



IS-R2 Wireless 2 channel Receiver Instruction Manual

One year product warranty

Product Model		Equipment serial number	
Customer name		Contact number	
Address			
Purchase date			
Selling store stamp	<p>Be sure to put store stamp and fill in purchase date for the warranty to be effective!</p>		

Warranty description

1. Be sure to put the warranty label indicating purchase date on the bottom of equipment to ensure your interest in maintenance and service.
2. Product warranty, starting on the purchase date indicated on “warranty label”, will last for one year; if the equipment does not have “warranty label”, the warranty period is 15 months from the manufacturing date. If a microphone is broken but not sent back with the equipment, the warranty period is 15 months from the manufacturing date of the microphone.
3. Within the warranty period, if the equipment is broken under normal use as instructed in manual, please contact the original selling store for repair.
4. When the product is returned for repair, to facilitate proper determination of cause of malfunction and of whether repair fee is needed, please ship back the equipment and microphone together.
5. Within the warranty period, our company provides repair service at no cost except for the following conditions that parts and repair may be charged:
 - a. Damages due to natural disaster or irresistible outside forces.
 - b. Damages due to drop, water, moisture, corrosion, foreign objects, missing components.
 - c. The warranty does not cover consumable parts. (such as microphone capsule, ball grille etc.)
 - d. Those without “warranty label” on equipment or with “warranty label” being damaged and failing to identify warranty period.
6. Please keep the warranty properly. No replacement will be made if the warranty is missing.


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1. Notes for system operations

- Before connecting to power, make sure the voltage marked on equipment is the same as that on the power socket.
- Do not leave the unit at where the humidity and temperature are high.
- Dry your hands before operating the system.
- Keep the unit away from fire and heat source.
- Turn the volume to minimum at both the mixer and amplifier before setting up the system.
- Caution : The suitable environment for this product is with a temperature between- 10°C (14°F) and +50°C (122°F).

2. Features

- 3rd generation True Diversity system.
- Transmission power selectable between "High" and "Low".
- 6 groups are provided as default. Every group contains up to 23 default channels.
- There are in total 1,441 channels to choose from.
- 36MHz bandwidth.
- The patented **REMOSET**  ultrasonic pairing for synchronized setting of all parameters.
- Channel scan.
- Adjustable receiving sensitivity.
- Automatic microphone power off.
- Charging contact ready.

3. Specifications

3-1 UHF PLL Dual-channel True Diversity receiver // IS-R2

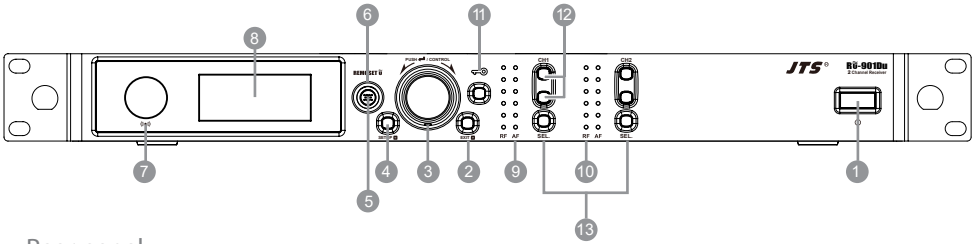
Frequency Oscillation Mode	Phase-locked loop (PLL)
Carrier Frequency Range	470~960 MHz
Remoset Frequency	2.4 GHz
Diversity	True diversity
Bandwidth	36MHz
Signal/Noise Ratio	>105dB(A)
Total Harmonic Distortion (Thd)	<0.6%@1KHz
Receiving Sensitivity	-95dBm · S/N>80dB
Image Rejection Ratio	>80 dB
Frequency Response	50Hz~16KHz±2dB
Antenna Type	1/2λ BNC detachable
Antenna Booster Power	DC12V/100mA
Function Display By	LCD
Contents Of Display	Group, channel, frequency, battery level, antenna A/ B, muting level, AF indication, RF indication, channel scanning, output level attenuation, volume indication
Control Functions	Power, group, channel, frequency, muting level, button lock, volume, output attenuation (XLR), scan ,Mix Output
Audio Frequency Output Level(MAX)	Ø6.3 Phone Jack : +4dBu
	XLR Jack : +10dBu(Line) 、 -10dBu(MIC)
Audio Frequency Output Impedance	600Ω
Muting	Noise muting and tone code locking
Output Port	2 x balanced XLR jack 2 x unbalanced Ø6.3 jack
Power Supply	100~240VAC
Dimension (Mm)	485mm (W) x45mm (H) x 260mm (L)

