# Instructions for Use BEHIND-THE-EAR HEARING AIDS Micro BTE



Chronos



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Congratulations on the purchase of your new Bernafon hearing aid. Your hearing care professional has adjusted your hearing aid to meet your needs. With a little practice, you will soon be on your way to better hearing.



Please read the entire contents of this booklet before using your hearing aid. It contains instructions on how to use and how to handle your hearing aid and batteries. It also contains important safety information.

# Indications for Use

The hearing aid is intended to amplify sound to compensate for the loss of hearing.

It compensates for mild to severe hearing loss as defined by the American Speech-Language-Hearing Association (ASHA).

Model Overview

The following Bernafon hearing aid models are covered within these instructions for use:

# Chronos 9|7|5

- CN9 M, with wireless functionality
- CN7 M, with wireless functionality
- CN5 M, with wireless functionality

# Dome Overview

Domes are earpieces used to secure the Spira Flex thin tube in your ear canal and to protect the sound outlet from wax.

Open Dome	Tulip Dome	Dome, Large Vent	Dome, Small Vent	Power Dome
20		Ó	Ó	

# General Warnings and Safety Information

Hearing aids and batteries can be dangerous if swallowed or improperly used. Improper use can result in severe injury, permanent hearing loss, or even fatality. Before you use your hearing aid, please read the following hazard warnings.

### Hazard Warnings

#### Warnings for Hearing Aid Users

- Never allow others to wear your hearing aid. It could permanently damage another person's hearing.
- Avoid wearing your hearing aid while playing contact sports (e.g., rugby, football, etc.).
  A slap to your ear while wearing a hearing aid could be harmful.

- Keep your hearing aid, parts, and batteries out of the reach of infants, children, and anyone who might swallow these items
- ▲ Discard batteries safely. Keep discarded batteries out of sight of infants, small children, vulnerable persons, and pets.
- Clean your hearing aid (including parts) on a regular basis, as recommended by your hearing care professional. Microorganisms from an unclean hearing aid may cause skin irritations.
- A Be careful of leaking battery liquid. Battery liquid is a hazardous substance.
- A Never try to recharge non-rechargeable batteries

- A Never change the battery, or adjust the controls of the hearing aid, in front of infants, small children, and vulnerable persons
- Be aware of the possibility that your hearing aid may stop working without notice. Keep this in mind when you depend on warning sounds (e.g., when you are in traffic).
- A Be aware of the possibility that the directional microphone in your hearing aid may reduce the volume of some warning sounds coming from behind you
- Remove your hearing aid before applying aftershave, hairspray, oils, perfume, mosquito repellent, lotions, etc. If your hearing aid is exposed to such a product, allow the product to dry before you put your hearing aid on.

### Warnings to Hearing Care Professionals and Users

- ▲ Take special care when fitting and using a hearing aid with maximum sound pressure capability in excess of a maximum of 132 dB SPL (IEC 60318-4). In this case, there may be a risk of damaging the hearing aid user's hearing.
- ▲ Only connect hearing aids with Direct Audio Input (DAI) to electrically powered devices that comply with EN 60601-1-1, EN 60065 or equivalent safety standards. The external signal source determines the safety of hearing aids with DAI.

## Safety Information

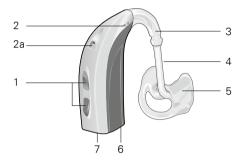
- Only use hearing aids as directed
- Hearing aids should be adjusted by a trained hearing care professional
- Misuse or improper adjustments can result in sudden and permanent hearing loss
- Hearing aids will not restore normal hearing or prevent hearing loss resulting from organic conditions
- Never put your hearing aid or batteries in your mouth
- Keep batteries away from medications. Batteries can easily be mistaken for pills.
- See a doctor immediately if a battery or hearing aid is swallowed
- Be aware that hearing aid use may cause excess ear wax to build up in the ear canal
- Excess ear wax may require removal by a trained medical professional
- See a doctor immediately if your hearing aid or earmold causes a discharge from the ear or allergic reaction

