OmniSport 2000 Pro
Synchronized Swimming Software

Installation & Operation Manual

DD3109495 ***Rev 0 – 3 August 2015***

201 Daktronics Drive PO Box 5128 Brookings, SD 57006-5128
Tel: 1-800-DAKTRONICS (1-800-325-8766) Fax: 605-697-4746
www.daktronics.com/support

DAKTRONICS

DD3109495
Product 1240
Rev 0 – 3 August 2015

DAKTRONICS, INC.

Copyright © 2015
All rights reserved. While every precaution has been taken in the preparation of this manual, the publisher assumes no responsibility for errors or omissions. No part of this book covered by the copyrights hereon may be reproduced or copied in any form or by any means – graphic, electronic or mechanical, including photocopying, taping or information storage and retrieval systems – without written permission of the publisher.

OmniSport® is a trademark of Daktronics, Inc. All other trademarks used in this manual are property of their respective owners.

Table of Contents

Section 1: Introduction 1

1.1 System Requirements 1
1.2 Software Conventions 1

Section 2: Installation & Registration 3

2.1 Installation 3
Downloading from the Internet 3
2.2 Opening & Exiting the Application 3
2.3 Registration 3

Section 3: Serial Port Setup 5

Section 4: Operation 7

4.1 Main Application Screen 7
Event Routine 7
Competitor Information 8
Judge Scores 8
Results 8
Connection/Timers 8
Penalties 8
Scoreboard Control 8
4.2 Event Menu/Creating Events 8
Creating Events 8
Opening Events 9
Editing Events 9
Copying Events 9
Deleting Events 9
4.3 Tabs 9
Event Order Tab 10
Add/Insert/Remove Swimmer 10
Change Swimmer Order 10
Back to Next 10
Edit Options 10
Rank Tab 11
Roster Tab 11
Affiliations Tab 11
4.4 Configurations 12
Timer Configuration 12
Communications Setup 12
General Configurations 13
Com Settings 13
Protocol List 13
Communications Monitor 13
Display Options 14
4.5 Typical Operation 14
Before the Meet 14

Verify the Configurations 14
Test the System 14
During an Event 15
After an Event 15

Appendix A: Software Revision History 17

Section 1: Introduction

The OmniSport 2000 Pro Synchro software interfaces with the OmniSport 2000 timer and allows officials to control the competition through a Windows-based user interface. Synchronized swimming is only available with the OmniSport Pro software; the timer by itself cannot score synchronized swimming, but must be set to the "5-SYNCHRO SWIM" mode. The timer does have some Menu settings as described in ***Appendix C*** of the OmniSport 2000 manual (***ED-13312***).

This manual describes how to install, configure, and operate the Daktronics OmniSport 2000 Pro Synchronized Swimming software system, **Version 1.0.1.1**.

Daktronics identifies manuals by an ED or DD number located on the cover page of each manual. Any manuals referenced in this document will be identified by its ED/DD number. For example, this manual would be referred to as ***DD3109495***.

1.1 System Requirements

The OmniSport 2000 Pro software operates on a Windows®-based computer. The following list describes the requirements for the OmniSport 2000 Pro Synchro software:

- Windows XP operating system or better
- CPU and RAM must at least be equal to minimum requirements of operating system
- Internet Explorer® 5.0 or higher

The following list describes the optional equipment that may be used with the Pro software:

- One open serial port for connection to the OmniSport 2000 timer (COM port) or USB port and USB-to-serial adapter
- Straight-through 9-pin male to 9-pin female serial cable
- OmniSport 2000 timing console
- RC-100 wireless (or JC-100 wired) judges consoles (2 min, 18 max)

1.2 Software Conventions

This manual contains the following software conventions and terminology. Note that these instructions are based on the standard, right-handed mouse configuration.

Bold	Indicates an item that requires direct action, such as clicking, pressing, selecting or formatting.
Italics	Indicates onscreen text or labels that are not clickable.
Bold Italics	Used to reference items within the manual, such as figures or sections, as well as other documents and important notes.
[X]	Represents a keyboard key that needs to be pressed.
"Quotes"	Text or commands that may be typed; also indicate file or folder names
Click	Press and release the left mouse button.
Double-click	Press and release the left mouse button twice.
Right-click	Press and release the right mouse button.
Select	Highlight or mark, such as by placing a check mark ✓ in a nearby box; clicking will not necessarily perform an action.
>	Followed by, as in menu navigation (ex. **File > Open**).

Section 2: Installation & Registration

2.1 Installation

Downloading from the Internet

To install the Pro Syncho software from the Internet:

1. Open an Internet browser to: http://dakfiles.daktronics.com/downloads/Sports_Products/OmniSport 2000/Pro/Synchro.
2. Click the "OmniSport Pro Synchro.exe" file, and then click **Run** (twice if necessary) to begin the installation procedure.
3. Follow the onscreen instructions to complete the installation.

