BelFone

BF - SCP860

MULTI-MODE RADIO

User Manual

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 !

We are grateful you choose BelFone series professional radio communications 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-SCP860 series

⚠ Warning !

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

Instructions before Use

It's important for the operator to be aware of and understands 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.

◆The recommended usage rate is 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, 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, don't 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 the local traffic laws before using the radio while driving.

◆If there are any problems with the radio, please turn the radio off immediately. Then contact with 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.

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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.

Accessories

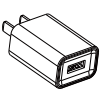
Items	Quantity
Antenna	1
Strap	1
Belt Clip	1
Screw Set	1
AC Adaptor	1
Charging Cable	1
Charger	1
Li-ion Battery	1
User Manual	1

Antenna

Strap

Belt Clip

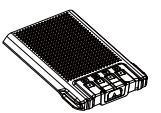
Screw Set



AC adapter

Charging cable

Charger

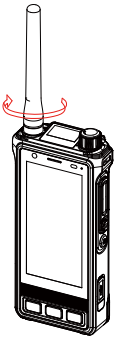


Li-ion Battery

Installation of Accessories

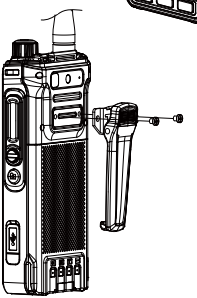
Install/Remove the Antenna

Hold the antenna base, screw it into the connector on the top of the radio until fasten. Turn the antenna anti-clockwise to remove it.



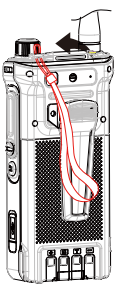
Install/ Remove the belt clip

Secure the belt clip with two M3×4mm screws.



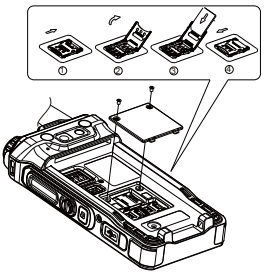
Attach the Strap

Thread the hand strap to the loop back of the radio.



Install SIM Card

Remove the protective cover on the surface of the radio before installation. The radio supports the installation of dual cards. Slide to the left to open the card slot lock, confirm that the SIM card chip is facing downwards and the SIM card's diagonal angle is consistent with the direction of the card slot, insert it into the SIM card slot on the radio, adjust it to the appropriate position, slide to the right to lock the lock, and finally cover the protective cover to install the radio battery.



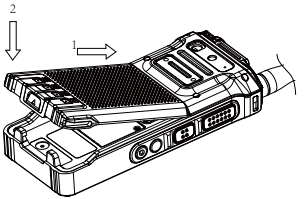
Note:
Before removing or inserting the SIM card, please power off the radio first;
Do not bend the card and keep the metal chip clean;
To protect the metal chip, do not frequently remove the SIM card from the radio.

Install / remove the Battery

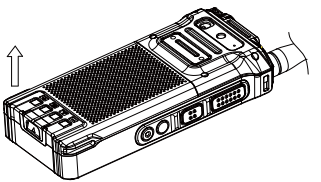
Warning!

- Don't short-circuit the battery, which may cause damaged or catch fire;
- Never attempt to remove the casing from battery, the battery terminals may short circuit;
- Battery is flammable objects, don't throw it into fire or don't use it on dangerous area.

Align the battery with the corresponding grooves on the upper rear of the radio, then press the battery until a click is heard to lock it in place.



To remove the battery, please power off and then press the latch to unlock the battery and pull the battery away from the radio.



Note: Don't attach / remove the battery if the radio is powered on.

Battery Information

The new battery is not fully charged before shipment, please charge the new battery before use. Generally, the battery needs to be charged for 5 hours when it is used for the first time. The first three full charge and discharge cycles will optimize the battery capacity. When the battery power is low, it needs to be charged or replaced.

Applicable Battery

To reduce the risk of injury, please only use the battery and charger specified by Belfone, other batteries may burst, causing bodily injury and property damage.

Battery Tips

1.When charging the battery, keep it at a temperature among 5℃—40℃. Temperature out of the limit may cause battery leakage or damage.
2.Prior to charge a battery with the radio, it is recommended to turn the radio off.
3.Avoid cut off the power supply or remove the battery during charging.
4.Please ensure that the battery is charged in a dry state before charging.
5.Please change the battery when working time is shorten than normal performance even if the battery is fully charged.

