Version History

No.	Date	Version	Revised Content	Editor	Reviewer	Remarks
1	2024.11.15	V1.0.0	First release	Chen wanling		

Notice to the user

Government law prohibits the operation of unlicensed radio transmitters within the territories under government control.
Illegal operation is punishable by fine or imprisonment or both.

THANK YOU!

Thank you for choosing BelFone series professional wireless communication products! Since 1989, BelFone has been engaged in research and exploration in the field of radio communication technology for decades, and has a global leading position in the field of private network communication technology. Based on research and development design, adapt to the modern complex communication environment, it is able to customize specific communication solutions according to different industry characteristics. High-performance, high-quality products that can control the overall situation, while providing smart dispatching and command communication.

This manual is applicable to

BF-OG308 series

<div style="border:1px solid black; padding:1em;">

Warning !

◆In explosive atmospheres(inflammable gas, dust particles, much powder area，etc.), please turn the power off.

</div>

Instructions before Use

It's important for the operator to be aware of and understand hazards common to the operation of any radio. Please observe the following safety precautions to prevent radio damage and personal injury. The following precautions shall be observed during operation, service and repair of this radio.

◆It is recommended to use 1 minute for TX and 4 minutes for RX, when the radio is used in the transmission mode for many hours continuously, the radiator and chassis will become hot, don't allow the rear panel of the radio to contact a surface of low melting point /low Ignition point.

◆Don't expose the radio to direct sunlight for a long periods of time. Also, do not place the radio on sources of extremely heat, humid, dusty area, or unstable surfaces.

◆In areas where the use of radio devices is restricted or warned, please obey the regulation and turn off the radio.

◆Use of the radio while driving may be against traffic laws in some countries, please check local traffic laws before using the radio while driving.

◆If there is any problems with the radio, please turn the radio off immediately. Then contact the local dealer/technician. Do not modify this radio unless instructed by this manual. Please find a certified technician to repair it.

◆If secondary development is required, please contact BelFone or the local dealer for technical assistance.

◆Please keep the surface of radio clean and dry. To clean the radio, use a damp fabric soaked in mild washing liquid.

Contents

Unpacking and Device Inspection

Note: The following instructions regarding unpacking are only for BelFone's distributors, and service agencies or factories authorized by BelFone.
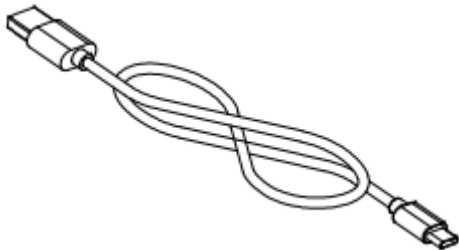After carefully unpacking the radio, identify the items listed in the table below. If any items are missing or have been damaged during shipment please contact dealer or BelFone immediately.

Standard Accessories

| Items	Quantity
Antenna	1
Strap	1
Belt clip	1
Charging cable	1
User manual	1
Warranty card	1
Certificate	1

Antenna Strap Belt clip

Charging cable

Installation of Accessories

Install/Remove the Antenna

Hold the bottom of the antenna and screw it clockwise into the interface on the top of the radio until it is tightened.
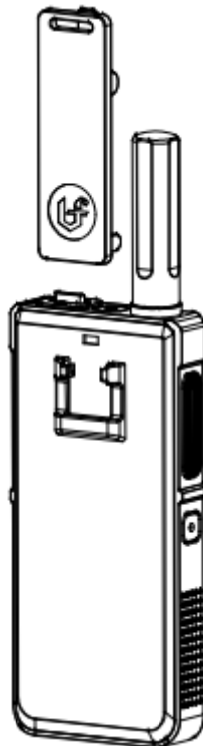
To remove the antenna, rotate counterclockwise to remove it.
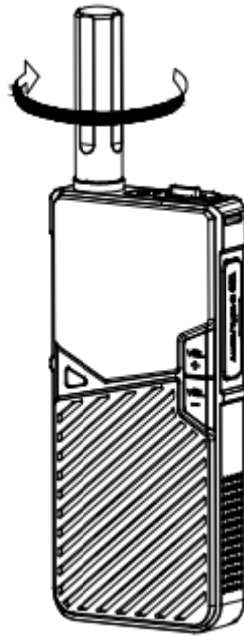
Install/Remove the Belt Clip
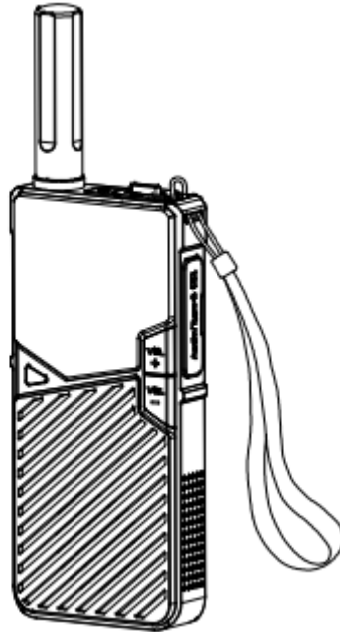
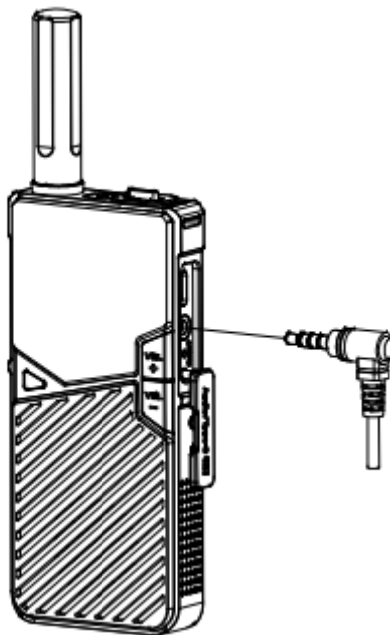Align the belt clip with the groove on the back of the radio and press it down.

