



Catalog

Product feature abstract	01
Product feature	01
Product parts and components	02
Single channel buttons of front panel or interfaces of rear panel for receiver	03
Dual channel buttons of front panel or interfaces of rear panel for receiver	04
Main interface for receiver	05
TFT display interface for receiver	06-07
Bodypack transmitter functionality and interface description.....	08-13
Handheld transmitter functionality and interface description.....	14-20
Plug-on transmitter functionality and interface description.....	21-22
Sync operation between transmitter and receiver	23
Precautions and troubleshooting	23
Specification about receiver and handheld/bodypack transmitter	24

Feature Abstract

- ACEMIC G3/G4 uses a latest high fidelity technology of UHF wireless transmission to ensure the superb clear original sound.
- True diversity reception can ensure no blind point or dropout during long range transmission, maximum receiving range is up to 300m with stable signal.
- Receiver is equipped with a TFT display and has multiple equalization mode adjustments to meet different demands of use to make a better sound quality.
- Receiver has 32 groups of channel, pre-set 6000 selectable frequencies.
- Simple to operate, with features of quick spectrum scan and channel setup to avoid interference from other wireless devices in the same location.
- Supports the simultaneous use of 20 sets, antenna bridge feature may connect multiple receivers, transmitters may use ID identification feature to quickly find corresponding receivers.
- English and Chinese menu switch on receiver
- Receiver has lock feature to avoid accident change of setup
- ACEMIC G3/G4 is a wireless mic system with features of high quality sound, reliable and stable signal, multifunctional and easy-of-use, designed for a complex stage environment and a location requires a very long distance transmission, it may definitely meet your high demand of sound quality.

Frequency Selection

ACEMIC can provide different frequency band options for the wireless system that comply with government regulations in different countries or regions. These regulations help limit the interference of radio frequency (RF) between different wireless devices, And it can prevent interference with local public communication channels such as television and emergency broadcasting. The receiver and transmitters are labeled with the system's band and frequency range. For example, "610MHz-698MHz". For information on the available bands in your region, please consult your local dealer or call us to check. You may also go to our official website (www.acemic.com) for more details.

Group and Channel

To transmit audio signals through a wireless system, the transmitter and receiver must be set to an identical radio frequency or channel. Because each microphone must use a different channel. A large channel selection range allows users to use more microphones simultaneously. It also provides a wider selection of available channels - these channels are away from interference from television broadcasts, electronic devices, or other wireless systems. A group is a combination of a series of compatible channels. By setting channels in the same group, wireless microphones can achieve better performance.

Frequency Automatic Scanning

The following functions can scan the radio frequency environment to find the best group and channel settings for specific installations.

Channel Scan: Can find the best available frequency for the current A or B channel, and set the receiver to that frequency.

Spectrum Analyzer

This feature can scan audio signals transmitted by multiple wireless systems in the same environment, and then stagger the channels between the system and other wireless devices, this can avoid channel interference issue.

Interface Lock

This feature can lock the transmitter and receiver, so user cannot change setup.

Product parts and components
All systems include:



G3/G4 Receiver



Receiver's Antenna X2



Quarter Inch Audio Cable



Rechargeable Battery
for Handheld Mic



Charging Cable



Power Adapter

Handheld Transmitter Options:



Handheld Transmitter

Bodypack Transmitter Options:



Bodypack Transmitter

Plug-on Transmitter:



Plug-on Transmitter

G3 Button of front panel and interface of rear panel for receiver

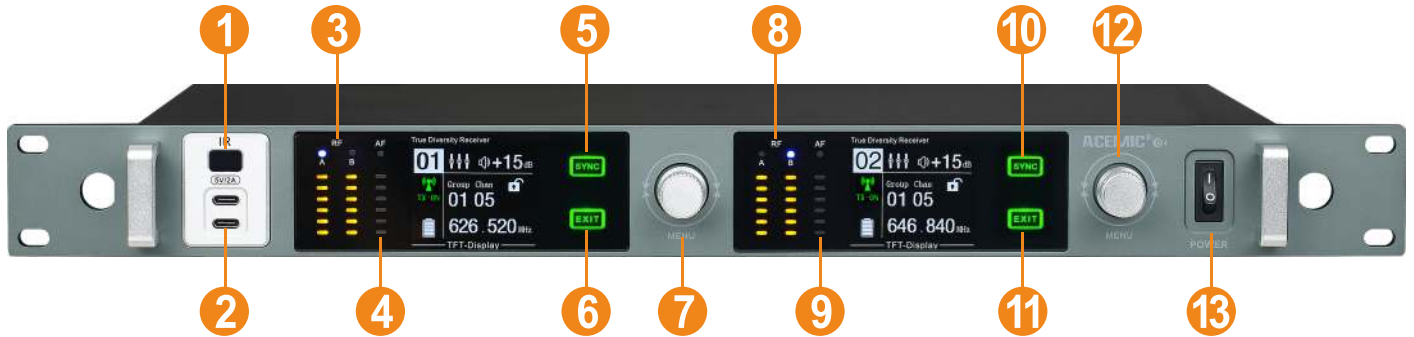


1. Sync window
2. TYPE-C charge port
3. Radio frequency signal strength for channel A of RX
4. Audio signal strength for channel A
5. SYNC button for Channel A
6. Return/cancel button for Channel A
7. Menu knob for CH A , push to enter menu/confirm, rotate left/right to select
8. Power switch



1. Quarter inch audio output for channel A
2. Audio balanced output for channel A
3. Antenna input
4. Antenna power switch
5. Power socket

