

# OmniSport® 2000 Rodeo

## Operation Manual

*ED-14843*

*Rev 3 –22 January 2015*

# DAKTRONICS



**ED-14843**  
**Product 1240**  
**Rev 3 – 22 January 2015**

## **DAKTRONICS INC.**

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# Section 1: Introduction

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This manual is designed to explain the operation of OmniSport® 2000 timing console for rodeo events. For additional information regarding the safety, installation, operation, or service of this system, refer to the telephone numbers listed in *Section 1.4*.

## 1.1 Important Safety Instructions

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

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

- An internal battery allows the timer to continue operation for approximately 10 minutes in the event of a power failure.

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

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

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

As a safety feature, this device has a three-wire, ground-type plug equipped with a third (grounding) pin. This plug only fits into a grounding-type power outlet. The outlet shall be installed near the console and easily accessible. If unable to insert the plug into the outlet, contact a qualified electrician to replace the obsolete outlet.

## 1.2 Resources

Figure 1 illustrates a Daktronics drawing label. The drawing number is located in the lower-right corner of a drawing. This manual refers to drawings by listing the last set of digits and the letter preceding them. In the example, the drawing would be referred to as *Drawing C-325405*.

THE CONCEPTS EXPRESSED AND DETAILS SHOWN IN 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.			
DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: DAKTRONICS UNIVERSITY			
TITLE: SYSTEM RISER DIAGRAM			
DES. BY: AORMESH		DRAWN BY: AORMESH	DATE: 15 JAN 08
REVISION	APPR BY-	14963-R01	C-325405
00	SCALE- NONE		

Figure 1: Daktronics Drawing Label

### Reference Drawing:

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

Daktronics identifies manuals by an ED or DD number located on the cover page of each manual. For example, this manual would be referred to as *ED-14843*.

## 1.3 Reference Guides

Daktronics provides OmniSport 2000 timing system users with supplemental reference guides.

Reference Guide	ED/DD #
<b>OmniSport 2000 Rodeo Quick Reference Guide</b> Provides basic descriptions of rodeo common keys and menu navigation. Included in <i>Appendix B</i> .	<b>DD2870296</b>
<b>Rodeo Interface Technical Guide</b> Advanced display interface setup. Available online at <a href="http://www.daktronics.com/manuals">www.daktronics.com/manuals</a> .	<b>DD1660229</b>
<b>DakStats Rodeo Manual</b> Explains the setup and operation of DakStats Rodeo software. Available online at <a href="http://www.daktronics.com/manuals">www.daktronics.com/manuals</a> .	<b>ED-14946</b>

## 1.4 Daktronics Exchange and Repair & Return Programs

### Exchange Program

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

#### *Before Contacting Daktronics*

Identify these important numbers:

Assembly Number: \_\_\_\_\_

Job/Contract Number: \_\_\_\_\_

Date Installed: \_\_\_\_\_

Daktronics Customer ID Number: \_\_\_\_\_

To participate in the Exchange Program, follow these steps.

#### 1. Call Daktronics Customer Service.

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

#### 2. If the replacement part fixes the problem, send in the problem part being replaced.

- Package the old part in the same shipping materials in which the replacement part arrived.
- Fill out and attach the enclosed UPS shipping document.
- Ship the part to Daktronics.

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

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

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

## Repair & Return Program

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

1. **Call or fax Daktronics Customer Service:**  
Refer to the appropriate market number in the chart listed on the previous page.  
**Fax:** 605-697-4444
2. **Receive a case number before shipping.**  
This expedites repair of the part.
3. **Package and pad the item carefully to prevent damage during shipment.**  
Electronic components, such as printed circuit boards, should be placed in an antistatic bag before boxing. Daktronics does not recommend using packing 'peanuts' when shipping.
4. **Enclose:**
  - name
  - address
  - phone number
  - the case number
  - a clear description of symptoms

### *Shipping Address*

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

## Daktronics Warranty and Limitation of Liability

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

## 1.5 Console Revision History

### **Version 4.10.17 Release date: 17 October 2004**

- Initial software release

### **Version 5.6.08 Release date: 8 June 2005**

- In die C3 of 80C390, the SMOD\_1 bit for Serial Port 1 seems to be ignored and the baud rate is always doubled (WDCON.7=1) so the reload values of Timer 1 were adjusted to work with this as doubled.
- Added an H-segment on digit two of the clock in address 1 for a caption control.
- Removed the selection in the menu for start of timer using judge number 1.

### **Version 5.9.26 Release date: 26 September 2005**

- Added the ability to take a time input from the FarmTek timer for barrel racing to show on our displays.

### **Version 5.12.02 Release date: 2 December 2005**

- Added a Cutting mode that uses 1, 2, 3 or 5 judge's consoles to score the event.
- Added a Bubble Time/Score key function to the console and in RTD.
- Added a Cattle number key function to the console and in RTD.
- Added a previous Time/Score section in the RTD.
- Added a Clear Previous key function to the console.
- Added an Enable/Disable Photocell key to the console.
- Added the ability to receive a time input from the FarmTek timer in Timed Events and Cutting Events.
- Added the ability to Start, Stop and Reset from all judge consoles in Scored Events.
- Added to the printout for a scored event, which judge console started and stopped the timer.
- Added the entry of an extra judge console to be used as a Start, Stop console.
- Added a Menu selection to select if any judge's console can Start/Stop the timer.
- Added a warning time in cutting and penning that sounds a .5 second horn when the warning time is reached.
- Changed the Reset Judges key to get the judges consoles to exit scoring if no score was entered.

### **Version 6.2.16 Release date: 16 February 2006**

- Fixed a problem when configured for 1 judge, the score always came back with the status set to reride on.
- Fixed a problem that the Cutting horn time is using the scored event horn time.
- Fixed a problem of the Warning horn is not sounding when clock is counting down.

### **Version 6.9.21 Release date: 21 September 2006**

- Fixed a problem with entering the # of judges in cutting mode, as it would not let all of the allowed judges be entered.
- Fixed a problem when timing with Farmtek in external timing, if the timer was turned off or disconnected, the OmniSport timer would not allow the user to switch to a different timing mode.

**Version 7.4.16 Release date: 16 April 2007**

- Added 2 Rider/2 Stock scoring mode for use with 4 judges only.
- Fixed a problem in Separate scoring mode that the judge status would not show on the console LCD until a judge score was entered.

**Version 7.7.5 Release date: 5 July 2007**

- Added ability for single judge to generate a reride for the 2Rider/2Stock mode.

**Version 7.12.26 Release date: 26 December 2007**

- Fixed a problem with Scored Events with the clock in count down and set for horn after stop. If the time was stopped before it reached zero the time would get set to zero when the clock hit zero and blew the horn.
- Fixed a problem with half-point scoring set on the leader score would not display all digits. If the score was entered as 89 it would show 8 on the display.

**Version 9.2.16 Release date: 16 September 2009**

- Modified scoreboard output in cutting so the score will shift right if over 100 so x100 digit is displayed.
- Changed the printer output routines (as done in Omni2000 swim) for the new version of printer.

**Version 13.1.25 Release date: 25 January 2013**

- Added menu items for network settings.
- Added RTD output on the Ethernet jack.

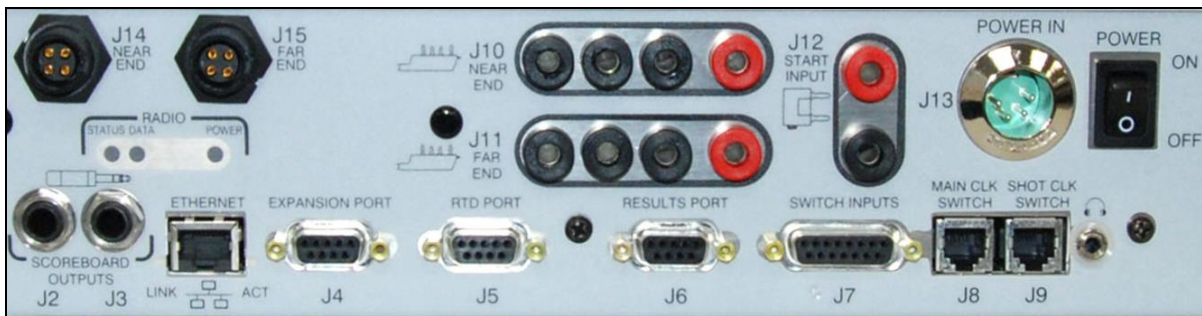
## Section 2: Timing System Setup

### 2.1 Connections on the Console

**Reference Drawing:**

Connector Designations: OmniSport 2000..... **Drawing A-154282**

It is important to become familiar with the connections on the back of the OmniSport 2000 timing console to ensure all equipment is properly connected before each event. Refer to *Figure 2* and *Drawing A-154282*. Make ALL connections to the OmniSport 2000 console and attached equipment BEFORE turning on the console's power switch.



**Figure 2:** OmniSport 2000 Console Rear View

Connection	Function
J2 / J3– SCOREBOARD OUTPUTS	Control numeric rodeo scoreboards/timers
J4 – EXPANSION PORT	Communication with FarmTek wireless photocells
J5 – RTD PORT	Bi-directional communication with Daktronics display control software
J6 – RESULTS PORT	Bi-directional communication with DakStats Rodeo software
J7 – SWITCH INPUTS	Communication with rodeo interface (wired photocells, push buttons)
J8 – MAIN CLK SWITCH	<i>(Not used for rodeo applications)</i>
J9 – SHOT CLK SWITCH	Start/Stop/Reset clock in <b>Scored Events</b> mode
J10 – NEAR END	<i>(Not used for rodeo applications)</i>
J11 – FAR END	<i>(Not used for rodeo applications)</i>
J12 – START INPUT	<i>(Not used for rodeo applications)</i>
J13 – POWER IN	Supplies power from wallpack transformer
J14 – NEAR END	Communication with wireless judges' consoles
J15 – FAR END	<i>(Not used for rodeo applications)</i>
ETHERNET	Bi-directional communication with DakStats Rodeo software and Daktronics matrix display control software
🎧	Hear the console beeper via headphones

## Power Connection

Connect the power adaptor to the **J13 POWER IN** jack (Figure 3), and plug the other end into a 100-240 VAC outlet. Use the rocker switch on the rear of the unit to power it ON and OFF.



Figure 3: Power Connection

## Rodeo Timing Interface Connection

The Rodeo Timing Interface is connected to the OmniSport 2000 console via a 15-pin cable (W-1264). Connect the male end of the cable to the **J7 SWITCH INPUTS** on the rear of the OmniSport 2000 (Figure 4), and connect the female end of the cable to the **TO A/S 5100** jack on the rear of the Rodeo Timing Interface (Figure 5). Refer to *Section 2.2* for more connections on the Rodeo Timing Interface.



Figure 4: SWITCH INPUTS



Figure 5: TO A/S 5100

## Judges' Console Connection

Typically, an RC-100 wireless base station will be plugged into the **J14 NEAR END** jack on the rear of the OmniSport 2000 (Figure 6).

For more information about the RC-100 base station, refer to the *Remote Control System RC-100 All Sport Operation Manual (ED-15133)*, available online at [www.daktronics.com/manuals](http://www.daktronics.com/manuals).



Figure 6: Judges' Console Connection



## Wireless Photocell Connection

**Note:** If using wired photocells, refer instead to *Section 2.2*.

The OmniSport 2000 console is capable of interfacing with third-party FarmTek Polaris wireless photocells ([www.farmtek.net](http://www.farmtek.net)). The system consists of a wireless transmitter, wireless receiver, and the timer (*Figure 7*). For more information about setting up FarmTek equipment, consult the manufacturer's documentation. The timer and photocells are powered by AA and 9V batteries, respectively. *Always keep fresh batteries on hand for every event!*



**Figure 7:** FarmTek Wireless Photocell System

To communicate with the wireless photocells, connect the cable (by FarmTek) between the **Output** jack of the Polaris timer and the **J4 EXPANSION PORT** on the back of the OmniSport 2000 console (*Figure 8*).

Ensure the photocell eyes are aligned and level, with a clear line of sight between them. Both transmitter and receiver feature mounting holes for included tripods. *Power on the Polaris timer AFTER powering on the console or the console will not boot up!*



**Figure 8:** Wireless Photocell Connection

## Daktronics Numeric Display Connection

Connect a 1/4" scoreboard signal cable into **J2** or **J3 SCOREBOARD OUTPUTS** as shown in *Figure 9*. Make sure that the plug is fully inserted into the jack on the console.



**Figure 9:** Numeric Scoreboard Plug

## Serial Connections

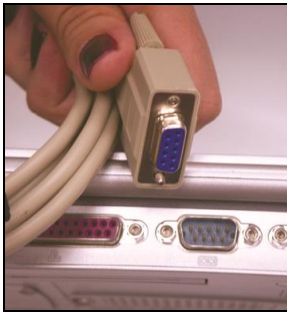
### *DakStats Rodeo Software*

Using a straight-through 9-pin male to 9-pin female serial cable (Daktronics part # W-1267, 10' or Radio Shack part # 27-117), connect the male end to **J6 RESULTS PORT** (*Figure 10*).



**Figure 10:** Serial Connection to DakStats Rodeo

Connect the female end to a serial port on the computer with the software (*Figure 11*). If the computer does not have a built-in serial port, use a USB-to-serial adapter (Daktronics part # A-1801 or Radio Shack part # 26-183) as shown in *Figure 12*. Drivers for the USB-to-serial adapter should be found on a CD provided with it or on the manufacturer's web site.



**Figure 11:** Serial Connection



**Figure 12:** USB-to-Serial Adapter

### *Matrix Display Connection*

Different matrix displays may require different connection methods. A typical connection method for Daktronics displays uses a 50' (15 m) 9-pin male to 1/4" cable (part # 0A-1240-0032). Connect the 9-pin male end to **J5 RTD PORT** (*Figure 13*). Connect the male 1/4" plug into a 1/4" phone outdoor J-box (part # 0A-1091-0227).



**Figure 13:** Serial Connection to Matrix Display

For more information on outputting data to Daktronics displays, refer to the *Rodeo Interface Technical Guide (DD1660229)*, available online at [www.daktronics.com/manuals](http://www.daktronics.com/manuals).

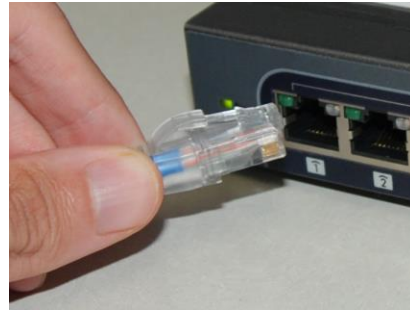
## Network Connections

The **ETHERNET** jack allows Real-Time Data (RTD) to be sent over a local area network and connection to the DakStats Rodeo software.

Connect a Cat5 Ethernet cable between the **ETHERNET** jack on the OmniSport 2000 console (*Figure 14*) and a network hub (*Figure 15*).



**Figure 14:** ETHERNET Connection



**Figure 15:** Network Hub Connection (1)

Connect a Cat5 Ethernet cable between the network hub (*Figure 16*) and the DakStats Rodeo software and/or Daktronics matrix display control computer (*Figure 17*). Connect as many computers as the network hub supports.