- See your hearing care professional if you experience discomfort or irritation of your ear
- Never insert cleaning tools into the sound outlet or microphone inlet. This could damage the hearing aid.
- Do not expose your hearing aid to extreme heat by leaving it in the car, near a radiator, etc.
- Do not wear your hearing aid while swimming, snorkeling, or diving. Your hearing aid is not designed for such activities.
- Do not immerse your hearing aid in water or other liquids
- · Remove your hearing aid before sleeping
- Keep your hearing aid in the case for protection when you are not wearing it

# Hearing Aid Description

## Micro Model

Option A: with earhook

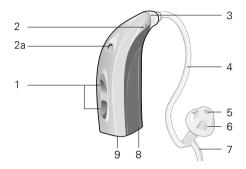


- 1 Multi Control
- 2 Microphone
- 2a Second microphone
- 3 Earhook

- 4 Earmold tubing
- 5 Earmold
- 6 Battery door
- 7 Direct Audio Input (with an optional DAI adapter)

### Micro Model

Option B: with Spira Flex thin tube system



- 1 Multi Control
- 2 Microphone
- 2a Second microphone
- 3 Adapter
- 4 Spira Flex thin tube

- 5 Sound outlet
- 6 Dome
- 7 Ear grip
- 8 Battery door
- 9 Direct Audio Input (with an optional DAI adapter)

# Battery Size

Your hearing aid uses a size 312 battery.

# Step-by-Step Instructions for Using Your Hearing Aid

# Step 1: Inserting the Battery

• Gently swing the battery door fully open, but do not force it (A)

В

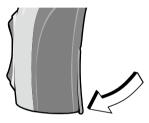
- · Remove the sticker from the new battery (B)
- Place the battery into the empty compartment. The + sign on the battery should face up. (C)





# Step 2: Turning the Hearing Aid ON

Close the battery door completely. You should notice a click. The hearing aid is now ON.



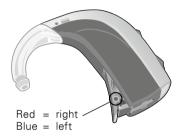
Click "ON"

i Never use excessive force to open or close the battery door.

### Step 3: Inserting Your Hearing Aid

Your hearing aid has been programmed individually for your right or left ear.

You will see a color marking inside the battery door. This can help you to distinguish between the left and right hearing aid.



#### Step 3a: Inserting Your Hearing Aid with an Earmold

- When inserting the right earmold, hold it with the right hand. When inserting the left earmold, hold it with the left hand.
- Hold the earmold so that the canal part is pointing at the ear canal entrance and the frame of the earmold is pointing straight up
- Insert the canal part into the ear canal aiming slightly up and back, not straight into the ear. Then twist back slightly to press the frame of the earmold into the hollow part of the ear.



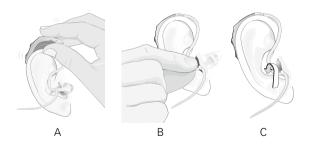
- Run your finger down the skin just in front of your ear. If you feel any plastic parts of the earmold, it is not inserted correctly. Gently push the plastic back and behind the top fold of your ear. The earmold should seal into all folds of the ear.
- Then tuck the hearing aid over/behind your ear, making sure that the tubing is not twisted



i It takes patience and practice to insert your earmold correctly. If you have difficulty, please consult your hearing care professional.

# Step 3b: Inserting Your Hearing Aid with a Spira Flex System

- · First, position the hearing aid behind your ear (A)
- Grasp the bend of the thin tube. Gently push the dome into your ear canal until the tube rests against the side of your head. (B)
- · Push the ear grip into the bowl of your ear (C)
- If the thin tube is sticking out from your ear, insert the dome further. If the ear grip is sticking out, it has not been positioned correctly. Try adjusting it again.

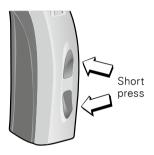


i If the dome is not securely attached to the thin tube, it could fall off in your ear canal. If this happens, please see your medical practitioner.

