



NOKOV

Motion Capture System

Entertainment



Virtual Production



CG Animation



VTubing
/ Live Performance



Highlights of NOKOV



High Precision Real-Time Motion Capture

Ideal for capturing individuals simultaneously within the same space with sub-millimeter accuracy and low latency.



Powerful Anti-Occlusion

Even in cases of partial overlap or marker occlusion of the capture objects, stability of the skeleton can still be ensured.



Finger & Facial Capture

NOKOV Mocap System can capture the movements of both hands and face, with capabilities to rapidly and automatically create skeletons. Supports other finger tracking or facial capture kit, allowing for the synchronization within the software.



Data Synchronization – NOKOV Sync Unit

NOKOV mocap cameras can be synced to external sources such as video Genlock signal. User can stamp recorded and streamed motion capture data with SMPTE Time Code for integrating with other media and data in post.



Plugins

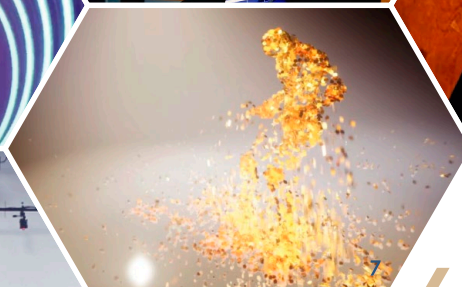


OpenVR

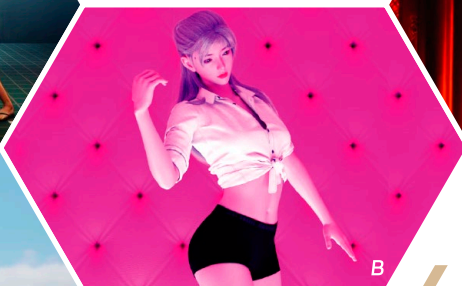
Aximmetry

Hecoos

Disguise



CG Animation



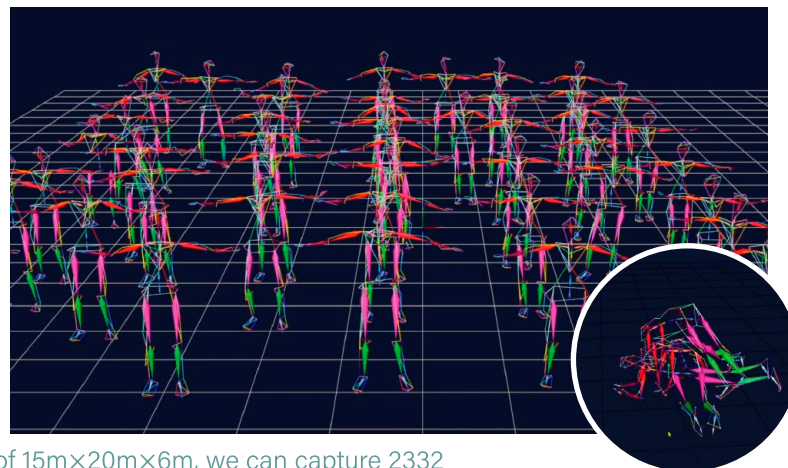
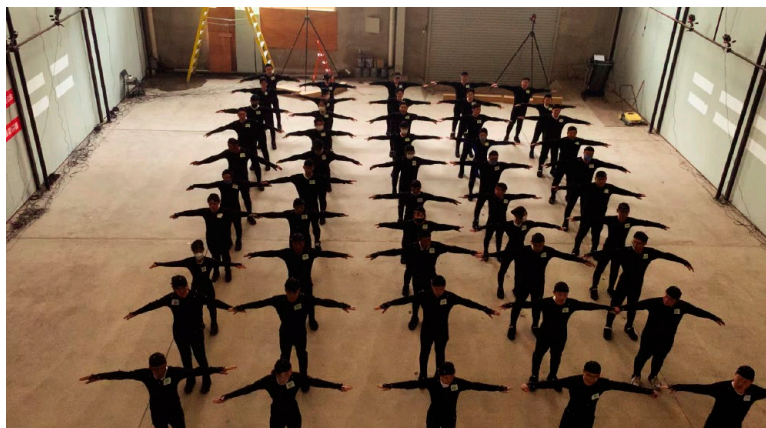
VTubing / Live Performance



User Cases

Real-time Motion Capture for up to 44 Individuals

Sub-millimeter Accuracy, Stable Skeleton



- Each actor has 53 reflective markers attached. Within an area of 15m×20m×6m, we can capture 2332 reflective markers simultaneously, even under occluded conditions. Additionally, the software can quickly map the actors to their respective human models.

