

# Diving



## For the System 6 Sports Timer Software User Guide

F871 Rev. 20100817



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# 1

# INTRODUCTION

Colorado Time Systems would like to thank you for purchasing a System 6 sports console with the Diving Program. Diving is a fully featured and easy to use automatic diving meet program. With Diving for the System 6, you can quickly set up, store, retrieve, and customize even the largest diving meets. The straightforward menu navigation, buttons, and setups are designed to minimize the learning curve and get your diving meet running as quickly as possible. Staying up-to-date with software upgrades and patches is easier than ever before (See page 20 for details). If you should experience difficulties with any of your Colorado Time Systems' equipment, check the appropriate user guide for a solution first. The most recent version of all of our user manuals is available from our website, [www.coloradotime.com](http://www.coloradotime.com). If the user guide does not offer a solution to the problem, e-mail Colorado Time Systems' Customer Service Department at [customerservice@coloradotime.com](mailto:customerservice@coloradotime.com), or call toll-free (US and Canada) at (800) 287-0653 ext. 256 or (970) 667-1000 ext. 256 (international).

## Diving Contents

Your basic Diving package includes the Diving Keyboard Insert and this User Guide. Additional diving options, including judging terminals, can be ordered separately.

## Scope of this User Guide

This user guide addresses all issues relating to normal operation of the Diving program. It provides basic meet setup procedures and a supplemental reference of system and key functions. This guide is also equipped with a Table of Contents and Index to help locate specific information quickly

## Contents

Chapter 1 - Contains introductory and background information on the Diving program. For reference, this is the section you are currently reading

Chapter 2 - Details Diving software and hardware setup, including setting up and running a sample meet.

Chapter 3 - The detailed key and procedure reference.

Chapter 4 - The cross-referenced index.

Appendix A – Scoreboard Information & Configuration

Appendix B - Softkey Menu Tree



# 2

## SETUP/TUTORIAL

The first part of this chapter describes how to set up the external peripherals that are available for your Diving package, including judging terminals, printer and the scoreboard. The second part will give you step-by-step instructions for configuring and running a meet.

### Hardware Setup

Hardware setup for Diving with the System 6 involves connecting the System 6 to power, and connecting any peripherals you are using. These can include a printer, judging terminals and a judging I/O box, and scoreboard(s).

If you are running Diving and Swimming as part of the same meet, you may leave the swimming peripherals (touchpads, backup up buttons, relay judging platforms with speedlights, etc.) plugged in during Diving if you like.

#### **Battery**

An internal lithium ion battery provides backup power in case of emergency or power outage. To charge the battery, plug the System 6 into a grounded power outlet with the unit turned off. The charge time of the battery is a minimum of 3 hours, or overnight. The battery will provide approximately 45 minutes of usage time. This can be increased to 1 hour after 4 to 5 cycles of fully charging and fully discharging.

If you are discharging the battery, go to the Select Sports Menu and let the timer run until it dies. CTS recommends completely discharging the battery at least once a year.

#### **Power**

Connect the DIN connector from the 15-volt power supply that came with your System 6 (model R-920-004) to the external power connector on the back of the System 6, and plug the adapter into a working AC outlet. Use only the recommended power supply! Use of any other power supply (including a System 5 power supply) may cause serious damage to your system.



Figure 2-A: The scoreboard and power jacks on the back of the System 6.

### **Proper Shutdown Procedure**

When finished using the System 6, be sure to properly shut down your timer:

- 1) On the softkey menu, choose Misc
- 2) Choose Change Sport
- 3) Confirm that you wish to leave Diving
- 3) Choose Shut Down from the Sport Loader Menu, and press Yes
- 4) Turn off the timer using the power switch on the back.

### **Judging Terminals**

*Note:* Make sure you physically connect the interface box (WIO or IO) to the System 6 before entering Diving.

Judging Terminals (JTs) are optional. They are used to allow the judges to enter their scores and have that data transmitted to the System 6. They save having someone enter the scores into the System 6 manually.

#### **Wireless JTs**

To use the wireless judging system, simply install the antenna on the wireless interface box (WIO), and connect the WIO to either of the System 6's USB ports (labeled "CTS Expansion Ports;" see Fig. 2-C). If you're using it for the first time or you need to make changes you'll set the channel in the Setups menu, as described beginning on page 33.

Turn on the WJTs, and make sure their channel number matches that of the WIO. Set each WJT to a different JT ID#. Instructions are on the back of the WJTs.



When you are setting up a meet, be sure to use the number of judges option from the softkey menu or in the 'Edit Sessions' screen (see page 37).

### **Standard JTs**

To install standard remote judging terminals, simply connect each terminal to the judging interface box with the provided interface cable (see Figure 2-B). The interface cable is terminated with ¼" phono jacks on each end. Connect the interface box to the port labeled 'Judges I/O' on the back panel of your System 6 (see Fig 2-C).

When you are setting up a meet, be sure to use the number of judges option from the softkey menu or in the 'Edit Sessions' screen (see page 37).

### **Printer**

If you are using a printer with a USB connection, install it by following the instructions in the Sport Loader manual.

If you are using a printer with a parallel connection, plug the printer cable securely into the printer port on the back of the System 6. *Note:* To work with the System 6, printers must support control-code printing. Consult the manufacturer's manual for your printer to check this. See pages 30-32 for information about configuring your System 6 for printing.

### **Scoreboard(s)**

Connect your scoreboard(s) to the System 6 with data cables. The scoreboard can display a wide variety of data, including judge's scores, time of day, information about the current diver, the lead diver, points needed to overtake the leader, etc. See page 27 for details of setting the scoreboard to display this information.

### **Meet Management**

If using meet management software, connect your meet management computer to the COM1 port on the back panel of the System 6.

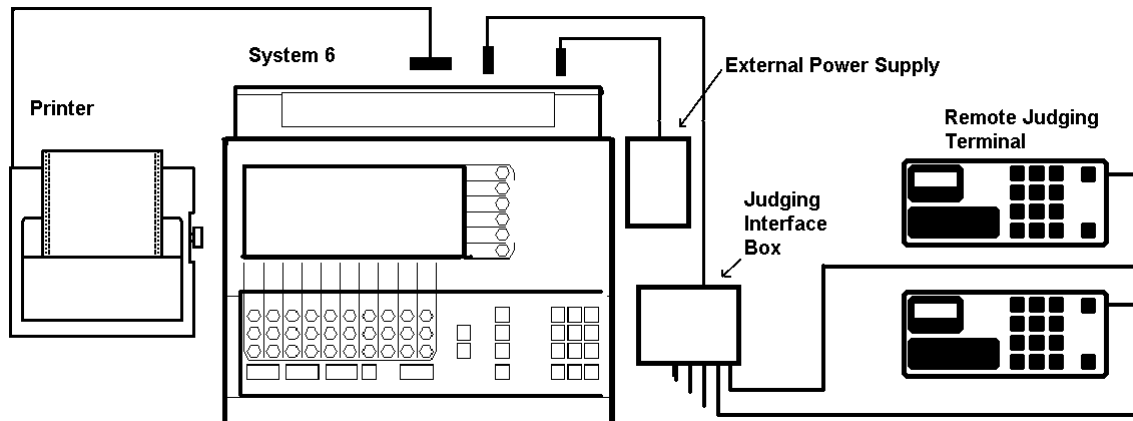


Figure 2-B: System 6 Peripherals Connection Diagram

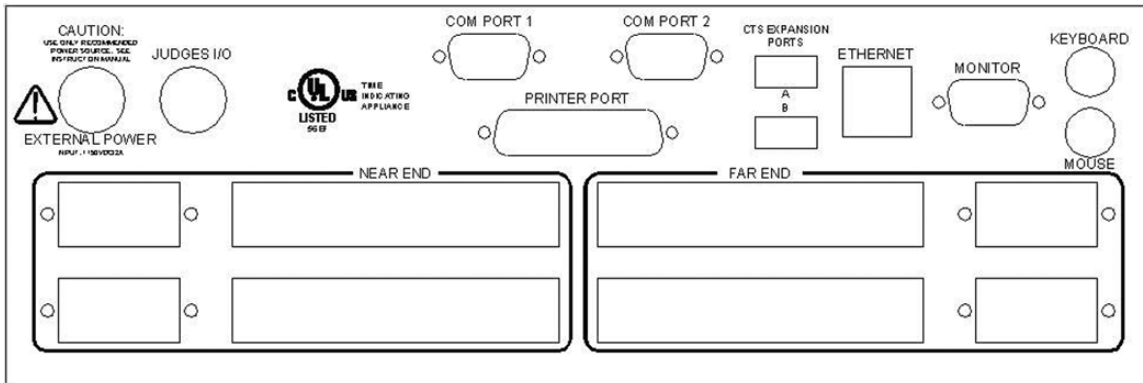


Figure 2-C: System 6 I/O Back Panel

## Running Diving

To begin using Diving, turn on your System 6. After it comes up, you will see the Main screen (see Figure 2-D). Select the softkey labeled Diving. The Diving software loads and the Choose Meet screen for Diving will appear (see Figure 2-F).

If not already in place, insert the Diving keyboard insert. You will first need to remove any other sport insert from the sleeve, and store it in a safe place.



Figure 2-D: Main Sport Loader Menu

# Diving Meet Tutorial

## **Introduction**

Once you have configured the peripheral options that accompany Diving, you can now set up and run a diving meet. The following tutorial serves as a brief overview of the basic operation of Diving. For a comprehensive listing of key functions and procedures, please refer to the reference section (Chapter 3). It is assumed that the user understands the elements, rules, and routines of a standard diving meet.



Figure 2-E: Cascading tabs help navigate menu screens

**Note:** As you navigate through the Diving menus, the lower right corner of the screen (below the softkey menu) will display cascading menu tabs to indicate your current position in the menu hierarchy.

## **Overview**

This tutorial will guide you through setting up the following basic meet elements:

- Name and create a meet
- Add events to the new meet
- Define and edit the sessions for each event
- Add divers to the meet
- Add dives for each diver

## **Creating a Meet**

Diving will begin on the 'Choose Meet' screen (indicated by the navigation tab), shown in Figure 2-F.

