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1 Introduction

This manual explains the operation, installation, maintenance, and troubleshooting of the OmniSport® 2000 series timing console Version 16.02.23 and beyond. (Version numbers refer to the date the version was released; 16.02.23 was released on February 23, 2016.) For additional information regarding the safety, installation, operation, or service of this system, refer to the telephone numbers listed in **Daktronics Exchange and Repair & Return Programs (p.3)**.

Important Safeguards

- Read and understand all instructions, both general and for specific sports.
- Always turn off and/or unplug the control equipment when it is not in use. Never yank the power cord to pull the plug from the outlet. Grasp the plug and pull to disconnect.
- Do not drop the control console or allow it to get wet.
- This device shall not be exposed to dripping or splashing, and no objects filled with liquid shall be placed upon it.

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

• An internal battery backup 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 fire.

- Do not let the power cord touch hot surfaces or hang over the edge of a table that would damage or cut the cord.
- If an extension cord is necessary, use a three-pronged, polarized cord. Arrange the cord with care so that it will not be tripped over or pulled out.
- Before using an extension cord, inspect the cable thoroughly and verify its compliance with the local electric codes.
- Do not disassemble control equipment or electronic controls of the display; failure to follow this safeguard will make the warranty null and void.
- Inspect console for shipping damage such as rattles and dents, and verify that all equipment is included as itemized on the packing slip. Immediately report any problems to Daktronics; save all packing materials if exchange is necessary.

As a safety feature, this product has a three-wire, ground-type plug equipped with a third (grounding) pin. This plug only fits into a grounding-type power outlet. If unable to insert the plug into the outlet, contact a qualified electrician to replace the obsolete outlet.

Specifications Label

Power specifications as well as product assembly information can be found on the rear of the console.

When calling Daktronics customer service, please have the assembly number and the date manufactured available to ensure the request is serviced as quickly as possible.

Introduction

Resources

Figure 1 illustrates a Daktronics drawing label. The drawing number is located in the lowerright corner of a drawing. This manual refers to drawings by listing the last set of digits. In the example, the drawing would be referred to as **DWG-1007804**. All references to drawing numbers, appendices, figures, or other manuals are presented in bold typeface. Any drawings referenced in a particular section are listed at the beginning of it as shown below:

DAKTRONICS, INC. BROOKINGS, SD 57006 DO NOT SCALE DRAWING				THE CONCEPTS EXPRE THIS DRAWING ARE CO DO NOT REPRODUCE EXPRESSED WRITTEN O COPYRIGHT 20	ESSED AND E ONFIDENTIAL BY ANY MEA CONSENT OF 10 DAKTRON	DETAILS SI AND PROF NS WITHON DAKTRON ICS, INC.	HOWN C PRIETAR JT THE ICS, INC	N r.
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Figure 1: Drawing Label

Reference Drawings:

System Riser Diagram......DWG-1007804

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

Reference Guides

Daktronics provides several convenient reference guides for OmniSport 2000 timing system operation. Customers should keep these guides with the timing console equipment for reference before, during, and after meets. All of the documents below are available online at <u>www.daktronics.com/manuals</u>.

Reference Guide	Document #
OmniSport 2000 Timing Console Quick Reference Guide Provides basic steps to host swimming, diving, water polo, and track.	ED-13584
OmniSport 2000, Pro Swimming, & Hy-Tek Software Quick Guide Explains how to connect and use the Hy-Tek and Pro Swimming software with the OmniSport 2000 console.	ED-13876
OmniSport 2000 Pro Swimming Software Manual Explains installation and operation of Pro Swimming software.	DD3109473
OmniSport 2000 Pro Diving Software Manual Explains installation and operation of Pro Diving software.	DD3109489
OmniSport 2000 Pro Synchronized Swimming Software Manual Explains installation and operation of Pro Synchro software.	DD3109495
Aquatics Interface Technical Guide Advanced display interface setup.	DD1387596

Console Revision History

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

Daktronics Exchange and Repair & Return Programs

Exchange Program

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

Before contacting Daktronics, identify these important numbers:

Assembly Number: _____

Job/Contract Number: _____

Date Manufactured/Installed: _____

Daktronics Customer ID Number: _____

To participate in the Exchange Program, follow these steps:

1. Call Daktronics Customer Service.

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

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

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

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

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

If any part is not returned within five (5) weeks, a non-refundable invoice will be presented to the customer for the costs of replenishing the exchange parts inventory with a new part. Daktronics reserves the right to refuse parts that have been damaged due to acts of nature or causes other than normal wear and tear.

Repair & Return Program

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

1. Call or fax Daktronics Customer Service.

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

2. Receive a case number before shipping.

This expedites repair of the part.

3. Package and pad the item carefully to prevent damage during shipment.

Electronic components, such as printed circuit boards, should be placed in an antistatic bag before boxing. Daktronics does not recommend using packing peanuts when shipping.

4. Enclose:

- name
- address
- phone number
- the case number
- a clear description of symptoms

5. Ship to:

Daktronics Customer Service

[Case #]

201 Daktronics Drive, Dock E

Brookings, SD 57006

Daktronics Warranty & Limitation of Liability

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

2 Timing System Setup

Daktronics aquatics timing system setup will be unique to each pool. This manual describes a typical pool setting. Generally it is recommended that 2-3 people assist in the setup for a meet. Allow 2-3 hours to complete the timing system setup for the first time.

Equipment Overview

The information in this section is general information only and may or may not apply to every pool setting.

- Touchpads
- Relay Take-Off Platforms (RTOPs)
- Deck cabling with lane modules and lane extension cable
- Horn start with start cable
- OmniSport 2000 console, power pack, and swimming keypad insert
- Meet management computer and software with serial cable

Touchpad Installation

Before the meet, install the touchpads in the pool (Figure 2). With one person on each end of the touchpad, carefully lower the touchpad into the pool. Center the touchpad in the lane. Secure the supplied adjustable bracket to the pool gutter. If the pool does not have a gutter, secure the touchpad by running a cord through the holes on top of the touchpad and tying it to the starting block.

Connect the touchpads to the lane modules or deck plates. Read and follow instructions in **Deck Cabling & Lane Modules (p.5)** before plugging the touchpads into the deck cabling.

For more information, refer to the **Daktronics T-7000 Figure Series Touchpads Installation & Maintenance Manual** (DD1953274), available online at <u>www.daktronics.com/manuals</u>.



Figure 2: Touchpad Next to Wall

Deck Cabling & Lane Modules

Note: Always place cables and equipment in areas of minimal traffic. Cover wires and cables with a mat to prevent accidents. Figure 3 illustrates an important detail to always remember when plugging dual banana connectors. The GND (ground) tab on the plug must line up with the black female jack for the timing system to work. Remember this when connecting all dual banana plugs.



Figure 3: Insert GND Side to Black Female Jack

On-deck System

Figure 4 illustrates a typical on-deck swimming installation.



Figure 4: On-deck Swimming Installation

The on-deck system uses lane modules to interconnect the touchpads and backup buttons to the timing consoles. Lane modules are universal and can be used on any lane. The console knows which module it is by where it is connected in the chain. Each lane module (**Figure 5**) controls one touchpad and up to three button inputs. The lane modules daisy chain together, allowing another module to be plugged into the end to add another lane (**Figure 6**).

Easy servicing is an additional benefit of on-deck cabling. If one lane goes bad, the whole harness does not have to be replaced; only that individual lane module needs replacing. Simply remove and replace with another Daktronics lane module.



Figure 5: Daktronics Lane Module



Figure 6: Daisy Chain Lane Modules

Maintenance Kit

The OmniSport 2000 Console Maintenance Kit (Daktronics part # 0A-1240-0003) includes tools and materials to help set up and maintain the life of the timing equipment.

- Use the brush provided in the kit to remove any corrosion from the connections (Figure 7).
- Use silicon lubricant every time the system is set up and taken down to protect the jacks and plugs. This will ensure a good connection and reduce corrosion. Simply squeeze silicone into the neck of the tube and insert male pins of banana connectors into the neck to coat with silicone (**Figure 8**).



Figure 7: Cleaning Connections



Figure 8: Lubricating Connections

Connecting to Lane Modules

Refer to **Figure 9** to verify proper connection of the lane module to the touchpad, push buttons and next lane connection. Refer to **Figure 4** for an overview of a typical swimming setup of lane modules with the timing system.

Note: Do not connect the far end lane module harness into the near end lane module harness. Each harness system should connect to the OmniSport 2000 console separately. For more information on how to connect to the timing console, refer to **Connections on the Console (p.12)**.

- Modules for each lane are connected through the jacks labeled **TO NEXT LANE**. The lane cable will fit only one way. Position lane modules so that they are out of the way of the swimmers and are not directly submerged in water.
- Touchpads connect to the lane module jack labeled **TOUCHPAD**.
- The push button connection jacks (marked **BUTTON 1**, **BUTTON 2**, and **BUTTON 3**) accept input from backup buttons held by up to three timing judges per lane. As with the touchpad connection, match the black jack with the GND side of the plugs (**Figure 10**). If only one backup button is used, connect it to the jack marked **BUTTON 1**. **Figure 11** illustrates a lane module with all the connections made except to the RTOP.
- The RTOP connection plugs into BUTTON 3, again matching the black jack with the GND side of the plug. If the system is only using 1 or 2 buttons per lane, plug the banana connector from the RTOP directly into Button 3. If the system is using all three buttons per lane, the RTOP plug may be piggy-backed to the push button plug using Button 3 (Figure 12). For more information about RTOPs, refer to Section 9: Relay Take-Off Platform (p.98).
- The Lane Extension Module (**Figure 13**) acts as an extension cable between the OmniSport 2000 console and the closest lane module. Standard lengths of lane extension available are 25', 50', 100', and 200' (7.6 m, 15.2 m, 30.5 m, and 61 m).



Figure 9: Lane Module to Next Lane



Figure 10: Push Button



Figure 11: Lane Module with All Connections (Except RTOP)



Figure 12: RTOP Connected to BUTTON 3



Figure 13: Lane Extension Module

Always Remember:

- If some touchpads are connected backwards and some are connected correctly, it will cause touchpads to register times when the pad has not been touched.
- Look out for poor connections between plugs and jacks on the lane module. Inspect cabling and connectors for corrosion and damage. Use the silicone lubricant from the maintenance kit to protect the jacks and plugs from corrosion. Refer back to
 Figure 7 and Figure 8 to see how to clean the plugs and use the silicone before and after each use.

Connecting to the Timer

Connect the four-pin plug from the deck extension from the "Near" end (or primary finish end) into the **J10 NEAR END** jack on the rear of the OmniSport 2000 console. If "Far" end (or split end) touchpads are being used, connect the four-pin plug from that extension cable into the **J11 FAR END** jack on the rear of the OmniSport 2000 console. For more information on the OmniSport 2000 timer connections, refer to **Figure 23**.

In-deck System

The in-deck cabling system is designed to eliminate most cables from the pool deck. Conduits and junction (J-)boxes embedded into the floor and walls contain the cables needed to connect the touchpads, push buttons, RTOPs, lane speakers, horn start, back stroke speaker, and bulkheads to the timing console (**Figure 14**).





Figure 14: Typical In-deck Installation

The only cable on the pool deck will be the ones that connect a piece of equipment like a horn start, timing console, touchpad, etc. to a connection plate on a J-box. J-boxes mounted in the deck are commonly referred to as deck boxes. J-boxes mounted in or on the wall are referred to as wall boxes. Conduits contain the cable runs between J-boxes.

Individual Lane Deck Plate

The individual lane deck plate (**Figure 15**) has six sets of connection jacks.

- The touchpad will plug into the dual banana jack labeled **TP**.
- Buttons 1-3 will plug into the banana jacks labeled **B1**, **B2**, and **B3**.
- The RTOP will plug in the jack labeled **B3**. If the system has three push buttons, piggy-back the RTOP connector onto **B3** connector.
- The SPEAKER connector is for a 45 ohm
 individual lane speaker. Do not substitute any
 other type of speaker without consulting Daktronics.



Figure 15: Lane Deck Plate

• The **START** connector is used to plug in a remote strobe. In some cases, if a system does not have an independent start location deck plate, the horn start will be connected to the nearest individual lane deck plate. This will provide for the start and lane speaker connections, but not the Aux (Backstroke) speaker connection.

Start Location Deck Plate

The start location deck plate (**Figure 16**) is used for both the horn start location and the Aux (Backstroke) speaker location.

Plug the cable from the horn start jack labeled **START** to the mating jack on the deck plate labeled **START**. Plug the cable from the horn start jack labeled **AUX SPEAKER** to the mating jack on the deck plate labeled **AUX SPEAKERS**. Do the same for the jacks labeled **LANE SPEAKERS**. Most facilities will have one of these plates on both sides of the pool.

If there is a second plate on the other side of the pool, connect a Daktronics auxiliary speaker to the jack labeled **AUX SPEAKERS**. If using a remote strobe for the opposite side of the pool, plug it into the jack labeled **START**.



Figure 16: Start Deck Plate

Bulkhead Deck Plate

Figure 17 illustrates a bulkhead location deck plate, which combines the connectors from a start deck plate with the lane data from a lane interface in the bulkhead. Typically one of these plates is on the bulkhead and one on the deck. Jumper cables over the deck connect the two plates together.

Wall Plates

A wall plate is typically where the timer is set up and connected to the system. There are a variety of wall plates. Two of the most common wall plates are shown in **Figure 18** and **Figure 19**.



Figure 17: Bulkhead Deck Plate



Figure 18: Wall Plate (Double-Ended)



Figure 19: Wall Plate (Single-Ended)

Horn Start HS-200 System

Reference Drawings:

HS-200 Horn Start: On-Deck Configuration......DWG-185695

For typical placement of start system components, refer to **Figure 4** for on-deck installation and **Figure 14** for indeck installation. For specific part numbers and options available, refer to **DWG-185695**.

Horn Start Components

- HS-200 Horn Start unit with wired microphone (Figure 20) or optional wireless microphone (Figure 21)
- Individual lane speaker (Figure 22); 10 max per HS-200
- Microphone extension, 15' (4.6 m)
- Start cable, 30' (9.1 m)



Figure 20: HS-200 w/ Wired Mic





Figure 22: Lane Speaker

Figure 21: HS-200 w/ Wireless Mic

Connecting the Horn Start System

- Connect the lane speaker cable into the LANE SPEAKERS jack on the HS-200. If an auxiliary speaker is used, connect the cable from the desired speaker location to the AUX SPEAKER jack on the HS-200.
- Connect the 30' (9.1 m) start cable between the **START** (normally open) jack on the HS-200 and the **J12 START INPUT** jack on the rear of the OmniSport 2000.
 - If using the HS-200 with an Omega[®] timing console, connect the start cable from the console to the **N/C** (normally closed) jack on the HS-200.
 - If using the HS-200 with a Colorado Timing System (CTS) console, connect the start cable from the console to the **START** (normally open) jack on the HS-200.
- For HS-200 units with a wired mic, connect the mic into the 4-pin jack labeled MIC.

For additional information about horn start setup and operation, refer to the **HS-200 Owner's Manual (ED-12935)**, available online at <u>www.daktronics.com/manuals</u>.

Connections on the Console

Reference Drawings:

Connector Designations: OmniSport 2000 DWG-154282

Become familiar with all connections on the rear of the OmniSport 2000 timing console as shown in **Figure 23** and **DWG-154282**. Make all connections to the OmniSport 2000 console and attached equipment before turning on the **POWER** switch.



Figure 23: OmniSport 2000 Console Rear View

Equipment	Connections To Use			
Single ended pool with Hy-Tek MEET MANAGER software and a numeric scoreboard	J2 or J3 SCOREBOARD OUTPUTS to control single or multi-line scoreboards, event/heat, score, and lengths/record time modules J6 RESULTS PORT or ETHERNET jack for bi-directional communication with results programs such as Hy-Tek's MEET MANAGER J10 NEAR END lane harness (in-deck or on-deck) J12 START INPUT from horn start J13 POWER IN from wallpack transformer Hear the console beeper via headphones			
Far End (Split End) lane harness (in-deck/on-deck)	J11 FAR END lane harness (in-deck or on-deck)			
OmniSport Pro software	J4 EXPANSION PORT or ETHERNET jack for bi-directional communication with OmniSport Pro software			
Matrix scoreboard	J5 RTD PORT or ETHERNET jack for bi-directional communication with Daktronics display control software (or CTS scoreboard, J5 only)			
Track/rodeo push button timing	J7 SWITCH INPUTS is a port for external control switches			
Water polo	J8 MAIN CLK SWITCH is a game clock switch port for water polo J9 SHOT CLK SWITCH is a shot clock switch port for water polo			
Judge console	J14 NEAR END for Judge console J15 FAR END for Judge console A maximum of 9 judges can be plugged into either J14 or J15. Diving has a maximum of 9 judge consoles. Synchronized swimming has a maximum of 18 consoles. (Example: 4 judges on one side of the dive well are plugged into J14 and 3 judges on the other side of the pool are plugged into J15 for a total of 7 judges.)			

Deck Harness & Horn Start Connections

Figure 24 shows a Near End deck harness connected to J10 and the cable from the horn start plugged into J12. Remember the GND tab on dual banana plugs lines up with the black female connector.



Figure 24: Lane Data & Horn Start Plugs

Daktronics Numeric Display Connection

Connect the 1/4" scoreboard signal cable into J2 or J3 SCOREBOARD OUTPUTS as shown in Figure 25. Ensure the plug is fully inserted into the jack on the console.



Figure 25: Numeric Scoreboard Plug

Serial Connections

Pro Swimming & Results Software (MEET MANAGER)

Using a 10' (3 m) straight-through 9-pin male to 9-pin female serial cable (Daktronics part # W-1267, or Radio Shack part # 27-117), connect the male end to **J4 EXPANSION PORT** for Pro Swimming software or **J6 RESULTS PORT** for MEET MANAGER (**Figure 26**).



Figure 26: Serial Connection to Console

Connect the female end to a serial port on the computer with the software (Figure 27).

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 28**. Drivers for the USB-to-serial adapter should be found on a CD provided with it or on the manufacturer's web site.





Figure 27: Serial Connection

Figure 28: 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' (15.2 m) 9-pin male to 1/4" cable (Daktronics part # 0A-1240-0032). Connect the 9-pin male end to **J5 RTD PORT** (**Figure 26**). Connect the male 1/4" plug into the appropriate connector on the wall plate.

Network Connections

The **ETHERNET** jack allows Real-Time Data (RTD) to be sent over a local area network and connection to the Daktronics Pro Swimming software (**version 3.0+**) and Hy-Tek MEET MANAGER (**version 5.0+**).

Connect a Cat5 Ethernet cable between the **ETHERNET** jack on the OmniSport 2000 console (**Figure 29**) and a network hub (**Figure 30**).





Figure 29: ETHERNET Connection

Figure 30: Network Hub Connection (1)

Connect a Cat5 Ethernet cable between the network hub (**Figure 31**) and the Daktronics Pro Swimming software, Hy-Tek MEET MANAGER software, and/or Daktronics matrix display control computer (**Figure 32**). Connect as many computers as the network hub supports.



Figure 31: Network Hub Connection (2



Figure 32: 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 the **Setup Network Menu** sections of this manual to change the settings as needed.

Note: Older versions of the console (shipped prior to June 2013) do not have the ETHERNET 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.

Basic Timing System Maintenance

After each meet, it is crucial to follow these basic maintenance procedures to ensure the longevity of the timing equipment.

- Turn off the power to all equipment including the OmniSport 2000 console, HS-200 horn start, results computer, OmniSport 2000 Pro computer, matrix computer, scoreboard, printers and any other equipment associated with the system.
- When the system is set up for an event, touchpads should be removed from the water every 48 hours, inspected, and allowed to dry for 6 hours.
 - Inspect the cable and connector for nicks, cuts, and corrosion. Use the brush provided in the maintenance kit to remove any corrosion from the banana connections.
 - Verify that all edge protectors are securely in place.
 - Verify the boot along the top front bend is not cut.
- At the end of each meet, remove the touchpads from the pool, and store them in a room outside of the pool environment and chemicals. Recommended temperatures in storage area should range between 33° F and 90° F (55° C and 32.2° C) with adequate fresh air circulation. Daktronics offers an optional touchpad cart for easy transport and storage.
- Coat all cleaned cabling connections with silicone grease (Daktronics Part# LU-1002), included in the maintenance kit.
- Completely dry all equipment and place into appropriate tote or carrying cases for storage. Place portable cabling equipment into a storage tote.

For more information about touchpad care and maintenance, refer to the **Daktronics T-7000 Series Touchpads Installation & Maintenance Manual (DD1953274)**, available online at <u>www.daktronics.com/manuals</u>.

3 General Console Features & Operation

This section introduces the operator to the OmniSport 2000 timing console. The console is reliable and easy to use for beginning operators, but has the ability to expand its capabilities to satisfy the desires of the most advanced operator. The OmniSport 2000 console comes programmed for swimming, diving, pace clock, water polo, track, and as an interface for Pro Diving and Pro Synchronized Swimming programs.

The OmniSport 2000 console capabilities are expanded when used with Pro software programs available for swimming, diving and synchronized swimming.

Console Operation

The console face consists of three separate two-line by 16-character liquid crystal displays (LCDs), an area for a sport-specific insert, number/ menu keypad, and a built-in printer. Refer to **Figure 33** to locate these components on the control console face.



Figure 33: OmniSport 2000 Timing Console Layout

Sport Inserts

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

If an insert is lost or damaged, a printed copy of the insert drawing from **Appendix B**: **Sport Inserts (p.151)** may be used until a replacement is ordered.

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

Sport	Insert Number
Swimming	LL-2549
Diving	LL-2566
Water Polo	LL-2569
Track	LL-2573
Pace Clock	LL-2581

All of the keys that pertain to a specific sport code insert are explained in detail in their respective sport section.

General Console Features & Operation

In addition, Quick References and Menu Flowcharts for the Standard Keys and many of the more common individual sports are provided in **Appendix C: Menu Navigation Shortcuts (p.159)**.

Throughout this manual, the names or letters of keys on the keypad are enclosed in brackets (such as **[ENTER]**).

Keypad

To the right of the sport-specific insert is a keypad with a section of permanent keys. These keys include the numbers **0-9**, **CLEAR/NO**, **ENTER/YES**, and arrows. Notice the up and down arrow keys are also labeled **NEXT** and **LAST**. The function of these keys will depend on what the LCD is prompting the operator to do.

Built-in Printer

The OmniSport 2000 console features a convenient built-in thermal printer which prints out event results and console settings in under 10 seconds.

Paper Installation

- 1. Open the printer cover by turning the knob with the arrow to the left 1/4 turn, or until the arrow points left. Lift the cover up and forward to remove it from the console (**Figure 34**).
- 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. If the paper is placed incorrectly, the printer will act like it is printing, but no text will appear on the paper. Refer to **Figure 35**.



Figure 34: Removing Printer Cover



CORRECT



INCORRECT

Figure 35: Printer Paper Installation

- 5. Place the newly cut squared edge of the paper into the back side of the black rubber roller on the printer. With the console powered on, the printer should automatically advance, pulling the paper through the printer.
- 6. Replace the cover and turn the latch back to the right until the arrow is pointing upward to secure.

Thermal printer paper can be ordered from Daktronics (part # SF-1034). It is also readily available at office supply stores. Max dimensions: 2.28" (58mm) wide, 165' (50.3 m) long

General Console Features & Operation

Startup

After all connections are made, power on the OmniSport 2000 timer. Initially the LCDs confirm the product, the version and software identification as illustrated below.

In most cases, the timer name should be set to "OMNI-1". Selecting a different name sets the console to a specific IP address when there are multiple consoles on a network (up to 4). Use $[\uparrow][\downarrow]$ to change the name as needed, and then press **[ENTER]** to continue.

Using the numeric keypad, enter the date and then press [ENTER]. Enter time of day in 24 hour format and then press [ENTER]. The date and time appears on each event printed from the OmniSport 2000 console.

Note: If the current date/time is not set and the console is connected to the Pro software, the console will take the computer's date and time.



Use $[\uparrow][\downarrow]$ on the console to select the desired sport, and then press **[ENTER]**.

If the timing console includes a radio, read **Setting Radio Channels (p.19)**. If the console does not include a radio, skip to **Updating Software in the Console (p.21)** on how to receive software updates from Daktronics. For further explanations on swimming, diving, and water polo operations, refer to the respective sections of this manual.

Setting Radio Channels

Reference Drawings:

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

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

Note: The number of available broadcast groups varies depending on the generation and region of radio receiver: Gen V receivers have 1–4, while Gen VI receivers have 1–8. Gen VI units sold internationally (Europe/Asia) only have groups 1–4.

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

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

To determine the settings of a scoreboard, first power it down and shut off any radioequipped 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 operator for transmitter settings after selecting the sport mode.

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

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

Single Controller System

In a single controller system, all radio receivers and all scoreboards receive signal from the same console. The default channel and broadcast group settings on the receiver are not typically modified. An example of this type of system is a typical high school swimming installation.

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

Multiple Controller System with Single Broadcast Group

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. An example of this type of system is a natatorium with multiple pools and a scoreboard and controller on each pool.

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 Groups

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.

One example of this scenario is split pool operation, where scoreboards are used to score multiple meets at once, but can be grouped together to score one event if necessary. Refer to the drawings listed at the beginning of this section for more information.

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			
The LCD will toggle between these 2 screens.	The LCD shows the current radio settings along with a prompt to accept or modify these values.			
RADIO SETTINGS	If the radio se	ttings are cor	rrect press [ENTER].	
	If these values are incorrect, press [CLEAR] , and the LCD at bottom left is shown, allowing edit of the channel or broadcast group setting.			
CLEAR TO MODIFY	Use the number keys to enter the desired broadcast group and press [ENTER] to accept. The asterisk will move to the channel setting.			
BCAST GROUP X* RADIO CHAN YY	Edit the channel number to the desired value and press [ENTER] to accept.			
X = broadcast group number YY = channel number	Broadcast Group	Channel Setting	Control Scoreboards	
	0	0	All Scoreboards	
	1	0	All in BCAST Group 1	
		1-8	Set to corresponding BCAST 1 Channel	
	↓	¥	¥	
		0	All in BCAST Group 8	
	8*	1-8	Set to corresponding BCAST 8 Channel	
	* Gen V radic groups 2 and	receivers ha 4, only chanı	ve only 4 groups; also, on broadcast nels 1-4 may be used.	

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:

- 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: <u>http://dakfiles.daktronics.</u> <u>com/downloads/Sports_Products/</u> <u>OmniSport%202000/Timer/</u> <u>DakLoader2.exe</u>

A prompt will appear on asking to **Run** or **Save** the program. Click **Run** (twice if necessary). The DakLoader2 program should open (**Figure 36**).

 Go to File > Hex Files and click Download Latest Hex Files (Figure 37).

🛷 DakLoa der 2	
Eile Console Communications About	
Choose Setup Type: C Aquatics C Rodeo C Speed Skating	Update Progress:
• Other	
Status Configure Communications Settings and S	etup Type.

Figure 36: DakLoader2

🛷 DakLoader 2					
Eile	<u>C</u> onsole	Co <u>m</u> munications	<u>A</u> bout		
Н	ex Files 🕩	Download Lat	est Hex File	es	1
E:	xit	ype:		Update	Progress
_	C Aqu	atics			

Figure 37: Download Latest Hex Files

- 4. Click **Communications** and select the COM port that the 9-pin serial cable is currently connected to.
- 5. On the main screen, click **Aquatics**, and then click **Update**.
- 6. 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.

4 Swimming Mode Operation

Reference Drawings:

Insert; LL-2549 OmniSport 2000 Swimming DWG-163808

The sport insert drawing is located in **Appendix B: Sport Inserts (p.151)**. If an insert is lost or damaged, a copy of the insert drawing may be used until a replacement is ordered.

Refer to **Section 3: General Console Features & Operation (p.17)** for information on how to start up the timer and use the sport insert.

General Features

The swimming mode of the OmniSport 2000 timer will perform automatic timing and judging for up to ten lanes with two touchpads per lane (one touchpad at each end of pool for near and far end splits; Relay Take-Off Platforms; and one, two or three backup buttons per lane. Races of up to 66 splits can be accommodated with all split times and final times logged on the printer as they occur. All near and far split times, final times and backup times are also recorded in memory and are available for additional printouts as needed.

The OmniSport 2000 timer can be set up to record split times from both ends of the pool. Near-end cabling is connected to the **J10 NEAR END** connector on the rear of the timer. Far-end cabling is connected to the **J11 FAR END** connector. Refer to **Connections on the Console (p.12)** for more information.

The OmniSport 2000 timer can store approximately 50 races, depending on the number of lanes in the pool and the length of the races. The OmniSport 2000 timer will automatically clear the oldest events. This ensures that old races will not be confused with new ones by the operator. If the OmniSport Pro Swimming software is connected to the console, the stored races in the console will be transferred to the computer and erased in the console. After that point, the results can be found in the Pro software.

The always-ready-start feature is another operator aid that allows correct times to be recorded in the event of certain operator errors or equipment problems. These features are described fully in **Always Ready Start (p.34)**.

Getting Started

When starting the OmniSport 2000 console, set the console to the swimming mode. Press **[ENTER]** when the right LCD shows 1-SWIMMING.

The top line of the right LCD shows the console name (OMNI#) and running time (RT). The bottom line displays the event number (E), the heat (H), the current round (R), and

the total number of lengths to be completed (L). The current round shows whether the race is a standard timed event (blank), a preliminary (P), a semifinal (S), or a final (F). The current round (R) only appears when the selected event is found in the programmed event order. The (R) disappears if an event is selected that is not programmed. To set the Event Order, refer to **Edit Event Order (p.43)**.

The top line of the right also LCD displays notifications (in place of console name):

BATT – Console is running on battery power

NETWK – Network cable is disconnected; refer to Connections on the Console (p.12)

PAPER – Paper is not in place; refer to Built-in Printer (p.18)

Swimming Mode Operation

SELECT SPORT	
1-SWIMMING	



The left and middle LCDs show lane status and current length. The top line is lane status and the bottom line is the length counter.



The following table explains the lane status symbols that may appear on the left and middle LCDs during a race. This can be changed if using touchpads at one or both ends of the pool. Refer to **Timer Operation During Race (p.32)** for more information on Near End and Far End touchpad status during a race.

Symbol	Definition
-	Lane is turned on but unarmed
NN	Arming delay ("NN" equals a number from 1-99 that is counting down to 0)
+	Lane armed for a split time
*	Lane armed for a finish time
0	Lane has finished the race
?	No lane module present or fault
A	An overly active input; likely a bad connection or faulty button
R	A faulty RTOP; replace the batteries in the RTOP

Swimming Keys

The keys highlighted on the Swimming insert (LL-2549) are grouped together and shaded by lane. Lane 1 keys line-up vertically with Lane 1 on the LCD, Lane 2 keys with Lane 2, and so on through Lane 10. The keys with borders are used together or perform similar operations, as described in the following sections.

Additional keys on the fourth row along with keys on the right side of the insert are used regularly during a meet. These keys are not lane specific, but are equally important in operating the timer.

Lane On/Off

At the start of a race, the timer automatically turns every lane on. It is up to the operator to turn lanes off as needed.

For each lane that is empty (no swimmer in that lane), press **[LANE ON/OFF]** to tell the timer to not expect any data from that lane.

A second use of the key is to temporarily disable a lane and then turn it back on. For example, this is useful during a relay event. If the arming delay on a lane is about to expire and the athlete has not climbed out of the pool, the operator can press **[LANE ON/OFF]** for that lane and prevent a false touch from the touchpad. After the athlete is out of the pool, the operator then presses **[LANE ON/OFF]** again to turn the lane on and prepare for the next valid input from the touchpad.

Finish Arm & Finish Arm All

The timer receives split times and finish times. What is unique about a finish time is that it is the end of the race, and the timer compares the final time to the back-up time (push buttons). The final time is what is used to place that lane into the final results. The **Finish Arm** key for each individual lane is used to force that lane to be ready for a finish time. Typically when the timer has a pre-programmed event order and the operator selects a particular event, the timer knows how many split times to receive before it is expecting a finish time. The **Finish Arm** key is used in the event a swimmer is on his/her final leg and the timer is not ready to receive the finish time. Press **[FINISH ARM]** to set the status of that lane to *Lane armed for a finish time* and the length count will be adjusted accordingly.

Examples of when to use **Finish Arm**:

- A missed touchpad time and the timer was still expecting a split time
- Timer received an extra touchpad time caused by a swimmer reaching over the top of the pad
- A swimmer did not climb out before the arming delay expired on a relay
- Touchpad malfunction
- Wrong event number used and incorrect length of the race; typically this would be corrected by pressing [FINISH ARM ALL]
- Operator is not using a pre-programmed event order and the incorrect number of lengths was entered; typically this would be corrected by pressing [FINISH ARM ALL]
- Arming Delay programmed too long and the lane is not armed to receive the finish time

Split Arm & Split Arm All

When the timer is armed for a split, it only receives times from the touchpad input and if it is a relay exchange, the Relay Take-Off Platform (RTOP). If the arming delay is counting down for a particular lane, and the swimmer is about to press the touchpad for a split time, the operator can press **[SPLIT ARM]** for the desired lane and the timer will immediately decrement the length count by one and set the lane status to *Lane armed* for a split time. If the lane is already armed for a split time, finish time or finished, ignore **Split Arm**.

