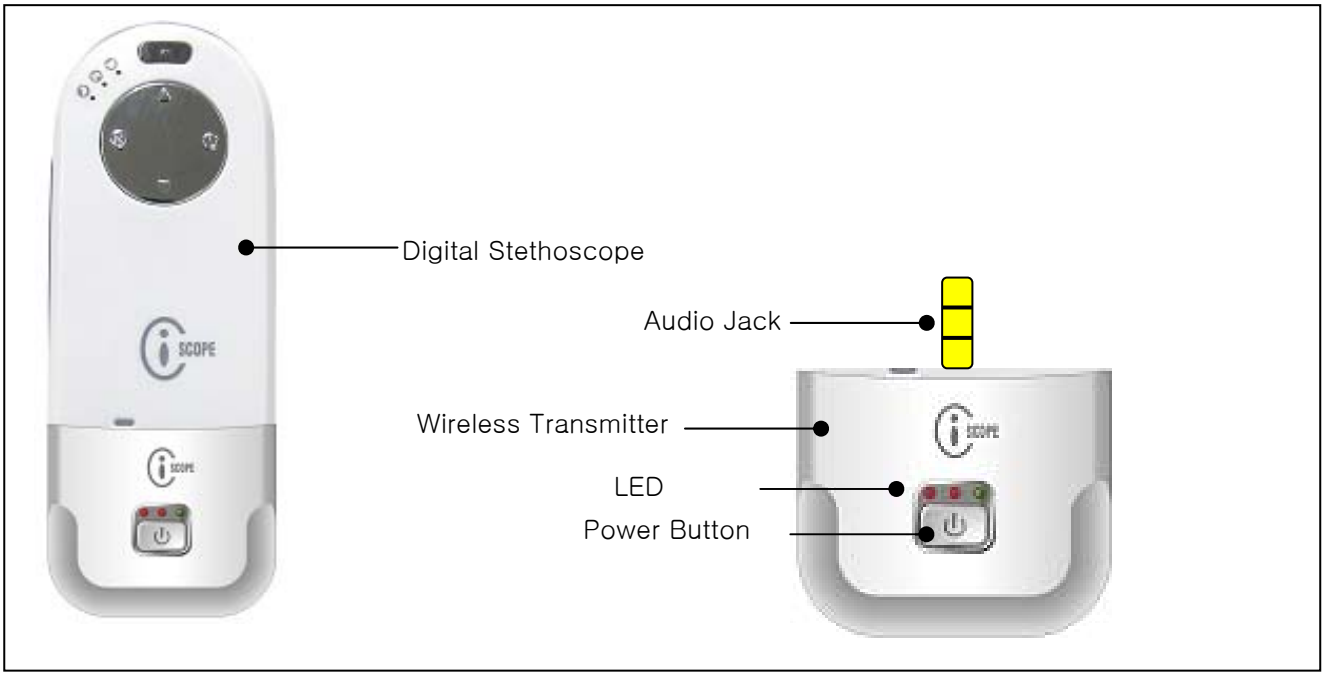
Wireless Device Manual

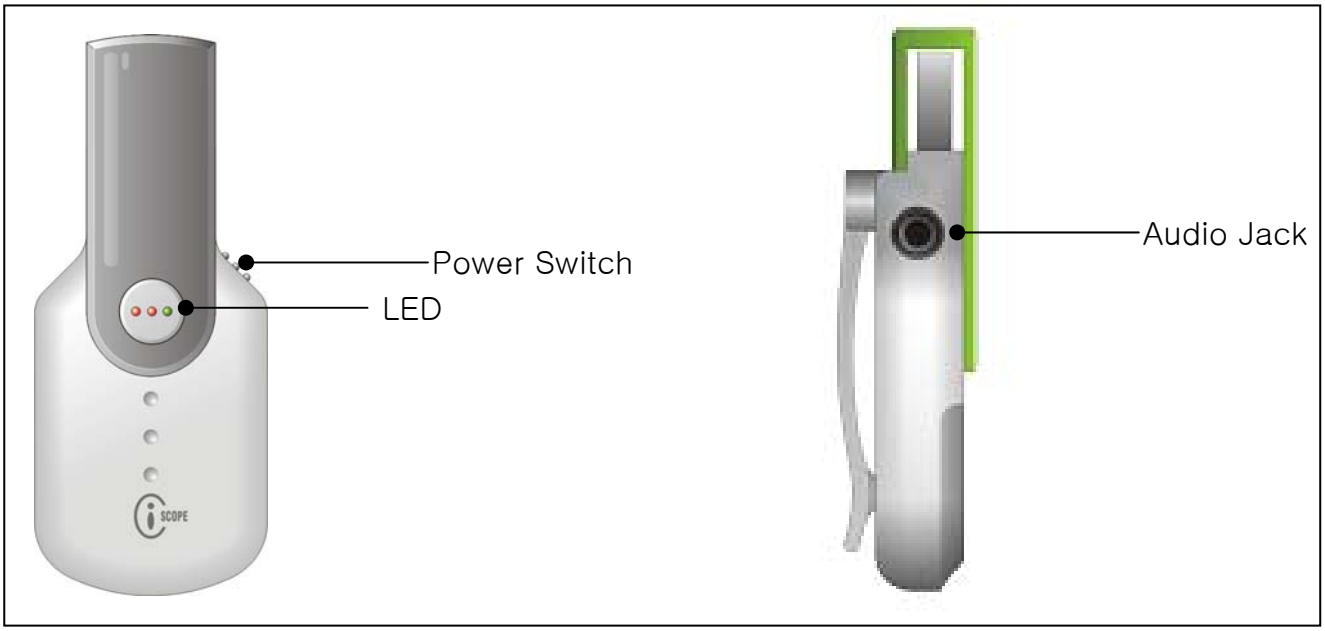
DONGJIN MEDICAL

Name of the Part

[Transmitter]