G4 Button of front panel and interface of rear panel for receiver

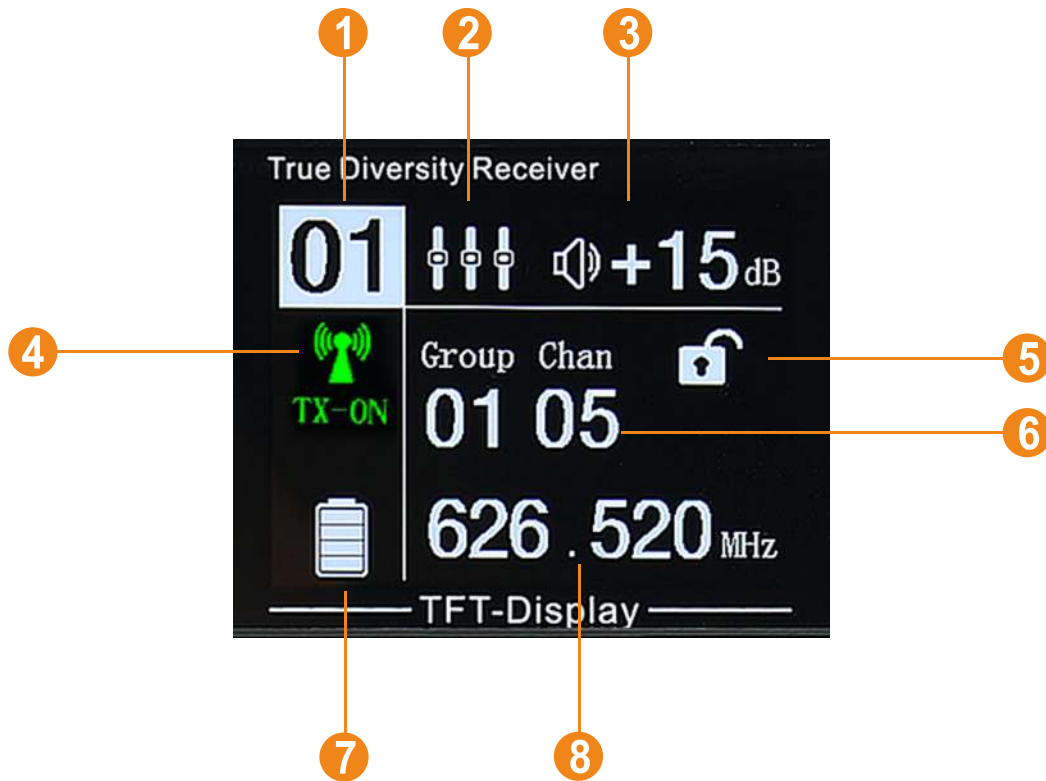


1. Sync window
2. TYPE-C charge port
3. Radio frequency signal strength for channel A of RX
4. Audio signal strength for channel A
5. SYNC button for Channel A
6. Return/cancel button for Channel A
7. Menu button for CH A , push to enter menu/confirm, rotate left/right to select
8. Radio frequency signal strength for channel B of RX
9. Audio signal strength for channel B
10. Sync button for Channel B
11. Return/cancel button for Channel B
12. Menu knob for CH A , push to enter menu/confirm, rotate left/right to select
13. Power switch



1. Quarter inch audio output for channel A
2. Audio balanced output for channel A
3. Antenna input for channel A
4. Antenna output for channel A
5. Antenna power switch
6. Cable rack
7. Quarter inch audio output for channel B
8. Audio balanced output for channel B
9. Antenna input for channel B
10. Antenna output for channel B
11. Feature selection of quarter inch output for channel B, up means mixed output of Channel A+B
12. Power supply socket

G3/G4 Interface of Receiver



1. Corresponding ID code to transmitter

2. Equilibrium value status

3. Mic volume -30~ +15dB, 3dB each step

4. Working status of transmitter

TX-ON: Good

TX-OFF: Closed or sync failed

5. Lock receiver

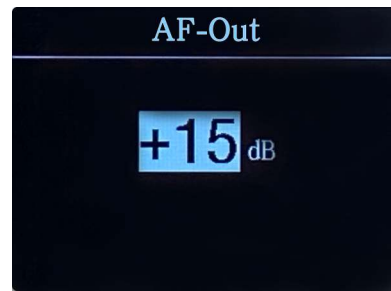
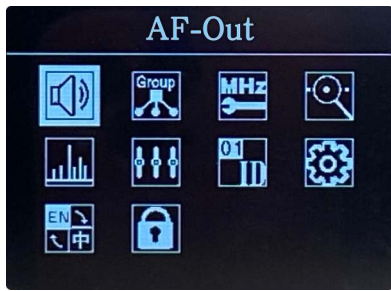
6. Chan means Channel, When Group is OU, user can set up frequency themselves

7. Power status of transmitter

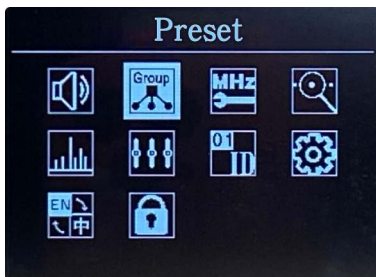
8. Currently operating frequency

G3/G4 TFT display of receiver

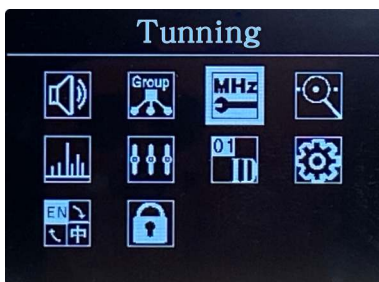
Menu



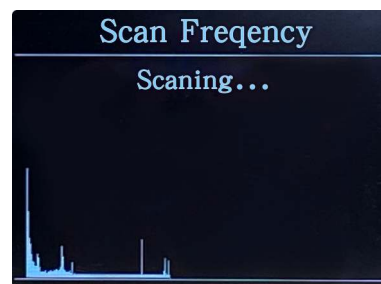
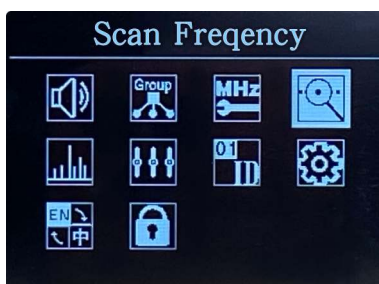
AF-Out: Adjust volume, -30~+15dB, 3dB each step



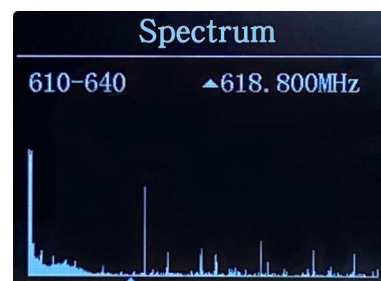
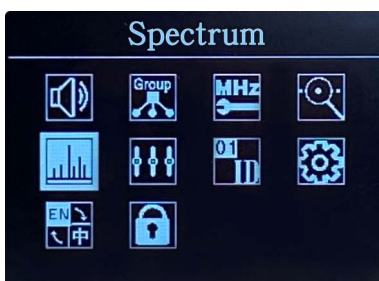
Preset: Preset or find the frequency used last time



