

Tour Mic/HEI-18Y-1 Instructions



Transmitter



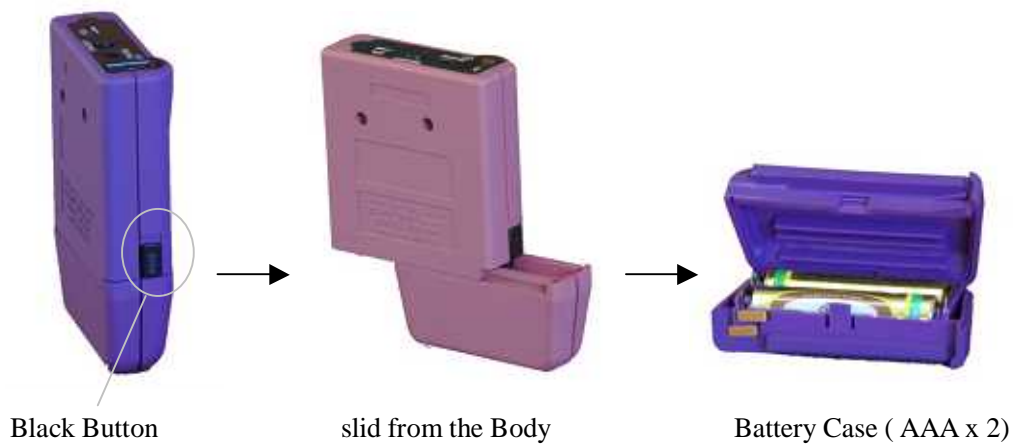
Receiver

I. Precautions when using

Caution:

- To prevent the electromagnetic wave from influencing medical equipment, make sure to switch off the unit's power when placing it in close proximity to the medical equipment.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

1. Batteries



(1) How to open the battery case

As pushing up the black button on the side, slide the battery case horizontally from the body.
Snap the battery case open by the upside.

(2) Dry cell batteries

Size AAA alkaline batteries

When mounting replacement batteries, be sure not to mistake the polarity.

If the polarity is reversed, the battery will discharge all at once and may be incapable of being reused.

(3) Battery life should be about 20 hours if used continuously.

(4) This model has functions to extend battery life and device for not used continuously.

(5) When the battery power gets low, the LED lamp flashes to let you know it's time to change the batteries.

(6) If there is a strange noise on the receiver side or if the majority of the receivers are hard to hear, replace the batteries of the transmitter or check if the plug is loose or there is dust in the jack.

2. Transmitter/receiver operation



Transmitter



Receiver

(1) Power on

Lightly pressing the power button of the transmitter/receiver turns the power on and lights the red LED lamp. (At first, gradually increase the volume with the volume knob.) At this status, the transmitter/receiver is working normally.

(2) Standby mode

Transmitter: If there is no communication for approximately 20 seconds, the LED lamp goes off and the equipment switches to "standby mode."

Receiver: Linked with the transmitter, and change into "standby mode" immediately. (Applying for a patent) The LED lamp goes off (but power is not cut off).

When in "standby mode," when a call is initiated by the transmitter side, the LED lamps of both the

transmitter and receiver light and communication commences automatically. (It may take about 1 second for communication to commence.)

If you press and hold the power of both the transmitter and receiver for several seconds, the LED lamp flashes and the power is shut off.

(2) Active mode

When the transmitter detects voice input, the receiver is switched to standby mode automatically and starts communication – the receiver is linked with the transmitter.

The transmitter/receiver can be reset by pressing the on/off switch for no more than 1 second.

(3) The device has 10 channels (0 - 9CH). Set both the receiver and transmitter to the same channel when using.

If the lines are crossed, try another channel.

(See the following precautions when selecting/switching channels with the channel selector.)

(4) When plugging the microphone in the microphone jack of the transmitter and earphones in the earphone jack of the receiver, be sure to insert all the way.