[Receiver]



[LED Indicator]

Low Battery Link Recharge

Link Recharge Low Battery

1. Product Content

The device is consist of wireless transmitter and receiver with using 2.4GHz ISM BAND frequency. The transmitter is made up RF ONE CHIP, CPU, 오디오A/D Converter, Tact Switch, Antenna, LED indicator, Audio JACK, Lithium- Polymer rechargeable battery, the receiver is composed RF ONE CHIP, CPU, Audio D/A Converter, USB Driver IC, Slide Switch, Antenna, LED indicator, USB connector, Audio JACK, Power ON/OFF switch, Lithium- Polymer Rechargeable Battery as well. The device transmits the auscultation signal to earphone or USB through cooperation of transmitter and receiver from digital stethoscope. Also, it is conveniently designed for pairing automatically when you power on transmitter and receiver.

2. Product part

2-1. Wireless Transmitter

① Power Part

-. The power circulation is designed for minimizing consumption of electric current and noise with using voltage regulator which is supplied each circuit with 3.7v Lithium-polymer battery

-. The device can be recharged with USB.

② Wireless Transmitter Part

-. Used RF ONE CHIP

-. Used internal antenna

-. Used LED indicator to confirm operation of product.

③ Audio control Part

-. The device is digitalizing the analogue signal to digital stethoscope with using A/D Converter

2-2. Wireless Receiver

① Power Part

-. The power circulation is designed for minimizing consumption of electric current and noise with using voltage regulator to supply each circuit with 3.7v Lithium- polymer battery.

-. The device can be recharged with USB.

② Wireless Receiver Part
-. Wireless Transmitter Part
-. Used RF ONE CHIP
-. Used internal antenna
-. Used LED indicator to confirm operation of product.

③ Audio control Part
- This part converts the analogue signal into digital audio signal through D/A Converter which is connected to Computer or Earphone with USB Controller IC.

3. Specification

3-1) TX SPECIFICATION

- Operational Frequency : 2.404 GHz ~ 2.479 GHz
- Maximum TX Power : 10dBm(10㎽)
- 2.4GHz RF Single chip GFSK Transceiver
- CHANNEL : Adaptive Frequency Hopping
- Supply Voltage : 3.7V Lithium Polymer Battery
- Supply Current : 0.4㎃ (Stand By), 41㎃ (LINK ON)
- Antenna : CHIP ANTTENA

3-2) RX SPECIFICATION

- Operational Frequency : 2.404 GHz ~ 2.479 GHz
- RX Sensitivity(1Mbps) : -80dBm
- 2.4GHz RF Single chip GFSK Transceiver
- CHANNEL : Adaptive Frequency Hopping
- Supply Voltage : USB PC Voltage & 3.7V Lithium Polymer Battery
- Supply Current : 96mA
- Antenna : CHIP ANTTENA

3-3) SPECIFICATION

- AUDIO SAMPLING RATE : 32KHz
- AUDIO BAND : 20Hz ~ 16KHz
- OPERATING RANGE : above the 10m
- LED Indicator
  -.LINK ON/OFF LED
  -.LOW Battery LED
  -.Charger Display LED
- Operating temperatures : -20 ℃ ~ +55 ℃

4. How to use

1.Connect a audio jack from the bottom of digital stethoscope and receiver.
2.Connect a receiver to USB connector of computer or earphone jack.
3. Power switch on of transmitter and receiver.
4. Check the LED Link indicator. If the LED light is on it, it is already paired.
5. Test a output with operating computer or earphone.

5. How to solve

Question1 : The transmitter LED LAMP is not working on it.

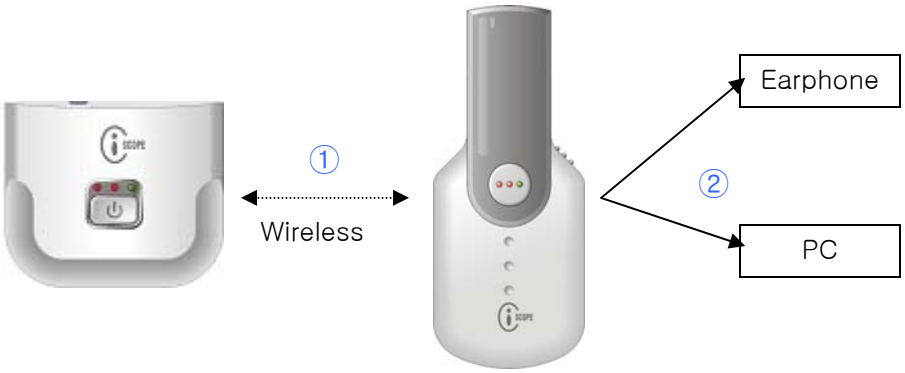
1. Please check the low battery and recharge.
2. Check a Switch button on it.
3. Check the connecting status of input port.

Question2 : The receiver LED LAMP is not working on it.

1. Please check the low battery and recharge.
2. Check a LED LAMP status.

Question3 : The external device is not working.

1. Check the output port and connecting status.
2. Check a cable and jack.



<i-scope TX> <i-scope RX>

① The device(i-scope TX) transmits the auscultation signal to USB(i-scope RX) by wireless.

② Listen to the auscultation signal using a earphone and a PC.

Federal Communication Commission Interference Statement

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 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 con-nected.

• Consult the dealer or an experienced radio/TV technician for help.

IMPORTANT NOTE:

FCC RF Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOIDTHE USER&#xFFFD;S AUTHORITY TO OPERATE THE EQUIPMENT.