

Safety Precautions

Important Information

This manual contains warnings and notes which you should observe to ensure your own personal safety, as well as to protect the product and connected equipment. They are marked as follows according to the level of danger.

Warning



Indicates that the potential serious damage to the system may be caused if proper precautions are not taken.

- When the system is short of voltage, the batteries should be recharged in time, otherwise the life span of the batteries will be influenced.
- Please use the same brand batteries, and do not use a new battery together with an old battery at the same time.
- 3. Please do not charge the non-rechargeable battery.
- 4. Please do not pull the antenna forcefully.

Notes



Indicates the slight damage to the system may be caused if proper precautions are not taken.

- Please clean the machine by dry soft cloth.
 Do not clean the machine with gasoline, or other chemical products.
- 2. Please do not touch the body with the antenna.
- 3. Please do not twist or knob the antenna with the microphone wire.

Chapter 1 System Description

1.1 Introduction

The UHF Tour Guide System AG600 series is a portable, high- performance, wireless system composed of the AG7600 body-pack Transmitter and AGR600 body-pack Receiver. Whether at the crowded tourist attractions or at the noisy factory, the system delivers high quality sound very clearly and allows the user to move around freely at the certain distance without any influence on the quality of received sound.

This system is an all-round equipment designed for language interpretation and tour group. It is widely used in group visiting activities such as touring, factory visit, training classes etc.

1.2 Applicable Occasions

- Factory VisitTourist Attractions
- MuseumInternational Meeting
- ExhibitionLarge-scale Speech
- GymnasiumSchool Meeting Room

1.3 Components of the Product

- AGT600 body-pack transmitter
- AGR600 body-pack receiver
- 1.2V (such as NI-MH, 1300mAH)* 2 AA type rechargeable battery or 1.5V * 2 AA Alkaline disposable battery
- Headset microphone
- Lavalier microphone
- Stereo earphone (Provided several optional types)
- Portable charging case
- Transmitter/Receiver carrying case

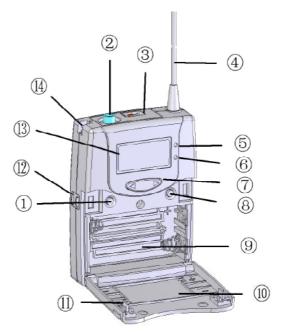
1.4 Main Features

- Portable, exquisite, stylish and user-friendly streamline design.
- Adopting UHF system and 700-960MHz professional frequency with high anti-interference.
- PLL synthesized design, and higher frequency stability.
- Digital mute lock setting ensures no interference is picked.
- White backlit LCD displays operation menu and status clearly.
- Using ordinary "AA" size battery with high efficiency and prolonged battery life.
- Able to use rechargeable battery and the recharging device is provided.
- Displaying the battery capacity, and clearly indicating battery consumption status.
- Automatic power off when the battery is low to protect the battery life.
- Setting key lock mode allows you to avoid accidental triggering key operation.
- Advanced frequency group allows several groups to use this system simultaneously on the same occasion.
- External microphone input jack can input audio source, such as CD, MP3 to realize music sharing, and also can input the electronic tour guide recording.
- High quality and durable plastic cover with strong resistance to impact.

Chapter 2 Operating Instructions of AGT600 Transmitter

AGT600 is a portable body-pack transmitter, which can be easily worn on the waistband or on the front of chest. This transmitter has six selectable channels and a user-selectable channel.

2.1 Components Names



- ① ESC key(ON/OFF key)
- ② Microphone/Audio input jack
- ③ MUTE key
- 4 Antenna
- ⑤ Red power status indicator (Power)

- Green audio (voice level) modulation indicator (AFPEAK) (6)
- $\overline{7}$ **◄/▶** Selection keys
- (11)Battery cover latch

Accessories slot

(8) SET key

- (12)Charging contact
- 9 Battery compartment (10)Battery cover
- (13) LCD Display (14)

2.2 The Description of Display Interface

The standard display is shown as follow when the transmitter has been turned on:



The display shows CH 1, in which 1 represents that the first channel is used currently.

