



Panasonic®

Operating Instructions Hearing Hub

Model No. **WH-0M1101A**

Before Use

Operations

Reference

Thank you for purchasing a Panasonic Hearing Hub. This product is a Bluetooth® device, designed to act as a medium between Panasonic's wireless digital hearing instruments and other electronic devices like Bluetooth® enabled mobile phones and external audio sources. The two main purposes of audio streaming are phone usage and audio entertainment including digital audio players and TV. The Hearing Hub delivers crystal-clear sound directly to your hearing instruments wirelessly. Further, the Hearing Hub allows you to change the volume level and switch memory programs of your hearing instrument wirelessly.

Please be aware that you cannot use your wireless digital hearing instrument and Hearing Hub in the following cases:

- Outside the United States
- While in flight
- If you are fitted with a cardiac pacemaker.

For safe and reliable operation, it is important that you read this manual thoroughly and fully understand the operating procedures before attempting to set up and operate the Hearing Hub. Failure to follow the operating instructions may result in poor performance of the product or even can result in serious and sometimes permanent bodily injury.

If you have any questions, consult the dispenser where you purchased your hearing instrument and Hearing Hub.

The Limited Warranty document is enclosed together in the package. Keep it in a secure place. Make sure that it is properly completed, signed with the authorized dispenser's name, and filled in with date of original purchase, name of dispenser and other important information.

Wireless connection To dispensers

Before Use

Product	Model
R1-W series	WH-R17C, WH-R15C, WH-R13C

For wireless connection between the Hearing Hub and hearing instrument, be aware of the following:

- Use 1 (one) for the wireless device identification of the hearing instrument and Hearing Hub.
- If more than one person is using a Panasonic wireless device sharing the same wireless ID in the same area, the performance of the hearing instruments can be affected.
- Contact your dispenser to configure the device identification number for you.

A wireless connection between the Hearing Hub and hearing instrument must be adjusted and configured by the dispenser on an individual basis. Inappropriate wireless connection setup may cause damage to your clients or result in poor performance of the product.

If you have any questions, contact the Panasonic Sales Division below.

**Panasonic Corporation of North America
Healthcare Group**
One Panasonic Way, 1H-6, Secaucus, NJ 07094
Telephone No. 1-888-422-6309

Wireless Device Identification No.: _____

2

Table of contents

Before Use

Package contents	5	General Bluetooth® description	20
Safety precautions	6	Device description	22
Care and handling instructions	17	Neckloop antenna	24
Product description	18		

Operations

Charging (Charge the battery immediately after purchase)	26	◆ Make and receive calls on mobile phone	
Proper way to wear or carry your Hearing Hub	28	Make and receive calls on mobile phone (Pairing)	45
Turn on/off Hearing Hub	30	Make and receive calls on mobile phone (Prerequisite)	48
Put Hearing Hub in key lock mode	31	Make and receive calls on mobile phone (Operation)	49
◆ Operate your hearing instrument		◆ Make and receive calls on landline phone	
Monaural/Binaural switch	32	Make and receive calls on landline phone (Pairing)	53
Volume adjustment	33	Make and receive calls on landline phone (Prerequisite)	55
Memory switch	35	Make and receive calls on landline phone (Operation)	57
Remaining battery power of the hearing instrument	36		
Hearing instrument reset	37		
◆ Listen to TV audio			
Listen to TV audio (Pairing)	39		
Listen to TV audio (Prerequisite)	42		
Listen to TV audio (Operation)	43		

Before Use

Table of contents (Continued)

Before Use

◆ Listen to music	
Listen to music (External input terminal)	61
◆ Voice memo recording	
Record audio data (Voice memo recording)	64
Listen to recorded audio data	68
Protect audio files	70
Hearing Hub reset	71
LED indicator	72

Reference

Maintenance	77
Bluetooth® operation instructions	78
Troubleshooting guide	80
Specifications	86
Warranty and customer service	88
Information	89
FCC compliance	91

Package contents

The Panasonic Hearing Hub comes with the following items.
If there are any missing or defective items, please inform your dispenser.

Operating Instructions



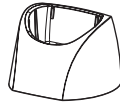
Easy Guide



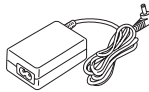
Limited Warranty



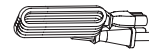
Charger cradle
QTY: 1



AC adaptor
QTY: 1



AC cord
QTY: 1



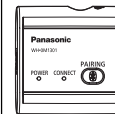
Audio cable (Length 1.0 m)
QTY: 1



Option (sold-separately)

Consult your dispenser.

Audio Transmitter for
hearing instruments
(WH-0M1301A)




Before Use


Safety precautions

Follow the instructions below to reduce the risk of personal injury or damage to your Hearing Hub.

Before Use

■ The following symbols are used throughout this document, and contain important differences regarding the probability of serious injury. These definitions are as follows:

 **WARNING** Indicates a potentially hazardous situation that could result in death or serious injury.

 **CAUTION** Indicates a possible hazard which if not avoided may result in minor to moderate injury. It is also used to alert against unsafe practices that can result in property damage.

■ The following symbols specify behavior or actions which are not allowed and an instruction that must be carried out.

    Not allowed

 Mandatory

 Attention, consult ACCOMPANYING DOCUMENT

WARNING

This device is equipped with a high-capacity rechargeable lithium-ion battery.



Do not expose to fire or extreme heat. Do not use or leave in a high temperature environment.

Failure to follow this warning can result in battery leakage, overheating, ignition, or explosion.

The charging system consists of an AC cord, AC adaptor and charger cradle. Use the charger cradle provided specifically designed to charge the Hearing Hub.



- Use of any other device could result in battery leakage, overheating, ignition, or explosion.

If the battery is completely drained, it needs to be replaced. Promptly consult your dispenser.

- Do not attempt to replace the battery yourself. Incorrect replacement can lead to battery leakage, overheating, ignition or explosion.

Before Use

Safety precautions (Continued)

WARNING

Before Use



Do not let others use your Hearing Hub.

Inappropriate use of the Hearing Hub could trigger the hearing instrument to emit loud sounds, which may result in serious damage to the ear.

- Do not let children play with your wireless device and other components.
- Keep them out of reach of children.



Turn off your wireless device on airplanes.

This device is designed in compliance with FCC rules, for use only within the United States. Its use aboard an airplane is subject to individual airlines rules. Typically, the airline responsible person (pilot) will announce all electronic equipment and wireless devices should be turned off during take-off and landing. As a general rule, it is recommended not to use this device while aboard the airplane.

WARNING

Before Use

Do not use your wireless device in the hospital or near medical equipment. Electromagnetic interference (EMI) emitted by your Hearing Hub can interfere with the normal operation of medical monitors and other hospital devices. Medical device malfunction can inadvertently affect the various medical devices and consequently disrupt operations or cause accidents.



Do not use your wireless device near automatic control equipment systems. Electromagnetic interference (EMI) emitted by your Hearing Hub can affect the functionality of automatic control equipment such as automatic doors and fire alarms. They are vulnerable to other electromagnetic energy. Medical device malfunction can disrupt operations or cause serious accidents.

Do not use your Hearing Hub while driving.

It introduces a significant form of distraction. Violation of this warning can cause serious traffic accidents.

- Give full attention to driving and to the road. Be alert of your surroundings even while walking. If you are too focused on your Hearing Hub in certain situations, like crossing a train track, a street, walking along a busy street, through a parking lot, etc., you could actually be putting yourself at great risk.

Safety precautions (Continued)

WARNING

Before Use



Do not use the Hearing Hub if you are fitted with a pacemaker. Your Hearing Hub may affect pacemaker functioning.

Pacemakers can be susceptible to interference from radio waves.

- Turn off the Hearing Hub if you are around somebody wearing a pacemaker or while in hospitals, where an active wireless device could interfere with other equipment and pacemakers.



Turn off your device in places where people are close to each other, such as in trains.

This is to prevent your device from inadvertently affecting pacemakers and other medical devices when the device is in close proximity with people wearing them.



Keep out of reach of children and pets.

A length adjustment mechanism (rubber slider) for a neckloop antenna (P. 24) may be accidentally removed. It can be swallowed and pose a choking hazard and possibly cause internal injury. To prevent accidental ingestion, secure your Hearing Hub in a safe place where it is not accessed by infants, small children, pets, or others who might accidentally swallow it.

- If swallowed, seek immediate medical treatment.

WARNING

Before Use



Do not modify or disassemble your wireless device.

Violation of this warning could cause a fire, personal injury or seriously damage your Hearing Hub.

- Consult with your dispenser if your Hearing Hub needs to be adjusted or repaired.
- Contact your dispenser if you have encountered unexpected behavior of your Hearing Hub.



Do not touch the AC cord plug with wet hands.

It can result in a shock hazard.



Avoid overloading an electrical circuit.

Do not plug in and run too many appliances on the same circuit at one time and overload the circuit. The AC cord plug must be connected to an AC 120 V only. Failure to heed to this warning may result in overheating and/or even a fire.

Do not damage the AC cord or plug.

Do not use a damaged AC cord.

Do not modify, forcibly bend, twist, pull, or heat the AC cord. Do not use the plug if the blades are loose as it may cause an electric shock or fire.

- Do not place any heavy items on the AC cord. Do not allow the AC cord to be crimped as it may cause an electric shock or fire. Contact your dispenser for repair.

Safety precautions (Continued)

WARNING

Before Use

Only use the supplied AC cord and AC adaptor.

The use of any other AC cord and AC adaptor can cause a shock hazard or fire.

In the event of an abnormal event or a malfunction such as those listed below, disconnect the AC cord plug from the outlet or turn off the Hearing Hub.

It can result in a fire or electric shock.

- A short circuit due to any foreign substance such as water, liquid, metals or other matters.
- A mechanical impact or dropping the instrument, or any damages to the instrument.
- Unusual situations such as abnormal odor, emission of smoke or unusual sound.

Insert the AC cord plug into the outlet until it is fully inserted.

- Fire or electric shock due to overheating may result if it is not plugged in all the way.
- Do not use a damaged AC cord plug.
- Do not plug the AC cord plug in a damaged outlet. It can cause a fire.

Clean the AC cord plug periodically.

- If dust accumulates on the AC cord plug or outlet, it may cause a fire. Unplug and wipe clean with a dry cloth.
- Unplug the AC cord plug when it is not to be used for an extended period.

WARNING



Do not touch the AC adaptor during a thunderstorm.

Unplug the AC cord and charger cradle during lightning storms to avoid electric shock or fire.



Do not connect the positive "+" and negative "-" terminals of the charger cradle with a metal object.

Do not leave the charger cradle in places subject to extremely high temperatures.

Failure to heed this caution may cause a fire or seriously damage your Hearing Hub.



When connecting your Hearing Hub to other external devices via an audio cable, be sure to connect only to devices compliant with electric safety standards.

- Non-safety compliant devices may pose a shock hazard when inter-connected if their insulation is inadequate.
- Do not use broken or modified devices.

Before Use

Safety precautions (Continued)

Before Use

WARNING

Handle the neckloop antenna carefully.

When you are hanging the Hearing Hub around your neck, choking and strangulation can occur when the neckloop antenna accidentally gets caught on something or get tangled around the neck and cause you to choke.

- Do not twirl, spin, or play with your neckloop antenna to avoid the possibility of accidentally hitting someone with your neckloop antenna.



Do not insert the connector pin of the neckloop antenna into any terminals of other devices.
It can cause a shock hazard.



CAUTION

Make sure the volume level is safe and appropriate before use.

Exposure to loud sounds or excessive sound levels can cause damage to your hearing. Adjust the volume to the most appropriate level.



CAUTION

Keep your wireless device away from excessive moisture and extreme temperatures.