Attach the Strap

Thread the Strap into the loop on the right side of the top of the radio.
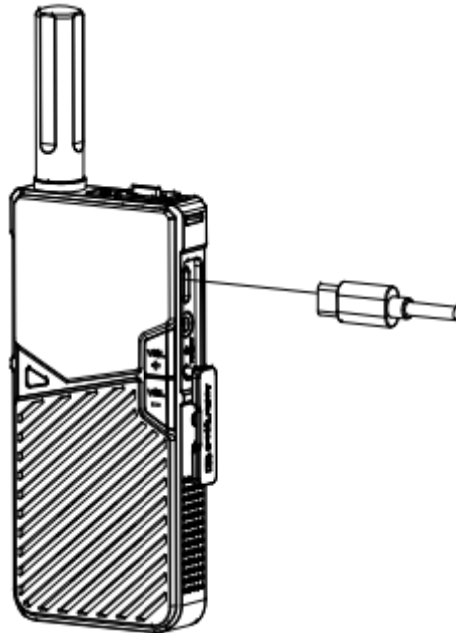
Attach the Speaker/Microphone

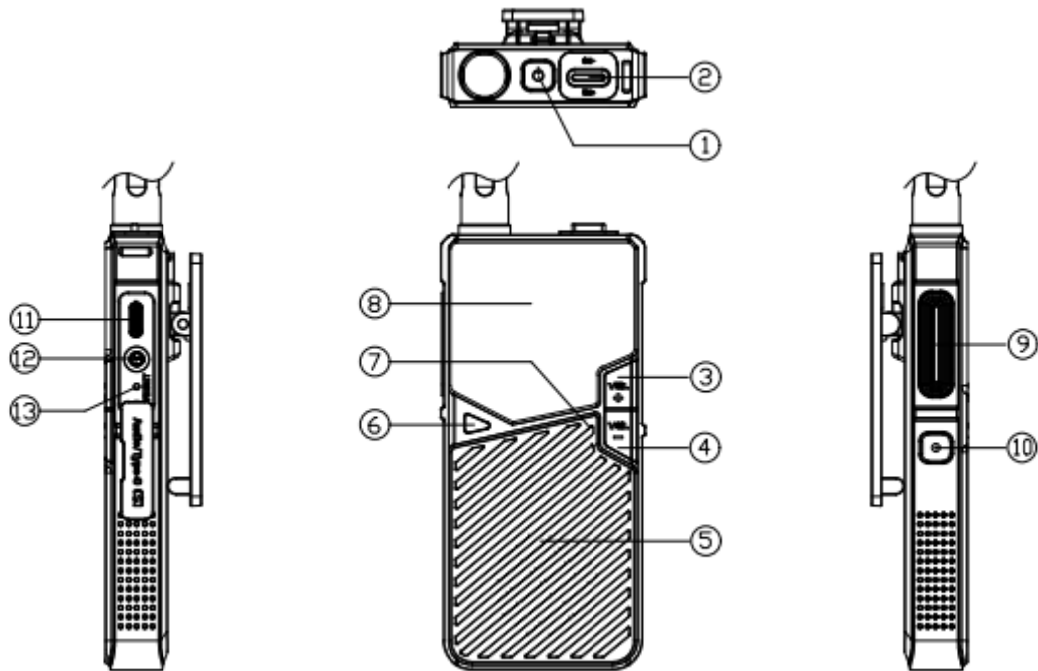Open the side cover and insert the speaker/microphone earphones directly into the speaker/microphone jack.

