

TRACK & FIELD PACKAGES

FinishLynx Fully Automatic Timing

Athletics



Complete

These athletics timing packages offered by Lynx are all-inclusive and provide everything you need to produce certified Fully Automatic Timing. They are planned to meet every budget-level, represent the very latest in sports timing technology, and are designed to be fully upgradeable at any time.

Approved

All FinishLynx cameras, starting systems, wind gauges, scoreboards, false start detection systems, and wireless hardware contained in these packages meet or exceed the technical standards of the USATF, IAAF and other major governing bodies for athletics.

Powerful

FinishLynx leads the world in accuracy and reliability. Lynx cameras capture up to 20,000 frames per second and integrate seamlessly with a variety of hardware and software add-ons. Add scoreboards, chip timing, video cameras, wireless start, false start detection, and field event hardware for a truly integrated solution.

To find your local recommended reseller:

Email (USA/Canada/Mexico):
Email (International):
Telephone (USA):

domsales@finishlynx.com intlsales@finishlynx.com USA (978) 556 9780

Contents

Description	Page
Regulatory Approval	3
EtherLynx Vision Camera	4
EtherLynx Vision PRO Camera	9
Explanation of Line-Scan Photo-Finish Cameras	12
Competition Package	14
Competition Elite Package	16
Championship Package	18
Championship Elite Package	20
Grand Prix Package	22
Grand Prix Elite Package	24
Triad Solution For Cross Country	26
Field Events-Electronic Distance Measurement	29
Field - Competition Package	30
Field - Competition Elite Package	32
Field - Championship/Championship Elite Packages	34
Field - Grand Prix/Grand Prix Elite Packages	36
ReacTime False Start Detection - Wireless	38
LED Video Displays	40
Infrastructure Design for Athletics Stadiums	42
Reference Events	44

Packages and Beyond

Lynx has designed these packaged solutions to make the decision-making process easier in all situations. Every FinishLynx package contains everything you need to produce fully automatic timing – all the hardware, software, and cables.

Every package offers a completely self-contained solution and it is possible to mixand-match any *Track* package with any *Field* package. For example, a Grand Prix Elite *Track* package integrates just as smoothly with a Competition *Field* package, as it will with a Grand Prix Elite *Field* package. From the simple to the sophisticated, the range of possible combinations provides endless options for any budget level.

Lynx timing systems are field-proven, cost-effective, and technologically advanced solutions that have been designed from a real-world perspective. Because of the modular nature of Lynx technology, products can be easily added to any of the packages—at any time, now or in the future—to provide a customized solution that meets the specific needs of any facility.



World Athletics Specifications and Compliance

Lynx digital technology has been used at major athletic events around the world since 1992. Our photo-finish systems comply with the requirements of World Athletics (formerly IAAF) and are used regularly at meets sanctioned by World Athletics.



Lynx System Developers, Inc. Doug DeAngelis 179 Ward Hill Avenue Haverhill, MA 01938 USA

Monaco, 30 January 2021

Dear Doug,

Technological devices other than the reaction time measuring module of the Start Information System (SIS) (e.g. Timing Systems, Wind Gauges, Distance Measuring Equipment etc.) used in athletics are not issued a certificate by World Athletics and therefore no certified lists for such devices are available.

All measuring equipment used in World Athletics competitions shall be manufactured and calibrated according to international standards. The accuracy has to be guaranteed by the manufacturer according to the relevant international standards and shall have been verified by an appropriate organisation accredited by the national measurement authority.

To our knowledge and experience, the equipment of Lynx meets this condition and is also successfully used in international athletics competitions organised under IAAF Rules and Regulations.

The "ReacTime Championship" accelerometer based reaction time measuring module of the Start Information System (SIS) by Lynx System Developers, Inc (software ver. 2.0 or later) was studied and tested according to the established World Athletics criteria and was found to have met the current requirements for an World Athletics Product Certificate.

Sincerely,

Imre MÁTRAHÁZI

Tabalesti Tune

Technical Services Senior Manager Competition & Events Department

6-8, Quai Antoine 1er BP 359 MC 98007 Monaco Cedex www.worldathletics.org @WorldAthletics ○ ② ▼ □

ETHERLYNX VISION CAMERA — 5L500

EtherLynx Vision Photo-Finish Camera

with EasyAlign Mode & LuxBoost Low-Light Upgrade

The (5L500) EtherLynx Vision Camera brings powerful new features to the EtherLynx family of photo-finish cameras. Along with the EasyAlign™ and LuxBoost™, Vision cameras offer hardware and software improvements that make FinishLynx timing systems more powerful and user-friendly than ever before.

Intelligent power management, an onboard rechargeable battery option, faster data transfers, and user-friendly upgrades all combine to make the Vision line of cameras the most versatile sports timing cameras ever made.



EasyAlign allows operators to switch seamlessly between 2-D (alignment) and 1-D (capture) modes for even faster set up. The base model Vision camera captures 1,000 frames per second at 640 pixels high and the high resolution upgrade enables captures up to 2,000 fps at 1,280 pixels. The EtherLynx Vision is an ideal camera for sports like athletics and road races. To capture higher speed finish lines like motorsports or horse racing at up to 20,000 fps, we recommend the next generation Vision PRO. See below for a list of brand new features and upgrades available with the Vision.

Powerful Features & Add-Ons



EasyAlign - Full-frame video mode makes camera alignment easier than ever.



Power-Over-Ethernet - All Vision cameras can draw power via the Ethernet cable.



Full-Color - All Vision cameras come standard with the ability to capture color images.



Gigabit Transfers - The first EtherLynx camera to allow for Gigabit Ethernet transfers (1,000 Mbps).



Silent Operation - The Vision runs silently thanks to reduced power consumption and no fans.



Advanced Power Control - New power controls ensure the best power source in each situation.



Backwards Compatible - The Vision is compatible with all Lynx cameras made since 1996.



Onboard Level [Upgrade] - Monitor the camera's level and orientation directly from FinishLynx.



LuxBoost™ [Upgrade] - Amplifies available light for better race images in low-light conditions.



Electronic Filter Control [Upgrade] - Users can enable/disable low-light filters from FinishLynx.



High-Resolution [Upgrade] – Provides captures up to **2,000** fps with up to **1,280** pixels of height.



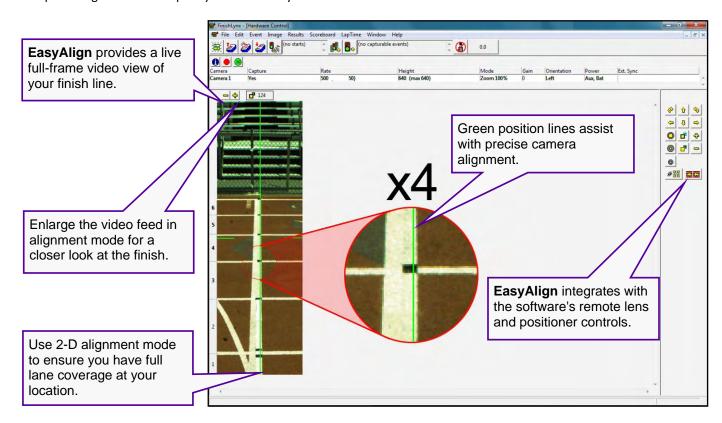
Internal Battery Backup [Upgrade] - Battery pack allows the camera to withstand power loss.



Electronic Viewfinder [Upgrade] – Connect a video viewfinder to the HDMI port for alignment.



Video Display Module [Upgrade] - Send live results from camera to HDMI-connected display. All EtherLynx Vision cameras offer EasyAlign full-frame video alignment mode. EasyAlign displays a live, full-frame video preview of the camera's field-of-view on your computer screen. The 2-D preview also overlays two thin lines (vertical and horizontal) so the camera can be adjusted visually to ensure precise alignment on the finish line. Once aligned, just switch the camera back to 1-D capture mode for accurate, photo-finish results images. This new 2-D video mode makes it extremely simple to align the camera quickly and accurately on the finish line to ensure accurate results.



Advanced Power Options and Management

The Vision offers a number of advanced power options not previously available in EtherLynx cameras. The Vision can receive power via PoE, from an AC adaptor, or from an optional battery pack. These options not only give timers more flexibility, but also provide new power management options inside the FinishLynx software.



PoE or DC inputs

Power-Over-Ethernet: The Vision can run completely over a PoE connection. This means it can be operated without any AC power (just like IdentiLynx cameras). Simply connect the Vision to an Ethernet PoE switch or injector with a single CAT5/6 cable to provide both power and data connectivity.

Advanced Power Control: The Vision has a brand new advanced power control option that works with the software to monitor available power options, and it can even be used to remotely reboot distant or hard-to-reach cameras.

Optional On-Board Battery: With the optional rechargeable NiMH battery pack installed, the software reports battery levels, and seamlessly switches to battery operation in the event of a loss of power.

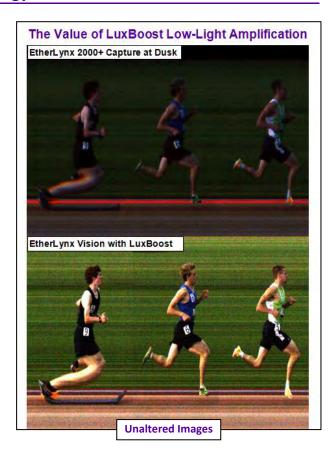
Software Power Controls See Available Sources Power Aux, Bat **Monitor Battery Health** Power Bat (7.1v-Ok) Click to Reboot Remotely Power Aux, Bat Shut down... Power . Restart...

LuxBoost™ Low-Light Amplification Technology

The optional LuxBoost technology dramatically amplifies the light available for 1-D image captures. Improved light sensitivity means that the camera can capture high-quality images in very low-light conditions. Historically, once an operator had made all possible adjustments to scan rate, gain and filters, they were still limited by the available light. LuxBoost changes that.

LuxBoost employs advanced hardware and software techniques to amplify the available light. The images on the right show a direct comparison between two EtherLynx cameras capturing the same race at dusk (8:00pm). The top image was captured with an EtherLynx 2000+ while the bottom was captured with an EtherLynx Vision using LuxBoost.

With a light amplification factor that is user-configurable between 2x and 4x, LuxBoost not only illuminates the image, but it also increases the visibility of key elements necessary for athlete identification like the hip numbers.