Examples when to use **Split Arm**:

- During a relay, the arming delay for the touchpad was too short because a swimmer from one of the first three legs was still in the water and triggered the touchpad before climbing out
- Another swimmer reached over the top of a touchpad and triggered the pad
- A malfunctioning touchpad
- If the arming delay was set too long and all lanes need to be armed for a split, press [SPLIT ARM ALL].
- If there was a start system failure, press **[START]** then **[SPLIT ARM ALL]** and **[ENTER]**. The timer records the finish order of the race. The time will be incorrect, but the finish order will be correct.

Start

In most cases, there is a horn start connected to the timing console to signal the start of the race. Under unique circumstances, the operator has the option to start the timer counting by pressing **[START]**. The printer will label the results with the source of the start. If the keypad was used it would be labeled *Source: Keyboard*. If the start was from the horn start it would be labeled *Source: External*.

Examples when to use Start:

- Test the timing system or scoreboard
- In the event of a start system failure, press **[START]** then **[SPLIT ARM ALL]** and **[ENTER]**. The timer records at least the finish order of the race. The time will be incorrect, but some data is better than no data.

Store Print

Press **[STORE PRINT]** to tell the timer to store the race results for that heat up to that moment. In addition to storing the results, the timer will print whatever printouts are configured in the settings menu for the printer. Refer to **Print Menu (p.45)**. If using the OmniSport 2000 Pro Swimming software, the operator may view/edit the settings from that program (refer to **Section 3** of **DD3109473**). If **[STORE PRINT]** was pressed before the race was complete, it must be pressed again when the race is complete in order to save and print the complete results; otherwise, any changes/additions will be lost.

Examples when to use Store Print:

- To verify the results before the console is reset; this might be to look at the tolerances between the touchpad and back-up times to see if the back-up push buttons should be used instead of the touchpad
- To produce more than one set of printouts; press [STORE PRINT] more than once and each time will create a printout

Paper Feed

Press **[PAPER FEED]** to have the printer advance the paper. The printer will not print on the advanced lines.

Event/Heat

The **[NEXT EVENT]**, **[HEAT +1]**, **[HEAT -1]**, and **[EVENT/HEAT]** keys tell the timer which event/ heat is happening next. When an event order is pre-configured, the timing console knows the length of the event and the record time for that event.

Having a programmed Event Order makes operating the timing system during a meet much easier. There are three methods of setting up an Event Order.

- 1. Download from a results program like Hy-Tek's MEET MANAGER. Refer to the OmniSport 2000 and Hy-Tek Software Quick Start Guide (ED-13876).
- 2. Using the OmniSport 2000 Pro software, pick the Event Order from one previously saved, or create a new one.
- 3. Manually program it in the OmniSport 2000 console.

Event Order Type	Information Included
Downloaded from Hy-tek or OmniSport 2000 Pro software	Event Number, Round, Distance, Gender, Age Group, Stroke, Heat Title and Record Time
Edited in the OmniSport 2000 console	Basic information needed to set the timer: Event Number, Round, Distance and Record Time
When an Event Order is downloaded, it does not include information like the start lists, or the number of heats. One thing that many operators worry about is re-downloading, if the seeding or the number of heats change. This is not necessary. The OmniSport 2000 console gets that information using the Event Order. When the operator selects the event, the timing console asks the results computer for the current start list for that event, round and heat.

An **Event Order** has room for up to 500 different pre-programmed events numbered 1-999 with or without an A-Z designator following the event number. The events do not need to be in numerical order. They should be programmed in the order that the events occur.

The **Event Number** can be from 1 to 999. Following the event number there is a position to set an alpha character used to distinguish between varsity and junior varsity, or different levels of swimmers when "A" swimmers must compete against each other and "B" against "B".

The **Round** can be left Blank, set to Preliminary, Semi-Final, or Final. The Round allows the results program to distinguish between Heat 1 of prelims versus Heat 1 of finals. The printouts will also be designated with a round.

The **Distance** is the total distance of the event that the competitors will swim. The console has the length of the pool configured. If the console was configured to a 25 yard pool and a distance of 200 was set, the console would do the math and automatically set the number of lengths for that event to 8.

Additional Settings in Pro Software

The **Type** can be left Blank, set to Girls, Boys, Womens, Mens or Mixed. This puts the correct title for that event on the printout from the Pro software and the event title on a matrix display.

The **Age** can be set to whatever is selected for the meet. This enters the correct title for that event on the printout from the Pro software and the event title on a matrix display.

The **Stroke** can be left blank, set to Free Style, Back Stroke, Breast Stroke, Butterfly, Individual Medley, Freestyle Relay, Medley Relay, Backstroke Relay, Breaststroke Relay, Butterfly Relay, 1 Meter Diving, 3 Meter Diving, or Platform. When the timing console sees a relay event, and relay platforms are connected, it will utilize them in its timing. During individual events, the OmniSport 2000 console will ignore platforms for everything except the start reaction. Remember, there will be no start reactions for events that start in the water like Backstroke and Medleys. When the timing console opens to a diving event, it will prompt the operator to switch to diving.

The **Heat** can be left blank, set to Final, Consolation, Bonus Final or Timed Final. This serves no other purpose than to put the correct title for that event on the printout from the Pro software and the event title on a matrix display.

The **Record Time** is for display on the record time auxiliary module. When an event order is downloaded from meet management software and the record time is entered into the program, the event order will be included.

Lengths

If the operator has not configured the console with an event order, it is pertinent that the correct number of lengths be set for the race being timed. Press **[LENGTHS]** followed by the number of lengths to be completed using **[0-9]>[ENTER]**. Every time the swimmer goes from one end of the pool to the other is a length. To figure out the correct number of lengths, divide the distance of the race by the length of the pool. Example: a 200 yard race in a 25 yard pool (200/25=8), Lengths = 8. The maximum number of lengths that the OmniSport 2000 console will time is 66.

Reset

When a race is complete, the operator presses [RESET]>[ENTER] to reset the timer.

Note: If the operator has not pressed **[STORE PRINT]** before resetting the timer, pressing **[RESET]** will store the race and print the results in addition to resetting the clock.

If the timer was not reset before the start of the next race, refer to **Always Ready Start** (p.34).

Menu

Press [MENU] to access additional functions and settings in the console. Section 5: Swimming Mode Menus & Settings (p.41) describes the menus in swimming and how to navigate them.

Touch

Use the touch keys during a race to adjust lengths count for a lane. This keeps the timer's internal length count correct if there is a missed split time or an accidental touch. To make the changes to the desired lane, press **[+ TOUCH]** or **[- TOUCH]** followed by the specific **[LANE ON/OFF]** key (or the lane number on the numeric keypad) and press **[ENTER]**.

Examples of when to use the touch keys:

- Missed touchpad on a split; press [+ TOUCH]>[LANE ON/OFF] for the desired lane
- A swimmer in the water got out late during a relay and triggered the touchpad. If the operator caught it right away, [SPLIT ARM] would have been pressed. If the arming delay has counted down and the lane is armed for the next touch, press [- TOUCH]>[LANE ON/OFF] for the desired lane.

Edit

The function of **[EDIT]** depends on whether the time is reset, or if the clock is counting.

If the Timer is Reset

With the timer reset, press **[EDIT]** to bring up the Edit Start Menu on the right LCD. The Time of Day for the last start received will be displayed. Verify that is the correct start time and press **[ENTER]**, or use the numeric keypad to input the correct Time of Day and press **[ENTER]**.



Examples of when to use **Edit** when the console is Reset:

- The console was reset accidently and the race was still going on.
- If two OmniSport 2000 consoles are being used in parallel and one timer either missed the start, or it was accidently turned off, a start Time of Day could be read from the printout on the other console.

Swimming Mode Operation 28

If the Clock Is Still Counting

When the running time is counting, press **[EDIT]** to make corrections to the times in the current race memory. Use **[EDIT]** to insert a backup or a stopwatch time if there was a problem with a touchpad. Distinguished from touchpad times on the LCD and printouts, edited times indicate an "E" if manually entered or a "B" if it is a backup time.



The top line of the left and middle LCDs display the current lane status. An arrow by the lane also indicates which lane is currently selected for editing. The following table defines what each symbol means.

Symbol	Definition
•	There is an error in the lane and the data needs to be edited.
DQ	Indicates the person in the lane has been disqualified.
E	Indicates an edited time.
	Lane has been turned off.
OK	All data is correct.

The bottom line of the left LCD shows the lane and time, and the center LCD shows the backup time. The right LCD shows the options available for editing the lane times. Press [1] to skip to the next lane. Press [2] to use the backup time. Press [3] to edit the lanes time. Press [4] to turn the lane ON/OFF.

Disqualification (DQ)

Before the meet, the timing operator should clarify with the meet referee if he/she wants the swimmers to be disqualified on the timer. Clarification of this is important for results to be properly ranked on the printouts and meet management software which will show as a DQ on the scoreboard.

Press **[DQ]** (disqualification) and **[LANE ON/OFF]** for the desired lane (or press the lane number on the numeric keypad) and press **[ENTER]**. The DQ operation is normally done at the conclusion of the race, after the officials have ruled on the situation that caused the swimmer to be disqualified. On exit from the DQ command, the scoreboard is automatically updated and any subsequent printouts will show the revised placing.

The DQ operation shown on the right LCD as illustrated, can be done at any point in the race and does not affect arming or recording of times for the lane. Press the same lane number again while in the DQ command to re-qualify the swimmer and the original status indicator is returned.

DISQUALIFY (DQ) LANE NUMBER:10

Typical Single-line Scoreboards

The normal single-line display of timing information is completely automatic and does not require any operator input. The following information is for normal (automatic) operation. **Figure 38** shows the sequence of information on single-line scoreboard during a race.

Start of Race

The running time counts up from 0.0.

Split Times

The scoreboard will display the first place split time with the lane. The split time will hold for however many seconds as set up in the scoreboard menu of the OmniSport 2000 console (default = 15 seconds).

The display will continue showing the running time.

Finish Times

At the end of the race, the scoreboard will scroll through the results in the order that the competitors finish. Each finish time will hold at least the amount of time as set up in the scoreboard menu of the OmniSport 2000 console (default = 5 seconds).

Timer Reset

The scoreboard scrolls through the results of the last race until the start of the next race.



Figure 38: Single-Line Race Sequence

Typical Multiple-Line Scoreboards

Multiple-line scoreboards are any LANE, PLACE and TIME digit board that will display two or more lanes of results at one time. If the scoreboard is big enough to show all of the lanes in the pool at the same time, the console can be configured to show the results in lane order or place order.

If there are more lanes in the pool than the scoreboard can show, the console will display the results in place order by scrolling through the results one page at a time. To configure how the OmniSport 2000 console should display information on the scoreboard, refer to **Setup Numeric Scoreboard Menu (p.51)**.

The normal multi-line display of timing information is completely automatic and does not require any operator input. **Figure 39** illustrates a 3-line scoreboard with a 6-lane pool. **Figure 40** illustrates a 6-line scoreboard with a 6-lane pool.

Start of Race

The scoreboard shows the running time on the top line of the scoreboard and blanks the remaining lines. The running time counts up from 0.0. If the number of lines on the scoreboard

equals the number of lanes in the pool, the operator can select lane order or finish order. If the number of scoreboard lines is less than the number of lanes in the pool, the results are forced to place order.



Figure 39: 3-Line/6-Lane Race Sequence



Figure 40: 6-Lane Race Sequence

Split Times

Split times are shown in lane order (default) for each lane on the corresponding scoreboard line. Split times are held for 15 seconds (default). If there are fewer lines on the scoreboard than lanes in the pool, only the first place split is displayed. Finish times will page according to the number of lines set. Refer to **Setup Numeric Scoreboard Menu** (p.51).

Finish Times

Finish times are displayed on the scoreboard until the next race begins.

Timer Reset

The scoreboard shows last race data until the start of the next race.

Swimming Mode Operation

Pre-race Setup for the Timer Operator

Before the race begins, the operator must set and confirm that the OmniSport 2000 console is ready to record the correct event.

Verify the Console is Reset

Confirm the console is reset and that RT shows "00:00.0". Set the correct Event, Heat and Length in the OmniSport 2000 console. In the example at right, the timer is about to record



Event number 2 for the first Heat in the Finals. The length is 2, which means it is likely either a 50-meter race in a 25-meter pool or a 100-meter race in a 50-meter pool.

Press **[NEXT EVENT]>[HEAT +1]** or **[HEAT -1]** or simply press **[EVENT HEAT]** to enter the correct Event and Heat. Confirm the correct number of lengths (can be up to 66) for the current event. If the number of lengths needs to be changed, press **[LENGTHS]**, the appropriate **[1-9]>[ENTER]**.

Timer Operation During Race

During the race, the operator watches the meet officials, lane status indicators on the console's LCDs, and swimmers in their lanes.

Check for Unused Lanes

The timer operator should turn off any unused lanes after visually verifying any open lanes in the pool. Press **[LANE ON/OFF]** for the appropriate lane.

Watch Lane Status LCDs

The operator watches the lane status indicators on the left and middle LCDs to confirm that all touches are recorded by the touchpads. With touchpads at the near end only, the lane status is shown on the top line of the LCDs. Line two shows the lengths completed. Refer to **Getting Started (p.23)** to review the symbols and their interpretation.

An example of the LCD on a typical Near End Only configuration is shown below.



Line 2 shows the lengths completed. The symbol **I** denotes this information. The timer operator uses the information on completed lengths to confirm if a swimmer has missed a touch or an extra touch has occurred, requiring subsequent use of **Split Arm**, **Finish Arm**, **+ Touch** or **- Touch**. Refer to **Swimming Keys (p.24)** for more information on using those keys.

If both pool ends have touchpads, the LCDs show both ends' lane status and lengths completed. Use $[\uparrow][\downarrow]$ to cycle through 3 lane status views shown below.

Note: In these other view modes, the near end status is on the top line of the LCD with the lengths completed status on the bottom, or the far end status is on the bottom with lengths completed on the top.

	1	2	3	4	5		6	7	8	9	10		
	4 4	5 4	+ 2	6 5	2 1		3 2	7 *	*	*	+ *	E:011	RT:01:37.6 H:03 R:P L:08
Ne	ar Er	nd ar	nd Fo	ar End	d Touch	р	ad Sto	atus					
	1	2	3	4	5		6	7	8	9	10		
	+ 3	4 4	+ 3	*	* 7 0		+ 5	7 4	+ 4	* 4	* 3 0	E:011	RT:01:37.6 H:03 R:P L:08
Ne	ar Er	nd To	uch	bad	Status a	nc	d Leng	gths	Com	plet	ed		
	1	2	3	4	5		6	7	8	9	10		
	3 4	4 +	3 2	5 *	7 🖪 0		5 *	4 +	4 +	4 +	+ 3 🛛	E:011	RT:01:37.6 H:03 R:P L:08

Lengths Completed and Far End Touchpad Status

Watch for Accurate Lane Status

Watch swimmers as they touch for splits or finish a race to verify that the correct lane status is showing. Refer to **Getting Started (p.23)** to interpret the symbols on the LCDs.

Manual Touch Commands

If necessary, add or subtract touches if swimmers miss the touchpad or have extra touches. Press **[+ TOUCH]** or **[- TOUCH]** then **[LANE ON/OFF]** at any time during a race to adjust the length count for an individual lane. Another method is to press **[+ TOUCH]** or **[- TOUCH]**, and use the numeric keypad to input the lane number followed by **[ENTER]**. This would normally be done to keep the timer's internal length count correct if a split time was missed. Press **[CLEAR]** to cancel the action any time.

Note: Manual times are marked with a +/- on printouts to distinguish them from normal touchpad times.

Start

The timer operator watches running time to verify start was received. The timer starts automatically when the horn start triggers the start of the race. Be prepared to manually start by pressing **[START]** if the timer does not start automatically with the horn start's flash and tone. If this occurs, the timer operator must notify the meet starter and the meet referee.

The timer will start any time a start impulse is received. Pressing **[START]** may also be used to start the timer. The printer notes if the start is External or Keyboard.

The OmniSport 2000 console has an internal time-of-day clock that continually runs when the timer is turned on which allows the always-ready-start feature. The internal clock runs even when the race clock is stopped.

When a Start is Missed

If a start was missed because the timer was not reset (race clock was still running from the previous race), the start impulse is logged in the memory and on the printer. To prompt the operator that a start has occurred, reset the timer. If the operator chooses to use the received start signal, the timer will automatically start timing the event by calculating the correct running time. If the timer has already been reset, press **[EDIT]** to retrieve the start impulse used for the last race.

Swimming Mode Operation

Timer Operations After Race

After the race, the operator saves and prints the results, makes corrections if necessary, and disqualifies a swimmer if the meet referee requests it. Review **Edit (p.28)** and **Disqualification (DQ) (p.29)**.

Store Print

Refer to **Store Print (p.26)** to keep the race data for later use and print the results for verification.

If an error is observed on the printout, press **[EDIT]**. Press **[STORE PRINT]** to verify the correction. After all corrections are made, press **[RESET]>[ENTER]**.

The timer is now ready to begin the next event. Advance to the next event or heat and continue. Follow the steps in **Pre-race Setup for the Timer Operator (p.32)** and **Timer Operation During Race (p.32)** through each race.

Reading & Editing the Printout

The OmniSport 2000 printer uses the following symbols in its printouts to label data.

Symbol	Definition
+	Plus touch
-	Minus touch
B(1-3)	Buttons 1 through 3
R	Relay Take-Off Platform trigger
*	Discrepancy between touchpad and backup
B or BK	Backup time
Е	Edited time
М	Manual time
F	Early Relay exchange
R(1-3)	Relay exchange 1 through 3

Special Features of the OmniSport 2000 Console

Always Ready Start

The Always Ready Start feature is based on the fact that the OmniSport 2000 timer has an internal time-of-day clock that continually runs when the timer is turned on, even when the race clock is stopped. This feature is used when the timer was not reset, a start was missed, or the timer was accidentally reset after a valid start. Every start signal is recorded on the race log and in the timer. It is extremely helpful to know how to reset the timer if a start is missed because the timer was not reset. Refer to **Reset (p.28)**.

Arming Delay

The Arming Delay is the time after a start or split that the timer ignores the touchpad. It is primarily used in relay races to allow the athlete time to exit the pool without adding a touch. The OmniSport 2000 console has an arming delay count for each lane after every start and touch. This feature is set when configuring the console before the race. Refer to **Arming Delay (p.50)** for more information.

Printouts from the Built-in Printer

This section illustrates typical printouts from the OmniSport 2000 console. To create a printout from the console's built-in printer, refer to **Print Menu (p.45)**.

Pool Configurations

Save a printout of system settings (Figure 41) to reuse in the competition pool. These settings let the console know how the physical pool and timer are configured. Setup Numeric Scoreboard Menu (p.51) describes numeric scoreboard configurations and Setup RTD/Matrix Scoreboard Menu (p.53) describes matrix scoreboard configurations. RTD and Port configurations are explained in Setup Comm Ports Menu (p.56), while Setup Printer Menu (p.57) explains the printer configurations.

```
POOL CONFIGURATIONS:
 1.Number Lanes- 10
 2.Order Lanes- NRM
 3.Pool Length- 25Y
 4.Lane Label- 1-10
TIMER CONFIGURATIONS:
 1.Start Input-
                  N.O.
 2. Touchpads-
                  NEAR
 3. Timing Input- TPAD
 4.Flag Time- .3 SEC
 5.Arming Delay- 15
 6.Precision- 1/100
 7.Takeoff- BTN/DAK
   On Input- Btn 3
   Arm Time- 0.8 SEC
SCOREBOARD CONFIGS:
 1.Num of Lines- 10
 2.Split Hold-
                  15
 3.Finish Hold-
                   5
 4. Results by- LANE
 5.Subtractive- NO
RTD CONFIGURATIONS:
 1.Num of Lines- 10
 2.Split Hold-
                  15
 3. Finish Hold-
                   5
 4. Results by- LANE
 5.Subtractive- NO
 6.Show Place-
                 NO
 7.Show Start-
                 NO
 8.RTD Offset- 0
PORT CONFIGURATIONS:
 1.Scbrd Port- M-DROP
             RTD
 2.RTD Port-
 3.Results- OMNI2000
PRINTER CONFIGS:
 1.Printer Log-
                  ON
 2.Results by-
                  LANE
 3. Print Backup-
                  YES
 4.Splits Type-
                  NONE
 5.Intensity-
                   4
 6.Number Copies- 1
```

Figure 41: Pool Configuration Printout

Swimming Printouts

Figure 42 illustrates a typical printout for a 10-lane race log. The right printout shows the heat results with backups (the times entered by the officials with backup buttons).

			STA SC	I OMN RT DAT UR(AK AISI AT E: CE:	IRONICS PORT 2000 2:54:53.996 08-27-08 KEYBOARD
			P L A	L	LENG	RACE:024 EVENT:001 HEAT/R:01 LENGTH:04
			E	E	H	-RESULTS-
D	AKI	RONICS	9	1	4 8K	1:14.74
OMN	ISP	ORT 2000			B1	1:14.84
DAT	E:	08-27-08			B2 B3	1:14.84 1:14.85
SOURC	E:	KEYBOARD	6	2	4	1:07.71
	L	RACE:024			BK	1:07.79
P L L	EN	EVENT:001 HEAT/R:01			B2	1:07.79
A A	G	LENGTH:04		-	B3	1:07.80
EE	H	-TIME-	4	3	BK	1:02.10
					B1	1:02.24
5	2	23.29			B3	1:02.24
6	2	24.07	2	4	4	58.71
3	2	24.83			BK B1	58.84
2	2	25.35			B2	58.84
8	2	26.36	1	5	15 J	55,23
9	2	27.35	-	0	BK	55.35
10	2	27.85			B1 B2	55,35
5	4	55.23			B3	55.36
4	4	58.71	3	6	4 RK	1:00.17
3	4	1:02.10			B1	1:00.28
2	4	1:03.58			B2 B3	1:00.28
2	4	1:07.71	5	7	4	1:03.58
8	4	1:11.72			BK B1	1:03.69
9	4	1:13.12			B2	1:03.68
1	4	1:14.74	-1	0	B3	1:03.71
10	4	1:16.59	1	0	BK	1:11.80
					B1 B2	1:11.79
Tvr	aica	Racelog			B3	1:11.81
1 31	0106	I NACE LOY	8	9	4	1:13.12
					B1	1:13.25
					B2 B3	1:13.25
			10	10	4	1:16.59
					BK	1:16.64
					B5 B1	1:16.63
					B 3	1:16.68
			He	at F	Res	ults with Backup
				ari	103	

Figure 42: Swimming Printout

Lane & Place Order Printouts

Figure 43 illustrates a typical Lane Order (left) and Place Order (right) printout for an 8-lane race.

O Star D Sou	DAK MNIS T AT ATE: RCE:	IRONICS PORT 2000 1:02:57.402 09-10-08 KEYBOARD	DAKTRONICS OMNISPORT 2000 START AT 1:06:41.094 DATE: 09-10-08 SOURCE: KEYBOARD
P L C E	L E N A G N T E H	RACE:344 EUENT:001 HEAT/R:01 LENGTH:04 -TIME-	L RACE:346 P E EVENT:001 L L N HEAT/R:01 A A G LENGTH:04 C N T E E H -TIME-
	5 4 3 6 2 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	$\begin{array}{c} 20.82\\ 21.10\\ 21.34\\ 21.72\\ 22.32\\ 23.09\\ 23.36\\ 23.85\\ 40.42\\ 41.24\\ 41.96\\ 42.76\\ 43.41\\ 44.30\\ 45.21\\ 46.10\\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
STAF I SOL	DAK MNIS RT AT DATE: IRCE:	TRONICS PORT 2080 1:02:57,402 09-10-08 KEYBOARD	DAKTRONICS Omnisport 2000 Start at 1:06:41.094 Date: 09-10-08 Source: Keyboard
P L A C E	L E L N A G N T E H	RACE:344 EVENT:001 HEAT/R:01 LENGTH:04 -RESULTS-	L RACE:346 P E EVENT:001 L L N HEAT/R:01 A A G LENGTH:04 C N T E E H -RESULTS-
8	1 4 BK B1 B2	46.10 46.19 46.19 46.19	1 4 4 41.99 BK 42.06 B1 42.05 B2 42.06
6	B3 2 4 BK B1 B2	46.21 44.30 44.38 44.37 44.38	B3 42.06 2 5 4 43.04 BK 43.06 B1 43.03 B2 43.06 B3 43.07
3	B3 3 4 BK B1 B2	44.39 41.96 42.12 42.12 42.12	3 3 4 43.60 BK 43.63 B1 43.63 B2 43.63 B3 43.64
2	ыз 4 4 ВК В1 В2	42.13 41.24 41.37 41.32 41.32	4 2 4 44.11 BK 44.14 B1 44.12 B2 44.14 B3 44.15
1	5 4 BK B1 B2 R2	40.42 40.57 40.55 40.57 40.58	5 6 4 44.92 BK 44.94 B1 44.94 B2 44.94 B3 44.94
4	6 4 BK B1 B2 B3	42.76 42.88 42.88 42.89 42.89 42.89	6 7 4 45.54 BK 45.53 B1 45.53 B2 45.53 B3 45.52
5	7 4 BK B1 B2 B3	43.41 43.51 43.51 43.51 43.51 43.51	7 1 4 46.44 BK 46.44 B1 46.44 B2 46.44 B3 46.47
7	8 4 BK B1 B2 B3	45.21 45.26 45.26 45.27 45.27	8 8 4 47.26 BK 47.28 B1 47.27 B2 47.28 B3 47.30
	In L	ane Order	In Place Order

Figure 43: Lane/Place Order Printouts

Relay Exchange Printout

An abbreviated Relay Exchange printout is illustrated in **Figure 44**. The OmniSport 2000 console printout shows a (+) or (-) by each swimmer's exchange. The left column printout is an example of each lane's results.

DAKTRONICS Omnisport 2000 Start at 3:07:46.2 Date: 08-27-08 Source: Keyboard	03				
L RACE:03: P E EVENT:00: L L N HEAT/R:01 A A G LENGTH:08 C N T E E H -TIME-	1 3	ST	DA OMNI ART A	KTRO SPOI	DNICS RT 2000 3:07:46.20?
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	S Start reaction time s s s s s s s s s	S P L A C E S	L A N E 1	L E N G T H 8 S R=2	EYBOARD RACE:C31 EUENT:003 HEAT/R:01 LENGTH:08 -RESULTS- 1:29.66 +0.63 +0.02
4 2 21.53 4 2 21.64 R 4 2 +0.11 5 2 22.46 5 2 22.46 R 5 2 +0.02 3 2 23.83 3 2 23.83	R R	6	2	R=4 R=6 8 S = 2 R=4 R=6	+0.00 +0.05 1:27.06 +0.57 +0.03 +0.05 +0.04
R 3 2 +0.06 6 2 25.09 6 2 25.16 7 2 25.81 R 6 2 +0.07 7 2 25.88 P 2 2 +0.07	R	4	3	8 8 8=2 8=4 8=6	1:26.03 +0.66 +0.02 +0.06 1:25.73
2 2 27.50 2 2 27.53 R 2 2 +0.03 8 2 29.13 8 2 29.17 8 2 20.17	R	1	5	S R=2 R=6 8 S P=2	+0.58 +0.11 +0.05 +0.06 1:26.09 +0.60 +0.02
R 9 2 29.86 9 2 29.91 R 9 2 40.05 1 2 30.91 1 2 30.93 R 1 2 40.02	R R	2	6	R=4 R=6 8 \$ R=2 R=4	+0.08 +0.04 1:25.39 +0.59 +0.07 +0.03
10 2 31.83 R 10 2 +0.05	RTOP time for that length and that lane	5	7	R=6 8 F S R=2 R=4 R=6	+0.02 1:26.53 +0.60 +0.07 +0.02 -0.01
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Relay exchange time for that length and R lane number R	7	8	8 S R=2 R=4 R=6 8	1:28.73 +0.65 +0.04 +0.02 +0.02 1:29.07
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		10	10	S R=2 R=4 R=6 S F	+0.61 +0.05 +0.00 +0.03 1:30.25 +0.60
2 8 1:27.06 8 8 1:28.73 9 8 1:29.07 1 8 1:29.66 10 8 1:30.25				R=2 R=4 R=6	+0.05 +0.02 -0.02

Figure 44: Relay Exchange Printout

Splits Printouts

When requesting subtractive or cumulative splits, **Figure 45** illustrates typical information recorded on the OmniSport 2000 console printouts.

	D	A K I	RONICS		D	AXI	RONICS
	OMN	ISI	PORT 2000		OMN	ISI	PORT 2000
STA	RT	ΑT	1:02:57.402	STA	RT	ΑT	1:08:24.152
	DAT	E:	09-10-08		DAT	Е:	09-10-08
50	URC	E :	KEYBOARD	S 0	URC	E :	KEYBOARD
		т.	POCE: 344			τ	BACE . 247
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	1	2	23.85		1	2	22,60
		4	22.25			4	46.40
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	3	2	21.34		3	2	21.12
		4	20.62			4	42.96
	4	2	21.10		4	2	20,66
		4	20.14			4	41.71
	-		00.00		5	2	20.86
	ອ	2	20.82		0	~	42 22
		4	19.60			-	42.55
	6	2	21.72		6	2	21.42
		4	21.04			4	44.37
	7	2	23 09		7	2	21.65
	· ·		20.00			4	44.87
		**	20.52		•	2	21 00
	8	2	23,36		0	4	AE 40
		4	21.85			4	43.43
Su	btra	ictiv	ve Splits Printout	Cu	ımu	lati	ve Splits Printout

Figure 45: Subtractive and Cumulative Splits Printout

Expectations of the Operator

Following is a list of expectations of the aquatics operator before and during a meet:

- Get the schedule of events/times and arrive an hour or more ahead of start time
- Perform a timing system check before the start of the meet on the following:
 - Touchpads, RTOPs
 - Horn start
 - Buttons
 - Scoreboard
- Confirm timing console is communicating to the display
- Ensure all touchpads are centered in their pool lane
- Download latest meet information from Hy-Tek software
- Avoid distractions during the meet and carefully pay attention to details; example: length count can be wrong if a touchpad does not activate, or the warm-up swimmer hits it accidently
- Adjust Arm Delay correctly
- Store Print and Reset after each race
- Make sure timer is on correct Event and Heat for the next race
- Turn off the equipment between sessions
- Follow the progress of the race closely; maintain correct length counts

Swimming Mode Operation

Revolving Race Memory if Pro Software Is Connected

The main window of the Pro Swimming software contains the Stored Races tab (**Figure 46**).

Cur	rent R	ace St	ored Races Scoreboards Te:	st						
Se	Select Database File: 11/12/02 09:37 🔽 Title: Mens Seniors 50Y Freestyle 💌 Race: 358 💌 Print									
Event: 3 Heat: 1 Length: 2 Date/Time: 11/12/2002 11:07:15.131 Edit Save							<u>S</u> ave			
Γ	.ane	Place	Name	Affiliation	Time	Length	Backup	B1	B2	B3
	1	8	Stout, C	TUR	41.87	2	0.00	0.00	0.00	0.00
	2	7	Kruse, D	FRA	41.35	2	0.00	0.00	0.00	0.00
	3	5	Martens, S	CAN	39.25	2	0.00	0.00	0.00	0.00
	4	3	Song, Q	CHI	37.43	2	0.00	0.00	0.00	0.00
	5	2	Gapp, B	UKR	36.80	2	0.00	0.00	0.00	0.00
	6	1	Semple, D	USA	36.31	2	0.00	0.00	0.00	0.00
	7	4	Kuck, T	MEX	38.24	2	0.00	0.00	0.00	0.00
	8	6	Rowbotham, S	KEN	39.85	2	0.00	0.00	0.00	0.00
	9	9	Anderson, S	BRZ	43.49	2	0.00	0.00	0.00	0.00
	10	10	Grann, J	IRQ	43.77	2	0.00	0.00	0.00	0.00

Figure 46: Stored Races Tab

The **Stored Races** tab allows the operator to view, print, and edit stored events. Use the dropdown boxes to select the desired event. The *Name*, *Affiliation*, and *Time* fields are all editable. To edit one of these fields, select it and click the **Edit** button, double-click it, or right-click and select **Edit**. **Print** sends the stored race data to the printer, and **Save** sends the edited data to a file.

