

HEARING AID **HB-37S** **HB-37T**

 **RION CO., LTD.**

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HOW TO USE YOUR FIRST HEARING AID

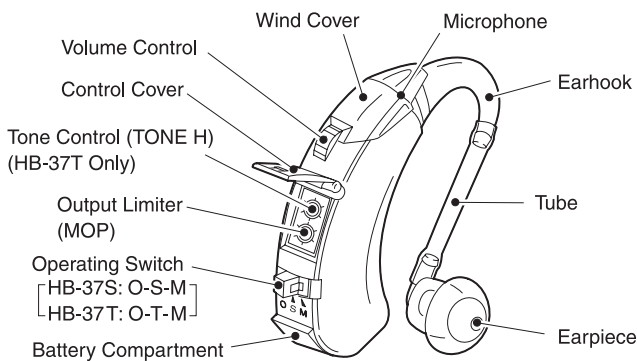
- Any hearing aid cannot return level of your hearing to normal or halt further hearing deterioration, but proper use of your hearing aid can help you hear what is going on around you and let you get more enjoyment of life.
- If this is your first hearing aid, you - like most new users - will probably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

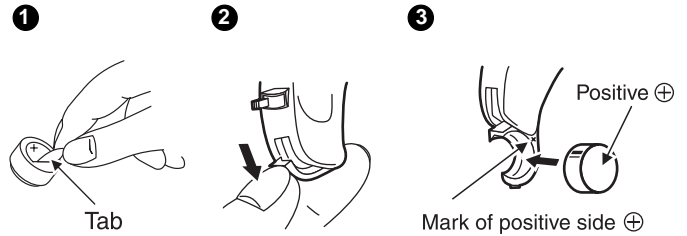
Parts and Controls



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

Battery Placement

1. Remove the tab on the battery (PR-44 or A675HP zinc-air battery).
2. Open the battery door.
3. Place the battery in the door, checking to see that the battery is in with the positive the plus mark side matched.
4. Close the battery door tightly.



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 (PR-44 or A675HP, for continuous use)

HB-37S: Approx. 420 hours

HB-37T: Approx. 380 hours

Battery life will change depending on the operating condition.

3-Position Operating Switch

(HB-37S: O-S-M, HB-37T: O-T-M)

O: Power off

Set to "O" when the hearing aid is not in use.

S: Power on and low frequency reduced

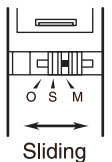
(HB-37S Only)

Set to "S" when using the hearing aid in noisy place.

T: Induction coil (Telephone coil)

(HB-37T only)

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

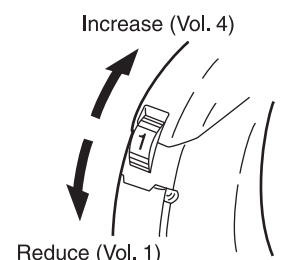
Set to "M" for ordinary use.

When taking off the hearing aid, set the switch to "O". If not, whistling (acoustic feedback) may occur.

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.



Output Limiting Control (MOP)

This control serves to adjust the maximum output of the hearing aid to protect your hearing from loud sounds.

The maximum output can be held to a given level even when input exceeds that level.

Use the screw driver for fine adjustment.

Turning this control counterclockwise will reduce the maximum power output by up to 10 dB.



Tone Control (TONE H, HB-37T only)

Turning this control clockwise from "N" to "4" cuts off low frequencies continuously.



Do not lift up the control cover too far.



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

Model	HB-37S	HB-37T
Maximum SSPL90	125 dB	
HFA-SSPL90	120 dB	
HFA-full-on Gain	52 dB	
Reference Test Gain	42 dB	
Frequency Range	160 Hz to 5800 Hz	140 Hz to 6000 Hz
Equivalent Input Noise Level	25 dB	
Total Harmonic Distortion	800 Hz: 1.7% 1600 Hz: 1.1%	
Induction Coil Sensitivity (at 10 mA/m)	NO	103 dB
Operating Switch	O-S-M	O-T-M
Output Limiting Control	MOP, range 10 dB (continuous)	
Tone Control	NO	TONE H, N to 4
Low Frequency Reduction	S	NO
Battery Type, Supply Voltage	PR-44 or A675HP, 1.3 V	
Battery Current, Life	1.25 mA, 420 h	1.38 mA, 380 h
Dimensions	3.9 x 1.42 x 0.88 cm	
Weight (excluding battery)	5 g	

