

Operation instructions

USER'S MANUAL



Professional wireless intercom

PROFESSIONAL FM TRANSCEIVER



天线: Antenna

发射键: PTT

自定义: Customizable

静噪: Squelch

信道: Channel

音量/电源开关: Volume/Power switch

喇叭: Speaker

耳机接口: Earphone Jack

送话器: MIC

信道显示屏: Channel Display

FUNCTION

1. Operating Frequency: 430MHz~439MHz, Frequency Range: 430~470MHz
2. 16 channel numbers; Battery level display; Volume indicator light; Channel indicator light
3. 50 groups CTCSS/105 groups DCS
4. Time-out timer(TOT): 60 seconds
5. Power saving mode
6. Built-in VOX Function
7. Low voltage Alert(3.4V)

8. Scan function(programmable)
9. Wide/Narrow band(programmable)
10. Monitor Function(programmable)
11. Busy Channel Lockout to avoid disturbance(When turned on, it prevents interference with users who are transmitting on the same channel;programmable)
12. Drop frequency(DCS,when open this function,the frequency will be constantly jumping, to avoid interference or eavesdropping;programmable)
13. Match code and copy the frequency function(crack transmitter frequencies and copy 16 channel frequencies from the other walkie talkie)
14. Scrambler (This is a encryption function, when it be opened, will add scrambler signal, then there is no same scrambler signal can not receive, transmit ;programmable)
15. Voice compandor(This function is turned on to reduce ambient noise, improve call clarity;programmable)
16. Battery voltage detection (when the voltage is below a certain level, there will be a low voltage voice warning)
17. Program encryption function

FUNCTIONAL OPERATION

Squelch Level Setup

This function is to mute the speaker when no signal received. If the squelch level is setup too high, weak signal won't be heard. If the squelch level is setup to low, the signal will be heard with noised background. The squelch level can be setup via programming software, ranging from 0~9.

Power Saving

If you turn on power function, it will decrease-es the power consumption when the transceiver no action(no press any keys or switch power button) or no receive any signal for more than 10 seconds. This function will turn off when receive signal or operate the transceiver.

Scan Function

Long press the side button, switch on to open/close scan.

When scan function is enabled, after rotating the channel1 switch to Channel 16,the transceiver will enter scan mode automatically. When a signal is received, scan will stop at the current channel.(set up switch on/off via PC software)

VOX(PROGRAMMABLE)

This function allows the user to activate the communication without pressing the PTT button.You just have to speak and the communication is on.

- a. Voice control function: It can be effective only when the voice control function is enabled.
- b. Voice-controlled gain level: When the sound level is higher than the set voice-controlled gain level,VOX will automatically transmit. The gain level can be adjusted from 1 to 9.
- c. When the radio receives a signal, even if the sound level is higher than the set gain level,VOX will not be transmitted.
- d. Programmable (short press or long press the function key to open this function)

Battery voltage detection

Low voltage alarm: When the voltage is below a certain level, about every 20S low voltage voice prompt, effective emission.

TOT

It is to control transmitting time, 30~180 seconds adjustable. The TOT function will be active 30 seconds before the transmitting time coming. Transmitting LED light will flash.

Display Status

When turn on the radio or switch the channel numbers or adjust the volume, the battery capacity and channel number and the volume will be showed 5 seconds.

Replication Function

This function is to assist the radio frequency and channel number function, when two radios switch to channel 2 at the same time, then turn off this two radios, long press radio1 PTT and side key 1, and turn on the radio at the same time, radio 1 of green light will flash to go into replication mode, this time, press radio2 PTT button to transmit until the red light change to green flash light, after shutdown and restart, the replication is complete. the frequency and function of this two radio will be the same in all channels.

Code Matching Function

This function is to crack the frequency and DCS/CTCSS, switch the channel of two radios to channel 1, and turn off the radio, long press radio1 PTT and side key 1 (Customizable Key), and turn on the radio at the same time, radio 1 of green light will flash to go into code matching mode, this time, press radio2 PTT button to transmit until heard "DI", then code matching is complete. the frequency and function of this two radio will be the same in channel 1. The same as the above operation, can match the code one by one from channel 1~16.

Automatic Detection

Turn on the radio to channel 13, then turn off the radio, and press PTT and +key and squelch key, turn on the radio at the same time, this radio go into the automatic detection mode, the radio will automatically transmit/receive until 30 seconds is up. Shut down and exit the automatic detection mode.

CTCSS/DCS

This radio has CTCSS and DCS (PC programmable). Some channels can preprogrammed with CTCSS/DCS tones. A CTCSS/DCS is a sub-audio tone. On the same channel, only the same CTCSS/DCS tone can communicate. When you receive a signal that has different CTCSS/DCS, you will not hear the signal.

[Note] Although using channels set with CTCSS/DCS tones relieves you from listening to unwanted calls, it does not mean your calls will be private.

Scrambler

Programming to open the function on the channel of the walkie-talkie, when you are on a call, the signal is encrypted, and only when the same channel is turned on the scrambling function can the intercom be normal.

TECHNICAL SPECIFICATION

Frequency Range	UHF400~470MHz
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Memory Channel	16
Operate Voltage	DC3.7V
Frequency Stability	±2.5ppm
Working Temperature	-20°C~+50°C
Antenna Impedance	50 ohm
Transmitter	
RF output power	>=1.7w
Emission current	<=1200mAh
Peak Frequency Deviation	<=5KHz
Conducted Carrier Power Output	<=7.5uW
Adjacent selectivity	<= -65db
Hum & Noise Ratio (Un-squelched)	>= -45DB
Mic Sensitivity	8~12mV
Receiver	
Receiver Sensitivity	-122dBm(12Db sinad)
Rated audio output power	>=350mA
Rated audio distortion	<10%
Inter modulation	>=65dB
Adjacent selectivity(wideband)	>=65dB
RX Current Consumption	<=350mA