

Version History

No.	Date	Version	Revised Content	Editor	Reviewer	Remarks
1	2025.4.9	V1.0.0	First release	Chenwanling		

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 !

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-TD935 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 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, 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 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

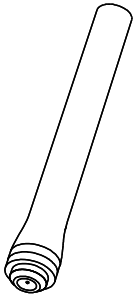
Note: The following instructions regarding unpacking are only for BelFone's distributors, and service agencies or factories authorized by BelFone.

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.

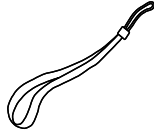
Accessories

Items	Quantity
Antenna	1
Strap	1
Belt Clip	1
Adapter	1
Charger	1
Li-ion Battery	1
User Manual	1
Warranty Card	1
Certificate	1

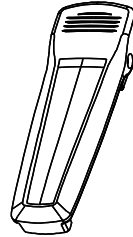
Antenna



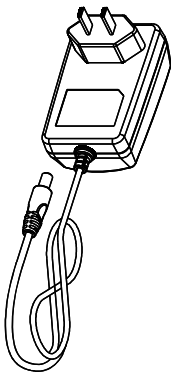
Strap



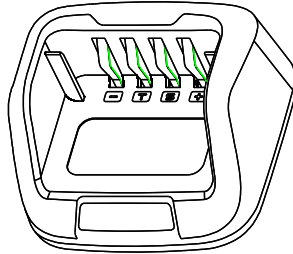
Belt Clip



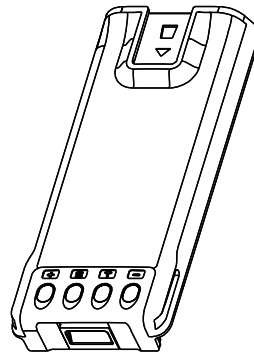
Adapter



Charger



Li-ion Battery



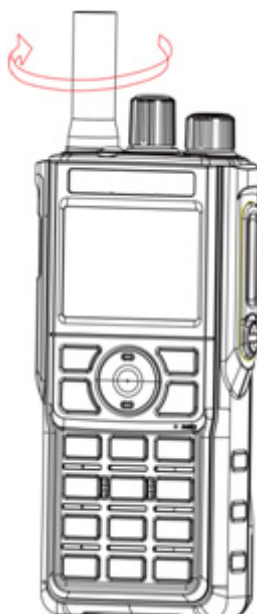
Figures in this manual are for reference only.

Installation of Accessories

Install/ Remove the antenna

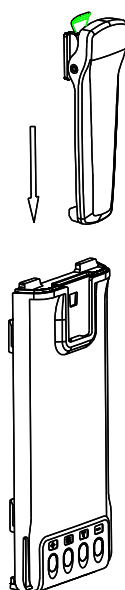
Hold the antenna base, then screw it into the connector at the top of the radio until fasten.

Turn the antenna anticlockwise to remove it.



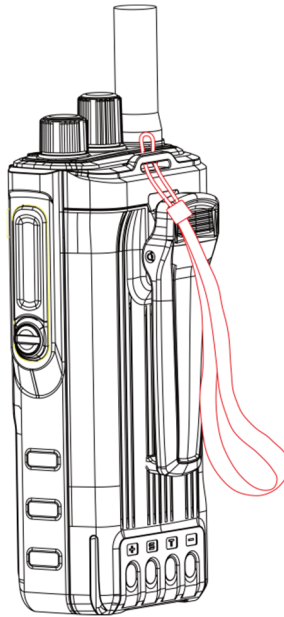
Install/ Remove the belt clip

Align the belt clip with the groove on the back of the radio and press it down.



