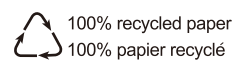
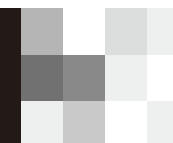




TM-500

UHF Dual Channel True Diversity Wireless Microphone

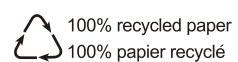


Installation and Operation



TM-500

UHF Dual Channel True Diversity Wireless Microphone



Installation and Operation

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TM-5H Handheld Transmitter Panel Function..... P7

TM-5H Transmitter features introduced..... P8

Receiver equipment installation P9

User simple steps..... P11

Technical specification..... P14

08 Technical specification

TM-500 Receiver		
Receive bandwidth:	521MHz ~ 938MHz	
Receiving method:	FM super heterodyne true diversity reception	
RF Sensitivity:	5dBv, S/N≥60Db at 25KHz deviation	
Squelch adjustment:	set	
Frequency synchronization method:	IR Sync	
Maximum output level:	maximum output + 11dBV	
Output level adjustment range:	set	
Power supply:	DC12V / 1A	
Normal working current:	DV12V, 330mA	
Dimensions:	410mm (width) x43mm (height) x206mm (deep)	
Net weight:	1.8Kg	

TM-5-H Transmitter		
RF carrier frequency range:	521MHz ~ 938MHz	
Frequency stability:	± 0.005%	
Working distance:	50m (ideal environment)	
Audio companding:	Relacart's classic audio companding circuit	
Audio frequency response:	50Hz to 18KHz / ± 3dB	
Dynamic range :	> 100dB	
S/N (A weighting):	> 100dB	
Total harmonic distortion:	<0.6%@1KHz	
Operating temperature range:	-10° C to + 50° C	

Content

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Packing list..... P4

TM-500 System function overview..... P5

TM-5H Handheld Transmitter Panel Function..... P7

TM-5H Transmitter features introduced..... P8

Receiver equipment installation P9

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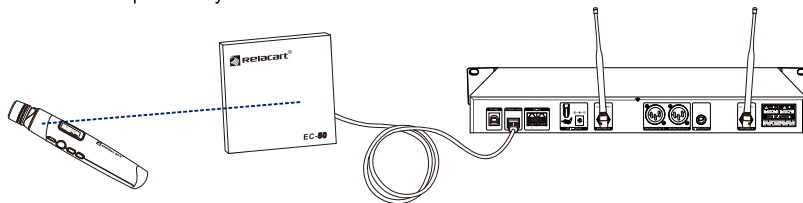
Technical specification..... P14

08 Technical specification

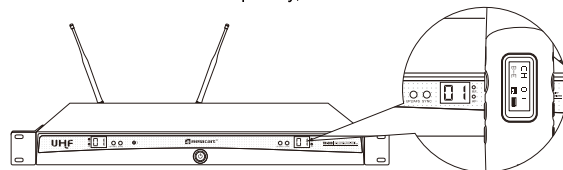
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If the infrared External synchronizer is used, the receiver will no need to manually frequency-match, as long as the receiver and the transmitter are aligned within 30CM of the External synchronizer, the automatic synchronization function will be achieved; after the synchronization is completed, you will hear a "Beep" voice from the infrared expansion synchronizer.



After the frequency of the transmitter and the receiver are synchronized, when speaking with the microphone, it indicates that the audio signal from the transmitter of this channel is received. When the transmitter and receiver are at the same frequency, this indicator will be on.

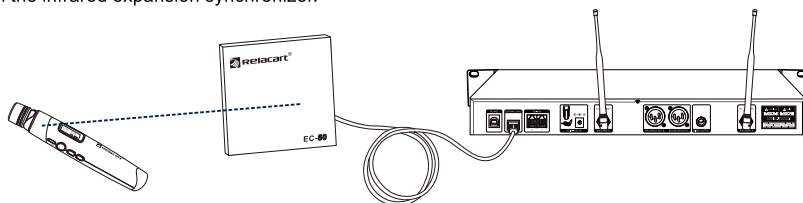


Channel display
(the receiver and transmitter are at the same frequency)

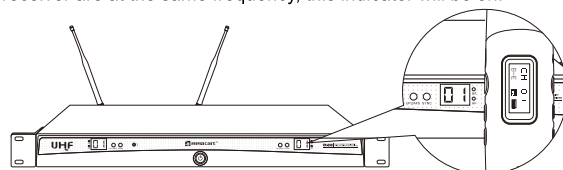
Introduction

Thank you for choosing a RELACART professional wireless microphone system. You have joined thousands of other satisfied customers. Our years of professional experience of design and manufacturing to ensure our products' quality, performance and reliability.