**Figure 16:** Network Hub Connection (2)



**Figure 17:** Computer Connection

Data is sent using UDP protocol as a broadcast packet. The OmniSport 2000 currently operates using a static IP address. The default address and subnet mask are used with Daktronics control system networks. If the console is going to operate on a network other than for a Daktronics control system, an assigned IP address must be obtained and set in the console. The subnet mask must also be set appropriately for the network. Consult the facility's network administrator, and refer to *Section 5.6* to change the settings as needed.

**Note:** Older versions of the console (shipped prior to June 2013) do not have this jack. If using one of these older consoles, any references in this manual about the Ethernet jack and network setup may be disregarded. To upgrade, please contact Daktronics.

## External Switch Inputs

The OmniSport 2000 console provides external switch inputs for use in **Scored Events** mode. Connect a handheld start/stop and reset assembly (0A-1196-0031) to **J9 SHOT CLK SWITCH** on the rear of the console. On the handheld switch, toggle the **CLOCK START/STOP** switch to start or stop the timer. Press **RESET** to reset the timer.

## 2.2 Rodeo Timing Interface

### Reference Drawing:

Allen Bradley Photocells; 6000 & 9000 Series.....**Drawing A-70989**  
Rodeo Photocell Interface Connector Assignments.....**Drawing A-147806**

External switch inputs, including wired photocells and pushbuttons, are brought into the OmniSport 2000 console using the AS/5100 Rodeo Timing Interface (0A-1196-0055). Refer to *Figure 18* and *Drawing A-147806* for details of each connector on the timing interface.



**Figure 18:** Timing Interface, Front & Rear Views

### Power Connection

The Rodeo Timing Interface is equipped with a 3-prong power cord. The interface may operate while plugged into a standard grounded outlet or via an internal 12 VDC battery. Use the rocker switch on the rear of the unit to power it ON and OFF.

The unit features two LEDs to indicate power and battery status:

- **PWR** illuminates green when the unit has power.
- **BAT CHG** illuminates red when the unit is plugged in and the battery is charging.

The unit can operate for ~20 hours on a full charge, but this may vary depending on the age of the battery. Note that it can take up to 6 hours to fully recharge the battery.

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

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

## Pushbutton Connection

Connect up to 3 pushbuttons (part # 0A-1056-0156) for use in **Timed Events** to the **TIMER 1**, **TIMER 2**, and **TIMER 3** jacks on the front of the Rodeo Timing Interface. The **TIMER 1** input may also be used to start and stop the clock in **Scored Events**.

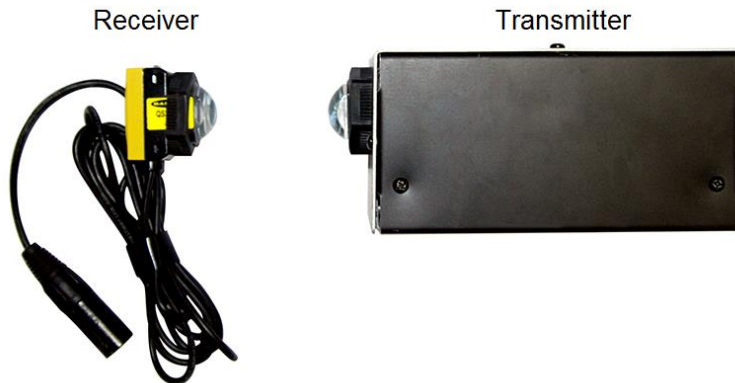
**Note:** Pay attention to the orientation of the GND tab of the banana plug – this must connect into the black jack (*Figure 19*).



*Figure 19: Pushbutton Connection*

## Wired Photocell Connection

Wired photocells may be used for automatic timing of timed events. The system consists of a transmitter (part # 0A-1163-0025) and a receiver (part # 0A-1163-0024). Refer to *Figure 20*.



*Figure 20: Wired Photocell System*

Connect the receiver to the **J31 PHOTOCELL** XLR jack on the rear of the Rodeo Timing Interface (*Figure 21*).

**Note:** **J32 / J33** is an optional photocell input. This 2-pin connector does not provide power, so the photocell receiver would require an alternate power supply.



*Figure 21: Photocell Receiver Connection*

The transmitter is housed in an enclosure with two 6 VDC batteries (part # BT-1019). A 12 VDC wall plug-in charger (part # 0A-1088-0013) is included to provide power and charge the batteries. Use the rocker switch on the rear of the unit to power it on (I) and off (O). The transmitter is designed to operate 75 hours on a full charge. Note that it can take up to 6 hours to fully recharge the battery.

Ensure the photocell eyes are aligned and level, with a clear line of sight between them. Both transmitter and receiver feature mounting holes for included tripods (part # A-1509).

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

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

## Horn Outputs

Connect the 150' (47.5 m) 4-pin horn cable (part # 0A-1163-0007) between the **J34 HORN RELAY** jack and the **J1 SIGNAL IN** jack of the external horn assembly (part # 0A-1163-0005).

The horn is connected to an enclosure with a 12 VDC battery (part # BT-1009). A 12 VDC wall plug-in charger (part # 0A-1088-0013) may provide power and charge the batteries.

To broadcast a horn tone to a public address (PA) system, connect a male-RCA-to-male-XLR audio cable (part # 0A-1163-0032) between the **J35 HORN AUDIO** jack and the PA system (by others).

## Section 3: General Console Features & Operation

### 3.1 Liquid Crystal Displays (LCDs)

The OmniSport 2000 console has three separate two-line by 16-character LCDs to keep the operator informed (*Figure 22*). *Section 3.4* describes the readout on the LCDs when the console is first powered-up.



Figure 22: OmniSport 2000 Timing Console

### 3.2 The Keypad

Throughout the manual, keys are referenced with brackets and bold – for example, [**ENTER**]. The far left side of the keypad on the OmniSport 2000 console has a pocket that allows for a plastic insert with the names of the keys. The Rodeo insert is Daktronics part # LL-2609. If an insert is lost or damaged, a printed copy of the insert drawing (located in *Appendix A*) may be used until a replacement is ordered.

**Note:** Remove the protective plastic film from the insert before using it in the console.

The right side of the keypad (*Figure 23*) has a section of permanent keys. These keys include the numbers [0]–[9], [**CLEAR/NO**], [**ENTER/YES**], and arrows.

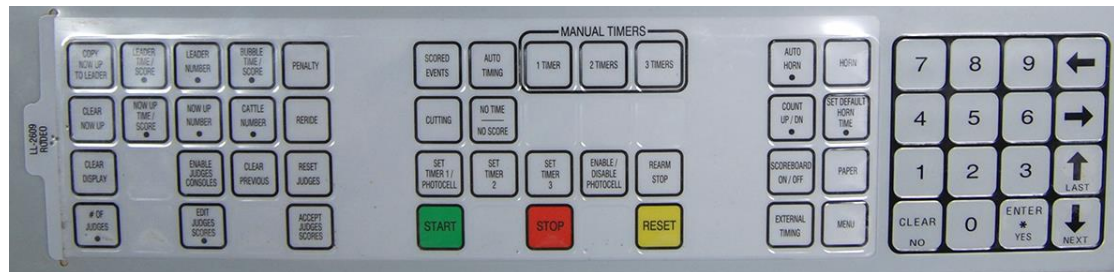


Figure 23: OmniSport 2000 Keypad with Rodeo Insert

#### Number Key Pad

Press these keys to enter specific numerical information into the timer. The data may pertain to a specific lane, an event number, or a particular setting among others.

#### Arrow Keys

These keys are used for menu navigation. The up and down arrows are also labeled *NEXT* and *LAST*; their function will depend on what the LCD is prompting the operator to do.

#### Enter/Yes

The [**ENTER/YES**] key has two functions:

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

## Clear/No

The [CLEAR/NO] key has two functions:

- Clears the LCD of numerical information.
- Serves as [NO] for input prompts (N).

## 3.3 Built-in Printer

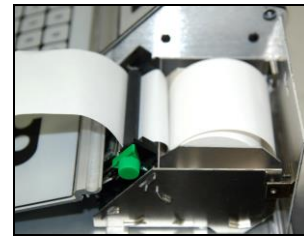
Daktronics OmniSport 2000 console has a convenient built-in thermal printer which gives results printouts in under 10 seconds.

### Correct Paper Installation

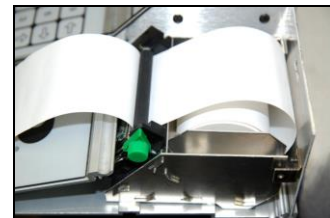
1. Remove the cover from the printer by turning the knob with the arrow to the left  $\frac{1}{4}$  turn, or until the arrow points left. Remove the cover by lifting up and forward on the knob (*Figure 24*).
2. Remove the old roll of paper.
3. Using a pair of scissors, cut the new roll of paper off to make the end of the paper square.
4. Place the roll of paper into the printer compartment so that the paper feeds up from underneath the roll (*Figure 25*). If the paper is placed incorrectly (*Figure 26*), the printer will act like it is printing, but no text will appear on the paper.
5. Place the newly cut squared edge of the paper into the back side of the black rubber roller on the printer. The printer should automatically advance – pulling the paper through the printer.
6. Place the cover back on and turn the latch to secure.



*Figure 24: Console Printer*



*Figure 25: Correct Paper Feed*

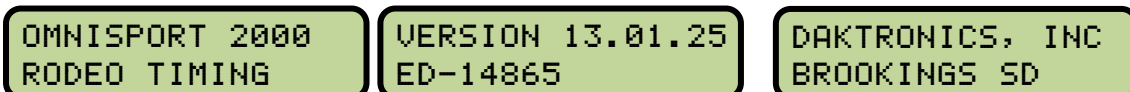


*Figure 26: Incorrect Paper Feed*

The thermo printer paper can be ordered from Daktronics – part # SF-1034. Thermo printer paper is also readily available at office supply stores (58mm wide and 165' long max).

## 3.4 Startup

When the OmniSport 2000 timer is initially powered up, the LCDs appear as shown below.



If the timing console includes a radio, read **Section 3.5**. If the console does not, skip ahead to **Section 3.6** on how to receive software updates from Daktronics. For further explanations on rodeo timing console operations, refer to **Section 3**.



## 3.5 Setting Radio Channels on Wireless Consoles

### Reference Drawings:

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

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

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

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

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

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

The console automatically detects when a radio transmitter is installed and will prompt the user for transmitter settings after powering on the console.

**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 below.

### Single Controller Systems Channel Setting

In a single controller system, all radio receivers and all scoreboards receive signal from the same console at all times. The default channel and broadcast group settings on the receiver are not typically modified. This is the most common setup.

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

### Multiple Controller with Single Broadcast Group Channel Setting

In a multiple controller system with a single broadcast group, 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.


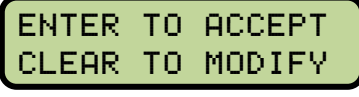

Multiple controller systems typically use Broadcast 1 and Channel 1 for the first controller and Channels 2-8 for all remaining controllers. All radio receivers in the system must be set to Broadcast 1 (BCAST 1).

### Multiple Controller with Multiple Broadcast Systems Channel Setting

In a multiple controller system with multiple broadcast groups, 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.

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.

### Basic Operation of Radio Settings

Display	Action																		
  <p>The LCD will toggle between these 2 screens.</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>[ENTER]</b>.</p> <p>If these values are incorrect press <b>[CLEAR]</b>, and the LCD at bottom left is shown, allowing edit of the channel or broadcast group setting.</p> <p>Use the number keypad to enter the desired broadcast group and press <b>[ENTER]</b> to accept. The asterisk will move to the channel setting.</p> <p>Edit the channel number to the desired value and press <b>[ENTER]</b> to accept.</p> <table border="1" data-bbox="695 1417 1356 1795"> <thead> <tr> <th>Broadcast Group</th> <th>Channel Setting</th> <th>Control Scoreboards</th> </tr> </thead> <tbody> <tr> <td rowspan="2">0</td> <td>0</td> <td>All Scoreboards</td> </tr> <tr> <td>0</td> <td>All in BCAST Group 1</td> </tr> <tr> <td rowspan="2">1</td> <td>1-8</td> <td>Set to corresponding BCAST 1 Channel</td> </tr> <tr> <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	0	All in BCAST Group 1	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																	
	0	All in BCAST Group 1																	
1	1-8	Set to corresponding BCAST 1 Channel																	
	↓	↓																	
8*	0	All in BCAST Group 8																	
	1-8	Set to corresponding BCAST 8 Channel																	

## 3.6 Updating Software in the Console

### Equipment needed:

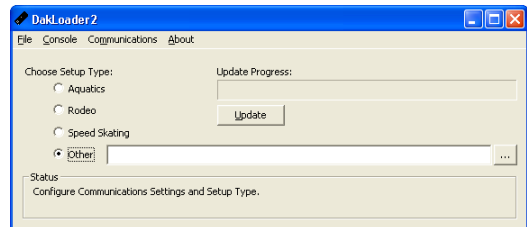
- OmniSport 2000 timing console
- 9-pin male to 9-pin female cable, Daktronics part # W-1267 (in maintenance kit) or Radio Shack part # 27-117
- Computer with an available serial (COM) port; or a USB-to-serial adapter
- Computer with Internet connection

### To update the OmniSport 2000 timer:

1. Connect the 9-pin serial cable from the COM port of the computer to the *J4 EXPANSION PORT* on the console, and then power on the console

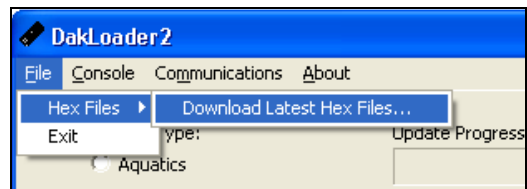
2. Open an Internet browser and go to:  
[http://dakfiles.daktronics.com/downloads/Sports\\_Products/OmniSport%202000/Timer/DakLoader2.exe](http://dakfiles.daktronics.com/downloads/Sports_Products/OmniSport%202000/Timer/DakLoader2.exe)

3. A prompt will appear on asking to *Run* or *Save* the program. Click **Run** (twice if necessary). The DakLoader2 program should open (*Figure 27*).



**Figure 27:** DakLoader2 Main Screen

4. Go to **File > Hex Files** and click **Download Latest Hex Files** (*Figure 28*).



**Figure 28:** Download Latest Hex Files

6. On the main screen, click **Rodeo**, and then click **Update**.
7. Turn the OmniSport 2000 console **OFF** and then back **ON**. After cycling power, the console should automatically begin programming the hex file selected.

**Note:** To review DakLoader2 Instructions, go to **About > Help** using DakLoader2. To confirm system status or for more information from Daktronics, go to **About > About DakLoader2**.



# Section 4: Rodeo Timer Operations

## Reference Drawings:

- Rodeo Photocell Interface Connector Assignments..... **Drawing A-147806**
- Insert, 0L-212281, OmniSport 2000 Rodeo Timer..... **Drawing B-212381**
- System Riser Diagram; OmniSport 2000 Rodeo setup..... **Drawing B-220003**

## 4.1 General Rodeo Timer Information

The OmniSport 2000 Timer can be used in four separate modes of operation. Three of the four modes can be used with an external timer using wireless photocells.

