

BF-T12

To users

Thank you for your favor with our products.

We are dedicated to providing high performance and high stability radio communication products. This two-way radio is no exception. This product is a small and exquisite walkie-talkie developed and produced by the professional team for the popularization of civil consumer market. In order to make you fully understand the various advantages of the radio performance and use and maintenance methods, please read this manual carefully.

一 功能简介 Function Introduction

- 1、3.7V Rechargeable Lithium Battery
- 2、Frequency Range: FRS
- 3、Narrow Band Selection: 12.5KHz
- 4、Stepped Frequency: 5K/6.25K/12.5K/25K
- 5、Output power: 1.5W/0.5W
- 6、50 Groups CTCSS, 105 Groups DCS
- 7、Up to 99 Channels(1-99)
- 8、Time-out timer(TOT)
- 9、VOX Level: OFF/1/2/3/4/5
- 10、Busy Channel Lockout (BCL0)
- 11、Squelch Level: 0-9
- 12、Battery Saving Function
- 13、Monitor Function
- 14、Low Battery Voltage Warning/Indication
- 15、Chinese/English Language

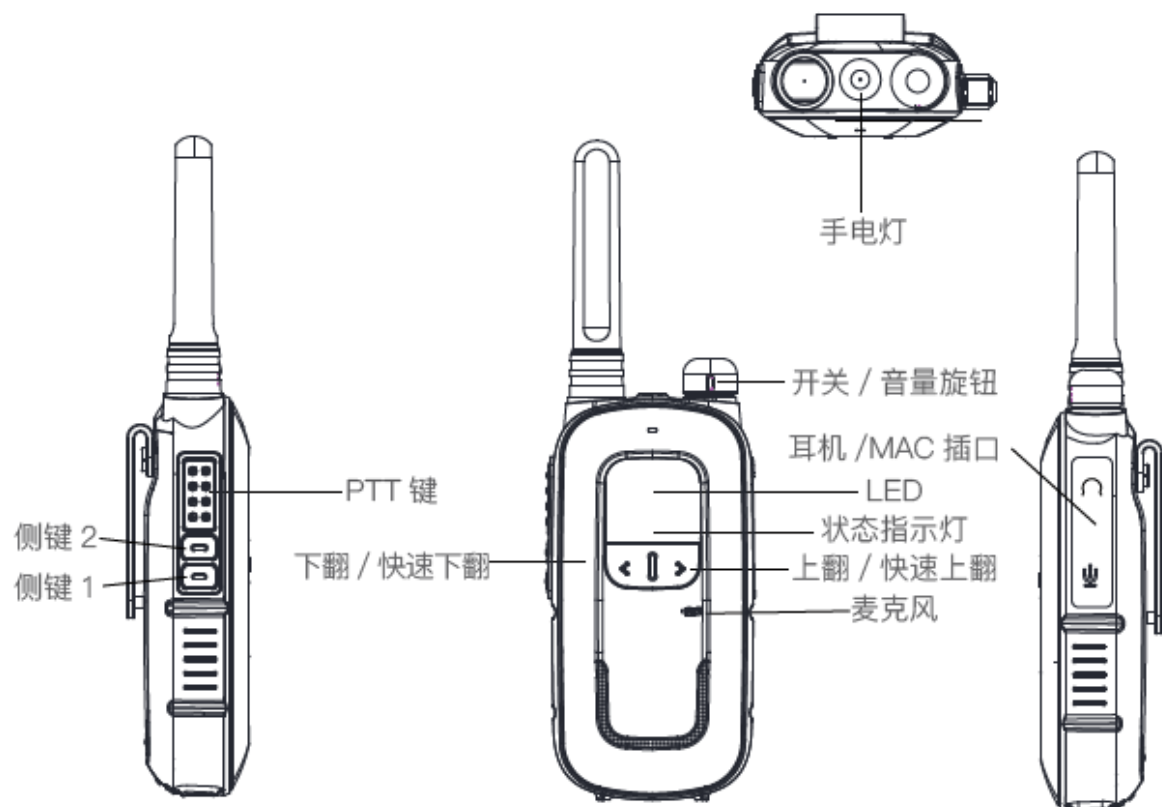
二 安全信息 Safety Information

Please read the following information in order to use this two-way radio safely and efficiently.