All-Inclusive Packaged Solutions



ETHERLYNX VISION CAMERA

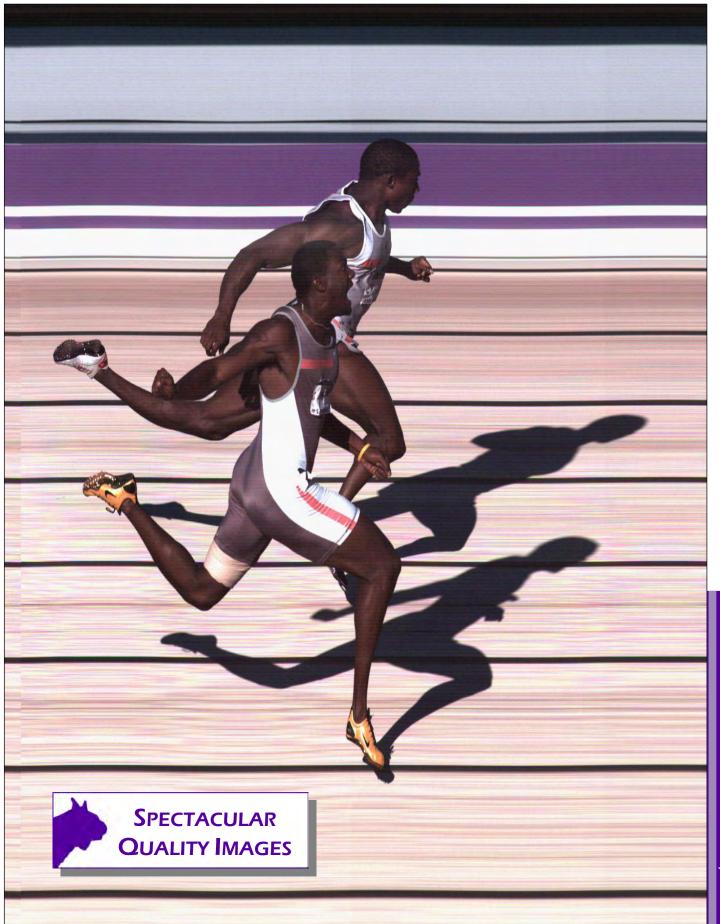
Vision Hardware Specifications

Item	Specification
Pixels (vertical)	640; 1280 with High Resolution Option (continuously adjustable)
Distance Camera to Computer	100m Cat 5/6, 2,000m Fiber Optic (with converter)
PC-connection	10/100/1000Mbit/s 802.3 Ethernet Topology
#colors/pixel	Up to 31bit – 2 billion colors (user adjustable)
Sensor Type	CMOS Array
Internal Camera Memory	1Gb, Expandable to 2Gb
Acquisition Rate	100 – 1,000 frames per second; 2,000 with High-Resolution option
Frame Rate Adjustment	Continuously Adjustable
Time Base	1 Part Per Million (.001s per 16.7 min) - Temp. Compensating
Lens Mount	CS Mount (C-Mount with adaptor)
Camera Alignment Aids	EasyAlign ™ full video image preview
Remote Lens Option	Yes
Remote Alignment Option	Yes
802.11 Wireless connectivity	Optional Add-on
Light Sensitivity	High – Extreme low-light capability with optional LuxBoost™
Switchable IR Filter	Optional - Electronically Controlled 2 stage
Digital Zoom	Optional 2x
Gamma Control	Software
Image Compression	Real-time Lossless
Built-In Battery Backup	Optional
Start Signal Options	 Manual Start Normally Open wired sensor/switch closure Normally Closed wired sensor/switch closure Optional RadioLynx wireless start
Power Input	POE, internal rechargeable batteries, 100-240 VAC with Adaptor, or optional 12v DC input
Operating Temperature	0° - 60°C
Control multiple cameras from 1 computer	Yes
Mix and Match Camera Models	Yes
Auto-Iris (in addition to Auto-Gain)	Yes
"Hot-swap" instant replacement guarantee	Yes. Applies to in-warranty cameras
Approvals	UL and CE
Camera Body Dimensions	15.7cm x 7.5cm x 15.5cm
Camera Body Weight (Excluding Lens)	1.4Kg

FinishLynx Software Features

- Selectable User Interface Language
- Evaluate image while race still in progress
- Allows multiple events to be active simultaneously
- Apply missed starts
- Interface to Meet Manager
- Optional Automatic Capture capability

- Optional Software Photocell function
- User Configurable Screen Layout
- Optional IP-network connection to serial devices
- User-scriptable scoreboard interface
- Optional Interface to RFID transponders/pushbutton timers for split timing



ETHERLYNX VISION PRO CAMERA – 5L600

EtherLynx Vision PRO Photo-Finish Camera

with EasyAlign, LuxBoost, and up to 20,000 FPS Capture

The EtherLynx Vision PRO is an elite-level photo-finish camera that combines the user-friendly features of the EtherLynx Vision with the speed and power of the EtherLynx PRO. The Vision PRO is the latest in a long line of EtherLynx cameras and it brings powerful new features to the world of high-speed sports timing.

Along with the EasyAlign™ and LuxBoost™ features, Vision cameras offer hardware and software improvements that make FinishLynx timing systems



more intuitive than ever. The standard Vision PRO captures 3,000 frames per second at 1024 pixels high and includes features like LuxBoost4, On-Board Level, and Electronic Filter Control all standard. There are also two highresolution upgrades that increase image height and capture rates to 6,000 fps (at 2048 pixels) and an unprecedented 20,000 fps. The high frame rate (20k) and advanced capture settings make the Vision PRO an excellent choice for high-speed timing applications like horse racing, cycling, motorsports, and more.

Elite-Level Photo-Finish Camera Features



High-Speed Capture – Comes standard with **3,000** fps. Optional upgrades enable 6,000 & 20,000 fps.



Power-Over-Ethernet – Provide camera power and data transfers from a single Ethernet cable.



EasyAlign - Full-frame video mode makes photofinish camera alignment easier than ever.



Gigabit Transfers - Capture large images quickly with Gigabit Ethernet transfers (1,000 Mbps).



LuxBoost™ - Amplifies available light for better race images in low-light conditions.



Advanced Power Control - New power controls ensure the best power source in each situation.



Backwards Compatible - The Vision PRO is compatible with all Lynx cameras sold since 1996.



Silent Operation - The Vision PRO runs silently thanks to no fans and reduced power use.



Electronic Filter Control - Users can enable or disable low-light filters from FinishLynx.



Onboard Level - Monitor the camera's level and orientation directly from FinishLynx.



Internal GPS [Upgrade] - Sync with GPS times for use with Motorsports and Time of Day events.



Video Display Module [Upgrade] - Send live results from camera to HDMI-connected display.



High-Resolution [Upgrade] – High-Res. provides **6,000** or **20,000** fps captures at **2048** pixels high.



Electronic Viewfinder [Upgrade] - Connect a video viewfinder to the HDMI port for alignment.



Wi-Fi [Upgrade] - Connect a small, external Wi-Fi unit to wirelessly transfer timing & results data.



Internal Battery Backup [Upgrade] - Battery pack allows the camera to withstand power loss.

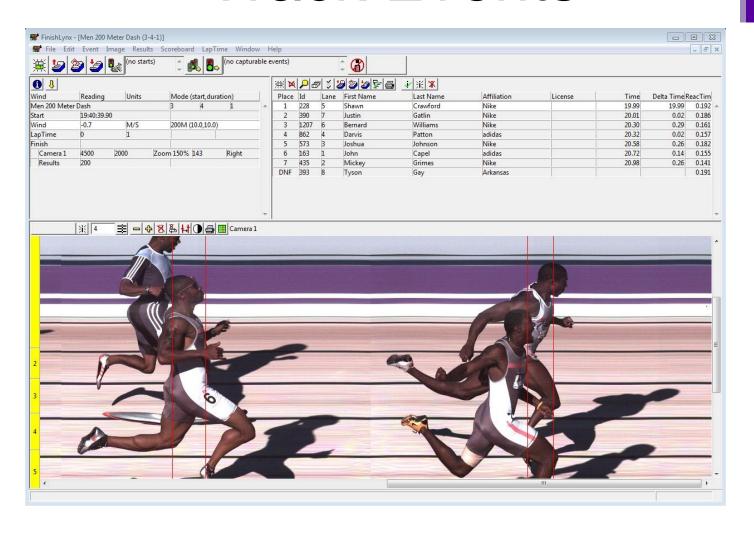
Feature	Specification
Vertical Pixels	1024; 2048 max with High Resolution Option
Vertical Pixel Adjustment	Continuously adjustable
Max Frame Rate	3,000 frames per second standard; 6,000 fps upgrade; 20,000 fps upgrade
Frame Rate Adjustment	Continuously Adjustable
Distance Camera to Computer	100m Cat 5/6, 2,000m Fiber Optic (with converter)
PC-connection	10/100/1000Mbit/s 802.3 Ethernet Topology
# colors/pixel	Up to 2 million colors (user adjustable)
Sensor Type	CMOS Array (single line in photo-finish mode)
Time Base	0.5 Part Per Million (.0005s per 16.7 min) - Temp. Compensating
Available Lens Mounts	CS-Mount; C-Mount; F-Mount
Camera Alignment Aids	EasyAlign full-frame video preview
Remote Lens & Remote Alignment Options	Yes
LuxBoost Low-Light Capture & Auto LuxBoost	Yes – LuxBoost4
On-Board Level	Yes
Frame Offset	Optional Add-On
Built-In Battery Backup	Optional Add-On
Phased Light Compensation	Optional Add-On
802.11 Wireless Connectivity	Optional Add-On
Light Sensitivity	High – Extreme low-light capability with optional LuxBoost8
Switchable IR Filter	Yes – Electronically Controlled 2 Stage
Digital Zoom	Optional 200%
Gamma Control	Hardware and Software
Image Compression	Real-time Lossless
Start Signal Options	Manual Start • Normally Open wired sensor/switch closure • Normally Closed wired sensor/switch closure • Optional RadioLynx wireless start • Image Start
Power Inputs	802.3at PoE, 100-240 VAC with optional adaptor, or 12v DC input
Backup Power Options	Optional Internal Rechargeable Batteries; Optional External Battery
Operating Temperature	0° - 60°C
Control multiple cameras from 1 computer	Yes
Mix and Match Camera Models	Yes
Automatic Luminance Control	Auto-Iris; Auto-Gain; Auto LuxBoost
"Hot-swap" instant replacement guarantee	Yes. Applies to in-warranty cameras
Approvals	UL and CE
Camera Body Dimensions	15.7cm x 7.5cm x 15.5cm
Camera Body Weight (Excluding Lens)	1.4Kg



For more information on all FinishLynx cameras and accessories, visit <u>www.finishlynx.com</u>



Track Events





Fully Automatic Timing

Your 10 - 20 - 3 Guide to Fully Automatic Timing

What is Fully Automatic Timing?

Fully Automatic Timing – or FAT – is the standard required today by every regulatory body in Track & Field. In general, the requirements of an approved FAT system include:

- 1 The timing must be started automatically by the signal from the starting apparatus (like a starter pistol in Track and Field)
- The system must be capable of producing printed images showing the times
- 3 It must be capable of timing to a precision of at least 1/100th second

FAT is mandated for record ratification at all levels, from the International Association of Athletics Federations (IAAF) to the National Federation of High Schools (NFHS).

If, and only if, a timing system meets all of these requirements, can it be used to sanction meet results for new state, national, and international records.

Are FAT Systems Complicated?

Absolutely not – There are three main components to a basic digital line-scan FAT system:



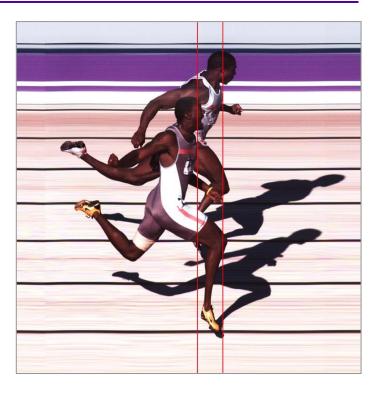
Photo-Finish Camera – A photofinish camera aimed at the finish line captures 1,000 fps for accurate, timestamped results images approved by the NFHS.



FinishLynx Software – Powerful timing and results software captures photo-finish results and integrates hardware like scoreboards, wind gauges, and additional cameras.



Start Sensor – An integrated start sensor detects the start signal and instantly relays it to FinishLynx for accurate Fully Automatic Timing and results.



How Accurate is a FAT System?

FinishLynx timing systems can capture anywhere from 600 frames per second (fps) up to an astounding 20,000 fps. That's why FinishLynx is trusted by world-class events like NASCAR and the Tour de France. In fact, FinishLynx cameras have an internal digital clock that is accurate to plus-or-minus one part per million.



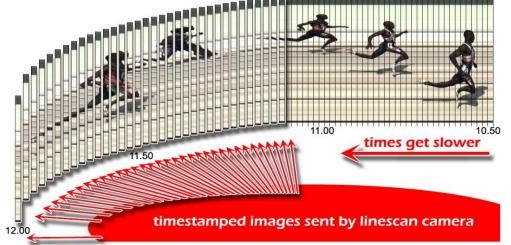
What Are Line-Scan Images?

