Make Augmented Reality Graphics a Part of your Studio

Take AR to the next level with Reality 5. With Reality 5, AR elements become integral parts of the environment, cast ray-traced shadows and reflections on the floor and vice versa.

Whether for set extensions on your physical studio, dynamic AR graphics with real-time data or live event insertions, Reality 5 offers unrivalled storytelling capabilities that unlock efficiency and visual impact.

Real Time Data Integration

Clean Feed

Final Image

▸ Augmented Reality (AR) graphics can be managed through Lino's **template-based workflow**, making it easier to design and control sophisticated visuals.

▸ **The AR pipeline** delivers photorealistic results using an AR Region Mask with ambient occlusion and reflections, eliminating the need for additional camera renders. Bidirectional dynamic shadows and reflections seamlessly blend physical and virtual objects.

▸ Reality 5 introduces **state awareness to AR graphics** with transition logic, setting a new benchmark in the industry. Broadcasters can now apply the same state-aware logic used in on-air graphics to AR, enabling dynamic, automated transitions across all broadcast graphics.

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- Reality Hub can **ingest data** from web services, databases, and .xlsx or .csv files directly into your dynamic, template-based graphics. For advanced scenarios, you can also run custom scripts using JavaScript.

- **Web-Based Control Interface:** Reality Hub is a server-based control application installed on your premises. It is accessed via Chrome or Edge on any modern laptop or computer for template-based graphics playout — with no installation required on users' computers.

- **Traxis Hub** can manage and visualize all tracking data via FreeD, as well as Traxis Camera Tracking, at no cost. With built-in lens calibration and optional noise reduction, it's an ideal companion for industry-standard tracking systems that support the FreeD protocol.

- **Traxis Talent Tracking** delivers AI-powered, real-time human body tracking without wearable markers. It provides 3D coordinates for the talent, including depth information for their pixels. By projecting the talent's video pixels at the correct depth and tracking them in 3D, Reality 5 can immerse them into the virtual environment — complete with industry-leading, realistic shadows and reflections on virtual elements.

- **Traxis Camera Tracking** sets new industry standards for accuracy. Even in demanding setups, it delivers rock-solid performance thanks to continuous calibration, ensuring uninterrupted, real-time tracking while supporting broadcast-type zoom lens encoders.

Discover the future of sports broadcasting

Zero Density's virtual studio production and on-air graphics solutions unlock new dimensions in sports broadcasting. Discover the infinite possibilities to tell sports stories with unprecedented levels of efficiency via template-based graphics designs made with Lino workflow, Reality Hub's NRCS and automation integrations and more!

Unified Control from Reality Hub

All broadcast graphics content can be effortlessly operated from Reality Hub, allowing for seamless execution from one control interface, with or without NRCS (Newsroom Computer System) and automation integration. Manage rundowns, playouts, and stream preview channels via a web browser for maximum flexibility.

SHOP
CHECK OUT THE AUGMENTED REALITY BUNDLE

About Zero Density

Zero Density is a global leader in virtual studio productions and on-air graphics solutions to boost operational efficiency and deliver results you can rely on. Zero Density gives visual storytellers the tools to bring their creative vision to life effortlessly and with lasting impact. Zero Density is your forward-thinking industry partner, with offices around the globe serving clients such as CBS, The Weather Channel, Warner Bros. Discovery, Univision and Charter Communications.

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