4. Description of parts

4-1 UHF PLL Dual-channel diversity receiver(True Diversity) // IS-R2

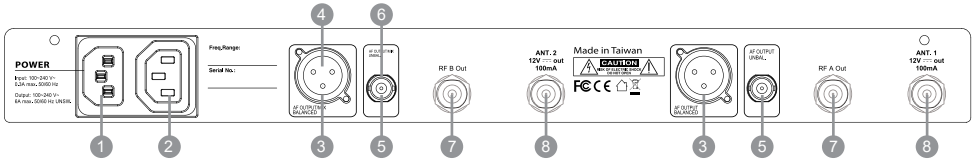
Front panel

- ① **Power ON/OFF:**
ON : push once to turn on.
OFF : push and hold until "Power OFF" is shown on the LCD to turn off.
- ② **EXIT:** Push exit to cancel a selection or exit from the current menu when IS-R2 is in the "setting menu."
- ③ **Rotary Switch:** when in the "function menu," turn the switch to select the desired function; push the switch (or SETUP) to enter the selection and spin the switch to select the setting. Push [SETUP] to save the setting.
- ④ **SETUP:** Push and hold for 2 seconds to enter the "setting menu." Push SETUP to save the setting once the selection and setting are made according to "3. Rotary Switch."
- ⑤ **REMOSET \tilde{U} :** this allows user to synchronize the transmitter after modifying a parameter. Push "REMOSET \tilde{U} " to synchronize the settings to the transmitter.
- ⑥ **Remoset indicator:** this shows the current pairing status. It flashes rapidly when data is being transmitted and the flashing stops when the synchronization is completed. However, the flashing slows down if synchronization fails after a period of time of pairing attempt.
- ⑦ **Ultrasonic transmission unit:** it transmits digital pairing data at ultrasonic frequency. When setting, direct the ultrasonic receiving element of the microphone to the ultrasonic transmitting unit of the receivers. The effective range is 30° on both sides with the optimized distance greater than or equal to 5~20cm.
- ⑧ **LCD display:** See "Receiver LCD display instructions."
- ⑨ **AF:** indicates the current strength of audio frequency signals.
- ⑩ **RF:** indicates the current strength of radio frequency signals.
- ⑪ **Key lock:** push and hold for 2 seconds to lock all keys, and again to unlock.
- ⑫ **Volume keys:** push ▲/▼ keys to adjust the volume between 0 and -31dB.
- ⑬ **Selection key:** push this button
 - a. Push SETUP to enter the setting for the selected channel for parameter settings.
 - b. Push REMOSET to transmit the setting data to the transmitter in this selected channel.