1. The maintenance work of the two-way radio can only be carried out by professional technical personnel; assembly/dis assembly without permission is prohibited;
2. To avoid problems caused by electromagnetic interference and/or electromagnetic compatibility, please turn off the two-way radio in places with the sign "Please turn off two-way radio", such as hospitals and other health care facilities.
3. When taking airplane, please turn off the two-way radio when the crew request.
4. In automobile with airbags, do not place the two-way radio in the inflation area of the airbags.
5. Turn off the two-way radio before entering the flammable and explosive environment;
6. Do not replace or charge the battery in flammable and explosive environments;
7. Turn off the two-way radio before approaching the blasting area and detonator area;

8. Do not use the two-way radio if the antenna is damaged, or else it may cause minor skin burns;
9. Do not expose the two-way radio to direct sunlight or near the heating device.
10. While the portable two-way radio is transmitting, keep the radio in a vertical position and keep the microphone about 5cm from the mouth.
11. Keep the two-way radio at least 2.5cm from the head or body during transmitting.
12. If you are wearing the portable two-way radio on your body, make sure that the antenna is at least 2.5cm away from the body when the two-way radio is transmitting.
13. If the two-way radio has any odor or smoke, turn off the power immediately and contact your dealer.

三 熟悉本机 Get start



PTT 键 PTT Button

侧键 1 Side Key 1

侧键 2 Side Key 2

LED Lamp

开关/音量旋钮 Power and Volume Knob

LED Screens

状态指示灯 Status Indicator

下翻/快速下翻 DOWN/ Quickly Backward

上翻/快速上翻 UP/ Quickly Forward

麦克风 Microphone

耳机/Mac 插口 Earphone/Mac Socket

1. 按键介绍 Description of the Buttons

[PTT]: When transmitting, press this button and speak to the microphone; release the button to receive.

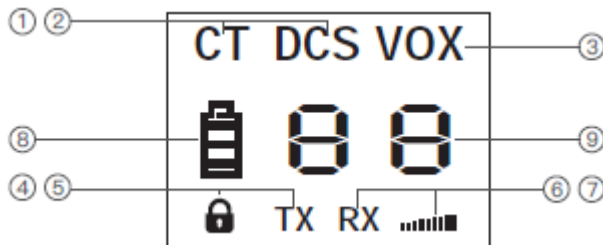
[<] DOWN Button: Press this key for decrement of channel; long press this key for fast decrement of channel.

[>] UP Button: Press this key for increment of channel; long press this key for fast increment of channel.

Note:

- ①. "<" and ">" are presses for more than 2 seconds to enter channel scanning.
- ②. Press and hold the PTT+ "<" button and turn on radio. Switch between Chinese and English.
- ③. Press and hold PTT+ ">" button to transmit DTMF (1750HZ, 1450HZ, 2100HZ) by default to 1750HZ, It can be set by the write frequency software (edit → optional function → DTMF).
- ④. Side Key 1: Press the key to turn on or off the SOS function, long press this key for monitor function.
- ⑤. Side Key 2: Press the key to turn on flashlight; long press this key for keypad lock.

2. LED icon and function description



1. CT (CTCSS): When the screen displays this symbol, it represents the current channel for CTCSS receive and transmit.
2. DCS (CDCSS): When the screen displays this symbol, it represents the current channel for CDCSS receive and transmit.
3. VOX : When the screen displays this symbol, it represents the VOX function of the turn on.
4. (Key lock): When the screen displays this symbol, it represents the keyboard is locked and cannot be switched up and down; except for PTT key and MONI key.
5. TX: When the screen displays this symbol, it represents is in the transmitting state, and the signal strength icon is display same time.
6. RX: When the screen displays this symbol, it represents is in the receiving state, and the signal strength icon is display same time.
7. Signal strength icon.
8. Battery level and Charging indicator: The icon represents the current battery level. When charging, the battery level jumps back and forth from 1 grid to 3 grids.

(No display when power off and charging)

9. Channel number: Display current channel.

Note: The radio will enter power-saving mode after 10 seconds of standby, then the screen will be turned off, this moment, the green is flicker.

四 功能操作 Function Operation

1. CTCSS/CDCSS 编解码功能 CTCSS/CDCSS encode and decode

50 groups of CTCSS and 105 groups of CDCSS encode and decode functions can be set to prevent unrelated calls received on the same channel.

