

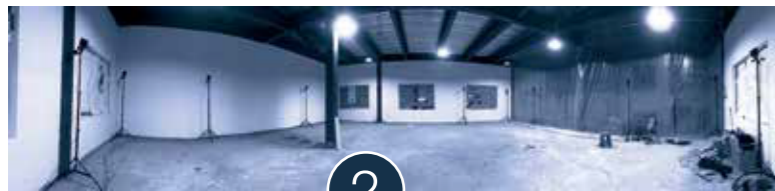
## Case Studies



1

Consumer Electronics Show (CES), Las Vegas, the United States

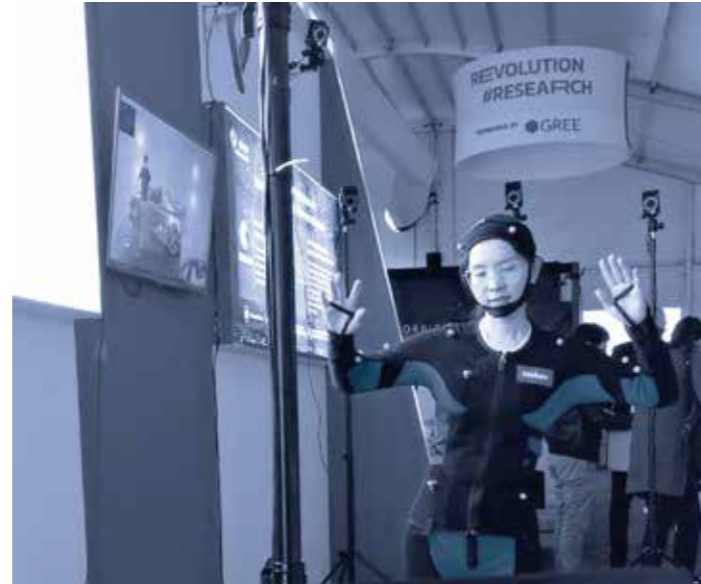
Military Simulation Training



2

University of Science and Technology of China

Positioning and tracking of multiple virtual reality helmets and controllers enable large-space, multi-person virtual interaction with free movement. Real-time data acquisition of interactive devices' position and angle changes. See "Siggraph2018" for relevant research findings.



3

Laval Virtual, Laval, France

Integration with Longtek MakeReal3D software for on-site demonstrations of industrial virtual simulations.

## Motion Capture Camera

# MARS Series

Possibly the most cost-effective optical motion capture solution available.



Model	Resolution	No. of Pixels	Frame Rate	Latency	FOV	Interface
Mars 1.3H	1280×1024	1.3MP	240FPS	4.0ms	56°×46°	GigE/POE
Mars 1.3HW	1280×1024	1.3MP	240FPS	4.0ms	95°×74°	GigE/POE
Mars 2H	2048×1088	2.2MP	380FPS	2.4ms	70°×40°	GigE/POE
Mars 2HW	2048×1088	2.2MP	380FPS	2.4ms	104°×55°	GigE/POE
Mars 4H	2048×2048	4.1MP	180FPS	5.2ms	52°×52°	GigE/POE

Customized models are also available upon request. For more information, please contact [info@nokov.com](mailto:info@nokov.com).

## ORBIT

Plug and play, no calibration required.

- Features a fast mounting bracket that can be installed directly onto a TV.
- Close-range models are available for desktop ultra-close-range motion capture.



## PLUTO

Designed for entry-level developers and ideal for commercial & consumer-grade product development and integration

- Highly cost-effective and small, light, and portable.
- Tracks moving objects at a constant speed of 5m/s to meet the capture requirements for millimeter accuracy.
- Supports the IEEE 802.3af/at standard POE system and provides an optional network power supply system for development without link restriction.



## Virtual Reality Accessories

Optional accessories

- Optional accessories include the Virtual Reality Controller and the Helmet Position Tracker.

Product Features

- Interactive devices for virtual reality solutions.
- NOKOV offers high-precision 6DoF (position, direction) tracking with improved immersive experience.
- Position tracking with sub-millimeter accuracy.
- The accessories can be integrated with straight screen, circular screen, CAVE, and other equipment.
- The data supports VRPN and can be directly transmitted to Unity or Unreal.



Virtual Reality Controller



Helmet position tracker

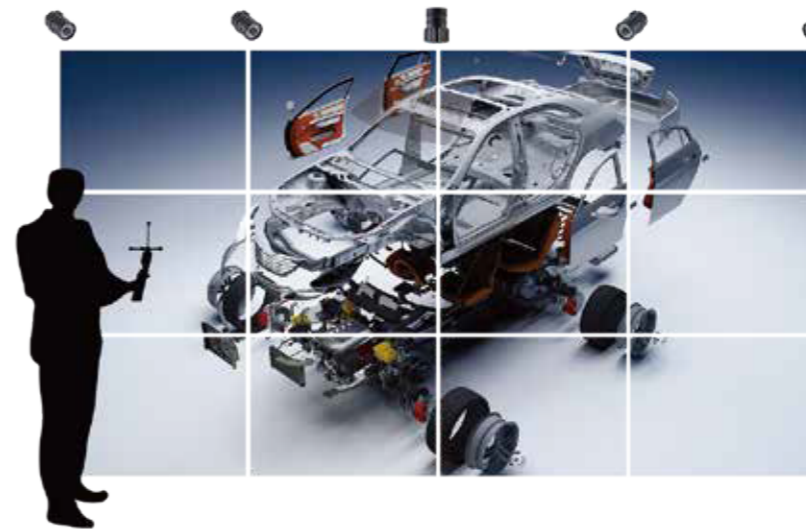


NOKOV Motion Capture System  
Applications in Virtual Reality



# NOKOV

Applications in Virtual Reality



Integration of NOKOV Motion Capture System with Flat-Panel Display



Integration of NOKOV Motion Capture System with CAVE

### Integrated Devices

- Head-mounted displays (HMD)
- Straight/circular/arc screens
- CAVE systems

### System Functions

- 6 degrees of freedom (6DoF) data for HMDs
- 6DoF data for controllers
- 3D coordinated information of whole-body movement

### Solutions

- Virtual simulation
- Virtual reality entertainment in large spaces
- Military simulation training

### Data Input Software

- Virtual Reality Peripheral Network (VRPN)
- Matlab
- Unreal Engine
- Unity
- Motion Builder



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