Extend Battery Life

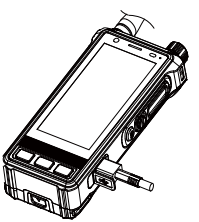
1.The battery performance will be decreased under 0℃. Please prepare a spare battery in cold weather. A battery not work properly in a cold environment does not mean that it is damaged. Please keep the battery and reconfirm at room temperature.
2.The dust on the battery contact point may cause battery faulty, please cleaning it by a dry cloth before using.

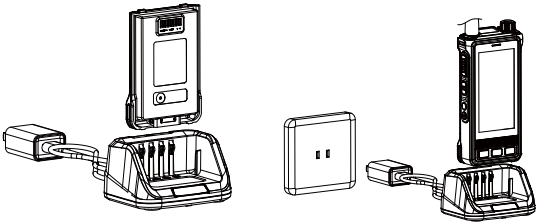
Battery Storage

1.Fully charge a battery before storing it for a long time, to avoid battery damage due to over-discharge.
2.Recharge a battery after several months' storage, to avoid battery capacity reduction due to over-discharge.(NI-MH batteries:3 months, Li-Ion& Li-polymer batteries: 6 months)
3.Store the battery in a cool, dry place under room temperature, to reduce self-discharge.

Charge the battery

Use only the charger specified by the manufacturer.



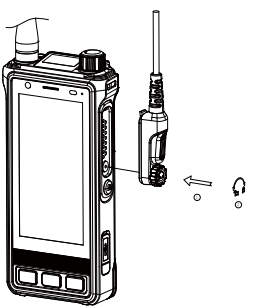


The radio supports seat charging and direct charging, and the indicator light on the charger and radio can display the charging condition.

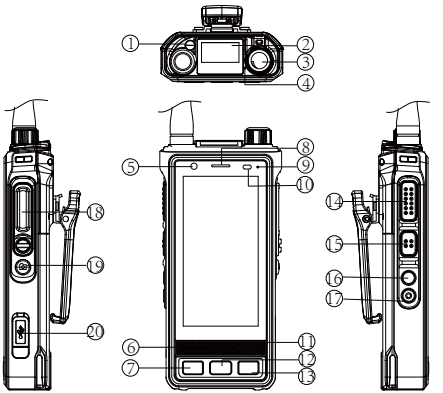
Charging state	Indicator of Charger	Indicator of radio
In charging	Red light always on	Blue light flashes
Full charged	Green light always on	Blue light always on

Install the Speaker/Microphone

Open the accessory jack cover, then align the plug with the accessory jack and tighten the screw on the plug.



Getting Acquainted



① **Emergency alarm button ***
Short press to send SOS emergency alarm for help; Short press again to cancel the SOS emergency alarm. (DMR Network)
② **Shoulder screen**
Display narrowband status information.
③ **Volume knob**
After powered on, rotate clockwise to increase volume and anti-clockwise to decrease volume.
④ **MIC2**
Used when the telephone call is hands-free.
⑤ **Front camera**
⑥ **Speaker**
⑦ **Power button**
◆In the power off state, press and hold the button for about 2-3 seconds to power on the radio;
◆When powered on, press and hold the button for about 2-3 seconds to select emergency call, power off or restart the radio;
◆After powered on, short press this button to wake up or turn off the radio screen;

⑧**Earpiece**

⑨**LED indicator**

◆ When insert USB for charging, the LED will flash blue during charging and it will glow blue after fully charged.

◆ When the radio is transmitting the LED will glow red; when receiving the LED will glow green; when standby with network the LED will flash green; when standby without network the LED will flash red.

Note: When a SIM card is not installed, the LED will not flash when standby.

⑩**Proximity and environmental light sensor**

⑪**MIC1**

⑫**Home key**

Short press to return to the home screen.

⑬**Back Key**

Short press the key to return to the previous menu level.

⑭**PTT1 Key***

Press to initiate a DMR voice call to the current DMR network contact, and release the key to stop the call. (Factory preset)

⑮**PTT2 Key ***

Press to initiate a group call to the current public network(PoC system) contact, and release the key to stop the call. (Factory preset)

⑯**Side key 1**

Custom key.

⑰**Side key 2**

Custom key.

⑱**MIC/SP Jack**

Connect to optional speaker and MIC.