Attach/ Remove the strap

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

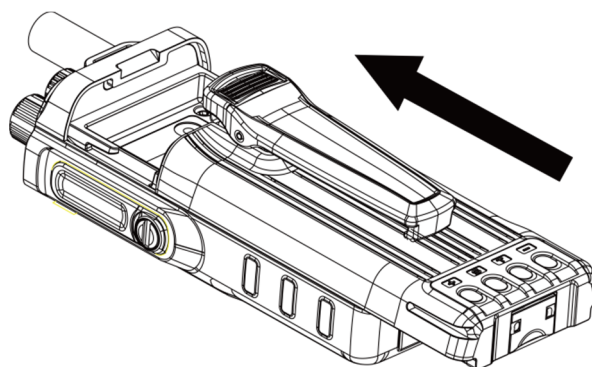


Attach/Remove the Battery

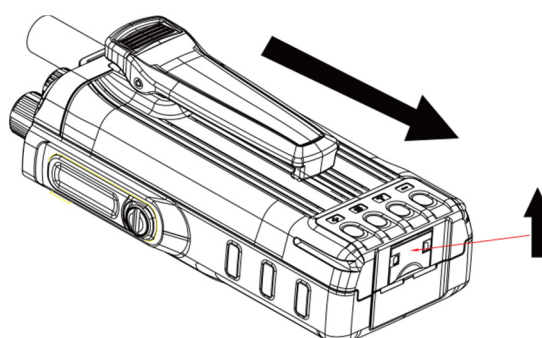
Warning !

- ◆ 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 and don't use it on dangerous area.

Match the guides of 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 turn the power off then upward push the latch to unlock the battery and pull the battery away from the radio.



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

Battery Information

The new battery hasn't been fully charged before shipped, please charge more than 5 hours at the first using. The maximum battery capacity and performance is achieved after three full charge/discharge cycles. If the battery power runs lows, please recharge the battery.

Applicable Battery

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

Battery Tips

1. When charging the battery, keep it at a temperature among 5°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 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°C. 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 charge indicator indicates the charging progress.

Charger Status	Charger Indicator
Standby(No-load)	Charge Indicator glows green
Battery is charging	Charge Indicator glows red
Battery is fully charged	Charge Indicator glows green

Charge Steps:

1. Plug the connector of the AC adapter into the AC outlet socket.
2. Place the battery or the radio attached with a battery in the charger.
3. Make sure the battery is connected to the charger, the charging process initiates when the charger indicator glows red.
4. The charger indicator glows green when the battery fully charged, please remove the battery.

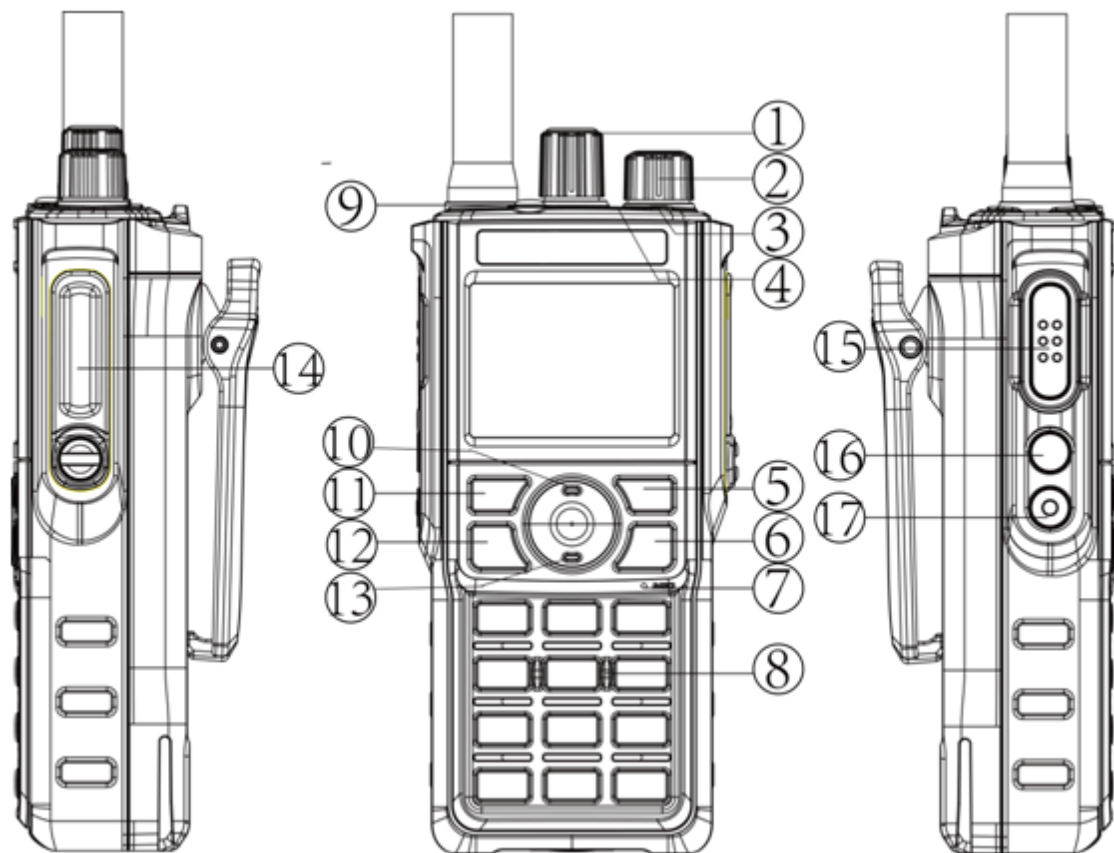
Note: While charging the temperature out of the limit the LED indicator of charger will flash red and green; if battery has damaged or battery is not connected to the charger correctly, the LED indicator of charger also will flash red and green.