2.2 Opening & Exiting the Application

To open the application:

- Double-click the "Synchro" icon on the desktop.
- Click the **Start** menu and navigate to **All Programs > Daktronics > OmniSport Pro > Synchro**.

To exit the application:

- Click the exit button in the upper-right corner of the window.
- Left- or right-click the icon in the upper-left corner of the window and click **Close**.
- Go to **File > Exit**.

2.3 Registration

After installing the Pro Synchro software, users are given a 30 day trial period (Demo Mode). Each time the program is opened, the number of days remaining for the free trial is shown. To use the software without registering, click **Continue**. When the 30 day trial period is over, users must register the software as described below:

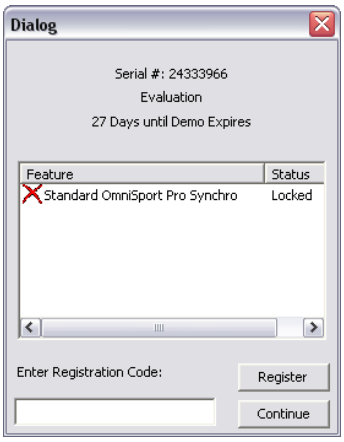


Figure 1: *Registration*

1. On the registration window (***Figure 1***), make a note of the *Serial* #. Email the *Serial* # to sportsoftware@daktronics.com with the subject line "Pro Synchro License". Be sure to also include the name of your organization, facility name, and/or contract number for the fastest response.
2. Upon proof of purchase, Daktronics will email a Registration Code.
3. Back on the registration window, enter the Registration Code, and then click **Register**.

   Note: Installing the software on a separate computer requires a new Registration Code.

Section 3: Serial Port Setup

The OmniSport 2000 Pro Synchronized Swimming software may be used independently. It does not depend on the console for calculating judges' scores or printing reports. A complete synchronized swimming competition can be recorded with only the Pro software and by manually entering the individual judge's scores.

If a video display or a scoreboard is used with the software, the OmniSport 2000 timer must be present and connected. The timing console only acts as an interface in this configuration and handles no operational functions. The timer must also be used to interlink the judge consoles with the Pro software. The following table describes the equipment needed to perform different levels of competition recording.

Scoring Devices	Scoring Display Type	Equipment
Pro Software	Paper Score Pin-Up	Pro Synchro Computer; Printer
Pro Software and Judge Consoles	Numeric Display	Pro Synchro Computer; Printer; OmniSport 2000 timer; Judge Consoles
Pro Software and Judge Consoles	Matrix Display	Pro Synchro Computer; Printer; OmniSport 2000 timer; Judge Consoles; Daktronics Display Control Computer

To establish a proper connection:

1. Ensure a straight-through 9-pin male to 9-pin female serial cable is connected between computer's serial port and the *J4 EXPANSION PORT* on the OmniSport 2000 timer.
2. Turn on the console, set the date and time, and then select *5-SYNCHRO SWIM*.
3. Start the Pro Synchro software (see ***Section 2.2***).
4. Go to **Options > Communications > Setup**.
5. Click the **Com Settings** tab, and select the *Port* that the OmniSport 2000 console is currently plugged into. It should not be necessary to modify any of the other COM port settings. Click **Finish**.
6. Go to **Options > Communications > Monitor.** If the computer is receiving data in the top half of the monitor window, the connection was made properly and the correct port was selected. Data on the bottom half is the data being sent by the Pro Synchro software.
7. If the computer is not receiving data, go back to step 5 and select a different port. Do this until data is received through the selected port.

   Note: Refer to ***Section 4.4*** for more information about the communication options.

If the cables are connected properly, the connection icon on the main application screen will be green (***Figure 2***). It will flash green when receiving data, and will be red when it is not connected.

Also, when connected and operating properly, the LCD on the timer will show "Controlled by Pro Sync Swim".

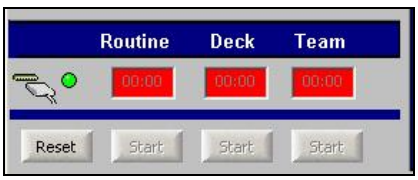


Figure 2: *Connection Indicator*

Note: Some computers purchased with this software will have a Rocket® port installed with the system. The port labeled *Port 0* will be normally set as COM port 5 in the computer system. The next port would then be COM 6, then COM 7, and finally COM 8 for a four-port Rocket port. The OmniSport 2000 Pro software recognizes these ports no matter what port number has been assigned to them.

