



V120 DUO & TRIO



FEATURES

FACTORY CALIBRATED

Each tracking bar is self-contained and factory calibrated, for out of the box motion tracking that is accurate, flexible, and very simple to use.

SIMPLE INPUT/OUTPUT

Power, data, and external synchronization are all transmitted between the I/O-X sync box and tracking bar via a single cable.

EXTERNAL SYNC

External sync in/out is supported with the included sync box, for seamless compatibility with shutter glasses and other hardware devices.

FREE SOFTWARE

Your purchase of Duo or Trio hardware includes a free license of Tracking Tools, OptiTrack's engineering-grade rigid body and marker tracking application.

ON-BOARD PROCESSING

A variety of pre-processed image types are supported on-camera, resulting in decreased bandwidth and CPU load and more efficient motion tracking.

REFERENCE VIDEO (TRIO)

Operate a camera in IR grayscale mode for high-speed reference video. Visible spectrum video is also available in the center camera. (Trio only.)

COMPACT FORM FACTOR

At 11" and 23" in length, these tracking bars are highly portable, enabling easy transport and rapid deployment of the entire tracking system.

FLEXIBLE DATA EXPORT

Save recorded data in C3D or CSV formats, or stream real-time via VRPN, trackd, or custom NatNet transport.

OEM INTEGRATION

Incorporate the Duo or Trio's full tracking and export capabilities into your own ecosystems via the Tracking Tools API, free with any tracking bar purchase.

TECH SPECS - V120:DUO

Body

- Width: 11 inches (279.4 mm)
- Height: 1.6 inches (40.6 mm)
- Depth: 2 inches (50.8 mm)
- Weight: 1.3 pounds (0.6 kg)
- Mounting: 1/4"-20 tripod thread
- Display: 128 × 22 OLED

Image Sensor

- Resolution: 640 × 480
 - Image size windowing
 - Spatial decimation: 320 × 240, 160 × 120
- Frame Rate: 30, 60, 120 FPS
 - Frame decimation
- Accuracy: Sub-millimeter
- Latency: 8.333 ms
- Shutter Type: Global
- Shutter Speed:
 - Default: 1/1000th of a sec. (1 ms)
 - Minimum: 1/50,000th of a sec. (20 μs)

Image Processing Types

- Object
- Segment
- Precision Grayscale
- MJPEG Grayscale
- Raw Grayscale

Lens & Filter

- Standard M12 Lenses
 - Horizontal FOV: 57.5°
 - Focal Length: 3.5 mm
 - F-number: 2.0
- Filter: 800 nm IR pass

LED Rings

- No. of LEDs: 26 (× 2)
- Wavelength: 850 nm IR
- Strobe or Continuous Illumination
- Adjustable brightness

Input/Output & Power

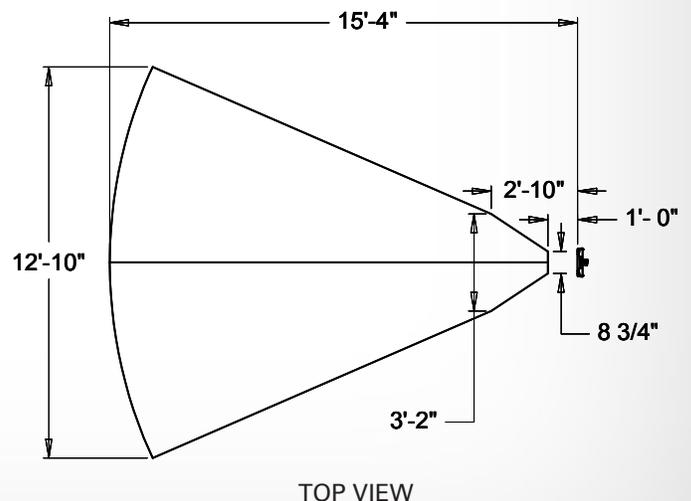
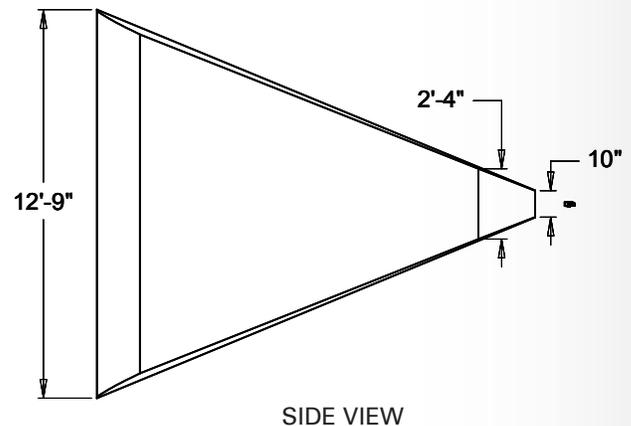
- Data: USB 2.0
- Sync: internal or external (via IO-X)
- 12V @ 3A

System Requirements

- Windows 2000/XP/Vista/7
- 1 GHz processor
- 256MB of RAM
- 5MB of available disk space
- USB 2.0 Hi-speed port

In the Box

- 1 V120:Duo
- 1 Quick Start Guide
- 1 12v universal power supply
- 1 USB uplink cable (5 meters)
- 1 Set of 5 hard reflective markers (7/16 inch)
- 1 Set of 5 hard marker bases (1 inch)
- 1 Hand rigid body



TECH SPECS - V120:TRIO

Body

- Width: 23 inches (584.2 mm)
- Height: 1.6 inches (40.6 mm)
- Depth: 2 inches (50.8 mm)
- Weight: 2.8 pounds (1.3 kg)
- Mounting: 1/4"-20 tripod thread
- Display: 128 × 22 OLED

Image Sensor

- Resolution: 640 × 480
 - Image size windowing
 - Spatial decimation: 320 × 240, 160 × 120
- Frame Rate: 30, 60, 120 FPS
 - Frame decimation
- Accuracy: Sub-millimeter
- Latency: 8.333 ms
- Shutter Type: Global
- Shutter Speed:
 - Default: 1/1000th of a sec. (1 ms)
 - Minimum: 1/50,000th of a sec. (20 μs)

Image Processing Types

- Object
- Segment
- Precision Grayscale
- MJPEG Grayscale
- Raw Grayscale

Lens & Filter

- Standard M12 Lenses
 - Horizontal FOV: 57.5°
 - Focal Length: 3.5 mm
 - F-number: 2.0
- Left and Right Cameras
 - 800 nm IR pass filter
- Middle Camera
 - 800 nm IR pass filter w/ Filter Switcher

LED Rings

- No. of LEDs: 26 (× 3)
- Wavelength: 850 nm IR
- Strobe or Continuous Illumination
- Adjustable brightness

Input/Output & Power

- Data: USB 2.0
- Sync: internal or external (via IO-X)
- 12V @ 3A

System Requirements

- Windows 2000/XP/Vista/7
- 1 GHz processor
- 256MB of RAM
- 5MB of available disk space
- USB 2.0 Hi-speed port

In the Box

- 1 V120:Trio
- 1 Quick Start Guide
- 1 12v universal power supply
- 1 USB uplink cable (5 meters)
- 1 Set of 5 hard reflective markers (7/16 inch)
- 1 Set of 5 hard marker bases (1 inch)
- 1 Hand rigid body

