

adi Communications

AB-01



User Manual

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Overview

Thank you for choosing a handheld UHF FM radio. In order to make your walkie-talkie use in the best condition, please read this manual carefully.

The machine is easy to operate, stable in performance, and sturdy and generous in appearance. It is researched and developed in order to meet the needs of a wider area and more users. Whether you are in a rural area, forest area, pastoral area, or sea area, you can talk normally, and the exquisite appearance can better meet your individual needs.

Thank you for your continued support and love to ADI Communications Corp.!

Unpacking and device inspection

Please take out the walkie-talkie carefully from the packing box. We recommend that you check whether the following items are in the box before discarding the packaging materials. If any items are lost or damaged during transportation, please immediately ask the seller and ask for the corresponding accessories.

Random accessories list

Goods	Unit	Quantity
User manual	piece	1
Bluetooth earpiece	piece	1
Charging cable	piece	1

Main features of this machine

1. 467.5125 – 467.675 MHz full-band intercom.
2. Chinese/English voice report number.
3. High/low power is optional.
4. Wide and narrow bands are optional.
5. 50 sets of CTCSS and 104 sets of DCS noise suppression system.
6. VOX (voice control) function, it is more convenient to release both hands.
7. TOT (Time-Limited Launch) function can avoid damage caused by long-time launch.
8. BCL (Busy Lock) function to understand the busy state of communication.
9. SCAN (scan) function, scan and answer all communication channels.

10. With dual PTT function, emergency communication is more convenient and fast.

11. With deep power saving function, the standby time is longer.

12. Built-in Bluetooth function (optional)

13. The charging data of the external headset shares the TYPE C interface for easy use.

14. Built-in antenna

15. BLE PC programming (optional)

Technical indicators

Whole part

Frequency Range	467.5125 – 467.675 MHz
Memory channel	14 Channel spacing
Channel Spacing	12.5kHz

Modulation FM(F3E)

Range of working temperature $-20^{\circ}\text{C} \text{ --- } +55^{\circ}\text{C}$

Operating Voltage 3.7V

Waiting current About 20mA (Normal power saving)

Size **140(H) × 49(W) × 20(D)**

Weight About **100g**

Emission part

Frequency tolerance $\pm 3\text{ppm}$

Output Power $\leq 0.5\text{W}/3.7\text{V}$

Emission current $\leq 0.5\text{A}$

Max frequency deviation 2.5kHz

Audio distortion $< 5\%$

Adjacent channel power $< -55\text{dB}$

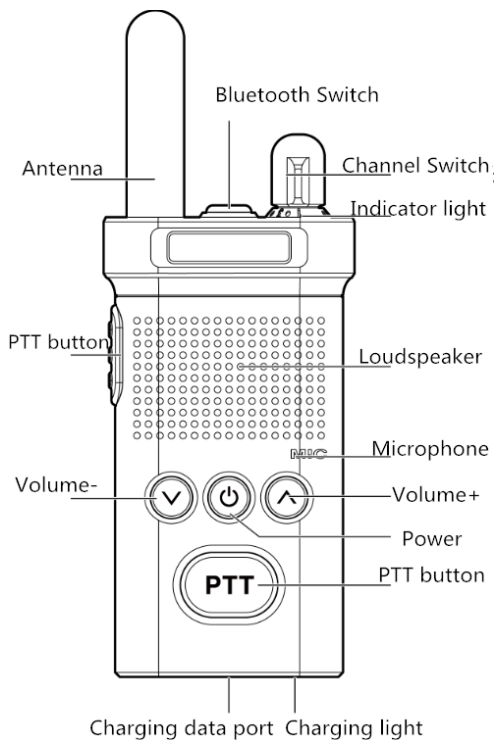
Residual wave radiation $< -13\text{dBm}$

Receiving part

Sensitivity $< -122\text{dBm}$ (12dB SINAD)

Sensitivity off $< -126\text{dBm}$

Audio power	$\geq 0.5\text{W}$
Maximum receiving current	$\leq 380\text{mA}$
Audio distortion	$< 5\%$
Adjacent channel selectivity	$\geq 60\text{dB}$
Intermodulation anti-interference	$\geq 60\text{dB}$



Function Operation

Turn on/off

Press and hold the power button for 1-2 seconds. During power on, the interphone will beep. If the voice alarm function is activated, the current channel number will be reported at the same time. When the walkie-talkie is turned on, press and hold the power button to hear the dual tone to turn off.

Channels change

Turn the channel switch knob to select the channel you want to use. When you receive the same channel signal, the speaker will emit sound.