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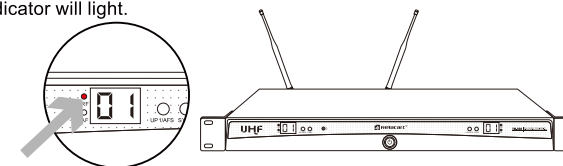
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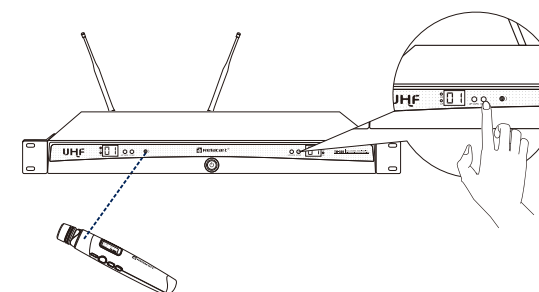
01 Safety Operation and Notice

- 1、Please read instructions for safety operation carefully before installation and operation. Please save your safety operation guide for future reference.
- 2、Do not scratch, bend, twist, stretch or heat the power cord as this may cause damage to the power cord, resulting in a fire or electric shock.
- 3、Do not open the device shell, otherwise it may cause electric shock. If you need to repair, maintain or repair, please contact your local agent.
- 4、Do not touch the power plug with wet hands as this may cause a fire or electric shock.
- 5、Do not attempt to modify this device. Failure to do so may result in personal injury or product malfunction.
- 6、Do not use this equipment near water.
- 7、If the power cord is damaged (such as a broken wire or bare core), obtain replacement parts from your dealer. Continued use of the equipment with a damaged power cord may result in fire or electric shock.
- 8、To move the device he power, unplug the power cord, and unplug all connecting cables as this may damage the cable, resulting in a fire or electric shock.
- 9、Before cleaning the device, unplug the power cord and unplug all connecting cables. Please clean it with a dry soft cloth.
- 10、If the device is not in use for a long time, turn off the power, it is best to unplug the socket.
- 11、With the power plug and appliance coupler as the disconnecting device, it should be kept easy to operate.
- 12、For the safe use of the equipment and adequate ventilation, the minimum clearance around the equipment should be maintained at a distance of 5 cm or more.
- 13、DO NOT cover the Ventilation holes, such as: newspaper / fabric / curtains and other items.
- 14、Equipment should not be placed on a bare flame source, such as: lit candles.
- 15、Battery should not be exposed to sunshine, roasted or other high temperature overheating environment.
- 16、Do not throw the waste battery, please put in the designated bins.
- 17、Water protection rating: IPX0
- 18、The device can be used normally in tropical / temperate climates.
- 19、This product is only suitable for safe use at the altitude of 2000m and below.
- 20、This symbol “⚡” indicates that dangerous voltage constituting a risk of electric shock is present within this unit.
- 21、All Relacart products will be afforded one year free maintenance except for man-made damage, such as:
 - the device is damaged by man-made factors.
 - the device is damaged by improper operation.
 - some components are damaged or loss after the self-disassembly.

The searched channel automatically calculates a clean and undisturbed frequency, indicating that the radio frequency signal of this channel is received. When the transmitter is on the same frequency as the receiver, this indicator will light.



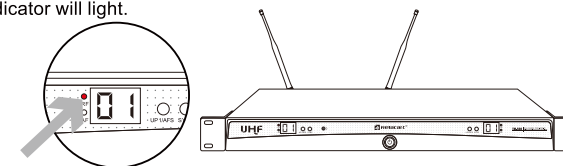
3. Transmitter's infrared window facing the infrared window of the receiver and press the "SYNC" button.