Attach the Speaker/Microphone

Rotate the screw of the accessory jacket cover counterclockwise to remove the accessory jacket cover, then align the plug with the accessory jacket and tighten the screw on the plug.



Get Familiar with the Device



①	Channel Encoder	⑩	Direction Up
②	Power Switch/Volume Adjust Keys	⑪	Menu/OK Key
③	LED Indicator	⑫	P1 Key
④	MIC2 (Duplex mode)	⑬	Direction Down
⑤	Return Key	⑭	MIC-SP-USB Port
⑥	P2 Key	⑮	PTT Key
⑦	MIC1	⑯	Side Button 1
⑧	Speaker	⑰	Side Button 2
⑨	Orange Button		

Basic Operations

LCD Icons

	Signal strength		Zone menu		Emergency Message send successfully
	Emergency Message unread		Settings menu		Emergency Message send failed
	Emergency		Accessory menu		Keypad locked
	Scan on		The inbox/outbox is full		All alert tones disabled
	Missed call		Unread message		Voice call
	Digital mode		Monitoring		Recording
	Analog mode		Connect to USB		
	D&A mode		VOX on		Duplex mode
	A&D mode		Earphone is connected		Half-duplex mode
	Private call		Positioning on		Battery level
	Group call		Message read		Configured
	All call		Message unread		First priority scan channel
	Analog call		Message send successfully		Second priority scan channel
	Contacts menu		Message send failed		Channel locked
	SMS menu		State Message		Encryption on

	Call log menu		Emergency Message		Disturb Free on
	Scanning menu		Emergency Message read		Call Forwarding ON
	Work mode switch				

Power on/off

Rotate the Power switch/Volume adjustment knob clockwise to power on, the power on tone will sound.

Rotate the Power switch/Volume adjustment knob counterclockwise to power off, the screen displays: power off.

Note: When the radio is configured with a power-on password, the correct 6-digit password must be entered each time it is powered on. When the password input error exceeds the set number of times, the radio will self-kill and clear all data except for the device ID, device name, and language environment. It can only be used normally by re-programmed. Users are advised to use the power-on password with caution.

Adjust the volume

● Adjust the voice volume

After the radio powered on, rotate the power switch/volume adjust keys to adjust the volume level. Rotate the knob clockwise to increase the volume, or rotate the knob anti-clockwise to decrease the volume.

● Adjust the alert tone volume

Go to “Menu” ->”Settings” ->”Settings” ->”Tone/Alert”, then press OK key to enable or disable the alert tone and set the volume level as level 1~8 or same as voice volume.

Switch work mode

Enter Menu mode and select “Modes” menu, and then select DMO mode, TMO mode or MPT mode.

● Conventional Mode

(1) Select a channel

Rotate the channel encoder to switch channels. Rotate the knob clockwise to increase the channel number, or rotate the knob anti-clockwise to decrease the channel number. While all tone alert is enabled, a channel number will sound after changing the channel.

(2) Switch the Zone

The radio supports up to 128 zones, each with a maximum of 64 channels, all 128 zones can support up to 1024 channels. Select a desired zone through zone menu or set zone selection function to programming buttons, then switch zone. While all tone alert is enabled, a channel number will sound after selecting the zone.

(3) A/D modes Switching

If current channel mode is D/A compatible, press programming button

【Digital/Analog Switch】 function to switch to other channel mode. If the current channel mode is digital, press 【Digital/Analog Switch】 button to switch to analog mode. If the current channel mode is analog, press 【Digital/Analog Switch】 button to switch to digital mode.

