

**TRACK & FIELD INTERFACES FOR
SCOREBOARDS & DISPLAYS**

SETUP GUIDE

P1125

DD3059635
Rev 03
14 March 2024

FOR TRACK SYSTEMS SOLD
PRIOR TO APRIL 2015,
REFER TO [ED-14511](#)



DAKTRONICS

Copyright © 2019-2024

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

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

Table of Contents

1	Introduction	1
	Resources	1
	Software Conventions.....	1
2	LED Scoreboards	2
	OmniSport 2000 & Football/Track Scoreboard	2
	OmniSport 2000 & Lane/Place/Time Track Scoreboard	3
	Hy-Tek Results with OmniSport 2000.....	4
	Fully Automatic Timing (FinishLynx)	5
	FinishLynx Setup for Football/Track Scoreboard	5
	Hy-Tek Setup with FinishLynx	6
	FinishLynx Setup for Lane/Place/Time Track Scoreboard	7
	FinishLynx Setup for TI-2020, TI-2021, or TR-3101	9
	FinishLynx Tips & Troubleshooting	10
	Fully Automatic Timing (FlashTiming)	11
	FlashTiming Setup for Football/Track Scoreboard	11
	Hy-Tek Setup with FlashTiming	12
	FAQ	12
3	LED Video Displays	14
	OmniSport 2000 & LED Video Display	14
	Hy-Tek Results with OmniSport 2000.....	15
	Fully Automatic Timing (FinishLynx)	16
	Fully Automatic Timing (FlashTiming)	19
	Hy-Tek Results for Video Display.....	21
	Sending Start Lists, Results, & Team Scores from Hy-Tek.....	22
	Request Choices	22
	MeetPro Results for Video Display	23
	Sending Start Lists & Results from DirectAthletics	24
	FAQ	24
4	LED Message Displays (Galaxy/M3)	26
	OmniSport 2000 & LED Message Display	26
	Hy-Tek Results with OmniSport 2000.....	27
	Fully Automatic Timing (FinishLynx)	28
	Fully Automatic Timing (FlashTiming)	30
	Hy-Tek Results for Message Display.....	32
	Sending Start Lists, Results, & Team Scores from Hy-Tek.....	33
	Request Choices	33
	MeetPro Results for Message Display	34
	Sending Start Lists & Results from DirectAthletics	35
	Daktronics Communication Server (DCS) Installation & Setup	35
	FAQ	37
5	Creating RTD Sequences	40
	Hy-Tek Results with Running Time	40

Table of Contents

DirectAthletics Results with Running Time	41
FinishLynx Results with Running Time	43
FlashTiming Results with Running Time	44
6 FieldLynx Setup & Sequence Creation	46
FieldLynx Setup for Portable Timer	46
FieldLynx Setup for LED Message Display	48
Daktronics Communication Server (DCS) Installation & Setup	50
RTD Sequence Creation	53
7 Additional Resources	54
Contact Information	54
Daktronics	54
FinishLynx	54
Hy-Tek.....	54
FlashTiming.....	54
Daktronics Manuals	54
A Reference Drawings	55

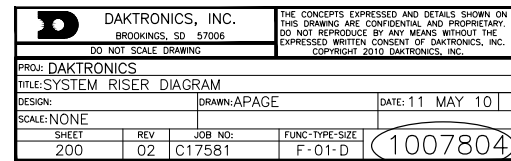
1 Introduction

This manual explains the settings required to send data to a Daktronics scoreboard or display system from third-party FinishLynx™ and FlashTiming timing software as well as Hy-Tek Meet Manager® and DirectAthletics MeetPro results software. This manual also describes connection to FieldLynx to display information for field events.

For other questions concerning this system, refer to the telephone numbers listed in **Section 7: Additional Resources (p.54)**.

Resources

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



Drawing Number

Figure 1: Drawing Label

Reference Drawings:

System Riser Diagram **DWG-1007804**

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

Software Conventions

This manual contains the following software conventions and terminology:

Bold	Bold text indicates an item that requires direct action, such as clicking, pressing, selecting, or formatting. Bold text is also used to reference items within the manual, such as figures or sections, as well as other documents and important notes.
<i>Italics</i>	Text in italics indicates onscreen text or labels that are not clickable.
[X]	Bold text in brackets represents a keyboard key to press.
"Quotes"	Text or commands that may be typed are shown in quotes. Quotes also indicate folder names and file paths.
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	To select means to highlight or mark, such as by placing a checkmark ✓ in a nearby box; clicking will not necessarily perform an action.
>	This stands for "followed by"; typically when describing menu navigation. For example: Go to File > Open .

2 LED Scoreboards

OmniSport 2000 & Football/Track Scoreboard

Reference Drawings:

System Riser: FB/Track Scbd w/ Omni2K- Track Side..... **DWG-186535**

This setup displays running time, lane results, and event/heat information on a Daktronics football scoreboard from an OmniSport 2000 timing console. A track button interface connects to the **J7 SWITCH INPUTS** jack on the console. The track button interface supports up to 8 pushbutton switches to manually record the times for each lane.

See **Figure 2** and **DWG-186535** for typical components and connections to a football/soccer scoreboard. Refer also to the scoreboard installation manual for internal signal connections or wireless radio control settings. For optional Hy-Tek Meet Manager setup, refer to **Hy-Tek Results with OmniSport 2000 (p.4)**.

Note: For timing up to 10 lanes, a larger track button interface will connect to the **J10 NEAR** jack on the timing console. This also supports up to 3 buttons per lane.

For more about track operation and settings, refer to the **OmniSport 2000 Timing Console Operation Manual (ED-13312)**, available online at www.daktronics.com/manuals.

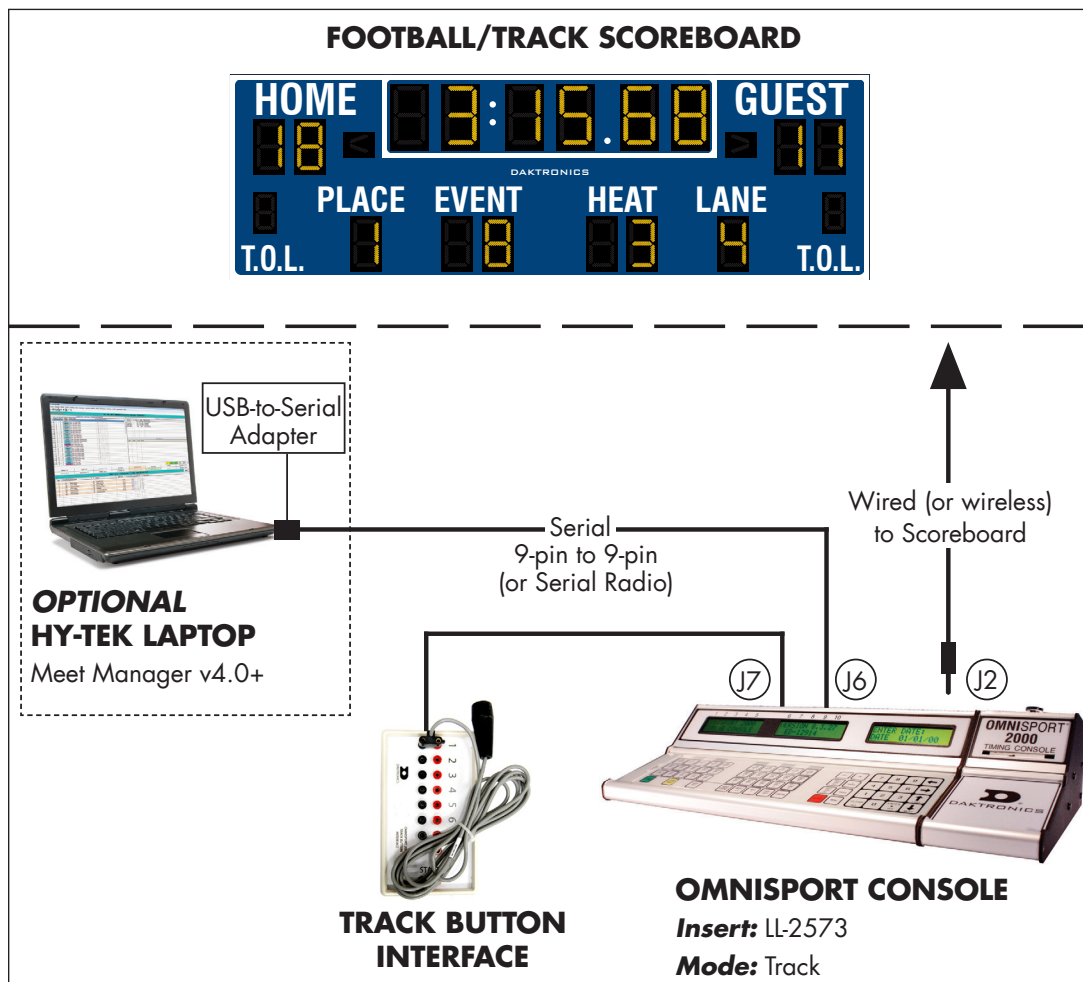


Figure 2: OmniSport 2000 with Football/Track Scoreboard & Optional Hy-Tek

OmniSport 2000 & Lane/Place/Time Track Scoreboard

Reference Drawings:

System Riser: FB/Track Scbd w/ Omni2K- Track Side..... **DWG-186535**

This setup will display running time and lane results from an OmniSport 2000 timing console on a Daktronics track scoreboard, which typically shows 6, 8, or 10 lines of information at once. Additional scoreboard modules may be used to show Event/Heat, Record Time, and Home/Guest/2/3 scoring information. A track button interface connects to the **J7 SWITCH INPUTS** jack on the console. The track button interface supports up to 8 pushbutton switches to manually record the times for each lane.

See **Figure 3** and **DWG-186535** for typical components and connections to a lane/place/time track scoreboard. Refer also to the scoreboard installation manual for internal signal connections or wireless radio control settings. For optional Hy-Tek Meet Manager setup, refer to **Hy-Tek Results with OmniSport 2000 (p.4)**.

Note: For timing up to 10 lanes, a larger track button interface will connect to the **J10 NEAR** jack on the timing console. This also supports up to 3 buttons per lane.

For more about track operation and settings, refer to the **OmniSport 2000 Timing Console Operation Manual (ED-13312)**, available online at www.daktronics.com/manuals.

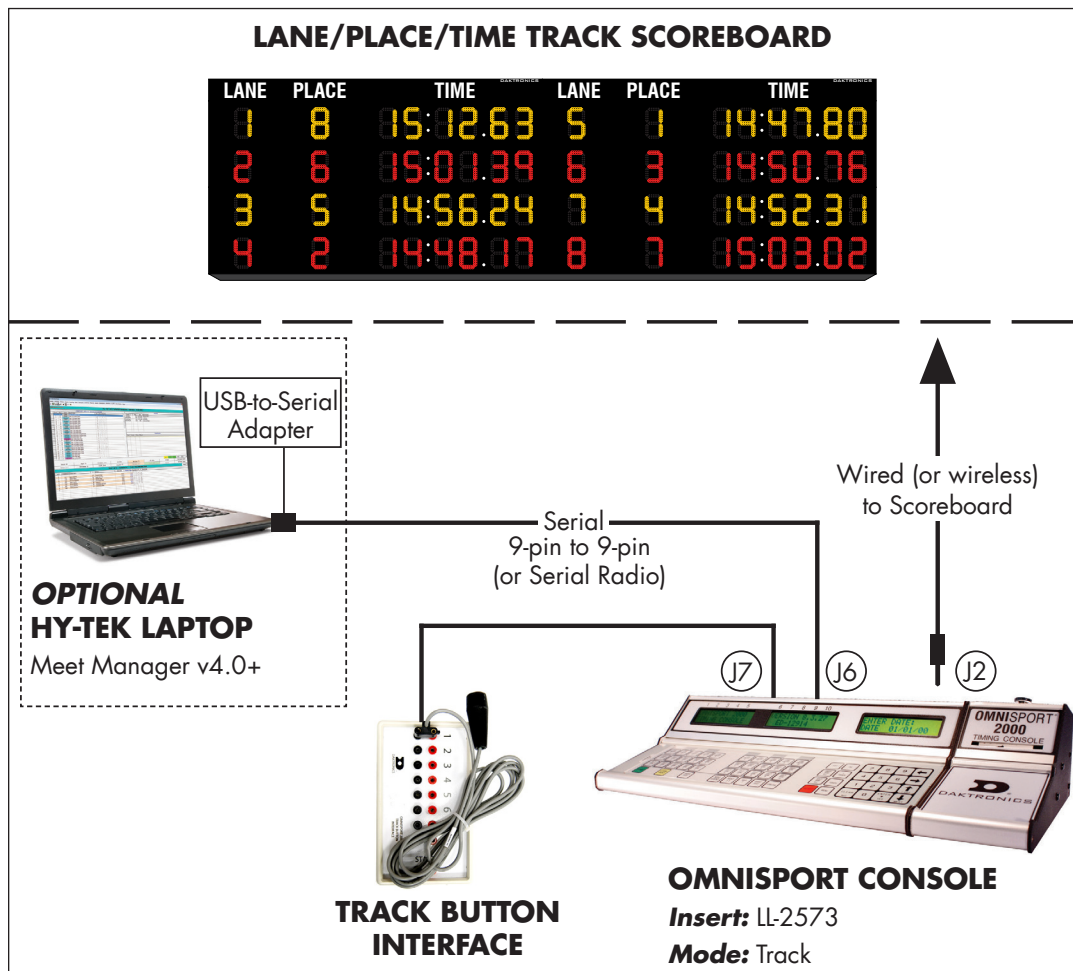


Figure 3: OmniSport 2000 with Lane/Place/Time Track Scoreboard & Optional Hy-Tek

Hy-Tek Results with OmniSport 2000

This setup allows lane, place, and time information to be pulled into by Hy-Tek Meet Manager software from the OmniSport 2000. This setup DOES NOT allow Hy-Tek data to be displayed on a scoreboard.

The OmniSport 2000 console connects to a Hy-Tek computer via the **J6 RESULTS PORT** jack. The serial connection may be wire or radio. On the Hy-Tek computer, use the following settings:

1. Open the Meet Manager program.
2. Click **Run** on the main menu.
3. Go to **Interfaces > Set-up > Track Button Timer (Figure 4)**.
4. Select **Daktronics OmniSport 2000**, and then click **OK**.
5. Go to **Interfaces > Track Button Timer - OmniSport 2000 > Open/Close Serial Port**.
6. For the *Track Button Finish Timer (0-16)* option (**Figure 5**), select the COM port number on the Hy-Tek computer connected to the OmniSport, and then click **OK**.
7. Go to **Interfaces > Track Button Timer - OmniSport 2000 > Test Communication**. When all connections and configurations are correct, the *Communications Passed* message appears with the version of firmware in the OmniSport 2000 console (**Figure 6**). Click **OK**.

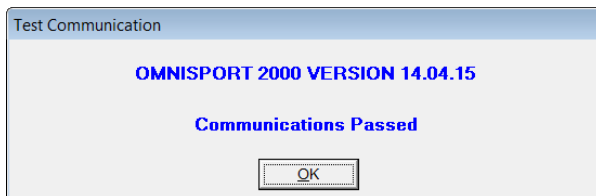


Figure 6: Communications Passed

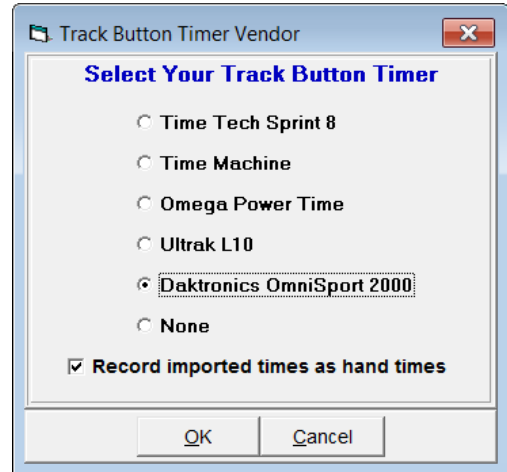


Figure 4: Track Button Timer Vendor

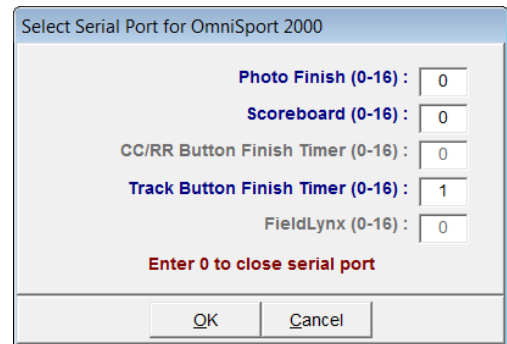


Figure 5: Serial Port for Track Button

Fully Automatic Timing (FinishLynx)

The FinishLynx™ Timing System consists of a personal computer, FinishLynx software, and a photo finish camera for Fully Automatic Timing (FAT).

FinishLynx Setup for Football/Track Scoreboard

Reference Drawings:

- Track/Football SCBD w/ FinishLynx & All Sport 5000..... **DWG-95152**
- Track/Football SCBD w/ FinishLynx, In Field **DWG-95153**

This setup will display FinishLynx running time, lane results, and event/heat information on a Daktronics football/track scoreboard. This setup DOES NOT allow Hy-Tek data to be displayed on a scoreboard. For optional Hy-Tek Meet Manager setup, refer to **Hy-Tek Setup with FinishLynx (p.6)**.

See **Figure 7** for typical components and connections. For cabling required when a FinishLynx computer is next to the All Sport 5000 in the press box, refer to **DWG-95152**. When the FinishLynx computer is on the field and the All Sport 5000 is in the press box, refer instead to **DWG-95153**. Refer also to the scoreboard installation manual for internal signal connections or wireless radio control settings.

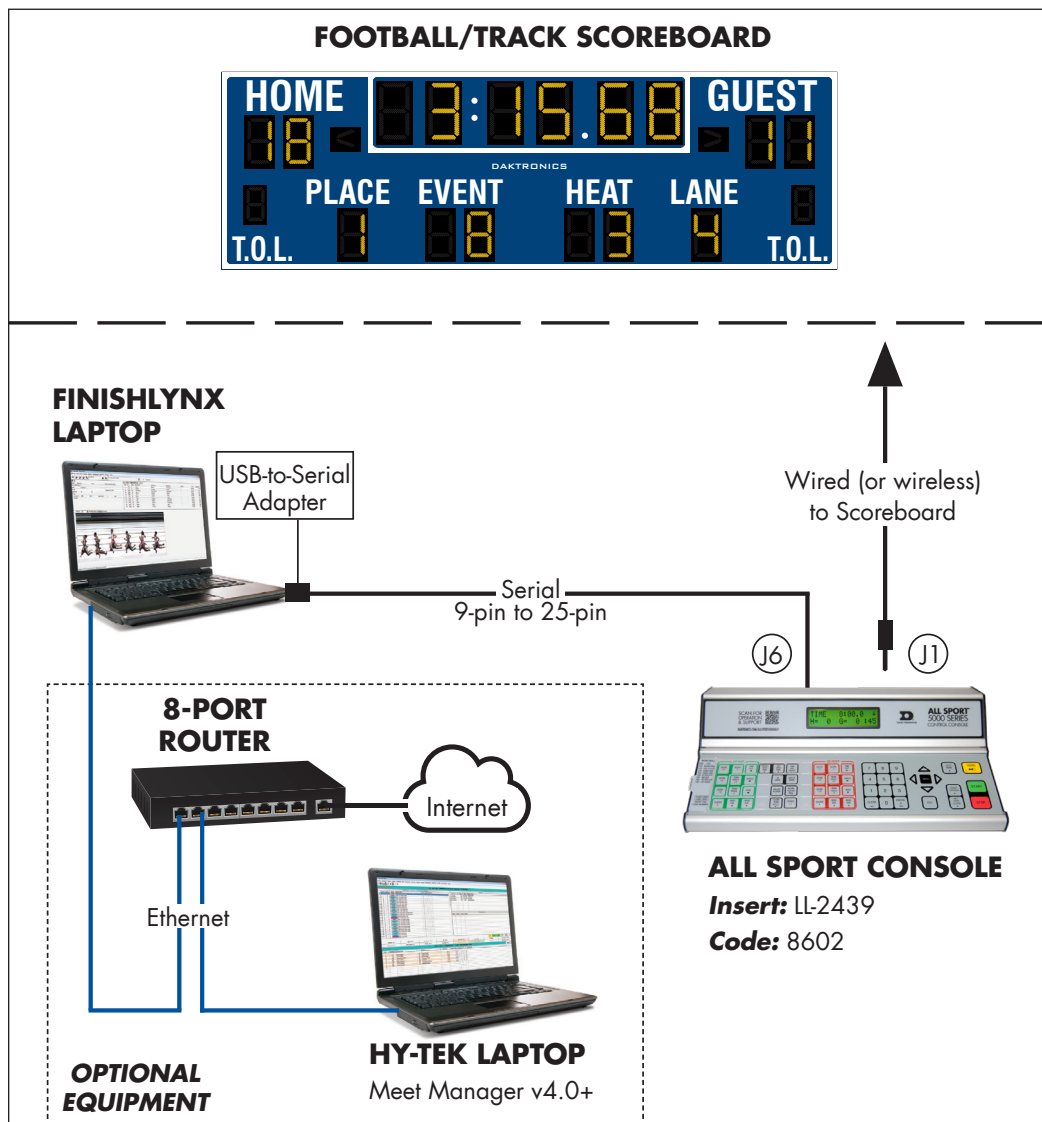


Figure 7: FinishLynx with Football/Track Scoreboard & Optional Hy-Tek

When a USB-to-Serial adapter is being used on the FinishLynx computer, enter code **8602** on the All Sport 5000.

1. To access the connection settings in FinishLynx, open the software and go to **Scoreboard > Options**.
2. Click on the **Scoreboard** tab.
3. Click **New**.
4. Set up the options on the FinishLynx computer as follows (refer also to **Figure 8**):
 - *Script*: "Powertime.lss"
 - *Name*: "Football/Track Scoreboard"
 - *Code Set*: **Single Byte**
 - *Serial Port*: Select an available COM port.
 - *Baud*: **9600**
 - *Data Bits*: **7**
 - *Parity*: **Even**
 - *Stop Bits*: **1.0**
 - *Running Time*: **Normal**
 - *Results*: **Auto, Always send place** enabled
 - *Paging* enabled, *Size* "1", *Time* "5.0"

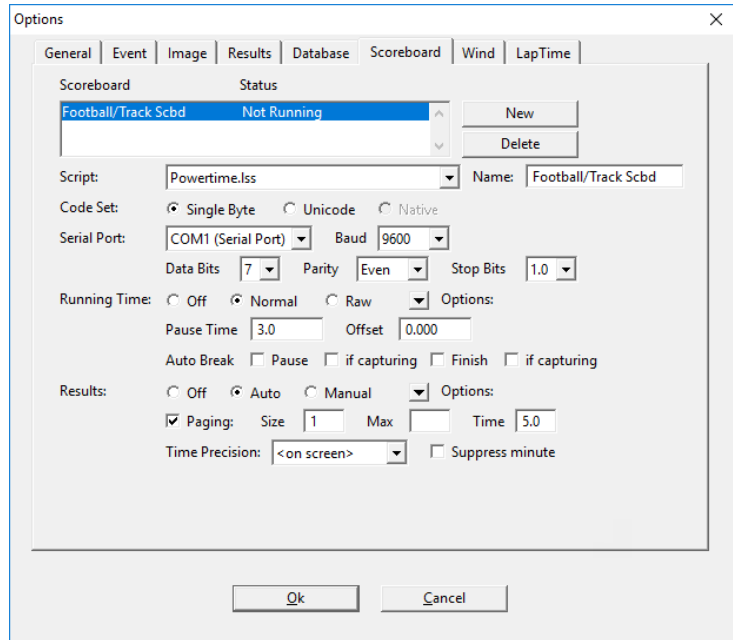


Figure 8: FinishLynx Scoreboard Options

5. Click **OK** when finished to save the settings.
6. Restart the FinishLynx software to load the scoreboard script.

Hy-Tek Setup with FinishLynx

If a Hy-Tek results computer is included as part of the system, it does not need to connect to the All Sport controller. However, the Hy-Tek computer will need to connect to the FinishLynx computer via a network router and Ethernet cables (not provided by Daktronics). For more information about properly networking these two computers together, refer to the documentation provided with each piece of software, or contact the appropriate software vendor using the information listed in **Section 7: Additional Resources (p.54)**.

FinishLynx Setup for Lane/Place/Time Track Scoreboard

Reference Drawings:

Track SCBD w/ FinishLynx, in Press Box **DWG-104300**

This setup will display FinishLynx running time and lane results on a Daktronics track scoreboard, which typically shows 6, 8, or 10 lines of information at once. An additional scoreboard module may be used to show Event/Heat information. See **Figure 9** for typical components and connections.

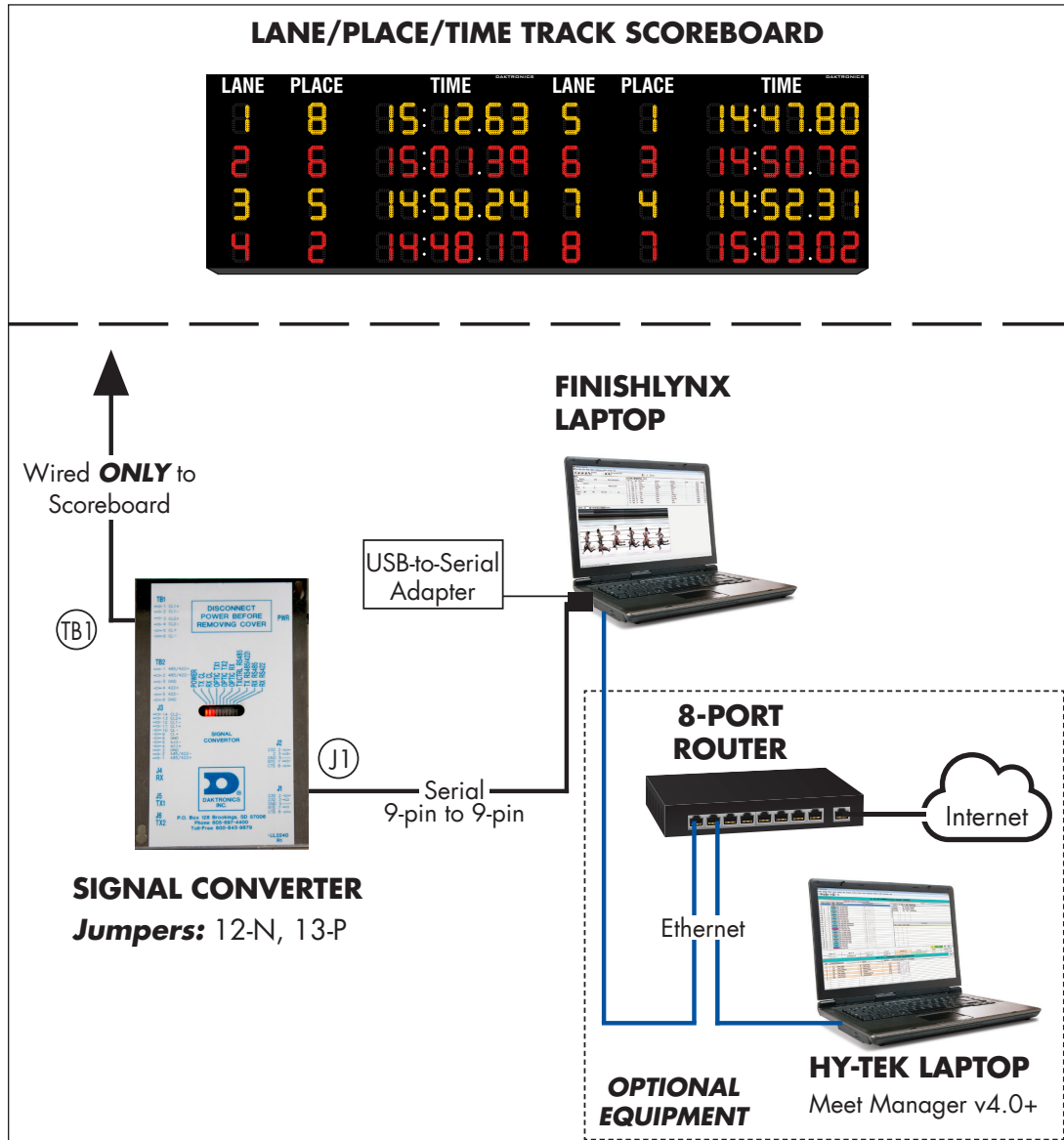


Figure 9: FinishLynx with Lane/Place/Time Track Scoreboard

The cabling should go according to **DWG-104300**. Set the scoreboard driver addresses according to the FinishLynx settings in **Section 3** of the **Daktronics Aquatic/Track LED Scoreboards Display Manual (DD3043167)**, available online at www.daktronics.com/manuals.

For optional Hy-Tek Meet Manager setup, refer to **Hy-Tek Setup with FinishLynx (p.6)**.

1. To access the connection settings in FinishLynx, open the software and go to **Scoreboard > Options**.
2. Click on the **Scoreboard** tab.
3. Click **New**.
4. Set up the options on the FinishLynx computer as follows (refer also to **Figure 10**):

- *Script*: "Omni1000placeNEW.lss"
- *Name*: "Lane/Place/Time Scoreboard"
- *Code Set*: **Single Byte**
- *Serial Port*: Select an available COM port.
- *Baud*: **9600**
- *Data Bits*: **7**
- *Parity*: **Even**
- *Stop Bits*: **2.0**
- *Running Time*: **Normal**
- *Results*: **Auto, Always send place** enabled
- *Paging* enabled; set the *Size* to the number of lanes that can be displayed on the scoreboard.

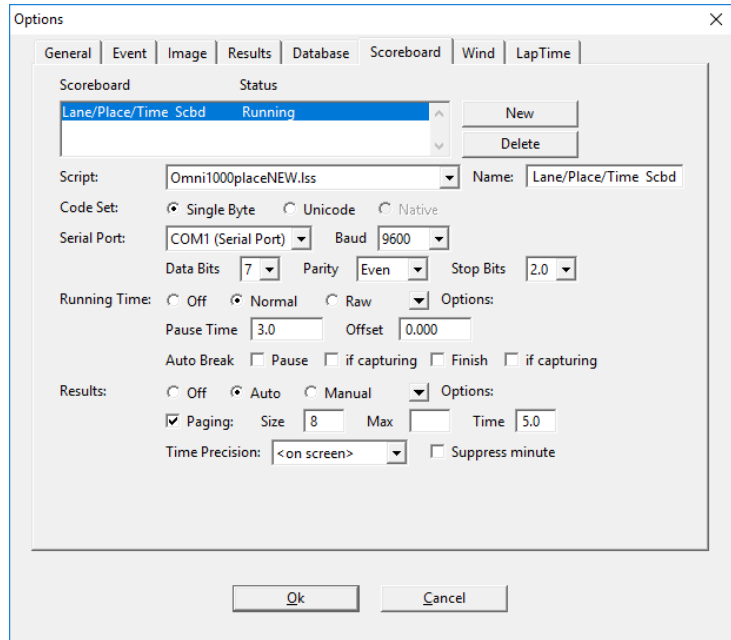


Figure 10: Scoreboard Options for Lane/Place/Time

5. Click **OK** when finished to save the settings.
6. Restart the FinishLynx software to load the scoreboard script.

FinishLynx Setup for TI-2020, TI-2021, or TR-3101

Reference Drawings:

TI-2020, -2021, -3101 w/ Finish Lynx..... **DWG-267638**

This setup will display FinishLynx running time on a Daktronics portable timing display. See **Figure 11** for typical components and connections.

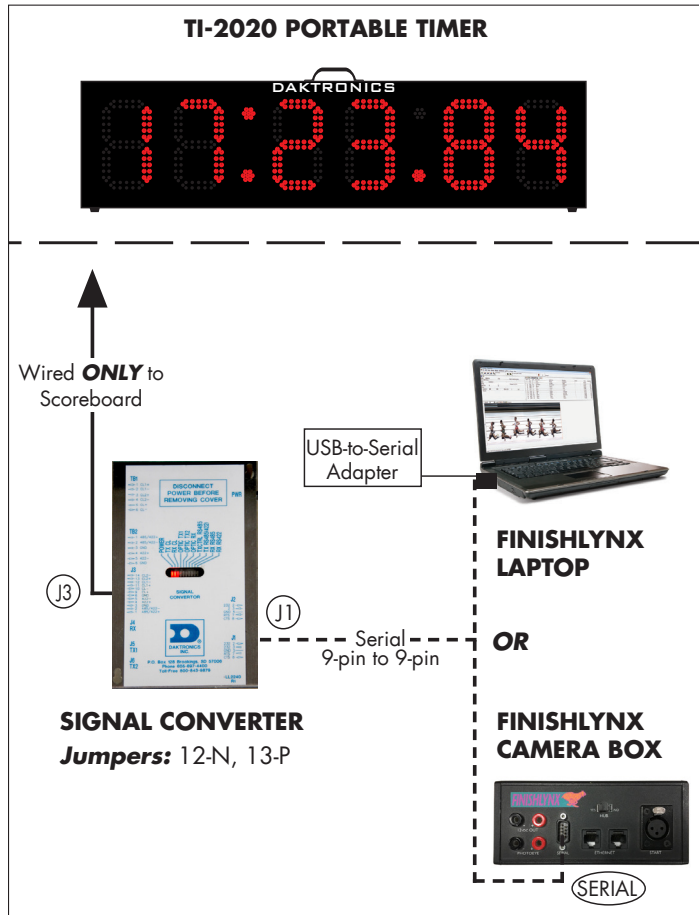


Figure 11: FinishLynx with Portable Timer

In this setup, the display is typically sitting in the infield near the finish line.

1. Identify which serial port will control the display, either:
 - On the FinishLynx computer in the press box **OR**
 - At the connection box at track side

Note: A USB-to-serial converter may be required on the FinishLynx computer.

2. Connect the signal converter kit (part # 0A-1125-0007) between the serial port selected in **Step 1** to the input jack on the timing display. The cabling should go according to **DWG-267638**.
3. To access the connection settings in FinishLynx, open the software and go to **Scoreboard > Options**.
4. Click on the **Scoreboard** tab.
5. Click **New**.

6. Set up the scoreboard options on the FinishLynx computer as follows (refer also to **Figure 12**):

- *Script:* "DakMDP.Iss"
- *Name:* "6 or 7-Digit Clock"
- *Code Set:* **Single Byte**
- *Serial Port:* Select an available COM port. If connecting to the serial port on the connection box, select **Camera 1 (C-Box)**.
- *Baud:* **19200**
- *Data Bits:* **8**
- *Parity:* **None**
- *Stop Bits:* **1.0**
- *Running Time:* **Normal**
- *Results:* **Auto, Always send place** enabled
- *Paging* enabled; set the *Size* "1"; *Time* "5.0".