Do not leave your wireless device inside a vehicle including a trunk or in places where the temperature may exceed 140 °F (60 °C), such as on a car dashboard, window sill, or behind a glass that is exposed to direct sunlight or strong ultraviolet light for extended periods of time. If you park outside during the summer months, your car will heat up quickly. The temperature inside the car can reach 140 °F (60 °C). The heat will deteriorate the coating on the outer surface of the Hearing Hub and materials of the parts and components. This may damage the product, overheat the battery, or pose a risk to the vehicle.

Do not let your wireless device come into contact with skin for an extended period of time.

The prolonged, intense contact between skin and the Hearing Hub can cause thermal injury or thermal burn.*1

*1 Individuals who have difficulties in any of the following areas tend to burn easily:
blood vessel, blood circulation, diabetes, high blood pressure and haptic sense.

Before Use

Safety precautions (Continued)

CAUTION

Before Use



Do not use your wireless device near any equipment that emits high frequency radio waves or generates a strong magnetic field.

Your hearing instrument may emit acoustic feedback, which can result in damage to the ear. Stop using your wireless device or get them out of electromagnetic fields.

Turn off your wireless device while undergoing any kind of electromagnetic treatment such as X-Rays, Magnetic Resonance Imaging (MRI), Computerized Axial Tomography (CAT), Electroencephalogram (EEG), Electrocardiogram (ECG), Short-Wave Diathermy, or other electrical or magnetic treatment.



Inspect your wireless device before each use. Do not use it if damaged.

Rugged projection like sharp edges and rough burrs protruding from the surface of the Hearing Hub can cause cuts and nicks to the skin.

- When cleaning the Hearing Hub, wipe it gently with a soft cloth. Never use organic solvents such as alcohol, paint thinner, or benzene. Failure to heed this caution may result in deformation of the hearing instrument or cracking on the surface.

If the safety mechanism of your neckloop antenna is removed, put the neckloop antenna back together.

Incomplete connection could result in accidents that might hurt yourself and others by dropping the device or letting the connector pin exposed.

For example, the device might drop on your foot or the connector pin might scratch someone's body.

Care and handling instructions

CAUTION

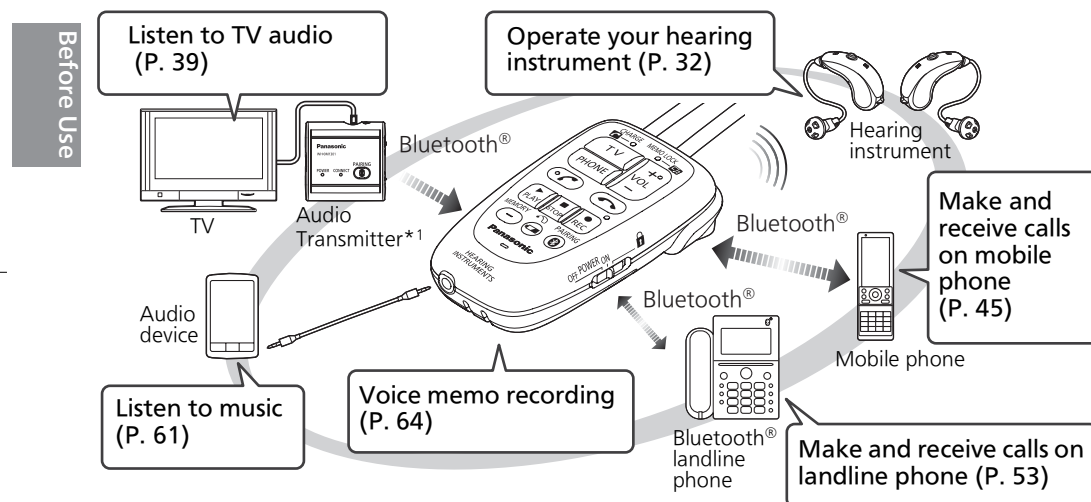
For proper care and handling of your Hearing Hub, be sure to read and follow the instructions below. Preventive maintenance can help extend the life span of the Hearing Hub.

- Do not drop, hit or shake the Hearing Hub. Do not subject it to high impact, vibration, or shock loads. Drops and impacts can cause scratches, cracks and physical damage.
- Ask the dispenser to perform the wireless configuration setup between your hearing instrument and Hearing Hub.
- After using hair styling products and skin care products, do not touch the Hearing Hub without washing your hands.
- Avoid high temperatures, moisture, humidity and dust.
- Do not use the Hearing Hub in the shower or swimming.
- Do not touch the Hearing Hub with wet hands.
- Do not leave or store the Hearing Hub in a damp location like bathroom, dusty environment or in direct sunlight, high temperature or humidity. For example, do not leave it in an unventilated automobile, exposed to direct sunlight with its all doors and windows shut.
- Do not use the Hearing Hub near any device that emits high frequency radio waves or generates a strong magnetic field. There is a possibility that the volume adjustment or memory change by the Hearing Hub does not work. Your hearing instrument may emit acoustic feedback, which can result in damage to the ear.
- Check your pockets to ensure that your Hearing Hub will not accidentally get thrown in the wash before doing the laundry.
 - The Hearing Hub has no special protection against ingress of water.
 - Degree of protection against harmful ingress of water is ordinary equipment (IPX0).
- The Hearing Hub is not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.
- The Hearing Hub is designed to comply with United States regulations and is intended for use in the United States.
- After using the Hearing Hub, avoid exposure to direct sunlight, and high humidity and temperature. Keep the Hearing Hub at room temperature.

Before Use

Product description

The features, benefits and functions of the Hearing Hub are outlined below.



*1 The Audio Transmitter is an optional accessory sold separately.

1. Operate the hearing instrument

- Volume adjustment (P. 33)
- Memory switch (P. 35)
- Remaining battery power of the hearing instrument (P. 36)

2. The Hearing Hub allows you to hear the audio from TV and phones clearly.

- 2-1. Listen to TV audio (Pairing is required) (P. 39)
- 2-2. Make calls on your mobile phone (Pairing is required) (P. 45)
- 2-3. Make calls from your landline (Pairing is required) (P. 53)
- 2-4. Listen to music (External input terminal) (P. 61)

3. Record and save audio data with voice memo recording (P. 64)

The Hearing Hub allows you to record your voice or someone's voice through its microphone. Audio from TV or external devices and conversation on mobile or landline phones can be recorded.

Priority mode

An operation mode switch is performed in the order indicated below.

1. Make calls from your landline or mobile phone
2. Listen to music
3. Listen to TV audio

If you get a call on a mobile phone while watching TV, the Incoming calls is automatically switched to the mobile phone mode.

Before Use

General Bluetooth® description

Bluetooth® is a short range wireless radio technology that allows electronic devices to communicate with each other. It eliminates the need for the cables that connect devices together.

Before Use

The Bluetooth® word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Panasonic Corporation is under license. Other trademarks and trade names are those of their respective owners.

You need a Bluetooth® enabled device.

To use your Bluetooth® mobile phone and landline phone through the Hearing Hub, they need to have either Bluetooth® profile:

- Hands-Free Profile
- Headset Profile

If your phone has both the profiles, select "Hands-Free Profile".

Bluetooth® pairing process

Pairing is a special process used when two devices connect for the first time. The pairing process is used to generate a link key that is used for authentication purposes during subsequent Bluetooth® connections between the two devices. Normally, once a Bluetooth® accessory has been paired with the device, it can be used with the device, without the need for re-pairing, assuming the appropriate profile exists for the required service. However, some devices may require pairing process each time they are used. Refer to the manual that came with your Bluetooth® device for further details.

The battery power drain does not affect information on the established connection. In other words, pairing is remembered and preserved regardless of the remaining power.

Bluetooth® device name

The Bluetooth® device name is used to identify a device when searched and registered.
The Bluetooth® device name of Hearing Hub is HABT01.
The name may vary depending on device model.

HABT01

- The name may vary depending by device model.
- For example, only part of the name is displayed due to limited space of the field, or a device name was changed due to the name change function.

Bluetooth® Passkey (PIN)

A Bluetooth® passkey is a password that is used for pairing process of enabling devices to securely communicate with each other.
The default passkey is "0000".

Connection with Bluetooth® devices

You can connect the Hearing Hub to an Audio Transmitter*¹ and up to two phones.

* During talking on the phone through Hearing Hub, Hearing Hub cannot receive any call from the other phone.

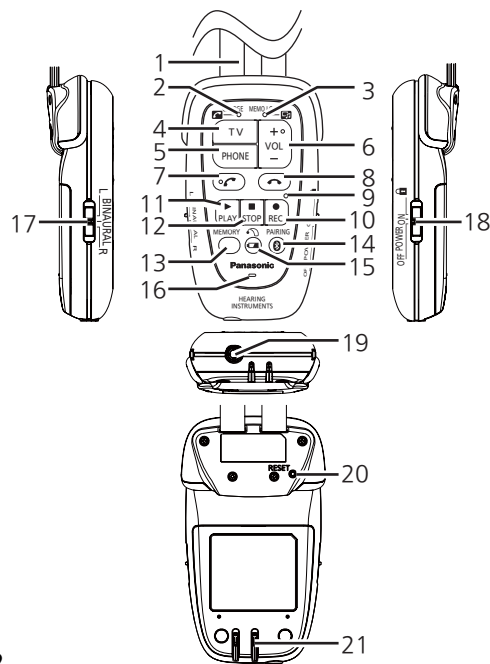
It is recommended to get your dispenser to perform the Bluetooth® pairing when they adjust and program your hearing instrument.

*1 The Audio Transmitter is an optional accessory sold separately.

Before Use

Device description

Before Use



1. Neckloop antenna

- It is a built-in antenna (intermediary device around the neck) that stabilizes the communication with the hearing instrument and enhances the sound quality.

2. LED 1

- The green LED indicates the status that the Hearing Hub is in phone mode.
- The orange LED allows you to check the remaining battery power and charging status of the Hearing Hub.

3. LED 2



- The green LED indicates that the Hearing Hub is in TV mode.
- The orange LED indicates that the recorded data is protected.

4. TV key

- It enables or disables TV listening.

5. Phone key

- It enables or disables a Bluetooth® connection to the phone.

Symbol	Description
	The symbol indicates TV mode.
	The symbol indicates the hearing instrument.

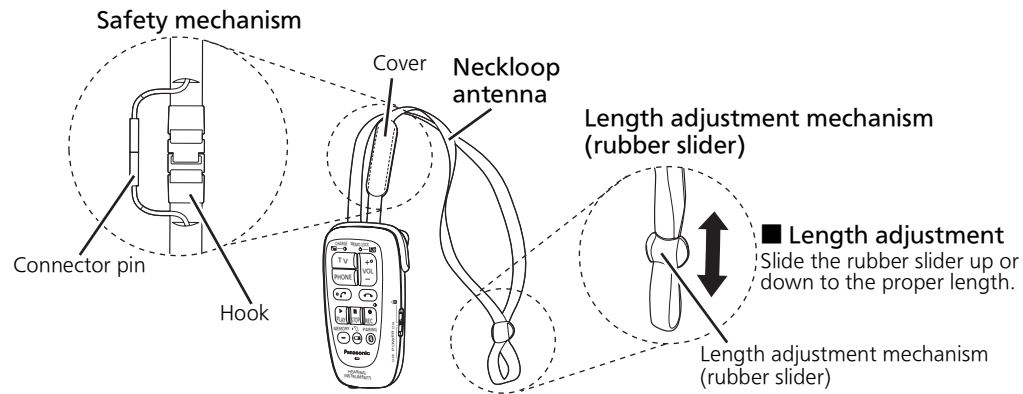
6. Volume key
 - It adjusts the volume level.
7. Send key
 - It answers incoming calls or makes calls.
8. End key
 - It ends calls or rejects incoming calls.
9. LED 3
 - It notifies you of the status of voice memo recording.
10. Record key
 - It records audio data with voice memo recording.
11. Play key
 - It plays audio data recorded with the voice memo recording function.
12. Stop key
 - It stops recording and playing with voice memo recording.
13. Memory key
 - It switches between tones of the hearing instrument.
 - It write-protects audio data recorded with voice memo recording and removes the write-protection.

