

# Belfone

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**BF** - CM629

Two-way Radio



# THANK YOU!

Founded in 1989, BelFone is a leading technology and solution provider of mission and business-critical communications, dedicated to bringing cut-edge communications technologies and empowering our customers with integrated radio solutions. With outstanding performance and excellent communication capabilities, BelFone products are the proper choices for mastering the overall situation and achieving intelligent dispatching and command delivery.

**This manual is applicable to**

BF-CM629

## 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 understand hazards common to the operation of any radios .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, 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, 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 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 with 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.

# 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.

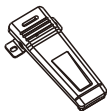
## Standard Accessories

Items	Quantity
Battery	1
Belt Clip	1
Charging Cable	1
Strap	1
Screw Set	1
User Manual	1
Warranty Card	1
Certificate	1

Battery



Belt Clip



Charging cable



Strap



Screws

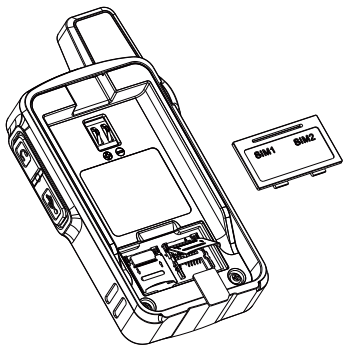


## Accessories Installation

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### Install SIM Card

Remove the waterproof cover, slide up to open the latch, insert the SIM card with the chip facing down and the bevel of the SIM card aligned with the card slot on the radio, adjust it to the appropriate position, slide down to lock the latch, then close the waterproof cover, and install the battery back cover of the radio.



#### Note:

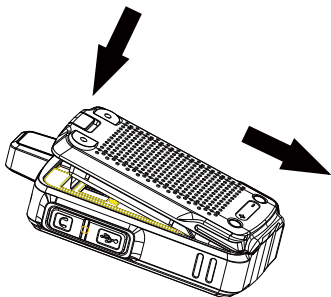
- The radio can only be used if a valid SIM card is inserted correctly;
- Before removing or inserting the SIM card, please turn off the radio;
- Do not bend the card and keep the metal chip clean;
- To protect the metal chip, do not frequently remove the SIM card from the radio.

## Install/Remove Battery

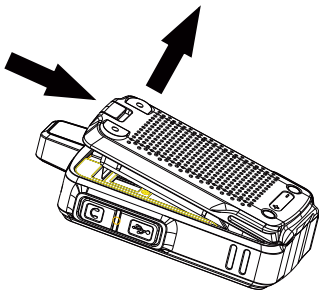
### Warning!

- 1. Don't short-circuit the battery, which may cause damaged or catch fire;
- 2. Do not attempt to remove the battery casing to prevent battery short circuit.
- 3. Batteries are flammable and explosive objects. Please do not throw batteries into fire or use them in dangerous areas such as gas stations.

Align the bottom of the battery with the corresponding slot on the bottom of the back of the radio, then gently press the top of the battery until a "click" sound is heard, and the latch on the top of the battery locks the radio.



To remove the battery, first turn off the radio, then push down the latch on the top of the back of the radio to make the top of the battery pop out of the radio, and then remove the battery.



**Note:** Do not insert or remove the battery when the radio is powered on.

## Battery Information

The new battery is not fully charged before shipment, please charge the new battery before using. 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 4°C—40°C. 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 cutting off the power supply or removing 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.



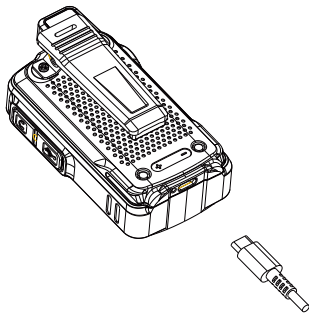
## Extend Battery Life

- 1.The battery performance will be decreased under 0℃. Please prepare a spare battery in cold weather. A battery does 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

## Charge the Battery



### USB charging steps:

- 1.Plug the charger into the AC power outlet;
- 2.Align the connector of the power adapter with the USB interface at the bottom of the radio and insert it;

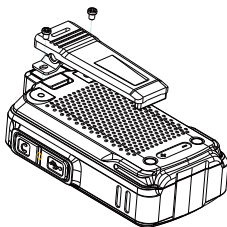
3. The charging indicator light on the bottom of the radio is red, indicating that charging has started;
4. The charging indicator light on the bottom of the radio is green, indicating that the charging has been completed.

**Note:**

It is recommended to use the standard power adapter. If, for personal reasons, a non-standard high-voltage power adapter is used, any damage to the battery caused by this is not covered by BelFone's warranty. Any damage caused by the battery should be borne by the individual.