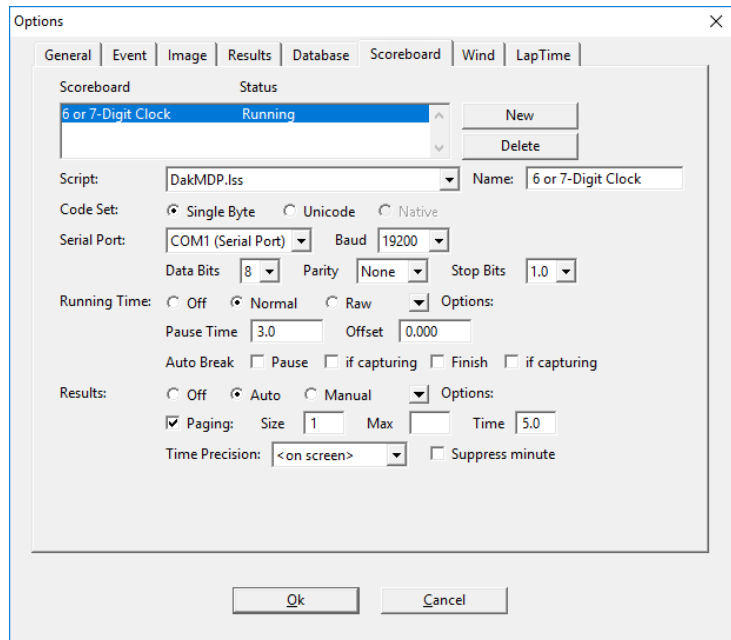


Figure 12: Scoreboard Options for 6- or 7-Digit Clock

7. Click **OK** when finished to save the settings.
8. Restart the FinishLynx software to load the scoreboard script.

FinishLynx Tips & Troubleshooting

- Is the correct code entered into the All Sport?
- Does the All Sport have the proper software revision? **>V1.4** for All Sport 5000.
- Is the correct serial port selected? Camera(s) must be connected and operating for the running time to display.
- Save and close each race after finish of the race. Otherwise, the scoreboard will continue to display the race opened. The Lynx program will place an "S" to the left of the event the scoreboard is displaying.
- If results and running time are being received from the same COM port of the FinishLynx computer system, press **[ALT + S]** on the FinishLynx computer keyboard to stop transmitting running time and display results.
- On the FinishLynx computer, **COM1** is usually the capture button. If a button splitter cable is connected, the capture button uses pins **4, 7, and 8** of the serial port. The scoreboard uses pins **2, 3, and 5** of the serial port.
- If settings in the FinishLynx software are changed, exit out of the program and restart for the changes to take effect.
- If there are more lanes on the track than can be displayed on the scoreboard, **Paging** must be enabled, and the **Size** must be set to the number of lines the scoreboard can display. This will enable the computer to send the results for the first group lanes, and then the next group of lanes.

Fully Automatic Timing (FlashTiming)

The FlashTiming system consists of a personal computer, FlashTiming software, and a photo finish camera for Fully Automatic Timing (FAT).

FlashTiming Setup for Football/Track Scoreboard

This setup will display FlashTiming running time on a Daktronics football/track scoreboard. This setup DOES NOT allow Hy-Tek data to be displayed on a scoreboard. For optional Hy-Tek Meet Manager setup, refer to **Hy-Tek Setup with FlashTiming (p.12)**.

See **Figure 13** for typical components and connections. Refer also to the scoreboard installation manual for internal signal connections or wireless radio control settings.

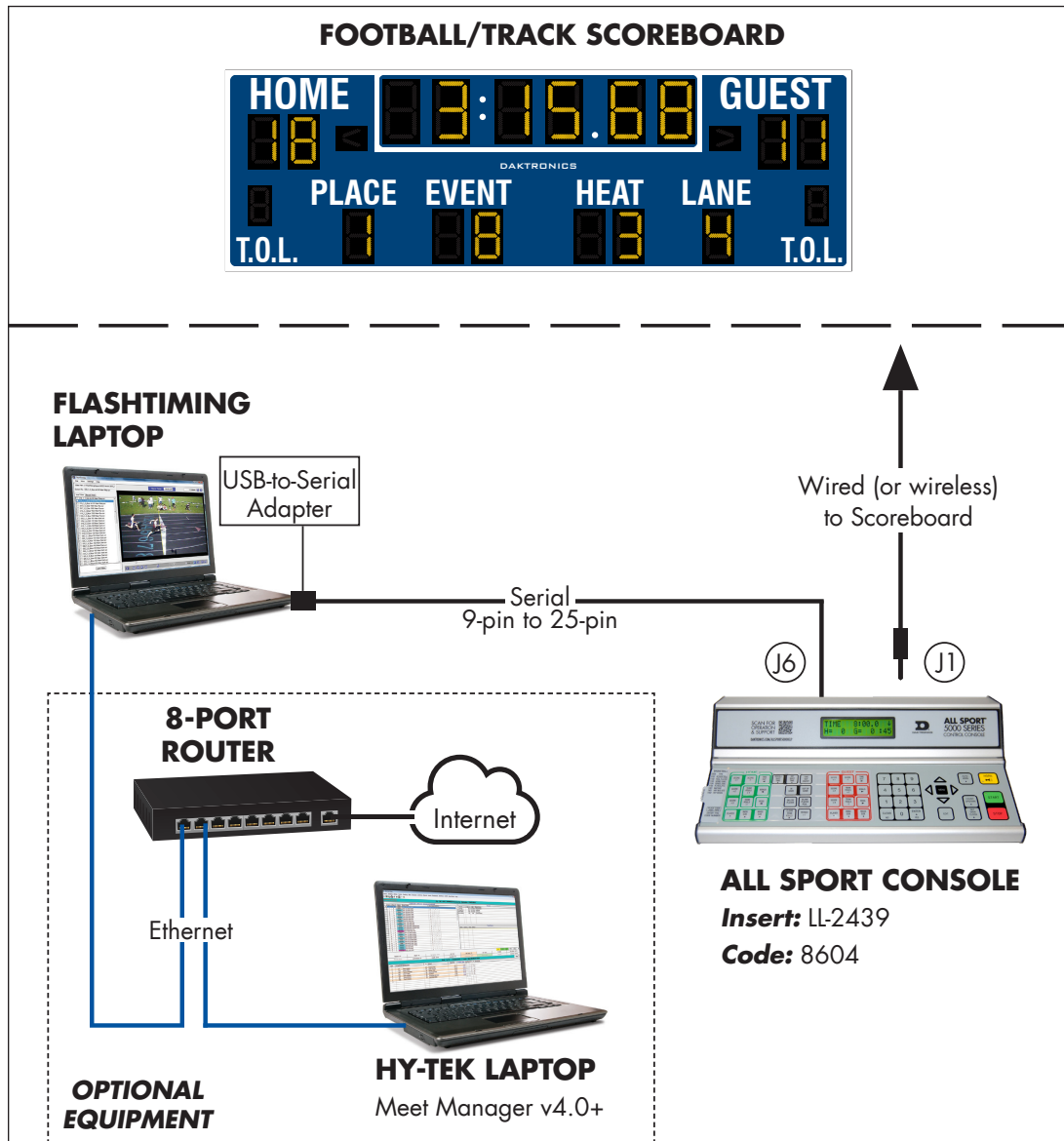


Figure 13: FlashTiming with Football/Track Scoreboard & Optional Hy-Tek

When a USB-to-Serial adapter is being used on the FlashTiming computer, enter code **8604** on the All Sport 5000.

1. To access the connection settings in FlashTiming, open the software and go to **Display > Daktronics RaceClock**.
2. Click on **Serial Port**, and set up the options as follows (refer also to **Figure 14**).
 - *Com/Serial Port*: Select an available COM port.
 - *Baud Rate*: **9600**
3. Click **OK** when finished to save the settings.

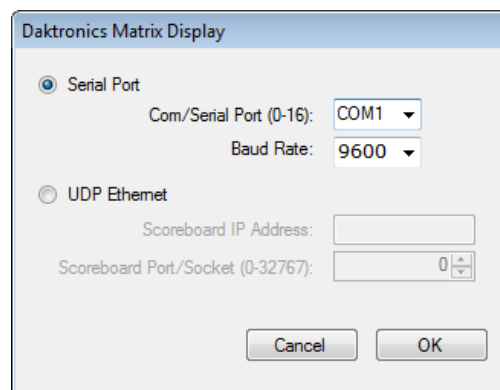


Figure 14: FlashTiming Scoreboard Options

Hy-Tek Setup with FlashTiming

If a Hy-Tek results computer is included as part of the system, it does not need to connect to the All Sport controller. However, the Hy-Tek computer can be connected to the FlashTiming computer via a network router and Ethernet cables (not provided by Daktronics). For more information about properly networking these two computers together, refer to the documentation provided with each piece of software, or contact the appropriate software vendor using the information listed in **Section 7: Additional Resources (p.54)**.

FAQ

What OmniSport information can I display on my football/track scoreboard?

During a Lane race, the event, heat, and running time will be displayed. The first place finisher lane and time will display once he/she crosses the finish line. As other runners finish, their times will then be displayed. Once all runners finish, their times will display one place at a time for a number of seconds as set up in the OmniSport.

During a Non-Lane race, the running time will be displayed. Based on the OmniSport configuration, the running time can be displayed continuously, or the running time will stop and display the first place finish time.

Can I interface Hy-Tek to my football/track scoreboard?

No. Hy-Tek Meet Manager cannot send data directly to the football/track scoreboard.

Can I display Hy-Tek field event information?

No. Hy-Tek Meet Manager cannot send data directly to the football/track scoreboard.

How many lines can a track/football scoreboard display?

One line of data can be displayed at a time. The results change every few seconds to show all lanes.

What additional software is needed to connect an OmniSport 2000 to Hytek Meet Manager?

A software plug-in for Hy-Tek Meet Manager called "Track Button Finish Interface" will need to be purchased from Hy-Tek. Refer to contact information in **Section 7: Additional Resources (p.54)**.

What software is needed to connect FinishLynx/FlashTiming to Hy-tek Meet Manager?

A software plug-in for Hy-Tek Meet Manager called "Photo Finish Interface" will need to be purchased from Hy-Tek. Refer to contact information in **Section 7: Additional Resources (p.54)**.

Is the OmniSport 2000 the only Daktronics timer that can communicate to Meet Manager?

Yes. The OmniSport 2000 is the only timer that can send times to Meet Manager software.

Can the OmniSport 2000 communicate to Meet Manager via network?

No. In Track mode, a serial connection (or serial radios) are required between an OmniSport console and Meet Manager software.

Can I communicate wirelessly from FinishLynx/FlashTiming to a football/track scoreboard?

Yes. The All Sport 5000 must be equipped with a radio transmitter and a radio receiver must be installed in the scoreboard.

Can I communicate wirelessly from an OmniSport 2000 to a Lane/Place/Time track scoreboard?

Yes. The OmniSport 2000 must be equipped with a radio transmitter and a radio receiver must be installed in the scoreboard.

Can I communicate wirelessly from FinishLynx to a Lane/Place/Time track scoreboard?

No. A wired signal converter is used for this setup.

Which Auxiliary Modules (SW-2000 series) can be controlled by the OmniSport 2000?

Event/Heat, Home/Guest, Record Time, Lengths/Record Time, and Guest 2/Guest 3

Which Auxiliary Modules (SW-2000 series) can be controlled by FinishLynx?

Event/Heat only

3 LED Video Displays

OmniSport 2000 & LED Video Display

Reference Drawings:

Riser: DMP-8000/FB Track Scbd, w/Omni 2K, Hytek, Show Cntrl.....**DWG-3058769**

This setup displays running time, lane results, and event/heat information on a Daktronics LED video display from an OmniSport 2000 timing console. A track button interface connects to the **J7 SWITCH INPUTS** jack on the console. The track button interface supports up to 8 pushbutton switches to manually record the times for each lane. By interfacing with Hy-Tek, complete competitor information, such as name and affiliation, can be displayed along with their results.

Data from the OmniSport 2000 is sent via the **ETHERNET** port into a network switch, which in turn connects to the router in the video control rack. See **Figure 15** and **DWG-3058769** for typical components and connections to a video control rack.

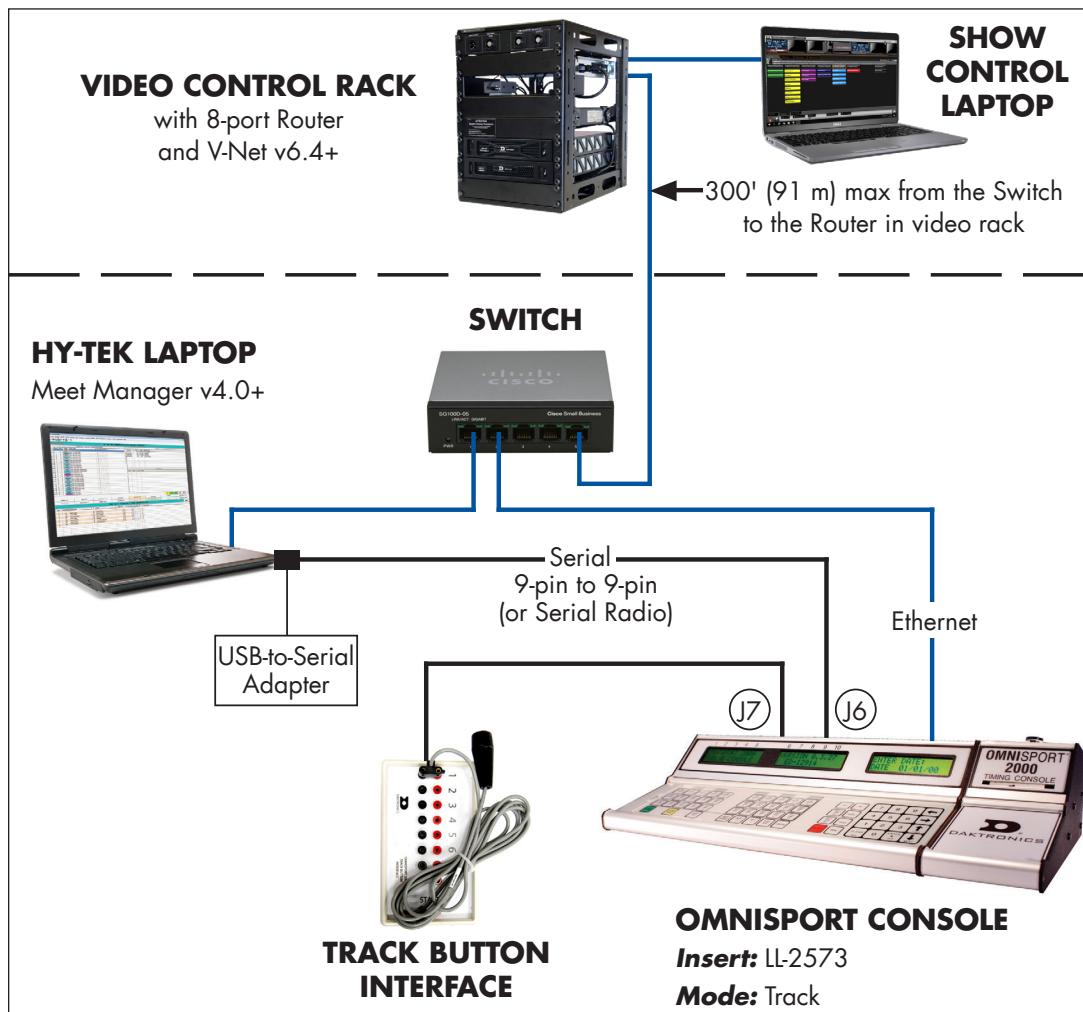


Figure 15: OmniSport 2000 & Hy-Tek with Video Display

Note: For timing up to 10 lanes, a larger track button interface will connect to the **J10 NEAR** jack on the timing console. This also supports up to 3 buttons per lane.

Refer to the video display manual for more information on sending fiber optic signal from the control rack to the display. If there is a football/soccer scoreboard or a dedicated track scoreboard in addition to the video display, refer also to the scoreboard installation manual for internal signal connections.

For more about track operation and settings, refer to the **OmniSport 2000 Timing Console Operation Manual (ED-13312)**, available online at www.daktronics.com/manuals.

Hy-Tek Results with OmniSport 2000

This setup allows lane, place, and time information to be pulled into by Hy-Tek Meet Manager software from the OmniSport 2000. If the Hy-Tek computer will also be outputting data to the video display, refer to **Hy-Tek Results for Video Display (p.21)**.

The OmniSport 2000 console connects to a Hy-Tek computer via the **J6 RESULTS PORT** jack to record race times in the Meet Manager software. The serial connection may be wire or radio. On the Hy-Tek computer, use the following settings:

1. Open the Meet Manager program.
2. Click **Run** on the main menu.
3. Go to **Interfaces > Set-up > Track Button Timer (Figure 16)**.
4. Select **Daktronics OmniSport 2000**, and then click **OK**.
5. Go to **Interfaces > Track Button Timer - OmniSport 2000 > Open/Close Serial Port**.
6. For the *Track Button Finish Timer (0-16)* option (**Figure 17**), select the COM port number on the Hy-Tek computer connected to the OmniSport, and then click **OK**.
7. Go to **Interfaces > Track Button Timer - OmniSport 2000 > Test Communication**. When all connections and configurations are correct, the *Communications Passed* message appears with the version of firmware in the OmniSport 2000 console (**Figure 18**). Click **OK**.

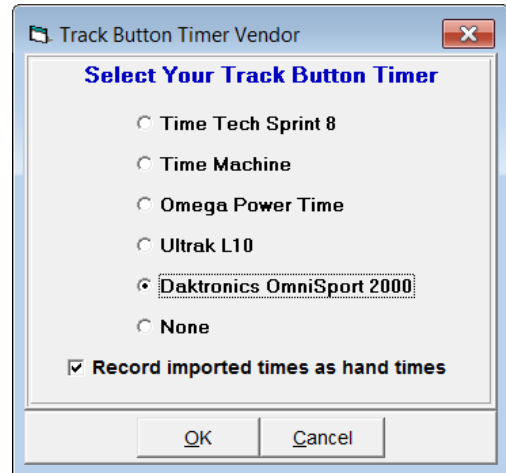


Figure 16: Track Button Timer Vendor

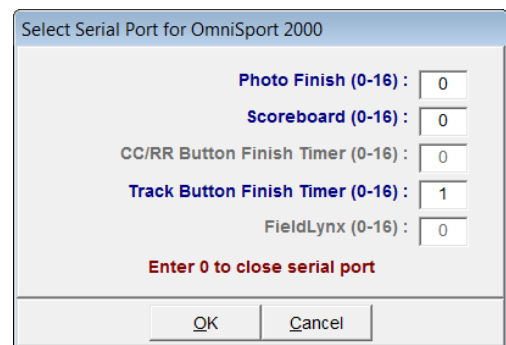


Figure 17: Serial Port for Track Button

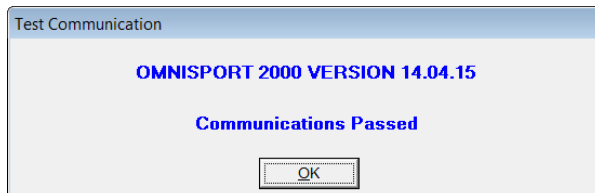


Figure 18: Communications Passed

Fully Automatic Timing (FinishLynx)

Reference Drawings:

Riser; Hytek/Lynx/Show Cntrl, Fiber, Scbd, DVX w/ Version 6.4 **DWG-3058591**

The FinishLynx™ Timing System consists of a personal computer, FinishLynx software, and a photo finish camera for Fully Automatic Timing (FAT). This setup displays running time, lane results, and event/heat information as RTD (Real Time Data) on a Daktronics LED video display. By interfacing with Hy-Tek or DirectAthletics, complete competitor information, such as name and affiliation, can be displayed along with their results.

Data from FinishLynx and Hy-Tek or DirectAthletics is sent via Ethernet into a network switch, which in turn connects to the router in the video control rack. See **Figure 19** and **DWG-3058591** for typical components and connections to a video control rack.

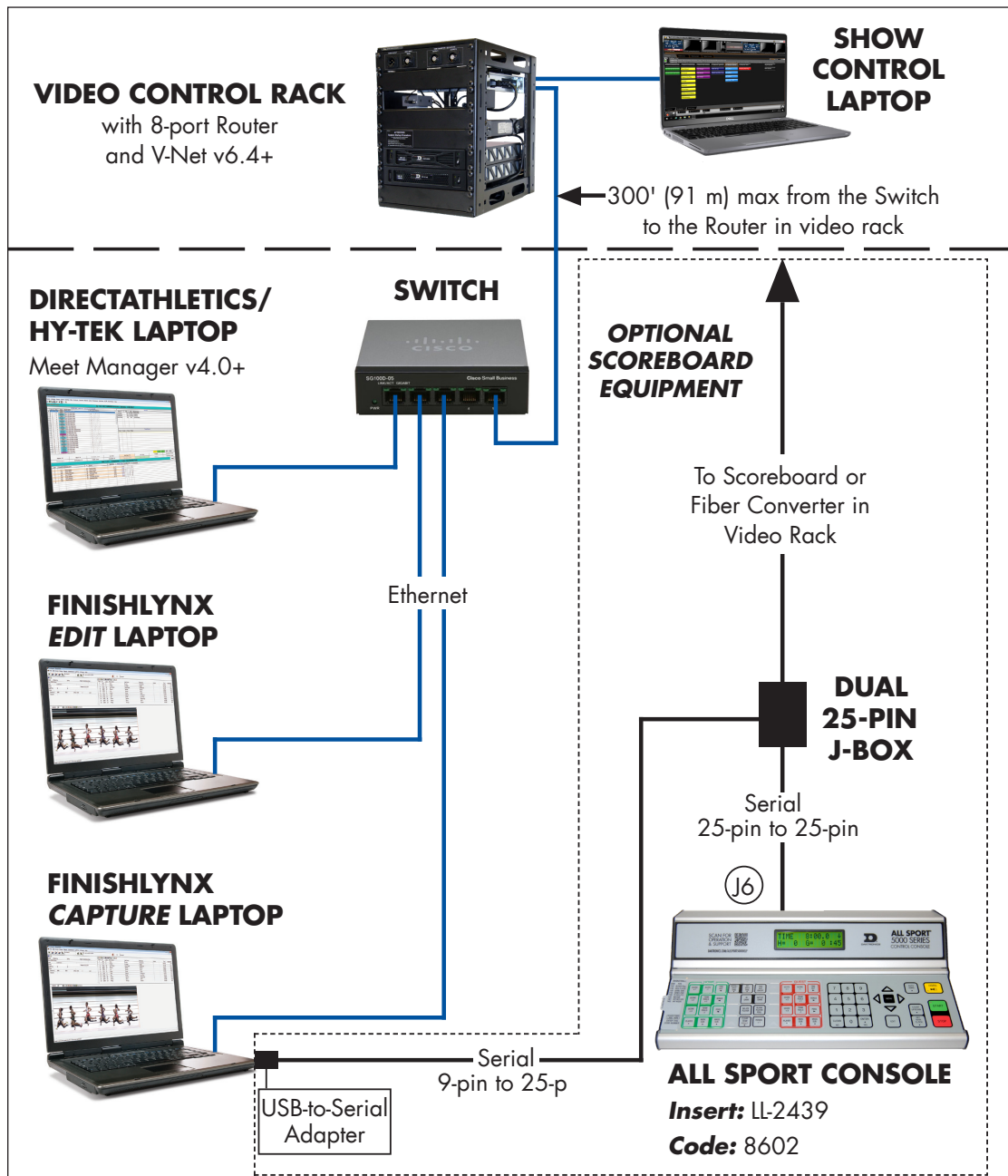


Figure 19: FinishLynx & Hy-Tek/DirectAthletics with Video Display

Refer to the video display manual for more information on sending fiber optic signal from the control rack to the display. If there is a football/soccer scoreboard or a dedicated track scoreboard in addition to the video display, refer also to the scoreboard installation manual for internal signal connections.

When a USB-to-Serial adapter is being used on the FinishLynx computer, enter code **8602** on the All Sport 5000.

1. To access the connection settings in the FinishLynx Capture Station computer, open the software and go to **Scoreboard > Options**.

2. Click on the **Scoreboard** tab.

3. Click **New**.

4. Set up the Scoreboard options as follows (refer also to **Figure 20**):

- *Script*: "Powertime.lss"
- *Name*: "Football/Track Scoreboard"
- *Code Set*: **Single Byte**
- *Serial Port*: Select an available COM port.
- *Baud*: **9600**
- *Data Bits*: **7**
- *Parity*: **Even**
- *Stop Bits*: **1.0**
- *Running Time*: **Normal**
- *Auto Break*: **Off**
- *Results*: **Auto**, **Always send place** enabled
- *Paging* enabled, *Size* "1", *Time* "5.0"

5. Click **New** once more.

6. Set up the Running Time options as follows (refer also to **Figure 21**):

- *Script*: "Dak-Extended.lss"
- *Name*: "Running Time"
- *Code Set*: **Single Byte**
- *Serial Port*: **Network (UDP)**
- *Port*: "21000"
- *Running Time*: **Normal**, **Send results if armed** enabled
- *Results*: **Off**

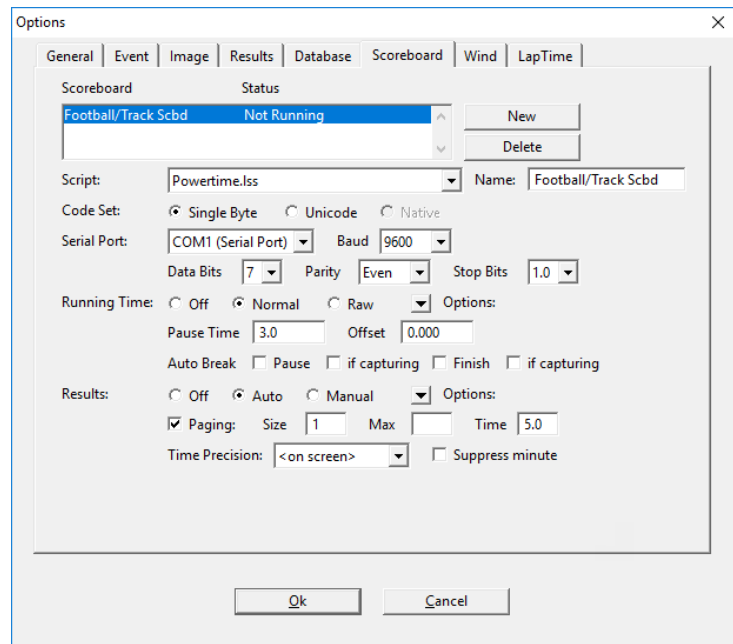


Figure 20: FinishLynx Scoreboard Options

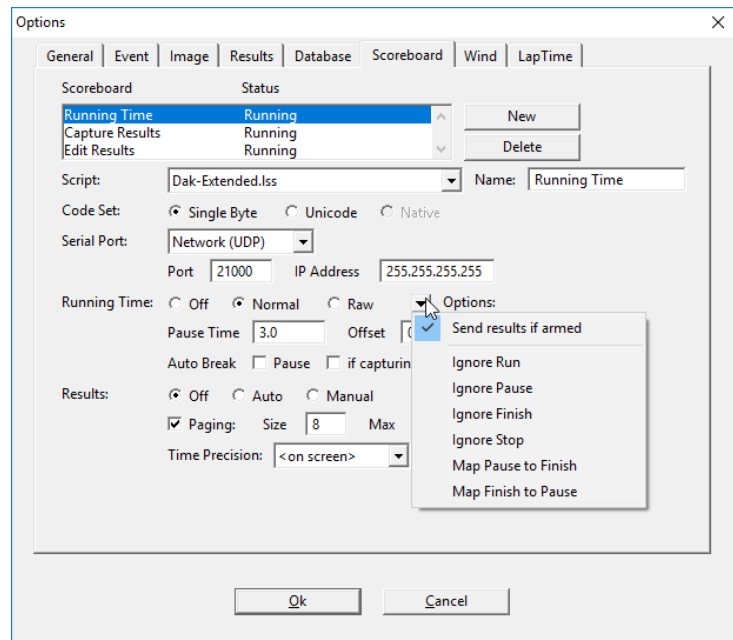


Figure 21: FinishLynx Running Time Options

- Click **New** once more.
- Set up the Capture Results options as follows (refer also to **Figure 22**):

- Script: "Dak-Extended.Iss"
- Name: "Capture Results"
- Code Set: **Single Byte**
- Serial Port: **Network (UDP)**
- Port: "21100"
- Running Time: **Off**
- Results: **Auto, Always send place** enabled
- Paging enabled; set the Size to the number of lanes that can be displayed on the matrix display; Time "5.0"

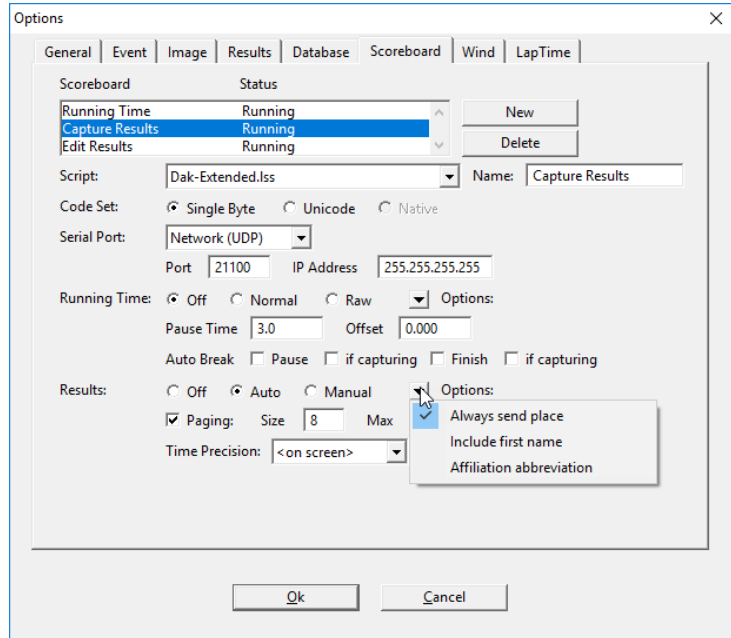


Figure 22: FinishLynx Results Options

- Click **OK** when finished to save the settings.
- Restart the FinishLynx software to load the scripts.

Note: If a separate FinishLynx Edit Station is included as part of the system, on that computer, go to **Scoreboard > Options**, click on the **Scoreboard** tab, and then click **New**. Set up the Edit Results options as follows (refer also to **Figure 23**).

- Script: "Dak-Extended.Iss"
- Name: "Edit Results"
- Code Set: **Single Byte**
- Serial Port: **Network (UDP)**
- Port: "22000"
- Running Time: **Off**
- Results: **Auto, Always send place** enabled
- Paging enabled; set the Size to the number of lanes that can be displayed on the matrix display; Time "5.0"

Click **OK** when finished, and then restart the FinishLynx software to load the script.

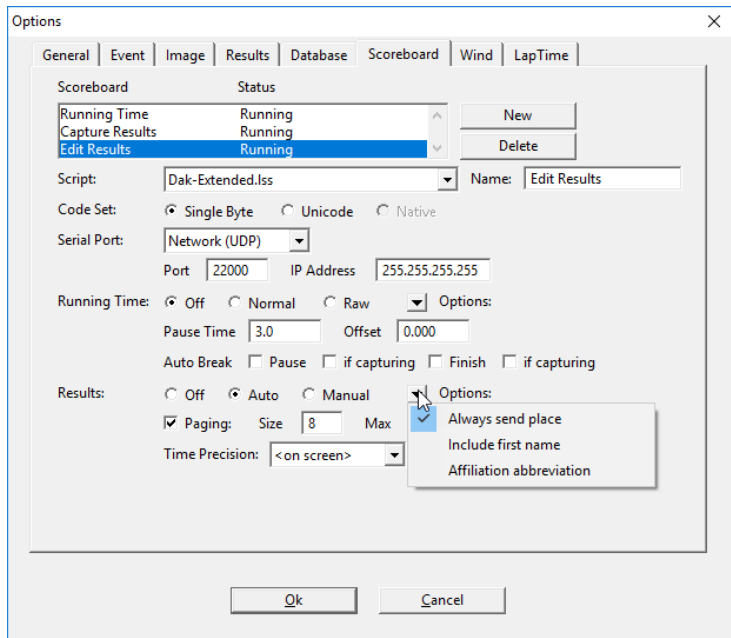


Figure 23: FinishLynx Results Options (Edit Station)

Fully Automatic Timing (FlashTiming)

The FlashTiming system consists of a personal computer, FlashTiming software, and a photo finish camera for Fully Automatic Timing (FAT). This setup displays running time, lane results, and event/heat information as RTD (Real Time Data) on a Daktronics LED video display. By interfacing with Hy-Tek or DirectAthletics, complete competitor information, such as name and affiliation, can be displayed along with their results.

Data from FlashTiming and Hy-Tek or DirectAthletics is sent via Ethernet into a network switch, which in turn connects to the router in the video control rack. See **Figure 24**.

