




IdentiLynx+ & XR+ Full-Frame Video Cameras Quick Start Guide

Verify that your IdentiLynx 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
	IdentiLynx Camera	IdentiLynx+/XR+
	Protective Case	CP102
	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	C10BT-100

Items not included

- Computer (laptop recommended) running Microsoft Windows. Your computer needs: one available serial port, or USB port, and one available Ethernet port.
- (Recommended) Gigabyte Hub/Switch
- UPS Battery Backup

Introduction

In this quick start guide, you will learn how to set up and configure the IdentiLynx camera with your FinishLynx timing system and play back full-frame video captured at the finish line.

NOTE: Lynx recommends a **Gigabyte hub/switch** and a **Gigabyte network card** as a minimum when adding the IdentiLynx camera to your timing system.

Step 1: Install the Latest FinishLynx Software

NOTE: IdentiLynx requires the latest version of FinishLynx.

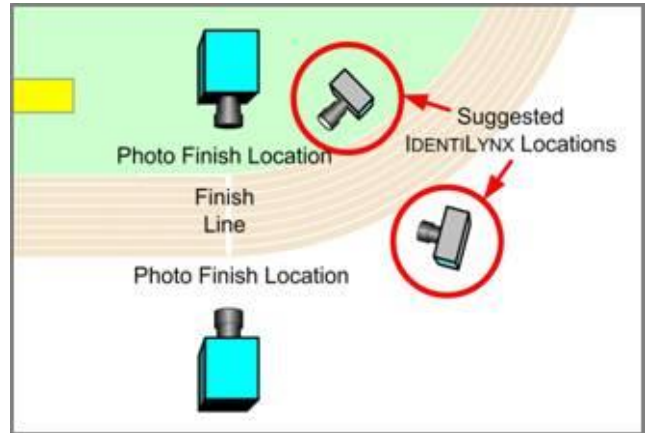
- Open FinishLynx on your computer – go to **Help | About** and write down your FinishLynx Serial Number if you do not already have it stored somewhere. Also, record the serial numbers for any FinishLynx software plug-ins.
- If accessible, insert the supplied Lynx flash drive into your computer's USB port and install FinishLynx.

OR: Download the latest FinishLynx software online: www.finishlynx.com/product/software/finishlynx-results-software/

- Enter the serial number.
- Open FinishLynx, click **Help | About** and verify a serial number is listed next to FinishLynx (this verifies installation was successful).

Step 2: Set Up the IdentiLynx Camera

- Place the camera on the tripod, about chest high and in a safe location. Aim it at the finish line facing in the direction of the oncoming runners.
- Plug the Power-over-Ethernet power supply into the power source or UPS battery backup.
- Connect the first Ethernet cable (10') from the Hub/Switch to the **In** port of the IdentiLynx power supply.
- Connect the second Ethernet cable (100') to the **Out** port on the IdentiLynx power supply.
- Do not** connect the other end of the second Ethernet cable to the **RJ45** port on the back of the IdentiLynx camera until FinishLynx is ready to boot the cameras.



NOTE: The IdentiLynx camera gets Power-over-Ethernet (POE).

Step 3: Boot Cameras

- Open FinishLynx.
- Power on the FinishLynx cameras first**, before the IdentiLynx camera, one camera at a time.
- Check that each regular FinishLynx camera has appeared in the Hardware Control window in FinishLynx.
- Once they have appeared, connect the Ethernet cable from the **OUT** port on the power injector to the **RJ45** port on the back of the IdentiLynx camera.
- Verify that the IdentiLynx camera boots with the default settings (*see below*):

NOTES:

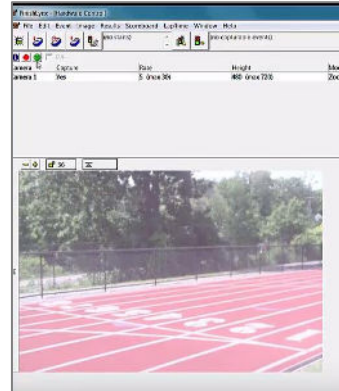
- If the IdentiLynx camera goes offline due to loss of power or network connection, the camera name **does not** turn **RED** like the FinishLynx camera. The software does not do a check to see if the IdentiLynx camera is connected.
- Booting the IdentiLynx camera at the end of the order will eliminate any interruption in camera communication if you turn off or lose connection with the IdentiLynx camera at some point and require re-booting of the FinishLynx cameras (IP order of assigning).

Camera	Capture	Rate	Height	Mode	Gain	Orientation	Power	Ext. Sync
Camera 1	Yes	5 (max 30)	720 (max 1944)	Zoom 100%	140 (60)	Left	Ext	

Step 4: Align the IdentiLynx Camera


The IdentiLynx camera is a full-frame video camera, so the image during alignment mode will show a normal two-dimensional video in the Image Zone (see right).

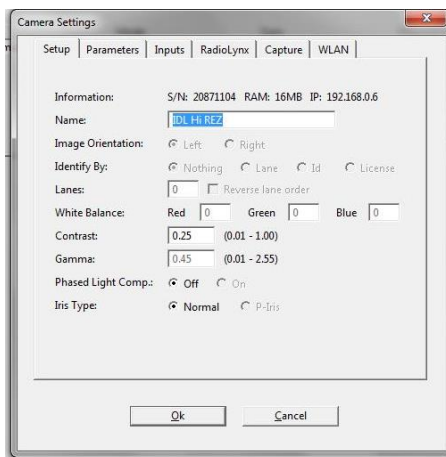
- Have someone stand on the finish line to determine the focus point.
- Select the IdentiLynx camera in the Hardware Control window and click on the **Red Stop Sign** to put the IdentiLynx camera into Alignment mode.
- Once your line of sight is correct, use the **Remote Zoom** and **Auto Focus** function in the FinishLynx screen to adjust the camera until you have desired image. (See Remote Zoom and Auto Focus instructions in Step 8 below.)



