# VeriLynx Field Event - Video Verification

Quick Start Guide (v2.00)

Verify that your VeriLynx Full-Frame video system contains the components pictured below.
If not, or if you need additional help, please call: USA 978 556 9780 or email support@finishlynx.com.

| Item | Description | ID |
|---|---|---|
| | VeriLynx Camera and Tripod | VeriLynx |
| | Protective Case | SE520 |
| | 10’ (3 meter) Ethernet Cable | C10BT-10 |

| Item | Description | ID |
|---|---|---|
| | Power Injector for Power-over-Ethernet | IDL-PoE |
| | Power-over-Ethernet Power Supply Connector | Included with IDL-PoE |
| | 100’ (33 meter) Ethernet Cable with Weatherproof XLR-RJ45 connector | WPCAT6-100 |

## Items Not Included

- Computer (laptop recommended) running Microsoft Windows. Your computer needs: one available Ethernet port.
- UPS Battery Backup

## Introduction

The following guide will walk you through the setup, configuration, and operations of FinishLynx, when used with VeriLynx cameras to assist judging of take-off fouls for horizontal jumps or other field events. If at any point you need additional help, please contact Technical Support: support@finishlynx.com.

## General Information

Under World Athletics Technical Rule 30.1.1, horizontal jump take-off failures are re-defined to include any breaking of the vertical plane of the take-off line. Rule 29.5 strongly encourages judges to use video or other technology to assist the decision process. VeriLynx cameras, along with special configuration of the FinishLynx software, can be used for this purpose.

**NOTES:** **The new VeriLynx cameras are a different design from the older models. The Ethernet port in the back of the camera supports XLR to RJ-45 connectors for weatherproof connection. Failure to use this connector may lead to water infiltration which could damage the camera.**
To learn how to install the connector on your Ethernet cable, go to: www.neutrik.com/en/product/ne8mx-b to find the **Assembly Instructions**.

The VeriLynx cameras **require FinishLynx version 12.10 or later** to operate. Download the software from the Lynx Flash Drive included with the camera, or download from the website:
www.finishlynx.com/product/software/finishlynx-results-software/

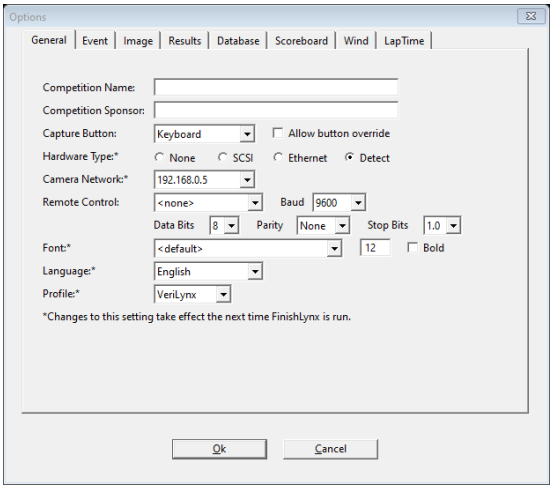
## Setup 1 Hardware Setup

1. Place the camera on the tripod in the plane of the take-off board.
   a. (optional) position a second VeriLynx camera beyond the take-off board and pointed back toward the runway. This camera can be used for visual confirmation of the current athlete.
2. Plug the Power-over-Ethernet (PoE) power supply into the power source or UPS battery backup.
3. Connect the short Ethernet cable (10') from the PC to the **IN** port of the PoE power supply.
4. Connect the long Ethernet cable (100') from the **OUT** port of PoE power supply to the back of the camera.

## Setup 2 Software Configuration (Options)

1. Start **FinishLynx** (version 12.00 or newer).
2. Go to **File** | **Options...**
3. Select **VeriLynx** from the **Profile:** list.
4. Restart FinishLynx.
5. Go to **File** | **Options...** | **Database** and set the **Input Directory** to the location of the Lynx database files (fldlynx.sch, lynx.evt, lynx.ppl).
6. Click **Ok**.

**NOTE –** When running **FinishLynx** using the **VeriLynx** profile, the splash screen and the application title bar will display a reference to **VeriLynx**. This helps confirm the right profile is selected.