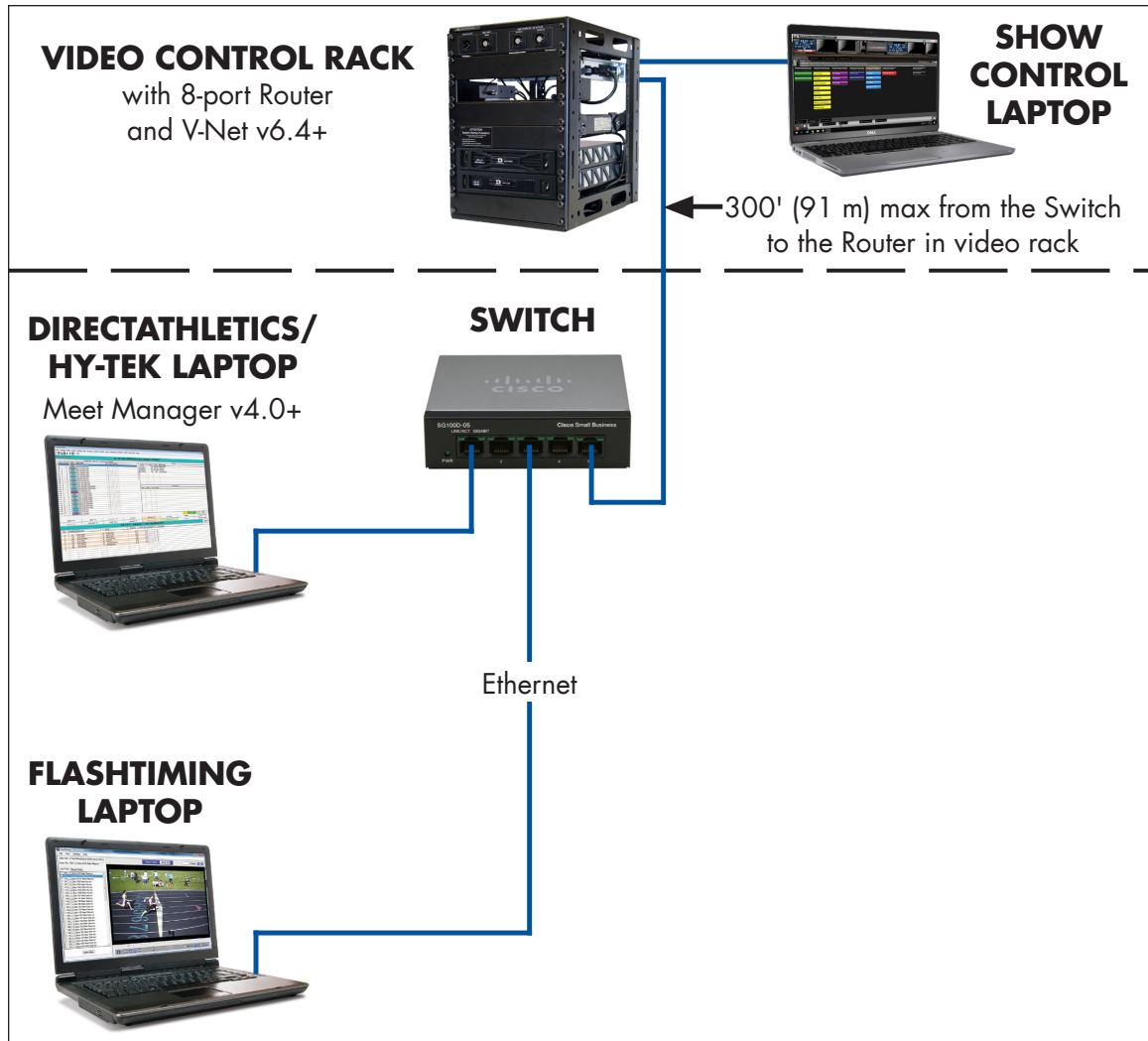


Figure 24: FlashTiming & Hy-Tek/DirectAthletics with Video Display

Refer to the video display manual for more information on sending fiber optic signal from the control rack to the display. If there is a football/soccer scoreboard or a dedicated track scoreboard in addition to the video display, refer also to the scoreboard installation manual for internal signal connections.

1. To access the connection settings in FlashTiming, open the software and go to **Display > Daktronics - RaceClock**.

2. Click on **UDP Ethernet**, and set up the options as follows (**Figure 25**).

- *Scoreboard IP Address*: The first 3 sets of numbers should match the DMP-8000 IP address. Then use "255" as the last set of numbers.
- *Scoreboard Port/Socket*: "21000"

Click **OK** when finished to save the settings.

3. Go to **Display > Daktronics Matrix -Results**.

4. Click on **UDP Ethernet**, and set up the options as follows (**Figure 26**).

- *Scoreboard IP Address*: The first 3 sets of numbers should match the DMP-8000 IP address. Then use "255" as the last set of numbers.
- *Scoreboard Port/Socket*: "21100"

Click **OK** when finished to save the settings.

5. Go to **Display > Display Settings** (**Figure 27**).

- Set the *Lines of Text* to 1–29, depending on the RTD sequence.
- Set the *Characters per Line* to 8–100, depending on the RTD sequence.
- Set the *# of lines for Race Description* to 0, 1, or 2, depending on the RTD sequence.
- All other settings are the user's preference.

For assistance with creating RTD sequences, refer to **Section 5: Creating RTD Sequences (p.40)**.

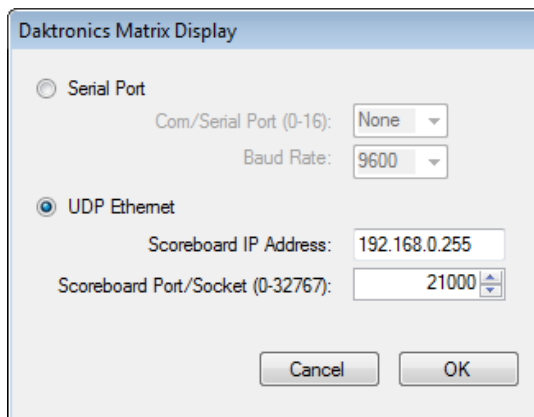


Figure 25: RaceClock Comm Options

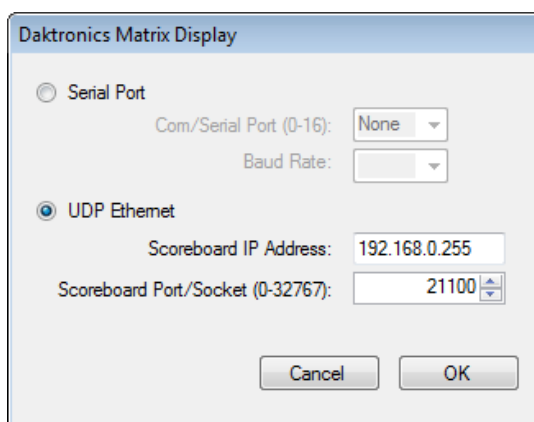


Figure 26: Matrix -Results Comm Options

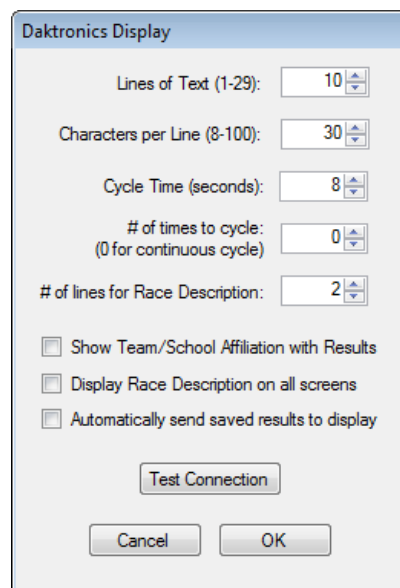


Figure 27: Display Settings

Hy-Tek Results for Video Display

Hy-Tek Track & Field Meet Manager is a third-party results program. With its optional Alpha Scoreboard Interface, Hy-Tek can send start lists, results, and team scores in a standard RTD format for display on a Daktronics video display. If your Hy-Tek license does not include the Alpha Scoreboard Interface, please contact Hy-Tek to purchase it.

1. Open the Meet Manager program.
2. Click **Run** on the main menu.
3. Go to **Interfaces > Set-up > Scoreboard** (Figure 28).
4. Select **Daktronics Full Matrix** and **UDP Ethernet**, and then click **OK**.
5. Go to **Interfaces > Scoreboard - Daktronics Full Matrix > Set UDP Port and IP Address**.
6. For the *Remote Scoreboard Port/Socket* option (Figure 29), enter "20000". Verify the *Remote Scoreboard IP Address* is "255.255.255.255", and then click **OK**.
7. Go to **Interfaces > Scoreboard – Daktronics Full Matrix > Customize** (Figure 30).
 - Set the *Number of Rows for Header* to 1 or 2, depending on the RTD sequence.
 - Set the *Number of Rows for Lanes* to 1–29, depending on the RTD sequence.
 - Set the *Number of Characters per Row* to 1–100, depending on the RTD sequence.
 - All other settings are the user's preference.

For assistance with creating RTD sequences, refer to **Section 5: Creating RTD Sequences (p.40)**.

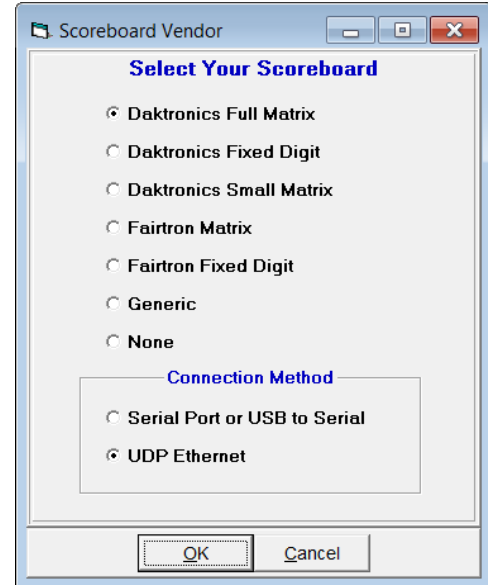


Figure 28: Scoreboard Vendor Selection

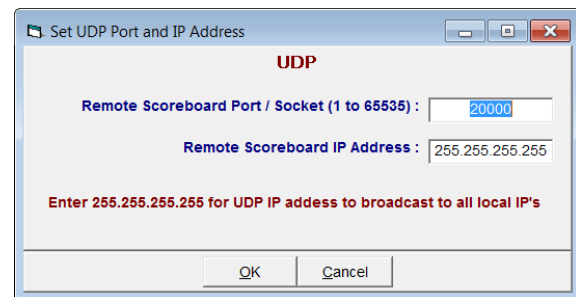


Figure 29: UDP Port for Daktronics Full Matrix

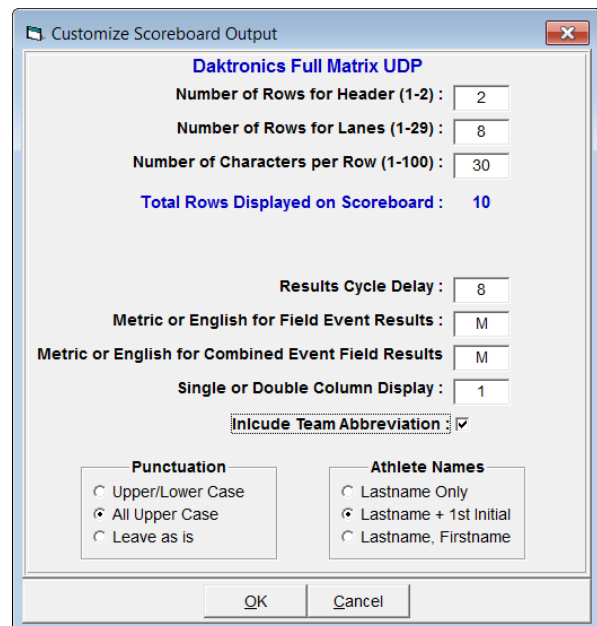


Figure 30: Customize Scoreboard Output - Daktronics Full Matrix (UDP)

Sending Start Lists, Results, & Team Scores from Hy-Tek

The most common method of operation from the Run Menu within the Hy-Tek software is as follows:

1. Get heat on screen and press **[Ctrl] + [F10]** to display start list.
2. Enter results for a heat, section, or flight.
3. Press **[Ctrl] + [F11]** to instantly display these results.
4. Press **[F5]** for next heat and repeat **Steps 1–3**.
5. After the results for the last heat, section, or flight are entered, press **[Ctrl] + [F12]** to display complete results for the round.

Any start list, result, or team score can be displayed at any time from the Run Menu by pressing **[Ctrl] + [F1]**. A selection box will appear as shown in **Figure 31**.

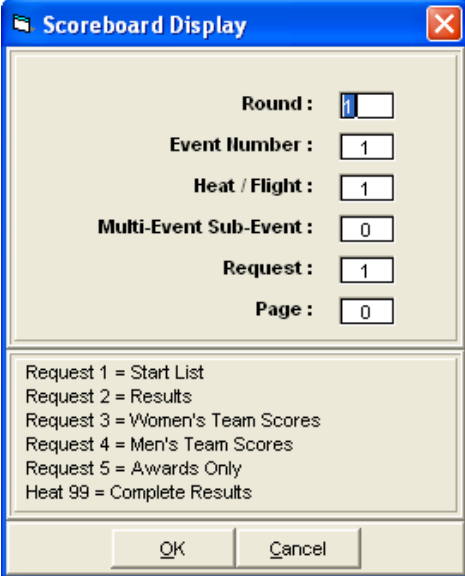


Figure 31: Scoreboard Display Requests

Request Choices

Start Lists and Results: Enter the desired *Round*, *Event Number*, and *Heat/Flight* and then enter a *Request* for a Start List (“1”) or Results (“2”). Entering “99” for the *Heat/Flight* and “2” for *Request* will show complete results for the selected round and event.

Combined-events: To display a combined-event, also enter the *Multi-Event Sub-Event* number. To display combined-event total scores for all sub-events, enter “99” for the *Heat/Flight* and “0” for *Multi-Event Sub-Event*.

Team Scores: Use Request “3” and “4” for team scores. If there are separate team scores for divisions, enter the division number in the *Heat/Flight* number field. For example, when scoring class A (division 1) and class AA (division 2) in the same meet, enter Request “3” and *Heat/Flight* “2” to get girls team scores for the AA division and enter Request “4” and *Heat/Flight* “1” to get boys team scores for the A division. If an event is a Cross Country (CC) event, be sure to also include the *Event Number* so that the software will show the CC team scores.

Award Ceremonies: If there are award ceremonies, enter “5” for *Request* along with the *Event Number*, and the award winners will be displayed for the event based on what was put in the Hy-Tek Meet Set-up Part B for number getting awards. If the event is set up as multi-age group, the awards for each age group will be displayed on a rotational basis.

Paging: If a particular request has more than one screen full of information, the “pages” are cycled. A *Page* number of “0” means cycle all pages normally. To continually display a particular page, enter the specific *Page* number. This can be useful when an announcer is calling out the entrants in a larger event, such as the 16-person mile.

MeetPro Results for Video Display

DirectAthletics MeetPro is a third-party results program that can send start lists, results, and team scores in a standard RTD format for display on a Daktronics video display.

1. Open the MeetPro program.
2. Go to **Interfaces > Scoreboard > Daktronics** (Figure 32).
3. In the *Daktronics Scoreboard Board Setup* window, use the following settings (refer also to **Figure 33**):
 - *Connection Type*: **Network**
 - *Port Type*: **UDP**
 - *IP Address*: "255.255.255.255" (default)
 - *Port*: "20000"
 - *Height*: set to the number of lanes that can be shown on the matrix display plus 1 header; example: if the display can show 8 lanes, set the height to "9"
 - *Width*: "100"
4. Refer to **Figure 33** for typical information to display for the *Run*, *Relay*, and *Field* data columns. Adjust the *Length* of the data fields to fit the display as needed.
5. Click **Save** when finished to save the settings.

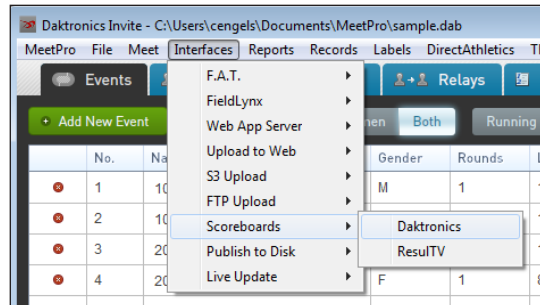


Figure 32: MeetPro Interfaces Menu

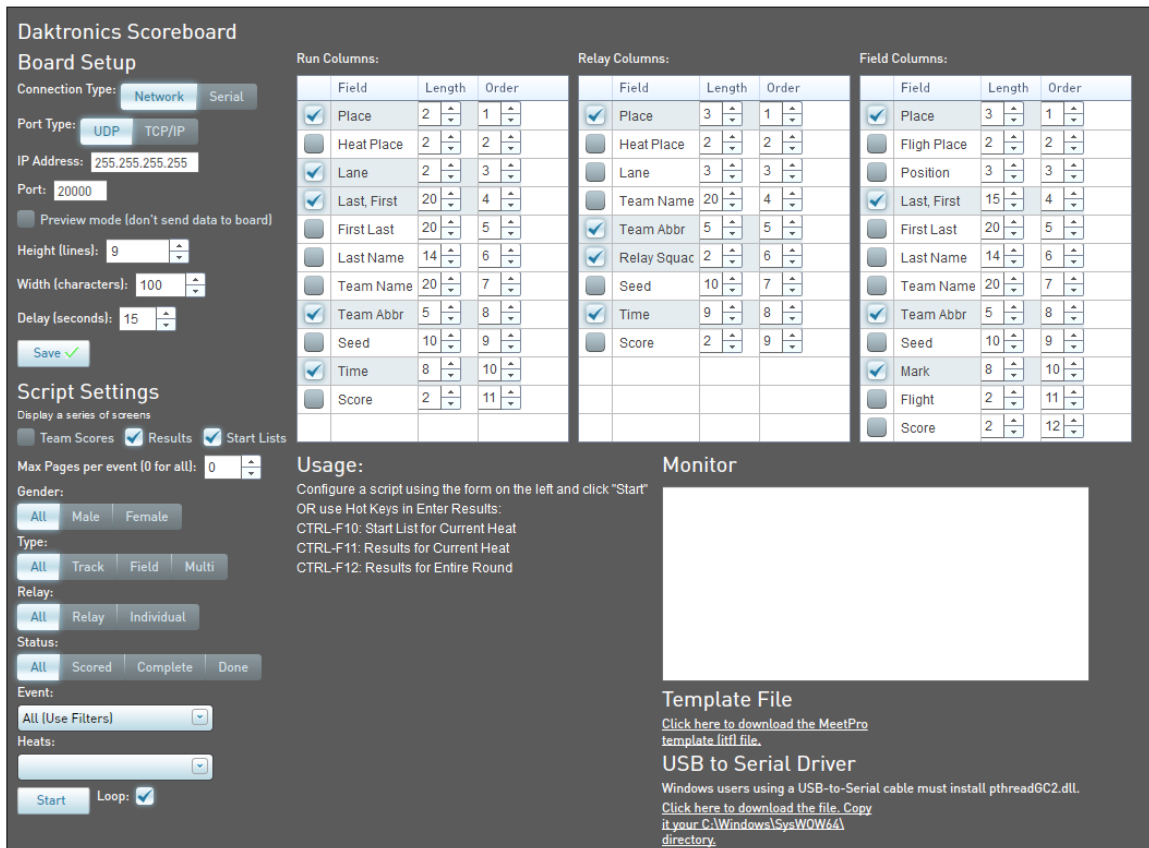


Figure 33: MeetPro Scoreboard Setup

Sending Start Lists & Results from DirectAthletics

1. Go to **Interfaces > Scoreboard > Daktronics (Figure 32)**.
2. In the *Daktronics Scoreboard Board Setup* window (**Figure 33**), use the Script Settings or the shortcut keys for displaying the *Start List for Current Heat*, *Results for Current Heat*, and *Results for Entire Round*.

FAQ

What information can be shown on the video display?

Common header fields are Event Title, Running Time, and Event Heat. Common line fields are ID #, Lane, Name, Affiliation, Time, and Place.

What additional FinishLynx software is needed to send data to Daktronics video display?

A software plug-in called "Network COM Port" (NCP) will be need to be purchased from FinishLynx. Refer to contact information in **Section 7: Additional Resources (p.54)**.

What additional Hy-Tek software is needed to send data to a Daktronics video display?

A software plug-in for Hy-Tek Meet Manager called "Alpha Scoreboard" will need to be purchased from Hy-Tek. Refer to contact information in **Section 7: Additional Resources (p.54)**.

What additional FlashTiming software is needed to send data to a Daktronics video display?

None

What is the recommended data to show on the video display?

Hy-Tek data is typically considered the Official Results and therefore is the recommended data source to display.

Can I send data from both FinishLynx/FlashTiming and Hy-Tek?

Yes. However, sending data from FinishLynx/FlashTiming and Hy-Tek will require coordination between their operators and the video display operator to ensure the presentation being played matches the data being sent.

Is there an advantage of showing results from only one data source?

Yes. The advantage of using one data source is that the results display presentation can be started at the beginning of the meet and left running all meet, with no additional effort from the video display operator.

Does Show Control use a profile to build an RTD sequence for MeetPro results?

Yes. The profile is named "DirectAthletics".

What does a typical Hy-Tek/DirectAthletics display sequence look like?

Refer to the image below:

1(or 2) Lines of Header Info

Running Time

Men 800 Meter				0.0
1	D Solomon	USC	1:47.76	
2	Coachman	MSST	1:47.89	
3	R Brown	UWA	1:48.41	
4	S Smith	ORAL	1:48.91	
5	L Brooks	TXSA	1:49.17	
6	Y Kincaid	UTN	1:49.29	
7	K Smith	UNI	1:49.65	
8	D Emrani	AMDC	1:49.67	

Up to 29 Lines
of Lane Info

What does a typical FinishLynx display sequence look like?

Refer to the image below:

1(or 2) Lines of Header Info

Running Time

Boys 3000 Meter				0.0
1	Torres	Silve	8:47.57	1
16	Rodriguez	Missi	8:52.03	2
12	Hansen	Saint	8:52.75	3
9	Henstorf	Am U	8:54.38	4
7	Wellman	Saint	8:54.96	5
2	Trueba	Hunti	8:56.24	6
5	Ebaye	Logan	8:57.46	7
19	Miramonte	Golde	8:57.67	8

Up to 10 Lines
of Lane Info

Lane Name Affiliation Time Place

4 LED Message Displays (Galaxy/M3)

OmniSport 2000 & LED Message Display

Reference Drawings:

System Riser; Track M3 Matrix w/ Omni2K in Pressbox..... **DWG-1072146**

This setup displays running time, lane results, and event/heat information on a Daktronics LED message display from an OmniSport 2000 timing console. A track button interface connects to the **J7 SWITCH INPUTS** jack on the console. The track button interface supports up to 8 pushbutton switches to manually record the times for each lane. By interfacing with Hy-Tek, complete competitor information, such as name and affiliation, can be displayed along with their results.

Data from the OmniSport 2000 is then sent via the **ETHERNET** port into a network router. See **Figure 34** and **DWG-1072146** for typical components and connections.

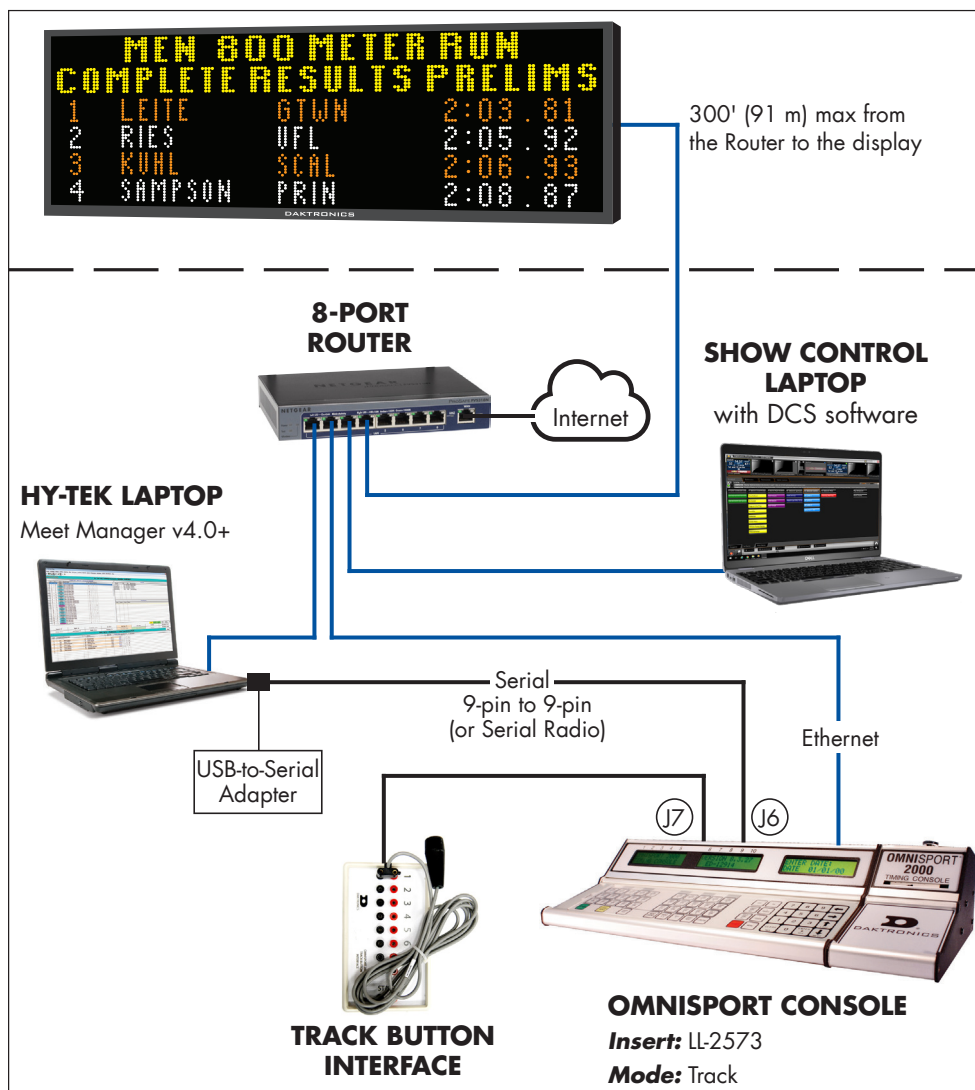


Figure 34: OmniSport 2000 & Hy-Tek with Message Display

Note: For timing up to 10 lanes, a larger track button interface will connect to the **J10 NEAR** jack on the timing console. This also supports up to 3 buttons per lane.

Refer to the message display manual for more information on routing signal to the display. Displays may be controlled wirelessly via Ethernet Bridge Radio. If there is a football/soccer scoreboard or a dedicated track scoreboard in addition to the message display, refer also to the scoreboard installation manual for internal signal connections.

For more about track operation and settings, refer to the **OmniSport 2000 Timing Console Operation Manual (ED-13312)**, available online at www.daktronics.com/manuals.

Hy-Tek Results with OmniSport 2000

This setup allows lane, place, and time information to be pulled into by Hy-Tek Meet Manager software from the OmniSport 2000. If the Hy-Tek computer will also be outputting data to the message display, refer to **Hy-Tek Results for Message Display (p.32)**.

The OmniSport 2000 console connects to a Hy-Tek computer via the **J6 RESULTS PORT** jack to record race times in the Meet Manager software. The serial connection may be wire or radio. On the Hy-Tek computer, use the following settings:

1. Open the Meet Manager program.
2. Click **Run** on the main menu.
3. Go to **Interfaces > Set-up > Track Button Timer (Figure 35)**.
4. Select **Daktronics OmniSport 2000**, and then click **OK**.
5. Go to **Interfaces > Track Button Timer - OmniSport 2000 > Open/Close Serial Port**.
6. For the *Track Button Finish Timer (0-16)* option (**Figure 36**), select the COM port number on the Hy-Tek computer connected to the OmniSport, and then click **OK**.
7. Go to **Interfaces > Track Button Timer - OmniSport 2000 > Test Communication**. When all connections and configurations are correct, the *Communications Passed* message appears with the version of firmware in the OmniSport 2000 console (**Figure 37**). Click **OK**.

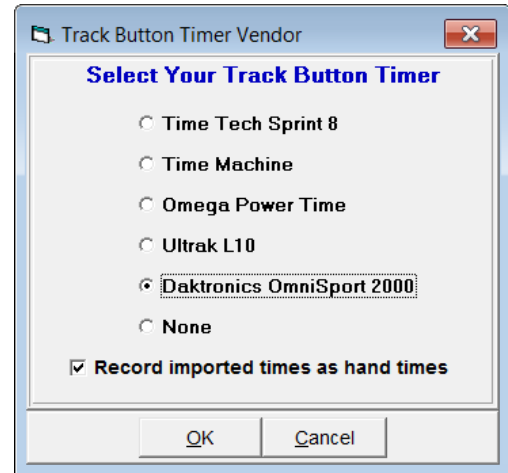


Figure 35: Track Button Timer Vendor

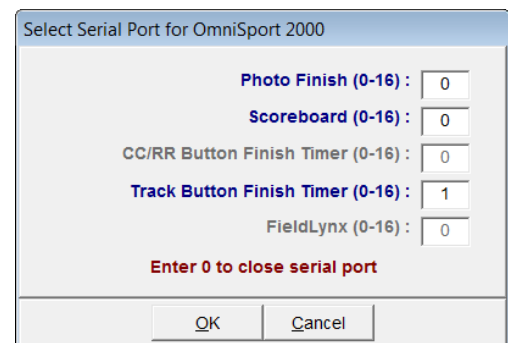


Figure 36: Serial Port for Track Button



Figure 37: Communications Passed

Fully Automatic Timing (FinishLynx)

Reference Drawings:

Riser; V1500/M2/M3/Galaxy, Lynx/Hytek, Ethernet	DWG-266821
Riser; Hytek/Lynx/V1500, M2/M3 Galaxy, Fiber, SCBD.....	DWG-291376
Riser; Hytek/Lynx/V1500, M2/M3 Galaxy, Fiber, AS5000.....	DWG-298848
Riser; Hytek/Lynx/Show Cntrl. M2/M3 Galaxy, EBR Radio	DWG-300928
Riser; Hytek/Lynx/Show Control Galaxy, E-net, SCBD.....	DWG-3695367

The FinishLynx™ Timing System consists of a personal computer, FinishLynx software, and a photo finish camera for Fully Automatic Timing (FAT). This setup displays running time, lane results, and event/heat information as RTD (Real Time Data) on a Daktronics LED message display. By interfacing with Hy-Tek or DirectAthletics, complete competitor information, such as name and affiliation, can be displayed along with their results.

In this setup, RTD (Real Time Data) is sent from the FinishLynx system directly to the display via a network UDP/IP connection. See **Figure 38** for typical components and connections. Depending on the equipment used in a particular setup, refer to **DWG-266821**, **DWG-291376**, **DWG-298848**, or **DWG-300928** for cabling configurations.

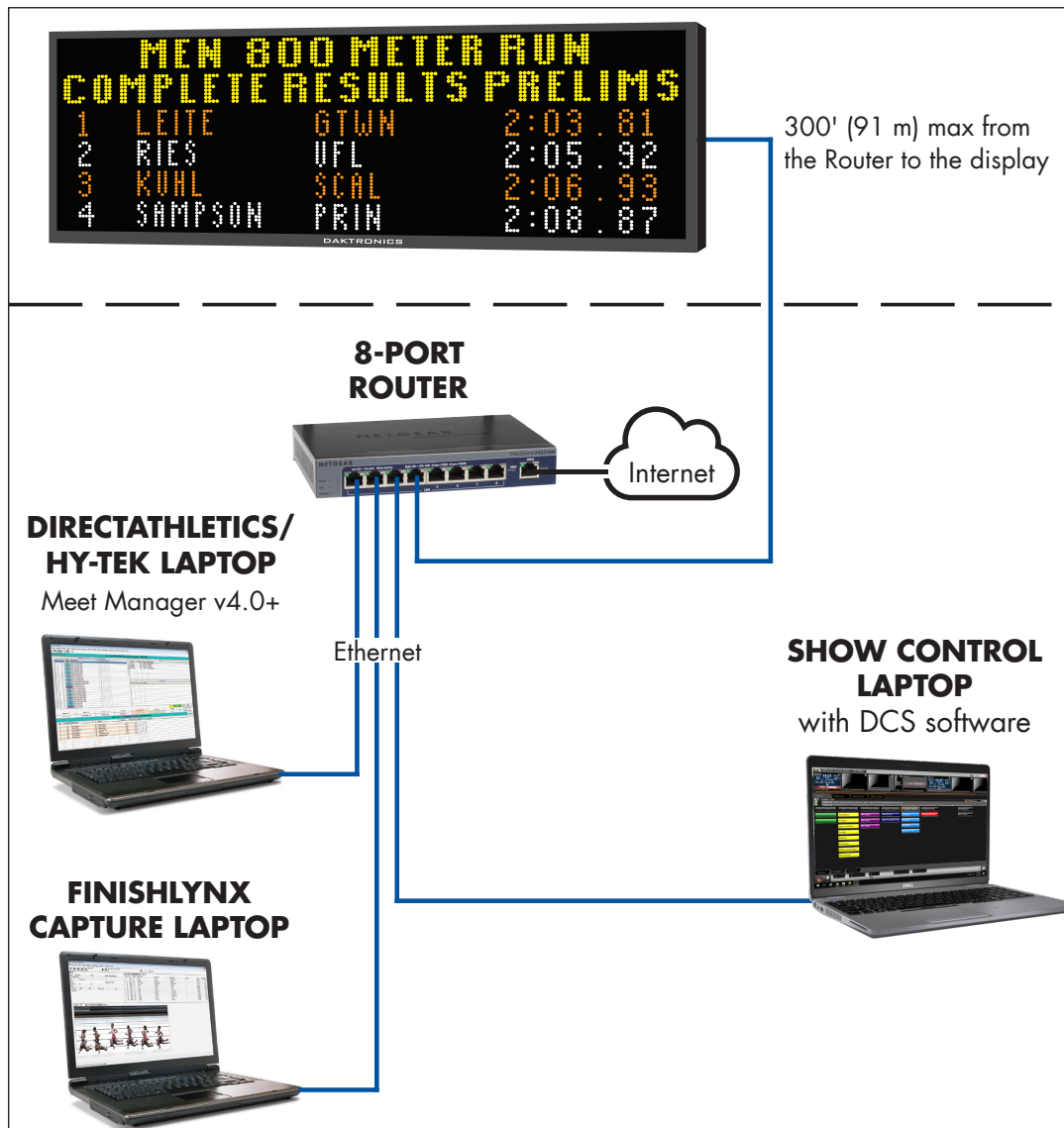


Figure 38: FinishLynx & Hy-Tek/DirectAthletics with Message Display

Refer to the message display manual for more information on routing signal to the display. Displays may be controlled wirelessly via Ethernet Bridge Radio. If there is a football/soccer scoreboard or a dedicated track scoreboard in addition to the message display, refer also to the scoreboard installation manual for internal signal connections.

When a USB-to-Serial adapter is being used on the FinishLynx computer, enter code **8602** on the All Sport 5000.

1. To access the connection settings in the FinishLynx Capture Station computer, open the software and go to **Scoreboard > Options**.
2. Click on the **Scoreboard** tab.
3. Click **New**.
4. Set up the Scoreboard options as follows (refer also to **Figure 39**):

- *Script*: "Dak-Extended.Iss"
- *Name*: "Capture Run & Results"
- *Code Set*: **Single Byte**
- *Serial Port*: **Network (UDP)**
- *Port*: "3002"
- *Running Time*: **Normal**
- *Results*: **Auto**
- *Paging* enabled; set the *Size* to the number of lanes that can be displayed on the matrix display; *Time* "5.0"

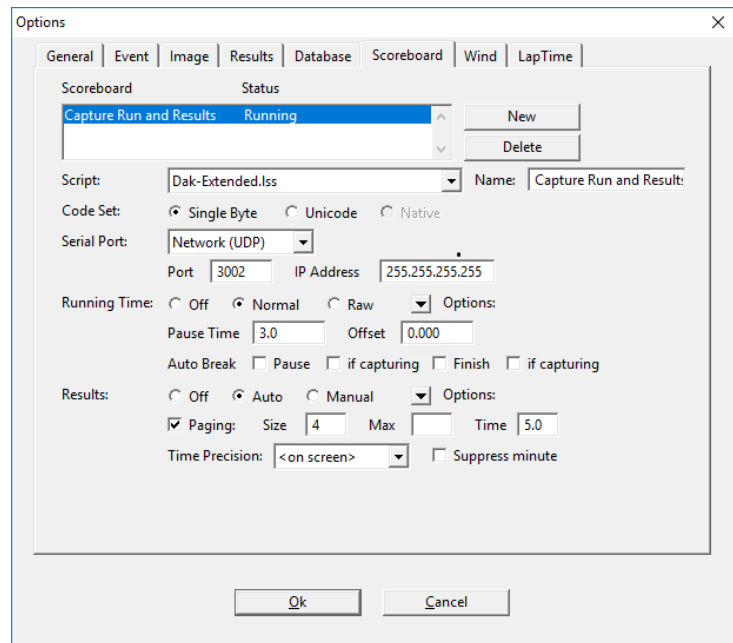


Figure 39: Scoreboard Options for Galaxy Via UDP/IP

IMPORTANT: With this setup, results and running time are being sent over the same network port of the FinishLynx computer system, and therefore CANNOT be displayed at the same time. Press **[ALT + S]** on the FinishLynx computer keyboard to stop transmitting running time and display results.

