARETTE LIGHTER) CABLES ORDER THE CABLES LISTED BELOW AS NEEDED:  
W-1448 FEMALE 12 VOLT ASSESSORY CABLE.  
W-1479 MALE 12 VOLT ASSESSORY CABLE.

THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS, INCLUDING ELECTRONICALLY WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2008 DAKTRONICS, INC.

03	09 DEC 08	CORRECTOR PART NUMBERS AND TEXT	DKD	
02	07 MAY 08	REVISED PART NUMBERS AND TEXT	BLH	
01	03 JUN 03	UPDATED DRAWING TO ILLUSTRATE THE XLR ONLY CONNECTIONS.	CJB	
REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: ALL SPORT 1600 SERIES CONSOLES			
TITLE: ALL SPORT BATTERY KIT OPTION			
DES. BY: EBRAVEK		DRAWN BY: NWRIEDT	
DATE: 19 OCT 00			
REVISION	APPR. BY:	1196-R04A-139990	
03	SCALE: 1=3		



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.

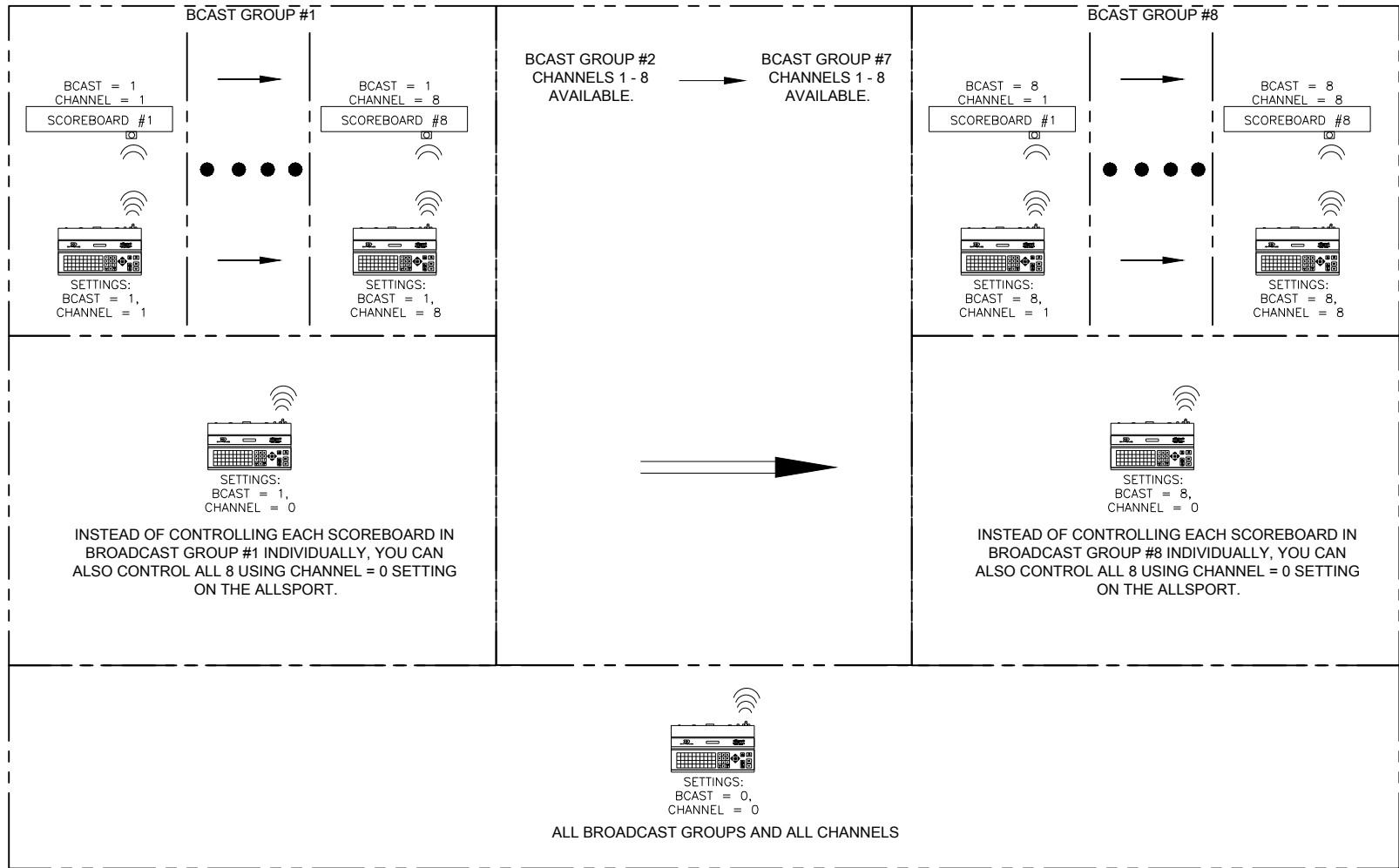
THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS, INCLUDING ELECTRONICALLY WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2002 DAKTRONICS, INC.

PROJ: ALL SPORT RADIO  
 TITLE: CHANNEL SELECTION; MULTIPLE BROADCAST GROUP, GEN IN  
 DES. BY: RTAGTOW  
 DRAWN BY: RTAGTOW  
 DATE: 26 JAN 04

DAKTRONICS, INC. BROOKINGS, SD 57006

REVISION 00  
 APPR. BY: MILLER  
 SCALE: NONE

1110-R01A-203113



**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.

<p><b>DAKTRONICS, INC.</b> BROOKINGS, SD 57006</p>		<p>DO NOT SCALE DRAWING</p>	
		<p>PROJ: RADIO LINK, GEN VI</p>	
<p>TITLE: INSTALLATION DETAILS, GEN VI CHANNEL SELECTION GUIDE</p>		<p>DATE: 14 AUG 12</p>	
<p>DESIGN: JOSE</p>		<p>DRAWN: MILLER</p>	
<p>SCALE: NONE</p>		<p>SCALE: NONE</p>	
<p>SHEET</p>	<p>REV</p>	<p>JOB NO.</p>	<p>FUNC-TYPE-SIZE</p>
<p>00</p>	<p>P 110</p>	<p>F - 01 - A</p>	<p>1109870</p>

THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2012 DAKTRONICS, INC.

