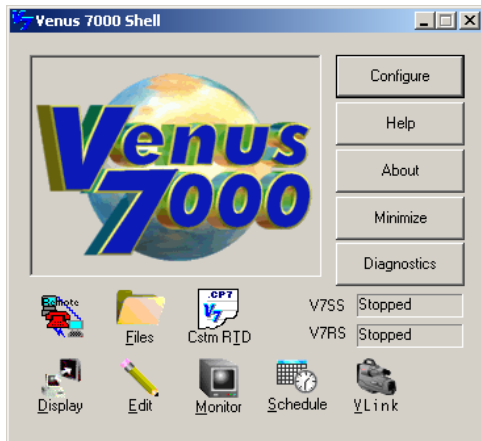


# Daktronics Venus<sup>®</sup> 7000 Controller Track Setup Guide

🔗 **NOTE:** This reference is intended as a guide to help configure the Venus 7000 controller to interface with Hy-Tek's MEET MANAGER for track and FinishLynx photo finish system.

## STEP 1 Configure **RTD Inputs**

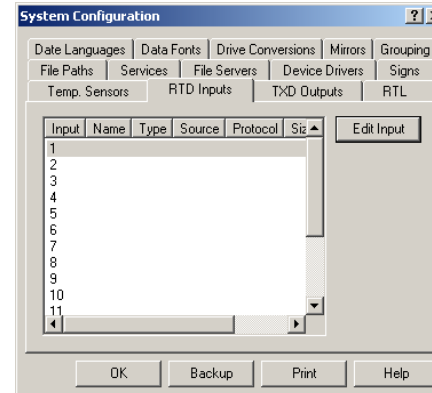
Click on **<Configure>** shown in **Figure 1**. Next, select the **RTD Inputs** file tab as seen in **Figure 2**. To edit an input, highlight a number (i.e. 1:) and click on **<Edit Input>**.



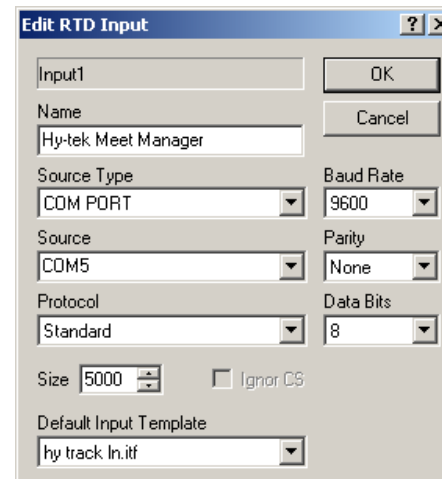
**Figure 1:** Venus 7000 Shell Menu

## STEP 2 Configure **RTD Input 1**

Choose **Input 1** and configure it per **Figure 3** for a serial connection from Hy-Tek's MEET MANAGER.



**Figure 2:** RTD Inputs



**Figure 3:** **RTD Input 1** settings for a serial connection from the MEET MANAGER

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Windows<sup>®</sup> and DOS<sup>®</sup> are registered trademarks of Microsoft, Inc.

FinishLynx<sup>™</sup> is a trademark of the Lynx System Developers, Inc.  
Hy-Tek Meet Manager<sup>®</sup> is a registered trademark of Hy-Tek Ltd.



Daktronics, Inc.  
[www.daktronics.com](http://www.daktronics.com)

PO Box 5128, 331 32<sup>nd</sup> Ave. Brookings, SD 57006  
tel (605) 697-4036 or (877) 697-1115 fax (605) 697-4444

ED-12636 REV 1  
e-mail: [helpdesk@daktronics.com](mailto:helpdesk@daktronics.com)

# Daktronics Track Venus® 7000 Controller COM Port Troubleshooting Guide

**STEP 3** Identify how FinishLynx will connect to the Venus 7000. **Option 1** is through a serial comm. port. **Option 2** is over the network via a UDP/IP socket. One thing to consider when making this decision is that if you use serial ports and you want to send both results and running time from the FinishLynx capture computer, it is best to use two separate scoreboard outputs. If you use serial ports, then you need two serial ports. If you use the network, you just need to configure two UDP/IP scoreboard outputs, but no further hardware is required. If you decide to use the network, you will need the NCP plug-in from FinishLynx. It is possible to send both run time and results on the same serial port, but while the run time is counting on the scoreboard, there will be no results sent over. Either stop the run time manually, or by using the internal photocell in FinishLynx. After you have stopped the run time, when the next result is picked, it will be sent to the scoreboard.