Fully Automatic Timing (FlashTiming)

The FlashTiming system consists of a personal computer, FlashTiming software, and a photo finish camera for Fully Automatic Timing (FAT). This setup displays running time, lane results, and event/heat information as RTD (Real Time Data) on a Daktronics LED message display.

In this setup, RTD (Real Time Data) is sent from the FlashTiming system directly to the display via a network UDP/IP connection. See **Figure 40** for typical components and connections.

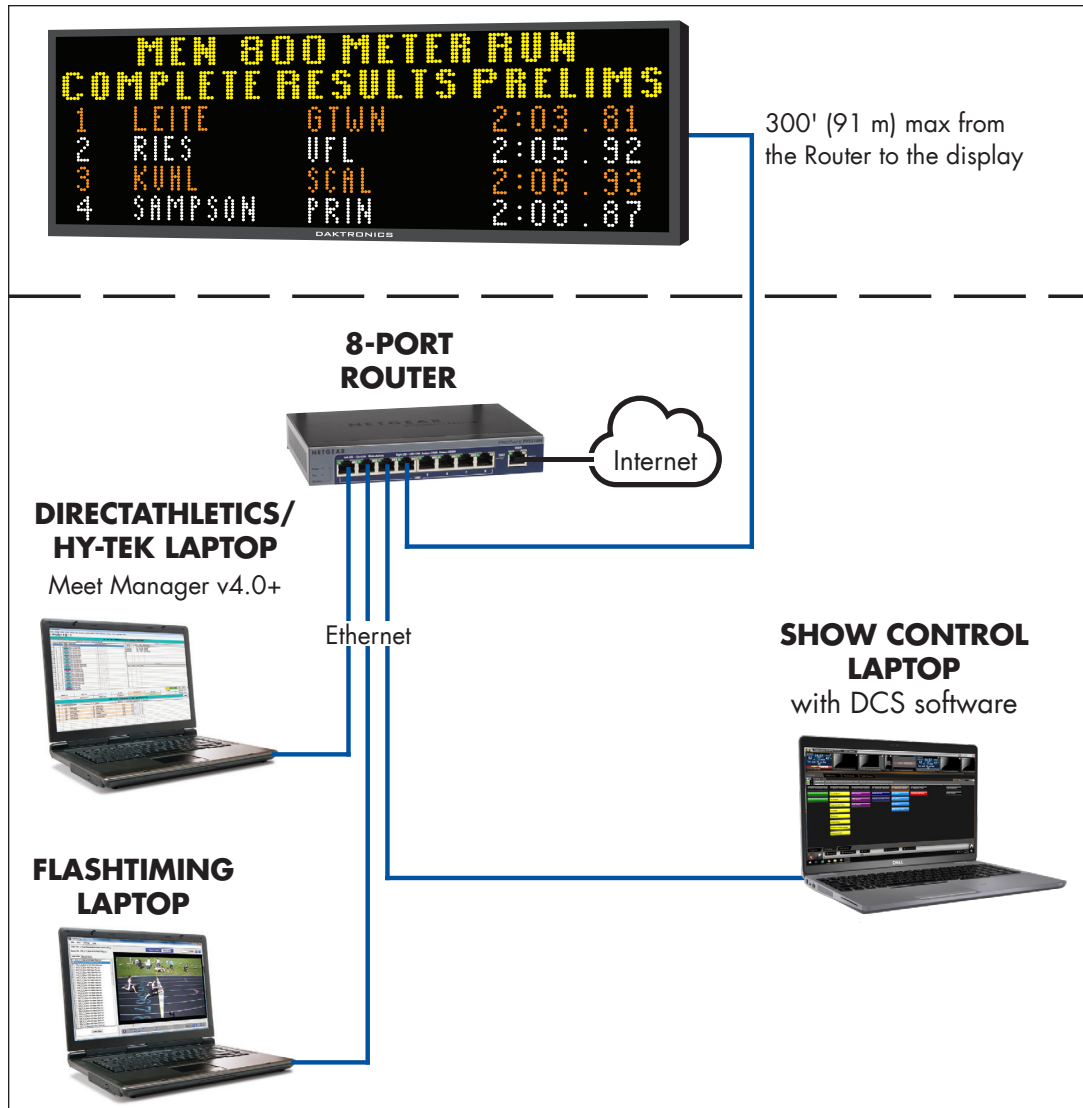


Figure 40: FlashTiming & Hy-Tek/DirectAthletics with Message Display

Refer to the message display manual for more information on routing signal to the display. Displays may be controlled wirelessly via Ethernet Bridge Radio. If there is a football/soccer scoreboard or a dedicated track scoreboard in addition to the message display, refer also to the scoreboard installation manual for internal signal connections.

1. To access the connection settings in FlashTiming, open the software and go to **Display > Daktronics - RaceClock**.
2. Click on **UDP Ethernet**, and set up the options as follows (**Figure 41**).
 - *Scoreboard IP Address*: The first 3 sets of numbers should match the display's IP address. Then use "255" as the last set of numbers.
 - *Scoreboard Port/Socket*: "3002"

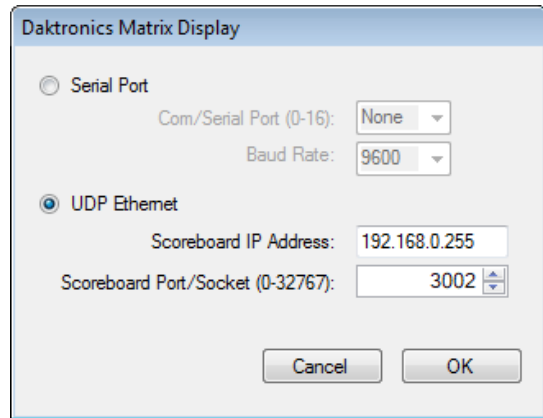


Figure 41: RaceClock & Matrix-Results Options

Click **OK** when finished to save the settings.

3. Go to **Display > Daktronics Matrix -Results**.
4. Click on **UDP Ethernet**, and set up the same options as **Step 2** and as shown in **Figure 41**. Click **OK** when finished to save the settings.
5. Go to **Display > Display Settings (Figure 42)**.
 - Set the *Lines of Text* to 1–29, depending on the RTD sequence.
 - Set the *Characters per Line* to 8–100, depending on the RTD sequence.
 - Set the *# of lines for Race Description* to 0, 1, or 2, depending on the RTD sequence.
 - All other settings are the user's preference.

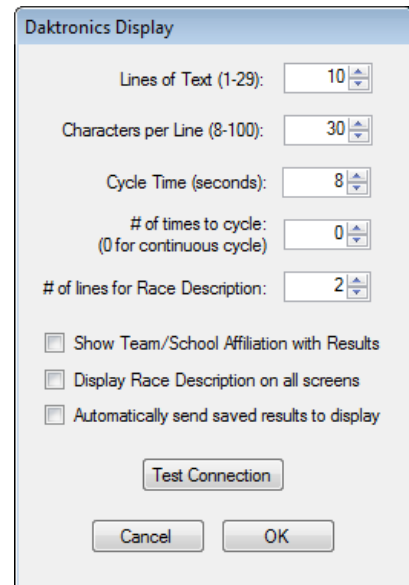


Figure 42: Display Settings

For assistance with creating RTD sequences, refer to **Section 5: Creating RTD Sequences (p.40)**.

IMPORTANT: With this setup, results and running time are being sent over the same network port of the FlashTiming computer system. If the clock is running on the display, it will briefly blank for 1/10 of a second when each result is sent. To avoid this, be sure to stop the running time before sending results.

Hy-Tek Results for Message Display

Hy-Tek Track & Field Meet Manager is a third-party results program. With its optional Alpha Scoreboard Interface, Hy-Tek can send start lists, results, and team scores in a standard RTD format for display on a Daktronics matrix display. If your Hy-Tek license does not include the Alpha Scoreboard Interface, please contact Hy-Tek to purchase it.

1. Open the Meet Manager program.
2. Click **Run** on the main menu.
3. Go to **Interfaces > Set-up > Scoreboard (Figure 43)**.
4. Select **Daktronics Full Matrix** and **UDP Ethernet**, and then click **OK**.
5. Go to **Interfaces > Scoreboard - Daktronics Full Matrix > Set UDP Port and IP Address**.
6. For the *Remote Scoreboard Port/Socket* option (Figure 44), enter "20000". Verify the *Remote Scoreboard IP Address* is "255.255.255.255", and then click **OK**.
7. Go to **Interfaces > Scoreboard – Daktronics Full Matrix > Customize (Figure 45)**.
 - Set the *Number of Rows for Header* to 1 or 2, depending on the RTD sequence.
 - Set the *Number of Rows for Lanes* to 1–29, depending on the RTD sequence.
 - Set the *Number of Characters per Row* to 1–100, depending on the RTD sequence.
 - All other settings are the user's preference.

For assistance with creating RTD sequences, refer to **Section 5: Creating RTD Sequences (p.40)**.

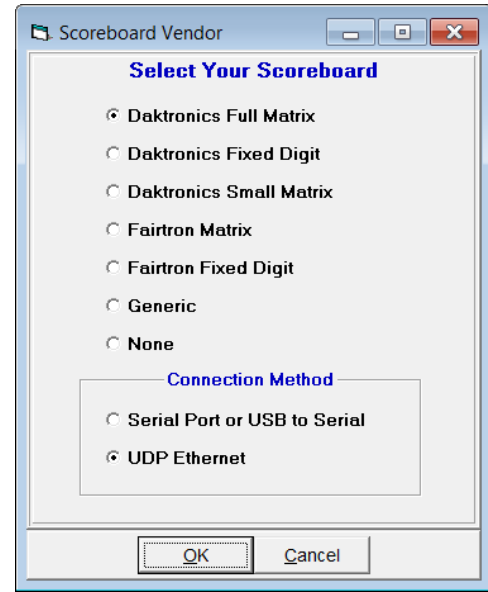


Figure 43: Scoreboard Vendor Selection

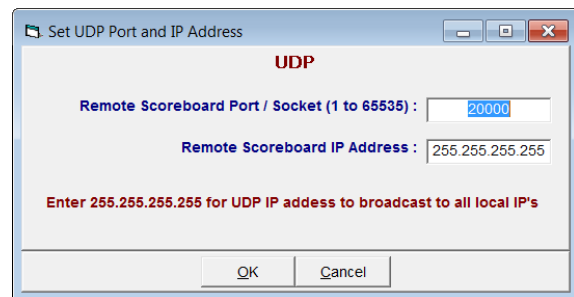


Figure 44: UDP Port for Daktronics Full Matrix

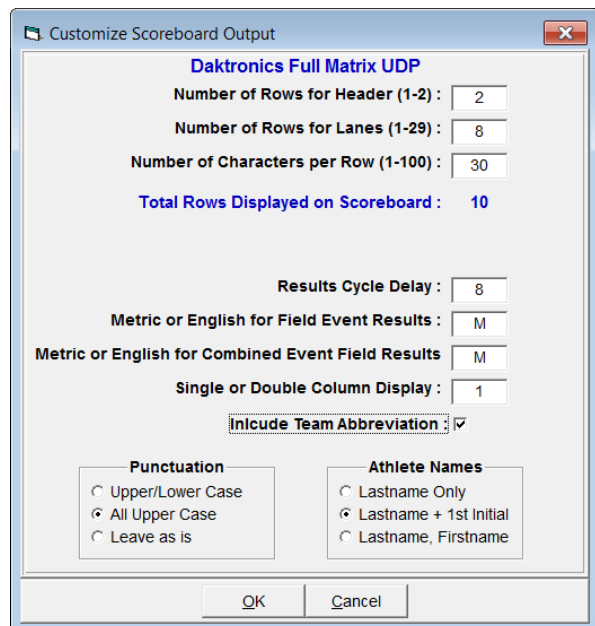


Figure 45: Customize Scoreboard Output - Daktronics Full Matrix (UDP)

Sending Start Lists, Results, & Team Scores from Hy-Tek

The most common method of operation from the Run Menu within the Hy-Tek software is as follows:

1. Get heat on screen and press **[Ctrl] + [F10]** to display start list.
2. Enter results for a heat, section, or flight.
3. Press **[Ctrl] + [F11]** to instantly display these results.
4. Press **[F5]** for next heat and repeat **Steps 1–3**.
5. After the results for the last heat, section, or flight are entered, press **[Ctrl] + [F12]** to display complete results for the round.

Any start list, result, or team score can be displayed at any time from the Run Menu by pressing **[Ctrl] + [F1]**. A selection box will appear as shown in **Figure 46**.

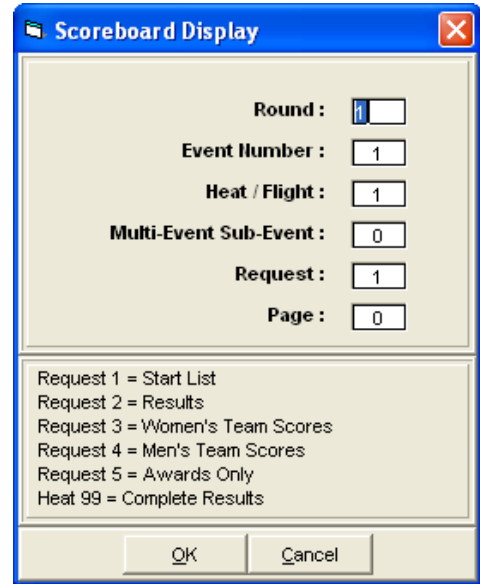


Figure 46: Scoreboard Display Requests

Request Choices

Start Lists and Results: Enter the desired *Round*, *Event Number*, and *Heat/Flight* and then enter a *Request* for a Start List (“1”) or Results (“2”). Entering “99” for the *Heat/Flight* and “2” for *Request* will show complete results for the selected round and event.

Combined-events: To display a combined-event, also enter the *Multi-Event Sub-Event* number. To display combined-event total scores for all sub-events, enter “99” for the *Heat/Flight* and “0” for *Multi-Event Sub-Event*.

Team Scores: Use Request “3” and “4” for team scores. If there are separate team scores for divisions, enter the division number in the *Heat/Flight* number field. For example, when scoring class A (division 1) and class AA (division 2) in the same meet, enter Request “3” and *Heat/Flight* “2” to get girls team scores for the AA division and enter Request “4” and *Heat/Flight* “1” to get boys team scores for the A division. If an event is a Cross Country (CC) event, be sure to also include the *Event Number* so that the software will show the CC team scores.

Award Ceremonies: If there are award ceremonies, enter “5” for *Request* along with the *Event Number*, and the award winners will be displayed for the event based on what was put in the Hy-Tek Meet Set-up Part B for number getting awards. If the event is set up as multi-age group, the awards for each age group will be displayed on a rotational basis.

Paging: If a particular request has more than one screen full of information, the “pages” are cycled. A *Page* number of “0” means cycle all pages normally. To continually display a particular page, enter the specific *Page* number. This can be useful when an announcer is calling out the entrants in a larger event, such as the 16-person mile.

MeetPro Results for Message Display

DirectAthletics MeetPro is a third-party results program that can send start lists, results, and team scores in a standard RTD format for display on a Daktronics message display.

1. Open the MeetPro program.
2. Go to **Interfaces > Scoreboard > Daktronics** (Figure 47).
3. In the *Daktronics Scoreboard Board Setup* window, use the following settings (refer also to **Figure 48**):
 - *Connection Type*: **Network**
 - *Port Type*: **UDP**
 - *IP Address*: "255.255.255.255" (default)
 - *Port*: "20000"
 - *Height*: set to the number of lanes that can be shown on the matrix display plus 1 header; example: if the display can show 8 lanes, set the height to "9"
 - *Width*: "100"
4. Refer to **Figure 48** for typical information to display for the *Run*, *Relay*, and *Field* data columns. Adjust the *Length* of the data fields to fit the display as needed.
5. Click **Save** when finished to save the settings.

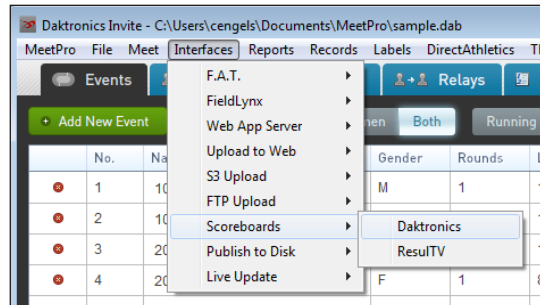


Figure 47: MeetPro Interfaces Menu

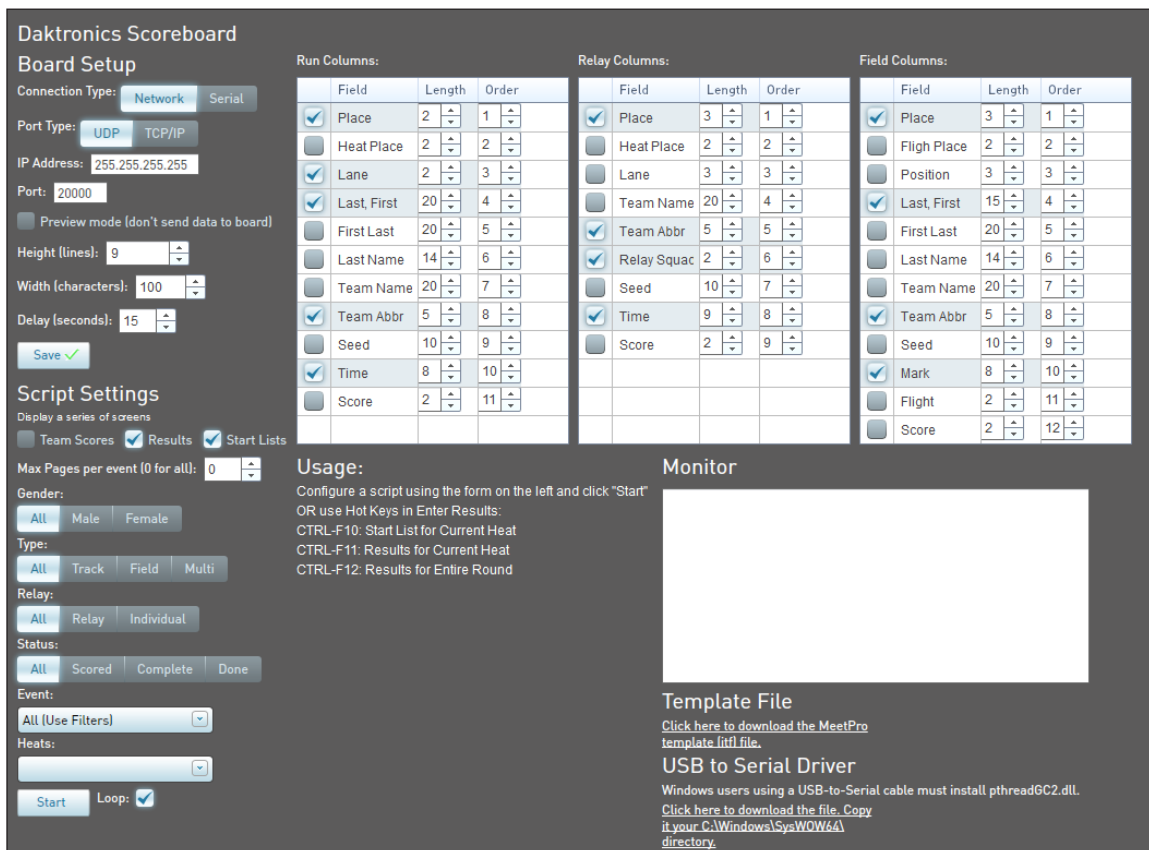


Figure 48: MeetPro Scoreboard Setup

Sending Start Lists & Results from DirectAthletics

1. Go to **Interfaces > Scoreboard > Daktronics** (Figure 32).
2. In the *Daktronics Scoreboard Board Setup* window (Figure 33), use the Script Settings or the shortcut keys for displaying the *Start List for Current Heat*, *Results for Current Heat*, and *Results for Entire Round*.

Daktronics Communication Server (DCS) Installation & Setup

The DCS program is required to convert the data output from Hy-Tek or DirectAthletics into a format that the Galaxy (M3) controller can show on the display.

1. Insert the Daktronics Communication Server (DCS) installation CD (part # 0A-1453-0035) into the CD-ROM drive of the Show Control computer (typically "D:").
2. Press the Windows key [⊞] + [E] to open File Explorer. Double-click your CD-ROM drive, and then double-click the "dcs3" file (Figure 49).

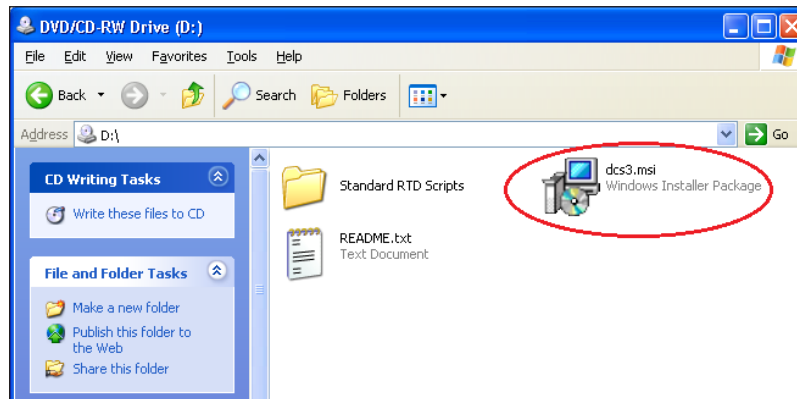


Figure 49: DCS Installation Folder

3. Follow the onscreen instructions to complete the installation.
4. Once the installation is complete, double-click the shortcut icon on the desktop to run the program. An icon will also appear in the taskbar.



Note: After the initial installation, each time the computer is started, DCS should begin running automatically (visible in the taskbar).

5. Click the **Ports** button on the left side of the application window (Figure 50).

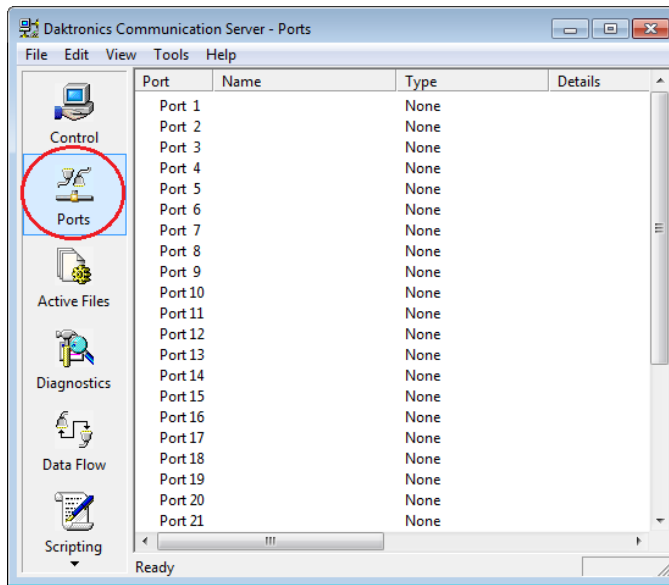


Figure 50: DCS Ports

- Double-click **Port 2**. The *Port Configuration* window will open. Configure Port 2 as follows and as shown in **Figure 51**:
 - Name: "Hy-Tek", "DirectAthletics", or another descriptive name for the meet management software in use
 - Type: **UDP/IP Socket**
 - Port: "20000"
 - Leave all other settings as is.

Click **OK** when finished.

- Double-click **Port 5** and the *Port Configuration* window will open again. Configure Port 5 as follows and as shown in **Figure 52**:

- Name: must be "Output"
- Type: **UDP/IP Socket**
- Port: "3002"
- Click **Advanced >>** and set the Mode to **Transmit only**.
- Leave all other settings as is.

Click **OK** when finished.

- Click the **Active Files** button on the left side of the application window (**Figure 50**).

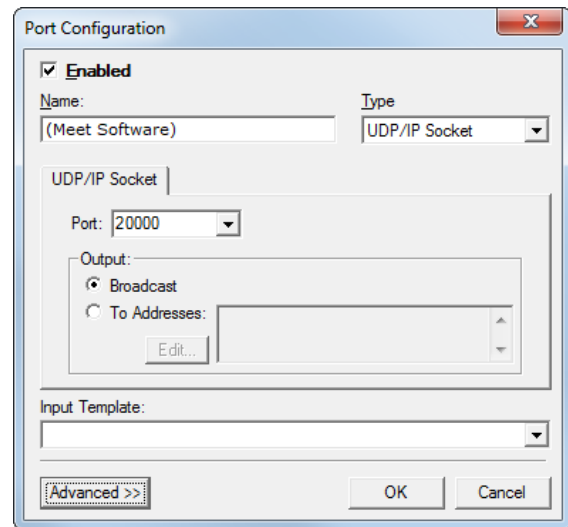


Figure 51: Port 2 Configuration

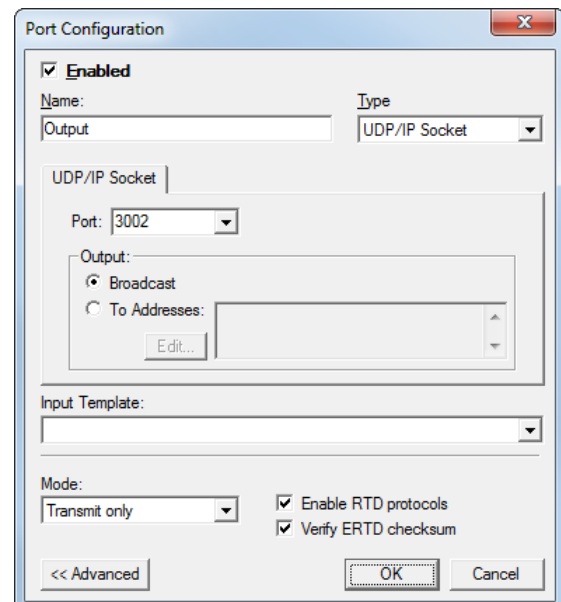


Figure 52: Port 5 Configuration

- Right-click in the area that says *No items to display*, and select **Insert File (Figure 53)**.

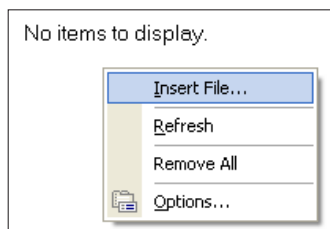


Figure 53: Insert File

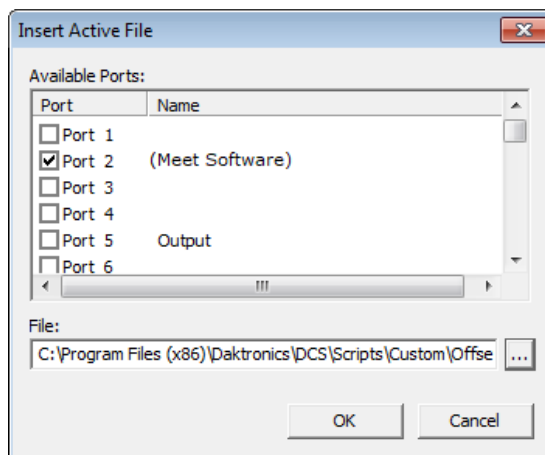


Figure 54: Insert Active File

- In the *Insert Active File* window (**Figure 54**):
 - Check the box next to **Port 2**.
 - Click the [...] button and browse to "C:\Program Files (x86)\Daktronics\DCS\Scripts\Custom" and select "OffsetStandardRTD5000.dds"

Click **OK** when finished.

Once correctly configured, the **Ports** tab should look like **Figure 55**. Remember that **Port 2** will be named for the meet management software in use.

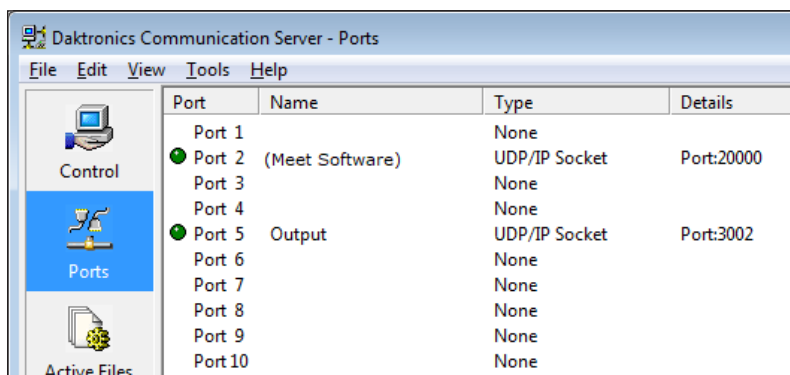


Figure 55: Configured Ports

When data is sent from Hy-Tek/DirectAthletics, it should now go out to the display. If there is more than one Ethernet connection configured on the computer, for example one wireless and one wired, you may need to disable the unused network, or change the order of preference to ensure that the information is delivered to the desired network.

FAQ

What information can be shown on the message display?

Common header fields are Event Title, Running Time, and Event/Heat. Common line fields are ID #, Lane, Name, Affiliation, Time, and Place.

What additional FinishLynx software is needed to send data to Daktronics message display?

A software plug-in called "Network COM Port" (NCP) will be need to be purchased from FinishLynx. Refer to contact information in **Section 7: Additional Resources (p.54)**.

What additional Hy-Tek software is needed to send data to a Daktronics message display?

A software plug-in for Hy-Tek Meet Manager called "Alpha Scoreboard" will need to be purchased from Hy-Tek. Refer to contact information in **Section 7: Additional Resources (p.54)**.

What additional FlashTiming software is needed to send data to a Daktronics message display?

None

Can FinishLynx/FlashTiming and Hy-Tek data be wirelessly sent to a Galaxy display?

Yes. However, a wired connection is preferred. Wireless communication is possible with server/client Ethernet Bridge Radios. A maximum distance of 1500' (457 m) with direct line of sight between radios is required.

What is the recommended data to show on the message display?

Hy-Tek data is typically considered the Official Results and therefore is the recommended data source to display.

Can I send data from both FinishLynx/FlashTiming and Hy-Tek?

Yes. However, sending data from FinishLynx/FlashTiming and Hy-Tek will require coordination between their operators and the message display operator to ensure the presentation being played matches the data being sent. Hy-Tek data also requires the setup of DCS. Refer to **Daktronics Communication Server (DCS) Installation & Setup (p.35)**.

Is there an advantage of showing results from only one data source?

Yes. The advantage of using one data source is that the results display presentation can be started at the beginning of the meet and left running all meet, with no additional effort from the message display operator.

What does a typical Hy-Tek/DirectAthletics display sequence look like?

Refer to the image below:

1(or 2) Lines of Header Info				Running Time	
Men 800 Meter				0.0	
1	D	Solomon	USC	1:47	.76
2		Coachman	MSST	1:47	.89
3	R	Brown	UWA	1:48	.41
4	S	Smith	ORAL	1:48	.91
5	L	Brooks	TXSA	1:49	.17
6	Y	Kincaid	UTN	1:49	.29
7	K	Smith	UNI	1:49	.65
8	D	Emrani	AMDC	1:49	.67

Up to 29 Lines of Lane Info

What does a typical FinishLynx display sequence look like?

Refer to the image below:

1(or 2) Lines of Header Info

Running Time



Lane	Name	Affiliation	Time	Place
	Boys 3000 Meter			0.0
1	Torres	Silve	8:47.57	1
16	Rodriguez	Missi	8:52.03	2
12	Hansen	Saint	8:52.75	3
9	Henstorf	Amo V	8:54.38	4
7	Wellman	Saint	8:54.96	5
2	Trueba	Hunti	8:56.24	6
5	Embaye	Logan	8:57.46	7
19	Miramonte	Golde	8:57.67	8

Up to 10 Lines
of Lane Info

Lane Name Affiliation Time Place

5 Creating RTD Sequences

Hy-Tek Results with Running Time

1. On the Show Control computer, open Content Studio and create a new presentation.
2. Click on the **Dynamic Data Library** tab, and then select the **Track and Field** Category for the timing system in use (FinishLynx or FlashTiming).
3. Double-click the “Hy-tek Results” folder to see the list of all available data fields (**Figure 56**).
4. Click and drag the “Line 1” data field onto the blank presentation.
5. With the “Line 1” data field still selected, set the font to the best fit on the presentation. The recommended fonts differ based on the display type/controller:
 - **Galaxy/M3:** any Venus Fixed Width font
 - **Live Video/DMP-8000:** Courier New or Lucida Console

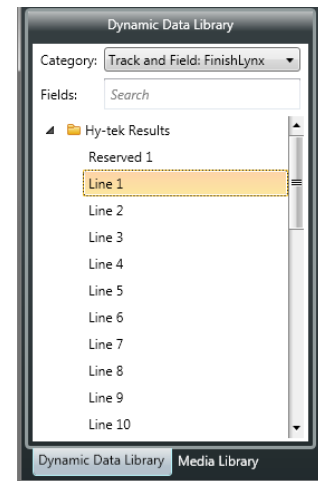


Figure 56: Hy-tek Results

Note: Ensure that Smooth Text is disabled for all data fields.

6. With the “Line 1” data field still selected, click on the **Field Properties** tab (**Figure 57**). Adjust the *Length* to best fit the presentation layout. The *Length* value should match the *Number of Characters per Row* set up in Meet Manager. Refer back to **Figure 30** or **Figure 45**. While adjusting the width of the data field, leave a couple pixels of space on either side to ensure that the edges are not touching any sides of the sign boundary.

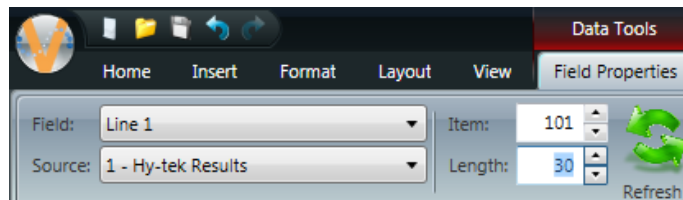


Figure 57: Data Field Properties (Galaxy/M3)

Note: For Live Video/DMP-8000 presentations, it is not possible to adjust the *Length*. Instead, click and drag the edges of a data field box to shorten it.