*This page intentionally left blank.*



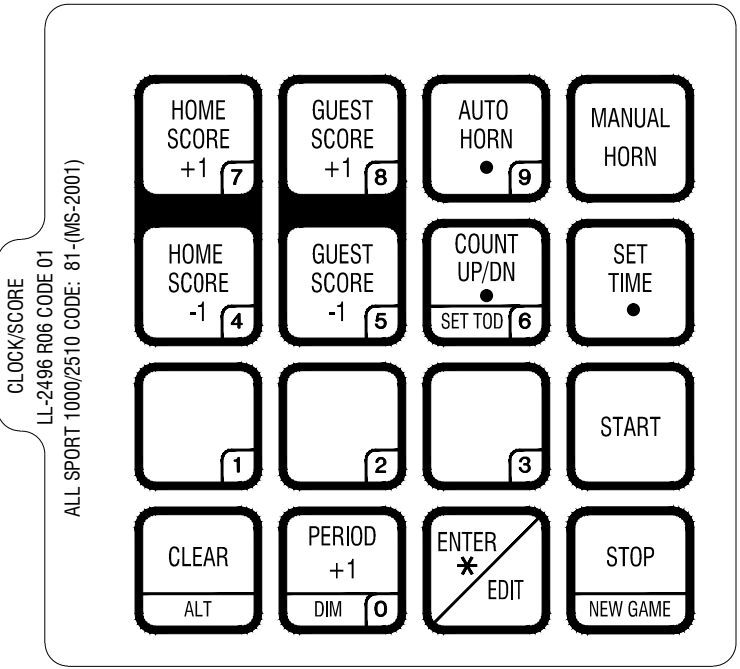
## B Sport Inserts

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


### Reference Drawings:

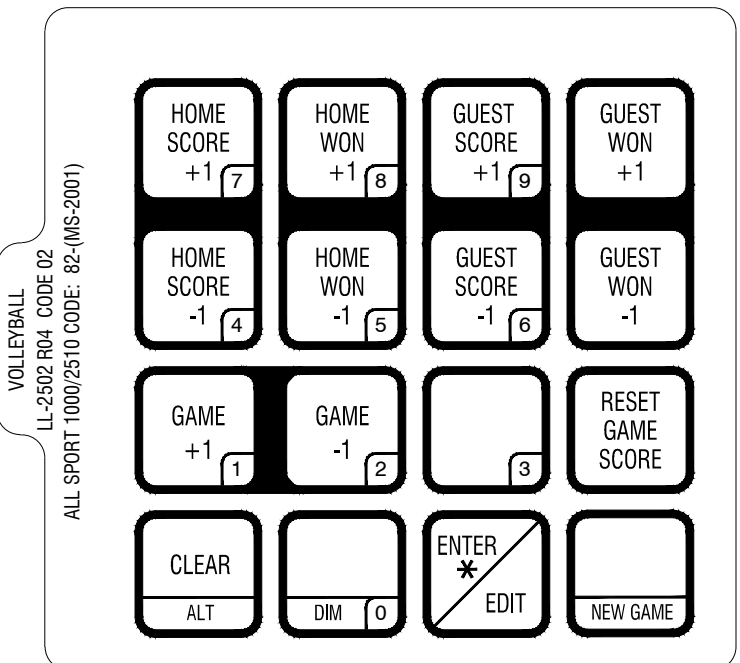
Insert; LL-2496 A/S 1600, Clock/Score.....	<b>DWG-139419</b>
Insert; LL-2502 A/S 1600, Volleyball .....	<b>DWG-139482</b>
Insert; LL-2499 A/S 1600, Multipurpose Timer.....	<b>DWG-139487</b>
Insert; LL-2500 A/S 1600, Baseball.....	<b>DWG-139491</b>
Insert; LL-2498 A/S 1600, Segment Timer.....	<b>DWG-139492</b>
Insert; LL-2497 A/S 1600, Tennis .....	<b>DWG-139494</b>
Insert; 0G-139744, A/S 1600 Test Insert .....	<b>DWG-139744</b>
Insert, 0G-139761; A/S 1600 Relay Board .....	<b>DWG-139761</b>
Insert; LL-2501 A/S 1600, Shot/Play Clock.....	<b>DWG-139889</b>
Insert, 0G-140299; A/S 1600 Field Event Board .....	<b>DWG-140229</b>
Insert, 0G-140230, A/S 1600 Lap Counter.....	<b>DWG-140230</b>
Insert; A/S 1600 Gymnastics.....	<b>DWG-144810</b>
Insert; 0G-199192; A/S 1600 Squash .....	<b>DWG-199192</b>
Insert: LL-2667- A/S Basketball- Code 21 .....	<b>DWG-303302</b>

