Identil Lynx® & XR+ Full-Frame Video Cameras
Quick Start Guide

Verify that your Identil Lynx 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.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>ID</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Identil Lynx Camera" /></td>
<td>Identil Lynx®/XR+</td>
<td>IdentiLynx+/XR+</td>
</tr>
<tr>
<td><img src="image" alt="Protective Case" /></td>
<td>Protective Case</td>
<td>CP102</td>
</tr>
<tr>
<td><img src="image" alt="10' (3 meter) Ethernet Cable" /></td>
<td>10' (3 meter) Ethernet Cable</td>
<td>C10BT-10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>ID</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Power Injector for Power- over-Ethernet" /></td>
<td>Power Injector for Power- over-Ethernet</td>
<td>IDL-PoE</td>
</tr>
<tr>
<td><img src="image" alt="Power-over-Ethernet Power Supply Connector" /></td>
<td>Power-over-Ethernet Power Supply Connector</td>
<td>Included with IDL-PoE</td>
</tr>
<tr>
<td><img src="image" alt="100’ (33 meter) Ethernet Cable" /></td>
<td>100’ (33 meter) Ethernet Cable</td>
<td>C10BT-100</td>
</tr>
</tbody>
</table>

**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 Identil Lynx camera with your Finish Lynx 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 Identil Lynx camera to your timing system.
Step 1: Install the Latest FinishLynx Software

**NOTE:** IdentiLynx requires the latest version of FinishLynx.

a. 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.

b. If accessible, insert the supplied Lynx flash drive into your computer’s USB port and install FinishLynx.

c. Enter the serial number.

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

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

Step 2: Set Up the IdentiLynx Camera

a. 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.

b. Plug the Power-over-Ethernet power supply into the power source or UPS battery backup.

c. Connect the first Ethernet cable (10’) from the Hub/Switch to the In port of the IdentiLynx power supply.

d. Connect the second Ethernet cable (100’) to the Out port on the IdentiLynx power supply.

e. **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

a. Open FinishLynx.

b. **Power on the FinishLynx cameras first**, before the IdentiLynx camera, one camera at a time.

c. Check that each regular FinishLynx camera has appeared in the Hardware Control window in FinishLynx.

d. 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.

e. Verify that the IdentiLynx camera boots with the default settings (see below):

<table>
<thead>
<tr>
<th>Camera</th>
<th>Capture</th>
<th>Rate</th>
<th>Height</th>
<th>Mode</th>
<th>Gain</th>
<th>Orientation</th>
<th>Power</th>
<th>Ext. Sync</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera 1</td>
<td>Yes</td>
<td>5 (max 30)</td>
<td>720 (max 1944)</td>
<td>Zoom 100%</td>
<td>140 (60)</td>
<td>Left</td>
<td>Off</td>
<td>Local</td>
</tr>
</tbody>
</table>

**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).
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).

a. Have someone stand on the finish line to determine the focus point.

b. Select the IdentiLynx camera in the Hardware Control window and click on the Red Stop Sign to put the IdentiLynx camera into Alignment mode.

c. 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.

a. Click the Camera Settings icon.

b. Click the Setup tab and name the camera based on location or function.

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

d. In File | Options | Image, make sure that Time Tracking is set to All Cameras.
# Step 6: IdentiLynx Image Toolbar

a. Open a new Blank Event in FinishLynx.
b. Get a start for the system and have someone run across the finish line as you capture (All Cameras).
c. Click the [ ] icons on the Image Toolbar to zoom in and out of the image.
d. The Full Screen icon [ ] will show the full screen image.
e. The Cropping tools and Find Next Object are not applicable to the IdentiLynx image.
f. 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.

![Image Toolbar](image)

Step 6 (continued)
g. 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.

# 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.

a. Using the same Blank Event, explore the time tracking between the FinishLynx and IdentiLynx cameras.
b. Click on a competitor in the FinishLynx image and the IdentiLynx image will jump to that frame (time reference) in the sequence.
c. 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.

a. **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.
b. **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.

![Auto Focus Icons](image)

Step 8 (continued)
c. **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.

a. 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.