If not inserted all the way, you will not be able to transmit/receive properly.

(5) Noise may be produced if the plug or jack is dirty. If so, wipe away dirt from the plug and jack with a soft cloth, etc. (if used in areas where there is a lot of sand or dust)

(6) Stretch out the microphone cord and earphone cord when using.

(7) The transmitter microphone cord and the receiver earphone cord break easily. Be careful when handling the cords.

(8) Signals may get mixed with the frequency of local broadcasting stations in small areas. If so, transmission/reception may be temporarily interrupted. Using a cellular telephone in the immediate vicinity may produce noise. This does not however indicate equipment failure. Try a different location.

3. Standby mode

(1) If there is no voice communication for approximately 20 seconds, the equipment is designed to switch to standby mode in order to extend the life of the batteries.

When the transmitter switches to standby mode, the receiver being used also automatically switches to standby mode and stands by to receive a transmission from the channel that had been used up to that point.

(2) Standby mode is when the equipment becomes dormant without the power being cut off completely; the equipment uses minimal power while waiting for transmission/reception.

(3) Functions in the standby mode are as follows:

The receiver waits for a transmission from the transmitter. (The frequency of the current channel is used. If the channel is changed, the transmission cannot be received.)

The LED lamps of both the transmitter and receiver go off (but power is not cut off).

(4) When a radio wave of the frequency of the channel that had been used up to then is transmitted from the transmitter side, the receiver automatically begins receiving, all function restart and the LED lamp lights.

(5) Important

The microphone regards not only audio signals as signals; it regards all signals including noise and scratching sounds as signals. The equipment is therefore programmed so that the circuit does not re-open unless you talk for a relatively long period of time (about 1 second). You should note that the initial word is not transmitted.

4. Auto power off function

This is a function for saving electricity, and is a measure for when you forgot to turn power off.

Transmitter: If nothing is inputted for approximately an hour, the auto power off function is actuated, and the power of both the transmitter and receiver is cut off.

Receiver: If transmitter does not send signal for approximately an hour, the auto power off function is actuated, and the power of both the transmitter and receiver is cut off.

In this state, both the transmitter and the receiver do not go back to “active mode,” automatically. Turn the power back on by pressing the power switch (no more than 1 second).

5. Other precautions when using

(1) No exposure to water

The equipment is not water-proof. If it gets wet from drops of water, etc., wipe away right away.

(2) Turn the power off in airplane and any time other than when necessary!

Use of electronic devices in airplanes is prohibited. You should also turn the power off when unnecessary to save electricity and prevent equipment failure.

(3) Be careful of volume

You should turn the volume to minimum when the power is turned on and gradually increase.

(4) Mount the batteries correctly.

The equipment uses size AAA alkaline batteries. Be careful not to mistake the polarity when mounting the batteries.

(5) Precautions for people who use a pacemaker

People who use a pacemaker should avoid using.

II. Functions (detail supplement)

The transmitter is equipped with various functions to realize safe and secure communications.

Depending upon the circumstances under which the equipment is used, the functions may appear to be malfunctioning or not functioning properly despite being used correctly.

1. Functions shared by the transmitter and receiver

(1) Stop mode

Condition when battery box is mounted. When electricity is supplied to the electronic circuit, the microcomputer is actuated, but the power of the transmitter is not on and communication has not started.

There is almost no consumption current in this state (not flowing).

The batteries can therefore remain mounted, but internal battery leakage could occur if the battery life (approx. 2 years) is exceeded.

Pressing and holding the on/off switch (at least 2 seconds) sets the equipment to this state no matter what state it is in when the switch is pressed.

Press and hold (at least 2 seconds) and the LED lamp begins flashing and then goes off.

The equipment is then switched to the stop mode.

(2) Active mode

The active mode is when the power is on and the transmitter switches to communication mode and the microphone is ready for transmission.

