

### SLE/F/H 2.5x~3.5x Surgical Binocular Loupes

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## SLE/F/H 2.5x~3.5x Surgical Binocular Loupes

Thank you for purchasing zumax product. To prevent damage to your product or injury to yourself or to others, read the following safety precaution in their entirety before using this equipment. Keep these safety instructions where all those who use the product will read them.

Your Binocular Loupes contains these primary components:

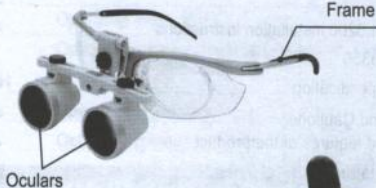
**SLE**

Frame



**SLF**

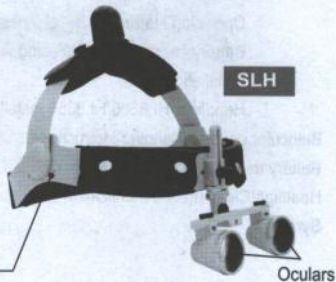
Frame



Oculars

**SLH**

Headband



Oculars

## Specifications

### Optical specifications

Magnification	Work distance (mm)	Field of view (mm)
2.5 x	340 / 420 / 460 / 500	80 / 90 / 100 / 110
3.0 x	340 / 420 / 460 / 500	60 / 65 / 68 / 70
3.5 x	340 / 420 / 460 / 500	50 / 60 / 70 / 80

### Environment requirements

Operation	Temperature	+10 °C - +40 °C
	Relative humidity	30% - 75%
	Atmospheric pressure	700 hPa - 1060 hPa
Shipping	Common conveyance	
	Temperature	-40 °C - +55 °C
Storage	Relative humidity	10% - 90%
	Atmospheric pressure	500 hPa - 1060 hPa

## Warnings and Cautions

### ⚠ Attention.

Read operating manual for cautions and instructions before using.

Do not expose your product in liquid, moisture or humidity environment.

Never clean the surface of lens with any hard or dirty materials.

Do not look at the sun or any powerful light source directly with this loupes.

Federal law restricts this device to sale or order of a physician.

Do not use an autoclave, chemiclave, glutaraldehyde, idophor or any other sterilization method.

The instrument should be covered and put into the packing box when it is not in using.

Do not disassemble the optical lens by unskilled or unqualified technicians.



## Purpose and Features

### Purpose

The binocular loupe is designed for all possible medical needs. They are widely accepted by Stomatology, ENT, Gynecology, Cardiology, Brain surgery and Plastic surgery etc.

### Features

- Multi-coated, high grade glass lenses produce crisp, clear images.
- The Loupes which employ eyepiece of very large view field diameter. The depth of focus is deep and object can be seen stereoscopically with actual distance feeling.
- The angle of the loupes can be adjusted between  $0^{\circ}$ ~ $40^{\circ}$  with ease and fatigue is minimized even after prolonged use.
- 6mm up and down displacement. Pupil distance can be adjusted individually which could be suited for all kind of faces.
- Adapts to zumax Headband and Headlight.
- Smart design, convenient for mobile diagnosis.

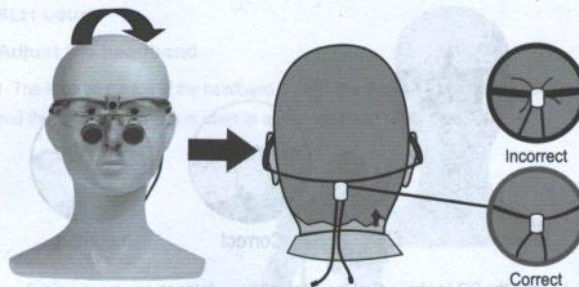
## Operating instruction

### SLE and SLF

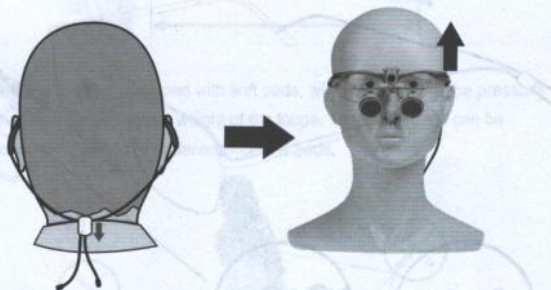
#### Adjust the head strap

Using a head strap can reduce the weight of the loupe on nose, feeling comfortable even if it is worn all-day.

1. Wear the loupe and tighten the strap bead. Don't pinch the strap too tight to giving extra pressure on your nose.



2. Loosen the head bead to remove the loupe, then take off your loupes.



#### Adjust the Visual Field

1. Move your head for property focus.

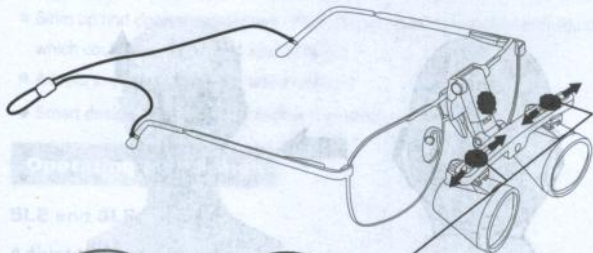


Correct



Incorrect

2. Loosen the PD knobs, adjust the interpupillary distance one by one slowly and combine the two images you see in your eyes into one. Then lock the screws of both sides.



Correct

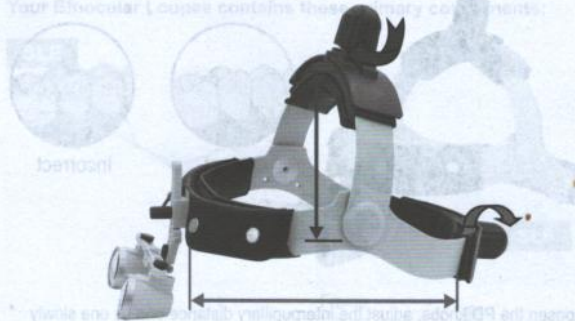


Incorrect

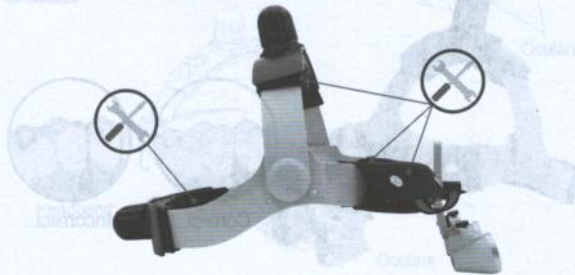
## SLH Loupe

### Adjust the headband

1. The knob on the top of the headband is used to adjust the depth of the headband, and the knob at the back is used to adjust the head circumference.

