

Virtual Training

Military field exercises, virtual instructors, and role-playing games are just some of the possibilities that the Motion Analysis systems can contribute to the training of personnel.

Virtual environments allow a group of instructors and students to carry out the learning process that is meant to replace the physical class environment. This experience allows for the potential of increased interactivity between students and the environment created. Environments can be updated and changed immediately to reflect current design of machine prototypes or physical surroundings, resulting in substantial cost savings.

Typical System Configuration

VIRTUAL TRAINING SYSTEM

- **16-24 Raptor-4, Eagle-4, Eagle or Hawk cameras**
- **Cortex**
- **Calcium**
- **Talon Plug-ins**

Choosing the correct camera and number of cameras for your motion capture system is dependent on various factors including:

- Size of capture area
- Size of physical room
- Complexity of movement
- Speed of movement
- Current and future needs

Your Motion Analysis account representative will work with you to determine the best system configuration. Our systems integrate fully with HMD, JACK software, CATIA V5 software, Eye Mark Recorder and other hardwares and softwares. Customers have full access to an SDK in order to develop their own software interfaces.

Recommended Cameras

Raptor-4 Digital Camera

- Resolution of 4 million pixels
- 1-200 Hz selectable frame rates
- Up to 10,000 frames per second at reduced resolution
- Can process up to 5,000 markers in greyscale
- High quality 35mm lenses for low optical distortion
- Built-in zoom provides more visual options
- 237 LED's for brighter and better light uniformity
- Software controlled adjustable light output

Eagle-4 Digital Camera

- Resolution of 4 million pixels
- 1-200 Hz selectable frame rates
- Up to 10,000 frames per second at reduced resolution
- High quality 35mm lenses for low optical distortion
- Built-in zoom provides more visual options
- 237 LED's for brighter and better light uniformity
- Software controlled adjustable light output

Eagle Digital Camera

- Resolution of 1.3 million pixels
- 1-500 Hz selectable frame rates
- Up to 2,000 frames per second at reduced resolution
- High quality 35mm lenses for low optical distortion
- Built-in zoom provides more visual options
- 237 LED's for brighter and better light uniformity
- Software controlled electronic shutter

Hawk Digital Camera

- Resolution of .3 million pixels
- 1- 200 Hz selectable frame rates
- C-Mount or Zoom lenses available
- 237 LED's for brighter and better light uniformity
- Software controlled electronic shutter

Recommended Software

Cortex - our core motion capture software comprises tracking, editing, scripting and modeling functions in a *single integrated package*.

Calcium- a powerful skeletal creation, setup, and motion solving solution. It is an easy to use tool to solve captured marker data onto a skeleton.

Talon Plug-ins -stream high quality data into Maya, 3ds Max, MotionBuilder, and Softimage XSI.