The receiver also becomes ready for reception and the earphones are ready for reception on the same channel as the transmitter. When in the stop mode, pressing the on/off switch (no more than 1 second) switches the equipment to the active mode.

Press the switch (no more than 1 second) and the power is turned on and the LED lamp lights.

(3) Standby mode

The standby mode is a function for extending the life of the batteries. Consumption current is about 1/8 that of the active mode.

Also called the "sleep mode," the microcomputer "goes to sleep" in this mode. Performing any operation (audio transmission from the transmitter, pressing of the on/off switch no more than 1 second) reverts to the active mode.

If the equipment remains in the standby mode for an hour continuously it switches to the stop mode.

(4) Reset

Reset returns the equipment to its initial state. You can reset the equipment by pressing the on/off switch for no more than 1 second during use.

*If you press the on/off switch for no more than 1 second when in standby mode, the equipment switches to active mode. The set channel is used in this case.

*If you move outside the communication range (approx. 100 meters outdoors), you may lose the signal from the transmitter. If the signal cannot be picked up for 20 seconds, the receiver automatically switches to the standby mode. When reset is executed, the receiver once again tries to pick up a signal from the transmitter.

(5) Auto power off

If the equipment remains in standby mode for one hour, the power shuts off automatically and it switches to stop mode.

(6) Battery voltage check

When the batteries (size AAA alkaline batteries x 2) wear down, the LED lamp begins to flash. Communication is no longer possible in this state. You must change the batteries.

2. Transmitter functions

(1) External microphone

A microphone input jack is provided on the control panel at the top. The jack is used to connect an external microphone.

(2) Built-in microphone

The built-in microphone becomes effective when the external microphone is disconnected. The two small holes above where MIC is printed on the control panel are the openings for the built-in microphone to receive sounds. Be sure one of the microphones is effective when in the active mode. If there is no audio input for 20 seconds consecutively, the transmitter automatically switches to standby mode. If you begin speaking when in standby mode, the line is restored and the equipment

switches back to active mode.

Note: 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.

3. Receiver functions

(1) Standby mode

When in the active mode and there is no transmission from the transmitter, the receiver automatically switches to the standby mode.

If the channel of the transmitter is changed, the receiver regards it as no transmission.

The LED lamp goes off but the power is not shut off. When a transmission on the same channel is picked up, the mode switches from standby to active mode. If the equipment remains in the standby mode for an hour continuously it switches to the stop mode.

(2) Tone squelch

The receiver is programmed with a function whereby weak signals are not output to the earphones depending on the strength of the audio signals received. This is provided to filter out harsh hissing noise that is characteristic of radio waves with no audio signal (unmodulated radio waves). The line is closed and you can't hear anything.



Ear-hang Earphone



Pin-type Microphone

Note: This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

III. Main specifications

Models:	HEI-18Y-1
Products name:	Transmitter / receiver
Standard:	FCC part 15.249
Transmission frequency:	920.20 - 922.00 MHz, 10ch
Transmission type:	Frequency synthesizer
Reception type:	Double super heterodyne
Communication method:	Unidirectional
Wave format:	F3E
EIRP power: Max.	48dBuV/m
Consumption current:	Max. 55 mA, Max. 50 mA
Battery duration:	Approx. 20 hrs. (continuous transmission/receiving)
Antenna:	TX:Helical antenna (dedicated external), RX:loop antenna (built-in)
Batteries:	2 LRX size AAA alkaline batteries (03)
Rated voltage:	3.0V \pm 10%
Min. operation voltage:	2.5V \pm 0.1V
Total weight:	Max. 78 g (including batteries)
Service temperature:	-10°C to 50°C

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 UNDESIRE OPERATION.

Federal Communications Commission Requirements

The equipment has been tested and found to comply with the limits for 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 instruction, may cause harmful interference to radio communication. 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 of 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.

THE CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

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.

This device complies with RSS-210 of the IC 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.