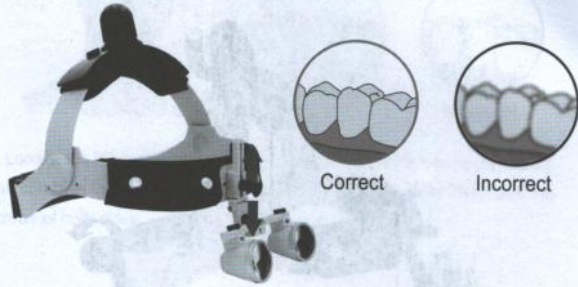


2. The headband is equipped with soft pads, which can reduce the pressure on the head caused by the weight of the loupe. These soft pads can be removed for cleaning or replaced with new pads.

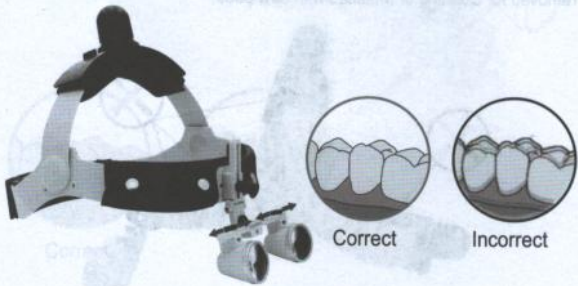


## Adjust the Visual Field

1. Loosen the knob in front of the headband, move up and down to level the oculars with your pupils.



2. Loosen the PD knobs, adjust the interpupillary distance one by one slowly and combine the two images you see in your eyes into one. Then lock the screws of both sides.



## SLE/F/H 4.0x~6.0x Surgical Binocular Loupes

Thank you for purchasing zumax product. To prevent damage to your product or injury to yourself or to others, read the following safety precaution in their entirety before using this equipment. Keep these safety instructions where all those who use the product will read them.

Your Binocular Loupes contains these primary components:

**SLE**

Frame

Oculars

**SLF**

Frame

**SLH**

Headband

Oculars



## Specifications

### Optical specifications

Magnification	Work distance (mm)	Field of view (mm)
4.0 x	340 / 420 / 460 / 500	55 / 65 / 75 / 85
5.0 x	340 / 420 / 460 / 500	45 / 55 / 60 / 65
6.0 x	340 / 420 / 460 / 500	40 / 47 / 50 / 58

### Environment requirements

	Parameter	Requirement
Operation	Temperature	+10 °C - +40 °C
	Relative humidity	30% - 75%
	Atmospheric pressure	700 hPa - 1060 hPa
Shipping	Common conveyance	
	Temperature	-40 °C - +55 °C
Storage	Relative humidity	10% - 90%
	Atmospheric pressure	
		500 hPa - 1060 hPa

## List of accessories

Product type	accessory name	Quantity
SLE/SLF/SLH Binocular Loupes	Magnetic housing	1
	Disinfection cover	2
	Magnetic HL8200 Headlight (Optional)	1

## Warnings and Cautions

### ⚠ Attention.

Read operating manual for cautions and instructions before using.

Do not expose your product in liquid, moisture or humidity environment.

Never clean the surface of lens with any hard or dirty materials.

Do not look at the sun or any powerful light source directly with this loupes.

Federal law restricts this device to sale or order of a physician.

Do not use an autoclave, chemiclave, glutaraldehyde, idophor or any other sterilization method.

The instrument should be covered and put into the packing box when it is not in using.

Do not disassemble the optical lens by unskilled or unqualified technicians.

## Purpose and features of the product

### Purpose

The binocular loupe is designed for all possible medical needs. They are widely accepted by Stomatology, ENT, Gynecology, Cardiology, Brain surgery and Plastic surgery etc.

### Features

- Multi-coated, high grade glass lenses produce crisp, clear images.
- The Loupes which employ eyepiece of very large view field diameter. The depth of focus is deep and object can be seen stereoscopically with actual distance feeling.
- The angle of the loupes can be adjusted between  $0^{\circ}$ ~ $40^{\circ}$  easily to minimized fatigue even after prolonged using.
- 15mm up and down displacement. Pupil distance can be adjusted individually which could be suited for all kind of faces.
- Adapts to any Head-Band and Headlight.
- Smart design, convenient for mobile diagnosis.

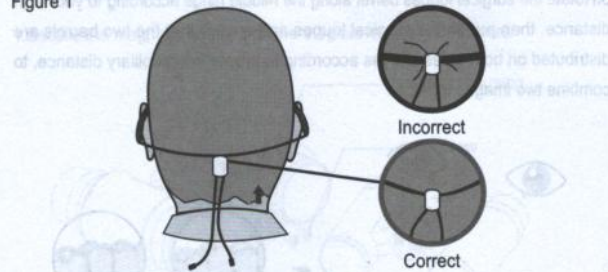
## SLE/SLF Operating instruction

### Adjusting headband

1.Pull the headline button to the end and then put on the glasses to adjust to the most comfortable position. Tighten the head cord button to ensure that the surgical loupes is stable on the head.

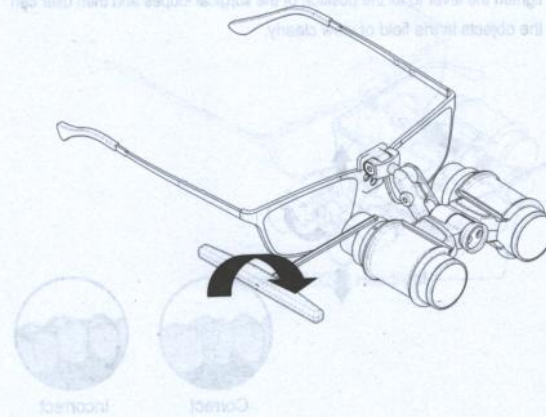
(Figure 1)

Figure 1

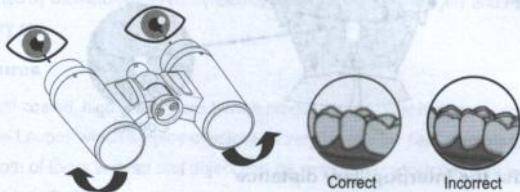


### Adjust the interpupillary distance

2.Loosen the Wrench to make the loupes active.

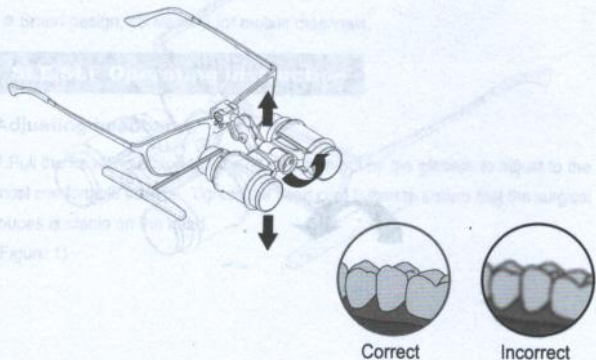


3. Rotate the surgical loupes barrel along the middle hinge according to your own distance, then put on the surgical loupes and ensure that the two barrels are distributed on both sides of eyes according to proper interpupillary distance, to combine two images together.