Right-clicking on a field (Figure 47) also brings up the following actions:

- Edit allows the operator to change the field.
- **DQ** initiates the disqualification flag for that lane.
- Use Backup sets the backup-time as the lane time.
- Lane Log opens the lane log file.

Þ	Edit
	DQ
	Use Backup
B	Lane Log

Figure 47: Right-Click Menu

5 Swimming Mode Menus & Settings

The console saves the settings and does not need to be reconfigured once it is set. The quickest way to confirm settings is press **[MENU]>[3]>[3]>[ENTER]**. Reconfirm the settings before each meet by saving the printout from the previous meet.

Menu Navigation

a number when in menu mode.

Press **[MENU]** to access the Main Menu screen. The swimming mode has five menus, described in following sections.



The operator may navigate through the menus using the arrow keys or by pressing the number that precedes the menu title. To return to the main menu at any time, press **[MENU]** twice.

- Use [↑][↓] to scroll through the menus. When a selection is made, press [ENTER] to accept the menu displayed on the right LCD. Pressing an arrow is equivalent to using
 - The second method uses numbers to go directly to a desired menu choice. Using the [1]–[9] keys, enter the number sequence as shown on the OmniSport 2000 Timing Console Quick Reference Guide (ED-13584). For example, pressing [4]>[2]>[5] from the main menu prompts the operator to enter a new Arming Delay. Daktronics provides a laminated copy of the quick reference guide; keep it next to the console during a meet for convenience.

Each operator will find his/her own method that works best. Remember that when using either navigation method, pressing **[CLEAR]** at any time will go back to the previous function or menu. Pressing the **[YES]** and **[NO]** keys is the same as **[ENTER]** and **[CLEAR]**.

Note: In this manual, LCD illustrations aligned to the right indicate menu location while the set-up actions are shown on the screens to the left. Each step is illustrated as the console's right LCD prompts. The keystrokes to get to the menu shown are indicated below that menu.

Scoreboard Menu

In the Scoreboard Menu, the operator can turn the scoreboard output ON or OFF, set the dimming (brightness) level for Multi-drop displays, and display Time-of-Day on the scoreboard.



```
From Main Menu – [1] or [ENTER]
```

Scoreboard ON/OFF

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



From Main Menu – [1]>[1] or from SCBD ON/OFF Menu [1] or [ENTER]

If the setting is ON, data is sent to a scoreboard. If this setting is OFF, the scoreboard will be blank until either the start of the next race, or it is turned back ON in the menu.

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.

Dimming

This menu is used to adjust the dimming (brightness) level on scoreboards that receive Multi-drop protocol.



Use the numeric keypad to select one of the values shown in the table to the right, or use $[\uparrow][\downarrow]$ to toggle through the levels.

When to use this:

without saving, press [CLEAR].

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

To save the setting, press [ENTER]. To return to the Dimming Menu

Time-of-Day

This menu is used to display Time-of-Day (TOD) on the scoreboard. Press **[YES]** to clear the scoreboard and show Time-of-Day. Press **[NO]** to do nothing and return to the Time-of-Day menu. Use $[\uparrow][\downarrow]$ to toggle between 12 and 24 hour setting, and then press **[ENTER]**.



From Main Menu – [1]>[3] or from SCBD 3-TIME OF DAY [ENTER]

Note: The running time must be reset before the console will display Time-of-Day on the scoreboard.

Time-of-Day will remain on the scoreboard until:

- The start of the next race.
- The operator presses [**RESET**] a second time to re-display the current results on the scoreboard.
- It is toggled off in the menu. When it is toggled off, the current results will go back on the scoreboard.

When to use this:

• Any time the console is reset and the operator wants to just display Time-of-Day on the scoreboard. This might be during a break in the meet.

Edit Menu

The *Edit Menu* allows the operator to manually edit the team scores for display on auxiliary team score scoreboards and edit the basic event order.



From Main Menu – [↓]

Dimming levels: 0 = none (full bright) 1 = 90%

MENU-SCOREBOARD

From SCBD ON/OFF Menu

2-DIMMING

- 2 = 80%
- 3 = 70%
- 4 = 60%
- 5 = 50% 6 = 40%
- 7 = 30%
- 8 = 20%
- 9 = 10% (dimmest)



From SCBD 2-DIMMING Menu

Edit Team Score

This menu is used to manually edit up to 4 team scores for display on auxiliary team score scoreboards. The asterisk (*) identifies which team score is selected.



From 1-TEAM SCORE – [ENTER] or from Main Menu – [2]>[1]

Enter a score of 0 to 999 using the **[0]–[9]** keys. The asterisk (*) flashes to indicate the score is ready to enter. Press **[ENTER]** on the last score to post the scores to the scoreboard and advance to the *Edit* – *Event Order Menu*. To exit without saving the data, press **[CLEAR]**.

Some operators will use the four scores (H, G1, G2 & G3) as HOME and GUEST for men and women or HOME and GUEST for varsity and junior varsity. Another option is to post the men's scores when a men's event is finished, and the women's scores when a women's event is finished.

Note: If the console is connected to Hy-Tek MEET MANAGER, it is not possible to automatically update the team scores in the console when the team scores in MEET MANAGER are updated.

When to use this:

• Typically team scores are updated on the scoreboard after each event is finished and scored.

Edit Event Order

The Event Order menu is where the operator can choose one of the menus described below to edit the event order, insert an event into the event order, delete an event in the event order, or clear the event order entirely. Remember that the operator has three options to manage the event order. Refer to **Event/Heat (p.26)**.



From Main Menu – [2]>[↓]

Edit Order

This group of menus is used to manually enter a basic event order in the OmniSport 2000 timing console.



From Main Menu – [2]>[2]>[1] or from 1-EDIT ORDER – [ENTER]

The OmniSport 2000 timer holds up to 500 events in numbered locations. The locations allow the events to be entered in any order (example: event 001, 012, 035). An alpha character (A-Z) may also be added (example: 001A). Event locations have been numbered from 1 to 500. The asterisk (*) indicates it is OK to press **[ENTER]** and begin to edit this event location. Use [↑][↓] to select the event location number. Press **[ENTER]** when the location number to be edited is shown. Press **[CLEAR]** to return to the menu selection.

Continue through the *Event Order* settings by pressing **[ENTER]** after each setup. Press the **[0]–[9]** keys to change the event number. Use $[\leftarrow][\rightarrow]$ to set the event's alpha designator and press **[ENTER]** to accept. Use $[\leftarrow][\rightarrow]$ to change the round type (final, semi-final, prelim, blank), then press **[ENTER]** to accept.



1-EDIT ORDER

From Main Menu – [2]>[2]

Swimming Mode Menus & Settings 43



From Edit Menu [ENTER] or [2]





Using the **[0]–[9]** keys, enter a distance for the event number and press **[ENTER]**. If desired, enter a record time (REC) and press **[ENTER]** or bypass by pressing **[ENTER]** again. Entering a distance of "0" will insert a diving event. Instead of asking for a record time, it will show the dive order (A, B, C, or D) set for that event.

#001= EVT: 001	#001= EVT: 001
DISTANCE= •100*	REU: 01:30.27 *

When to use this:

- If the console is not connected to a results program that downloads the event order.
- If the console is not connected to a computer running the OmniSport Pro Swimming software.

Insert Event

This group of menus is used to insert an event into the event order.



INSERT BEFORE #001* E:001 R:P From-Main Menu - [2]>[2]>[2]

Use $[\uparrow][\downarrow]$ to select the event location number where the new event will be inserted. Press **[ENTER]** when the location number is shown.

Press the **[0]–[9]** keys to change the Event Number. Use $[\leftarrow][\rightarrow]$ to change the event's alpha designator and press **[ENTER]** to accept. Use $[\leftarrow][\rightarrow]$ to change the round type (final, semi-final, prelim, or blank) and press **[ENTER]** to accept. Subsequent events shift to new locations.

To enter a new distance for this event #, press **[ENTER]**. Use $[\leftarrow][\rightarrow]$ to change the selection and press **[ENTER]** to accept. Now using the keypad, enter a new record time (REC) and press **[ENTER]** to accept.

Entering a distance of "0" will insert a diving event. Instead of asking for a record time, it will show the dive order (A, B, C, or D) set for that event.

When to use this:

- If an event was missed and not programmed into the original event order.
- An additional event was added, like a time trial, and needs to be placed into the event order.

Delete Event

This menu is used to remove an event from the event order list.





Use $[\downarrow][\uparrow]$ to select the event location number to be deleted. Press **[ENTER]** to delete the location number shown.

When to use this:

• If an extra event was programmed into the original event order.

Clear Order

This menu is used to completely erase the entire event order stored in the OmniSport 2000 console. **Use with caution.**

MENU-EVENT ORDER 4-CLEAR ORDER

From Main Menu – [2]>[2]>[\downarrow]>[\downarrow]>[\downarrow]>[\downarrow]



Press **[YES]** to clear the entire event order and exit the menu. Press **[NO]** to exit the menu and leave the event order as is.

When to use this:

• If the existing event order needs to be completely erased from memory in the OmniSport 2000 console so a new event order can be programmed from scratch.

Remember: the operator may scroll through the sub-menus using $[\downarrow][\uparrow]$ and **[ENTER]**. From this point on, the manual uses the number sequence to navigate through the menus.

Print Menu

The *Print Menu* allows the operator to print a specific race result, the current event order in the OmniSport 2000 console, or the settings for the current console configuration.

Print Race Results

This menu is used to print races that are stored in the OmniSport 2000 console's revolving race memory. Refer to **Revolving Race Memory if Pro Software Is Connected** (p.40) for more information. Each time the console times





a race, that race is assigned a race number. The race number increments by one each time a new race is started and counts up from 1 to 999. When the console gets to race number 999, it rolls over and the next race number is 1. The console has enough memory to store approximately the last 50 races. If the memory in the console is full and a new race needs to be stored, the console deletes the oldest race in its memory.

The other time that races are deleted from memory is when the Pro Swimming software is connected to the console. All of the races stored in the console are transferred to the computer running the Pro software and erased from memory in the console.



To print a stored race, press the **[0]–[9]** keys to enter the desired race number and press **[ENTER]**. The LCD will then prompt the operator to verify the entered race number. Press **[YES]** to print the selected results. Refer to **Printouts from the Built-in Printer (p.35)** for printout samples. Press **[NO]** to ignore the selection and return to the *Print Menu*.



If the desired race has been deleted from the console's memory, the LCD will quickly flash RACE NOT FOUND.



When to use this:

• Use this to re-print a race result on the console's built-in thermal printer.

Print Event Order

This menu is used to print the event order.



Press [YES] to print the event order. Press [NO] to exit the menu without printing.

When to use this:

• It is a good idea to print out an event order before starting each session to verify that the console is expecting to time the events in the desired order.

Print Settings

This menu is used to print the console's configuration.





MENU-PRINT

2-EVENT ORDER



Press **[YES]** to print the settings. Press **[NO]** to exit the menu without printing.

When to use this:

- Print the settings after the console has been set up and functioning correctly. Keep this printout for future reference. It will be valuable if the console is loaned to someone else, a change was made in the console unknowingly, or if the console was returned to or exchanged by Daktronics for service.
- It is a good idea to pull out the known good settings and verify them to a new printout when the equipment is being set up for a meet.

Setup Pool Menu

The pool settings let the console know how the physical pool is configured. The console will retain these configurations when it is powered up the next time.

Number of Lanes

This setting tells the OmniSport 2000 console how many lanes are in the pool. The console can be set to time from 1 to 10 lanes.

OF LANES: •6* From Main Menu – [4]>[1]>[1]

Press the [0]-[9] keys to enter the number of lanes from 1 to 10. When the correct number of lanes is shown on the LCD, press **[ENTER]** to save.

Lane Order

MENU-POOL

LANE ORDER: NRM*

From Main Menu - [4]>[1]>[2]

MENU-POOL

This setting tells the OmniSport 2000 console the order data is received from the lane modules/lane interface on J10 and **J11**.

MENU-POOL

MENU-POOL

3-LENGTH

If the cabling is in-deck and using a lane interface, set this to NRM (normal). When using on-deck cabling (lane modules and deck extension), in some situations, the OmniSport 2000 console will be set up closest to Lane 1 and in others, it will be set up closest to the last lane (Lane 6 in a six-lane pool). If Lane 1 is closest to the timer, the console should be set to NRM (normal). If the console is set up on the same side of the pool as the last lane, the console should be set to REV (reversed). The operator will quickly know if the settings are incorrect because when Lane 1 results are displayed, it will show up in the last lane.

LANE ORDER: REV*

Use $[\leftarrow][\rightarrow]$ to toggle the setting from NRM to REV and then press **[ENTER]** to save.

Lenath

The console can be configured to time 25-yard, 25-meter, or 50-meter pools. The length of the pool setting is used to calculate the number of lengths.

When the console has a defined event order, it takes the distance of the event, divides it by the length of the pool to calculate the number of lengths for each event. Knowing the number of lengths in an event is important so that the console arms itself for a split or finish accordingly.



Use $[\leftarrow][\rightarrow]$ to select between 25Y, 25M, or 50M and then press **[ENTER]** to save.







From Main Menu – [4]>[1]



From Main Menu – [4]

Lane Label

This menu labels the lanes either 1–10 or 0–9.

MENU-POOL 4-LANE LABEL



Some facilities have ten lanes, but only want to utilize the center 8 lanes for a particular event or only for finals. By setting the label 0–9, the center 8 lanes are automatically numbered 1–8.

The only thing that needs to be reviewed is the numbers on the blocks.

Use $[\leftarrow][\rightarrow]$ to toggle the setting from 1–10 or 0–9 and then press **[ENTER]** to save.

Setup Timer Menu

This menu contains the settings that tell the console which inputs to use, how to read those inputs and what to do with those inputs.



Start Input

The console can be configured to receive inputs from different starting devices. Some start devices are an open switch that closes (*Normally Open*) and others are a closed switch that opens (*Normally Closed*).



From Main Menu – [4]>[2]



Typically, plug the start cable into the **START** (N/O) jack on the HS-200 horn start and plug the other end of the start cable into **J12** on the OmniSport 2000 console. When this connection is used, verify that the OmniSport 2000 console is set to N.O. (Normally Open).

The advantage of using N.O. is that two HS-200 horn starts, one on the near end of the pool and one on the far end of the pool, can both be connected in parallel to the OmniSport 2000 console's start input. This eliminates the need to move the horn start during the middle of the event.

Use $[\leftarrow][\rightarrow]$ to select between N.O. or N.C. and then press **[ENTER]** to save.

Horn Start Manufacturers	Type of Output(s)				
Daktronics (HS-200)	N.O. and N.C.				
Colorado Timing Systems	N.O.				
Omega	N.C.				

Lane Module Input

This menu tells the console if there are touchpads at the near end only, or both ends of the pool.

MENU-TIMER 2-LM INPUT



If there are no touchpads at the far end of the pool, or if they are not plugged into the deck cabling, this setting should be set to NEAR. If there are touchpads at both ends of the pool and they are plugged into a deck plate or lane module, this should be set to BOTH.

Use $[\leftarrow][\rightarrow]$ to select between NEAR or BOTH and then press **[ENTER]** to save.

Primary Time

This menu will configure the console for which timing input(s) to use as the primary time.

MENU-TIMER 3-PRIMARY TIME



The console can be set to use the TOUCHPAD or BUTTONS. One, two, or three buttons may be used. If the console is set to use buttons as the primary time:

- There is no back-up time.
- If the console receives a single button, that is the time.
- If the console receives two buttons, an average time is calculated.
- If the console receives three buttons, it takes the middle button time.

Use $[\leftarrow][\rightarrow]$ to toggle the setting between TOUCHPAD or BUTTONS and then press [ENTER] to save.

Flag Time

This menu determines the time (Flag Time) used when the touchpad is compared to the back-up time.

MENU-TIMER 4-FLAG TIME



If the discrepancy exceeds the flag time, the timer places an asterisk (*) next to that touchpad time on the final results. Most rules say that if the touchpad time and the backup time are more than 0.3 seconds, they need to be reviewed. The flag time can be set from 0.0 to 0.9 seconds. If it is set to 0.0, the console will not flag discrepancies.

Press the [0]-[9] keys to enter the flag time and then press [ENTER] to save.

Arming Delay

This menu determines the length of time (*Arming Delay*) that the touchpad will be inactive following a split time.

MENU-TIMER 5-ARMING DELAY



This function is extremely useful during relay exchanges to provide enough time for competitors to exit the pool. The delay can be set from 1 to 99 seconds; 15 to 20 seconds is typical, depending on the caliber of athletes and the length of the pool.

Press the [0]-[9] keys to enter the arming delay time and then press [ENTER] to save.

Precision

This menu sets the timer to report and display times to one hundredth (1/100) or one thousandth (1/1000) of a second. All of the rule books say that the system should time to a minimum of 1/100 of a second. MENU-TIMER 6-PRECISION

MENU-TIMER PREC: 1/100 *
From Main Menu – [4]>[2]>[6]

Use $[\leftarrow][\rightarrow]$ to select between 1/100 or 1/1000 and then press **[ENTER]** to save.

Relay Take-Off

This group of menus will configure whether Relay Take-Off Platforms are connected to the console, or if only push buttons are being used.



If the console is set to use platforms or a button, the console will also ask which button input they will be plugged into on the lane module or deck plate and the arm time that configures how long the console is comparing the touchpad to the platform. For more information, refer to **Section 9: Relay Take-Off Platform (p.98)**.



From Main Menu – [4]>[2]>[7]

The console can be set to NONE, BTN/DAKTRONICS, or OMEGA PLATFORM. NONE tells the timer that there are no platforms connected. BTN/DAKTRONICS tells the timer that a push button or a Daktronics RTOP is connected. OMEGA PLATFORM tells the timer that an Omega platform is being used. The console will use these inputs to print and display start reaction times for races that start on the block and relay exchanges for events configured as relays.

Use $[\leftarrow][\rightarrow]$ to select between NONE, BTN/DAKTRONICS, or OMEGA PLATFORM and then press **[ENTER]** to save. If the console was set to NONE, this function is completed. If either of the other two settings were selected, the console will prompt the operator for additional input information.

Since relay exchanges are only used during the splits, and back-up buttons are only needed on the final time, the timer uses the same inputs for platforms as it does for buttons. The platform can be plugged into the Button 1, 2 or 3 input on the lane module or deck plate. Typically, the Button 3 input is used.



Use $[\leftarrow][\rightarrow]$ to select between input 1, 2, or 3 and then press **[ENTER]** to save and advance to the next setting.

The relay take-off arm time is the amount of time that the console will look for an input from the platform, after it has received a touchpad. This is used to filter out any garbage data in case of teammates inadvertently bumping or slapping the top of the platform. The arming time can be set from 0.1–1.5 seconds. A setting of 0.8 seconds works the best.

RELAY TAKE-OFF ARM TIME:0.8SEC*

Press the [0]–[9] keys to enter the arm time and then press [ENTER] to save.

Note: Even with a correct arm time setting, it is very important that no one except the competitor in the event touches the platform during relay events. The console does not know the difference between the correct athlete, a teammate, or an official leaning against the block.

Beeper Volume

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

MENU-TIMER 8-BEEPER VOLUME



From Main Menu - [4]>[2]>[8]

Use [\uparrow][\downarrow] or the [0]–[7] keys to set the volume level, with 7 being the loudest setting, and then press [ENTER] to save.

Setup Numeric Scoreboard Menu

This menu configures how the console will display data on a Lane, Place, and Time numeric scoreboard.

Number of Lines

This menu sets the number of lines (1-10) of lane data that the scoreboard will display. If the number of active lanes in the pool is greater than the value set, the timer will automatically page the information in place order. The default is 10.



From Main Menu – [4]>[3]>[1]>[1]

MENU-SCOREBOARD

From Main Menu – [4]>[3]



Press the [0]–[9] keys to enter the number of lines and then press [ENTER] to save.

Split Hold Time

Select Split Hold Time to configure how long the split times remain on the scoreboard. The Split Hold Time can be set from 1-99 seconds. The default time is 15 seconds.

MENU-NUMERIC 2-SPLT HOLD TIME



Press the **[0]–[9]** keys to enter the number of seconds split times will be displayed and then press **[ENTER]** to save.

Note: If the number of lanes in the pool is greater than the number of lines on the scoreboard, the timer will automatically page the information in place order. For splits, only the first place split will display and hold for the amount of time set in the *Split Hold Time* menu. Finish times will page according to the amount of time set in the *Finish Page Time* menu. Refer to **Typical Single-line Scoreboards (p.30)** and **Typical Multiple-Line Scoreboards (p.31)**.

Finish Page Time

This menu configures how long (0 to 99 seconds) each page of the Finish Times will hold on the scoreboard. The default time is 5 seconds. MENU-NUMERIC 3-FIN PAGE TIME



then press [ENTER] to save.

Press the [0]-[9] keys to enter the number of seconds each page will be displayed and

When to use this:

• Use this feature when there are fewer Lane, Place, and Time lines on the scoreboard than the number of lanes in the pool.

Results Order

This menu configures the console to display results on the scoreboard in either Lane Order or Place Order. If the number of lanes in the pool is greater than the number of lines on the scoreboard, the timer will display the information in place order regardless of this setting. The default is Lane Or



in place order regardless of this setting. The default is Lane Order.



RESULTS ORDER ORDER-PLACE*

From Main Menu – [4]>[3]>[1]>[4]

Use $[\leftarrow][\rightarrow]$ to select either LANE or PLACE and then press **[ENTER]** to save.

When to use this:

- Select LANE to display the results in the order of the lane in which the swimmers finished.
- Select PLACE to display the results in the order of which the swimmers placed.

Subtractive Splits

This setting configures the console to display only the cumulative split or the first subtractive split followed by the cumulative split on the scoreboard. The default is NO.

MENU-NUMERIC 5-SUBTRACTIVE



Use $[\leftarrow][\rightarrow]$ to select YES or NO. If the timer is set to YES, the scoreboard shows subtractive splits and then shows the cumulative splits. Press **[ENTER]** to save.

Note: It is important for the timer operator to explain this to coaches before the meet.

Show DQ

SHOW DQ

This menu configures what will show on the scoreboard when there is a disqualification (DQ).

SHOW DQ

MENU-NUMERIC 6-SHOW DQ



Use $[\leftarrow][\rightarrow]$ to select to display the DQ ONLY (in the TIME digits) or to display the DQ/TIME, with "DQ" in the PLACE digits and the time in the TIME digits. Press **[ENTER]** to save.

Show Start

This menu tells the console whether or not to display the start reaction time (from RTOPs) on a numeric scoreboard.

MENU-NUMERIC 7-SHOW START



SHOW START REACTION=YES*

From Main Menu - [4]>[3]>[1]>[7]

Use $[\leftarrow][\rightarrow]$ to select NO (do not show start reaction time) or YES (show start reaction time) and then press **[ENTER]** to save.

Setup RTD/Matrix Scoreboard Menu

Number of Lines

This menu sets the # of Lines of lane data being sent to the matrix display. If the number of lanes in the pool is greater than the value set, the timer will automatically page the information in place order. The default setting is 10.



From Main Menu – [4]>[3]>[2]



From Main Menu - [4]>[3]>[2]>[1]

Press the **[0]–[9]** keys to enter the number of lines appropriate to the facility's display and then press **[ENTER]** to save.

Split Hold Time

Select Split Hold Time to configure how long the split times remain on the display. The Split Hold Time can be set from 1-99 seconds. The default time is 15 seconds. MENU-RTD/MATRIX 2-SPLT HOLD TIME



Press the [0]-[9] keys to enter the number of seconds and then press [ENTER] to save.

Note: For splits, only the first place split will display and hold for the amount of time set in the *Split Hold Time* menu. Finish times will page according to the amount of time set in the *Finish Page Time* menu.

Finish Page Time

This menu configures how long (0 to 99 seconds) each page of the Finish Times will hold on the display.

MENU-RTD/MATRIX 3-FIN PAGE TIME



Press the **[0]–[9]** keys to enter the appropriate length of time the finish time will appear on the display and then press **[ENTER]** to save. The default time is 5 seconds.

Results Order

This menu configures the console to display results in either *Lane Order* (default) or *Place Order*. If the number of lanes in the pool is greater than the number of lines configured for the display, the timer will display the information in place order regardless of this setting.

MENU-RTD/MATRIX 4-RESULTS ORDER



From Main Menu – [4]>[3]>[2]>[4]

Use $[\leftarrow][\rightarrow]$ to select either LANE or PLACE and then press **[ENTER]** to save.

When to use this:

- Select LANE to display the results in the order of the lane in which the swimmers finished.
- Select PLACE to display the results in the order of which the swimmers placed.

Subtractive Splits

This setting configures the console to display only the cumulative split or the first subtractive split followed by the cumulative split on the display. The default is NO.

From Main Menu – [4]>[3]>[1]>[5]



Use $[\leftarrow][\rightarrow]$ to select YES or NO. If the timer is set to YES, the display shows subtractive splits and then shows the cumulative splits. Press **[ENTER]** to save.

Note: It is important for the timer operator to explain this to coaches before the meet.

Show DQ

This menu configures what will show on the display when there is a disqualification (DQ).

MENU-RTD/MATRIX 6-SHOW DQ



Use $[\leftarrow][\rightarrow]$ to select to display the DQ ONLY (in the TIME field) or to display the DQ/TIME, with "DQ" in the PLACE field and the time in the TIME field. Press **[ENTER]** to save.

Show Start

SHOW START

This menu tells the console whether or not to display the start reaction time (from RTOPs) on the display.

MENU-RTD/MATRIX 7-SHOW START



Use $[\leftarrow][\rightarrow]$ to select NO (do not show start reaction time) or YES (show start reaction time) and then press **[ENTER]** to save.

SHOW START REACTION=YES*

Show Place

This menu determines whether or not to display place with split times.

MENU-RTD/MATRIX 8-SHOW PLACE

MENU-RTD/MATRIX

9-RTD/OFFSET





From Main Menu – [4]>[3]>[2]>[8]

Use $[\leftarrow][\rightarrow]$ to select YES or NO. If the timer is set to YES, the display shows the swimmer's place and split time. Press **[ENTER]** to save.

RTD Offset

This menu will add an offset to the Real-Time Data (RTD) output to the matrix display.



Use [\uparrow][\downarrow] to toggle through the RTD offset settings (*OK*, *5K*, *10K*, or *15K*). Each setting adds 5000 to the original item numbers, up to 15000. The default setting is *OK* (no offset). To save the setting, press [ENTER].

When to use this:

- Data from more than one pool/OmniSport 2000 is going to one display.
- If using a Daktronics M2, M3, or V-Link[®] controlled display, this menu allows multiple RTD inputs directly into the display.

Setup Comm Ports Menu

The following Comm Ports menus select the protocol used for transmitting data to the display and communicating with a results program.

Scoreboard Outputs

MENU-COMM PORTS SCBD: MULTIDROP* From Main Menu - [4]>[4]>[1]

Select Scoreboard Outputs to assign a protocol to transmit data from the J2 and J3 outputs on the console.

Use $[\leftarrow][\rightarrow]$ to select MULTIDROP, MULTILINE, or OMEGA protocol, depending on the type of display used, and then press **[ENTER]** to save. MULTICAST is reserved for future use.

When to use this:

- By default, the OmniSport 2000 is set to MULTIDROP, and this will work for most Daktronics scoreboards built after 2000.
- If the Daktronics scoreboard does not appear to function with the MULTIDROP protocol, set the OmniSport 2000 to MULTILINE. To verify the scoreboard protocol is set to MULTILINE, unplug the signal cable from the back of the console, and then cycle power to the scoreboard. When it powers up, "P1" will appear on the left two digits.
- If the display is manufactured by Omega, set the console to OMEGA.

RTD Port

Select RTD Port to assign a protocol, either Real-Time Data (RTD) or Colorado Timing System (CTS), to transmit out of the J5 RTD PORT on the console.

Use $[\leftarrow][\rightarrow]$ to select RTD (default) to send information to a Daktronics display controller or CTS to send to a numeric CTS scoreboard, and then press [ENTER] to save.

Results Port

COMM PORTS

RSLT: OMNI 2000* From Main Menu – [4]>[4]>[3]

Select Results Port to assign a protocol to transmit out of the J6 RESULTS PORT on the console to communicate with meet management software.



Use $[\leftarrow][\rightarrow]$ to select OMNI 2000, OMNI 6000, or CTS, depending on what the meet management software is expecting to receive, and then press **[ENTER]** to save.

Note: If using an older version of Hy-Tek Meet Manager, it may require configuring this port to the OmniSport 6000 data. Selecting Omni 6000 transmits Omni 6000 RTD item numbers on the RTD output.



MENU-SETUP

4-COMM PORTS







MENU-COMM PORTS

2-RTD PORT

Setup Printer Menu

This menu configures which printouts will be printed on the built-in printer in the console as well as the intensity of the print on those printouts.

Race Log

The Race Log menu allows race logging to be turned ON/ OFF. Typically the Race Log is set ON. As times are registered, the printer will automatically print the results.



Use $[\leftarrow][\rightarrow]$ to toggle race logging ON or OFF and then press **[ENTER]** to save.

When to use this:

• Using the Race Log is the most thorough way to identify issues with the system. Daktronics recommends that the Race Log is always turned on.

Results

The *Results* menu selects printouts by *LANE* or *PLACE* order. The results printout format is used for verification and is usually the preference of the meet management program operator.

MENU-PRINTER 2-RESULTS



From Main Menu – [4]>[5]>[2]

Use $[\leftarrow][\rightarrow]$ to select LANE or PLACE and then press **[ENTER]** to save.

Backups

The Backups menu configures whether or not backup times will be printed with the race results. Printing backup times is usually the preference of the meet management program operator.

MENU-PRINTER 3-BACKUPS



MENU-PRINTER BACKUPS: NO *

From Main Menu – [4]>[5]>[3]

Use $[\leftarrow][\rightarrow]$ to select YES (backups enabled) or NO (backups disabled) and then press **[ENTER]** to save.

Splits

This menu configures whether or not split times will be printed with the race results.





From Main Menu – [4]>[5]>[4]

Use $[\leftarrow][\rightarrow]$ to select NONE, SUBTR (subtractive) or CUMUL (cumulative) split times and then press **[ENTER]** to save.

Swimming Mode Menus & Settings

MENU-SETUP 5-PRINTER

MENU-PRINTER

From Main Menu – [4]>[5]

1-RACE LOG

Number of Copies



Press the [1]-[5] keys to select the number of copies to print and press [ENTER] to save.

Intensity

This menu sets the printer's contrast for easy readability. The typical level is 5.

PRINT	INTER	ISITY
LEVEL	1-5:	5∗
From Main I	Nenu – [4]>[5]>[6]

Press the [1]-[5] keys to select the print intensity and press [ENTER] to save.

Setup Time-of-Day Menu

This menu is used to set the console's date and time.



MENU-SETUP 6-TIME OF DAY

Press the [0]-[9] keys to enter the correct date and time and then press [ENTER] to save. Press [CLEAR] twice to exit without saving and retain the previous time and date.

Setup Network Menu

This menu is used to configure various network settings for outputting Real-Time Data (RTD) to displays and connecting to Pro Swimming and Meet Manager software.

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-NETWORK NETWORK: ON *

MENU-NETWORK NETWORK: OFF*

From Main Menu - [4]>[7]>[1]

Use $[\leftarrow][\rightarrow]$ 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.

IP Address

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





From Main Menu - [4]>[7]>[2]



MENU-PRINTER 5-# OF COPIES





In most cases, the standard IP address should be selected. Press [1] followed by [ENTER] and the display will verify the console's IP address. The standard IP address varies by console name as shown in the table at right.

If a custom IP address is required, such as for connecting to a non-Daktronics network, press [2] followed by [ENTER]. Press the [0]–[9] keys to enter a new value for each group of numbers and press [ENTER] after every group. To select a standard address instead, press [CLEAR] twice to exit the menu.

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

IP ADDR- OMNI1

192*168.

0. 55



Press the **[0]–[9]** keys 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 4-GATEWAY ADDRES



Press the **[0]–[9]** keys 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.

RTD Port Number

This menu allows the operator to set or verify the RTD port number of the console. The default setting is shown below.

1-STD*	2-CUST
PORT#-	3002
From Main Monu - [4]>[7]>[5]	

From Main Menu – [4]>[7]>[5]

- In most cases, the standard RTD port number should be selected. Press [1].
 - If the RTD will be sent to a Daktronics DVX/DVN video display, press [1] followed by [ENTER]. The standard port number will vary by console name as shown in the table at right.
 - If the RTD will be sent to a Daktronics Galaxy message center, press [2] followed by [ENTER]. The standard port number will always be "3002".

MENU-NETWORK 5-RTD PORT #

1-DUX/N	2-GALXY*
PORT#-	3002

Name	RTD Port #
OMNI1	21000
OMNI2	21001
OMNI3	21002
OMNI4	21003

Name	IP Address	
OMNI1	192.168. 0.55	
OMNI2	192.168. 0.56	
OMNI3	192.168. 0.57	
OMNI4	192.168. 0.58	

If a custom RTD port number is required, press [2]. Press the [0]-[9] keys to enter a new value and press [ENTER]. To select a standard port number instead, press [CLEAR] twice to exit the menu.