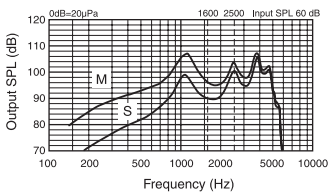
(Typical value)

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

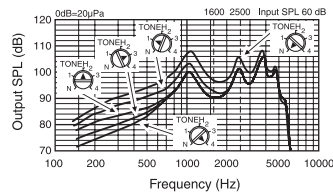
Model	HB-37S	HB-37T	
Reference Test Frequency	1600 Hz		
OSPL ₉₀	123 dB		
	500 Hz	123 dB 122 dB	
	Peak	129 dB	
Full-on Acoustic Gain	54 dB		
Equivalent Input Noise Level	29 dB		
Total Harmonic Distortion	800 Hz: 5% 1600 Hz: 10%		
Induction Coil Sensitivity (at 1 mA/m)	NO	88 dB	
Operating Switch	O-S-M	O-T-M	
Output Limiting Control	MOP, range 10 dB (continuous)		
Tone Control	NO	TONE H, N to 4	
Low Frequency Reduction	S	NO	
Battery Type, Supply Voltage	PR-44 or A675HP, 1.3 V		
Battery Current, Life	1.25 mA, 420 h	1.38 mA, 380 h	
Dimensions	3.9 x 1.42 x 0.88 cm		
Weight (excluding battery)	5 g		

(Typical value)

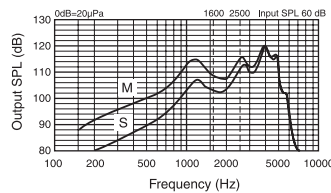
Frequency response curve (HB-37S)



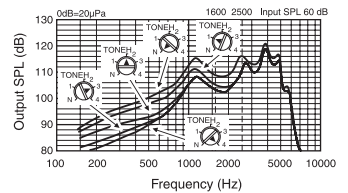
Frequency response curve and effect of tone control (HB-37T)



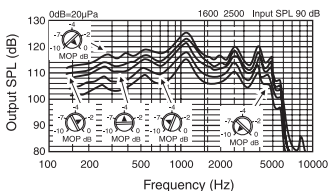
Basic frequency response curve (HB-37S)



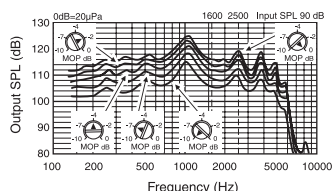
Basic frequency response curve and effect of tone control (HB-37T)



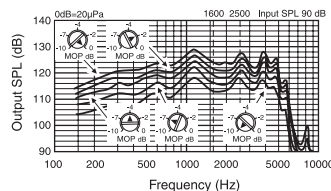
SSPL90 curve and effect of output limiting control (HB-37S)



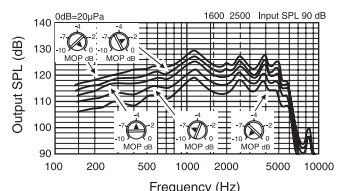
SSPL90 curve and effect of output limiting control (HB-37T)



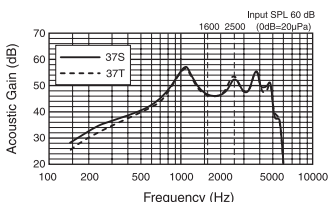
OSPL₉₀ curve and effect of output limiting control (HB-37S)



OSPL₉₀ curve and effect of output limiting control (HB-37T)



Full-on gain curve



Note:

- (1) Production number (serial number) is indicated inside the battery door.
- (2) Manufacturer's name is imprinted at the back side of a hearing aid.

Full-on acoustic gain frequency response curve