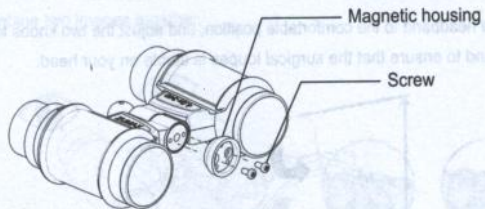
### Adjust position

4. After adjusting the height and pitch angle of the surgical loupes to the appropriate position, tighten the lever to fix the position of the surgical loupes and then user can observe the objects in the field of view clearly.

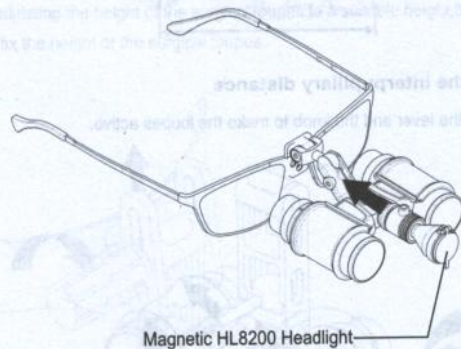


### Optional accessory installation method

1. Secure the magnetic housing on the surgical loupes with screws.



2. Magnetic HL8200 can be directly attracted to the magnetic base.

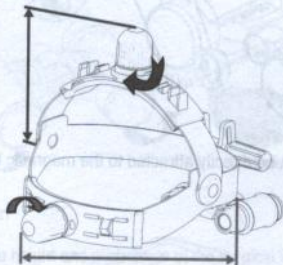




## SLH Operating instruction

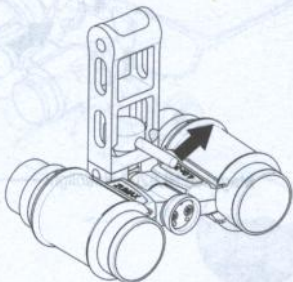
### Adjusting headband

1. Adjust the headband to the comfortable position, and adjust the two knobs to fix the headband to ensure that the surgical loupes is stable on your head.

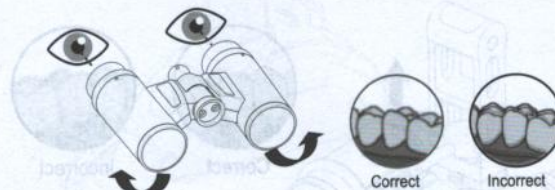


### Adjust the interpupillary distance

2. Loosen the lever and the knob to make the loupes active.

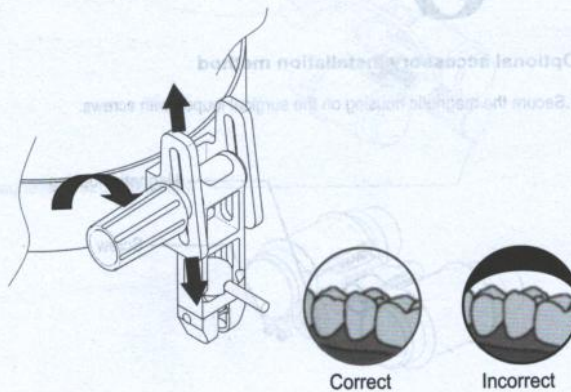


3. Rotate the surgical loupes barrel along the middle hinge according to your own distance, then put on the surgical loupes and ensure that the two barrels are distributed on both sides of eyes according to proper interpupillary distance, to combine two images together.



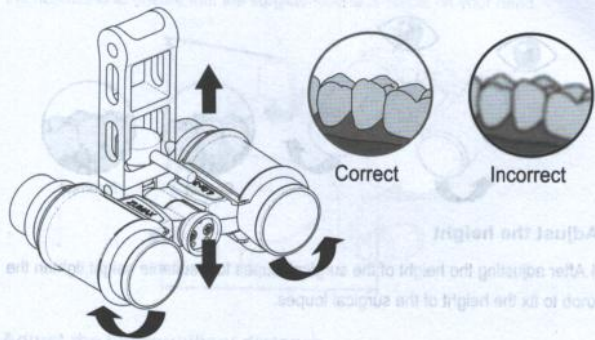
### Adjust the height

4. After adjusting the height of the surgical loupes to a suitable height, tighten the knob to fix the height of the surgical loupes.



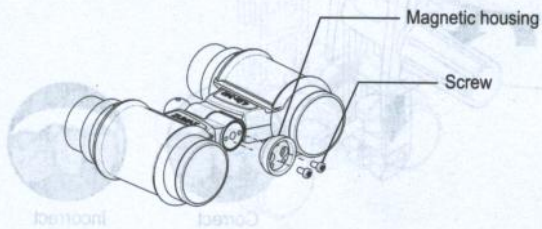
### Adjust position

5. After adjusting the height and pitch angle of the surgical loupes to the appropriate position, tighten the lever to fix the position of the surgical loupes and then user can observe the objects in the field of view clearly.