Tuning: Adjust frequency manually to use different ones



Scan Frequency: Auto scan to find and set a best frequency in a working environment



Spectrum: Scan the surrounding interference frequencies, adjust manually to use other clean frequencies to avoid interference

G3/G4 TFT display of receiver

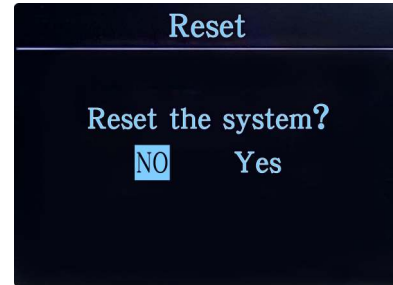
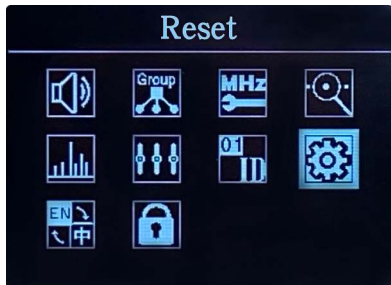
Menu



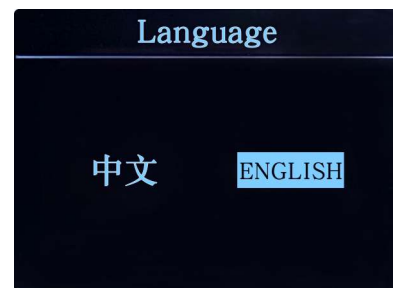
Equalizer: it has 4 modes, user can use them flexible



ID Set: 01~99, Set corresponding ID codes to transmitters when using multiple G4 devices



Reset: Factory reset



Language: Menu in English and Chinese



Lock : Unlock to set menu feature before entering into menu if it is in Lock mode

Features of Bodypack Transmitter(BP-A)



1. Antenna

2. Display

3. 4 pin XLR Port

4. Antenna Connector

5. IR sync window

6. Power Switch (Long Press)

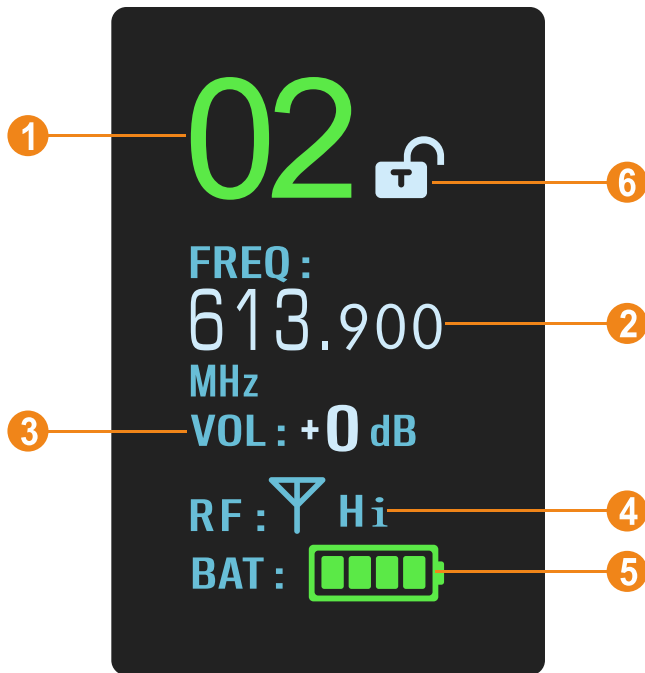
7. Up Button

8. Feature Menu Button (Short Press)

9. Down Button

10. Battery Compartment

Interface of Bodypack Transmitter(BP-A)



1. Corresponding Code Between Transmitter and Receiver
2. Current working Frequency of Bodypack Transmitter
3. Gain (+4dB+6dB+10dB each step)
4. Bodypack Transmitter Power (Hi or Low)
5. Battery Indicator



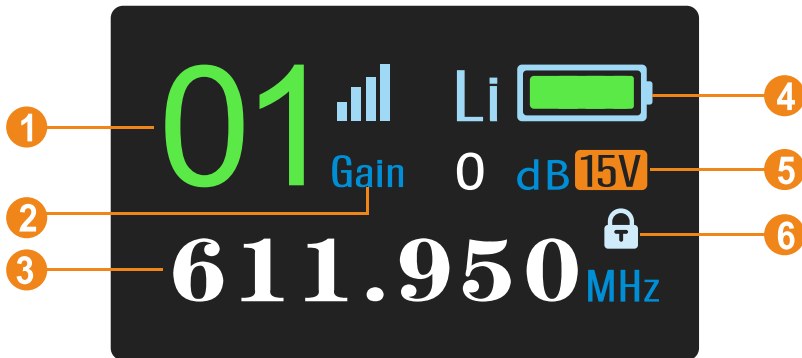
1. Gain setting: -10dB 0dB +10dB three options
2. Press the up and down to manually set the frequency
3. High: 30mW Low: 10mw
4. Chinese and English switching
5. Turn on the lock screen to avoid misoperation

Body-pack Transmitter Function Description(BP-B)