One way to think of line-scan photography is to imagine sitting in a room with the door open a tiny crack and watching someone from outside run past the door. As they run by, you only ever see a thin "slice" of them through the door. But, after a short period of time, they will travel completely past the doorway. Now imagine that the crack

in your door is aligned perfectly with the finish line.

A line-scan photo-finish image is actually composed of a series of incredibly thin individual pictures of a finish line (and whatever is crossing it). Then, each vertical finish line image is combined one after the other to create a full image. See the diagram for an example.

The FinishLynx software combines these thin, time-stamped images side-by-side so it becomes very easy for the timer to see exactly when each competitor crosses the finish line. Simply click the mouse on a competitor's torso and the software displays their finish time automatically down to 1/1000th of a second.



What Other Features Are Available?

Quick and Easy Hardware Setup

- Unlike any other FAT system, the FinishLynx software can use a Remote Positioner to adjust the camera placement and align it perfectly on the finish line every time.
- Thanks to RadioLynx Wireless Start Technology (included with the higher-end packages), the days of stringing cables to each of the start locations are a thing of the past.

2 Data Sharing

• All Lynx systems (Bronze and above) have the ability to link to scoreboards and meet management software for instant and error-free sharing of data (results, names, affiliations, etc.).

3 High-Quality Photo Printing

• The photo-finish image printouts produced by a FinishLynx FAT system meet all the requirements for record authorization at all levels of the sport.

Why Choose a Lynx Package?

Improved Meet Results

- **Fairness** Coaches and athletes quickly learn that results are accurate and reviewable, putting an end to unnecessary disputes.
- 2 Timeliness Meets will start and end on time because there won't be confusion over lanes and finish times at the end of every race.
- 3 Accuracy Athletes won't be denied recognition for their achievements.

Improved Financial Results

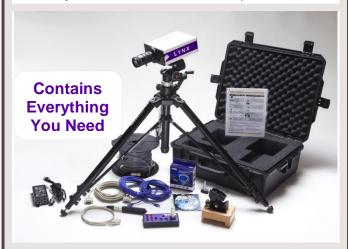
- Make better use of limited resources No need to find hand timers for every lane.
- Save on costs No need to pay a costly timing service to provide FAT at each local meet.
- 3 Raise money for the program High-quality image printouts can be sold as souvenirs.



World Athletics-Approved Full-Color Photo-Finish System

World Athletics Rule 165:13

"Fully Automatic Timing and Photo Finish System approved by IAAF should be used at all competitions."



The Competition package is an all-inclusive, singlecamera, color photo finish system for athletics. It needs only a computer to deliver World Athletics compliant, Fully Automatic Times (FAT) at track and field meets of any size.

Accepted by World Athletics, and used at athletics competitions around the globe, this system is a perfect introduction to Lynx technology. It is easy to set up, easy to use, and provides high-quality timing features at an affordable price.

Although designed as a basic package, it can be upgraded at any time to a higher specification. In fact, the ability to upgrade or add components, without fear of obsolescence, is a key feature of the FinishLynx philosophy.

Components

- Camera: EtherLynx Vision, 2,000 frames/second, full color images, timer-enabled, fully upgradeable
 - EasyAlign Full-Frame Video Alignment Mode
 - High-Resolution Option (2,000 fps x 1280 pixels of image height)
 - C-mount f1.2, 8-48mm Manual Zoom Lens
- · Wired Start System & Capture Button
- All-inclusive Power, Ethernet, & Start Cable Set
- Tripod & Mounting Hardware for Precision Adjustment
- Built-in Interface to Scoreboards and Wind Gauges
- Full-Access to Lynx Technical Support
- 1-Year Renewable Warranty
- FinishLynx32 Multi-Language* Photo Finish Software
- LynxPad Multi-Language Meet Management Software

* FinishLynx is available in English, Spanish, French, Arabic, German, Italian, Korean, Portuguese (Brazil), Russian, Swedish, Finnish, Chinese (Simp.), Chinese (Trad.), Japanese. See website for current listing.

Why Choose FinishLynx?

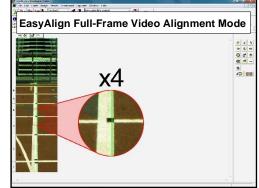
When choosing a FinishLynx packaged solution, you can feel secure knowing you have made a smart investment. FinishLynx offers everything you need to produce accurate and professional race results. Because you always have access to the latest software upgrades, you can be sure that your system is compatible with all the latest features as our technology evolves. Join the thousands of other venues across the world who trust their timing to FinishLynx.

In addition, because of the modular design of Lynx technology, you can add enhancements to your timing system at any future time as your needs grow.

FinishLynx Competition Package for Athletics

This World Athletics-approved timing system is a perfect introduction to the world-class FinishLynx technology. At the heart of the system is the **EtherLynx Vision** timing camera, a powerful photo-finish camera that captures full-color images at 2,000 frames per second (fps) and offers **EasyAlign** for quickly aligning the camera on the finish line.

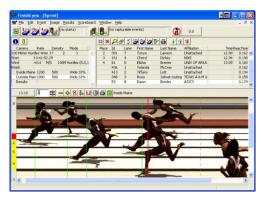
Combine this next-generation camera with FinishLynx results software and you have a powerful athletics timing system for meets of any size. The system also includes advanced technical support and access to a network of timing professionals from around the globe. Join our international community of event timers.



FinishLynx Competition Package for Athletics

Part of what makes FinishLynx systems so popular is the suite of features available in the FinishLynx timing software. It allows users to customize their system by adding software plug-ins and additional 3rd-party hardware like scoreboards, wind gauges, and RFID chip timing.

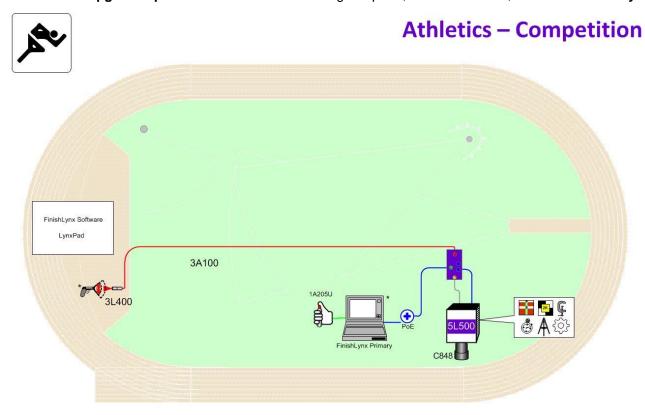
We offer a number of software plug-ins to extend your timing capabilities, including Automatic Capture Mode (ACM), Network COM-Port (NCP), and RadioLynx Wireless Start. The software also includes native support for multiple EtherLynx cameras, IdentiLynx 2-D video integration, and interfaces with compatible scoreboard displays and wind gauges.



EtherLynx Vision Camera Features

The Vision camera is the most popular in a long line of powerful EtherLynx photo-finish cameras. Key features include:

- EasyAlign Full-Frame Video Alignment for easily aligning your camera on the finish line
- Power-Over-Ethernet so the camera doesn't require AC power at the finish line
- Full-Color Images so you can produce high quality time-stamped images for immediate printing or online posting
- Gigabit Transfers so you can transfer FAT results data in real time at up 1,000 Mbps
- Virtually unlimited captures limited only by your hard drive capture every lap (for every athlete) in a 10k race
- Additional Upgrade Options include LuxBoost low-light capture, On-Board Level, and Internal Battery Pack



^{*} Computers and starting pistol not included in package



World Athletics-Approved Full-Color Photo-Finish System

Competition Elite Package includes all The components of the Competition Package - Plus a Remote Control Zoom Lens, and a complete RadioLynx Wireless Start system.

With the addition of these components, there is no need to run long start cables, or use a ladder to adjust the lens, so the set-up and operation of the system becomes even easier.

World Athletics Rule 165:14 (2012-2013 Edition)

...[Fully Automatic Timing apparatus] shall be started automatically by the Starter's gun, so that the overall delay between the report from the muzzle or its equivalent visual indication and the start of the timing system is constant and less than 1/1000th of a second.



Remote Control Zoom Lens: Software control of Zoom, Aperture and Focus Functions

Components

- Camera: EtherLynx Vision, 2,000 frames/second, full color images, timer-enabled, fully upgradeable
- · EasyAlign Full-Frame Video Alignment Mode
- High-Resolution Option (2,000 fps x 1280 pixels of image height)
- Internal RadioLynx option
- C-mount f1.2. 8-48mm Motorized Remote Control Zoom Lens:
 - Zoom, Focus, Iris
- RadioLynx Wireless Start System
- All-inclusive Power, Ethernet, & Start Cable Set
- Tripod & Mounting Hardware for Precision Adjustment
- Built-in Interface to Scoreboards and Wind Gauges
- Full-Access to Lynx Technical Support
- 1-Year Renewable Warranty
- FinishLynx32 Multi-Language* Photo-Finish Software
 - RadioLynx Plug-in for FinishLynx
 - Automatic Capture Mode (ACM) Plug-in
- LynxPad Multi-Language Meet Management Software
- FinishLynx is available in English, Spanish, French, Arabic, German, Italian, Korean, Portuguese (Brazil), Russian, Swedish, Finnish, Chinese (Simp.), Chinese (Trad.), Japanese. See website for current listing.

FinishLynx Competition Elite Package for Athletics



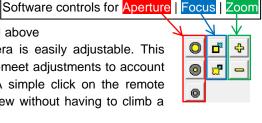
This is an all-inclusive, single-camera, full-color photo-finish system for athletics. The package contains several key enhancements over the Competition Package, including the RadioLynx wireless start system, the patented Lynx Automatic Capture Software plug-in, and a remote control lens.

The Automatic Capture & Virtual Photo-Eye Plug-in

This is a powerful software add-on that performs two key functions. First, it allows the software to automatically capture images whenever an athlete crosses the finish line without the need for an external photo cell. That means timers don't need to press and hold the capture button. Secondly, it enables the software to automatically send a split or finish time to display clocks whenever the lead athlete crosses the finish line.

Remote Control Lens Functions

Because finish line cameras are often mounted well above eye-level, the Remote upgrade ensures the camera is easily adjustable. This motorized accessory allows operators to make mid-meet adjustments to account for changes in light levels, glare, and shadows. A simple click on the remote adjustment icons will adjust your lens or field of view without having to climb a ladder to reach your camera.



FinishLynx Competition Elite Package for Athletics

The RadioLynx wireless start system will eliminate the need to run cables to all the start locations around the track. The secure wireless transmission technology is powerful, portable and reliable.

Even a missed or interrupted transmission is no problem – a press on the *repeat* button will re-send the race start time to FinishLynx. With a response time of less than 1/1000th of a second, RadioLynx is fully compliant with World Athletics Rule 165:14 and can be used at major international athletics competitions.



RadioLynx: World Athletics-Compliant Wireless Start System

EtherLynx Vision Camera Features

The Vision camera is the latest in a long line of powerful EtherLynx photo-finish cameras. Key features include:

- EasyAlign Full-Frame Video Alignment for easily aligning your camera on the finish line
- Power-Over-Ethernet so the camera doesn't require AC power at the finish line
- Full-Color Images so you can produce high-quality results images for immediate printing or online posting
- Gigabit Transfers so you can transfer FAT results data in real time at up 1,000 Mbps
- Virtually unlimited captures limited only by your hard drive capture every lap in a 10k race
- Additional Upgrade Options include LuxBoost low-light capture, On-Board Level, and Internal Battery

Athletics – Competition Elite FinishLynx Software Auto Capture Plug-in RadioLynx Plug-in Lynx Pad Alternate Wired Start Capability 3A100 Alternate Wired Start Capability 3CB48M

Computers and starting pistol not included in package



World Athletics-Approved Two-Camera Timing System

The **Championship Package** is a World Athleticsapproved athletics timing system that includes the fullcolor EtherLynx Vision photo-finish camera and a timesynchronized IdentiLynx full-frame video camera.