Section 4: Operation

4.1 Main Application Screen

Once the Pro Synchro software is configured, event management is quick and simple. The main synchronized swimming application screen (***Figure 3***) sends the data to output devices, such as matrix displays, numeric scoreboards, and paper printouts.

The buttons and indicators for the Pro Synchro software are described below.

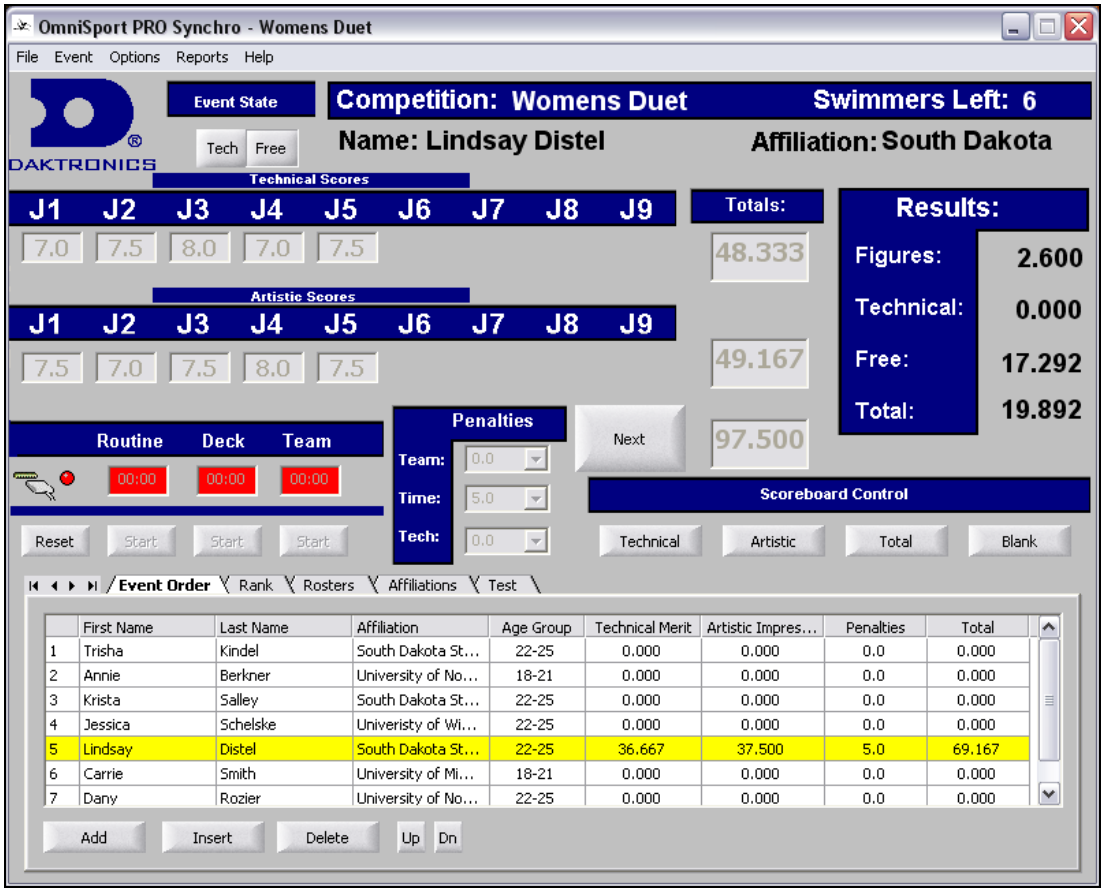


Figure 3: *Main Application Screen*

Event Routine

These buttons (***Figure 4***) allow the operator to switch between **Tech** and **Free** routines if configured for the current event.

Figure 4: *Event Routine*

Competitor Information

This section of the main application screen displays the current swimmer's name and affiliation, the competition, and how many swimmers are left in the event *(**Figure 5**)*.

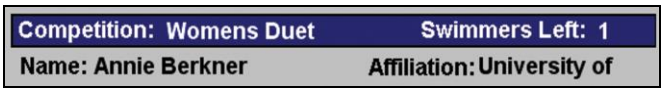


Figure 5: *Competitor Information*

Judge Scores

Individual technical and artistic judge scores and the total scores are shown here *(**Figure 6**)*. If the judge's consoles are connected properly, the bars under each judge's score will be green. If not connected properly, they will be red.

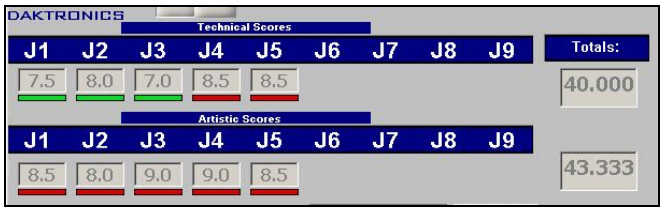


Figure 6: *Judge Scores*

Results

This section shows the final calculated results for each swimmer *(**Figure 7**)*.

