



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

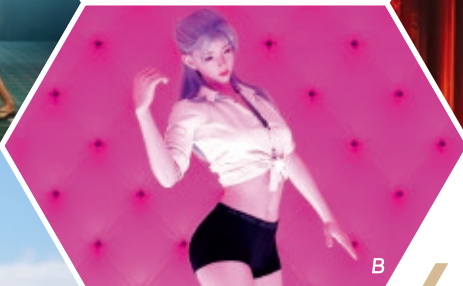
Aximmetry

Hecoos

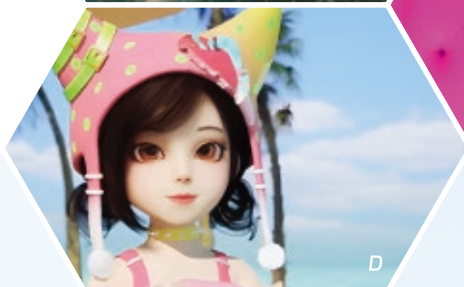
Disguise



CG Animation



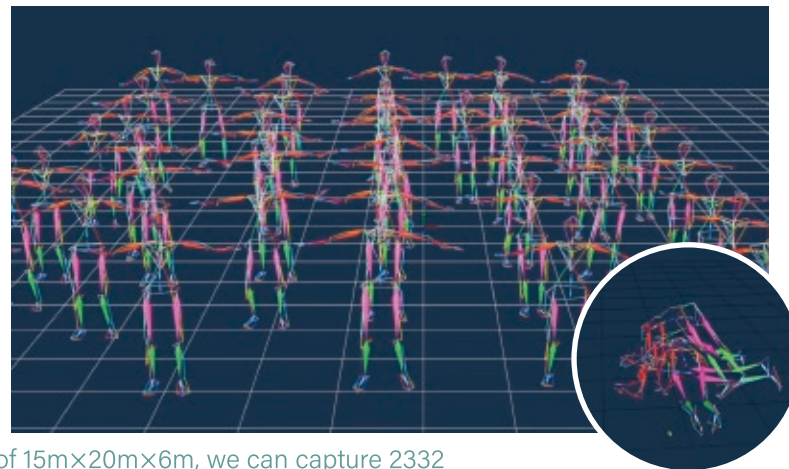
VTubing / Live Performance



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 14H	Mars 14H	14	4608×3072	670	2.0	±0.05	27*	68°×45°
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

Orbit Markerless Camera

USB Camera

Industrial Camera

P/N

SYNC Cam 1.3

Orbit AI Dualcam

USB Cam-S50

FLIR



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