14. Pairing key
 - It pairs the Hearing Hub and Bluetooth® enabled devices.
15. Battery power-left notification key
 - It notifies you of the remaining battery power of the hearing instrument with a sound. The alert sound differs depending on how much battery power is left.
16. Microphone
 - It is the sound input unit when you use a phone or voice memo recording.
17. Monaural/Binaural switch
 - It selects the hearing instrument for the left ear, right ear, or both ears for volume control, memory switch and battery power-left notification.
18. Power/Hold switch
 - It turns on and off the Hearing Hub. It puts the Hearing Hub into key lock mode.
19. External input terminal
 - It allows you to listen to music or audio data by connecting to external audio devices.
20. Reset key
 - It resets the Hearing Hub.
21. Charging terminal
 - It is used for charging the battery.

Before Use

Neckloop antenna

Before Use



CAUTION



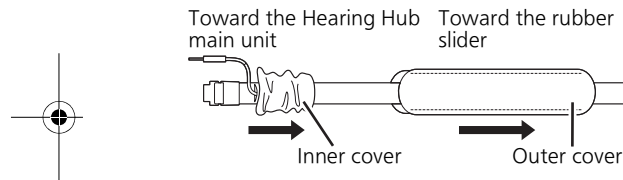
The neckloop antenna has a safety mechanism that reduces the risk of tangled neckloop antenna and associated risks. The hook of the neckloop antenna will uncouple when the neckloop antenna is pulled strongly, or gets caught on something.

Do not shorten or modify the neckloop antenna in any way, for example, tie a knot, cut or fold the neckloop antenna.

■ How to attach the hook to put the neckloop antenna ends back together

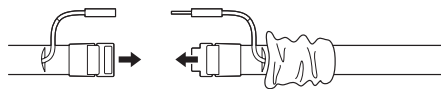
1 Move the outer cover.

- Move the outer cover to the right side, so the safety mechanism comes out.



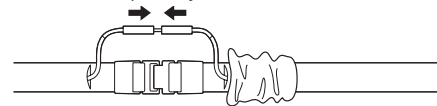
2 Connect the joints until they snap into place.

- Connect the hook until it clicks into place, as shown in the illustration.



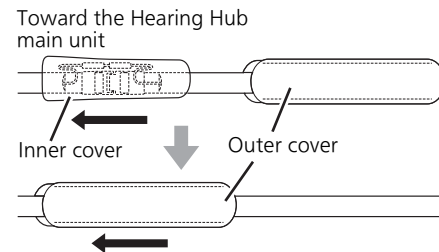
3 Attach the connector pins to each other.

- Insert completely.



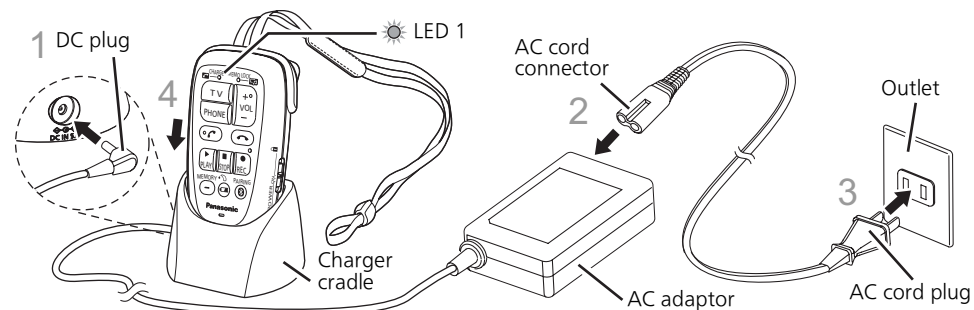
4 Put the covers back in place.

- Put back the inner cover first and then the outer cover.



Before Use

Charging (Charge the battery immediately after purchase)



Operations

WARNING: Use only specified AC adaptor.

- 1 Insert the DC plug into the charger cradle.
- 2 Insert the AC cord connector into the AC adaptor.
- 3 Insert the AC cord plug into the outlet.
- 4 Put your Hearing Hub into the charger cradle.

- Insert completely.
- LED 1 turns orange while charging.
- When charging is completed, LED 1 will shut off.

* All function keys are disabled during the charging process.

* It is recommended to unplug the AC cord when the charger cradle is not going to be used for an extended period of time.



LED 1 (orange)

When the battery of the Hearing Hub is running low, LED 1 is blinking orange. Recharge your Hearing Hub according to the instructions in Page 26.

Hearing Hub in use

LED indicator		Status	
LED 1 (Using)	Blinking once per 2-3 seconds	Running low on power	You have 7 minutes of power remaining (Varies depending on operating conditions).
	Blinking twice per second	Completely drained	Recharge your Hearing Hub immediately.

Hearing Hub in charging mode

LED indicator		Status	
LED 1 (Charging)	The LED turns on.	Charging	Full charge can be completed in 3 hours (Varies depending on operating conditions).
	The LED turns on then off.	Fully charged	Charging is complete.

* If you are getting shorter battery life after completing a full charge cycle, the battery needs to be replaced. Ask your dispenser for assistance. The Hearing Hub is not designed to allow you to replace the battery.

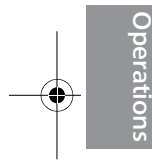
Proper way to wear or carry your Hearing Hub

Put the neckloop antenna around your neck.

Use your Hearing Hub as shown in the illustrations below.

Hanging loosely around your neck

Holding in your hand



- Following cases
- Listen to TV audio
 - Make and receive calls
 - Listen to music (external input terminal)



- Following cases
- Adjust your hearing instrument
 - Record audio data with voice memo recording

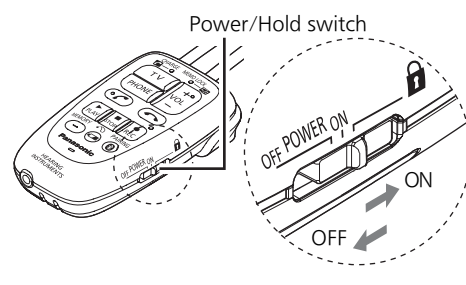
For wireless connection between the Hearing Hub and hearing instrument, very weak radio waves are used. The low-intensity radio waves get even weaker with distance from the source. Signal quality between the hearing instrument and the Hearing Hub can vary depending on where they are placed, the direction they are facing, or the presence of electromagnetic noise and interference.

If you do not wear the neckloop antenna, keep the distance between the Hearing Hub and your hearing instrument within 14.7 inches (40 cm). It is recommended to wear the neckloop antenna to stabilize the wireless connection.

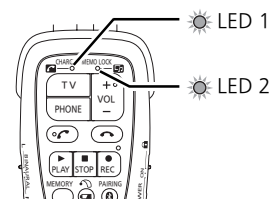
Turn on/off Hearing Hub

To turn on the Hearing Hub, slide the power/hold switch to **POWER ON**.

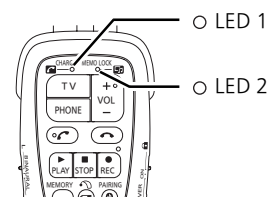
To turn off the Hearing Hub, slide the power/hold switch to **POWER OFF**.



- When the Hearing Hub is powered on, LED 1 and LED 2 will turn orange simultaneously.



- Once the function keys are working, LED 1 and LED 2 will shut off.



Put Hearing Hub in key lock mode

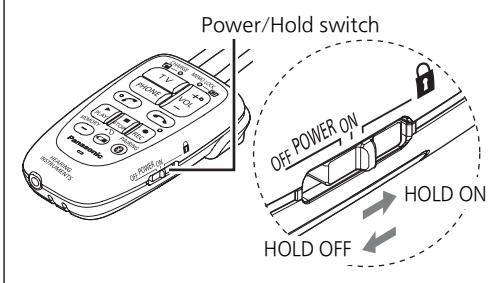
The hold function (Power/Hold switch) helps prevent unintentional operation or adjustment. The volume key and memory key are disabled in key lock mode.

To put the Hearing Hub in key lock mode

Slide the power/hold switch to .

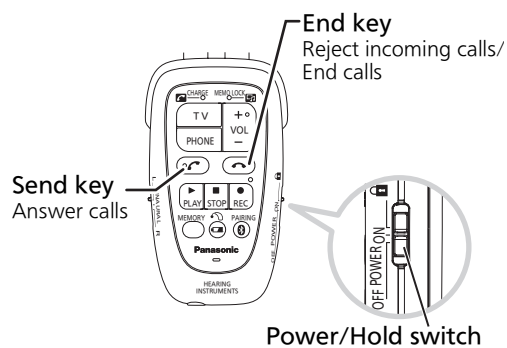
To cancel the key lock mode

Slide the power/hold switch to POWER ON.



- If the Hearing Hub is in key lock mode, the operation keys will be disabled. Cancel the key lock mode to enable the Hearing Hub functions.

- The send key and end key still function to answer and end calls while the Hearing Hub is in key lock mode.



- When the hearing instrument is turned off and then back on again while the Hearing Hub is in key lock mode, the volume levels will be reset to the original settings, and the program will be reset to Memory 1.

Monaural/Binaural switch

You can select the left ear, right ear, or both ears for the following operations on your hearing instrument:

- Volume control
- Memory program
- Battery power-left notification

Operations

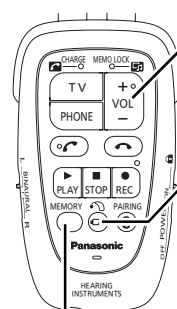
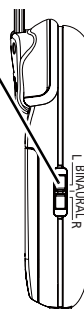
Operate your hearing instrument

Monaural/Binaural switch

L: The above operations are enabled for the left ear.

BINAURAL: The above operations are enabled for both ears.

R: The above operations are enabled for the right ear.



Volume key

- Adjusts the volume

Battery power-left notification key

- Notifies you of the remaining battery power of the hearing instrument

Memory key

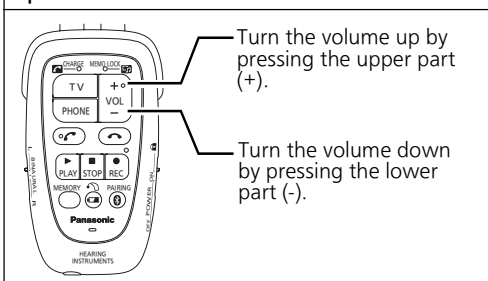
- Switches between memory programs

When you want to use in monaural mode, make sure that you set the position of the switch to the ear you need to operate the instrument for.

Volume adjustment

■ Volume adjustment while hearing through the microphone of the hearing instrument

Use the volume keys to turn the volume up or down.



* The volume control is not available during the following operations:

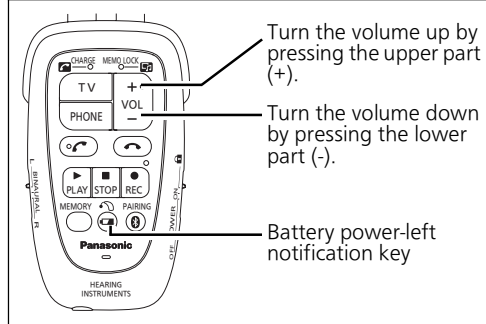
- Listening to TV audio
- Making calls, receiving calls, or talking on mobile phone
- Making calls, receiving calls, or talking on landline phone
- Listening to music (external input terminal)
- Recording or playing the recorded audio data with voice memo recording

- The volume control provides 24 adjustable volume levels. Each time the volume key is pressed, the hearing instrument makes a buzzing sound for every notification. When the hearing instrument reaches its maximum/minimum level, it does not emit a notification sound.
- Press and hold the volume key, so the volume is consecutively changing by itself at 1-second interval.
- When the hearing instrument is turned off and then back on again, the volume level will be reset to the original setting.