FM modulation indicator

Battery capacity indicator

Keyboard Lock mode enabled

Pilot mode enabled

Mute mode enabled

2.3 Introduction of keys

Keys	Mode	Function
SET	Standard display	Enters the operation menu
	Operation menu	Enters the setting mode
	The setting mode	Saves the settings and
		returns to operation menu
	Standard display	Press the selection keys
		simultaneously to display
4 / •		the present frequency of
		the current channel
	Operation menu	Operates menu selection
	The setting mode	Switches status
	Power off status	Press and hold for 1 second to
		enable the transmitter
ESC (ON /OFF)	Standard display	Press and hold for 3 seconds
		to disable the transmitter
	Operation menu	Returns to the standard
		display
	The setting mode	Gives up the setting and
		returns to the operation
		menu

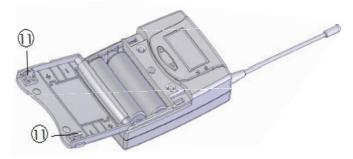


- ◆ to select the menu clockwise

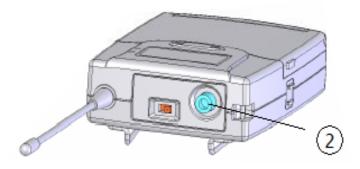
 ✓ to select the menu counterclockwise.
- Pressing ◀ / ▶ keys simultaneously can display the present frequency of the current channel. If press ◀ / ▶ keys simultaneously again at this time, or no key operation has occurred in 10 seconds,the screen will return to the standard display. The user-selectable frequency function has been enabled if the standard display is unable to be returned. (Please refer to 2.5.4 to set)
- When the keyboard lock function is disabled, pressing any key will turn the backlit lamp on. If no key operation has occurred in 15 seconds, the backlit lamp will turn off.

2.4 Operating Instructions

2.4.1 Advance Preparation



- 1. Prepare two AA batteries.
- 2. Press two battery cover latches at the side of battery cover simultaneously. Open the battery cover and place two AA batteries in the compartment, making note of the battery polarity shown in the battery compartment, then close battery cover until it snaps shut.



- 3. Plug the headset microphone, lavalier microphone or external audio input (such as MP3 player etc.) to the microphone/audio input jack ②.
- 4. Select the proper sensibility according to the actual situation. (Please refer to the 2.5.3 for details.)

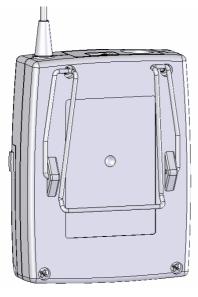


- The standard caliber of the microphone`s plug is 3.5mm.
- Please ensure that the mute mode is not enabled.

2.4.2 Power 0n/0ff

- 1. Open the battery cover at first.
- 2. Press and hold "ESC (ON/OFF)" for almost 1 second when the power is off, then the backlit lamp of LCD turns on and appears the standard display; the red power status indicator 5 turns on and transmitter is enabled at the same time.
- 3. Press and hold "ESC (ON/OFF)" for 3 seconds or so when the screen is in standard display, then the screen appears "OFF"; the backlit lamp of LCD turns off and the transmitter is disabled.

2.4.3 The Way of Carrying Transmitter



- Wear the lavalier microphone or headset microphone.
- 2. Clip the transmitter over the proper position of waistband through the metal clip on the rear panel of the transmitter, or hang the transmitter on the front of the chest by tying an accessory string to the accessories slot.

2.4.4 Mute Mode

Slide the mute switch to the "MUTE". When the display shows "MUTE", the mute mode is enabled. At this time, the microphone audio input is off and the transmitter can not receive any audio information.

2.4.5 Battery Capacity Indicator

When the red power status indicator ⑤ has turned on after the transmitter is normally enabled, the display will show the current battery capacity.

3 segments: The batteries are at 90% or greater capacity.

2 segments: The batteries are at 60% or so capacity.

1 segment: The batteries are at almost 30% capacity.

0 segment: The batteries are at almost 10% capacity.