### Manual Timing Mode

**Manual Timing** mode is used for events where a competitor’s time determines the place winner. Timing inputs are one, two or three manual pushbuttons connected to the Daktronics photocell interface. Examples of timed events using timer buttons are steer wrestling, calf roping, and team roping. Press [**1 TIMER**], [**2 TIMER**], or [**3 TIMER**] to select **Manual Timing** mode with the appropriate number of timer button inputs.

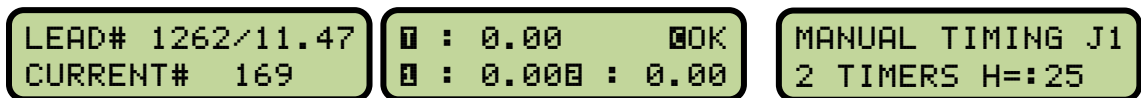
When in **Manual Timing** mode:

- The left LCD shows the leader number and time along with the current (now up) number.
- The center LCD shows the official timer (*T*) along with each timer value (1, 2, or 3). With 1 or 2 TIMER selected, photocell status is also visible. Refer to the table on the following page for descriptions of possible photocell statuses.
- The right LCD shows the default horn time (*H*), the current number of timers selected, and the judges’ console status (*J1* or *J?* if not properly connected/communicating). For more information about judge’s console operation, refer to *Section 6*.

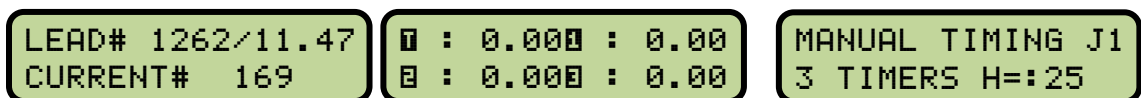
#### Manual Timing 1 Button:



#### Manual Timing 2 Buttons:



#### Manual Timing 3 Buttons:

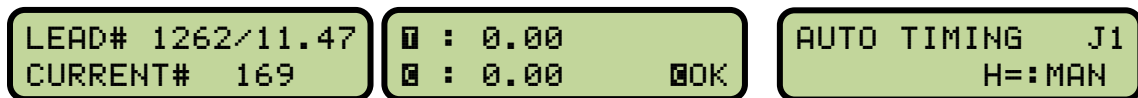


## Automatic Timing Mode

**Automatic Timing** mode is used for events where a photocell pair is used to time competitors. An example of an event using automatic timing is barrel racing. Press [AUTO TIMING] to select the **Automatic Timing** mode.

When in **Automatic Timing** mode:

- The left LCD shows the leader number and time along with the current (now up) number.
- The center LCD shows the official timer (*T*), including penalty times, along with the photocell time and status (*C*). Refer to the table below for descriptions of possible photocell statuses.
- The right LCD shows the default horn time (*H*) as “MAN” for manual and the judges’ console status (*J1* or *J?* if not properly connected/communicating). For more information about judge’s console operation for entering penalties, refer to *Section 6*.



LCD Indicator	Photocell Status
OK	Photocells are aligned ( <b>Normally Closed</b> ). Photocells are not aligned ( <b>Normally Open</b> ).
--	Photocells are not aligned ( <b>Normally Closed</b> ). Photocells are aligned ( <b>Normally Open</b> ).
XX	Photocell beam was broken. XX equals the number of seconds remaining for the arming time (time until next break will be accepted).
OFF	Photocells are disabled. If photocells will not be used for timing an event, disable them by pressing [ENABLE/DISABLE PHOTOCELL].

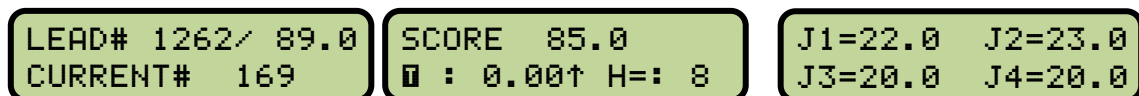
## Scored Events

**Scored Events** mode is used for events where a competitor’s score determines the place winner. Examples of scored events are bull riding, saddle bronc, and bareback. Press [SCORED EVENTS] to select the **Scored Events** mode.

When in **Scored Events** mode:

- The left LCD shows the leader number and score along with the current (now up) number.
- The center LCD shows the current score, the official timer (*T*), the timer direction (↑ or ↓), and the default horn time (*H*).
- The right LCD shows the scores from each configured judge console (up to 4 total). For more information about judge’s console operation, refer to *Section 6*.

**Note:** If a judge console is not properly connected/communicating, a “?” will be next to it.



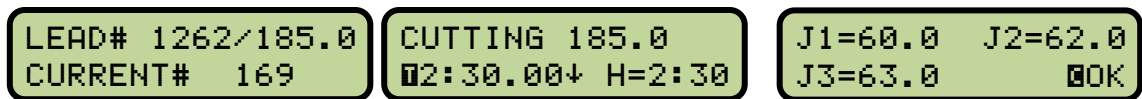
## Cutting

The **Cutting** mode is a scored event, but it uses a different score entry and calculation. Press [CUTTING] to select the **Cutting** mode.

When in **Cutting** mode:

- The left LCD shows the leader number and score along with the current (now up) number.
- The center LCD shows the current score, the official timer (*T*), the timer direction (↑ or ↓), and the default horn time (*H*).
- The right LCD shows the scores from each configured judge console and the photocell status (*C*). Refer to the table on the previous page for descriptions of possible photocell statuses. For more information about judge's console operation, refer to *Section 6*.

**Note:** If a judge console is not properly connected/communicating, a “?” will be next to it.



## External Timing

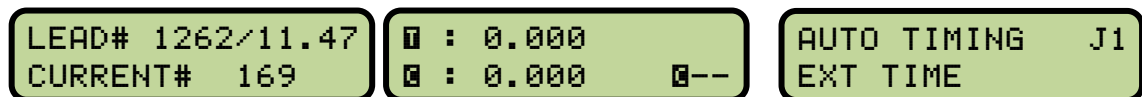
External Timing can be selected for Manual Timing, Automatic Timing, and Cutting modes. The external setting is needed when using wireless photocells (refer to *Section 2.1*).

The information shown on each LCD changes slightly for all timing modes to indicate External Timing is selected.

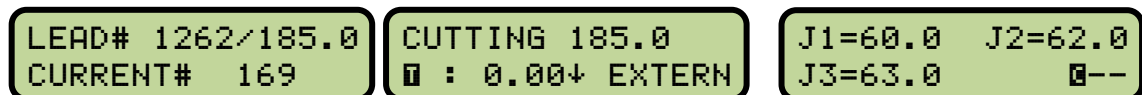
**External Manual Timing 1 Button:**



**External Automatic Timing:**



**External Cutting:**



**Note:** When set to External Timing, the photocell status (*C*) will always be “- -” (Normally Closed) or “OK” (Normally Open), whether the photocells are in alignment or not. This is because the status is not passed from the external timer to the OmniSport console.

## 4.2 Rodeo Keys

The keys described below are functional for scored and timed events, except where noted. Information entry prompts for these keys is shown on the right LCD.

### Leader Number

Display	Action
<p>LEADER NUMBER NNNN *</p> <p>NNNN = current setting</p>	<p>Press <b>[LEADER NUMBER]</b>, enter the current leader number using the number keypad, and then press <b>[ENTER]</b>.</p>

### Leader Time/Score

Display	Action
<p>LEADER TIME MM:SS.TH *</p> <p>MM:SS.TH = minutes, seconds, tenths, hundredths</p>	<p><b>Timed Events Mode</b> Press <b>[LEADER TIME/SCORE]</b>, enter the current leader time using the number keypad, and then press <b>[ENTER]</b>.</p>
<p>LEADER SCORE NNN.N *</p> <p>NNN.N = current setting</p>	<p><b>Scored Events Mode</b> Press <b>[LEADER TIME/SCORE]</b>, enter the current leader score using the number keypad, and then press <b>[ENTER]</b>.</p>

### Now Up Number

Display	Action
<p>NOW UP NUMBER NNNN *</p> <p>NNNN = current setting</p>	<p>Press <b>[NOW UP NUMBER]</b>, enter the current competitor number using the number keypad, and then press <b>[ENTER]</b>.</p>



## Now Up Time/Score

Display	Action
<p>MM:SS.TH = minutes, seconds, tenths, hundredths</p>	<p><b>Timed Events Mode</b> Press <b>[NOW UP TIME/SCORE]</b>, enter the current competitor time using the number keypad, and then press <b>[ENTER]</b>.</p> <p><b>Note:</b> This key is disabled in Automating Timing mode.</p>
<p>XXXX = now up number NNN.N = current score</p>	<p><b>Scored Events Mode</b> Press <b>[NOW UP TIME/SCORE]</b>, enter the current competitor score using the number keypad, and then press <b>[ENTER]</b>.</p> <p><b>Note:</b> To edit the current competitor number, press the up arrow. Enter the current competitor time using the number keypad, and then press <b>[ENTER]</b> or the down arrow.</p>

## Bubble Time/Score

Display	Action
<p>MM:SS.TH = minutes, seconds, tenths</p>	<p><b>Timed Events Mode</b> Press <b>[BUBBLE TIME/SCORE]</b>, enter the bubble time using the number keypad, and then press <b>[ENTER]</b>.</p>
<p>NNN.N = current setting</p>	<p><b>Scored Events Mode</b> Press <b>[BUBBLE TIME/SCORE]</b>, enter the bubble score using the number keypad, and then press <b>[ENTER]</b>.</p>

## Cattle Number

Display	Action
<p>N = current setting</p>	<p>Press <b>[CATTLE NUMBER]</b>, enter the current cattle number using the number keypad, and then press <b>[ENTER]</b>. The number will display on the seconds X1 clock digit when the clock is started, for five seconds.</p> <p>Entering a blank number will disable the cattle number. Press <b>[CLEAR]</b> followed by <b>[ENTER]</b> to blank the cattle number.</p> <p><b>Note:</b> Cattle number is used for team penning and is only functional in manual timing modes</p>

### **Copy Now Up to Leader**

Press [COPY NOW UP TO LEADER] to copy the **Now Up** number and time/score to the current leader values. This key could be used when the current competitor has become the new leader.

### **Clear Now Up**

Press [CLEAR NOW UP] to clear the **Now Up** number and time/score values on the scoreboard. This can be used at the end of a run.

### **Clear Previous**

Press [CLEAR PREVIOUS] to clear out the previous competitor number and time/score in the Real-Time Data (RTD) stream.

### **Clear Display**

Press [CLEAR DISPLAY] to clear all scoreboard items. This can be used at the end of an event.

### **Reride**

Press [RERIDE] to toggle the reride caption/indicator on or off. The reride status quickly displays on the right LCD.

### **No Time — No Score**

Press [NO TIME – NO SCORE] to display “NO TIME” or “NO SCORE” on the scoreboard and printout, depending on the current console mode of operation.

### **Start**

Press [START] to start the main timer. In **Timed Events** mode, all timers start simultaneously.

### **Stop**

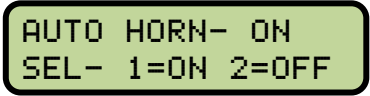
Press [STOP] to stop the main timer. In **Timed Events** mode, all timers stop simultaneously.

### **Reset**

Press [RESET] to set the timer values to their original value. If any timers are currently running, press [ENTER] to confirm the reset.

**Note:** If the timer is set to count down (**Scored Events** mode), the timer will be reset to the default horn time. In all other cases, the timer or timers will be reset to 0.

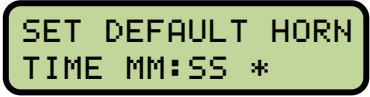
## Auto Horn

Display	Action
	<p>Press <b>[AUTO HORN]</b> followed by a number key:</p> <ul style="list-style-type: none"> <li>• Press <b>[1]</b> to enable auto horn. The horn will sound when the default horn time is reached.</li> <li>• Press <b>[2]</b> to disable auto horn. The horn will sound only when <b>[HORN]</b> is pressed.</li> </ul> <p><b>Note:</b> Auto horn is always disabled in <b>Automatic Timing</b> mode.</p>

## Horn

Press **[HORN]** to manually sound the horn.

## Set Default Horn Time

Display	Action
 <p>MM:SS = minutes, seconds</p>	<p>Press <b>[SET DEFAULT HORN TIME]</b>, enter the time to elapse before the main horn sounds, and then press <b>[ENTER]</b>.</p> <p>Set the Warning Horn Time as desired (for Cutting and Penning) and then press <b>[ENTER]</b>.</p> <p>The default horn time will be shown on the main LCD screen.</p> <p><b>Note:</b> In Automatic Timing mode, the horn time will show "MAN" for Manual (the horn only sounds by pressing <b>[HORN]</b>).</p> <p>In Scored Events mode, the timer will automatically stop when the default horn time is reached.</p> <p>Scored and Timed Events modes have separate horn times, and these values are saved when the console is powered down.</p>

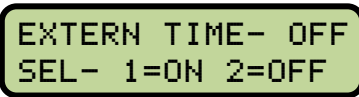
## Scoreboard On/Off

Press **[SCOREBOARD ON/OFF]** to quickly toggle the scoreboard output on or off.

## Paper

Press **[PAPER]** to advance the printer paper by one line.

## External Timing

Display	Action
	<p>External timing mode is required for receiving times from a wireless photocell system.</p> <p>Press <b>[EXTERNAL TIMING]</b> followed by a number key:</p> <ul style="list-style-type: none"><li>• Press <b>[1]</b> to enable external timing.</li><li>• Press <b>[2]</b> to disable external timing.</li></ul> <p><b>Note:</b> External timing is always disabled in <b>Scored Events</b>.</p>

### Menu

Press **[MENU]** to access various timer settings. Refer to *Section 5* for more information.

## 4.3 Timed Events Keys

Press any of the following timer keys to select a **Timed Events** mode.

### Auto Timing

Press **[AUTO TIMING]** to select the **Automatic Timing** mode with photocells.

### 1 Timer

Press **[1 TIMER]** to select the **Manual Timing** mode with one start/stop button timer. The start and stop for the official timer will be taken from the photocells.

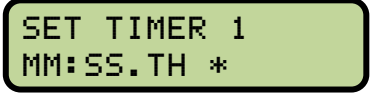
### 2 Timers

Press **[2 TIMERS]** to select the **Manual Timing** mode with two start/stop button timers.

### 3 Timers

Press **[3 TIMERS]** to select the **Manual Timing** mode with three start/stop button timers.

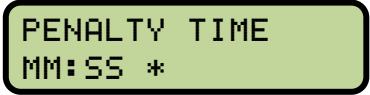
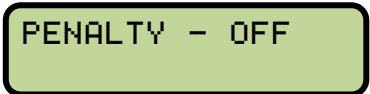
## Set Timer Keys

Display	Action
 <p>MM:SS = minutes, seconds, tenths, hundredths</p>	<p>Press <b>[SET TIMER 1/PHOTOCELL]</b>, <b>[SET TIMER 2]</b>, or <b>[SET TIMER 3]</b> to modify the final timer values <i>after</i> a run has been completed. Enter the desired time using the number keypad, and then press <b>[ENTER]</b>.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• In <b>Automatic Timing</b> mode, press <b>[SET TIMER 1/PHOTOCELL]</b> at the completion of a run to modify the photocell time for the run.</li> <li>• <b>Set Timer</b> keys are enabled only at the end of a run. Results are sent after each timer value is edited.</li> <li>• The time value set using the <b>Set Timer</b> keys does not include the penalty time. Press <b>[PENALTY]</b> to set or modify the penalty time for a run.</li> </ul>

## Enable/Disable Photocell

Press **[ENABLE/DISABLE PHOTOCELL]** to activate or deactivate the photocell input.