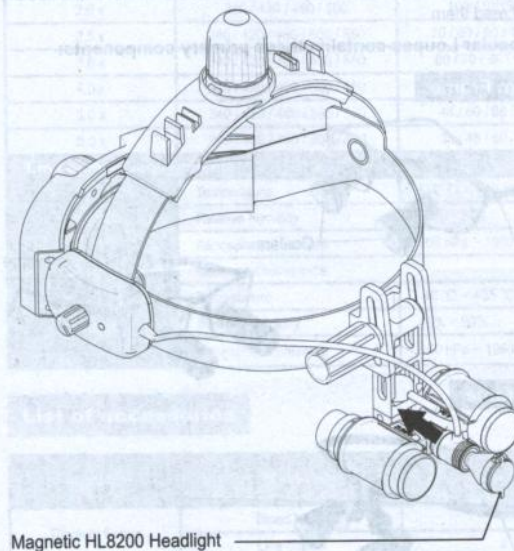


### Optional accessory installation method

1. Secure the magnetic housing on the surgical loupes with screws.



2. Magnetic HL8200 can be directly attracted to the magnetic base.

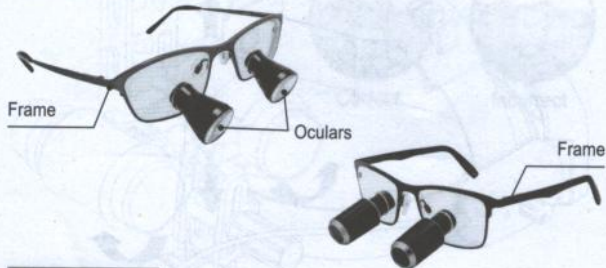


## SLT Loupes

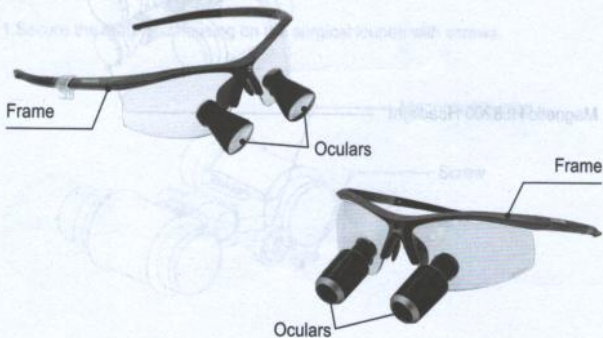
Thank you for purchasing this product. To prevent damage to your product or injury to yourself or to others, read the following safety precaution in their entirety before using this equipment. Keep these safety instructions where all those who use the product will read them.

Your Binocular Loupes contains these primary components:

### Titanium Frame



### Sport Frame



## Specifications

### Optical specifications

Magnification	Work distance (mm)	Field of view (mm)
2.0 x	340 / 420 / 460 / 500	100/110/130/140
2.5 x	340 / 420 / 460 / 500 / 550	70 / 80 / 90 / 100 / 120
3.0 x	340 / 420 / 460 / 500 / 550	60 / 70 / 80 / 90 / 100
4.0 x	340 / 420 / 460 / 500 / 550	51 / 65 / 70 / 75 / 82
5.0 x	340 / 420 / 460 / 500 / 550	48 / 60 / 66 / 71 / 78
6.0 x	340 / 420 / 460 / 500 / 550	38 / 46 / 50 / 54 / 60

### Environment requirements

	Temperature	+10 °C - +40 °C
Operation	Relative humidity	30% - 75%
	Atmospheric pressure	700 hPa - 1060 hPa
	Common conveyance	
Shipping	Temperature	-40 °C - +55 °C
	Relative humidity	10% - 90%
	Atmospheric pressure	500 hPa - 1060 hPa

### List of accessories

Product type	accessory name	Quantity
Titanium Frame	Blood block	1
	Line buckle	2
Sport Frame	Sport line buckle	1
Titanium/Sport Frame	Protective cover	2
Titanium/Sport Frame	HL8200 Headlight (Optional)	1



## Warnings and Cautions



### Attention.

- Read operating manual for cautions and instructions before using.
- Do not expose your product in liquid, moisture or humidity environment.
- Never clean the surface of lens with any hard or dirty materials.
- Do not look at the sun or any powerful light source directly with this loupes.
- Federal law restricts this device to sale or order of a physician.
- Do not use an autoclave, chemiclave, glutaraldehyde, idophor or any other sterilization method.
- The instrument should be covered and put into the packing box when it is not in using.
- Do not disassemble the optical lens by unskilled or unqualified technicians.

## Purpose and features of the product

### Purpose

SLT loupes are designed for all possible medical needs. They are widely accepted by Stomatology, ENT, Gynecology, Cardiology, Brain surgery and Plastic surgery.

### Features

- Multi-coated, high grade glass lenses produce crisp, clear images.
- The Loupes which employ eyepiece of very large view field diameter. The depth of focus is deep and object can be seen stereoscopically with actual distance feeling.
- Smart design, convenient for mobile diagnosis.

## Instructions for use

SLT loupes are personalized to meet the requirements of each surgeon. The following parameters are preset according to the data on the customer sheet.

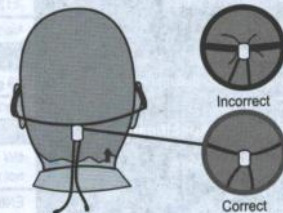
- Inter-ocular distance.
- Working distance.
- Lens correction.
- Inclination or declination drilling position.
- Depending on the inter ocular distance and position of the eyes.
- Position of the nose rest.

The device requires fine adjustment before the first time using. Adjust the sides if necessary and then try it on. SLT should be used with the head strap fastened to keep it in position. The side guards clip onto the frame.

### Titanium Frame

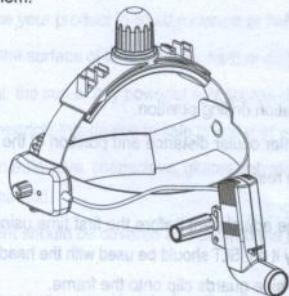


### Sport Frame



## Headlight HL8000

Thank you for purchasing this product. To prevent damage to your product or injury to yourself or to others, read the following safety precaution in their entirety before using this equipment. Keep these safety instructions where all those who use the product will read them.



## Technical Specification

### Optical specifications

Illumination light spot at 420mm	20-80 mm
Illumination in 200mm working distance	≥ 75000 lx
Adjustable range	
Fluctuation distance	≥12.5 mm
Angle range	Vertical ±45°

### Weight

Headlight ( excluding head band)	69 g
Option parts	Red color filter

### Electrical specifications

Illumination Source	5W LED, life 20000 hours continuous lifetime, do not need to change the LED lamp.
Electrical Safety	EN60601-1, EN60601-1-2 Class II and internal electrical power source

## Accessories

Battery BT552	7.4 V Rechargeable Lithium battery 4400mAh
Battery BT556	7.4 V Rechargeable Lithium battery 1800mAh
Power adapter input voltage	100VAC ~ 240VAC, 50Hz or 60Hz
Power adapter Output voltage and power	Output voltage 12V, maximum input power ≤ 30 VA
Battery Run-time	≥7 h (Maximum luminance) BT552 ≥3 h (Maximum luminance) BT556
Battery Charging-time	≤5 h BT552 ≤3 h BT556
Protection	Short circuit protection, power protection and over-current protection.

## Environment requirements

Operation	Temperature	+10 °C ~ +40 °C
	Rel. humidity	30% ~ 75%
	Air pressure	700 hPa ~ 1060 hPa
Storage	Temperature	-40 °C ~ +55 °C
	Rel. humidity	10% ~ 90%
	Air pressure	500 hPa ~ 1060 hPa



BT576



BT556



## Warnings and Cautions



### Attention.

Read operating manual for cautions and instructions before using.

Do not use this instrument in damp rooms. Do not expose the instrument to water splashes, dripping water or sprayed water.

This product must not be used in the presence of flammable gases.

Do not look at the light source directly.

Ensure that the headband power cord is located in the clips provided. The headlight body should not be left covered with a cloth or similar.