*This page intentionally left blank.*



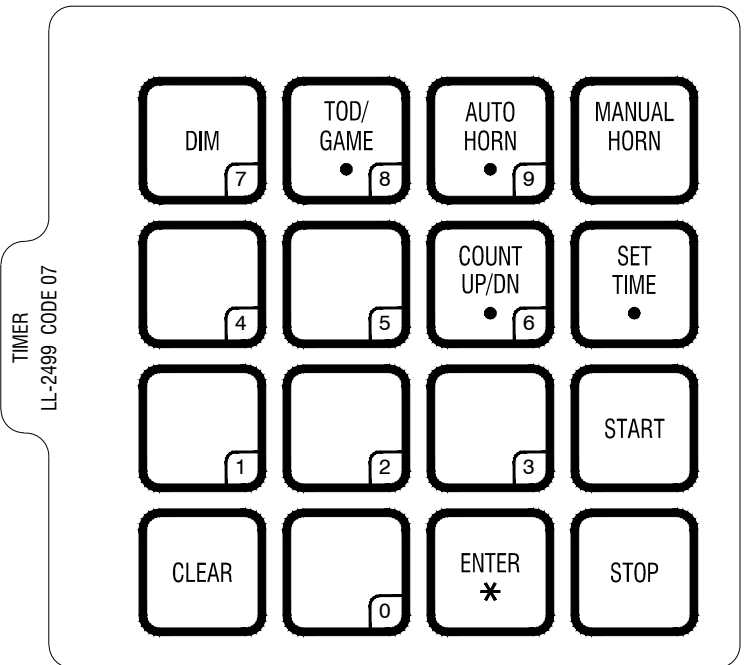
REV 06	DATE: 19 AUG 08	UPDATED DRAWING BORDER NO CHANGES TO INSERT	BY: JMC
REV 05	DATE: 26 JUN 08	ADDED "SET TOD" TEXT TO COUNT UP/DN KEY	BY: JMC
REV 04	DATE: 04 JAN 06	ADDED NEW GAME TEXT TO STOP KEY	BY: DUU
REV 03	DATE: 14 MAY 02	CORRECTED CODE NUMBER FROM 02 TO 01	BY: EB
REV 02	DATE: 03 DEC 01	ADDED DIM FUNCTION TO "0" KEY	BY: CLB
REV 01	DATE: 04 APR 01	ADDED ALL SPORT 1000 AND 2510 CODE	BY: NW

 <b>DAKTRONICS, INC.</b> BROOKINGS, SD 57006		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.	
PRD: DO NOT SCALE DRAWING			
TITLE: INSERT; LL-2496 A/S 1600, CLOCK/SCORE			
DESIGN: EB		DRAWN: N WRIEDT	
SCALE: 1 = 1		DATE: 9 OCT 00	
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
06	P1196	139419	E-07-A



REV 04	DATE: 10 DEC 08	ADDED NEW GAME KEY	BY: DUU
REV 03	DATE: 20 JAN 04	REMOVED TEXT FROM DIM LAYER	BY: DUU
REV 02	DATE: 03 DEC 01	ADDED DIM KEY TO KEY "0"	BY: CJB
REV 01	DATE: 04 APR 01	ADDED ALL SPORT 1000 AND 2510 CODE	BY: NW

		DAKTRONICS, INC. BROOKINGS, SD 57006	
DO NOT SCALE DRAWING			
THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.			
PROJ:	TITLE: INSERT: LL-2502 A/S 1600, VOLLEYBALL		
DESIGN: EB	DRAWN: NSW		DATE: 04 OCT 00
SCALE: 1 = 1	REV: 04	JOB NO: P1196	FUNC-TYPE-SIZE: E-07-A
SHEET	REV	JOB NO	FUNC-TYPE-SIZE
	04	P1196	E-07-A
			139482



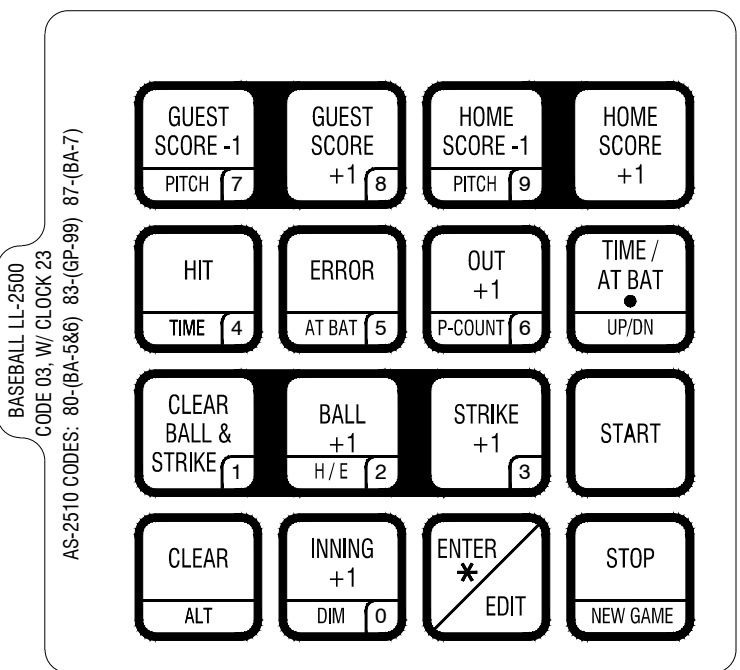

**DAKTRONICS, INC.**  
 BROOKINGS, SD. 57006  
 DO NOT SCALE DRAWING

THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON  
 THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY.  
 DO NOT REPRODUCE BY ANY MEANS WITHOUT THE  
 EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC.  
 COPYRIGHT 2010 DAKTRONICS, INC.


PROJ: \_\_\_\_\_  
 TITLE: INSERT: LL-2499 A/S 1600, MULTIPURPOSE TIMER  
 DESIGN: EB DRAWN: N WRIEDT DATE: 4 OCT 00  
 SCALE: 1 = 1

REV 01 DATE: 20 JAN 04 BY: DUU  
 REMOVED MITROGRAPHER TEXT FROM DIM LAYER


SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	DATE
01	P1196		E-07-A	1 39487