# Step 4: Changing the Volume

To increase the volume, press the upper button on the Multi Control (a short press: less than 1 second). Repeat until you reach the desired loudness.

To decrease the volume, press the lower button on the Multi Control (a short press: less than 1 second). Repeat until you reach the desired loudness.

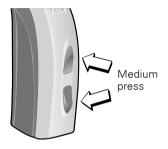


The hearing aid will click to confirm that the volume has been changed and then will beep when you reach the programmed maximum or minimum.

Your hearing aid automatically returns to a preset loudness level when it starts, when the battery is low, or when the program is changed. If you find that the volume is not adequate, your hearing care professional may need to adjust your hearing aid settings.

# Step 5: Changing the Programs

A medium press (about 1 second) on either the upper or lower button on the Multi Control will change the program. The number of beeps you hear will tell you which program you are in.

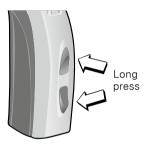


Up to 4 listening programs can be configured by your hearing care professional depending on your hearing aid. Please ask your hearing care professional about the programs that are available with your hearing aid.

## Step 6: Muting Your Hearing Aid

Your hearing aid may have the mute function. Please ask your hearing care professional if this function is available with your hearing aid.

A long press (about 2 seconds) on either the upper or lower button on the Multi Control will cause your hearing aid to mute.



To un-mute the hearing aid, give any control on the hearing aid a push.

**1** Do not use the mute function to turn off the hearing aid. In this mode, the hearing aid is still drawing current from the battery.

# Step 7: Removing Your Hearing Aid

#### Step 7a: Removing Your Hearing Aid with an Earmold

- · Lift the hearing aid from your ear first
- Push the back of your ear with your thumb to loosen the frame of the earmold, then use your index finger to remove it
- Grasp the frame of the earmold and twist it forwards
- Gently pull the earmold straight out of the ear, holding on to the frame of the mold

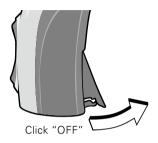
# Step 7b: Removing your Hearing Aid with a Spira Flex System

- Grasp the bend of the thin tube and gently pull the tube and dome out of your ear
- · Lift the hearing aid from behind your ear

**1** Do not remove the earmold, or thin tube and dome by pulling on the hearing aid. This could disconnect the hearing aid from the earmold or from the thin tube.

### Step 8: Turning the Hearing Aid OFF

Open the battery door slightly until a click is felt. The hearing aid is now OFF.



#### Step 9: Changing the Battery

When the battery is running out, the hearing aid will beep at regular intervals. You should be prepared to replace the battery. The time until the hearing aid stops working depends on the battery type and manufacturer. Mercury-free batteries generally cause earlier warning beeps.

# Features of Your Hearing Aid

The following features may be activated in your hearing aid. Please consult your hearing care professional to find out how your hearing aid is configured.

Telecoil helps you hear better when using a telephone or in buildings where inductive loop systems are installed.



This symbol or a similar sign should be displayed wherever a permanent loop has been installed.

- □ **Auto Telephone** can be automatically activated eliminating the need to access a dedicated phone program with the push button.
- Direct Audio Input (DAI) adapter allows your hearing aid to receive signals directly from external sources such as TV, personal stereos, etc.
- FM receiver allows your hearing aid to receive signals directly from an external wireless FM transmitter.

# Caring for Your Hearing Aid

Healthy ears produce a waxy substance that can clog your hearing aid. Please follow these cleaning instructions to prevent wax build-up and ensure optimal performance of your hearing aid.

For further information on the care of your hearing aid, please consult your hearing care professional or watch our instructional videos, available on our website www.bernafon.com in the section "Our Products".

#### **General Care Instructions**

Treat your hearing aid like any other delicate electronic device (check the safety guidelines on page 8) and make sure that the hearing aid does not come in contact with moisture or water.