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.

MAC	ADDRESS
09:E	C:03:01:06
From Mo	ain Menu – [4]>[7]>[6]

MENU-NETWORK NETWORK PRO:ON * From Main Menu – [4]>[7]>[7]

MENU-NETWORK NETWORK MMR:ON *

Pro Software & Meet Manager Enable

This menu allows the operator to enable network communications to Pro Swimming and Meet Manager (results) software.

Use $[\leftarrow][\rightarrow]$ to toggle between ON/OFF and then press [ENTER] to continue.

Use $[\leftarrow][\rightarrow]$ to toggle between ON/OFF and then press **[ENTER]** to save.

Test Menu

The OmniSport 2000 timer is equipped with features that test battery level, the lane modules, and the numeric scoreboard. The following submenus explain how to use each of these tests. It is important to run through these tests before the meet begins to prevent problems from occurring during the meet.

Battery Test

This menu checks the battery power level.



The battery level will show as CHARGED or LOW. Press [ENTER] to exit the menu.





MENU-MAIN

5-TEST MENU

7-NETWK PROZMMR

CUSTOM. PORT#- 18000*

MENU-NETWORK

6-MAC ADDRESS

Lane Module Test

This menu tests the lane module inputs.



The left and middle LCDs will show the lane module input status by lane. Button feedback will appear as B1, B2, or B3 in the lane being tested. Touchpad feedback will appear as TP. All devices should be tested before every session. Press **[ENTER]** to exit the menu.

Scoreboard Test

These menus check the numeric scoreboard drivers.

Cycle ON/OFF

This menu checks the signal to the scoreboard.



MENU-TEST 3-SCOREBOARD

MENU-TEST

2-LANE MODULES



Press [1] to toggle the scoreboard ON and OFF. When this menu is selected, an all ON signal is sent at intervals of approximately 3 seconds. Press [ENTER] to exit the menu.

Driver Address

This menu shows which addresses each of the drivers on the scoreboard are set to. The addresses were set when the display was installed.





Press [2] to display the driver addresses. Press [ENTER] to exit the menu.

Digit Number This menu shows the digit designation.



Press [3] to display a digit number. The number or letter will show which output on the

driver that digit is plugged into. Press [ENTER] to exit the menu.



6 Diving Mode Operation, Menus, & Settings

Reference Drawings:

Insert; LL-2566 Omni 2000, Diving DWG-180044

The sport insert drawing is located in **Appendix B: Sport Inserts (p.151)**. If an insert is lost or damaged, a copy of the insert drawing may be used until a replacement is ordered.

Refer to **Section 3: General Console Features & Operation (p.17)** for information on how to start up the timer and use the sport insert.

General Features

The OmniSport 2000 console includes a diving program that is useful for smaller dive meets. If the meet requirements exceed the functionality of the program built into the console, refer to the **OmniSport 2000 Pro Diving Software Manual (DD3109489)**. Some of the major features include:

- Up to four separate dive orders (events) labeled A, B, C and D
- Up to 25 divers per dive order
- Up to 13 rounds per diver
- Uses 2, 3, 5, 7, or 9 judge's scores to calculate the award
- Three methods of entering dive sheets:
 - Manually before the event
 - While the event is running
 - Download from a results program like E-dive or DiveMeets.com
- Dive sheets contain the four-digit dive number, position, and degree of difficulty for each dive
- Ability to cut divers
- Log and results printouts
- Judges' scores can be entered:
 - By the OmniSport 2000 console operator using the keypad
 - By individual judge consoles (optional)

Three things to remember about the OmniSport 2000 diving program:

- Divers' names or affiliation are not entered into the console and do not appear on the display or printouts.
- Judges' scores and round scores are not stored in the console.
- The console does not have a pre-programmed dive list with the Degree of Difficulty (DD) for each dive. The operator will need to enter a DD for each dive.

Getting Started

When starting the OmniSport 2000 console, set the console to the diving mode. Refer to **Startup (p.19)** and press **[ENTER]** when the right LCD shows 2-DIVING.

SELECT SPORT 2-DIVING
The three LCDs on the OmniSport 2000 keep the operator informed during the event:

DIVER# 01 ROUND:01 RANK:-- DIVE 105B DD2.6 TOTAL: 0.00 DIVE ORDER-A

The left LCD shows the diver number, round, and diver rank. The middle LCD displays the current diver's dive type, position, degree of difficulty, and total score for that round. The right LCD shows the selected dive order and the event number.

2.

Diving Keys

When looking at the keys on the Diving insert (LL-2566), notice that some of them have been grouped together by location and others have been grouped with a border. The keys with borders are used together or perform similar operations, as described in the following sections.

Judges' Score Keys

The numbers along the top of the insert are the scoring keys. These keys contain numbers ranging from zero to ten at half-point intervals (0, 0.5, 1, 1.5, etc.). The keys with borders are used to enter the judges' scores. The console then calculates the awarded score using the formula selected and the degree of difficulty.

Note: Do not confuse the scoring keys with the permanent number keypad at the right side of the console. The number keypad is used to enter all editable information such as menu selections, round, and diver edits. The scoring keys are only used to enter scores.

Round Key

The diving program in the console scores up to 13 rounds. To view which round the console is currently scoring, look at the second line of the left LCD. To change the current round, press **[ROUND •]** then use **[0]–[9]>[ENTER]** to input the desired round number.

Pressing $[\leftarrow][\rightarrow]$ is another method to increment or decrement the current round number.

Diver Key

The diving program in the console manages up to 25 divers per event. To view which diver is the current diver, look at the first line of the left LCD. To change the current diver, press **[DIVER •]** then use **[0]–[9]>[ENTER]** to input the diver's number.

Pressing $[\uparrow][\downarrow]$ is another method to increment or decrement the current diver number.

Current Total

Judges scores and round scores are not stored in the console. Each diver has a current total score, the cumulative score of all rounds for that diver. To change the cumulative score, press [CURRENT TOTAL •] then use [0]-[9]>[ENTER] to input the correct value.

When to use this:

• If the total score in the console is different than the actual total because the console has an incorrect DD or judge's score.

Note: This is the only way to edit the total score. If the operator returned to the diver with the incorrect total score and reentered the information, those points will be added onto the current total score. The console does not automatically remove the incorrect score.

Select Order

See A/S, B/P, C/T, & D/F Keys (p.64).

A/S, B/P, C/T, & D/F Keys

These keys are used in two different functions in the diving system.

The first function is to select which Dive Order is currently being scored on the console. Press [SELECT ORDER] followed by the desired key: [A], [B], [C], or [D]. Line two of the right LCD displays the Dive Order currently selected

e Order currently selected.	0	. ,	Pike
cond function is to select the Dive	Position when	enterina	Tuck
live. The table at right outlines the	se positions	entening	Free

The sec each d e. The table at right outlines those position

Print Key

At any time in the meet, the operator may print the Dive Results, Individual Dive List, or the All Dive List to the console's built-in printer. Press [PRINT]>[1, 2, or 3]>[ENTER] for the desired printout. The printouts are assigned to the following numbers:

Dive Position

Straight

Key

A/S

B/P

C/T

D/F

[1]=Dive Results

[2]=Individual Dive List

[3]=All Dive List

Refer to Print Menu (p.73) for illustrations of these printouts.

Paper Feed

Press **[PAPER FEED]** to have the printer advance the paper. The printer will not print on the advanced lines.

Score, Abort, & Edit

See **Operation During Event (p.66)** for additional description of when to use these keys.

In order for the console to calculate a score for the dive, the following data is needed:

- Dive # ٠
- Dive Position ٠
- Degree of Difficulty (DD) ٠
- Judges' scores •

When pressing [SCORE], the console will determine if a Dive #, Dive Position, and DD have been pre-programmed, or if it still needs that information. If the console has this information, it prompts the operator to either manually enter the judges' scores, or the judges' scores will be filled in by the judge consoles. After all the judges' scores are displayed, press [SCORE] again to calculate the award for that round and add it on to the total for that dive.

If the console did not have the Dive #, Dive Position, or DD for that diver and that round, the console will first prompt the operator to input the needed information before allowing the judges' scores to be entered.

- Press [ABORT] any time after pressing [SCORE] to back out of the Score function without affecting the Total Score.
- Press **[EDIT]** to enter the dive information ahead of time, or to change the dive information entered for the current diver and round.

Diving Mode Operation, Menus, & Settings

Fail & Balk

Fail and balk actions are only used when the score operation is active. If an official determines that a diver balked on the dive or failed to perform the dive properly, the judges are notified and the scores will be determined based on this. Pressing [BALK] subtracts two points from each judges' score. Pressing [FAIL] sets the awarded score to 0.

Note: The [FAIL] and [BALK] keys are only available after [SCORE] has been pressed the first time and the judges' scores are being entered. The center LCD shows FAIL or BALK if this button has been pressed for the current diver.

Cut

When a diver is cut, that athlete will not be executing any dives in any future rounds. The individual cut will be skipped when the console gets to that point in the Dive Order.

The results will show that individual's score, up to the point of being cut. Press **[CUT]** to togale the cut setting. Verify a diver's cut status by looking at the first line of the left LCD, next to the Diver #. If the diver is cut, the LCD will show (CUT).

Next Event, Prev Event, & Event Heat

The OmniSport 2000 console has the capability of pre-programming an Event Order. Refer to Edit Menu (p.69).

Press **[NEXT EVENT]** to advance the console to the next event in the Event Order.

Press [PREV EVENT] to return the console back to the previous event in the Event Order.

Press [EVENT HEAT] to set the console to whatever event/ heat was entered. If that event is swimming, it will prompt the user to switch. If the event is a diving event, it will set the console to that Dive Order.

EVENT IS	SWIM
SWITCH	YZN 👘

Pre-Event Setup

Clearing the Order

Before a new diving competition or event can be performed, the Dive Order must be set. Clear any old information from the Dive Orders to eliminate any confusion that may arise. Complete the following steps to clear the orders.

- 1. Press [SELECT ORDER]>[A] to set the current Dive Order to A.
- 2. Press [MENU]>[2]>[3]>[ENTER] to clear out Dive Order A.
- 3. Repeat Steps 1-2 for the [B], [C], and [D] Dive Orders.

Entering Dive Lists (Optional)

Each diver must perform certain dives during an event. The Dive List of each diver can be stored in the Dive Orders. To enter the Dive List for each of the divers in Dive Order A, follow the steps below:

- 1. Press [SELECT ORDER]>[A] to set the current Diver Order to A.
- 2. Verify on the left LCD that the Diver # and Round are both set to "01".
- 3. Enter the first diver's dive list by pressing [MENU]>[2]>[4]>[ENTER].
- 4. The LCD will prompt the operator to enter the dive and position. Use the numeric keypad to enter the three- or four-digit dive number and the [A], [B], [C], and [D] keys to select the position. Press [ENTER] to accept the dive and position.



DIVER# 05 (CUT)

5. Use the numeric keypad to enter the DD for the dive selected. Press **[ENTER]** to accept the DD and increment the round by one. Repeat this sequence to enter the dive, position, and DD for each additional round for the selected diver.

Note: When in the Editing Order menu, press [←] to decrement the round by one,
 [→] to increment the round by one, [↑] to decrement the diver by one, and [↓] to increment the diver by one.

- After the first diver's dive list is entered, press [↓] to increment the diver by one. Press
 [←] as many times as necessary to decrement the round to "01". Now repeat the above instructions for each diver's dive list.
- 7. Press [PRINT]>[3]>[ENTER] to print the dive list for all the divers in the selected Dive Order.
- 8. Repeat Steps 1–7 for the [B], [C], and [D] Dive Orders.

Configure Number of Judges

The correct number of judges is a critical part of scoring an event. To set the number of judges, press **[MENU]>[4]>[1]>[1]** and select **2**, **3**, **5**, **7** or **9** for the correct number of judges. If **7** or **9** judges are selected, the LCD also prompts to select the correct formula.

Operation During Event

Selecting the Order

At the beginning of a diving event, the correct Dive Order must be selected by pressing **[SELECT ORDER]** and the correct letter key. Verify on the left LCD that the Diver # and Round # are both set to "01".

Entering Scores

Entering the scores is the most important part of a diving event. The following images represent what the LCDs should look like when entering scores with nine judges. The top row of the left and middle LCDs displays the judges' scores. The bottom row of those two LCDs shows the dive number, position, degree of difficulty, total points awarded, and the round. If a diver fails a dive or balks on a dive, AWARD is replaced with FAIL or BALK.



To start entering scores, first select a diver, dive, position, and DD. The two methods to enter scores are as follows:

When the Dive Order is pre-programmed:

- 1. Verify on the center LCD that the correct dive, position, and DD is programmed.
- 2. If not, press [EDIT] and correct any mistakes.
- 3. Press [SCORE] and the left and middle LCDs will request the judges scores.

When the Dive Order is not pre-programmed:

- 1. Press [SCORE] and the left and middle LCDs will prompt the user to enter dive and position. Use the numeric keypad to enter the three- or four-digit dive number and the [A], [B], [C], and [D] keys for the position. Press [ENTER] to accept the dive and position.
- 2. Use the number pad to enter the DD for the dive selected, then press **[ENTER]**. The left and middle LCDs then prompt the user for the judges' scores.

Use the **[0]–[10]** scoring keys to fill in the judges' scores. Press **[FAIL]** or **[BALK]** if they apply. When the correct judges' scores have been filled in, press **[SCORE]** to accept the awarded score and advance to the next diver in that round. Repeat for each dive.

If that was the last diver for that round, press $[\rightarrow]$ to increment the round by one. Next, press **[DIVER •]>[1]>[ENTER]**. Repeat the above steps until all dives and rounds are completed.

Menu Navigation

Press **[MENU]** to access the Main Menu screen. The diving mode has five menus, described in following sections.



Main Menu Screen

The operator may navigate through the menus using the arrow keys or by pressing the number that precedes the menu title. To return to the main menu at any time, press **[MENU]** twice.

- Use [^][] to scroll through the menus. When a selection is made, press **[ENTER]** to accept the menu displayed on the right LCD. Pressing an arrow is equivalent to using a number when in menu mode.
- The second method uses numbers to go directly to a desired menu choice. Using the [1]–[9] keys, enter the number sequence as shown on the OmniSport 2000 Timing Console Quick Reference Guide (ED-13584). Daktronics provides a laminated copy of the quick reference guide; keep it next to the console during a meet for convenience.

Note: If the console is set in the swimming mode and the operator wants to change to diving, either turn the console off and restart to select the new sport or select an event in the Event Order that is configured for a diving event.

Each operator will find his/her own method that works best. Remember that when using either navigation method, pressing **[CLEAR]** at any time will go back to the previous function or menu. Pressing the **[YES]** and **[NO]** keys is the same as **[ENTER]** and **[CLEAR]**.

Note: In this manual, LCD illustrations aligned to the right indicate menu location while the set-up actions are shown on the screens to the left. Each step is illustrated as the console's right LCD prompts. The keystrokes to get to the menu shown are indicated below that menu.

Scoreboard Menu

In the Scoreboard Menu, the operator can turn the scoreboard output ON or OFF, set the dimming (brightness) level for Multi-drop displays, and display Time-of-Day on the scoreboard.



From Main Menu – [1] or [ENTER]

Scoreboard ON/OFF

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



If the setting is ON, data is sent to a scoreboard. If this setting is OFF, the scoreboard will be blank until either the start of the next race, or it is turned back ON in the menu.

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.

Dimming

This menu is used to adjust the dimming (brightness) level on scoreboards that receive Multi-drop protocol.



From Main Menu – [1]>[2] or from SCBD 2-DIMMING [ENTER]

Use the numeric keypad to select one of the values shown in the table to the right, or use $[\uparrow][\downarrow]$ 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.

Time-of-Day

This menu is used to display Time-of-Day (TOD) on the scoreboard. Press **[YES]** to clear the scoreboard and show Time-of-Day. Press **[NO]** to do nothing and return to the Time-of-Day menu. Use **[**]**[**] to toggle between 12 and 24 hour setting, and then press **[ENTER]**.



From Main Menu – [1]>[3] or from SCBD 3-TIME OF DAY [ENTER]

Note: The running time must be reset before the console will display Time-of-Day on the scoreboard.

Time-of-Day will remain on the scoreboard until:

- The start of the next race.
- The operator presses [**RESET**] a second time to re-display the current results on the scoreboard.

MENU-SCOREBOARD 2-DIMMING

```
From SCBD ON/OFF Menu
```

Dimming levels:	Dimming	levels:
-----------------	---------	---------

0	=	none	(full	bright)	
1	=	90%			
2	=	80%			
3	=	70%			
		1000			

- 4 = 60%
- 5 = 50% 6 = 40%
- 7 = 30%
- 8 = 20%
- 9 = 10% (dimmest)



From SCBD 2-DIMMING Menu

• It is toggled off in the menu. When it is toggled off, the current results will go back on the scoreboard.

When to use this:

• Any time the console is reset and the operator wants to just display Time-of-Day on the scoreboard. This might be during a break in the meet.

Edit Menu

Edit Team Score

The *Edit Menu* allows the operator to manually edit the team scores for display on auxiliary team score scoreboards and edit the basic event order.

MENU-MAIN 2-EDIT MENU From Main Menu - [1]



H 000* G1 000 G2 000 G3 000 G2 000* G3 000

This menu is used to manually edit up to 4 team scores for

display on auxiliary team score scoreboards. The asterisk (*)

From 1-TEAM SCORE – [ENTER] or from Main Menu – [2]>[1]

identifies which team score is selected.

Enter a score of 0 to 999 using the **[0]–[9]** keys. The asterisk (*) flashes to indicate the score is ready to enter. Press **[ENTER]** on the last score to post the scores to the scoreboard and advance to the *Edit* – *Event Order Menu*. To exit without saving the data, press **[CLEAR]**.

Some operators will use the four scores (H, G1, G2 & G3) as HOME and GUEST for men and women or HOME and GUEST for varsity and junior varsity. Another option is to post the men's scores when a men's event is finished, and the women's scores when a women's event is finished.

Note: If the console is connected to Hy-Tek MEET MANAGER, it is possible to automatically update the team scores in the console when the team scores in MEET MANAGER are updated. Refer to the OmniSport 2000 and Hy-Tek Software Quick Start Guide (ED-13876).

When to use this:

• Typically team scores are updated on the scoreboard after each event is finished and scored.

Edit Event Order

The Event Order menu is where the operator can choose one of the menus described below to edit the event order, insert an event into the event order, delete an event in the event order, or clear the event order entirely. Remember that the operator has three options to manage the event order. Refer to **Event/Heat (p.26)**.



From Main Menu – [2]>[↓]

Edit Order

This group of menus is used to manually enter a basic event order in the OmniSport 2000 timing console.



From Main Menu – [2]>[2]>[1] or from 1-EDIT ORDER – [ENTER]

MENU-EVENT ORDER 1-EDIT ORDER

From Main Menu – [2]>[2]

Diving Mode Operation, Menus, & Settings

The OmniSport 2000 timer holds up to 500 events in numbered locations. The locations allow the events to be entered in any order (example: event 001, 012, 035). An alpha character (A-Z) may also be added (example: 001A). Event locations have been numbered from 1 to 500. The asterisk (*) indicates it is OK to press [ENTER] and begin to edit this event location. Use [1][] to select the event location number. Press [ENTER] when the location number to be edited is shown. Press [CLEAR] to return to the menu selection.

Continue through the Event Order settings by pressing **[ENTER]** after each setup. Press the [0]–[9] keys to change the event number. Use $[\leftarrow][\rightarrow]$ to set the event's alpha designator and press [ENTER] to accept. Use $[\leftarrow][\rightarrow]$ to change the round type (final, semi-final, prelim, blank), then press [ENTER] to accept.

#001= EVT: 001 *	#001= EVT: 001
RND= (BLANK)	RND= FINAL *

Enter a distance of "0" to insert a diving event and show the dive order (A, B, C, or D) set for that event.



When to use this:

- If the console is not connected to a results program that downloads the event order.
- If the console is not connected to a computer running the OmniSport Pro Swimming software.

Insert Event

This group of menus is used to insert an event into the event order.







From-Main Menu – [2]>[2]>[2]

Use $[\uparrow][\downarrow]$ to select the event location number where the new event will be inserted. Press [ENTER] when the location number is shown.



Press the [0]–[9] keys to change the Event Number. Use $[\leftarrow][\rightarrow]$ to change the event's alpha designator and press **[ENTER]** to accept. Use $[\leftarrow][\rightarrow]$ to change the round type (final, semi-final, prelim, or blank) and press [ENTER] to accept. Subsequent events shift to new locations.

Enter a distance of "0" to insert a diving event and show the dive order (A, B, C, or D) set for that event.



When to use this:

- If an event was missed and not programmed into the original event order.
- An additional event was added, like a time trial, and needs to be placed into the event order.

Delete Event

This menu is used to remove an event from the event order list.





Use [1][1] to select the event location number to be deleted. Press [ENTER] to delete the location number shown.

When to use this:

• If an extra event was programmed into the original event order.

Clear Order

This menu is used to completely erase the entire event order stored in the OmniSport 2000 console. Use with caution.

MENU-EVENT ORDER 4-CLEAR ORDER

From Main Menu – [2]>[2]>[\downarrow]>[\downarrow]>[\downarrow]



Press [YES] to clear the entire event order and exit the menu. Press [NO] to exit the menu and leave the event order as is.

When to use this:

If the existing event order needs to be completely erased from memory in the OmniSport 2000 console so a new event order can be programmed from scratch.

Clear Order A (A-D)

This menu is used to clear one of the four dive orders (A, B, C or D). The specific dive order to be cleared must be selected before entering the menu. Refer to Selecting the Order (p.66).





From Main Menu – [2]>[3]

Press [YES] to clear the order. Press [NO] to exit the menu and leave the dive order as is.

When to use this:

Refer to Pre-Event Setup (p.65) and Operation During Event (p.66).

Diver Order

This menu is used to edit the dive orders. The specific dive order to be edited must be selected before entering the menu. Refer to Selecting the Order (p.66).



From Main Menu – $[2]>[\downarrow]>[\downarrow]>[\downarrow]$

Diving Mode Operation, Menus, & Settings

MENU-EDIT EDITING ORDER A From Main Menu - [2]>[4]

Verify on the left LCD that the diver # and round are both set to "01". Use the numeric keypad to enter the three- or four-digit dive number and the **[A]**, **[B]**, **[C]**, and **[D]** keys to select the position. Press **[ENTER]** to accept the dive and position. Use the numeric keypad to enter the DD for the dive selected. Press **[ENTER]** to accept the DD and increment the round by one. Repeat this sequence to enter the dive, position, and DD for each additional round for the selected diver.

Note: When in the *Editing Order* menu, press [←] to decrement the round by one, [→] to increment the round by one, [↑] to decrement the diver by one, and [↓] to increment the diver by one.

After the first diver's dive list is entered, press [\downarrow] to increment the diver by one. Press [\leftarrow] as many times as necessary to decrement the round to "01". Now repeat the above instructions for each diver's dive list.

When to use this:

• Refer to Entering Dive Lists (Optional) (p.65).

Clear Totals

This menu is used to clear the dive order scores. The specific Dive order to be cleared must be selected before entering the menu. Refer to **Selecting the Order (p.66)**.

Press **[YES]** to clear the totals. Press **[NO]** to exit the menu and leave the totals as is.

When to use this:

• If the Dive Order has been pre-entered and (due to testing or for whatever reason) the divers have points awarded to them, the function will set all of the stats for the selected Dive Order to 0.00.

Diver Totals

#01

EVENT A TOTALS

0:00

TOT:

From Main Menu – [2]>[6]

This menu is used to edit the total scores for each diver in the selected dive order. The specific dive order to be edited must be selected before entering the menu. Refer to **Selecting the Order (p.66)**.

Press **[ENTER]** to select a diver to edit. Use the number keypad to edit the totals of a diver. Press **[ENTER]** to accept the changes. The arrow keys increment and decrement the diver number by one. Press **[CLEAR]** to leave the menu and return to the *Edit* menu.

When to use this:

• If the divers are carrying a score from a previous round, like from prelims to finals.

Diving Mode Operation, Menus, & Settings



From Main Menu – [2]>[↑]



CLEAR OUT	DIVER YZN?
From Main Menu –	[2]>[5]

efer to Selecting the Order

Print Menu

The Print Menu allows the operator to print a specific event result, the current event order in the OmniSport 2000 console, or the settings for the current console configuration.

Print Dive Results

This menu is used to print results from the Dive Order currently selected (**Figure 48**).



Press **[YES]** to print the selected results.

Press [NO] to return to the Print Menu.

When to use this:

• Use this to re-print dive results on the console's built-in thermal printer.

Print Event Order

This menu is used to print the event order (Figure 49).



From Main Menu – [3]>[2]

Press **[YES]** to print the event order.

Press [NO] to exit the menu without printing.

When to use this:

 It is a good idea to print out an event order before starting each session to verify that the console is expecting to score the events in the desired order.

Print Settings

This menu is used to print the console's configuration (**Figure 50**).



Press [YES] to print the event order.

Press [NO] to exit the menu without printing.

When to use this:

• Print the settings after the console has been set up and functioning correctly. Keep this printout for future reference. It will be valuable if the console is loaned out to someone else, a change was made in the console unknowingly, or if the console was returned to or exchanged by Daktronics for service. MENU-MAIN 3-PRINT MENU



DI	ΨE	RESU	LT	s	-		Ø	R	D	ER	F	1
ΤI	ME:	20:	16	;	0	Q						
Ra	nk	Div	er			s	С	0	23	e		
斜	1		6		з	1	6		з	2		
#	2		3		2	8	8		з	0		
#	3		5		2	8	7		б	1		
#	4		4		2	8	2		2	1		
谷	5		1		2	8	Q		0	2		
Ħ	6		2		2	7	4		8	з		
												_

Figure 48: Dive Results Printout



	ΕV	ENT	ORDER	
EVENT	UN	D		
l	1	DIST	ANCE	
1	1	1	-REC(ORD
1		Dive	Order	e A
2		Dive	Order	o B
3		Dive	Order	e C
4		Dive	Order	e D

Figure 49: Event Order Printout

ſ	MENU-PRINT
l	3-SETTINGS

DIVING SETTINGS
- VERSION 7.11.30 -
JUDGE CONFIGURATIONS:
1.Num Judges- 7
Scoring Formula
Drop 1Hi & 1LO
SCOREBOARD CONFIGS:
1.Num of Lines- 8
2.Display Lead- NO
3.Multisport- YES
PORT CONFIGURATIONS:
1.Scbrd Port- M-DROP
2.RTD Port- RTD
3.Results- OMNI2000
PRINTER CONFIGS:
1.Printer Log- ON

Figure 50: Settings Printout

Diving Mode Operation, Menus, & Settings

• It is a good idea to pull out the known good settings and verify them to a new printout when the equipment is being set up for a meet.

Print Individual Dive List

This menu is used to print the dive order of the current diver (Figure 51).



Press [YES] to print the individual dive list.

Press [NO] to exit the menu without printing.

When to use this:

• If the operator needs to print an active order for an individual diver.

Print All Dive List

This menu prints the dive list for all divers in the current dive order (**Figure 52**).

MENU-PRINT PRINT ALL LIST?	
From Main Menu – [3]>[5]	

Press [YES] to print the dive list for all divers.

Press [NO] to exit the menu without printing.

When to use this:

• If the operator needs to print an active order for all divers in that event.

DIVE DIVEF Rnd 1 2 3 4 5 6	LIST- 1 Dive 107C 405C 205C 305C 5235D 5335D	EUENT A EUENT A Dofd 2.8 2.7 2.8 2.8 2.8 2.8 2.8 2.8
DIVEP	2 2	EVENT A
Rnd	Dive	DofD
1	5235D	2.8
2	303A	2.6
3	205C	2.8
4	5335D	2.9
5	405C	2.7
6	1070	2.8
/	1—	
DIVER	6 E	UENT A
Rnd	Dive	DofD
1 :	5233D	2.4
2 5	5235D	2.8
3	205C	2.8
4	405C	2.7
5	305C	2,8
6	1070	2.8

Figure 52: Dive List - All

Diving Mode Operation, Menus, & Settings

DIVE	LIST-	EVENT A
DIVER	2 1 E	VENT A
Rnd	Dive	DofD
1	1070	2,8
2	405C	2.7
3	205C	2.8
4	305C	2.8
5	5235D	2.8
6	5335D	2.9

Figure 51: Dive List - Individual

MENU-F	RINT	
5-ALL	DIVE	LIST

Setup Timer Menu

This menu contains the settings that tell the console how many judges will score the events and what designators they will use for the positions.

Number of Judges

This menu configures the number of judges (2, 3, 5, 7, or 9) used to score an event.

From	Main	Menu –	[4]>[1	1>[1]

OF JUDGES: •7*

MENU-TIMER



Press [2], [3], [5], [7], or [9] to input the number of judges used for the event, and then press [ENTER] to save. If seven or nine judges are selected, the console prompts the operator for a formula selection. Use $[\leftarrow][\rightarrow]$ to toggle to the correct formula and press [ENTER] to accept or [CLEAR] to exit the judges' menu.

DIVE POSITION CODE-SPTF*

Position Code

This is a user preference to identify if the Dive Positions will be labeled A, B, C, D or S, P, T, F.

MENU-TIMER 2-POSITION CODE



DIVE POSITION

Use $[\leftarrow][\rightarrow]$ to toggle to the desired selection and press **[ENTER]** to save.

Beeper Volume

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





From Main Menu – [4]>[1]>[3]

Use [\uparrow][\downarrow] or the [0]–[7] keys to set the volume level, with 7 being the loudest setting, and then press [ENTER] to save.

Setup Numeric Scoreboard Menu

This menu configures how the console will display data on a numeric scoreboard.

Number of Lines

This menu sets the number of lines (1-10) that the scoreboard displays. The default is 10.



Press the [0]-[9] keys to enter the number of lines and then press [ENTER] to save.



From Main Menu – [4]>[2]



MENU-SETUP 1-TIMER

1-NUMBER JUDGES

From Main Menu – [4]>[1]

From Main Menu – [4]

MENU-TIMER

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Lead Diver

This menu determines whether or not the diver with the most points is displayed.

DISPLAY LEAD DIVER-YES* From Main Menu - [4]>[2]>[1]>[2]

Use $[\uparrow][\downarrow]$ to select YES/NO and press **[ENTER]** to save.

Multisport SB

This menu determines whether or not the display in use at the facility is a multisport scoreboard.



MENU-RTD/MATRIX RTD OFFSET: 5K* From Main Menu - [4]>[2]>[2]>[1]

Use $[\uparrow][\downarrow]$ to select YES/NO and press **[ENTER]** to save.

Setup RTD/Matrix Scoreboard Menu

This menu configures how the console will output Real-Time Data (RTD) to matrix displays.

RTD Offset

This menu will add an offset to the Real-Time Data (RTD) output to the matrix display.

Use $[\uparrow][\downarrow]$ to toggle through the RTD offset settings (0K, 5K, 10K, or 15K). Each setting adds 5000 to the original item numbers, up to 15000. The default setting is 0K (no offset). To save the setting, press **[ENTER]**.

When to use this:

- Data from more than one pool/OmniSport 2000 is going to one display.
- If using a Daktronics M2, M3, or V-Link[®] controlled display, this menu allows multiple RTD inputs directly into the display.

Setup Comm Ports Menu

The following Comm Ports menus select the protocol used for transmitting data to the display and communicating with a results program.

Scoreboard Outputs

Select Scoreboard Outputs to assign a protocol to transmit data from the J2 and J3 outputs on the console.



From Main Menu - [4]>[3]>[1]





MENU-SCOREBOARD

2-RTD/MATRIX





From Main Menu – [4]>[3]

MENU-NUMERIC 2-LEAD DIVER Use $[\leftarrow][\rightarrow]$ to select MULTIDROP, MULTILINE, or OMEGA protocol, depending on the type of display used, and then press **[ENTER]** to save. MULTICAST is reserved for future use.

When to use this:

- By default, the OmniSport 2000 is set to MULTIDROP, and this will work for most Daktronics scoreboards built after 2000.
- If the Daktronics scoreboard does not appear to function with the MULTIDROP protocol, set the OmniSport 2000 to MULTILINE. To verify the scoreboard protocol is set to MULTILINE, unplug the signal cable from the back of the console, and then cycle power to the scoreboard. When it powers up, "P1" will appear on the left two digits.
- If the display is manufactured by Omega, set the console to OMEGA.

RTD Port

Select *RTD Port* to assign a protocol, either Real-Time Data (RTD) or Colorado Timing System (CTS), to transmit out of the **J5 RTD PORT** on the console.