Volume adjustment (Continued)

■ Adjust the notification alert sound

Pressing and holding the battery power-left notification key for at least 3 seconds, press the volume keys to turn the volume up or down.



Operations

Operate your hearing instrument

* Once the battery power-left notification key is pressed, you can hear the alert sound to notify you how much power is left on the hearing instrument then you can hear the sound to assure that the volume setup has been completed.

• You can adjust the volume level of the notification alert for the following functions:

- ① The remaining battery power of the hearing instrument is notified.
- ② Recording is started or stopped with voice memo recording.

• The volume control provides 17 adjustable volume levels. Each time the volume key is pressed, the hearing instrument makes a notification sound.

• Press and hold the volume key, so the volume is consecutively changing itself.

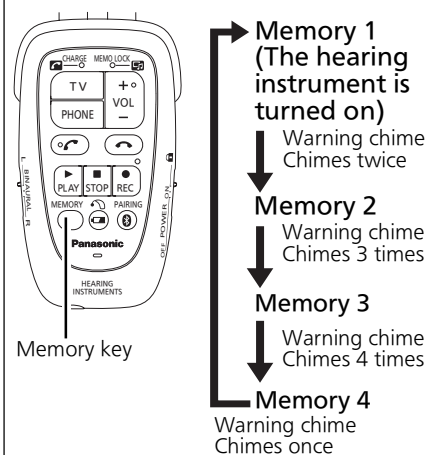
• When the hearing instrument or Hearing Hub is turned off and then back on again, the volume level of the notification alert will not be reset to the original setting.

* The alert sound adjustment is not available during the following operations:

- Listening to TV audio
- Making calls, receiving calls, or talking on mobile phone
- Making calls, receiving calls, or talking on landline phone
- Listening to music (external input terminal)
- Recording or playing the recorded audio data through voice memo recording

Memory switch

The memory key is used to switch between memory programs.



- The memory key allows you to switch between situations (programs) depending on surrounding conditions.
- The number of memory programs varies depending on the type of hearing instrument. For details, ask your dispenser.
- When the hearing instrument is turned off and then back on again, the program will be reset to Memory 1.

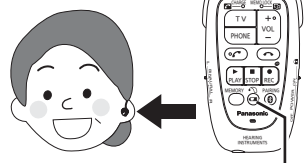
* Memory switch is not available during the following operations:

- Listening to TV audio
- Making calls, receiving calls, or talking on mobile phone
- Making calls, receiving calls, or talking on landline phone
- Listening to music (external input terminal)
- Recording or playing the recorded audio data through voice memo recording

Remaining battery power of the hearing instrument

How you get to know the remaining battery power of your hearing instrument

Press the battery power-left notification key near your ear, so you can check the remaining battery power of your hearing instrument.



Battery power-left notification key

Almost full

Chimes once

Half

Chimes twice*¹

Low

Chimes three times*¹

Improper connection with the hearing instrument

Warning alarm (once)*²

*¹ Chimes will sound continuously.

*² When the warning sound is emitted, get the Hearing Hub closer to the hearing instrument then press the battery power-left notification key again.

Operations

Operate your hearing instrument

- The alert notification for the left ear is made from the hearing instrument for the left ear.
- The alert notification for the right ear is made from the hearing instrument for the right ear.
- In case of binaural use, the alert notification is made from the left ear to the right ear.

* The battery power-left notification is not available during the following operations:

- Listening to TV audio
- Making calls, receiving calls, or talking on mobile phone
- Making calls, receiving calls, or talking on landline phone
- Listening to music (external input terminal)
- Recording or playing the recorded audio data through voice memo recording

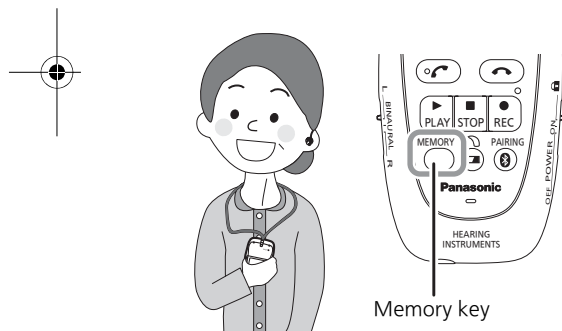
For information on how to adjust the volume level of notification alert sound, see Page 34.

Hearing instrument reset

In case of binaural hearing instruments, the memory switch and volume control may work only on one ear depending on the communication status of the Hearing Hub. If this occurs, reset your hearing instrument by following the instructions below.

■ Reset the hearing instrument on the Hearing Hub

- 1 Wearing the neckloop antenna, press and hold the memory key for about 10 seconds.



When the hearing instrument emits alert sounds (to notify the completion of memory switch or volume setup) for a few seconds, the reset operation is complete.*1

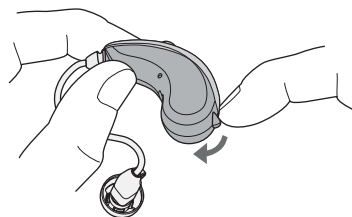
*1 The alert sound varies depending on the volume and memory program settings.

Hearing instrument reset (Continued)

■ Reset with your hearing instrument

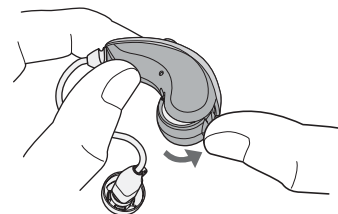
1 Turn off your hearing instrument.

- Fully open up the battery compartment by pulling the edge of the swing-out door outward.



2 Turn the hearing instrument back on again.

- Completely close the battery compartment by swinging the door until it snaps securely. Once powered on, the reset operation has been completed.*1



*1 When reset has completed, the memory program and volume level will be reset to the original settings. You need to set them up again to properly function according to your needs.

Operations

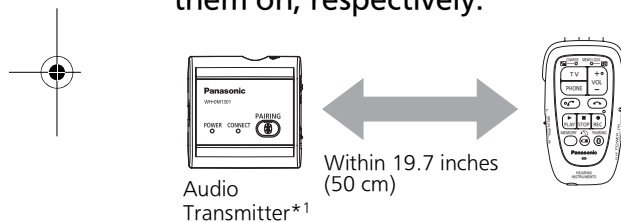
Operate your hearing instrument

Listen to TV audio (Pairing)

To listen to TV audio, you need to complete the Bluetooth® pairing procedure between the Hearing Hub and Audio Transmitter*1 as a prerequisite.

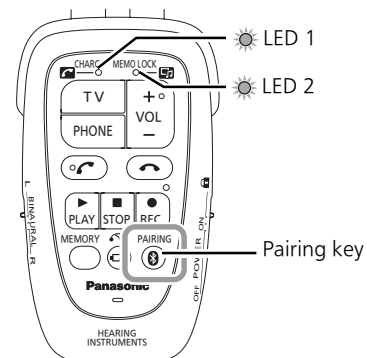
■ Pairing procedure

1 Place the Hearing Hub within 19.7 inches (50 cm) from the Audio Transmitter*1 and turn them on, respectively.



- Turn off other Bluetooth® devices around that have already been paired with the Hearing Hub.

2 Press and hold the pairing key of the Hearing Hub for about 5 seconds.

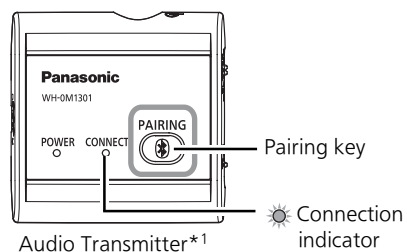


- LED 1 and LED 2 are rapidly blinking green simultaneously (5 times per second).

*1 The Audio Transmitter is an optional accessory sold separately.

Listen to TV audio (Pairing) (Continued)

3 Press and hold the pairing key of the Audio Transmitter*1 for about 5 seconds.



- The connection indicator LED of the Audio Transmitter*1 is rapidly blinking (5 times per second).

4 Make sure that the pairing procedure has been completed.

- This process may take up to 45 seconds to complete.
- The rapid blinking (5 times per second) of LED 1 and LED 2 will shut off.
- The connection indicator LED of the Audio Transmitter*1 will be blinking for about 15 seconds, come on for about 30 seconds then shut off.

Pairing two wireless devices is a one-time operation using a Bluetooth® connection. After the Audio Transmitter*1 has been successfully registered (paired) with the Hearing Hub, pairing does not need to be repeated for subsequent usage.

* If you have any questions about pairing or need assistance, ask your dispenser.

*1 The Audio Transmitter is an optional accessory sold separately.

■ Pairing instructions

- Pairing failed.

If the Hearing Hub cannot find the Bluetooth® device within 120 seconds, the pairing procedure will be cancelled. For the connection timeout, see the instructions that came with the Bluetooth® enabled device.

- To cancel the pairing procedure, press the pairing key again.

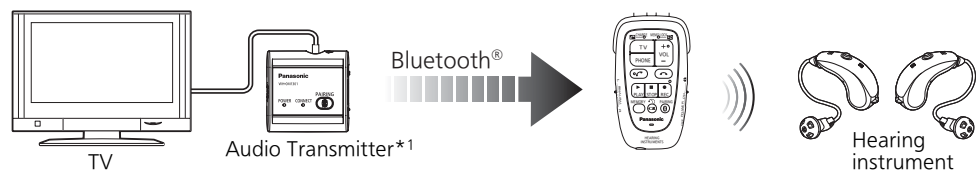
- To delete the registered information, first hold the pairing key down, turn on the Hearing Hub then keep holding the pairing key for approximately 10 seconds. LED 1 and LED 2 will turn solid green for 3 seconds during deletion.

Once pairing information is deleted, the Bluetooth® device that has already been paired will be disabled.

Listen to TV audio (Prerequisite)

Bluetooth® pairing with the Audio Transmitter*1 must be completed.

- You can hear the sound on TV through the Audio Transmitter*1.



Operations

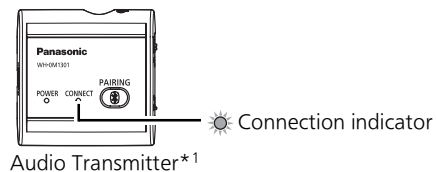
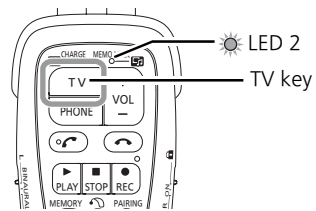
■ Connection instructions

- Listen to TV audio
- 1 Connect the Audio Transmitter*1 to the television.
 - See the instructions that came with the Audio Transmitter*1.
 - 2 Turn on the Audio Transmitter*1.

*1 The Audio Transmitter is an optional accessory sold separately.

Listen to TV audio (Operation)

■ Listening to TV audio



1 Press the TV key.

- You can hear TV audio from your hearing instrument in several seconds.
- During Bluetooth® connection process, both LED 1 and LED 2 simultaneously blink green once per second. Likewise, the connection indicator LED of the Audio Transmitter*1 blinks once per second.
- While you are listening to TV audio, LED 2 slowly blinks green once per 2-3 seconds. The connection indicator LED of the Audio Transmitter*1 comes on green.

■ Stop listening to TV audio

1 Press the TV key.

- LED 2 and the connection indicator LED of the Audio Transmitter*1 will shut off.
- The mode of the hearing instrument will be returned to Memory 1 so you get back to the normal hearing environment.

*1 The Audio Transmitter is an optional accessory sold separately.