Charge the Radio

Open the side cover and insert the charging cable directly into the Type-C socket.

Getting Acquainted

① **Power key**

Press and hold to power on/off.

② **Channel switching key**

In channel mode, toggle forward to increase the channel number by 1, toggle back ward to decrease the channel number by 1; Double toggle forward to increase the channel number by 10, double toggle backward to decrease the channel number by 10;

In channel mode, long press forward or backward to lock/unlock the channel.

In radio (FM) mode, toggle forward to increase the frequency, toggle backward to decrease the frequency. Long press forward to automatically search for the next valid channel, and long press backward to automatically search for the previous valid channel.

③ **Volume+key**

Press to increase the volume; In mute mode, long press to disable the "mute all" function.

④ **Volume key**

Press to decrease the volume; Inun-mute mode, long press to enable the 'mute all' function.

⑤ **Speaker**

⑥ **LED indicator**

It is red when transmitting, blue when receiving, flash red when scanning, and flash red when the battery is low.

⑦ **Microphone (MIC)**

⑧ **Display screen**

Dot matrix display screen. The screen automatically darkens after 5 seconds without any operation of the radio, and then automatically turns off after 5 seconds.

⑨ **PTT key**

Press to speak into the microphone for transmission.

⑩ **Function buttons**

Short press is set for a programmable button. (For details, please refer to the button definitions in the basic operation section);

Double click to enter/exit radio (FM) mode;

⑪ **Type C interface**

Used for charging and program.

⑫ **3.5mm headphone jack**

⑬ **Reset button**

Long press to restore factory configuration.

Basic Operation

LCD icon

A01	Preset channel	**RSA**	Rescue scanning mode	**HOT!**	TOT
C01	Custom channel	**FM**	FM mode	**<!>**	Limit transmission
< >	Transmitting	**TARRPT**	Direct/Talk around mode	**◀✕**	Mute All
> <	Receiving	**◀**	Monitoring	**🔒**	Channel locking
<T>	One touch call	**↓∨**	VOX enabled	**◢**	Volume level
⌐ ¬	Scanning	**N**	Noise reduction	**■▮**	Battery level
DEL	Delete useless channel	**SOS**	Rescue/distress mode	**⊏!⊐**	Low battery level
⛰	Emergency Alert	**❘❘❘**	One key frequency matching		

Power on/off

Long press and hold the power key to power on.
In the power on state, long press the power key to power off.

Adjust the volume

In the power on state, press the volume+/- keys to adjust the volume level to 1-7 levels, with level 0 being mute.

Select channel

Toggle the channel switching key to switch channels. Toggle forward to increase the channel number; Toggle the channel backward to decrease the channel number. The radio supports up to 26 preset channels according to different versions, which are displayed as "A+channel number", 99 custom channels which are displayed as "C+channel number".

APP program

The radio can be programmed and control through a dedicated mobile phone APP.
Note: The APP can only be installed and used on Android devices, and iss not supported on iOS devices.

Call

In digital mode, private call, group call or All call can be initiated; In Analog mode, press PTT key to directly initiate call. When calling, press and hold the PTT key, keep a distance of 3~4cm from the microphone, speak with a normal tone, and the LED indicator lights up red, indicating that transmission is in progress.

1. Private call

If the feature "private call ACK" is enabled, the called radio needs to be detected before establishing the call

（1） If a private call contact is preset as the default address for current digital channel, press PTT key to set up the private call;

（2） Set a private call contact to the one touch key, press the preset button and then press PTT key to set up the private call.

2. Group call

（1） If a group call contact is preset as the default address for current digital channel, press PTT key to set up the group call;

（2） Set a group call contact to the one touch key, press the preset button and then press PTT key to set up the group call.

3. All call

If an all call contact is preset as the default address for current digital channel, press PTT key to set up the all call.

Note: If the talk permission prompt tone is set, when the current channel is available, pressing PTT a prompt tone of "beep" will sound.

Receiving and Calling Back

When the current channel receives a call, the LED indicator will light blue. In digital mode, when receiving a private call or group call, press PTT key to answer the current call within the hang time; When receiving an all call, it cannot respond to an all call.

Note: If the channel free indication is set, when the transmitter releases the PTT key, a

prompt tone of "beep" will sound.

Button Setting

The function of function keys can be set through the programming software or App.