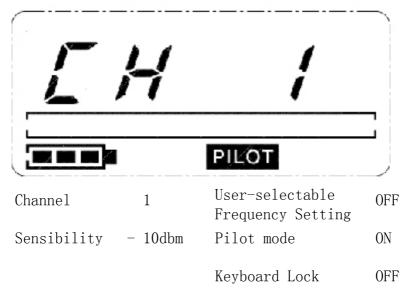
If the batteries are not replaced immediately when the battery capacity indicator is 0 segment, the battery indicator's frame begins flashing along with the red power status indicator to warn you that the batteries capacity is used up. If the batteries are not replaced until this moment, the transmitter will turn off automatically to protect the battery life after the red power status indicator kept flashing for 2 minutes.



- When the transmitter will not be used for a long time, please take out the batteries from the battery compartment in order to prevent the damage to the product resulted from battery leakage.
- Please recharge the batteries in time when the battery is low, or the battery life will be reduced.

2.5 Transmitter's Function Setting

2.5.1 Default Setting



Press "SET" key to enter the operation menu when the screen is in standard display. Shown as follow:



CHAN Channel setting menu

SENSIT Sensitivity setting menu

MHz User-selectable frequency setting menu

PILOT Pilot setting menu

Keyboard lock setting menu

2.5.2 Channel setting

During the screen in operation menu, press \blacktriangleleft / \blacktriangleright key to make the "CHAN" indicator blink, then press "SET" key to enter the channel setting mode.

The desired channel can be selected by pressing \blacktriangleleft / \blacktriangleright key. Press "SET" key to save the current selected channel and return to the operation menu or press "ESC" key to give up the present selection and return to the operation menu.

2.5.3 Sensitivity Setting

During the screen in operation menu, press $\blacktriangleleft/\triangleright$ key to make the "SENSIT" indicator blink, then press "SET" key to enter the sensitivity setting mode.

When the normal speech voice or audio source input is ideally set, the FM modulation indicator will flash with 3 to 5 segments, and the green audio (voice level) modulation indicator will turn off.



In order to gain the optimal received quality, please set the transmitter's sensitivity according to the real needs!! The sensitivity setting reference is shown as follow:

External audio source input:

sensitivity is set at -30—— -20 dBm

Microphone input:

sensitivity is set at -10 — 0 dBm

2.5.4 User-selectable Frequency Setting

During the screen in operation menu, press ◀/▶ key to make the "MHz" indicator blink, then press "SET" key to enter the user-selectable frequency setting mode and the last set frequency value is shown on the display. Press ◀/▶ key to re-select your desired frequency ranging from 854MHz to 865MHz. The frequency will drop by 0.1MHz (100KHz) for each pressing of ◀ key, and increase by 0.1MHz (100KHz) for each pressing of ▶ key. If press and hold ◀ or ▶ key, the frequency will decrease or increase continuously.

Press "SET" key to save the current selected frequency and return to the operation menu or press "ESC" key to give up the present operation and return to the operation menu. If the screen returns to the standard display after the user-selectable frequency mode is enabled, the LCD display will not show the channel, but the user-selected frequency value will be shown. If the user set the channel after having enabled user-selectable frequency mode, the user-selectable frequency mode will be disabled automatically.

2.5.5 Lock Mode Setting

During the screen in operation menu, press
key to make the " " indicator blink, then press
"SET" key to enter the lock mode. If the display
shows "ON", it indicates the transmitter is in lock
mode now; if the display shows "OFF", it indicates
that the lock mode is disabled.

Pressing ◀/▶ key can switch between "ON" and "OFF". Press "SET" key when the display shows "OFF" to disable the lock mode and return to the operation menu. When the display shows "ON", press

"SET" key to enable the lock mode and return to the operation menu, at this time press "ESC" key can return to the standard display and the " \square " icon is shown on the display, meanwhile, the \triangleleft / \triangleright becomes invalid, but the "ESC" key and "SET" key can still be used effectively.

2.5.6 Pilot mode setting

During the screen in operation menu, press
key to make the "PLOT" indicator blink, then press "SET" key to enter the pilot mode setting. If the display shows "OFF", it indicates the pilot mode is disabled; if the display shows "ON", it indicates the transmitter is in pilot mode now.