Figure 7: *Results*

Connection/Timers

This section displays a connection icon (***Figure 2***) that flashes green when the OmniSport 2000 console is connected and red if not connected. *Routine, Deck*, and *Team* timers are also displayed.

Penalties

The drop-down menus are used to calculate a swimmer's score minus penalties *(**Figure 8**)*. Penalties automatically appear when the associated timer indicates a penalty.

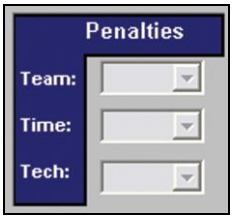


Figure 8: *Penalties*

Scoreboard Control

These buttons allow the operator to choose what information is displayed on the scoreboard: *Technical/Execution scores, Artistic/Overall Impression* scores, *Total* scores, or *Blank* - no information (***Figure 9***).

Figure 9: *Scoreboard Control Buttons*

4.2 Event Menu/Creating Events

Creating Events

To create a new event, go to **Event > New Event**. The *Event Setup* window appears (***Figure 10***). In the *Event Setup* section, enter a descriptive *Event Name,* select an *Event Type,* and enter the *Event Date* and *Event Time*. Next, if there is more than one age group competing, designate the different *Age Groups* participating in the competition.

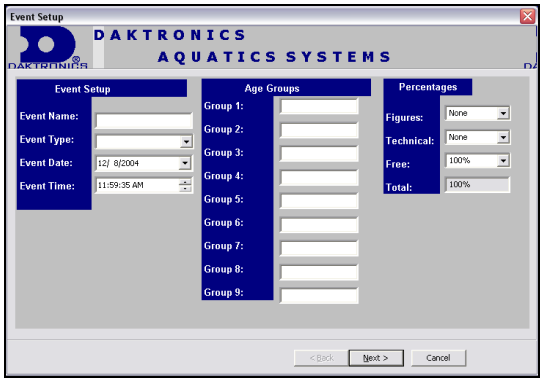


Figure 10: *Event Setup Window*

The *Percentages* section allows the operator to set up which percentages of the *Figures*, *Technical*, and *Free* scores will be used to calculate the final score. Click **Next** when completed**.**

The *Technical Routine Time Limits* window (***Figure 11***) allows the operator to enter the appropriate time limit and penalty in each field, as well as the number of judges and panels for this portion of the event. Click **Next** when completed**.**

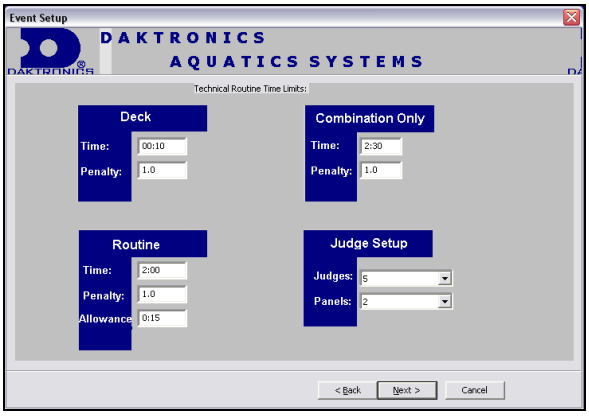


Figure 11: *Technical Routine Time Window*

The *Free Routine Time Limits* window is exactly the same as the technical routines, but is used for free routines. After setting the appropriate data, click **Finish.**

> **Note:** Technical and Free Routines cannot be configured if their percentage is set to *None*. Refer to ***Figure 10***.

Opening Events

To open an event, go to **Event > Open Event**. Select an event from the list and click **Open**. Then enter competitor names and affiliations in the **Rosters** and **Affiliations** tabs.

Editing Events

To edit an event, go to **Event > Edit Event**. Select the event to edit and click **Edit**.

Copying Events

To copy an event, go to **Event > Copy Event**. Select the event to copy of and click **Copy**. This uses a previously created event as a template for a new event if there are only a few differences between events.

Deleting Events

To delete an event, go to **Event > Delete Event**. Select the event to delete and click **Delete**.

4.3 Tabs

The lower portion of the main application screen contains five tabs (***Figure 12***). Each tab is described in the following sections.

