

**HEINE** QUALITY  
MADE IN GERMANY

## HEINE GAMMA® 3.1, 3.2, 3.3, C3



**CE**

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Please read and follow these instructions for use and keep them for future reference.

## General Conditions of Warranty

Instead of the statutory warranty time period of 2 years, HEINE will grant a guarantee of 5 years from the date of the consignment of the goods ex works, concerning its equipment (excluding disposables, e.g. bulbs, single-use articles, and rechargeable batteries). Date of consignment means that HEINE hands the goods over to the transport carrier, freight forwarder or any other person designated by the Customer for the transport of the goods without loading the collecting vehicle.

The guarantee covers irreproachable workmanship, on condition of the proper use of the equipment and the observation of the operating instructions. During the warranty- and guarantee time period, errors and deficiencies arising on the equipment will be rectified free of charge, in so far as such are evidenced by defective materials, processing and/or constructional errors. Should buyer complain of a material deficiency during the warranty time period, then the onus of proof is always to be on the orderer, that the product was defective already upon receipt of the goods. The statutory warranty and the guarantee do not apply to loss or damage caused by wear and tear, negligent use, the non-employment of original HEINE components and/or spares (in particular bulbs, as these have been especially developed for HEINE instruments in accordance with the following criterions: colour temperature, useful service life, safety, optical quality and performance. The statutory warranty and the guarantee do not apply to interventions by persons not authorised by HEINE or when the operating instructions are not observed by the customer. Any modification of a HEINE product with parts or additional parts which do not conform to the original HEINE specification will invalidate the warranty for the correct function of the product and further invalidate any warranty claims which result from such a change or modification. Further claims, in particular claims for replacement of loss or damage, which are experienced otherwise than directly on the HEINE product itself, are hereby excluded.



**For U.S. only:**

**Federal law restricts this device to sale by or on the order of a Physician or Practitioner!**

## Warnings and Safety Information



**CAUTION!** Indicates potential hazardous situations. Ignoring the corresponding instructions may lead to dangerous situations of mild to moderate extent. (Background color yellow; foreground color black).



**NOTE!** Indicates valuable advice in terms of installation, operation, maintenance or repair. Notes are important, but not related to hazardous situations.

## INTENDED USE

### Range of applications

HEINE GAMMA® stethoscopes are used for auscultation of the activity of human organs and in connection with non-invasive blood pressure measurements.

### Areas of application / indications

Stethoscopes are used by physicians and trained personnel for auscultation of the circulatory system, respiratory system as well as the gastrointestinal system in order to interpret the respective sounds. During blood pressure measurement a stethoscope is used for the detection of Korotkow sounds in order to determine the systolic and diastolic blood pressure of adults and children.

The stethoscope consists of chest piece, stethoscope tube and binaurals with separate ear olives.

HEINE GAMMA® Stethoscopes are available with various chest pieces and tubes. Please see the following description of the different models:

### GAMMA 3.1 Pulse Stethoscope

Especially useful for blood pressure measurement. The chest piece fits comfortably under the cuff of the sphygmomanometer.

### GAMMA 3.2, 3.3 Acoustic Stethoscope

For the auscultation of high and low frequency tones. Switchable.

### GAMMA C3 Cardio Stethoscope

For the auscultation of high and low frequency tones. Switchable.

Special features: dual membrane, bell and double channel tube. The dual membrane permits auscultation of high and low frequency sounds and the bell facilitates evaluation of lower frequencies. (Cardiology)

## OPERATE

### Adjustment of the tension of the binaurals

Adjust to fit correctly.

#### Adjustments:

##### • Binaurals are too tight for comfort

To **reduce** the spring tension, firmly grasp each section of the binaurals between thumb and fore finger and widen carefully.

##### • Binaurals are too loose

To **increase** the spring tension, grasp both sides of spring with one hand and squeeze them together.

This process can be repeated as often as needed.

### Switching the double chest piece

Depending on the needed frequency range, select either the membrane or the open bell side. In order to change hold the connecting tube in one hand and the chest piece in the other, now turn it 180° until there is a noticeable click.

**If the connecting tube points towards the membrane:** Auscultation with the bell.

**If the connecting tube points towards the bell:** Auscultation with the membrane.

## HYGIENIC CLEANING / PROCESSING

For cleaning we recommend a clean, damp cloth with a mild soap solution. If needed, use a **non-aggressive** disinfectant for the membrane. To extend the flexibility of the stethoscope tube we recommend the use of a vinyl lubricant.

### Maintenance

This product does not require regular maintenance.

### Service

This product does not require regular service.

### Disposal



The product must be recycled as separated electrical and electronic devices. Please observe the relevant state-specific disposal regulations.

### Technical specification

Storage and transport conditions:

- Store the instrument at a temperature between -10°C and 40°C
- Relative air humidity below 85%

### Applicable standards:

The Product complies with the requirements of the Council Directive 93/42/EEC of 14 June 1993 (Medical Device Directive).

### General Notes and Warnings



Check the correct operation of the product at regular intervals. Do not use the equipment if it shows visible signs of damage.

#### - To prevent injury:

The ear pieces should be firmly attached to the binaurals. Do not insert the ear pieces too far into ear canal, check for cleanliness regularly and clean as needed.

- Never use a stethoscope without ear pieces.
- Never use a stethoscope without a membrane.



This product is a precise optical instrument. Please handle this product with care and store it in a clean place.















- Measurements should only be interpreted by qualified persons.
- Avoid unnecessary impact on and vibration of the instrument.
- Avoid damaging membrane and soft components with sharp or pointed objects.
- Do not sterilize thermally.
- Do not dip in cleaning fluid and ensure that no fluids enter the tubing system.
- Use only HEINE original spare parts.
- Do not expose the instrument, in particular the soft components, to direct ultraviolet radiation.
- All HEINE GAMMA® stethoscopes are latex-free.



This product is not allowed to be entered or used in strong magnetic fields like MRI scanners.

## Explanation of utilized symbols

The following symbols are used on the device or on the packaging:

	The CE mark indicates that the product complies with the European medical device directive 93/42/EEC.
	Catalogue- or reference number
	Serial number
	Manufacturer
	Date of manufacture
	Product bearing this symbol may not be disposed of together with general household waste, but instead requires separate disposal according to local provisions. (European Waste Electrical and Electronic Equipment Directive, WEEE)
	Temperature limits in °C for storage and transport
	Temperature limits in °F for storage and transport
	Humidity limitation for storage and transport
	Please read and follow the instructions for use and keep them for future reference (background color blue; foreground color white)
	Fragile, handle with care!
	Keep dry
	Interference may occur in the vicinity of equipment marked with the following symbol
	“Grüner Punkt” (country-specific)