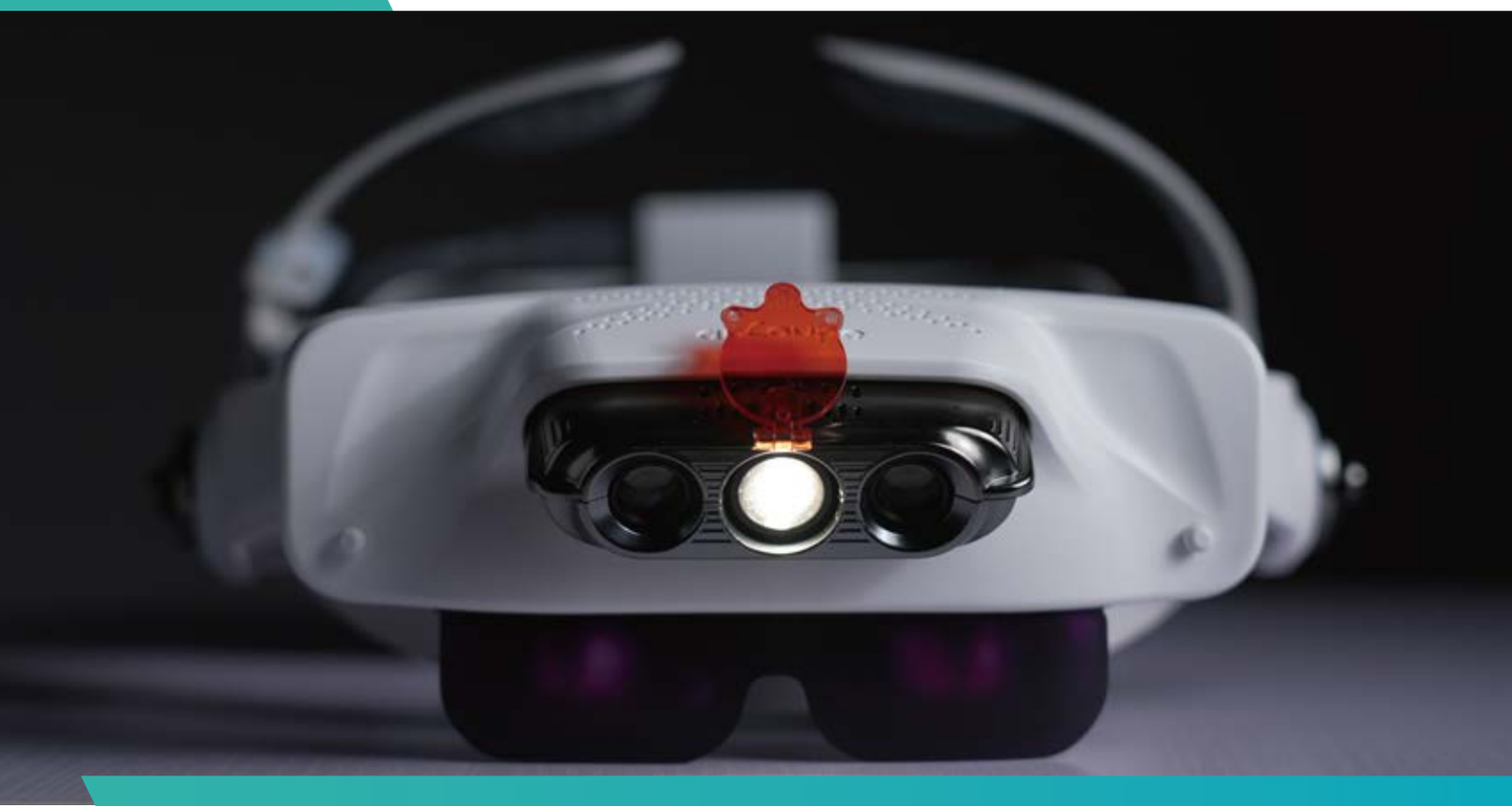
arLoupe



3D Digital Loupe

An all-in-one solution that integrates a magnifier, headlight, camera, and Micro OLED display.

Offering up to 12× magnification, first person perspective : Enable clinicians to see, record, and share every deta

bewelltechs

Founded in 2015, Bewelltech Inc. is an innovative technology company specializing in advanced medical imaging solutions. With R&D teams based in Taipei and Nanjing, and team members from internationally renowned high-tech companies, we successfully developed the world's first head-mounted 3D digital loupe.

