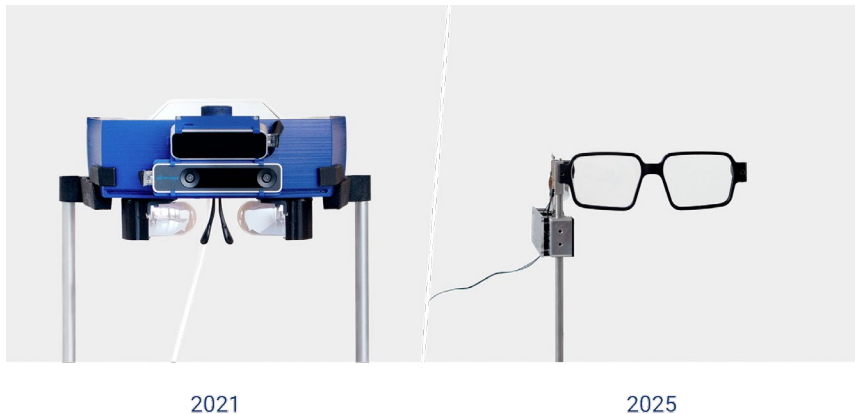


CREAL Unveils its New Light Field Display for Augmented Reality: The Next Generation of AR Coming Today

Clarity - CREAL's new light field display is ready for integration, bringing OEMs a solution that enables uncompromised vision comfort and realism in Augmented Reality.



23 January 2025 – Lausanne, Switzerland – CREAL's next-generation light field display developed for Augmented Reality (AR) glasses is now ready for integration. By replicating real-world light to deliver genuine focus depth, the display uniquely provides complete and correct 3D perception for an entirely natural, comfortable, and healthy visual experience in AR. The display is compatible with conventional prescription lenses, offering precise vision correction while maintaining high transparency to ensure clear view, eye contact, and social comfort.

Current AR displays fall short of delivering a natural visual experience due to missing depth cues. They provide incomplete 3D by displaying flat images at a fixed focus distance - preventing our eyes from focusing at different distances as they do in reality. As a result, real and virtual objects can never blend correctly and the mismatch between the vergence (eye crossing) and the accommodation (focusing) confuses our visual system leading to eye strain and nausea. These limitations are especially problematic for all interactions happening in the personal space, where direct touch and precision are key.

CREAL's patented light field display technology projects digital content with fully correct 3D depth, allowing each eye to focus on digital objects at any distance, just like in the real world. By moving beyond the limitations of flat screen-based imitations of 3D, CREAL enables the seamless blending of digital content into the real world. The elimination of all visual conflicts finally allows prolonged and comfortable visualization of digital content, paving the way for AR to reach its full potential.

"AR glasses are the next evolutionary stage of traditional eyewear. Their primary purpose—vision correction and enhancement—must therefore remain uncompromised. This is why CREAL has pioneered a light field display technology that incorporates vision care requirements and traditional eyewear features at its core. CREAL ensures that AR glasses put vision care first before they can start enhancing our world and mind with AI-powered content", says Tomas Sluka, CREAL's CEO.

CREAL's unique display also allows for mass customizability of the glasses and is compatible with Open XR, enabling access to a wide range of applications. Based on low-cost core components, the display is today ready for integration under a licensing agreement.

The display is now available for demonstrations, starting at SPIE AR | VR | MR next week.

About CREAL

CREAL is a display technology startup based in Switzerland, with a technical team drawn from cutting-edge projects at Intel, Magic Leap, EPFL and CERN. CREAL has developed a patented light field micro-display technology stack, uniquely projecting images with true-to-life depth. While serving vision care applications, CREAL naturally expands its mission toward AR hardware. With the same business model and partners among the market leaders in the vision care/eyewear industry, CREAL ultimately enables a much-needed natural and healthy visual experience of digital content. To know more, please visit www.creal.com. For press inquiries, please contact karen.liernur@creal.com