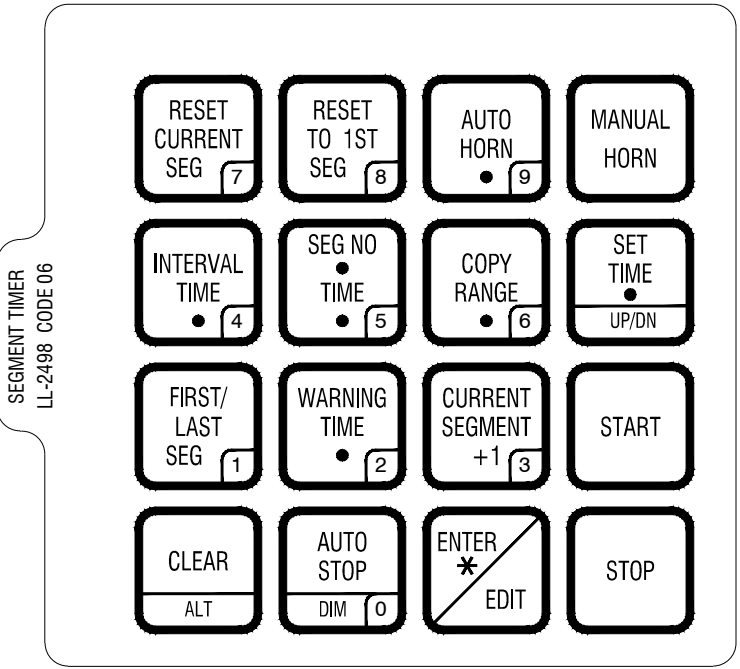


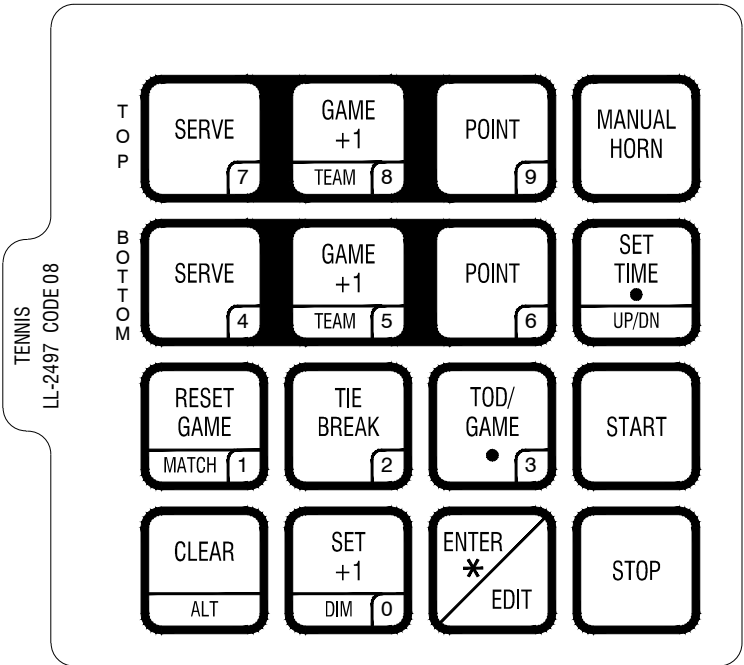
REV 07	DATE: 21 JUN 10	ADDED H/E LABEL TO KEY 2.	BY: CRD
REV 06	DATE: 09 DEC 08	ADDED NEW GAME TO STOP KEY	BY: DUU
REV 05	DATE: 1 JUL 08	ADDED BASEBALL WITH CLOCK CODE 23 TEXT	BY: JMC
REV 04	DATE: 21 AUG 07	ADDED PITCH COUNT CONTROL	BY: JMC
REV 03	DATE: 21 MAY 07	ADDED AT BAT CONTROLS ADDED PITCH COUNT CONTROLS	BY: JMC
REV 02	DATE: 20 JAN 04	REMOVED MITROGRAPHER TEXT FROM DIM LAYER	BY: DUU
REV 01	DATE: 04 APR 01	ADDED ALL SPORT 1000 AND 2510 CODES	BY: NW

 <b>DAKTRONICS, INC.</b> BROOKINGS, SD 57006			
DO NOT SCALE DRAWING			
THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.			
PROJ:	TITLE: INSERT: LL-2500 A/S 1600, BASEBALL		
DESIGN: EB	DRAWN: N WRIEDT		DATE: 04 OCT 00
SCALE: 1 = 1	SHEET	REV	JOB NO:
	07	P1196	FUNC-TYPE-SIZE E-07-A
			139491


REV: 01 DATE: 20 JAN 04 REMOVED TEXT FROM DIM LAYER BY: DUU

 <p><b>DAKTRONICS, INC.</b> BROOKINGS, SD 57006</p>		<p>THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.</p>	
<p>PROJ: _____</p>			
<p>TITLE: INSERT: LL-2498 A/S 1600, SEGMENT TIMER</p>			
<p>DESIGN: EB</p>		<p>DRAWN: N WRIEDT</p>	
<p>SCALE: 1 = 1</p>		<p>DATE: 4 OCT 00</p>	
<p>SHEET</p>	<p>REV</p>	<p>JOB NO:</p>	<p>FUNC-TYPE-SIZE</p>
<p>01</p>	<p>P1196</p>	<p>E-07-A</p>	<p>1 39492</p>