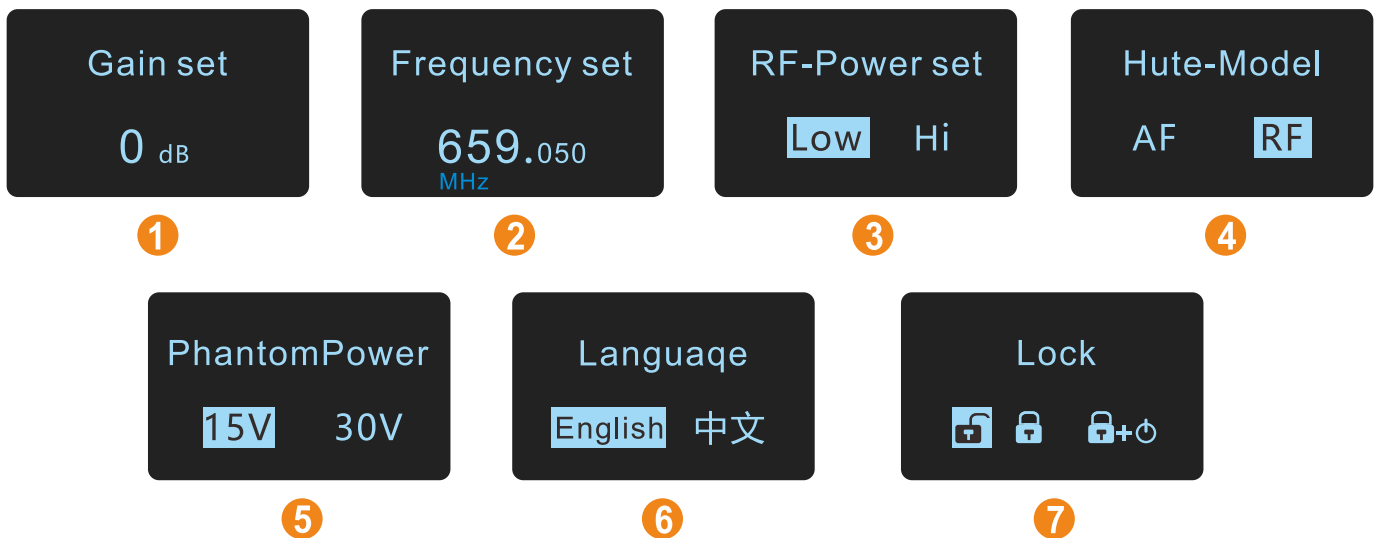


1. Antenna
2. Power (double-click quickly to turn on or off the mute function)
3. 4-pin XLR jack
4. Up
5. Set (short press)
6. Down
7. Battery compartment
8. TYPE-C charging port

Body-pack Transmitter Interface Description(BP-B)



1. The corresponding numbers of the transmitter and receiver
2. Volume gain setting
3. Operating frequency of the bodypack transmitter
4. Battery life display (Lithium battery is displayed as Li, Dry battery is displayed as AA)
5. Phantom power
6. Lock screen or unlock screen icon



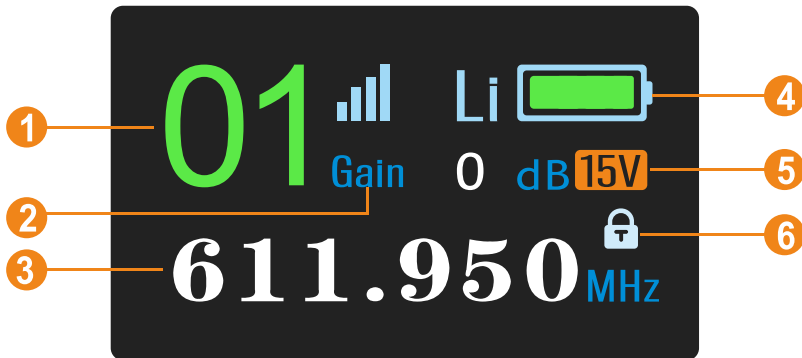
1. Volume setting: Gain has three modes to choose from: -10dB 0dB +10dB
2. Frequency setting: Press the up and down to set
3. Transmitting power: Low: 10mW, High: 30mW
4. Mute mode: Quickly double-click the power button to turn on or off the mute mode
Audio off: Transmitter signal is normal, microphone is muted
RF off: Transmitter signal is turned off, and microphone is muted at the same time (this mode will save more power)
5. Phantom power: 15V/30V phantom power can be manually selected
6. Language: Chinese and English
7. Lock button: The first one: unlock mode;
The second one: turn on the lock screen mode, the transmitter can be shut down normally
The third one: turn on the lock screen mode, the transmitter cannot be shut down (need to be unlocked before shutting down)

Body-pack Transmitter Function Description(BP-C)

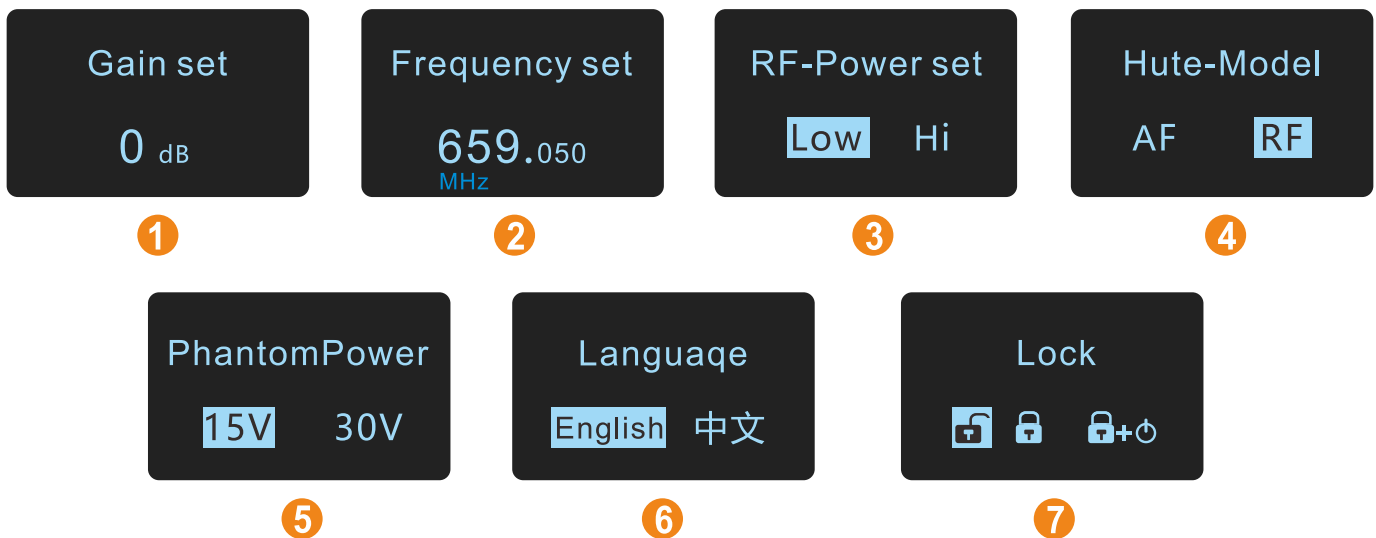


1. 4-pin XLR jack
2. Power (double-click quickly to turn on or off mute mode)
3. Antenna
4. Up
5. Set
6. Down
7. Battery compartment lock button
8. TYPE-C charging port
9. Battery compartment

Body-pack Transmitter Interface Description(BP-C)

