

Eagle-4 Digital RealTime System



The Eagle-4 Digital RealTime System consists of Eagle-4 Digital Cameras and Cortex software, which captures complex motion with extreme accuracy. Real-time capabilities allow our customers to see capture results at the same instant as the subject is performing a specific task. The Eagle-4 can be mixed with other Motion Analysis digital cameras to optimize your capabilities.

Eagle-4 Digital Camera

The Eagle-4 uses the Micron Corporation MI-MV40 sensor and operates up to 200 fps at a full resolution of 2352 x 1728 pixels, and up to 10,000 fps at reduced resolutions. The Eagle-4 Digital Cameras provide today's motion capture technicians with a tool that assures reliable and accurate data. With digital technology there is no degradation of the signal over distance, less noise, and no resampling of data on another piece of electronics.

With today's motion capture facilities demanding multiple person capture within increasing volumes, the stability of the signal becomes critical. The Eagle-4 Digital Camera signal goes directly to the tracking computer via an Ethernet connection. The signal processing is embedded in the camera. This streamlined system of motion capture from camera to computer means less hardware and less potential for equipment problems. The FPGA (field programmable field array) built into the Eagle-4 is software and firmware upgradeable via the Internet - you don't even have to take the cameras down.

The Eagle-4 Digital Camera has a larger sensor area than standard video cameras. The corresponding use of a high quality 35mm lens allows for the sweet spot of the lens to map over this larger image sensor area, resulting in greater lens and system accuracy.

Features

- 1-200 Hz selectable frame rates at full resolution
- Up to 10,000 Hz at partial resolution
- Portable - up to 8 cameras in two suitcases
- Built-in zoom provides more visual options for ease of set-up
- Separate zoom, iris and focus settings independent of ringlight
- Available with visible red, near red, or infrared ringlights
- LED display panel for camera identification and status
- 237 LED's for brighter and better light uniformity
- Strobed ringlight with camera body heat sink
- Four body mount points on camera for variable positioning
- Software controlled adjustable light output

Cortex

Cortex software provides a user with a simple and powerful interface. Under a single software environment you can set up, calibrate, capture motion in real-time, capture motion for post processing, edit and save data in the format of your choice.

Integration

- Fully compatible with Cortex software
- Standard TCP/IP Protocol
- 128 channels of synchronized 16-bit analog data acquisition (forceplate and EMG data)
- Exportable to all major animation software packages