This package includes all the components of the Competition Elite Package (remote camera/lens capabilities and RadioLynx wireless start, etc.) as well as an IdentiLynx camera, ACM software plug-in, 9-digit LED display, and World Athletics-approved wind gauge. Plus all the components can be controlled directly from the FinishLynx timing software.



Components

- Camera: EtherLynx Vision, 2,000 frames/second, full color images, timer-enabled, fully upgradeable
 - EasyAlign Full-Frame Video Alignment Mode
 - High-Resolution Option (2,000 fps x 1280 pixels of image height)
 - Internal RadioLynx Option
 - C-Mount f1.2, 8-48mm Motorized Zoom Lens
- IdentiLynx Full-Frame Video Camera (30 fps, 720p)
- Ultrasonic Wind Gauge (World Athletics compliant)
- 9-Digit Alphanumeric LED Display (with tripod, bag and charger)
- · Remote Lens
- Remote Camera Positioner
- RadioLynx Wireless Start System
- All-inclusive Power, Ethernet, & Start Cable Set
- Tripod & Mounting Hardware for Precision Adjustment
- Built-in Interface to Scoreboards and Wind Gauges
- Full-Access to Lynx Technical Support
- 1-Year Renewable Warranty
- FinishLynx32 Multi-Language* Photo-Finish Software
 - Automatic Capture Mode (ACM) Plug-in
 - · RadioLynx Wireless Start Plug-in
- LynxPad Multi-Language Meet Management Software
- * FinishLynx is available in English, Spanish, French, Arabic, German, Italian, Korean, Portuguese (Brazil), Russian, Swedish, Finnish, Chinese (Simp.), Chinese (Trad.), Japanese. See website for current listing.

FinishLynx Championship Package for Athletics

The functionality of the **Automatic Capture & Virtual Photo-Eye Plug-in** introduced with the Competition Elite Package is fully utilized with the addition of the LED display. By using the Virtual Photocell capability of the plug-in, the operator can automatically stop the running time on the display as the first finisher crosses the line to provide an instantaneous "Unofficial Time" for the winner.



The 9-digit Alphanumeric LED display connects to your FinishLynx system and can display running times and results that are clearly visible from over 200 feet away. The display also integrates with the ACM plugin to automatically display finish times or splits whenever an athlete crosses the finish line.

The ultrasonic wind gauge included in the system has no moving parts and meets the latest standards of World Athletics.

Inclusion of readings into the race results is fully automated and controlled directly from the FinishLynx software, without the need for any user intervention.



FinishLynx Championship Package for Athletics

IdentiLynx is an Ethernet-based digital video camera that captures video of the finish line integrated with the EtherLynx Vision photo-finish images. The IdentiLynx video is time-synced with the photo-finish capture inside the software so you can see multiple angles of the finish line for every competitor. This makes it extremely easy to identify and evaluate athletes no matter how crowded the race.

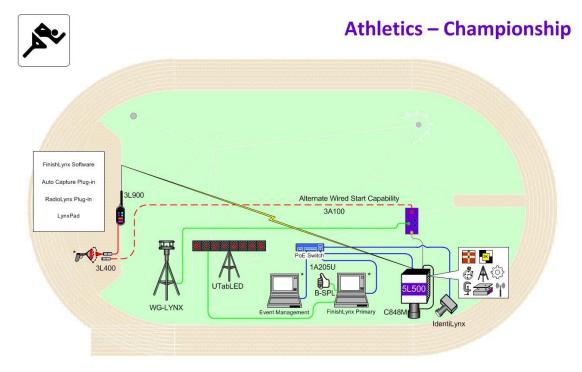
This all-inclusive Championship package enables you to produce fast and accurate results by combining precision FAT captures (2,000 fps) with high-quality video (30fps at up to 720p) for easy athlete identification. It also includes a high-visibility LED display and World Athletics-approved wind gauge so you can capture certified photo-finish results at any level of athletics competition.



EtherLynx Vision Camera Features

The Vision camera is the latest in a long line of powerful EtherLynx photo-finish cameras. Key features include:

- EasyAlign Full-Frame Video Alignment for easily aligning your camera on the finish line
- Power-Over-Ethernet so the camera doesn't require AC power at the finish line
- Full-Color Images so you can produce high-quality results images for immediate printing or online posting
- Gigabit Transfers so you can transfer FAT results data in real time at up 1,000 Mbps
- Virtually unlimited captures limited only by your hard drive capture every lap (for every athlete) in a 10k race
- Additional Upgrade Options include LuxBoost low-light capture, On-Board Level, and Internal Battery Pack

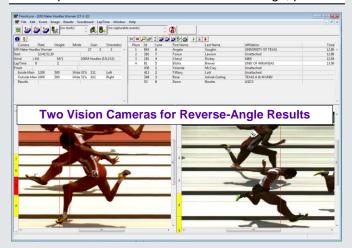


^{*} Computers and starting pistol not included in package



World Athletics-Approved Three-Camera Timing System

The CHAMPIONSHIP ELITE Package includes all the components of the CHAMPIONSHIP Package, plus:



"There should be at least two photo finish cameras in action, one from each side..." - World Athletics Rule 165:19.20 (2020-21)

Multiple-Camera Results System - The Championship Elite Package includes two 2,000 fps EtherLynx Vision cameras so you can capture full-color photo finish images from both sides of the finish line. The package also includes an IdentiLynx full frame video camera so you can produce head-on video that is time-synchronized with your results.

NCP Plug-In & SeriaLynx Network Adapter - SeriaLynx combines with the NCP Plug-in to enable a single FinishLynx computer to interface with multiple serial devices over a wired or wireless network - including displays, wind gauges, etc.

Components

- Primary Camera: EtherLynx Vision, 2,000 fps x 1280 pixels, color images, timer-enabled, EasyAlign.
 - LuxBoost Low-Light Amplification Option
 - Internal Battery Pack Option
 - Internal Camera Level Option
 - Electronic Filter Option
 - Internal RadioLynx Option
 - C-Mount f1.2, 8-48mm Motorized Zoom Lens (x2)
- Second Camera: EtherLynx Vision, 2,000 fps x 1280 pixels, color images, EasyAlign, High-Res, upgradeable
- IdentiLynx Full-Frame Video Camera (30 fps, 720p)
- Ultrasonic Wind Gauge (World Athletics compliant)
- 9-Digit Alphanumeric LED Display
- Remote Lens & Remote Camera Positioner (x2)
- RadioLynx Wireless Start System
- All-inclusive Power, Ethernet, & Start Cable Set
- Tripod & Mounting Hardware for Precise Adjustment
- Professional Tripod with 3m+ elevated mounting
- Built-in Interface to Scoreboards and Wind Gauges
- Full-Access to Lynx Technical Support
- 1-Year Renewable Warranty
- FinishLynx32 Multi-Language* Photo-Finish Software
 - Network COM Port Plug-in
 - Automatic Capture Mode (ACM) Plug-in
 - · RadioLynx Wireless Start Plug-in
- LynxPad Multi-Language Meet Management Software

FinishLynx Championship Elite Package for Athletics

The Championship Elite Package is an all-inclusive athletics timing system with two photo-finish cameras and an IdentiLynx head-on video camera so you can capture 3 different views of the finish line. The system meets all World Athletics timing guidelines and enables you to produce accurate, full-color, reverse-angle results.

The reverse-angle camera and IdentiLynx video are especially useful in races where the view of an athlete's torso may be obstructed by another competitor - making it difficult to establish a finish order. In this case, you can see three different time-synchronized views of the finish line in order to evaluate a very close finish with accuracy to up to 1/2000th of a second.



Available in English, Spanish, French, Arabic, German, Italian, Korean, Portuguese (Brazil), Russian, Swedish, Finnish, Chinese (Simp.), Chinese (Trad.), Japanese. See Website for current listing.

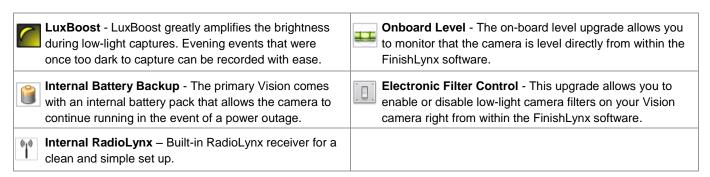
FinishLynx Championship Elite Package for Athletics

The Championship Elite Package includes all the components from the Championship package (like IdentiLynx, ACM, and an LED display), as well as a 3+ meter camera tripod and key networking enhancements like NCP so you can integrate serial devices across your timing network.

2000+ without LuxBoost Vision with LuxBoost

The package also includes two EtherLynx Vision

cameras for full color, reverse-angle results. Both Vision cameras include Automatic Capture Mode and come outfitted with remote control features for easy setup and adjustment at your venue's finish line. The primary Vision camera also includes several premium upgrades that will enhance the ease and quality of your race captures.



Athletics – Championship Elite 0 FinishLynx Software Auto Capture Plug-in RadioLynx Plug-in Network Com Port Plug-in 3A100 LynxPad WG-LYNX UTabLED IdentiLyn C848M 1A205U B-SPL FinishLynx Primary

© 1992 – 2022 | Lynx System Developers, Inc. | www.finishlynx.com

^{*} Computers and starting pistol not included in package



World Athletics-Approved Three-Camera Timing System





2,000 fps Vision Camera

3,000 fps Vision PRO

"There should be at least two photo finish cameras in action, one from each side. Preferably, these timing systems should be technically independent, i.e. with different power supplies and recording and relaying of the Starter's signal, by separate equipment and cables." - World Athletics Rule 165:19.20 (2020-21)

The Grand Prix package is a world-class athletics timing system that includes two independent photo-finish cameras and start systems for full timing redundancy. The cameras are linked to separate wireless start systems, which effectively creates two independent systems. This satisfies World Athletics standards recommended championship meets.

Vision PRO Camera - The Grand Prix package includes the Vision PRO camera as the primary timing device. The Vision PRO captures up to 3,000 frames per second and includes the Wi-Fi option for fully wireless transfers, plus an On-Board Level, Electronic Filter Control, Internal Battery Pack, and LuxBoost, which improves image quality and clarity in low-light conditions. Results are accurate up to 0.00033 seconds and fully independent of those captured by the secondary camera.

ResulTV Display Software - ResulTV is a digital data and graphic display program that integrates with FinishLynx. It allows timers to produce scalable results graphics for any compatible graphic display or scoreboard. It can even produce high-quality dynamic images suitable for broadcast television.

Components

CAMERAS

- Primary Camera: EtherLynx Vision PRO, 3,000 fps, 2,048 vertical pixels, color, timer-enabled
 - LuxBoost Low-Light Capture Mode
 - Wireless-Enabled Option for Wi-Fi Transfers
 - Video Display Module for HDMI Display Output
 - Internal RadioLynx, Battery Pack & Level Options
 - Electronic Filter Control
 - C-Mount, 12-75mm Motorized Zoom Lens
- Second Camera: EtherLynx Vision, 2,000 fps upgrade, 1,280 vertical pixels, color, timer-enabled
 - LuxBoost Low-Light Capture Mode
 - Video Display Module for HDMI display output
 - Internal RadioLynx, Battery Pack & Level Options
 - C-Mount, f1.2, 8-48mm Motorized Zoom Lens
- IdentiLynx Full-Frame Video Camera (30 fps, 720p)

ACCESSORIES

- AirLynx Wireless Gateway/Amplified Antenna
- Lynx 1-Sided 168x336 Pixel LED Video Display
- 4-Digit LED Wind Display & Countdown Timer
- Ultrasonic Wind Gauge (World Athletics-compliant)
- SeriaLynx (Wired/Wireless) Network Adapter
- Remote Lens & Remote Camera Positioner (x2)
- RadioLynx Wireless Start System (x2)
- All-inclusive Power, Ethernet, & Start Cable Set (x2)
- Tripods, Mounting Hardware, & 3m+ Professional Tripod
- Lynx Tech Support & 1-Year Renewable Warranty

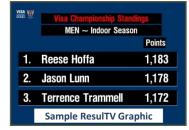
SOFTWARE

- **ResulTV Live Data Display Software**
- FinishLynx Multi-Language Photo-Finish Software
 - Network COM Port Plug-in
 - Automatic Capture Mode (ACM) Plug-in
 - RadioLynx Wireless Start Plug-in
 - LapTime Plug-in
- LynxPad Meet Management Software

Software available in multiple languages. See website for current listing.