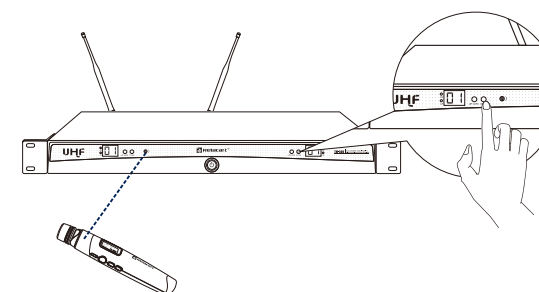
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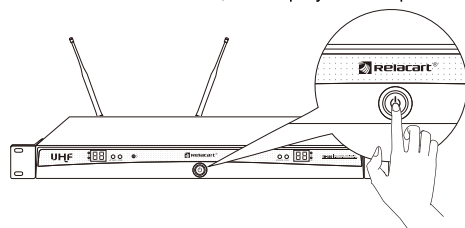


3. Transmitter's infrared window facing the infrared window of the receiver and press the "SYNC" button.



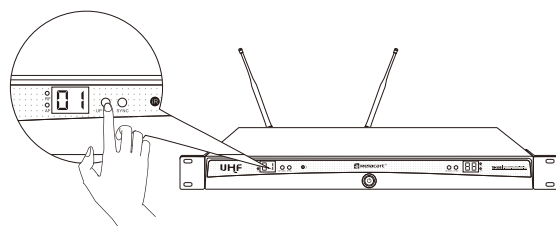
07 User simple steps

1. Press the power button to turn on the receiver, the display and the power indicator are all lit.



2. Manually set channel / auto search button:

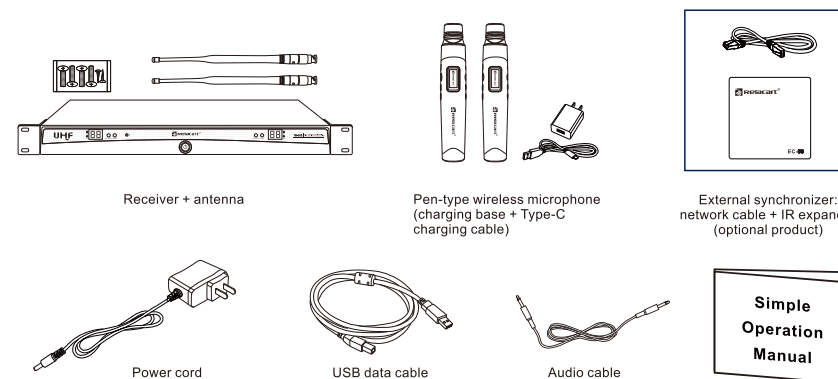
- ① Set the working channel manually, press [UP1 / AFS] button to change the channel, after stopping the press, the channel light flashes for 3 seconds to automatically confirm.
- ② Search channel automatically, press and hold [UP1 / AFS] button for 3 seconds, the receiver will automatically search and lock on the undisturbed channel in the actual working environment.



P11

02 Packing list

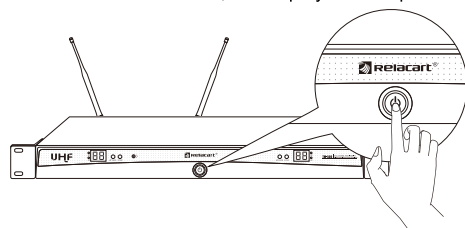
- ◆ Receiver * 1
- ◆ Pen-type wireless microphone * 2
(with charging base and Type-C charging cable)
- ◆ External synchronizer * 1 (optional product)
- ◆ BNC antenna * 2
- ◆ External power adapter * 1
- ◆ 1 meter audio cable * 1
- ◆ USB data cable * 1
- ◆ Rack mount kit (including screws) * 1 set
- ◆ Simple operation manual * 1 copy