Please use special certificated adapter.

Never scratch the glass surface with fingers or any other hard materials.

Federal law restricts this device to sale or order of a physician.

Do not use an autoclave, chemiclave, glutaraldehyde, idophor or any other sterilization method.

The instrument should be covered and put into the packing box when it is not in using.

Please ask qualified trained professional technician to maintenance the product. Please contact with authorized dealer or manufacturer.

Please use the appropriate battery. The battery should never be placed in municipal waste. Please check local regulations for disposal of batteries.

Be careful to keep the device away from solvent.

## Purpose and features of the product

### Purpose

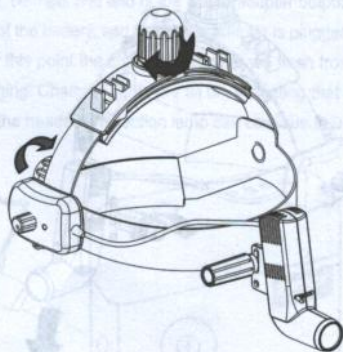
Headlight HL8000 is used for examination and surgical operation in multifarious microsurgery.

## Features

- Light Source: LED source with color temperature of 5000 K. White, shadow-free light allowing the doctor to see tissue characteristics without distortion.
- Enjoy the flexibility of operating the headlight using the rechargeable Lithium battery, can use without the direct power source. It is one of the most comfortable lightweight headlamps and suitable for all kinds of surgery.
- The headlight could be used when it is charging.
- Battery indicator lights.
- Adapts to any Binocular Loupes of Zumax except SLT loupes.
- Smart design, convenient for mobile diagnosis.

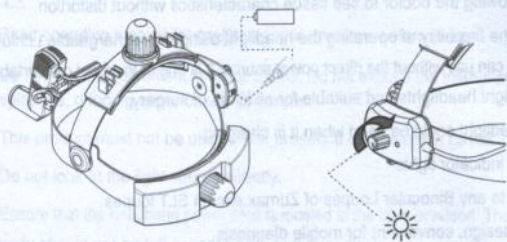
## Operating Instruction

1. Attach the power cord by means of the clip provided. Place the device on your head and adjust for width and height until you feel comfortably.

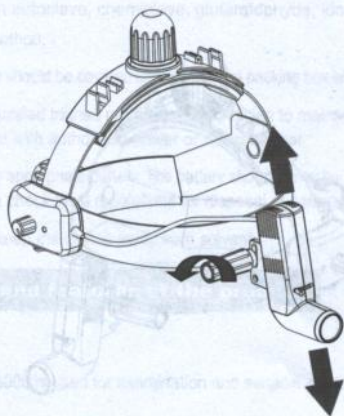




2. Connect the Headlight to the power adapter. Use the headband right or left brightness control knob to select the required brightness.



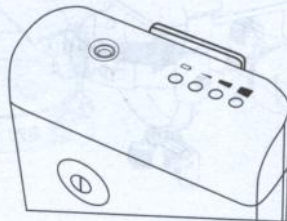
3. Loosen the fixing screw to adjust the light head up and down and backwards or forwards. After adjustment, retighten the screw. The illuminated field of view can be selected by means of the slide control.



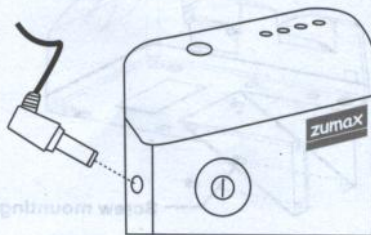
## Battery charging and replacing

### Battery case BT552 is charged

1. Battery box BT552 (hereinafter referred to as the battery) yellow light, prompted to charge or replace as soon as possible to recharge the battery backup. If the power indicator only yellow light and continue to use, the battery will start self-protection, cut off the power to prevent the battery over-discharge.



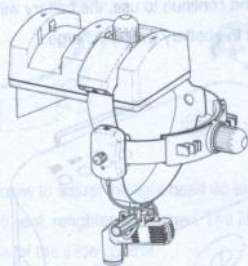
2. When charging, connect one end of the power adapter output line to the round hole on the side of the battery, and the power adapter is plugged into the network power socket. At this point the charging indicator will flash from yellow to green followed by charging. Charging lights are all off, indicating that the battery is full. When charging, the headset inspection lamp can continue to use.



### Battery case BT556 is charged

The headlight can be plugged directly into the charger to charge when the battery power is depleted.

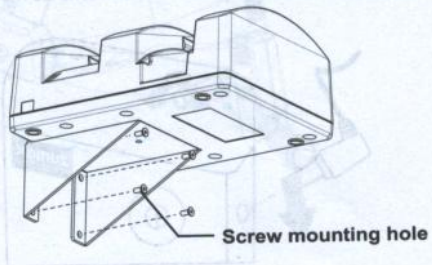
When charging, you should put the headlight in the charger and connect adapter one end connected to the charger and the other end connected to power supply.



### Installation

#### Installing the cradle

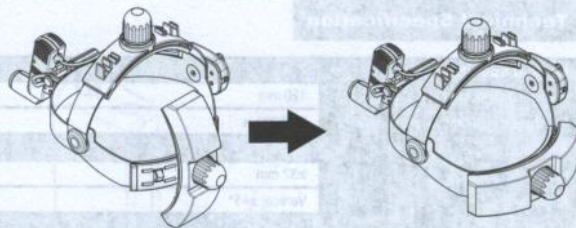
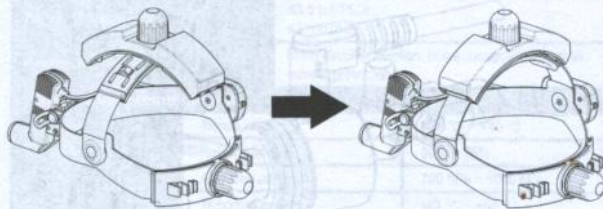
According to the battery box mounting hole in the wall, fitting two expansion screw into the holes and then typing the expansion screw sets and then installing the device as follow the picture.



### Installing the battery into the headband

Installing as shown in below picture, the battery cartridge into the adjusting knob cover, then rotate along time until the level stops. Removing, counter-clockwise rotation to 90 degree position and then pull it out.

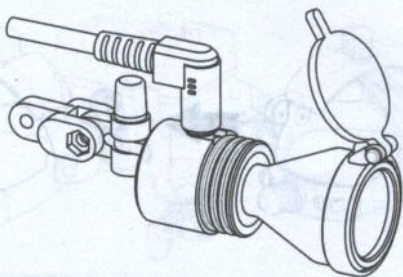
There are two types of battery installation, respectively, up or back.