If you already have meets set up, you may choose one of those by highlighting it using the 'Up' and 'Down' keys and pressing 'Enter.'

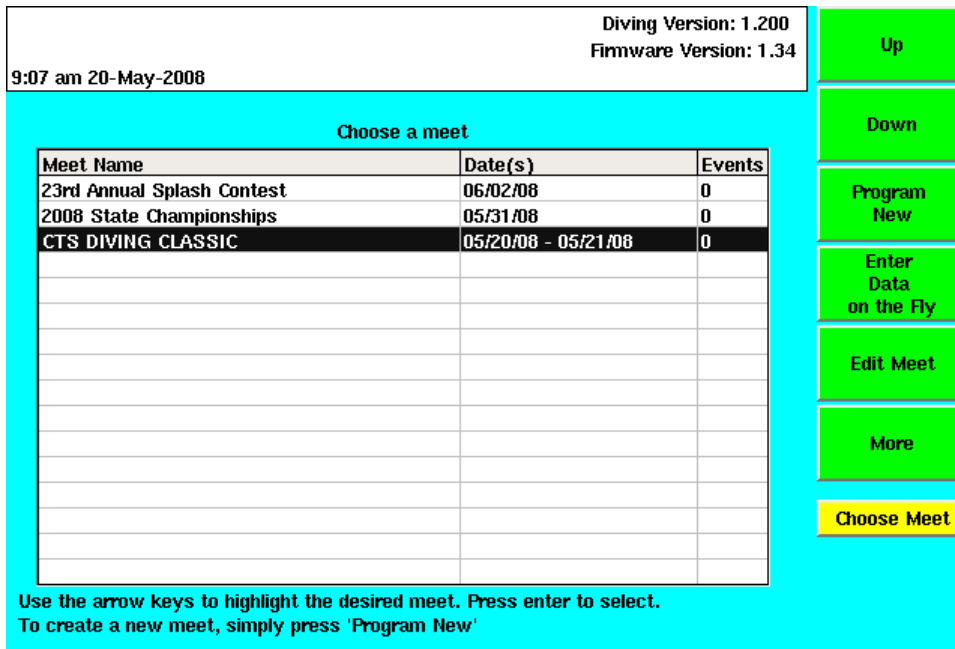


Figure 2-F: The 'Choose Meet' Screen

You can begin a new meet with data you type into the System 6, or with data sent from meet management software.

**Create a Meet with Data Sent from Meet Management**

To begin a new meet with data from your meet management software, make sure that your meet management computer is connected to the System 6’s COM1 port. Simply send the data from your meet management software while the System 6 is on the Choose Meet screen, shown in Figure 2-F. The System 6 will automatically create a new meet and the first event with the data it receives. It will continue creating events as it receives the data you send.

**Create a Meet by Typing Data into the System 6**

To begin a new meet typing data into the System 6, press the 'Program New' softkey, which opens the 'Create Meet' screen (Figure 2-G). All fields on this screen are optional. If you wish to enter information, use the console keyboard for letters and the numeric keypad for numbers. If you wish to leave the fields blank, press the 'Create Meet' softkey. You can go back later to add or edit the information.

10:45 am 04-Jun-2008		Diving Version: 1.200 Firmware Version: 1.34	Edit Meet Name
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <p style="text-align: center;"><b>Create New Meet</b></p> <p>Meet Name <input type="text"/></p> <p>Start Date <input type="text" value=" / /"/></p> <p>End Date <input type="text" value=" / /"/></p> <p>All fields are optional</p> </div>			Edit Start Date
			Edit End Date
			<input type="text"/>
			<input type="text"/>
			Create Meet
			Create Meet

Figure 2-G: The 'Create New Meet' Screen

Your Diving overlay keys are inset with alpha characters in the standard 'Qwerty' arrangement. This includes a space key (bottom, near 'Reflash') where the space bar would be on a keyboard, a backspace key (top-center, to the right of the 'p' alpha key) about where it would be on a normal keyboard, and a clear key (bottom right, on the keypad). For reference, the overlay is shown in Figure 3-B on page 20.

### **Creating an Event**

Choose the meet in which you are creating the event by highlighting the desired meet and pressing **Enter**. You can create an event with data you type into the System 6, or with data sent from meet management software. You will be taken to the 'Choose Event' screen, shown in Figure 2-H.

### **Creating an Event with Data Sent from Meet Management**

With your meet management computer connected to the System 6's COM1 port, simply send the data from your meet management software while the System 6 is on the Choose Event screen, shown in Figure 2-H. The System 6 will automatically create a new event in the current meet with the data it receives.

Meet: CTS DIVING CLASSIC	Diving Version: 1.200
	Firmware Version: 1.34
9:10 am 20-May-2008	

**Choose an Event**

Number	Event Name	Divers	Rounds
1	Womens 1m Springboard	0	6
2	Mens 3m Springboard	0	6
3	Mixed Platform Synchro	0	6

Use the arrow keys to highlight the desired event. Press enter to select.  
 To create a new event, simply press 'Program New'

Up

Down

Program New

Delete Event

Change Meet

Choose Meet

Choose Event

Figure 2-H: The 'Choose Event' Screen.

### Creating an Event by Typing Data into the System 6

To add an event to your meet, press the 'Program New' softkey from the Choose Event screen. This will take you to the 'Edit Event' screen, shown in Figure 2-I. You will find five columns of event settings. To define your event, move the highlighting to each column using the 'Right' and 'Left' softkeys.

In the 'Event#,' '# Rounds,' and '# Sessions' columns, enter the value using the numeric keypad (use 'C/E' to clear an entry). Press the 'Enter' key on the keypad to save the value. In the 'Board' and 'Category' columns, press the numeric key that corresponds to the desired option. Once you are finished defining the event, press the 'Edit Sessions' softkey to setup how each event session will proceed.

Meet: CTS DIVING CLASSIC	Diving Version: 1.200
Event: 1 - Womens 1m Springboard	Firmware Version: 1.34
9:08 am 20-May-2008	

Event #	Board	Category	# Rounds	# Sessions
1	1m	Women	6	2

1) 1m	1) Girls
2) 3m	2) Boys
3) Platform	3) Women
4) 1m Sync	4) Men
5) 3m Sync	5) Mixed
6) Plat Sync	6) Blank
7) Other	7) Other

Right

Left

Edit Sessions

Main Menu

Edit Event

Figure 2-I: The 'Edit Event' Screen.

## Editing the Sessions

In the 'Edit Session' screen (Figure 2-J), you will find 6 columns of session properties and a row for each session. Similar to the 'Edit Event' screen, you can navigate the columns and rows using the 'Right,' 'Left,' 'Up,' and 'Down,' softkeys. Enter the desired value in each category or select the desired option and save the value entered by pressing the 'Enter' key on the keypad.

Meet: CTS DIVING CLASSIC			Diving Version: 1.200		Up	
Event: 1 - Womens 1m Springboard			Firmware Version: 1.34			
10:50 am 04-Jun-2008						
Down						
Session #1	Starts with Round #1					Right
End Round#	# Judges	Max DD	Start Score	Cut to Dive order		
3	3	NA	None	0	Manually enter	
Session #2	Starts with Round #4					Left
End Round#	# Judges	Max DD	Start Score	Cut to Dive order		
6	3	NA	S1 score	8	Rev. place order	
			1) None	1) Manually enter		
			2) Manually enter	2) Random		
			3) S1 score	3) Same as last		
			4) S2 score	4) Cut dropped		
			5) S3 score	5) Place order		
			6) S2-S1 score	6) Rev. place order		
			7) S3-S1 score			
			8) S3-S2 score			
Main Menu						
Edit Event						
Edit Session						

Figure 2-J: The Edit Session Screen.

If you are using the remote judging terminals, be sure that the number of judges entered matches the number of terminals used before proceeding. Diving will only record as many scores as you set judges for the sessions. Extra terminals will be ignored. If you have fewer terminals than judges in a session Diving will never assign a final score to the dive, nor will it display on the scoreboard.

When you are finished entering values, press the 'Quit' key to back out of the menu. The entered values in each screen are automatically stored when you back out of them.

Back out of both the 'Edit Session' and the 'Edit Event' screens (using the 'Quit' key). From the 'Choose Event' screen, select the event you just created and press the 'Divers' softkey. This will take you to the 'Edit Divers' screen. **See page 37 for more details on sessions.**

## Adding Divers to the Meet

Once you have successfully created a meet, added an event (or events) to the meet, and defined the session procession, you will need to add divers to the meet.

Within the 'Divers' screen (Figure 2-K) you can add divers to the lineup by pressing 'Insert Diver.' If you highlight a blank line, this key's name changes to 'Add Diver.' Either one will open the 'Add Diver' screen (Figure 2-L). Use the arrow keys on the System 6 keyboard or the 'Up' and 'Down' softkeys to navigate up or down the list of divers. Divers can be inserted at any location using the 'Insert Diver' key, or deleted using the 'Delete Diver' key. To insert a diver into a particular position, select the diving position and press the 'Insert Diver' key. The divers will be shifted accordingly. You can also change the position of a diver on the list with the 'Move Diver' key. See page 38 for details.