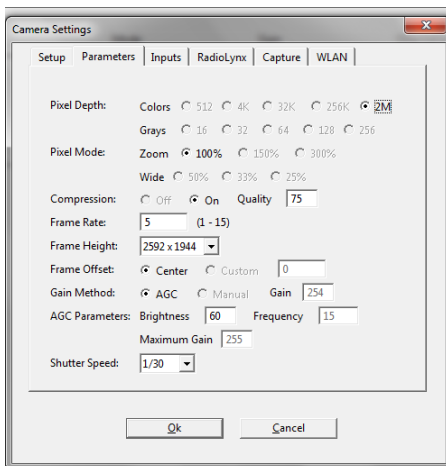
Step 5: Camera Settings

NOTE: Only the **Setup**, **Parameters** and **Capture** tabs will apply to settings for the IdentiLynx camera. The other settings are grayed out as they do not apply to the IdentiLynx functions.

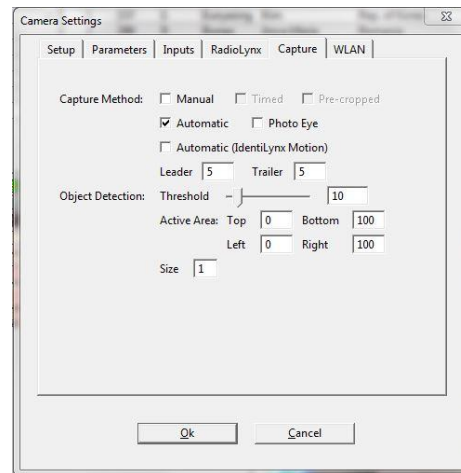
- Click the **Camera Settings** icon. 
- Click the **Setup** tab and name the camera based on location or function.



- Click the **Parameters** tab and set the Frame Rate and Height to your desired need.







- Click the **Capture** tab and make sure you select the preferred capture method.



- In **File | Options | Image**, make sure that **Time Tracking** is set to **All Cameras**.

Step 6: IdentiLynx Image Toolbar

- Open a new Blank Event in FinishLynx.
 - Get a start for the system and have someone run across the finish line as you capture (All Cameras).
 - Click the   icons on the Image Toolbar to zoom in and out of the image.
 - The **Full Screen** icon  will show the full screen image.
 - The **Cropping** tools and **Find Next Object** are not applicable to the IdentiLynx image.
 - In the IdentiLynx image, right-click, hold, and drag to draw a small box. Choose **Enhance** from the menu when the mouse is released. Click the **Restore Image** icon to bring the image back to its original state.
- 
- Click on the **Play** icon and see the images change (you should see the time advance to the left of the play icon). Click it again to stop playback
 - Click on the **Forward** or **Reverse** icons to move one frame at a time in either direction (you should see the time advance with each frame).
 - Hitting the **Reverse** button at full-speed forward playback goes to ½ speed playback. Hitting it again goes to ½ speed reverse playback, and again goes to full-speed reverse. It works the same going forward in playback.
 - Clicking the **Play** button in slow or fast mode brings it to full-speed, and clicking the **Stop** button will stop playback.
 - The Play speeds aren't displayed in the image toolbar. If you hold **Ctrl** and click **Forward** or **Backwards** you'll go to the first or last frame. If you hold **Shift** and click **Play**, the image playback will loop back to the beginning when the end is reached.
 - Images can be printed from the **Image Toolbar** or cropped and saved as a .jpg, similar to FinishLynx images.

Step 7: Time Tracking With IdentiLynx

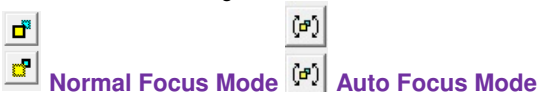
NOTE: The **Red** hash line does not appear on the IdentiLynx image unless you click on the image frame. Time **cannot** be read from the IdentiLynx image.

- Using the same Blank Event, explore the time tracking between the FinishLynx and IdentiLynx cameras.
- Click on a competitor in the FinishLynx image and the IdentiLynx image will jump to that frame (time reference) in the sequence.
- Click the **Play** button for the IdentiLynx images and then click in the FinishLynx image. The IdentiLynx image will jump to that location and continue to play from that point forward.

Step 8: Remote Zoom, Auto Focus and Iris Control

Our latest IdentiLynx camera is the first equipped with a remote control lens which offers complete control over the iris, zoom and focus settings from within the FinishLynx software. It's as simple as clicking the icons in the remote control panel of the Hardware Control window.

- Iris & 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.
- 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.



- Manual Focus Steps:** 3 step sizes are available. Use a simple click, Shift-click or Ctrl-click on the Focus Near or Focus Far icons to manually change the focus in increasingly bigger steps.

Step 9: Camera Care and Tips

The new IdentiLynx cameras are a different design from the older models. The Ethernet port in the back of the camera is covered by a case. We recommend leaving an extra inch of Ethernet cord within the back of the camera to eliminate the risk of bending the cable too much which could cause connection issues.

- When adding the **IdentiLynx+/XR+** camera to your network, be sure to monitor Ethernet traffic and watch for congestion. Add one camera at a time and increase the Resolution, or Frame Rate, in increments. We recommend the use of a Gigabyte Network Switch. Use the same methodology when adding a second IdentiLynx camera to your FinishLynx network. From a results-production standpoint, it is rarely necessary to go over 10fps in Cross Country or Road Races.

This concludes the IdentiLynx+/XR+ Quick Start Guide. Please contact support@finishlynx.com with any questions.