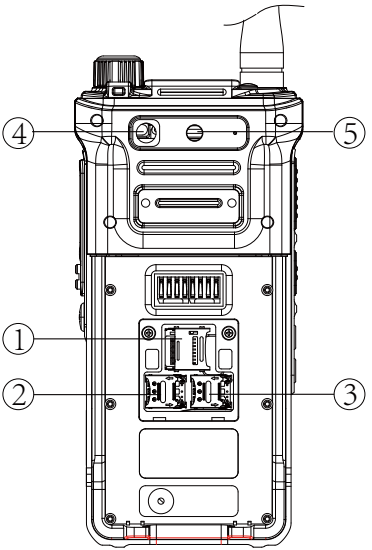
⑲**Camera Button**

Short press to enter the camera, long press to enter the video camera.

⑳**Type-C Interface**

Connect the charging and data cable interface.

Note: According to the customer's adaptation requirements for the application, the PTT keys and custom keys may differ at the factory.



①SD Card Slot

Using Micro SD card.

②SIM Card Slot 2

Using Nano SIM card.

③SIM Card Slot 1

Using Nano SIM card.

④Rear Camera

⑤Flash Lamp

Basic Operation

Power on/ off

In the power off state, long press the power button for about 2~3 seconds to power on.
In the power on state, long press the power button for about 2~3 seconds, and select "Shutdown" in the pop-up window to power off.

Adjust volume

After the radio powered on, rotate the volume knob to adjust the volume level, rotate the knob clockwise to increase the volume, or rotate the knob anti-clockwise to decrease the volume.

Call

The radio supports both private network(DMR system) and public network(PoC System) calls. Press PTT1 to call the private network object of the current channel, and press PTT2 to call the current public network object. While calling, hold down the PTT button and speak with a normal tone at a distance of 3~4cm from the microphone. The LED indicator light is red, indicating that it is transmitting.

Cross network Repeater

The radio can be used as the repeater gateway between the private network (DMR system) or analog signal and the public network (PoC System). Through cross network forwarding of the public network and private network signals, the interconnection between the public network and private network terminals can be realized, and the problem of communication failure across networks can be solved.

Main screen and shoulder screen

The radio supports automatic screen brightness adjustment, which can automatically adjust the screen brightness according to the ambient light to achieve better comfort. When making a phone call, if the ear approaches, the screen automatically turns off and the touch is ineffective to prevent accidental touch; When the ear leaves, the screen automatically lights up and normal operation can be performed.

Screen automatic adjustment

The radio supports automatic screen brightness adjustment, which can automatically adjust the screen brightness according to the ambient light to achieve better comfort. When making a phone call, if the ear approaches, the screen automatically turns off and the touch is ineffective to prevent accidental touch; When the ear leaves, the screen automatically lights up and normal operation can be performed.

Specifications

Wireless Data Communication	
Private network frequency	136-174MHz;350-400MHz 400-480MHz
Public network frequency	TDD-LTE: B38/39/40/41 FDD-LTE: B1/3/5/8 WCDMA: B1/5/8 EVDO: BC0 CDMA: BC0
WLAN	Support 802.11 b/g/n/ac, 2.4G
BT	Support BT4.2
NFC	Support
Positioning	GPS/ Beidou/GLONASS/Galileo
General	
Memory (RAM+ROM)	4GB+64GB
SD extended storage	256GB Max
Operating system	Android 11
Display screen	4 inches, 1080 * 540 resolution, supports glove touch
Card slot	2x Nano SIM card 1x Micro SD card
Camera	Front: 8 million pixels Rear: 13 million pixels
Operating Voltage	7.6V(Rated)
Battery	Standard configuration: 2400mAh (thin battery) Optional: 3500mAh (thick battery) Removable
Compass	Support
Gyroscope	Support
Vibration function	Support
Recording	Support

Dimensions (L×W×H)	67（L）* 28(W)* 152 (H)mm
Weight	380g(include battery)
General specifications for private networks	
Working mode	Digital compatible analog
Channel spacing	12.5KHz/25KHz
Zones	128
Channel capacity	100
Contact	Regular 1024, Trunking 512
Receiving group	Regular 1024, Trunking 50
RF output power	<5W
Environmental Specifications	
Operating Temperature	-20℃—+60℃
Storage Temperature	-30℃—+70℃
Waterproof	IP68

Note: This product supports customized pure public network versions, which do not support private network frequency bands. If needed , please contact with the manufacturer.

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.

BelFone

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RECYCLABLE PACKAGING