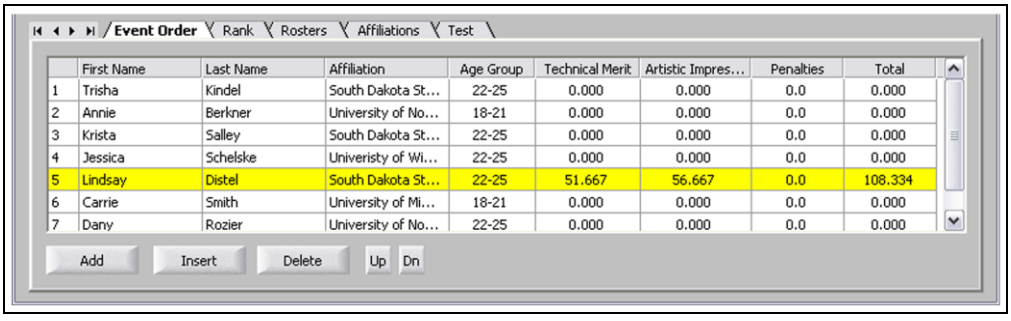


Figure 12: *Main Application Screen Tabs*

Event Order Tab

The **Event Order** tab shows information pertaining to the current swimmers and event. The name of the current swimmer is highlighted in yellow or green depending on the mode of scoring.

Select a swimmer's name and click **Up/Dn** to change the order of the swimmers shown on the Event Order tab.

Right-click in the **Event Order** tab for additional options. Refer to the menu shown in ***Figure 13***.

Figure 13: *Right-Click Menu Options*

Add/Insert/Remove Swimmer

Click **Add Swimmer** or **Insert Swimmer** from the right-click menu, and the *Add/Insert Swimmer* window appears **(*Figure 14*)**. Use the drop-down list box to select swimmers previously entered in other events, or manually enter new swimmers. To delete a swimmer, click **Remove Swimmer** followed by **Yes**.

Change Swimmer Order

Right-click the name of the swimmer to move then click **Move Up** or **Move Down**. This can also be done using the **Up/Dn** buttons on the **Event Order** tab.

Back to Next

Click **Back to Next** so another swimmer can be selected as current. This function allows the operator to abort a score entry in the *Accept* mode. The operator must be in the *Next* mode to use the *Make Current* option. When in *Accept* mode, the judge's scores can be entered but the swimmer's scores and order cannot be edited.

> **Note:** Determine the mode (*Next* or *Accept*) by looking at the button located next to the penalties box on the main menu (***Figure 15***).

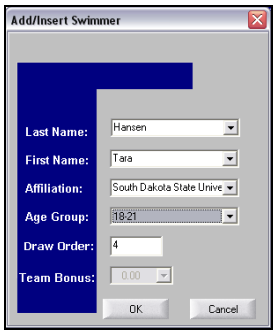


Figure 14: *Add/Insert Swimmer Window*

Edit Options

To edit a swimmer's score, right-click that swimmer and select **Edit Score**. Click the type of score to edit. In the *Edit Score* window (***Figure 16***), enter the correct scores and click **Accept**.

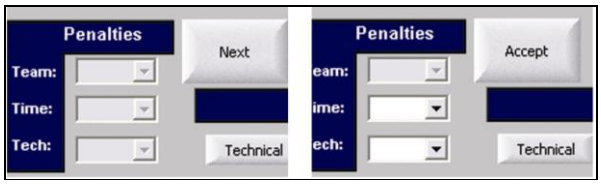


Figure 15: *Next/Accept Mode*

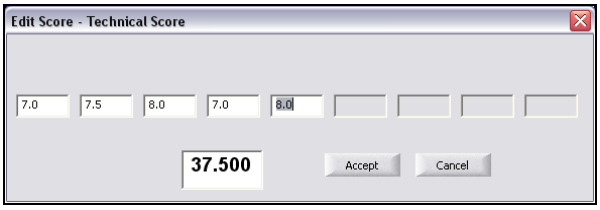


Figure 16: *Edit Score Window*

To edit **Age Group**, **Draw Number**, or **Names**, right-click on a swimmer and select the information to edit. The appropriate information may be edited; the rest of the options in the box will be locked to prevent accidental changes (***Figure 17***). Click **OK** when finished.

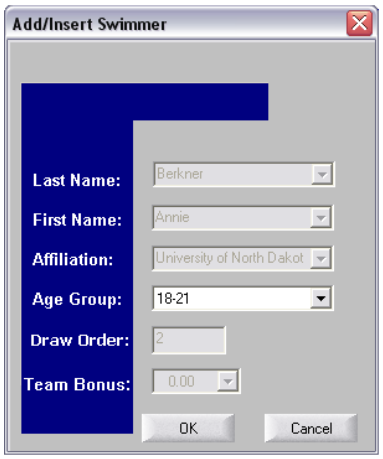
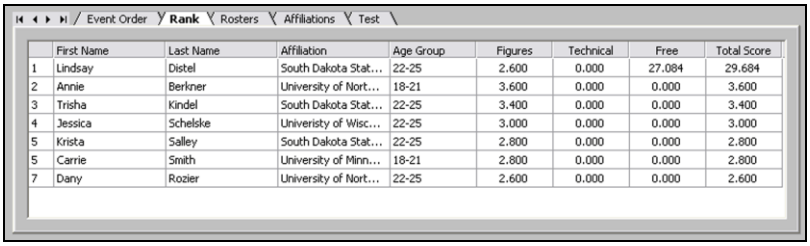