## Penalty

Display	Action
 <p>MM:SS = minutes, seconds</p>	<p>Press <b>[PENALTY]</b> <i>after</i> a run has been completed, enter the penalty time using the number keypad, and then press <b>[ENTER]</b>. The penalty time is added to the current official timer. The PENALTY caption/indicator will also turn on.</p>
	<p>Pressing <b>[PENALTY]</b> a second time clears the penalty time for the current competitor, restores the official timer to its original value, and turns off the penalty caption/indicator.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• <b>[PENALTY]</b> is only enabled after the official timer is set (individual timers are stopped).</li> <li>• Penalty times are cleared after pressing <b>[RESET]</b> or <b>[CLEAR NOW UP]</b>.</li> </ul>

## Rearm Stop

Press **[REARM STOP]** to undo the last **[STOP]** key press. All timer values will be restored to the value they would have displayed if they hadn't been stopped. Once **[RESET]** has been pressed, the timers cannot be restored.

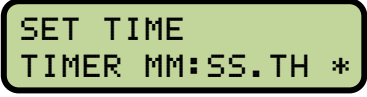
**Note:** This key can be used to undo an accidental stop from manual timers and photocells.

## 4.4 Scored Events & Cutting Keys

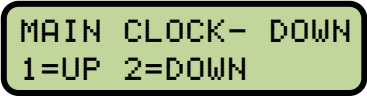
Press [SCORED EVENTS] to select **Scored Events** mode.

Press [CUTTING] to select **Cutting** mode.

### Set Main Clock

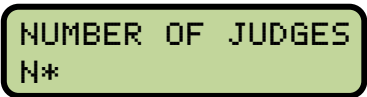
Display	Action
 <p>MM:SS = minutes, seconds, tenths, hundredths</p>	Press [SET TIMER 1/PHOTOCELL] to modify the main clock value <i>before</i> a run has been started. Enter the desired time using the number keypad, and then press [ENTER].

### Count Up/Dn

Display	Action
	Press [COUNT UP/DN] followed by a number key: <ul style="list-style-type: none"><li>• Press [1] to set the main clock to count up.</li><li>• Press [2] to set the main clock to count down.</li></ul> <p><b>Note:</b> The direction of the main clock is shown by the arrow on the center LCD.</p>

## 4.5 Judges Keys

### Number of Judges

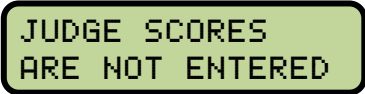
Display	Action
 <p>N = current value</p>	Press [# OF JUDGES], enter the number of judges using the number keypad, and then press [ENTER]. <p><b>Note:</b> The number of judges may only be set to 1, 2, or 4 for <b>Scored Events</b> or 1, 2, 3, or 5 for <b>Cutting</b>.</p>

<p>SCORING MODE- 1-COMBINED</p> <p>SCORING MODE- 2-SEPARATE</p> <p>SCORING MODE- 3-TOTAL/STOCK</p> <p>SCORING MODE- 4-2RIDER/2STOCK</p>	<p><b>Not applicable to Cutting</b></p> <p>After setting the number of judges, the console prompts for the scoring mode. Select one of the following scoring modes by pressing the corresponding number key:</p> <p><b>[1] Combined</b> The score is entered as a total of the rider and stock combined.</p> <p><b>[2] Separate</b> The score is entered separately for the rider and the stock.</p> <p><b>[3] Total/Stock</b> The score is entered as a total combined score and then the score for just the stock is entered.</p> <p><b>[4] 2 Rider/2 Stock</b> The rider score is entered by judges 1 and 2 and the stock score is entered by judges 3 and 4. Selecting this mode will automatically set the number of judges to 4.</p>
<p>HALF POINTS-YES 1=YES 2=NO</p>	<p><b>Not applicable to Cutting</b></p> <p>Select whether to allow half-point scoring:</p> <ul style="list-style-type: none"> <li>• Press <b>[1]</b> to allow half points.</li> <li>• Press <b>[2]</b> to not allow half points.</li> </ul> <p>Press <b>[ENTER]</b> to accept the selection.</p>
<p>AUTO SCORE- NO 1=YES 2=NO</p>	<p>Select the Auto Score setting:</p> <ul style="list-style-type: none"> <li>• Press <b>[1]</b> to let the console automatically accept the total score after all judges' scores are entered.</li> <li>• Press <b>[2]</b> to make the operator manually accept the total score after all judges' scores are entered.</li> </ul> <p>Press <b>[ENTER]</b> to accept the selection.</p>

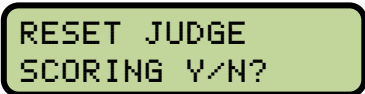
### Edit Judges Score

Display	Action
<p>EDIT SCORE JUDGE 1: NNN.N*</p> <p>NNN.N = current setting</p>	<p>Press <b>[EDIT JUDGES SCORES]</b> to edit each of the judge's scores. This function may be used if incorrect scores are received or if the remote judges' consoles are not connected.</p> <p>Enter the desired score for the first judge using the number keypad, and then press <b>[ENTER]</b>. Repeat for all remaining judges. Pressing <b>[ENTER]</b> without entering a score will leave the score as is and advance to the next judge score.</p> <p>Press <b>[CLEAR]</b> at any time to abort the edit of scores.</p>

## Accept Judges Score

Display	Action
	<p>Press <b>[ACCEPT JUDGES SCORES]</b> when all judges' scores have been received. This will tally and display the total score.</p> <p><b>Note:</b> It is not necessary to press this key if the <b>Auto Score</b> setting is enabled.</p> <p>If not all scores have been received before pressing this key, a message will display on the right LCD stating so.</p>

## Reset Judges

Display	Action
	<p>Press <b>[RESET JUDGES]</b> after one or more judges' scores have been received, then press <b>[ENTER]</b> to reset all scores, or press <b>[CLEAR]</b> to cancel.</p> <p><b>Note:</b> With <b>Auto Score</b> enabled, this key must be pressed before all scores are entered or it is not possible to reset them. Similarly, if <b>[ACCEPT JUDGES SCORES]</b> has already been pressed, this key will not function.</p>

## Enable Judges Consoles

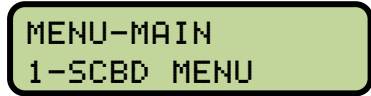
Press **[ENABLE JUDGES CONSOLES]** to re-enable the judges' consoles. This would be done if the scores have been accepted and a correction needs to be made from the judge's consoles.



## Section 5: Rodeo Menus & Settings

### 5.1 Menu Navigation

Press [MENU] to access the Main Menu screen. There are two methods of navigating through the OmniSport menus.



```
MENU-MAIN
1-SCBD MENU
```

*Main Menu screen*

The first method allows the operator to step through each of the menu levels. To use this method, press [MENU] and then use [←], [→], [↑], and [↓] to scroll through the menus. Press [ENTER] to select the menu item displayed on the LCD.

The second method is to go directly to a menu. Press [MENU] immediately followed by the one- to three-digit number from the list below, and the LCD will prompt for the desired setting or action in that menu. For example, **322** will prompt to enter the photocell arming delay.

When finished navigating the menus and adjusting the desired settings, press [MENU] to exit. Each menu setting is described in detail in the following sections.

- |                    |                      |
|--------------------|----------------------|
| [1] SCBD MENU      | [32] PHOTOCELL       |
| [11] SCBD ON/OFF   | [321] PCELL PREC     |
| [12] SCORE DISPLAY | [322] PCELL ARMING   |
| [13] DIMMING       | [323] PCELL SWITCH   |
| [2] PRINT MENU     | [33] NETWORK         |
| [21] LOGGING       | [331] NETWORK ENABLE |
| [22] INTENSITY     | [332] MAC ADDRESS    |
| [3] SETUP MENU     | [333] IP ADDRESS     |
| [31] TIMER         | [334] SUBNET MASK    |
| [311] TIMER PREC   | [335] GATEWAY ADDRES |
| [312] TIMER MODE   | [336] SOCKET NUMBER  |
| [313] BEEPER       | [4] TEST MENU        |
| [314] BEEP VOLUME  | [41] BATTERY         |
| [315] HALF POINTS  | [42] SCOREBOARD      |
| [316] HORN         | [421] CYCLE ON/OFF   |
| [317] JUDGE START  |                      |

### 5.2 Scoreboard Menu

The *Scoreboard Menu* is where the operator can turn the scoreboard output ON or OFF, select score display, and set the dimming (brightness) level.

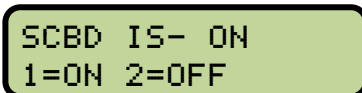


```
MENU-SCOREBOARD
1-SCBD ON/OFF
```

*From Main Menu – [1] or [ENTER]*

#### Scoreboard ON/OFF

This menu is used to toggle the scoreboard output ON/OFF.



```
SCBD IS- ON
1=ON 2=OFF
```

*From Main Menu – [1]>[1]*

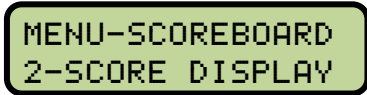
- Press [1] to set the scoreboard output ON. Press [ENTER] to save.
- Press [2] to set the scoreboard output OFF. Press [ENTER] to save. The scoreboard will be blank until: the start of the next event, [RESET] is pressed to re-display data of the last event, the scoreboard is turned back ON in the menu, or [SCOREBOARD ON/OFF] is pressed.

**When to use this:**

- The scoreboard is displaying false information due to equipment or operator error and needs to be blanked.
- The error is corrected and the scoreboard output can be turned back on.

**Score Display**

This menu selects whether to show scores on the scoreboard.



*From Main Menu – [1]>[2]*

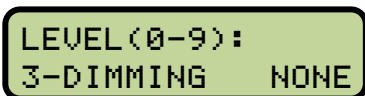
- Press [1] to show scores on the scoreboard. Press [ENTER] to save.
- Press [2] to not show scores on the scoreboard. Press [ENTER] to save.

**When to use this:**

- There’s only enough room on the scoreboard to show either time or score at one time, and time is the preferred information to show.

**Dimming**

This menu is used to adjust the scoreboard dimming (brightness) level. The dimming setting only applies to scoreboards configured to receive multi-drop protocol.



*From Main Menu – [1]>[3]*

Use the number keypad to select one of the values shown in the table to the right, or use [←][→] to toggle through the levels. To save the setting, press [ENTER]. To return to the *Dimming Menu* without saving, press [CLEAR].

**When to use this:**

- In low light conditions the scoreboard may be too bright.
- In direct sunlight the scoreboard may need to be turned to full bright.

Dimming Levels:	
0	= NONE (full bright)
1	= 90%
2	= 80%
3	= 70%
4	= 60%
5	= 50%
6	= 40%
7	= 30%
8	= 20%
9	= 10% (dimmost)

## 5.3 Print Menu

The *Print Menu* includes settings related to the OmniSport 2000's built-in printer.

```
MENU-MAIN
2-PRINT MENU
```

### Logging

Print logging automatically prints event results in real time.

```
MENU-PRINTER
1-LOGGING
```

*From Main Menu – [2]*

```
MENU-PRINTER
PRINTER LOG: ON
```

*From Main Menu – [2]>[1]*

Press [**←**], [**→**], [**↑**], or [**↓**] to toggle the logging feature. Press [**ENTER**] to save.

### Intensity

The print intensity level can be adjusted from 1 to 5, with 1 being the lightest and 5 being the darkest.

```
MENU-PRINTER
2-INTENSITY
```

```
PRINT INTENSITY
LEVEL 1-5: 5*
```

*From Main Menu – [2]>[1]*

Press the number key that corresponds to one of the five intensity levels. The printer will print a test message with the selected intensity level to allow comparison. Adjust the level as needed.

## 5.4 Setup Timer Menu

```
MENU- SETUP
1-TIMER
```

*From Main Menu – [3]*

### Timer Precision

This menu sets how times appear on the console LCD.

*This setting is only for 1, 2, and 3 Timers modes.*

```
MENU-TIMER SETUP
1-TIMER PREC
```

*From Main Menu – [3]>[1]*

```
TIMER PRECISION
1-TENTHS
```

```
TIMER PRECISION
2-HUNDREDTHS
```

*From Main Menu – [3]>[1]>[1]*

- Press [**1**] to show times to tenths of a second (0.0). Press [**ENTER**] to save.
- Press [**2**] to show times to hundredths of a second (0.00). Press [**ENTER**] to save.

### Timer Mode

This menu sets how official time is obtained using three timers. *This setting is only for 3 Timers mode.*

```
MENU-TIMER SETUP
2-TIMER MODE
```

```
3 TIMER MODE
1-AVERAGE TIMING
```

```
3 TIMER MODE
2-MEDIAN TIMING
```

*From Main Menu – [3]>[1]>[2]*

- Press [1] to select Average Timing. The official timer value will be determined by averaging the three timer values. Press [ENTER] to save.
- Press [2] to select Median Timing. The official timer value will be determined by the median (middle) of the three timer values. Press [ENTER] to save.

### Beeper

This menu sets the time running beeper, which makes the timer beep every second to indicate the time is running.

```
MENU-TIMER SETUP
3-BEEPER
```

```
TIME BEEPER- OFF
1=ON 2=OFF
```

*From Main Menu – [3]>[1]>[3]*

- Press [1] to set the time running beeper ON. Press [ENTER] to save.
- Press [2] to set the time running beeper OFF. Press [ENTER] to save.

### Beep Volume

This menu is for setting the internal beeper volume when keys are pressed.

```
MENU-TIMER SETUP
4-BEEP VOLUME
```

```
BEEPER
BEEP VOLUME: 0
```

*From Main Menu – [3]>[1]>[4]*

Use [↑][↓] or the [0]-[7] keys to set the volume level, with 7 being the loudest setting. Press [ENTER] to save.

### Half Points

With half-point scoring enabled, scores will include a decimal point value. With half-point scoring disabled, scores will be entered as three-digit whole numbers.

```
MENU-TIMER SETUP
5-HALF POINTS
```

```
HALF POINTS-YES
1=YES 2=NO
```

*From Main Menu – [3]>[1]>[5]*

- Press [1] to enable half-point scoring. Press [ENTER] to save.
- Press [2] to disable half-point scoring. Press [ENTER] to save.

## Horn

This menu allows the final horn to sound in a scored event even if the clock was stopped before the horn time.

MENU-TIMER SETUP  
6-HORN

HORN AFTER STOP  
1=YES 2=NO YES

*From Main Menu – [3]>[1]>[6]*

- Press [1] to enable horn after stop. Press [ENTER] to save.
- Press [2] to disable horn after stop. Press [ENTER] to save.

