

## GIMA 31524

# GIMA Otoscope F.O. SIGMA 2.5V Xenon-Halogen Instruction Manual

Model: 31524

## 1. INTRODUCTION

The GIMA SIGMA Fiber Optic Otoscope is a reliable diagnostic tool designed for medical professionals and students. It features a 2.5V xenon-halogen bulb, providing intense and natural illumination for clear observation of the ear canal and tympanic membrane. Constructed from durable reinforced plastic, this otoscope is built for frequent use. Its ergonomic design ensures a comfortable and secure grip during examinations. The device offers 3x magnification for clear, distortion-free images, and includes a fixed, laterally rotating magnification window for enhanced viewing flexibility. The otoscope is supplied with a practical nylon carrying pouch and 14 disposable specula (7 x 2.5 mm and 7 x 4 mm). Please note that batteries are not included. For safe and effective use, always ensure a speculum is attached before inserting the otoscope.

## 2. PRODUCT COMPONENTS

The GIMA Otoscope F.O. SIGMA package includes the following components:

- GIMA Otoscope F.O. SIGMA unit
- 14 Disposable Specula (7 pieces of 2.5 mm diameter, 7 pieces of 4 mm diameter)
- Nylon Carrying Pouch



Image 2.1: GIMA Otoscope F.O. SIGMA, disposable specula, and carrying pouch.



Image 2.2: Key features including 3x magnification, direct light, and swivel ring.

## 3. SETUP

### 3.1 Battery Installation

The otoscope requires batteries for operation (not included). To install or replace batteries:

1. Unscrew the bottom cap of the handle.
2. Insert the required batteries, ensuring correct polarity (+/-).
3. Screw the bottom cap back on securely.

### 3.2 Attaching a Speculum

Before each examination, a new, disposable speculum must be attached.

1. Select the appropriate size speculum (2.5 mm or 4 mm).
2. Place the speculum onto the otoscope head, aligning its internal projection with the designated slot.
3. Gently screw the speculum into place by turning it slightly to the right until it is securely fastened.



Esame visivo diretto del condotto  
uditivo esterno e della membrana del  
timpano

✓ 7 speculum Ø 2,5 mm

✓ 7 speculum Ø 4 mm

Direct visual examination of the  
external auditory canal and tympanic  
membrane

✓ 7 speculums Ø 2.5 mm

✓ 7 speculums Ø 4 mm

Image 3.1: Direct visual examination of the external auditory canal and tympanic membrane using 2.5 mm or 4 mm specula.

## 4. OPERATING INSTRUCTIONS

### 4.1 Powering On/Off

Locate the power switch on the handle of the otoscope. Slide the switch to the 'ON' position to activate the light source. Slide it to the 'OFF' position when not in use to conserve battery life.

### 4.2 Performing an Examination

Always ensure a disposable speculum is securely attached before use.

1. Gently insert the speculum-covered tip of the otoscope into the patient's ear canal.
2. Look through the viewing window to observe the ear canal and tympanic membrane. The 3x magnification provides clear, distortion-free images.
3. The magnifying window is fixed to the device but can be rotated laterally. Rotate the window clockwise or counter-clockwise as needed to achieve the best viewing angle of the tympanic membrane.
4. After the examination, carefully remove the otoscope from the ear.





Image 4.1: The 3x magnifying glass provides sharp and glare-free images during examination.

### 4.3 Optional Accessories

The GIMA Otoscope F.O. SIGMA is compatible with the following optional accessories, which are sold separately:

- Pneumatic Connector (Code 31532)
- Insufflation Pump (Code 31500)

## 5. MAINTENANCE

### 5.1 Cleaning

To ensure hygiene and longevity of your otoscope:

- After each use, wipe the exterior of the otoscope handle and head with a soft cloth dampened with a mild disinfectant solution.
- Do not immerse the otoscope in liquid.
- Ensure the device is completely dry before storage.

## 5.2 Specula Disposal

Disposable specula are intended for single use only. Dispose of used specula according to local medical waste regulations after each patient examination to prevent cross-contamination.

## 6. SAFETY INFORMATION

- Always use the otoscope with an attached, clean, disposable speculum.
- Do not use the device if it appears damaged or if any components are missing.
- Keep the device out of reach of children.
- This device is intended for use by trained medical professionals or under their direct supervision.
- Consult a healthcare professional for proper usage techniques and interpretation of findings.

## 7. SPECIFICATIONS

Model Number	31524
Manufacturer	GIMA
Light Source	2.5V Xenon-Halogen Bulb
Magnification	3x
Material	Reinforced Impact-Resistant Plastic
Dimensions (L x W x H)	9 x 18 x 3 cm
Weight	150 grams



Plastica rinforzata  
resistente agli urti

Acciaio inossidabile  
altamente resistente alla  
corrosione

Reinforced  
impact-resistant plastic

Highly corrosion-resistant  
stainless steel

Image 7.1: The otoscope is made from reinforced impact-resistant plastic and features highly corrosion-resistant stainless steel.

## 8. TROUBLESHOOTING

If you encounter issues with your GIMA Otoscope, consider the following:

- **No Light:** Check if the batteries are correctly inserted and charged. Replace batteries if necessary. Ensure the power switch is in the 'ON' position.
- **Dim Light:** Replace batteries with new ones.
- **Unclear View:** Ensure the speculum is clean and properly attached. Clean the viewing window if smudged.

For persistent issues not resolved by these steps, please contact GIMA customer support.

## 9. WARRANTY AND SUPPORT

For information regarding warranty coverage, technical support, or spare parts availability, please refer to the documentation provided with your purchase or contact GIMA directly through their official website or customer service channels. Please have your model number (31524) and purchase date available when

contacting support.

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