MENU-COMM PORTS 2-RTD PORT



Use $[\leftarrow][\rightarrow]$ to select *RTD* (default) to send information to a Daktronics display controller or *CTS* to send to a numeric CTS scoreboard, and then press **[ENTER]** to save.

Results Port

Select *Results Port* to assign a protocol to transmit out of the **J6 RESULTS PORT** on the console to communicate with meet management software.





OMNI 2000 (default) and OMNI 6000 are bi-directional protocols. CTS is a unidirectional protocol, utilizing the standard CTS scoreboard information.

Use $[\leftarrow][\rightarrow]$ to select OMNI 2000, OMNI 6000, or CTS, depending on what the meet management software is expecting to receive, and then press **[ENTER]** to save.

Note: If using an older version of Hy-Tek Meet Manager, it may require configuring this port to the OmniSport 6000 data. Selecting Omni 6000 transmits Omni 6000 RTD item numbers on the RTD output.

Setup Printer Menu

This menu configures which printouts will be printed on the built-in printer in the console as well as the intensity of the print on those printouts.

Dive Log

The Dive Log menu allows dive logging to be turned ON/ OFF. Typically the Dive Log is set ON.



Use $[\leftarrow][\rightarrow]$ to toggle dive logging ON or OFF and then press **[ENTER]** to save.

When to use this:

• Using the Dive Log is the most thorough way to identify issues with the system. Daktronics recommends that the Dive Log is always turned on. As scores are accepted, the printer will print the results (**Figure 53**).



Figure 53: Dive Log Printout

Intensity

This menu sets the printer's contrast for easy readability. The typical level is 5.





Press the [1]-[5] keys to select the print intensity and press [ENTER] to save.

MENU-SETUP 4-PRINTER

MENU-PRINTER 1-DIVE LOG From Main Menu - [4]>[4]

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non-Daktronics network, press [2] followed by [ENTER]. Press the [0]–[9] keys to enter a new value for each group of numbers and press [ENTER] after every group. To select a standard

If a custom IP address is required, such as for connecting to a

In most cases, the standard IP address should be selected.

Press [1] followed by [ENTER] and the display will verify the

IP ADDR- OMNI1 address instead, press [CLEAR] twice to exit the menu. 192*168. Note: Once the

> **Diving Mode Operation, Menus, & Settings** 79

Setup Time-of-Day Menu

HH:MM:SS*

DATE MM/DD/YY

From Main Menu – [4]>[5]

TOD

This menu is used to set the console's date and time.

Press the [0]-[9] keys to enter the correct date and time and then press [ENTER] to save. Press [CLEAR] twice to exit without saving and retain the previous time and date.

Setup Network Menu

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

Network Enable

MENU-NETWORK

NETWORK: ON *

1-STD* 2-CUST

From Main Menu - [4]>[6]>[2]

0. 55

name as shown in the table at right.

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

From Main Menu - [4]>[6]>[1]

Use $[\leftarrow][\rightarrow]$ 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.

MENU-NETWORK

NETWORK: OFF*

IP Address

192.168.

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

Name OMNI1 192.168. 0.55 console's IP address. The standard IP address varies by console OMNI2 192.168. 0.56 OMNI3 192.168. 0.57 192.168. 0.58 OMNI4

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
disconnected norm me nerwork in order to change me in address serings.



0. 55



MENU-SETUP

6-NETWORK

MENU-SETUP 5-TIME OF DAY



5	MENU-NETWORH
	2-IP ADDRESS

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 3-SUBNET MASK



Press the **[0]–[9]** keys 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 4-GATEWAY ADDRES



Press the **[0]–[9]** keys 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.

RTD Port Number

This menu allows the operator to set or verify the RTD port number of the console. The default setting is shown below. MENU-NETWORK 5-RTD PORT #



From Main Menu – [4]>[6]>[5]

- In most cases, the standard RTD port number should be selected. Press [1].
 - If the RTD will be sent to a Daktronics DVX/DVN video display, press [1] followed by [ENTER]. The standard port number will vary by console name as shown in the table at right.
 - If the RTD will be sent to a Daktronics Galaxy message center, press [2] followed by [ENTER]. The standard port number will always be "3002".
- If a custom RTD port number is required, press [2]. Press the [0]–[9] keys to enter a new value and press [ENTER]. To select a standard port number instead, press [CLEAR] twice to exit the menu.

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.



From Main Menu – [4]>[6]>[6]

1-DVX/N 2-GALXY* PORT#- 3002

Name	RTD Port #
OMNI1	21000
OMNI2	21001
OMNI3	21002
OMNI4	21003





Pro Software Enable

This menu allows the operator to enable network communications to Pro Diving software.

MENU-NETWORK 7-NETWK PRO/MMR



Use $[\leftarrow][\rightarrow]$ to toggle between ON/OFF and then press **[ENTER]** to save.

Test Menu

The OmniSport 2000 timer is equipped with features that test battery level, and the numeric scoreboard. The following submenus explain how to use each of these tests. It is important to run through these tests before the meet begins to prevent problems from occurring during the meet.

Battery Test

This menu checks the battery power level.

From Main Menu – [5]>[1]

LEVEL= CHARGED

BATTERY TEST

The battery level will show as CHARGED or LOW. Press [ENTER] to exit the menu.

BATTERY TEST

LEVEL= LOW

Scoreboard Test

These menus check the numeric scoreboard drivers.

Cycle ON/OFF

This menu checks the signal to the scoreboard.

DI EN	SPLAY TER T	ALL ON O EXIT
_		

From Main Menu – [5]>[2]>[1]



MENU-MAIN 5-TEST MENU

MENU-TEST 2-SCOREBOARD



From Main Menu – [5]>[2]

Press [1] to toggle the scoreboard ON and OFF. When this menu is selected, an all ON signal is sent at intervals of approximately 3 seconds. Press [ENTER] to exit the menu.

Driver Address

This menu shows which addresses each of the drivers on the scoreboard are set to. The addresses were set when the display was installed.





From Main Menu – [5]>[2]>[2]

Press [2] to display the driver addresses. Press [ENTER] to exit the menu.

Digit Number This menu shows the digit designation.





Press **[3]** to display a digit number. The number or letter will show which output on the driver that digit is plugged into. Press **[ENTER]** to exit the menu.

Judge Consoles

This menu tests whether or not the judge consoles are connected to and communicating with the OmniSport 2000

MENU-TEST 3-JUDGE CONSOLES

timing console. The right LCD alternates between the below messages:



From Main Menu – [5]>[3]

The left and middle LCDs indicate where a judge console is connected in the rear of the OmniSport 2000 console:



- N = Near jack (J14)
- F = Farjack (J15)
- ? = No connection

The LCDs also indicate that judge consoles One and Six are currently operational—judge console One is plugged into **J14**, and judge console Six is plugged into **J15**. The numbers on the bottom row correspond to the key recently pressed on the judge console, to help verify correct two-way communication. Test each judge console being used. Press **[ENTER]** to exit. For more information on judge consoles, refer to **Section 7: Judge Consoles (p.83)**.

CAN Network

This menu is used for advanced debugging by Daktronics service personnel only.

7 Judge Consoles

Reference Drawings:

OmniSport 2000 and JC-100 Equipment	. DWG-189089
OmniSport 2000 Judging Equipment- In-Deck	. DWG-190817
System Riser: RC-100- Rodeo/Diving/Sync Swimming	. DWG-230608
System Riser: RC-200- Rodeo/Diving/Sync Swimming	DWG-3640329

Judge consoles are used to enter scores during diving and synchronized swimming events. The OmniSport 2000 console can be set up to operate with 2, 3, 5, 7, or 9 judge consoles for diving and synchronized swimming; or 7, 9, or 11 for synchronized diving. The consoles are connected to the **J14** or **J15** ports on the back of the console. If wireless judge consoles are used, a wireless base station is connected to the **J14** or **J15** ports on the back of the **J14** or **J15** ports on the

Refer to **DWG-189089** for on-deck connection details or **DWG-190817** for in-deck connection details. Refer to **DWG-230608** or **DWG-3640329** for wireless connection details. For more information on the RC-100 or RC-200 consoles, refer to their operation manuals, available online at <u>www.daktronics.com/manuals</u>:

- Remote Control System RC-100 All Sport Operation Manual (ED-15133)
- Remote Control System RC-200 All Sport Operation Manual (DD3572889)

Console Setup

ENTER JUDGE #

- *****K

The first time a judge console (**Figure 54**) is connected to the OmniSport 2000 timer it will prompt the user to enter a judge number.

The LCD on the judge console prompts the user to enter a number from one to the maximum number of judge's consoles the OmniSport 2000 console has been configured to use. If a number is entered that has already been used by another judge or is higher than the number of judges configured, the console will beep and wait for a new number to be entered.
 DAKTRONICS

 DAKTRONICS

 DK JUDGE 5: 7.5

 DUEILSGA DD2.

 7
 9

 4
 5
 6

 DET
 1
 2
 10

 CLEAR
 0
 ENTER
 5

Figure 54: JC-100 Console

Once a judge number has been set for the judge's console, it will appear on the LCD. This information is the same for the JC-100, RC-100, and RC-200 console.

JUDGE 1:

Diving Event Operation

The request for scores will show on the judge consoles when the OmniSport 2000 console has entered scoring mode for the dive. Refer to **Operation During Event (p.66)**. The dive number and degree-of-difficulty (DD) will also be displayed.



Enter the score for the current dive, then press **[ENTER]** to accept. When the score has been entered, *OK* appears to the left of the *JUDGE* number.

Score Editing

After a score has been entered, it may be changed by pressing **[RE-ENTER/EDIT]** on the JC-100 (or **[EDIT]** on the RC-100/RC-200). This puts the console back into the scoring mode to allow the score to be re-entered. The score cannot be edited if the OmniSport 2000 console operator has already accepted the judge's scores.

Judge Consoles 83

Synchronized Diving Event Operation

The judge consoles used to enter scores during synchronized diving events are grouped by their entry function. The OmniSport Pro Diving program can be set to use 7, 9, or 11 judge consoles. Refer to the following table to set the appropriate program:

Score	# Judges = 7	# Judges = 9	# Judges = 11
Dive Synchronization	1-2	1-2	1-3
Diver #1 Execution	3-4	3-4	4-6
Diver #2 Execution	5-7	5-9	7-11

Note: When using 11 judge consoles, up to 9 may be connected to a single port on the OmniSport console. The remaining 2 would then be connected to the other port. Alternately, the ports could be split by function; for example, judges 1-6 on one port and judges 7-11 on the other.

Synchronized Swimming Event Operation

One or two panels of judges can score a synchronized swimming event. If there is one panel of judges, the judge numbers on the consoles are entered as one through the number of judges configured for the event. If there are two panels of judges, the second panel would be entered as the next set of judge numbers available after the first panel. If there are two panels of five, the second panel is entered as judge numbers 6-10. There can be up to 2 panels of 9 judges or 18 total judges per OmniSport 2000 console.

If there is only one panel of judges, they enter both sets of scores for the event. When there are two panels of judges, each panel enters a separate set of scores. The operations for one and two panels are detailed in the sections that follow.

One Judge Panel Operation

When there is one panel of judges, all judges are responsible for entering both sets of scores for the routine. The prompts are shown below:

Technical Routine Operation

The first score to enter for the technical routine is for execution of the routine.

JUDGE 1 EXECUTION: 5.0

The second score to enter for the technical routine is for the overall impression of the routine.



JUDGE 1 OVERALL: 6.0

The LCD will then show the two scores and an OK after they have been entered.

Free Routine Operation

The first score to enter for the free routine is for technical merit portion of the routine.

The second score to enter for the free routine is for the artistic impression portion of the routine.





JUDGE 1 TM: 5.0 AI:

JUDGE 1 OK EXECUTION: 5.0

JUDGE 6 OK OVERALL: 5.5

JUDGE 1 OK TECHNICAL: 5.0

The LCD will then show the two scores and an OK after they have been entered.

Two Judge Panel Operation

With two panels of judges, the first panel enters the first set of scores, and the second panel enters the second set of scores for the routine. The prompts are shown below.

Technical Routine Operation

In a technical routine, the first panel of judges enters the score for the execution of the routine.

The OK will display by the judge's number after the score is entered.

The second panel of judges enters the score for the overall impression of the routine.

The OK will display by the judge number after the score is entered.

Free Routine Operation

In a free routine, the first panel of judges enters the score for the technical merit portion of the routine.

The OK will display by the judge number after the score is entered.

The second panel of judges enters the score for the artistic impression portion of the routine.



JUDGE 6 OK OVERALL: 5.5

After a score has been entered, it may be changed by pressing [RE-ENTER/EDIT] on the JC-100 (or **[EDIT]** on the RC-100/RC-200). This puts the console back into the scoring mode to allow the score to be re-entered. The score cannot be edited if the OmniSport 2000 console operator has already accepted the judge's scores.



ARTISTIC: 5.5



JUDGE 6

JUDGE 6

OVERALL: 5.5



8 Pace Clock Mode Operation, Menus, & Settings

Reference Drawings:

Insert; LL-2581 Omni 2000, Pace Clock DWG-188395

The sport insert drawing is located in **Appendix B: Sport Inserts (p.151)**. If an insert is lost or damaged, a copy of the insert drawing may be used until a replacement is ordered.

Refer to **Section 3: General Console Features & Operation (p.17)** for information on how to start up the timer and use the sport insert.

General Features

The pace clock mode serves as a workout manager. The pace clock can manage up to ten different simultaneous workouts. Each workout will display consecutively on the scoreboard's lane 1-10. The pace clock also works with a downloaded workout from Hy-Tek Workout Manager. The **J6 RESULTS PORT** is used to download the workout. The OmniSport will accept 50 steps of the workout for each lane.

Getting Started

When starting the OmniSport 2000 console, set the console to the pace clock mode. Refer to **Startup (p.19)** and press **[ENTER]** when the right LCD shows 3-PACE CLOCK.

SELECT SPORT 3-PACE CLOCK

The three LCDs on the OmniSport 2000 keep the operator informed during the event. Note the following layout of the LCDs shown in the pace clock mode:





The left and middle LCDs contain information for lanes 1-10, while the right LCD displays detailed information for a specific lane plus editing information when in the editing mode. The following table describes each symbol and function.

Function	Location	Definition
Lane #	# above left & middle LCDs	Clearly identifies the lane.
Step #	Top row # in left and middle LCDs [far left – ex. 3]	Displays which step a specific swimmer is performing. Up to 50 steps for each lane may be entered.
Lane Activity	Bottom row * and – in left and middle LCDs	The – indicates the timer is stopped and the flashing * indicates the timer for that lane is running.

Function	Location	Definition
Step Type	Bottom row word on right LCD [ex. PACE] Lane details are contained in the right LCD. For example, the lane and step numbers currently shown are identified on the top row.	 Possible steps include: Beg Circuit: for a workout, enter a combination of desired steps: swim, rest, pace and stop. Repeat a certain number of times. Basically, this is a workout within the whole workout. Press [ENTER] to select this step. The prompt requests entering the number of times this circuit will repeat. Adding different steps within this circuit is the same as adding steps to the whole workout. End Circuit: ends the circuit that was entered within the BEG CIRCUIT option. When ending a circuit, steps may still be added before finishing the total workout. Swim: selects the amount of time athletes will swim within one step. Rest: within a workout, enter the amount of time for the swimmers' rest within one step. Pace: overrides the rest of the workout (or circuit if a pace step is entered within one) and continue to count up to the entered time, return to 0:00 and start counting again. This step can repeat indefinitely. Stop: identifies where to end or "Stop" the workout.
Timer	Bottom row on right screen center	Counts up during the swimming and pace steps or down during the rest step.
Repeat Count #	Bottom row on right screen [far right ex. #3]	Displays which repetition the swimmer is currently on. For example, the step was programmed to repeat 5 times. Swimmer in Lane 1 is currently completing that step's third repetition. Note: When the repeat count number is "0," the swimmer has not started.

Pace Clock Keys

The keys highlighted on the Pace Clock insert (LL-2581) are grouped together and shaded by lane. Lane 1 keys line-up vertically with Lane 1 on the LCD, Lane 2 keys with Lane 2, and so on through Lane 10. The operator may perform four basic functions by individual lane, or START, STOP, or RESET ALL using the keys on the right.

Menu Navigation

Press [MENU] to access the Main Menu screen. The pace clock mode has five menus, described in following sections.

The operator may navigate through the menus using the arrow keys or by pressing the number that precedes the menu title. To return to the main menu at any time, press [MENU] twice.

- Use $[\uparrow][\downarrow]$ to scroll through the menus. When a selection is made, press **[ENTER]** to accept the menu displayed on the right LCD. Pressing an arrow is equivalent to using a number when in menu mode.
- The second method uses numbers to go directly to a desired menu choice. Using the [1]-[9] keys, enter the number sequence as shown on the OmniSport 2000 Timing Console Quick Reference Guide (ED-13584). Daktronics provides a laminated copy of the quick reference quide; keep it next to the console during a meet for convenience.

Each operator will find his/her own method that works best. Remember that when using either navigation method, pressing [CLEAR] at any time will go back to the previous function or menu. Pressing the [YES] and [NO] keys is the same as [ENTER] and [CLEAR].

Note: In this manual, LCD illustrations aligned to the right indicate menu location while the set-up actions are shown on the screens to the left. Each step is illustrated as the console's right LCD prompts. The keystrokes to get to the menu shown are indicated below that menu.

Scoreboard Menu

In the Scoreboard Menu, the operator can turn the scoreboard output ON or OFF, set the dimming (brightness) level for Multi-drop displays, and display Time-of-Day on the scoreboard.

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.



From Main Menu - [1]>[1] or from SCBD ON/OFF Menu [1] or [ENTER]

If the setting is ON, data is sent to a scoreboard. If this setting is OFF, the scoreboard will be blank until either the start of the next race, or it is turned back ON in the menu.

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.



Main Menu Screen

Dimming

This menu is used to adjust the dimming (brightness) level on scoreboards that receive Multi-drop protocol.



From Main Menu – [1]>[2] or from SCBD 2-DIMMING [ENTER]

Use the numeric keypad to select one of the values shown in the table to the right, or use $[\uparrow][\downarrow]$ 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.

Time-of-Day

This menu is used to display Time-of-Day (TOD) on the scoreboard. Press **[YES]** to clear the scoreboard and show Time-of-Day. Press **[NO]** to do nothing and return to the Time-of-Day menu. Use $[\uparrow][\downarrow]$ to toggle between 12 and 24 hour setting, and then press **[ENTER]**.



From Main Menu – [1]>[3] or from SCBD 3-TIME OF DAY [ENTER]

Note: The running time must be reset before the console will display Time-of-Day on the scoreboard.

Time-of-Day will remain on the scoreboard until:

- The start of the next race.
- The operator presses [**RESET**] a second time to re-display the current results on the scoreboard.
- It is toggled off in the menu. When it is toggled off, the current results will go back on the scoreboard.

When to use this:

• Any time the console is reset and the operator wants to just display Time-of-Day on the scoreboard. This might be during a break in the workout.

MENU-SCOREBOARD 2-DIMMING

From SCBD ON/OFF Menu

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



From SCBD 2-DIMMING Menu

Edit Menu

The *Edit Menu* allows the operator to manually edit the workout for each lane (1-10).

Edit Workout



MENU-MAIN 2-EDIT MENU MENU-EDIT 1-EDIT WORKOUT From Main Menu - [2]

Press the [0]–[9] keys to enter the lane number. Press [ENTER] to begin editing that lane.

Edit Step



Press the [0]-[9] keys to enter the step number. Press [ENTER] to begin editing that step.

Within the selected step, choose from the following six modes:

- 1=STOP
- 2=BEG CIRCUIT (with repeat count)
- 3=END CIRCUIT
- 4= SWIM (with time and repeat count)
- 5=REST (with time)
- 6=PACE (with time)

For example, after selecting mode 4 (Swim) the following prompts appear:



- Enter in the desired amount of time and then press [ENTER].
- Enter the number of times to repeat this step and then press **[ENTER]**. The LCD will automatically display the next step for the selected lane to edit.
- To insert another step, press [ENTER].
- To return to the main menu, press [MENU] twice.

Insert Step



From Main Menu – [2]>[1]>[Lane #]>[ENTER]>[2]

Press the **[0]–[9]** keys to enter the step number to insert a step into and then press **[ENTER]**. For example, to insert swim as Step 3, enter **[3]** and press **[ENTER]**. Delete Step

From Main Menu – [2]>[1]>[Lane #]>[ENTER]>[3]

Press the **[0]–[9]** keys to enter the step number to delete from the workout order and then press **[ENTER]**.

Copy Workout



From Main Menu – [2]>[1]>[Lane #]>[ENTER]>[4]

To copy a workout from one lane to another, press [ENTER].

Press the **[0]–[9]** keys to enter the lane number to copy the current workout to and press **[ENTER]**. In this example, the workout from Lane 1 is being copied to Lane 2.

Clear Workout



From Main Menu – [2]>[1]>[Lane #]>[ENTER]>[5]

Press [YES] to clear the entire workout or press [NO] to go back to the menu selection.

Print Menu

The *Print Menu* is where the operator can print a specific workout result, all workout results, or the settings for the current console configuration.

MENU-MAIN 3-PRINT MENU

1-IND WORKOUT

MENU-PRINT

From Main Menu – [3]

Individual Workout

This menu prints the results of an individual workout in a specific lane.



Press the **[0]–[9]** keys to enter the lane number for the workout to print and press **[ENTER]**. The LCD displays a prompt verifying to be printed. Press **[YES]** to print the selected workout or press **[NO]** to return to the *Print Menu*.

All Workouts

This menu prints the workouts for every lane.





MENU-PRINT 2-ALL WORKOUTS

Press [YES] to print all workouts or press [NO] to return to the Print Menu.

Pace Clock Mode Operation, Menus, & Settings

Settings

This menu prints the console's configuration.





Press **[YES]** to print the settings or press **[NO]** to return to the Print Menu.

Setup Timer Menu

Beeper Volume

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







Use [\uparrow][\downarrow] or the [0]–[7] keys to set the volume level, with 7 being the loudest setting, and then press [ENTER] to save.

Setup Numeric Scoreboard Menu

This menu configures how the console will display data on a numeric scoreboard.



Number of Lines

This menu sets the number of lines (1-10) that the scoreboard displays. The default is 10.





Press the **[0]–[9]** keys to enter the number of lines and then press **[ENTER]** to save. If the number of active lanes in the pool is greater than the value set, the timer will automatically page the information in place order.

Setup RTD/Matrix Scoreboard Menu

This menu configures how the console will output Real-Time Data (RTD) to matrix displays.

RTD Offset

This menu will add an offset to the Real-Time Data (RTD) output to the matrix display.









Use [\uparrow][\downarrow] to toggle through the RTD offset settings (0K, 5K, 10K, or 15K). Each setting adds 5000 to the original item numbers, up to 15000. The default setting is 0K (no offset). To save the setting, press **[ENTER]**.

Pace Clock Mode Operation, Menus, & Settings

When to use this:

- Data from more than one pool/OmniSport 2000 is going to one display.
- If using a Daktronics M2, M3, or V-Link[®] controlled display, this menu allows multiple RTD inputs directly into the display.

Setup Comm Ports Menu

The following *Comm Ports* menus select the protocol used for transmitting data to the display and communicating with a results program.

Scoreboard Outputs

Select Scoreboard Outputs to assign a protocol to transmit data from the **J2** and **J3** outputs on the console.



From Main Menu – [4]>[3]

MENU-SETUP

3-COMM PORTS

MENU-COMM PORTS SCBD: MULTIDROP*

From Main Menu – [4]>[3]>[1]

Use $[\leftarrow][\rightarrow]$ to select MULTIDROP, MULTILINE, or OMEGA protocol, depending on the type of display used, and then press **[ENTER]** to save. MULTICAST is reserved for future use.

When to use this:

- By default, the OmniSport 2000 is set to *MULTIDROP*, and this will work for most Daktronics scoreboards built after 2000.
- If the Daktronics scoreboard does not appear to function with the MULTIDROP protocol, set the OmniSport 2000 to MULTILINE. To verify the scoreboard protocol is set to MULTILINE, unplug the signal cable from the back of the console, and then cycle power to the scoreboard. When it powers up, "P1" will appear on the left two digits.
- If the display is manufactured by Omega, set the console to OMEGA.

RTD Port

Select *RTD Port* to assign a protocol, either Real-Time Data (RTD) or Colorado Timing System (CTS), to transmit out of the **J5 RTD PORT** on the console.

MENU-COMM PORTS



From Main Menu – [4]>[3]>[2]

Use $[\leftarrow][\rightarrow]$ to select *RTD* (default) to send information to a Daktronics display controller or CTS to send to a numeric CTS scoreboard, and then press **[ENTER]** to save.

Results Port

Select *Results Port* to assign a protocol to transmit out of the **J6 RESULTS PORT** on the console to communicate with meet management software.





From Main Menu - [4]>[3]>[3]

OMNI 2000 (default) and OMNI 6000 are bi-directional protocols. CTS is a unidirectional protocol, utilizing the standard CTS scoreboard information.

Pace Clock Mode Operation, Menus, & Settings

Use $[\leftarrow][\rightarrow]$ to select OMNI 2000, OMNI 6000, or CTS, depending on what the meet management software is expecting to receive, and then press **[ENTER]** to save.

Note: Selecting Omni 6000 transmits Omni 6000 RTD item numbers on the RTD output.

Setup Printer Menu

PRINT INTENSITY LEVEL 1-5: 5* From Main Menu - [4]>[4]>[1]

DATE MM/DD/YY

From Main Menu – [4]>[5]

TOD

This menu configures which printouts will be printed on the built-in printer in the console as well as the intensity of the print on those printouts.

Intensity

This menu sets the printer's contrast for easy readability. The typical level is 5.

Press the [1]-[5] keys to select the print intensity and press [ENTER] to save.

Setup Time-of-Day Menu

This menu is used to set the console's date and time.

Press the [0]–[9] keys to enter the correct date and time and then press [ENTER] to save. Press [CLEAR] twice to exit without saving and retain the previous time and date.

Setup Network Menu

HH:MM:SS*

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

Network Enable

MENU-NETWORK

NETWORK: ON *

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

From Main Menu - [4]>[6]>[1]

Use $[\leftarrow][\rightarrow]$ 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.

MENU-NETWORK NETWORK: OFF*

IP Address

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

1-STD* 2-CUST 192.168. 0. 55 From Main Menu - [4]>[6]>[2]

MENU-PRINTER 1-INTENSITY

MENU-SETUP

4-PRINTER



MENU-SETUP

6-NETWORK





In most cases, the standard IP address should be selected. Press [1] followed by [ENTER] and the display will verify the console's IP address. The standard IP address varies by console name as shown in the table at right.

If a custom IP address is required, such as for connecting to a non-Daktronics network, press [2] followed by [ENTER]. Press the [0]-[9] keys to enter a new value for each group of numbers and press **[ENTER]** after every group. To select a standard address instead, press [CLEAR] twice to exit the menu.

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

SUBNET MASK 255*255.255.

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

0.

Press the [0]–[9] keys 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

From Main Menu - [4]>[6]>[3]

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

Press the [0]–[9] keys 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.

RTD Port Number

This menu allows the operator to set or verify the RTD port number of the console. The default setting is shown below.

PORT#-3002 From Main Menu - [4]>[6]>[5]

1-STD* 2-CUST

- In most cases, the standard RTD port number should be selected. Press [1].
 - If the RTD will be sent to a Daktronics DVX/DVN video display, press [1] followed by [ENTER]. The standard port number will vary by console name as shown in the table at right.
 - If the RTD will be sent to a Daktronics Galaxy message center, press [2] followed by [ENTER]. The standard port number will always be "3002".

IP ADDR- OMNI1 192*168. 0. 55

MENU-NETWORK 3-SUBNET MASK

· · · · · · · · ·	
L1-DUXZNI	-2-601-XV*
T PAGE U	Z UNCAIP
	7000
FURI#-	-300Z

MENU-NETWORK

5-RTD PORT #

Name	RTD Port #
OMNI1	21000
OMNI2	21001
OMNI3	21002
OMNI4	21003







MENU-NETWORK 4-GATEWAY ADDRES

96

If a custom RTD port number is required, press [2]. Press the [0]-[9] keys to enter a new value and press [ENTER]. To select a standard port number instead, press [CLEAR] twice to exit the menu.

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.

MAC ADDRESS 09:EC:03:01:06
From Main Menu – [4]>[6]>[6]

Test Menu

The OmniSport 2000 timer is equipped with features that test battery level, and the numeric scoreboard. The following submenus explain how to use each of these tests.

Battery Test

This menu checks the battery power level.



The battery level will show as CHARGED or LOW. Press [ENTER] to exit the menu.

Scoreboard Test

These menus check the numeric scoreboard drivers.

Cycle ON/OFF

This menu checks the signal to the scoreboard.

ENTER TO EXIT From Main Menu - [5]>[2]>[1]

SHOWING ADDRESS

DISPLAY ALL ON

Press [1] to toggle the scoreboard ON and OFF. When this menu is selected, an all ON signal is sent at intervals of approximately 3 seconds. Press [ENTER] to exit the menu.

Driver Address

This menu shows which addresses each of the drivers on the scoreboard are set to. The addresses were set when the display was installed.

ENTER TO EXIT From Main Menu - [5]>[2]>[2]

Press [2] to display the driver addresses. Press [ENTER] to exit the menu.







From Main Menu – [5]

MENU-TEST

2-SCOREBOARD

SB TEST MENU

From Main Menu – [5]>[2]

1-CYCLE ON/OFF

MENU-MAIN 5-TEST MENU

MENU-NETWORK 6-MAC ADDRESS

PORT#- 18000*

CUSTOM.

Digit Number This menu shows the digit designation.





Press **[3]** to display a digit number. The number or letter will show which output on the driver that digit is plugged into. Press **[ENTER]** to exit the menu.

9 Relay Take-Off Platform

The Relay Take-Off Platform (RTOP) triggers the OmniSport 2000 console when a swimmer leaves the start block. The touchpad time is also sent to the console where it is compared to the time when the swimmer left the RTOP. The difference between these two times is either positive or negative. A positive time is a legal exchange while a negative time indicates that there was an early exchange. The RTOP senses human contact and not pressure or force. It is not affected by loose, vibrating blocks, weight of the swimmer, or hop starts. There is NO manufacturer's tolerance to set on Daktronics RTOPs.

The RTOP also plays an important part in training. When used with a Daktronics touchpad, horn start, and pace clock, it allows athletes to perfect their relay exchange time and reaction times. When the platform and touchpad are connected to a pace clock, it will display the relay exchange time of the athletes. When the platform is used in conjunction with the horn start and pace clock, it determines the reaction time from when the start tone sounds and when the athlete leaves the platform.

System Setup

Reference Drawings:

Mounting, Relay Take-Off Platform DWG-268945

The lightweight plastic construction of the RTOP (**Figure 55**) allows for easy setup and removal of the platform. Follow the steps below each time the RTOP is used.

Before Securing the RTOP

- Before placing the RTOP on the block with the platform bend towards the pool, inspect the sides, back, and front for cracks or breaks.
- Inspect the gray electronics box for cracks. Also check that the sticker covering the red LED on the end is not peeling or torn, plus verify that the cable strain reliefs are secure and not broken, loose, or missing.



Figure 55: Relay Take-Off Platform

- **a.** Loosen, but do not completely remove, the four screws on the gray electronics box to take off the cover.
- **b.** Do not allow the inside of the box to get wet when the cover has been taken off for inspection or battery replacement.
- **c.** Check the inside of the box for any indication of water. Next, inspect the gasket that seals the cover of the box for any tears, kinks, or anything that may cause the box to no longer be waterproof.
- **d.** The RTOP uses two AA batteries inside the electronics box. These batteries should be replaced before the meet, whenever the LED indicator shows a constant solid light, or the light is off when plugged into the deck cabling and the timing console is powered on.

Typically the batteries need replacing every two days of competition or 20 hours of use. Verify that the batteries are installed so that the springs are pressing on the negative end of the batteries.
The console's left and middle LCDs can indicate weak or dead batteries. The letter "R" appears on the screen in the lane where the RTOP's batteries are low. When the batteries are completely dead, the R will not display on the screen (**Figure 56**).

- e. Return the cover squarely onto the box. Start the screws and tighten until they are snug and then twist them 1/4 turn more. If any of these screws are missing, the cover will leak and the RTOP may have problems.
- Examine the cable for cuts or exposed wires between the electronics box and platform and between the electronics box and the dual banana cable.
- Remove any corrosion on the dual banana plug with the maintenance kit included with the OmniSport 2000 console.



Figure 56: RTOP Batteries & Console LCD

• Loosen the strap so each end is free. Verify that the straps securing the RTOP to the starting block are not cut/frayed and that the buckles are in place.