7. Repeat **Steps 4–6** to add additional “Line #” data fields.
8. To add the current running time, click on the “Line 1” data field, and go to the **Field Properties** tab to shorten the length by 8-10 characters (depending on the timer precision).
9. On the **Dynamic Data Library** tab, double-click the “FinishLynx Capture-Running Time” folder (**Figure 62**) or the “FlashTiming Run Time” folder (**Figure 64**) under the appropriate *Category*.
10. Click and drag the “Running Time” data field into the presentation next to the top line of header information. If desired, shorten this field to match the timer precision.

The example presentation shown in **Figure 58** has 10 lines of data plus running time.

The first 2 lines are for event header information. The next 8 lines are for lane results information.

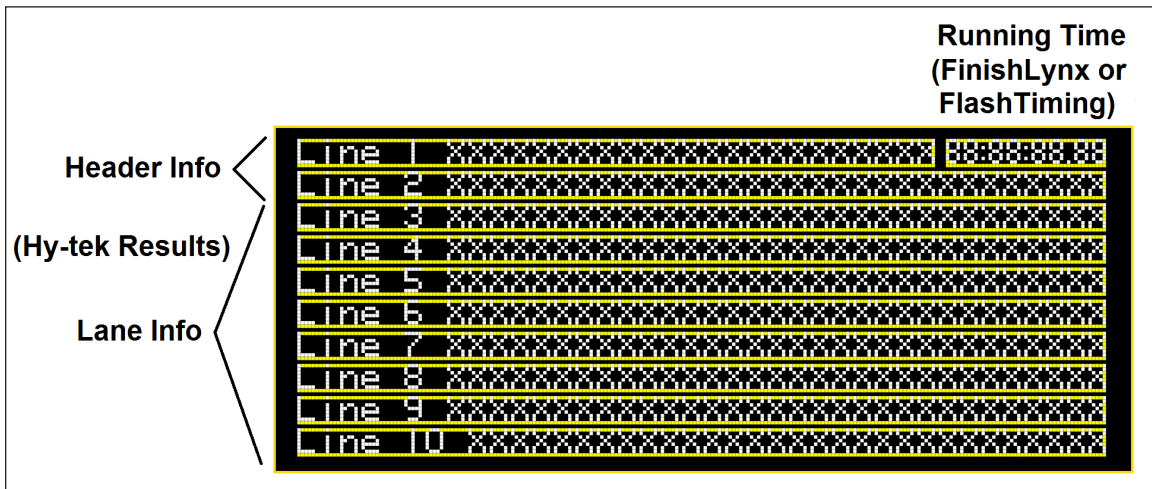


Figure 58: Presentation with Hy-Tek Data Fields & Running Time

If the display isn't tall enough (or the font is too large) to display all of the lanes on a track at once, Meet Manager will automatically page the results as long as the *Number of Rows for Lanes* value matches the number of data fields in the presentation. Refer back to **Figure 30** or **Figure 45**.

DirectAthletics Results with Running Time

1. On the Show Control computer, open Content Studio and create a new presentation.
2. Click on the **Dynamic Data Library** tab, and then select the **Track and Field** Category for the timing system in use (FinishLynx or FlashTiming).
3. Double-click the "DirectAthletics Results" folder to see the list of all available data fields (**Figure 59**).
4. Click and drag the "Line 1 - Lane Data" data field onto the blank presentation.
5. With the "Line 1 - Lane Data" data field still selected, set the font to the best fit on the presentation. The recommended fonts differ based on the display type/controller:
 - **Galaxy/M3:** any Venus Fixed Width font
 - **Live Video/DMP-8000:** Courier New or Lucida Console

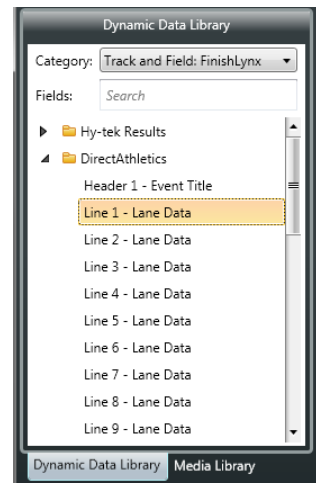


Figure 59: DirectAthletics Results

Note: Ensure that Smooth Text is disabled for all data fields.

6. With the "Line 1 - Lane Data" data field still selected, click on the **Field Properties** tab (**Figure 60**). Adjust the *Length* to best fit the presentation layout. The *Length* value should match the *Width* set up in MeetPro. Refer back to **Figure 33** or **Figure 48**. While adjusting the width of the data field, leave a couple pixels of space on either side to ensure that the edges are not touching any sides of the sign boundary.

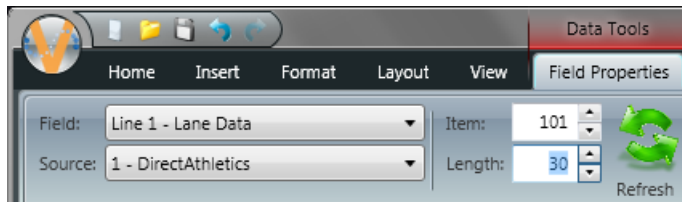


Figure 60: Data Field Properties (Galaxy/M3)

Note: For Live Video/DMP-8000 presentations, it is not possible to adjust the *Length*. Instead, click and drag the edges of a data field box to shorten it.

7. Repeat **Steps 4–6** to add additional “Line # - Lane Data” data fields.
8. Click and drag the “Header 1 - Event Title” data field onto the presentation.
9. To add the current running time, click on the “Header 1 - Event Title” data field, and go to the **Field Properties** tab to shorten the length by 8-10 characters (depending on the timer precision).
10. On the **Dynamic Data Library** tab, double-click the “FinishLynx Capture-Running Time” folder (**Figure 62**) or the “FlashTiming Run Time” folder (**Figure 64**) under the appropriate *Category*.
11. Click and drag the “Running Time” data field into the presentation next to the top line of header information. If desired, shorten this field to match the timer precision.

The example presentation shown in **Figure 61** has 9 lines of data plus running time. The first line is for event header information. The next 8 lines are for lane results information.

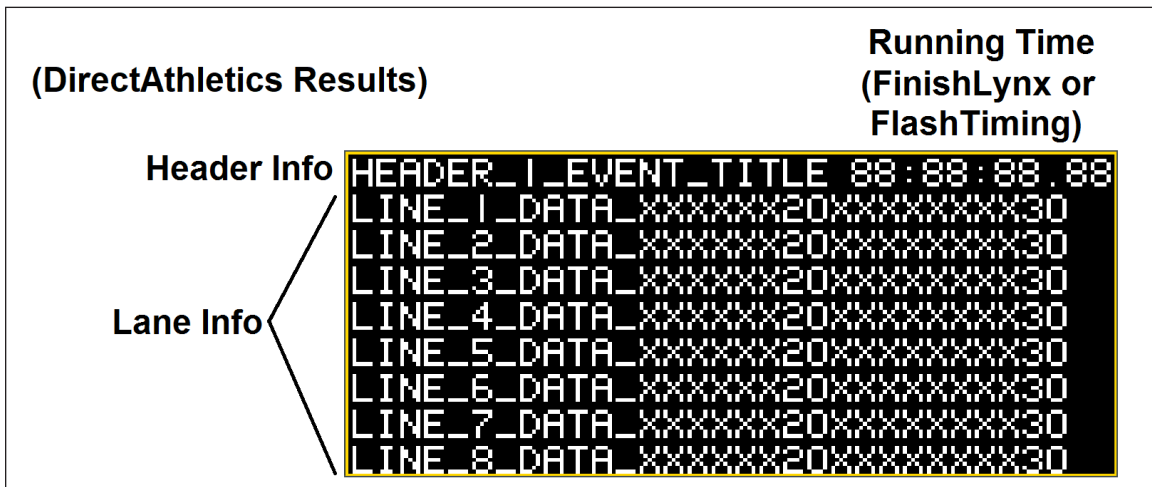


Figure 61: Presentation with DirectAthletics Data Fields & Running Time

If the display isn't tall enough (or the font is too large) to display all of the lanes on a track at once, MeetPro will automatically page the results as long as the *Height* value matches the number of data fields in the presentation. Refer back to **Figure 33** or **Figure 48**.

FinishLynx Results with Running Time

1. On the Show Control computer, open Content Studio and create a new presentation.
2. Click on the **Dynamic Data Library** tab, and then select the **Track and Field: FinishLynx Category**.
3. Double-click the "FinishLynx Capture-Running Time" folder to see the list of all available data fields (**Figure 62**).
4. Click and drag the "Running Time" data field into the blank presentation.
5. Double-click the "FinishLynx Capture-Results" folder to see the list of all available data fields.
6. Click and drag the desired data fields onto the presentation. Arrange the fields as shown in **Figure 63**.
7. For data fields that are too long, click on the **Field Properties** tab, and adjust the *Length* to best fit the presentation layout. While adjusting the width of the data field, leave a couple pixels of space on either side to ensure that the edges are not touching any sides of the sign boundary.

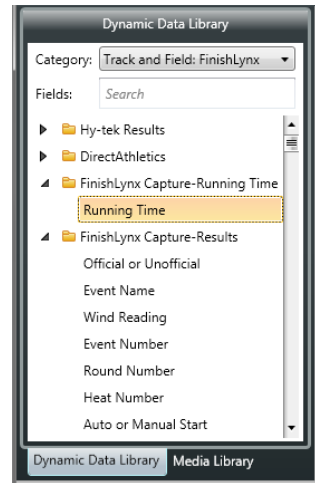


Figure 62: FinishLynx Capture-Running Time

Note: For Live Video/DMP-8000 presentations, it is not possible to adjust the *Length*. Instead, click and drag the edges of a data field box to shorten it.

8. Select each data field, and set the font to the best fit on the presentation. The recommended fonts differ based on the display type/controller:
 - **Galaxy/M3:** any Venus Fixed Width font
 - **Live Video/DMP-8000:** Courier New or Lucida Console

Note: Ensure that Smooth Text is disabled for all data fields.

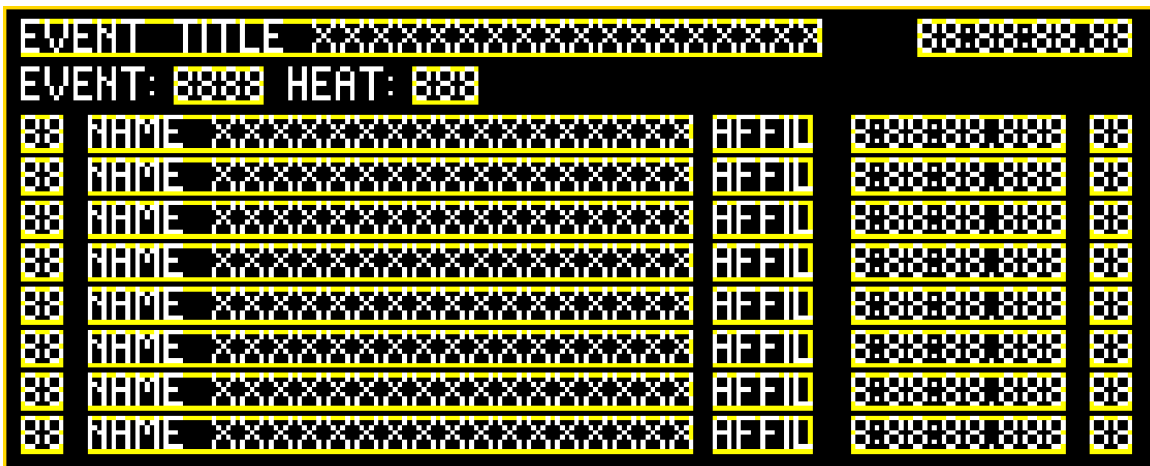


Figure 63: Presentation with FinishLynx Data Fields

In the example presentation shown in **Figure 63**, only the running time comes from the "FinishLynx Capture-Running Time" folder; every other data field comes from the "FinishLynx Capture-Results" folder. Note that "EVENT:" and "HEAT:" are not data fields; these are regular text boxes set to the same font and size to match the data fields.

If the display isn't tall enough (or the font is too large) to display all of the lanes on a track at once, FinishLynx will automatically page the results as long as the *Paging Size* value matches the number of data fields in the presentation. Refer back to **Figure 22** or **Figure 39**.

FlashTiming Results with Running Time

1. On the Show Control computer, open Content Studio and create a new presentation.
2. Click on the **Dynamic Data Library** tab, and then select the **Track and Field: FlashTiming** Category.
3. Double-click the "FlashTiming Results" folder to see the list of all available data fields (**Figure 64**).
4. Click and drag the "Header 1 - Event Title" data field onto the blank presentation.
5. With the "Header 1" data field still selected, set the font to the best fit on the presentation. The recommended fonts differ based on the display type/controller:
 - **Galaxy/M3:** any Venus Fixed Width font
 - **Live Video/DMP-8000:** Courier New or Lucida Console

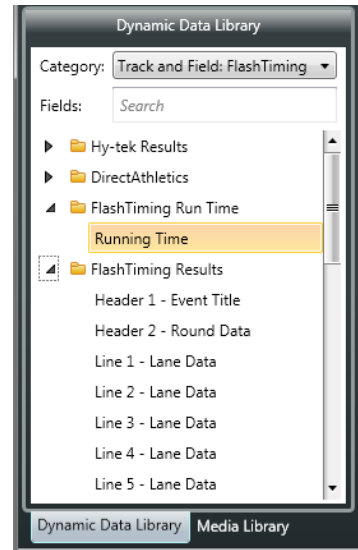


Figure 64: FlashTiming Folders

Note: Ensure that Smooth Text is disabled for all data fields.

6. With the "Header 1 - Event Title" data field still selected, click on the **Field Properties** tab. Adjust the *Length* to best fit the presentation layout. The *Length* value should match the *Characters per Line* set up in FlashTiming. Refer back to **Figure 27** or **Figure 42**. While adjusting the width of the data field, leave a couple pixels of space on either side to ensure that the edges are not touching any sides of the sign boundary.

Note: For Live Video/DMP-8000 presentations, it is not possible to adjust the *Length*. Instead, click and drag the edges of a data field box to shorten it.

7. Repeat **Steps 4–6** to add "Header 2 - Round Data" (if desired) and each "Line # - Lane Data" field.
8. To add the current running time, click on the "Header 1 - Event Title" data field, and go to the **Field Properties** tab to shorten the length by 8-10 characters (depending on the timer precision).
9. On the **Dynamic Data Library** tab, double-click the "FlashTiming Run Time" folder.
10. Click and drag the "Running Time" data field into the presentation next to the top line of header information. If desired, shorten this field to match the timer precision.

The example presentation shown in **Figure 65** has 2 lines of header information and 8 lines of lane results information. Only the running time comes from the "FlashTiming Run Time" folder; every other data field comes from the "FlashTiming Results" folder.

Header 1	Event Title	XXXXXXXXXX	XXXXXXXXXX
Header 2	Round	DataXXXXXXXXXX	XXXXXXXXXX
Line 1	Data	XXXXXXXXXX	XXXXXXXXXX
Line 2	Data	XXXXXXXXXX	XXXXXXXXXX
Line 3	Data	XXXXXXXXXX	XXXXXXXXXX
Line 4	Data	XXXXXXXXXX	XXXXXXXXXX
Line 5	Data	XXXXXXXXXX	XXXXXXXXXX
Line 6	Data	XXXXXXXXXX	XXXXXXXXXX
Line 7	Data	XXXXXXXXXX	XXXXXXXXXX
Line 8	Data	XXXXXXXXXX	XXXXXXXXXX

Figure 65: Presentation with FlashTiming Data Fields

If the display isn't tall enough (or the font is too large) to display all of the lanes on a track at once, FlashTiming will page the results as long as the *Lines of Text* value matches the number of Lane Data fields in the presentation. Refer back to **Figure 27** or **Figure 42**.

6 FieldLynx Setup & Sequence Creation

FieldLynx Setup for Portable Timer

This setup will display FieldLynx competitor results on a Daktronics portable timing display. See **Figure 66** for typical components and connections.

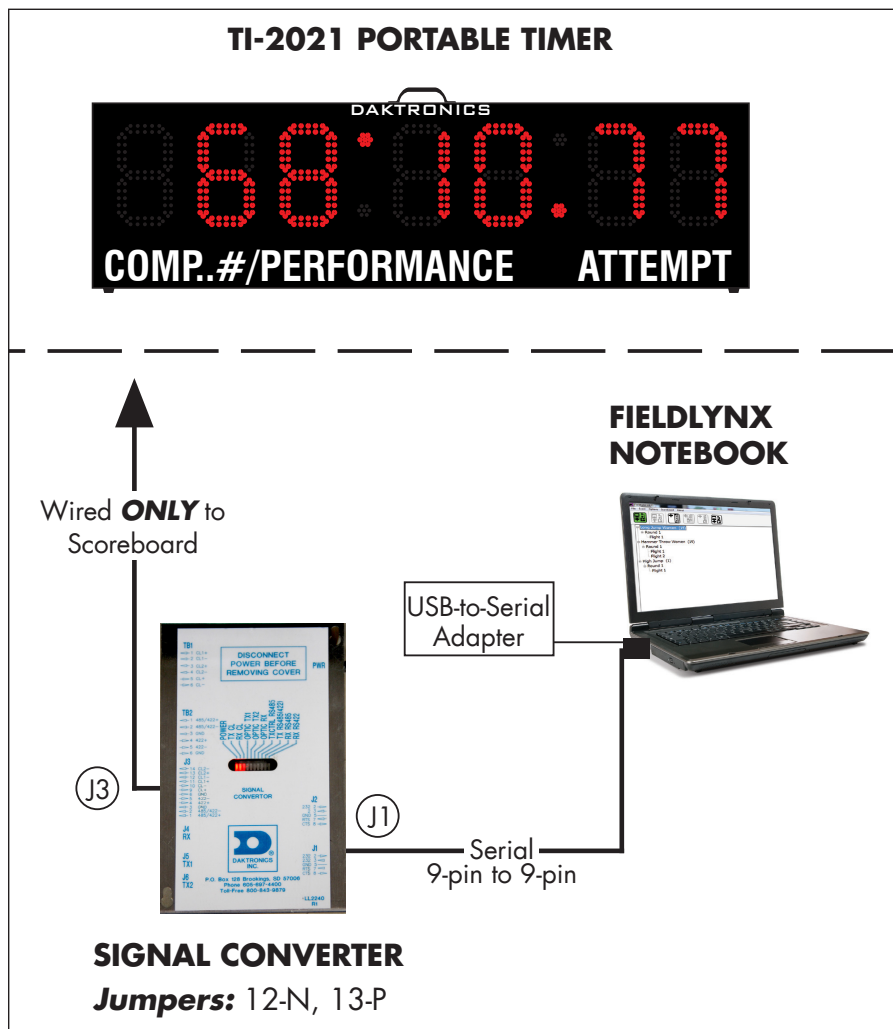


Figure 66: FieldLynx with Portable Timer

In this setup, the display is typically sitting in the infield.

1. Connect the signal converter kit (part # 0A-1125-0007) between the USB-to-Serial adapter on the FieldLynx notebook and the input jack on the timing display.
2. Open the FieldLynx program.
3. To access the connection settings in FieldLynx, open the software and go to **Options > Preferences** (**Figure 67**).
4. Click on the **Scoreboard** tab, and then click **New** (**Figure 68**).

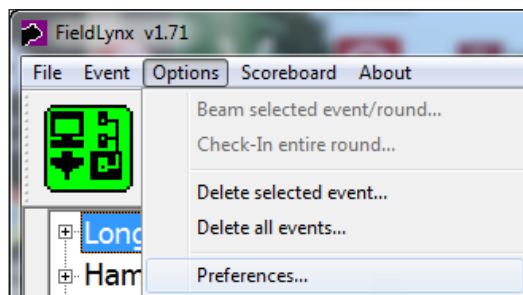


Figure 67: FieldLynx Options Menu

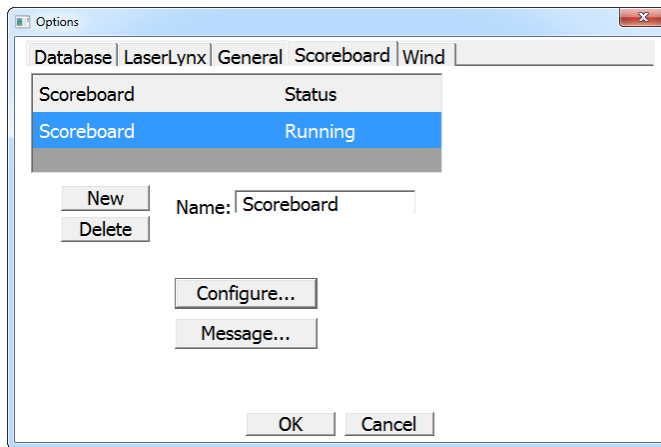


Figure 68: Scoreboard Options

5. Click **Configure**. In the *Configure Scoreboard* window, select the correct script files as shown below and in **Figure 69**:

- *Metric*: **DakTI2021_met.lss**
- *English*: **DakTI2021_eng.lss**
- *Standings*: **DakTI2021_met.lss**

Ensure *Code Set* is **Single Byte**.

6. Click **Communication**. In the *Communication* window, click **Serial** and select the correct settings as shown below and in **Figure 70**:

- *COM Port*: select the **COM** port outputting to the timing display
- *Baud Rate*: **19200**
- *Parity*: **None**
- *Bits Per Char*: **8**
- *Stop Bits*: **1**
- *Flow Control*: **None**

7. Click **OK** to exit the *Communication* window, then click **OK** once more to exit the *Configure Scoreboard* window.

8. Restart the FieldLynx program. Go to **Options > Preferences** and click on the **Scoreboard** tab again to verify the *Status* shows "Running" (**Figure 68**).

9. With an event open in FieldLynx, click the button shown in **Figure 71** to output the mark data.

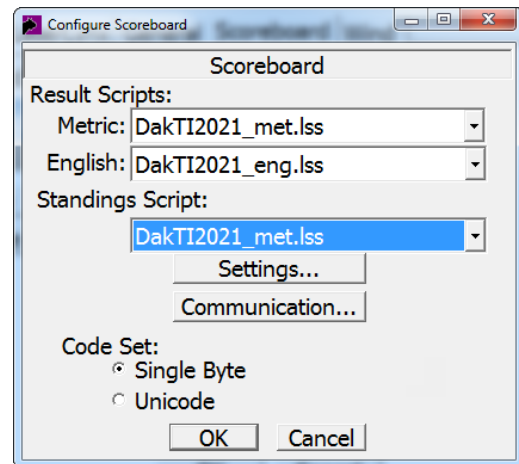


Figure 69: Configure Scoreboard

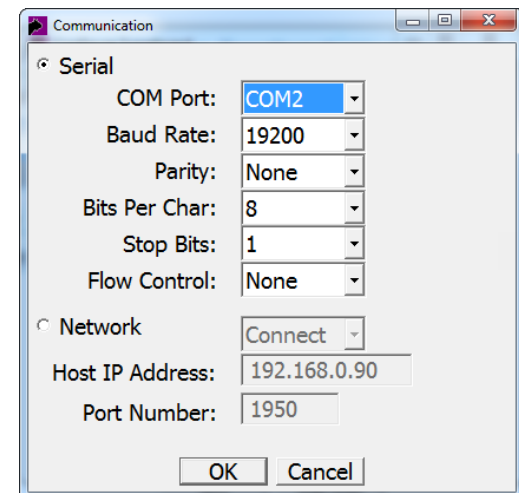


Figure 70: Scoreboard Communication

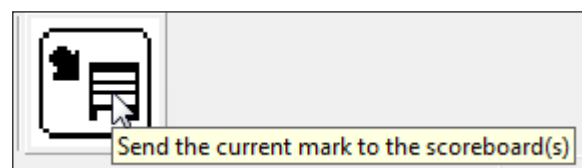


Figure 71: Send Mark

FieldLynx Setup for LED Message Display

This setup will display FieldLynx competitor results on a Daktronics message display. See **Figure 72** for typical components and connections.

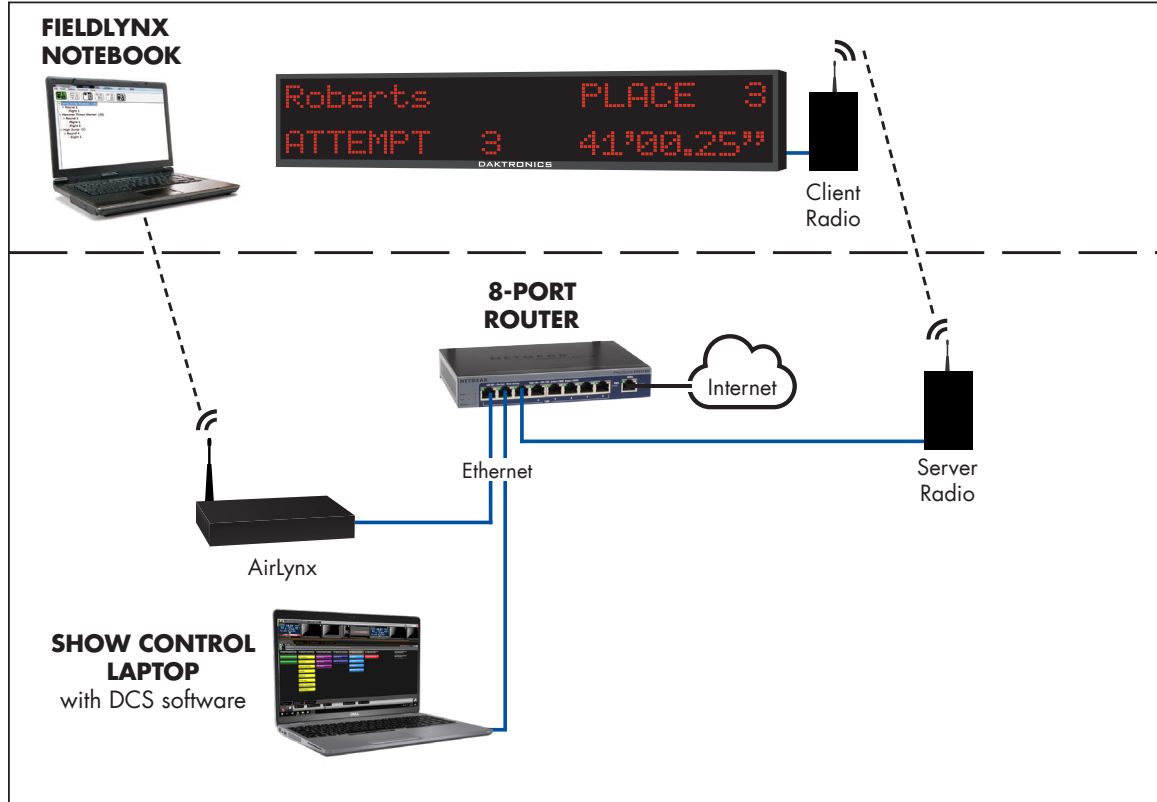


Figure 72: FieldLynx with Portable Timer

In this setup, the display is typically sitting in the infield. Displays are typically controlled wirelessly via Ethernet Bridge Radio, but wired control is also available. Refer to the message display manual for more information on routing signal to the display.

1. Open the FieldLynx program.
2. To access the connection settings in FieldLynx, open the software and go to **Options > Preferences (Figure 73)**.
3. Click on the **Scoreboard** tab, and then click **New (Figure 74)**.

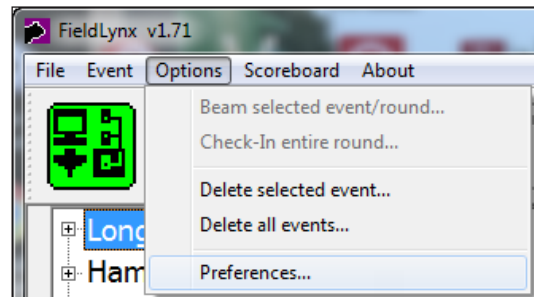


Figure 73: FieldLynx Options Menu

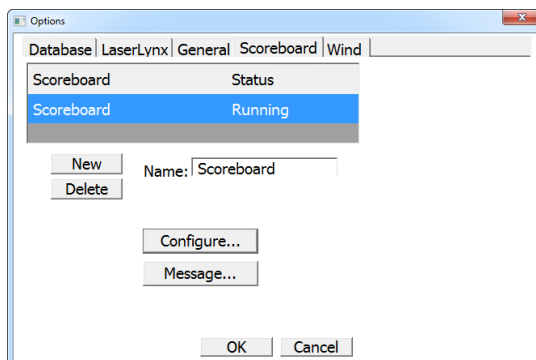


Figure 74: Scoreboard Options

4. Click **Configure**. In the *Configure Scoreboard* window, select the correct script files as shown below and in **Figure 75**:
 - *Metric*: **Dak_MC_Fieldlynx.Iss**
 - *English*: **Dak_MC_Fieldlynx.Iss**
 - *Standings*: **Dak_MC_Fieldlynx.Iss**

Ensure *Code Set* is **Single Byte**.

5. Click **Communication**. In the *Communication* window, click **Network** and select the correct settings as shown below and in **Figure 76**:

- *Host IP Address*: "192.168.0.122"
- *Port Number*: "3005"

6. Click **OK** to exit the *Communication* window, then click **OK** once more to exit the *Configure Scoreboard* window.

7. Restart the FieldLynx program. Go to **Options > Preferences** and click on the **Scoreboard** tab again to verify the *Status* shows "Running" (**Figure 74**).

8. Refer to **Daktronics Communication Server (DCS) Installation & Setup (p.50)** to complete the communication setup.

9. With an event open in FieldLynx, click the button shown in **Figure 77** to output the mark data.

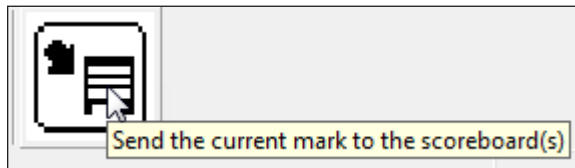


Figure 77: Send Mark

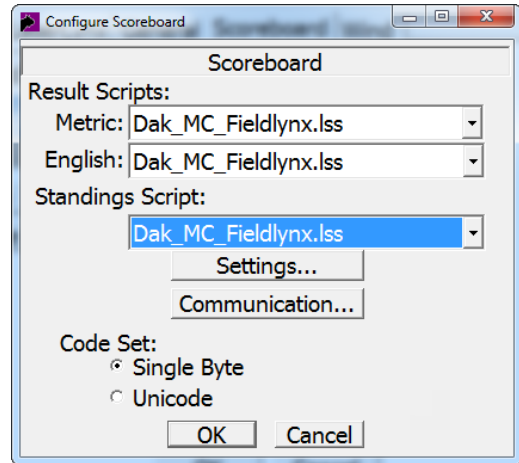


Figure 75: Configure Scoreboard

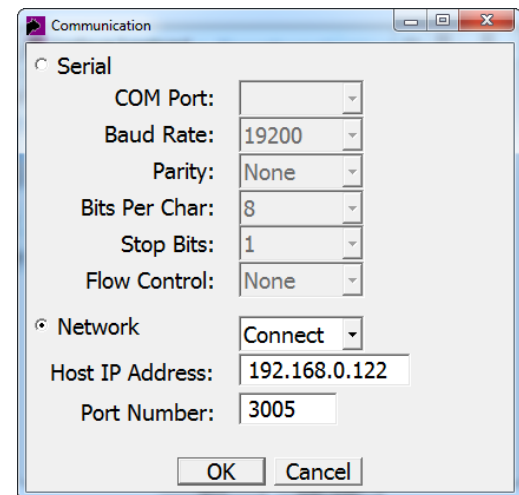


Figure 76: Scoreboard Communication

Daktronics Communication Server (DCS) Installation & Setup

The DCS program is required to convert the data output from FieldLynx into a format that the Galaxy (M3) controller can show on the display.

1. Insert the Daktronics Communication Server (DCS) installation CD (part # 0A-1453-0035) into the CD-ROM drive of the Show Control computer (typically "D:").
2. Press the Windows key [Windows] + [E] to open File Explorer. Double-click your CD-ROM drive, and then double-click the "dcs3" file (**Figure 78**).

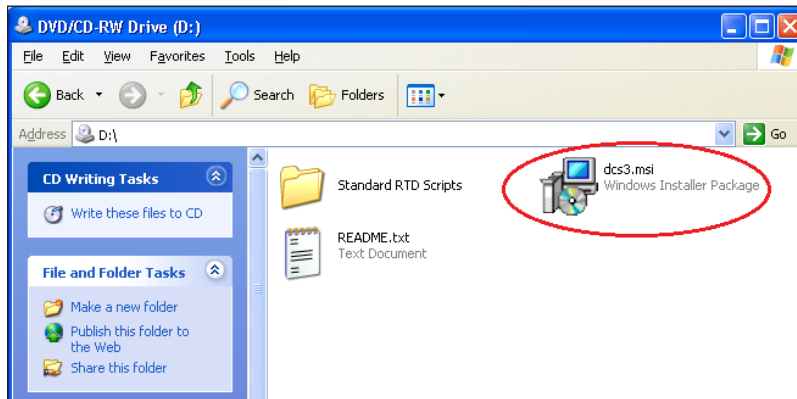


Figure 78: DCS Installation Folder

3. Follow the onscreen instructions to complete the installation.
4. Once the installation is complete, double-click the shortcut icon on the desktop to run the program. An icon will also appear in the taskbar.



Note: After the initial installation, each time the computer is started, DCS should begin running automatically (visible in the taskbar).

5. Click the **Ports** button on the left side of the application window (**Figure 79**).

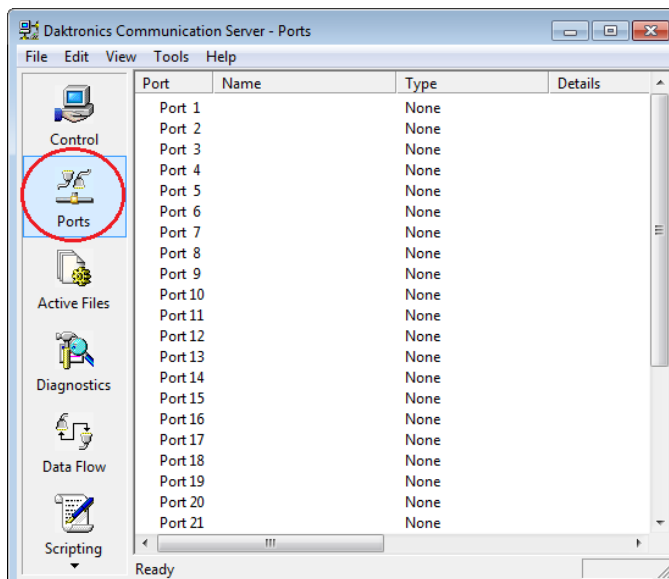


Figure 79: DCS Ports

- Double-click **Port 1**. The *Port Configuration* window will open. Configure Port 1 as follows and as shown in **Figure 80**:

- Name: "FieldLynx1"
- Type: **TCP/IP**
- Port: "3005"
- Leave all other settings as is.