Listen to TV audio (Operation) (Continued)

■ Volume adjustment

You can adjust the TV audio volume by following the instructions below.

Use the volume keys to turn the volume up or down.

- The volume control provides 17 adjustable volume levels. A notification sound is not made from the hearing instrument.
- Press and hold the volume key, so the volume is consecutively changing by itself at 1-second interval.
- When the hearing instrument or Hearing Hub is turned off and then back on again, the volume remains unchanged since it was last adjusted.
- Adjusting TV volume does not affect the volume of the hearing instrument.
- The TV volume is the same as that for music through the external input terminal.

Volume adjustment through the Audio Transmitter*¹

- See the instructions that came with the Audio Transmitter*¹.

*¹ The Audio Transmitter is an optional accessory sold separately.

■ Mix left and right audio channels

You can switch between stereo binaural hearing and L/R mix. In binaural stereo hearing, one channel is differentiated from the other. The split audio is directed from one stereo channel to one ear and from the other channel to the other ear. In the Hearing Hub, the binaural stereo mode is set as default. Those who are wearing a monaural hearing instrument can only hear the sound from one stereo channel in one ear because the other channel is disabled. In L/R mix, multiple sound sources are merged together to create a multi-dimensional sound, rich in depth and complexity. Regarding L/R mix setup, ask your dispenser for assistance.

■ Hearing instrument microphone

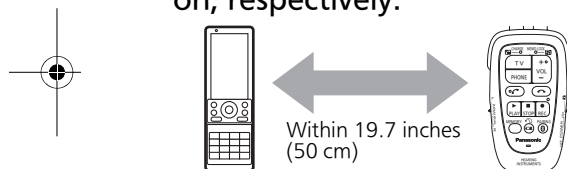
You can set up the microphone of your hearing instrument as you can simultaneously listen to the sound from a television through your hearing instrument's microphone. For enabling or disabling the microphone, ask your dispenser for assistance.

Make and receive calls on mobile phone (Pairing)

To use with your Bluetooth® mobile phone, you need to complete the Bluetooth® pairing procedure between the Hearing Hub and your Bluetooth® mobile phone as a prerequisite.

■ Pairing procedure

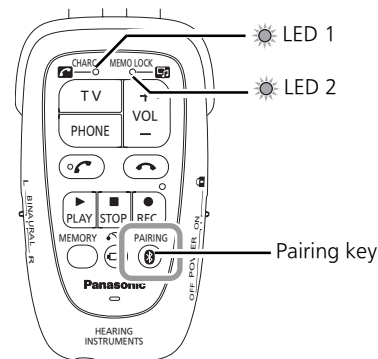
1 Place the Hearing Hub within 19.7 inches (50 cm) from your mobile phone and turn them on, respectively.



Mobile phone

- Power your phone on and choose "Settings". Access the "Bluetooth" options menu and choose "On" to power on Bluetooth®. See the instructions that came with the mobile phone.
- Turn off other Bluetooth® devices around that have already been paired with the Hearing Hub.

2 Press and hold the pairing key of the Hearing Hub for about 5 seconds.



- Both LED 1 and LED 2 are rapidly blinking green (5 times per second).

Make and receive calls on mobile phone (Pairing) (Continued)

3 Open the "Settings" or "Tools" option on your mobile phone. Choose "Bluetooth", then select "Add New Device" or "Search".

- See the instructions that came with the mobile phone.

4 Your mobile phone will search for nearby Bluetooth® devices. This may take several seconds.

- See the instructions that came with the mobile phone.
- On your mobile phone, when searching for device, "HABT01" will appear in the device list.
The name may vary depending on the make or model of the mobile phone.
- Select the name of the Hearing Hub, "HABT01", from the list of discovered devices displayed on your phone's screen.
- Enter "0000" when you are asked to enter the PIN or passkey. Press "OK".

5 Your mobile phone will confirm pairing and automatically connect to the Hearing Hub. Make sure that the Bluetooth® pairing procedure has been completed.

- LED 1 will slowly blink green once per 2-3 seconds to indicate that your mobile phone is connected to the Hearing Hub through Bluetooth®.

* If your phone has both the Bluetooth® Hands-Free Profile and Headset Profile, select Hands-Free Profile for "Profile" options.

After the mobile phone has been successfully registered (paired) with the Hearing Hub, the Hearing Hub will automatically reconnect to your phone.

Normally, the first time a Bluetooth® device is used with the Hearing Hub, a one-time pairing connection must be established. The pairing connection is only required for the first use, and does not need to be repeated for subsequent usage.

■ Pairing instructions

See the "Pairing instructions" in Page 41.

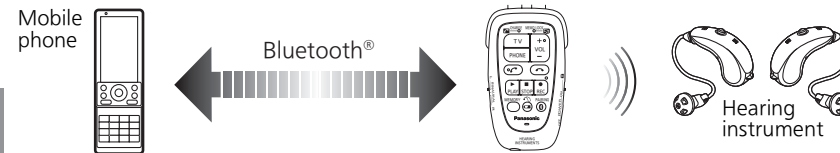
* Music playing on the mobile phone is not supported.

* If you have any questions about pairing or need assistance, ask your dispenser.

Make and receive calls on mobile phone (Prerequisite)

Bluetooth® pairing with your mobile phone must be completed.

- You can make and receive calls from your mobile phone through Hearing Hub.
- You can talk on the phone by using your hearing instrument and the microphone of the Hearing Hub.



Operations

■ Phone setup

1 Enable Bluetooth® in your mobile phone.

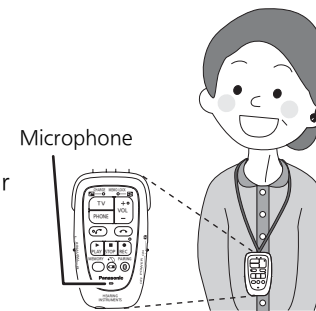
- See the instructions that came with the mobile phone.

■ Proper use of a microphone

When you talk, hang your Hearing Hub around your neck, as shown in the illustration.

If the surrounding is noisy, position the microphone close to your mouth.

* Depending on where the microphone is located or facing, voice communications might be interrupted.
Try changing the position of the microphone if you experience poor communication.

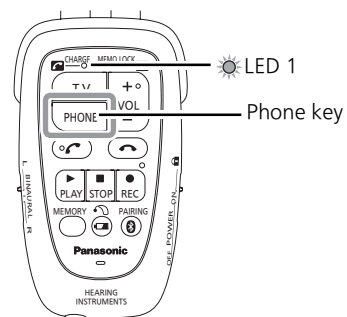


Make and receive calls on mobile phone (Operation)

■ Put the Hearing Hub into standby mode.

Note:

The Hearing Hub is connected to the mobile phone through Bluetooth®.



1 Connect your mobile phone to the Hearing Hub through Bluetooth®.

- See the instructions that came with the mobile phone.
- The two devices must be paired. Turn on the Hearing Hub, so it will automatically connect to the mobile phone through Bluetooth®, and the phone will go into standby mode.
- If Bluetooth® connection is disabled due to poor signal reception, press the phone key for reconnection.
- Once the Hearing Hub and mobile phone are connected to each other through Bluetooth®, LED 1 will be slowly blinking green once per 2-3 seconds.

Make and receive calls on mobile phone (Operation) (Continued)

■ Receive calls

1 You will get notification ringtones for incoming calls from your hearing instrument.

- While incoming calls are being received, LED 1 is rapidly blinking green 5 times per second.

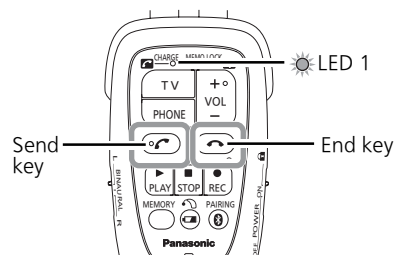
- * Ringtones may vary depending on the phone settings. An alert notification may be emitted from the Hearing Hub.
- * Text message alert is not supported.

2 Press the send key to answer the call.

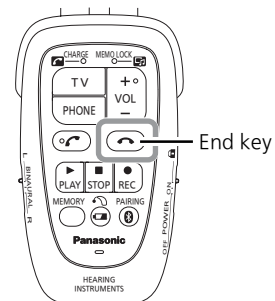
Operations

Make and receive calls on mobile phone

50



- While you receive incoming calls, LED 1 is slowly blinking green once per 2-3 seconds.
 - Press the end key to reject an incoming call without answering.
- #### 3 When done talking, hang up by pressing the end key.



- When the call is done, the mode of the hearing instrument will be returned to Memory 1.

■ Make calls

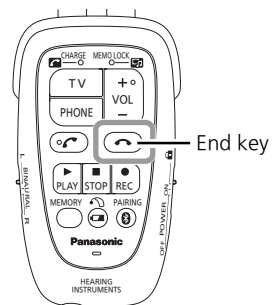
1 Dial the numbers.

- Depending on the make and model of mobile phones, you might need to set up or operate your mobile phone, so you can pick up the call from your mobile phone and switch it to Hearing Hub. For details, see the instructions that came with the mobile phone.

2 You will hear the ringback tone from your hearing instrument.

3 When someone answers it, start talking.

4 When done talking, hang up by pressing the end key.



- When the call is done, the mode of the hearing instrument will be returned to Memory 1.

Make and receive calls on mobile phone (Operation) (Continued)

■ Volume adjustment

You can adjust the phone volume such as ringtone, ringback tone and conversation by following the instructions below.

Use the volume keys to turn the volume up or down.

- The volume control provides 17 adjustable volume levels. A notification sound is not made from the hearing instrument.
- Press and hold the volume key, so the volume is consecutively changing by itself at 1-second interval.
- When the hearing instrument or Hearing Hub is turned off and then back on again, the volume remains unchanged since it was last adjusted.
- Adjusting the phone volume such as ringtone, ringback tone and conversation does not affect the volume of the hearing instrument.

Adjust the volume on mobile phone

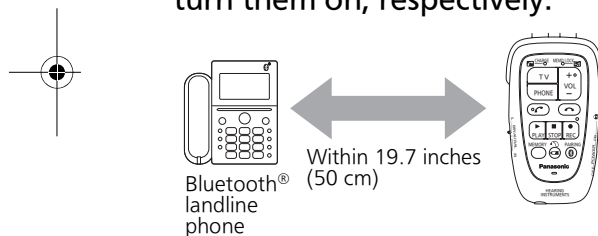
- See the instructions that came with the mobile phone. Some mobile phone models may not allow you to adjust the volume.

Make and receive calls on landline phone (Pairing)

To use with your Bluetooth® landline phone, you need to complete the Bluetooth® pairing procedure between the Hearing Hub and your Bluetooth® landline phone as a prerequisite.

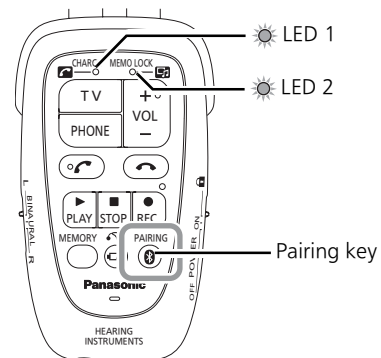
■ Pairing procedure

1 Place the Hearing Hub within 19.7 inches (50 cm) from the Bluetooth® landline phone and turn them on, respectively.



- Turn off other Bluetooth® devices around that have already been paired with the Hearing Hub.

2 Press and hold the pairing key of the Hearing Hub for about 5 seconds.



- Both LED 1 and LED 2 are rapidly blinking green (5 times per second).

Make and receive calls on landline phone (Pairing) (Continued)

3 Put the Bluetooth® landline phone into pairing mode.

- See the instructions that came with the Bluetooth® landline phone.
- If you are prompted for passkey, enter "0000".