P4

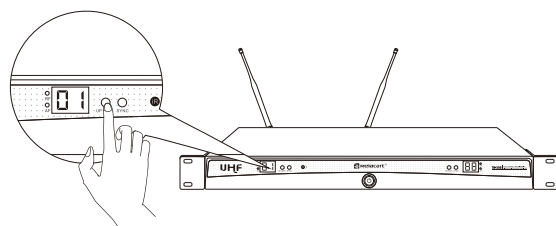
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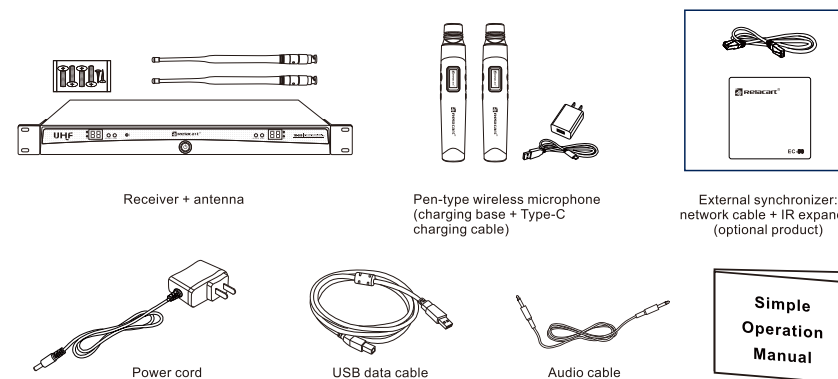
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P11

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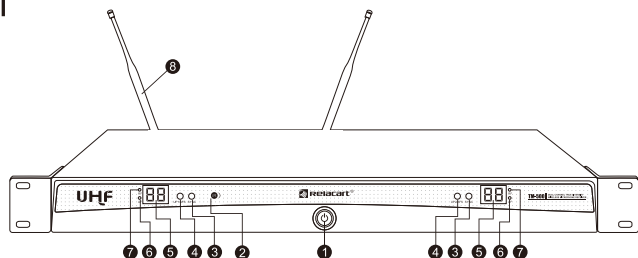
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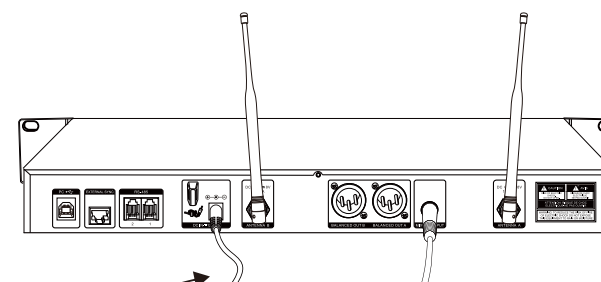
P4

03 TM-500 System function overview

Front Panel



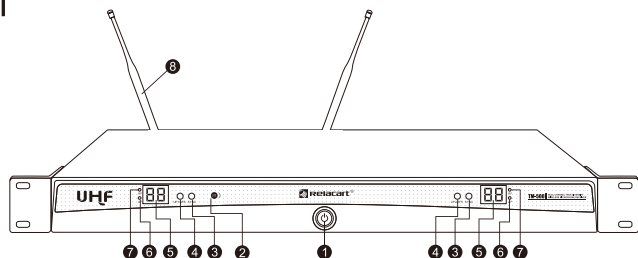
- ❶ Power switch: Press power switch to turn on the receiver, long press to turn off.
 - ❷ Infrared [iR] window: used to send infrared signals to the transmitter to achieve synchronization.
 - ❸ Infrared data transmission button [SYNC]:
 1. Short press to transmit the channel data of the receiver to the transmitter (Er error appears when the channel is not available).
 2. Long press [SYNC] to lock the front panel buttons, the LED Segment display ❹ displays "LO".
 3. Long press again to unlock front panel buttons, the LED Segment display ❹ flashes 3 times.
 - ❹ Manually set channel / AFS button:
 1. Set the working channel manually, this button can change the channel totally 50 channels. (Go to channel 50, then start from channel 1, and stop pressing the button, the channel light flashes 3 times confirm this channel automatically).
 2. Automatically scan for search channels [AFS], press and hold this button for 3 seconds, the receiver will automatically search and lock on an open, interference free frequency.
- LED Segment Displays: can display the working channel clearly.