- Always clean and dry your hands thoroughly before handling the hearing aid
- Do not use your hearing aid without a dome or mold
- Never mount a used dome on the Spira Flex thin tube

# **Daily Care Instructions**

- Check your hearing aid for ear wax and wipe it clean with a cloth or tissue
- If necessary, use the cleaning tool to remove wax from the canal and vent openings on your earmold or dome
- · Open the battery door fully to allow air to circulate
- A dry storage kit is recommended to remove any moisture that may have accumulated in the hearing aid. Always remove zinc-air batteries before drying your hearing aid with a drying kit. Drying out zinc-air batteries shortens their lifetime.

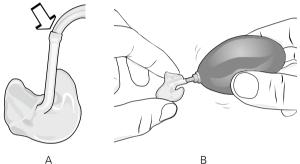
### **Specific Care Instructions**

### A: How to Clean Your Earmold

You should wash your earmold regularly. However, the hearing aid itself must never be washed or allowed to get wet!

- Handle your hearing aid over a soft surface to avoid damage in case you drop it
- Disconnect the earmold from the hearing aid by grasping the end of the hook firmly with one hand and grasping the tubing firmly with the other hand (A)

- · Pull the tubing away from the earhook
- · Gently clean the **earmold** in warm soapy water
- · Rinse the earmold and allow it to dry completely
- Use an air puffer to remove any remaining moisture in the tubing (B)
- · When re-attaching the earmold to the hearing aid, it is important to position it correctly

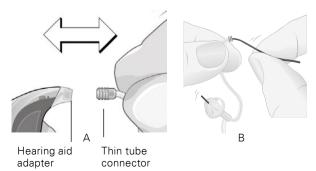




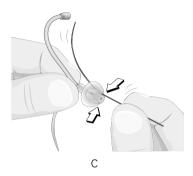
## B: How to Clean the Spira Flex Thin Tube

If you have the thin tube system, make sure that the tube and dome are kept free of ear wax at all times.

- Grasp the adapter firmly and disconnect the thin tube connector from the hearing aid adapter by pulling it off (A)
- Use a soft dry cloth or tissue to clean the outside of the thin tube and dome
- To remove wax from the thin tube, insert the cleaning wire at the connector end. Push the wire all the way into the thin tube until it comes out through the dome. (B)
- Pull the cleaning wire out through the dome and discard it (B)
- Reattach the thin tube connector to the hearing aid adapter by pushing the thin tube connector into the hearing aid adapter (A)



• If your hearing care professional has selected a vented dome for your hearing aid, use the cleaning wire to remove the wax from the vents (C)

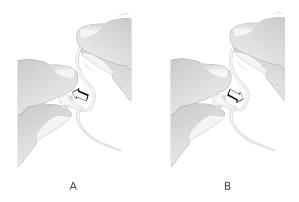


**i** To avoid blocking the thin tube, do not use water to clean it.

### C: How to Exchange the Dome

Inspect your hearing aid's dome for yellowing, hardening and cracks. In the case of these changes, consider replacing your dome or contacting your hearing care professional. Spare domes may be obtained from your hearing care professional.

- Clean your hands thoroughly before replacing the dome. Never change the dome with wet or dirty fingers.
- Remove the old dome by pulling it off the end of the thin tube (A)
- Push a new dome as far as possible onto the thin tube. When attached correctly, the dome should touch the plastic ring around the thin tube. (B)

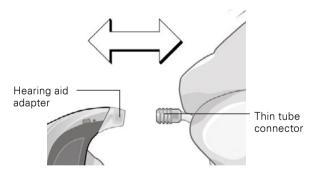


- i If the dome is not securely attached to the thin tube, it could fall of in your ear canal. If this happens, please see your medical practitioner.
- **1** Never remount a used dome on the thin tube. A remounted dome is more likely to fall off in the ear canal.

### D: How to Exchange the Thin Tube

If the thin tube becomes discolored, stiff or brittle, it should be replaced.

- Hold the hearing aid by the hearing aid adapter and grasp the thin tube close to the connector
- · Pull firmly to remove the old tube
- Attach the new thin tube by pushing it firmly into the connector



## Common Problems and Solutions

### Hearing aid whistles or squeals

Check that the earpiece is inserted correctly. If this is the case and the hearing aid still whistles or squeals, please consult your hearing care professional.