Click **OK** when finished.

- Double-click **Port 2** and the *Port Configuration* window will open again. Configure Port 2 as follows and as shown in **Figure 81**:

- Name: "192.168.0.201" (see **Note**)
- Type: **UDP/IP Socket**
- Port: "3002"
- Under *Output*, click **To Addresses** and then click **Edit**.
- In the *Edit Address List* window, click **Add**.
- In the *Edit Address* window, type in "192.168.0.201" for the *Address*, and then click **OK**. (see **Note**)
- Back in the *Edit Address List* window, click **OK**.

Click **OK** once more when finished.

Figure 80: Port 1 Configuration

Figure 81: Port 2 Configuration

Note: The port name and address must match the IP address of the display to which the data is to be sent. Refer to the display manual for more information on changing the IP address.

- Click the **Data Flow** button on the left side of the application window (**Figure 79**).
- In the Data Flow screen (**Figure 82**), create a connection between **RTD DATA** of *Port 1* to **TX** of *Port 2* by clicking and dragging between the two points.

Note: If both ports are not immediately visible, right-click in the empty space and select **Auto Arrange**.

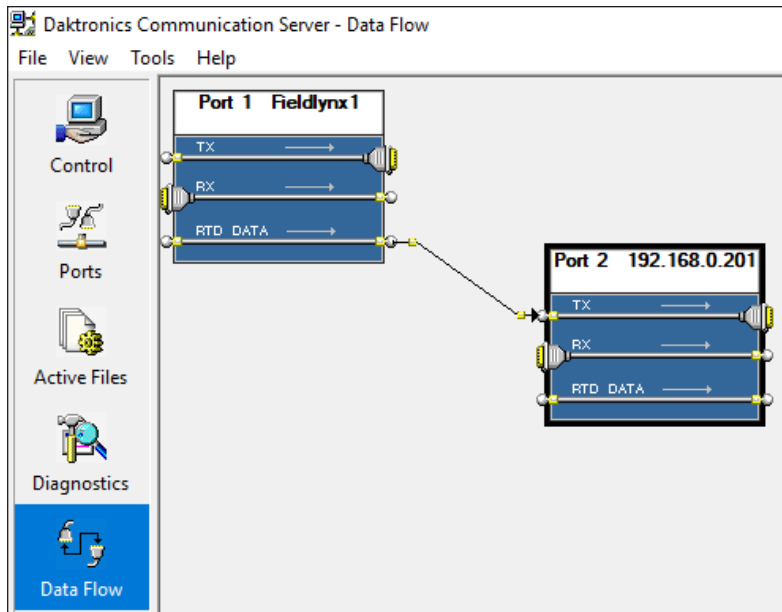


Figure 82: Data Flow

Once correctly configured, the **Ports** tab should look like **Figure 83**.

Port	Name	Type	Details
● Port 1	Fieldlynx1	TCP/IP	Port:3005
● Port 2	192.168.0.201	UDP/IP Socket	Port:3002
Port 3		None	
Port 4		None	
Port 5		None	
Port 6		None	
Port 7		None	
Port 8		None	
Port 9		None	
Port 10		None	

Figure 83: Configured Ports

When data is sent from FieldLynx, it should now go out to the display.

Note: DCS will need another pair of ports (input and output) for each additional FieldLynx notebook in the system. A system may include up to a max of 8 notebooks.

If there is more than one Ethernet connection configured on the computer, for example one wireless and one wired, you may need to disable the unused network, or change the order of preference to ensure that the information is delivered to the desired network.

RTD Sequence Creation

1. On the Show Control computer, open Content Studio and create a new presentation.
2. Click on the **Dynamic Data Library** tab, and then select the **Track and Field: FieldLynx** Category.
3. Double-click the "FieldLynx Device 1" folder to see the list of all available data fields (**Figure 59**).
4. Click and drag the desired data fields onto the blank presentation.
5. With a data field still selected, set the font to the best fit on the presentation. The recommended fonts differ based on the display type/controller:
 - **Galaxy/M3:** any Venus Fixed Width font
 - **Live Video/DMP-8000:** Courier New or Lucida Console

Note: Ensure that Smooth Text is disabled for all data fields.

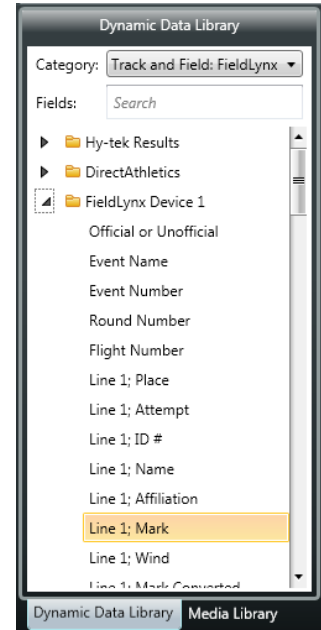


Figure 84: FieldLynx Device

6. With a data field still selected, click on the **Field Properties** tab to adjust the *Length* to best fit the presentation layout. While adjusting the width of the data field, leave a couple pixels of space on either side to ensure that the edges are not touching any sides of the sign boundary.

Note: For Live Video/DMP-8000 presentations, it is not possible to adjust the *Length*. Instead, click and drag the edges of a data field box to shorten it.

7. Repeat **Steps 4–6** to add additional data fields.
8. If the display is large enough to show more than one event, open the "FieldLynx Device 2" folder, "FieldLynx Device 3" folder, and so on, adding all desired data fields for as many events that can fit on the display.

The example presentation shown in **Figure 85** illustrates a typical small display with 2 lines of event information. Note that "ATTEMPT" is not a data field; this is a regular text box set to the same font and size to match the data fields.

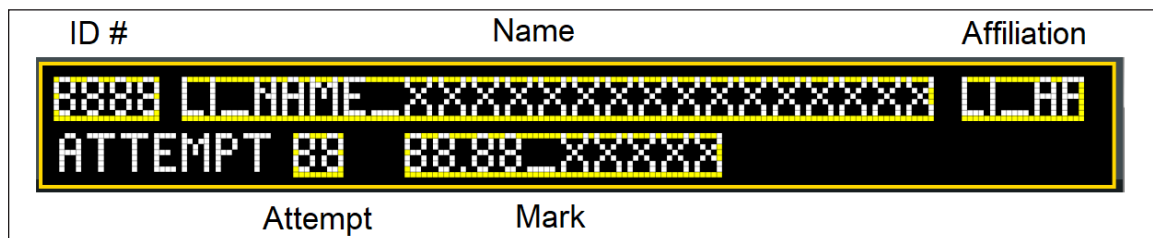


Figure 85: Presentation with FieldLynx Event

7 Additional Resources

Contact Information

Daktronics

www.daktronics.com

Mail: Daktronics, Inc., Customer Service
201 Daktronics Drive
P.O. Box 5128
Brookings, SD 57006

Phone: 1-800-325-8766 or 1-605-697-4400 (outside USA & Canada)

Email: helpdesk@daktronics.com

FinishLynx

www.finishlynx.com

Sales

Phone: 1-800-989-5969

Email: domsales@finishlynx.com (Domestic)
intlsales@finishlynx.com (International)

Technical Support

Phone: 1-978-556-9780

Email: support@finishlynx.com

Hy-Tek

www.hy-tekLtd.com

Sales

Phone: 1-866-456-5111

Email: sales@hy-tekLtd.com

Technical Support

Phone: 1-866-941-5123

Email: support@hy-tekLtd.com

FlashTiming

www.flashtiming.com

Technical Support

Phone: (971) 998-2349 PST
(309) 274-2970 or (309) 369-6208 CST

Email: support@flashtiming.com

Daktronics Manuals

- **All Sport 5000 Series Control Console Operations Manual (ED-11976)***
- **OmniSport 2000 Timing Console Operation Manual (ED-13312)***
- **Daktronics Aquatic/Track LED Scoreboards Display Manual (DD3043167)***

* Available online at www.daktronics.com/manuals.

To learn more about the Daktronics Show Control System software, consult the **Show Control System User Handbook (DD2003514)**, accessible via the following options:

- Press the Windows key [⊞] and go to **All Programs > Daktronics > Display Studio > Show Control System User Handbook**.
- From within Display Studio, press the **Display Studio Hub** button and select **Help**.

Additional Resources

A Reference Drawings

Refer to **Resources (p.1)** for information regarding how to read the drawing number. Any contract-specific drawings take precedence over the general drawings.

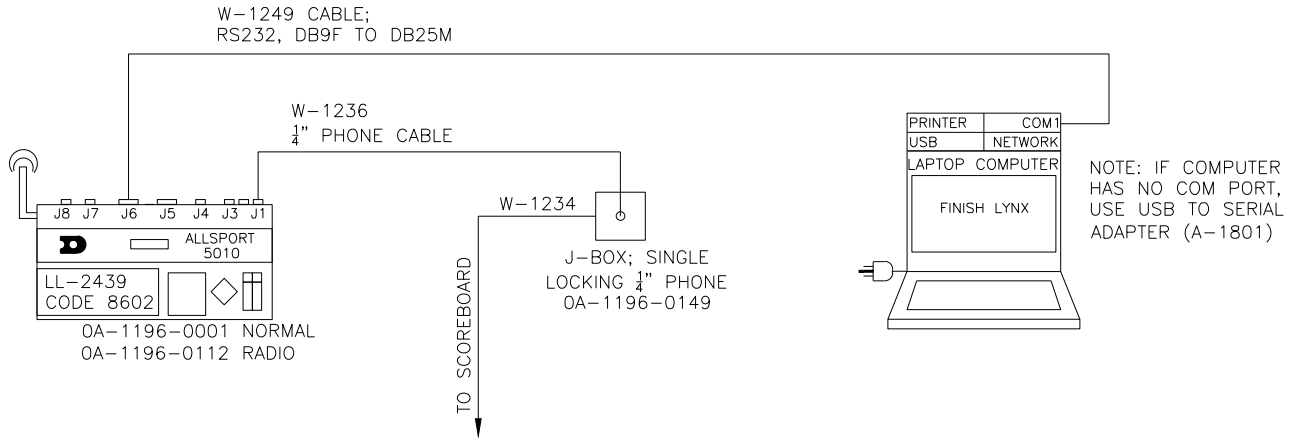
Reference Drawings:

Track/Football SCBD w/ FinishLynx & All Sport 5000.....	DWG-95152
Track/Football SCBD w/ FinishLynx, In Field	DWG-95153
Track SCBD w/ FinishLynx, in Press Box.....	DWG-104300
System Riser: FB/Track SCBD w/ Omni2K– Track Side	DWG-186535
Riser; V1500/M2/M3/Galaxy, Lynx/Hytek, Ethernet	DWG-266821
TI-2020, -2021, -3101 w/ Finish Lynx.....	DWG-267638
Riser; Hytek/Lynx/V1500, M2/M3 Galaxy, Fiber, SCBD.....	DWG-291376
Riser; Hytek/Lynx/V1500, M2/M3 Galaxy, Fiber, AS5000.....	DWG-298848
Riser; Hytek/Lynx/Show Cntrl. M2/M3 Galaxy, EBR Radio	DWG-300928
System Riser; Track M3 Matrix w/ Omni2K in Pressbox.....	DWG-1072146
Riser; Hytek/Lynx/Show Cntrl, Fiber, Scbd, DVX w/ Version 6.4	DWG-3058591
Riser: DMP-8000/FB Track Scbd, w/Omni 2K, Hytek, Show Cntrl.....	DWG-3058769
Riser; Hytek/Lynx/Show Control Galaxy, E-net, SCBD.....	DWG-3695367

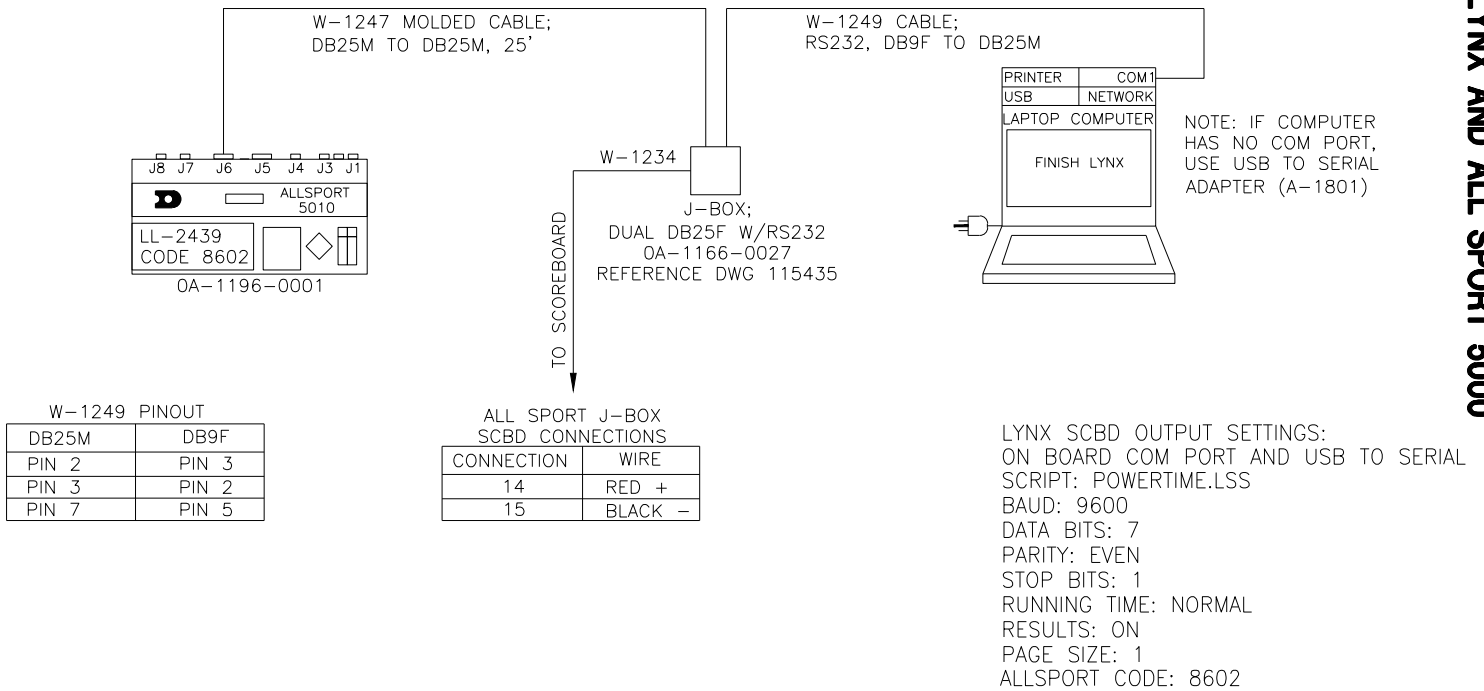
This page intentionally left blank.

TRACK/FOOTBALL SCBD WITH FINISH LYNX AND ALL SPORT 5000

RADIO OR 1/4" PHONE CONNECTION TO SCBD



DUAL 25 PIN J-BOX CONNECTION TO SCBD



REV	DATE:	UPDATED DRAWING TO BE MORE UNIVERSAL, USE ALL SPORT 5000, AND ONLY INCLUDE POWERTIME SCRIPT	BY:	AMG
04	23 NOV 10			
REV	DATE:	ADDED POWERTIME SCRIPT FOR WHEN USING USB TO 9 PIN ADAPTER	BY:	SAL
03	04 OCT 07			
REV	DATE:	CHANGED TEXT	BY:	GMS
02	05 SEP 01			
REV	DATE:	ADDED LYNX SCBD OUTPUT SETTINGS	BY:	CUB
01	15 SEP 98			

DAKTRONICS, INC.		BROOKINGS, SD 57006	
DO NOT SCALE DRAWING			
Proj: TRACK SYSTEM RISER DIAGRAM OPTION #3		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.	
Title: TRACK/FOOTBALL SCBD W/ FINISH LYNX & ALL SPORT 5000		DRAWN: AGORDER	
DESIGN: SCALE: 1 = 1		DATE: 07-28-97	
SHEET		JOB NO:	
REV	04	P1125	FUNC-TYPE-SIZE
			P-08-A
		95152	

TRACK SYSTEM RISER DIAGRAM

TRACK/FOOTBALL SCBD W/ FINISH LYNX

LYNX SCBD OUTPUT SETTINGS:

SETTINGS WHEN USING 9 PIN COM PORT	OR	SETTINGS WHEN USING USB TO 9 PIN ADAPTOR
SCRIPT: ALLSPORT.LSS		SCRIPT: POWERTIME.LSS
BAUD: 12,800		BAUD: 9600
DATA BITS: 8		DATA BITS: 7
PARITY: EVEN		PARITY: EVEN
STOP BITS: 2		STOP BITS: 1
RUNNING TIME: NORMAL		RUNNING TIME: NORMAL
RESULTS: ON		RESULTS: ON
PAGE SIZE: 1		PAGE SIZE: 1
ALLSPORT CODE: 8603		ALLSPORT CODE: 8602

PRESS BOX

OA-1065-0026
25 PIN to 16 PIN CABLE

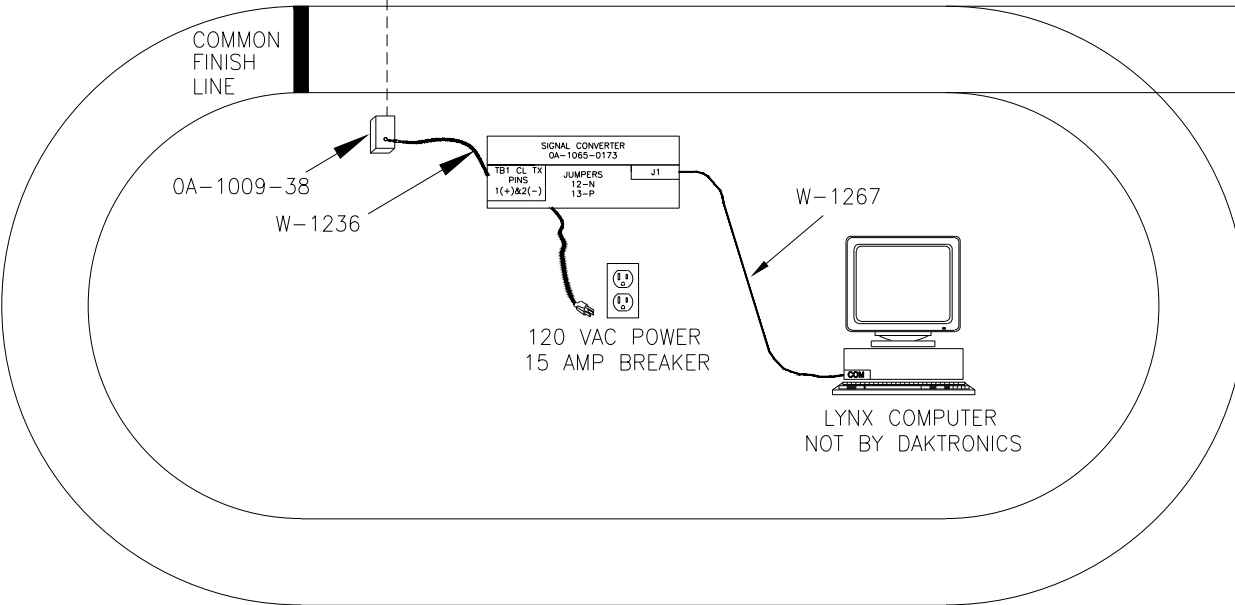
ALL SPORT® 2600, 4000, OR 5000
(>V1.5) (>V1.4)

120 VAC POWER

J-BOX
OA-1010-0026

2 CONDUCTOR 22 AWG SHIELDED
CABLE HOUSED IN 1/2" CONDUIT
CONNECT TO PINS 13(+) AND 14(-)
OF J-BOX OA-1010-0026.

STANDS



SEE SCOREBOARD
SPECIFICATIONS

COMMON
FINISH
LINE

OA-1009-38

W-1236

SIGNAL CONVERTER
OA-1065-0173

TB1 CL TX
PINS
1(+)&2(-)

JUMPERS
12-N
13-P

J1

W-1267

120 VAC POWER
15 AMP BREAKER

LYNX COMPUTER
NOT BY DAKTRONICS

FOOTBALL
SCOREBOARD

TYPICAL INTERFACE EQUIPMENT NEEDED:

- | | |
|------------|---------------------------------|
| <u>QTY</u> | |
| 1 | SIGNAL CONVERTER (OA-1065-0173) |
| 1 | J-BOX (OA-1009-0038) |
| 1 | CABLE (W-1236) |
| 1 | CABLE (W-1267) |

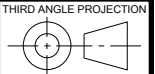
STANDS

REV 03	DATE: 15 SEP 03	CHANGED SIGNAL CONVERTER DRAWING TO SHOW JACK NUMBERS AND PINS.	BY: LWS
REV 02	DATE: 05SEP01	CHANGED SOME TEXT	BY: GWS
REV 01	DATE: 15 SEP 98	ADDED LYNX SCBD OUTPUT SETTINGS	BY: CJB

REV 06	DATE: 31 AUG 16	UPDATE ALLSPORT CODE FROM 8604 TO 8603	BY: MTR
REV 05	DATE: 27 NOV 13	UPDATED BORDER, TITLE BLOCK, REVISION BLOCKS	BY: ACB
REV 04	DATE: 04 OCT 07	ADDED POWERTIME SCRIPT WHEN USING A USB TO 9 PIN ADAPTOR CABLE	BY: SAL



THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESS WRITTEN CONSENT OF DAKTRONICS, INC. OR ITS WHOLLY OWNED SUBSIDIARIES. COPYRIGHT 2016 DAKTRONICS, INC. (USA)

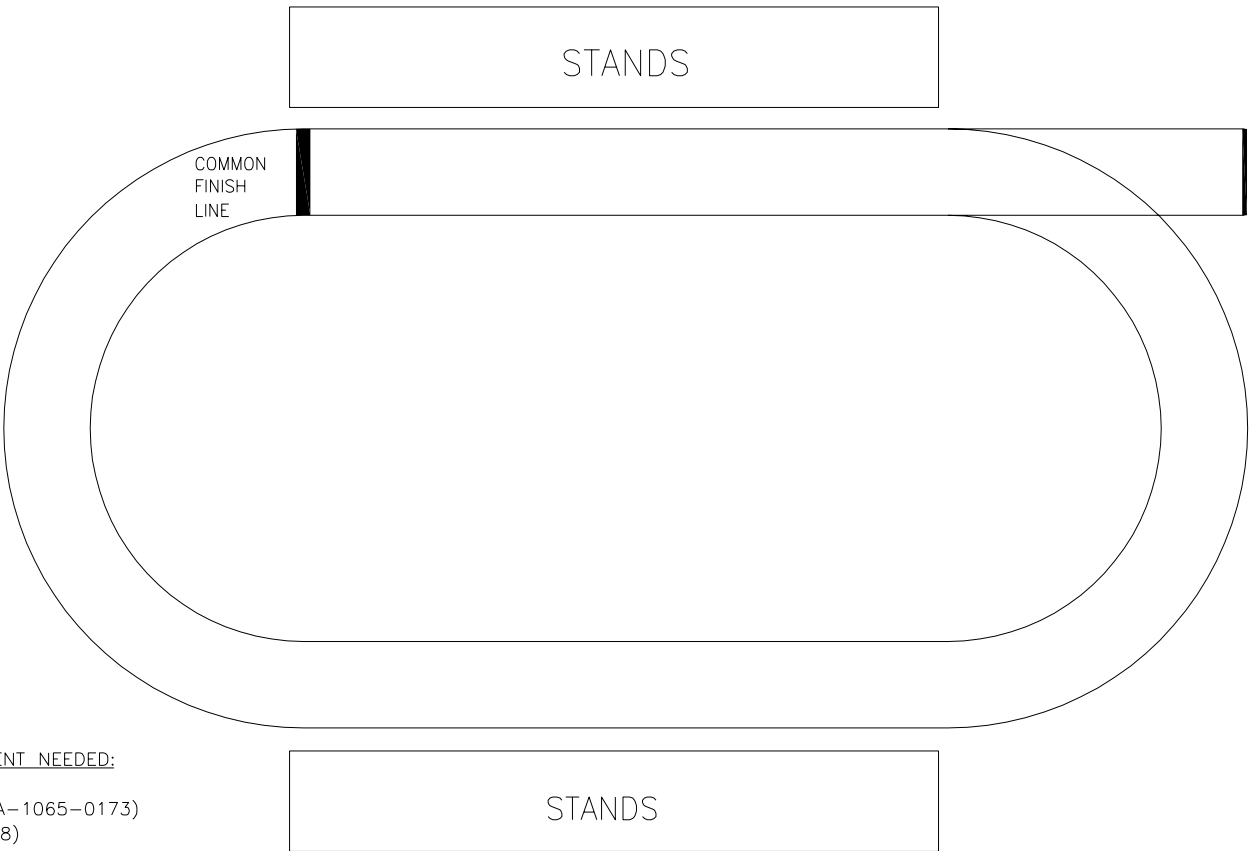
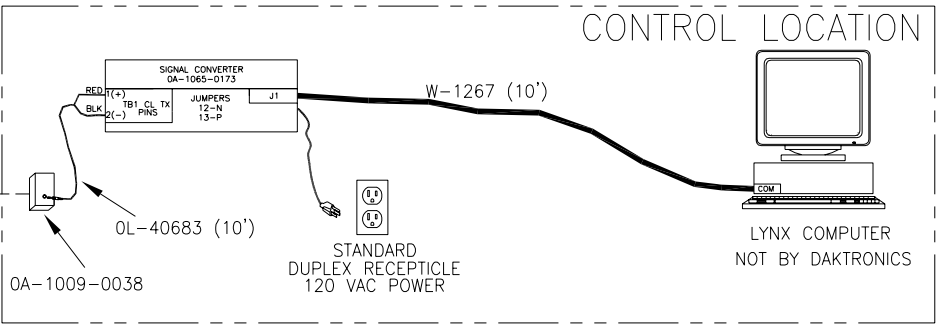


PROJECT: TRACK SYSTEM RISER DIAGRAM OPTION #1			
TITLE: TRACK/FOOTBALL SCBD W/ FINISH LYNX- IN FIELD			
DATE: 07-28-97	DIM UNITS: INCHES [MILLIMETERS]	SHEET	REV 06
SCALE: 1=1	DO NOT SCALE DRAWING		
DESIGN:	JOB NO. P1125	FUNC - TYPE - SIZE P-08-A	95153
DRAWN: JW HITAK			

TRACK SYSTEM RISER DIAGRAM

TRACK SCBD W/ FINISH LYNX

LYNX SCBD OUTPUT SETTINGS:
 SCRIPT: OMNI1000PLACE.LSS
 BAUD: 9600
 DATA BITS: 7
 PARITY: EVEN
 STOP BITS: 2
 RUNNING TIME: NORMAL
 RESULTS: ON
 PAGE SIZE: EQUAL TO NUMBER OF
 LINES ON SCOREBOARD



LANE PLACE TIME
LED SCOREBOARD

- TYPICAL INTERFACE EQUIPMENT NEEDED:
- | QTY | |
|-----|---------------------------------|
| 1 | SIGNAL CONVERTER (OA-1065-0173) |
| 1 | J-BOX (OA-1009-0038) |
| 1 | CABLE (OL-40683) |
| 1 | CABLE (W-1267) |

REV.	DATE	DESCRIPTION	BY	APPR.
05	NOV 07	CHANGED OMNI1000.LSS TO OMNI1000PLACE.LSS	AMG	
04	MAR 05	REORGANIZED DRAWING ADDED DETAIL TO SIG CONVERTER	KQB	
3	15 SEP 03	CHANGED SIGNAL CONVERTER DRAWING TO SHOW JACK NUMBERS AND PINS	LWS	
2	28 DEC 98	UPDATED DRAWING, ADDING LYNX SCBD OUTPUT SETTINGS.	CJB	
1	29 JUNE 98	UPDATED DESCRIPTION OF SCBD.	HBB	

© COPYRIGHT 1997 DAKTRONICS, INC

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: TRACK SYSTEM RISER DIAGRAM OPTION #4

TITLE: TRACK SCBD W/ FINISH LYNX, IN PRESS BOX

DES. BY: DRAWN BY: HBONER

DATE: 26 JUNE 98

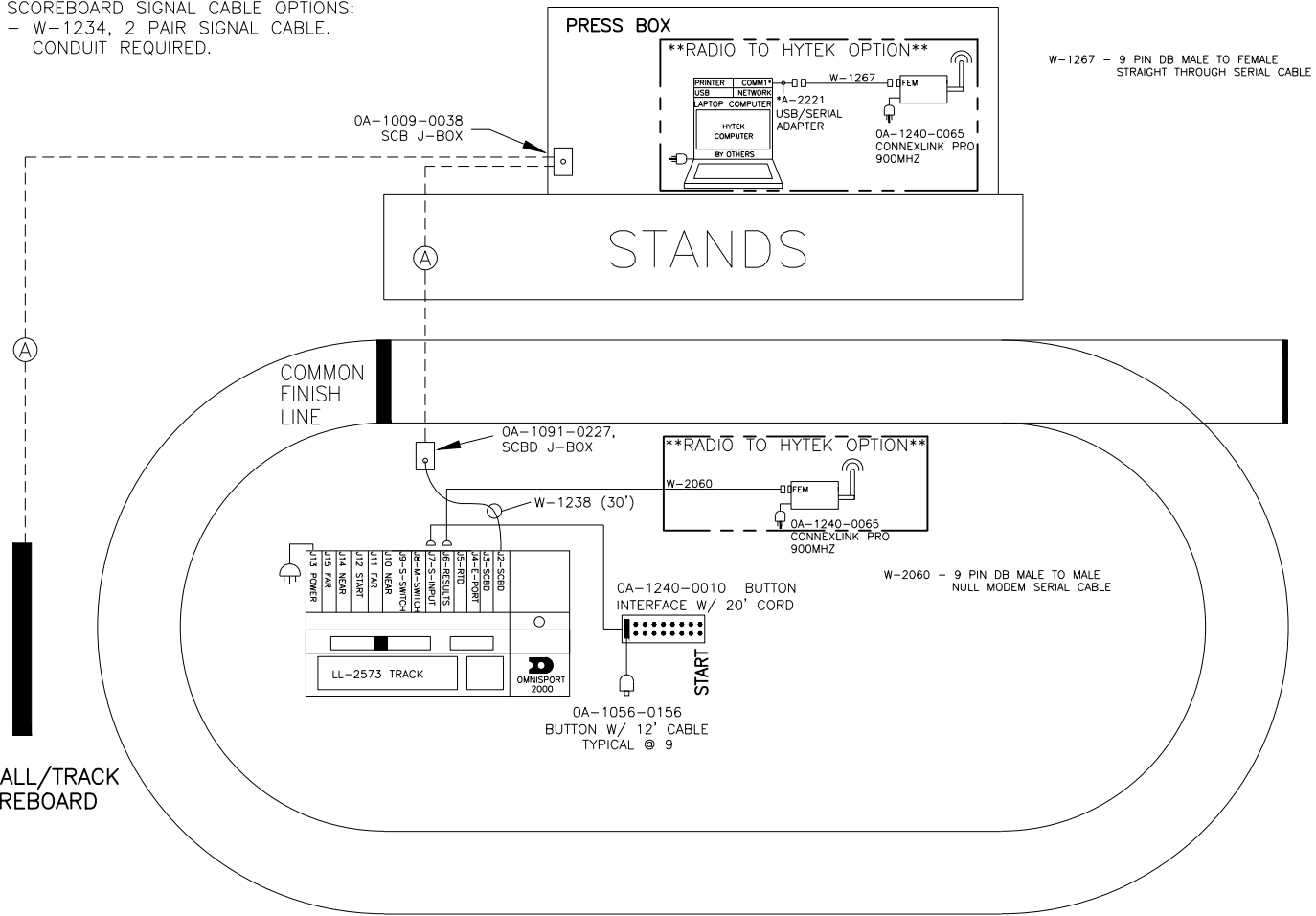
REVISION
05

APPR. BY: SCALE: 1=1

1125-R01A-104300

TRACK SYSTEM RISER DIAGRAM
FOOTBALL/TRACK SCBD WITH
OMNISPORT 2000, TRACK SIDE

(A) SCOREBOARD SIGNAL CABLE OPTIONS:
- W-1234, 2 PAIR SIGNAL CABLE.
CONDUIT REQUIRED.



- TRACK EQUIPMENT BOM:**
- OA-1240-0082 OMNISPORT 2000E (TRACK TIMER) @ 1
 - W-1238 30' SIGNAL CABLE @ 1
 - OA-1091-0227 TRACK SIDE J-BOX @ 1
 - OA-1240-0010 BUTTON INTERFACE @ 1
 - OA-1056-0156 12' PUSH BUTTON @ 9

- DIP SWITCH SETTINGS FOR CONNEXLINK PRO RADIO'S**
- CLIENT #1 ON, #2,3,4,5,6 OFF
 - SERVER #1,5 ON, #2,3,4,6 OFF
- REFER TO SL-04370 FOR ADDITIONAL INFORMATION AS NEEDED.

-IF MORE THAN 8 LANES ARE REQUIRED, OR MORE THAN 1 BUTTON PER LANE, REPLACE OA-1240-0010 WITH OA-1240-0016 AND ORDER THE NUMBER OF BUTTONS NEEDED.

REV 07	DATE: 02 AUG 13	BY: CME	CHANGED RADIOS TO CONNEXLINK PRO AND OMNISPORT CABLES BETWEEN HY-TEK AND OMNISPORT
REV 08	DATE: 23 MAR 15	BY: HBB	CLEAN UP DRAWING TO COMBINE FB/TR INTO ONE DRAWING. DWG 186548 WAS INACTIVATED.
REV 08	DATE: 23 MAR 15	BY: HBB	ADDED SL-NOTE AND OWNI PART NUMBER TO HELP DRAWING. DWG 186548 WAS INACTIVATED.