Volume adjustment

Press the volume up and down keys to adjust the volume level. Each time you adjust it, there

will be a corresponding beep sound. If you continue to adjust it when the maximum or minimum is reached, there will be a higher-pitched beep sound to remind you that the volume level has been adjusted to the limit .

Emission

After pressing the side button [**PTT**] or the red light of the PTT button on the panel is on, the call can be made, and the call is ended when you let go.

Monitor

Long press the [**Volume+**] button on the panel for more than two seconds to force the monitor function to turn on, release it and exit.

Keyboard lock function

Press and hold the [**Volume -**] button on the panel for more than two seconds to activate the keyboard lock function. At this time, the

volume key function cannot be adjusted when the volume button is locked. Long press the panel [**Volume -**] button for more than two seconds to unlock the keyboard lock function.

Bluetooth function operation (optional)

Bluetooth function is on

When the power of the walkie-talkie is turned on, the Bluetooth function is automatically turned on when you hear the dual-tone tone.

When the green light flashes on standby, the walkie-talkie acts as the host. When the

Bluetooth switch is pressed shortly, the blue light flashes to search and connect to

Bluetooth. After searching for Bluetooth, you can start Bluetooth intercom. Long press the Bluetooth switch and turn off the Bluetooth function when you hear the dual tone tone.

Press and hold the Bluetooth switch key for 4

seconds to turn off the Bluetooth function.

Scan

When the channel knob is turned to the 16th channel, the walkie-talkie automatically starts the scan function, and the speaker prompts "scan". Perform cyclic scanning on channels with additional scanning.

The frequency writing software can set carrier scan and time scan,

Carrier scanning means that after scanning to the relevant channel, it stays on that channel for intercom.

The time scan is to stay on the channel for about 5 seconds and continue to scan in a loop.

Battery Level Detection

When the device is turned on, short press the power button.

Power voltage above 3.8V—— "beep beep beep" indicate high power

Power voltage 3.6V to 3.8V ——"beep beep" indicate medium power

Electric voltage below 3.6V—— "beep"once indicates low electric potential

You can get a rough estimate of the power of the walkie-talkie battery.

Low battery detection function

1. When the voltage is lower than 3.35V, it will remind to charge every 30 seconds
2. When the voltage is lower than 3.2V, the machine will automatically shut down

USB charging function

When the configured CHARGING USB socket is inserted into the charging port to charge, the red light will be on during the charging process, and the green light will be on when the battery is fully charged.

PC programming software function setting

Computer PC programming software function setting

software operation method

Please log in to the website **http://**

https://www.adicomm.com.tw/ ,Download

frequency writing software. The frequency

writing software has Chinese and English

versions respectively.

SQL squelch level setting

1、 The quiet voice level in the drop-down menu "Function Settings" of the main menu "Settings" of the frequency writing software is divided into 1 to 5 levels. The higher the squelch level, the smaller the chance of interference, but it will have a certain impact on the communication distance. The default is

level 3.

2、The squelch system can eliminate the background noise when there is no signal received, which not only makes the waiting time quieter, but also significantly reduces the standby power consumption.

VOX function (no keystrokes to speak)

1、In the key-free speaking level under the drop-down menu "Function Settings" in the main menu of the frequency writing software "Settings", select the off and level 1 to 5 you need. The higher the level, the higher the sensitivity.

2、The VOX function can release your hands, but it will automatically launch due to excessive ambient sound. The factory default is off.

Power saving function

Set the power saving switch in the drop-down menu "Function Settings" of the main menu "Settings" of the programming software, and the default is to turn on the power saving. After the power saving function is turned on, the machine has no action and enters 1/4 power saving mode in 10 seconds. When there is no operation or receiving signal for 0.5 hours, the machine enters 1/10 power saving mode.

Transmit timeout timer

Select the transmission timeout time (from off or 30-300 seconds) under the drop-down menu "Function Settings" in the main menu of the programming software "Settings". If you continuously transmit more than the timeout timer you set, the walkie-talkie Transmission

will stop and a beep will sound. Release the [PTT] key. Press the [PTT] key again to resume transmission.

Voice reporting function

In the main menu of the frequency writing software, the "Settings" pull-down menu "Function Settings" under the broadcast voice item can choose Chinese and English two kinds of report sounds.

Key tone options

Check the key tone option under the drop-down menu "Function Settings" in the main menu of the frequency writing software "Settings" to set the key tone.