Pressing ◀/▶ key can switch between "ON" and "OFF". Press "SET" key when the display shows "OFF" to disable the pilot mode and return to the operation menu. When the display shows "ON", press "SET" key to enable the pilot mode and return to the operation menu, at this time press "ESC" key can return to the standard display and the "PLOT" icon is shown on the display, which indicates the pilot mode is enabled.

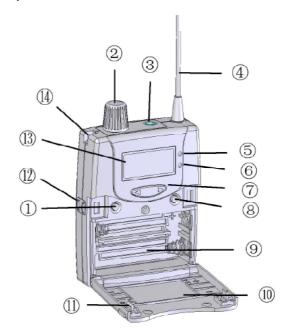


- The transmitter`s pilot mode must have been enabled before enabling the receiver`s pilot mode.
- During the transmitter in the setting status, if no key operation has occurred in 10 seconds, the screen will exit the setting mode automatically and return to the standard display.
 - It is unnecessary to reset when you restart the transmitter, because all settings have been saved after the transmitter is turned off.

Chapter 3 Operating Instructions of The AGR600 Receiver

AGR600 is a portable body-pack receiver, which can be easily worn on the waistband or on the front of chest. This receiver has six selectable channels and a user-selectable channel.

3.1 Components Names

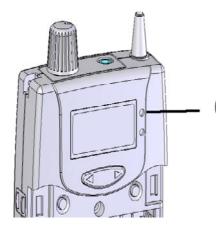


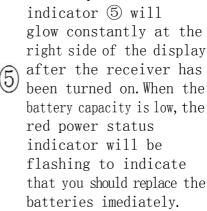
- ① ESC Exit key
- ② Volume control knob(ON/OFF)
- 3 Earphone/Audio output jack
- 4 Antenna
- ⑤ Red power status indicator (Power)
- 6 Green RF signal indicator (RF)

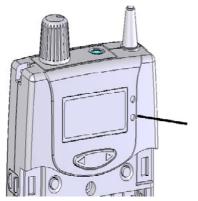
- ⑦ ◀/►Selection keys
- SET Key
- 9 Battery compartment
- 10 Battery cover

- Battery cover latch
- ① Charging contact
- ① LCD Display
- (14) Accessories`slot

The red power status





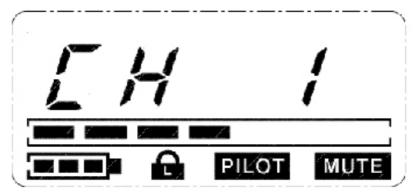


received, the green RF signa lindicator at the right side of the display will glow to indicate the receiver operates normally.

When a signal has been

3.2 The Description of Display Interface

The standard display is shown as follow when the receiver has turned on:



The display shows CH 1, in which 1 represents that the first channel is used currently.

RF signal intensity indicator

Battery capacity indicator

Keyboard Lock mode enabled

PILOT Pilot mode enabled

MUTE Mute mode enabled

3.3 Introduction of keys

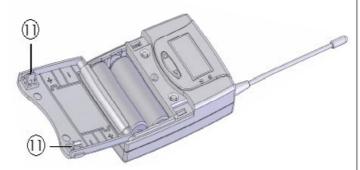
Keys	Mode	Function	
SET	Standard display	Enters the operation menu	
	Operation menu	Enters the setting mode	
	The setting mode	Saves the settings and returns	
		to operation menu	
4/	Standard display	Operates channel selection	
	Operation menu	Operates menu selection	
	The setting mode	Switches status	
ESC	Standard display	Switches between the	
		displayed channel and	
		displayed frequency	
	Operation menu	Returns to the standard display	
	The setting mode	Gives up the setting and returns	
		to the operation menu	
ON/ OFF	Power off status	Turn on the receiver	
	Power on status	Turn off the receiver and	
		adjust the volume	