## Judge Start

This menu allows for selecting any judge console to start the clock in scored events.

MENU-TIMER SETUP  
7-JUDGE START

ANY JUDGE START  
1=YES 2=NO YES

*From Main Menu – [3]>[1]>[7]*

- Press [1] to enable any judge start. Press [ENTER] to save.
- Press [2] to disable any judge start. Press [ENTER] to save.

## 5.5 Setup Photocell Menu

MENU- SETUP  
2-PHOTOCELL

### Photocell Precision

This menu sets how precise times are when using photocells. *This setting is only Automatic Timing mode.*

MENU-PCELL SETUP  
1-PCELL PREC

*From Main Menu – [3]>[2]*

PCELL PRECISION  
1-HUNDREDTHS

PCELL PRECISION  
2-THOUSANDTHS

*From Main Menu – [3]>[2]>[1]*

- Press [1] to time to hundredths of a second (0.00). Press [ENTER] to save.
- Press [2] to time to thousandths of a second (0.000). Press [ENTER] to save.

### Photocell Arming

The arming time is the number of seconds after a beam break where the photocells will be inactive. Any other beam breaks during this time will be ignored. The remaining arming time counts down on the LCD.

MENU-PCELL SETUP  
2-PCELL ARMING

PHOTOCELL ARMING  
TIME 03 \*

Use the number keypad to enter the arming delay time, and then press [ENTER] to save.

*From Main Menu – [3]>[2]>[2]*

## Photocell Switch

Photocells can be configured for Normally Open or Normally Closed contacts via a switch setting on the photocell eye. *In most cases, the photocells will be set to Normally Closed.*

```
MENU-PCELL SETUP
3-PCELL SWITCH
```

```
PHOTOCELL SWITCH
1-NORMAL CLOSED
```

```
PHOTOCELL SWITCH
2-NORMAL OPEN
```

*From Main Menu – [3]>[2]>[3]*

- Press [1] for normally closed photocell contacts. Press [ENTER] to save.
- Press [2] for normally open photocell contacts. Press [ENTER] to save.

## 5.6 Setup Network Menu

This menu is used to configure various network settings for outputting Real-Time Data (RTD) to displays and connecting to DakStats Rodeo software.

```
MENU-SETUP
3-NETWORK
```

### Network Enable

This menu sets the *ETHERNET* jack output on or off. If the jack is not needed, it can be turned OFF (default).

```
MENU-SETUP
1-NETWORK ENABLE
```

*From Main Menu – [3]>[3]*

```
MENU-NETWORK
NETWORK: ON *
```

```
MENU-NETWORK
NETWORK: OFF*
```

*From Main Menu – [3]>[3]>[1]*

Use [←][→] to toggle between *ON/OFF* and then press [ENTER] to save.

**Note:** If this setting is set to OFF, all of the menus below will be disabled.

### MAC Address

This menu allows the operator to verify the MAC address of the console. The MAC Address cannot be edited. Press any key to exit the menu.

```
MENU-NETWORK
2-MAC ADDRESS
```

```
MAC ADDRESS
09:ec:03:02:7d
```

*From Main Menu – [3]>[3]>[2]*

### IP Address

This menu allows the operator to set or verify the IP address of the console. The default setting is shown below.

```
MENU-NETWORK
3-IP ADDRESS
```

```
IP ADDRESS
192*168. 0. 55
```

*From Main Menu – [3]>[3]>[3]*

In most cases, the standard IP address should be used. Press [ENTER] four times or [CLEAR] twice to keep the IP address as is.

If a custom IP address is required, such as for connecting to a non-Daktronics network, use the number keypad to enter a new value for each group of numbers and press [ENTER] after every group. To return to the default address, press [CLEAR] twice *before entering the fourth group of numbers*.

*Note:* Once the console has been successfully connected to a network, it must be disconnected from the network in order to change the IP address settings.

### Subnet Mask

The subnet mask may only be edited if the IP address is set to custom. The default setting is shown below.

```
MENU-NETWORK
4-SUBNET MASK
```

```
SUBNET MASK
255*255.255. 0
```

*From Main Menu – [3]>[3]>[4]*

Use the number keypad to enter a new value for each group of numbers and press [ENTER] after every group. If no change is needed, press [CLEAR] twice to exit the menu.

### Gateway Address

The gateway address may only be edited if the IP address is set to custom. The default setting is shown below.

```
MENU-NETWORK
5-GATEWAY ADDRESS
```

```
GATEWAY ADDRESS
192.168. 0. 1
```

*From Main Menu – [3]>[3]>[5]*

Use the number keypad to enter a new value for each group of numbers and press [ENTER] after every group. If no change is needed, press [CLEAR] twice to exit the menu.

### Socket Number

This menu allows the operator to set or verify the socket number of the console. The setting varies by display type:

```
MENU-NETWORK
6-SOCKET NUMBER
```

*Galaxy:*

```
SOCKET NUMBER
03002*
```

*DVN/DVX:*

```
SOCKET NUMBER
21000*
```

*From Main Menu – [3]>[3]>[6]*

In most cases, the default socket number “3002” should be used for Daktronics Galaxy displays. Press [ENTER] once or [CLEAR] twice to exit the menu.

Daktronics DVN/DVX video displays use “21000”. Use the number keypad to enter a new value and then press [ENTER]. Other values may be required for non-standard applications.

## 5.7 Test Menu

The OmniSport 2000 timer is equipped with test features that can be used to test battery level and numeric scoreboards.

```
MENU-MAIN
4-TEST MENU
```

### Battery

The Battery Test allows for the checking of the battery power level.

```
BATTERY TEST
LEVEL:CHARGED
```

```
BATTERY TEST
LEVEL:LOW
```

*From Main Menu – [4]>[1]*

If the battery level is LOW, plug the console into a power outlet immediately. Press [ENTER] to exit to the Test Menu.

### Scoreboard

The Scoreboard Test allows for the testing of scoreboard drivers.

```
SB TEST MENU
1-CYCLE ON/OFF
```

*From Main Menu – [4]>[2]*

### Cycle On/Off

Press [1] to cycle scoreboard digits ON and OFF. When this menu is selected, an “all on” signal is sent at intervals of approximately 3 seconds. Press [ENTER] to exit to the Test Menu.

```
DISPLAY ALL ON
ENTER TO EXIT
```

```
DISPLAY ALL OFF
ENTER TO EXIT
```



## Section 6: Judges' Console Operation

---

The judges' consoles are used to enter scores during scored events. The OmniSport rodeo timer can be set to use 1, 2, or 4 for **Scored Events** or 1, 2, 3, or 5 for **Cutting**. Refer to the system risers **Drawing B-220003** and **Drawing A-230608** for connection details.

For more information about the RC-100 wireless system, refer to the *Remote Control System RC-100 All Sport Operation Manual (ED-15133)*, available online at [www.daktronics.com/manuals](http://www.daktronics.com/manuals).

### 6.1 Console Setup

When the consoles are first connected to the OmniSport timer they will prompt the user to enter a judge number.

```
ENTER JUDGE #
  -*
```

The LCD on the judge's console will display this prompt and wait for the user to enter a number from one up to the maximum number of judges' consoles the OmniSport is configured to use. If the number has already been used by another judge or is above the number of judges the console will beep and wait for a new number. Once the judge's console has selected a judge number, the LCD will display which judge number it is set for as shown at right.

```
JUDGE 1:
```

### 6.2 Scored Events Operation

The request for scores will show on the judges' consoles after the timer has stopped. Enter the score(s), and then press [ENTER] to confirm. If the score is out of the acceptable range, the console will beep and wait for a different score. After a valid score is entered, "OK" will appear by the competitor number. Once the score is accepted, the console will indicate this.

```
JUDGE 1: 20.0
#1262 OK
```

```
JUDGE 1: 20.0
ACCEPTED
```

The four modes of score entry are shown below. Refer to *Section 4.5* for selecting score modes.

#### Combined Mode

In combined mode, the total score for rider and stock is entered.

```
JUDGE 1: . . . *
#1262
```

#### Separate Mode

In separate mode, the rider and stock scores are entered separately.

```
JUDGE 1: . . . * R
#1262 . . . S
```

#### Total/Stock Mode

In total/stock mode, the total score is entered first, and then the stock score is entered.

```
JUDGE 1: . . . * C
#1262 . . . S
```

## 2 Rider/2 Stock Mode

```
JUDGE 1: .....*
#1262      Rider
```

```
JUDGE 1: .....*
#1262      Stock
```

In the 2 rider/2 stock mode, 4 judges' consoles are always used. Judges 1 and 2 enter the riders score, and judges 3 and 4 enter the stock score. The four scores are added for the total.

## Maximum Scoring Values

Mode	2 Judges	4 Judges
Combined	50.0	50.0
Separate Stock Rider	25.0 25.0	25.0 25.0
Total/Stock Total Stock	50.0 25.0 or max of total score	50.0 25.0 or max of total score
2 Rider/2 Stock Rider Stock	N/A N/A	25.0 25.0

## Re-ride Select

The judges' consoles can be used to select a re-ride when the score is entered. Press the Re-ride/Penalty key to alternately toggle the re-ride ON and OFF. An "R" appears to the left of the score if it is ON.

```
JUDGE 1:R20.0
#1262 OK
```

## Start, Stop, & Reset

In scored events, a judge console can be used to remotely start, stop and reset the timer. With one judge, Judge 2 will do this; with two judges, Judge 3 will do this; and with four judges, Judge 5 will do this. If ANY JUDGE START is set to YES, then any judge console can start, stop, and reset the timer (refer to *Section 5.4*).

- At this prompt, press [START] to start the timer. When running, time is shown to the nearest second.
- At this prompt, press [STOP] to stop the timer. The other judges' consoles will then be able to enter scores.
- At this prompt, press [RESET] to reset the timer. When stopped, time is shown to hundredth of a second.

```
JUDGE 3:
READY TO START
```

```
JUDGE 3:
READY TO STOP
```

```
JUDGE 3:  0.00
PRESS RESET
```

## Score Editing

After a score is entered, it may be changed by pressing [EDIT]. This clears the current score so a new score may be entered. If the scores have already been accepted, the OmniSport operator must press [ENABLE JUDGES CONSOLES] to reactivate the [EDIT] key.

## 6.3 Cutting Event Operation

The request for scores will show on the judges' consoles after the timer has stopped.

Enter the score(s), and then press [ENTER] to confirm.

In this mode, the judge scores are added for the total score if there are three or fewer judges. If there are five judges, the high and low scores are thrown out and the other three are added.

```
JUDGE 1: ...*
#1262
```

## 6.4 Timed Events Operation

The Judge 1 console can be used to remotely enter a penalty in timed events.

```
JUDGE 1:
#1262 PEN ..*
```

**Note:** All other judges' consoles show "NOT ACTIVE".  
Power off any consoles that are not currently in use.

```
JUDGE 2:
NOT ACTIVE
```

Press [PENALTY] to add a five second penalty. Each press will add another five seconds.

When the penalty is correct, press [ENTER]. If the penalty was not entered correctly, it can be modified by pressing [EDIT]. Once the timer is reset, the penalty cannot be edited.

If the judges' console is to be used for entering penalties, ensure the OmniSport operator doesn't also add penalties as it may result in too much penalty time added to the clock.



# Appendix A: Reference Drawings

---

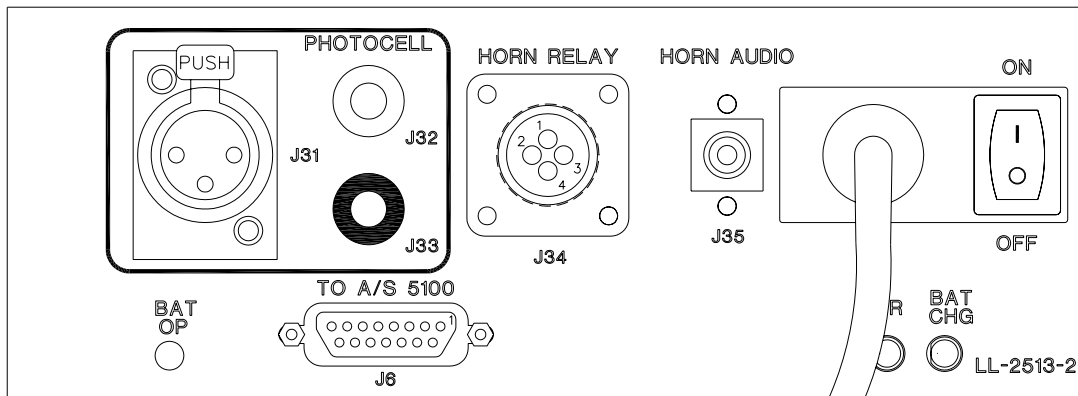
<i>Drawing Title</i>	<i>Drawing Number</i>
Rodeo Photocell Interface Connector Assignments .....	<b>A-147806</b>
Connector Designations: OmniSport 2000 .....	<b>A-154282</b>
Channel Selection; Multiple Broadcast Group, Gen IV .....	<b>A-203113</b>
Insert, LL-2609, OmniSport Rodeo.....	<b>B-212381</b>
System Riser Diagram; OmniSport 2000 .....	<b>B-220003</b>
System Riser: RC-100 - Rodeo/Diving/Sync Swimming.....	<b>A-230608</b>
Insert; LL-2608, RC-100, Rodeo.....	<b>A-231529</b>
Installation Details, Gen VI Channel Selection Guide.....	<b>A-1109870</b>



## A/S 5100 RODEO TIMING INTERFACE



LL-2513-1



LL-2513-2

120V AC  
POWER IN

J31- PHOTO CELL INPUT	
PIN #	FUNCTION
1	PHOTO1-N
2	PWR1-P
3	GND1-N

J32-33 PHOTOCELL INPUT	
PIN #	FUNCTION
RED	PHOTO1-N
BLK	GND1-N

TIMER 1 (TIMER INPUT)	
PIN #	FUNCTION
RED	PHOTO2-N
BLK	GND2-N

J6 - SWITCH INPUT	
PIN #	FUNCTION
1	INPUT #1
2	INPUT #2
3	INPUT #3
4	INPUT #4
5	INPUT #5
6	INPUT #6
7	INPUT #7
8	INPUT #8
9	INPUT #9
10	INPUT-GND
11	RELAY COMMON
12	RELAY NORMALLY OPEN
13	RELAY NORMALLY CLOSED
14	CURRENT LOOP #1 OUT-P
15	CURRENT LOOP #1 OUT-GND

J34-HORN RELAY INPUT	
PIN #	FUNCTION
1	NORMALLY OPEN
2	RELAY COMMON
3	N\C
4	N\C

TIMER 2 (TIMER INPUT)	
PIN #	FUNCTION
RED	PHOTO3-N
BLK	GND3-N

J35-HORN AUDIO OUT	
PIN #	FUNCTION
1	TONE-N (OUTER COND.)
2	TONE-P (CENTER COND.)

TIMER 3 (TIMER INPUT)	
PIN #	FUNCTION
RED	PHOTO4-N
BLK	GND4-N

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: ALL SPORT 5000 SERIES CONSOLES

TITLE: RODEO PHOTOCELL INTERFACE CONNECTOR ASSIGNMENTS

DES. BY: GSCHIEF

DRAWN BY: GSCHIEF

DATE: 18 APR 01

REVISION APPR. BY: JWARNE  
SCALE: 1=3

1196-R04A-147806

REV.	DATE	DESCRIPTION	BY	APPR.