## Headlight HL8200

Thank you for purchasing this product. To prevent damage to your product or injury to yourself or to others, read the following safety precaution in their entirety before using this equipment. Keep these safety instructions where all those who use the product will read them.



## Technical Specification

### Optical specifications

Illumination light spot at 420mm	120 mm
Illumination in 200mm working distance	≥ 35000 lx
Adjustable range	
Fluctuation distance	≥32 mm
Angle range	Vertical ±45°
Weight	
Headlight ( excluding head band)	16 g
Option parts	Orange color filter

### Electrical specifications

Illumination Source	3W LED, life 20000 hours continuous burn, do not need to change the LED lamp.
Electrical Safety	EN60601-1,EN60601-1-2 Class II and internal electrical power source

## Accessories

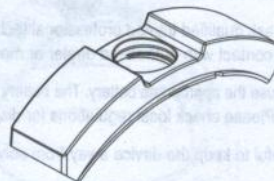
Battery BT576	7.4 V Rechargeable Lithium battery 2400mAh
Battery BT556	7.4 V Rechargeable Lithium battery 1800mAh
Power adapter input voltage	100VAC ~ 240VAC, 50Hz or 60Hz.
Power adapter Output voltage and power	Output voltage 12V, maximum input power ≤ 30 VA
Battery Run-time	≥7 h (Maximum luminance) BT576 ≥3 h (Maximum luminance) BT556
Battery Charging-time	≤3.5 h BT576 ≤3 h BT556
Protection	Short circuit protection, power protection and over current protection.

## Environment requirements

Operation	Temperature	+10 °C ~ +40 °C
	Rel. humidity	30% ~ 75%
	Air pressure	700 hPa ~ 1060 hPa
Storage	Temperature	-40 °C ~ +55 °C
	Rel. humidity	10% ~ 90%
	Air pressure	500 hPa ~ 1060 hPa



BT576



BT556



## Warnings and Cautions

### ⚠ Attention.

Read operating manual for cautions and instructions before using.

Do not use this instrument in damp rooms. Do not expose the instrument to water splashes, dripping water or sprayed water.

This product must not be used in the presence of flammable gases.

Do not look at the light source directly.

Ensure that the headband power cord is located in the clips provided. The headlight body should not be left covered with a cloth or similar.

Please use special certificated adapter.

Never scratch the glass surface with fingers or any other hard materials.

Federal law restricts this device to sale or order of a physician.

Do not use an autoclave, chemiclave, glutaraldehyde, idophor or any other sterilization method.

The instrument should be covered and put into the packing box when it is not in using.

Please ask qualified trained professional technician to maintenance the product. Please contact with authorized dealer or manufacturer.

Please use the appropriate battery. The battery should never be placed in municipal waste. Please check local regulations for disposal of batteries.

Be careful to keep the device away from solvent.

## Purpose and features of the product

### Purpose

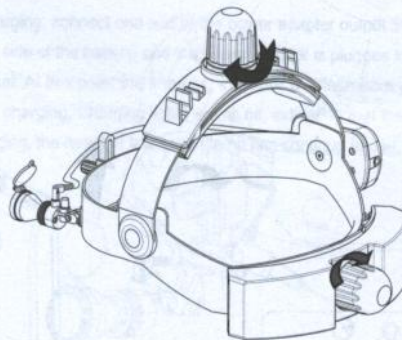
Headlight HL8200 is used for examination and surgical operation in multifarious microsurgery.

## Features

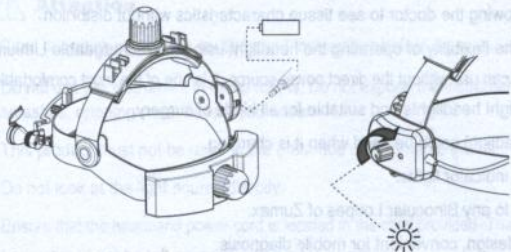
- Light Source: LED source with color temperature of 5000 K .White, shadow-free light allowing the doctor to see tissue characteristics without distortion.
- Enjoy the flexibility of operating the headlight using the rechargeable Lithium battery, can use without the direct power source. It is one of the most comfortable lightweight headlights and suitable for all kinds of surgery.
- The headlight could be used when it is charging.
- Battery indicator lights.
- Adapts to any Binocular Loupes of Zumax.
- Smart design, convenient for mobile diagnosis.

## Operating Instruction

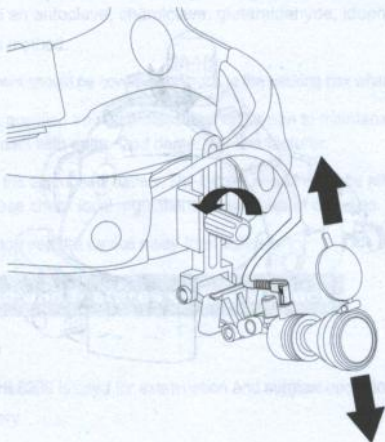
1. Attach the power cord by means of the clip provided. Place the device on your head and adjust for width and height until you feel comfortably.



2. Connect the Headlight to the power adapter. Use the headband right or left brightness control knob to select the required brightness.



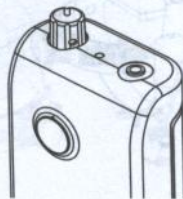
3. Loosen the fixing screw to adjust the light head up and down and backwards or forwards. After adjustment, retighten the screw. The illuminated field of view can be selected by means of the slide control.



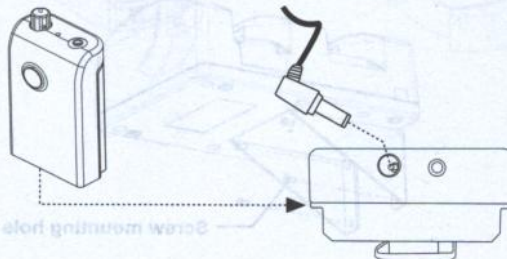
## Battery charging and replacing

### Battery case BT576 is charged

1. Battery box BT576 (hereinafter referred to as the battery) yellow light, prompted to charge or replace as soon as possible to recharge the battery backup. If the power indicator only yellow light and continue to use, the battery will start self-protection, cut off the power to prevent the battery over-discharge



2. When charging, connect one end of the power adapter output line to the round hole on the side of the battery, and the power adapter is plugged into the network power socket. At this point the charging indicator will flash from yellow to green followed by charging. Charging lights are all off, indicating that the battery is full. When charging, the headset inspection lamp can continue to use.

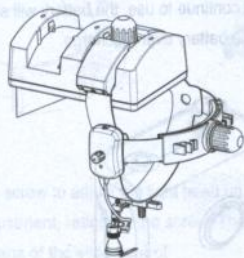




### Battery case BT556 is charged

The headlight can be plugged directly into the charger to charge when the battery power is depleted.