No.	Shortcut Keys	Description
1	None	No functions have been assigned to programmable keys.
2	SPD call 1-6	Quickly initiate digital group calls, digital single calls, call prompts, or send pre made text messages.
3	Emergency mode on/off	Send emergency information or exit emergency mode.
4	Monitor	Quickly enable or disable the monitoring function.
5	Scan on/off	Quickly enable or disable the scanning function.
6	Battery level indicator	Quickly check the battery level.
7	Power switch	Quickly switch between high, medium, and low power.
8	Repeater/Talk around	Quickly enable or disable the talk around function.
9	Voice control on/off	Quickly enable or disable VOX function.
10	Delete useless channels	Temporarily delete unwanted active channels received during scanning.
11	Permanent monitor	Quickly enable or disable the permanent monitoring function.
12	Voice noise reductions witch	Quickly enable or disable the voice noise reduction function.
13	Rescue mode switch	Quickly enable or disable rescue mode.
14	Rescue scan mode switch	Quickly enable or disable rescue scanning mode.
15	SOS mode switch	Quickly enable or disable the distress mode.
16	One −click frequency matching	Quickly enter the frequency matching mode.

Specifications

General	Frequency range	UHF: 400-480 MHz
	Channel capacity	≤ 125
	Zones	1
	Channel spacing	12.5kHz
	Operating voltage	DC 3.8V
	Battery capacity	2200mAh
	Battery Life (5/5/90)	Digital 15 hours Analog 10 hours
	Frequency stability	±0.5ppm
	Antenna impedance	50Ω
	Current	Receiving: 400mA Transmitting: 2500mA
	Dimensions (L×W×H)	52.7 (L) *16.6 (W) *115 (H)mm
	Weight	135.6g (including battery)
Transmitter	RF output power	≤ 2W
	Modulation	FM, 4FSK
	Modulation limiting	+/- 2.5kHz @ 12.5kHz;
	FM noise	-40dB
	Transmission spurious	-36 dBm≤1GHz/-30 dBm≥1GHz
	Adjacent channel power	≤-60dB
	Audio response	+1/-3 dB
	Digital protocol	DMR
	Free time slot power	≤-57dBm
	Digital voice coder type	AMBE3000
Receiver	Digital sensitivity	5% BER：0.25 uV
	Analog sensitivity	0.25 uV (12 dB SINAD)
	Inter modulation	65dB

	Adjacent channel selectivity	60 dB
	Spurious response rejection	70 dB
	FM noise	-40dB
	Audio response	+1/-3 dB
	Rated audio-frequency output power	0.5W
	Maximum audio-frequency output power	1W
	Rated audio distortion	3%
	harmonic suppression	≤-70dBm
	IF rejection	≤-70dBm
	co-channel rejection	≤-70dBm
	image rejection	≤-70dBm
	Conducted radiation	≤-57dBm
	spurious radiation	≤-57dBm
	Blocking	＞84dBm
Environ mental	Operating temperature	-20℃—+60℃
	Storage temperature	-30℃—+85℃
	Dustproof and waterproof	IP54

Statement

In the process of compiling this manual, we have strived for accuracy and completeness in its content. If you have any doubt, please contact us promptly, and we will provide you with detailed answers immediately. Due to the rapid development of wireless communication technology, BelFone reserves the right to modify product design and specifications without further notice. We appreciate your understanding.

For FCC

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

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.

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.

RF Exposure Compliance and Control Guidelines and Operating Instructions
To control your exposure and ensure compliance with the occupational/controlled environment exposure limits always adhere to the following procedures.
Guidelines:
• Do not remove the RF Exposure Label from the device.
• User awareness instructions should accompany device when transferred to other users.
• Do not use this device if the operational requirements described herein are not met.
Operating Instructions:
• Transmit no more than the rated duty factor of 50% of the time. To transmit (talk), push the Push-To-Talk (PTT) button. To receive calls, release the PTT button. Transmitting 50 % of the time, or less, is important because this radio generates measurable RF energy exposure only when transmitting (in terms of measuring for standards compliance).
• Hold the radio in a vertical position in front of face with the microphone (and the other parts of the radio, including the antenna) at least one inch (2.5 cm) away from the nose.

Keeping the radio at the proper distance is important because RF exposures decrease with distance from the antenna.   Antenna should be kept away from eyes.
• When worn on the body, always place the radio in approved clip, holder, holster, case, or body harness for this product. Use of non-approved accessories may result in exposure levels, which exceed the occupational/controlled environment RF exposure limits.
• Use only manufacturer's name approved supplied or replacement antennas, batteries, and accessories. Use of non-manufacturer-name approved antennas, batteries, and accessories may exceed the FCC RF exposure guidelines.
• For a list approved accessories please consult your local dealer for information.

Antenna Gain: 1.5 dBi