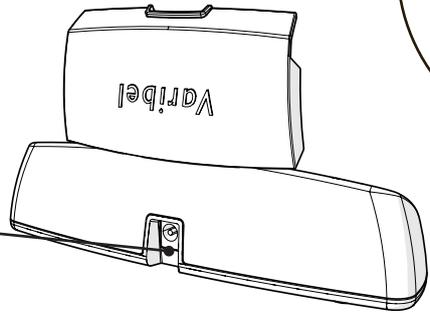
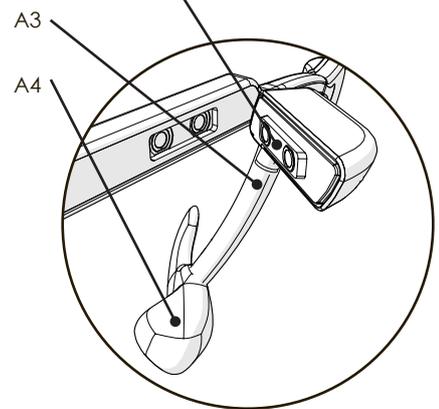
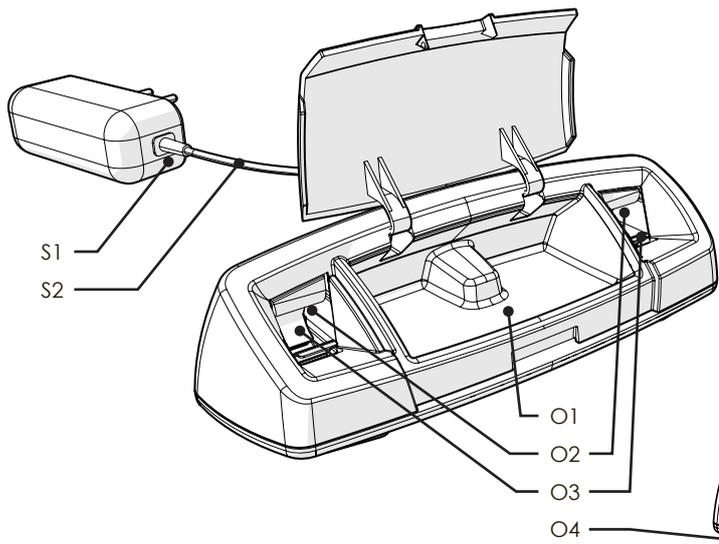
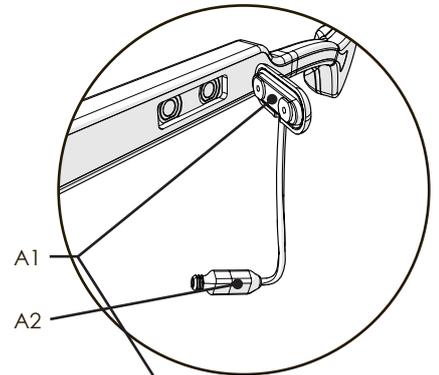
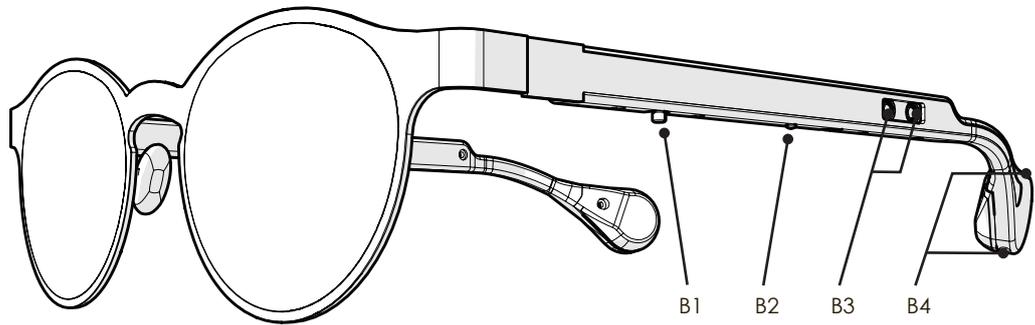




Varibel

Quattro Usermanual



Varibel user manual

Thank you for choosing the Varibel Quattro. We hope you enjoy your purchase. At Varibel we will do everything we can do to be of service.