Attach & Connect the RTOP

- Attach both straps on each side by placing the loose end into the end with the cam buckle. Once inserted into the cam buckle, pull loose end until platform is snug on the block. Make sure there are no twists in the strap and that the electronics box is flat against the bottom of the starting block. Tie the excess strap up so that it is not hanging in the water that splashes up on the pool deck (Figure 57). Refer to DWG-268945 to correctly mount the RTOP to a starting block.
- Plug the dual banana cord attached to the gray electronics box into either the lane module for an on-deck system or a deck plate for an in-deck system. The RTOP is typically plugged into the **BUTTON 3** input (**Figure 58**). The push button and RTOP cables are stackable connectors. If all three push buttons are in use, piggy-back the RTOP plug on one of the button plugs. For more information refer to **On-deck System (p.6)**.

Note: Swim meets usually use one or two backup buttons with **BUTTON 3** empty. Dedicate **BUTTON 3** for the RTOP so the OmniSport 2000 console can stay set to input 3.



Figure 57: RTOP Mounted to Starting Block



Figure 58: RTOP Connected to BUTTON 3

Test the RTOP When using the OmniSport 2000 console:

- Plug the RTOP into a button input on the deck cabling, typically the BUTTON 3 input. Configure the OmniSport 2000 console for that button. Refer to Relay Take-Off (p.50).
- The red LED on the RTOP's gray electronics box should be flashing.
- Place your hand flat on the RTOP, hold for 2 seconds, and then quickly pull away. The red LED should turn on solid for approximately 1 second then begin flashing again.
- Verify that the times are appearing on OmniSport printouts. Times should also appear in Pro Swimming computer if using that software.

Note: The OnmiSport 2000 console must be configured for a relay event in order to see Exchange times.

When using the pace clock:

- Set the pace clock to Program 11.
- Connect the RTOP cord into the pace clock jack labeled **PLATFORM** (Figure 59).
- Place your hand flat on the RTOP, hold for 2 seconds, and then quickly pull away. The top colon on the pace clock will quickly flash on and off if there is proper connection.

Operations

The main function of the Relay Take-Off Platform is for relay exchanges during competitive events. When used in conjunction with a complete Daktronics timing system, it can be used to detect relay exchanges to 1/100th of a second. Daktronics RTOPs will only work with an OmniSport 2000 timer or a Daktronics pace clock. Coaches can use the RTOP in practices with the pace clock to improve start reaction times. **Figure 60** shows a negative exchange when the swimmer left the platform early.



Figure 59: Connecting to Pace Clock



Figure 60: Pace Clock w/ Negative Time

Operating with OmniSport 2000 Console Only

When operating the OmniSport 2000 timing console with RTOPs, the configuration is done in the *RELAY TAKE-OFF* menu; refer to **Relay Take-Off** (p.50). Press [MENU]>[4]>[2]>[7] to edit the following information:

- BTN/DAKTRONICS: For Daktronics Relay Take-Off Platform. Press [ENTER].
- *RELAY TAKE-OFF INPUT USED:* This is the button input that the platform is plugged into. Use **[1]–[3]** to select the button # the RTOP is plugged into and then press **[ENTER]**.
- *RELAY TAKE-OFF ARM TIME:* This is the duration window between touchpad time and RTOP time (0.8 seconds suggested). Use **[0]–[9]** to set the desired arm time and then press **[ENTER]** to save. Return to the main menu by pressing **[MENU]** once.

Note: The relay race printout shows a positive or negative time on the paper. For a sample printout, refer to **Figure 44**. The results section shows the times for each relay exchange at the end of the race.

Note: The OmniSport 2000 timing console needs to be Version 8.3.27 or newer to properly operate the RTOP. The console's version should display in the middle LCD when first powered up. Refer to Updating Software in the Console (p.21) for information about updating the console to the latest version.

Operating with OmniSport Pro Swimming Software

When OmniSport Pro Swimming is connected to the console, the RTOP settings can be configured in the software itself. From the Pro Swimming software go to **Options > Configuration** and then click on the **Timer** tab (**Figure 61**).

Configure			
Pool Timer Conso	le Printer Pro Printer SC	BD Results Event Order	Comm Ports
Aming Delay: IS Flag Time: 0.3 Flag Time Window C Off C On	Start Input C N.C Other N.O Daktronics Primary Time Touchpads C Button 1 C Buttons 1-3	Lane Module Input Near Near/Far Precision (1/100 (1/1000	Relay Take-off Platforms Type: Button/Daktronics Input: Button 3 Arm Time: 0.8

Figure 61: Pro Software RTOP Configuration

Note: Pro Swimming requires a version 1.1.18 or newer. This will be displayed in the top header of the software.

System Storage

When storing the platforms:

- Store in a dry location.
- Daktronics optional cart is the preferred method transport and storage.
- Make sure cables are not pinched or torn.
- Keep the surface free from debris.
- Avoid storing the RTOP on platform lip.

Troubleshooting

If the RTOP is not working:

- Replace batteries
- Inspect cable
- Inspect and clean banana jack
- Try a different lane module or deck plate
- Contact Daktronics



What if the swimmer does a hop start?

The RTOP tells the timing console each and every time that the swimmer left the block. The console then compares the last input from the RTOP to the touchpad time.

Is the RTOP affected by block vibrations?

No. The RTOP does not sense movement, it senses the human contact.

What if the swimmer places a towel on the block?

That is not recommended. The RTOP may trigger early if there is something between the swimmer's skin and the RTOP.

Is the RTOP affected by the weight of the athlete?

No. The RTOP senses human contact and not pressure or force to activate it.

What is a safe exchange time and what is a DQ?

0.0 seconds or higher is safe and -.01 or lower is a DQ.

Is the equipment approved by the sanctioning body?

Organizations like the NCAA and FINA do not approve equipment. They do write the rule books that outline what the equipment needs to do. The RTOP meets and exceeds all requirements of the NCAA, USA Swimming, FINA and NFHS.

10 Water Polo Mode Operation, Menus, & Settings

Reference Drawings:

Insert; LL-2569, Water Polo, Omni2000..... DWG-182350

The sport insert drawing is located in **Appendix B: Sport Inserts (p.151)**. If an insert is lost or damaged, a copy of the insert drawing may be used until a replacement is ordered.

Refer to **Section 3: General Console Features & Operation (p.17)** for information on how to start up the timer and use the sport insert.

General Features

The water polo mode of the OmniSport 2000 timer will perform timing and scoring operations for water polo events. It can store period, shot, timeout, and penalty times as well as each team's scores.

Getting Started

When starting the OmniSport 2000 console, set the console to the water polo mode. Refer to **Startup (p.19)** and press **[ENTER]** when the right LCD shows 4-WATER POLO.

SELECT SPORT 3-PACE CLOCK

The three LCDs on the OmniSport 2000 keep the operator informed during the event:



The left and middle LCDs show the home and guest team information, respectively. Both teams' LCDs display the same information for each team. The first area under *HOME* or *GST* shows the score. The number under *TOL* shows the number of time outs left. *PL* shows the player's number who has the penalty. The *#* shows the number of penalties that player has; the final area shows the amount of time remaining in the penalty.

The caption above the penalty time remaining (*P1* in this example) shows which of the three available penalties is currently being viewed. Up to three players' penalties can be entered. Press [\uparrow], [\downarrow], [\rightarrow], or [\leftarrow] to cycle through the penalties to select the desired one. The scoring system may be configured to display all three penalties for both teams at the same time.

The right LCD displays the game time, shot time, and period. The *h* after the game time designates that the automatic horn has been enabled. *TIME* will change to *REST* when in a rest period.

Water Polo Keys

When looking at the keys on the Water Polo insert (LL-2566), notice that some of them have been grouped together by location and others have been grouped with a border. The keys with borders are used together or perform similar operations, as described in the following sections.

Auto Horn

With Auto Horn enabled and the game clock reaches zero, the OmniSport 2000 console will signal the horn to sound. Press **[AUTO HORN •]** followed by **[ENTER]** to enable or **[CLEAR]** to disable. An "h" will display in the upper-right corner of the right LCD when Auto Horn is enabled.

Water Polo Mode Operation, Menus, & Settings

Manual Horn

Pressing **[HORN]** will sound the horn. This key can be pressed at any time whether or not the clock is counting.

Game Time Keys

The keys in the GAME TIME section control the main clock. This clock can be set to count the period time, rest time, or overtime. One more setting to be aware of is the Horn Control setting. This can be set so that the main clock horn and the shot time horn are either tied together so that if either one sounds, they both sound, or they can be independent.

Set Time

This key is used to set the time on the main clock. Pressing **[SET TIME •]** more than once accesses the preset times. Read the right LCD to view the value the clock is being set to. During any step, press **[CLEAR]** to exit. Note that the main clock must first be stopped to edit the times.

- Press [SET TIME •] once to view the current time on the clock. Press [ENTER] and use the numeric keypad to input the desired time, and then press [ENTER] again to set the time.
- Press [SET TIME •] twice to set the default period time. Press [ENTER] and use the numeric keypad to change the main clock to the desired default period time, and then press [ENTER]. This sets the main clock to the new period time and it changes the default period time in the console's stored memory.
- Press [SET TIME •] three times to set the Rest 1 time, which is typically the rest period between quarters 1 and 2 or quarters 3 and 4. Press [ENTER] and use the numeric keypad to change the default Rest 1 time, then press [ENTER]. This sets the new Rest 1 time in the main clock and the default time in the console's stored memory.
- Press [SET TIME •] four times to set the Rest 2 time, which is typically the rest period for half time and before overtime, if the match goes into overtime. Press [ENTER] and use the numeric keypad to change the default Rest 2 time, then press [ENTER]. This sets the new Rest 2 time in the main clock and the default time in the console's stored memory.
- Press **[SET TIME** •] five times to set the default overtime. Press **[ENTER]** and use the numeric keypad to input the desired default overtime and then press **[ENTER]**. This sets the main clock to the new overtime and it changes the default overtime in the console's stored memory.

Start

Press [START] to start the clock counting.

Stop

Press **[STOP]** to stop the clock.

Reset

Press **[RESET]** followed by **[ENTER]** to set the main clock to the default period time value. To cancel resetting the clock, press **[CLEAR]**. The clock must be stopped otherwise the **[RESET]** key will be ignored.

Shot Time Keys

The keys in the SHOT TIME section control the shot clock.

Set Time

Press **[SET TIME •]** to set a specific time for the shot clock. One use would be if an official wanted to put 5 seconds back onto the shot clock.

Reset

Press **[RESET]** to reset the shot clock time to the RESET 1 value. **[RESET]** can be pressed while the clock is running or stopped.

Recall Shot Time

Press **[RECALL SHOT TIME •]** to set the shot clock back to the time that was on the clock before **[RESET]** was pressed. This is helpful if **[RESET]** was accidentally pressed, or if a turnover was nullified by an official's ruling.

Start

Press [START] to start the shot clock counting.

Stop

Press [STOP] to stop the shot clock.

Home & Guest Keys

The keys in the HOME and GUEST sections work the same for their respective team.

Score +1

Press [SCORE +1] to increment (add) a point to that team.

Score

Press **[SCORE •]** and then use the numeric keypad followed by **[ENTER]** to input a specific score for that team.

Score -1

Press [SCORE -1] to decrement (subtract) a point from that team.

Timeout

Press **[TIMEOUT •]** use the numeric keypad followed by **[ENTER]** to input the number of Full timeouts for that team. Next, the right LCD prompts the operator for the number of Partial timeouts. Use the numeric keypad followed by **[ENTER]** to input the number of Partial timeouts for that team.

Timeout -1

Press **[TIMEOUT -1]** once followed by **[ENTER]** to decrement a full timeout from that team and start the timeout counting on the main clock. Press **[TIMEOUT -1]** twice followed by **[ENTER]** to decrement a partial timeout from that team and start the timeout counting on the main clock. If no timeouts are available for that team, the right LCD will show NO *TIMEOUTS LEFT*.

Player Penalty +1

Press **[PLAYER PENALTY +1]**, use the numeric keypad to enter the player number that committed the penalty, then press **[ENTER]**. There can be a maximum of three different penalty timers counting per team and each player can have a max of three penalties per game.

Water Polo Mode Operation, Menus, & Settings

Edit Player

Press **[EDIT PLAYER •]** to adjust the number of penalties that have been assigned to a player. Input the player number to adjust and press **[ENTER]**. The player and current number of penalties will be displayed on the right LCD. Use the numeric keypad to input the correct number of penalties for that player and press **[ENTER]**.

Delete Penalty

Press **[DELETE PENALTY** •] and the LCD for that team will show (\rightarrow) next to the penalty time. If there is more than one penalty time counting for that team, use [\uparrow][\downarrow] to select which penalty needs to be deleted. Press **[ENTER]** to delete the penalty or press **[CLEAR]** to exit without deleting the penalty.

Clear All Penalties

Press [CLEAR ALL PENALTIES •]>[ENTER] to remove all penalties that are currently being counted for that team.

Pre-Game Operations

Complete the following steps before each game.

- 1. Set up and test the system. Turn on the timer. Enter the correct date and time, and then select the proper sport operation.
- 2. Print out the consoles settings by pressing [MENU]>[2]>[1]>[ENTER] and verify they are correct. Specifically review:
 - Horn Control Refer to Horn Control (p.111).
 - Shot=0 Control Refer to Shot=0 Control (p.111).
 - Default Time Set Refer to Set Times (p.109).
 - Auto Sequence is ON or OFF. Refer to Auto Sequence (p.110).

If the Auto Sequence is set to ON, the console will:

- a. Count Period 1 time down to zero.
- **b.** Switch to Rest 1 time and start counting. Count down to zero.
- c. Switch to Period 2 and reset time to period time. Wait for start.
- d. Operator presses [START].
- e. Count Period 2 time down to zero.
- f. Switch to Rest 2 time and start counting down to zero.
- g. Switch to Period 3 and reset time to period time. Wait for start.
- h. Operator presses [START].
- i. Count Period 3 time down to zero.
- j. Switch to Rest 1 time and start counting down to zero.
- k. Switch to Period 4 and reset to period time. Wait for start.
- I. Operator presses [START].
- m. Count Period 4 time down to zero.
- n. Switch to Rest 2 time and start counting. Count down to zero.
- o. Switch to Period 5 and reset to overtime. Wait for start.

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In-Game Operations

The functions during a match should be available through one of the keys on the keypad. Thoroughly review Water Polo Keys (p.103).

Enable/Disable Penalty Timer Keys

Press [ENABLE PENALTY TIMER] and [DISABLE PENALTY TIMER] to enable or disable the penalty times, respectively.

Period Keys

To increment the period, press [PERIOD+1]. To edit the period directly, press [PERIOD •], use the number pad to enter the correct value, and then press [ENTER].

Time Out ON/OFF

The [TIME OUT ON/OFF] key toggles the timeout clock. If the timeout clock is on, it will turn it off; if it is off, it will allow for selection of a full or partial timeout without it being assigned to either team. Each press of the key will select the next type available. Press [ENTER] to start the type shown on the LCD.

Menu Navigation

Press [MENU] to access the Main Menu screen. The water polo mode has four menus, described in following sections.



Main Menu Screen

The operator may navigate through the menus using the arrow keys or by pressing the number that precedes the menu title. To return to the main menu at any time, press [MENU] twice.

- Use $[\uparrow][\downarrow]$ to scroll through the menus. When a selection is made, press [ENTER] to accept the menu displayed on the right LCD. Pressing an arrow is equivalent to using a number when in menu mode.
- The second method uses numbers to go directly to a desired menu choice. Using the [1]-[9] keys, enter the number sequence as shown on the OmniSport 2000 Timing Console Quick Reference Guide (ED-13584). Daktronics provides a laminated copy of the quick reference guide; keep it next to the console during a meet for convenience.

Each operator will find his/her own method that works best. Remember that when using either navigation method, pressing [CLEAR] at any time will go back to the previous function or menu. Pressing the **[YES]** and **[NO]** keys is the same as **[ENTER]** and **[CLEAR]**.

Note: In this manual, LCD illustrations aligned to the right indicate menu location while the set-up actions are shown on the screens to the left. Each step is illustrated as the console's right LCD prompts. The keystrokes to get to the menu shown are indicated below that menu.

Scoreboard Menu

In the Scoreboard Menu, the operator can turn the scoreboard output ON or OFF, set the dimming (brightness) level for Multi-drop displays, and display Time-of-Day on the scoreboard.



From Main Menu – [1] or [ENTER]

Scoreboard ON/OFF

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



If the setting is ON, data is sent to a scoreboard. If this setting is OFF, the scoreboard will be blank until either the start of the next game, or it is turned back ON in the menu.

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.

Dimming

This menu is used to adjust the dimming (brightness) level on scoreboards that receive Multi-drop protocol.



From Main Menu – [1]>[2] or from SCBD 2-DIMMING [ENTER]

Use the numeric keypad to select one of the values shown in the table to the right, or use $[\uparrow][\downarrow]$ 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.

Time-of-Day

This menu is used to display Time-of-Day (TOD) on the scoreboard. Press **[YES]** to clear the scoreboard and show Time-of-Day. Press **[NO]** to do nothing and return to the Time-of-Day menu. Use **[**]**[**] to toggle between 12 and 24 hour setting, and then press **[ENTER]**.



From Main Menu – [1]>[3] or from SCBD 3-TIME OF DAY [ENTER]

Note: The running time must be reset before the console will display Time-of-Day on the scoreboard.

Time-of-Day will remain on the scoreboard until:

- The start of the next game.
- The operator presses [**RESET**] a second time to re-display the current results on the scoreboard.

MENU-SCOREBOARD 2-DIMMING

From SCBD ON/OFF Menu

Dimming	g levels:
0 = none	(full bright)

=	90%	
=	80%	

3 = 70%

1

2

- 4 = 60%
- 5 = 50%
- 6 = 40% 7 = 30%
- 8 = 20%
- 9 = 10% (dimmest)



From SCBD 2-DIMMING Menu

• It is toggled off in the menu. When it is toggled off, the current results will go back on the scoreboard.

When to use this:

• Any time the console is reset and the operator wants to just display Time-of-Day on the scoreboard. This might be during a break in the game.

Print Menu

Print Settings

This menu is used to print the console's configuration.





MENU-PRINT 1-SETTINGS

From Main Menu – [2]

Press [YES] to print the settings. Press [NO] to exit the menu without printing.

Paper Feed

Press [ENTER] to advance the paper. The printer will not print on the advanced lines.

MENU-PRINT 2-PAPER FEED
From Main Menu – [2]>[↓]

Setup Timer Menu

This menu is used to configure the game settings.

Set Times

These menus establish the times used while playing the game from overtime minutes to the number of timeouts allowed for each team. MENU-SETUP 1-TIMER From Main Menu - [3]



From Main Menu – [3]>[1]

Note: For each of the following menus, set the time length pressing **[0]–[9]>[ENTER]**. Press **[CLEAR]** twice to leave this setting as is and exit to the *TIMER* menu.

Period Time

This menu sets the period time for the game.

MENU-SET TIME PERIOD: 04:22* From Main Menu - [3]>[1]>[1]>[1]

Overtime

This menu sets the minutes to be played during overtime.



From Main Menu – [3]>[1]>[1]>[2]





Rest Time This menu sets the rest period values.



MENU-SET TIME

If it is OFF, press **[YES]** to turn it ON, or press **[NO]** to leave it OFF. If it is ON, press **[YES]** to turn it OFF, or press **[NO]** to leave it ON.

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Shot=0 Control

The SHOT=0 CONTROL menu sets whether the game clock stops when the shot time reaches zero or if the two clocks run independently of each other.

MENU-TIMER 3-SHOT=0 CONTROL



If it is OFF, press **[YES]** to turn it ON, or press **[NO]** to leave it OFF. If it is ON, press **[YES]** to turn it OFF, or press **[NO]** to leave it ON.

Penalties

This menu sets the maximum number of penalties allowed for a player before being removed from the pool.

MENU-TIMER 4-PENALTIES



MENU-PENALTIES

Press the **[0]–[9]** keys to set the maximum number of penalties and then press **[ENTER]**. Then press **[YES]** or **[NO]** to select whether to reset the shot clock after a penalty.

RESET SHOT-OFF

SET ON? Y/N

Timeouts

The TIMEOUTS menu sets the maximum number of timeouts allowed for each team.

MENU-TIMER 5-TIMEOUTS



From Main Menu – [3]>[1]>[5]

Press the **[0]–[9]** keys to set the maximum number of full timeouts allowed for each team and then press **[ENTER]**. Do the same to set the number of partial timeouts.

1*

Horn Control

The game clock horn and the shot clock horn can be set to operate independently or together.

MENU-TIMER 6-HORN CONTROL



From Main Menu – [3]>[1]>[6]

Press **[YES]** or **[NO]** to make the shot clock and game clock horn sound together (COMBINED) or separately (INDEPENDENT).

Beeper Volume

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





From Main Menu – [3]>[1]>[7

Use [\uparrow][\downarrow] or the [0]–[7] keys to set the volume level, with 7 being the loudest setting, and then press [ENTER] to save.

Water Polo Mode Operation, Menus, & Settings

Setup Numeric Scoreboard Menu

This menu configures how the console will display data on a numeric scoreboard.

Number of Lines

This menu sets the number of lines (1-10) that the scoreboard displays. The default is 10.

OF LINES
LINES= •8

From Main Menu – [3]>[2]>[1]>[1]

Press the [0]–[9] keys to enter the number of lines and then press [ENTER] to save.

Score Module

This menu tells the console whether it will be displaying team scores on a separate team score module on the numeric scoreboard, or if the console's scores will display on the Lane, Place, Time portion of the numeric scoreboard.

SCORE MODULE-Y USED? Y/N

From Main Menu - [3]>[2]>[1]>[2]

MENU-RTD/MATRIX RTD OFFSET: 5K* From Main Menu - [3]>[2]>[2]>[1]

Press [YES] if a module is used or [NO] if no nodule will be used.

Setup RTD/Matrix Scoreboard Menu

This menu configures how the console will output Real-Time Data (RTD) to matrix displays.

RTD Offset

This menu will add an offset to the Real-Time Data (RTD) output to the matrix display.

Use $[\uparrow][\downarrow]$ to toggle through the RTD offset settings (0K, 5K, 10K, or 15K). Each setting adds 5000 to the original item numbers, up to 15000. The default setting is 0K (no offset). To save the setting, press [ENTER].

When to use this:

- Data from more than one pool/OmniSport 2000 is going to one display.
- If using a Daktronics M2, M3, or V-Link[®] controlled display, this menu allows multiple RTD inputs directly into the display.

Setup Comm Ports Menu

The following Comm Ports menus select the protocol used for transmitting data to the display and communicating with a results program.

MENU-SCOREBOARD 1-NUMERIC

From Main Menu – [3]>[2]

MENU-NUMERIC 1-# OF LINES



MENU-NUMERIC





From Main Menu - [3]>[2]>[2]





Scoreboard Outputs

Select Scoreboard Outputs to assign a protocol to transmit data from the **J2** and **J3** outputs on the console.



From Main Menu – [3]>[3]



Use $[\leftarrow][\rightarrow]$ to select MULTIDROP, MULTILINE, or OMEGA protocol, depending on the type of display used, and then press **[ENTER]** to save. MULTICAST is reserved for future use.

When to use this:

- By default, the OmniSport 2000 is set to MULTIDROP, and this will work for most Daktronics scoreboards built after 2000.
- If the Daktronics scoreboard does not appear to function with the MULTIDROP protocol, set the OmniSport 2000 to MULTILINE. To verify the scoreboard protocol is set to MULTILINE, unplug the signal cable from the back of the console, and then cycle power to the scoreboard. When it powers up, "P1" will appear on the left two digits.
- If the display is manufactured by Omega, set the console to OMEGA.

RTD Port

Select *RTD Port* to assign a protocol, either Real-Time Data (RTD) or Colorado Timing System (CTS), to transmit out of the **J5 RTD PORT** on the console.

MENU-COMM PORTS 2-RTD PORT



Use $[\leftarrow][\rightarrow]$ to select *RTD* (default) to send information to a Daktronics display controller or *CTS* to send to a numeric CTS scoreboard, and then press **[ENTER]** to save.

Results Port

Select *Results Port* to assign a protocol to transmit out of the **J6 RESULTS PORT** on the console to communicate with meet management software.

MENU-COMM PORTS 3-RESULTS PORT



OMNI 2000 (default) and OMNI 6000 are bi-directional protocols. CTS is a unidirectional protocol, utilizing the standard CTS scoreboard information.

Use $[\leftarrow][\rightarrow]$ to select OMNI 2000, OMNI 6000, or CTS, depending on what the meet management software is expecting to receive, and then press **[ENTER]** to save.

Note: Selecting Omni 6000 transmits Omni 6000 RTD item numbers on the RTD output.

Setup Printer Menu

This menu configures which printouts will be printed on the built-in printer in the console as well as the intensity of the print on those printouts.



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Game Log

This menu is used to turn the game log printout ON or OFF.

MENU-PRINTER 1-GAME LOG

From Main Menu - [3]>[4]

MENU-PRINTER GAME LOG: OFF* From Main Menu - [3]>[4]>[1]

If the GAME LOG is turned on, each time a clock is started, stopped, score +1, score -1, player penalties, etc., the printout shows the time-of-day the action occurred. Use $[\leftarrow][\rightarrow]$ to set the Game Log ON or OFF, and then press **[ENTER]** to save.

Intensity

This menu sets the printer's contrast for easy readability. The typical level is 5. MENU-PRINTER 2-INTENSITY



Press the [1]-[5] keys to select the print intensity and press [ENTER] to save.

Setup Time-of-Day Menu

This menu is used to set the console's date and time.

MENU-SETUP 5-TIME OF DAY

MENU-SETUP

6-NETWORK

MENU-SETUP

1-NETWORK ENABLE



Press the **[0]–[9]** keys to enter the correct date and time and then press **[ENTER]** to save. Press **[CLEAR]** twice to exit without saving and retain the previous time and date.

Setup Network Menu

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

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-NETWORK NETWORK: ON *	MENI NETI
12121/1211	

MENU-NETWORK NETWORK: OFF*

From Main Menu – [3]>[6]>[1]

Use $[\leftarrow][\rightarrow]$ 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.

IP Address

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



From Main Menu – [3]>[6]>[2]



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In most cases, the standard IP address should be selected. Press [1] followed by [ENTER] and the display will verify the console's IP address. The standard IP address varies by console name as shown in the table at right.

If a custom IP address is required, such as for connecting to a non-Daktronics network, press [2] followed by [ENTER]. Press the [0]–[9] keys to enter a new value for each group of numbers and press [ENTER] after every group. To select a standard address instead, press [CLEAR] twice to exit the menu.

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

SUBNET MASK 255*255.255.

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

0.

Press the **[0]–[9]** keys 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

From Main Menu - [3]>[6]>[3]

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

Press the **[0]–[9]** keys 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.

RTD Port Number

This menu allows the operator to set or verify the RTD port number of the console. The default setting is shown below.



1-STD* 2-CUST

- In most cases, the standard RTD port number should be selected. Press [1].
 - If the RTD will be sent to a Daktronics DVX/DVN video display, press [1] followed by [ENTER]. The standard port number will vary by console name as shown in the table at right.
 - If the RTD will be sent to a Daktronics Galaxy message center, press [2] followed by [ENTER]. The standard port number will always be "3002".

o exit the menu.

4-GATEWAY ADDRES

MENU-NETWORK

1-DVX/N 2-GALXY*

MENU-NETWORK

5-RTD PORT #

PORT#- 3002

Name	RTD Port #
OMNI1	21000
OMNI2	21001
OMNI3	21002
OMNI4	21003

Name	IP Address
OMNI1	192.168. 0.55
OMNI2	192.168. 0.56
OMNI3	192.168. 0.57
OMNI4	192.168. 0.58





GATEWAY	ADDRE	SS -
192.168.	0.	1
From Main Men	u – [3]>[6]	>[4]

Water Polo Mode Operation, Menus, & Settings 116

 If a custom RTD port number is required, press [2]. Press the [0]–[9] keys to enter a new value and press [ENTER]. To select a standard port number instead, press [CLEAR] twice to exit the menu.

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.

MAC ADDRESS 09:EC:03:01:06	
From Main Menu – [3]>[6]>[6]	

Test Menu

The OmniSport 2000 timer is equipped with features that test battery level, and the numeric scoreboard. The following submenus explain how to use each of these tests.

Battery Test

This menu checks the battery power level.



From Main Menu – [4]>[1]

The battery level will show as CHARGED or LOW. Press [ENTER] to exit the menu.

Scoreboard Test

These menus check the numeric scoreboard drivers.

Cycle ON/OFF

This menu checks the signal to the scoreboard.



Press [1] to toggle the scoreboard ON and OFF. When this menu is selected, an all ON signal is sent at intervals of approximately 3 seconds. Press [ENTER] to exit the menu.

Driver Address

This menu shows which addresses each of the drivers on the scoreboard are set to. The addresses were set when the display was installed.





From Main Menu – [4]>[2]>[2]

Press [2] to display the driver addresses. Press [ENTER] to exit the menu.









From Main Menu – [4]>[2]

CUSTOM PORT#- 18000*

MENU-NETWORK 6-MAC ADDRESS Digit Number This menu shows the digit designation.





Press **[3]** to display a digit number. The number or letter will show which output on the driver that digit is plugged into. Press **[ENTER]** to exit the menu.

11 Track Mode Operation

Reference Drawings:

Insert, LL-2573, Omni2000 Track Timing	. DWG-184685
System Riser: FB/Track Scbd w/ Omni2K- Track Side	. DWG-186535

The sport insert drawing and system riser diagrams are located in **Appendix B: Sport Inserts (p.151).** If an insert is lost or damaged, a copy of the insert drawing may be used until a replacement is ordered.

Refer to **Section 3: General Console Features & Operation (p.17)** for information on how to start up the timer and use the sport insert.

General Features

The normal display of timing information on a single-line or multi-line scoreboard is completely automatic and does not require any operator input. The following information is for normal (automatic) operation. Also included are some special actions that can be done with operator input.

Single-line Scoreboards

- Timer Reset: The scoreboard shows last race data.
- Start of Race: The scoreboard shows running time.
- **Final Time:** The first place final time is held on the scoreboard for at least five seconds (default). The page time (time for the scoreboard to page) can be configured in the *SETUP-NUMERIC SCOREBOARD* menu. All of the subsequent final times are then automatically sequenced on the scoreboard as they finish. When all of the active lanes have completed the race, the system displays all of the final times in sequence from first place to last place and repeats the sequence until the next race is started.

Multi-line Scoreboards

- Timer Reset: The scoreboard shows last race.
- **Start of Race:** The scoreboard shows the running time on line one of the scoreboard and blanks the remaining lines.
- Final Time: Final times are displayed on the scoreboard until the next race begins.

The track mode of the OmniSport 2000 console has three different timing modes: by **lane**, by **place**, and **non-lane**. By **lane** and by **place** are typically used to time events that run in lanes (sprints). The OmniSport 2000 console can time up to ten lanes with 1-3 buttons per lane.

Non-lane mode uses a single push button to press each time a runner crosses the finish line in a distance event.

Getting Started

When starting the OmniSport 2000 console, set the console to the track mode. Press **[ENTER]** when the right LCD shows 6-TRACK.

The top line of the right LCD shows the console name (OMNI#) and running time (*RT*). The bottom line displays the event number (*E*), the heat (*H*), and whether it is in *LANE* or *NON-LANE* timing mode.





While other race information is shown on the right LCD, the left and middle LCDs show lane status. The table below explains the lane status symbols that may appear during a race.

Symbol	Definition
(blank)	Lane is off
-	Timer has been reset
NN	Arming delay ("NN" equals a number from 1-2 that is counting down to 0)
*	Lane armed for a final time
0	Lane has finished the race
?	There is a problem with the button interface

An example of the three LCDs is shown below. While all possible lane status symbols are shown, it is unlikely to appear like this during an actual meet.



Track Keys

The keys highlighted on the Track insert (LL-2573) are grouped together and shaded by lane. Lane 1 keys line-up vertically with Lane 1 on the LCD, Lane 2 keys with Lane 2, and so on through Lane 10. The lane keys, along with all other keys on the insert, are described in the following sections.

Lane On/Off

At the start of a race, the timer automatically turns every lane on. It is up to the operator to turn lanes off as needed. Use these keys to disable the empty lanes after the start of a race.

For each lane that is empty (no runner in that lane), press **[LANE ON/OFF]** to tell the timer to not expect any data from that lane. A second use of the key is to temporarily disable a lane and then turn it back on.

Start

The operator has the option to start the timer counting by pressing **[START]**. The printer will label the results with the source of the start. If the keypad was used it would be labeled *Source: Keyboard*. If the start was from the horn start it would be labeled *Source: External*.

Examples when to use Start:

- Starting the race
- Testing the timing system or scoreboard

Store Print

The **[STORE PRINT]** key stores the race data for later use and prints the results for verification. When pressed, the event data is stored up to its current status. It then performs the printer commands selected in the *SETUP-PRINTER* menu. To print information from a previous race, go to the *PRINT STORED DATA* menu. Refer to **Print Menu (p.127)** for more information.