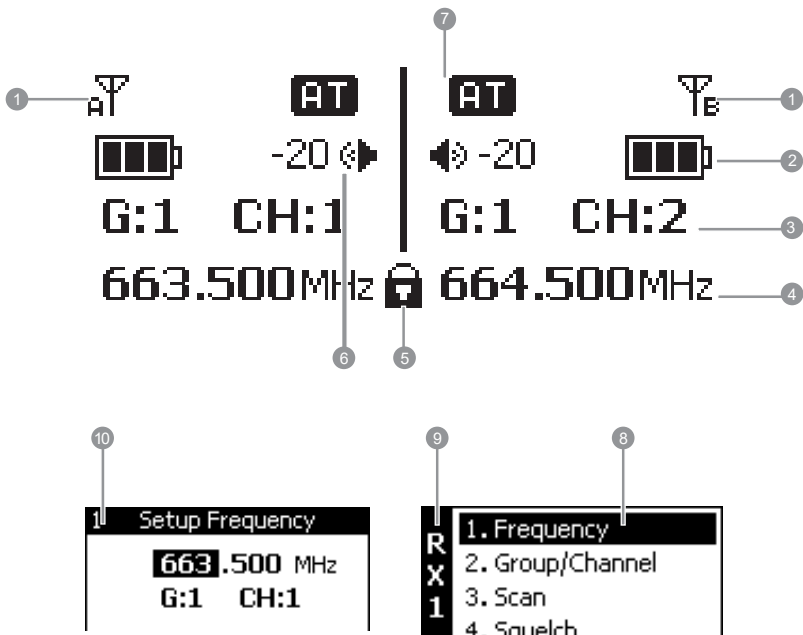
Rear panel

- 1 **Power** : AC power 100~240VAC
- 2 **AC power outlet(for cascading)**: it allows power connection to next receiver with an extension AC power cable.
- 3 **XLR audio jack**: balanced audio signal output
- 4 **XLR audio jack**: balanced audio signal output after mixing
- 5 **Ø6.3 audio output jack**: unbalanced audio signal output
- 6 **Ø6.3 audio output jack**: unbalanced audio signal output after mixing
- 7 **RF A (or B) Out**: RF signal output socket(for cascading); Provide RF signal to next receiver.
- 8 **Antenna A (B) input terminal**: BNC antenna input jack that also provides DC12V/100mA output.



Content Displayed under the Non-Setting Mode:

- ①  :Antenna Selection A/B.  The Receiver is mute.
- ②  : Transmitter Battery Level
- ③ **G:1 CH:1** :Frequency (Group/Channel)
- ④ **663.500MHz** : Frequency
- ⑤  : Key Lock (Key Lock ON)
- ⑥ **-20**  : Volume
- ⑦ **AT** : Output attenuation ON
- ⑧ Setup Menu
- ⑨ RX1: Set the Receiver's Channel 1. RX2: Set the Receiver's Channel 2.
- ⑩ 1: Set the Receiver's Channel 1. 2: Set the Receiver's Channel 2.



5. Preparing Procedures

5-1 How to connect the receiver// IS-R2

1. Connect the audio output of receiver to mixer or amplifier

1.IS - R2 :

- (1) The XLR output jack or 6.3mm unbalance output jack can be selected individually to connect the AF output to a mixer or amplifier for volume control.
- (2) Switch the “Mixed” on the back to ON. This allows to mix the RX1 and RX2 signals to RX1’s 6.3mm non-balance output jack and then to a mixer or amplifier for volume control.

2. Connect to power

2.1. Connect to AC outlet:

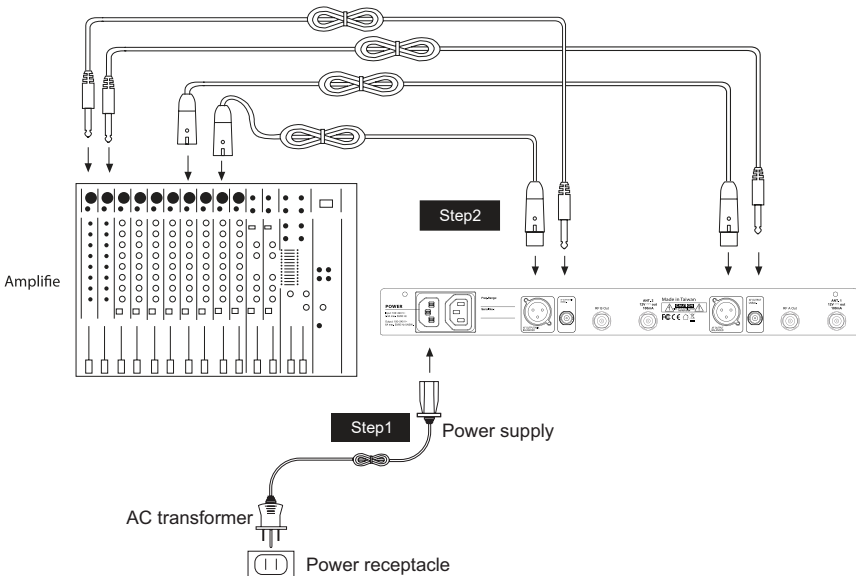
One end connects to receiver “power input”, while the other end connects to AC power receptacle.