**STEP 4** Configure **RTD Inputs 2, 3 & 4**.

**Input 2** will be the running time from FinishLynx Capture computer. **Input 3** will be the start lists and results from FinishLynx Capture computer and **Input 4** will be the start lists and results from FinishLynx Edit Computer.

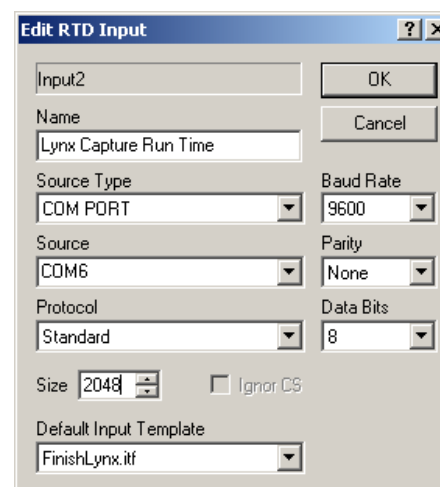
### Serial Port Connection

Choose **Input 2** and configure it per **Figure 4**. Choose **Input 3** and configure it per **Figure 5**. Choose **Input 4** and configure it per **Figure 6**.

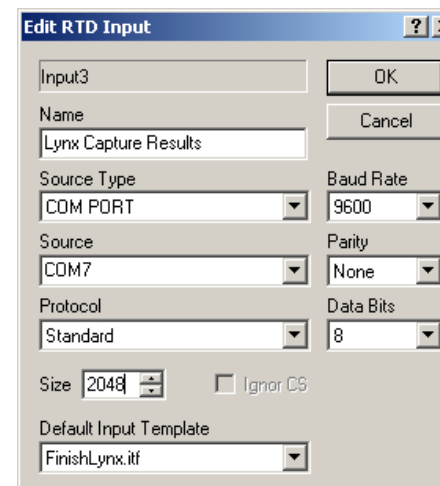
OR

### Network via a UDP/IP socket connection

Choose **Input 2** and configure it per **Figure 7**. Choose **Input 3** and configure it per **Figure 8**. Choose **Input 4** and configure it per **Figure 9**.



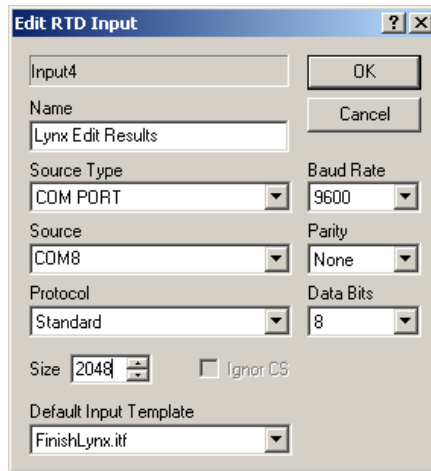
**Figure 4: RTD Input 2** Settings for Run Time from a serial comm. port on the Lynx Capture Station.



