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2024 PRODUCT CATALOG

CELLICO

Eyecane AR Glasses

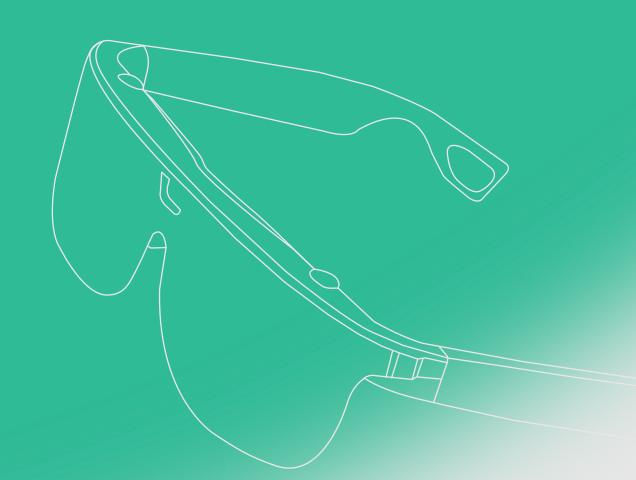## Samartest way to support people with vision loss

Eyecane AR glasses use augmented reality to help people with age-related macular degeneration (AMD) see better.

Eyecane AR glasses have a small 4K optical image stabilizer (OIS) camera that captures images in real time and displays them back with full HD screen to the user with an augmented reality overlay. This overlay moves the central vision to the peripheral field of view with specially designed mobile app, allowing AMD patients to recover their lost vision and regain independence.

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Product Details

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Model Number	EC2.01
Display resolution	1080p
Display field of view	40°
Camera resolution	4k
Connectivity Technology	USB-C
Length	175mm
Width	155mm
Height	48mm
Weight	80g
LC(Liquid Crytal) Film Sunglass	Transmittance 25% - 70%
AR Lens	Free Form Lens
Image stabilizer	OIS(Optical Image Stabilizer)

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Product Description

Retinal Disease

The main cause of age-related macular degeneration is aging. The macular area is lost and degenerates due to various factors related to aging and resulting in loss of function. As you get older, your chances of getting it increase. As the world is constantly entering an aging society, the number of patients with macular degeneration increases every single day.

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Product Description

Eyecane AR glasses has key engineering functions to help AMD patients:

1. A 4K 13MP OIS camera that stably records images zoomed up to 20 times.

2. A camera captures images and sends them to the smartphone app. The app uses Eyecane's image processing engine with a automatic scotometry program to quickly pinpoint the vision area damaged by AMD. The patient can then shift the central vision to the peripheral field of view with a simple touch.

3. A full-HD free-form lens with a 40-degree field of view that clearly displays the image processed by the application.
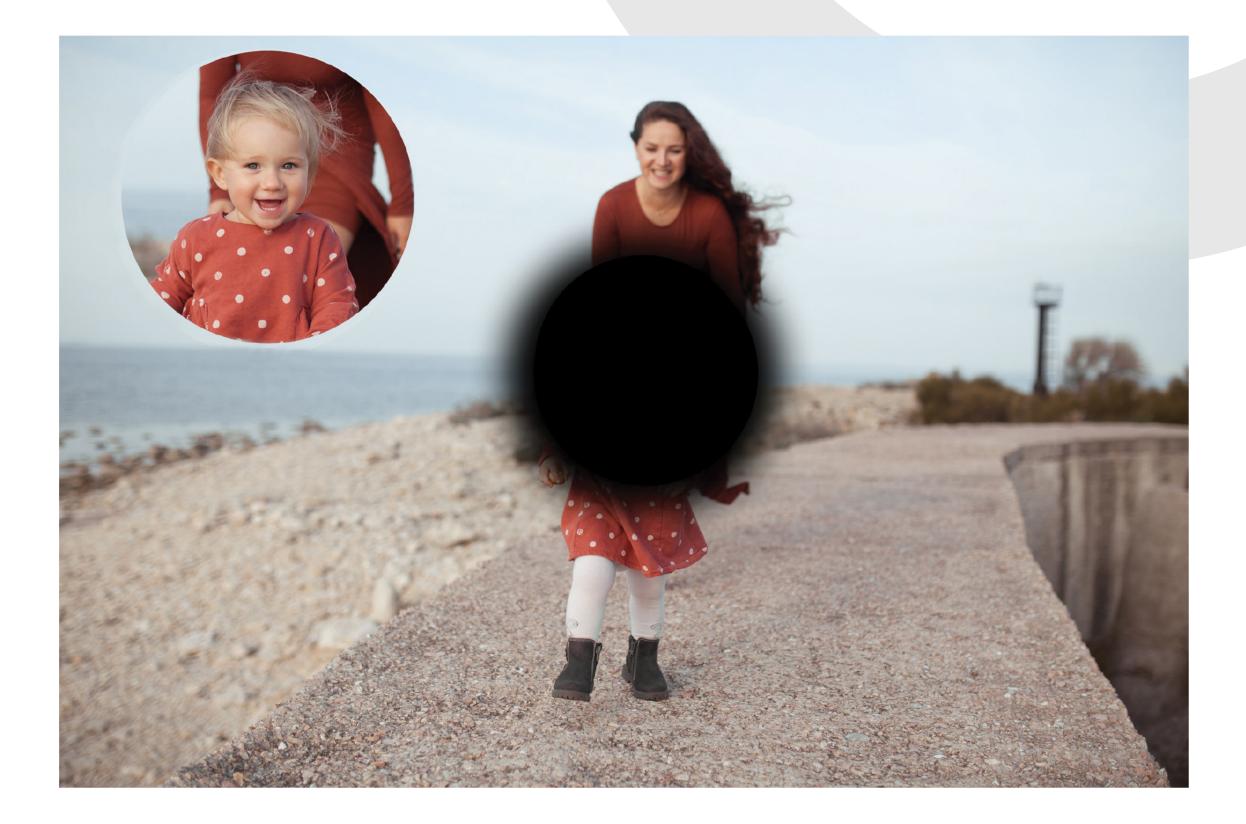
4. An automatic speech recognition function that allows patients to conveniently adjust the position and size of the central vision.

5. An electrochromic see-through (Liquid Crytal Film) sunglass that safely protects the eyes of patients from bright external light.

These features work together to help AMD patients see better by shift the central vision to the peripheral field of view. This allows patients to perform daily tasks such as reading, driving, and cooking.

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Cellico's Solution

for the RETINAL disease patients(AMD, RP)

Cellico proposes a solution for the AMD and RP patients. Eyecane glasses developed by Cellico use a small 4k camera and mobile app to capture and process images in real-time. The images are then displayed back to the user with an augmented reality display in Full-HD. This process moves the central vision to the peripheral field of view, allowing retina disease patients to recover their lost vision and regain independence.

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Cellico's Solution

A survey of visually impaired patients found that they did not want to be seen as disabled. To address this, Eyecane focused on three things when designing its AR glasses, Eyecane.

• Simple structure: All performance except for the camera, optical engine, and driver chipset has been moved to the smartphone. This reduces the size of the AR glasses and allows for a simpler design. The voice recognition function also eliminates the need for additional buttons, leaving only two: power and see closer.

• Calm color: Most AMD patients are over 50 years old, so Eyecane chose a metallic gray color that is both elegant and sophisticated.

• Lightweight materials: Titanium is used for the optical engine cover to help dissipate heat and reduce weight. Ultem is used for the rest of the glasses because it is strong, lightweight, and non-toxic that certified by the FDA and safe to use for skin contact.

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