Meet: CTS DIVING CLASSIC				Diving Version: 1.200	
Event: 1 - Womens 1m Springboard				Firmware Version: 1.34	
10:52 am 04-Jun-2008					

Diver	Name	Team	Total
1	TINA W	MKT	0.00
2	KATIE P	SLS	0.00
3	ANNE J	ENG	0.00
4	VIDA S	OPS	0.00
5	MONIQUE M	LMS	0.00

Up
Down
Insert Diver
Delete Diver
Move Diver
More
Main Menu
Edit Divers

Use arrow keys to move up and down. Press enter to select current diver  
Press enter on an empty slot to insert a diver in that position

Figure 2-K: The 'Edit Divers' Screen



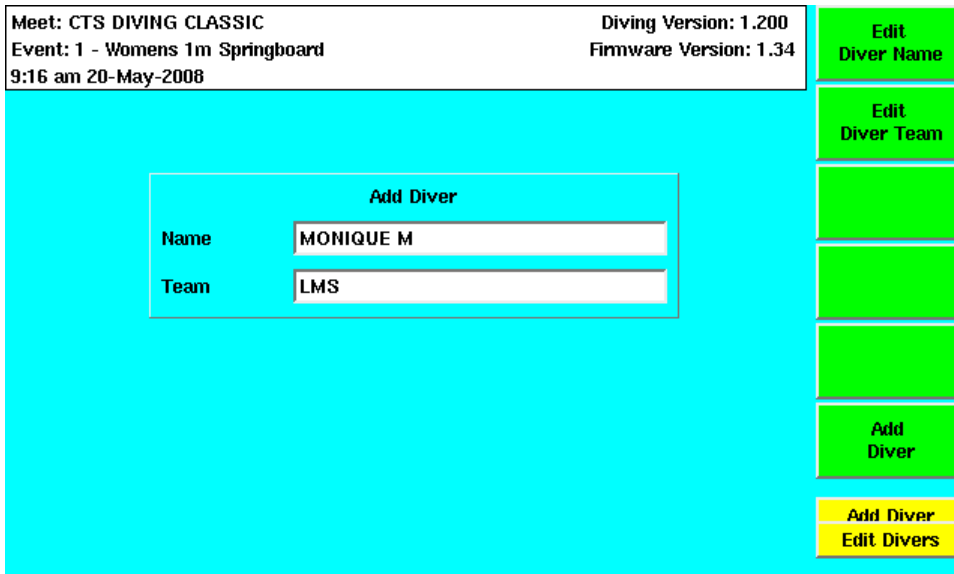


Figure 2-L: The 'Add Diver' Screen

There is no practical limit to how many divers you can store, but bear in mind that only two digits are used to indicate the diving order on the scoreboard. It is advisable to keep the number of divers at 99 or below.

### Adding Dives for a Diver

To add dives to each diver, simply press the 'Enter' key with the desired diver selected. You will be taken to the 'Enter Dive' Screen with rows for dives for the whole event (Figure 2-N). Use the numeric keypad to enter the dive number and the four lettered Dive Position keys on the System 6 keyboard that corresponds to the possible dive positions (next to the numeric keypad on the System 6 keyboard).

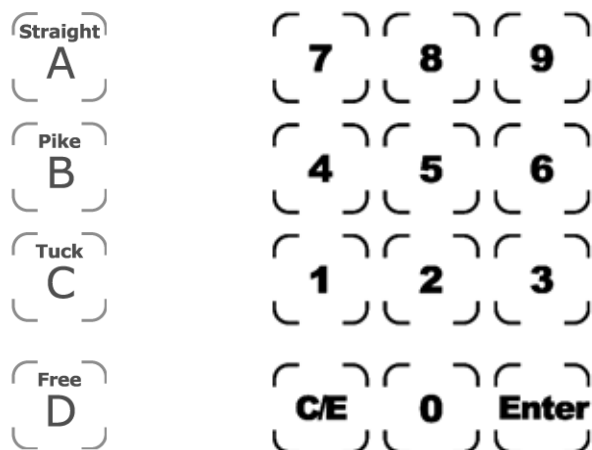


Figure 2-M: The Numeric Keypad and Dive Position Keys

When the dive is completely entered, Diving will automatically display the corresponding Degree of Difficulty. The default D.D. values are calculated based on current FINA rules. If for some reason you need to change the D.D. for a certain dive, see page 35.

Repeat this procedure for each of the divers entered into the meet. When finished, simply hit the 'Quit' key. The entered data will be automatically saved.

You can also insert and delete dives as you see fit using the 'Insert Dive' and 'Delete Dive' softkeys. Simply select the dive or the position where you wish to insert the new dive and hit the respective softkey. The remaining dives will be shifted accordingly.

You can also edit the dives and the awarded scores for each diver during the meet. The 'Enter Dive' screen will now display the score awarded from each judge for each dive as well as the diver's total points awarded for each dive. You can delete a dive, add a dive, or change its score using the available softkeys. As the meet progresses, Diving will progress with dives according to order of the dive list. During a meet you can only enter new dives for upcoming rounds, not new dives for previous ones, as the System 6 is not a time machine. You can change the dives from previous rounds and the Diving program will recalculate the diver's score according to the new D.D.

With dives for each diver, you are now ready to run a diving meet!

<b>Meet: CTS DIVING CLASSIC</b> <b>Event: 1 - Womens 1m Springboard</b> <b>9:17 am 20-May-2008</b>		<b>Diving Version: 1.200</b> <b>Firmware Version: 1.34</b>	<b>Up</b>																					
<b>Diver #1</b> <b>TINA W (MKT)</b>			<b>Down</b>																					
	<table border="1"> <thead> <tr> <th>Rnd</th> <th>Dive</th> <th>DD</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>101B</td> <td>1.3</td> </tr> <tr> <td>2</td> <td>201C</td> <td>1.5</td> </tr> <tr> <td>3</td> <td>301C</td> <td>1.6</td> </tr> <tr> <td>4</td> <td>5111A</td> <td>1.8</td> </tr> <tr> <td>5</td> <td>401C</td> <td>1.4</td> </tr> <tr> <td>6</td> <td>103C</td> <td>1.6</td> </tr> </tbody> </table>	Rnd	Dive	DD	1	101B	1.3	2	201C	1.5	3	301C	1.6	4	5111A	1.8	5	401C	1.4	6	103C	1.6		<b>Insert Dive</b>
Rnd	Dive	DD																						
1	101B	1.3																						
2	201C	1.5																						
3	301C	1.6																						
4	5111A	1.8																						
5	401C	1.4																						
6	103C	1.6																						
			<b>Delete Dive</b>																					
			<b>Edit Name and Team</b>																					
			<b>More</b>																					
			<b>Main Menu</b>																					
			<b>Edit Divers</b>																					
			<b>Enter Dives</b>																					

Figure 2-N: Editing a Diver's Dives. When performed mid-meet, judge scores will also be displayed/editable.

## **Running the Meet**

In the Main Menu screen, press 'Run Event.' You can also begin running the meet at any time by simultaneously pressing the 'Next Dive' keys on the System 6 keyboard.

When you run an event, Diving will advance to the first diver with an un-scored dive. The Judging screen will display the meet name, event, the current diver, round, dive, degree of difficulty, the diver's total points, and the current award (once the current dive is judged). This screen will also calculate and display the number of points needed to overtake the leader. Based on this amount, the score needed to overtake the leader on the current dive (based on the current D.D.) will be automatically calculated and displayed. This data is also sent to scoreboard module '0A'.

Diving is configured to take scores both from the remote judging terminals as well as the System 6 keyboard. When a wireless interface box (WIO) or standard interface box (IO) is connected to the System 6, that information will show in the screen header (see figures 2-O and 2-P).

<b>Meet: STATE CHAMPIONSHIPS</b>	<b>Diving Version: 1.210 -K3</b>
<b>Event: 1 - Platform</b>	<b>Firmware Version: 1.42</b>
<b>3:20 am 16-Dec-2009</b>	<b>Judges' Interface: Wireless</b>

Figure 2-O: Screen header with Wireless Judges' Interface connected

<b>Meet: STATE CHAMPIONSHIPS</b>	<b>Diving Version: 1.210 -K3</b>
<b>Event: 1 - Platform</b>	<b>Firmware Version: 1.42</b>
<b>3:22 am 16-Dec-2009</b>	<b>Judges' Interface: Standard</b>

Figure 2-P: Screen header with Standard (wired) Judges' Interface connected

In the case of a score that was mistyped on the judging terminal, you can override or edit the values submitted by the remote terminals by pressing the judge number in the top row of keys, and then typing in the correct score with the numbers below. With wireless judging, a judge can request to change a score after sending it. In this case, that judge's score will be highlighted with a magenta box on the screen. You can ignore the request, or allow it by pressing that judge number on the top row of keys. The judge will then enter the correct score.

When the Judging Screen opens, the first judge score is highlighted at the bottom of the screen (See Figure 2-Q). The highlighted selection box will automatically advance to the next judge after a score is entered. If necessary, you may also skip to a particular judge's score by using the 'Edit Judge' row of keys on the System 6 keyboard.

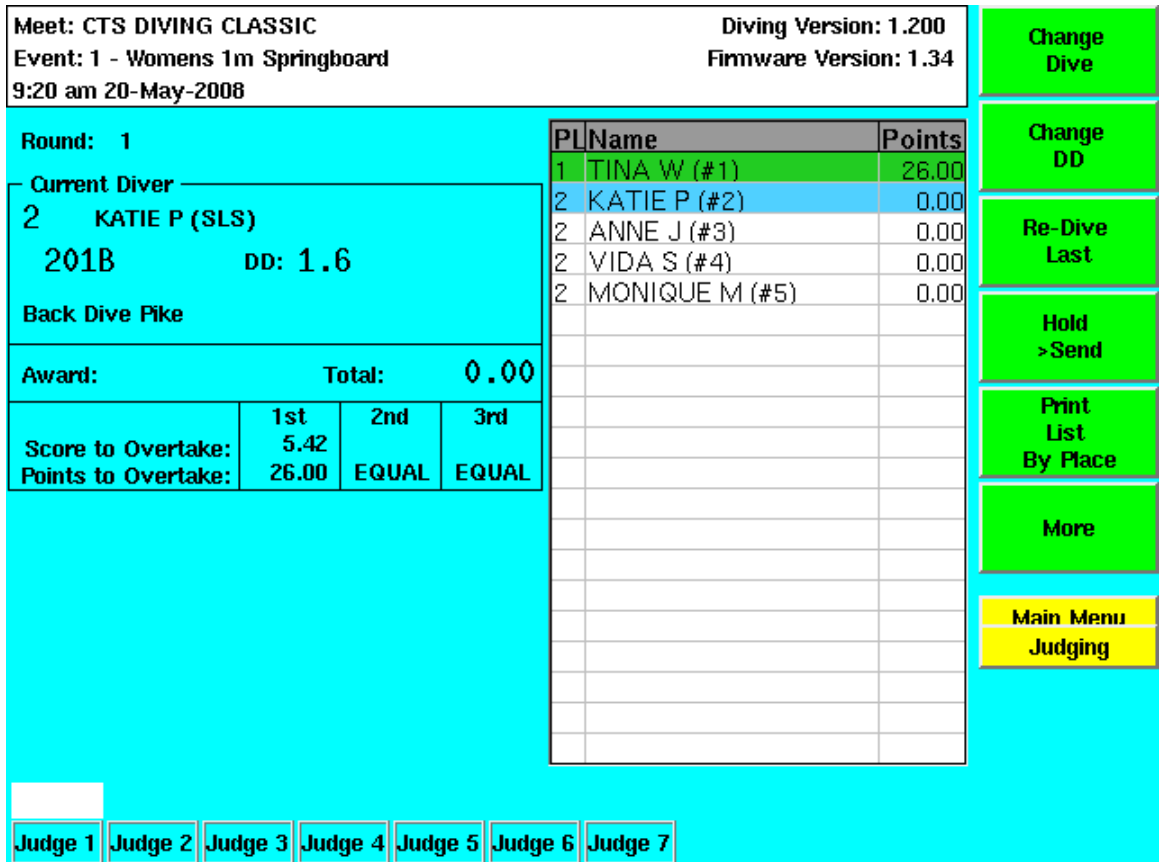


Figure 2-Q: The Judging Screen.