### No volume, level too soft or humming noise

Check if the volume level is too soft and adjust by increasing the volume level with the control on your hearing aid. If you have no volume at all, check whether the hearing aid is in mute position. If the problem still occurs, check that the battery door is closed completely. Also check if the battery is inserted correctly. If the problem still remains, change the battery. If the problem still persists, contact your hearing care professional.

## Whirring noise, fading, weak or motor-boating sounds

Open and close the battery door several times or clean the battery contacts carefully with a dry cotton swab. If the problem still occurs, change the battery. If the problem still remains, contact your hearing care professional.

## Hearing aid switches from ON to OFF periodically

Your battery is running down. Please change the battery.

### Hearing aid beeps without any action from you

Your battery is running down. Please change the battery.

### Other problems with your hearing aid

If other problems occur with your hearing aid which are not listed, contact your hearing care professional.

## Accessories

Bernafon offers a wide range of optional accessories that may be purchased to enhance your hearing aid. Depending on the hearing aid family and local regulations, the following accessories are available:

- Remote control
- SoundGate communication device (for wireless connection to mobile phones, music players, etc.)
- SoundGate Mic (for wireless external microphone connection)
- TV Adapter (for wireless connection to your television via the SoundGate)
- Phone Adapter (for wireless connection to your landline phone via the SoundGate)
- DAI and FM Adapters
- Tamper-resistant battery door (recommended when fitting infants, small children, and vulnerable persons)
- Cleaning and drying kit

## For further information on accessories, please contact your hearing care professional.

# Product Approval, Markings and Compliance

All Bernafon hearing aid models covered by these instructions for use comply with international standards concerning electromagnetic compatibility. Due to the limited size available on the hearing aid, all relevant approval markings are found in this document.

### **Electromagnetic Interference**

Your hearing aid has been thoroughly tested for electromagnetic interference. However, some products may emit electromagnetic energy causing unforeseen interference with hearing aids. Examples include induction cooking appliances, shop alarm systems, mobile phones, fax machines, personal computers, X-rays, CT scans, etc. Even though your hearing aid is designed to comply with the most stringent international standards of electromagnetic compatibility, it may emit electromagnetic energy that can cause interference with other devices.

Your hearing aid contains a radio transmitter using short range magnetic induction technology working at 3.84 MHz.

The magnetic field strength of the transmitter is  $< -42 \text{ dB}\mu\text{A/m}$  @ 10 m.

The electromagnetic emission from the radio system is well below international limits for human exposure. By comparison, the electromagnetic energy of the hearing aid is lower than that generated by household items such as halogen lamps, computer monitors, dishwashers etc.

## Cell Phone and Hearing Instrument Compatibility

Some hearing instrument users have reported a buzzing sound in their instruments when they are using cell phones, indicating that the cell phone and hearing instrument may not be compatible.

The compatibility of a particular hearing aid and cell phone can be predicted by adding the rating for the hearing aid immunity to the rating for the cell phone emissions (ANSI C63.19-2006 American National Standard Methods of Measurement of Compatibility between Wireless Communication Devices and Hearing Aids).

For example, the sum of a hearing aid with a rating of 2 (M2/T2) and a telephone with a rating of 3 (M3/ T3) would result in a combined rating of 5. According to the standard, any combined rating that equals at least 5 would provide "normal use"; a combined rating of 6 or greater would indicate "excellent performance." The immunity of all Bernafon hearing instrument models covered by these instructions for use is at least M2/T2. The equipment performance measurements, categories and system classifications are based upon the best information available but Bernafon cannot guarantee that all users will be satisfied.