2. VOX 声控发射 VOX

Turn On and Off with PC programming software.

3. 繁忙禁发 Busy Channel Lockout (BCLO)

To activate this function, when the channel is being used by other users, press "PTT" key, the radio will cannot transmit and "beep, beep" prompt sound.

When the channel is idle, press the "PTT" key again and it can be transmitted.

4. 超时定时器 Time-out timer (TOT)

The function of the time-out timer is to prevent the any calling party from using a channel too long and continuously.

You can set this function through the programmable by PC (time:30 seconds, 60 seconds, 90 seconds, 120 seconds, 150 seconds, 180 seconds, 210 seconds, 240 seconds, 270 seconds, 300 seconds). If you continue to transmit beyond the set time, the radio will stop transmitting and beep. Release the [PTT] button and press the [PTT] button again to resume transmit.

5. 监听功能 Monitor

Turn on the radio, press the "MONI" button for a long time to compulsively open the receiver and listen to whether there is any voice on the current channel.

6. 静噪电平 SQL 选择 Squelch Level

The frequency of squelch is 0 (on) -9 (deep), steps: 1, Level 0 is normally open SQL.

7. 自动省电功能 Automatic Battery Saving Function

This function starts when the machine does not receive a signal or does not perform an operation for more than 10 seconds. The machine automatically stops this function when it receives a signal or performs an operation.

8. 语音报号功能 Chinese/English voice prompts

Switch Chinese and English with PC programming software

9. 低电告警 Low Battery Voltage Warning

When the battery voltage is 3.3v, the radio voice prompts: "charge battery". When the battery voltage is 3.1v, the radio is forbidden to transmit.

11、扫描 Scan

In standby mode, Press and hold the 【UP】 and 【DOWN】 keys for 2s to start scanning, and press any key to stop scanning.

12、发射 DTMF Transmit DTMF

Press and hold the 【PTT】 + ">" key to transmit the corresponding DTMF number. (1750HZ、1450HZ、2100HZ)

13、紧急呼叫 (SOS)

Press the side key 2 to open and close the SOS, there are "field alarm" and "send alarm", which need to be set by write frequency software.

五. 技术指标 Technical Specification

整体部份 General

Frequency range:FRS

Memory channels: 99

Operation voltage: DC3.7V (li-ion Battery)

Frequency stability: $\pm 2.5\text{ppm}$

Operation temperature: $-20^{\circ}\text{C}\sim +50^{\circ}\text{C}$

Mode of operation: Simplex

Antenna impedance: 50Ω

Ground connection: Negative electrode

Volume: 58x28.5x172MM

Transmitter

RF Power: 1.5W/0.5W

Modulation: FM

Max frequency deviation: $\leq \pm 5\text{KHz}$

Stray Radiation: $\leq -60\text{dB}$

Transmit current: $\leq 1000\text{mA}$

Pre-emphasis Character: 6dB/per octave

Receiver

Sensitivity: $< 0.16\mu\text{v}$ (12dB SINAD)

Squelch Sensitivity : $< 0.2\mu\text{v}$

Audio power: $\geq 380\text{mW}$

Audio distortion: $< 10\%$

Intermodulation: $\geq 65\text{dB}$

Receive current: $\leq 380\text{mA}$

Note: The above specifications/technical instructions are for reference only because of the continuous improvement of the technology. Please refer to the physical object.

FRS Frequency List:

No.	Frequency List	No.	Frequency List
1	462.5625	12	467.6625
2	462.5875	13	467.6875
3	462.6125	14	467.7125
4	462.6375	15	462.5500
5	462.6625	16	462.5750
6	462.6875	17	462.6000
7	462.7125	18	462.6250
8	467.5625	19	462.6500
9	467.5875	20	462.6750
10	467.6125	21	462.7000
11	467.6375	22	462.7250

FCC Warning

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

RF Exposure Information:

This product is compliance to FCC RF Exposure requirements and refers to FCC website <https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm> search for FCC ID: 2AJGM-BF-T12 to gain further information include SAR Values.

The device only supports simplex-mode and transmitting is no more than the rated duty cycle factor of 50% of the time. For hand-held operation, the radio should be held at least 25mm from the user's face. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with RF exposure requirements, and should be avoided.