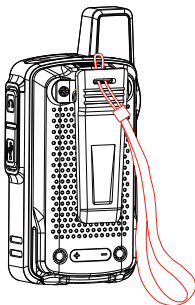
## Install/Remove the Belt Clip

Secure the belt clip with two random 3×4mm screws.



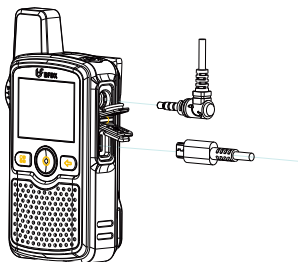
## Attach the Strap

Insert the strap into the ring on the top side of the radio.

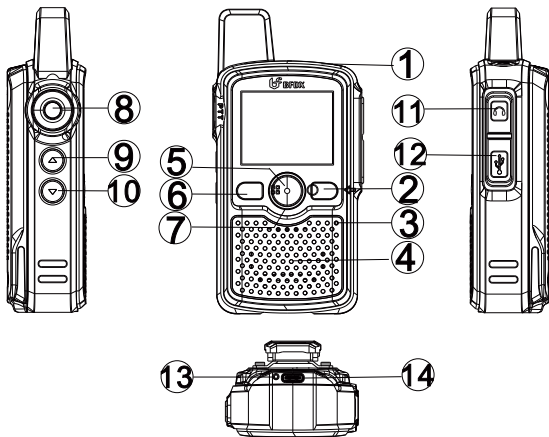


## Attach the Speaker/Microphone

Open the earphone cover and plug the speaker/microphone earphone directly into the speaker/microphone jack.



## Get Familiar with the Device



### ① Power button

- In the shutdown state, long press this key for about 3~4 seconds to turn on the radio;
- In the boot state, long press this key for about 2~3 seconds to turn off the radio;
- After startup, short press this key to wake up or turn off the radio screen.

### ② Return key

- Short press this key to execute the return function.

### ③ Microphone

### ④ Speaker

### ⑤ Confirm button

- Short press this key to execute the confirmation function.

### ⑥ Menu key/Down selection key

- In the main interface, short press this key to enter the menu settings;
- When not in the main interface, short press this key to execute the down selection function.

### ⑦ LED ring indicator

- The red light is always on when calling, the green light is always on when receiving, and the green light flashes slowly when in standby mode;
- The red light is constantly on when the device is turned on, until successful login and entry into the group after startup; the green light flashes slowly after login.
- The red light flashes rapidly during shutdown until the power is turned off.
- When the SIM card is not recognized or inserted during startup, or when the account is not logged in or the network is abnormal, the red light remains constantly on.
- When the battery is below 20%, the red light flashes slowly, and a low battery charging reminder is given every 5 minutes.

### ⑧ PTT key

- In group mode, press this key initiates a group call to the current group and to talk, and release the key stops talking.
- In private call mode, press this key will initiate a individual call to the current contact, and release the key will stop talking.

#### ⑨ **Volume up key**

- Short press this key increases the volume, with each press increasing the volume by one level, up to a maximum of level 9.

#### ⑩ **Voice Down**

- Short pressing this key decreases the volume by 1 level each time, with a minimum of 0 level and mute.

- Long press this button to voice broadcast the current battery status.

#### ⑪ **Headphone jack**

- Connect the speaker/microphone cable.

#### ⑫ **Micro USB interface**

- Connect the data cable interface.

#### ⑬ **Charging indicator light**

- It lights up in red when charging and turns green when fully charged.

#### ⑭ **Charging interface**

- Type-C interface, connect the charging cable.

## **Basic Operation**

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### **Power on/ Power off**

In the shutdown state, long press the power button for 3~4seconds to start the radio, the LED indicator will be constantly on red and enter the boot login interface, after successful login and entering the group, the voice broadcast will prompt "enter XXX (group name)".

In the boot state, long press the power button for 2~3seconds to turn off the radio, and the LED indicator flashes rapidly in red.

### **Adjust Volume**

In the startup state, short press the volume up/down key to adjust the volume. Short press the volume up key to increase the volume, and short press the volume down key to decrease the volume.

**Note: The volume adjustment changes the volume of both the reception and the alert tone, that is, the alert tone of the radio changes with the volume adjustment.**

## Select Group

After the radio is powered on, it automatically logs into the group. Press the menu button on the main interface to enter the menu page. Select the "Group List" option and press the confirm button to enter the "Group List" page. Select a group by pressing the down selection button, and then press the confirm button to enter the new group. If the voice broadcast function is enabled, there will be a voice prompt "Enter XXX (group name)". At this time, press the PTT button to call the selected group.

## Select Member

In the main interface, press the menu button to enter the menu page. Select the "Member List" option using the menu button/down selection button and press the confirm button to enter the "Member List" page. Select a member using the down selection button and press the confirm button to create a temporary call group for the selected member. At this point, press and hold the PTT button to call the selected member.