Grand Prix Package for Athletics

The Grand Prix package builds on the components of the Championship Elite Package and adds premium features like AirLynx wireless, ResulTV display software, the Video Display Module, a 1-sided LED video display, and the 3,000 fps Vision PRO camera with LuxBoost, Wi-Fi, and other premium add-ons. Plus, the addition of the LapTime software plug-in means you can produce fast and accurate lap times during distance races using only the FinishLynx camera. Capture every lap and add split times directly to the athlete results. These components combine to create an advanced timing and results network for elite track and field meets.



FinishLynx Grand Prix Package for Athletics

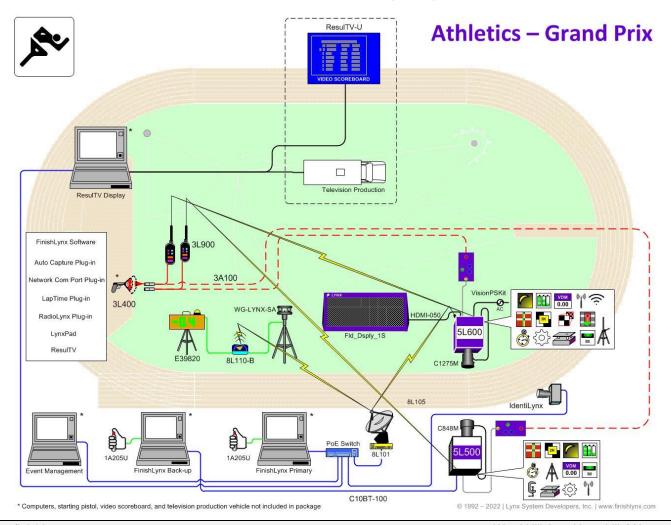
Video Display Module (VDM) – The VDM add-on enables the live display of FinishLynx running time, results, and FinishLynx images on a video display connected to the HDMI port of Vision cameras. Simply connect a compatible video display to the Vision camera back and instantly show live results data at the finish line.

Lynx 1-Sided LED Video Board – This LED video display was designed by Lynx as an ideal video board for track and field events. The large infield display (83" W x 58" H x 24" D) can broadcast live running times, finish times, athlete/event info, and custom text or images. The display is also compatible with the Video Display Module (VDM) on Vision cameras.



The VDM-enabled Vision cameras in the Grand Prix package can connect directly to the video board via HDMI and allow timers to send live race data and FinishLynx results images without the need for a third-party results program.

Advanced Wireless Networking – A major consideration in the design of the Grand Prix package was making it suitable for facilities with no infrastructure for running cables underneath the track. The addition of an EtherLynx Vision PRO camera with the 802.11g wireless communication option means that the camera can be controlled from the opposite side of the track with no cables needed to the FinishLynx computer. Because both systems are triggered by RadioLynx Wireless start systems, there is no need for start sensor cabling. The wind gauge and scoreboard are also connected to a wireless SeriaLynx unit, which eliminates the need for cables between them and the cameras. The Grand Prix package provides a powerful track and field results network suitable for World Athletics championship events.





World Athletics-Approved Three-Camera Timing System



The **Grand Prix Elite** package is the most powerful athletics timing solution offered today. It includes all the cameras, software, displays, and wireless networking you need to produce world-class photo-finishes at international events. The system includes everything from the Grand Prix package plus a number of accessories suitable for major World Athletics meets.

The Vision PRO camera serves as the primary timing device and provides all the power and features needed to produce fast and accurate World Athletics-certified results. The Vision PRO offers 6,000 fps captures, 2,048 pixels of vertical resolution, and powerful upgrades like LuxBoost, Wi-Fi-enabled transfers, Electronic Filter Control, an Internal Battery Pack, On-Board Camera Level, Remote Positioner, Motorized Zoom Lens, and the Video Display Module to send live race results to an HDMI-connected video display.

The Vision Camera is the secondary capture device and connects to a separate wireless start system to provide fully independent captures at 2,000 fps. The Vision camera comes fully loaded with features like EasyAlign, LuxBoost, Internal Battery & Level, and the Video Display Module.

Full System Redundancy

In accordance with World Athletics rule (165:19.20), both EtherLynx Vision cameras include their own wireless start systems for fully-redundant FAT results. Because both cameras receive a separate start signal, they function like two independent systems for reverse-angle (or dual finish line) captures. The package also includes an IdentiLynx front-facing camera that captures video of every athlete as they cross the finish line. IdentiLynx combines with the photo-finish cameras to offer three time-synchronized views of every competitor to ensure fast and accurate results. Capture up to 6,000 frames per second and never miss a finish again.

Components

CAMERAS

- Primary Camera: EtherLynx Vision PRO, 6,000 fps upgrade, 2,048 vertical pixels, color, timer-enabled
 - · LuxBoost Low-Light Capture Mode
 - · Wireless-Enabled Option for Wi-Fi Transfers
 - Video Display Module for HDMI Display Output
 - Internal RadioLynx, Camera Level
 & Battery Pack Option
 - · Electronic Filter Control
 - C-Mount, 12-75mm Motorized Zoom Lens
- Second Camera: EtherLynx Vision, 2,000 fps upgrade, 1,280 vertical pixels, color, timer-enabled
 - · LuxBoost Low-Light Capture Mode
 - · Video Display Module for HDMI Display Output
 - Internal RadioLynx, Camera Level
 Region Region Region
 - & Battery Pack Option
 - C-Mount, f1.2, 8-48mm Motorized Zoom Lens
- IdentiLynx Full-Frame Video Camera (30 fps, 720p)

DISPLAYS

- Lynx 2-Sided LED Video Display
- Lynx 1-Sided LED Video Display (x3)
- 2-Digit, 3-Sided Digital Lap Counter
- 4-Digit LED Wind Display & Countdown Timer

ACCESSORIES

- Short Range Wireless Photocell Kit (x2)
- Double Photocell Kit with 15m Range
- · AirLynx Wireless Gateway & Amplified Antenna
- Ultrasonic Wind Gauge (World Athletics-compliant)
- SeriaLynx (Wired/Wireless) Network Adapter
- Remote Lens & Remote Camera Positioner (x2)
- RadioLynx Wireless Start System (x2)
- All-inclusive Power, Ethernet, & Start Cable Set (x2)
- Tripod & Mounting Hardware for Precise Adjustment
- · Professional Tripod with 3m+ elevated mounting
- Lynx Tech Support & 1-Year Renewable Warranty

SOFTWARE

- ResulTV Live Data Display Software
- FinishLynx Multi-Language Photo-Finish Software
 - · Network COM Port Plug-in
 - Automatic Capture Mode (ACM) Plug-in
 - RadioLynx Wireless Start Plug-in
 - · LapTime Plug-in
- LynxPad Meet Management Software

Grand Prix Elite Package for Athletics

The Grand Prix Elite package includes (6) high-visibility LED displays for superior athlete and fan engagement throughout the venue. This includes (3) 1-sided video displays across the in-field, (1) 2-sided video display at the finish line for scrolling results/images, (1) 4-digit LED wind gauge display, and (1) three-sided Lap Counter.

Lynx 1-Sided & 2-Sided LED Video Boards – The large 1-sided displays (83"W x 58"H x 24"D) broadcast results, running times, athlete/event info, and custom text from any HDMI-connected source like a laptop or netbook. The 2-sided version combines two LED panels with a sturdy, weatherproof stand and is an ideal finish line display for

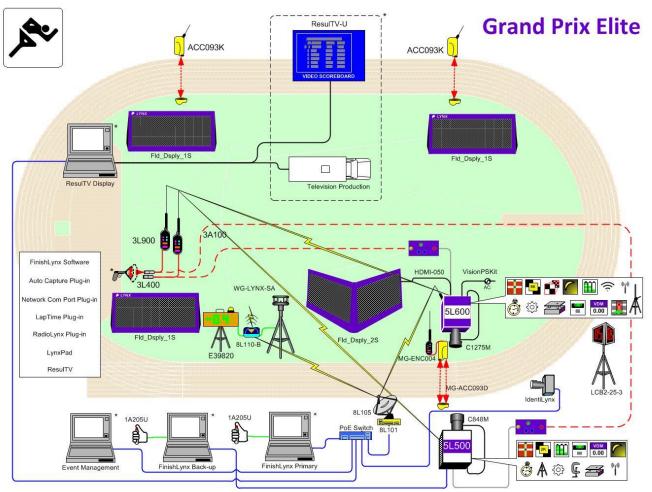




live running times and race results. The 2-sided display also connects directly to the Vision or Vision PRO camera to show live race data and FinishLynx images using the Video Display Module.

Video Display Module (VDM) – All 4 Lynx video boards are compatible with the Video Display Module (VDM) on the Vision and Vision PRO photo-finish cameras. The VDM-enabled cameras can connect directly to the 2-sided display via HDMI to show live race data and FinishLynx results images without the need for a third-party results program. The 4 boards can also be connected via Ethernet cable to mirror results and images from a single data source throughout the venue.

The Grand Prix Elite package combines **power**, **reliability**, **and World Athletics-compliance** into a single advanced timing and results package. All the components have been field-tested at major events and meet or exceed all World Athletics requirements. Join the thousands of organizations across the world that trust their athletics events to FinishLynx.



^{*} Computers, starting pistol, video scoreboard, and television production vehicle not included in package

© 1992 – 2022 | Lynx System Developers, Inc. | www.finishlynx.com



Lynx System Developers, Inc.

Cross Country Triad

Cross Country Race Timing with Photo-Finish, Video, & RFID Chip Integration

The FinishLynx Triad is an integrated Cross Country timing system that combines three popular digital products to improve the speed and accuracy of meet results. The Lynx Triad makes Cross Country timing easier by combining **photo-finish**, **video**, and **RFID** results in a single interface.

The finish line at a cross country meet can be a confusing place with multiple finishers crossing at the same time. Athletes can finish fractions of a second apart and accurate team scores often depend on individual results. This makes fast and accurate identification crucial for any cross country meet.



Key Components of the Triad Solution

EtherLynx Vision Camera



Product Category: EtherLynx Vision Product Description: Vision high sensitivity fullcolor camera. Accurate to at least 1/1000th of a second and includes 2-D

Part Number: 5L500

MYLAPS EasyMat



Product Category: Lap & Split Timing

Product Description: The rollable formula enables you to deploy the timing mat with one movement. The cabling is integrated within the mat, so there's no more manual cable handling needed.

Part Number: 30S061

Full-Frame IdentiLynx Video Camera



Part Numbers: IDL-SR, IDL-HRS

Product Category: IdentiLynx

preview.

Product Description: Full-frame video camera that produces high resolution images that can be integrated in the FinishLynx Software.

Part Nu

MYLAPS SideAntennas



Part Number: 30S038

Product Category: Lap & Split Timing

Product Description: The SideAntenna frame stands low on the ground and the antennas allow you to place your BibTag decoder on the back of the frame making the setup compact and easy to handle.

MYLAPS BibTag Portable Decoder



Part Number: 15S016/1

Product Category: Lap & Split Timing

Product Description:

Decodes the BibTag signals into the athlete IDs and their measured times. Portable decoders have an integrated battery and can measure up to 50 ThinTag passings per second.

www.finishlynx.com FinishLynx Triad Solution

On-Screen Information Display

The FinishLynx software combines the data from the Transponder system(s), EtherLynx camera(s) and IdentiLynx camera(s) and displays all the information about the hardware on the screen.