# Compliance with Requirements for Europe

All devices covered in these instructions for use are in conformance with the requirements of the Directive 93/42/EEC of the Council of the European Communities concerning medical devices, MDD. This is certified by applying the following marking:

## **CE** 0543

All devices with wireless functionality also comply with the essential requirements of the Directive 1999/5/EC of the European Parliament on radio equipment and telecommunications terminal equipment, R&TTE. It operates as an inductive application in a harmonized frequency band according to the Commission Decision 2008/432/EC and may be used in all member states of the EU and EFTA. This is certified by applying the following marking:

## **C E** 0682

Declaration of conformity is available at: Bernafon AG Morgenstrasse 131 3018 Bern Switzerland Compliance with Radio Communications Requirements for the USA and Canada

### Bernafon AG

Chronos hearing aid models: CN9 M, CN7 M, CN5 M FCC ID U6XFUBTE02 IC: 7031A-FUBTE02

Statement of compliance:

This device complies with part 15 of the FCC Rules and RSS-210 of Industry Canada. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus complies with Canadian ICES-003.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experience radio/TV
- technician for help.

## International Warranty

Your hearing aid has a limited warranty, covering defects in materials and workmanship.

This warranty covers the hearing aid itself, but not accessories such as batteries, tubing, earmolds, etc.

This warranty is void if a defect is the result of misuse or mistreatment. The warranty is also void if the hearing aid has been repaired by nonauthorized service personnel.

Please review the warranty with your hearing care professional.

**1** Changes or modifications not expressly approved by Bernafon AG could void the user's authority to operate the equipment.

Date:	Model:	
Warranty period:		
Model L:	Model R:	
Serial no.:	Serial no.:	
Battery size:	Battery size:	
Hearing Centre		

## Notes

## Notes

# Information and Explanation of Symbols

## **CE** The CE conformity marking indicates conformance to all applicable European Directives



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

IP57 This symbol indicates the class of protections against harmful ingress of water and particulate matter according to EN 60529:1991/A1:2000. IP5X indicates dust protection. IPX7 indicates the protection against the effects of temporary immersion in water.



This sign indicates important safety information that must be observed to minimize risks or to avoid hazardous situations



Important information for handling and product safety



The crossed-out wheeled bin indicates that the European Directive 2002/96/EC on waste of electronic equipment applies. Please recycle your hearing aid and batteries according to your local regulations or return them to your hearing care professional for disposal.

#### **OPERATING CONDITIONS**

The product is designed such that it functions without problem or restrictions if used as intended, unless otherwise noted in these instructions for use

#### TRANSPORT AND STORAGE CONDITIONS

During transport or storage, the temperature should not exceed the limit value of -25°/60° Celsius (-13°/140° Fahrenheit)

### Service

If none of the actions listed on the previous pages solve the problem, contact your hearing care professional.

## Do not attempt to repair your hearing aid yourself.

Place stamp with dispenser name and address here:

143704/US

## Technical Data BEHIND-THE-EAR HEARING AIDS Micro BTE



Chronos

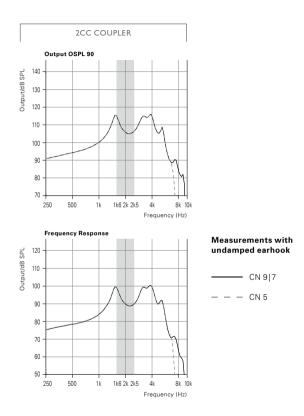
### Micro

	2CC COUPLER <sup>1)</sup> , EARHOOK	
	CN 9 7	CN 5
OSPL 90, HFA (dB SPL)	107	107
Full-on Gain, HFA (dB)	42	42
Reference Test Gain (dB)	31	31
Frequency Range (Hz)	140-7300	150-6500
Distortion 500/800/1600 Hz (%)	<2/<2/<2	<2/<2/
Equivalent Input Noise, dB(A)	24	24
Operating Current (mA)	1.4	1.3
Telecoil HFA SPLITS (dB SPL)	86	86

#### Additional Information

<sup>1)</sup>Technical data measured with expansion, corresponding to the test box measurement settings.

"2cc" refers to a coupler according to IEC 60318-5. Applied standard: ANSI S3.22:2009.



< > 8,15 mm



< > 9.0 mm

#### Canada

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