Note: Digital/Analog Switch function only switching the channel mode temporarily, restart the radio or rotate channel selector knob, the current channel will return to its default channel mode.

● Trunking Mode

In trunking mode, the radio will start scanning automatically when powering on, audio or data communication will be available after registering to trunking system

successfully.

(1) Registration

After the radio is powered on, it will automatically scan to search for available base stations and try to regist. During scanning, the radio displays: “Scanning...”with the icon , and LED indicator glows orange, after registering successfully, the radio will display: Connected or Weaken.

(2) Select a Group

In trunking mode, rotate the channel encoder to select a group or the user ID .

Voice Call

To ensure optimal voice quality on the receiving radio, keep the microphone a distance of 3~4cm away from mouth while transmitting, then speak into the microphone (In half duplex mode speak into microphone 1, and in duplex mode speak into microphone 2). Private call, group call or all calls can be initiated in the digital channel of conventional mode or trunking mode.

Conventional Mode

(1) Group Call

- When the default communication address of the current digital channel is set to the group call ID, press the PTT button to initiate a group call;
- In the contact list menu, select the group call ID and press the PTT button to initiate a group call;
- When the keyboard allows input, press the # key to switch between group call types and directly input the number, or enter the manual dialing menu and input the group call ID to be dialed, and press the PTT button to initiate a group call;
- When the one-touch call is set to a group call, a group call can also be initiated by one-touch function.

(2) Private Call

- When the default communication address of the current digital channel is set to the private call ID, press the PTT button to initiate the private call;
- In the contact menu, select a private call contact and press the PTT button to initiate a private call;
- When keyboard input is allowed, directly enter the number, or enable the manual dialing mode and input the private call ID to initiate a private call ;
- Select a private call contact in the missed/Answered/outgoing numbers, and press the PTT key to initiate a private call;
- When the one-touch call is set to a private call, a private call can also be initiated by one-touch function.

(3) All Call

- When the default communication address of the current digital channel is set to the all call ID, press the PTT button to initiate all call;
- In the contact list menu, select the All Call ID and press the PTT button to initiate all call.

(4) Full Duplex Call

The radio supports full duplex mode communication that permit the radio to transmit and receive at the same time. Only the current channel of transmitter and receiver are set as duplex mode that users can make a full duplex call. By the way, only private call can support full duplex mode, the group call cannot support.

(5) Call on Analog Channel

On an analog channel, press and hold the PTT button to make an analog call.

(6) Call on A/D Mode

On digital compatible analog mode, press the PTT key to initiate digital calls; On analog compatible digital mode, press the PTT key to initiate analog calls; During hang time, the calls base on the channel mode and ID.

(7) Receiving and Calling Back

On digital channel, while a private call is received, press the PTT key within the hang time to set up the private call and then to talk each other. If there is not respond to a

received private call within the hang time, the radio will display the missed call icon; while a group call is received, press the PTT key within the hang time to call back; while an all call is received, it cannot respond to an all call. On digital compatible analog channel or analog compatible digital channel, the radio will detect digital and analog signal (must attach to CTCSS/CDCSS) simultaneously when receiving, and if matching signal is detected, within the hang time the current call can be called back.

Trunking Mode (Only trunking versions support the related feature settings)

(1) Group Call

Initiate a Group Call

- Rotate the channel encoder to select the required group contact, and press and hold the PTT key to initiate the group call;
- Press [MENU/OK] key to enter the contact list, select a group call contact, then press PTT button to make a group call;
- Input group call number then press PTT key to make a group call;
- When the one-touch call is set to a group call, a group call can also be initiated by long press the key.

End a Group Call

- The calling party ends the call;
- The call duration exceeds the preset time;
- The base station signal is lost;

(2) Private Call

Initiate a private call

- Press [MENU/OK] key to enter the contact list, select a private call contact, then press PTT button to make a private call;
- When keyboard input is allowed, directly enter the private call ID to initiate a private call;
- When the one-touch call is set to a private call, a private call can also be initiated by

long press the key.

- Select a private call contact in the Missed/Answered/Outgoing numbers, and press the PTT key to initiate a private call.

End a private call

- The calling or the called party ends the call;
- The call duration exceeds the preset time;
- The base station signal is lost;

(3) All Call

Initiate an All Call

In the home screen, enter an all call number using the keypad, then press [#]or[PTT] key to make an all call, the radio must be authorized that allows to make all call.