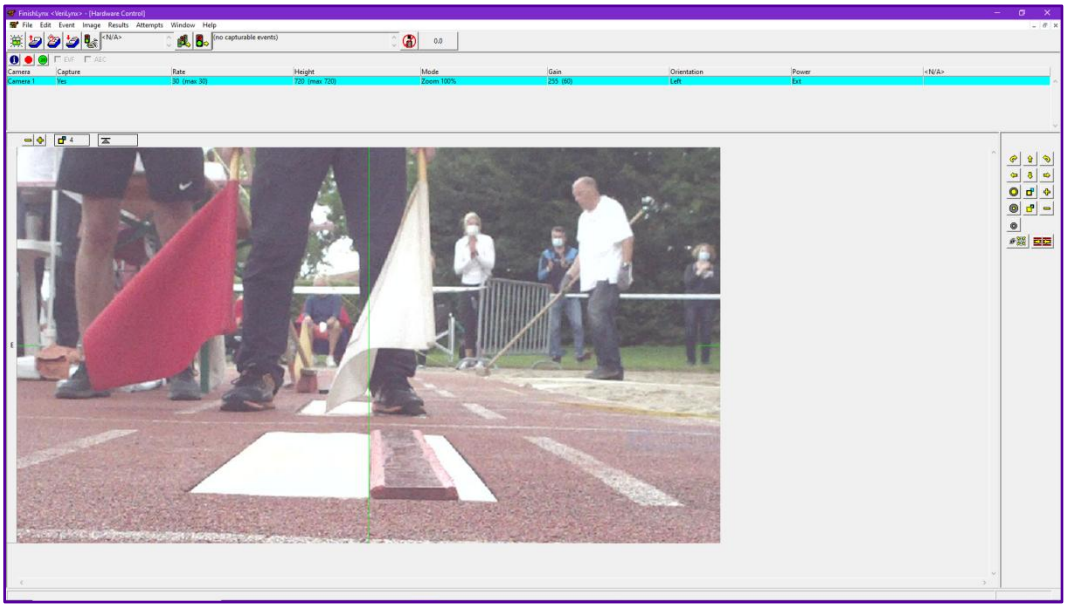

## Setup 3 Software Configuration (Camera Settings)

1. Click the **Camera Settings** icon.
2. Click the **Parameters** tab:
   a. **Frame Rate** = Max available.
   b. **Frame Height** = 1280x720 (or higher).
   c. Shutter **Speed** = 1/700 (or smaller).
3. Click the **Capture** tab:
   a. Capture Method = **Automatic (VeriLynx Motion)**.
   b. Capture Method = **Trailer** = 5.
4. Click **Ok**.

## Setup 4 Camera Alignment

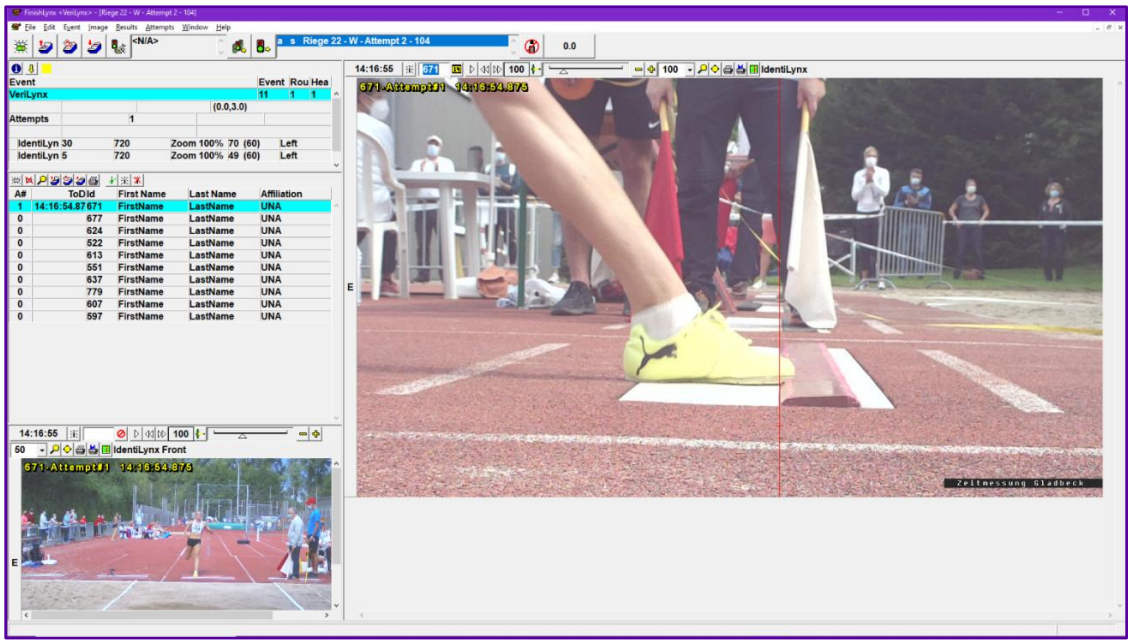
1. Have someone stand on the take-off board to determine the field of view and focus point.
2. Click on the **Red Stop Sign** to put the camera into Alignment mode.
3. Use the **Remote Zoom** and **Auto Focus** in the remote control panel to adjust the camera until you have the desired image. The full width of the take-off board should be in view and the vertical alignment line should appear at the edge of the take-off board.
   a. **Auto-Iris**: Always on and managed automatically by the camera (cannot be manually adjusted). To change exposure, adjust the brightness value.
   b. **Zoom Steps**: 4 step sizes are available. Use the mouse to click the **Iris** or **Zoom** icons for the smallest change. Try to Shift-click, Ctrl-click or Ctrl-Shift-click (full range in two steps) for increasingly bigger steps.
   c. **Auto Focus:** Ctrl-Shift-click the Focus Near or Focus Far icon to activate the camera's Automatic focus function. The focus icons will change when in auto focus.