Figure 17: *Edit Age Group Window*

Rank Tab

The **Rank** tab (***Figure 18***) shows the swimmer ranks in order from first to last for the current event selected.

> **Note:** The scores shown under the rank tab take into account the pre-configured percentages for *Figures*, *Technical,* and *Free* scores.



	First Name	Last Name	Affiliation	Age Group	Figures	Technical	Free	Total Score
1	Lindsay	Distel	South Dakota Stat...	22-25	2.600	0.000	27.084	29.684
2	Annie	Berkner	University of Nort...	18-21	3.600	0.000	0.000	3.600
3	Trisha	Kindel	South Dakota Stat...	22-25	3.400	0.000	0.000	3.400
4	Jessica	Schelske	Univeristy of Wisc...	22-25	3.000	0.000	0.000	3.000
5	Krista	Salley	South Dakota Stat...	22-25	2.800	0.000	0.000	2.800
5	Carrie	Smith	University of Minn...	18-21	2.800	0.000	0.000	2.800
7	Dany	Rozier	University of Nort...	22-25	2.600	0.000	0.000	2.600

Figure 18: *Rank Tab*

Roster Tab

The **Roster** tab (***Figure 19***) is used to enter new swimmers' names and assign them to the correct affiliations. To add swimmers to the correct affiliations, first select a previously-created *Affiliation* from the list, and then click **New Swimmer**. Enter the *First Name, Last Name*, and *Event Type*. Click **Save**.

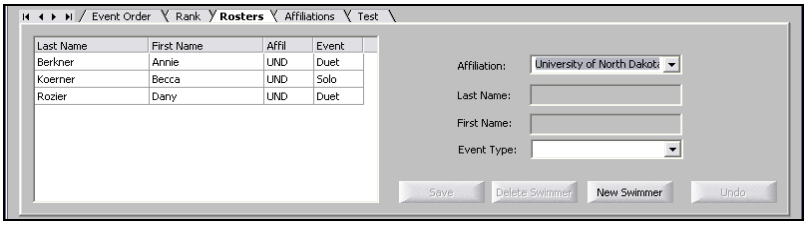


Figure 19: *Roster Tab*

To edit a swimmer, select the swimmer in the roster list on the left side of the tab and simply change the data to the right. Click **Save** when complete or **Undo** to replace the original data. Click **Delete Swimmer** to remove the swimmer from the roster.

Affiliations Tab

The **Affiliations** tab (***Figure 20***) is used to create and edit affiliations. To add affiliations, click **Add Team**. Enter the *Team Name* and *Team Abbreviation* and click **Save**. To edit the affiliation, select the team in the list on the left side of the tab and change the team's data on the right. Click **Save** when complete or **Undo** to replace the original data. Click **Delete Team** to remove it from the list.

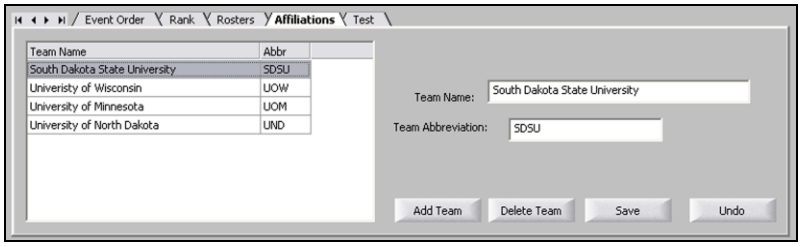


Figure 20: *Affiliation Tab*

Test Tab (disabled)

4.4 Configurations

Timer Configuration

Configuring the OmniSport 2000 Pro Synchronized Swimming software is an important part of managing events efficiently and completely.