- **All Call in System:** In the home screen, input *1987 then press PTT key to initiate system all call;
- All Call in Area:** In the home screen, input *1977 then press PTT key to initiate area all call;
- All Call in Station:** In the home screen, input *1957 then press PTT key to initiate base station all call;
- All Call in local:** In the home screen, input *1967 then press PTT key to initiate local all call;
- Home Zone All Call:** In the home screen, input *1917 then press PTT key to initiate home zone all call;
- Custom All Call:** In the home screen, input *1947 then press PTT key to initiate custom all call;

End an all call

- The calling party ends the call;
- The call duration exceeds the preset time;
- The base station signal is lost.

(4) Broadcast Call

A broadcast call is a special group call which the called party cannot respond. The radio can make a broadcast group call if the radio is authorized by programming

software and trunking system. In the home screen, input *11*+ Group Call ID (For Example: *11*80020900) using the keypad then press PTT key or [#] key to initiate a broadcast call.

Note: For broadcast calls, the authority should be selected through the programming software. Generally the all call is a special broadcast call.

(5) Emergency Call

In trunking mode, users can initiate a private emergency call, group emergency call, all emergency all call.

- Enter private call ID, group call ID or all call ID, then press [Menu/OK] key and then select the call type as Emergency Call .

- Enter *9*+Call ID then press PTT key to make an emergency call. (For Example: *9*80020900)

- Enter the main menu, select [Contacts] ->[All Contacts] ->[Private Call Contact], select a private call contact, and press the [Select] key to initiate an emergency call.

- Enter the main menu, select [Call History], select a contact in the call history, and press the [Select] button to initiate an emergency call.

Note: while initiated an emergency all call in system, you can enter: “*1982”then press [#] key or PTT key.

(6) PSTN Call

A telephone call is a call between a radio and a phone, if the trunking system is connected to a PSTN/PABX gateway and joins the PSTN/PABX system, the radio can communicate with phone through the system.

Initiate a PSTN Call

- Press [MENU/OK] key select “Contacts” →” All Contacts” →”Private Call” →PSTN or PABX contacts, then press [#] key or PTT key to call.

- In the home screen, input the prefix and PSTN/PABX number then press [#] key or [PTT] key to call.

- Press [MENU/OK] key and select “Call Logs” →Recent Calls/Outgoing Calls/Incoming Calls/Missed Calls to select PSTN/PABX contacts, then press [#] key or PTT key to call.

End a call

During communication, if the calling party or called party ends the call, press preprogrammed [Hang Up] key, the call duration exceeds the time preset or the base station signal is lost the telephone call will be terminated.

Button Configuration

Use the programming software to configure all buttons, short and long press of a key can be assigned with different functions.

Programmable buttons include the following functions:

No.	Defined Name	Function Description
1	Undefined	No function is assigned to the programmable button
2	Emergency On	Turn on the emergency alarm, (can only be set as a short press of the orange key)
3	Emergency Off	Turn off the emergency alarm, (can only be set as a long press of the orange key)
4	TX Power High/Low	Switch High/ Low Power quickly
5	Adjust Squelch Level (Conventional Mode)	Switch squelch level as normally open, normal or tight
6	Alert Call (Conventional Mode)	Quick access to Alert Call menu
7	Battery Indicator	Quick view battery capacity
8	Call Logs	Quick access to Call Logs menu
9	Channel Up (Conventional Mode)	Quick switch a channel and turn to next channel
10	Channel Down (Conventional Mode)	Quick switch a channel and turn to previous channel
11	Mode Switch	Quick access to [Modes] menu
12	Home Screen	Quick return to Home Screen
13	Boot Menu List	Quick access to Boot Menu List
14	Lone Worker On/Off	Enable or disable lone worker quickly