To enact a two-point deduction (when a balk has been declared) or to fail the dive, simply simultaneously press the two keys for the function at the bottom of the keyboard. A failed dive results in all judges' scores being zero. The Diving software uses two keys for some critical functions, including two-point deduction and failed dive, to ensure that the key press is deliberate.

With wireless judging and a referee console (JT ID#0) in use, the referee will declare the BALK or FAIL, and enter it directly into the WJT.

If allowed by the governing body, a diver can change a dive before diving. Press the 'Change Dive' softkey and enter the new dive number + position letter. The dive and D.D. will update automatically. You can change only the D.D. for a dive by pressing the 'Change D.D.' softkey and entering the new degree of difficulty.

If a diver is re-diving a dive, use the 'Re-Dive Last' softkey. If pressed, Diving will re-prompt for judges' scores.

Another softkey option on the Judging screen is the 'Hold [or] Send' option. Pressing the adjoining softkey will toggle between each mode. Selecting '>Hold,' the judges scores are not displayed to the scoreboard until you send them. If you select '>Send,' the scores will be sent to the scoreboard as soon as they are all received.

Press the 'Next Dive' keys together to advance to the next diver/dive. The judges' scores are stored automatically when the next diver/dive is loaded

Repeat the process for each diver/dive until all are completed. If you exit a diving event prematurely, it will start at the next diver when you re-enter it.

### **Printing the Meet**

Whenever desired, you can print the accumulated meet data. Using the 'Quit' softkey, back out to the 'Main Menu'. Select 'More,' and then the 'Print Results' softkey.

From within the 'Print' menu you can either print a single diver's data or print all of the divers in one of the listed permutations. When printing a single diver by pressing the 'Single Diver Data' key, select the desired competitor with the up and down arrow keys and hit 'Enter' to print all the information pertaining to that diver.

'Full Results by Order' will print all the divers that have competed in the order entered. 'Full Results by Place' will print all of the divers in the competition in the order they placed in the meet. Selecting 'Print List by Order' will print the currently competing divers, excluding all cut and disqualified divers, in the order they were entered. Selecting 'Print List by Place' will print the currently competing divers, excluding all cut and disqualified divers, ordered in their respective ranking by score.

To successfully print meet or individual data, you will have to have a compatible printer connected with defined print codes. See 'Printer Control Codes' on page 30 for further details.



# 3

## REFERENCE

This chapter describes in detail the operation of the Diving program, the function of each key on the keyboard, and all the softkey functions. This chapter is not meant to be read from beginning to end. Rather, it is to be used as a reference for individual features. Diagrams or pictures are provided when necessary. To locate topics quickly, please refer to the table of contents in the front of the manual, or search by keyword in the index included at the end of the manual.

### Loading Diving

When you power on your System 6 you will see the Colorado Display Systems Sport Loader screen, pictured in Figure 3-A. If Diving is properly installed, you will see a softkey on the right-hand side of the screen that will read 'Diving.' Press this button to load the Diving sport module.



Figure 3-A: The System 6 Sport Loader

# Updating Diving Software

The System 6 has the capability to connect to the Internet in order to download updates for the Diving program. To update your software, follow the instructions in the Sport Loader Manual. The Diving program should be updated before the beginning of each season.

## Display Screen

Your System 6 sports timer incorporates a full color 10.4 inch LCD (liquid crystal display) screen. All of the relevant information pertaining to your sports timer and diving meet is communicated via your LCD screen.

Both the colors used for each sport module and the backlighting for the LCD screen can be selected. Select the 'Setups' softkey from the 'Main' menu. From here you can set the backlight setting from the 'General' option. From within the 'Colors' option, you can set the color for the menu tabs (the screen titles in the upper-left corner), the softkeys, as well as the background. For more information on the setups menu, see the 'Setups' section on page 26 for more information.

## Keyboard

This section describes the function of the keys on the Diving keyboard insert. The keyboard keys are described as they appear left to right. Refer to the index in the back of the manual to locate specific key functions quickly. The Diving keyboard insert is depicted in Figure 3-B.

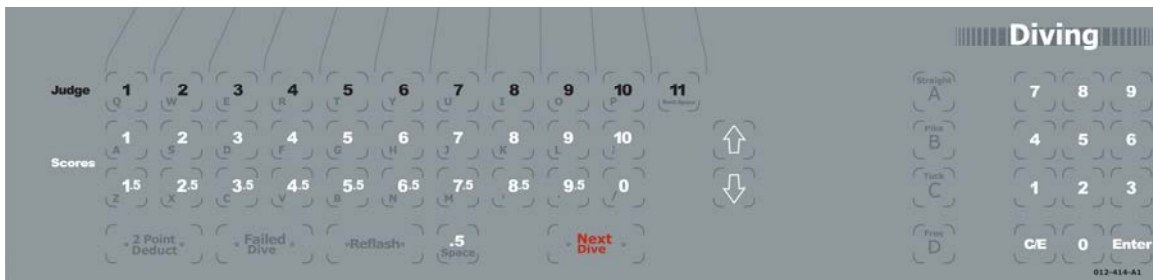


Figure 3-B: The Diving Keyboard insert.

### **Alphabetic Keys**

Located in the first three rows of your Diving keyboard insert, the Alphabetic keys are used for text input. The keys are arranged in the 'Qwerty,' or standard typewriter arrangement. Use these keys when prompted for diver and meet names. Most input screens require that you hit the 'Enter' key to confirm the text input.



## Judge

Located in the top row of the keyboard overlay, the judge keys are used to select a particular judge's score for editing during the meet. These keys are not to be confused with the numeric keypad on the right side of the keyboard overlay.



Figure 3-C: The Judge Keys.

You can use the keyboard judging scores even when remote terminals are being used. Change the desired score before pressing the 'Next Dive' keyboard keys. **Do not** use the numeric keys on the right end of the keyboard insert to enter dive scores.

## Score

Located in the second and third rows of the keyboard overlay, the score keys can be used to assign dive scores to each judge or to edit the scores as they are entered on the remote judging terminals (Figure 3-D). There is also a '.5' key located in the fourth row.

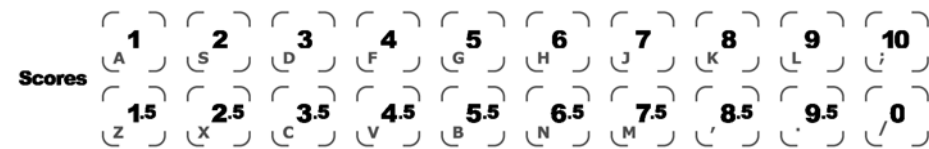


Figure 3-D: The Score Keys.

## 2 Point Deduct (Balk)

If using wireless judging, and one WJT is designated as the referee's console (JT ID#0), you do not need to use these keys. The referee will send the information from the WJT to the System 6 if a balk has been declared. In this case, scores will be accepted from the WJTs, and the System 6 will automatically calculate the 2-point deduction. BALK will appear on the screen next to Award.

In all other cases, (not using judging terminals, or using non-wireless JTs, or not using a designated referee console), when a balk has been declared press these keys simultaneously before you press 'Next Dive.' Diving recalculates the award and automatically displays the new information on the scoreboard. BALK will appear on the screen next to Award.

## Failed Dive

If using wireless judging, and one WJT is designated as the referee's console (JT ID#0), the referee will send the information from the WJT to the System 6 if the dive is declared a failed dive. In this case, no scores will be accepted from any other WJTs, and you do not need to use the Failed Dive keys. All scores will appear in red type at 0.0 and are automatically sent to the scoreboard. FAIL will appear on the screen next to Award.

In all other cases (not using judging terminals, or using non-wireless JTs, or not using a designated referee console), if the dive is declared failed, press these keys simultaneously

during the current dive before you press 'Next Dive.' All scores will appear in red type at 0.0 and are automatically sent to the scoreboard. FAIL will appear on the screen next to Award.

### **Reflash**

Allows you to edit dive information, including scores, and blanks the scoreboard for the current dive.

During the current dive, before pressing 'Next Dive,' press 'Reflash' to edit the dive. This will restart the dive, as if it had never happened. You can also use this feature in conjunction with 'Re-Dive Last' (described on page 35) to re-enter information for a prior dive.

You can receive scores from judges' terminals, reenter judges' scores or press one of the edit dive softkeys. By pressing the appropriate softkey, you can edit the D.D., re-dive, automatically send the dive information to the scoreboard and printer at the completion of each dive, or send that information manually.

Press quit to exit without making any changes or press 'Next Dive' to store changes and continue to the next dive. If you have used 'Re-dive Last,' you will need to press 'Next Dive' twice.

### **Space**

This key is equivalent to the space bar on a computer keyboard. Press this key to enter a space at the current cursor position while entering text.

