

### HOW TO USE YOUR FIRST HEARING AID

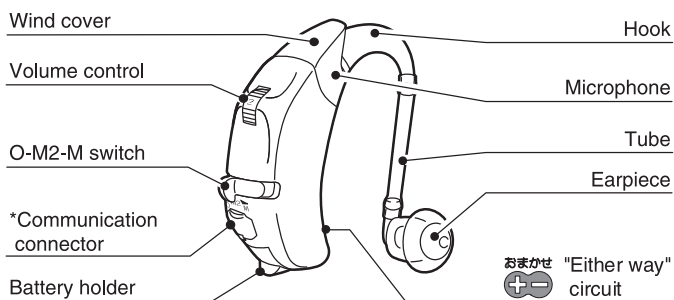
- Any hearing aid cannot return level of your hearing to normal or halt further hearing deterioration, but proper use of your hearing aid can help you hear what is going on around you and let you get more enjoyment of life.
- If this is your first hearing aid, you - like most new users - will probably 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

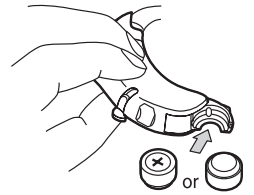
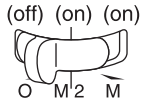
#### Parts and Controls



- Tube and earpiece shown above are not included as standard accessories in some countries.
- \* The communication connector serves for adjustment of the hearing aid by the hearing aid professional.

#### Battery Placement

1. Set the O-M2-M switch of the hearing aid to "O" (power off).
2. Peel off the sticker on the positive side of battery (PR48 or 13 zinc-air battery).
3. Open the battery holder with the tip of your finger.
4. Insert the battery into the battery holder. **You do not have to worry about the polarity.**
5. Close the battery holder.



#### Battery life (PR48 or 13, for continuous use)

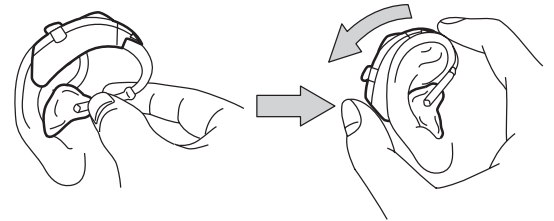
ANSI: Approx. 280 hours

IEC: Approx. 260 hours

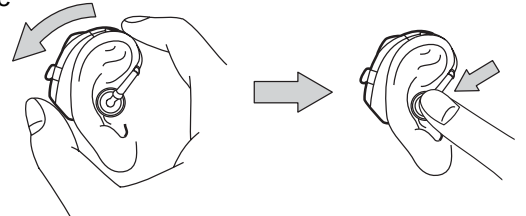
- Battery life will change depending on the operating condition.

#### Putting on Hearing Aid

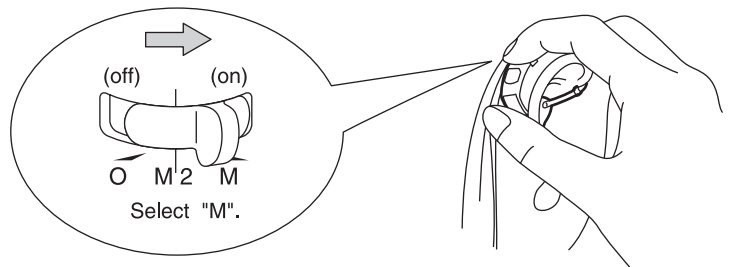
1. Place the hearing aid on the ear.
  - Earmold



- Earpiece

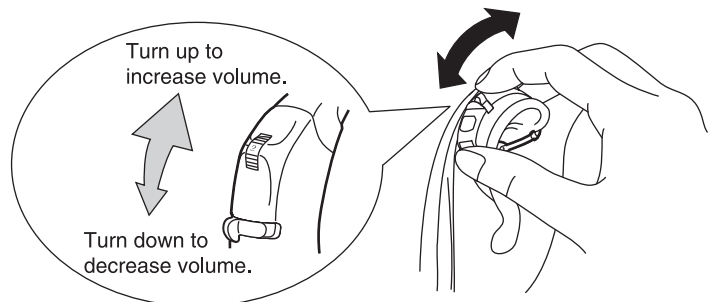


2. Turn the power on.



3. Adjust the volume control to a suitable level.
  - Volume control

Higher numbers mean louder sound.



- \* Adjust the volume according to the situation (volume of other voices, ambient noise, etc.).

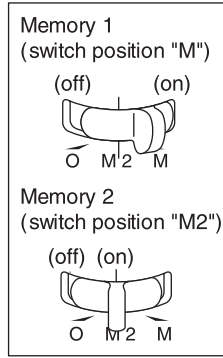
● Memory selection (using selector switch)

If sounds are hard to hear depending on the environment, such as in a noisy or quiet environment, change the setting of the memory selector to find the position that yields best results.

