



# arLoupe48 User's Manual



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国内安卓

# Head-Mount Digital Loupe

## arLoupe 48<sup>®</sup>



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# Introduction

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## ■ Functions

- arLoupe 48® is a head-mount digital loupe designed for professionals such as Dentist, Plastic Surgeon or precision workshops. It provides real time, high definition 3D motion images to the viewers and records videos and photos exactly the same as what the users see simultaneously.
- User can view their image files in the SD card through a computer. Simply take out the SD card and insert it to a computer card reader, then retrieve the files to view the photos and videos.

## ■ Packing

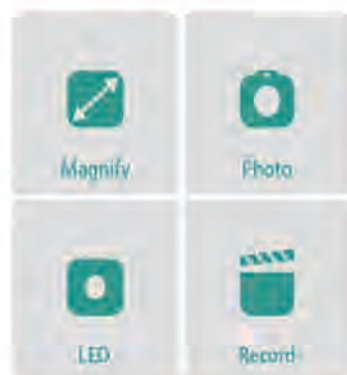
Your arLoupe 48® contains following items. Should any item missing from the package, please contact your local agent or dealer.

			
arLoupe 48® body	Head-mount	Dual end USB-C cable	Battery pack








\* The accessories might vary for different regions and countries.

## App Control Panel

### ■ arLoupe48 App control panel buttons :



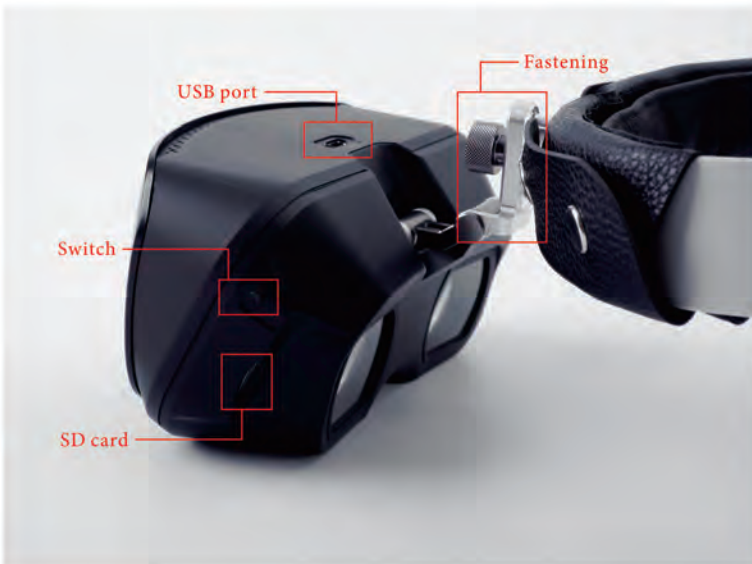
Bewelltech Inc.  
Magnificent Vision

button	icon	function
Bluetooth		Connecting device.
Language		Five languages are available: Simple Chinese, Traditional Chinese, English, Japanese and Thai.
Color Temp.		Four color temp. are available: 3000,4000,5000,6000k.
Magnification		Switch between magnifications.
Photo		Take a picture.
LED		Turn on/off the LED.
Video		Record a video.

## Start to use

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arLoupe 48® is consist of the main body,head-mount and the battery pack. Three parts are tightly connected through a set of fine-carved solid aluminum alloy.





Provide power the device:

- A. Use the dual end USB-C cable to connect the main body with the battery pack. This also allow you to output image through HDMI cable.
- B. Use regular USB-C cable to connect with USB power adapter. You will not be able to output image through HDMI cable when using this power supply method.

### **Connect to outside display**

Through the HDMI connector on the battery pack, you will be able to output image to an outside display.

### **Charge the battery pack**

Use the regular USB-C cable to charge the battery pack.

### **Use the SD card**

Insert the Micro SD card into the SD connector. Without the SD card, the photo taking and image recording will be disabled. Meanwhile, the eye-front display will show "NO SD card" sign.



## How to wear and adjust the device to get a clear image

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- In order to wear the arLoupe48 comfortably as well as obtain the best image quality please operate the device through the following steps:
  1. Adjust the device vertical position through the button on the metal connectors at the front of the head-mount as shown in below picture.
  2. Assembly the device, head-mount and the battery pack. Wear the set on your head and adjust the tightness to your own preference using the top and back knobs.
  3. Flip the device up and down ( maximum  $90^{\circ}$  ), gently move the device according the horizon direction to set the images of both eyes at the center position.
  4. Long push the power button for 2 seconds to turn on the device. Adjust the pupil distance through the knob at the bottom of the device. When the pupil distance is adjusted to users' best position, images of two eyes will merge into one and provide a crystal-clear 3D image.
  5. Slowly move your head between 35cm to 55cm distance from the object at the LED light direction, your will find a most clear image at a fixed distance. This distance is subjected to the model size (S : 35cm , M : 42cm , L : 49cm) of your device.



Note:

1. You may continuously adjust your position to obtain best image while the device is turned on.
2. You may wear your own eye glasses while operating the loupe.


## How to use the App


### ■ Language select

Open the APP , hit the  , select your own language



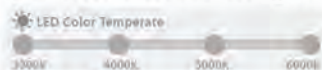
### Connect the bluetooth

Hit the  ,the app will search surroundings to find all Bluetooth devices. Select the “DJF\_BLE”.




The button will turn into green,  Bluetooth connected successfully.

### Color Temperature



Select color temperature according to the environment



## Magnification


Hit the button  , the color of button change into green  , a "X2" will be shown on right top corner of the image, the image will be enlarged after 2 seconds ; hit the button again, the green color.  will fade out and the "X2" disappeared, the image change back to lower magnification.

## Photo




Hit the button  ,color change into green  for a second and change back to grey. One shoot of photo is taken and the file is stored into the SD card.

Note: you need to insert the SD card before you can take a picture.

## LED

Hit the button  . The LED will be turned on when the color change into green  . Hi the button again, the color change into grey and the light is turned off.

## Record a video

Hit the button , the button change into green  and the device start to record a video, a red dot appear on the screen indicating the recording is in process. Recorded video files will be stored in the SD card. Hit the button again  the color change into grey, red dot disappear and recording stopped.

Note :

1. You need to insert the SD card before you can record a video.
2. Recoding can not be operated while connecting HDMI to a outside display.



## Specifications

General	
Size ( without head-mount )	80 ( L ) X 160 ( W ) X 71 ( H ) mm
Weight ( with head-mount )	600 g
Flip up angle	90°
Environment Temperature	Working temperature: 10 - 40°C Storage temperature: -25 - 70°C
Electronics	
Working voltage	DC 5V
Working current	1.2A
Power	5V、2.1A
Est. Power/working hour	6 hr/ 10000mA@5V
Optical	
Lens	Fix focal length
CMOS sensor	1/3" CCD
Resolution	2688 x 1520 pxl
magnification	4x/8x(self-defined)
Image file format	video : AVI ( 1280 x 720@60fps ) photo : JPG
Color temperature	3000 to 6000 K
Pupil distance	Adjustable 60–70 mm
View angle	diagonal : 9.8° Horizon : 7.3° Vertical : 5.4°
Working distance	350 - 560 mm ( eyes to object ) 280 - 460 mm ( lens to object )

**Warning:**

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**NOTE:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**RF exposure compliance statement:**

This device has been evaluated to meet the general RF exposure requirement

**Warranty certificate**

Client's name :

Contact number :

Username :

Correspondence address:

Email address:

Product information :