### **Next Dive**

These keys (used together) tell the Diving program that the current dive is completed and accepts the current scores entered for that dive. If you entered the meet information ahead of time Diving will automatically load the next dive and the corresponding information. If you are entering the information on the fly you will be prompted for diver/dive information.

These keys, along with the '2 Point Deduct', 'Failed Dive', and 'Reflash' keys, must be pressed at the same time to be enacted. This feature ensures that the key press is intentional.

### **Back Space**

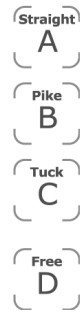
Located at the right end of the 'Judge' keys (the same key as the 11<sup>th</sup> Judge key), this key is equivalent to the 'Back Space' key on your computer keyboard. When entering text or numeric values, this key will delete the last character entered.

### **Up and Down Arrow Keys**

The Up and Down arrow keys move the highlight bar on the display screen up or down, allowing you to select the desired line on the screen.

## **Position Keys**

These four keys allow you to enter the position for each dive. When entering dives for a diver, you must press a position key after the dive number for Diving to accept the entered dive. Once the complete dive has been entered, Diving will display the corresponding degree of difficulty, as calculated by the FINA formula.



# Numeric Keypad

Located on the right-hand side of the keyboard insert, the numeric keypad allows you to enter numeric values when prompted (Figure 3-E).

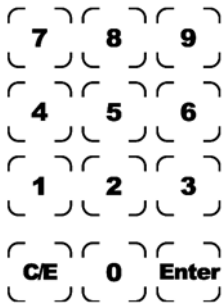


Figure 3-E: The Numeric Keypad.

## **C/E (Clear Entry)**

Allows you to clear an erroneous entry. Press this key before press in the 'Enter' key, which would accept the entry. This key is valid for text or alphabetical entries.

## **Enter**

After entering a numeric or alphabetical value, press the 'Enter' key to accept the value. There is not always a visual confirmation of the value's acceptance. The 'Enter' key on the numeric keypad performs exactly the same as the 'Enter' key on the upper console.

# Console Keys

The console keys are located to the right of the LCD display screen. The console keys are shown below in Figure 3-F.

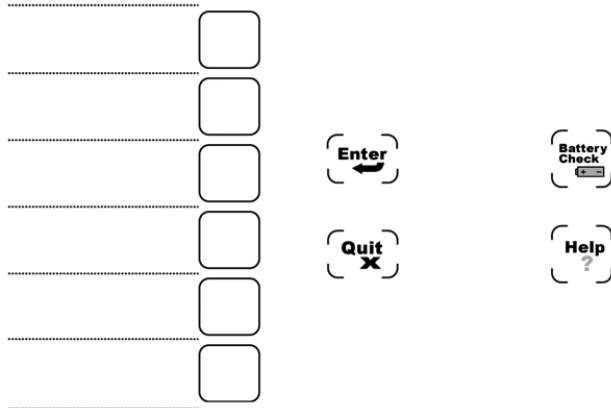


Figure 3-F: The Console Keys.

## **Enter**

After entering a numeric or alphabetical value, press the 'Enter' key to accept the value. There is not always a visual confirmation of the value's acceptance. The 'Enter' console key performs exactly the same as the 'Enter' key on the numeric keypad.

## **Quit**

This key will back out of Diving functions with or without saving the current settings. To ensure that settings are saved before exiting, press the 'Enter' key after entering values.

## **Battery Check**

This key currently does not function

## **Help**

The 'Help' console key will display a supplemental information screen appropriate to whatever screen you are currently using.

# Softkeys

The six on-screen, graphical buttons are referred to as the 'softkeys.' Throughout this manual, we also refer to the six console buttons that correspond to these buttons as softkeys. The console keys are simply the physical access to the onscreen keys.

The on-screen softkeys will change when using the System 6 sport loader or any of the accompanying sport modules, depending on the current screen or mode. There may also

be more options/keys available than are currently displayed by the six available keys. A softkey that reads 'More' will appear to indicate that there are more options available.

Pressing the 'More' softkey will cycle through the softkeys available. The softkeys listed below are organized according to the menus in which they appear. To quickly find a key, search the index included in the back of this manual.

For more information about the progression of the softkey menus, please refer to the Softkey Menu Tree in Appendix B.

### **Up and Down**

The 'Up' and 'Down' softkeys correspond to the 'Up' and 'Down' arrows on the keyboard overlay. When selecting between setup, meet, or diver data organized into columns, the 'Up' and 'Down' softkeys will move the highlight bar accordingly.

### **Choose Meet Menu**

This menu appears when you open the Diving program. It allows you to select an already programmed meet, program a new meet, or begin without entering any information ahead of time (Enter Data on the Fly).

### **Program New**

The 'Program New' softkey opens the 'Create New Meet' Menu, allowing you to enter a meet name, start date and end date. You can access this meet information to edit or complete later by highlighting the desired meet in the 'Choose Meet' Menu and pressing 'Edit Meet.'

### **Enter Data on the Fly**

Instead of entering all of the data for the divers and dives beforehand, this option allows you to enter the information during the meet. If this option were enabled, you would enter the diver's name, dive, and degree of difficulty before each dive during the meet.

### **Delete Highlighted Meet**

When selected, this option will delete the meet that is currently highlighted. You will be asked to confirm this request before it is enacted.

**Note:** *Deleting a meet is irreversible.*

### **Change Sport**

When you wish to run a different sport module, run the system diagnostic menu, or power down your System 6 sports timer, you will need to press the 'Change Sport' softkey. You will be prompted to confirm the exit with 'Yes' and 'No' softkeys. This option can also be found in the 'Misc' menu.

**Note:** Diving is able to continue with a meet where you left off if you exit properly. You may lose data if you power your system down without exiting first.

## **Choose Event Menu**

The 'Choose Event' Menu can be accessed from the 'Choose Meet' Menu. Either press the 'Program New' softkey and create a new meet, or highlighting a desired meet and press 'Enter.'

### **Program New**

Pressing the 'Program New' softkey while in the 'Choose Event' Menu will take you to the 'Edit Event' Menu. For more information on the 'Edit Event' Menu, refer to the 'Edit Event' section in Chapter 2 (page 9).

### **Delete Event**

When selected, this option will delete the event that is currently highlighted. You will be asked to confirm this request before it is enacted.

**Note:** *Deleting an event is irreversible.*

### **Change Meet**

This option will return you to the 'Choose Meet' Menu.

## **Main Menu**

After you have chosen a meet and an event, you will be taken to the main menu.

## **Setups**

Using the 'Up' and 'Down' softkeys or the arrow keys on the diving overlay, select the category you wish to configure. Once selected, you will be presented with a column of sub-options to configure for each category. To choose a sub-option, simply press the number on the numeric keypad that corresponds to the number listed in the 'Choice' column. Depending on the option, a panel may appear prompting you for a specific value. Enter the desired value and accept it by pressing the 'Enter' key located on the numeric keypad or upper console.

Press the 'Record Setups' Softkey if you want to save the setups you have chosen. If you do not save the setups, they will revert back to the previously saved setups.

The categories and sub-options contained in the 'Setups' screen are listed below.

## **General**

### **Speaker Volume**

The internal speaker will beep to signify a successful key press. When you select 'Speaker Volume' you will be prompted for a value between 0 and 3; 0 being muted and 3 being the loudest. Enter the desired value and press 'Enter.'

## **Backlight Intensity**

The LCD screen is backlit to ensure proper viewing in low lighting conditions. When you select 'Backlight intensity' you will be prompted for a value between 0 and 9; 0 being the darkest, 9 being the brightest. Enter the desired value and press 'Enter.'

## **7 Judges Scoring...**

There are two recognized methods for computing the scores of 7 judges: 5 or 3. The '7 Judges scoring - (5 or 3) judges computing' setting sets how each dive is scored when there are 7 judges. If '...3 judges computing' is selected the top two and bottom two scores are dropped, leaving the median 3 scores. If '...5 judges computing' is selected the top and bottom scores are dropped and the remaining sum is multiplied by a scaling factor of 0.6. Please note that the 5 judge computing system will often produce diving scores with thousandth of a point precision (three significant digits after the decimal).

Pressing the corresponding numeric choice will toggle between these modes.

For reference, most governing bodies use the 3 judges computing method.

## **Judging Interface On/Off**

Choosing this features tells the timer whether Remote Judging Interfaces are being used and turns them on or off accordingly.

## **Synchro Pattern**

This option is used for synchronized diving. When judging synchronized diving, four judges critique the execution of one of the two divers while the other five critique their synchronization. Choosing this option allows you to designate which category each judge will be judging. Check with the rules of your governing body to see what pattern to use.

## **Synchro Dives Must Match/Can Be Different**

This option is used for synchronized diving. The standard is that the divers must be diving the same dive. Select "Can be different" only if the rules of your governing body allow it.

## **Don't Send/Send Presentation String**

Unless you know that you need this option set to "Send," leave it at "Don't Send."

## **Scoreboard**

### **Scoreboard Setup**

The numbered options that appear are available to configure your scoreboard display.

Should you need to modify the scoreboard output values, press the '1' key on your keypad to bring up the module definitions panel (see page 29). You can then use the up and down arrows on your System 6 keyboard to highlight the desired module. Press 'Enter' to select the highlighted choice. Type the desired value on the keypad and press the 'Enter'

key when finished. A diagram of the currently defined scoreboard output is provided in figure 3-G.

The scoreboard modules consist of sets of data that can be displayed on the scoreboard. Setting an output value in the scoreboard menu will send that particular set of data to the corresponding scoreboard module.



Figure 3-G shows the diving scoreboard modules with signage installed and module numbers indicated.



## Module Definitions

Will bring up a screen that allows you to change which scoreboard row will display which set of data. To change a value, highlight the module with the arrow keys and press 'Enter.' Enter the desired value and press 'Enter' again.

