IKinema Orion

Animation technology specialist IKinema has debuted a disruptive new system harnessing virtual reality hardware to provide a powerful, flexible and accessible form of motion capture, as well as live body tracking for VR content; all for $500 per seat.

- **Product name:** IKinema Orion
- **Company:** IKinema
- **Product categories:** Motion capture, animation, VR
- **Serving:** Games development, animation, VR and AR content, film and television, VFX, simulation, enterprise, training, pre-visualization, live events, virtual conference and collaboration, and more.
- **Availability:** Q2, 2017
- **Cost:** $500 per-year. See below.
- **Website:** https://www.IKinema.com/Orion

Why use Orion?

Orion is an animation technology that uses a standard HTC Vive VR headset to deliver motion capture, as well as live body tracking for VR content.

Full body motion capture technology can be prohibitively expensive, both in terms of software and hardware, and often requires the use of vast stage volumes. The Orion technology – in using a consumer VR headset and tracking devices such as hand controllers and HTC's Vive Trackers – makes professional quality motion capture more accessible, more affordable and more flexible.

Using IKinema's Orion middleware, and the aforementioned VR hardware, the technology detects tracking points, and assigns them to an animation rig, but quality motion capture in the reach of a broad range of studios.

The same combination of hardware and software can equally be used as a means for users – wearing the same headset and using various motion tracked devices – to offer full body movement tracking within VR experiences, resulting in improved immersion.

What are Orion’s advantages over existing solutions?

Orion offers motion capture at a very affordable price, and will require little or no investment in specialist hardware. The lightweight, marker-free nature of the Orion system also makes it less encumbering to performers, and removes reliance on using large, expensive capture volumes.

Furthermore, and unique to Orion, the offering employs a number of IKinema's existing, proven technologies, including the team's core animation engines, and the popular LiveAction, which lets content creators place live performance within virtual worlds.

Who is it for?

The Orion system will be of great use to game developers prototyping animation, creators of a wide spread of VR and AR content, and those in numerous sectors including simulation, enterprise, retail, medical and automotive, where, increasingly, immersive experiences have a key role to play.

Equally, the real-time nature of Orion means it should prove particularly useful to those conducting mixed-reality live shows, staged events, promotional on-site VR experiences and VR theatres.

How much will it cost?

The standard license will offer a single seat for a year for just $500: an incredibly affordable price relative to most motion capture systems. Traditionally motion capture requires £10,000s spent, and tens or even hundreds of sensors. Orion, meanwhile, requires a single computer, three Vive Trackers, and an ordinary VR HMD.

One seat license will provide all required plug-ins, a bespoke version of IKinema LiveAction, maintenance services, and a harness system for attaching HTC's special Trackers to the user's body. Additional Trackers are available to purchased separately from HTC.

Who are IKinema?

IKinema are an established provider of high-end middleware and technology for animation, and has delivered numerous innovative solutions since their founding in 2006. The company's technologies make available many different offerings, but most are united in radically improving the quality of animation while simultaneously reducing the cost. IKinema serves numerous clients across games development, virtual production, television, design, engineering and more.

Spun out from the Surrey Space Centre in the UK, IKinema has served clients including Disney, Framestore, DreamWorks Animation, The Foundry, Microsoft, Zenimax, Square Enix, Lucasarts, Technicolor, Vicon, and PlatinumGames Inc. The company is in partnership with Autodesk, Sony, Microsoft, Intel and Nvidia.