4 Make sure that the Bluetooth® pairing procedure has been completed.

- LED 1 will slowly blink green once per 2-3 seconds to indicate that the phone is connected to the Hearing Hub through Bluetooth®.
- See the instructions that came with the Bluetooth® landline phone.

After the Bluetooth® landline phone has been successfully registered (paired) with the Hearing Hub, the Hearing Hub will automatically reconnect to the phone. Normally, the first time a Bluetooth® device is used with the Hearing Hub, a one-time pairing connection must be established. The pairing connection is only required for the first use, and does not need to be repeated for subsequent usage.

■ Pairing instructions

See the "Pairing instructions" in Page 41.

If you have any questions about pairing or need assistance, ask your dispenser.

Operations

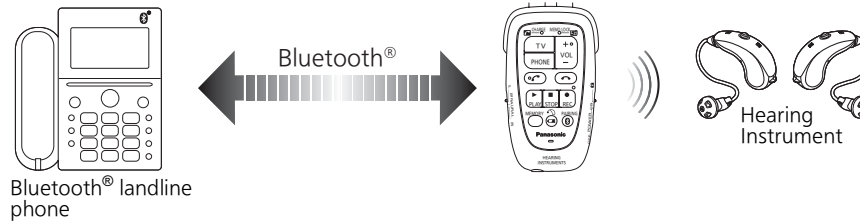
Make and receive calls on landline phone

54

Make and receive calls on landline phone (Prerequisite)

Bluetooth® pairing with your landline phone must be completed.

- You can make and receive calls from your landline phone through Hearing Hub.
- You can talk on the phone by using your hearing instrument and the microphone of the Hearing Hub.



■ Phone setup

Directly plug the Bluetooth® landline phone into a telephone wall mount jack.

- See the instructions that came with the Bluetooth® landline phone.

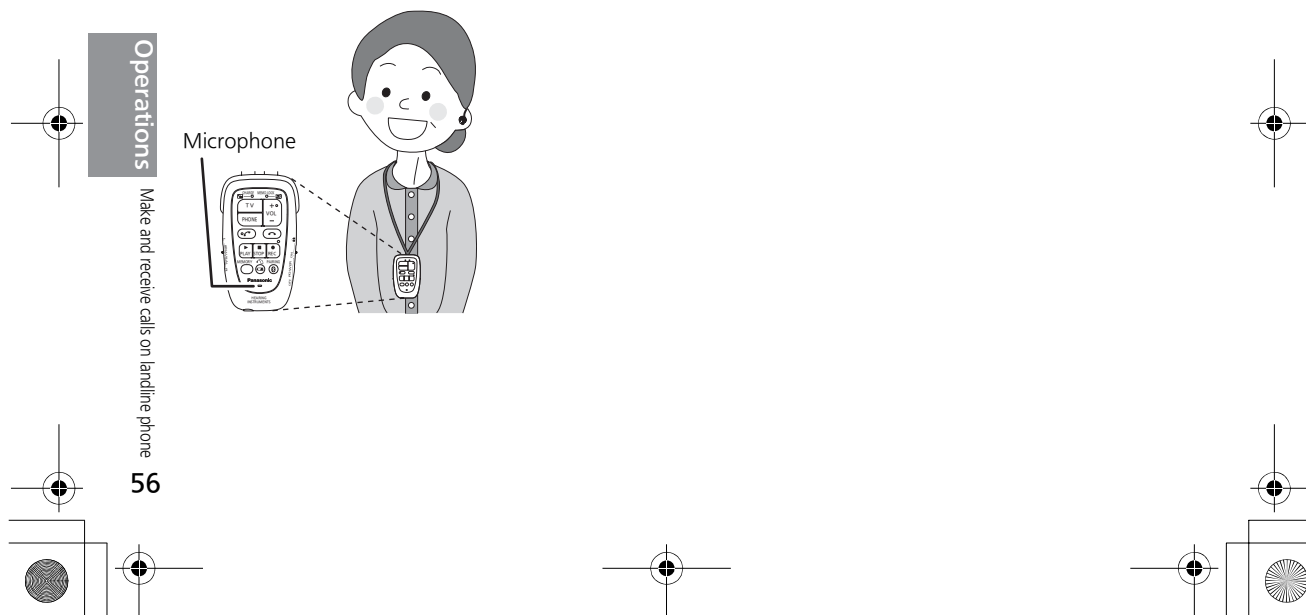
Make and receive calls on landline phone (Prerequisite) (Continued)

■ Proper use of a microphone

When you talk, hang your Hearing Hub around your neck, as shown in the illustration.
If the surrounding is noisy, position the microphone close to your mouth.

Depending on where the microphone is located or facing, voice communications might be interrupted.

Try changing the position of the microphone if you experience poor communication.

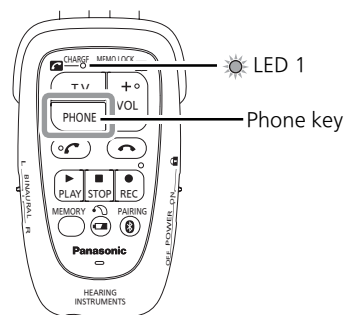


Make and receive calls on landline phone (Operation)

■ Put the Hearing Hub into standby mode.

Note:

The Hearing Hub is connected to the landline phone through Bluetooth®.



1 Connect the Bluetooth® landline phone to the Hearing Hub.

- See the instructions that came with the Bluetooth® landline phone.

- The two devices must be paired. Turn on the Hearing Hub, so it will automatically connect to the Bluetooth® landline phone, and the phone will go into standby mode.
- If Bluetooth® connection is disabled due to poor signal reception, press the phone key for reconnection.
- Once the Hearing Hub and Bluetooth® landline phone are connected to each other through Bluetooth®, LED 1 will be slowly blinking green once per 2-3 seconds.

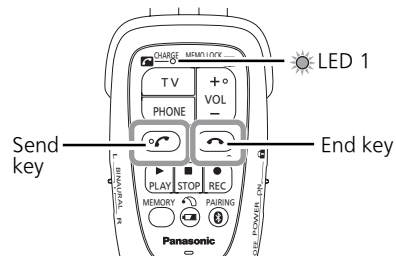
Make and receive calls on landline phone (Operation) (Continued)

Receive calls

1 You will get notification alert from the Hearing Hub.

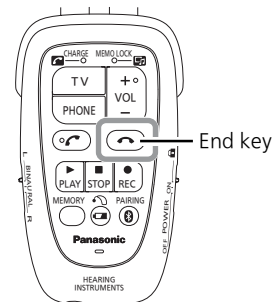
- While incoming calls are being received, LED 1 is rapidly blinking green 5 times per second.

2 Press the send key to answer the call.



- While you receive incoming calls, LED 1 is slowly blinking green once per 2-3 seconds.
- Press the end key to reject an incoming call without answering.

3 When done talking, hang up by pressing the end key.



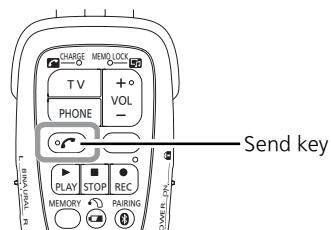
- When the call is done, the mode of the hearing instrument will be returned to Memory 1.

■ Make calls

- 1 Dial the numbers on the Bluetooth® landline phone.
- 2 When you hear the ringback tone from your hearing instrument, go to the next step.
- 3 Press the send key.

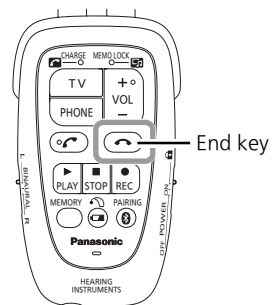
Note:

This step might not be required depending on the make or model of the phone.



- When you hear the ringback tone from your hearing instrument, put down the receiver. This will not hang up the phone.

- 4 Wait until someone answers the call.
- 5 When done talking, hang up by pressing the end key.



- When the call is done, the mode of the hearing instrument will be returned to Memory 1.

Make and receive calls on landline phone (Operation) (Continued)

■ Volume adjustment

You can adjust the phone volume such as ringtone, ringback tone and conversation by following the instruction below.

Use the volume keys to turn the volume up or down.

- The volume control provides 17 adjustable volume levels. A notification sound is not made from the hearing instrument.
- Press and hold the volume key, so the volume is consecutively changing by itself at 1-second interval.
- When the hearing instrument or Hearing Hub is turned off and then back on again, the volume remains unchanged since it was last adjusted.
- Adjusting the phone volume such as ringtone, ringback tone and conversation does not affect the volume of the hearing instrument.

Operations

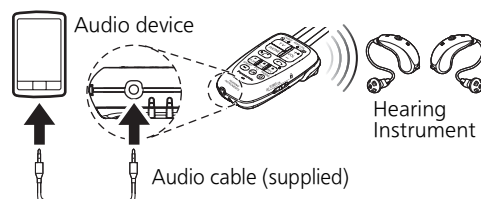
Make and receive calls on landline phone

60

Listen to music (External input terminal)

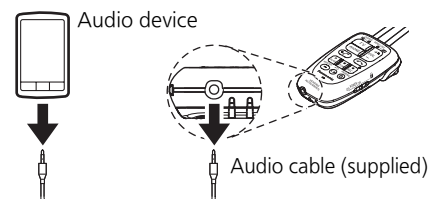
You can listen to music on your hearing instrument by connecting an audio device to the Hearing Hub. For connection, use the supplied audio cable (M3 plug). If the cable jack does not fit into the terminal of the audio device, you need to purchase a compatible plug separately.

■ Listening to music



- 1 Insert one end of the audio cable into the terminal of the audio device.
- 2 Insert the other end of the audio cable into the input terminal of the Hearing Hub.
- 3 Play audio, so you can listen to music from the hearing instrument.

■ Stop listening to music



- 1 Press stop on the audio device.
- 2 Disconnect the audio cable from the audio device.
- 3 Disconnect the audio cable from the Hearing Hub.
 - The mode of the hearing instrument will be returned to Memory 1.

Listen to music (External input terminal) (Continued)

■ Volume adjustment

Adjust the music volume by following the instructions below.

Use the volume keys to turn the volume up or down.

- The volume control provides 17 adjustable volume levels. A notification sound is not made from the hearing instrument.
- Press and hold the volume key, so the volume is consecutively changing by itself at 1-second interval.
- When the hearing instrument or Hearing Hub is turned off and then back on again, the volume remains unchanged since it was last adjusted.
- Adjusting music volume does not affect the volume of the hearing instrument.
- The volume level is the same as TV.

Adjust the volume of audio devices

- See the instructions that came with the audio device.

Operations

Listen to music

■ Mix left and right audio channels

You can switch between stereo binaural hearing and L/R mix. In binaural stereo hearing, one channel is differentiated from the other. The split audio is directed from one stereo channel to one ear and from the other channel to the other ear. In the Hearing Hub, the binaural stereo mode is set as default. Those who are wearing a monaural hearing instrument can only hear the sound from one stereo channel in one ear because the other channel is disabled. In L/R mix, multiple sound sources are merged together to create a multi-dimensional sound, rich in depth and complexity. Regarding L/R mix setup, ask your dispenser for assistance.

■ Hearing instrument microphone

You can set up the microphone of your hearing instrument as you can simultaneously listen to the sound from an audio device through your hearing instrument's microphone. For enabling or disabling the microphone, ask your dispenser for assistance.

Operations
Listen to music

Record audio data (Voice memo recording)

The following audio data can be recorded in the Hearing Hub.

- Microphone sound of the Hearing Hub*¹
- Phone conversation
- TV audio*²
- Audio from external devices*²

Number of audio files: Up to 5 files*³

Recording time: 2 minutes 40 seconds per file

Write-protection: Up to 4 files

*1 The microphone should be located toward the sound source.



*2 Stereo audio is recorded in monaural.

