Flexible Choice of Display Types

LetinAR provides various PinMR™ lens modules such as light sources with OLED, micro LED, digital light processing (DLP) and liquid crystal on silicons (LCoS). That gives manufacturers of augmented reality (AR) glasses options for different light sources that meet their needs. LetinAR also makes modification and optics system adjustment much easier.



Small, Thin and Simple

LetinAR PinMR™ lens module, thanks to its relatively simple structure, is expected to offer a small form factor for AR glasses. This makes it possible to build AR glasses that look like a regular pair of glasses. LetinAR PinMR™ lens, equipped with an optimized optical system, allows for the usage of plastic materials, leading to cost-effective mass production.





LetinAR



- ♠ letinar.com
- youtube.com/c/letinar
- info@letinar.com
- Headquarter

11th floor, Dreamplus Gangnam, 311, Gangnam-daero, Seocho District, Seoul, Republic of Korea, 06628

Research Lab

8th floor, Multidisciplinary Lecture Hall, Hanyang University, 222, Wangsimni-ro, Seongdong District, Seoul, Republic of Korea, 04763



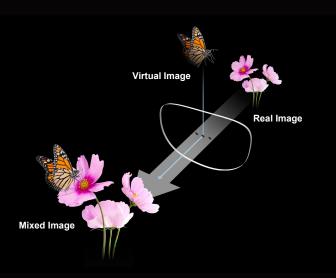


PinMR™, Next-generation AR Optic technology

Current smart glasses manufacturers use traditional optical systems. Under-par performance of those optical systems has hardly satisfied users and experts. LetinAR's PinMR™ lens is set to replace such displays. LetinAR aims to break down the technical barriers that have long hindered the commercialization of AR glasses, with its trademarked PinMR™. LetinAR plans to supply PinMR™ Lens as a complete module, which consists of PinMR™ lens and a microdisplay from external partners.

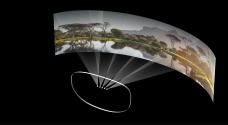
Patented Pin Mirror Technology

LetinAR has applied the so-called "Pinhole Effect" to tiny mirrors and embedded them with eyeglass lenses. Respective PinMR™ reflects the light from a microdisplay and guides the light into human pupils. Users may view the virtual image from the microdisplay as well as the image from the real world at ease. Human eyes cannot detect the mirrors because the mirrors are smaller than human pupils. Only the virtual image formed by the light reflected by those mirrors becomes visual.



What makes PinMR™ so special?

Wide FOV (Field of View)



PinMR™ offers extended field of view (FOV) on the back of an array of pin mirrors in a single lens. LetinAR PinMR™ lens is currently able to offer FOV of 70 degrees and aims to achieve more than 80 degrees of FOV on an ordinary pair of eyeglasses.

Extended DoF (Depth of Field)



LetinAR PinMR™ Lens can show a clear image without inducing dizziness because it is able to extend the Depth of Field multiple times, while conventional optical systems can not expand the Depth of Field easily.

Crystal-Clear Image



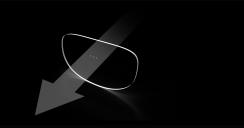
PinMRTM Lens can accurately express colors – an edge over diffraction-based or refraction-based systems from competitors. Diffraction or refraction of conventional optical systems degrades the color uniformity (a.k.a. rainbow effects) of an image. However, LetinAR PinMRTM is a mirror itself, which reflects the light totally. Thus, LetinAR PinMRTM is free from any issues regarding to expressing accurate colors.

High Optical Efficiency



LetinAR PinMR™ lens fully reflects the light and is less likely to lose brightness. That feature allows users to enjoy AR glasses in daylight outdoor conditions.

High Transparency



LetinAR PinMR™ delivers real-world images to the human eye more clearly than other lenses, allowing the optic system to be highly transparent. User may view images more efficiently.