

# MOTION CAPTOR RT

## REAL-TIME CAPTURE

Motion Captor is an optical motion capture system that is extremely easy to learn and use. It provides outstanding accuracy and very clean data, thanks to automatic use of a biomechanical capture method. It excels in real-time processing of one or two characters. Motion Captor is a turn-key solution offering stand-alone operation in addition to excellent Kaydara Mocap integration.



### Description

Motion Captor RT is the ideal optical motion capture system for video game and animation production. It is a turn-key system that contains everything necessary for fast efficient and accurate motion capture. Automatic biomechanical capture methods and minute learning curve translate into tremendous production advantages for companies that utilize Motion Captor RT. Specialized versions are available for gait analysis, sports analysis, VR simulation and ergonomic analysis. Motion Captor is developed by STT – Europe's leading biomechanical engineering and visualization experts.

### Real-Time

Motion Captor RT excels in real-time display of one or two actor's motions on your 3D characters. Retargeting is automatic – therefore the system automatically compensates for differences between the dimensions of the actor and character.

This real-time capability provides exceptional integration with Kaydara Mocap™, as well as real-time performance in the Motion Captor stand-alone program and other programs such as Maya, 3D Studio MAX and Character Studio, Softimage, XSI, etc.



Motion Captor's real-time performance capabilities provide exceptional pre-visualization capabilities and make it easy for actors and directors to

immediately critique the effect of particular motions and actions.

### Easy to Use

Learning curve is about 4 hours and users are generally completely up-to-speed by the end of a week. This is in sharp contrast with other optical motion capture systems that have a 6 to 12 month learning curve.

### Super-clean data

Motion Captor RT features automatic use of a biomechanical capture method. This greatly reduces the amount of marker swapping or occlusion that occurs. The result is clean data that needs 50 to 75% less clean-up than comparable systems. Data is often clean enough to be used as-is, without editing.



25 marker standard configuration

### Turn-key system

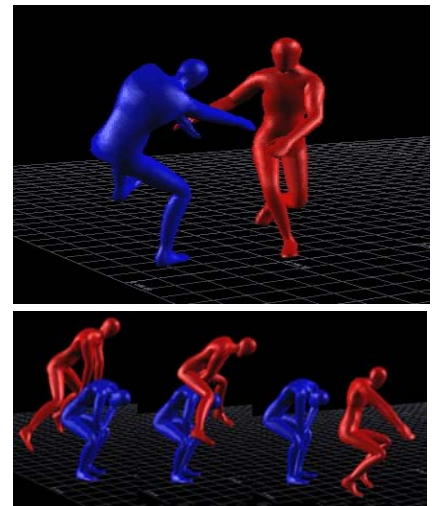
Motion Captor RT comes as a turn-key system with everything necessary for doing motion capture (computers, cables, cameras, lights, tripods, stands or clamps, markers, calibration rod, etc.) Stand-alone capture



programs and 3D import plug-ins facilitate fast and easy integration with Maya™, 3D Studio MAX™ and Character Studio™, Softimage™, XSI™ and Kaydara MotionBuilder. Motion Captor RT's Kaydara Mocap™ plug-in provides excellent integration with and capture directly inside Kaydara Mocap.

### Several characters

Motion Captor provides superior dual person capture results due to automatic use of biomechanical capture methods. Two actors can hug, play leap-frog or duck under each other while the system still keeps up with the real-time capture and display on actual 3D models. The resulting data quality saves days of clean-up



Two character capture samples

### Affordable

Motion Captor RT is a much better value than other optical motion capture systems. System cost is dramatically lower than comparable optical mocap systems. The excellent data quality provides greatly reduced clean-up times, allowing for greatly increased workflow and tremendous labor savings. Motion Captor's extremely short learning curve provides

tremendous savings as well, since most studios will be completely up-to-speed by the end of a week, unlike other mocap systems that have a 6 to 12 month learning curve.

### Easy to calibrate

Motion capture calibration has traditionally been time-consuming and laborious. Motion Captor changes all this with a calibration process that takes about a minute. If a camera is accidentally moved, that camera can be re-calibrated in about 10 seconds. If cameras are mounted to walls, pipes or ceilings re-calibration process is seldom required.



The calibration is very simple to do.

### Easy to transport and set up

Motion Captor is very easy to transport and can be set up in new locations in about an hour. Calibration takes about a minute.

### Fast and effective workflow

Motion Captor provides extremely efficient workflow and throughput for the shortest times from capture to finished animation. As a result, Motion Captor users spend less time not only in the capture process but also cleaning the resultant data.

### Marker Configurations

Motion Captor includes numerous preset marker configurations, such as complete models for human motion (may include one or more props). Available marker configurations cover the majority of client's needs. Customized capture model development (for humans, props or animals) is available upon request (even for animals)



Right hand Prop configuration

### Choice of cameras

Motion Captor can utilize several different camera configurations. Analog cameras such as JAI M50 IR or JAI A33 cameras provide excellent

performance for companies with smaller budgets. Digital cameras such as the Standard Deviation™ Sapphire™ cameras or Qualisys™ ProReflex™ cameras provide higher capture speeds and improved marker tracking along with easy expandability. Most configurations of the Motion Captor system use Infrared lighting. Halogen lighting is available for the analog systems for additional savings or special applications. Standard configurations use 6 cameras, although 4 camera configurations provide additional savings for smaller spaces (single actor capture). Configurations with more than 6 cameras are available for covering larger volumes.



A 50 IR PR.-REFLEX STD DEV

### API

All the capture features in Motion Captor are accessible via an API (application programming interface) for easy inclusion of real-time motion capture into customized applications.

### Capture customization

New capture models can also be developed if requested. These models might be also non-human models.



Marker configuration - Bull

### Examples

In this section we have collected some of our customer's results.



Actimel: Spor on T.V.



Martial Arts



Video Games: Zidane 2002



Two Characters interaction



Mantis motion (U.S.A)



Sport on Japanese TV



Game: Torero

### For further information

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