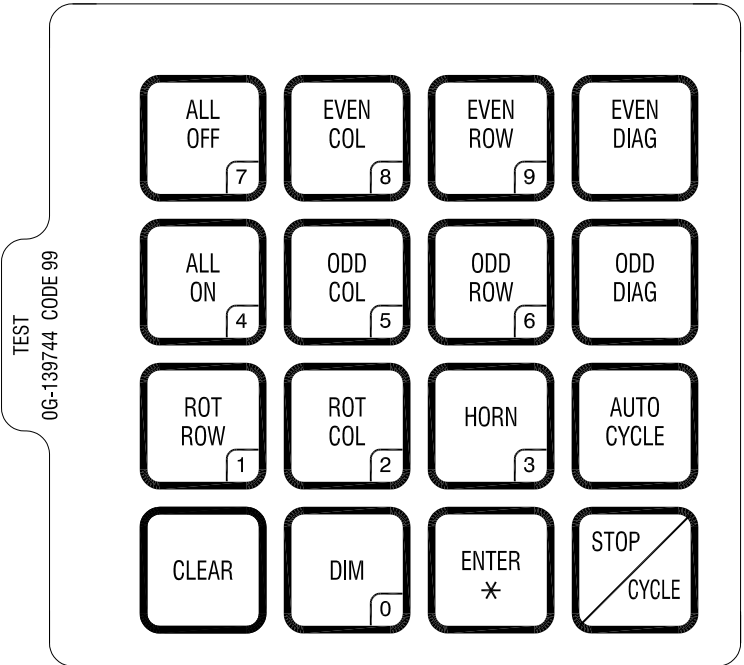




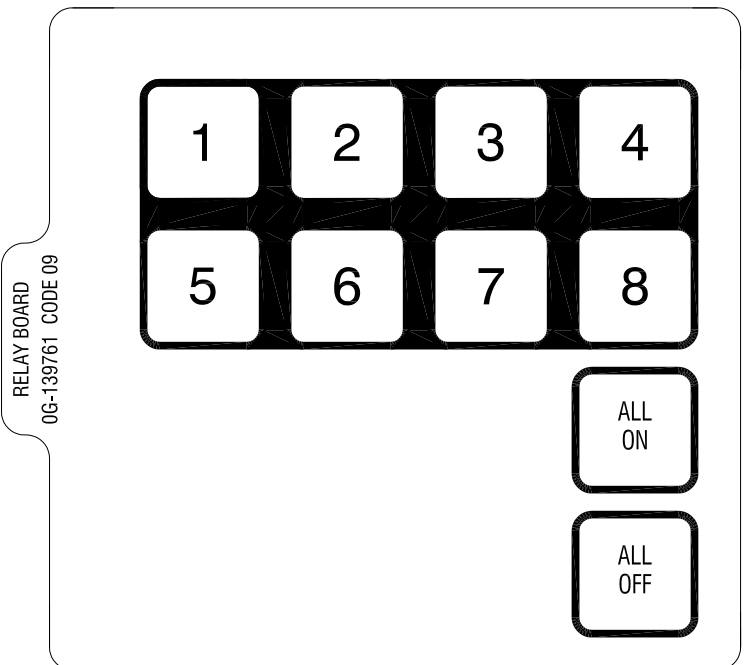
REV: 01 DATE: 20 JAN 04 BY: DUU  
REMOVED TEXT FROM DIM LAYER

 <p><b>DAKTRONICS, INC.</b> BROOKINGS, SD 57006</p>		<p>THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.</p>	
<p>PROJ: _____</p>			
<p>TITLE: INSERT: LL-2497 A/S 1600, TENNIS</p>			
<p>DESIGN: EB</p>		<p>DRAWN: N WRIEDT</p>	
<p>SCALE: 1 = 1</p>		<p>DATE: 04 OCT 00</p>	
<p>SHEET _____</p>	<p>REV: 01</p>	<p>JOB NO: P1196</p>	<p>FUNC-TYPE-SIZE: E-07-A</p>
			<p>1 39494</p>

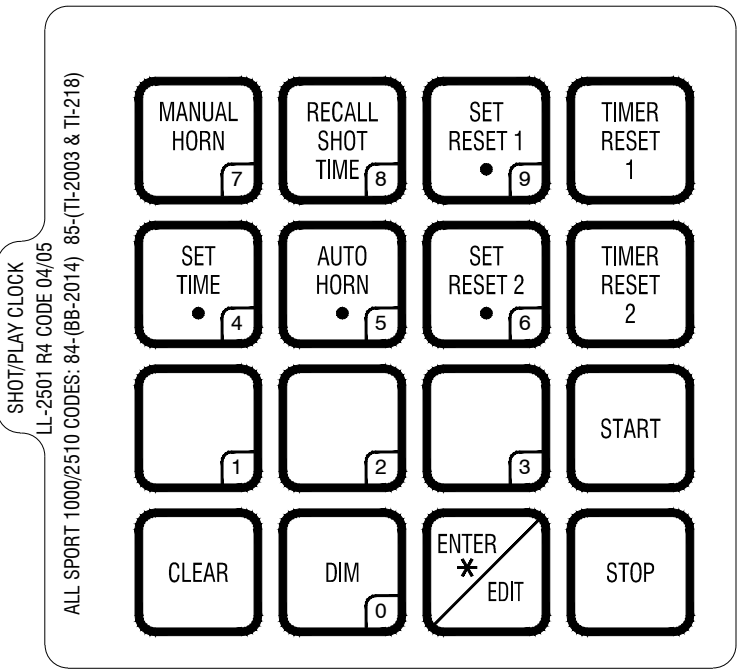





PROJ:		DAKTRONICS, INC. BROOKINGS, SD 57006	
TITLE: INSERT; 0G-139744, A/S 1600 TEST INSERT			
DES. BY: EB		DRAWN BY: N WRIEDT	
DATE: 4 OCT 00		DATE: 4 OCT 00	
REVISION	APPR. BY:	1196-E07A-139744	
00	SCALE: 1=1		
REV.	DATE	DESCRIPTION	BY
			APPR.



REV.		DATE		DESCRIPTION		BY		APPR.	
PROD: DAKTRONICS, INC. BROOKINGS, SD 57006 TITLE: INSERT, 0G-139761; A/S 1600 RELAY BOARD DES. BY: EB DRAWN BY: N WRIEDT DATE: 9 OCT 00 REVISION 00 APPR. BY: SCALE: 1=1 1196-E07A-139761									