REV 02	DATE: 25 JAN 13	ADDED ETHERNET PORT AND AUDIO JACK - UPDATED REAR JACKS AND LABELS.	BY: SMB
REV 04 DEC 02	DATE: 04 DEC 02	CHANGED LABEL ON J6 FROM RTD PORT TO RESULTS PORT.	BY: CLB

J14 - NEAR LANE	
PIN #	FUNCTION
1	+VUNREG
2	NEAR CAN-H
3	NEAR CAN-L
4	GND

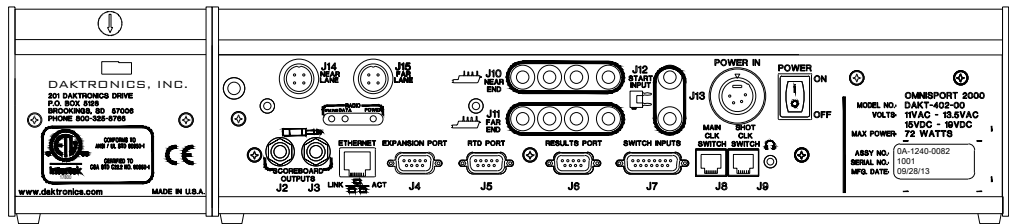
J10 - NEAR END	
PIN #	FUNCTION
1-BLK	GND
2-BLK	LM NEAR
3-BLK	CLK NEAR
4-RED	+VUNREG

J15 - FAR LANE	
PIN #	FUNCTION
1	+VUNREG
2	FAR CAN-H
3	FAR CAN-L
4	GND

J11 - FAR END	
PIN #	FUNCTION
1-BLK	GND
2-BLK	LM FAR
3-BLK	CLK FAR
4-RED	+VUNREG

J13 - POWER IN	
PIN #	FUNCTION
1	N/C
2	N/C
3	14VAC
4	14VAC
SHELL	EARTH GND

J12 - START INPUT	
PIN #	FUNCTION
1-RED	START +, SWIN9-P
2-BLK	START -, SWIN9-N



J2-J3 SCOREBOARD OUTPUTS	
CONTACT	FUNCTION
TIP	CURRENT LOOP OUTPUT +
RING	CURRENT LOOP OUTPUT -
SHAFT	GND

J5 - RTD PORT	
PIN #	FUNCTION
1	NOT USED
2	RTD RS-232 TX
3	RTD RS-232 RX
4	NOT USED
5	GND
6	RTD CL TX-P
7	NOT USED
8	RTD CL RX-P
9	RTD CL RX-N

J7 - SWITCH INPUTS	
PIN #	FUNCTION
1	SWITCH INPUT 1 +
2	SWITCH INPUT 2 +
3	SWITCH INPUT 3 +
4	SWITCH INPUT 4 +
5	SWITCH INPUT 5 +
6	SWITCH INPUT 6 +
7	SWITCH INPUT 7 +
8	SWITCH INPUT 8 +
9	SWITCH INPUT 9 +
10	SWITCH INPUT-GND
11	RELAY COMMON
12	RELAY NORMALLY OPEN
13	RELAY NORMALLY CLOSED
14	CURRENT LOOP OUT +
15	CURRENT LOOP OUT -

J4 - EXPANSION PORT	
PIN #	FUNCTION
1	NOT USED
2	EXPANSION RS-232 TX
3	EXPANSION RS-232 RX
4	NOT USED
5	GND
6	NOT USED
7	NOT USED
8	NOT USED
9	NOT USED

J6 - RESULTS PORT	
PIN #	FUNCTION
1	NOT USED
2	RESULTS RS-232 TX
3	RESULTS RS-232 RX
4	NOT USED
5	GND
6	RESULTS CL TX-P
7	NOT USED
8	RESULTS CL RX-P
9	RESULTS CL RX-N

J8 - MAIN START/STOP/HORN	
PIN #	FUNCTION
1	SWITCH INPUT 2 -
2	SWITCH INPUT 1 -
3	RELAY OUTPUT -
4	RELAY OUTPUT +
5	SWITCH INPUT 1 +
6	SWITCH INPUT 2 +

ETHERNET PORT:  
NETWORK INTERFACE SUPPORTS  
AUTO MDI/MDIX - EITHER  
CABLE TYPE MAY BE USED.

AUDIO OUTPUT: 3.5mm

J9 - SHOT CLOCK START/STOP	
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 +

PROJ: OMNI SPORT 2000  
TITLE: CONNECTOR DESIGNATIONS: OMNISPORT 2000  
DESIGN: CBRECZI  
SCALE: 1=4  
DATE: 19 JUN 02

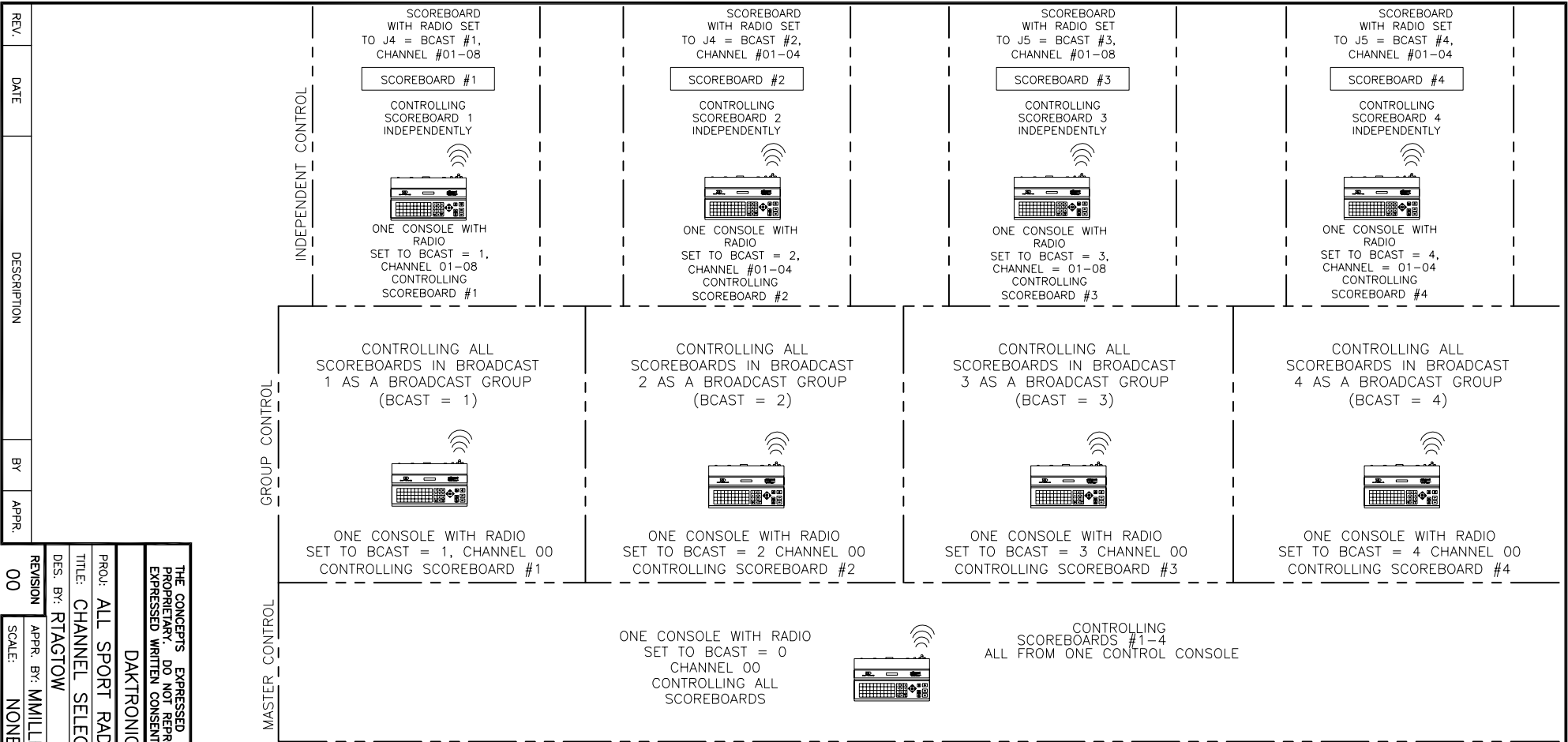
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BROOKINGS, SD 57006  
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SHEET 02 REV 02 JOB NO: 1240 FUND-TYPE-SIZE R-08-A

154282





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**

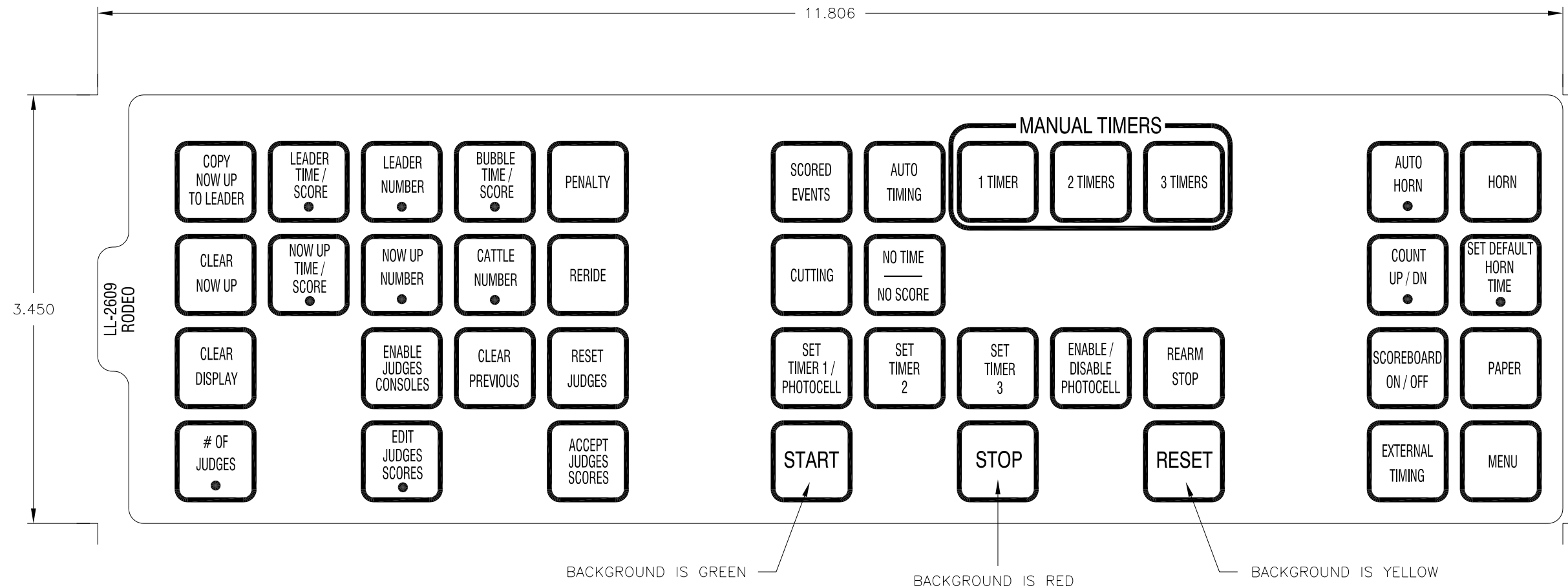
TO RUN EACH SCOREBOARD INDEPENDENTLY, SET THE CONTROL CONSOLE TO THE APPROPRIATE BROADCAST GROUP (BCAST = 1-4), AND THEN SET THE CHANNEL TO THE SCOREBOARD CHANNEL. EX. TO RUN SCOREBOARD #3 IN THE SETUP ILLUSTRATED ABOVE, SET THE CONTROL CONSOLE TO BCAST = 3, CHANNEL = 01.

PROJ: ALL SPORT RADIO TITLE: CHANNEL SELECTION; MULTIPLE BROADCAST GROUP, GEN IV DES. BY: RTAGTOW DRAWN BY: RTAGTOW DATE: 26 JAN 04 REVISION APPR. BY: MILLER SCALE: NONE 1110-R01A-203113	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.
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MATERIAL IS 10-MIL CLEAR POLYCARBONATE WITH SMOOTH FINISH.  
 START KEY BACKGROUND IS GREEN TO MATCH PMS # 355.  
 STOP KEY BACKGROUND IS RED TO MATCH PMS # 179.  
 RESET KEY BACKGROUND IS YELLOW TO MATCH PMS # 1089.  
 ALL TEXT INSIDE OF KEYS AND ALL REMAINING COPY IS BLACK.  
 BACKGROUND IS GRAY TO MATCH PMS #429.  
 COPY IS PRINTED ON THE BACK SIDE.  
 FINISHED PART IS DIE CUT PER DRAWING A-153416.



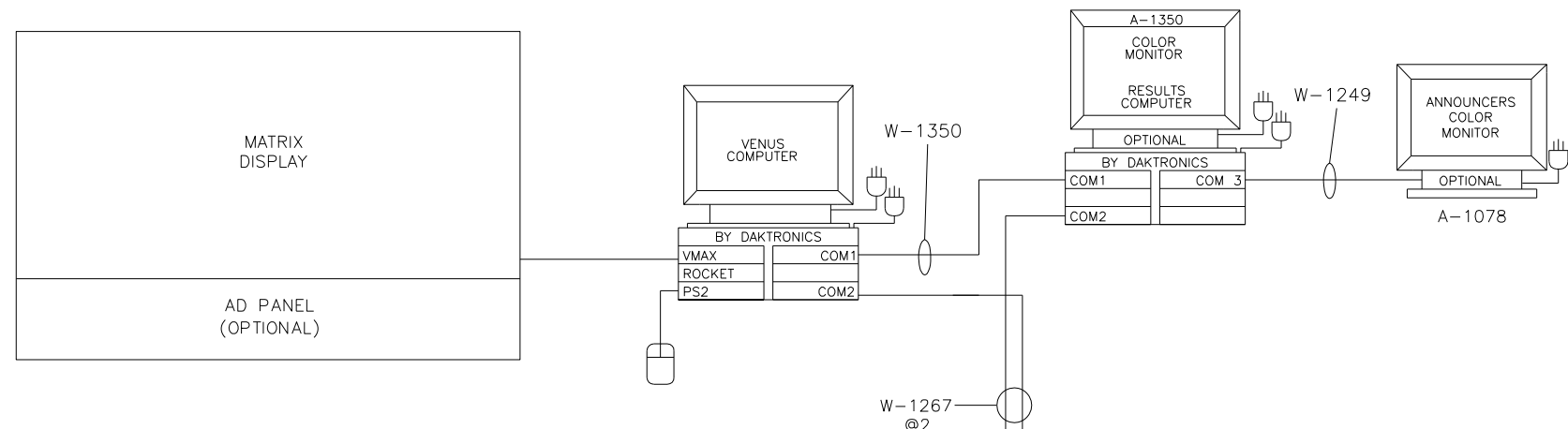
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PROJ:			
TITLE:	INSERT, LL-2609, OMNISPORT RODEO		
DES. BY:	BCARSRU	DRAWN BY:	JFELBER
			DATE: 25 MAY 04
REVISION	APPR. BY:	1240-E07B-212381	
02	SCALE: 1=1		