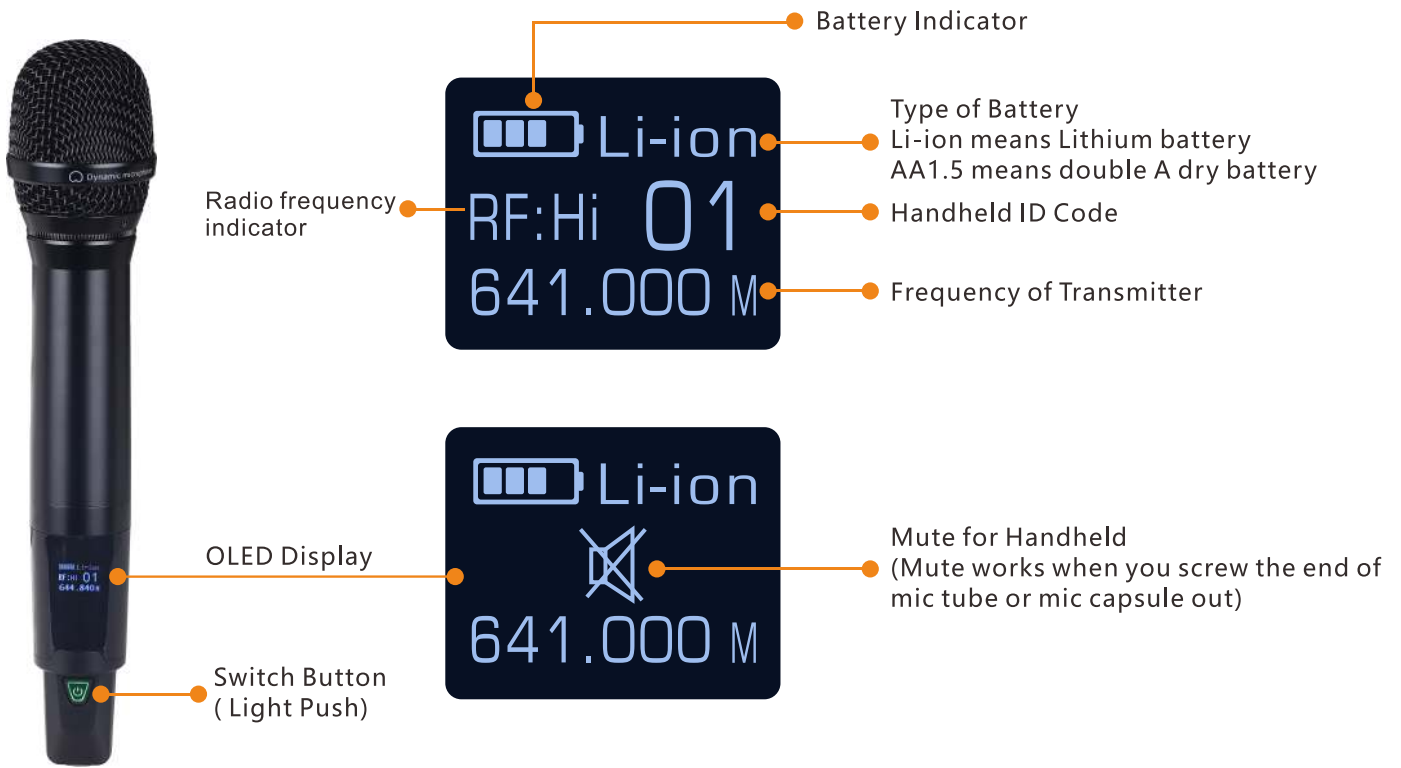


1. The corresponding numbers of the transmitter and receiver
2. Volume gain setting
3. Operating frequency of the bodypack transmitter
4. Battery life display (Lithium battery is displayed as Li, Dry battery is displayed as AA)
5. Phantom power
6. Lock screen or unlock screen icon



1. Volume setting: Gain has three modes to choose from: -10dB 0dB +10dB
2. Frequency setting: Press the up and down to set
3. Transmitting power: Low: 10mW, High: 30mW
4. Mute mode: Quickly double-click the power button to turn on or off the mute mode
Audio off: Transmitter signal is normal, microphone is muted
RF off: Transmitter signal is turned off, and microphone is muted at the same time (this mode will save more power)
5. Phantom power: 15V/30V phantom power can be manually selected
6. Language: Chinese and English
7. Lock button: The first one: unlock mode;
The second one: turn on the lock screen mode, the transmitter can be shut down normally
The third one: turn on the lock screen mode, the transmitter cannot be shut down (need to be unlocked before shutting down)

Handheld Transmitter Function Description(MIC A)