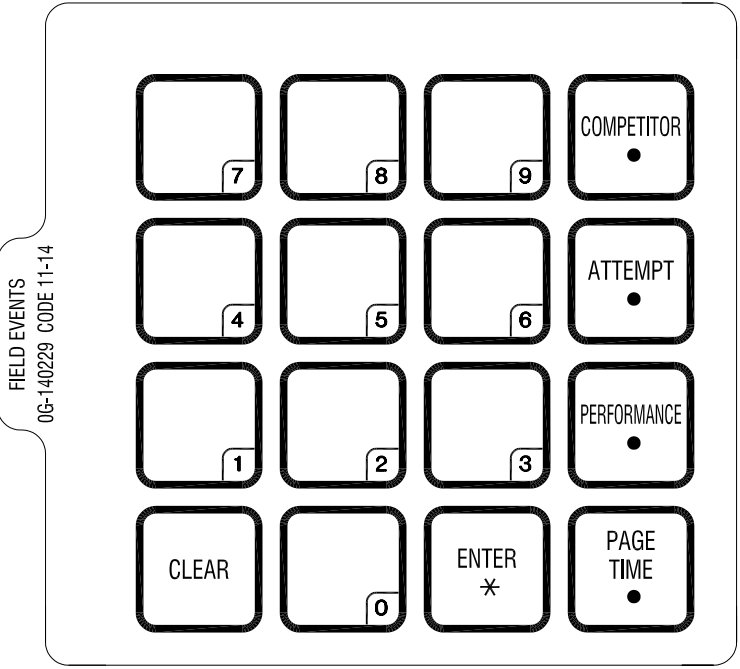


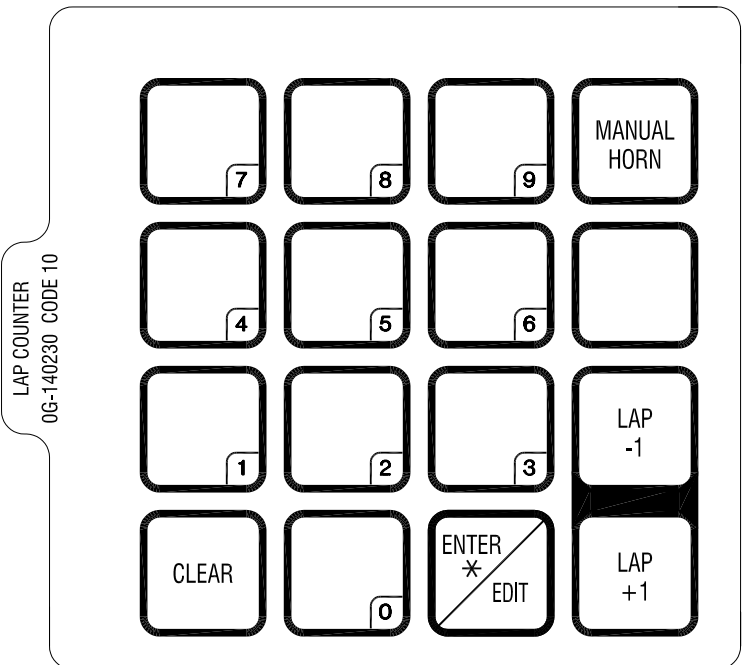
REV 04	DATE: 20 JAN 04	REMOVED TEXT FROM DIM LAYER	BY: DUU
REV 03	DATE: 24 SEP 02	ADDED AUTO HORN BUTTON	BY: CJB
REV 02	DATE: 08 MAY 01	ADDED MANUAL HORN BUTTON	BY: NW
REV 01	DATE: 04 APR 01	ADDED ALL SPORT 1000 AND 2510 CODES	BY: NW

 <b>DAKTRONICS, INC.</b> BROOKINGS, SD, 57006		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.	
DO NOT SCALE DRAWING			
PROD:			
TITLE: INSERT: LL-2501 A/S 1600, SHOT/PLAY CLOCK			
DESIGN: EB		DRAWN: N WRIEDT	
SCALE: 1 = 1		DATE: 12 OCT 00	
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
04	P1196	139889	E-07-A

REV.	DATE	DESCRIPTION	BY	APPR.
------	------	-------------	----	-------

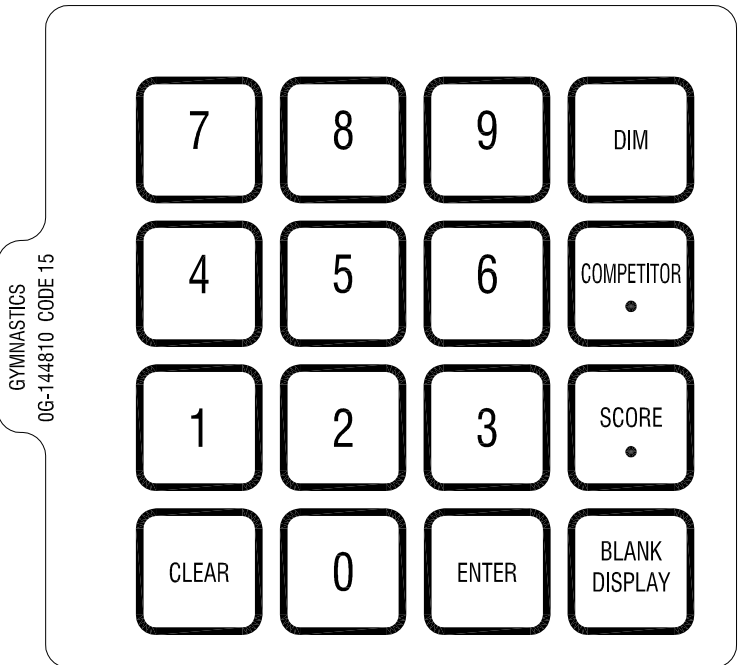
PROJ:		DAKTRONICS, INC. BROOKINGS, SD 57006		
TITLE:		INSERT, 0G-140229; A/S 1600 FIELD EVENT BOARD		
DES. BY:	EB	DRAWN BY:	N WRIEDT	DATE: 23 OCT 00
REVISION	00	APPR. BY:		
SCALE:	1=1	1196-E07A-140229		





REV.	DATE	DESCRIPTION	BY	APPR.
------	------	-------------	----	-------

PROJ:		DAKTRONICS, INC. BROOKINGS, SD 57006		
TITLE:		INSERT: 06-140230, A/S 1600 LAP COUNTER		
DES. BY:	EB	DRAWN BY:	N WRIEDT	DATE: 23 OCT 00
REVISION	00	APPR. BY:		
SCALE:	1=1	1196-E07A-140230		



THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS, INCLUDING ELECTRONICALLY WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2004 DAKTRONICS, INC.