**Figure 5: RTD Input 3** Settings for Results from a serial comm. port on the Lynx Capture System.



# Daktronics Track Venus® 7000 Controller COM Port Troubleshooting Guide



Input4

OK

Cancel

Name  
Lynx Edit Results

Source Type  
COM PORT

Baud Rate  
9600

Source  
COM8

Parity  
None

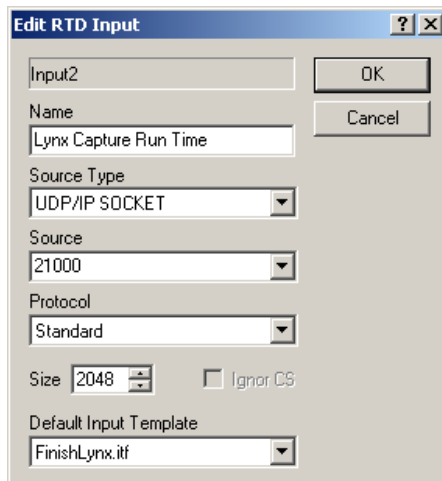
Protocol  
Standard

Data Bits  
8

Size 2048 ☐ Ignor CS

Default Input Template  
FinishLynx.itf

**Figure 6: RTD Input 4** Settings for Results from a serial comm. port on the Lynx Edit Station.



Input2

OK

Cancel

Name  
Lynx Capture Run Time

Source Type  
UDP/IP SOCKET

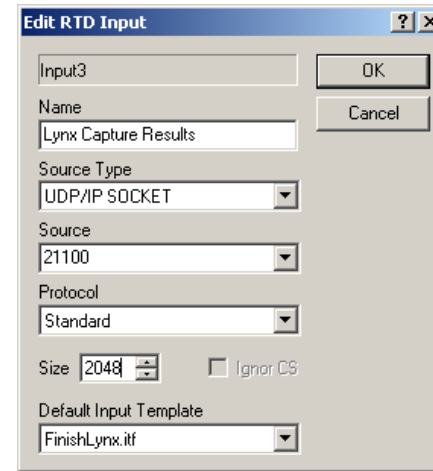
Source  
21000

Protocol  
Standard

Size 2048 ☐ Ignor CS

Default Input Template  
FinishLynx.itf

**Figure 7: RTD Input 2** Settings for Run Time over a UDP/IP network socket from the Lynx Capture Station.



Input3

OK

Cancel

Name  
Lynx Capture Results

Source Type  
UDP/IP SOCKET

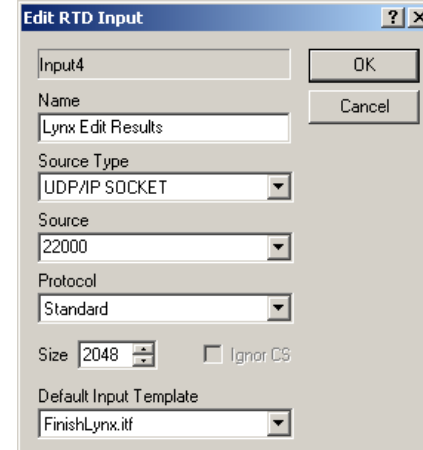
Source  
21100

Protocol  
Standard

Size 2048 ☐ Ignor CS

Default Input Template  
FinishLynx.itf

**Figure 8: RTD Input 3** Settings for Results over a UDP/IP network socket from the Lynx Capture Station.



Input4

OK

Cancel

Name  
Lynx Edit Results

Source Type  
UDP/IP SOCKET

Source  
22000

Protocol  
Standard

Size 2048 ☐ Ignor CS

Default Input Template  
FinishLynx.itf

**Figure 9: RTD Input 4** Settings for Results over a UDP/IP network socket from the Lynx Edit Station.



# Daktronics Venus<sup>®</sup> 7000 Controller Track Request Guide

🔗 **NOTE:** The Track Request program is used to make requests for Start Lists, Results and Team scores from the Venus 7000 to the MEET MANAGER.

## STEP 1 Installing Track Request.

Install the Track Request program onto the Venus 7000 using the Track Request.msi installation file from Daktronics.

## STEP 2 Operation of Track Request.

To open the Track Request program, double-click on the icon found on the desktop of the Venus 7000 computer. Once you open the program, leave it open to keep it ready for the next request.

The parameters on the left side of the window are used to select which information to display.

**Round:** determines if the data is from a preliminary, semi-final, or final event. If there are no prelims or semi-finals, the finals will be round 1.

**Event:** is the event as numbered in the MEET MANAGER.

**Heat:** is the heat as numbered in the MEET MANAGER.

**Multi:** is used for decathlons, heptathlons and pentathlons. Example, the Event# is the number of the decathlon, the Multi# is the number of the sub-event within the decathlon like the shot put. This is numbered in the MEET MANAGER. The **Multi:** field will not affect the lists unless the **Event:** field is a multi-disciplined event.

**Page:** will select which lines of data are displayed. The page size is set in the MEET MANAGER. If the size is set to 8 and you have 24 competitors, page 1 will show place 1-8, page 2 will show 9-16 and page 3 will show 17-24. If you enter page 0, the competitors will cycle 1-8, 9-16, 17-24 automatically. The page time is configured in the MEET MANAGER.

The radio buttons under the **Request Type:** are used to select which type of data you would like. Choose **Start List**, **Result List**, **Women's Scores**, **Men's Scores**, or **Awards**. Awards are similar to the results, except they will only display the athletes that received awards in that event.

## STEP 3 Start Lists.

Refer to **Figure 10**. To request a **Start List**, fill in the appropriate Round, Event, Heat, Multi and Page. Next click on the Start List radio button under the **Request Type:**. Now press the large **<REQUEST>** button to request the selected information from MEET MANAGER.