Intended use

Generic air-conduction hearing instruments are wearable sound-amplifying devices intended to compensate for impaired hearing. The fundamental operating principle of hearing instruments is to receive, amplify, and transfer sound to the eardrum of a hearing impaired person. The intended use of the Varibel Quattro is the amplification of sound for hearing impaired adult persons with a mild to moderate hearing loss.

Product description

RIC (receiver in canal) (Ref Right: 3002, Left: 3003)

- A1 Magnetic connector
- A2 Receiver

Earconnector (Ref Right: 3022, Left: 3023)

- A1 Magnetic connector
- A3 Tube
- A4 Earpiece

Hearing Glasses

- B1 Push Button (On/Off/Switch programs)
- B2 Programming contact for hearing care professional
- B3 Magnet connector for Earpiece
- B4 Battery contact

Charger cradle (Ref 40001)

- O1 Storage
- O2 Status light
- O3 Charger connector
(Output 2V DC / 19 mA)
- O4 DC Connector-in for adapter cable
(Input 5V DC / 1.2 mA)

DC Adapter (Egston type P2EFMW3)

- S1 Adapter (Input 100-240 V AC / 50-60 HZ)
- S2 Adapter cable with DC plug
(Output 5V DC / 1.2A)

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Listen comfortably

The Varibel glasses house 4 tiny microphones that amplify the sound coming from the front and dampen the sound around you on each of its temples.

This allows you to hear the sound in the direction you're watching. Like this telephone calls are not being hindered by background noise, so you can experience the sensation of being able to listen again in a relaxed manner without effort. Listening in a relaxed manner is refreshing.

Hearing will take much less effort, which will result in you having more energy left at the end of the day.

Usage in short

First your Varibel authorized hearing care professional will completely adjust your Varibel hearing solution to your personal hearing condition. Afterward the daily use of your device is easy. After putting on the glasses and putting in your earpieces, click the magnetic connectors in place (A1 to B3). This activates the sound. When using the magnetic connector to remove the glasses the sound will automatically go off. At the front of the temple you will find a button (B1) that you can use to choose from three program modes.

You can also use the button to reduce the volume and mute the sound.

Before you go to bed in the evening you should put the glasses in the charger. The next morning the glasses are charged and ready for all-day usage.



Important

- Your hearing instruments should be stored within the temperature and humidity ranges of -40°C (-40°F) to $+63^{\circ}\text{C}$ (145°F) and up to 95% rH and up to 65% rH when stored for longer periods of time.
- Your hearing instruments are designed to operate beyond the range of temperatures comfortable to you, from very cold (-40°C (-40°F)) up to 50°C (122°F).
- The air pressure range between 500 and 1100 hPa is appropriate for usage, transport and storage of the hearing glasses.
- The air pressure range between 800 and 1100 hPa is appropriate for usage, transport and storage of the adapter and charging cradle.
- Don't submerge your devices in water or other liquids.
- Do not leave hearing instruments in the sun, near an open fire, or in a hot, parked car. or carry it outside in your bag when it's freezing.
- Do not wear hearing instruments while showering, swimming, in heavy rain, or in a moist atmosphere such as a steam bath or sauna.
- Should the hearing instrument become moist, place the hearing instrument in a closed container with a drying agent. Your hearing care professional can provide options for drying containers or kits.
- Remove the hearing instruments when applying items such as cosmetics, perfume, aftershave, hairspray, and suntan lotion.
- Use only original Varibel consumables e.g. tubes and domes. Never attempt to modify the shape of the hearing instrument, earmolds, or tubing yourself.
- Only connect your Varibel Quattro to Varibel accessories intended and qualified to be used with Varibel Quattro.
- Consult a hearing care professional if you think there may be a foreign object in your ear canal, if you experience skin irritation, or if excessive earwax accumulates with the use of the hearing instrument.
- Different types of radiation, from e.g. NMR, MRI, or CT scanners, may damage hearing instruments. It is recommended not to wear hearing instruments during these or other similar procedures. Other types of radiation, such as burglar alarms, room surveillance systems, radio

equipment, and mobile telephones, contain less energy and will not damage hearing instruments. However, they have the potential to momentarily affect the sound quality or temporarily create strange sounds from hearing instruments.