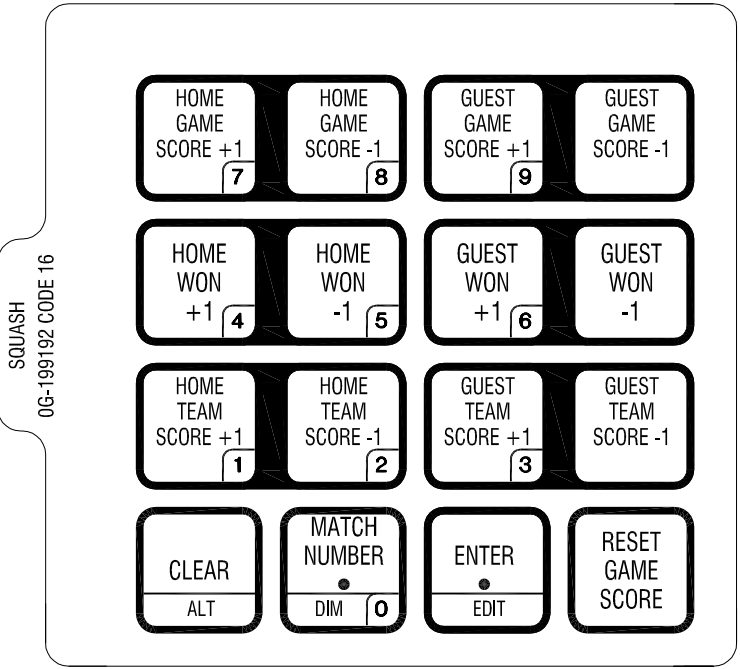
PROJ: DAKTRONICS, INC. BROOKINGS, SD 57006

TITLE: INSERT; A/S 1600 GYMNASTICS

DES. BY: DRAWN BY: N WRIEDT DATE: 19 FEB 01

REVISION APPR. BY: SCALE: 1 = 1 1196-E07A-144810

REV.	DATE	DESCRIPTION	BY	APPR.
01	20 JAN 04	REMOVED TEXT FROM DIM LAYER	DUJ	



THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS, INCLUDING ELECTRONICALLY WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2005 DAKTRONICS, INC.

DAKTRONICS, INC. BROOKINGS, SD 57006

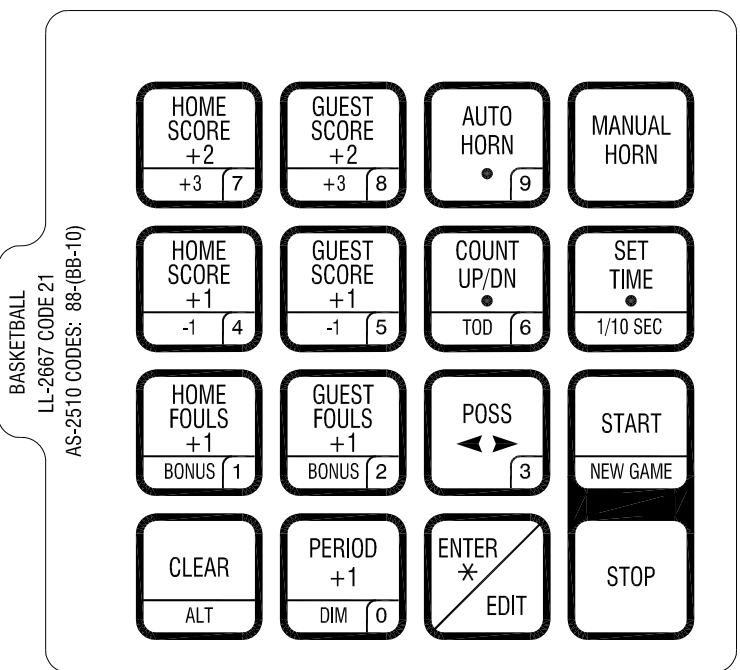
PROJ:

TITLE: INSERT: 0G-199192, A/S 1600 SQUASH

DES. BY: DULSCHM DRAWN BY: DULSCHM DATE: 23 OCT 00

REVISION APPR. BY: SCALE: 1=1 1196-E07A-199192

01	13 DEC 05	CHANGE GAME TO TEAM ON BUTTON 2	JRA	DMD
REV.	DATE	DESCRIPTION	BY	APPR.



THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS, INCLUDING ELECTRONICALLY WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2004 DAKTRONICS, INC.

PROJ: DAKTRONICS, INC. BROOKINGS, SD 57006

TITLE: INSERT: LL-2667 - A/S BASKETBALL - CODE 21

DES. BY: JCOSE DRAWN BY: JCOSE DATE: 24 APR 07

REVISION APPR. BY: SCALE: 1=1 1196-E07A-303302

02	28 DEC 09	UPDATED TO MATCH SPEC DRAWING	DUU	
01	09 DEC 08	ADDED ALL SPORT 2510 CODES	DUU	
REV.	DATE	DESCRIPTION	BY	APPR.



## C Sport Code Numbers

**Note:** Code numbers in parenthesis are for boards previously controlled by an All Sport 1000 or 2510 series console.

### Sport Code Output Table

Sport/Code	Scoreboard Models	Address Sent
Clock/Score Code 01 (81)	MS-915, MS-918, MS-2001, MS-2002, MS-2003, MS-2006, MS-2011, MS-2013, MS-2113, MS-2020, MS-2025, MS-3918, SO-918, SO-2009, SO-2010, SO-2918	11 (No Address: 81)
	MS-2017, MS-2026, MS-2126	17
Volleyball Code 02 (82)	MS-2001, MS-2013, MS-2113	11 (No Address: 82)
Baseball Code 03 (80) (83) (87)	TI-413, TI-418, TI-2019, TI-2032	1
	TI-215, TI-218, TI-2003, TI-2010, TI-2014, TI-2015, TI-2024	2
	BA-2023, BA-2024, BA-2031, BA-2033, BA-2034, BA-2035	3
	MS-2001, MS-2013, MS-2113	11 (No Address: 83)
	BA-1018, BA-2020	12
	BA-515, BA-518, BA-618, BA-624, BA-2010, BA-2012, BA-2017, BA-2515, BA-2518, BA-2618	61 (No Address: 80)
	BA-718, BA-2715, BA-2718	62 (No Address: 87)
Baseball Code 23	TI-413, TI-418, TI-2019, TI-2032	1
	TI-215, TI-218, TI-2003, TI-2010, TI-2014, TI-2015, TI-2024	2
	BA-2023, BA-2024, BA-2031, BA-2033, BA-2034, BA-2035	3
	MS-915, MS-918, MS-2002, MS-2003, MS-2006, MS-2011, MS-2020, MS-2025, MS-3918, SO-918, SO-2009, SO-2010, SO-2918	11
	BA-1018, BA-2020	12
	BA-515, BA-518, BA-618, BA-624, BA-2010, BA-2012, BA-2017, BA-2515, BA-2518, BA-2618	61
	BA-718, BA-2715, BA-2718	62
Shot Clock Code 04 (84)	BB-2014, BB-2114	1 (No Address: 84)
	TI-215, TI-218, TI-2003, TI-2010, TI-2014, TI-2015, TI-2024	2
Play Clock/ Pitch Timer Code 05 (85)	BB-2014, BB-2114, TI-2019, TI-2032	1
	TI-215, TI-218, TI-2003, TI-2010, TI-2014, TI-2015, TI-2024	2 (No Address: 85)
Segment Timer Code 06	BB-2014, BB-2015, BB-2114, BB-2115, TI-2012	1
	TI-215, TI-218, TI-2003, TI-2010, TI-2014, TI-2015, TI-2024	2
	MS-2001, MS-2013, MS-2113	11