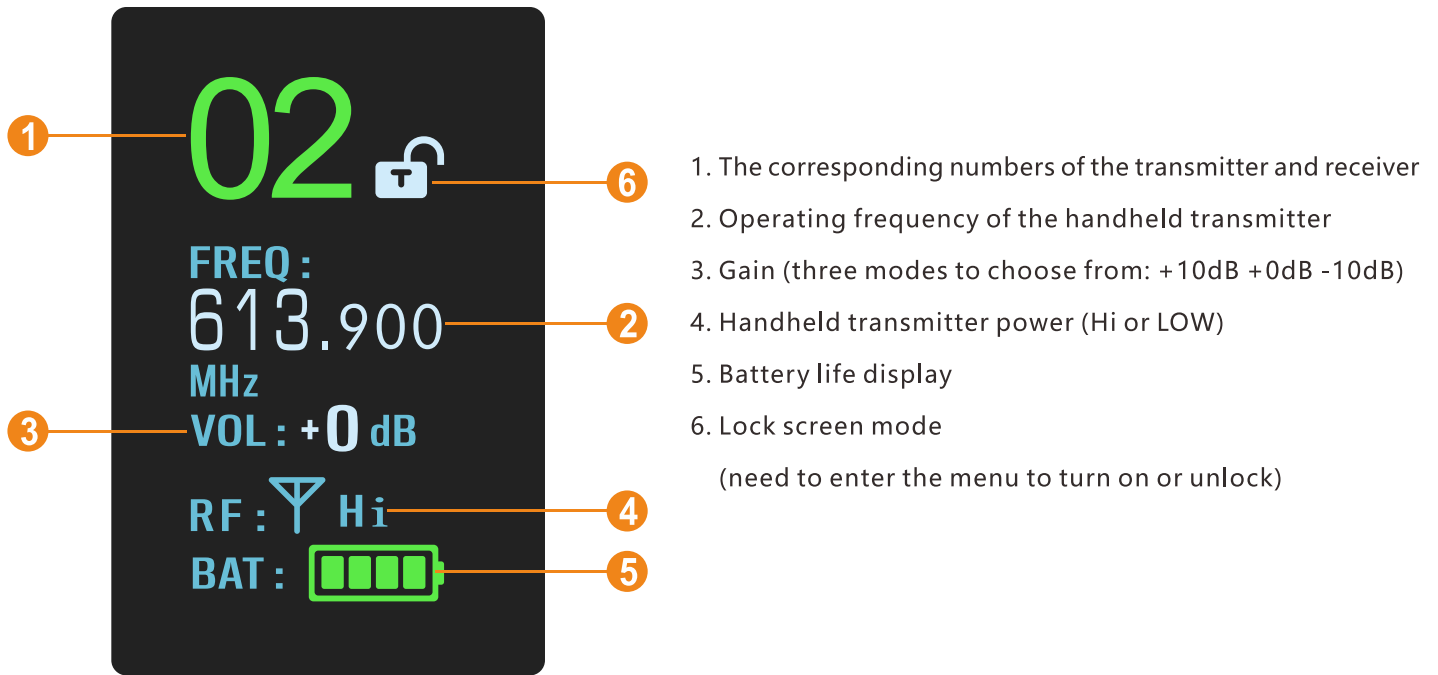


Handheld Transmitter Function Description(MIC B)



1. 4-pin XLR jack
2. Power (double-click quickly to turn on or off silent mode)
3. Antenna
4. Up
5. Set
6. Battery compartment

Handheld Transmitter Interface Description(MIC B)



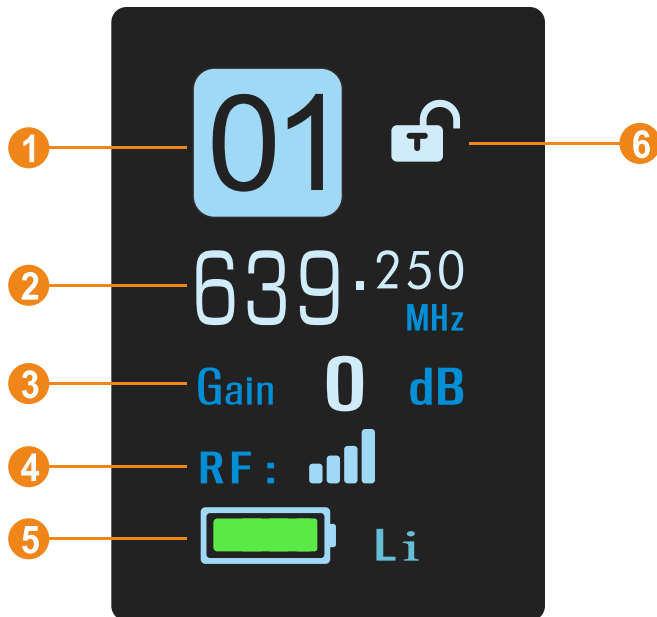
1. Gain setting: -10dB 0dB +10dB three options
2. Press the up and down to manually set the frequency
3. High: 30mW Low: 10mw
4. Chinese and English switching
5. Turn on the lock screen to avoid misoperation

Handheld Transmitter Function Description(MIC D)

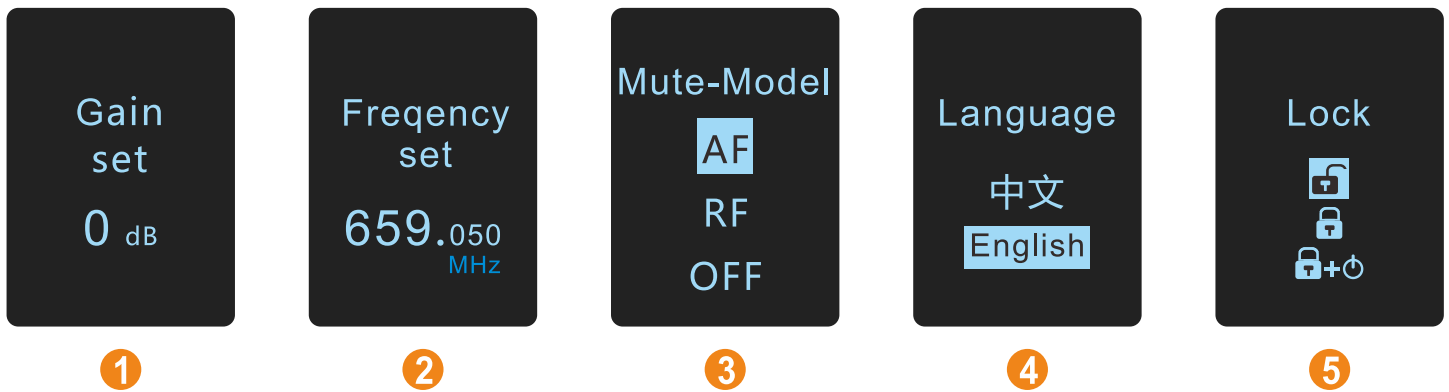


1. Power (double-click quickly to turn on or off mute mode)
2. Battery compartment
3. TYPE-C charging jack
4. Set
5. Up
6. Down
7. Transmit power: H (high, 30mW), L (low, 10mW)
8. Sync window

Handheld Transmitter Interface Description(MIC D)



1. The corresponding numbers of the transmitter and receiver
2. Operating frequency of the handheld transmitter
3. Gain (three modes of +10dB +0dB -10dB)
4. Handheld transmission signal
5. Battery life display
(Li for standard lithium battery and AA for ordinary dry battery)
6. Lock screen mode
(need to enter the menu to turn on or unlock)



1. Volume setting: Gain has three modes to choose from: -10dB 0dB +10dB

2. Frequency setting: Press the up and down to set

3. Mute mode: Quickly double-click the power button to turn on or off the mute mode

Audio off: Transmitter signal is normal, microphone is muted

RF off: Transmitter signal is turned off, microphone is muted at the same time (this mode will save more power)