If an error is observed on the printout, use the **[EDIT]** key to make corrections. Press **[STORE PRINT]** to verify the correction. After all corrections have been completed, press **[RESET]>[ENTER]**. The timer is now ready to begin the next event.

The OmniSport 2000 printer uses the following symbols on its printouts to label data.

Symbol	Definition
B(1-3)	Buttons 1 through 3
B or BK	Backup time
E	Edited time
М	Manual time

Edit

When the running time is counting, the **[EDIT]** key allows corrections to be made to times in the current race memory. Press **[EDIT]** then the desired lane number key. Enter the new time with the numeric keypad then press **[ENTER]**. Note that **[EDIT]** is disabled during non-lane timing.

Paper Feed

Press **[PAPER FEED]** to have the printer advance the paper. The printer will not print on the advanced lines.

Event Heat

- **Event +1**: This function increments the event number by one.
- Heat +1: This function increments the heat number by one.
- Heat -1: This function decrements the heat number by one.
- Event Heat: Press [EVENT HEAT] to enter a particular event and heat number.

Place/Lane/Non-Lane Timing

- Lane Timing: Pressing [LANE TIMING] enables all lanes and buttons configured in the system. When this is enabled, each lane has one to three push buttons that will record when a racer finishes the race.
- **Place Timing:** Pressing **[PLACE TIMING]** enables all places and buttons configured in the system. When this is enabled, each place has one to three buttons that will record when a racer finishes the race.
- **Non-Lane Timing:** Pressing **[NON-LANE TIMING]** disables all of the buttons except Lane 1, Button 1. The official should press the button for every competitor finishing the race.
- Non-Lane Split Enable: [NON-LANE SPLIT ENABLE] uses the next button recorded to calculate the cumulative and subtractive split for that last lap. The split time will be printed and displayed on the scoreboard. The [NON-LANE SPLIT ENABLE] key only works if the [NON-LANE TIMING] key has been pressed.

Reset

The timer is automatically reset when first turned on. The timer may be reset any time the race clock is running by pressing **[RESET]>[ENTER]**.

When a race is complete, the operator presses [RESET]>[ENTER] to reset the timer.

Note: If the operator has not pressed **[STORE PRINT]** before resetting the timer, pressing **[RESET]** will store the race and print the results in addition to resetting the clock.

If the timer was not reset before the start of the next race, refer to **Always Ready Start** (p.122).

Menu

Press [MENU] to access additional functions and setting in the console. Section 12: Track Mode Menus & Settings (p.125) describes the menus in track mode and how to navigate them.

Disqualification (DQ)

The DQ (disqualification) flag can be used to disqualify a racer with subsequent reranking on printouts and on the scoreboard.

Typical operation: Press **[DQ]** and **[LANE ON/OFF]** key for the desired lane, or enter the lane number on the number keypad and press **[ENTER]**. Doing this sets the DQ flag for that lane. The DQ operation should normally be done at the conclusion of the race, after the officials have ruled on the situation that caused the athlete to be disqualified. On exit from the DQ command, the scoreboard is automatically updated and any subsequent printouts will show the revised placing.

The DQ operation can be done at any point in the race and does not affect arming or recording of times for the lane. By pressing the same lane number again while in the DQ command, the lane is "re-qualified" and the original status indicator is returned. Before the meet, the timing operator should clarify with the meet referee if he/she wants the athletes to be disqualified on the timer. Clarification of this is important for results to be properly ranked on the printouts and meet management software which will show as a DQ on the scoreboard.

Event/Heat, Home/Guest & Record Time Scoreboards

The Event/Heat Number and Home/Guest Scores can be displayed on the appropriate scoreboard module if it is included in the system.

When the Event/Heat module is present, the event and heat numbers will automatically be displayed whenever they are changed with the **[EVENT HEAT]** key.

When the Home/Guest or Guest/Guest modules are present, the home, guest 1, guest 2 and guest 3 scores will automatically be displayed after being entered in the *EDIT-TEAM SCORE* menu. Refer to **Edit Team Score (p.127)**.

When the Record Time module is present, record data for the corresponding event will be displayed at the start of the race. One record can be pre-entered for each event in the *EDIT-RECORD TIME* menu. Refer to **Record Time (p.127)**.

Pre-race Setup for the Timer Operator

Printer Setup

Before the start of the first race, the printer should be set up to print the desired information. Refer to **Setup Printer Menu (p.133)** to configure the printer.

Verify the Console is Reset

Confirm the console is reset and that *RT* shows 00:00.0. Set the correct Event Heat and Lane. Press **[NEXT EVENT]>[HEAT +1]** / **[HEAT -1]** or simply press **[EVENT HEAT]** to enter the correct Event and Heat.

Timer Operation During Race

During the race, the operator watches the meet officials, lane status indicators on the console's LCDs and athletes in their lanes. This section describes operations that must take place during an event. Doing these operations will increase the effectiveness and accuracy of the timer, and help ease the flow of running a track meet.

Start Operations

The timer will start any time a start impulse is received and the timer is reset (clock shows 00:00.00). As a backup operation or for testing, press **[START]** to start the timer. The printer will note if the start is *External* or *Keyboard*.

Check for Unused Lanes

The timer operator should turn off any unused lanes after visually verifying any open lanes on the track. Press [LANE ON/OFF] for the appropriate lane.

Watch Lane Status LCDs

The operator watches the lane status indicators on the left and middle LCDs to confirm that all times are recorded.

Always Ready Start

The Always Ready Start feature is based on the fact that the OmniSport 2000 timer has an internal time-of-day clock that continually runs when the timer is turned on. The internal clock continues to run even when the race clock has been stopped.

If a start was missed because the timer was not reset (race clock was still running from the previous race), the start impulse is logged in the memory and on the printer. To prompt the operator that a start has occurred, reset the timer. If the operator chooses to use the received start signal, the timer will automatically start timing the event by calculating the correct running time. Press **[EDIT]** to retrieve the start impulse used for the last race.

If two independent OmniSport 2000 timers are being used in parallel for an especially critical application and one timer misses a start impulse completely because of a technical problem, a start time may be manually entered when read from the printout of the other timer.

Example: Editing a Start - If a start is missed because the timer was not reset:

- The time-of-day of the start impulse will be logged on the printer.
- The OmniSport will inform the operator of the start after the timer is reset.

Procedure:

- 1. To reset the timer:
 - a. Press [RESET]>[ENTER].
 - **b.** The following message displays on the screen:



- c. Accept the missed start by pressing [ENTER], and the timer will start from the missed start time. If the missed start is to be ignored, simply press the [CLEAR] key and the timer will be reset only.
- 2. If the start time was not on the LCD, use the EDIT-START menu:

- **a.** With the timer reset, press **[EDIT]**. This reveals the *EDIT-START* menu and puts the time-of-day of the last start impulse on the LCD.
- **b.** Confirm that the time-of-day shown on the LCD is the correct time for the start of the race. The start time may be edited using the number keys.
- c. Press [ENTER]. This completes the editing operation. The race clock will start and the running time will be correct based on the entered start time.

Timer Operations After Race

This section describes operations that must take place after an event has completed. Doing these operations will increase the effectiveness of accurate timing and help ease the flow of running a large track meet.

Store Print

If an error is observed on the printout, press [EDIT]. Press [STORE PRINT] to verify the correction. After all corrections are made, press [RESET]>[ENTER]. Refer to Print Menu (p.127). The timer is now ready to begin the next event. Advance to the next event or heat and continue, following Pre-race Setup for the Timer Operator (p.121) and Timer Operation During Race (p.122) through each race.

Printouts from the Built-in Printer

This section illustrates typical printouts from the OmniSport 2000 console. To create a printout from the console's built-in printer, refer to **Print Menu (p.127)**.

Track Configurations

It is important to save the printout (**Figure 62**) for system settings to reuse for future meets. The basis of the settings is letting the console know how the physical track and timer are configured.

```
--SYSTEM SETTINGS--
- VERSION 8.6.02b -
TIMER CONFIGURATIONS:
1.Number Lanes- 8
2.Start Input- N.O.
3. Timing Input- J7
4. Precision- 1/100
SCOREBOARD CONFIGS:
1.Num of Lines- 8

7 Finish Hold- 3
2. Finish Hold-
3.Results by- LANE
4.On FB SCBD- EV/HT
5. Run Time- Splits
RTD CONFIGURATIONS:
1. Num of Lines- 8
2. Finish Hold-
                    5
3.Results by- LANE
PORT CONFIGURATIONS:
1.Scbrd Port- M-DROP
2.RTD Port- RTD
 3.Results- OMNI2000
PRINTER CONFIGS:
1. Printer Log- ON
2.Results by- LANE
 3.Print Backup- YES
```

Figure 62: Track Settings

Results Printouts

Figure 63 illustrates a typical printout for an eight-lane track showing Lane and Place results for two heats.

	_
DAKTRONICS	DAKTRONICS
OMNISPORT 2990	OMNISPORT 2000
START AT 10:31:36.955	SIHKI AT 10:30:03.128
DATE: 01-19-09	DHIE: 01-19-09
SOURCE: EXTERNAL	SOURCE: KEYBOARD
RHCE:309	P FUENT AAA
L L HEATICI	
	A A
	C N
F F -TIMF-	E E -TIME-
4 2:08.87	4 10.21
5 2:09.97	3 11.25
3 2:11.75	5 13.21
6 2:12.90	6 14.33
7 2:14.10	2 15.81
2 2:15,47	7 17.33
1 2:16.41	8 18.74
8 2:18.33	1 20.47
DAKTRONICS	DAKTRONICS
OMNISPORT 2860	VINISPURI 2850
START AT 10:31:36.955	31HKI HI 10:30:03.128 DATE: 01-10-00
DHIL: 01-19-09 COUDCE, EVTEDNAL	SOURCE, KEABOOBD
SOURCE: ENIERNHE	CORVER WEIGARN
RACE: 509	RACE: 508
P EVENT:001	P EVENT:001
L L HEAT:01	L L HEAT:01
Á Á	A A
C N	- H
CN EE - RESULTS-	E E -RESULTS-
C N E E -RESULTS- 7 1 2:16,41	E E -RESULTS- 8 1 20.47
C N E E -RESULTS- 7 1 2:16.41 6 2 2:15.47	E E -RESULTS- 8 1 20.47 5 2 15.81
C N E E -RESULTS- 7 1 2:16.41 6 2 2:15.47 3 3 2:11.75	E E -RESULTS- 8 1 20.47 5 2 15.81 2 3 11.25
C N E E -RESULTS- 7 1 2:16.41 6 2 2:15.47 3 3 2:11.75 1 4 2:08.87	E E -RESULTS- 8 1 20.47 5 2 15.81 2 3 11.25 1 4 10.21
C N E E -RESULTS- 7 1 2:16.41 6 2 2:15.47 3 3 2:11.75 1 4 2:08.87 2 5 2:09.97	E E -RESULTS- 8 1 20.47 5 2 15.81 2 3 11.25 1 4 10.21 3 5 13.21
C N E E -RESULTS- 7 1 2:16.41 6 2 2:15.47 3 3 2:11.75 1 4 2:08.87 2 5 2:09.97 4 6 2:12.90	E E -RESULTS- 8 1 20.47 5 2 15.81 2 3 11.25 1 4 10.21 3 5 13.21 4 6 14.33
C N E E -RESULTS- 7 1 2:16.41 6 2 2:15.47 3 3 2:11.75 1 4 2:08.87 2 5 2:09.97 4 6 2:12.90 5 7 2:14.10	E E -RESULTS- 8 1 20.47 5 2 15.81 2 3 11.25 1 4 10.21 3 5 13.21 4 6 14.33 6 7 17.33 6 7 17.33

Figure 63: Track Results

12 Track Mode Menus & Settings

The console saves the settings and does not need to be re-configured once it is set. The quickest way to confirm settings is press [MENU]>[3]>[2]>[ENTER]. Re-confirm the settings before each meet by saving the printout from the previous meet.

Menu Navigation

Press [MENU] to access the Main Menu screen. The track mode has five menus, described in following sections.

The operator may navigate through the menus using the arrow keys or by pressing the number that precedes the menu title. To return to the main menu at any time, press [MENU] twice.



Main Menu Screen

Use $[\uparrow][\downarrow]$ to scroll through the menus. When a selection is made, press [ENTER] to accept the menu displayed on the right LCD. Pressing an arrow is equivalent to using a number when in menu mode.

The second method uses numbers to go directly to a desired menu choice. Using the [1]-[9] keys, enter the number sequence as shown on the OmniSport 2000 Timing Console Quick Reference Guide (ED-13584). Daktronics provides a laminated copy of the quick reference guide; keep it next to the console during a meet for convenience.

Each operator will find his/her own method that works best. Remember that when using either navigation method, pressing [CLEAR] at any time will go back to the previous function or menu. Pressing the [YES] and [NO] keys is the same as [ENTER] and [CLEAR].

Note: In this manual, LCD illustrations aligned to the right indicate menu location while the set-up actions are shown on the screens to the left. Each step is illustrated as the console's right LCD prompts. The keystrokes to get to the menu shown are indicated below that menu.

Scoreboard Menu

In the Scoreboard Menu, the operator can turn the scoreboard output ON or OFF, set the dimming (brightness) level for Multi-drop displays, and display Time-of-Day on the scoreboard.



From Main Menu – [1] or [ENTER]

Scoreboard ON/OFF

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



From Main Menu – [1]>[1] or from SCBD ON/OFF Menu [1] or [ENTER]

If the setting is ON, data is sent to a scoreboard. If this setting is OFF, the scoreboard will be blank until either the start of the next race, or it is turned back ON in the menu.

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.

Dimming

This menu is used to adjust the dimming (brightness) level on scoreboards that receive Multi-drop protocol.



From Main Menu – [1]>[2] or from SCBD 2-DIMMING [ENTER]

Use the numeric keypad to select one of the values shown in the table to the right, or use $[\uparrow][\downarrow]$ 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.

Time-of-Day

This menu is used to display Time-of-Day (TOD) on the scoreboard. Press **[YES]** to clear the scoreboard and show Time-of-Day. Press **[NO]** to do nothing and return to the Time-of-Day menu. Use $[\uparrow][\downarrow]$ to toggle between 12 and 24 hour setting, and then press **[ENTER]**.



From Main Menu – [1]>[3] or from SCBD 3-TIME OF DAY [ENTER]

Note: The running time must be reset before the console will display Time-of-Day on the scoreboard.

Time-of-Day will remain on the scoreboard until:

- The start of the next race.
- The operator presses [**RESET**] a second time to re-display the current results on the scoreboard.
- It is toggled off in the menu. When it is toggled off, the current results will go back on the scoreboard.

When to use this:

• Any time the console is reset and the operator wants to just display Time-of-Day on the scoreboard. This might be during a break in the meet.

Edit Menu

The *Edit Menu* allows the operator to manually edit the team scores for display on auxiliary team score scoreboards and edit the record times.



From Main Menu – [↓]

2-DIMMING From SCBD ON/OFF Menu

MENU-SCOREBOARD

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



From SCBD 2-DIMMING Menu

Edit Team Score

This menu is used to manually edit up to 4 team scores for display on auxiliary team score scoreboards. The asterisk (*) identifies which team score is selected.



Enter a score of 0 to 999 using the **[0]–[9]** keys. The asterisk (*) flashes to indicate the score is ready to enter. Press **[ENTER]** on the last score to post the scores to the scoreboard and

Some operators will use the four scores (H, G1, G2 & G3) as HOME and GUEST for men and women or HOME and GUEST for varsity and junior varsity. Another option is to post the men's scores when a men's event is finished, and the women's scores when a women's event is finished.

advance to the Edit – Record Time Menu. To exit without saving the data, press [CLEAR].

When to use this:

• Typically team scores are updated on the scoreboard after each event is finished and scored.

Record Time

This menu is used to set an event's record time to be displayed.



MENU-EDIT

1-TEAM SCORE

From Edit Menu [ENTER] or [2]



Enter a record time using the **[0]–[9]** keys and press **[ENTER]**. Press **[CLEAR]** twice to leave this unchanged and return to the Edit menu.

Print Menu

The *Print Menu* is where the operator can print a specific race result or the settings for the current console configuration. Refer to **Printouts from the Built-in Printer** (p.123) for additional illustrations of available printouts.

Print Race Results

This menu is used to print races that are stored in the OmniSport 2000 console's revolving race memory. Each time the console times a race, that race is assigned a race number. The race number increments by one each time a

new race is started and counts up from 1 to 999. When the console gets to race number 999, it rolls over and the next race number is 1. The console has enough memory to store approximately the last 50 races. If the memory in the console is full and a new race needs to be stored, the console deletes the oldest race in its memory.



To print a stored race, press the **[0]–[9]** keys to enter the desired race number and press **[ENTER]**. The LCD will then prompt the operator to verify the entered race number.





Press **[YES]** to print the selected results (**Figure 63**). Press **[NO]** to ignore the selection and return to the *Print Menu*.

If the desired race has been deleted from the console's memory, the LCD will flash RACE NOT FOUND.



When to use this:

• Use this to re-print a race result on the console's built-in thermal printer.

Print Settings

This menu is used to print the console's configuration.



Press [YES] to print the settings. Press [NO] to exit the menu without printing.

When to use this:

- Print the settings after the console has been set up and functioning correctly. Keep this printout for future reference. It will be valuable if the console is loaned out to someone else, a change was made in the console unknowingly, or if the console was returned to or exchanged by Daktronics for service.
- It is a good idea to pull out the known good settings and verify them to a new printout when the equipment is being set up for a meet.

Setup Timer Menu

This menu configures the track settings.

Number of Lanes

This setting tells the OmniSport 2000 console how many lanes are on the track.





MENU-PRINT

2-SETTINGS



From Main Menu – [4]>[1]

Press the **[0]–[9]** keys to enter the number of lanes from 1 to 10. When the correct number of lanes is shown on the LCD, press **[ENTER]** to save.

Start Input

The console can be configured to receive inputs from different starting devices. Some start devices are an open switch that closes (Normally Open) and others are a closed switch that opens (Normally Closed).



From Main Menu – [4]>[1]>[2]



pi 05.	10 30 00.	
	 ton a state for a sec	

Use $[\leftarrow][\rightarrow]$ to toggle the setting from N.O. to N.C. and then press **[ENTER]** to save.

Note: Normally Open (N.O.) is the standard setting for Daktronics timing accessories with the OmniSport 2000 timer and is selected by default.

Primary Time

This menu will configure the console for which timing input(s) to use as the primary time.

MENU-TIMER 3-PRIMARY TIME



Primary Time is used to tell the timer to use the **J7 SWITCH INPUTS** jack and 1 button per lane for up to 8 lanes, or to use the **J10 NEAR END** jack 1, 2, or 3 buttons for up to 10 lanes. Press $[\leftarrow][\rightarrow]$ to toggle between settings:

- Input: J7 1 button
- Input: J10 1 button, 2 buttons, or 3 buttons

Press [ENTER] to save or press [CLEAR] to exit without saving.

Note: When three buttons are used, final times are printed when the middle time is received. If two buttons are being used, the time of the second button is printed after both buttons are pressed. If one button is used, that is the time. In non-lane events, only one button for lane one is used for all racers.

Precision

This menu tells the timer if it should report and display the times to one hundredth (1/100) or one thousandth (1/1000) of a second.

MENU-TIMER 4-PRECISION



Use $[\leftarrow][\rightarrow]$ to select between 1/100 or 1/1000, and then press **[ENTER]** to save.

Beeper Volume

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





Use [\uparrow][\downarrow] or the [0]–[7] keys to set the volume level, with 7 being the loudest setting, and

then press [ENTER] to save.

Setup Numeric Scoreboard Menu

This menu configures how the console will display data on a Lane, Place, and Time numeric scoreboard.



From Main Menu – [4]>[2]

Number of Lines

This menu sets the number of lines (1-10) of lane data that the scoreboard will display. If the number of active lanes on the track is greater than the value set, the timer will automatically page the information in place order. The default is 10.

MENU-NUMERIC 1-# OF LINES



Press the [0]-[9] keys to enter the number of lines and then press [ENTER] to save.

Finish Page Time

This menu configures how long (0 to 99 seconds) each page of the Finish Times will hold on the scoreboard. The default time is 5 seconds. MENU-NUMERIC 2-FIN PAGE TIME



Press the **[0]–[9]** keys to enter the number of seconds each page will be displayed and then press **[ENTER]** to save.

When to use this:

• Use this feature when there are fewer Lane, Place, and Time lines on the scoreboard than the number of lanes on the track.

Results Order

This menu configures the console to display results on the scoreboard in either Lane Order or Place Order. If the number of lanes on the track is greater than the number of lines on the scoreboard, the timer will display the information in place order regardless of this setting. The default is Lane Order.

MENU-NUMERIC 3-RESULTS ORDER



From Main Menu – [4]>[2]>[1]>[3]

Use $[\leftarrow][\rightarrow]$ to select either LANE or PLACE and then press **[ENTER]** to save.

When to use this:

- Select LANE to display the results in the order of the lane in which the runners finished.
- Select PLACE to display the results in the order of which the runners placed.

Show DQ

This menu configures what will show on the scoreboard when there is a disqualification (DQ).

MENU-NUMERIC 4-SHOW DQ



From Main Menu – [4]>[2]>[1]>[4]

Use $[\leftarrow][\rightarrow]$ to select to display the DQ ONLY (in the TIME digits) or to display the DQ/TIME, with "DQ" in the PLACE digits and the time in the TIME digits. Press **[ENTER]** to save.



Football SCBD

This setting determines if Event/Heat or Guest 2/3 will be displayed on the TO GO and BALL ON digits on the bottom of a on the bottom of a Football/Track scoreboard.

MENU-NUMERIC 5-FOOTBALL SCBD



Use $[\leftarrow][\rightarrow]$ to select the desired choice. Press **[ENTER]** to save.

Running Time

This menu sets what data is displayed on a single line numeric scoreboard.





Use $[\leftarrow][\rightarrow]$ to select either CONTINUOUS running data or the FINISH scores. Press **[ENTER]** to save.

Setup RTD/Matrix Scoreboard Menu

Number of Lines

This menu sets the # of Lines of lane data being sent to the matrix display. If the number of lanes on the track is greater than the value set, the timer will automatically page the information in place order. The default setting is 10.

MENU-SCOREBOARD
2-RTD/MATRIX



#	OF	LINE	s
LI	NES	5= •8	

From Main Menu – [4]>[2]>[2]>[1]

Press the **[0]–[9]** keys to enter the number of lines appropriate to the facility's display and then press **[ENTER]** to save.

Finish Page Time

This menu configures how long (0 to 99 seconds) each page of the Finish Times will hold on the display.

FINIS TIME:	H PAGE •5*	TIME



From Main Menu – [4]>[2]>[2]>[2]

Press the **[0]–[9]** keys to enter the appropriate length of time the finish time will appear on the display and then press **[ENTER]** to save. The default time is 5 seconds.

Results Order

This menu configures the console to display results in either *Lane Order* (default) or *Place Order*. If the number of lanes in the pool is greater than the number of lines configured for the display, the timer will display the information in place order regardless of this setting.





RESULTS ORDER ORDER-PLACE*

From Main Menu – [4]>[2]>[2]>[3]

Use $[\leftarrow][\rightarrow]$ to select either LANE or PLACE and then press **[ENTER]** to save.

When to use this:

- Select LANE to display the results in the order of the lane in which the runners finished.
- Select PLACE to display the results in the order of which the runners placed.

Show DQ

This menu configures what will show on the display when there is a disqualification (DQ).

MENU-RTD/MATRIX 4-SHOW DQ



Use $[\leftarrow][\rightarrow]$ to select to display the DQ ONLY (in the TIME field) or to display the DQ/TIME, with "DQ" in the PLACE field and the time in the TIME field. Press **[ENTER]** to save.

RTD Offset

This menu will add an offset to the Real-Time Data (RTD) output to the matrix display.

MENU-RTD/MATRIX 5-RTD/OFFSET



Use $[\uparrow][\downarrow]$ to toggle through the RTD offset settings (*OK*, *5K*, *10K*, or *15K*). Each setting adds 5000 to the original item numbers, up to 15000. The default setting is *OK* (no offset). To save the setting, press **[ENTER]**.

When to use this:

- Data from more than one pool/OmniSport 2000 is going to one display.
- If using a Daktronics M2, M3, or V-Link[®] controlled display, this menu allows multiple RTD inputs directly into the display.

Setup Comm Ports Menu

The following Comm Ports menus select the protocol used for transmitting data to the display and communicating with a results program.

MENU-SETUP 3-COMM PORTS

Scoreboard Outputs

Select Scoreboard Outputs to assign a protocol to transmit data from the **J2** and **J3** outputs on the console.



From Main Menu – [4]>[3]>[1]

MENU-COMM PORTS 1-SCBD OUTPUTS From Main Menu - [4]>[3]

Use $[\leftarrow][\rightarrow]$ to select MULTIDROP, MULTILINE, or OMEGA protocol, depending on the type of display used, and then press **[ENTER]** to save. MULTICAST is reserved for future use.

When to use this:

- By default, the OmniSport 2000 is set to MULTIDROP, and this will work for most Daktronics scoreboards built after 2000.
- If the Daktronics scoreboard does not appear to function with the MULTIDROP protocol, set the OmniSport 2000 to MULTILINE. To verify the scoreboard protocol is set to MULTILINE, unplug the signal cable from the back of the console, and then cycle power to the scoreboard. When it powers up, "P1" will appear on the left two digits.
- If the display is manufactured by Omega, set the console to OMEGA.

RTD Port

Select RTD Port to assign a protocol, either Real-Time Data (RTD) or Colorado Timing System (CTS), to transmit out of the J5 RTD PORT on the console.

MENU-COMM PORTS 2-RTD PORT



RTD PORT: CTS*

Use $[\leftarrow][\rightarrow]$ to select RTD (default) to send information to a Daktronics display controller or CTS to send to a numeric CTS scoreboard, and then press [ENTER] to save.

Results Port

Select Results Port to assign a protocol to transmit out of the J6 RESULTS PORT on the console to communicate with meet management software.

MENU-COMM PORTS 3-RESULTS PORT



OMNI 2000 (default) and OMNI 6000 are bi-directional protocols. CTS is a unidirectional protocol, utilizing the standard CTS scoreboard information.

Use $[\leftarrow][\rightarrow]$ to select OMNI 2000, OMNI 6000, or CTS, depending on what the meet management software is expecting to receive, and then press **[ENTER]** to save.

Note: If using an older version of Hy-Tek Meet Manager, it may require configuring this port to the OmniSport 6000 data. Selecting Omni 6000 transmits Omni 6000 RTD item numbers on the RTD output.

Setup Printer Menu

This menu configures which printouts will be printed on the built-in printer in the console as well as the intensity of the print on those printouts.

MENU-SETUP	
4-PRINTER	

Race Log

The Race Log menu allows race logging to be turned ON/ OFF. Typically the Race Log is set ON. As times are registered, the printer will automatically print the results.



From Main Menu – [4]>[4]>[1]

MENU-PRINTER 1-RACE LOG

From Main Menu – [4]>[4]

Use $[\leftarrow][\rightarrow]$ to toggle race logging ON or OFF and then press **[ENTER]** to save.

When to use this:

• Using the Race Log is the most thorough way to identify issues with the system. Daktronics recommends that the Race Log is always turned on.

Results

The Results menu selects printouts by LANE or PLACE order. The results printout format is used for verification and is usually the preference of the meet management program operator. MENU-PRINTER 2-RESULTS



Use $[\leftarrow][\rightarrow]$ to select LANE or PLACE and then press **[ENTER]** to save.

Backups

The *Backups* menu configures whether or not backup times will be printed with the race results. Printing backup times is usually the preference of the meet management program operator.

MENU-PRINTER 3-BACKUPS



From Main Menu – [4]>[4]>[3]

Use $[\leftarrow][\rightarrow]$ to select YES (backups enabled) or NO (backups disabled) and then press **[ENTER]** to save.

Intensity

This menu sets the printer's contrast for easy readability. The typical level is 5.





From Main Menu – [4]>[4]>[4]

Press the [1]-[5] keys to select the print intensity and press [ENTER] to save.

Setup Time-of-Day Menu

This menu is used to set the console's date and time.



From Main Menu – [4]>[5]

Press the **[0]–[9]** keys to enter the correct date and time and then press **[ENTER]** to save. Press **[CLEAR]** twice to exit without saving and retain the previous time and date.

Setup Network Menu

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



MENU-SETUP 5-TIME OF DAY
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



Use $[\leftarrow][\rightarrow]$ 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.

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 2-IP ADDRESS



In most cases, the standard IP address should be selected. Press [1] followed by [ENTER] and the display will verify the console's IP address. The standard IP address varies by console name as shown in the table at right.

If a custom IP address is required, such as for connecting to a non-Daktronics network, press [2] followed by [ENTER]. Press the [0]–[9] keys to enter a new value for each group of numbers and press [ENTER] after every group. To select a standard address instead, press [CLEAR] twice to exit the menu.

Name	IP Address		
OMNI1	192.168. 0.55		
OMNI2	192.168. 0.56		
OMNI3	192.168. 0.57		
OMNI4	192.168. 0.58		

IP ADDR- OMNI1 192*168. 0. 55

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.





Press the **[0]–[9]** keys 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.





From Main Menu – [4]>[6]>[4]

Press the **[0]–[9]** keys 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.

Track Mode Menus & Settings 135

RTD Port Number

This menu allows the operator to set or verify the RTD port number of the console. The default setting is shown below.

1-STD* 2-CUST PORT#- 3002 From Main Menu - [4]>[6]>[5]

- In most cases, the standard RTD port number should be selected. Press [1].
 - If the RTD will be sent to a Daktronics DVX/DVN video display, press [1] followed by [ENTER]. The standard port number will vary by console name as shown in the table at right.
 - If the RTD will be sent to a Daktronics Galaxy message center, press [2] followed by [ENTER]. The standard port number will always be "3002".
- If a custom RTD port number is required, press [2]. Press the [0]–[9] keys to enter a new value and press [ENTER]. To select a standard port number instead, press [CLEAR] twice to exit the menu.

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.

MAC ADDRESS 09:EC:03:01:06

From Main Menu – [4]>[6]>[6]

Meet Manager Enable

This menu allows the operator to enable network communications to Meet Manager (results) software.



From Main Menu – [4]>[6]>[7]

Use $[\leftarrow][\rightarrow]$ to toggle between ON/OFF and then press **[ENTER]** to save.

Test Menu

The OmniSport 2000 timer is equipped with features that test battery level, the lane modules, and the numeric scoreboard. The following submenus explain how to use each of these tests. It is important to run through these tests before the meet begins to prevent problems from occurring during the meet.

Battery Test

This menu checks the battery power level.

MENU-NETWORK 5-RTD PORT #

1-DUX/N	2-GALXY*
PORT#-	3002

Name	RTD Port #
OMNI1	21000
OMNI2	21001
OMNI3	21002
OMNI4	21003



MENU-NETWORK 6-MAC ADDRESS

MENU-NETWORK 7-NETWK PRO/MMR





From Main Menu – [5]

From Main Menu – [5]>[1]

The battery level will show as CHARGED or LOW. Press [ENTER] to exit the menu.

Lane Module Test

EAR END DATA +FAR END DATA From Main Menu – [5]>[2]

This menu tests the lane module inputs.

The left and middle LCDs will show the lane module input status by lane. All devices should be tested before every session. Press **[ENTER]** to exit the menu.

Scoreboard Test

DISPLAY ALL ON

SHOWING ADDRESS ENTER TO EXIT

SHOWING DIGIT # ENTER TO EXIT From Main Menu - [5]>[3]>[3]

ENTER TO EXIT

These menus check the numeric scoreboard drivers.

Cvcle ON/OFF

This menu checks the signal to the scoreboard.

From Main Menu - [5]>[3]>[1]

Press [1] to toggle the scoreboard ON and OFF. When this menu is selected, an all ON signal is sent at intervals of approximately 3 seconds. Press [ENTER] to exit the menu.

Driver Address

This menu shows which addresses each of the drivers on the scoreboard are set to. The addresses were set when the display was installed.

From Main Menu - [5]>[3]>[2] Press [2] to display the driver addresses. Press [ENTER] to exit the menu.

Digit Number This menu shows the digit designation.

Press [3] to display a digit number. The number or letter will show which output on the driver that digit is plugged into. Press [ENTER] to exit the menu.



MENU-TEST

MENU-TEST

2-LANE MODULES



3-SCOREBOARD

From Main Menu - [5]>[3]

SB TEST MENU

2-DRIVER ADDRESS





BATTERY TEST .EVEL= LOW

Switch

This menu checks the lane buttons port on the rear of the console.







When pressing one of the push buttons that is plugged into the Track Button Interface, a "C" will display in that lane on the left or middle LCD.