<p>DAKTRONICS, INC. BROOKINGS, SD 57006</p>		<p>PROJ: OMNISPORT 2000</p> <p>TITLE: SYSTEM RISER - FB/TRACK SCBD W/ OMNISPORT 2000 TRACK SIDE</p> <p>DESIGN: MILLER</p> <p>SCALE: NONE</p>
REV 08	JOB NO: P1240	DATE: 08 APR 03
SHEET 08	FUNC-TYPE-SIZE: R-01-A	
<p>186535</p>		

REV	DATE	DESCRIPTION	BY
01	08/02/13	ISSUED FOR CONSTRUCTION	CME
02	03/23/15	ISSUED FOR CONSTRUCTION	HBB
03	03/23/15	ISSUED FOR CONSTRUCTION	HBB
04	03/23/15	ISSUED FOR CONSTRUCTION	HBB
05	03/23/15	ISSUED FOR CONSTRUCTION	HBB
06	03/23/15	ISSUED FOR CONSTRUCTION	HBB
07	03/23/15	ISSUED FOR CONSTRUCTION	HBB
08	03/23/15	ISSUED FOR CONSTRUCTION	HBB

THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2011 DAKTRONICS, INC.

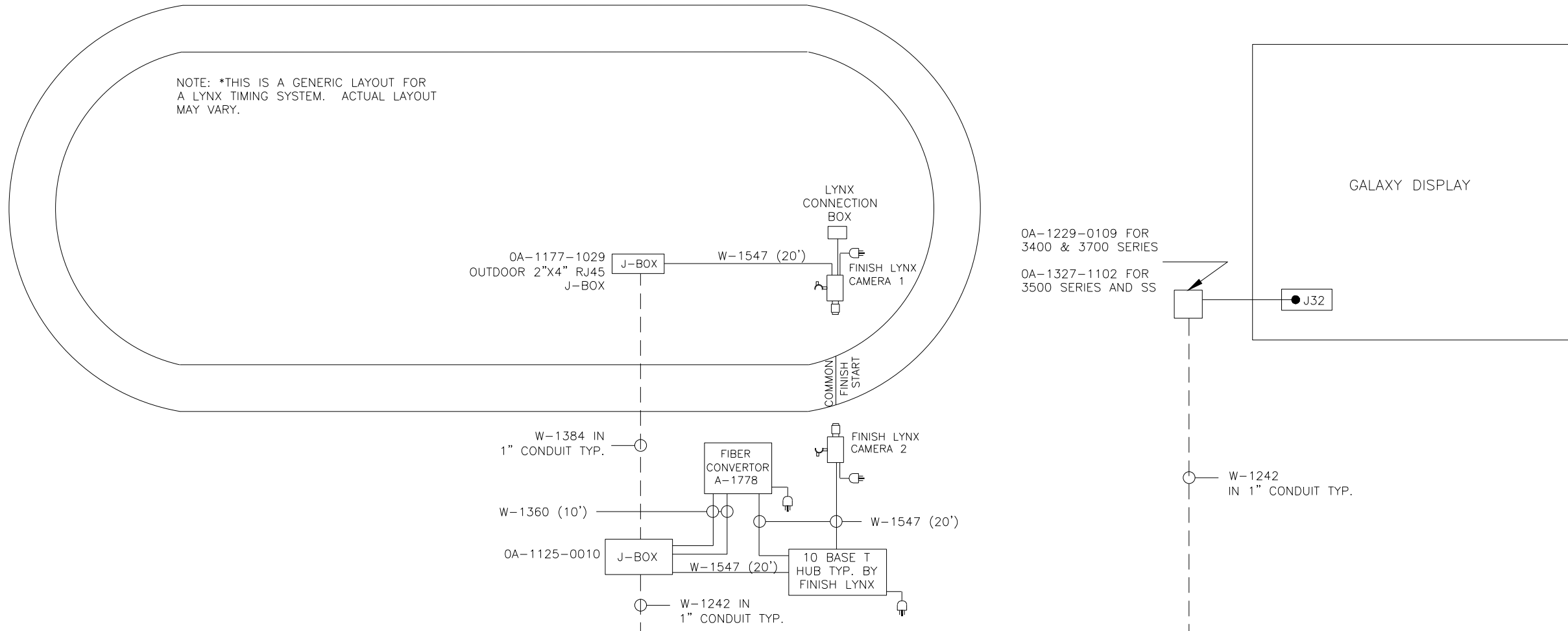
NOTE: *THIS IS A GENERIC LAYOUT FOR A LYNX TIMING SYSTEM. ACTUAL LAYOUT MAY VARY.

HY-TEK ALPHA SCBD SETTINGS

INTERFACES/SETUP/SCOREBOARD:
 DAKTRONICS FULL MATRIX
 INTERFACE/SCOREBOARD/OPEN-CLOSE SERIAL PORT:
 SERIAL PORT FOR SCOREBOARD: 1
 INTERFACES/SCOREBOARD/CUSTOMIZE:
 ROWS: EQUAL TO ROWS ON SIGN
 COLUMNS: EQUAL TO COLUMNS ON SIGN
 NUMBER OF BULBS BETWEEN EACH LANE : 1
 FONT SIZE : 7X5 OR 7X4 DEPENDING ON SEQUENCE
 BAUD RATE : 19200

FINISH LYNX SCBD SETTINGS

SCRIPT: DAK.LSS
 COM PORT: UDP
 PORT: 3002
 RUNNING TIME: NORMAL
 RESULTS: AUTO
 PAGE SIZE: (EQUAL TO NUMBER OF LINES ON SCOREBOARD)



GALAXY DISPLAY

0A-1229-0109 FOR 3400 & 3700 SERIES
 0A-1327-1102 FOR 3500 SERIES AND SS

J32

W-1384 IN 1\" CONDUIT TYP.

W-1360 (10')

0A-1125-0010

W-1547 (20')

W-1242 IN 1\" CONDUIT TYP.

FINISH LYNX CAMERA 2

W-1547 (20')

W-1242 IN 1\" CONDUIT TYP.

CONTROL LOCATION

0A-1125-0009

W-1360 (10')

FIBER CONVERTER A-1778

W-1547(20')

10 BASE T HUB TYP. BY FINISH LYNX

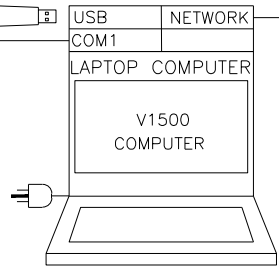
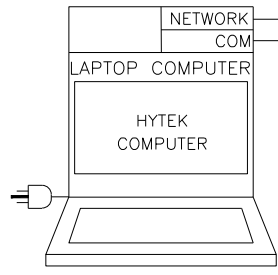
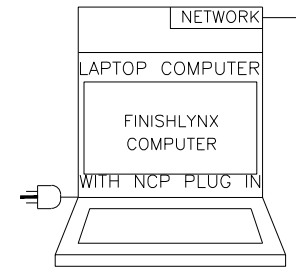
0A-1125-0009

W-1360 (10')

FIBER CONVERTER A-1778

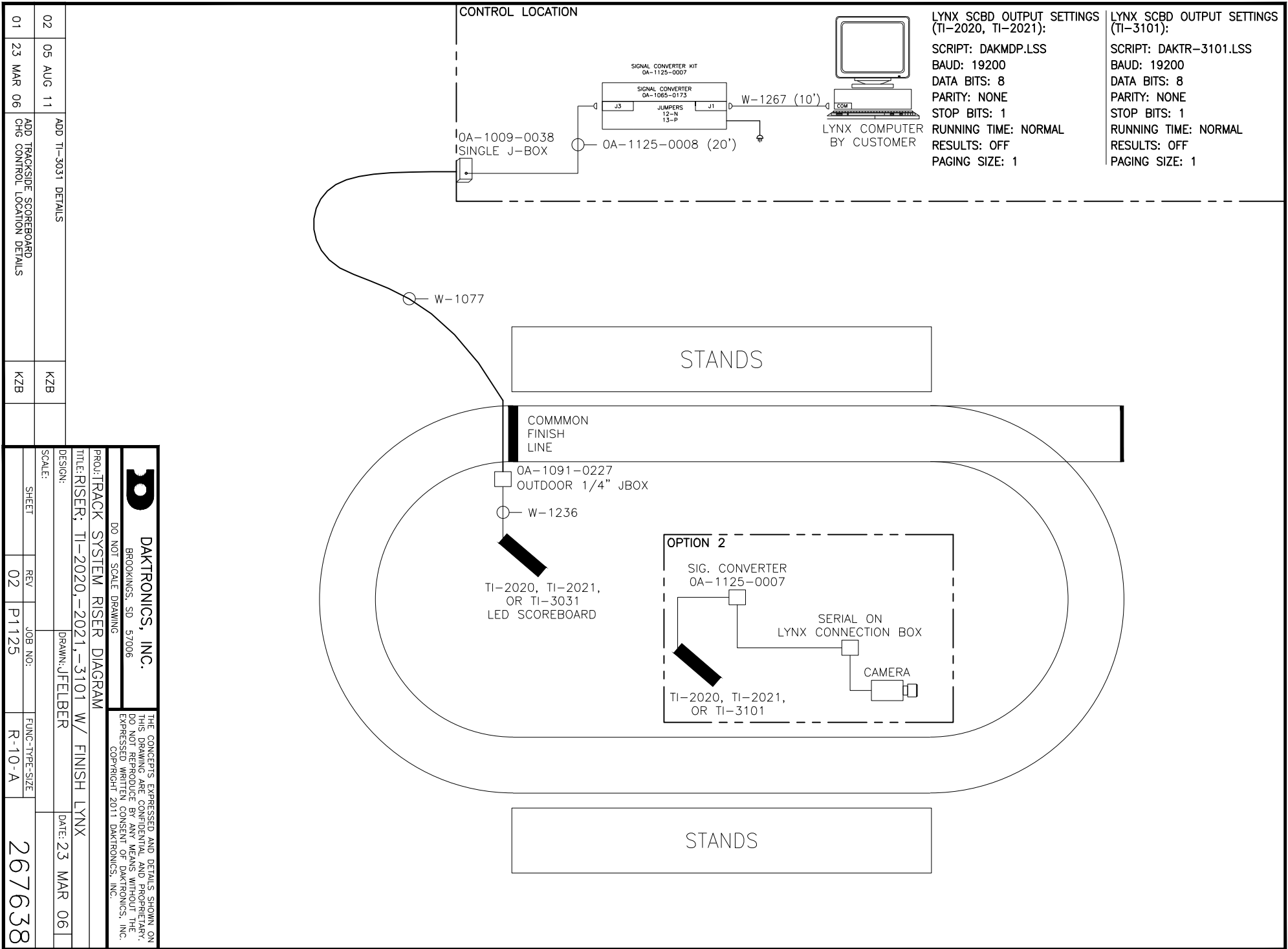
0A-1147-0011 SOFTWARE KEY

W-1350 (6')



		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2011 DAKTRONICS, INC.	
PROJ: TRACK			
TITLE: RISER; V1500/M2/M3/GALAXY, LYNX/HYTEK, ETHERNET			
DESIGN: JWARNE		DRAWN: JFELBER	
DATE: 14 MAR 06			
SCALE: NONE			
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	07	P1125	R-01-B
			266821

REV	DATE	TITLE UPDATED	BY:
07	10 APR 12		KZB
06	30 AUG 11	DWG INACTVATED DUE TO SHOW CONTROL SEE RELEVANT DWGS	KZB



LYNX SCBD OUTPUT SETTINGS
(TI-2020, TI-2021):
 SCRIPT: DAKMDP.LSS
 BAUD: 19200
 DATA BITS: 8
 PARITY: NONE
 STOP BITS: 1
 RUNNING TIME: NORMAL
 RESULTS: OFF
 PAGING SIZE: 1

LYNX SCBD OUTPUT SETTINGS
(TI-3101):
 SCRIPT: DAKTR-3101.LSS
 BAUD: 19200
 DATA BITS: 8
 PARITY: NONE
 STOP BITS: 1
 RUNNING TIME: NORMAL
 RESULTS: OFF
 PAGING SIZE: 1

02	05 AUG 11	ADD TI-3031 DETAILS	KZB
01	23 MAR 06	ADD TRACKSIDE SCOREBOARD CHG CONTROL LOCATION DETAILS	KZB

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

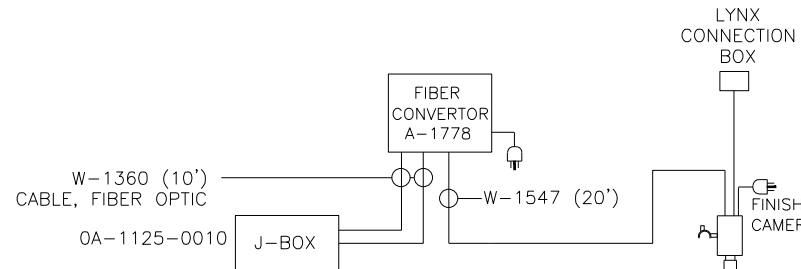
PROJ: TRACK SYSTEM RISER DIAGRAM
 TITLE: RISER: TI-2020, -2021, -3101 W/ FINISH LYNX
 DESIGN: JFELBER
 DRAWN: JFELBER
 DATE: 23 MAR 06

SCALE: SHEET REV JOB NO: FUNC-TYPE-SIZE
 02 P1125 R-10-A

267638

THIS DRAWING IS THE PROPERTY OF DAKTRONICS, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. WITHOUT THE EXPRESS WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT © 2011 DAKTRONICS, INC.

NOTE: *THIS IS A GENERIC LAYOUT FOR A LYNX TIMING SYSTEM. ACTUAL LAYOUT MAY VARY.



PULL BOX

W-1242
IN 1" CONDUIT TYP.

W-1242
FIBER OPTIC CABLE,
2 FIBER
IN 1" CONDUIT TYP.

OA-1125-0011 FOR
3400 & 3700 SERIES

OA-1125-0013 FOR
3500 SERIES AND SS.

W-1077, FIELD TERMINATED
IN 1" CONDUIT
SEE DETAIL 'A'

FOOTBALL SCOREBOARD

OA-1196-0038

GALAXY DISPLAY

J32

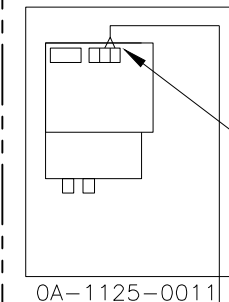
HY-TEK ALPHA SCBD SETTINGS

INTERFACES/SETUP/SCOREBOARD:
DAKTRONICS FULL MATRIX
INTERFACE/SCOREBOARD/OPEN-CLOSE SERIAL PORT:
SERIAL PORT FOR SCOREBOARD: 1
INTERFACES/SCOREBOARD/CUSTOMIZE:
ROWS: EQUAL TO ROWS ON SIGN
COLUMNS: EQUAL TO COLUMNS ON SIGN
NUMBER OF BULBS BETWEEN EACH LANE : 1
FONT SIZE : 7X5 OR 7X4 DEPENDING ON
SEQUENCE
BAUD RATE : 19200

FINISH LYNX
SCBD SETTINGS

SCRIPT: DAK.LSS
COM PORT: UDP
PORT: 3002
RUNNING TIME: NORMAL
RESULTS: AUTO
PAGE SIZE: (EQUAL TO NUMBER OF LINES
ON SCOREBOARD)

DETAIL 'A'



RED WIRE
TO TB3 SIG+
BLACK WIRE
TO TB3 SIG-

OA-1125-0011

W-1077 IN 1" CONDUIT

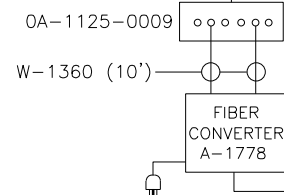
GALAXY DISPLAY

M2 OR M3
CONTROLLER

TB1

RED TO
TB1-2
BLACK TO
TB1-6

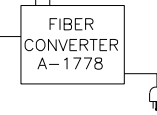
CONTROL LOCATION



W-1547 (20')

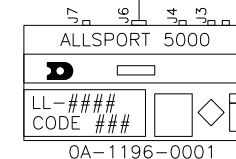
W-1360 (10')

6 POSITION FIBER SPLICE
BOX W/ DUAL CL TO
FIBER CONVERTER
OA-1125-0009 &
OA-1196-0152

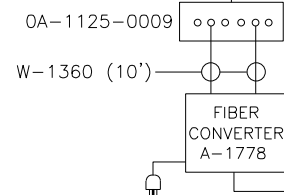
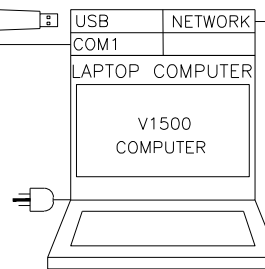
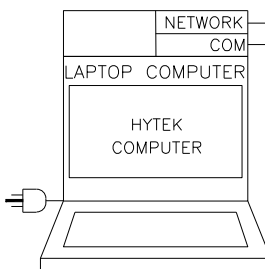
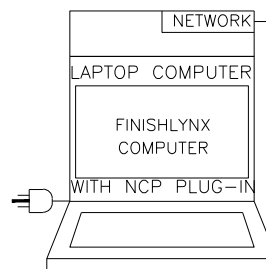


OA-1196-0168
CABLE, 25 PIN TO
PHONE PLUG, RTD

W-1236
CABLE, 2 COND,
W/ PHONE PLUG



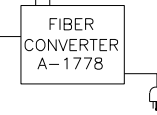
OA-1196-0001



W-1547 (20')

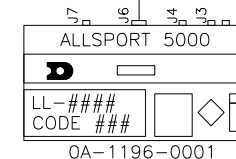
W-1360 (10')

6 POSITION FIBER SPLICE
BOX W/ DUAL CL TO
FIBER CONVERTER
OA-1125-0009 &
OA-1196-0152



OA-1196-0168
CABLE, 25 PIN TO
PHONE PLUG, RTD

W-1236
CABLE, 2 COND,
W/ PHONE PLUG



OA-1196-0001

REV	DATE	UPDATED TITLE	BY:
07	10 APR 12		JJL
06	30 AUG 11	DWG INACTIVATED DUE TO SHOW CONTROL, SEE RELEVANT DWGS	KZB
05	12 FEB 10	ADDED NOTE ABOUT DIFFERENT GALAXY SERIES	AMG
04	06 AUG 08	ADDED DETAIL 'A'	AMG
03	18 MAY 07	CHANGED ITEM DESCRIPTIONS, ADDED OA-1196-0152	AMG
02	11 MAY 07	CHANGED W-1343 TO W-1547	AMG
01	12 JAN 07	CHANGED W-1406 TO W-1343	AMG

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

THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2011 DAKTRONICS, INC.

PROJ: TRACK
TITLE: RISER; HYTEK/LYNX/V1500, M2/M3 GALAXY, FIBER, SCBD
DESIGN: JWARNE
DRAWN: AGORDER
DATE: 01 DEC 06
SCALE: NONE

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	07	P1125	R-01-B

291376

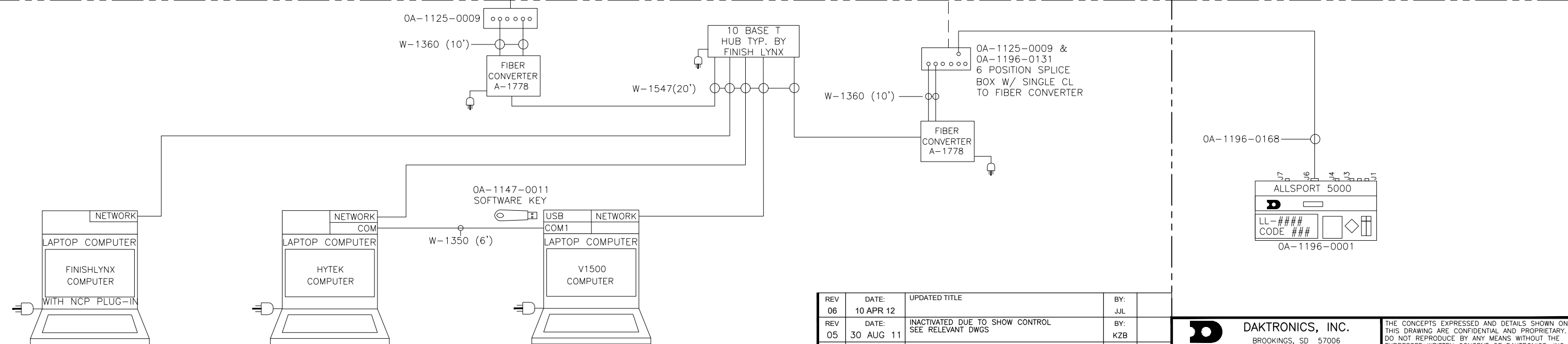
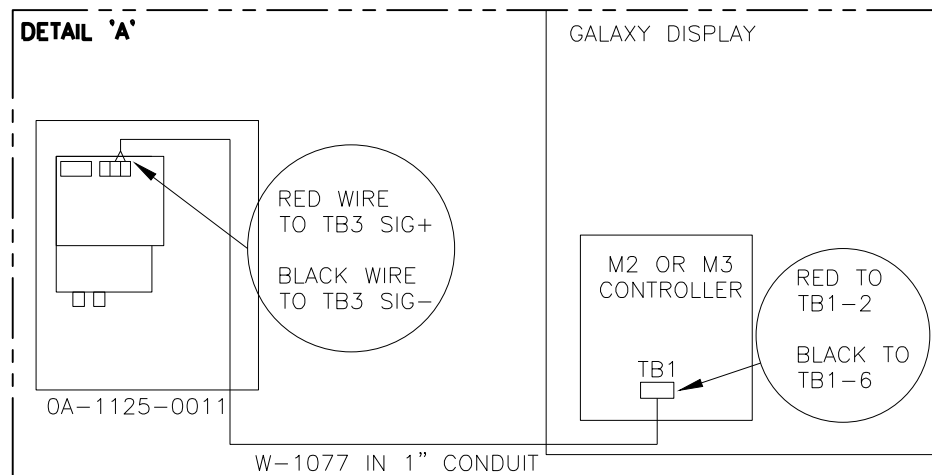
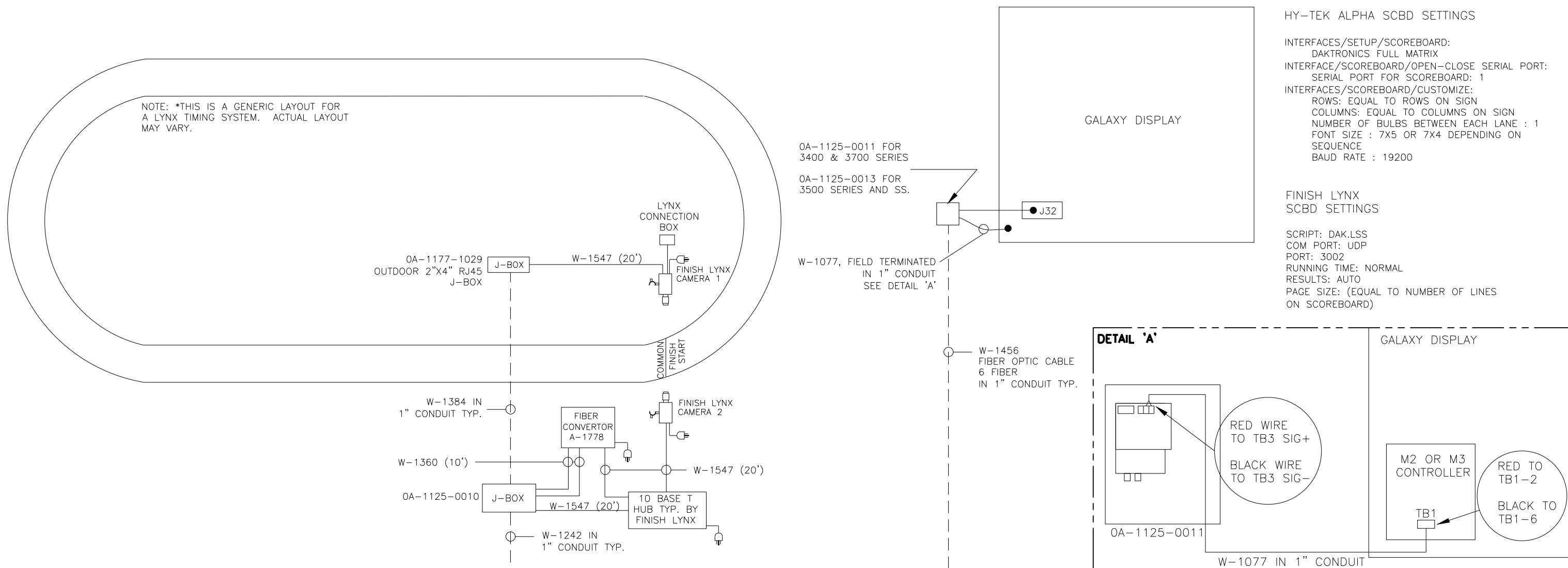
NOTE: *THIS IS A GENERIC LAYOUT FOR A LYNX TIMING SYSTEM. ACTUAL LAYOUT MAY VARY.

HY-TEK ALPHA SCBD SETTINGS

INTERFACES/SETUP/SCOREBOARD:
 DAKTRONICS FULL MATRIX
 INTERFACE/SCOREBOARD/OPEN-CLOSE SERIAL PORT:
 SERIAL PORT FOR SCOREBOARD: 1
 INTERFACES/SCOREBOARD/CUSTOMIZE:
 ROWS: EQUAL TO ROWS ON SIGN
 COLUMNS: EQUAL TO COLUMNS ON SIGN
 NUMBER OF BULBS BETWEEN EACH LANE : 1
 FONT SIZE : 7X5 OR 7X4 DEPENDING ON SEQUENCE
 BAUD RATE : 19200

FINISH LYNX SCBD SETTINGS

SCRIPT: DAK.LSS
 COM PORT: UDP
 PORT: 3002
 RUNNING TIME: NORMAL
 RESULTS: AUTO
 PAGE SIZE: (EQUAL TO NUMBER OF LINES ON SCOREBOARD)



REV	DATE	UPDATED TITLE	BY:
06	10 APR 12		JUL
05	30 AUG 11	INACTIVATED DUE TO SHOW CONTROL SEE RELEVANT DWGS	KZB
04	12 FEB 10	ADDED NOTE ABOUT DIFFERENT GALAXY SERIES	AMG
03	05 AUG 08	ADDED DETAIL 'A'	AMG
02	18 MAY 07	REMOVED OA-1196-0037 AND ADDED OA-1196-0131	AMG
01	14 MAY 07	CHANGED W-1343 AND W-1406 TO W-1547	AMG

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

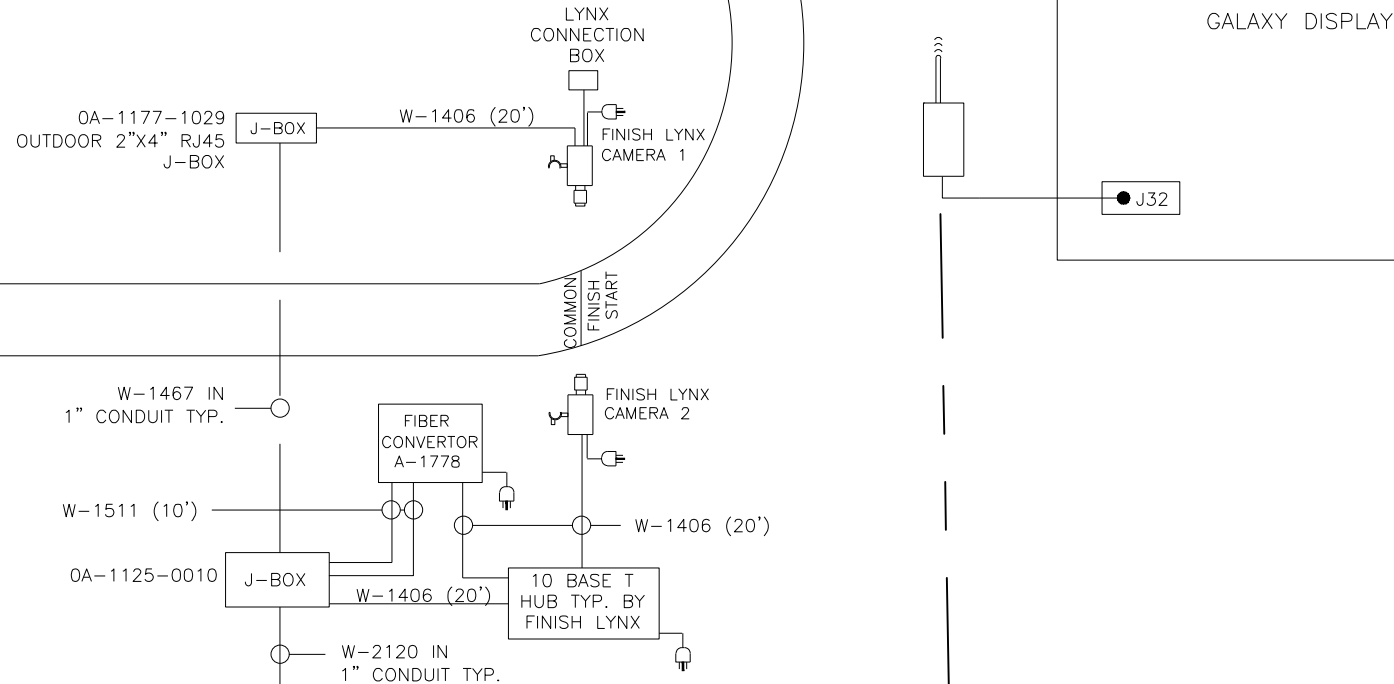
THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2011 DAKTRONICS, INC.

PROJ: TRACK
 TITLE: RISER; HYTEK/ LYNX/ V1500, M2/ M3 GALAXY, FIBER, AS5000
 DESIGN: JWARNE
 DRAWN: KBIERBA
 DATE: 5 MAR 07
 SCALE: NONE

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	06	P1125	R-01-B

298848

NOTE: *THIS IS A GENERIC LAYOUT FOR A LYNX TIMING SYSTEM. ACTUAL LAYOUT MAY VARY.



FINISH LYNX CAPTURE SCBD SETTINGS (W/ SCBD)

SCRIPT: DAK.LSS
 SERIAL PORT: NETWORK (UDP)
 PORT: 3002
 RUNNING TIME: NORMAL
 RESULTS: OFF

FINISH LYNX EDIT SCBD SETTINGS

SCRIPT: DAK.LSS
 SERIAL PORT: NETWORK (UDP)
 PORT: 21100
 RUNNING TIME: OFF
 RESULTS: AUTO
 PAGE SIZE: (EQUAL TO NUMBER OF LINES ON SCOREBOARD)
 NORMAL RESULTS: NONE

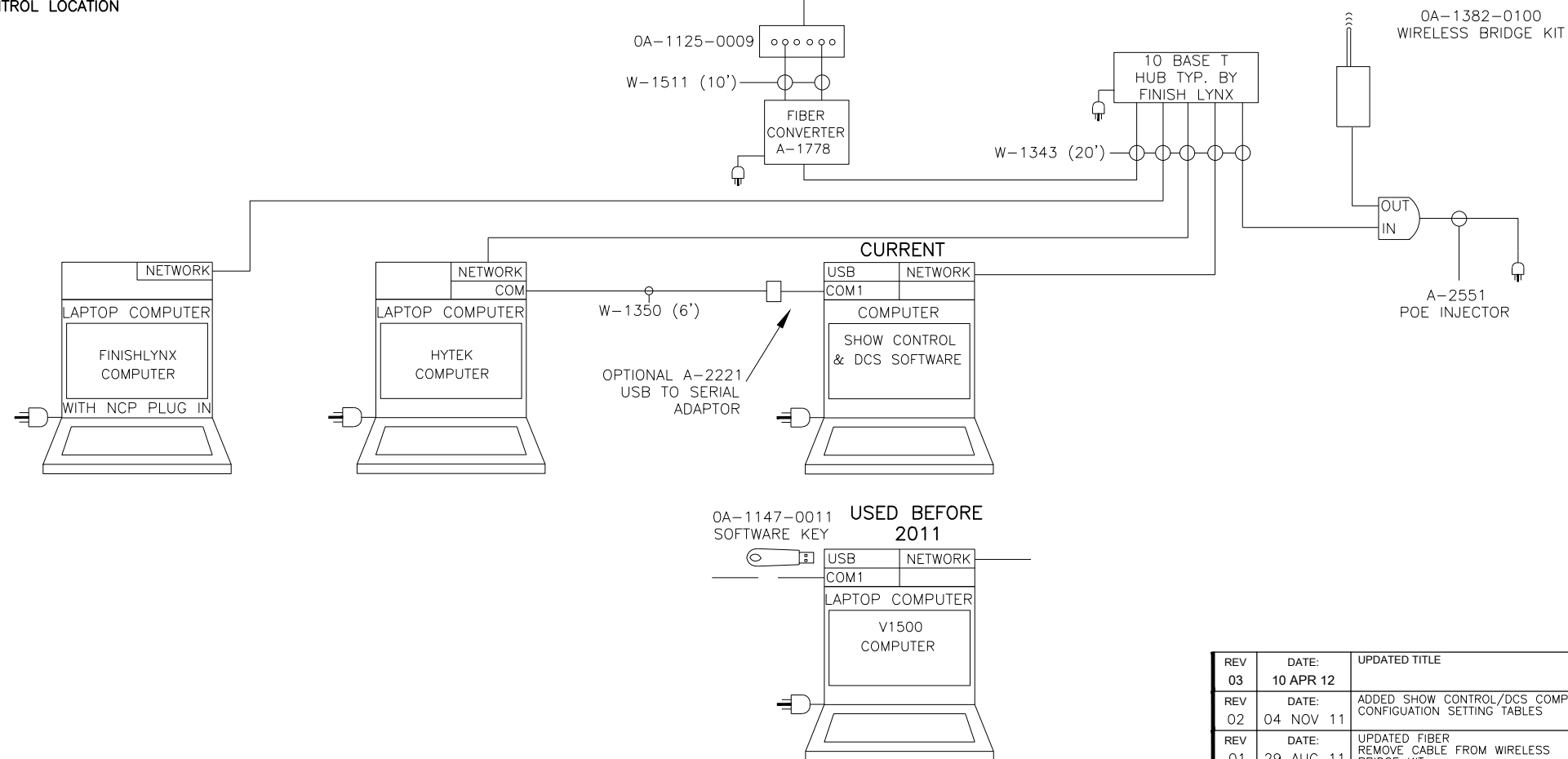
FINISH LYNX CAPTURE SCBD SETTINGS (W/O SCBD)

SCRIPT: POWERTIME.LSS
 SERIAL PORT: COM (#)
 BAUD: 9600, DATA BITS: 7,
 PARITY: EVEN, STOP BITS: 1
 RUNNING TIME: NORMAL
 RESULTS: NONE

HY-TEK ALPHA SCBD SETTINGS

INTERFACES/SETUP/SCOREBOARD:
 DAKTRONICS FULL MATRIX
 INTERFACE/SCOREBOARD/OPEN-CLOSE SERIAL PORT:
 SERIAL PORT FOR SCOREBOARD: 1
 INTERFACES/SCOREBOARD/CUSTOMIZE:
 ROWS: EQUAL TO ROWS ON SIGN
 COLUMNS: EQUAL TO COLUMNS ON SIGN
 NUMBER OF BULBS BETWEEN EACH LANE : 1
 FONT SIZE : 7X5 DEPENDS ON SEQUENCE
 BAUD RATE : 19200

