



# **Otoscope**

## **Instruction Manual**

An instruction of otoscope for otolaryngologist. It is an internally powered device. Please read through this brochure before use, and keep it handy for future reference.

## **Symbols:**

	Manufacturer
EC REP	Authorized Representative in the European community
X	Symbol for the marking of electrical and electronics devices according to Directive 2002/96/EC. the device, accessories and the packaging have to be disposed of waste correctly at the end of the usage. Please follow Local Ordinances or Regulations for disposal.
★	Type B Applied Part
$\triangle$	Attention, consult accompanying documents

## **Safety Information**

To assure the correct use of the product, basic safety measures should always be followed including the warnings and cautions listed in this instruction manual.

#### Warnings & Cautions:

- Do not use the device where it may be exposed to flammable gas.
- Protect this device from water, moisture, Impact, dropping, direct sunlight, heat and fire.
- Do not touch the lens directly by hand or something hard.
- Please use the bulb type specified in this instruction brochure.
- Keep the device out of the reach of unsupervised infants and children.





• Do not disassemble or attempt to repair the device or components.

## **General**

#### **Description:**

The otoscope is a classic medical device in ENT.HS-OT10G, and make the light path and observation of light tend to be coaxial through the optimization design, which increase the visual field of view. It is used to view the tympanic membrane and external ear canal to diagnose outer and middle ear pathologies.

### **Technical Specifications:**

- 3X magnification for the viewing window.
- Enhanced XHL Xenon Halogen Technology and LED Technology.
- 108G XHL bulb & 109G LED bulb used. (Optional parts.)



Direct illumination.

### How to use this device:

- Turn on (or off) the device by pushing downwards (or upwards) as fig.1;
- Select a reasonable tip for patient s ear canal and push it onto the head and screw the tip clockwise, refer to fig.2.
- Put the otoscope with a tip into the ear canal of patient, and examine through the viewing window which is with 3X magnification

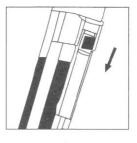








fig.1

G

fig.2

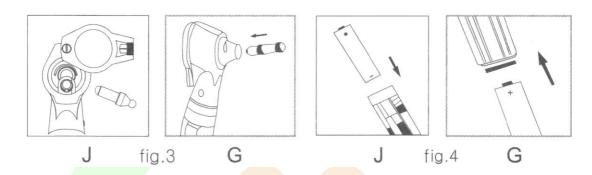




#### Attention:

- The otoscope should only be used to examine ear when a tip is fitted.
- It is an intermittent operated device, 1 minute ON, 5 minutes OFF.

## **Maintenance**



### Changing Spare Parts:

### Changing the bulb (fig.3)

Turn off the power, then use screwdriver screw the old bulb in the metal support and replace with new one.

#### Attention:

- Please use the specialized bulb (Model: & 108G or & 109G) for this device.
- After the bulb burns out, the temperature will remain high for approximately 5 minutes. Please wait for a moment to avoid injury.

#### Changing-the batteries (fig.4)

- Unscrew the bottom cover from the handle;
- Remove the old AA batteries, and replace with new ones. Ensure the anode of the batteries points to the head ot the device;
- Screw on the bottom cover of the handle.

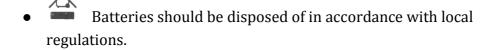
#### **Attention:**

- AA alkaline bakeries are recommended.
- Replace all batteries simultaneously and do not use alkali manganese batteries with lithium as bulb life will be reduced.





- Do not leave wom batteries in the handle.
- Please take out batteries from the device if not in use for a prolonged period.



#### Cleaning and Disinfection:

- Clean the surface of device with 75% alcohol solution at least once a week, avoid to touch the viewing window. And corrosive or polishing detergent is prohibited.
- Disinfect the tips of otoscope with saturated steam for 10 minutes at 134°C.

#### Attention:

Do not soak, autoclave or let water dip into the device!

## **Periodic Safety Checks**

Preventive inspection and maintenance to be performed including the frequency of such maintenance. The following safety check should be performed at least every 12 months by a qualified person who has adequate training, knowledge, and practical experience to perform these tests.

- Inspect the equipment and accessories for mechanical and functional damage.
- Inspect the safety relevant labels for legibility.
- Verify that the device functions properly as described in the instructions for use.





## **Specifications**

Illumination	Direct Illumination
Specified	LED bulb
bulb	Model : &109G
	3.0V, 80mA
Battery	AA x 2 alkaline battery
Operation	10°C - 35°C
Temperature	
Operation Humidity	30% - 75%
Storage & Transport	-20°C - 70°C , 10% - 90%
	(without condensation)

## **Electrical Classification**

Equipment Classification with respect to protection from electric shock: Internally powered equipment.

Degree of protection from electric shock: TYPE B.

Equipment not suitable for use in the presence of flammable mixture: Yes

Mode of operation: intermittent operation.

The manufacturer reserves the right to make technical changes without notice in the interest of progress. Prior notices will not be given in case of any amendments within this manual.