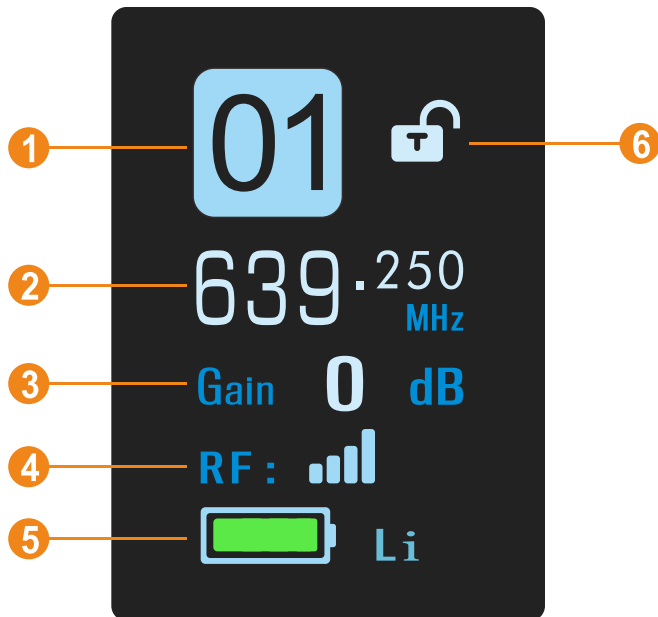
Cancel: Cancel the mute function

4. Language: Chinese and English switching

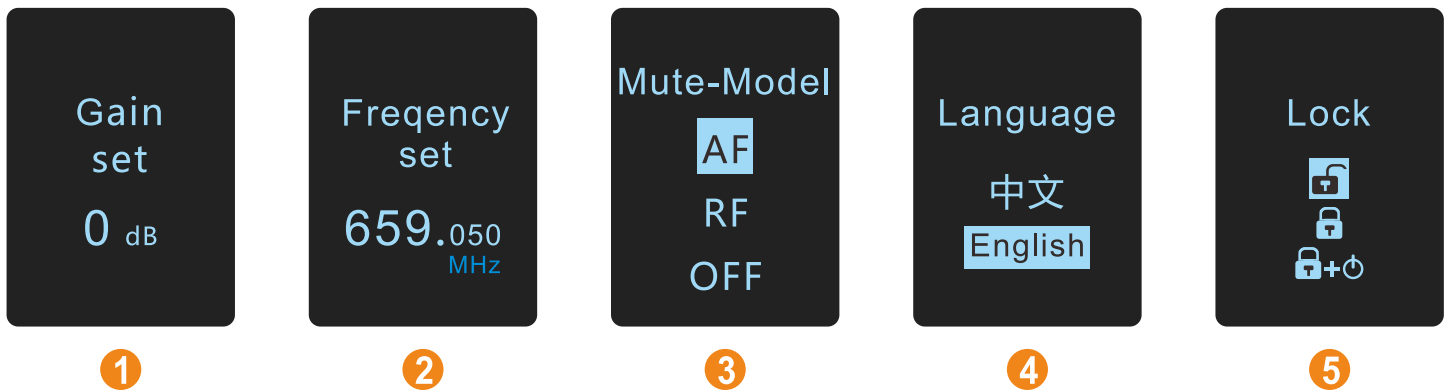
5. Lock key The first one: Unlock mode The second one: Turn on the lock screen mode, the transmitter can be shut down normally

The third one: Turn on the lock screen mode, the transmitter cannot be shut down (it needs to be unlocked before it can be shut down)

Handheld Transmitter Interface Description(MIC F)



1. The corresponding numbers of the transmitter and receiver
2. Operating frequency of the handheld transmitter
3. Gain (three modes of +10dB +0dB -10dB)
4. Handheld transmission signal
5. Battery life display
(Li for standard lithium battery and AA for ordinary dry battery)
6. Lock screen mode
(need to enter the menu to turn on or unlock)



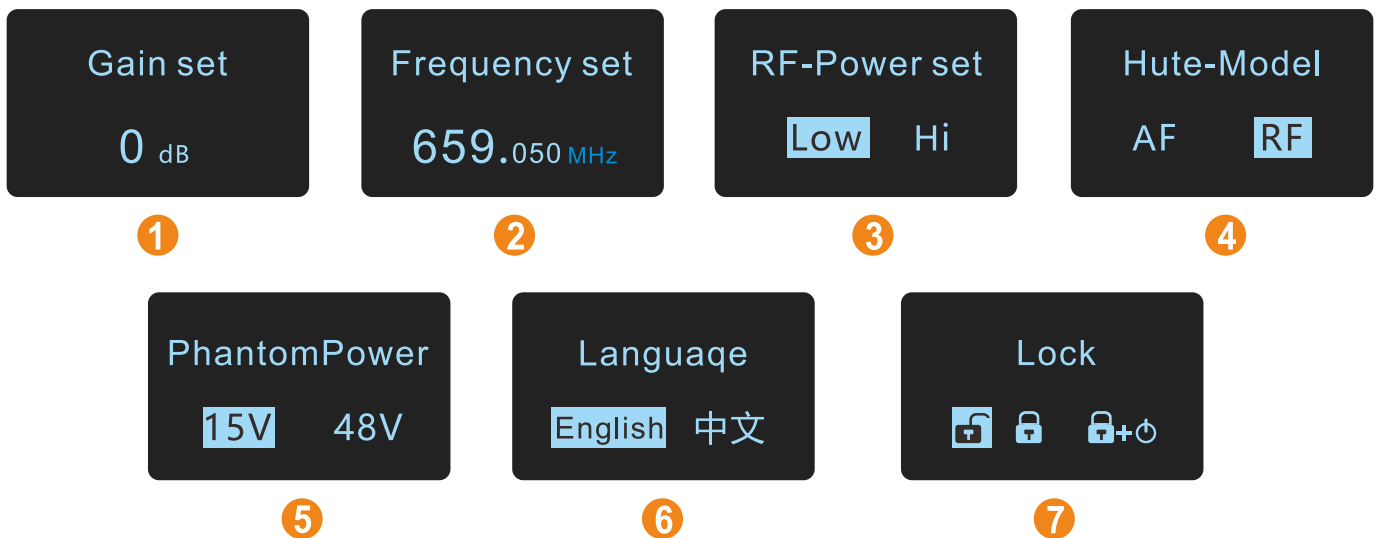
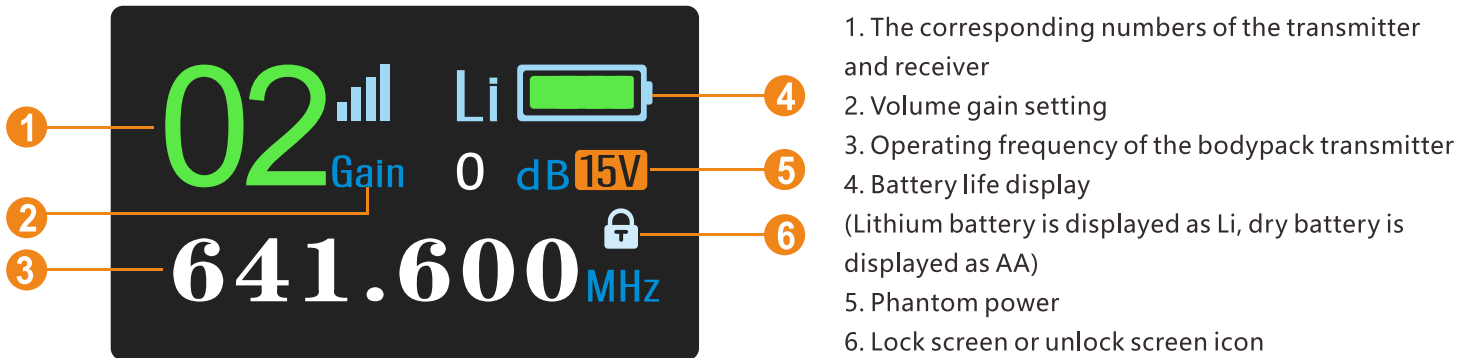
1. Volume setting: Gain has three modes to choose from: -10dB 0dB +10dB
2. Frequency setting: Press the up and down to set
3. Mute mode: Quickly double-click the power button to turn on or off the mute mode
Audio off: Transmitter signal is normal, microphone is muted
RF off: Transmitter signal is turned off, microphone is muted at the same time (this mode will save more power)
Cancel: Cancel the mute function
4. Language: Chinese and English switching
5. Lock key The first one: Unlock mode The second one: Turn on the lock screen mode, the transmitter can be shut down normally
The third one: Turn on the lock screen mode, the transmitter cannot be shut down (it needs to be unlocked before it can be shut down)