Changes to any camera settings can be made quickly and easily.

Accurate Times from Photo-Finish

When times are read from the photo-finish image, they are accurate and precise.

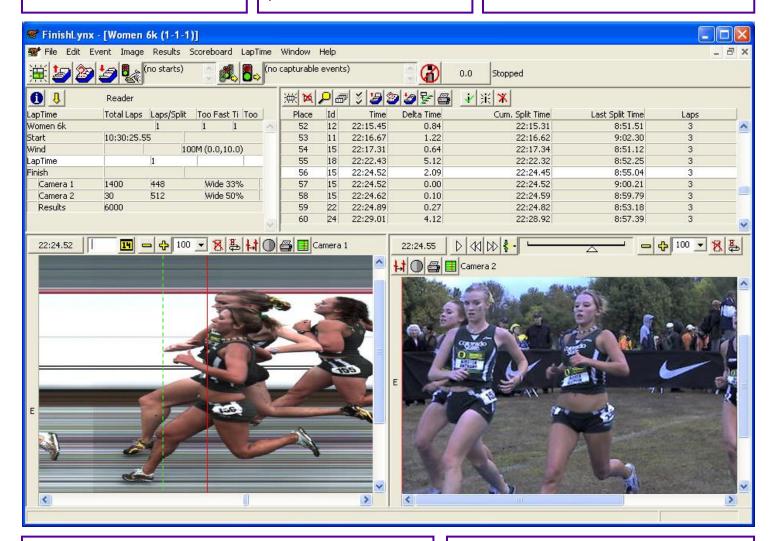
Finish order generated by Transponders is based on the location of the tag, but photo-finish times are accurately read from the position of the torso for precise results.

MYLAPS BibTag Decoder

The decoder attaches to the mats and decodes the BibTag signals into the athletes IDs and their measured times.

Decoders have an integrated battery and can measure up to 50 ThinTag passings per second.





EtherLynx Vision Camera

The Vision is a powerful photo-finish camera with an array sensor that integrates with FinishLynx to produce high-speed results. Evaluating races with 100, 200, or 300+ competitors is no problem. Image capture time is virtually unlimited so you never have to worry about missing a competitor. The image can be scrolled and zoomed so even the closest of races are easily resolved.



Overlay RFID Transponder Times

See the lines and instantly verify that every athlete's transponder has been recorded by the system.

IdentiLynx Video Camera



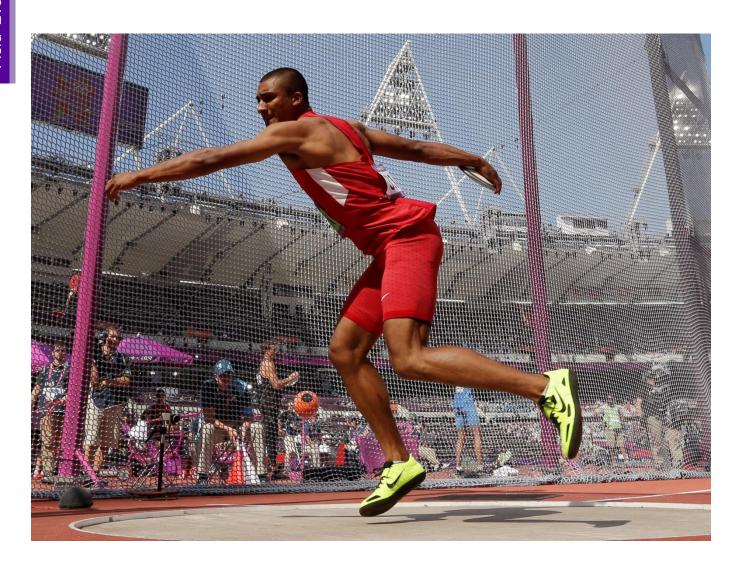
The full-frame video images confirm athlete identification with ease. Video footage can be cropped and exported to AVI files or JPGs.

Precise Image Control

Images are time-indexed and can be zoomed, advanced, or rewound frame-by-frame.



Field Events



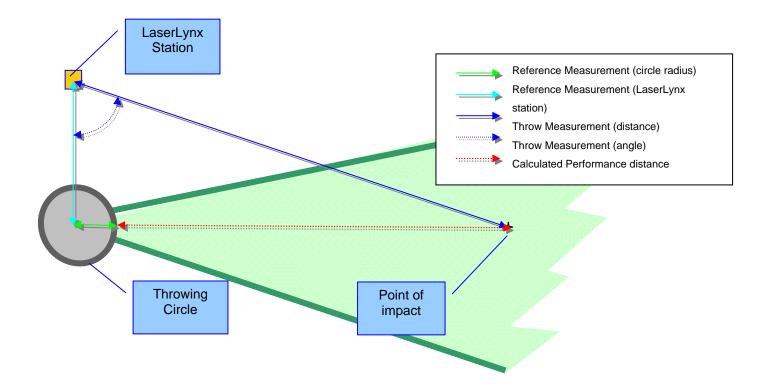
ATHLETICS-FIELD EVENTS

LYNX SYSTEM DEVELOPERS, INC.

YOUR GUIDE TO ELECTRONIC DISTANCE MEASUREMENT



There is no need for **any** officials to enter the throwing area during the competition. An athlete's performance for each throw is computed as shown below in the diagram by using data that was entered prior to the start of the competition and stored in the FieldLynx unit (the LaserLynx Station Reference Measurement, and the radius of the throwing circle or arc).



Field Event Packages Competition & Competition Elite

The FieldLynx software at the heart of the Competition Package enables the complete management of all your field events, including athlete check-in, scoring, results, and meet management integration. The package includes three Windows-based netbook computers and all the software you need to administer three events simultaneously. This modular package can also be upgraded at any time to include a wide range of add-ons like displays, wind gauges, and electronic distance measurement (EDM).

Built-in compatibility with existing wired Ethernet networks enables a simple and robust connection to your existing infrastructure for downloading athlete information and uploading results. When site conditions allow, the package also includes the AirLynx infrastructure, which enables wireless communication between the FieldLynx computers and wind gauges, scoreboards, and external meet/scoring databases.

Everything You Need

3 Windows-Based Netbook Computers, Wireless Connectivity, Amplified Antenna, & All Necessary Cables and Software



The **Competition Field Event Package** includes two software programs that run on Windows:

- FieldLynx Field Event Management Software.
 The world's most convenient, most portable, most flexible system for administering field events, from athlete check-in to results distribution.
- ClerkLynx A simple and effective system for forming heats in the stadium at a location other than the main LynxPad event management site. ClerkLynx downloads athlete names, allows the operator to combine them into heats, and then uploads the new start lists back to the FinishLynx photo-finish system.

Competition Elite Benefits

The Competition Elite package adds two key components to the Competition Package: a high-visibility LED display and a World Athletics-compliant wind gauge. Like the Competition Package, the Competition Elite provides everything you need to comfortably manage field events over a wired or wireless network.

World Athletics regulations require that any official marks in horizontal jumping events (long jump and triple jump) must be accompanied by wind readings. With this package, FieldLynx operators can instantly calculate and download wind information directly to each competitor's attempt record by simply tapping on an icon in the software. The stand-alone wind gauge kit has a weatherproof design and comes equipped with a battery pack, tripod, carrying case, and handheld controller with buttons and an LED screen.

The two SeriaLynx wireless units included with the package allow the scoreboard and wind gauge to be operated wirelessly from a netbook computer anywhere on the infield.

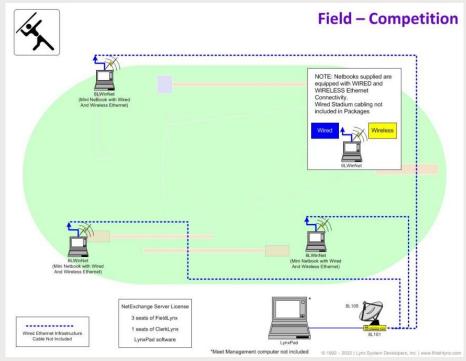


SeriaLynx enables fast and secure wireless communication between the FieldLynx netbooks and the LED display/wind gauge. One unit connects to the LED display to show live marks and standings from FieldLynx while the other connects to the wind gauge to wirelessly pull live wind readings for jumping events.

NetExchange is a field event results server that allows FieldLynx and ClerkLynx devices to send database files to and from a meet management computer. The NetExchange server software acts as a network gateway between field event scoring devices and the meet management computer running LynxPad, Hy-Tek, or another meet manager. Devices connect via a wired or wireless connection so event scoring data can be transferred from events across the infield.

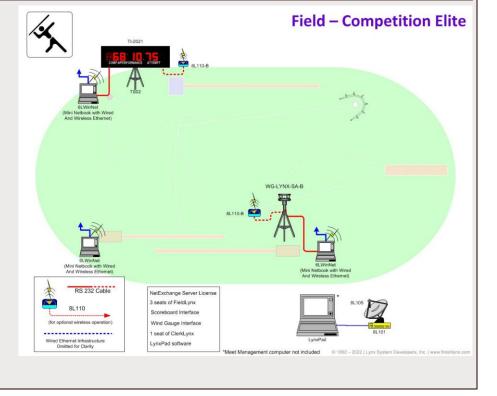
Components: Field Competition Package

- 3 Windows Netbook Computers (with USB port & wired/wireless Ethernet connectivity)
- 3 seats of FieldLynx Field Event Administration Software
- 1 seat of ClerkLynx Remote Clerking Software
- AirLynx Wireless 802.11 Gateway and Amplified Antenna Kit
- **NetExchange** Field Event Server License
- LynxPad Meet Management Software Available in multiple languages
- Access to Complete Technical Support



Components: Field Competition Elite Package

- 3 Windows Netbook Computers (with USB port & wired/wireless Ethernet connectivity)
- 3 Seats of FieldLynx Field Event Administration Software
 - Scoreboard Interface Plug-in for FieldLynx
 - Wind Gauge Interface Plug-in for FieldLynx
- 1 Seat of ClerkLynx Remote Clerking Software
- NetExchange Field Event Server License
- Ultrasonic Wind Gauge with Battery Pack
- 1 (7-Digit) 10" LED Display with Tripod
- AirLynx Wireless 802.11 Gateway and Amplified Antenna Kit
- **2 Wireless SeriaLynx units** (RS232 to Ethernet convertors)
- LynxPad Meet Management Software Available in multiple languages

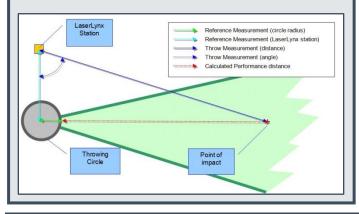




Field Packages Championship & Championship Elite

The two Championship-level Field Packages build on the components of the Competition packages, adding additional displays and the LaserLynx PRO Electronic Distance Measurement system. LaserLynx is a laser-based distance measurement device that produces accurate, computer-generated measurements for field events (throws: Shotput, Javelin, Discus, and Hammer; and horizontal jumps: Long Jump and Triple Jump). LaserLynx combines with the FieldLynx event software to integrate laser measurements across the FinishLynx results network with meet management databases, and scoreboards. LaserLynx is accurate to ±2mm and ±2 angular seconds, which easily exceeds World Athletics guidelines.

Integrating LaserLynx with FieldLynx computers is simple. Just select the menu option and all the settings are loaded automatically. The FieldLynx software is pre-programmed with the offset radii for all the standard field events and the unit can measure, calculate, and display athlete marks in a matter of seconds.



