



PHOTOVISION™

HIGH-SPEED PHOTO-FINISHES

CONSISTENTLY DELIVER IMMEDIATE,
CLEAR AND PRECISE RACE RESULTS



PHOTOVISION™

PhotoVision is a sports timing **full-frame** camera solution available in 120, 200, 500 and 1,000 frames-per-second (fps) models that deliver full-color, time-stamped photos to evaluate athlete results with ease and maximum accuracy. PhotoVision produces fully automatic timing (F.A.T.) results accurate to 1/1,000th of a second. F.A.T. compliant systems are required by a growing number of organizations such as USATF, IAAF, etc.

BENEFITS



EASY TO DEPLOY

Using the latest developments in optics and electronics, PhotoVision can be set up in less than 10 minutes and will allow you to capture crystal clear color photos immediately.



EASY TO USE

With Live View and Photo Viewer, Time Markers, Light Adjustment and Auto-Capture, and the full-frame camera solution, you'll be able to quickly and accurately determine finish order and times to 1/1,000th of a second.



Jaguar PhotoVision shown with optional
FATCAT Transmitter, Receiver, and standard tripod.

PERFORMANCE & SPECIFICATIONS

Jaguar PhotoVision

Features	PhotoVision-120	PhotoVision-200	PhotoVision-500	PhotoVision-1000
Capture Frames/Second	120	200	500	1,000
Focus Capabilities	Fixed/Variable	Fixed/Variable	Fixed/Variable	Fixed Variable
Resolution	640 x 480	1280 x 1020	800 x 600	640 x 480
Color/Black & White	Both	Both	Both	Both
Computer Interface	USB 3.0/3.1	USB 3.0/3.1	USB 3.0/3.1	USB 3.0/3.1
Supports 6-25 mm lens	YES	YES	YES	YES
Variable Brightness & Gamma	YES	YES	YES	YES
Photo Enhancement Tools	YES	YES	YES	YES
Zoom - Manual & Digital	YES	YES	YES	YES
Automatic Capture	YES	YES	YES	YES
Integrates with Laser Curtain	YES	YES	YES	YES
Communicates with Digital Clock	YES	YES	YES	YES
CSV File Export of Timing Data	YES	YES	YES	YES
Supports FAT for Track & Field	YES	YES	YES	YES





FATCAT

The FATCAT transmitter and receiver are the heart of the F.A.T. (Fully Automatic Timing) solution of PhotoVision. When a starter pistol is fired, the FATCAT transmitter sends an electronic start signal to the FATCAT receiver, which is connected via USB to the computer running the PhotoVision Software. The FATCAT receiver includes two ports for Jaguar accessories, including our digital lasers. Now you can trigger photo capture automatically and send finish times to the optional Jaguar Digital Clock. Times are recorded to 1/1,000th of a second!

BENEFITS



EASE OF USE

Lightweight wireless transmitter that detects starter pistol firing while ignoring crowd noise and loud music.



WIRELESS

Forget about messy cables. Transmit the FATCAT start signal up to nearly 2,000 ft (600 m) away from the FATCAT receiver.



MULTIPLE INTERFACES

Supports multiple lasers for triggering photo capture and updating a Jaguar clock with the winner's finish time.

TRANSMITTER



RECEIVER

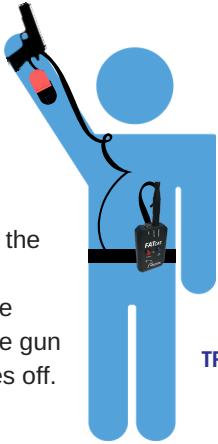


PERFORMANCE & SPECIFICATIONS

Jaguar FATCAT » » » HOW IT WORKS

1

The mic attached to the FATCAT captures the sound of the gun when it goes off.



TRANSMITTER

2

The FATCAT transmitter then instantly sends the start signal wirelessly to the FATCAT receiver.



RECEIVER

3

The receiver then sends the signal to the laptop and the race begins!



FATCAT Transmitter	Specifications
Power Supply	Three AA batteries
Battery Life	24 hours of usage
Transmission Range	Up to nearly 2,000 ft (600 m)
Operating Frequency	2.4 GHz range
Protection	Water resistant
Size	5.75" x 3.5" x 1.1" 14.6 cm x 8.9 cm x 2.8 cm
Weight	0.8 lbs/ .36 kg

FATCAT Receiver	Specifications
Power Supply	USB port on laptop
Current Draw	<500 mA
Receiver Sensitivity	Adjustable
Operating Frequency	2.4 GHz range
Protection	Water resistant
Size	7" x 5" x 2" 17.8 cm x 12.7 cm x 5.1 cm
Weight	1.4 lbs/ .64 kg





SMART INVESTMENT

Question: What makes PhotoVision different, or a better choice, than other products?