Meet: CTS DIVING CLASSIC	Diving Version: 1.200	Up																																			
Event: 1 - Womens 1m Springboard	Firmware Version: 1.34																																				
9:19 am 20-May-2008																																					
<b>Scoreboard Module Definitions</b> Choose an Event			Down																																		
<table border="1"><thead><tr><th>Scoreboard Data</th><th>Displayed On Module</th></tr></thead><tbody><tr><td>judge 1</td><td>01</td></tr><tr><td>judge 2</td><td>02</td></tr><tr><td>judge 3</td><td>03</td></tr><tr><td>judge 4</td><td>04</td></tr><tr><td>judge 5</td><td>05</td></tr><tr><td>judge 6</td><td>06</td></tr><tr><td>judge 7</td><td>07</td></tr><tr><td>judge 8</td><td>08</td></tr><tr><td>judge 9</td><td>09</td></tr><tr><td>pts overtake leader</td><td>0A</td></tr><tr><td>dd round award</td><td>0B</td></tr><tr><td>current diver total</td><td>0C</td></tr><tr><td>lead diver total</td><td>0D</td></tr><tr><td>j5 award</td><td>0E</td></tr><tr><td>dd dive pos</td><td>10</td></tr><tr><td>round award</td><td>11</td></tr></tbody></table>			Scoreboard Data	Displayed On Module	judge 1	01	judge 2	02	judge 3	03	judge 4	04	judge 5	05	judge 6	06	judge 7	07	judge 8	08	judge 9	09	pts overtake leader	0A	dd round award	0B	current diver total	0C	lead diver total	0D	j5 award	0E	dd dive pos	10	round award	11	Blank Module
Scoreboard Data	Displayed On Module																																				
judge 1	01																																				
judge 2	02																																				
judge 3	03																																				
judge 4	04																																				
judge 5	05																																				
judge 6	06																																				
judge 7	07																																				
judge 8	08																																				
judge 9	09																																				
pts overtake leader	0A																																				
dd round award	0B																																				
current diver total	0C																																				
lead diver total	0D																																				
j5 award	0E																																				
dd dive pos	10																																				
round award	11																																				
Use arrow keys to select a module Press enter to edit module definition			Record Setups																																		
			Default Modules																																		
			Main Menu																																		
			Setups																																		

Figure 3-H: The Module Definitions Page

Shown in Figure 3-H is the 'Module definitions' screen, which displays the default scoreboard module definitions. To see the default scoreboard module definitions as they appear on the scoreboard, see Figure 3-G on page 29.

## Show Definitions on Scoreboard

To ease assignment of modules, the modules defined address value can be displayed on the board. Press the corresponding choice number to toggle this function on and off.

## Send/ Hold Data

Selecting 'Send Data' will send the judges scores to the scoreboard as soon as they are all received. Selecting 'Hold Data' will hold all of the judges scores until you, the System 6 operator, tell it to send them.

## Step Interval

If you are using the 'Step Data' output on module 0F the 'Step Interval' represents the time, in seconds, that each line (usually a diver and a score) should remain on the scoreboard line.

Select the corresponding choice number using the numeric keypad. When prompted, enter the time, in seconds, pressing 'Enter' to accept the value.

### **Self Test**

When pressed, 'Self test' triggers a scoreboard testing routine that sequentially displays an 8 in each column of the scoreboard. Progressively enabling every segment on the scoreboard, the operator can quickly determine if any digit has malfunctioned.

### **Step Data**

When a meet is being run with significantly fewer scoreboard lines than would adequately display all of the relevant meet information, 'Step Data' can be cycled periodically on module 0F. The designated line could, for example, display the individual judges' awards and then the score for the current diver. The display time for each item is determined by the 'Step interval' setting.

### **Scoreboard Intensity**

Select this option to change the brightness of the scoreboard display. Press 8 and then select the desired brightness by pressing a number 1-8, with 8 being the brightest. This option is only applicable for LED Numeric Scoreboards.

## **Printer**

### **Printer Control Codes**

Your Diving software communicates with your printer by sending generic commands that format each page. These 'control codes' are specific to each printer and can be found in the owners manual for the printer. It is imperative that you purchase a printer that will accept print control codes. Common printer control codes are shown on page 31.

From within the 'Printer control codes' screen, set the code string for each code type you intend to use by doing the following:

- Select code type using the 'Choices Up' and 'Choices Down' softkeys.
- For each code, enter each ASCII value (in decimal) followed by the 'Enter' key.
- If you need to edit, insert, or delete any value entered, use the 'Left' and 'Right' softkeys to select the value and the 'Insert' and 'Delete' softkeys to edit.

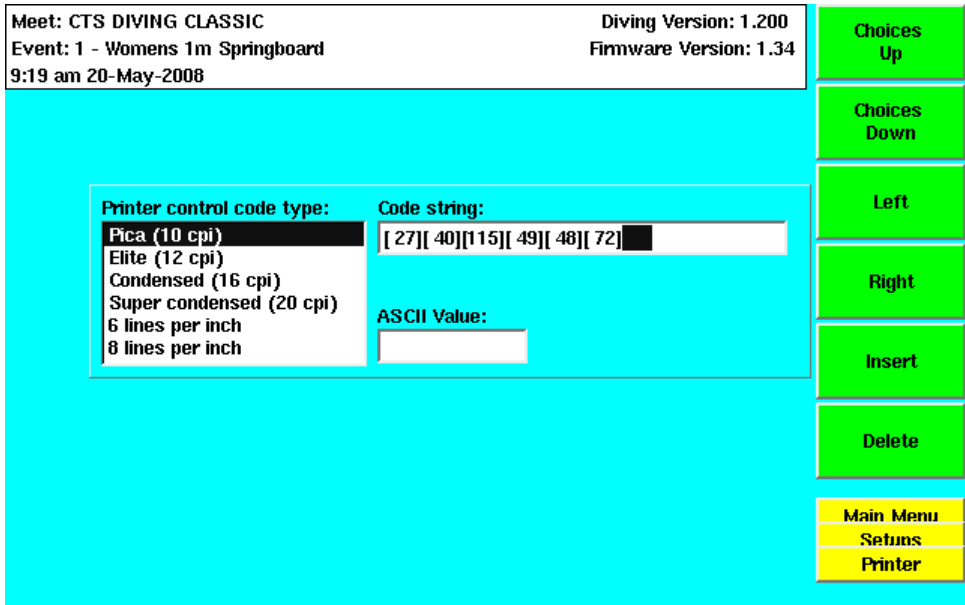


Figure 3-I: Printer Control Codes.

Quitting out of the 'Printer' screen will automatically store any values entered. See Figure 3-I.

**PCL Codes:**

**Citizen GSX190:**

Pica: 27 51 48  
 Elite: 27 51 49  
 Condensed: 27 51 50  
 Super Cond: 27 51 55  
 6 LPI: 27 48 50 52  
 8 LPI: 27 48 49 56

**HP-PCL:**

Pica: 27 40 115 49 48 72  
 Elite: 27 40 115 49 50 72  
 Condensed: 27 40 115 49 54 72  
 Super Cond: 27 40 115 50 48 72  
 6 LPI: 27 38 108 54 68  
 8 LPI: 27 38 108 56 68

**IBM:**

Pica: 18  
 Elite: 27 58  
 Condensed: 28  
 Super Cond: (none)  
 6 LPI: 27 50  
 8 LPI: 27 48

**Epson:**

Pica: 27 80  
 Elite: 27 77  
 Condensed: 27 80 27 15  
 Super Cond: 27 77 27 15  
 6 LPI: 27 50  
 8 LPI: 27 48

**Okidata:**

Pica: 30  
 Elite: 28  
 Condensed: 29  
 Super Cond: 27 35 51  
 6 LPI: 27 54  
 8 LPI: 27 56

**Panasonic:**

Pica: 27 80 18  
 Elite: 27 80 27 77  
 Condensed: 27 80 15  
 Super Cond: (none)  
 6 LPI: (none)  
 8 LPI: (none)

## **Type Size**

Pressing the 'Type size' choice number on the numeric keypad will cycle through the available type sizes used for printing. Type size refers to the size of character printed on each line. Please note that type size availability depends on your printer and the supplied printer control codes.

## **Lines per inch**

Pressing the 'Lines Per Inch' choice number on the numeric keypad will toggle between 6 and 8 lines per inch. 'Lines per inch' refers to the number of lines (or rows) printed per inch on each sheet of paper. Please note that the lines per inch availability depends on your printer and the supplied printer control codes.

## **Printer**

Pressing the 'Printer' choice number on the numeric keypad will cycle through the available pre-defined printers that are currently available. Setting 'Printer' to any of these printers will use known printer control values for these printers. Leave the printer setting on 'Other' if you are using custom printer control codes.

## **Do/Don't Print Data During Event**

This option, when turned on, prints a record containing the dive and scoring information following each dive.

## **Colors**

### **Background**

Selecting the 'Background' choice number will display the color selection softkeys. Scroll through the 15 color choices by pressing the 'More' softkey. Press the softkey with the background color you want.

### **Softkeys**

Selecting the 'Softkeys' choice number will display the color selection softkeys. Scroll through the 15 color choices by pressing the 'More' softkey. Press the softkey with the color you want.

### **Menu**

Selecting the 'Menu' choice number will display the color selection softkeys. Scroll through the 15 color choices by pressing the 'More' softkey. Press the softkey with the menu color you want.

## **Time/ Date**

### **12-Hour clock**

Selecting the '12-Hour Clock' choice number will toggle between a 12-hour clock and a 24-hour (military) style clock.

## Set Time

Selecting the 'Set Time' choice number will display a prompt to set the current time in the HH:MM:SS format. Setting the time is done in the 24-hour format (1pm = 13).

## Set Date

This option allows you to enter the current date in the MM/DD/YY format.

## Wireless Judging

If a wireless interface box (WIO) is connected to the System 6's USB port before entering Diving, the System 6 will detect it and this option will be available. The screen header will display "Judges' Interface: Wireless," as shown in Figure 3-J. If you are using wireless judging and this option is not available, exit Diving (Select Change Sport from the Misc menu), then connect the WIO to either USB port, and then re-enter Diving.