**Figure 10:** Start List

## STEP 4 Results Lists.

Refer to **Figure 11**. To request **Results**, fill in the appropriate Round, Event, Heat, Multi and Page. To select a final result for multiple heats, enter 99 for the Heat. Next click on the Result List radio button under the **Request Type:**. Now press the large **<REQUEST>** button to request the selected information from MEET MANAGER.



# Daktronics Venus<sup>®</sup> 7000 Controller Track Request Guide

Untitled(1) - Track Request

Round: 1  
Event: 1  
Heat: 99  
Multi: 0  
Page: 0

Request Type:  
☐ Start List  
☒ Result List  
☐ Women's Scores  
☐ Men's Scores  
☐ Awards

Request Port Version

Figure 11: Results List

## STEP 5 Multi-event Results.

Decathlons, heptathlons and pentathlons have multiple disciplines all in one event. To display each discipline, the event number must be chosen for the multi-discipline event. For example, if the decathlon is event 40, enter 40 into the **Event:** field and then change the **Multi:** field to the discipline desired. If the 100 meter dash is the 1st discipline of a decathlon, set **Event:** to the proper event number and the **Multi:** to 1, then click request. Refer to **Figure 12**. The **Multi:** field will not affect the lists unless the **Event:** field is a multi-disciplined event.

## STEP 6 Team Score.

Refer to **Figure 13**. To display team scores, select the **Women's Scores** or the **Men's Scores** and click on **<REQUEST>**. When requesting team scores, the values for **Round:**, **Event:**, **Heat:** and **Multi:** are ignored. However, the **Page:** field operates normally.

Untitled(1) - Track Request

Round: 1  
Event: 40  
Heat: 1  
Multi: 1  
Page: 0

Request Type:  
☐ Start List  
☒ Result List  
☐ Women's Scores  
☐ Men's Scores  
☐ Awards

Request Port Version

Figure 12: Multi-Event List

Untitled(1) - Track Request

Round: 3  
Event: 40  
Heat: 1  
Multi: 0  
Page: 1

Request Type:  
☐ Start List  
☐ Result List  
☒ Women's Scores  
☐ Men's Scores  
☐ Awards

Request Port Version

Figure 13: Team Scores List



# Daktronics Venus<sup>®</sup> 7000 Controller Track Request Guide Troubleshooting

- ☀ If you request an event or heat that does not exist, nothing will happen.
- ☀ A Hy-Tek sequence has 5 frames. Frame 1 is for the start list, 2 is for results, 3 and 4 are teams scores and 5 is awards. Frames 2 and 5 are typically identical and frames 3 and 4 are identical.
- ☀ If the results are flashing, be sure the Venus 7000 controller sequence **Hy-Tek** is running in “**selected frame**” mode and not in “**continuous**” mode.
- ☀ When using the track request program, **Port** is associated to the Venus 7000 controller input that the **MEET MANAGER** is connected to. The Port defaults to the Venus 7000 controller **Input 1**. The COM Port and protocol settings for the input must be changed in the Venus 7000 controller configuration menu.
- ☀ Verify that you have the Alpha Scoreboard option in your Hy-Tek MEET MANAGER for track. Configure MEET MANAGER to use the Daktronics Fixed Digit output. Next identify and configure the comm. port on the Hy-Tek computer that will connect to the Venus 7000. Last set the baud rate in MEET MANAGER to 9600.
- ☀ You can also push data from the MEET MANGER by pressing Ctrl-F1 while in the Run menu of MEET MANAGER. A menu will pop-up similar to the Track Request.
- ☀ Refer to Daktronics Dwgs B-127739 and B-267220 for sample system riser diagrams.
- ☀ Refer to Daktronics ED-14511 for instructions on setting up MEET MANAGER and FinishLynx.