- Do not wear hearing instruments in mines, oil fields, or other explosive atmospheres, or oxygen enriched atmospheres unless those areas are certified for hearing instrument use.
- Do not use the device near flammable agents or flammable anaesthetics environments.
- Do not allow others to use your hearing instruments. This may cause damage to the hearing instruments or to the hearing of the other individual.
- Instrument usage by children or mentally challenged persons should be supervised at all times to ensure their safety. The hearing instrument contains small parts that could be swallowed by children.
- Please be mindful not to leave children unsupervised with this hearing instrument.
- Hearing instruments should be used only as prescribed by your hearing care professional. Incorrect use may result in hearing loss.
- Warning to hearing care professionals: Special care should be exercised in selecting and fitting hearing instruments with maximum sound pressure level that exceeds 132dB SPL with an IEC 60711:1981 occluded ear simulator. There may be a risk of impairment of the remaining hearing.
- If the device is broken, do not use it.
- Please only use accessories provided by Varibel. External devices connected to the electrical input of the Charger cradle must be safe according to the requirements of IEC 60601-1-1, IEC 60065, or IEC 60950-1, as appropriate.
- In very rare cases, the dome can remain in your ear canal when removing the hearing tube from the ear. In the unlikely case that the dome does get stuck in your ear canal, it is strongly recommended to see a physician for safe removal.
- Your hearing instruments are classified as a Type B applied part under the IEC 60601-1 medical device standard.
- Do not drop your Varibel. This can damage the lenses and/or the electronics.
- Do not allow metal objects such as coins,

necklaces or rings to touch the gilded parts of the connectors of the glasses. This can damage the electronics.

- The glasses and the connection of the earpiece contain magnets. Please make sure not to keep cards with magnetic strips nearby these magnets as this might lead to the loss of data of the cards.
- As a safety measure always turn your Varibel hearing aid in position 1; "Quiet surroundings" when in traffic, so you can hear the sounds coming from all directions.
- Use your Varibel at least a few hours per day so you can get used to your Varibel quickly and so you will have the greatest hearing improvements.
- If you are not using the Varibel always return the glasses to the charger so that the batteries will always be charged.
- Keep your Varibel out of reach of children.
- When storing your Varibel Quattro for a longer period without using, please store the hearing glasses in the provided glasses case, store the Earpieces in the appropriate compartment in the charger cradle and unplug the adapter.

- The Charger cradle and adapter are suitable for dry, indoor use only.
- Please consider the environment: when not using the charging cradle, unplug the adapter from the socket outlet.
- Make sure the adapter and charging cradle are freely accessible when connected to a socket outlet.
- If you encounter any defects with the hearing glasses, the charging cradle or the adapter. Please contact your hearing care professional or the manufacturer directly. Please do not attempt to modify or repair anything yourself.



IMPORTANT:

- **If you are having your glasses corrected by your hearing care professional or optician please let them know that the glasses should not be heated or cleaned ultrasonically.**

Charging



Note: Please only use accessories provided by Varibel.

Insert the plug of cable S2 into socket O4 of the charger. Place the charger on a table or other flat surface, such as your bedside table. Now you can plug the adapter S1 in the wall socket. The status lights on the charger should light up bright green. This means that the charger is ready for charging. You can then place the rounded backs of the temples (with the contacts B4) into the charging slots of the charger and put the glasses on the table.

The status lights will start blinking green, indicating that the batteries of the glasses will be charged.

If the glasses are finished charging the status lights will go off. Charging takes about 6 hours. You can leave the glasses in the charger longer without any problem. Charged glasses have enough energy for a whole day's use (18 hours).

If you have glasses with a hearing aid on only one side, it takes about seven seconds before the glasses begin to charge.

Putting on and removing glasses

First you can put on your glasses and then insert the earpieces, or you can do it vice versa; whatever you prefer. Your hearing care professional has cut the tubes of your earpieces to size, so that the contacts B3 of the glasses and contacts A1 of the connection are located opposite from each other. By moving the connector towards the earpiece with your hand the connectors will click into place automatically. This activates the sound. Make sure your hair does not get caught in between the connectors. The same applies to the RIC A2.

When removing the glasses you disconnect the connectors and earpieces which will deactivate the sound. You can then take off your earpieces.

Program Modes

With the B1 button you can choose from three different modes.

The possible programs that you can select with your hearing aid are position 1, 2 and 3 are:

- Indoor + Outdoor (bit sensitive for direction). This is the universal program that lets you hear undisturbed in many circumstances. Includes wind noise suppression.
- Inside (Omni). This program is for peaceful areas.
- Speech in noise (highly directional). Allows you to hear directional in noisy conditions.
- Loop* (T). You hear only through the loop.
- Loop* (MT). You will hear from both the loop and through the hearing aid.