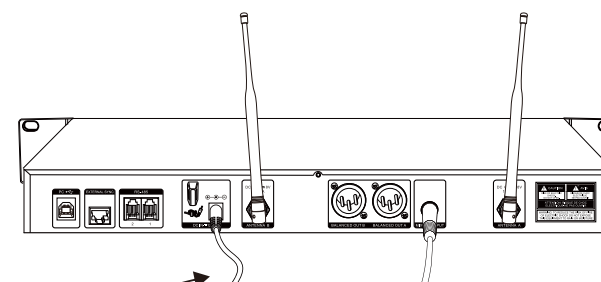
Power cord

03 TM-500 System function overview

Front Panel

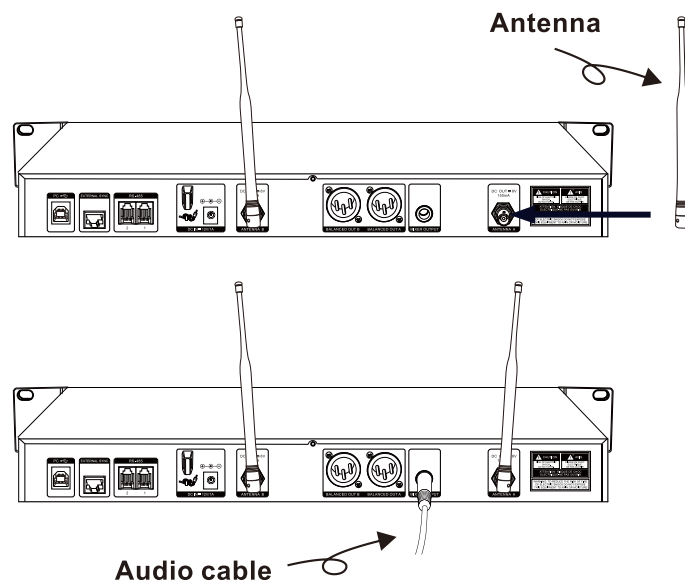


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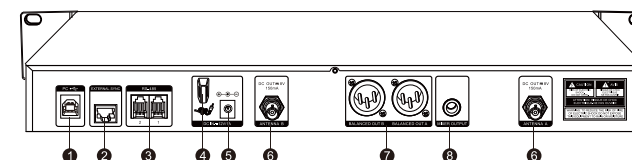
Power cord

06 Receiver equipment installation



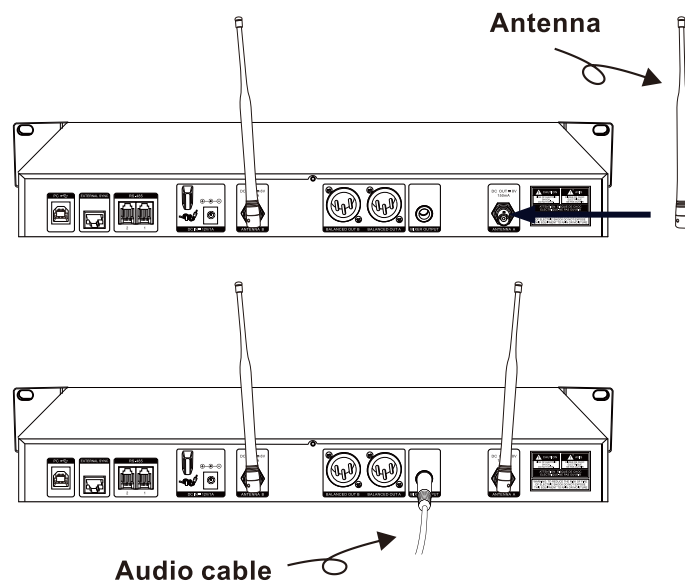
- ⑤ AF audio signal indicator light: indicates that the audio signal from the transmitter of this channel is received.
- ⑥ RF indicator light: It indicates that the radio frequency signal of this channel is received. When the transmitter is on the same frequency as the receiver, this indicator will light.
- ⑦ 1/2 wavelength BNC antenna: used to receive the radio waves transmitted by the transmitter.