2.2. Set the parameters:

Turn the power on and set the parameters of receiver according to the setting instructions.

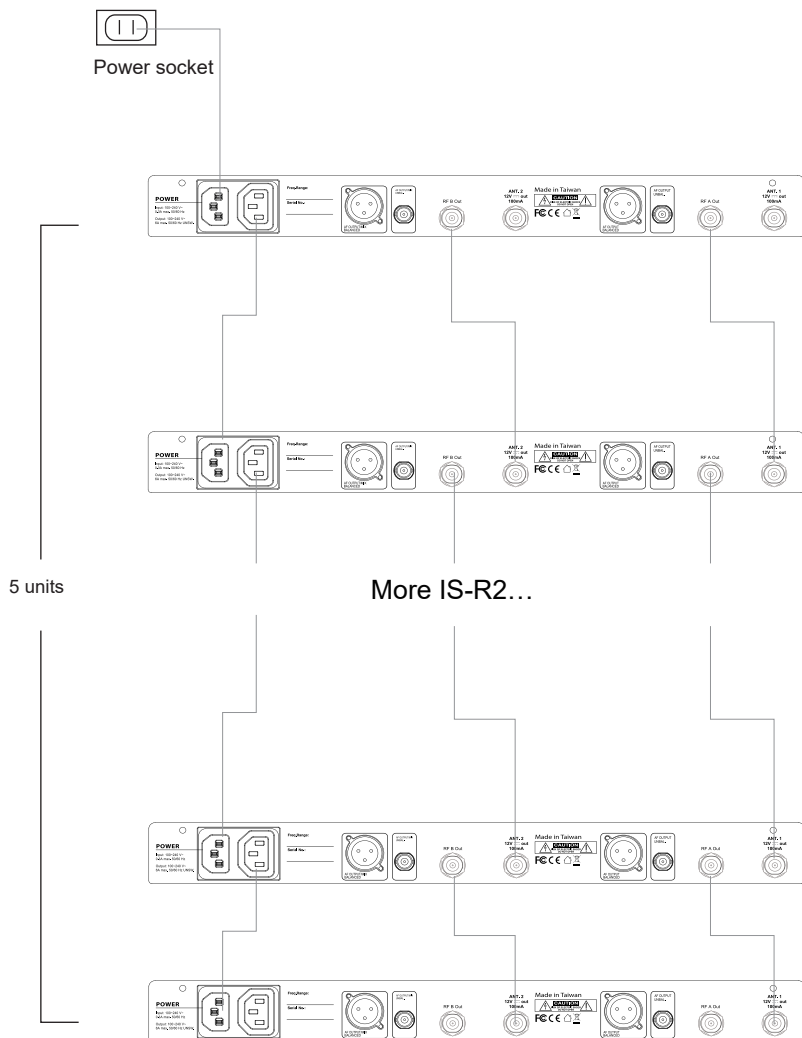


Caution! Secure the power cable on the fastening hook of anti-pulling clip in order to prevent the power cable from falling.



3. Cascading of AC power cable and antenna

It is allowed to cascade power and antennas for 5 units.