Sport/Code	Scoreboard Models	Address Sent
Multipurpose Timer Code 07	TI-413, TI-418, TI-2002, TI-2007, TI-2011, TI-2013, TI-2019, TI-2022, TI-2028, TI-2031, TI-2032, TI-2101, TI-2200	1
	TI-215, TI-218, TI-2003, TI-2010, TI-2014, TI-2015, TI-2024	2
	TI-2102	4
	TI-2017, TI-2018, TI-2020, TI-2021	22
Tennis Code 08	TI-413, TI-418, TI-2019, TI-2032	1
	TN-2007, TN-2008, TN-2016	11
	TN-2009	74
Relay Control Code 09	N/A	220
Lap Counter Code 10	BB-2014, BB-2114	1
	TI-215, TI-218, TI-2003, TI-2010, TI-2014, TI-2015, TI-2024	2
Field Events Codes 11, 12, 13, 14	TI-2021	22
Gymnastics Code 15	GM-2101, GM-2102, GM-2103	11
	WR-2024, WR-2025, WR-2026, WR-2101, WR-2102, WR-2103	104
Squash Code 16	SQ-2002, SQ-2003	10
	SQ-2001	11
Basketball Code 21 (88)	BB-1013	11 (No Address: 88)
	BB-1113, BB-2021	12
	BB-114, BB-2101, BB-2105, BB-2116, BB-2121, BB-2122, BB-2142, MS-2017, MS-2026, MS-2126	17

## Scoreboard Addresses

Model	Address
BA-515	61 + columns 1-8
BA-518	61 + columns 1-8
BA-618	61 + columns 1-8
BA-624	61 + columns 1-8
BA-718	62 + columns 1-8
BA-1018	12
BA-2010	61
BA-2012	61
BA-2017	61
BA-2020	12
BA-2023	3
BA-2024	3 + Columns 1-4
BA-2031	3 + Columns 1-4
BA-2033	3 + Columns 1-4
BA-2034	3 + Columns 1-4
BA-2035	3 + Columns 1-4
BA-2515	61 + Columns 1-8
BA-2518	61 + Columns 1-8
BA-2618	61 + Columns 1-8

Model	Address
BA-2715	62 + Columns 1-8
BA-2718	62 + Columns 1-8
BB-1013	11
BB-1113	12
BB-114	17
BB-2014	1 + columns 5-8
BB-2015	1
BB-2021	12
BB-2101	17
BB-2105	17
BB-2114	1 + columns 5-8
BB-2115	1
BB-2116	17
BB-2121	17
BB-2122	17
BB-2142	17
GM-2101	11
GM-2102	11
GM-2103	11

Model	Address
MS-915	11
MS-918	11
MS-2001	11
MS-2002	11
MS-2003	11
MS-2006	11
MS-2011	11
MS-2013	11
MS-2017	17
MS-2020	11
MS-2025	11
MS-2026	17
MS-2126	17
MS-2113	11
MS-3918	11
SO-918	11
SO-2009	11
SO-2010	11
SO-2918	11
SQ-2001	11
SQ-2002	10
SQ-2003	10 + columns 1-4
TI-215	2 + Columns 1-4
TI-218	2 + Columns 1-8
TI-413	1 + columns 1-4
TI-418	1 + Columns 1-8
TI-2002	1 + columns 1-4
TI-2003	2 + Columns 1-8
TI-2007	1 + columns 1-4
TI-2010	2 + Columns 1-8
TI-2011	1 + columns 1-4
TI-2012	1 + Columns 1-8
TI-2013	1 + columns 1-4
TI-2014	2 + columns 1-4
TI-2015	2 + Columns 1-8
TI-2017	22
TI-2018	22
TI-2019	1 + columns 1-8
TI-2020	22 + Columns 1-8
TI-2021	22 + Columns 1-8
TI-2022	1
TI-2024	2
TI-2028	1 + columns 1-4
TI-2031	1 + columns 1-4
TI-2032	1 + columns 1-8
TI-2101	1 + columns 1-4
TI-2102	4 + columns 1-4

Model	Address
TI-2200	1 + columns 1-4
TN-2007	11
TN-2008	11
TN-2009	74
TN-2016	11
WR-2024	104
WR-2025	104
WR-2026	104
WR-2101	104
WR-2102	104
WR-2103	104

*This page intentionally left blank.*

## **D Daktronics Warranty and Limitation of Liability**

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

*This page intentionally left blank.*

# 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") 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. 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; 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. 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; 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;

# DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

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**

Daktronics shall be under no obligation to furnish continued service under this Warranty if alterations are made to the Equipment without the prior written approval of Daktronics.

It is specifically agreed that the price of the Equipment is based upon the following limitation of liability. In no event shall Daktronics (including its subsidiaries, affiliates, officers, directors, employees, or agents) be liable for any 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.

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**

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**

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.

### **6. Availability of Extended Service Agreement**

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).