Rear Panel



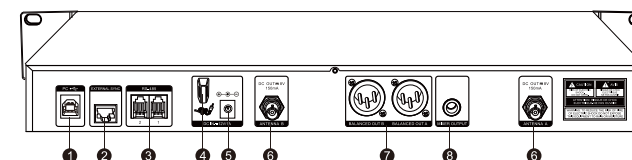
- ① PC USB connection interface: can control the upper and lower pages of the opened document.
- ② EXTERNAL SYNC infrared extension cable interface: can extend the infrared receiver directly.
- ③ RS-485: can be connected to the central controller, set to synchronize control of other equipment.
- ④ Anti-pull device: used to fix the connecting cable of the external power adapter.
- ⑤ DC IN socket: connect to external power adapter.
- ⑥ RF antenna diversity BNC input connector: suitable for connection of antenna A and antenna B, and supports DC 8V / 150mA power output.
- ⑦ Balanced XLR audio output (dual channel independent): connect to the microphone or line level input port of the preamp device.
- ⑧ ϕ 6.3mm unbalanced audio output: dual-channel mixed audio output, connected to the microphone or line input port of the device.

06 Receiver equipment installation



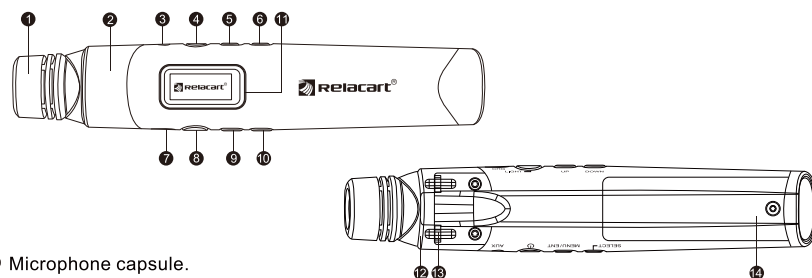
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04 TM-5H Handheld Transmitter Panel Function

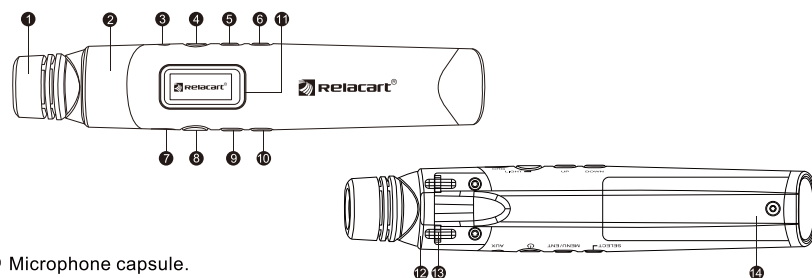


- ① Microphone capsule.
- ② IR window.
- ③ AUX socket: It can be connected to the condenser lavalier microphone or hanging microphone of 3.5mm interface.
- ④ Power button: long press for 3 seconds to turn on or off; when the power is turned on, the system automatically enters the frequency matching state until the frequency matching is successful.
- ⑤ Menu setting button: press to enter or select the confirmation menu.
- ⑥ SELECT button: Press to scroll or edit parameter values in the menus.
- ⑦ Type-C charging interface.
- ⑧ Laser light button: short press the "LIGHT" button to turn on the infrared laser light, then short press to turn off the infrared laser light.
- ⑨ UP: Upward page.
- ⑩ DOWN: Down Page.
- ⑪ OLED display: display RF signal, microphone volume, battery power information, etc.
- ⑫ Infrared laser light.
- ⑬ Lanyard bayonet.
- ⑭ Battery compartment (do not open it for Non-professional).

05 TM-5H Transmitter features introduced

- TM-5-H Transmitter
- Input Gain: (0dB, +3dB)
 - RF Power: (Low, Medium, High)
 - Brightness: (Low, Medium, High)
 - Light Mode: (Momentary, Latch)
 - Status save
 - Language: (Chinese, English)
 - Version
 - TX Reset
 - Exit

04 TM-5H Handheld Transmitter Panel Function



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