



3. Low/High Frequencies:

duplex®, duplex® baby, duplex® neonatal, tristar®, ri-rap®:

By turning the chest-piece, the membrane (high frequencies) or the bell side (low frequencies) can be set.

When performing auscultation, it is essential to ensure that the surface adaptation is good. When measuring blood pressure, it is possible to push the chest-piece partly under the cuff with the membrane side showing downwards. It is possible to recognise immediately on the closed/opened bell outlet which side is active. After putting on of the binaural and slightly stroking across the membrane, it is possible to tell acoustically whether the membrane is active.

With **ri-rap®** model it is also possible to change the small membrane side alternatively to an open bell. The different bell sizes are to be found in the box with the accompanying replacement parts.



cardiophon 2.0, duplex® 2.0, duplex® 2.0 baby, duplex® 2.0 neonatal:

Our new models do have a special marking on the top side of the tubing connection showing the user which membrane is currently open.



4. Adjustment/Putting on of Binaurals

duplex®, duplex® baby, duplex® neonatal, tristar®, anestophon®, ri-rap®:

Please ensure that the binaural are adjusted to the anatomically correct angle, i.e. the binaural are to be worn such that they slightly sit in front (see Fig.A).

Fig.A

The angle can be adjusted by turning the binaural individually. The ear-tips sit correctly if they rest completely at the same angle as the external auditory canal and disturbing external noises are optimally blocked out. The soft **Riester** ear-tips are particularly well-suited for this reason.

In case the contact pressure of the binaural is too strong or too weak, proceed as follows:

In case contact pressure is too weak, take both binaural and press them together, as shown in Fig. B. In case contact pressure is too strong, take both binaural and expand them, as shown in Fig. C.



Fig. B



Fig. C

cardiophon 2.0, duplex® 2.0, duplex® 2.0 baby, duplex® 2.0 neonatal:

Binaural are anatomically correctly pre-adjusted during production, contact pressure however of binaural may be adjusted individually, (Fig. B and C), ear olives are pivotable and do have an extra-soft material. These characteristics lead to perfect sealing of the auditory canals from external noises and furthermore to no disturbing noise due to movement of ear olives inside the auditory canal even during movement of the stethoscope.

ATTENTION! Ear olives are not meant to enter too deeply into the auditory canal.

5. Exchanging the membranes:

duplex®, duplex® baby, duplex® neonatal, tristar®, anestophon®, ri-rap®:

In order to change the membranes, take the non-chill ring between thumb and index finger and pull it off the chest-piece. Place the non-chill ring with the flat side facing downwards on an even surface and place the membrane into the non-chill ring with the printed side facing upwards. Take the non-chill ring with the membrane and push it onto the chest-piece. For the chest-piece of **ri-rap®**, please unscrew the ring nut, put the membrane in and fasten the ring nut again. If membranes with a bulge are used, the bulge needs to point away from **ri-rap®** chest-piece.

cardiophon 2.0, duplex® 2.0, duplex® 2.0 baby, duplex® 2.0 neonatal:

In order to change the membranes, take the non-chill ring between thumb and index finger and pull it off the chest-piece. Place the new membrane onto the chest-piece with the printed side facing upwards, put the non-chill ring onto the chest-piece in correct position and push the non-chill ring onto the chest-piece with a semi-circular movement. Please make sure the membrane remains correctly placed inside its bordering and doesn't move.

6. Care instructions:

General Note

Cleaning and disinfection of medical products are meant to protect patients, users, and third persons and lead to value retention of medical products. Due to product design and materials used, there is no possibility to define the maximum limit of re-processing cycles. Lifetime of medical products is determined by its function and gentle use. Before sending back defective products for repair, the described re-processing cycles have to be applied and followed.

Cleaning and disinfection

Stethoscopes may be cleaned on the outside using a damp cloth until optical cleanliness is achieved. Wipe disinfection only according to the instructions of use of respective manufacturer of disinfectant. Only disinfectants with proven effectiveness in consideration of national guidelines should be used. After disinfection, please wipe the instruments using a damp cloth in order to eliminate eventual remains of the disinfectants.

ATTENTION!

- Clean ear olives regularly and check on its free passageway.
- Do never put stethoscopes into liquids!
- Stethoscopes are not meant to undergo machine-processed maintenance and sterilization. It may lead to irretrievable damages!
- Never use disinfectants based on phenol to clean and disinfect the stethoscopes.
- pH-value of used solvents has to be between 4.5 and 10.
- Never use stethoscopes without ear olives / membranes!

7. Storage and Transport conditions:

- Ambient temperature: -10°C to +40°C relative humidity: 30% to 70% non-condensating
- storage temperature: -10°C to +55°C relative humidity: 10% to 95% non-condensating

8. Maintenance

Riester stethoscopes and its accessories do not require special maintenance. Should the stethoscopes require checking for any reason, send it to us or an authorised **Riester** specialist dealer close to you, whom we will be pleased to specify upon request.

ENGLISH

1. Important Information Before Use:

You have purchased a high quality **Riester** stethoscope, which has been manufactured according to the guidelines 93/42 EEC and is subject to continuous quality control checks.

Significance of the symbol on the folding box:



ATTENTION, please see instruction manual!



The stethoscopes are latex-free.

Please read through the Instructions for Use carefully before using and keep them in a safe place. Please note that the perfect functioning of the stethoscope can only be ensured if original accessories from **Riester** are used.

2. Designated Use:

Stethoscopes are sound-conducting instruments to be used for auscultation of body and organ sounds, especially of heart and lung; meaning they are used in order to diagnose illness of internal organs.

In medical science, doctors or other trained medical professionals use a stethoscope in order to assess sounds and noises linked with the function of heart, lung and bowel. During blood pressure measurement, a stethoscope is used to capture Korotkow blood flow murmur (Korotkow sounds) leading to determination of systolic and diastolic blood pressure.

The **Riester** stethoscope range offers all prospects for perfect auscultation from adults to children up to neonates.

Gebrauchsanweisung

Stethoskope

Instructions

Stethoscopes

Mode d'emploi

Stéthoscopes

Instrucciones para el uso

Fonendoscopios

Istruzioni per l'uso

Stetoscopi

Инструкция по эксплуатации

Стетоскопы



Riester

Rudolf Riester GmbH

P.O. Box 35 | Bruckstraße 31 | DE - 72417Jungingen | Germany

Tel.: [+49] +7477-9270-0 | Fax.: [+49] +7477-9270-70

E-Mail: info@riester.de | www.riester.de