Our flagship product, arLoupe, adopts cutting-edge digital imaging technology and integrates the advantages of traditional loupes and microscopes. Designed based on ergonomics and image clarity, it delivers microscope-quality visuals in a compact, lightweight, and easy-to-use head-mounted device.

Product Comparison

product	 optical loupe	 arLoupe	 microscope
Magnification	single magnification	2≤X≤12	multiple
Real time image recording	NA	4K photo FHD 1080p video	optional
Image broadcasting	NA	real time HDMI output	requires extra components
Size and customization	customization required	portable and light-weight no customization or training needed	bulky and requires training
Price level	affordable	affordable	expensive

arLoupe

arloupe Series Models

model	G-L2045	G-L3508	G-W2005	G-W3509	G-W5012
magnification	2x/4.5X	3.5x/8x	2x-3x-4x-5x	3.5x-5x-7.5x-9x*	5x-7x-10x-12x*
control	battery button control		remote control		
connection	wired		wireless		
product					

Optional: Foot switch control available for hands-free operation.
*15 % digital enhancement is applied on the max. magnification.

Package includes

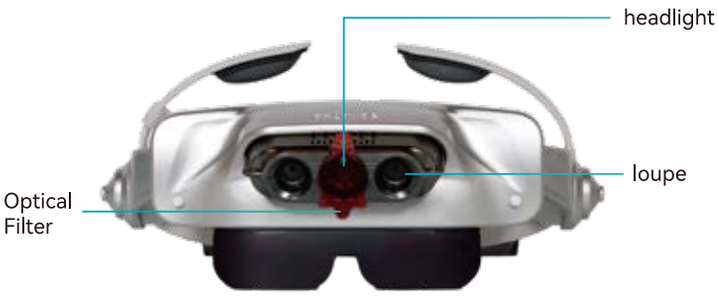
G-W Model: Main device, battery, battery shoulder pad, remote control, Type-C cable, HDMI cable, Lens cleaning cloth

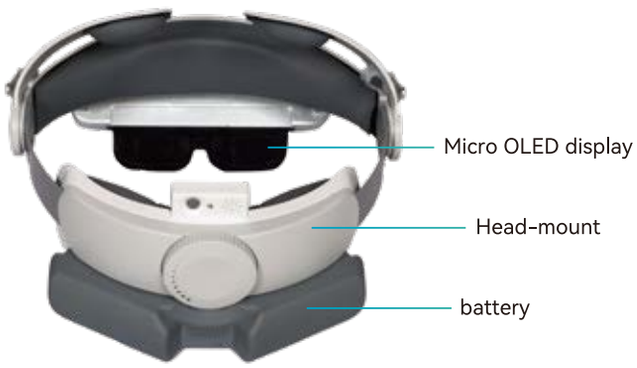
G-L Model: Main device, wire-control battery box, Type-C cable, HDMI cable, Lens cleaning cloth

arLoupe

Product Highlights

01 Integrated Structure





02 Core Components

- High-resolution CMOS sensor lens, Full HD micro OLED display.
- Ergonomically designed head-mount for comfortness

03 Working Principle

- The image is captured by the CMOS sensor through a high-definition lens.
- Real-time image data is then sent to the micro-OLED display.
- The user views the magnified digital image on the micro-OLED display.

04 Large HD Display

- 0.68-inch micro OLED screen equivalent to a 65-inch large display provides a wider field of view.