*3 When the number of recording files exceeds the maximum, the oldest file will be replaced with a new one (audio files are purged in chronological order). If the files are protected, they will not be overwritten.

Operations

Voice memo recording

Privacy laws and notice requirements for electronic recording of telephone conversations

There are both federal and state statutes governing the use of electronic, mechanical or other device recordings. The Federal Communications Commission (FCC) and many states have strict rules about recording telephone conversations. When the person answers, let the caller know right away that you are recording the call.

Copyright notice

Music and lyrics are subject to copyright protection in the United States. Copyright law applies to recorded music - the musical work and the sound recording of that work. The musical work refers to the notes and lyrics of a song. The performance of the lyrics and melody fixed in a variety of formats, such as compact discs, vinyl records and digital downloads, are protected as the sound recording. The public performance of music includes broadcast radio transmissions or digital transmissions, such as AM or FM radio or satellite radio, digital, satellite television, Internet and live concerts.

You may not modify, copy, reproduce, republish, upload, post, transmit, distribute or broadcast in anyway any material without the prior written permission of the owner of that content. You may not alter or remove any trademark, copyright or other notice from copies of the content.

You may record any materials with voice memo recording for your personal, non-commercial use only, provided you keep intact all copyright and other proprietary notices.

Record audio data (Voice memo recording) (Continued)

Indemnity

Panasonic is not liable for any recording failures resulting from Hearing Hub malfunction.

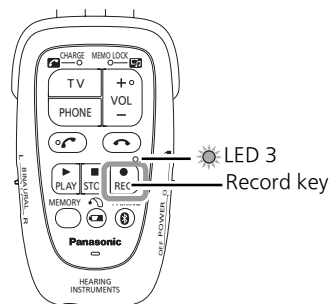
Operations

Voice memo recording

66

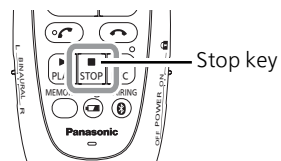
■ Recording instructions

1 Press and hold the record key for at least one second.



- A notification alert is emitted from the hearing instrument when recording is started. At the same time, LED 3 slowly blinks orange (once per 2–3 seconds). When the remaining time for recording is 10 seconds, the LED indicator is rapidly blinking twice per second.

2 Press the stop key to stop recording.



- A notification alert is emitted from the hearing instrument, and recording will be stopped.
- Recording is automatically stopped in the following cases:
 - * Recording time passes 2 minutes 40 seconds.
 - * Mode switching occurs, for example, you are done talking, and hang up the phone.

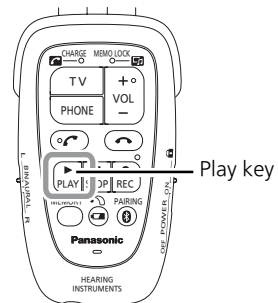
For information on how to adjust the volume level of notification alert sound for recording start/stop, see Page 34.

Listen to recorded audio data

You can listen to recorded audio data through the Hearing Hub.
If you want to play a specific audio file, just press the play key, so you can skip the current audio file.

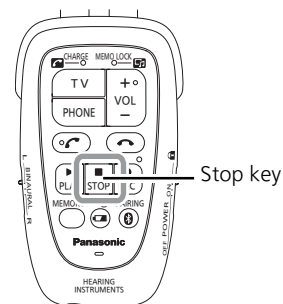
■ Instructions

1 Press the play key.



- You can hear the latest audio file from the hearing instrument.
- While playing audio data, just press the play key, so you can skip the current audio file.

2 To stop playing, press the stop key.



- After audio files such as phone conversation, TV sound and audio from external devices are played, the mode of the hearing instrument will be returned to Memory 1.

Operations

Voice memo recording

■ Volume adjustment

You can adjust the playing sound volume by following the instruction below.

Use the volume keys to turn the volume up or down.

- The volume control provides 17 adjustable volume levels. A notification sound is not made from the hearing instrument.
- Press and hold the volume key, so the volume is consecutively changing by itself at 1-second interval.
- When the hearing instrument or Hearing Hub is turned off and then back on again, the volume remains unchanged since it was last adjusted.
- Adjusting the playing sound volume does not affect the volume of the hearing instrument.

Protect audio files

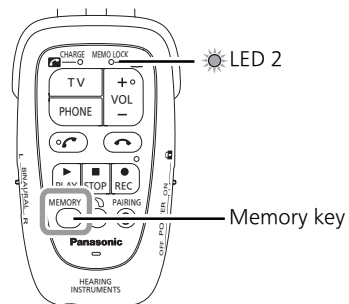
You can write-protect your recorded audio data.

■ Write-protect recorded audio data

- 1 Press and hold the memory key for at least one second while playing audio data that is not write-protected.

Operations

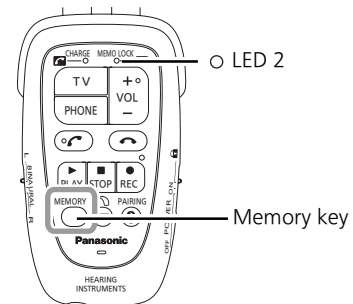
Voice memo recording



- When the audio file that is being played is write-protected, LED 2 turns solid orange.
- * Up to 4 files can be protected.

■ Cancel write-protection

- 1 Press and hold the memory key for at least one second while playing audio data that is write-protected.



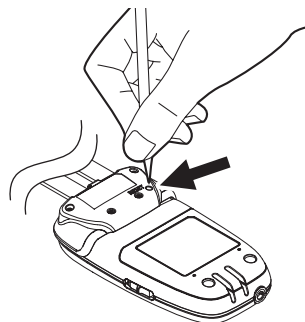
- When write-protection is canceled, LED 2 will shut off.

Hearing Hub reset

If the Hearing Hub suddenly does not work for some reason, reset it by following the instructions below.

1 Press the reset button on the back of the Hearing Hub.

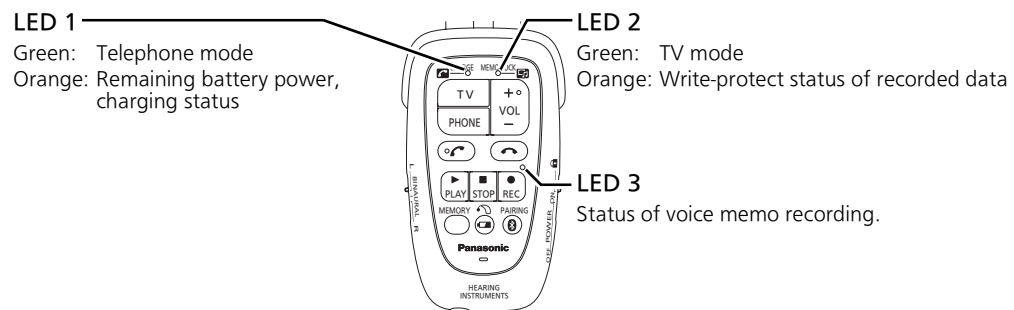
- Press the reset button until it clicks by poking a toothpick or something sharp, as shown in the illustration.



2 Turn off the Hearing Hub and then back on again.

Hearing Hub reset does not affect Bluetooth® pairing (registered) information.

LED indicator



Operations

LED 1 (Orange: Charged/charging)

LED indicator	Status	Descriptions
The LED turns on.	Charging	
The LED turns on then off.	Fully charged	
Blinking once per 2-3 seconds.	Cannot be charged due to temperature out of the appropriate temperature range.	Blinking until the temperature returns to the appropriate operating range.
Blinking twice per second.	Charging failure	Stop charging and turn off the Hearing Hub. Consult your dispenser.

LED 1 (Orange: Remaining battery power/In use)

LED indicator	Status	Descriptions
Blinking once per 2-3 seconds.	Running low on power.	You have 7 minutes of power remaining (Varies depending on operating conditions).
Blinking twice per second.	Completely drained.	Recharge your Hearing Hub immediately.

LED 2 (Orange: Write-protection)

LED indicator	Status	Descriptions
The LED turns on.	Recorded data is being played (Protected).	
The LED shuts off.	Recorded data is being played (Not protected).	
Blinking 5 times per second for 3 seconds.	The number of recording files reaches a maximum.	You have already write-protected the maximum number of files.

LED indicator (Continued)

LED 1 (Green: Phone mode)

LED indicator	Status	Descriptions
Blinking once per 2-3 seconds.	Connected with a phone through Bluetooth®. Sending a call Talking	Either a mobile or landline phone is being connected through Bluetooth®. Sending a call or talking on either a mobile or landline phone.
Blinking 5 times per second.	Receiving a call.	Receiving a call on either a mobile or landline phone.
The LED shuts off.	Not connected with a phone through Bluetooth®.	Neither a mobile or landline phone is connected through Bluetooth®.
Blinking twice per second.	Connected with a phone through Bluetooth® (Poor reception).	The Hearing Hub is too far away from a phone.

Operations

LED 2 (Green: TV mode)

LED indicator	Status	Descriptions
Blinking once per 2-3 seconds.	Connected with the Audio Transmitter*1 through Bluetooth®.	
The LED shuts off.	Not connected with the Audio Transmitter*1 through Bluetooth®.	
Blinking twice per second.	Connected with the Audio Transmitter*1 through Bluetooth® (Poor reception)	The Hearing Hub is too far away from TV.

Operations

LED 1 and LED 2 are simultaneously blinking orange

LED indicator	Status	Descriptions
The LED comes on for 3 seconds.	The Hearing Hub is ON.	Once the Hearing Hub is activated, the LED will shut off.

*1 The Audio Transmitter is an optional accessory sold separately.

LED indicator (Continued)

LED 1 and LED 2 are simultaneously blinking green

LED indicator	Status	Descriptions
The LED is blinking 5 times per second.	Pairing	
The LED comes on solid green for 3 seconds.	Registered information is being deleted.	
The LED is blinking once per second.	Connecting to the Audio Transmitter*1 or telephone through Bluetooth®.	
The LED comes on solid green for 2 seconds.	Connection with the Audio Transmitter*1 or telephone through Bluetooth® has been completed.	

Operations

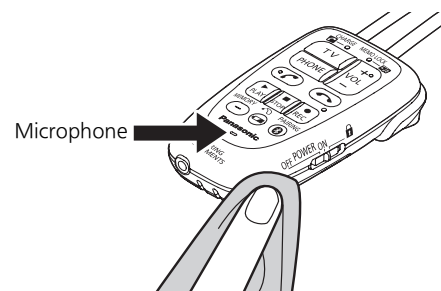
LED 3 (Orange: recording)

LED indicator	Status	Descriptions
The LED is blinking once per 2–3 seconds.	Recording	
The LED is blinking twice per second.	The remaining recording time is 10 seconds.	

*1 The Audio Transmitter is an optional accessory sold separately.

Maintenance

Wipe clean with a dry cloth.
When cleaning the Hearing Hub, wipe it gently with a soft cloth.
Make sure that your cloth is clean and free of dirt and dust.



- Use enough caution when cleaning the microphone. Never poke it with a needle, toothpick or the like.
- Never use organic solvents such as alcohol, paint thinner, or benzene.
- When you clean a charger cradle, unplug the AC cord first.

Bluetooth® operation instructions

This product uses Bluetooth® module transmitter (Ver.2.1+EDR) with 79 channel operation within 2402–2480 MHz frequency band and has rated RF output power of class1. This transmitter is designed for compliance with FCC rules and for usage only within the United States.

■Restrictions

- The Hearing Hub is designed to comply with United States regulations and is intended for use in the United States.
- Wireless Bluetooth® connection with any Bluetooth® enabled devices is not necessarily supported.
- Bluetooth® enabled mobile phone needs to be certified by the Bluetooth SIG, Inc. and be compliant with the standard. However, Bluetooth® certification does not guarantee the operation method, display, or behavior of the phone that fulfills the Bluetooth® requirements. The phone may not be able to be connected wirelessly due to the specifications and settings.
- The Hearing Hub meets the security requirements of Bluetooth® standards. However, security may not be enough due to usage conditions or settings.
- Panasonic is not responsible or liable for information leaks due to Hearing Hub malfunction or improper wireless connection.