- Telephone: You can listen to the phone via the front microphones of the glasses.
- Disabled. This program mode is not used.

On page 16 is indicated what programs your hearing has been programmed for you. When you press the button you go to the next position. You will hear one (position 1), 2 (position 2) or 3 (position 3) beeps that indicate which mode you have selected.



IMPORTANT:

Always make sure that your left and right temples are in the same position!

** Telecoil (loop): Many places, such as theatres, houses of worship, and schools are equipped with tele-loop systems. When using a telecoil program with tele-loop systems, sound is picked up directly and may improve speech understanding.*

Volume

The Varibel Quattro has an automatic volume control. This is set by your hearing care professional. If certain sounds are too loud or too soft, ask your hearing care professional to adjust the settings.

If you come into an environment where you want to turn the sound softer then you can do so with the B1 button. By holding the button until you hear a beep (after about a second) the volume goes one step down.

When you want to hear the sound at normal levels again you should hold the button again. You will hear a soft beep again. When you only press the button briefly the volume also goes back to normal levels, but it will also take you to the next program mode.

Turning on and off

To turn off: You can mute your Varibel hearing aids by pressing the B1 button for five seconds. You will hear five short beeps. After the button is released the sound turns off.

To turn on: By briefly pressing the B1 button again you will hear a short beep. This is program 1.

Battery empty indication

The Varibel hearingaids will notify you when its battery is running low with three short beeps. The glasses will have to be recharged before they can be used again.

Maintenance and cleaning

Glasses

- Only clean your Varibel lenses with special wipes for glasses. Using other tissues such as paper towels or kitchen paper could cause scratches.
- Clean the magnetic connectors by lightly moistening a cloth with water with a drop of detergent dissolved therein. Absolutely do not use alcohol!
- Clean the frame of your glasses with a lightly moistened cloth.

Connection and earpieces

- Depending on your specific hearing needs, your hearing care professional will choose a RIC or Earconnector for you.
- Clean your earpieces regularly. Check for damages and contamination on a daily basis. Separate your earpieces from the tubes and let them soak in warm soapy water for 15-20 minutes. You can also buy special cleaning products from your hearing care professional (liquid or tablets). Then rinse them under the tap, and clean and dry the canals. The ear piece and tubing must be completely dry

before they are attached to the sound rump A3 again.

- Slide the tubing as far as possible over the edge of the earpiece and the sound rump A3 when attaching it.
- Your hearing care professional can replace the tube if it becomes hard or if it doesn't fit on the earpiece or sound rump A3 properly.
- For Life Shell earpieces you cannot disconnect the tube from the earpiece. With the Life Shell earpieces you detach the tubing from the ear connector. The earpiece is connected with the tube. The earpiece and the associated tube can be cleaned in warm soapy water. The RIC A2 should NOT be cleaned with soapy water.



Charger cradle
Before cleaning: Unplug the charger cradle. Clean the charger twice a month using a lightly moistened cloth with water containing a dissolved drop of dishwashing liquid. The metal part can be cleaned with this as well. Absolutely do not use alcohol!

Battery replacement

The special rechargeable batteries are located in the curves at the back-end of the temples.

Using your hearing glasses in loud environments or at high amplification settings will typically drain batteries faster.

It is however normal for rechargeable batteries to lose capacity during its lifetime.

For a guaranteed good effect the batteries need to be replaced once per year.

Please visit your hearing care professional for this, the device may only be repaired by an authorized service center.

Safekeeping

Keep the Varibel hearing solution in the charger in a dry place at room temperature. Protect your glasses from materials such as sand or metal that may cause scratches. Make sure that no metal objects come in contact with the connectors.

Travelling

If you plan to travel for more than one day, you shouldn't forget to bring your charger and adapter. In different countries there are different sizes of sockets. You can purchase a plug that fits many different sockets for this purpose. The Varibel adapter is suitable for 100-240 V / 50-60 Hz power sockets only.

Possible side effects use of earpieces

By wearing the earpiece, it is possible that skin irritation occurs in the ear, or that there's increased formation of cerumen (ear wax). In this case you should consult your doctor.