<b>Meet: STATE CHAMPIONSHIPS</b>	<b>Diving Version: 1.210 -K3</b>
<b>Event: 1 - Platform</b>	<b>Firmware Version: 1.42</b>
<b>3:20 am 16-Dec-2009</b>	<b>Judges' Interface: Wireless</b>

Figure 3-J: Screen header with Wireless Judges' Interface connected

## Wireless Judging Channel

This option allows you to select the wireless channel (1, 2, 3 or 4) for the WIO. Enter the desired value and press 'Enter.'

These four channels are distinct from each other and all other CTS wireless products, avoiding potential wireless interference.

To run simultaneous events, use separate CTS timers, each connected to a WIO by USB cable. Set them to different wireless channels. Set the wireless judging terminals (WJTs) to match the associated WIO for the event they are judging.

## Show/Do Not Show Dive & DD on Judges' Terminals

The wireless judging terminals (WJTs) have the ability to show the dive number, degree of difficulty (DD), diver # and round# on their displays. Use this option to set whether this information will be shown.

## Wireless JT Management

Press Wireless JT Management to view all WJTs on the same channel as the connected WIO. The battery level shown for each WJT on the System 6 is the same as that shown on the individual WJT's display.

The referee's console is optional and, if present, is JT ID# 0.

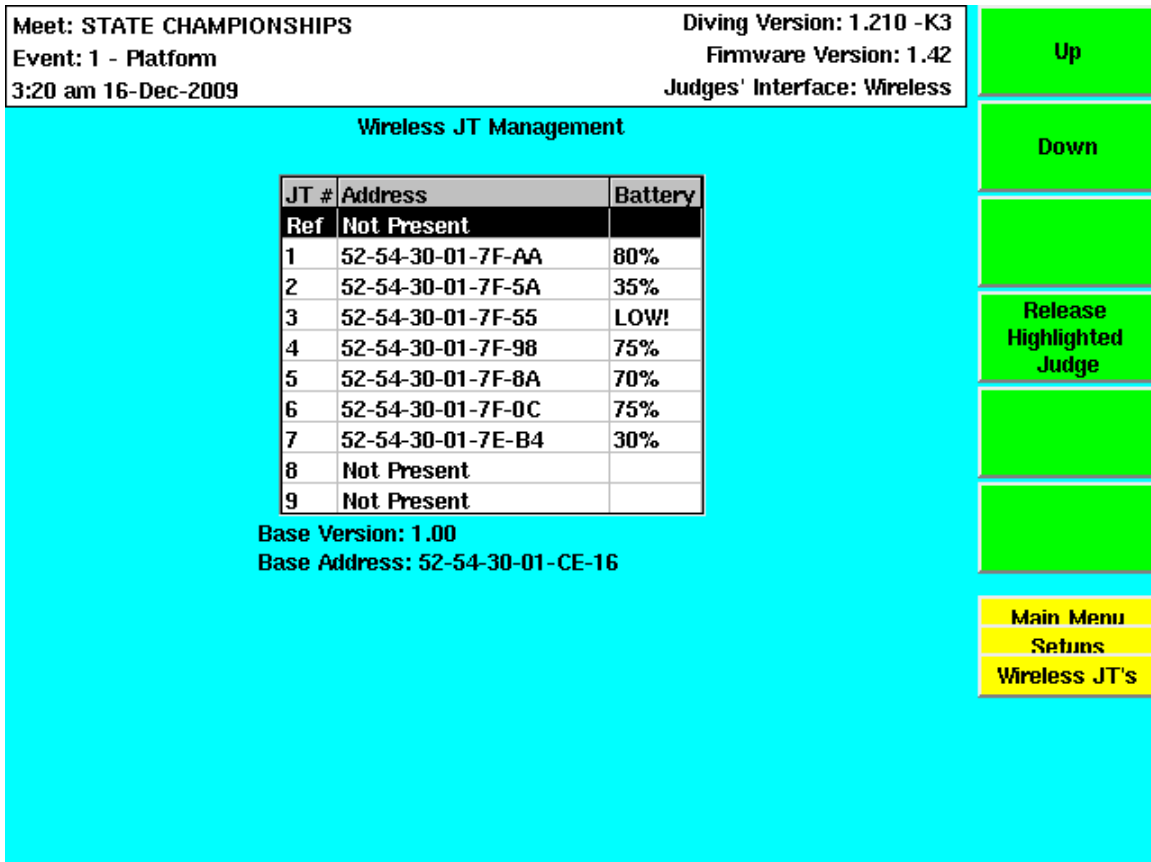


Figure 3-K: Wireless JT Management screen

### **Release Highlighted Judge**

Use this softkey, under Wireless JT Management, to release a judging terminal. This can be necessary if one has dead batteries and a different WJT will be used to replace it, or if a WJT is registered at the wrong JT ID#.

NOTE: There is no need to release the WJTs at the end of the meet; they are automatically released when the System 6 is turned off and also when the WIO is disconnected from the System 6 (this is not recommended during a meet, as data may be lost.)

### **Record Setups**

Records all of your settings and preferences so that they can be retrieved the next time you run a meet. Diving currently stores only one profile of settings for retrieval, so any data will be overwritten each time you save.

### **Restore Defaults**

Restores the factory default settings.

### **Run Event**

The 'Run Event' softkey will run whichever event is selected in the 'Choose Event' screen, taking you directly to the judging screen. Select the desired event using the 'Up' and 'Down' softkeys. If you are continuing a previous meet you can also press the 'Next Dive' keyboard keys to continue where you last left off.

### **Change Dive**

The Dive can be changed during a meet by pressing the 'Change Dive' softkey. When pressed, the highlight box will appear, prompting you to enter a new dive number and position letter. Once entered Diving will automatically adjust the degree of difficulty.

### **Change DD**

The degree of difficulty can also be changed during a meet independently of the dive. Press the 'Change DD' softkey and enter the new degree of difficulty in the highlight box.

### **Re-Dive Last**

The 'Re-Dive Last' key will step backwards in the meet chronology to re-dive the last scored dive. You can keep pressing the key to continue back one diver at a time, including divers that have been dropped. To change data, use the 'Edit' or 'Reflash' functions.

### **Hold/ Send**

Selecting 'Send Data' will send the judges' scores to the scoreboard as soon as they are all received. Selecting 'Hold Data' will hold all of the judges' scores until you, the System 6 operator, tell it to send them.

### **Print List by Place**

The 'Print List By Place' softkey will print only those divers remaining in the current round by their score ranking.

### **Drop/Un-drop Diver**

This option allows you to drop a diver from the competition. If a diver withdraws from the meet after the competition has begun, use this option to remove the diver without affecting the diving order.

### **Rank on Scoreboard**

The 'Rank on Scoreboard' softkey will re-arrange the divers displayed on the scoreboard to correspond with the current ranking, highest to lowest.

### **Set Overtake Spots**

Spot #1 is always defined as the leader (1<sup>st</sup> place). Spots #2 and #3 can be defined with the 'Set Overtake Spots' softkey. They could be defined as 2<sup>nd</sup> and 3<sup>rd</sup> places, or as the ranking needed to advance to the next round. This option cannot be set in the middle of a round.

## Judging Screen Options

The 'Judging Screen Options' softkey allows you to choose information to show on the System 6 screen during the meet (Figure 3-L).

'Overtake Off or On' sets whether to display the Score to Overtake and Points to Overtake information. If displayed, it will appear on the right side under the other information about the current diver.

'Leaderboard Off or On' sets whether to display the Leaderboard information. If displayed, it will appear on the left side between the current diver's information and the softkeys.

Meet: CTS DIVING CLASSIC		Diving Version: 1.200		Change Dive											
Event: 1 - Womens 1m Springboard		Firmware Version: 1.34													
9:20 am 20-May-2008															
Round: 1	<table border="1"> <thead> <tr> <th>PLName</th> <th>Points</th> </tr> </thead> <tbody> <tr> <td>1 TINA W (#1)</td> <td>26.00</td> </tr> <tr> <td>2 KATIE P (#2)</td> <td>0.00</td> </tr> <tr> <td>2 ANNE J (#3)</td> <td>0.00</td> </tr> <tr> <td>2 VIDA S (#4)</td> <td>0.00</td> </tr> <tr> <td>2 MONIQUE M (#5)</td> <td>0.00</td> </tr> </tbody> </table>		PLName	Points	1 TINA W (#1)	26.00	2 KATIE P (#2)	0.00	2 ANNE J (#3)	0.00	2 VIDA S (#4)	0.00	2 MONIQUE M (#5)	0.00	Change DD
PLName	Points														
1 TINA W (#1)	26.00														
2 KATIE P (#2)	0.00														
2 ANNE J (#3)	0.00														
2 VIDA S (#4)	0.00														
2 MONIQUE M (#5)	0.00														
Current Diver			Re-Dive Last												
2 KATIE P (SLS)															
201B	DD: 1.6			Hold >Send											
Back Dive Pike															
Award:	Total:	0.00		Print List By Place											
Score to Overtake:	1st	2nd	3rd												
Points to Overtake:	5.42	EQUAL	EQUAL	More											
	26.00														
Main Menu															
Judging															
Judge 1	Judge 2	Judge 3	Judge 4	Judge 5											
Judge 6	Judge 7														

Figure 3-L: The Judging Screen displaying both Overtake information and Leaderboard

## Misc

### Change Sport

The 'Change Sport' option allows you to exit the Diving program and return to the Sport Loader Menu to open another sport, or to properly shut down the timer. This option can also be found in the 'Choose Meet' menu.

### Scoreboard Blank/Scoreboard On

The 'Scoreboard Blank' and 'Scoreboard On' options are opposites of each other, allowing you to blank the scoreboard, or to display data again.



## **Edit Event**

The 'Edit Event' softkey is used to add events to a meet. By default, Diving will show one event, labeled 'Event 1', with the default event values. Press the 'Edit Event' softkey to edit or view these values.

Pressing the 'Edit Event' softkey opens the 'Edit Event' Screen. Within this screen are five edit columns comprising the core event definitions. Scroll through the columns using the 'Right' and 'Left' softkeys. This process is further detailed in the setup tutorial on page 9.

After each value has been entered, press the 'Enter' key to accept and store the entered value. Choose the 'Edit Sessions' softkey to further define the details of how each event is judged, scored, and ranked. Once the event is satisfactorily defined, press 'Quit' to exit and save the event.