■Available distance

The Hearing Hub should be located within 98.4 feet (30 m) of audio sources (Bluetooth® enabled devices). However, this distance cannot be guaranteed. Wireless communication is affected by obstacles such as walls, buildings, human bodies or other in-between electronic devices. The communication distance can be shorter when they cause interference with the Hearing Hub.

■Interference from other devices

- Some electronic devices, if located nearby, may interfere with proper behavior of the Hearing Hub. When you use your Hearing Hub, keep a distance of at least 16.4 feet (5 m) from a microwave oven and wireless LAN devices.
- The Hearing Hub may not work properly if there is a broadcast station in your area.
- If wireless LAN devices is placed within 16.4 feet (5 m) of your Hearing Hub and still the Hearing Hub behaves abnormally, disable LAN connection.

This Product is designed, developed and manufactured as contemplated for general use, including without limitation, general office use, personal use, household use, and ordinary industrial use, but is not designed, developed and manufactured as contemplated for use accompanying fatal risks or dangers that, unless extremely high safety is secured, could lead directly to death, personal injury, severe physical damage or other loss (hereinafter "High Safety Required Use"), including without limitation, nuclear reaction control in nuclear facility, aircraft flight control, air traffic control, mass transport control, medical life support system, missile launch control in weapon system. If customer's product possibly falls under the category of High Safety Required Use, consult with our sales representatives in charge before such use. In addition, FDTC shall not be liable against the Customer and/or any third party for any claims or damages arising in connection with the High Safety Required Use of the Product without permission.

Reference


Troubleshooting guide

This section discusses a general approach to solving problems related to Hearing Hub handling and operations. The following table will help you narrow down the problem area, identify the source of the issue, and provide workarounds. If your problem is particularly sensitive or persistent, write down any error conditions encountered and detailed description, so your dispenser will figure out what's going on with your Hearing Hub.

Symptom	Probable cause	Corrective action/Workaround	Page
No sound is produced.	If the remaining battery power of the hearing instrument is low, Hearing Hub operation and audio signal reception will be disabled.	Replace the battery.	-
	A neckloop antenna is not worn.	Wear a neckloop antenna around your neck.	28
Noise is continuous or sound is intermittent.	A neckloop antenna is not worn.	Wear a neckloop antenna around your neck.	28
	There are facilities or devices that emit strong electromagnetic wave located nearby.	Go out of that area.	-
	Your hearing instrument or Hearing Hub is placed in the location subject to radio frequency interference.	Change the position of your Hearing Hub.	-

Troubleshooting guide

Reference

Symptom	Probable cause	Corrective action/Workaround	Page
The hearing instrument does not work.	The power/hold switch is  or POWER OFF.	Slide the switch to POWER ON.	30 31
	The battery is running low on charge.	Recharge the battery.	26
	A neckloop antenna is not worn.	Wear a neckloop antenna around your neck.	28
	There are facilities or devices that emit strong electromagnetic wave located nearby.	Go out of that area.	-
Pairing fails	The Hearing Hub is too far away from the Bluetooth® enabled device.	Keep a distance of 19.7 inches (50 cm) between the Hearing Hub and Bluetooth® enabled device.	39 45 53
	There are facilities or devices that emit strong electromagnetic wave located nearby.	Go out of that area and perform pairing again.	39 45 53

Troubleshooting guide

Reference

Troubleshooting guide (Continued)

Symptom	Probable cause	Corrective action/Workaround	Page
Pairing fails	You are not operating the Bluetooth® enabled device properly.	Perform pairing again by referring to the manual that came with your Bluetooth® device. * If the device allows you to use the Advanced Audio Distribution Profile (A2DP) of the Bluetooth® profile, disable A2DP.	-
	You have entered the wrong passkey.	The correct passkey is "0000".	-
	The Hearing Hub is not put into pairing mode.	See instructions of "Listen to TV audio (Pairing)", "Make and receive calls on mobile phone (Pairing)" or "Make and receive calls on landline phone (Pairing)".	39 45 53
	Pairing was performed as soon as the Hearing Hub was turned on.	Wait at least 30 seconds after turning on the Hearing Hub. * If the Hearing Hub has been paired with the mobile or landline phone, and it is turned on, a Bluetooth® connection will be prioritized. A new pairing may be cancelled.	-

Troubleshooting guide

Reference

Symptom	Probable cause	Corrective action/Workaround	Page
You cannot hear any TV audio from your hearing instrument via Hearing Hub.	The Hearing Hub is too far away from the Audio Transmitter*1.	Make sure that your Hearing Hub is located within 98.4 feet (30 m) of the Audio Transmitter*1. Wireless communication is affected by indoor obstacles such as walls, furniture and other objects.	-
	The pairing has not been completed.	See instructions of "Listen to TV audio (Pairing)".	39
	The Audio Transmitter*1 has been powered off.	Turn on the Audio Transmitter*1.	42
	The battery is running low.	Recharge the battery.	26
Sending/Receiving calls are disabled.	The Hearing Hub is too far away from the mobile phone.	Make sure that your Hearing Hub is located within 32.8 feet (10 m) of your mobile phone. Wireless communication is affected by indoor obstacles such as walls, furniture and other objects.	-
	The Hearing Hub is too far away from the Bluetooth® landline phone.	Make sure that your Hearing Hub is located within 32.8 feet (10 m) of the Bluetooth® landline phone. Wireless communication is affected by indoor obstacles such as walls, furniture and other objects.	-

*1 The Audio Transmitter is an optional accessory sold separately.

Troubleshooting guide (Continued)

Symptom	Probable cause	Corrective action/Workaround	Page
Sending/ Receiving calls are disabled.	The pairing has not been completed.	See instructions of "Make and receive calls on mobile phone (Pairing)" or "Make and receive calls on landline phone (Pairing)".	45 53
	The Hearing Hub is not connected to the phone through Bluetooth®.	The Hearing Hub must be connected to the phone through Bluetooth®. If LED 1 is slowly blinking green once per 2-3 seconds, Bluetooth® connection has been created. If you are using two phones, either one may be only allowed to be connected to the Hearing Hub. Press the phone key to disconnect the phone then press the phone key again to reconnect.	49 57
	You are operating the phone the wrong way.	See the instructions that came with the phone.	-
	Bluetooth® is disabled on the mobile phone.	Enable Bluetooth® on your mobile phone. For details, see the instructions that came with your mobile phone.	48

Troubleshooting guide

Reference

Symptom	Probable cause	Corrective action/Workaround	Page
Sending/ Receiving calls are disabled.	The phone is OFF.	Turn on the Bluetooth® enabled device.	-
	The battery is running low.	Recharge the battery.	26
Your voice cannot be heard.	The surrounding is noisy.	Position the microphone close to your mouth.	48 56
	When the microphone is positioned close to your mouth, the voice gets distorted or intermittent.	Your hearing instrument or Hearing Hub is placed in the location subject to radio frequency interference. Change the position of your Hearing Hub.	48 56
The Hearing Hub does not charge.	The surrounding temperature is too high or too low.	If the surrounding temperature is out of the appropriate charge temperature range (7 °C to 40 °C [44.6 °F to 104 °F]), charging may be disabled. * In that case, LED 1 is blinking orange once per 2-3 seconds.	72
The battery life is short.	Your battery has reached its charge capacity.	Replace your rechargeable battery. Consult your dispenser.	27

Troubleshooting guide

Reference

Specifications

Transport/Storage temperature	-10 °C to 50 °C [14 °F to 122 °F]
Transport/Storage relative humidity	20 % to 85 %
Classification	Internally powered equipment

According to UL 60601-1:2003 R6.03

Battery		Built-in rechargeable battery: DC 3.6 V
Battery charge time		Approx. 3 hours (Varies depending on operating conditions and other factors)
Battery run time	Continuous TV watching	Approx. 8 hours (Varies depending on operating conditions and other factors)
	Bluetooth®	Version RF power output Profile Wireless communication QDID (Qualification design ID) Bluetooth® qualification/ Certification
Available distance	Wireless communication between the Hearing Hub and other Bluetooth® enabled devices.	Bluetooth® Ver.2.1+EDR Class1 (Approx. 6 mW) Telephone: HFP (Hands-Free Profile) HSP (Headset Profile) 2.4 GHz FH-SS (Frequency-hopping spread spectrum) B017883 Approx. 98.4 feet (30 m) Wireless communication is affected by obstacles such as walls, buildings, human bodies or other in-between electronic devices. The communication distance can be shorter when they cause interference with the Hearing Hub. * For Bluetooth® Class 2, the available communication is up to a 32.8 feet (10 m) line-of-sight distance.

Reference

Operating temperature	0 °C to 40 °C [32 °F to 104 °F]
Charging temperature	7 °C to 40 °C [44.6 °F to 104 °F]
Dimensions (excluding neckloop antenna)	59 mm (W) × 101 mm (H) × 28 mm (D) [2.3" (W) × 4.0" (H) × 1.1" (D)]
Mass (including neckloop antenna)	Approx. 123 g (4.3 oz)

AC adaptor	Power source	AC 110 V - 240 V, 50 Hz/60 Hz
	Input	0.22 A
	Output	DC 5.0 V 1.6 A
	Standby power	Less than 0.3 W

Reference

Warranty and customer service

Warranty

The Limited Warranty document is enclosed together in the package.
Make sure that it is filled in with date of original purchase, name of dispenser, and other important information.
Keep it in a secure place.











Customer Services Directory (United States)

Obtain product information and operating assistance and locate the nearest dispenser by visiting our website at: <http://www.panasonic.com/hearing>
You may also contact us directly at: 1-888-422-6309

Reference

Information

■Symbol Indications

 Symbol for "SERIAL NUMBER"	 Symbol for "THIS WAY UP"	 Symbol for "KEEP DRY"
 Symbol for "DATE OF MANUFACTURE"	 Symbol for "HANDLE WITH CARE"	 General symbol for recovery/recyclable
 Symbol for "MANUFACTURER"	 Symbol for "STACKING LIMIT BY NUMBER"	 Symbol for "TEMPERATURE LIMITATION"
 Symbol for "TUVus LICENCED TEST MARK"		

■Battery disposal

Your Hearing Hub must be disposed of properly according to local laws and regulations. This product contains a battery that can be recycled: Do not dispose in household waste. When your Hearing Hub reaches its end of life, contact your dispenser for assistance. The Hearing Hub is not designed to allow you to remove the battery.

Reference

Information (Continued)

■AC adaptor

The rated input voltage of the AC adaptor is AC 110 V - AC 240 V.
The AC adaptor must be used under the following condition:

- In the USA, the AC cord plug must be connected to an AC 120 V only.

Reference

90

FCC compliance

FCC ID: ACJ927152TX

Contains FCC ID: ACJ927153TX

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

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

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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 experienced radio/TV technician for help.

Reference

For your reference (Fill out when you purchase your Hearing Hub)

Name of owner:	
Model number:	Serial number*:
Dispenser:	Purchase date:
Dispenser address:	
Dispenser phone:	

*The serial number is printed on the package label.

[Distributor]

**Panasonic Corporation of North America
Healthcare Group**

One Panasonic Way, 1H-6, Secaucus, NJ 07094
Telephone No. 1-888-422-6309

[Manufacturer]

Panasonic Healthcare Co., Ltd.
247 Fukutake-ko, Saijo, Ehime 793-8510, Japan

© Panasonic Healthcare Co., Ltd. 2011

Printed in Japan
YAH0M1101A-0
F1011-0