Tips

- Make sure your right and left temple are always in the same mode.
- Are you not wearing your Varibel hearing aid temporarily? Then put it in the charger. The batteries will run empty. Moreover, the batteries will last longer if you do this.
- Do some sounds sound too sharp or too dull, or are some sounds too soft or too hard? Ask your hearing care professional to adjust the settings.
- Does your hearing aid whistle regularly? Then it could be that the tube is outdated or that your ear canal is blocked; consult your hearing care professional.
- Going on a trip? Do not forget to take your charger and adapter plug with a suitable plug.

Troubleshooting

Problem	Solution
Some sounds sound too dull or too sharp	Ask your hearing care professional to adjust the settings.
Some sounds sound too loud or too soft	Ask your hearing care professional to adjust the settings.
Sometimes I hear a whistling sound	Make sure that the tube is pulled correctly over the sound rump A3 and carefully place the earpiece in your ear. If it doesn't work the tube might be outdated, or your ear canal is blocked. Consult your hearing care professional.
The glasses aren't charging properly	Possibly the temples are bent. Consult your hearing care professional.
The glasses make a crackling sound	Clean the connectors A1 and B3 carefully.
The glasses don't give any sound	See if the connector A1 is placed on the glasses correctly. Press the button B1 to select a new program mode. If this doesn't solve the problem charge the glasses for 15 minutes and see if the lamps start to blink. Now check the sound.
A leaking battery (extremely rare)	Do Not use the device. Ask your hearing care professional to replace the battery immediately.

Information and service

If you have any questions or problems you can consult your hearing care professional as well as Varibel.

At Varibel we would like to talk to you.
Please call us at:
+31 26 3795469

You can also visit us at:

Varibel Innovations BV
Jansbinnensingel 10A
6811AJ Arnhem
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You can also email to info@varibel.com



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Technical information

Maximum output (2cc coupler) OSPL 90 (Acc. to IEC 60118-7)	128 dB SPL
Full-on gain (2cc coupler) Input: 50 dB SPL (Acc. to IEC 60118-7)	57 dB
Weighed directivity index	8.2 dB
Frequency adjustment	32 channels

Adapter specifications:

Egston type P2EFMW3 DC adapter
Input: 100-240 V AC / 50-60 Hz / 145mA
Output: 5 V DC / 1.2 mA

Charging Cradle specifications:

Varibel type 40001
Input: 5 V DC / 1 mA
Output: 1.2 V DC / 19 mA

Hearing aid battery specifications:

NiMH battery type V60, 1.2V 70mAh
(rechargeable)

Your personal settings

Your hearing care professional has programmed the follow programs in your glasses:

Mode 1: _____

Mode 2: _____

Mode 3: _____

Additional comments from your hearing care professional:

.....

.....

.....

.....

.....

.....

Information and explanation of symbols



With the CE symbol, Varibel Innovations BV confirms that this Varibel product – including accessories – meets the requirements of the Medical Devices Directive 93/42/EEC. The numbers below the CE symbol correspond to the code of certified institutions that were consulted under the above-mentioned directives.



This symbol indicates that the products described in these user instructions adhere to the requirements for an application part of Type B of EN 60601-1. The surface of the hearing aid is specified as application part of Type B.



This symbol indicates that it is important for the user to read and take into account the relevant information in these user guides.



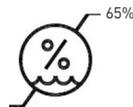
This symbol indicates that it is important for the user to pay attention to the relevant warning notices in these user guides.



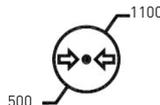
During transport or storage, the temperature should not exceed the limit values of $-40^{\circ}/63^{\circ}$ Celsius.



The device should be kept dry at all times during use, transport or storage.



During transport or storage, the relative humidity should not exceed the limit value of 65% for a long period of time.



The air pressure range between 500 and 1100 hPa is appropriate for usage, transport and storage of the hearing glasses.



The symbol with the crossed-out garbage bin is to make you aware that this hearing aid may not be thrown away as normal household waste. Please dispose of old or unused hearing aids, at waste disposal sites intended for electronic waste, or give your hearing aid to your hearing care professional for disposal. Proper disposal protects the environment and health.

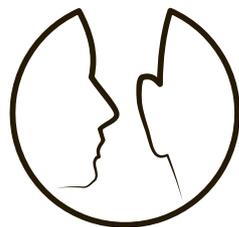


This symbol indicates the name of the manufacturer.



2015

This symbol indicates the year of production of the device.



**F O
C U S**

**O N H E
A R I N G**

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