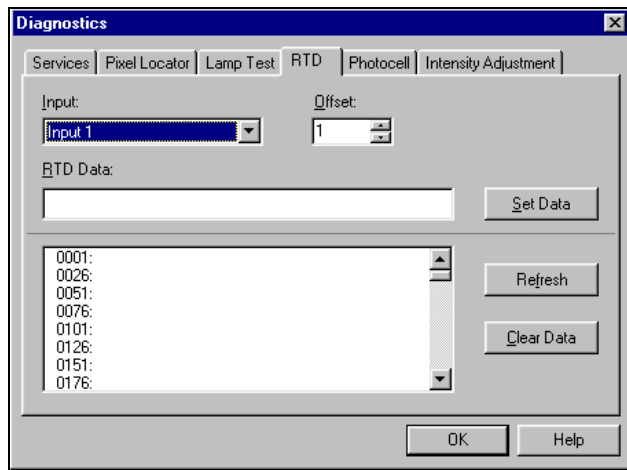
# Daktronics Track Venus® 7000 Controller COM Port Troubleshooting Guide

## **STEP 1** Choose the **RTD** input to test

From the Venus 7000 Shell Menu (refer to **Figure 1** in the **Track Setup Guide**), click on **<DIAGNOSTICS>**. In the **Diagnostics** menu, select the **RTD** file folder tab.

## **STEP 2** Test Hy-Tek Meet Manager

In the **Input:** data box, select **Input 1**. If the **RTD Diagnostic** menu shows **Input 1** under the **Input:** data box, click on **<REFRESH>**. Refer to **Figure 14**.



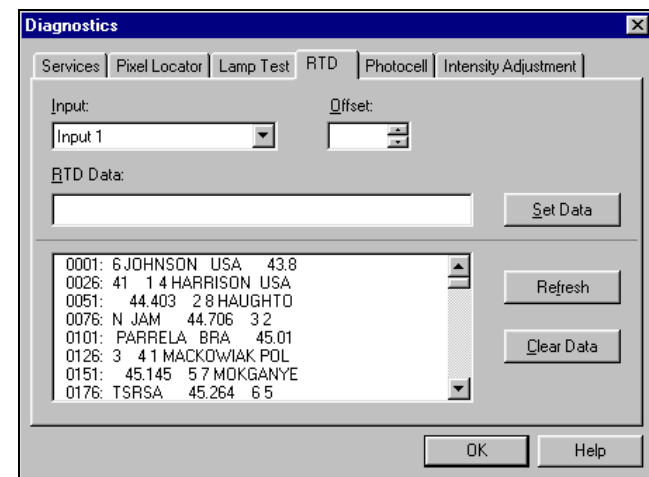
**Figure 14: RTD Input** Diagnostic menu with no data

## **STEP 3** Test Analysis

After clicking **<REFRESH>**, examine the data in the message box on the bottom left of the window as seen in **Figure 14**. If only the numbers on the left side of the colons are displayed, *you have received no data*. Try sending data from **MEET MANAGER** again. If no data is received (check data by clicking **<REFRESH>**), inspect cable routing and connections.

## **STEP 4** Test Analysis

If data was received, numbers and names will appear on the right side of the colon as seen in **Figure 15**. This data should also be displayed on your scoreboard display system. The data on the left side of the colons are the **Item Number** ranges.



**Figure 15: RTD Input** Diagnostic menu with Data



# Venus<sup>®</sup> 7000 Controller Track & Field Real Time Data

## STEP 1 Create Data Frame

When creating a new RTD sequence, a **Data Frame** must be added. To do this, open the **Frame** menu, then select **Insert** and then **Data Frame**. Refer to **Figure 16** below

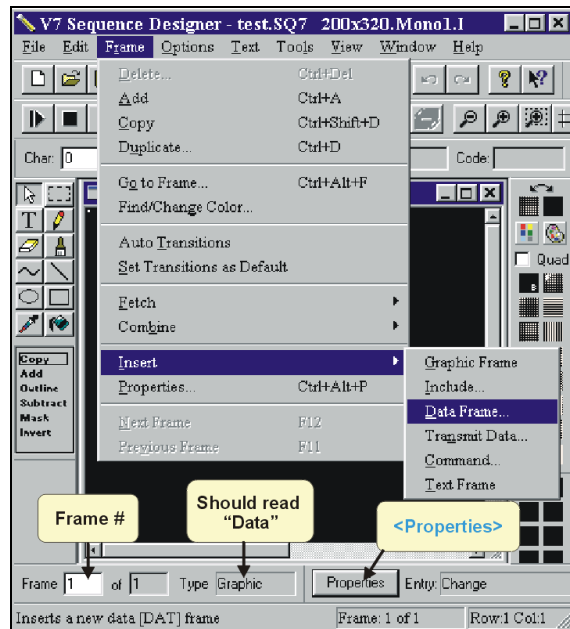



Figure 16: Insert Data Frame

## STEP 2 Delete Graphic Frame

After adding a data frame, there will be two frames. Frame 1 must be deleted. On the bottom of the window, the frame must be **Frame 1 of 1 Type: Data** and not **Type: Graphic**. Refer to **Figure 16**. To delete a frame, click on , or right-click on the frame to be deleted. Highlight **Frame** option, and then select **Delete**. Click on **<DELETE CURRENT>**.