Championship Elite Benefits

The Championship Elite Field Package adds an additional World Athletics-compliant wind gauge kit (2 total), 2 extra LED displays (4 total), and a second LaserLynx EDM unit (2 total). It also includes 3 more SeriaLynx wireless units (6 total), which enable data from all the peripheral devices to be shared wirelessly with FieldLynx netbooks, meet management computers, or FinishLynx timing computers. The additional displays, standalone wind gauge, and LaserLynx unit make the Championship Elite Package an excellent choice for large meets looking to capture World Athletics-certified field event results.



LaserLynx Features

Fast 15-minute equipment setup

Accurate Exceeds World Athletics accuracy standards

Easy One-touch measurement

Portable Long-lasting rechargeable

batteries

Powerful Integrates with compatible displays and databases across the network

Sight, Click, and Display

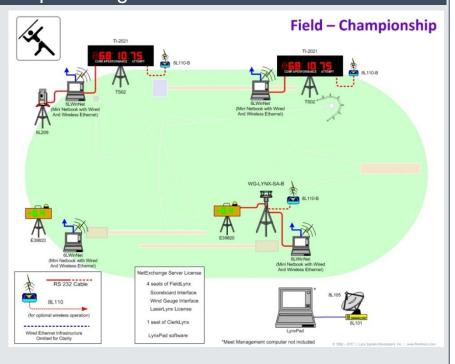
Measuring throws with LaserLynx is simple. After a throw is complete, a meet official places the prism at the point of impact and the LaserLynx operator "sights" it with the laser. Then tapping the icon on the FieldLynx unit will instantly calculate the athlete's mark. LaserLynx measurements can be sent wirelessly to the LED displays for excellent engagement of fans, athletes, and announcers. Marks can also be sent to the meet management software instantly using the NetExchange server.





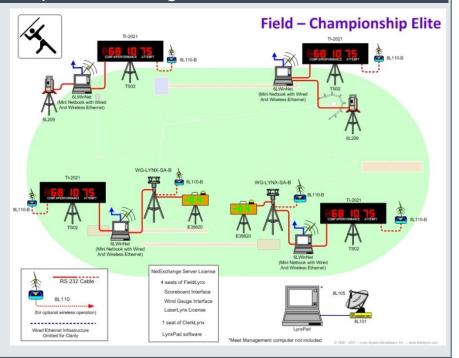
Components: Field Championship Package

- 4 Windows Netbook Computers
- 4 Seats of FieldLynx Field Event Software
 - Scoreboard Interface FieldLynx Plug-in
 - Wind Gauge Interface FieldLynx Plug-in
 - LaserLynx Interface FieldLynx Plug-in
- 1 Seat of ClerkLynx Remote Clerking Tool
- NetExchange Field Event Server License
- Ultrasonic Wind Gauge Kit & Battery Pack
- 2 (7-Digit) 10" LED Displays with tripods
- AirLynx Wireless 802.11 Gateway and Amplified Antenna Kit
- 3 Wireless SeriaLynx units (RS232 to Ethernet convertors)
- 2 (4-Digit) 6" LED Wind Gauge Displays & Countdown Timers
- LaserLynx PRO Electronic Distance Measurement System



Components: Field Championship Elite Package

- 4 Windows Netbook Computers
- 4 Seats of FieldLynx Field Event Software
 - Scoreboard Interface FieldLynx Plug-in
 - Wind Gauge Interface FieldLynx Plug-in
 - LaserLynx Interface FieldLynx Plug-in
- 1 Seat of ClerkLynx Remote Clerking Tool
- NetExchange Field Event Server License
- 2x Ultrasonic Wind Gauge Kit & Battery Pack
- 4x (7-Digit) 10" LED Displays with tripods
- AirLynx Wireless 802.11 Gateway and Amplified Antenna Kit
- 6x Wireless SeriaLynx units (RS232 to Ethernet convertors)
- 2 (4-Digit) 6" LED Wind Gauge Displays & Countdown Timers
- 2x LaserLynx PRO Electronic Distance Measurement System





Field Event Packages Grand Prix & Grand Prix Elite

The Grand Prix and Grand Prix Elite Field Packages bring the highest levels of technology to the world of field event management. These two Grand Prix-level packages include all the major components from the Championship Elite Package, while adding several custom LED video displays and the ResulTV software for world class results and fan engagement throughout the infield.

Custom LED Video Boards

The Grand Prix Package includes four 4-digit wind gauge/countdown displays plus four **1-sided LED video boards** for high-quality graphics at every field event station. The four video boards show real-time field event marks from FieldLynx as they are entered by meet officials. The LED panels are 2 meters long by 1 meter tall and support text, images, and animated GIFs — all powered by a netbook computer running FieldLynx and ResulTV.

ResulTV Live Results Display Software

Field event marks are entered into FieldLynx on a netbook computer and then the ResulTV software outputs vector graphics directly to the video board. Athlete names, performances, rankings, and other event info can be sent directly from the netbook using ResulTV to display dynamic, high-visibility graphics. Choose from a number of default templates or customize your graphics for the event by adding custom colors, images, logos, or GIFs.



Grand Prix Elite Benefits



The Grand Prix Elite is the most advanced field event administration package on the market today. It includes all the technology from the Grand Prix Package (2 LaserLynx, 2 wind gauges, 2 SeriaLynx wireless units, 6 Netbooks, 6 FieldLynx licenses, ResulTV, etc.) plus it adds two additional countdown timers (6 total) and swaps out the 1-sided displays in favor of four premium 3-sided LED video boards.

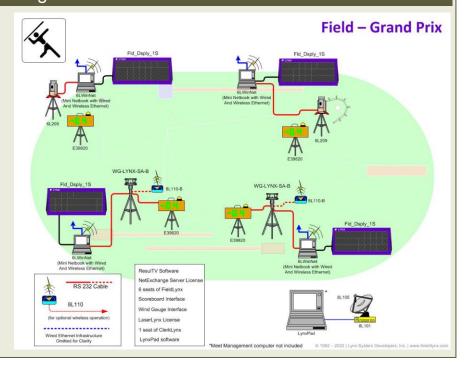
The 3-sided video displays provided with the package are suited for the highest levels of competition and have been used at World Athletics meets around the world. They combine three 2x1 meter LED panels using a custom-designed aluminum frame. The graphics are mirrored on all three panels to provide 360 degree visibility from throughout the stadium.

Each board includes a weatherproof vinyl cover to protect the rear connections and a sturdy wheel assembly base for easy transportation and movement throughout the venue.



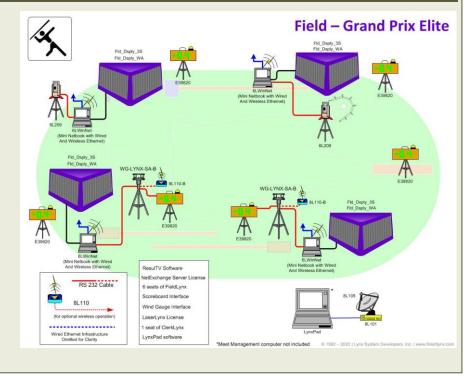
Components: Field Grand Prix Package

- 6x Windows Netbook Computers
- 6x Seats of FieldLynx Field Event Software
 - Scoreboard Interface FieldLynx Plug-in
 - Wind Gauge Interface FieldLynx Plug-in
 - LaserLynx Interface FieldLynx Plug-in
- 1 Seat of ClerkLynx Remote Clerking Tool
- NetExchange Field Event Server License
- 4x ResulTV Display Software License
- 2x Ultrasonic Wind Gauge Kit & Battery Pack
- AirLynx Wireless 802.11 Gateway and Amplified Antenna Kit
- · 2x Wireless SeriaLynx units
- 2x LaserLynx PRO Electronic Distance Measurement System
- 4x (4-Digit) 6" LED Wind Gauge Display & Countdown Timer
- 4x 1-Sided LED Video Display



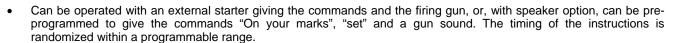
Components: Field Grand Prix Elite Package

- 6x Windows Netbook Computers
- 6x Seats of FieldLynx Field Event Software
 - Scoreboard Interface FieldLynx Plug-in
 - Wind Gauge Interface FieldLynx Plug-in
 - LaserLynx Interface FieldLynx Plug-in
- 1 Seat of ClerkLynx Remote Clerking Tool
- NetExchange Field Event Server License
- 4x ResulTV Display Software License
- 2x Ultrasonic Wind Gauge Kit & Battery Pack
- AirLynx Wireless 802.11 Gateway and Amplified Antenna Kit
- 2x Wireless SeriaLynx units
- 2x LaserLynx PRO Electronic Distance Measurement System
- 6x (4-Digit) 6" LED Wind Gauge Display & Countdown Timer
- 4x 3-Sided LED Video Display
 - 4x Wheel Assembly for 3-sided Displays

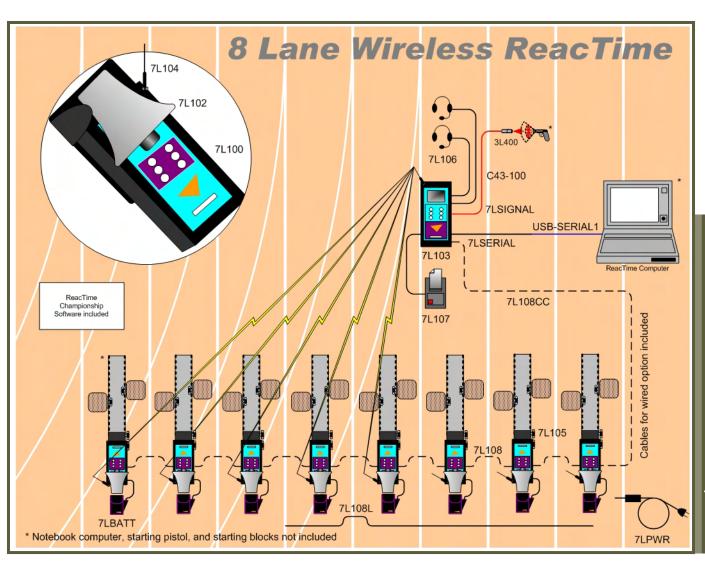


REACTIME FOR TRAINING

- Same technology for Reaction-Time Training System and Championship False-Start System. Buy a Training System today and simply upgrade to the Championship System at a later date.
- Accurate to 1/1000th of a second
- Downloadable reaction traces for detailed start analysis
- Battery operated and rechargeable
- · Clips to virtually any starting block
- · Cannot be "tricked" like many other systems
- Training system starter commands can be personally recorded
- Rugged, weather resistant construction designed to withstand the rigors of everyday use
- The world's top sprinters have shown that reaction times can be improved by training- and ReacTime can be the cornerstone of that training process



- Two Personal Training Systems can be linked for competitive training. Can be connected to photoeyes or a FinishLynx system for total sprint timing.
- Protects your investment. Personal ReacTime units can be used as components of a full false start detection system



Tel: 978.556.9780 Toll Free: 800.989.5969 www.finishlynx.com



Lynx LED Video Displays for Track & Field Results

The LED infield video displays from Lynx are custom designed to meet the demands of championship-level World Athletics events. These modular displays are available in 1, 2, or 3-sided units and integrate seamlessly with FinishLynx technology to display live results throughout the venue.

Each LED panel is **2 meters** long by **1 meter** high and provides highvisibility text, images, or animated graphics for superior fan engagement in large indoor or outdoor venues. Each display unit can receive data independently over an HDMI connection, or multiple units can be connected with an Ethernet cable to broadcast a single video/graphic feed simultaneously to displays located across the infield.



Software Compatibility

The displays are compatible with the ResulTV live display software, FieldLynx field event software, the Video Display Module for EtherLynx Vision cameras, or any custom software capable of outputting graphics to an HDMI-connected display. Infield displays can connect to a laptop or netbook to show live field event scores and measurements using the FieldLynx software. Finish line displays can connect to ResulTV for advanced broadcast-ready graphics, or display race results and images directly from FinishLynx cameras using the Video Display Module.