If the member is offline, the temporary call group cannot be successfully established, and a individual call cannot be initiated to them.

## Group Call

Create a group through the dispatch console and add the account to the corresponding group to initiate a group call.

After booting up, the radio automatically logs into the original group, and pressing the PTT button on any interface can initiate the group call. After entering a group through the "group list" menu, press the PTT button to call the new group.

When the PTT key is pressed, the LED indicator light is red, and the user can speak into the microphone to make a call. After the call ends, the radio is released from the transmission state and enters the idle state.

## Note:

1. To maintain optimal sound quality, it is recommended to speak between 5-10cm away from the Mic;
2. The radio can only talk to members within the same group.

## Private Call

After selecting the private contact to be called from the "Member List" menu, press the confirm button to create a temporary call group. Then, hold down the PTT button and speak into the microphone to initiate the call.

After the intercom ends, release the PTT button, the radio will exit the transmission state and enter the idle state. At this time, press the return button to exit the individual call intercom and return to the original group.

## Setting

Press the menu button on the main interface to enter the menu page, press the menu button/down selection button to select the "Settings" option, and press the confirm button to enter the "Settings" page.

- **Voice broadcast:** Select to turn on or off the voice broadcast function.
- **Backlight settings:** Set the backlight mode, the users can choose to be constantly on or a specific time. When choosing a specific time, if the radio does not have any operation within the set time, the backlight will automatically turn off.
- **Microphone level:** Set the microphone level to high, medium, or low.
- **Power saving level:** Set the power saving level to high, medium, or low.
- **LED breathing light:** Choose to turn on or turn off the LED Breathing Light. When choosing to turn off, there will be no corresponding LED ring indicator light when transmitting, receiving, or in standby mode.
- **Language:** Set the screen display to Chinese or English.
- **SIM Management:** Choose to use SIM card 1 or SIM card 2.
- **Transmission and reception alert tone:** Select to turn on or off the receiving and transmitting alert tones.
- **Positioning switch:** Select to turn on or turn off the positioning function.

● **Software update:** Check if a new software version has been released. If a new version is found, select "Update" and press the confirm button to proceed with the update. Select "Later" and press the confirm button to skip the update and exit the update check page.

## Device Information

Press the menu button on the main interface to enter the menu page, press the menu button/downward selection button to select the "device information" option, press the confirm button to enter the "device information" page, and the users can view the device model, account information, software version, IMEI, battery status, and positioning information of the device.

## Battery Detection

When the battery is low, the radio will automatically issue a reminder. The users can continue to use it for a while, but excessive transmission will cause the battery to run out quickly. Please charge it in time or replace the battery pack.

## Using Headphone

Insert the dedicated headset, press the PTT button on the headset to initiate a call, release the PTT button to end the call, and the radio enters an idle state.

## Programming

The radio can be connected to a computer through a dedicated programming cable, and the programming software "BFP-CP600" can be opened to read and write the radio's frequency and set the parameters.

Note: The radio should be in the power-on state before it can read and write frequency.



## Solutions to Common Problems

If the radio shows abnormalities during use, please first refer to the possible problems in the table (the problems described in the table are usually faults encountered during operation, not caused by the radio). If the problem is still not resolved, please contact the dealer or relevant personnel.

Problem	Possible Reasons	Possible Solutions
Unable to connect to the network	SIM card is invalid.	Please contact the network operator.
	The signal is weak or out of range.	Please take the radio to a more open place or report to the network operator about the poor reception signal.
SIM card not detected	The SIM card is damaged or not properly inserted.	Please check if the SIM card is properly inserted or replace the SIM card.
Poor signal, poor call quality	The radio is in a weak signal location, such as in a basement or inside a building with poor signal, or the network is busy.	Move to a location with less obstruction and good network signal, or avoid using it during peak hours.
Echo or noise occurs	The quality of the local telephone line is poor or the quality of the network trunk line of the network operator is poor.	Restart the radio to search for network again, or switch to a better quality network Repeater or phone line.

# Specifications

General section	
Network support	LTE-FDD:B1/B3/B5/B8 LTE-TDD:B38/B39/B40/B41
Working voltage	Minimum voltage: 3.2V Operating Voltage: 3.7V Maximum voltage 4.2V
Charging voltage	Standard 5V (±5%)
Battery capacity	3000mAh
External dimensions	57 (L) * 30 (W) * 95 (H) mm
Weight	150g (including battery)
External interface	3.5mm headphone jack, MICRO-USB interface
Satellite positioning (optional)	Support GPS
Charging method	Type-C charging
Environmental indicators	
Working temperature	-20°C — +60°C
Storage temperature	-40°C — +70°C
Humidity requirements	Relative humidity: 5% - 95% (non-condensing)

## Statement

In the process of compiling this manual, we have striven for accuracy and completeness in its content. If 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