Once running the software, go to **Options > Timer Configurations**. The *Timer* window (***Figure 21***) includes the following functions:

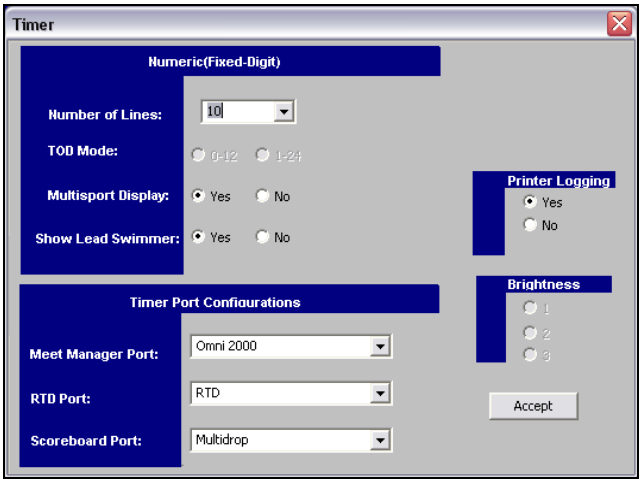


Figure 21: *Timer Configuration*

- *Number of Lines* tells the software how many lines are on the numeric scoreboard.
- *TOD Mode* (time-of-day mode) sets how the time-of-day will be displayed.
- *Multisport Display* sets whether or not a multisport module is in use.
- *Show Lead Swimmer* sets whether or not the lead swimmer will be displayed.
- *Printer Logging* turns on/off printing from the timer thermal printer.
- *Brightness* adjusts the light intensity of the display.
- *Meet Manager Port* configures which protocol (**Omni 2000, Omni 6000** or **CTS**) communicates with the meet management software out of the *J6 RESULTS PORT* on the OmniSport timer.
- *RTD Port* configures which protocol (**RTD** or **CTS**) will be transmitted out of the *J5 RTD PORT* on the OmniSport 2000 timer.
- *Scoreboard Port* configures which protocol (**Multidrop** or **Multiline**) will be transmitted out of the OmniSport scoreboard outputs (*J2* and *J3*).

Click **Accept** when finished.

Communications Setup

The Communication configuration sets which port interfaces the OmniSport 2000 timing console to the OmniSport 2000 Pro computer. To enter this area, go to **Options > Communications > Setup**.

General Configurations

The **General** tab contains the settings common to all stream types (***Figure 22***).

- *Enable:* **Should always be checked**
- *Type:* **always COM Port**
- *Name:* optional name for the port
- *Encrypt:* **Should never be checked**
- *Key:* not used
- After entering the correct data, click **Com Settings**.

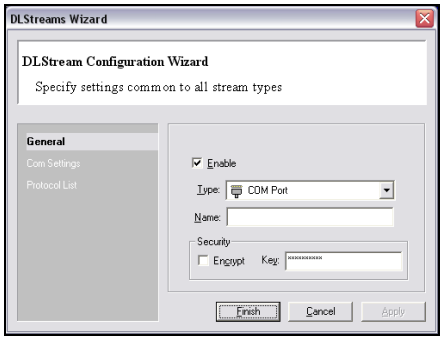


Figure 22: *General Tab*

Com Settings

This area configures the serial COM port settings (***Figure 23***).

- *Port:* Com # (Use the port # to which the serial cable is connected)
- *Baud:* 38400 (**Default – do not change**)
- *Data Bits:* 8 (**Default – do not change**)
- *Parity:* None (**Default – do not change**)
- After selecting the correct port, click **Protocol List.**

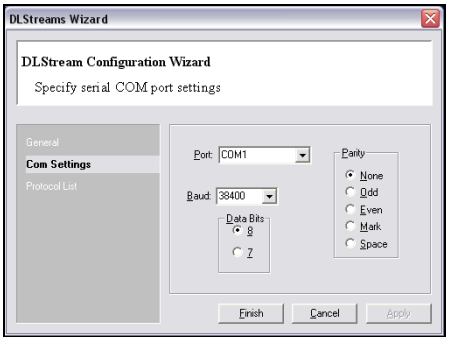


Figure 23: *Com Settings Tab*

Protocol List

Verify the following check boxes in the *Protocol List* (***Figure 24***):

- *HTTP:* **Should never be checked**
- *Standard/Enhanced RTD:* **Should never be checked**
- After verifying the correct settings, click **Finish**.

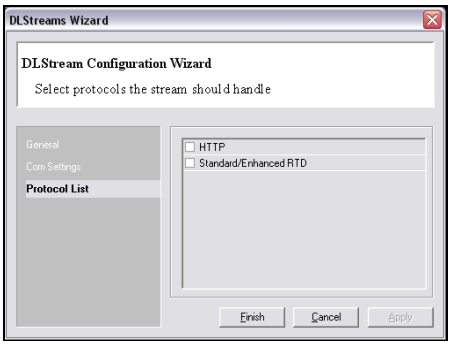


Figure 24: *Protocol List Tab*

Communications Monitor

Go to **Options > Communications > Monitor** to ensure data is flowing from the timer to the Pro software (***Figure 25***). The top section shows incoming data and the bottom shows outgoing data.