Stable skeleton

Real-time Motion Capture Performance

Millisecond-level Latency



- The system captures the actions of two motion capture actors and transmits them to Unreal Engine with millisecond-level latency. This stage design allows the audience to simultaneously appreciate both the actions of the actors and the resulting models.

Products & Solutions



• MARS Series

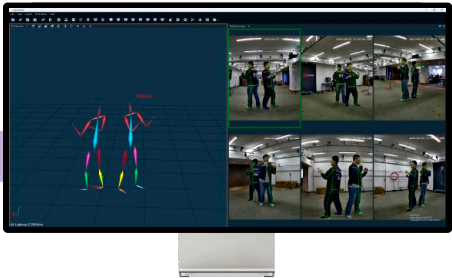
Ultimate Performance Series

| Model | P/N | Pixels MP | Resolution | Frame Rate FPS | Latency ms | 3D Accuracy mm | Capture Distance m | FOV |
|-----------|-----------------|-----------|------------|----------------|------------|----------------|--------------------|-----------|
| MARS 1.3H | Mars 1.3H-INTL | 1.3 | 1280×1024 | 240 | 4.0 | ±0.2 | 11* | 56°×46° |
| | Mars 1.3HW-INTL | 1.3 | 1280×1024 | 240 | 4.0 | ±0.3 | 9* | 95°×74° |
| MARS 2H | Mars 2H | 2.2 | 2048×1088 | 380 | 2.4 | ±0.15 | 21* | 70°×40° |
| | Mars 2HW | 2.2 | 2048×1088 | 380 | 2.4 | ±0.25 | 15* | 104°×55° |
| MARS 4H | Mars 4H | 4 | 2048×2048 | 180 | 5.2 | ±0.1 | 32* | 52°×52° |
| | Mars 4HW | 4 | 2048×2048 | 180 | 5.2 | ±0.25 | 20* | 90°×90° |
| MARS 9H | Mars 9H | 9 | 4250×2160 | 300 | 3.0 | ±0.05 | 28* | 68°×37° |
| | Mars 9HW | 9 | 4250×2160 | 300 | 3.0 | ±0.2 | 16* | 98°×50° |
| MARS 18H | Mars 18H | 18 | 4508×4096 | 139 | 5.0 | ±0.04 | 28* | 52°×47° |
| | Mars 18HW | 18 | 4508×4096 | 139 | 5.0 | ±0.15 | 20* | 90°×82° |
| MARS 26H | Mars 26H | 26 | 5120×5120 | 150 | 4.0 | ±0.03 | 30* | 56°×56° |
| | Mars 26HW | 26 | 5120×5120 | 150 | 4.0 | ±0.1 | 20* | 105°×105° |

* Using 15mm passive marker.

• ASTRA Markerless

- Configurations with **4, 6, 8,** or **more** cameras are supported. More cameras enable larger capture areas and higher numbers of identifiable subjects.
- Utilizes efficient **6-point** human calibration for rapid multi-camera calibration, completing calibration **in under 3 minutes**.
- The software includes multiple human recognition algorithms, and accurately identifies the main joints of the human body, allowing **one-click creation** of human skeleton models.
- Supports integration with **Gloves (Manus/DriveX/VRTRIX)**
- Supports hybrid use with **NOKOV Optical Systems**.



Version



ASTRA Live
Realtime Interaction



ASTRA Studio
Film Production



ASTRA Professional
Scientific Research Analysis

• Certified Hardware



Model SYNC Video Camera

P/N SYNC Cam 1.3



Model Orbit Markerless Camera

P/N Orbit AI Dualcam

Model USB Camera

P/N USB Cam-S50

Model Industrial Camera

P/N FLIR



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