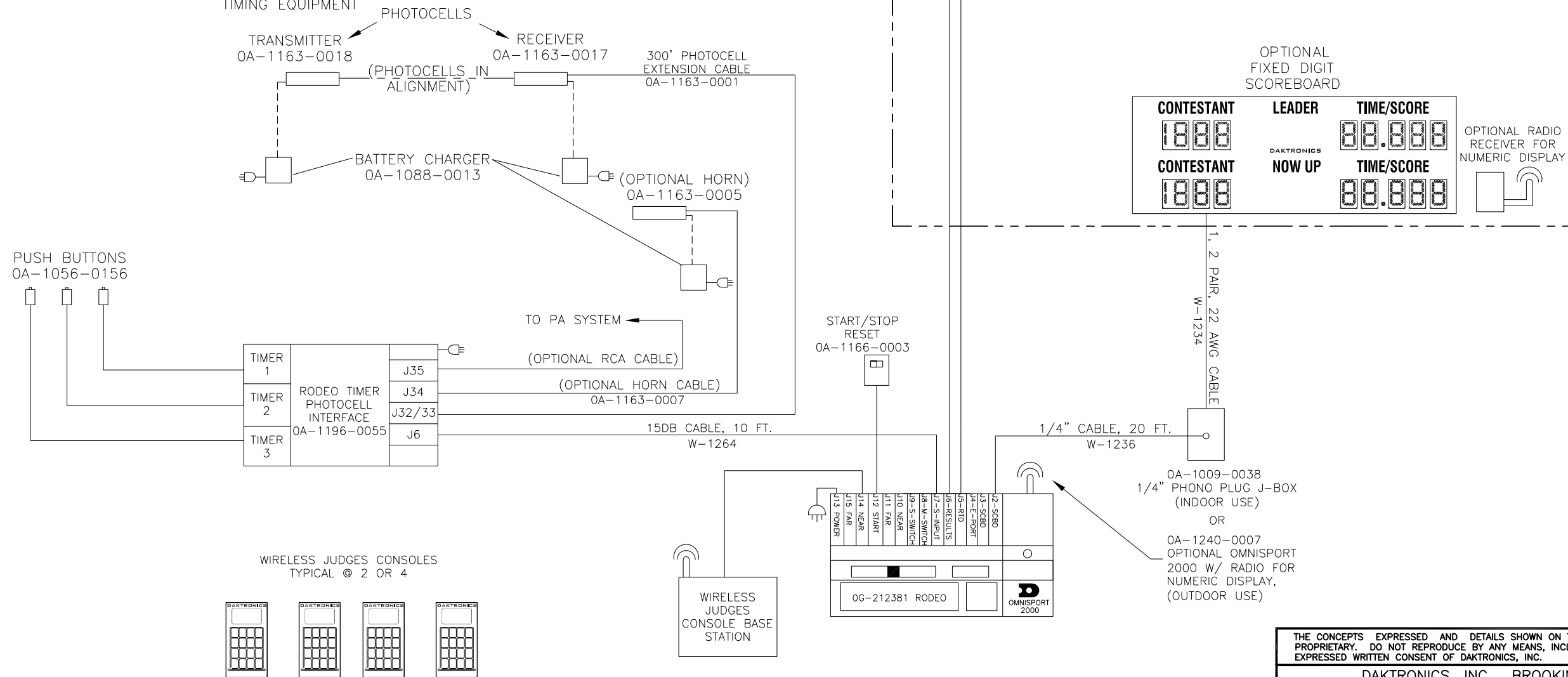
REV.	DATE	DESCRIPTION	BY	APPR.
02	16 DEC 05	ADDED KEYS FOR ADDITIONAL EVENTS	DJU	
01	29 DEC 04	CHANGED INSERT FROM 0G-212381 TO LL-2609 ADDED COLOR TO START, STOP AND RESET KEYS	DJU	

NOTE: FOR COMPLETE MATRIX CONTROL EQUIPMENT, SEE PROJECT SYSTEM RISER DIAGRAM.



RESULTS/DISPLAY EQUIPMENT

TIMING EQUIPMENT



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DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: OMNISPORT 2000 RODEO EQUIPMENT

TITLE: SYSTEM RISER DIAGRAM: OMNISPORT 2000 RODEO SETUP

DES. BY: RTAGTOW DATE: 30 JUL 04

REV.	DATE	DESCRIPTION	BY	APPR.
01	09 JUNE 09	UPDADED PART NUMBER AND QUANTITY	CME	

REVISION 01 SCALE: NONE

1240-R01B-220003

**SYNCHRONIZED SWIMMING**



OA-1110-0053  
DIVING INSERT: LL-2606  
RODEO INSERT: LL-2608



OA-1110-0053  
DIVING INSERT: LL-2606  
RODEO INSERT: LL-2608



OA-1110-0053  
DIVING INSERT: LL-2606  
RODEO INSERT: LL-2608



OA-1110-0053  
DIVING INSERT: LL-2606  
RODEO INSERT: LL-2608

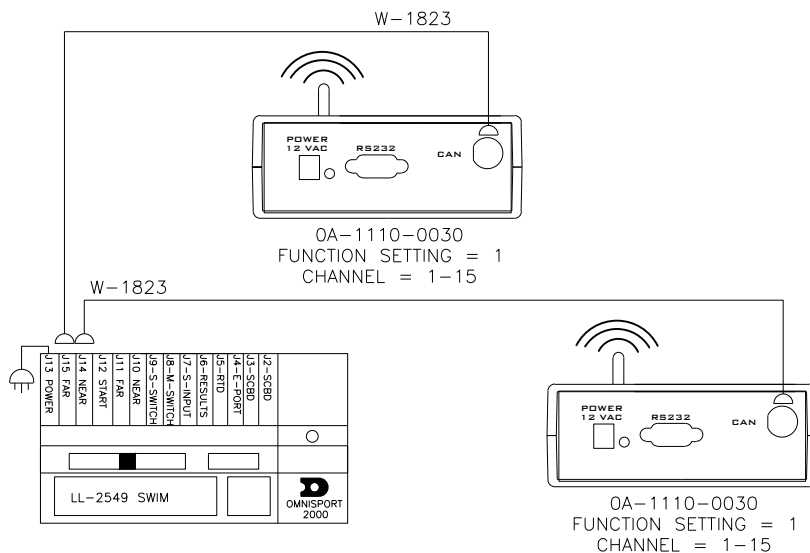
**NOTE:**

UP TO 18 RC-100 CONTROLLERS CAN BE USED AT ONCE (9 RC-100 CONTROLLERS PER BASE STATION).

CHANNELS 1-15 CAN BE USED, HOWEVER THE TWO BASE STATIONS MUST BE SET TO DIFFERENT CHANNELS. EACH BASE STATION AND ITS RESPECTIVE RC-100 CONTROLLERS NEED TO BE SET TO THE SAME CHANNEL.

**FUNCTION TABLE**

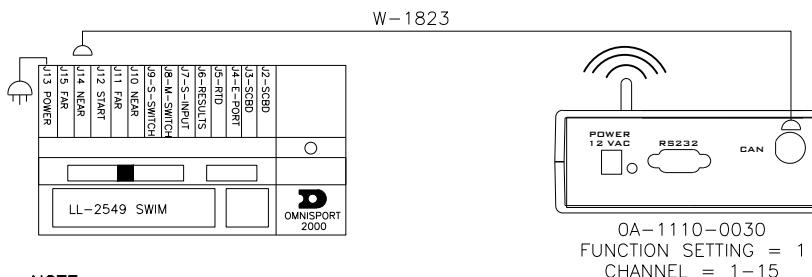
FUNCTION NUMBER	DESCRIPTION
0	DEFAULT FUNCTION (LAST POWER UP FUNCTION)
1	CAN HAND HELD (JUDGES) CONSOLE
2	BASEBALL/TENNIS SCOREBOARD CONTROLLER GEN I (ALLSPORT)
3	DATATIME/DATAMASTER DISPLAY CONTROL
5	BASEBALL/TENNIS SCOREBOARD CONTROLLER GEN II (ALLSPORT)



**DIVING/RODEO**

**FUNCTION TABLE**

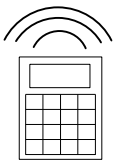
FUNCTION NUMBER	DESCRIPTION
0	DEFAULT FUNCTION (LAST POWER UP FUNCTION)
1	CAN HAND HELD (JUDGES) CONSOLE
2	BASEBALL/TENNIS SCOREBOARD CONTROLLER GEN I (ALLSPORT)
3	DATATIME/DATAMASTER DISPLAY CONTROL
5	BASEBALL/TENNIS SCOREBOARD CONTROLLER GEN II (ALLSPORT)



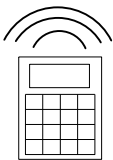
**NOTE:**

UP TO 9 RC-100 CONTROLLERS CAN BE USED AT ONCE.

CHANNELS 1-15 CAN BE USED, HOWEVER THE BASE STATION AND ALL RC-100 CONTROLLERS MUST BE OPERATING ON THE SAME CHANNEL.



OA-1110-0053  
DIVING INSERT: LL-2606  
RODEO INSERT: LL-2608



OA-1110-0053  
DIVING INSERT: LL-2606  
RODEO INSERT: LL-2608



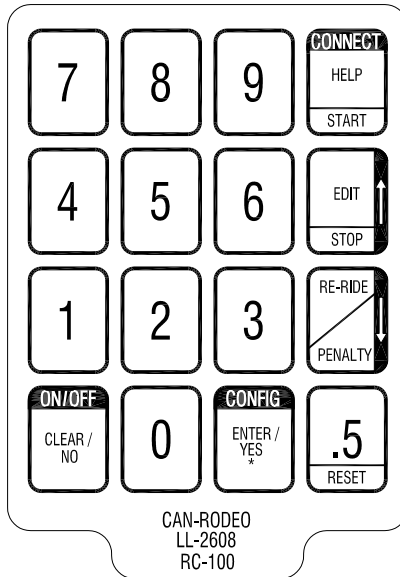
OA-1110-0053  
DIVING INSERT: LL-2606  
RODEO INSERT: LL-2608



OA-1110-0053  
DIVING INSERT: LL-2606  
RODEO INSERT: LL-2608

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	<p>DO NOT SCALE DRAWING</p>	
<p>PROJ: RADIO LINK</p>		
<p>TITLE: SYSTEM RISER: RC-100- RODEO/DIVING/SYNC SWIMMING</p>		
<p>DESIGN:</p>	<p>DRAWN: RTAGTOW</p>	<p>DATE: 30 DEC 04</p>
<p>SCALE: NONE</p>		
<p>SHEET</p>	<p>REV</p>	<p>JOB NO:</p>
<p>01</p>	<p>02</p>	<p>P 1110</p>
<p>FUNC-TYPE-SIZE</p>		<p>230608</p>
<p>R-01-A</p>		

REV 02	DATE: 27 APR 12	UPDATED RC-100 HANDHELD PART NUMBER UPDATED BOARDER AND TITLE BLOCK	BY: JFL
01	15 JAN 07	FUNCTION 5 GEN II	JRA JRA



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PROJ: HANDHELD WIRELESS CAN SYSTEM

TITLE: INSERT; LL-2608, RC-100, RODEO

DES. BY: GWITCHE

DRAWN BY: GWITCHE

DATE: 12 JAN 05

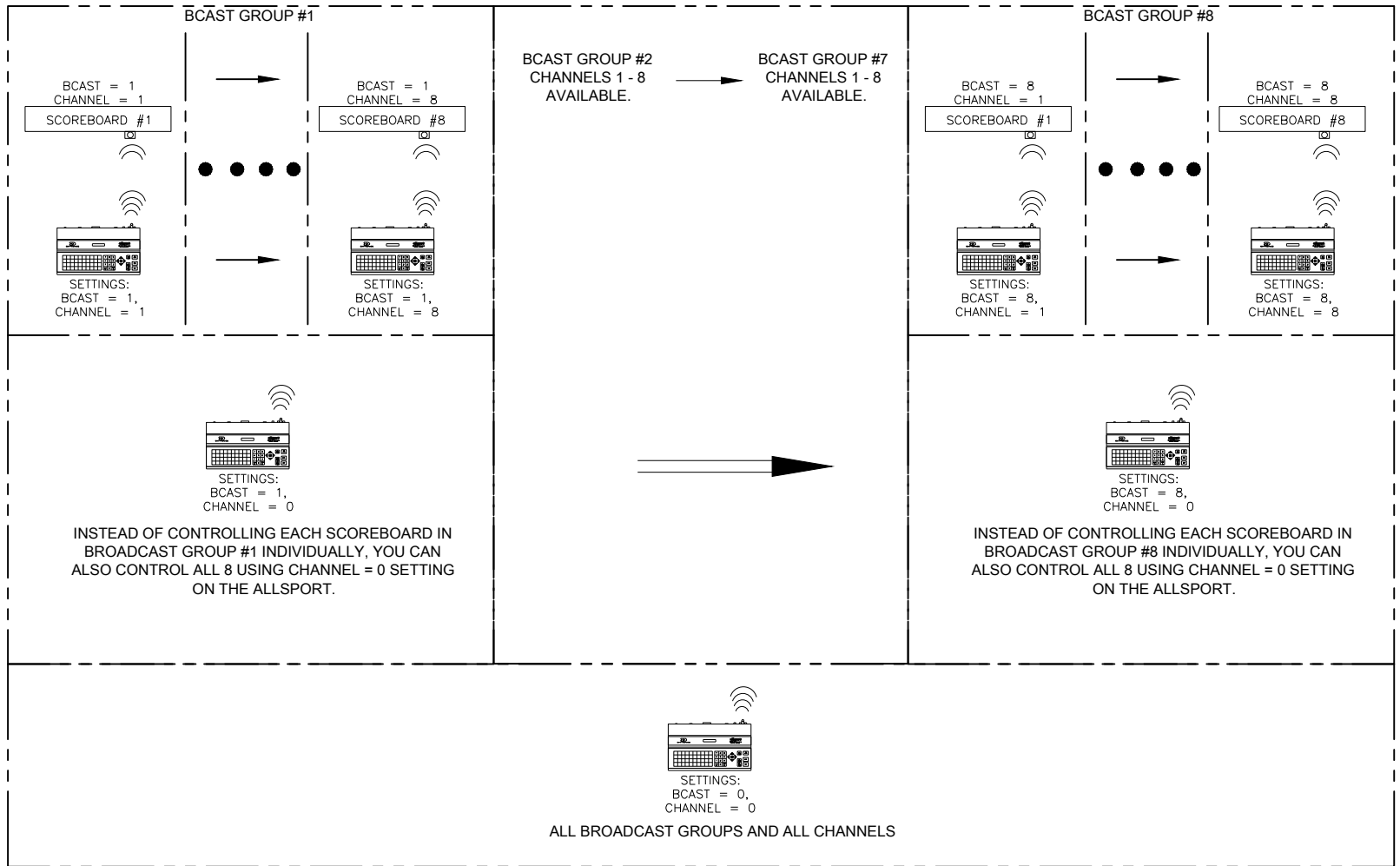
REVISION

APPR. BY:

SCALE: 1 = 1

1110-E07A-231529

REV.	DATE	DESCRIPTION	BY	APPR.