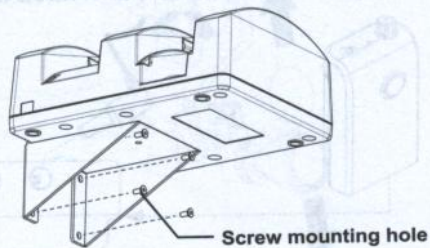
When charging, you should put the headlight in the charger and connect adapter one end connected to the charger and the other end connected to power supply.



### Installation

#### Installing the cradle

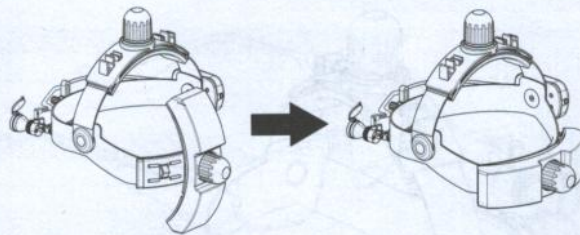
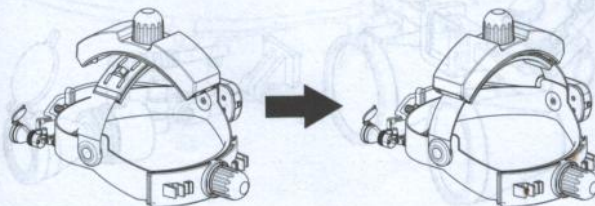
According to the battery box mounting hole in the wall, fitting two expansion screw into the holes and then typing the expansion screw sets and then installing the device as follow the picture.



### Installing the battery into the headband

Installing as shown in below picture, the battery cartridge into the adjusting knob cover, then rotate along time until the level stops. Removing, counter-clockwise rotation to 90 degree position and then pull it out.

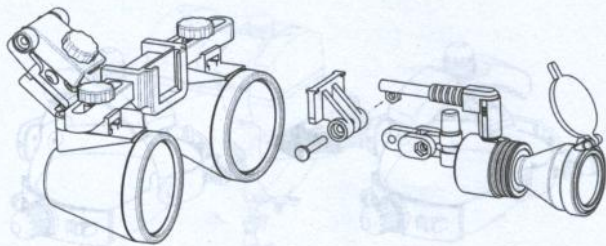
There are two types of battery installation, respectively, up or back.



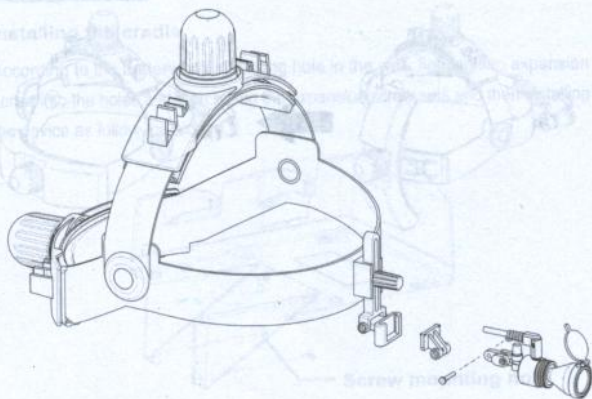
## Headlight HL8200 installation instructions

Headlight HL8200 can be easily mounted on R type headbands, SLE loupes, SLT.

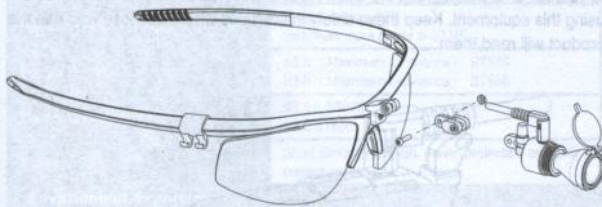
### SLE loupes + HL8200



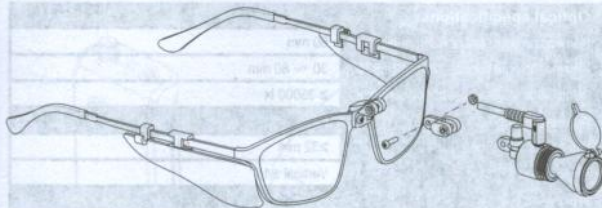
### R type headbands + HL8200



### SLF loupes + HL8200



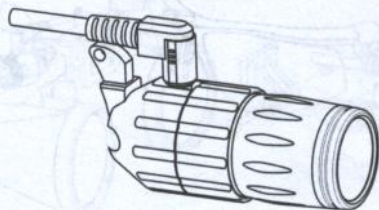
### SLT loupes + HL8200





## Headlight HL8300/HL8350

Thank you for purchasing this product. To prevent damage to your product or injury to yourself or to others, read the following safety precaution in their entirety before using this equipment. Keep these safety instructions where all those who use the product will read them.



## Technical Specification

### Optical specifications

Illumination light spot at 420mm(HL8300)	80 mm
Illumination light spot at 420mm(HL8350)	30 ~ 80 mm
Illumination in 200mm working distance	≥ 35000 lx
Adjustable range	
Fluctuation distance	≥ 32 mm
Angle range	Vertical ±45°
Weight	
Headlight ( excluding head band)	27 ± 3 g
Option parts	Orange color filter

### Electrical specifications

Illumination Source	3W LED, life 20000 hours continuous burn, do not need to change the LED lamp.
Electrical Safety	EN60601-1, EN60601-1-2 Class II and internal electrical power source

## Accessories

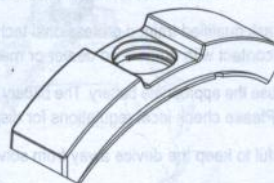
Battery BT576	7.4 V Rechargeable Lithium battery 2400mAh
Battery BT556	7.4 V Rechargeable Lithium battery 1800mAh
Power adapter input voltage	100VAC ~ 240VAC, 50Hz or 60Hz.
Power adapter Output voltage and power	Output voltage 12V, maximum input power ≤ 30 VA
Battery Run-time	≥ 6 h (Maximum luminance) BT576 ≥ 3 h (Maximum luminance) BT556
Battery Charging-time	≤ 3.5 h BT576 ≤ 3 h BT556
Protection	Short circuit protection, power protection and over current protection.