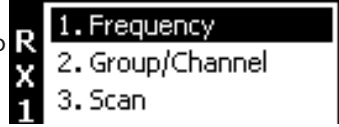


6. Instructions for use

6-1 How to use// IS-R2

Press and hold the SETUP key for 2 seconds to enter the Setup Menu. Turn the Rotary Switch to select the item to be set, and press SETUP again to enter the settings.

✕ Press EXIT to return to the previous item. Note that the set value will not be saved.



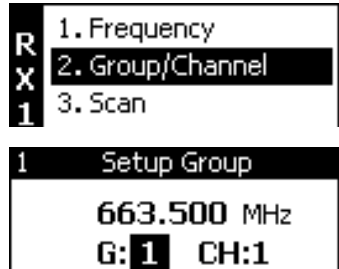
◎Frequency Setting

Adjust the left 3 digits of the Frequency. Turn the Rotary Switch to change by "+/-" 1 MHz each time. Press the SETUP key after adjustment is completed. Adjust the right 3 digits of the Frequency. Turn the Rotary Switch to change by "+/-" 0.025MHz each time. After the setup is completed, press the SETUP key to save the set value.



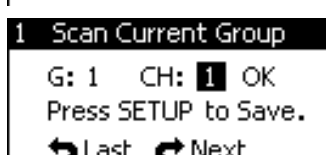
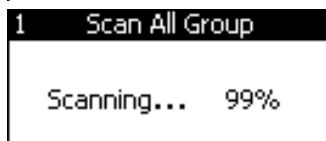
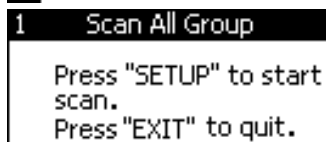
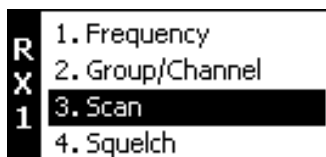
◎Default Group

Turn the Rotary Switch to select Group "G:" ; Press the SETUP key adjustment is completed. Turn the Rotary Switch to adjust Channel "CH:" After adjustment is completed, press the SETUP key to save the set value.



©The Scanning Function

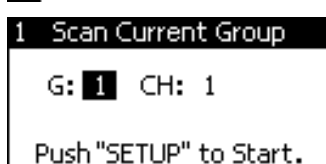
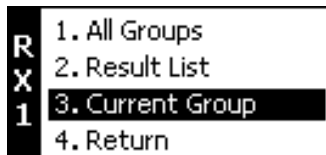
Scan All Groups. Press the SETUP key to start scanning. After the scan is completed, the "Scan Results List" screen will be displayed automatically. Users can also click on the menu to enter the "Scan Results List" directly.



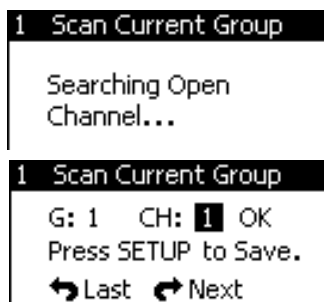
"Scan Results List": Press the SETUP key to enter the menu screen and view the scan results. Select the available channels, and press the SETUP key to save the settings.



Scanning the current Group: Upon entry into the screen, turn the Rotary Switch to select the group to be scanned, and press SETUP to start scanning. Press ▲ to search for the previous available Channel.

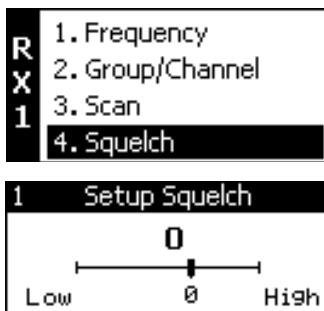


Rotate the Rotary switch to the right to search for the next available Channel. Press the SETUP key to save the settings.