15	Man Down On/Off	Enable or disable man down quickly
16	Contact List	Quick access to Contacts menu
17	Message	Quick access to Message menu
18	Monitor On/Off (Conventional Mode)	Enable or disable monitor quickly
19	Monitor Momentary (Conventional Mode)	Enable or disable monitor momentary quickly
20	Keypad Lock	Enable or disable keypad lock quickly
21	Squelch Open (Conventional Mode)	Enable or disable squelch quickly
22	Transient Squelch Open (Conventional Mode)	Enable or disable transient squelch quickly
23	Zone Up (Conventional Mode)	Quick select a zone and turn to next zone
24	Zone Down (Conventional Mode)	Quick select a zone and turn to previous zone.
25	Scan (Conventional Mode)	Enable or disable scan quickly
26	VOX	Enable or disable VOX quickly
27	Encrypt	Enable or disable encryption quickly
28	Talk Around (Conventional Mode)	Enable or disable talk around quickly
29	One Touch Call 1-5	Quick transmit group call/ private call /call alert or preset SMS
30	Manual Dial (Conventional Mode)	Quick access to Manual Dial
31	Covert Mode	Enable or disable covert mode quickly
32	Priority Interrupt (Conventional Mode)	Interrupt activity of current channel forcibly
33	Preset Channel 1~4 (Conventional Mode)	Quick select a preset channel

34	Delete Useless Channel (Conventional Mode)	Temporarily ignore unused channel activity
35	Vibration Setting	Enable or disable vibration quickly
36	Record Sound On/Off	Enable or disable recording quickly
37	Location On/Off	Enable or disable position quickly
38	Disconnect (Conventional Mode)	Hang up current call quickly
39	Radio Check (Conventional Mode)	Quick access to Radio Check menu
40	Remote Monitor (Conventional Mode)	Quick access to Remote Monitor menu
41	Radio Disable (Conventional Mode)	Quick access to Radio Disable menu
42	Radio Enable (Conventional Mode)	Quick access to Radio Enable menu
43	Digital/ Analog Switch (Conventional Mode)	To temporarily switch channel mode to AD or DA
44	Disable All Switch	Quick to enable or disable alert tone
46	Channel Lock (Conventional Mode)	Quickly to enable or disable channel lock function.
47	Noise Reduction	Enable or disable noise reduction quickly.
48	Scan Mode (Trunking Mode)	Quick access to Scanning menu
49	Do not Disturb Switch (Trunking Mode)	Quick to enable or disable Do not disturb feature.
50	Background Scan (Trunking Mode)	To enable or disable background Scan feature.
51	Hang Up (Trunking Mode)	Quick to end talking.
52	Callback (Trunking Mode)	Quick to enable or disable callback feature.
53	Lookback Scan	Enable or disable Lookback Scan feature.

	(Trunking Mode)	
54	Muti-site Handover (Trunking Mode)	Enable or disable Muti-site Handover feature.
55	Location Information (Trunking Mode)	Quick to view location information
56	Net Info (Trunking Mode)	Quick to view network information.
57	Single-duplex Switching (Trunking Mode)	Quick to switch to duplex mode or single mode.
58	Emergency Call (Trunking Mode)	Quick to initiate an emergency call.

Note:

- In conventional mode, the [orange key] is programmed as the emergency key by default, the short press of [Direction up key] is programmed as the channel up key by default, the long press of [Direction up key] is programmed as the zone up key by default; the short press of [Direction down key] is programmed as the channel down key by default; the long press of [Direction down key] is programmed as the zone down key by default; the short press of [OK key] is programmed as the root menu key by default; the short press of [Back key] is programmed as the message key by default; In trunking mode, the [orange key] is programmed as the emergency key by default, the short press of [side button 1] is programmed as the mode switch key by default, the short press of [side button 2] is programmed as do not disturb switch key by default; the short press of [OK key] is programmed as the root menu key by default; the short press of [Back key] is programmed as all mute on/off by default; the short press of [P1 key] is programmed as contact list by default.
- Features not mentioned above may unsupported temporarily in the radio.

Functions and operations

Feature Description

Feature	Conventional		Trunking
	Digital	Analog	
Scan	√	√	×
Scan List	√	√	×
Background Hunt, Home station Hunt, Multi-site Handover	×	×	√