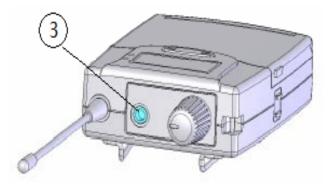
- ★ to select the menu clockwise
 ★ to select the menu counterclockwise.
- When the keyboard lock function is disabled, pressing any key will turn the backlit lamp on. If no key operation has occurred in 15 seconds, the backlit lamp will turn off.
- Press "ESC" key to display the present frequency of the current channel. If press "ESC" key again, or no key operation has occurred in 10 seconds, the standard display will be returned. The user-selectable frequency function has been enabled if the standard display is unable to be returned. (Please refer to 3.5.4 to set)

3.4 Operation Instructions

3.4.1 Advance Preparation



- 1. Prepare two AA batteries.
- 2. Press two battery cover latches (1) at the side of battery cover simultaneously. Open the battery cover and place two AA batteries in the compartment, making note of the battery polarity shown in the battery compartment, then close battery cover until it snaps shut.



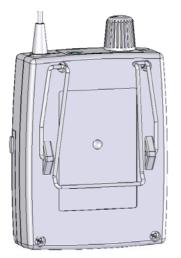
- 3. Plug the earphone to the audio output jack ③, and the standard caliber of the earphone's plug is 3.5mm. Please make sure the earphone's plug is inserted completely.
- 4. Change the squelch level appropriately according to the real situation. (Please refer to 3.5.3 for detailed operations)

3.4.2 On/Off System

When the receiver is in power off status, rotate the ON/OFF ② knob clockwise until a snap is generated and the backlit lamp of LCD turns on with a standard display, which indicates the receiver is enabled.

When the receiver is in power on status, rotate the ON/OFF ② knob counterclockwise until a snap is generated and the backlit lamp of LCD turns off, which indicates the receiver is disabled.

3.4.3 The Way of Carrying Receiver



Clip the receiver over the proper position of waistband through the metal clip on the rear panel of the receiver, or hang the receiver on the front of the chest by tying an accessory string to the accessories slot.

3.4.4 Volume Adjustment

When the receiver is turned on, rotate the volume control knob clockwise to increase the audio volume, and rotate the knob counterclockwise to decrease the audio volume.



Please rotate the volume control knob to the lowest volume before wearing the earphone, then rotate the volume control knob to the proper position gradually.

3.4.5 Digital Mute Mode

If the transmitter's pilot mode is disabled when the receiver's pilot mode is enabled, the receiver's mute mode will be enabled automatically. Then the received signal strength will be displayed on the receiver's screen, but no sound will be received, and the "MUTE" icon will be displayed compellingly.

3.4.6 Battery Capacity Indicator

When the red power status indicator ⑤ has turned on after the receiver is normally enabled, the display will show the current battery capacity.

3 segments: The batteries are at 90% or greater capacity.

2 segments: The batteries are at 60% or so capacity.

1 segment: The batteries are at almost 30% capacity. 0 segment: The batteries are at almost 10% capacity.

If the batteries are not replaced immediately when the battery capacity indicator is 0 segment, the battery indicator's frame begins flashing along with the red power status indicator to warn you that the batteries capacity is used up. If the batteries are not replaced at this moment, the receiver will turn off automatically to protect the battery life after the red power status indicator kept flushing for 2 minutes.



- When the receiver will not be used for a long time, please take out the batteries from the battery compartment to prevent the damage to the product from battery leakage.
- Please recharge the batteries in time when the battery is low, or the battery life will be reduced.
- If the receiver is turned off automatically resulted from the shortage of the battery capacity, it is necessary to rotate the ON/OFF knob to the OFF position to replace the batteries, and have waited 15 seconds before the receiver is turned on again in order to protect the equipment and prolong the batteries` life.

3.4.7 Quick Channel Selection

Press ◀ / ▶ keys under the standard display interface directly can change the currently tuned channel quickly when the keyboard lock mode of the receiver is disabled.

Operating procedure: Press \blacktriangleleft or \blacktriangleright key at the first time will enable the backlit lamp to glow, but the channel will not be changed. Then each pressing of \blacktriangleleft key will subtract one from the channel setting value and each pressing of \blacktriangleright key will add one to the channel setting value.