Answer: Our firm has over 10 years of experience manufacturing timing and photo products for the sports industry, and our solutions have been used at over 100,000 events including cycling, running, track & field, motocross, triathlon, kayak, and more. Our extensive engineering expertise has allowed us to create a new generation of photo solutions that are finally affordable, quick to deploy and extremely easy to use. We're also breaking new ground with some amazing features such as intelligent automatic capture, dynamic lighting adjustments, automatic book marks, continuous recording, and other features that eliminate time-consuming tasks for the operator.

Question: Do you have specific examples of your product's advantages?

Answer: Yes, for instance our camera captures the entire field of view in **Color**, at a width up to 10 feet (3 m), giving you better images and more frames to work with, ensuring that you won't miss a single moment of the action.

Also, you can plug Jaguar Lasers into our FATCAT receiver product, and the software will automatically start capturing frames when the athletes cross the finish line. You can also use a laser to capture the finish time for the race and send it instantly to our Jaguar Digital Clock.

When it comes to analyzing pictures to determine the exact time of an athlete, vehicle, or object, you need tools that help you improve the time accuracy to as tight as 1/1,000th of a second. Obviously, our top of the line 1,000fps cameras will provide you results to 1/1,000th of a second. However, what happens if you are using our 200fps model? Well, we have implemented advanced software algorithms to narrow the time down to the most plausible 1/1,000th of a second.

SMART INVESTMENT



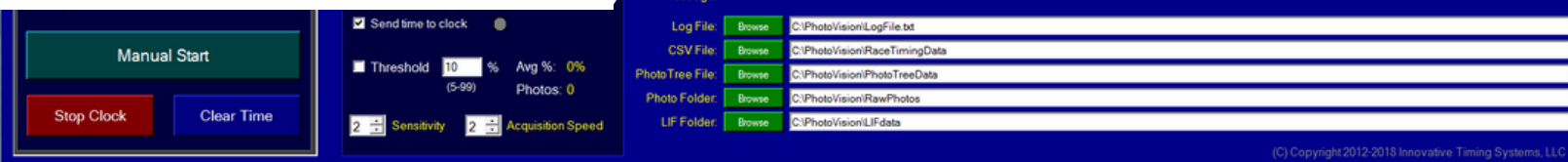
Another advantage of our product is that it leverages the latest economical USB SuperSpeed standard (USB 3.0/3.1 SS) to operate our camera. By comparison USB 3.0/3.1 SS delivers a maximum bandwidth rate of 10 Gbps (gigabits per second), or 10 times faster than any competitive Ethernet-based solution. You win on all fronts. Our product is more economical, easier to setup and operate, and most importantly, the operator can view images instantly.

We've leveraged all of the latest developments in computer technology. For example, the latest Intel® processors found on many laptops can actually operate as 8 different microprocessors (virtual cores), if the software is advanced enough to use this capability. Few vendors truly take advantage of it because it's extremely advanced. However, our software leverages this feature and it's what allows us to do remarkable things like capture continuously for 2 minutes, while also performing real-time photo analysis and bookmarking. We can capture at full speed, while also writing previous captures to an advanced Solid State Drive in your i7 laptop without missing a beat. Meanwhile, we can also communicate with our lasers and digital clocks. It's like having a super-computer that can do everything you need, without having to break the bank. Perhaps our most remarkable accomplishment is delivering all of these benefits in an easy-to-use interface that is amazingly quick to learn and operate.

Customer Testimonial...

"When I decided to expand from timing road races and cross country into Track & Field, I knew I needed a new FAT timing system. After looking at the systems offered by other manufacturers, I decided to use the PhotoVision camera & FATCAT wireless system built by Innovative Timing Systems, because I trust and love their RFID equipment that I have used for years. I am thrilled with the quick set up of the hardware, easy to use software, and rock solid performance of the system as a whole. It seems like every meet I time has someone looking over my shoulder and expressing surprise at how different the system is from most of the others they had seen - in a good way." - Lowell Ladd, 2L Race Services

PERFORMANCE



In summary, PhotoVision:

- Leverages all of the latest technologies in computers (Processor, Graphic Cards, Memory, SSD disk, USB SS interface) to enable capturing full-frame shots in color at speeds of up to 1,000 fps to disk (for up to 2 minutes continuously).
- Delivers powerful software features to help the operator determine, almost instantly, the finish time to 1/1,000th of a second (even with cameras that record less than 1,000 fps).
- Is easy to learn.
- Is up and running in minutes with the FATCAT wireless transmitter and receiver.

PhotoVision Features	Unique Benefits
Lighting Adjustment	Camera lens aperture ring as well as software adjustments
Capture Width	Full-frame color image; generally up to 10 ft (3 m) in width
Photo Viewer	Instant viewing of captured images with rapid scrolling
Lane Markers	Adjustable on-screen markers that make it easy to identify lanes
Live View	View image in real-time exactly as it will be captured
Accuracy	Photos captured with time stamps of 1/1,000th of a second
Photo Adjustments	Variable zoom and the ability to re-color photos to improve viewing
Data Formats	Interfaces with Jaguar timing products and third party Track & Field scoring software

Still have questions?

CONTACT
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