◎Receiver Sensitivity

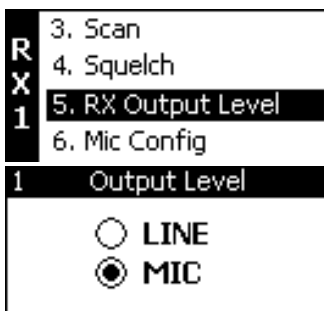
+10 ~ -5: The higher the value, the lower the Receiver Sensitivity; the lower the value, the higher the Receiver Sensitivity. Default Value is 0.



◎Output Attenuation

Rotate the Rotary switch to the right to set the balanced output level for Line to Line output.

Rotate the Rotary switch to the left to set the balanced output level for Mic to Mic output.



◎Microphone Options: Turn the Rotary Switch to select the item to be adjusted. Press SETUP, and then turn the Rotary Switch to select the settings to be adjusted, and then press SETUP to return to the item selection.



Sensitivity

Scope of Adjustment:

-15dB~+15dB ; Default Value is 0.

RX1	Sensitivity	0 dB
	Attenuate	OFF
	RF Power	Low
	Auto OFF	30 Min

RX1	Sensitivity	0 dB
	Attenuate	OFF
	RF Power	Low
	Auto OFF	30 Min

Input Attenuation

ON	Audio input is attenuated by 20dB. (Depending on whether the transmitter has this function)
OFF	Not Attenuated (Default Value)

This function only applies to the Waist-Mounted Transmitter RU-G3TB.

RX1	Sensitivity	0 dB
	Attenuate	OFF
	RF Power	Low
	Auto OFF	30 Min

RX1	Sensitivity	0 dB
	Attenuate	OFF
	RF Power	Low
	Auto OFF	30 Min

Radio Frequency Power

High	High Transmitting Power 50mW
Low	Low Transmitting Power 10mW(Default Value)

RX1	Sensitivity	0 dB
	Attenuate	OFF
	RF Power	Low
	Auto OFF	30 Min

RX1	Sensitivity	0 dB
	Attenuate	OFF
	RF Power	Low
	Auto OFF	30 Min

Automatic shutdown (when the Microphone is muted)

OFF	This function is turned off.
1 min	Automatic shutdown after 1 minute
10min	Automatic shutdown after 10 minutes
30min	Automatic shutdown after 30 minutes

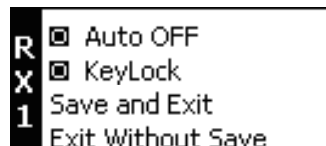
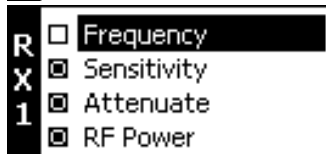
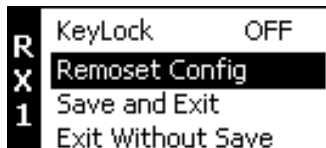
RX1	Sensitivity	0 dB
	Attenuate	OFF
	RF Power	Low
	Auto OFF	30 Min

RX1	Sensitivity	0 dB
	Attenuate	OFF
	RF Power	Low
	Auto OFF	30 Min

Synchronization Options

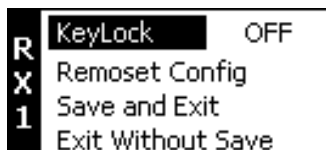
Turn the Rotary Switch to select **REMOSET** and synchronize transmission of the setup items, and then press the SETUP key to perform the selection action.