**ADVANCED SETUP CONFIGURATIONS:**

- 1 CONSOLE HAS 64 CHANNELS. USING IT AS A MASTER CONTROL:

- \*RUNS ALL SCOREBOARDS AT ONCE
- \*CONSOLE RADIO SETTING: BCAS T = 0, CHANNEL = 0

- 1 CONSOLE CAN ALSO CONTROL JUST 8 CHANNELS IN A SELECTED GROUP. GROUP CONTROL:

- \*RUNS ALL SCOREBOARDS ASSIGNED TO BCAS T X AND CHANNELS 1 - 8. X COULD BE BCAS T GROUP 1, OR 2, OR... 8
- \*CONSOLE RADIO SETTING: BCAS T = X, CHANNEL = 0. X COULD BE BCAS T 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 BCAS T X AND CHANNEL Y. X COULD BE BCAS T GROUP 1, OR 2, OR... 8. Y COULD BE CHANNEL 1, OR 2, OR... 8
- \*CONSOLE RADIO SETTING: BCAS T = X, CHANNEL = Y. X COULD BE BCAS T GROUP 1, OR 2, OR... 8. Y COULD BE CHANNEL 1, OR 2, OR... 8

**NOTE:** TO FIND THE SCOREBOARD RADIO SETTING:

- MAKE SURE THE CONSOLE IS TURNED OFF.
- CYCLE POWER TO THE SCOREBOARD
- WATCH THE DIGITS AS THE SCOREBOARD BOOTS UP. YOU WILL SEE A B X AND C Y APPEAR ON THE DIGITS.



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PROJ: RADIO LINK, GEN VI

TITLE: INSTALLATION DETAILS, GEN VI CHANNEL SELECTION GUIDE

DESIGN: JCOSE DRAWN: MILLER DATE: 14 AUG 12

SCALE: NONE

SHEET	REV	JOB NO.	FUNC-TYPE-SIZE
00		P1110	F-01-A

1109870





## **Appendix B: Quick Reference Guide**

---



## OmniSport 2000 Rodeo Menu Navigation

Two methods for navigating through the OmniSport 2000 menus:

The first method allows you to step through each of the menu levels. To use this method, press [MENU] and then use [→], [←], [↑], and [↓] to scroll through the menus. Press [ENTER] to select the menu displayed on the LCD.

The second method is to go directly to a menu. Press [MENU] followed by the one to three digit number from the list below and the LCD will prompt you for the desired setting or action in that menu. For example, "322" will prompt you to enter the photocell arming delay.

After you are done navigating through the menus, press [MENU] to return to the main menu.

- |                    |                      |
|--------------------|----------------------|
| [1] SCBD MENU      | [32] PHOTOCCELL      |
| [11] SCBD ON/OFF   | [321] PCELL PREC     |
| [12] SCORE DISPLAY | [322] PCELL ARMING   |
| [13] DIMMING       | [323] PCELL SWITCH   |
| <br>               |                      |
| [2] PRINT MENU     | [33] NETWORK         |
| [21] LOGGING       | [331] NETWORK ENABLE |
| [22] INTENSITY     | [332] MAC ADDRESS    |
|                    | [333] IP ADDRESS     |
|                    | [334] SUBNET MASK    |
| [3] SETUP MENU     | [335] GATEWAY ADDRES |
| [31] TIMER         | [336] SOCKET NUMBER  |
| [311] TIMER PREC   |                      |
| [312] TIMER MODE   |                      |
| [313] BEEPER       | [4] TEST MENU        |
| [314] BEEP VOLUME  | [41] BATTERY         |
| [315] HALF POINTS  | [42] SCOREBOARD      |
| [316] HORN         | [421] CYCLE ON/OFF   |
| [317] JUDGE START  |                      |

### Rodeo Keys

- **COPY NOW UP TO LEADER** copies **Now Up** number on the scoreboard to the leader position.
- **LEADER TIME/SCORE** sets the time or score for the leader, depending on the current console mode of operation.
- **LEADER NUMBER** sets the number of the current leader shown on the scoreboard.
- **BUBBLE TIME/SCORE** sets the bubble time or score, depending on the current console mode of operation.
- **CLEAR NOW UP** clears the **Now Up** competitor on the scoreboard.
- **NOW UP TIME/SCORE** sets the time or score for the **Now Up** competitor, depending on the current console mode of operation.
- **NOW UP NUMBER** sets the number of the current **Now Up** competitor shown on the scoreboard.
- **CATTLE NUMBER** is used for team penning.
- **CLEAR DISPLAY** clears all data on the scoreboard.
  
- **PENALTY** sets the penalty time for the current competitor. A second press of the penalty key turns the penalty off.
- **RERIDE** toggles the reride captions on or off.
  
- **# OF JUDGES** sets the number of judges used in scored events.
- **EDIT JUDGES SCORES** is used to enter or edit the judge's scores.
- **ACCEPT JUDGES SCORES** totals the judges' scores and displays the score on the scoreboard.
- **ENABLE JUDGE CONSOLES** is used to re-enable the judges' consoles after the scores have been accepted.
- **CLEAR PREVIOUS** clears out the previous competitor number and time/score.
- **RESET JUDGES** clears all judges' scores.
  
- **SCORED EVENTS** selects the **Scored Events** mode of operation (bull riding, bareback, etc.).
- **AUTO TIMING** selects the **Automatic** (photocell) mode of operation (barrel racing).
- **1 TIMER, 2 TIMERS, 3 TIMERS** select the manual timing with one, two or three timers, respectively (steer wrestling, team roping, etc.).
- **CUTTING** selects the **Cutting** mode of operation.
- **NO TIME – NO SCORE** displays "no time" or "no score" on the scoreboard and printout.
- **SET TIMER 1/PHOTOCCELL** sets the **Timer 1** time or **Photocell** time, depending on the current console mode of operation.
- **SET TIMER 2, SET TIMER 3** sets the **Timer 2** or **Timer 3** time (if applicable).
- **ENABLE/DISABLE PHOTOCCELL** enables or disables photocell input.

- **REARM STOP** cancels any stop that may have occurred during the run and restores the clock to its free-running state. This can be used to disregard an accidental button press or photocell beam crossing.
- **START** starts all timers.
- **STOP** stops all timers.
- **RESET** resets all timers to **0** for the next run. The clock is reset to the horn time if set to count down in the **Scored Events** mode.
- **AUTO HORN** selects whether the horn will sound automatically when the horn time is reached. The horn is automatically set to manual in **Auto Timing** mode. The horn can be sounded at any time by pressing the **HORN** key.
- **COUNT UP/DN** sets the clock to count either up or down. This is used only in the **Scored Events** and **Cutting** mode.
- **SET DEFAULT HORN TIME** sets the time until the horn sounds in timed or scored events (if **Auto Horn** is selected).
- **SCOREBOARD ON/OFF** toggles the scoreboard output on or off.
- **PAPER** advances printer the paper.
- **EXTERNAL TIMING** brings in the time from an external FarmTek timer (used for wireless photocells).
- **MENU** displays options available within the sport code.

## **Appendix C: Daktronics Warranty and Limitation of Liability**

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# DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

This Warranty and Limitation of Liability (the "Warranty") sets forth the warranty provided by Daktronics with respect to the Equipment. By accepting delivery of the Equipment, Purchaser agrees to be bound by and accept these terms and conditions. Unless otherwise defined herein, all terms within the Warranty shall have the same meaning and definition as provided elsewhere in the Agreement.

DAKTRONICS WILL ONLY BE OBLIGATED TO HONOR THE WARRANTY SET FORTH IN THESE TERMS AND CONDITIONS UPON RECEIPT OF FULL PAYMENT FOR THE EQUIPMENT.

## 1. Warranty Coverage

A. Daktronics warrants to the original end-user that the Equipment will be free from Defects (as defined below) in materials and workmanship for a period of one (1) year (the "Warranty Period"). The Warranty Period shall commence on the earlier of: (i) four weeks from the date that the Equipment leaves Daktronics' facility; or (ii) Substantial Completion as defined herein. The Warranty Period shall expire on the first anniversary of the commencement date.

"Substantial Completion" means the operational availability of the Equipment to the Purchaser in accordance with the Equipment's specifications, without regard to punch-list items, or other non-substantial items which do not affect the operation of the Equipment.

B. Daktronics' obligation under this Warranty is limited to, at Daktronics' option, replacing or repairing, any Equipment or part thereof that is found by Daktronics not to conform to the Equipment's specifications. Unless otherwise directed by Daktronics, any defective part or component shall be returned to Daktronics for repair or replacement. This Warranty does not include on-site labor charges to remove or install these components. Daktronics may, at its option, provide on-site warranty service. Daktronics shall have a reasonable period of time to make such replacements or repairs and all labor associated therewith shall be performed during regular working hours. Regular working hours are Monday through Friday between 8:00 a.m. and 5:00 p.m. at the location where labor is performed, excluding any holidays observed by either Purchaser or Daktronics.

C. Daktronics shall pay ground transportation charges for the return of any defective component of the Equipment. All such items shall be shipped by Purchaser DDP Daktronics; designated facility. If returned Equipment is repaired or replaced under the terms of this warranty, Daktronics will prepay ground transportation charges back to Purchaser and shall ship such items DDP Purchaser's designated facility; otherwise, Purchaser shall pay transportation charges to return the Equipment back to the Purchaser and such Equipment shall be shipped Ex Works Daktronics designated facility. All returns must be pre-approved by Daktronics before shipment. Daktronics shall not be obligated to pay freight for any unapproved return. Purchaser shall pay any upgraded or expedited transportation charges.

D. Any replacement parts or Equipment will be new or serviceably used, comparable in function and performance to the original part or Equipment, and warranted for the remainder of the Warranty Period. Purchasing additional parts or Equipment from the Seller does not extend the Warranty Period.

E. Defects shall be defined as follows. With regard to the Equipment (excepting LEDs), a "Defect" shall refer to a material variance from the design specifications that prohibit the Equipment from operating for its intended use. With respect to LEDs, "Defects" are defined as LED pixels that cease to emit light. The limited warranty provided by Daktronics does not impose any duty or liability upon Daktronics for partial LED pixel degradation nor does the limited warranty provide for the replacement or installation of communication methods including but not limited to, wire, fiber optic cable, conduit, trenching, or for the purpose of overcoming local site interference radio equipment substitutions.

EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS WARRANTY, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, DAKTRONICS DISCLAIMS ANY AND ALL OTHER PROMISES, REPRESENTATIONS AND WARRANTIES APPLICABLE TO THE EQUIPMENT AND REPLACES ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY OR QUALITY OF DATA. NO ORAL OR WRITTEN INFORMATION, OR ADVICE GIVEN BY THE COMPANY, ITS AGENTS OR EMPLOYEES, SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS LIMITED WARRANTY.

THIS LIMITED WARRANTY IS NOT TRANSFERABLE.

## 2. Exclusion from Warranty Coverage

The limited warranty provided by Daktronics does not impose any duty or liability upon Daktronics for:

A. Any damage occurring, at any time, during shipment of Equipment unless otherwise provided for in the Agreement. When returning Equipment to Daktronics for repair or replacement, Purchaser assumes all risk of loss or damage, and agrees to use any shipping containers that might be provided by Daktronics and to ship the Equipment in the manner prescribed by Daktronics;

B. Any damage caused by the improper installation, adjustment, repair or service of the Equipment by anyone other than personnel of Daktronics or its authorized repair agents;

C. Damage caused by the failure to provide a continuously suitable environment, including, but not limited to: (i) neglect or misuse, (ii) a failure or sudden surge of electrical power, (iii) improper air conditioning, humidity control, or other environmental conditions outside of the Equipment's technical specifications such as extreme temperatures, corrosives and metallic pollutants, or (iv) any other cause other than ordinary use;

D. Damage caused by fire, flood, earthquake, water, wind, lightning or other natural disaster, strike, inability to obtain materials or utilities, war, terrorism, civil disturbance or any other cause beyond Daktronics' reasonable control;

# DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

- E. Failure to adjust, repair or replace any item of Equipment if it would be impractical for Daktronics personnel to do so because of connection of the Equipment by mechanical or electrical means to another device not supplied by Daktronics, or the existence of general environmental conditions at the site that pose a danger to Daktronics personnel;
- F. Any statements made about the product by any salesperson, dealer, distributor or agent, unless such statements are in a written document signed by an officer of Daktronics. Such statements as are not included in a signed writing do not constitute warranties, shall not be relied upon by Purchaser and are not part of the contract of sale;
- G. Any damage arising from the use of Daktronics products in any application other than the commercial and industrial applications for which they are intended, unless, upon request, such use is specifically approved in writing by Daktronics;
- H. Any performance of preventive maintenance;
- J. Third-party systems and other ancillary equipment including without limitation front-end video control systems, audio systems, video processors and players, HVAC equipment, batteries and LCD screens;
- K. Incorporation of accessories, attachments, software or other devices not furnished by Daktronics; or
- L. Paint or refinishing the Equipment or furnishing material for this purpose.

### **3. Limitation of Liability**

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

It is specifically agreed that the price of the Equipment is based upon the following limitation of liability. In no event shall Daktronics (including its subsidiaries, affiliates, officers, directors, employees, or agents) be liable for any special, consequential, incidental or exemplary damages arising out of or in any way connected with the Equipment or otherwise, including but not limited to damages for lost profits, cost of substitute or replacement equipment, down time, lost data, injury to property or any damages or sums paid by Purchaser to third parties, even if Daktronics has been advised of the possibility of such damages. The foregoing limitation of liability shall apply whether any claim is based upon principles of contract, tort or statutory duty, principles of indemnity or contribution, or otherwise.

In no event shall Daktronics be liable to Purchaser or any other party for loss, damage, or injury of any kind or nature arising out of or in connection with this Warranty in excess of the purchase price of the Equipment actually delivered to and paid for by the Purchaser. The Purchaser's remedy in any dispute under this Warranty shall be ultimately limited to the Purchase Price of the Equipment to the extent the Purchase Price has been paid.

### **4. Assignment of Rights**

The Warranty contained herein extends only to the original end-user (which may be the Purchaser) of the Equipment and no attempt to extend the Warranty to any subsequent user-transferee of the Equipment shall be valid or enforceable without the express written consent of Daktronics.

### **5. Governing Law**

The rights and obligations of the parties under this warranty shall not be governed by the provisions of the United Nations Convention on Contracts for the International Sales of Goods of 1980. Both parties consent to the application of the laws of the State of South Dakota to govern, interpret, and enforce all of Purchaser and Daktronics rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Warranty, without regard to conflict of law principles.

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

For Purchaser's protection, in addition to that afforded by the warranties set forth herein, Purchaser may purchase extended warranty services to cover the Equipment. The Extended Service Agreement, available from Daktronics, provides for electronic parts repair and/or on-site labor for an extended period from the date of expiration of this warranty. Alternatively, an Extended Service Agreement may be purchased in conjunction with this warranty for extended additional services. For further information, contact Daktronics Customer Service at 1-800-DAKTRONICS (1-800-325-8766).