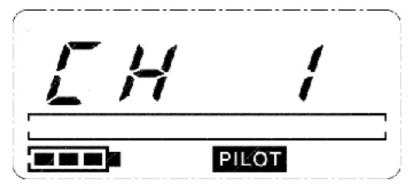
The current user-selected frequency value will be displayed when the user-selectable frequency setting is enabled after the receiver is turned on. The quick channel selection can be used too, but the changed frequency value is 0.1 MHZ (100KHZ) for each pressing of \blacktriangleleft or \blacktriangleright key. Press and hold \blacktriangleleft or \blacktriangleright key enable the frequency value to be changed continuously.



 Only after the keyboard lock mode is disabled can this operation be executed!

3.5 Receiver's Function Setting

3.5.1 Default Setting



Channel

1

User-selectable

Frequency Setting

0FF

Squelch Level 1 Level

Pilot mode

0N

Keyboard Lock

0FF

Press "SET" key to enter the operation menu.



CHAN

Channel setting menu

SQELCH

Squelch Level setting menu

MHz

User-selectable frequency setting menu

PILOT

Pilot setting menu



Keyboard lock setting menu

3.5.2 Channel setting

During the screen in operation menu, press ◀/▶ key to make the "CHAN" indicator blink, then press "SET" key to enter the channel setting mode.

The desired channel can be selected by pressing $\blacktriangleleft/\triangleright$ key. Press "SET" key to save the current selected channel and return to the operation menu or press "ESC" key to give up the present selection and return to the operation menu.

3.5.3 Squelch Setting

During the screen is in operation menu, press $\blacktriangleleft/\blacktriangleright$ key to make the "SQELCH" indicator blink, then press "SET" key to enter the squelch setting mode. The squelch level can be adjusted by pressing $\blacktriangleleft/\blacktriangleright$ key. The three levels are Hi(high), mi(middle), Lo(low) respectively.

If there are stronger interfering signals around the receiver, the squelch level can be raised to Hi or mi. However, the operating range will be reduced. If it is needed to extend the operating range of the receiver, the squelch level can be lowered to Lo or mi in order to receive audio.

The reference of squelch level setting is shown as follow:

The ambient stronger interference or close range :

the squelch level Hi — mi L

Long range:

the squelch level Lo — mi L

3.5.4 User-selectable Frequency Setting

During the screen is in operation menu, press \blacktriangleleft / \blacktriangleright key to make the "MHz" indicator blink, then press "SET" key to enter the user-selectable frequency setting mode and the last set frequency value is shown on the display. Press \blacktriangleleft / \blacktriangleright key to re-select your desired frequency ranging from 854MHz to 865MHz.

The frequency will drop by 0.1MHz (100KHz) for each pressing of ◀ key, and increase by 0.1MHz (100KHz) for each pressing of ▶ key. If press and hold ◀ or ▶ key, the frequency will decrease or increase continuously. Press "SET" key to save the current selected frequency and return to the operation menu or press "ESC" key to give up the present operation and return to the operation menu. If the screen returns to the standard display after the user-selectable frequency mode is enabled, the LCD display will not show the channel, but the user-selected frequency value will be shown.

If the user set the channel after having enabled user-selectable frequency mode, the user-selectable frequency mode will be disabled automatically.

3.5.5 Pilot mode setting

During the screen is in operation menu, press Image: Pleat "indicator blink, then press "SET" key to enter the pilot mode setting If the display shows "OFF", it indicates the pilot mode is disabled; if the display shows "ON", it indicates the receiver is in pilot mode now. Pressing Image: Pressing Pressing Pre



- The transmitter's pilot mode must have been enabled before enabling the receiver's pilot mode.
- The receiver can reduce the annoying noise greatly after this mode is enabled, but the operating range of the receiver will be shorten at the same time.

3.5.6 Lock Mode Setting

During the screen is in operation menu, press \checkmark / \blacktriangleright key to make the " \blacktriangleright " indicator blink, then press "SET" key to enter the lock mode. If the display shows "ON", it indicates the receiver is in lock mode now; if the display shows "OFF", it indicates that the lock mode is disabled.