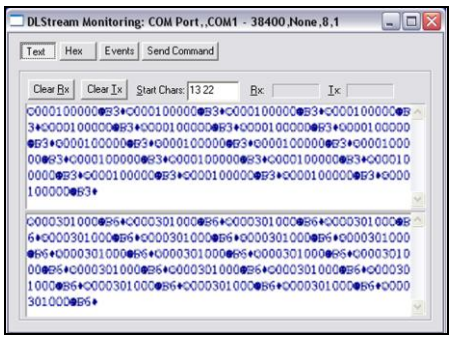


Figure 25: *Input/Output Monitoring*

Display Options

Go to **Options > Display** to configure how swimmer and team names are shown in the display output (***Figure 26***). Click **OK** when finished.

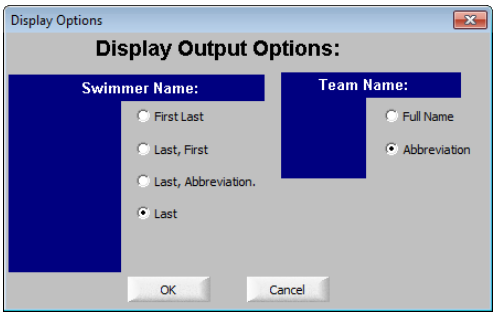


Figure 26: *Display Options*

4.5 Typical Operation

This section deals with the operational procedures used before a meet and during and after each event.

Before the Meet

Before each meet, three things must be done:

1. Verify the configurations.
2. Test the system.
3. Set up event and swim order.

Verify the Configurations

Once the system is tested, go to **Options > Timer Configurations**. Go through each setting (***Figure 21***) and make sure all the configurations are set correctly. The system will maintain the settings that it used during the last time it was operated. If any configuration setting was changed while the timer and software were not connected, the system will request that the configuration be synchronized upon reconnection.

Test the System

The OmniSport 2000 timer and Pro system must be operating properly for a meet to run smoothly. Turn on the system and ensure the cables are properly connected. Once the software is running, it should detect the OmniSport 2000 timer. If not, reconfigure the Com Port. Test the system by following the steps below:

1. Test the peripheral devices such as the judge's consoles. Using a test event and swim order, enter the judges' scores on each console. If the scores do not appear on the software score area, check the cables on the rear of the OmniSport 2000 timer.

   Note: If the judge's consoles are connected properly the bars under each judge's score will be green. If not connected properly they will be red (refer to ***Figure 6***). The judge console connections can also be tested by pressing **[Menu]>[3]>[3]** on the OmniSport console.

2. If using a display, test run an event to ensure the display shows what is expected.

During an Event

During a synchronized swimming competition, judges must make decisions on the quality of the performances. These judgments affect the swimmers' final scores. This subsection details what must be done in order to score a competition successfully.

There are two ways scores are entered into the OmniSport 2000 Pro Synchronized Swimming software: 1) manually with the software or 2) through peripheral judge consoles. Once entered, the software calculates the awarded score by using the formula set. Ensure the correct percentages are selected before the event.

Once a swimmer has been awarded his or her points, click **Accept** to move on to the next swimmer.

After an Event

After the event is finished, print the reports by going to **Reports > View Reports**. The available printouts are: **Technical Results(by Draw)**, **Technical Results(by Rank)**, **Free Results(by Draw)**, **Free Results(by Rank)**, **Total Results**, **Starting List**, and **Figures Results**. Refer to ***Figure 27***.

Select the event(s) to print, and click **Create** to generate the results to an HTML file, which can be sent to a printer or published on a web site.

Once the competition is officially completed, turn off and store all equipment in a safe location.

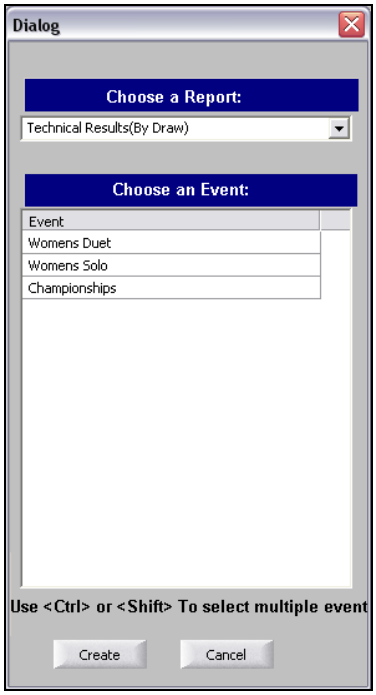


Figure 27: *Results Reports*

Appendix A: Software Revision History

Version 1.0.1.1 - Release date: May 2007

- Initial Synchronized Swimming release.