Private Call, Group Call, All Call	√	×	√
Broadcast Call	×	×	√
PSTN Call	×	×	√
Full Duplex Private Call	√	×	√
Emergency Call	√	×	√
Text Message	√	×	√
State Message	×	×	√
Call Alert, Device Check, Remote Monitor	√	×	×
Kill	√	×	√
Revive	√	×	√
Stun	×	×	√
Ambience Listening	×	×	√
Monitor	√	√	×
Open Squelch	×	√	×
Adjust Squelch Level	×	√	×
Emergency	√	√	√
Man Down	√	√	√
Lone Worker	√	√	√
Encrypt	√	×	√
Compandor	×	√	×
Positioning	√	√	√
Location Data Report	×	×	√
One Touch Call/Menu	√	×	√
Contacts	√	×	√
Modes Switch	√	√	√
Time-out Timer(TOT)	√	√	√
Busy Channel Lockout	√	√	√
TDMA Mode	√	×	×
Direct mode with different frequency	√	×	×
Reject Strange Call	√	×	×
Talk around	√	√	×
Call Convert	×	×	√
Call Priority	√	×	√
Priority-base Interrupt	√	×	×
Dynamic Group number Assignment (DGNA)	×	×	√
Long Message	×	×	√

Password	√	√	√
Backlight	√	√	√
LED Indication	√	√	√
TX Power	√	√	√
VOX	√	√	√
Covert Mode	√	√	√
Keypad Locked	√	√	√
Real Time	√	√	√
Voice Setting	√	√	√
Vibration	√	×	√
Manual Dial	√	×	√
Call Log	√	×	√
Record	√	√	√
Noise Reduction	√	√	√
Stack Switch	√	√	√
Alias Display	√	√	√
Voice With Location Information	√	×	×
Original Battery Testing	√	√	√

Contacts

In conventional mode, contacts list can contain a maximum of 1000 members, including private call, group call, all call. In trunking mode, contacts list can contain a maximum of 512 private contacts and 512 group contacts.

● View, edit and delete a contact

Go to **MENU→ALL Contacts** or press preprogrammed [Contacts] key and then select the required contact to view or edit the details, and the private contact can be deleted.

● Add a Contact

Go to **MENU→New Contact→Enter ID→Input Name→Press the [Menu/OK] key to Save.**

Note: While editing ID or alias, press [*] key to delete, press [#] to switch input method,

● Manual Dial

It allows to manually input the private number or group number for calling. On

manual dial menu, press “*” key can switch input private or group number, then press PTT key to transmit.

● Control Services

In conventional mode, control service can be sent to private call contacts.

Control Services	Description
Call Alert	Call alert is used for prompting the private receiver to respond the transmitter if communication is available.
Device Check	This function can check if the target radio is active in the system without sending any tone alert to the target device.
Remote Monitor	Allow a user to send a "Remote Monitor" request to the target device via menu. If the request is successful, the microphone of the target radio will be activated to monitor its activities.
Device Enable	Allow a user to send "Device enable" command to the killed radio and revive it.
Device Disable	Allow a user to send the Radio Disable command to a kill a radio , except remote monitor, all other functions will be disabled, The radio must be reprogrammed to restore or the radio receive “device enable” command to revive.

Message

The message feature allows send and receive the text messages on a digital channel in conventional mode or send and receive the text message and status messages in trunking mode.

● View a Message

To view a newly received message on the home screen, directly press the [Menu/OK] key.

To view received messages through the menu, go to **Menu→Messages→**

Inbox/Outbox/Draftbox, and select the required message, then press the [Menu /OK] key.

● **Send a Message**

Send a Text Message

It allows send a text message:

(1) Go to **Menu→All Contacts→**select the required contact press the [Menu /OK]

Key and then select Send SMS to send a text message;

(2) Go to **Menu→SMS→New SMS**, and type the text (256 characters at most in conventional mode and 23 characters at most in trunking mode) →then press [Menu/OK] key to send;

(3) Go to **Menu→SMS→Preset SMS**(10 messages at most in conventional mode and 30 messages at most in trunking mode)and select the required quick text message→press [Menu /OK] key to send.

(4) Go to **Menu→SMS→Outbox→**and then select "Resend or Forward" to send;

(5) Go to **Menu→SMS→Inbox→**and then select "Forward or reply to private or reply to group" to send;

(6) Go to **Menu→SMS→Draftbox→**and then select required text to send;

● **Send a Status Message**

The status message is available only in trunking mode, the status messages predefined through the programming software.

(1) Go to **Menu→State Message→Quick Text→**and press[Menu /OK] to enter the contact list menu, and then select the required contact to send;

(2) Go to **Menu→State Message→Inbox→**press [Menu/OK] key and then select"Forward or reply to private or reply to group" to send;

(3) Go to **Menu→SMS→Outbox→** press [Menu/OK] key and then select" Resend or Forward" to send;

● **Delete a Message**

Delete a Text Message

(1) Go to **Menu→SMS→Outbox/Inbox/Draftbox→**select the required message
→and then press [Menu /Ok]key to delete.