- Frequency
 - Sensitivity
 - Attenuate (RU-G3TB only)
 - RF Power
 - Auto OFF
 - Key Lock
- Save and Exit
Exit Without Save

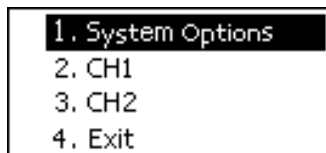


Key Lock

ON	Key Pad Lock ON
OFF	Key Pad Lock OFF

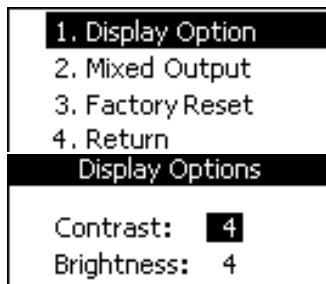


System Settings



Display Settings

Contrast	0~7 (Default Value4)
Brightness	0~7 (Default Value4)



©Mixed Output

ON	Mixed Output Enable
OFF	Mixed Output Disable

Mix the signal with RX1 and RX2 then output together from RX2

1. Display Option
- 2. Mixed Output**
3. Factory Reset
4. Return

©Reset to original manufacturer settings

1. Display Option
2. Mixed Output
- 3. Factory Reset**
4. Return


This will erase all user data from receiver's Internal Storage.

©Exit the Setup Screen.

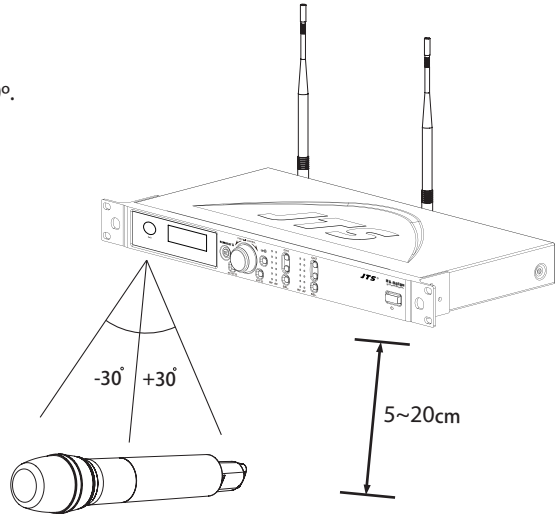
Press the SETUP key to exit the setup screen and return to the home screen.

1. System Options
2. CH1
3. CH2
- 4. Exit**

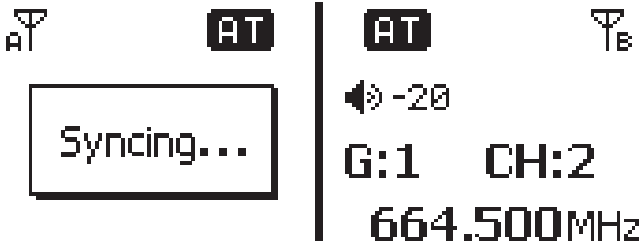
Pairing **REMOSET**

Once the parameters are set, push the “ **REMOSET**  ” button and the digital pairing data will be sent to the transmitter via ultrasonic transmitter for parameter synchronization. The indicator will flash rapidly while the data are being transmitted. When the synchronization is completed, the receiver will receive the corresponding data and the indicator will stop flashing. If the signal is not received for a certain period of time, the indicator will flash slowly to inform pairing failure (the slowly flashing indicator can be reset by pushing any button).

Note: The best pairing distance is greater than or equal to 5~20cm.



Note2: Only one Microphone can be synchronized at a time. When RX1 is synchronized, RX2 cannot be synchronized. RX2 must wait until RX1 is disconnected from synchronization.



Others

The transmitter's battery level is also shown on the LCD display. If the battery level is $\leq 2V$, the frame around the battery level will flash and the backlight turns into red as a warning

7. Notes for the product

- (1) For the best signal receiving quality, always keep the receiver within 3m of the transmitter.
- (2) The receiver and transmitter shall be away from other metal objects, preferably 50cm or farther.
- (3) Do not point the microphone directly to a speaker, or there will be feedbacks.
It is recommended to hold the transmitter (microphone) at the middle section for the best pickup.
- (4) In case that the transmitter will not be in use for an extended period of time, the batteries shall be removed from the battery holder to prevent damage to the transmitter due to leak of battery electrolyte solution.
- (5) For the best power performance, it is recommended to change both batteries or use the products of the same manufacturer when they are to be changed.