## STEP 3

### Hy-Tek sequences

Rename your file "**Hy-Tek**". From there, build a frame similar to **Figure 19**. Frame #1 will be for Start Lists. To start the **RTD Template**, click **<PROPERTIES>** on the bottom of the window. A **Frame Properties** window will appear.

### Frame Properties Data Box Description: (Refer to **Figure 17**)

**Field:** applies box number

**Row & Col:** Horizontal & Vertical position

**Font:** Size of letters and numbers

**Overlay:** Outline used for video background

⇒ Important ⇒ **Field Type:** select **RTD**

**RTD Field:** Individual field properties

**Input:** COM Port Source

**Item #:** Serial bit on data stream

**Length:** Number of characters after selected item number

**Justification:** Centering or spacing left or right

**Field Name:** Automatically sets item number length for selected choice. (Refer to **STEP 4**)

**Sample Text:** Text that will be seen on **Sequence Designer** but not on the **Scoreboard**

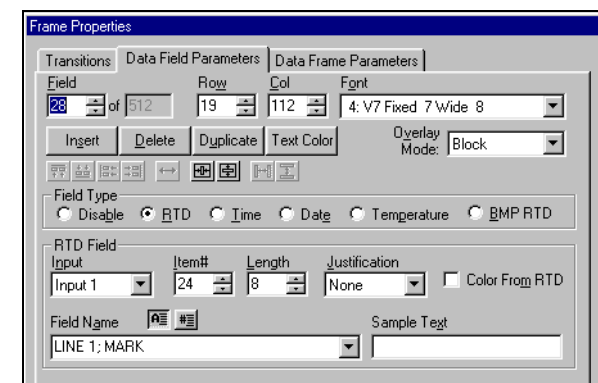


Figure 17: Frame Properties





# Venus<sup>®</sup> 7000 Controller Track & Field Real Time Data

## STEP 4 Verify the Data Frame Parameters

Refer to **Figure 18**. These will need to be verified for each frame. For the **Hy-Tek** sequence, Input 1, frames 1, 2 and 5 will be set to **hy track In.itf** and Frames 3 and 4 will be set to **hy track scr.itf**.

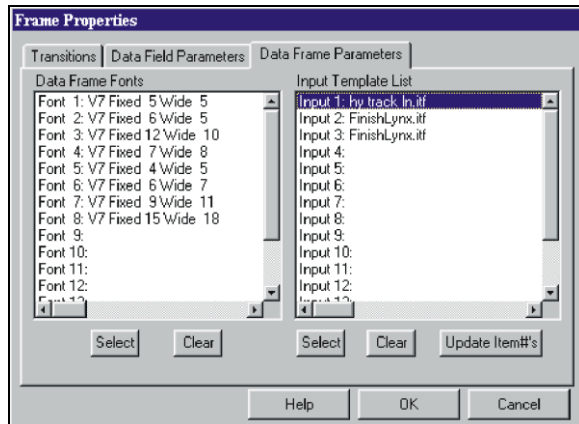


Figure 18: Data Frame Parameters

## STEP 5 Start creating RTD fields

Pick the **Frame Properties** file tab, next select **Field Type: RTD**. Now the **RTD Field** should display that fields parameters. Click on the **Field Name**, choose the desired information for that field. After entering each RTD field and it's respective parameters, the frame should appear similar to **Figure 19**.

## STEP 6 Additional **Hy-Tek** frames

The **Hy-Tek** sequence should consist of five frames: **Start List**, **Results List**, **Women's Scores**, **Men's Scores**, and **Awards**. Refer to **Figure 19**, **Figure 20** and **Figure 21** for frame setup.

NOTE: **Women's Score** and **Men's Score** frames are duplicates. Once one frame is created, it can be copied to the other frame.