Equivalent 65 inch ultra large field of view

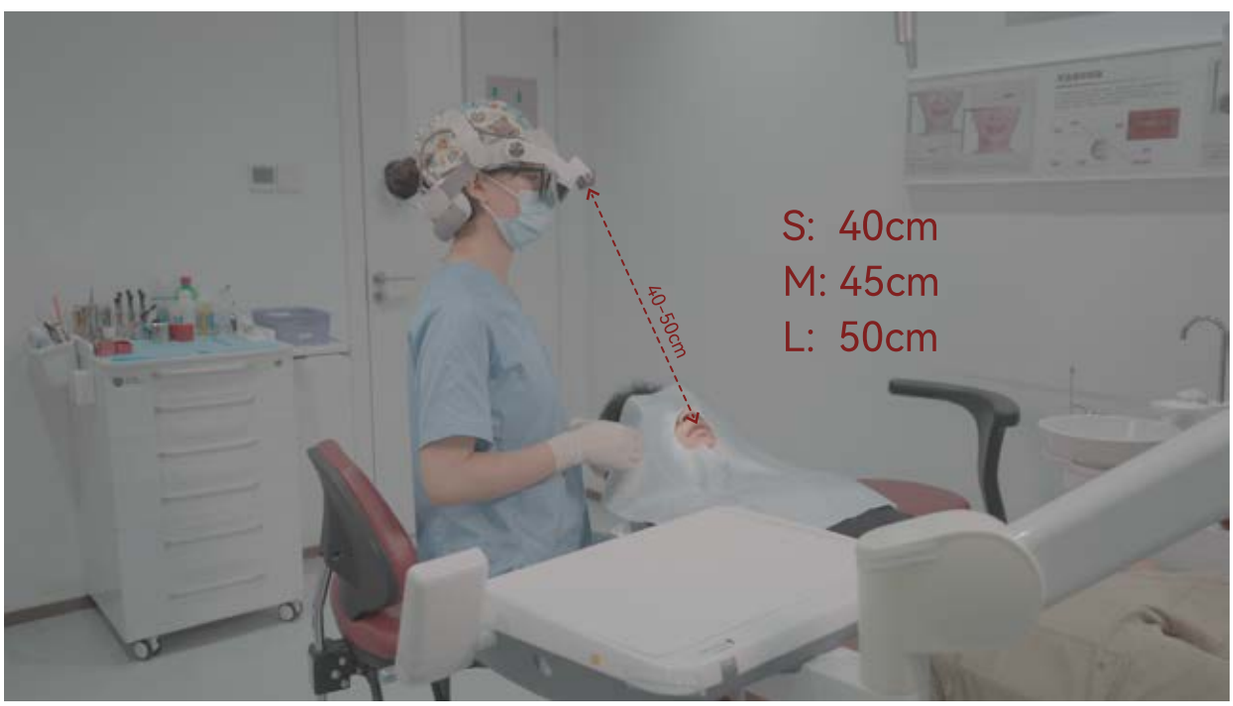
arLoupe

Multiple magnifications

2≤X≤12 combination of low/high magnifications to meet clinical and teaching needs

Effortless Operation

- No interpupillary adjustment required, Compatible with prescription glasses
  Easy to use - no special training need
- Multiple working distance choices (40 cm, 45 cm, and 50 cm) suit doctors of different heights and arm lengths



First-person perspective for recording case studies

4K ultra-high-definition photography and 1080p high-definition video recording to capture every important moment.
Image storage on a micro SD card, with support for up to 512GB.

Real-time screen casting

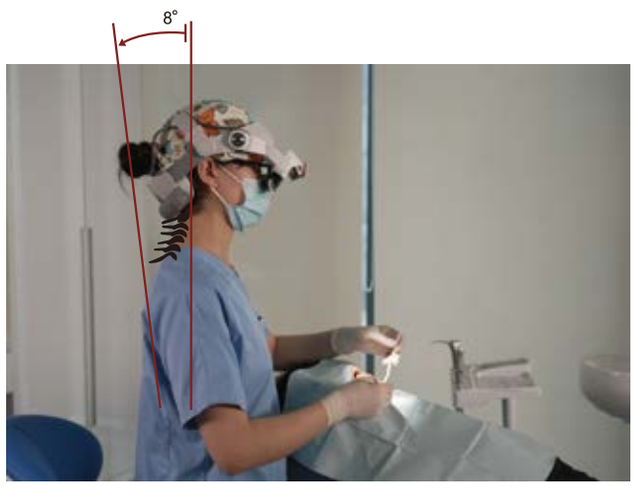
Real-time HD screen casting via HDMI, which facilitates clinical teaching and communication between dentists and patients.

Effortless and Comfortable Ergonomic Design

01 Proper posture relieves cervical spine pressure

The arloupe's lens angle design helps you maintain a natural sitting posture, which alleviates neck strain and makes operation more comfortable and sustainable.

Poor posture



Ergonomic design with a large tilt angle

02 Adjustable camera angle provides doctors more freedom during operation.

Adjustable camera angle

arLoupe in focus

01 Clinical Treatment

Deliver precision clinical treatment, enhance operational efficiency, strengthen medical expertise, and build patient trust.

02 Case Recording

Used for case recording, clinical treatment review and discussion, sharing and assessment, and creating teaching materials.

03 Live Teaching

Offers a first person perspective for students without crowding around, improving the learning experiences.

04 Doctor-Patient Communication

Facilitates real-time diagnostic discussions with patients and family members via external displays, ensuring treatment plans are understood.

arLoupe **3D Digital Loupe**

A multi-magnification loupe that can record

beWelltechs