A Reference Drawings

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

Reference Drawings:

Connector Designations: OmniSport 2000	DWG-154282
HS-200 Horn Start: On-Deck Configuration	DWG-185695
System Riser: FB/Track Scbd w/ Omni2K - Track Side	DWG-186535
OmniSport 2000 and JC-100 Equipment	DWG-189089
OmniSport 2000 Judging Equipment- In-Deck	DWG-190817
Channel Selection; Multiple Broadcast Group, Gen IV	DWG-203113
System Riser: RC-100- Rodeo/Diving/Sync Swimming	DWG-230608
Mounting, Relay Take-Off Platform	DWG-268945
Installation Details, Gen VI Channel Selection Guide	DWG-1109870
System Riser: RC-200- Rodeo/Diving/Sync Swimming	DWG-3640329

154282	R - 08 - A	1240	02		CJB	ESULTS PORT.	2 TO R	04 DEC 02	-
	FUNC-TYPE-SIZE	JOB NO:	REV	SHEET	3Y:	IGED LABEL ON J6 FROM RTD PORT	CHAN	DATE:	REV
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DATE: 19 JUN 02	CZI	DRAWN:CBRE		DESIGN: CBRECZI	3Y:	D ETHERNET PORT AND AUDIO JACK. UPDATED	ADDE	DATE:	REV
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	J14 - NEAR LANE
PIN#	FUNCTION
1	+VUNREG
2	NEAR CAN-H
3	NEAR CAN-L
4	GND

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

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

J10 - NEAR END

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

PIN # FUNCTION 1 N/C 2 N/C - - - -	
1 N/C 2 N/C	
2 N/C	
2 441/40	
3 14VAC	
4 14VAC	
SHELL EARTH GND	



J2-J3 S	SCOREBOARD OUTPUTS		J5 - RTD PORT		J7 - SWITCH INPUTS
CONTACT	FUNCTION	PIN #	FUNCTION	PIN #	FUNCTION
TIP	CURRENT LOOP OUTPUT +	1	NOT USED	1	SWITCH INPUT 1 +
RING	CURRENT LOOP OUTPUT -	2	RTD RS-232 TX	2	SWITCH INPUT 2 +
SHAFT	GND	3	RTD RS-232 RX	3	SWITCH INPUT 3 +
	1	4	NOT USED	4	SWITCH INPUT 4 +
		5	GND	5	SWITCH INPUT 5 +
J4	- EXPANSION PORT	6	RTD CL TX-P	6	SWITCH INPUT 6 +
PIN #	FUNCTION	7	NOT USED	7	SWITCH INPUT 7 +
1	NOTUSED	8	RTD CL RX-P	8	SWITCH INPUT 8 +
2	EXPANSION RS-232 TX	9	RTD CL RX-N	9	SWITCH INPUT 9 +
3	EXPANSION RS-232 RX			10	SWITCH INPUT-GND
4	NOT LISED			11	RELAY COMMON
5	GND		J6 - RESULTS PORT	12	RELAY NORMALLY OPEN
6	NOTUSED	PIN#	FUNCTION	13	RELAY NORMALLY CLOSED
7	NOTUSED	1	NOTUSED	14	CURRENT LOOP OUT +
8	NOTUSED	2	RESULTS RS-232 TX	15	CURRENT LOOP OUT -
9	NOT USED	3	RESULTS RS-232 RX		
		4	NOT USED		
		5	GND	J8 - M	IAIN START/STOP/HORN
		6	RESULTS CL TX-P	PIN #	FUNCTION
ETHER	NET PORT:	7	NOT USED	1	SWITCH INPUT 2 -
NETWO	ORK INTERFACE SUPPORTS	8	RESULTS CL RX-P	2	SWITCH INPUT 1 -
AUTO N	MDI/MDIX - EITHER	9	RESULTS CL RX-N	3	RELAY OUTPUT -
CABLE	TYPE MAY BE USED.			4	RELAY OUTPUT +
				5	SWITCH INPUT 1 +

AUDIO OUTPUT: 3.5mm

J9 -	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 +						

6 SWITCH INPUT 2 +

















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NOTE:

UP TO 18 RC-200 CONTROLLERS CAN BE USED AT ONCE (9 RC-200 CONTROLLERS PER BASE STATION).

ANY GROUP/CHANNEL CAN BE USED, HOWEVER THE TWO BASE STATIONS MUST BE SET TO DIFFERENT CHANNELS. EACH BASE STATION AND ITS RESPECTIVE RC-200 CONTROLLERS NEED TO BE SET TO THE SAME CHANNEL.



B Sport Inserts

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

Note: In order for the drawings to be at the correct scale to fit into the console keypad, they must be printed on 11" x 17" paper.

Reference Drawings:

Insert; LL-2549 OmniSport 2000 Swimming	DWG-163808
Insert; LL-2566 Omni 2000, Diving	DWG-180044
Insert: LL-2569; Water Polo, Omni2000	DWG-182350
Insert, LL-2573, Omni2000 Track Timina	DWG-184685
Insert; LL-2581 Omni 2000, Pace Clock	DWG-188395



PLOT IN AUTOCAD USING .005 PEN WIDTH FOR ALL COLORS



REV	DATE:	UPDATED YELLOW TO MATCH PMS NO. 108	BY:	
02	12 NOV 10		CRD	
REV	DATE:	UPDATED GRAY TO MATCH PMS NO. 429	BY:	
01	29 JUN 10		CRD	

	THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS. INC									
DO NOT	SCALE D	RAWING	3		COPYRIGHT	201	0 DAKTRONIC	S, INC.	,	
proj:OMNISPORT 2000 TIMER										
TITLE: INSERT; LL	-2549	9 01	INISPOR	RT :	2000 SWIMN	/11	١G			
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MATERIAL IS 10-MIL CLEAR POLYCARBONATE WITH SMOOTH FINISH.



ESIGN:		DRAWN:CBR	ECZI	DATE: 13 DEC 02
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SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	10001
	02	P1240	E-01-B	180044

MATERIAL IS 10-MIL CLEAR POLYCARBONATE WITH SMOOTH FINISH. START KEYS BACKGROUND IS GREEN TO MATCH PMS # 355 STOP KEYS BACKGROUND IS RED TO MATCH PMS # 179 HORN KEY BACKGROUND IS YELLOW TO MATCH PMS # 108 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. DIE CUT PER DRAWING B-153416.



REV	DATE:	UPDATED YELLOW TO MATCH PMS NO. 108	BY:	
02	12 NOV 10		CRD	
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01	29 JUN 10		CRD	



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C Menu Navigation Shortcuts

1-Swimming Menu Navigation

- 1) SCBD MENU
 - 1-1) SCBD ON/OFF clears the display
 - 1-2) DIMMING sets the dimming (brightness) level of the display
 - 1-3) TIME OF DAY displays the Time-of-Day and time format

2) EDIT MENU

- **2-1)** TEAM SCORE allows editing of team scores
- 2-2) EVENT ORDER allows editing of event orders
 - 2-2-1) EDIT ORDER edits the event order
 - 2-2-2) INSERT EVENT inserts an event into the order
 - 2-2-3) DELETE EVENT deletes an event
 - 2-2-4) CLEAR ORDER clears the event order
- 3) PRINT MENU
 - 3-1) RACE RESULTS prints the results of a specific race or a complete meet
 - **3-2)** EVENT ORDER prints out the selected event orders
 - 3-3) SETTINGS prints out all configurations entered in the Setup Menu
- 4) SETUP MENU
 - **4-1)** POOL configures the pool settings
 - **4-1-1)** # OF LANES sets the number of lanes
 - 4-1-2) LANE ORDER sets the lane order (Normal or Reverse)
 - 4-1-3) LENGTH sets the pool length (25Y, 25M, or 50M)
 - 4-1-4) LANE LABEL sets lane labeling (1-10 or 0-9)
 - 4-2) TIMER configures the timer settings
 - **4-2-1)** START IN sets the type of start input (Normally Open or Normally Closed)
 - 4-2-2) LM INPUT sets which end(s) of pool touchpads are located (NEAR or BOTH)
 - 4-2-3) PRIMARY TIME sets input for primary time (TOUCHPAD, BTNS 1 or BTNS 1-3)
 - 4-2-4) FLAG TIME sets the flag time when touchpad is compared to backup time
 - 4-2-5) ARMING DELAY sets the time delay for arming touchpads after a touch
 - 4-2-6) PRECISION sets the timer precision in seconds (1/100 or 1/1000)
 - 4-2-7) RELAY TAKE-OFF configures take-off platforms connections
 - 4-2-8) BEEPER VOLUME sets the volume of the internal beeper
 - **4-3)** SCOREBOARD configures the scoreboard settings
 - 4-3-1) NUMERIC sets output data for numeric scoreboards
 - 4-3-1-1) # OF LINES sets the number of lines on the scoreboard
 - 4-3-1-2) SPLT HOLD TIME sets the hold time for display of splits
 - **4-3-1-3)** FIN PAGE TIME sets the hold time for finish pages
 - 4-3-1-4) RESULTS ORDER sets order of results (LANE or PLACE)
 - 4-3-1-5) SUBTRACTIVE sets whether to display subtractive splits (YES or NO)
 - 4-3-1-6) SHOW DQ sets what DQ data to display (DQ ONLY or DQ/TIME)
 - **4-3-1-7)** SHOW START sets whether to display the start reaction (YES or NO)
 - **4-3-2)** RTD/MATRIX sets output data for matrix displays
 - 4-3-2-1) # OF LINES sets the number of lines on the display
 - **4-3-2-2)** SPLT HOLD TIME sets the hold time for display of splits
 - **4-3-2-3)** FIN PAGE TIME sets the hold time for finish pages
 - 4-3-2-4) RESULTS ORDER sets order of results (LANE or PLACE)
 - **4-3-2-5**) SUBTRACTIVE selects whether to display subtractive splits (YES or NO)
 - 4-3-2-6) SHOW DQ sets what DQ data to display (DQ ONLY or DQ/TIME)
 - 4-3-2-7) SHOW START sets whether to display the start reaction (YES or NO)
 - 4-3-2-8) SHOW PLACE sets whether to show place with split times (YES or NO)
 - 4-3-2-9) RTD OFFSET sets how data is sent to display with 2+ consoles or pools
 - **4-4)** COMM PORTS configures the communication ports
 - 4-4-1) SCBD OUTPUTS sets the J2/J3 protocol (MULTIDROP, MULTILINE, or OMEGA)

4-4-2) RTD PORT sets the J5 protocol (RTD or CTS)

4-4-3) RESULTS PORT sets the J6 protocol (OMNI 2000, OMNI 6000, or CTS) **4-5)** PRINTER configures printouts and the printer

4-5-1) RACE LOG sets whether to enable race logging (ON or OFF)

4-5-2) RESULTS sets order of printed race results (LANE or PLACE)

4-5-3) BACKUPS sets whether to print backup times (YES or NO)

4-5-4) SPLITS sets whether to print splits and what type (NONE, SUBTR, or CUMUL)

4-5-5) NUMBER OF COPIES sets the number of copies to print

4-5-6) INTENSITY sets printer intensity (contrast)

4-6) TIME OF DAY sets the day/month/year and hours/minutes/seconds4-7) NETWORK configures the ETHERNET port

4-7-1) NETWORK ENABLE enables/disables the ETHERNET port (ON or OFF)

4-7-2) IP ADDRESS sets the IP Address

4-7-3) SUBNET MASK sets the Subnet Mask

4-7-4) GATEWAY ADDRES sets the Gateway Address

4-7-5) RTD PORT # sets the Real-Time Data port number

4-7-6) MAC ADDRESS displays the console's MAC Address

4-7-7) NETWK PRO/MMR Pro Software & Meet Manager ON or OFF

5) TEST MENU

5-1) BATTERY checks battery power level

5-2) LANE MODULES allows testing of lane modules

5-3) SCOREBOARD allows testing of the scoreboard

5-3-1) CYCLE ON/OFF sends an all ON signal to scoreboard in 3 second intervals

5-3-2) DRIVER ADDRESS displays the driver address(es)

5-3-3) DIGIT NUMBER displays digit numbers

2-Diving Menu Navigation

1) SCBD MENU

1-1) SCBD ON/OFF clears the display

1-2) DIMMING sets the dimming (brightness) level of the display

1-3) TIME OF DAY displays the Time-of-Day and time format

2) EDIT MENU

2-1) TEAM SCORE allows editing of team scores

2-2) EVENT ORDER allows editing of event orders

2-2-1) EDIT ORDER edits the event order

2-2-2) INSERT EVENT inserts an event into the order

2-2-3) DELETE EVENT deletes an event

2-2-4) CLEAR ORDER clears the event order

2-3) CLEAR ORDER (A-D) clears only one of the four dive orders

2-4) DIVER ORDER allows editing of the diver order

2-5) CLEAR TOTALS clears scoring totals

2-6) DIVER TOTALS allows editing of the diver score totals

3) PRINT MENU

3-1) DIVE RESULTS prints the results of the dives or a complete meet

3-2) EVENT ORDER prints out the selected event orders

3-3) SETTINGS prints out all configurations entered in the Setup Menu

3-4) IND DIVE LIST prints the individual dive list of a selected diver

 $\ensuremath{\textbf{3-5}}\xspace$ ALL DIVE LIST prints out the entire dive list

4) SETUP MENU

4-1) TIMER sets the number of judges and positions used in the meet

4-1-1) NUMBER JUDGES sets the number of judges

4-1-2) POSITION CODE sets the Dive Positions label (ABCD or SPTF)

4-1-3) BEEPER VOLUME sets the volume of the internal beeper

4-2) SCOREBOARD configures the scoreboard settings

4-2-1) NUMERIC sets output data for numeric scoreboards

4-2-1-1) # OF LINES sets the number of lines on the scoreboard

4-2-1-2) LEAD DIVER sets whether to display the lead diver (YES or NO)

4-2-1-3) MULTISPORT SB sets whether the scoreboard is multisport (YES or NO) **4-2-2)** RTD/MATRIX sets output data for matrix displays

4-2-2-1) RTD OFFSET sets how data is sent to display with 2+ consoles or pools **4-3)** COMM PORTS configures the communication ports

4-3-1) SCBD OUTPUTS sets the J2/J3 protocol (MULTIDROP, MULTILINE, or OMEGA)

4-3-2) RTD PORT sets the J5 protocol (RTD or CTS)

4-3-3) RESULTS PORT sets the J6 protocol (OMNI 2000, OMNI 6000, or CTS) **4-4)** PRINTER configures printouts and the printer.

4-4-1) DIVE LOG sets whether to enable dive logging (ON or OFF)

4-4-2) INTENSITY sets printer intensity (contrast)

4-5) TIME OF DAY sets the day/month/year and hours/minutes/seconds

4-6) NETWORK configures the ETHERNET port

4-6-1) NETWORK ENABLE enables/disables the ETHERNET port (ON or OFF)

4-6-2) IP ADDRESS sets the IP Address

4-6-3) SUBNET MASK sets the Subnet Mask

4-6-4) GATEWAY ADDRES sets the Gateway Address

4-6-5) RTD PORT # sets the Real-Time Data port number

4-6-6) MAC ADDRESS displays the console's MAC Address

4-6-7) NETWK PRO/MMR enables/disables Pro Software (ON or OFF)

5) TEST MENU

5-1) BATTERY checks battery power level

5-2) SCOREBOARD allows testing of the scoreboard

5-2-1) CYCLE ON/OFF sends an all ON signal to scoreboard in 3 second intervals

5-2-2) DRIVER ADDRESS displays the driver address(es)

5-2-3) DIGIT NUMBER displays digit numbers

5-3) JUDGE CONSOLES indicates proper connection of judge consoles

5-4) CAN NETWORK allows advanced debugging (Daktronics service personnel only)

3-Pace Clock Menu Navigation

1) SCBD MENU

1-1) SCBD ON/OFF clears the display

1-2) DIMMING sets the dimming (brightness) level of the display

1-3) TIME OF DAY displays the Time-of-Day and time format

2) EDIT MENU

2-1) EDIT WORKOUT allows editing of workouts

(ENTER LANE #)

1) EDIT STEP edits a step within the order

2) INSERT STEP inserts a step into the order

3) DELETE STEP deletes a step

4) COPY WORKOUT copies the workout from one lane to another

5) CLEAR WORKOUT clears the workout from a lane

3) PRINT MENU

3-1) IND WORKOUT prints the entire workout for a specific lane

3-2) ALL WORKOUTS prints all workouts for every lane

3-3) SETTINGS prints out all configurations entered in the Setup Menu

4) SETUP MENU

4-1) TIMER configures the timer settings

4-1-1) BEEPER VOLUME sets the volume of the internal beeper

4-2) SCOREBOARD configures the scoreboard settings

4-2-1) NUMERIC sets output data for numeric scoreboards

4-2-1-1) # OF LINES sets the number of lines on the scoreboard

4-2-2) RTD/ MATRIX sets output data for matrix displays

4-2-2-1) RTD OFFSET sets how data is sent to display with 2+ consoles or pools

- **4-3)** COMM PORTS configures the communication ports
 - 4-3-1) SCBD OUTPUTS sets the J2/J3 protocol (MULTIDROP, MULTILINE, or OMEGA)

4-3-2) RTD PORT sets the J5 protocol (RTD or CTS)

- 4-3-3) RESULTS PORT sets the J6 protocol (OMNI 2000, OMNI 6000, or CTS)
- **4-4)** PRINTER configures printouts and the printer

4-4-1) INTENSITY sets printer intensity (contrast)

4-5) TIME OF DAY sets the day/month/year and hours/minutes/seconds

4-6) NETWORK configures the ETHERNET port

4-6-1) NETWORK ENABLE enables/disables the ETHERNET port (ON or OFF)

4-6-2) IP ADDRESS sets the IP Address

4-6-3) SUBNET MASK sets the Subnet Mask

4-6-4) GATEWAY ADDRES sets the Gateway Address

4-6-5) RTD PORT # sets the Real-Time Data port number

4-6-6) MAC ADDRESS displays the console's MAC Address

5) TEST MENU

5-1) BATTERY checks battery power level

5-2) SCOREBOARD allows testing of the scoreboard

5-2-1) CYCLE ON/OFF sends an all ON signal to scoreboard in 3 second intervals

5-2-2) DRIVER ADDRESS displays the driver address(es)

5-2-3) DIGIT NUMBER displays digit numbers

4-Water Polo Menu Navigation

1) SCBD MENU

1-1) SCBD ON/OFF clears the display

1-2) DIMMING sets the dimming (brightness) level of the display

1-3) TIME OF DAY displays the Time-of-Day and time format

2) PRINT MENU

2-1) SETTINGS prints out all configurations entered in the Setup Menu

2-2) PAPER FEED advances the printer paper one line

3) SETUP MENU

3-1) TIMER configures the game settings

3-1-1) SET TIMES sets the times used while playing the game

3-1-1-1) PERIOD TIME sets the timing length of the period

3-1-1-2) OVER TIME sets the timing length of the overtime period

3-1-1-3) REST TIME sets the timing length of the rest periods

3-1-1-4) WARNING TIME sets the timing length of warning times

3-1-1-5) SHOT TIME sets the timing length of the shot times

3-1-1-6) TIMEOUT TIME sets the timing length of timeouts

3-1-1-7) PENALTY TIME sets the timing length of the penalties

3-1-2) AUTO SEQUENCE sets the automatic clock run

3-1-3) SHOT=0 CONTROL sets if the shot clock = 0 will stop the main clock

3-1-4) PENALTIES sets the maximum amount of penalties and reset of shot clock

3-1-5) TIMEOUTS sets the maximum number of timeouts

3-1-6) HORN CONTROL selects how the game clock and shot clock horns operate

3-1-7) BEEPER VOLUME sets the volume of the internal beeper

3-2) SCOREBOARD configures the scoreboard settings

3-2-1) NUMERIC sets output data for numeric scoreboards

3-2-1-1) # OF LINES sets the number of lines on the scoreboard

3-2-1-2) SCORE MODULE sets whether the scoreboard has a score module

3-2-2) RTD/MATRIX sets output data for matrix displays

3-2-2-1) RTD OFFSET sets how data is sent to display with 2+ consoles or pools **3-3)** COMM PORTS configures the communication ports

3-3-1) SCBD OUTPUTS sets the J2/J3 protocol (MULTIDROP, MULTILINE, or OMEGA)

3-3-2) RTD PORT sets the J5 protocol (RTD or CTS)

3-3-3) RESULTS PORT sets the J6 protocol (OMNI 2000, OMNI 6000, or CTS)

3-4) PRINTER configures printouts and the printer.

3-4-1) GAME LOG sets whether to enable game logging (ON or OFF)

3-4-2) INTENSITY sets printer intensity (contrast)

3-5) TIME OF DAY sets the day/month/year and hours/minutes/seconds

3-6) NETWORK configures the ETHERNET port

3-6-1) NETWORK ENABLE enables/disables the ETHERNET port (ON or OFF)

3-6-2) IP ADDRESS sets the IP Address

3-6-3) SUBNET MASK sets the Subnet Mask

3-6-4) GATEWAY ADDRES sets the Gateway Address

3-6-5) RTD PORT # sets the Real-Time Data port number

3-6-6) MAC ADDRESS displays the console's MAC Address

4) TEST MENU

4-1) BATTERY checks battery power level

4-2) SCOREBOARD allows testing of the scoreboard

4-2-1) CYCLE ON/OFF sends an all ON signal to scoreboard in 3 second intervals

4-2-2) DRIVER ADDRESS displays the driver address(es)

4-2-3) DIGIT NUMBER displays digit numbers

5-Synchronized Swimming Menu Navigation

1) SCBD MENU

1-1) SCBD ON/OFF clears the display

1-2) DIMMING sets the dimming (brightness) level of the display

1-3) TIME OF DAY displays the Time-of-Day and time format

2) SETUP MENU

2-1) TIMER

2-1-1) JUDGES sets the number of judges

2-1-2) PANEL sets the number of panels

2-1-3) BEEPER VOLUME sets the volume of the internal beeper

2-2) SCOREBOARD configures the scoreboard settings

2-2-1) NUMERIC sets output data for numeric scoreboards

2-2-1-1) NUMBER OF LINES sets the number of lines on the scoreboard

2-2-1-2) PAGE TIME sets how long each page will hold on the scoreboard

2-2-1-3) MULTISPORT SCBD sets whether the scoreboard is multisport (YES/NO)

2-2-2) RTD/MATRIX sets output data for matrix displays

2-2-2-1) RTD OFFSET sets how data is sent to the with 2+ consoles or pools **2-3)** COMM PORTS configures the communication ports

2-3-1) SCBD OUTPUTS sets the J2/J3 protocol (MULTIDROP, MULTILINE, or OMEGA)

2-3-2) RTD PORT sets the J5 protocol (RTD or CTS)

2-3-3) RESULTS PORT sets the J6 protocol (OMNI 2000, OMNI 6000, or CTS)

2-4) PRINTER configures printouts and the printer

2-4-1) SWIM LOG sets whether to enable swim logging (ON or OFF)

2-4-2) INTENSITY sets printer intensity (contrast)

2-5) TIME OF DAY sets the day/month/year and hours/minutes/seconds2-6) NETWORK configures the ETHERNET port

2-6-1) NETWORK ENABLE enables/disables the ETHERNET port (ON or OFF)

2-6-2) IP ADDRESS sets the IP Address

2-6-3) SUBNET MASK sets the Subnet Mask

2-6-4) GATEWAY ADDRES sets the Gateway Address

2-6-5) RTD PORT # sets the Real-Time Data port number

2-6-6) MAC ADDRESS displays the console's MAC Address

2-6-7) NETWK PRO/MMR enables/disables Pro Software (ON or OFF)

3) TEST MENU

3-1) BATTERY checks battery power level

3-2) SCOREBOARD allows testing of the scoreboard

3-2-1) CYCLE ON/OFF sends an all ON signal to scoreboard in 3 second intervals

3-2-2) DRIVER ADDRESS displays the driver address(es)

3-2-3) DIGIT NUMBER displays digit numbers

3-3) JUDGE CONSOLES indicates proper connection of judge consoles

3-4) CAN NETWORK allows advanced debugging (Daktronics service personnel only)

6-Track Menu Navigation

1) SCBD MENU

1-1) SCBD ON/OFF clears the display

1-2) DIMMING sets the dimming (brightness) level of the display

1-3) TIME OF DAY displays the Time-of-Day and time format

2) EDIT MENU

2-1) TEAM SCORE allows editing of team scores

2-2) RECORD TIME allows editing of record times

3) PRINT MENU

3-1) RACE RESULTS prints the results of a specific race or a complete meet

3-2) SETTINGS prints out all configurations entered in the Setup Menu

4) SETUP MENU

4-1) TIMER configures the timer settings

4-1-1) # OF LANES sets the number of lanes

4-1-2) START IN sets the type of start input (Normally Open or Normally Closed)

4-1-3) PRIMARY TIME sets the number of buttons used per lane (J7 1BTN/J10 3BTN)

4-1-4) PRECISION sets the timer precision in seconds (1/100 or 1/1000)

4-1-5) BEEPER VOLUME sets the volume of the internal beeper

4-2) SCOREBOARD configures the scoreboard settings

4-2-1) NUMERIC sets output data for numeric scoreboards

4-2-1-1) # OF LINES sets the number of lines on the scoreboard

4-2-1-2) FIN PAGE TIME sets the hold time for finish pages

4-2-1-3) RESULTS ORDER sets order of results (LANE or PLACE)

4-2-1-4) SHOW DQ sets what DQ data to display (DQ ONLY or DQ/TIME)

4-2-1-5) FOOTBALL SCBD sets what data to display (EVENT/HEAT or GUEST 2/3)

4-2-1-6) RUNNING TIME sets what data to display (CONTINUOUS or FINISH)

4-2-2) RTD/MATRIX sets output data for matrix displays

4-2-2-1) # OF LINES sets the number of lines on the display

4-2-2-2) FIN PAGE TIME sets the hold time for finish pages

4-2-2-3) RESULTS ORDER sets order of results (LANE or PLACE)

4-2-2-4) SHOW DQ sets what DQ data to display (DQ ONLY or DQ/TIME)

4-2-2-5) RTD OFFSET sets how data is sent to display with 2+ consoles or pools

4-3) COMM PORTS configures the communication ports

4-3-1) SCBD OUTPUTS sets the J2/J3 protocol (MULTIDROP, MULTILINE, or OMEGA)

4-3-2) RTD PORT sets the J5 protocol (RTD or CTS)

4-3-3) RESULTS PORT sets the J6 protocol (OMNI 2000, OMNI 6000, or CTS)

4-4) PRINTER configures printouts and the printer

4-4-1) RACE LOG sets whether to enable race logging (ON or OFF)

4-4-2) RESULTS sets order of printed race results (LANE or PLACE)

4-4-3) BACKUPS sets whether to print backup times (YES or NO)

4-4-4) INTENSITY sets printer intensity (contrast)

4-5) TIME OF DAY sets the day/month/year and hours/minutes/seconds

4-6) NETWORK configures the ETHERNET port

4-6-1) NETWORK ENABLE enables/disables the ETHERNET port (ON or OFF)

4-6-2) IP ADDRESS sets the IP Address

4-6-3) SUBNET MASK sets the Subnet Mask

4-6-4) GATEWAY ADDRES sets the Gateway Address

4-6-5) RTD PORT # sets the Real-Time Data port number

4-6-6) MAC ADDRESS displays the console's MAC Address

4-6-7) NETWK PRO/MMR enables/disables Meet Manager software (ON or OFF)

5) TEST MENU

- 5-1) BATTERY checks battery power level
- 5-2) LANE MODULES allows testing of lane modules
- **5-3)** SCOREBOARD allows testing of the scoreboard
 - 5-3-1) CYCLE ON/OFF sends an all ON signal to scoreboard in 3 second intervals
 - 5-3-2) DRIVER ADDRESS displays the driver address(es)
 - 5-3-3) DIGIT NUMBER displays digit numbers
- 5-4) SWITCH allows testing of push button inputs

D RTD Output Specifications

This appendix contains Real-Time Data (RTD) output specifications. Input Template Files (ITFs) are used to add RTD into a display sequence. ITFs may be downloaded here: http://dakfiles.daktronics.com/downloads/Data/ITF/

Serial Port (COM) Transmission Specifications

- Baud Rate: 19,200
- Parity: None
- Data Bits: 8
- Protocol: Enhanced
- Size: 4096

Sport Mode	Input Template File
Diving/Synchronized Diving	OS2-Dive.itf
Pace Clock	OS2-Pace Clock.itf
Swimming	OS2-Swimming.itf
Synchronized Swimming	OS2-Sync Swim.itf
Track	OS2-Track.itf
Water Polo	OS2-Water Polo.itf

E Daktronics Warranty & Limitation of Liability

This section includes the Daktronics Warranty & Limitation of Liability statement (SL-02374).
DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

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

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

1. Warranty Coverage

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

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

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

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

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

E. Defects shall be defined as follows. With regard to the Equipment (excepting LEDs), a "Defect" shall refer to a material variance from the design specifications that prohibit the Equipment from operating for its intended use. With respect to LEDs, "Defects" are defined as LED pixels that cease to emit light. Unless otherwise expressly provided, this Warranty does not impose any duty or liability upon Daktronics for partial LED pixel degradation. Notwithstanding the foregoing, in no event does this Warranty include LED pixel degradation caused by UV light. This Warranty does not provide for the replacement or installation of communication methods including but not limited to, wire, fiber optic cable, conduit, trenching, or for the purpose of overcoming local site interference radio equipment substitutions.

EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS WARRANTY, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, DAKTRONICS DISCLAIMS ANY AND ALL OTHER PROMISES, REPRESENTATIONS AND WARRANTIES APPLICABLE TO THE EQUIPMENT AND REPLACES ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ACCURACY OR QUALITY OF DATA. OTHER ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY DAKTRONICS, ITS AGENTS OR EMPLOYEES, SHALL NOT CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS LIMITED WARRANTY.

THIS LIMITED WARRANTY IS NOT TRANSFERABLE.

2. Exclusion from Warranty Coverage

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

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

B. damage caused by: (i)the improper handling, installation, adjustment, use, repair, or service of the Equipment, or (ii) any physical damage which includes, but is not limited to, missing, broken, or cracked components resulting from non-electrical causes; altered, scratched, or fractured electronic traces; missing or gauged solder pads; cuts or clipped wires; crushed, cracked, punctured, or bent circuit boards; or tampering with any electronic connections, provided that such damage is not caused by personnel of Daktronics or its authorized repair agents;

C. damage caused by the failure to provide a continuously suitable environment, including, but not limited to: (i) neglect or misuse; (ii) improper power including, without limitation, a failure or sudden surge of electrical power; (iii) improper air conditioning, humidity control, or other environmental conditions outside of the Equipment's technical specifications such as extreme temperatures, corrosives and metallic pollutants; or (iv) any other cause other than ordinary use;



DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

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

E. failure to adjust, repair or replace any item of Equipment if it would be impractical for Daktronics personnel to do so because of connection of the Equipment by mechanical or electrical means to another device not supplied by Daktronics, or the existence of general environmental conditions at the site that pose a danger to Daktronics personnel;

F. statements made about the product by any salesperson, dealer, distributor or agent, unless such statements are in a written document signed by an officer of Daktronics. Such statements as are not included in a signed writing do not constitute warranties, shall not be relied upon by End User and are not part of the contract of sale;

G. damage arising from the use of Daktronics products in any application other than the commercial and industrial applications for which they are intended, unless, upon request, such use is specifically approved in writing by Daktronics;

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

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

J. performance of preventive maintenance;

K. third-party systems and other ancillary equipment, including without limitation front-end video control systems, audio systems, video processors and players, HVAC equipment, batteries and LCD screens;

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

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

3. <u>Limitation of Liability</u>

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

It is specifically agreed that the price of the Equipment is based upon the following limitation of liability. In no event shall Daktronics (including its subsidiaries, affiliates, officers, directors, employees, or agents) be liable for any claims asserting or based on (a) loss of use of the facility or equipment; lost business, revenues, or profits; loss of goodwill; failure or increased cost of operations; loss, damage or corruption of data; loss resulting from system or service failure, malfunction, incompatibility, or breaches in system security; or (b) any special, consequential, incidental or exemplary damages arising out of or in any way connected with the Equipment or otherwise, including but not limited to damages for lost profits, cost of substitute or replacement equipment, down time, injury to property or any damages or sums paid to third parties, even if Daktronics has been advised of the possibility of such damages. The foregoing limitation of liability shall apply whether any claim is based upon principles of contract, tort or statutory duty, principles of indemnity or contribution, or otherwise.

In no event shall Daktronics be liable for loss, damage, or injury of any kind or nature arising out of or in connection with this Warranty in excess of the Purchase Price of the Equipment. The End User's remedy in any dispute under this Warranty shall be ultimately limited to the Purchase Price of the Equipment to the extent the Purchase Price has been paid.

4. Assignment of Rights

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

5. <u>Governing Law</u>

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

6. Availability of Extended Service Agreement

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

