



3-20-41 Higashimotomachi, Kokubunji, Tokyo 185-8533, Japan

HOW TO USE YOUR FIRST HEARING AID

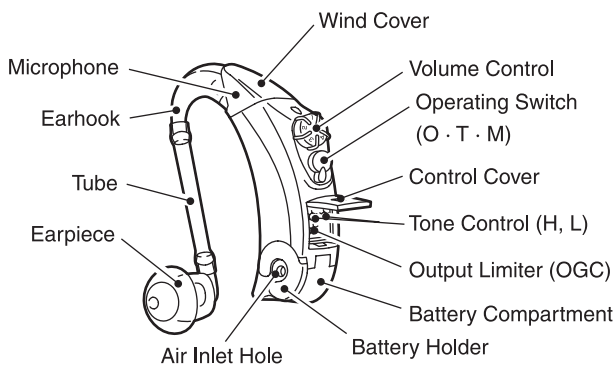
- Any hearing aid cannot return level of your hearing to normal or halt further hearing deterioration, but proper use of your hearing aid can help you hear what is going on around you and let you get more enjoyment of life.
- If this is your first hearing aid, you - like most new users - will probably be surprised at the loudness of the sounds, and after using it for a short while, you may even feel that it is too noisy. The following three tips are important in overcoming your concerns.
 - 1) Read this manual and become familiar with the hearing aid's various mechanisms and how to use them correctly.
 - 2) First, use your hearing aid in a quiet place and listen to quiet sounds and give yourself sufficient time to get accustomed to the sound of your hearing aid.
 - 3) If any physical problems develop, consult your doctor.

FOR KEEPING YOUR HEARING AID LONGER

- Always keep the hearing aid clean. Clean the hearing aid with dry cloth periodically and also remove earwax plugged in the earpiece or earmold using eyebrush or toothbrush.
- Do not expose the hearing aid to the heat from stoves, etc. Also, avoid leaving it in places with high humidity.
- Operate the controls with care. Do not press hard.
- If the hearing aid is dropped in water, wipe with dry cloth and ask the dispenser for check.
- Do not pick the microphone with nail, pin, etc., because this may damage the microphone.
- Do not disassemble or attempt any repairs by yourself. Ask the dispenser for repair.

OPERATING INSTRUCTIONS

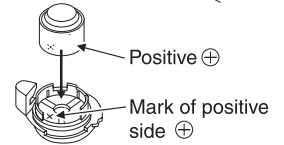
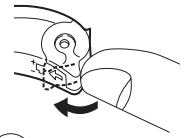
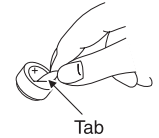
Parts and Controls



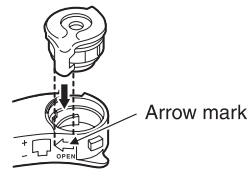
Tube and earpiece shown above are not included as standard accessories in some countries.

Battery Placement

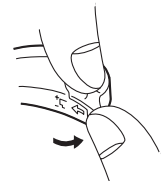
1. Remove the tab on the battery (PR-48 or A13HP).
2. Turn the battery holder clockwise to open it.
3. Place the battery in the holder, checking to see that the battery is in with the positive the plus mark side matched.
4. 1) Place the battery holder as illustrated, the nose of the battery holder must be placed at the edge of the arrow mark.
2) Press and turn it counterclockwise by a finger until it is locked.



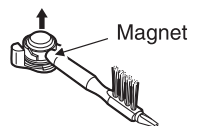
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5. When removing the battery, attach the bottom of the brush to the side of the battery. The magnet of the brush attracts the battery, so you can remove it easily.

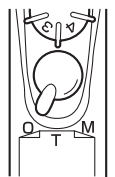


Be sure to remove the battery when the hearing aid is not to be used more than one week. In addition, Zinc-air battery may be discharged gradually after removing the tab.

Battery life: Approx. 270 hours (IEC), 230 hours (ANSI) (PR-48 or A13HP, for continuous use)
Battery life will change depending on the operating condition.

O-T-M Switch

- O: Power off**
Set to "O" when the hearing aid is not in use.
- T: Induction coil (Telephone coil)**
Set to "T" when the hearing aid is used for telephone or loop system.



When the switch of the hearing aid is set to T, noise may be heard in the vicinity of electromagnetic fields, such as generated for example by electronically secured gates or similar.

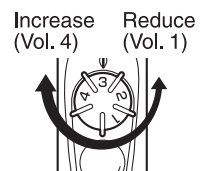
M: Microphone

Set to "M" for ordinary use.

When taking off the hearing aid, set the switch to "O". If not, whistling (acoustic feedback) may occur. When setting the switch to "O", a short whistling sound may be heard. This is not a problem.

Volume Control (Vol. 1 to 4)

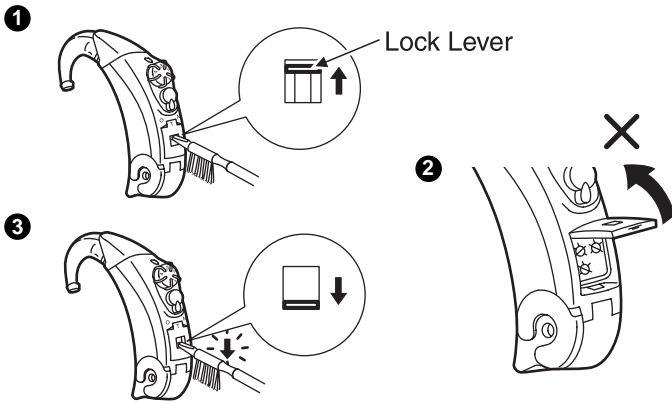
1. Turn the volume all the way down (Vol. 1) before putting your hearing aid in your ear.
2. Then, adjust the volume to the appropriate level.



