Motion Capture
Unleashed!

Real-Time Markerless Motion Capture

No Markers, No Sensors | Budget friendly | Unleash your Creativity

AR51 has developed

Real Time Parametric Capturing Technology

a REVOLUTIONARY 3D Content Capturing deep-tech

Based on a series of proprietary Deep Algorithms:

3D Skeleton Motion

Body ID

Finger Motion Synthesis

6DOF

High fidelity

Whether it’s that subtle wrist flick or tiny shimmy, our technology’s extremely high fidelity captures the very essence of human movement. AR 51 markerless motion capture is extraordinarily accurate and high quality

Real time

Our low-latency, high-fidelity capture ensures that the avatars created move just like their real-life counterparts, giving content creators the ability to see their digital creation come to life.

Markerless

AR 51 motion capture technology is completely markerless, making it possible to capture your motion easily and seamlessly no matter what you’re wearing and with no special attire required.

Main Advantages

No Markers

No Wear & Tear

No Batteries, No Suits
Less Hassle

Less Operations

No Setup, No Preparations
Less Employees

160 x Faster

World's Fastest Mocap AI
Computes 4 Gigapixels per second

Low Latency

9 milliseconds glass-to-glass
Customers feel as they are really there

On-Prem Solution

perfect balance of
hardware & software

Highly Scalable

AR 51 system fits all
From a small room to a basketball field

High-Fidelity

3mm spatial resolution
More engaging more interactive

Multiple Participants

No limit to the number of customers
that will enjoy the experience

A System in a Box

A turn-key solution with easy setup

Easy Integration

SDK for popular game engines
E.g. Unity, Unreal

Seamless VR

Supports all leading VR headsets

Automatic Proportion

Avatars fits automatically to all sizes, from
kids to basketball players

Body Identification

A unique identifier that persists
throughout the experience

Finger Tracking

Full integration with inside-Out
Finger tracking

Object Detection

Six degree of freedom prop tracking
Tactile experience, allow customers tp feel
& touch everything

Mixed Reality Videos

Create & share captivating videos of
fantastic worlds

Patent-Pending

Filed and processed

Accuracy & Precision

AR 51's system ensures high fidelity motion tracking

Global positioning, capturing movements with exceptional accuracy and fidelity.

Robust system - supports **High Speed** movements

Absolute Spatial Accuracy with less than **3 Millimeters** error

Object tracking with less than 1 Millimeter precision

Coming Q2 2024:

Foot Contact Detection

Markerless Hands / Fingers Tracking

Flexibility

Unparalleled Scalability

Robustness: Reflective Floors, Indoor and outdoor

Scalability: Large capture space, Connected spaces, and spaces on different floors

Unlimited number of people

Automatic body proportions adjustment - capture kids and tall people

Hybrid - Full body and Object tracking - supports upto 100 objects in parallel

Existing Pipelines

Unparalleled Scalability

Full integration with: Unreal, Unity and Motion Builder

offering **compatibility** and flexibility for developers and studios across the industry.

Real Time Retargeting

Ease of Use

- Short set-up
- Real-Time Calibration
- Persistent Unique ID
- Hybrid solution
- PROPS tracking
- Hands and Finger Tracking
- Existing pipelines: Unity, Unreal, Motionbuilder
- Easy Export: FBX, BVH and many other

Next Gen: AI Based Instant Post-Processing

REAL-TIME CAMERA TRACKING

Outside-in moving camera tracking

Real time rendering into Unreal

Roadmap for 2024

Discrete skeletal landmarks

Instant post-processing

Hands and Finger Tracking

Best for:

Immersive experiences

Real time VFX

Live Events - 3D Live streaming

Game development - 2D and VR - Rapid content generation

Virtual Production - Camera tracking in Unreal

Previz - EMPOWERING CREATIVE DECISIONS WITH MARKERLESS MOCAP

Next Gen:

VFX and CG - Final motion/pixel

MoCap Unleashed in Action

Motion Capture
Unleashed!

Real-Time Markerless Motion Capture

No Markers, No Sensors | Budget friendly | Unleash your Creativity

Thank You