CONTROL LOCATION



DCS SETTINGS

DAK#: ER-1814159
 INPUT PORT 1: OPEN
 INPUT PORT 2:
 NAME: HYTEK, TYPE: SERIAL PORT
 COM (#), BAUD: 19200,
 DATA BITS: 8, PARITY: NONE
 INPUT TEMPLATE: BLANK
 SCRIPT NAME: OFFSETSTANDARDRTD5000.DDS
 INPUT PORT 3:
 NAME: FINISH LYNX EDIT, TYPE: UDP/IP SOCKET
 PORT: 21100, BROADCAST: CHECKED
 INPUT TEMPLATE: BLANK
 SCRIPT NAME: OFFSETSTANDARDRTD10000.DDS
 INPUT PORT 4: OPEN
 PORT 5:
 NAME: OUTPUT, TYPE: UDP/IP SOCKET
 PORT: 3002, BROADCAST: CHECKED
 INPUT TEMPLATE: BLANK
 ADVANCED >>
 MODE: TRANSMIT ONLY
 ENABLE RTD PROTOCOLS: CHECKED
 VERIFY ERTD CHECKSUM: CHECKED

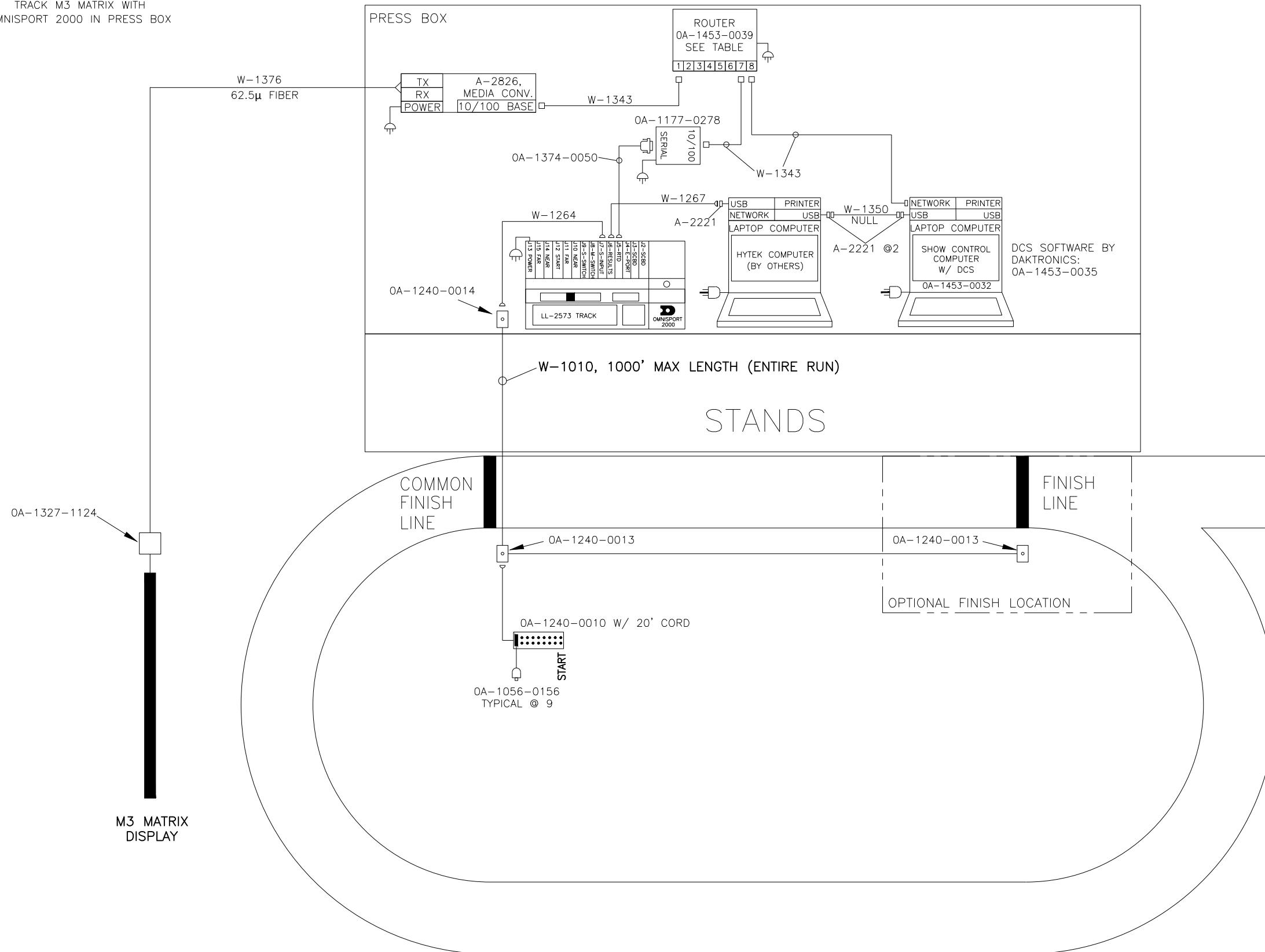
0A-1147-0011 USED BEFORE SOFTWARE KEY 2011

DAKTRONICS, INC. BROOKINGS, SD 57006		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2011 DAKTRONICS, INC.	
DO NOT SCALE DRAWING			
PROJ: TRACK W/ V1500			
TITLE: RISER;HYTEK/LYNX/SHOW CNTRL, M2/M3 GALAXY, EBR RADIO			
DESIGN: JWARNE	DRAWN: SLOWWAG	DATE: 30 MAR 07	
SCALE: NONE			
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	03	P1125	R-01-B
			300928

REV	DATE	UPDATED TITLE	BY:
03	10 APR 12		JJL
02	04 NOV 11	ADDED SHOW CONTROL/DCS COMPUTER AND MORE CONFIGURATION SETTING TABLES	MWM
01	29 AUG 11	UPDATED FIBER REMOVE CABLE FROM WIRELESS BRIDGE KIT	KZB

TRACK SYSTEM RISER DIAGRAM

TRACK M3 MATRIX WITH
OMNISPORT 2000 IN PRESS BOX



CABLE/DSL ROUTER DEFAULTS

-DAK PART#: OA-1453-0039
 -LOCAL IP ADDRESS: 192.168.0.1
 -SUBNET MASK: 255.255.255.0
 -USER NAME: ADMIN
 -PASSWORD: ADMIN
 -DHCP RANGE: 192.168.0.100
 -192.168.0.149

HY-TEK ALPHA SCBD SETTINGS

INTERFACES/SETUP/SCOREBOARD:
 DAKTRONICS FULL MATRIX
 INTERFACE/SCOREBOARD/OPEN-CLOSE SERIAL PORT:
 SERIAL PORT FOR SCOREBOARD: 1
 INTERFACES/SCOREBOARD/CUSTOMIZE:
 ROWS: EQUAL TO ROWS ON SIGN
 COLUMNS: EQUAL TO COLUMNS ON SIGN
 NUMBER OF BULBS BETWEEN EACH LANE: 1
 FONT SIZE : 7X5 DEPENDS ON SEQUENCE
 BAUD RATE : 19200

DCS SETTINGS

SCRIPT: ER-1814159
 INPUT PORT 1: OPEN
 INPUT PORT 2: HYTEK
 TYPE: SERIAL PORT
 COM (#), BAUD: 19200,
 DATA BITS: 8, PARITY: NONE
 SCRIPT NAME: OFFSETSTANDARDRTD5000.DDS
 INPUT PORT 3: NOT USED
 TYPE: UDP/XXXX
 SCRIPT NAME: XXXX
 INPUT PORT 4: OPEN
 OUTPUT PORT 5: UDP/3002
 TX ONLY: CHECKED

TRACK EQUIPMENT BOM:

- OA-1240-0002 OMNISPORT 2000 (TRACK TIMER) @ 1
- W-1010 12 COND. PUSH BUTTON CABLE @ MAX. 1000'
- OA-1240-0013 TRACK SIDE D15F J-BOX @ 1
- OA-1240-0014 PRESS BOX D15M J-BOX @ 1
- OA-1240-0010 BUTTON INTERFACE @ 1
- OA-1056-0156 12' PUSH BUTTON @ 9
- W-1264 10' DB15M TO DB15F @1
- W-1350 6' DB9F TO DB9F NULL @1
- W-1267 10' DB9M TO DB9F @1
- A-2826 10/100 BASE MEDIA CONVERTER @1
- OA-1327-1124 FIBER ETHERNET COMM. BOX @1
- OA-1453-0032 SCS-2000 TOUCHSMART W7 @1
- W-1343 14' RJ45 10 BASE NETWORK CABLE @1
- W-1376 4 FIBER CABLE DX @ DISTANCE TO MATRIX
- A-2221 USB TO SERIAL ADAPTER @3
- OA-1453-0035 DCS SOFTWARE CD @1
- OA-1177-0278 RS232 SS LANTRONIX BOX @1
- W-1343 RJ45 10BASE NETWORK CABLE @3
- OA-1374-0050 6' DB9M-DB25M, RS232 @1

-IF MORE THAN 8 LANES ARE REQUIRED, OR MORE THAN 1 BUTTON PER LANE, OA-1240-0010 MAY BE REPLACED WITH OA-1240-0016 ***NOTE: IF OA-1240-0016 IS USED, BUTTON INTERFACE MUST BE AT THE SAME LOCATION AS THE OMNISPORT 2000. ORDER THE NUMBER OF BUTTONS NEEDED.

DAKTRONICS, INC. BROOKINGS, SD 57006		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2011 DAKTRONICS, INC.	
DO NOT SCALE DRAWING			
PROJ: OMNISPORT 2000 TIMER			
TITLE: SYSTEM RISER: TRACK M3 MATRIX W/ OMNI2K IN PRESSBOX			
DESIGN: SBRINK	DRAWN: SBRINK	DATE: 27 OCT 11	
SCALE: NONE			
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	00	P1240	R-01-B
			1072146

② **HY-TEK ALPHA SCBD SETTINGS**
******HYTEK VERSION 4.0BE OR HIGHER******

SETUP>ALPHA SCBD INTERFACE:
 SCBD TYPE: DAKTRONICS FULL MATRIX
 CONNECTION METHOD: UDP ETHERNET

FROM THE "RUN" SCREEN
 INTERFACES>SCOREBOARD-DAKTRONICS FULL MATRIX>
 SET UDP PORT AND IP ADDRESS:
 - REMOTE SCBD PORT/SOCKET: 20000
 - REMOTE SCBD IP ADDRESS: 255.255.255.255

INTERFACE>SCOREBOARD-DAKTRONICS FULL MATRIX
 >CUSTOMIZE:
 - NUMBER OF ROWS FOR HEADER: (EXAMPLE: 2)
 - NUMBER OF ROWS FOR LANES: (EXAMPLE: 8)
 - NUMBER OF CHARACTERS PER ROW: (EXAMPLE: 30)
 (REFER TO SEQUENCE FOR THIS INFO)

MEET PRO SETTINGS

INTERFACES>SCOREBOARDS>DAKTRONICS
 CONNECTION TYPE: NETWORK
 PORT TYPE: UDP
 IP ADDRESS: 255.255.255.255 (DEFAULT)
 PORT: 20000
 HEIGHT: #OF LANES PLUS HEADER
 WIDTH: 100

④ **FINISH LYNX CAPTURE SCBD SETTINGS (ALLSPORT SETTINGS)**

SCRIPT: POWERTIME.LSS
 SERIAL PORT: COM (#)
 BAUD: 9600, DATA BITS: 7
 PARITY: EVEN, STOP BITS: 1
 RUNNING TIME: NORMAL
 RESULTS: AUTO
 PAGING: ENABLED SIZE: 1 TIME: 5.0

④ **FINISH LYNX CAPTURE RUNTIME SETTINGS**

SCRIPT: DAK-EXTENDED.LSS
 SERIAL PORT: NETWORK (UDP)
 PORT: 21000
 RUNNING TIME: NORMAL
 RESULTS: OFF

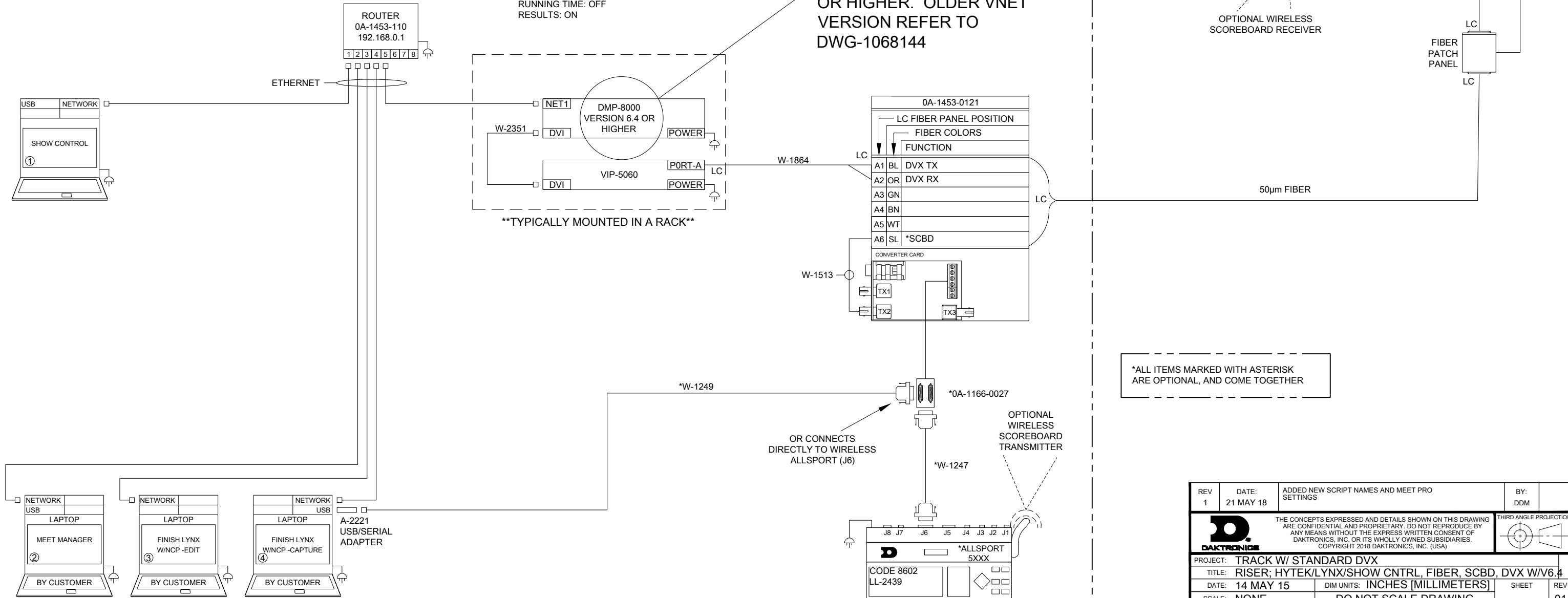
④ **FINISH LYNX CAPTURE RESULTS SETTINGS**

SCRIPT: DAK-EXTENDED.LSS
 SERIAL PORT: NETWORK (UDP)
 PORT: 21100
 RUNNING TIME: OFF
 RESULTS: ON

③ **FINISH LYNX EDIT SCBD SETTINGS**

SCRIPT: DAK-EXTENDED.LSS
 SERIAL PORT: NETWORK (UDP)
 PORT: 22000
 RUNNING TIME: OFF
 RESULTS: ON

NOTE:
 ABOVE SETTINGS ARE
 FOR DMP-8000 FRONT
 ENDS WITH VERSION 6.4
 OR HIGHER. OLDER VNET
 VERSION REFER TO
 DWG-1068144

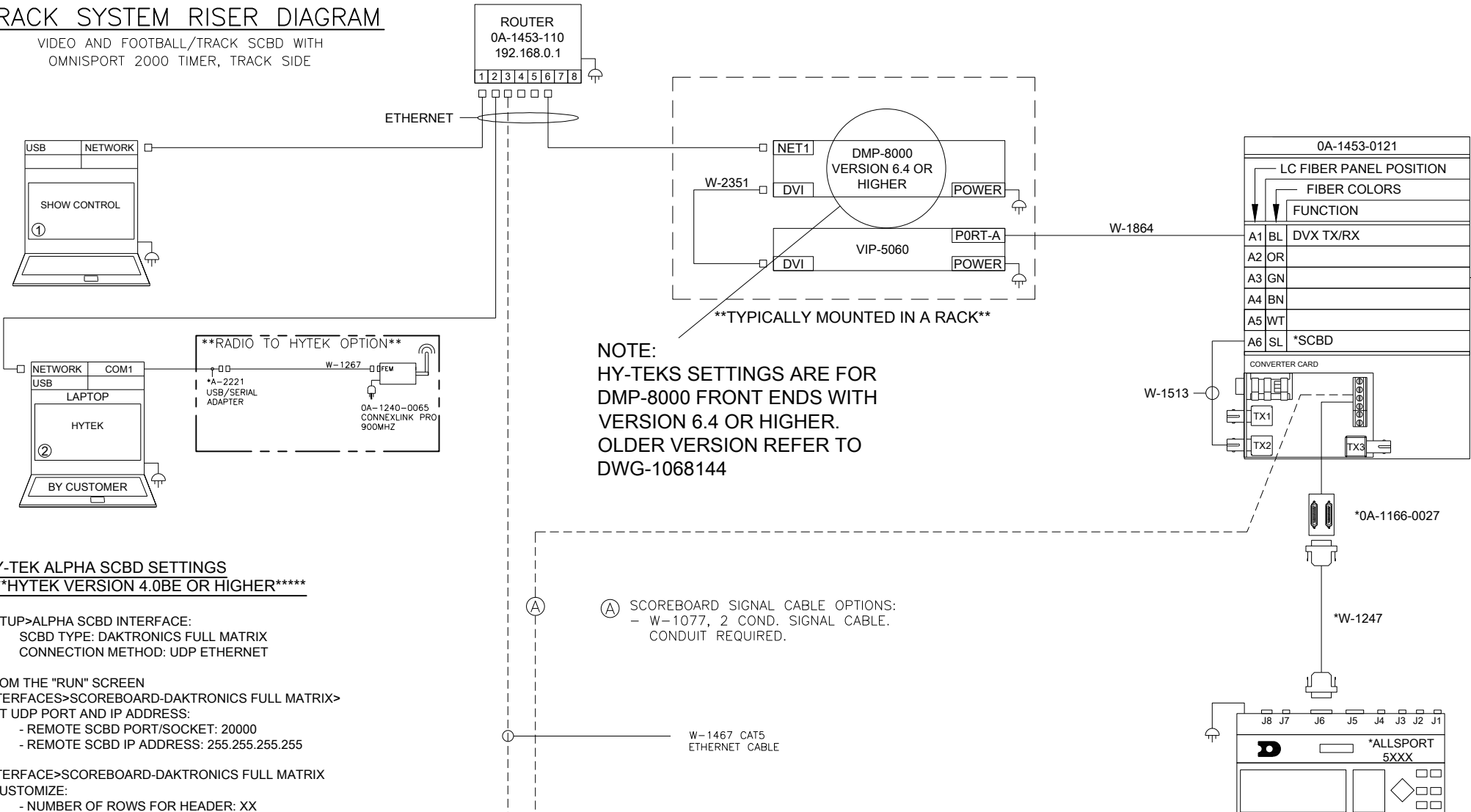


*ALL ITEMS MARKED WITH ASTERISK
 ARE OPTIONAL, AND COME TOGETHER

REV 1	DATE: 21 MAY 18	ADDED NEW SCRIPT NAMES AND MEET PRO SETTINGS	BY: DDM
			THIRD ANGLE PROJECTION
PROJECT: TRACK W/ STANDARD DVX			
TITLE: RISER; HYTEK/LYNX/SHOW CNTRL, FIBER, SCBD, DVX W/V6.4			
DATE: 14 MAY 15	DIM UNITS: INCHES [MILLIMETERS]	SHEET	REV 01
SCALE: NONE	DO NOT SCALE DRAWING		
DESIGN: CENGELS	JOB NO. P1125	FUNC - TYPE - SIZE R - 01 - B	3058591
DRAWN: CENGELS			

TRACK SYSTEM RISER DIAGRAM

VIDEO AND FOOTBALL/TRACK SCBD WITH
OMNISPORT 2000 TIMER, TRACK SIDE



NOTE:
HY-TEKS SETTINGS ARE FOR
DMP-8000 FRONT ENDS WITH
VERSION 6.4 OR HIGHER.
OLDER VERSION REFER TO
DWG-1068144

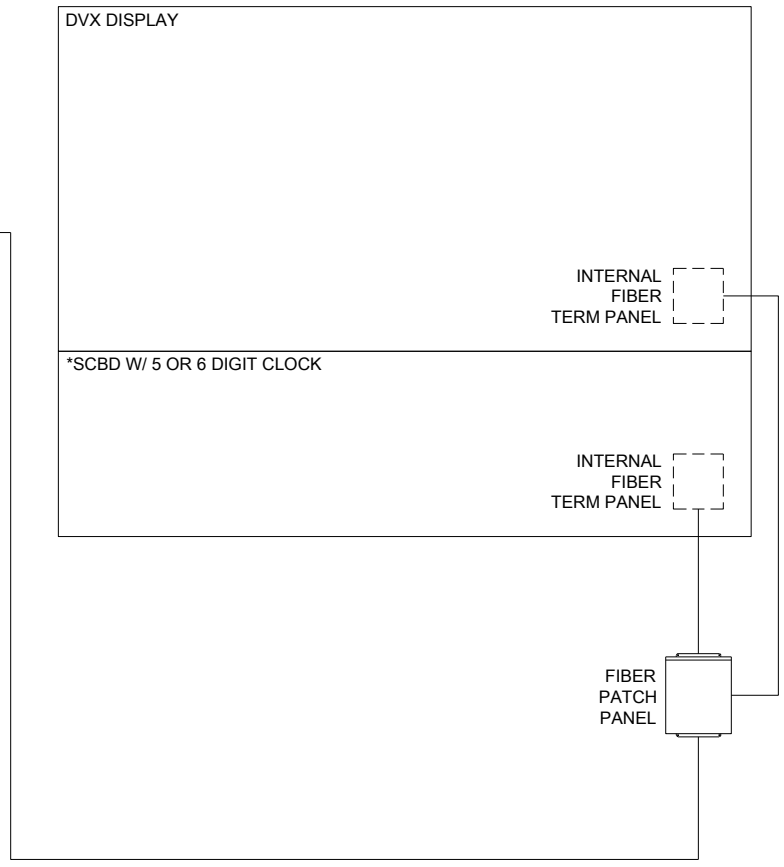
(A) SCOREBOARD SIGNAL CABLE OPTIONS:
- W-1077, 2 COND. SIGNAL CABLE.
CONDUIT REQUIRED.

NOTE: THIS SETUP DOES NOT REQUIRE THE
ALLSPORT FOR TRACK MODE.

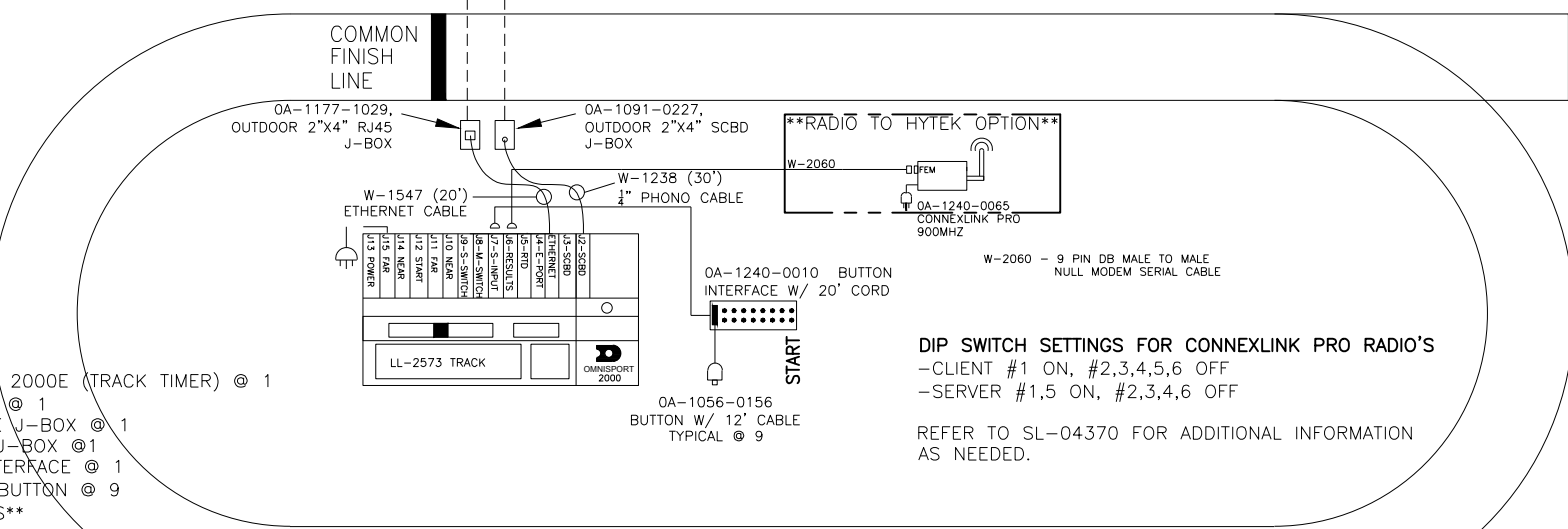
② HY-TEK ALPHA SCBD SETTINGS
****HYTEK VERSION 4.0BE OR HIGHER****

- SETUP>ALPHA SCBD INTERFACE:
SCBD TYPE: DAKTRONICS FULL MATRIX
CONNECTION METHOD: UDP ETHERNET
- FROM THE "RUN" SCREEN
INTERFACES>SCOREBOARD-DAKTRONICS FULL MATRIX>
SET UDP PORT AND IP ADDRESS:
- REMOTE SCBD PORT/SOCKET: 20000
- REMOTE SCBD IP ADDRESS: 255.255.255.255
- INTERFACE>SCOREBOARD-DAKTRONICS FULL MATRIX
>CUSTOMIZE:
- NUMBER OF ROWS FOR HEADER: XX
- NUMBER OF ROWS FOR LANES: XX
- NUMBER OF CHARACTERS PER ROW: XX
(REFER TO SQUENCE FOR THIS INFO)

REAR VIEW



*ALL ITEMS MARKED WITH ASTERISK
ARE OPTIONAL, AND COME TOGETHER



TRACK EQUIPMENT BOM:

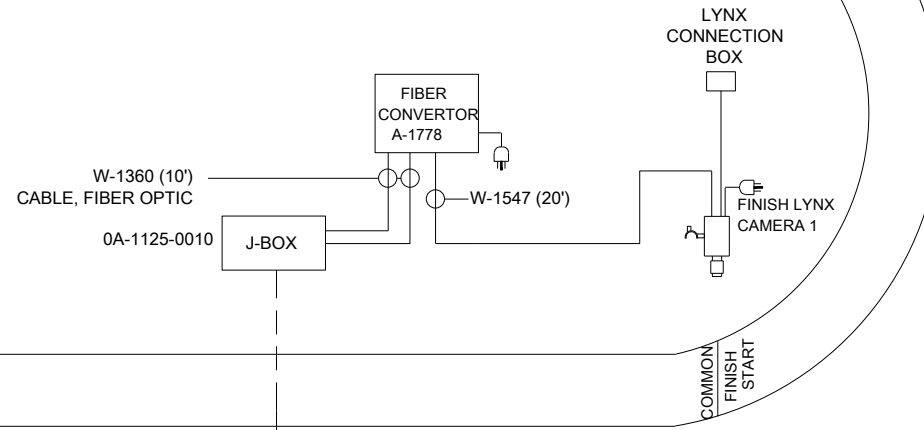
- 0A-1240-0082 OMNISPORT 2000E (TRACK TIMER) @ 1
- W-1238 30' SIGNAL CABLE @ 1
- 0A-1091-0227 TRACK SIDE J-BOX @ 1
- 0A-1177-1029 ETHERNET J-BOX @ 1
- 0A-1240-0010 BUTTON INTERFRACE @ 1
- 0A-1056-0156 12' PUSH BUTTON @ 9
- **OPTIONAL HY-TEK RADIO'S**

DIP SWITCH SETTINGS FOR CONNEXLINK PRO RADIO'S
-CLIENT #1 ON, #2,3,4,5,6 OFF
-SERVER #1,5 ON, #2,3,4,6 OFF
REFER TO SL-04370 FOR ADDITIONAL INFORMATION
AS NEEDED.

-IF MORE THAN 8 LANES ARE REQUIRED, OR MORE
THAN 1 BUTTON PER LANE, REPLACE 0A-1240-0010
WITH 0A-1240-0016 AND ORDER THE NUMBER OF
BUTTONS NEEDED.

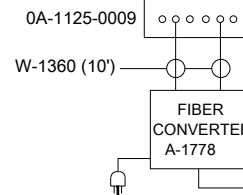
DAKTRONICS, INC. BROOKINGS, SD 57006		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESS WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2015 DAKTRONICS, INC.	
		DO NOT SCALE DRAWING	
PROJ: OMNISPORT 2000			
TITLE: RISER; DMP-8000/FB TRACK SCBD, W/OMNI 2K, HYTEK, SHOW CNTRL			
DESIGN: CENGELS		DRAWN: CENGELS	DATE: 8 MAY 15
SCALE: NONE			
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	00	P1240	F-01-B
			3058769

NOTE: *THIS IS A GENERIC LAYOUT FOR A LYNX TIMING SYSTEM. ACTUAL LAYOUT MAY VARY.



PULL BOX

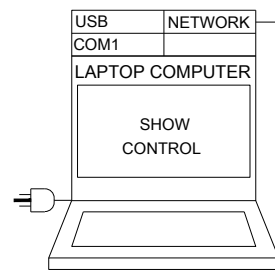
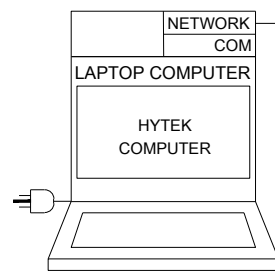
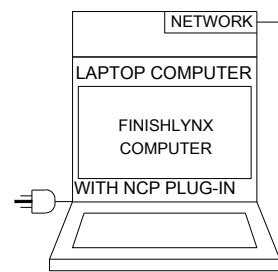
W-1242
IN 1" CONDUIT TYP.



OUTDOOR
RJ-45 J-BOX
0A-1177-1029

OUTDOOR
1/4" JACK J-BOX
0A-1091-0227

W-1236
CABLE, 2 COND, W/
PHONE PLUG



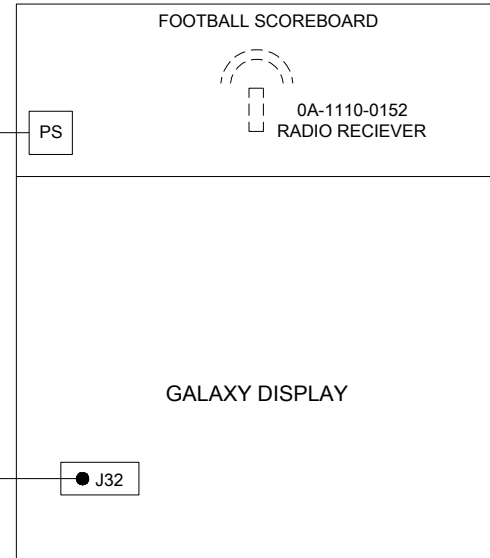
W-1234 CABLE
IN 1" CONDUIT TYP.

0A-1125-0011 FOR
3400 & 3700 SERIES

0A-1125-0013 FOR
3500 SERIES AND SS.

CP

W-1384 CAT5E CABLE
IN 1" CONDUIT TYP.



HY-TEK ALPHA SCBD SETTINGS
****HYTEK VERSION 4.0BE OR HIGHER*****

SETUP>ALPHA SCBD INTERFACE:
SCBD TYPE: DAKTRONICS FULL MATRIX
CONNECTION METHOD: UDP ETHERNET

FROM THE "RUN" SCREEN
INTERFACES>SCOREBOARD-DAKTRONICS FULL MATRIX>
SET UDP PORT AND IP ADDRESS:
- REMOTE SCBD PORT/SOCKET: 20000
- REMOTE SCBD IP ADDRESS: 255.255.255.255

INTERFACE>SCOREBOARD-DAKTRONICS FULL MATRIX
>CUSTOMIZE:
- NUMBER OF ROWS FOR HEADER: XX
- NUMBER OF ROWS FOR LANES: XX
- NUMBER OF CHARACTERS PER ROW: XX
(REFER TO SQUENCE FOR THIS INFO)

**FINISH LYNX CAPTURE SCBD
SETTINGS (W/ SCBD)**

SCRIPT: DAK.LSS
SERIAL PORT: NETWORK (UDP)
PORT: 3002
RUNNING TIME: NORMAL
RESULTS: AUTO
PAGE SIZE: (EQUAL TO NUMBER OF
LINES ON SCOREBOARD)
NORMAL RESULTS: NONE

DCS SETTINGS

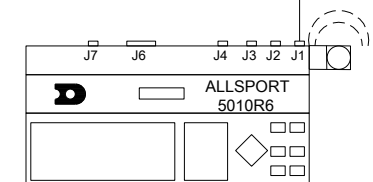
DAK#: ER-1814159
INPUT PORT 1: OPEN

INPUT PORT 2:
NAME: HYTEK, TYPE: UDP/IP SOCKET
PORT: 20,000
INPUT TEMPLATE: BLANK
SCRIPT NAME: OFFSETSTANDARDRTD5000.DDS

INPUT PORT 3: OPEN

INPUT PORT 4: OPEN

PORT 5:
NAME: OUTPUT, TYPE: UDP/IP SOCKET
PORT: 3002, BROADCAST: CHECKED
INPUT TEMPLATE: BLANK
ADVANCED >>
MODE: TRANSMIT ONLY
ENABLE RTD PROTOCOLS: CHECKED
VERIFY ERTD CHECKSUM: CHECKED



DAKTRONICS		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESS WRITTEN CONSENT OF DAKTRONICS, INC. OR ITS WHOLLY OWNED SUBSIDIARIES. COPYRIGHT 2017 DAKTRONICS, INC. (USA)		THIRD ANGLE PROJECTION
PROJECT:	TRACK	TITLE:	RISER; HYTEK/LYNX/SHOW CONTROL GALAXY, E-NET, SCBD	
DATE:	26 JUL 17	DIM UNITS:	INCHES [MILLIMETERS]	SHEET
SCALE:	NONE	DO NOT SCALE DRAWING		REV
DESIGN:	CENGLES	JOB NO.	P1125	00
DRAWN:	MRUFER	FUNC - TYPE - SIZE	R - 01 - B	3695367

This page intentionally left blank.