Lock

In the channel information of the main menu of the frequency writing software, you can choose whether it is busy and locked. The

definition of busy lock is that when the signal of the same frequency is received, it is forbidden to transmit and interfere with the communication of others.

High and low power selection

In the channel information of the main menu of the frequency writing software, you can select the channel you are using and select high/low power.

Wide and narrow band selection

In the channel information of the main menu of the frequency writing software, you can select the channel width\narrowband to be used.

Sub-audio QT/digital sub-audio DQT

1、 In the channel information of the main menu of the frequency writing software, you

can select the sub-audio QT/digital sub-audio DQT in the receive sub-tone and transmit sub-tone drop-downs respectively.

2、 When a channel is set with sub-audio or digital sub-audio signaling, the squelch can only be turned on when the same sub-audio or digital sub-audio signal is used. Similarly, only the radio station whose QT/DQT signaling mode is consistent with the signaling of your walkie-talkie can receive the signal you transmit. If the other party uses different QT/DQT to make a call on the same channel you are using, the squelch cannot be turned on, and only the green light is on.

Instructions for use and maintenance

The walkie-talkie you buy is an electronic product with precision design, so you should use it with care. The following suggestions can make your walkie-talkie last longer.

1、 Please do not try to disassemble this walkie-talkie, non-professionals

The handling of this unit may cause damage.

2、 Do not place in an explosive environment (the air contains a lot of

Places with sand, dust, and places with a lot of chemicals)

Use the walkie-talkie or charge the battery.

3、 When at the gas station, please turn off your walkie-talkie.

4、 Please do not expose the walkie-talkie to direct sunlight for a long time

Or placed in an overheated place, the high temperature will shorten the electricity

The life span of the sub-devices may cause some plastic parts to deform.

5、 Please keep the walkie-talkie dry, rain or humidity will corrode

Circuit board.

6、 If you find a strange smell or smoke from the walkie-talkie, please

That is, turn off the walkie-talkie and separate the battery from the walkie-talkie.

Troubleshooting

Problem	Solution
No response after Turning on	<ol style="list-style-type: none">1、 The battery pack may be exhausted. Please replace the battery with a new one or recharge it.2、 The battery pack may not be installed correctly. Please remove the battery pack and install it again.
Cannot talk to other members of the group	<ul style="list-style-type: none">● Confirm whether the frequency and mute audio signal you are using are the same as those of other members in the group.● Other members in the group may be too far

	<p>away, confirm whether you are within the effective range of other walkie-talkies.</p>
Short distance	<ul style="list-style-type: none"> ● Confirm that the antenna is in good contact and tightened. ● Confirm whether the original antenna provided by the manufacturer is used. ● The dealer or user's squelch level is set too high, reduce the squelch level.
The voices of other group members	<ul style="list-style-type: none"> ● Change the frequency point. ● Please change the sub-audio signaling. At

appear in the channel	the same time, you must change the signaling of all walkie-talkies in the group.
The battery power will not last long after charging	<ul style="list-style-type: none"> ● The life of the battery pack has expired, please update the battery. ● Whether the battery is fully charged.
The other party receives low or intermittent voice	<ul style="list-style-type: none"> ● Check whether the MIC sending place of the walkie-talkie is blocked.
Water in the machine	<ul style="list-style-type: none"> ● Take out the battery immediately after the machine enters the water, shake the water out vigorously, dry it in a

	ventilated and dry place, and send it to the repair station in the shortest time.
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Appendix: Sub-audio table and digital sub-audio table

50 groups of sub-audio frequencies

67.0	85.4	107.2	136.5	165.5	186.2	210.7	254.1
69.3	88.5	110.9	141.3	167.9	189.9	218.1	
71.9	91.5	114.8	146.2	171.3	192.8	225.7	
74.4	94.8	118.8	151.4	173.8	196.6	229.1	
77.0	97.4	123.0	156.7	177.3	199.5	233.6	
79.7	100.0	127.3	159.8	179.9	203.5	241.8	
82.5	103.5	131.8	162.2	183.5	206.5	250.3	

104*2 sets of digital sub-audio to
choose from

023	054	125	165	245	274	356	445	506	627	732
025	065	131	172	246	306	364	446	516	631	734
026	071	132	174	251	311	365	452	523	632	743
031	072	134	205	252	315	371	454	526	654	754
032	073	143	212	255	325	411	455	532	662	
036	074	145	223	261	331	412	462	546	664	
043	114	152	225	263	332	413	464	565	703	
047	115	155	226	265	343	423	465	606	712	
051	116	156	243	266	346	431	466	612	723	
053	122	162	244	271	351	432	503	624	731	