**Normal Focus Mode** **Auto Focus Mode**



## Setup 5 Software Operations

1. Select an event from the schedule or create a new (blank) event.
2. Enable capture by clicking the capture icon (**Event** | **Toggle Capture Alt-T**).
3. Use the **TAB** key to enable the **Scroll New Image** function.
4. When an athlete jumps, hit the **TAB** key to disable the **Scroll New Image** and freeze the view close to the frame showing the attempt.
5. Use the mouse wheel to move the image and to judge the take-off.
6. Enter the athlete's bib number (Identify by ID) and hit **Enter**.
   - This will add a line label, time of day (ToD) timestamp the current frame, export a JPEG and count up the attempt number (starts at 0).
   - To easily go back to any athlete's recorded jump, select the athlete in the *Results Zone* (or Shift-ArrowUp/Dn) and go to **Results** | **Previous/Next Attempt** (or Shift-ArrowLeft/Right) to cycle through each attempt.
7. Repeat for all athletes and all attempts in the flight.



## Advanced Tips

To limit the capture of unwanted image, set the Object Detection's **Active Area** to include only the vertical portion of the image that covers the take-off board (Camera Settings > Capture tab).

For details, go to this link: ACM – Active Area.

To manage multiple VeriLynx cameras on the same network with multiple PCs, use the FinishLynx camera whitelist feature.

For details, go to this link: Whitelist Management.

## FAQ

### How to operate a VeriLight?

Use the Alt-F (Foul) and Alt-V (Valid) to toggle VeriLight on/off. For details, go to this link: www.finishlynx.com/wp-content/uploads/2024/01/VeriLight_QSG.pdf

### How to remove an attempt from the Results Zone?

If the attempt to be removed is the last one entered, simply click the on the **Mask Attempt** button. To remove an older attempt, select the athlete from the *Results Zone* and go to **Attempts** | **Edit Attempts…**, then select the correct attempt and hit **Delete**.

### How to automatically export a JPEG image when I mark an attempt?

Go to **File** | **Options…** | **Image Export** and select **On** for the *Auto-Export* feature.

When an attempt is entered, a JPEG file is automatically exported to the **Export Directory:** on the *Database Options* tab. By default, this is set to the c:\Lynx folder.

The filename format is <EEE-R-HH>_<ID>_<Attempt#>.jpg.

### Will I lose the captured image if my PC fails or loses power?

No. All image is written to disk in real-time. If the PC fails before the event is saved, go to c:\Lynx\temp to recover the lost event and image.

### How to quickly move through the VeriLynx image?

- **Shift+Click** an athlete in the Results Zone to view their last attempt
- **Shift+ArUp** or **ArDown** to go to the previous or next athlete (Results menu)
- **Shift+ArLeft** or **ArRight** to go to the previous or next attempt for the current athlete (Results menu)
- Mouse wheel up/down to move the current image pane forward or back
- **Alt+ArUp** to Play or Stop the selected image pane (Image menu)
- **Alt+ArLeft** or **ArRight** to go to the previous or next image frame of the selected image (Image menu)
- **Home** or **End** to go to the beginning or end of the selected image pane
- **Find by ID** by clicking the magnifying glass in the Results toolbar (Results menu)
- **Find by Time** by clicking the magnifying glass in the Image toolbar (Image menu)

*For more shortcuts, go to https://help.finishlynx.com/Content/Shortcuts.htm

### How to install the XLR-RJ45 connector?

To learn how to install the connector on your Ethernet cable, go to: www.neutrik.com/en/product/ne8mx-b and find the Assembly Instructions. Failure to use this connector may lead to water infiltration and damage to the camera.