TR-1 Plug-on Transmitter Function Description



1. Gold-plated XLR female jack
 2. Rotate the icon to lock or unlock the wired microphone
 3. A red light will be displayed when the microphone volume is overloaded
 4. Power indicator
 5. Down
 6. Set
 7. Up
 8. Sync window
 9. Power (double-click quickly to turn on or off mute mode)
 10. Battery compartment lock button
 11. Phantom power switch
- (1) No need to turn on the switch when connecting a dynamic wired microphone
 (2) The switch needs to be turned on when connecting a condenser wired microphone
 (the red light will light up when the switch is turned on)
12. TYPE-C charging port

Plug-on Transmitter Interface Description



1. Volume setting: Gain has three modes to choose from: -10dB 0dB +10dB
2. Frequency setting: Press the up and down to set
3. Transmitting power: Low: 10mW, High: 20mW
4. Mute mode: Quickly double-click the power button to turn on or off the mute mode
Audio off: Transmitter signal is normal, microphone is muted
RF off: Transmitter signal is turned off, and microphone is muted at the same time (this mode will save more power)
5. Phantom power: 15V/48V phantom power can be manually selected
6. Language: Chinese and English
7. Lock button: The first one: unlock mode; The second one: turn on the lock screen mode, the transmitter can be shut down normally
The third one: turn on the lock screen mode, the transmitter cannot be shut down (need to be unlocked before shutting down)

SYNC operating guide between transmitter and receiver



1. Open battery compartment, you will see infrared IR port
2. Push SYNC button on receiver, IR interface starts flashing
3. Face directly the infrared IR port of handheld or bodypack transmitter to the receiver's IR interface
4. If frequencies are identical between transmitter and receiver, receiver will display TX-ON, indicating that they paired
5. G4 is a dual channel system, to SYNC channel A, push CH A's SYNC button, Ch B does the same way

Troubleshooting

Problems	Solutions....
No Audio	Power supply, cable or radio frequency
Small sound or distortion	Gain
Operating range is short, sudden noise or signal dropout	Radio frequency
Cannot change frequency setup or program the receiver	Lock interface

Power supply

Ensure transmitter and receiver are powered by proper voltage. Receiver should be powered by the original power adapter. Check the transmitter's battery indicator, change battery or charge in time if required.

Gain

Adjust transmitter's gain

Cable

Check if all cables and connectors work well

Feature

- Get transmitter SYNC or make sure transmitter and receiver are set in an identical group and channel
- Check frequency label on transmitter and receiver to ensure that they are working in an identical frequency range

Reduce interference

- Work in different channels or perform auto scan for group or channel
- When multiple systems are working, user should check if all systems are set to the channels in an identical group (systems in different frequency ranges need to be set in an identical group)
- The transmitter and receiver antennas should maintain a straight relative position without obstacles
- Keep the receiver antennas away from metal objects or other radio frequency interference sources such as CD players, computers, digital effects devices, network switches, network cables, and personal stereo monitors (PSM)

Specification for RX and TX

Receiver

Frequency Range	610-698MHz
Frequency Bandwidth	42M/60M
Maximum Number of Channels	6000
Receiving Sensitivity	-105dBm/S/N=12dB
Frequency Stability	+ -10PPM
Antenna Input	2*BNC/50Ω
Antenna Output	2*SMA/50Ω
Image Rejection	>100dB
3rd Order IMD Suppression	>75dB
Block Suppression	>75dB
Adjacent Channel Rejection	>110dB (+-200KHz)
Signal-To-Noise Ratio	≥110dB
Power Supply	1500mA

Handheld

Frequency Range	610-698MHz
Frequency Bandwidth	88M
RF Power	10/30mW
Max Frequency Deviation	65KHz
Power Requirements	1*14500 Lithium Battery or 1*1.5V AA Battery
Battery Life	1*14500 Lithium Battery 9-10 hrs (high power level); 13-14 hrs (low power level)

Plug-on Transmitter

Frequency range	610-698MHz
Bandwidth	88M
Maximum number of channels	8800
Transmit power	10/20mW
Maximum frequency deviation	65KHz
Phantom power supply for pins 2 and 3	15V/48V
Power requirements	1*14500 lithium battery or 1 AA alkaline battery
Battery life	Standard 14500 lithium battery 8-9 hrs (high power mode) 10-11 hrs (low power mode)

Bodypack

Frequency Range	610-698MHz
Frequency Bandwidth	88M
RF Power	10/30mW
Max Frequency Deviation	65KHz
Power Requirements	Built-in lithium battery
Battery Life	8-10 hours



Specifications Subject to Change without Notice
Actual product will not be as pictured