\* The memory selector switch (M2/M) is programmed to match your hearing pattern. Operate the switch to find the position that yields best results in a given situation.

● Switch operation sound

Memory 1	Memory 2
M2→M: one beep	M → M2: two beeps



in the "M" or "M2" position, acoustic feedback (howling) may occur.

2. Be sure to set the switch to "O" and take out the battery, when not using the hearing aid.

**Turn-on precaution**

If you switch the hearing aid off and then immediately on again, there may be no sound, but this is not a defect. In such a case, return the switch to "O" (Off), wait for at least 10 seconds, and then set the switch to "M" or "M2" again.

**Adjusting the Controls**

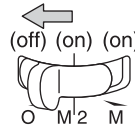
This hearing aid is a digital type. To adjust it, a computer (with NOAH and the Rionet Selector installed) and a HI-PRO unit are required. Have the adjustment done at the dealer.

**Factory Default Setting**

- O - M2 - M switch : "O"
- Volume control (1 - 4) : "1"

**Removing Hearing Aid**

1. Set the switch to "O" (power off) before removing the hearing aid. If the switch is left



**TECHNICAL DATA** (According to ANSI standard S3.22 2003)

Maximum-OSPL90	125 dB (1000 Hz)
HFA-OSPL90	122 dB
HFA-full-on Acoustic Gain	55 dB
Reference Test Gain	45 dB
Frequency Range	200 Hz to 5400 Hz
Equivalent Input Noise Level	21 dB
Total Harmonic Distortion	500 Hz: 2% 800 Hz: 2% 1600 Hz: 1%
AGC	CRC (Input AGC)/OPC (Output AGC)
Operating Switch	O-M2-M
Output Limiting Control	OPC (range: 18 dB)
Tone Control	TONE H, TONE L
Gain Control	Main VR (range: 30 dB) GAIN (range: 34 dB)
Battery Type/Supply Voltage	13/1.3 V
Battery Current	0.94 mA
Battery Life	Approx. 280 hours
Dimensions/Weight	3.75 x 1.27 x 0.88 cm/4.0 g (excluding battery)

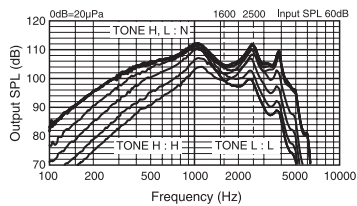
(Typical value with E1 hook)

**TECHNICAL DATA** (According to IEC standard Pub. 60118-0-1983 Amendment 1-1994)

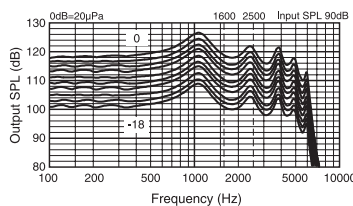
Reference Test Frequency	1600 Hz	
OSPL90	125 dB	
	500 Hz	122 dB
	Peak	132 dB
Full-on Acoustic Gain	58 dB	
Equivalent Input Noise Level	22 dB	
Total Harmonic Distortion	500 Hz: 3% 800 Hz: 2% 1600 Hz: 2%	
AGC	CRC (Input AGC)/OPC (Output AGC)	
Operating Switch	O-M2-M	
Output Limiting Control	OPC (range: 18 dB)	
Tone Control	TONE H, TONE L	
Gain Control	Main VR (range: 30 dB) GAIN (range: 34 dB)	
Battery Type/Supply Voltage	PR48/1.3 V	
Battery Current	1.0 mA	
Battery Life	Approx. 260 hours	
Dimensions/Weight	3.75 x 1.27 x 0.88 cm/4.0 g (excluding battery)	

(Typical value with E1 hook)

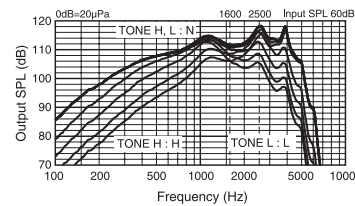
**Frequency response curve and effect of tone control**



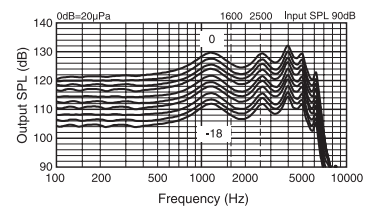
**OSPL90 curve and effect of output limiting control**



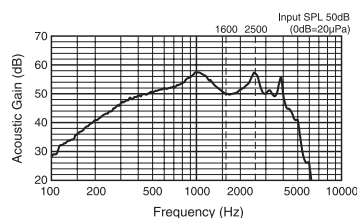
**Basic frequency response curve and effect of tone control**



**OSPL90 curve and effect of output limiting control**



**Full-on gain curve**



**Full-on acoustic gain frequency response curve**