## Environment requirements

Operation	Temperature	+10 °C ~ +40 °C
	Rel. humidity	30% ~ 75%
	Air pressure	700 hPa ~ 1060 hPa
Storage	Temperature	-40 °C ~ +55 °C
	Rel. humidity	10% ~ 90%
	Air pressure	500 hPa ~ 1060 hPa

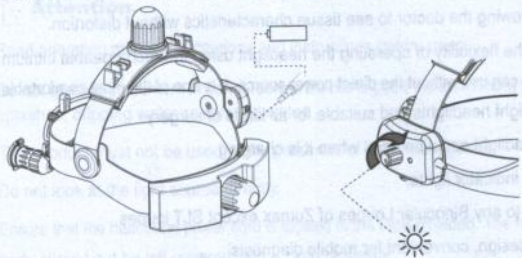


BT576

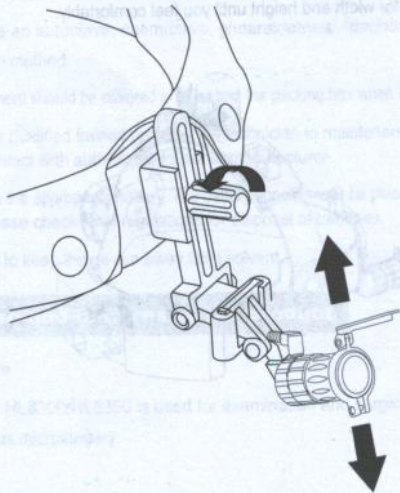


BT556

2. Connect the Headlight to the power adapter. Use the headband right or left brightness control knob to select the required brightness.



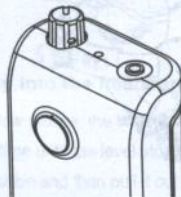
3. Loosen the fixing screw to adjust the light head up and down and backwards or forwards. After adjustment, retighten the screw. The illuminated field of view can be selected by means of the slide control.



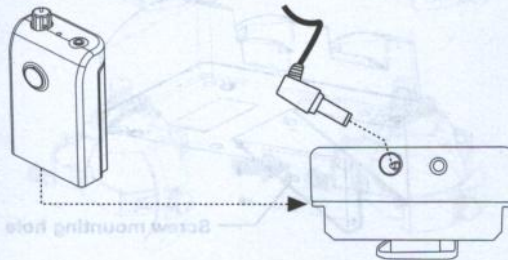
## Battery charging and replacing

### Battery case BT576 is charged

1. Battery box BT576 (hereinafter referred to as the battery) yellow light, prompted to charge or replace as soon as possible to recharge the battery backup. If the power indicator only yellow light and continue to use, the battery will start self-protection, cut off the power to prevent the battery over-discharge



2. When charging, connect one end of the power adapter output line to the round hole on the side of the battery, and the power adapter is plugged into the network power socket. At this point the charging indicator will flash from yellow to green followed by charging. Charging lights are all off, indicating that the battery is full. When charging, the headset inspection lamp can continue to use.

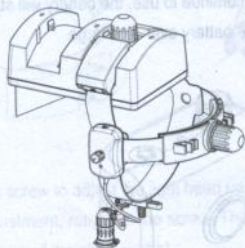




### Battery case BT556 is charged

The headlight can be plugged directly into the charger to charge when the battery power is depleted.

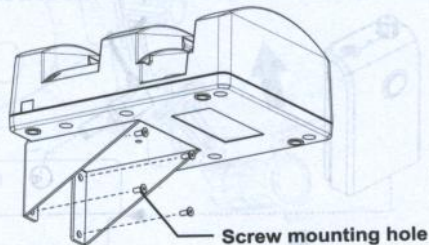
When charging, you should put the headlight in the charger and connect adapter one end connected to the charger and the other end connected to power supply.



### Installation

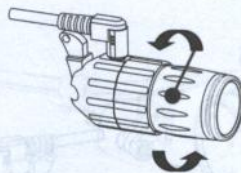
#### Installing the cradle

According to the battery box mounting hole in the wall, fitting two expansion screw into the holes and then typing the expansion screw sets and then installing the device as follow the picture.



### Matching spot adjustment method (HL8350)

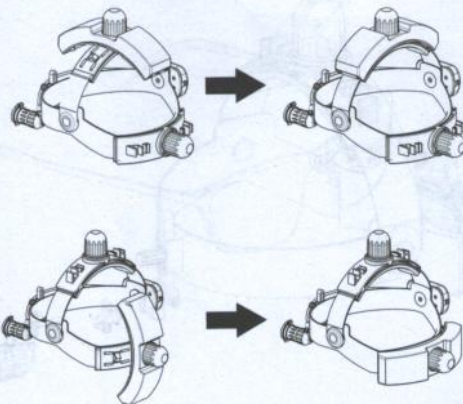
The iris diaphragm fitting is an optional accessory for the HL8300. After matching, the illumination spot can be adjusted steplessly. The clockwise rotation reduces the light spot, and the counterclockwise rotation increases the light spot.



### Installing the battery into the headband

Installing as shown in below picture, the battery cartridge into the adjusting knob cover, then rotate along time until the level stops. Removing, counter-clockwise rotation to 90 degree position and then pull it out.

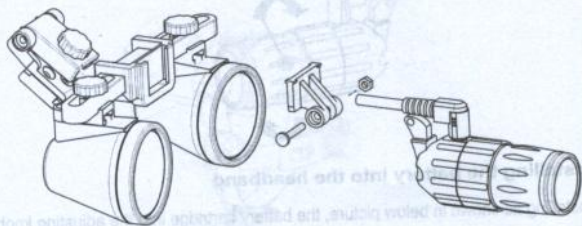
There are two types of battery installation, respectively, up or back.



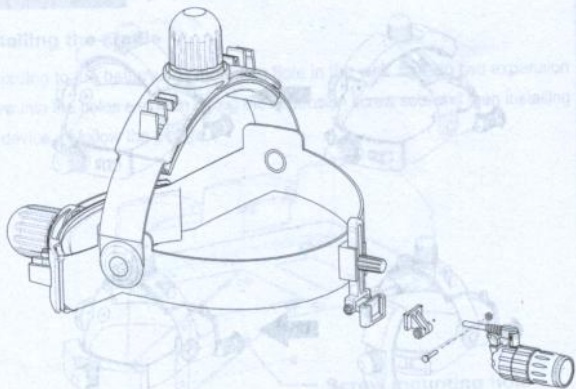
## Headlight HL8300/HL8350 installation instructions

Headlights can be easily mounted on R type headbands, SLE loupes, SLT.

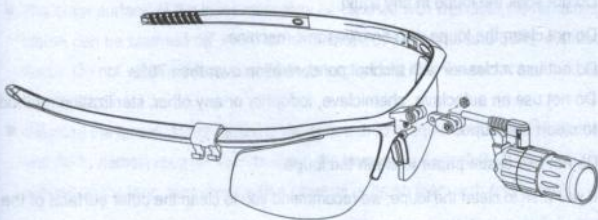
### SLE loupes + HL8300/HL8350



### R type headbands + HL8300/HL8350



### SLF loupes + HL8300/HL8350



### SLT loupes + HL8300/HL8350

