



01

FUNCTION

- 1.Frequency: TX/RX:462.5500-462.7250MHz 467.5625-467.7125MHz
- 2.Channel numbers: 22
- 3.50 groups CTCSS/105 groups DCS
- 4.Time-out timer(TCT):60 seconds.
- 5.Battery Saver:
- 6.Built-in VOX Function
- 7.Low voltage Alert(3.4V).
- 8.Scan function(long press side key 3)
- 9.Narrow band
- 10.Monitor Function(Long press side key2)
- 11.Site alarm, manual alarm switch(side key2).
12. power
- 13.Busy Channel Lockout to avoid disturbance
- 14.Drop frequency(ECS)
- 15.Match code and copy the frequency function
- 16.Scrambler, Voice compandor
- 17.High capacity battery design, low battery alert

02

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 too 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 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 channel 1 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)

03

VOX

It is to fix the VOX function and select the VOX level. When in level 10 , transmitting easily, when in level, VOX function will be active with loud voice.

Low Battery Warning

Low battery warning alert "Beep" every 10 seconds, the battery needs to be recharged or replaced.

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, the battery capacity and channel number will be showed 3 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 the two radios, long press radio1 PTT and side2 button, 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 changes 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.

04

Code Matching Function

This function is to track the frequency and DCS/CTCSS, switch the channel of two radios to channel 1, and turn off the radio, long press radio1 PTT and side2 button, 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 side2 button, turn on the radio at the same time, this radio goes 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 be 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 a 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.

06

TECHNICAL SPECIFICATION

Basic Information		Receiver:	
Frequency Range	462.5500-462.7250MHz 467.5625-467.7125MHz	Receiver Sensitivity	-122dBm(12Db sinad)
Memory Channel	22	Rated audio output power	>=350mA
Operate Voltage	DC3.7V	Rated audio distortion	<10%
Frequency Stability	±2.5ppm	Inter modulation	>=65dB
Working Temperature	-20 to +55 °C	Adjacent selectivity(wideband)	>=65dB
Antenna Impedance	50 ohm	RX Current Consumption	<=350mA
Transmitter:			
RF output power		462.5500-462.7250MHz: 32.67dBm 467.5625-467.7125MHz: 23.31dBm	
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	

05

Repair card

Machine type: _____ Date of purchase: _____
Serial number: _____ Contact number: _____
seller: _____ Contact number: _____
User name: _____ Zip code: _____
Address: _____

Warranty description

1. This warranty card is kept by the customer as warranty certificate, and will not be replaced if lost.
2. This card is valid only when stamped and dated by the point of sale.
3. This card shall not be altered. Please confirm that the serial number of the warranty card is consistent with the number of the machine purchased, otherwise it will be invalid.
4. The warranty period is one year. The charger, battery, earphone, antenna and feeder are consumables and are not covered by warranty.
5. Users can choose the following ways to obtain maintenance services:
 - a. At the original purchase.
 - b. Our company in the local special maintenance point.



WARNINGS: Replacement or substitution of transistors, regular diodes or other parts of a unique nature, with parts other than those recommended by XIANGRUN may cause a violation of the technical regulations of part 95 of the FCC rules, or violation of type acceptance requirements of part 2 of the rules. Your radio is set up to transmit a regulated signal on an assigned frequency. Any adjustment to your radio must be made by qualified technicians.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference, and
- 2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

SAR tests are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. Before a new model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the exposure limit established by the FCC. Tests for each product are performed in positions and locations as required by the FCC.

For body worn operation, this device has been tested and meets the FCC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that contains no metal.

To maintain compliance with the FCC's RF exposure guidelines, hold the transmitter and antenna at least 1 inch (2.5 centimeters) from your face and speak in a normal voice, with the antenna pointed up and away from the face.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to comply with the FCC RF exposure requirements, the antenna installation must comply with following:

Users must be fully aware of the hazards of the exposure and able to exercise control over their RF exposure to qualify for the higher exposure limits.

Your wireless hand-held portable transceiver contains a low power transmitter. This product sends out radio frequency (RF) signals when the Push-to-Talk (PTT) Button is pressed.

The device is authorized to operate at a duty factor not to exceed 50%.

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-----Reorient or relocate the receiving antenna.

-----Increase the separation between the equipment and receiver.

-----Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-----Consult the dealer or an experienced radio/TV technician for help.