Video Display Module on Lynx Cameras

The 1, 2, and 3-sided displays can connect directly to an EtherLynx Vision series photo-finish camera running the Video Display Module to display live finish times, results, custom text, and even FinishLynx results images directly from the camera's HDMI output. The VDM plug-in uses custom scoreboard scripts to output live race data and the options can be controlled from inside the FinishLynx software interface. Select images, send custom messages, or edit the display layout with a click of the mouse.



Construction & Frame

The premium aluminum frame offers solid, weatherproof construction and a lightweight design. Plus, the optional wheel assembly for the 2 and 3-sided units makes it easy to move the display within the infield or transport it between events. The large LED panels fit snugly into the aluminum frame and the rear connections are easily accessible during setup. The frame also includes removable vinyl panels to cover the rear of each display. Because the display units are modular, a 1-sided display can be turned into a 2 or 3-sided at a later date if necessary. Any of the four modular LED panels can also be swapped out or replaced at any time.

Key Features

- Large panels produce high-visibility graphics suitable for outdoor events
- Weatherproof design protects the LED hardware from harsh weather conditions
- Custom aluminum frame supports the LED panels and provides a polished, professional design
- Seamless data integration with FinishLynx cameras and software
- HDMI input is compatible with most graphic display programs
- Connect multiple display units using an Ethernet cable
- Modular design means you can choose any combination of 1, 2, or 3-sided displays

Lynx LED Video Displays for Track & Field

Live Field Event or Race Results



Weatherproof Internal Connections



Custom-Built Aluminum Frame



Modular 1, 2, or 3-Sided Designs



Hardware Specifications

LED Panel Dimensions	200cm W x 100cm H
LED Matrix	416 x 208 pixels
Full Unit Dimensions	1-Sided : 211cm x 148cm x 61cm
	2-Sided : 285cm x 148cm x 183cm
	3-Sided : 285cm x 148cm x 247cm
Full Unit Weight	1-Sided : 110 kg
	2-Sided : 210.5 kg
	3-Sided : 303.5 kg
Pixel Pitch	4.81 mm
Refresh Rate	>2000 Hz
Brightness	>5000 nits
Pixel Density	43264 Dot/sqm
Input Voltage	AC100-240V/50-60Hz
Average Power Consumption	260 W/m ² (520W per side)
Max Power Consumption	780 W/m ² (1560 W per side)
Operating Temperature	-20°C to +60°C
Operating Humidity	10% to 90% RH
Life Span	100,000 Hours
Front Ingress Protection Class	IP65
Back Ingress Protection Class	IP54
Frame Materials	Aluminum Frame, Vinyl Cover
Mounting	Optional Wheel Assembly Base
Connections	HDMI, AC Power



Lynx Portable Display

The Lynx portable LED display is custom-designed by Lynx to meet the demands of every competition level, from small high school meets to World Athletics championships. The display is portable, weather-proof, and integrates seamlessly with FinishLynx technology to display live results at your finish line or field event.

The LED panel measures 100cm x 50cm (19.68" x 39.5") and displays high-visibility text, images, results, and animated graphics for superior fan engagement. Plus, the **5mm** pixel pitch and **5000 nits** of brightness ensure that your live race results are visible in both indoor and outdoor venues.



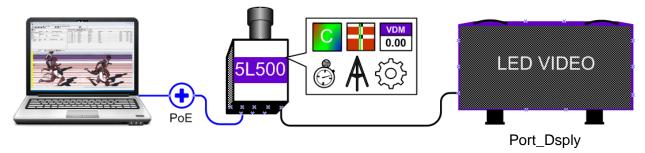
Software Compatibility

The display receives data through a standard HDMI connection and is compatible with any software capable of sending graphics to an HDMI-connected display. Place it at the finish line or field event and connect it to ResulTV to output results and broadcast-ready graphics, or send live results and images directly from FinishLynx cameras using the Video Display Module (VDM).



Video Display Module on Lynx Cameras

The portable LED display can connect directly to EtherLynx Vision-series photo-finish cameras running the Video Display Module to display live finish times, results, custom text, and even FinishLynx results images directly from the camera's HDMI output. The VDM option uses custom scoreboard scripts to output live race data and the options can be controlled from inside the FinishLynx software interface. Select capture images, send custom messages, or edit the display layout with a click of the mouse.



Key Features

- Seamless data integration with FinishLynx/FieldLynx and ResulTV
- Connect directly to a Vision-series camera to display live results using the Video Display Module (VDM) option
- HDMI input is compatible with most graphic display programs
- 5mm pixel-pitch and >5000 nits brightness produces high-visibility graphics suitable for indoor and outdoor events
- IP65 (front) and IP54 (back) weatherproof design protects the LED hardware from harsh weather conditions
- Custom aluminum frame supports the LED panels and provides a polished, professional design
- Scoreboard package includes the mounting feet, carrying case, and all the cables you need



Scoreboard Package Contents (KPort_Dsply)

Part Number	Description
Port_Dsply	High Resolution, 0.5 SQM, LED Video display. Works with 5LVDM, ResulTV, ResulTV-Connect & HDMI-Extender
FLT-LXLEDFeet	Universal Display Foot Set for Level/Flat Mounting
HDMI-05M-WR	HDMI Cable 5M – Water-Resistant Connector
HDMI-050	HDMI Cable 50 feet
Port_Dsply_CS	Travel/shipping case for Lynx Portable Display
USBCBL-A2B-06	USB A to B Cable, 6' long
USPwr25-WR/ EuroPwr25-WR	25' Power Cord – Water-Resistant Connector

Hardware Specifications

LED Panel Dimensions	100 cm x 50 cm
LED Matrix	104 x 208 pixels
Full Unit Dimensions	100 cm x 52 cm x 17.53 cm (39.5" x 20.5" x 6.9")
Full Unit Weight	27.9 kg (61.4 lbs)
Pixel Pitch	4.81 mm
Refresh Rate	>2000 Hz
Brightness	>5000 nits
Pixel Density	43264 dots/sqm
Input Voltage	AC100-240V/50-60Hz
Average Power Consumption	260 W/m ² (130W per side)
Max Power Consumption	780 W/m² (390W per side)
Operating Temperature	-20°C to +60°C
Operating Humidity	10% to 90% RH
Life Span	100,000 Hours
Front Ingress Protection Class	IP65
Back Ingress Protection Class	IP54
Frame Materials	Aluminum Frame
Mounting	Universal Display Feet, (Optional) BG3036 Tripod
Connections	HDMI, AC Power



Request more information online at: www.finishlynx.com/product/displays/lynx-portable-display/



BUILDING LYNX INTO THE DESIGN PROCESS

One area of track and field design where Lynx has been able to provide assistance to many of today's top architects is by helping to increase their knowledge of, and infrastructure planning for, a facility's Fully Automatic Timing (FAT) system. Every quality facility can expect to host at least a few meets per year that incorporate fully automatic timing, so the necessary infrastructure should always be considered during the design process.

This infrastructure is frequently already in place, but it is not always in the optimal position or designed with adequate redundancy. Many facilities are forced to adapt their timing system's setup due to



infrastructure designed solely for soccer. With a little foresight and minimal additional costs, every track facility can be designed to mesh with the needs of a multi-sport stadium.

ENTRY-LEVEL (MULTI-USE) INFRASTRUCTURE

A pair of junction boxes located inside and outside of the track near the finish line (and connected by 2" conduit) are the bare minimum for a track facility. However, in situations where it is not possible to place conduits under the track, it is possible to install a totally wireless infrastructure. Contact Lynx and talk to our technical staff if your project demands this solution.

As you will see from the basic diagram, the infrastructure requirements for a simple timing system at an entry-level track facility are very easy:

- · A pair of junction boxes located inside and outside the track close to the finish line
- An Ethernet cable running through the conduit under the track, connecting the primary EtherLynx finish line camera with the FinishLynx computer
- A power outlet for the EtherLynx camera, preferably on its own circuit breaker. It
 is preferable to have power both inside and outside the track to allow for future
 expansion to a two-camera system.





In-Ground Junction Box

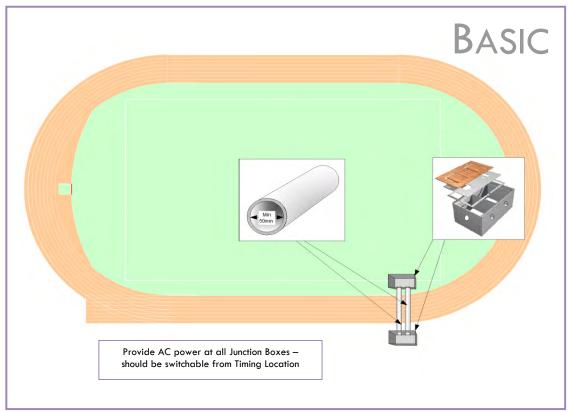
ADVANCED INFRASTRUCTURE

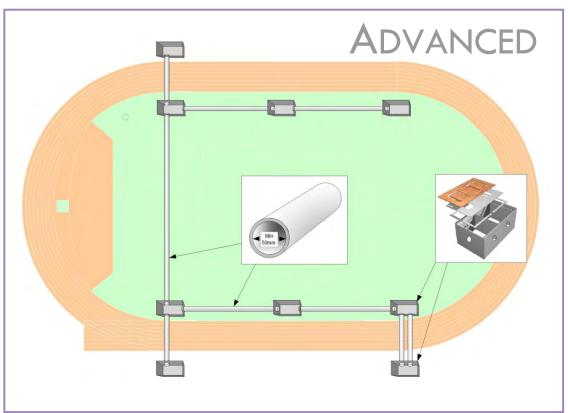
Some facilities require the flexibility to reverse the direction of the 100 and 200-meter sprint races to avoid headwinds. This will entail another set of junction boxes at every position where a race would potentially finish. Most large facilities run their starting gun cable underground to keep it away from athletes' spikes. If your customer prefers this, you will need three additional long conduit runs and junction boxes at the inside of the beginning of each straightaway.

The first conduit should run from the main infield junction box at the finish line along the straightaway to the beginning of the 100-meter dash. The second conduit will run from the 100-meter start under the infield to the beginning of the 200-meter start. The third conduit will run from the 200-meter start to the 1500-meter start.

CABLE SPECIFICATIONS

- Start Signal Cable Belden 9533
- Start Signal Connectors 3 pin XLR
- Ethernet Network Cable Options
 - Industry Standard Cat 5 (T568A/B RJ45)
 - Industry Standard Fiber Optic with applicable Transceivers





Major Athletics Events

- USA Track & Field Olympic Team Trials (USA)
- IAAF World Challenge Meeting Zagreb (Croatia)
- IAAF Winter Permit Meeting (Russia)
- DECASTAR IAAF World Combined Events Challenge (France)
- Pan-American Games (Mexico)
- Pan-Arab Games (Qatar)
- Ibero-American Games (Puerto Rico)
- Russian Athletics National Championships (Russia)
- Grande Premio Brasil Caixa de Atletismo (Brazil)
- IAAF World Challenge Meeting (Morocco)
- IPC Athletics World Championships (France)
- USATF Indoor Track & Field Championships (USA)
- USATF Outdoor Track & Field Championships (USA)
- Meeting Pas de Calais IAAF Indoor Permit Meeting (France)
- Great City Games (United Kingdom)
- Finnish Championships in Athletics (Finland)
- Balkan Athletics Senior Championships (Bulgaria)
- Millrose Games (USA)
- Penn Relays (USA)
- Drake Relays (USA)
- Nike Cross Nationals (USA)

Lynx System Developers, Inc.

To find your local recommended reseller:

Website <u>www.finishlynx.com</u>

 Email
 (USA/Canada/Mexico):
 domsales@finishlynx.com

 Email
 (International):
 intlsales@finishlynx.com

Telephone (USA): (978) 556 9780