The best position of the control will depend on the distance and sound level you want to hear.

How to Open and Close the Control Cover

1. Slide the Lock Lever upward with the screw driver and open the Control Cover as illustrated.
2. Do not lift up the Control Cover too far.
3. After trimmer adjustment, close the Cover pressing it with a finger and slide the Lock Lever downward until it is locked.

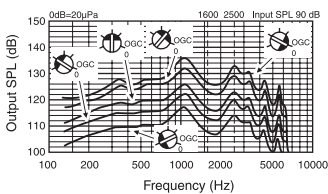


TECHNICAL DATA (According to ANSI Standard S3.22 1987)

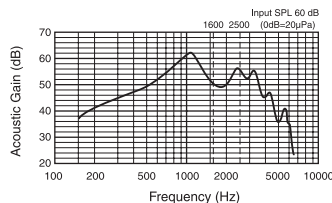
Maximum SSPL90	136 dB
HFA-SSPL90	132 dB
HFA-full-on Gain	56 dB
Reference Test Gain	55 dB
Frequency Range	140 Hz to 5000 Hz
Equivalent Input Noise Level	25 dB
Total Harmonic Distortion	800 Hz: 6%, 1600 Hz: 2%
Induction Coil Sensitivity	113 dB at 10 mA/m
Operating Switch	O-T-M
Output Limiting Control	OGC, range 18 dB (continuous)
Tone Control	TONE H, TONE L (continuous)
Circuitry	Class D
Battery Type, Supply Voltage	A13HP, 1.3 V
Battery Current, Life	0.9 mA, 230 h
Dimensions	4.6 × 1.4 × 0.95 cm
Weight (excluding battery)	5.7 g

(Typical value)

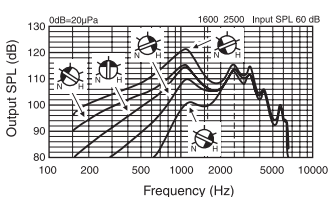
SSPL90 curve and effect of output limiting control



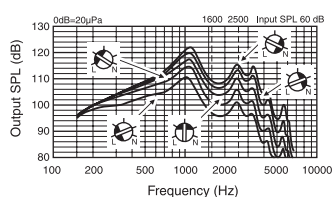
Full-on gain curve



Frequency response curve and effect of tone control (TONE H)



Frequency response curve and effect of tone control (TONE L)



Note: (1) Production number (serial number) is indicated inside the control cover.

(2) Manufacturer's name is imprinted at the back side of a hearing aid.

Trimmer Adjustment

TONE H (Low Cut):

Turning this trimmer clockwise (N to H) reduces the amount of low frequency amplification.



Maximum reduction at 500 Hz is 32 dB.

TONE L (High Cut):

Turning this trimmer counterclockwise (N to L) reduces the amount of high frequency amplification.



Maximum reduction at 2500 Hz is 14 dB.

Output Limiting Control (OGC)

The OGC can reduce the maximum output in overall frequencies as well as the acoustic gain.

Turning this control counterclockwise can reduce its output and gain by up to 18 dB and 20 dB, respectively.



Cautions:

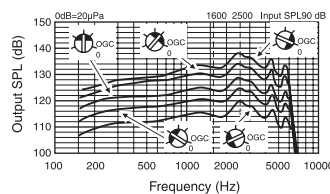
Special care must be taken in case the sound pressure level exceeds 132 dB as this may further impair the user's residual hearing.

TECHNICAL DATA (According to IEC Standard Pub. 118-0 1983)

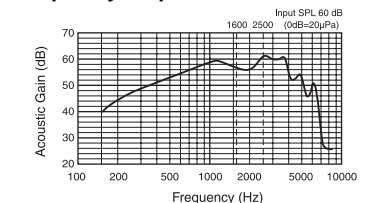
Reference Test Frequency	1600 Hz	
OSPL ₉₀		133 dB
	500 Hz	129 dB
	Peak	138 dB
Full-on Acoustic Gain	57 dB	
Equivalent Input Noise Level	28 dB	
Total Harmonic Distortion	500 Hz: 10%, 800 Hz: 10%, 1600 Hz: 3%	
Induction Coil Sensitivity	91 dB at 1 mA/m	
Operating Switch	O-T-M	
Output Limiting Control	OGC, range 18 dB (continuous)	
Tone Control	TONE H, TONE L (continuous)	
Circuitry	Class D	
Battery Type, Supply Voltage	PR-48, 1.3 V	
Battery Current, Life	0.75 mA, 270 h	
Dimensions	4.6 × 1.4 × 0.95 cm	
Weight (excluding battery)	5.7 g	

(Typical value)

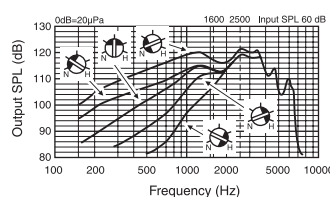
OSPL₉₀ curve and effect of output limiting control



Full-on acoustic gain frequency response curve



Basic frequency response curve and effect of tone control (TONE H)



Basic frequency response curve and effect of tone control (TONE L)