## **Edit Sessions**

The 'Edit Sessions' softkey brings up the settings for each defined session in an event. 'Sessions' are commonly associated with the portions of a meet between cuts. Use the 'Up', 'Down', 'Right', and 'Left' softkeys to highlight the desired values in each row and column. Each column presents an important session property; these are described in detail below. See Figure 2-I on page 11 for a picture of the 'Edit Session' screen.

### **End Round#**

'End Round#' is the number of the last round for this session. Press the 'C/E' key to clear the value and enter your own. Press 'Enter' to save the new value.

### **# Judges**

The number of judges used for this session. You are able to have a different number of judges for each session. Press 'C/E' to clear the value and enter the new value. Press 'Enter' to save it.

### **Max D.D.**

The total degree of difficulty entered for all of a particular diver's dives must not be greater than the number entered in this column. When entering a value the decimal will automatically be entered. A max D.D. of '10' would be entered as '100' and would be formatted as '10.0'. Press 'C/E' to clear the value and enter the new value. Press 'Enter' to save it. If there is no maximum degree of difficulty for this round, enter 'NA' by clearing the 'Max D.D.' field.

### **Start Score**

This value represents what each diver's score will be at the start of the round. With the highlight box in the 'Start Score' column, press the key on the numeric keypad that corresponds to the preferred scoring method. The start score value can be set to zero, manually entered, equal to the final score of another round, or the most current round minus an earlier round.

## **Cut to**

Diving will keep only the top divers within the 'Cut to' number for the start of the round. Note that this number has no meaning for the first session and is therefore ignored by Diving for the first session.

## **Dive Order**

'Dive Order' represents the order the divers are in at the beginning of the selected session. Press the key on the numeric keypad that corresponds to the desired dive order

## **Divers**

Once you have created and defined at least one event, you can add divers to said event using the 'Divers' softkey. When pressed, the 'Divers' screen appears to add divers to the selected event.

Use the alphabetic keys to add names to each diver, and press 'Enter' on each named diver to add dives to their routine.

Divers can be inserted in place using the 'Insert Diver' and 'Delete Diver' softkeys. Select the spot for the next or replacement diver using the 'Up' and 'Down' softkeys. All entered divers and dives will be saved when you press the 'Quit' console key to exit the 'Divers' screen.

## **Insert Diver**

Will insert a new diver into the current position highlighted. If there is a diver in the current position, that diver will be moved down a position, along with all of the successive divers.

## **Delete Diver**

Will delete the diver in the currently highlighted position. All of the remaining divers will be adjusted accordingly. You will be prompted to confirm the deletion with 'Yes' and 'No' softkeys. **Deleting a diver is irreversible.**

## **Move Diver**

To use the 'Move Diver' feature, select a diver with the arrow keys and press 'Move Diver.' Select the destination for the diver with the arrow keys. The diver will automatically fill the selected position, adjusting the remaining divers accordingly.

## **Random Order**

The 'Random Order' softkey randomly rearranges the order the divers are listed.

## **Drop/Undrop Diver**

This option allows you to drop a diver from the competition. If a diver withdraws from the meet after the competition has begun, use this option to remove the diver without affecting the diving order.

## **Set Starting Score**

In order for this option to function, the 'Starting Score' Option in the 'Edit Sessions' menu needs to be set to 'Manually Enter.' When enabled, this option will set the starting score for each diver to the entered amount instead of starting at zero.

## **Enter Dives Menu**

When you highlight a specific diver and select 'Enter,' you will open the 'Enter Dives' menu, which allows you to enter the information for the dives each diver will be performing.

## **Insert Dive**

Use the 'Insert Dive' softkey to put a new dive between two previously defined dives. The dive in the selected location will be shifted downward, along with the remaining dives.

## **Delete Dive**

Use the 'Delete Dive' softkey to permanently remove the currently selected dive. You will be prompted to confirm the Deletion with 'Yes' and 'No' softkeys. The remaining dives will be shifted accordingly.

## **Copy Dive Sequence**

The 'Copy Dive Sequence' softkey allows you to copy and paste a sequence of dives to another round. After you select the 'Copy Dive Sequence' key, a window will open prompting you to select which series of dives you wish to copy and where you wish to paste the series. Use the softkeys labeled 'Round to Copy Begin' and 'Round to Copy End' to select the series of dives to copy and the 'Round to Copy To' key to select where the series will be pasted. The 'Copy Dives' key executes the copy and paste outlined in the window.

## **Alternate DD**

You can use the 'Alternate DD' softkey to change the pre-defined degree of difficulty for a particular dive. When pressed, you will be prompted to enter the new D.D. Diving will automatically place the decimal for you. This will only change the value for this particular instance of the dive; it will not change the defined D.D. for this dive.

## **Print Results**

At any time during or after a meet you can print diver information and scores in a variety of permutations. The 'Print Results' softkey in the main menu will take you to the 'Print' menu with the following options.

If you get a "No Printer Found" error, check that the printer is turned on, that it is online, and the printer cable is securely attached to the printer itself and, depending on the printer, to the port marked "Printer Port" or one of the USB ports on the back of the System 6.

### **Single Diver Data**

The 'Single Diver Data' softkey will display a list of divers. With the desired diver selected, pressing 'Enter' will print their dives and scores from the current event.

### **Full Results By Order**

The 'Full Results By Order' softkey will print all the divers originally entered into the current event in their dive order.

### **Full Results By Place**

The 'Full Results By Place' softkey will print all the divers originally entered into the current event by their score ranking. This key serves the same function as the one in the 'Run Event' Menu

### **Print List By Order**

The 'Print List By Order' softkey will print only those divers remaining in the current round in their dive order.

### **Print List By Place**

The 'Print List By Place' softkey will print only those divers remaining in the current round by their score ranking.

### **Form Feed**

The 'Form Feed' softkey will print whatever information is stored in the printer without waiting for it to fill a full page.

### **Display Results**

Use the 'Display Results' softkey to review previously recorded meet data. From within the 'Display' screen you can display judges' scores for every dive of every diver from every round. The information retrieved is displayed only on the System 6 screen, not on the scoreboard. You are not able to edit or print information from the 'Display' screen.

### **Display Divers/Display Dives**

When the individual dives are displayed, the top softkey will be 'Display Divers,' and it will return the screen to display the divers and their scores. When the list of divers is displayed, the top softkey will be 'Display Dives,' and it will display the dives for the selected diver.

### **Previous Diver**

Within either the 'Dives' or 'Divers' screens, the 'Previous Diver' softkey will scroll to the previous diver.

### **Next Diver**

Within either the 'Dives' or 'Divers' screens, the 'Next Diver' softkey will scroll to the next diver.

**Previous Round**

Within either the 'Dives' or 'Divers' screens, the 'Previous Round' softkey will scroll to the previous round.

**Next Round**

Within either the 'Dives' or 'Divers' screens, the 'Next Round' softkey will scroll to the next round.

**Change Event/Meet**

The last two softkeys in the Main Menu allow you to change to a different event or meet. The 'Change Event' key will open the 'Choose Event' Menu while the 'Change Meet' key will open the 'Choose Meet' Menu.

**DD Table**

The complete FINA degree of difficulty formula has been programmed into the Diving software. This allows for the degree of difficulty to any dive to be calculated. Alternate DD's can still be specified on a per dive basis to accommodate mandatory DD's for compulsory dives. If and when the FINA formula is updated, a new version of Diving will be released to account for these changes.



# Appendix A

## Scoreboard Definitions

### Scoreboard Module Configurations

JUDGE	SCORE	Module #	SCORE	OVERTAKE LEADER	POINTS
1	B.B	01	B.B		BBB.BB
2	B.B	02			
3	B.B	03	1	2	3 4
4	B.B	04	B.B	B.B	B.B B.B
5	B.B	05	5	6	7 8
6	B.B	06	B.B	B.B	B.B B.B
7	B.B	07	5		AWARD
8	B.B	08	B.B		BBB.BB
9	B.B	09	9		AWARD
			B.B		BB.BB
DD	AWARD	12	9	ROUND	AWARD
B.B	BB.BB		B.B	BB	BB.BB
ROUND	AWARD	11	DD	DIVE POSITION	
BB	BBB.BB		B.B	BBBB	B
DD	ROUND	0B	DD	DIVE POSITION	
B.B	BB	BB.BB	B.B	BBBB	B
DIVER	CURRENT	TOTAL	DIVER	CURRENT	TOTAL
BB		BBB.BB	BB		BBB.BBB
DIVER	LEAD	TOTAL	DIVER	LEAD	TOTAL
BB		BBB.BB	BB		BBB.BBB
TIME OF DAY		16			
			BB:BB		

Diving Sample Templates for Matrix and Video Boards



A 64 x 128-Pixel LED Matrix or Video Board display showing diving scores. The text is rendered in a yellow, dot-matrix font on a black background. The display shows the following information:

2 B BARTOK						
403B INW 1.5 Som P						
DD:	2.1	AWARD:			33.60	
RND:	2	TOTAL:			72.55	
1	2	3	4	5	6	7
5.5	5.5	5.0	5.0	5.0	5.5	6.0

64 x 128-Pixel LED Matrix or Video Board



A 96 x 160-Pixel LED Matrix or Video Board display showing diving scores. The text is rendered in a yellow, dot-matrix font on a black background. The display shows the following information:

LEAD: 1 G MAHLER						75.70
2 B BARTOK						
403B INW 1.5 Som P						
DD:	2.1	AWARD:			33.60	
RND:	2	TOTAL:			72.55	
1	2	3	4	5	6	7
5.5	5.5	5.0	5.0	5.0	5.5	6.0

96 x 160-Pixel LED Matrix or Video Board



LEAD: 1 G MAHLER 75.70  
2 B BARTOK  
403B Inward 1 1/2 Somersault Pike  
DD: 2.1 AWARD: 33.60  
RND: 2 TOTAL: 72.55  
1 2 3 4 5 6 7  
5.5 5.5 5.0 5.0 5.0 5.5 6.0

96 x 192-Pixel LED Matrix or Video Board



# Appendix B

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