Pressing $\blacktriangleleft/\triangleright$ key can switch between "ON" and "OFF". Press "SET" key when the display shows "OFF" to disable the lock mode and return to the operation menu. When the display shows "ON", press "SET" key to enable the lock mode and return to the operation menu. At this moment press "ESC" key can return to the standard display and the " \blacktriangleright " icon is shown on the display, meanwhile, the $\blacktriangleleft/\triangleright$ becomes invalid to avoid accidental change of the currently tuned channel, but the "ESC" key and "SET" key can still be used effectively.



- During the receiver is in the setting status, if no key operation has occurred in 10 seconds, the screen will exit the setting mode automatically and return to the standard display. The current settings become invalid.
- It is unnecessary to reset when you restart the receiver, because all settings have been saved after the receiver is turned off.

Chapter 4 Troubleshooting

Problems	Possible reasons	Solutions
The receiver has no power	The batteries capacity is too low	Replace the batteries
The receiver can not be turned on after replacing the old batteries	The receiver is in memory protection of battery capacity	rotate the ON/OFF knob to the OFF position, and waited 15 seconds before the receiver is turned on again
No RF signal is	The transmitter and the receiver are tuned on the different channel	Set the transmitter and the receiver on exactly the same channel
received	The receiver is out of its operating range	Reduce the distance between the transmitter and the receiver
	The transmitter is disabled	Turn on the transmitter
There is no sound when the	There is something wrong with the earphone or microphone	Change the earphone or the microphone
RF signal is received	The mute mode of the transmitter is enabled	Disable the mute mode of the transmitter

Problems	Possible reasons	Solutions
There is no sound when the RF signal is received	The pilot mode of the receiver is enabled, while the transmitter's is disabled	Disable the pilot mode of the receiver, or enable the pilot mode of the transmitter
There is too much ambient noise	The sensitivity of the transmitter is set too low	Increase the sensitivity of the transmitter properly
The audio is distorted, and the green audio modulation indicator is lit	The sensitivity of the transmitter is set too high or the input signal to the transmitter is too strong	Lower the sensitivity of the transmitter appropriately, or weaken the input signal properly
"PLL" appears on the display when the receiver is turned on	The signal is not locked	Wait more than 15 seconds before turning on the receiver again
<pre></pre>	The keyboard is locked and the " " icon appears on the display	Unlock the keyboard (refer to 2.5.5 / 3.5.6) The " " icon disappeared
The receiver is unable to receive the signal when using other brand transmitters	The pilot mode of the receiver is enabled	Disable the pilot mode of the receiver

Chapter 5 Suggestions and Maintenance

- 1. When the transmitter or the receiver will not be used for a long time, please take out the batteries from the battery compartment to prevent the damage to the product from battery leakage.
- 2. Keep the transmitter and the receiver in the dry place and avoid the direct sunshine.
- Eliminate or minimize obstructions between the transmitter and receiver to avoid the interference.
- 4. In order to gain the optimal received quality, please adjust the sensitivity of the transmitter correctly.
- Please clean the machine by dry soft cloth.
 Do not clean the machine with gasoline, or other chemical products.

Chapter 6 Technical Parameters

Receiver:		
Number of Channels	6	
Frequency Range	854MHZ 865MHZ	
Adjacent Channels Rejection	>70dB	
Frequency Response	100HZ —— 12KHZ	
System Distortion	<1%	
Signal/Noise Ratio	>85dB	
Output Power of the earphone	>100Mw (32 Ω)	
Power	Two 1.5V AA batteries	
Battery Life	>20 hours(influenced by the volume.)	
Dimensions	82 * 62 * 21 mm	
Physical weight (the batteries`are excluded.)	83 g	
Environmental Temperature	−20 —— 60 ℃	

Transmitter:		
Modulation	FM	
Frequency Range	854MHZ 865MHZ	
Output Power	1 OmW	
Frequency Response	100HZ 12KHZ	
System Distortion	<1%	
Power	Two 1.5V AA batteries	
Battery Life	>20 hours	
Dimensions	82 * 62 * 21 mm	
Physical weight (the batteries`are excluded.)	73 g	
Environmental Temperature	-20 ── 60 °C	