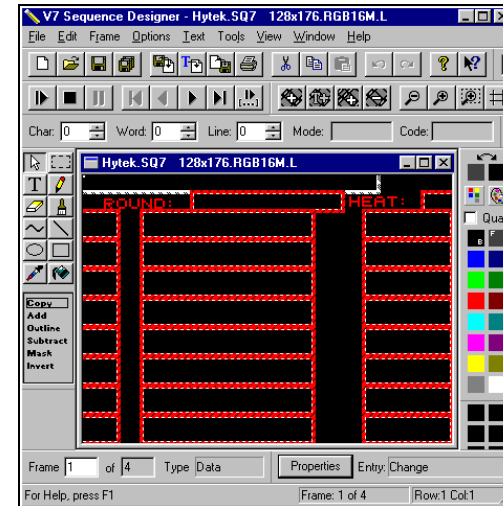


Figure 19: Hy-Tek Frame 1

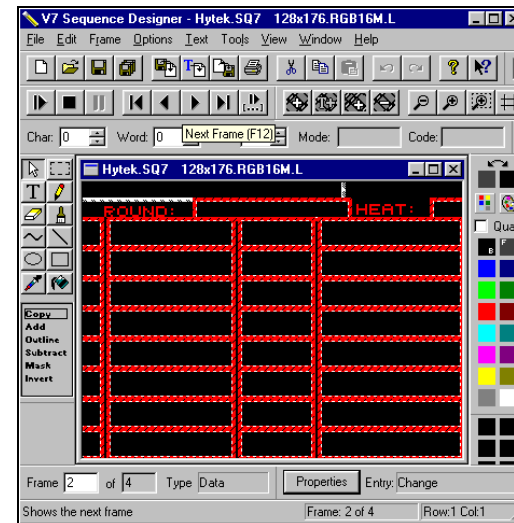


Figure 20: Hy-Tek Frames 2 and 5



# Venus<sup>®</sup> 7000 Controller Track & Field Real Time Data

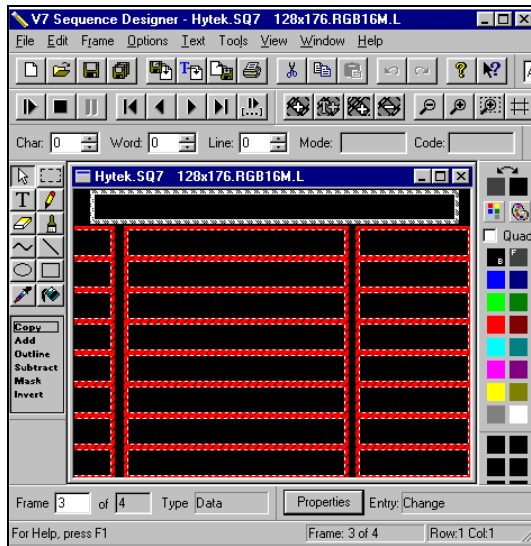


Figure 21: Hy-Tek Frames 3 and 4



## STEP 7

### FinishLynx RTD Sequences

Following the same instructions as the **Hy-Tek** in **STEP 3**, Create a **Lynx Start** list sequence. After that is completed, create a separate sequence **Lynx Results** list. Refer to **Figure 22** and **Figure 23**.

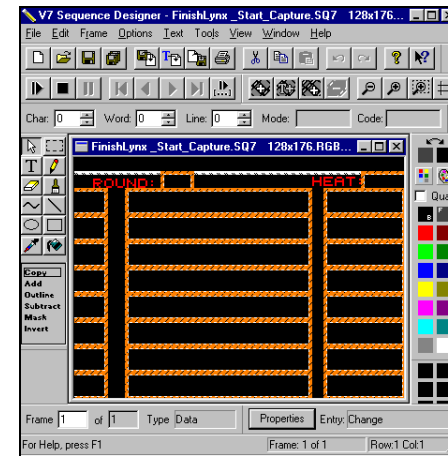


Figure 22: Lynx Start

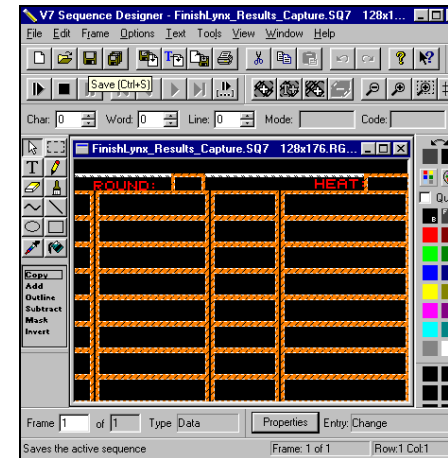


Figure 23: Lynx Results