(2) Go to **Menu→SMS→Outbox/Inbox/Draftbox→Delete All →**and then
press[Menu /Ok] key to delete.

● Delete a Status Message

(1) Go to **Menu→State Message→Outbox/Inbox→**select the required message
→and then press [Menu /Ok] key to delete.

(2) Go to **Menu→ State Message →Outbox/Inbox→Delete All →**and then press
[Menu /Ok] key to delete.

Call Logs

● Outgoing Calls

The radio will record all recent calls made in the digital mode. At most 20 recent records can be stored. Users can view the calling and called contacts in the detailed list, or delete the call records. Unknown call IDs can be stored in the contact list.

● Answered Calls

The device will record all recent private calls received in the digital mode. At most 20 recent records can be stored. Users can view the calling and called contacts in the detailed list, or delete the call records. Unknown call IDs can be stored in the contact list.

● Missed Calls

The device will record all recent private calls missed in the digital mode. At most 20 recent records can be stored. Users can view the calling and called contacts in the detailed list, or delete the call records. Unknown call IDs can be stored in the contact list.

Scan

Conventional Mode

In conventional mode, scanning allows the radio to search the scan list connected to the current channel to locate qualified channel for receiving or voicing. If the scan list contains priority channel, the priority channel will be scanned more frequently than a non-priority channel.

● Turn the Scan feature On

Go to **Menu→Scanning→On**, or press preprogrammed [Scan on/off] key to turn the scan feature on, the radio displays “” and LED indicator flashes red. When activities are detected on a channel, the radio will stay on the channel to receive current activities and LED indicator flashes green. If unwanted call is received on the channel, press the programmed [Delete Useless Channel] key to remove the channel from the scan list temporarily.

● Turn the Scan feature Off

- (1) Go to **Menu→Scanning→Off**;
- (2) Switch a channel;
- (3) Press preprogrammed [Scan On/Off] key to turn the scan feature off.

● View/Edit Scan List

Allow a user to view/edit the scan list via menu. A user can view the scan group members or add a new member to the scan list, the list contain 16 channels at most. Go to **Menu→Scanning→View/Edit**, and then select the required channel or select Add Scan Channel.

- (1) Go to **Menu→ Scanning→View/Edit**, and then select Add Scan Channel, to add a channel to current scan list;
- (2) Go to **Menu→ Scanning**→select the required channel, and press [Menu/ OK] key to delete a channel from current scan list or set a priority channel. Users can set a channel on the scan list as priority channel 1 or 2,  indicates priority channel 1,

 indicates priority channel 2.

Trunking Mode

In trunking mode, scan mode can be set to guarantee the radio registers with a base station quickly.

● Scan Mode

Before registering, the radio automatically scanning through the control channels for available base stations, either of the two scan plans can be adopted: fixed trunking station control channel (Fixed TSCC) and flexible trunking station control channel (Flexible TSCC). There are two search modes of Fixed TSCC: All channel or control channel table.

All Channel Scanning: The radio scans all the channels within the preset frequency range.

Control Channel Table Scanning: The radio scans the fixed TSCC in the defined control channel table.

Team Scanning: The radio scans the fixed TSCC in the defined team scan list.

● Enable handover/background/Retrospect scanning

The radio can enable the following scan modes after registration to ensure a seamless communication:

Mode	Description	Operation
Handover	The signal strength received from base station may weaken due to position change and affect the radio's communication quality, in such occasions; the feature allows the radio to automatically register on the base station with stronger signals.	Press[Menu/OK]key then select "Scanning" →Scan Switch→Handover→On
Background Scan	The feature allows an idle radio to keep detecting the signal strength of the base	Press[Menu/OK]key then select "Scanning" →Scan Switch→Background

	station which it register, if the signal strength goes below the threshold level preset, the radio will automatically scan for an adjacent base station with stronger signal strength and regist to the base station that the signal is stronger.	Scan→On
Retrospect Scan	In an overlapping area, the feature allows the radio operation on another base station to switch back to the home station when its signal strength reaches the preset threshold. It is recommended that you set your frequently used channel as the home station.	Press[Menu/OK]key then select "Scanning" →Scan Switch→Retrospect Scan→On

Note: Parameters of scanning can be set via the programming software.

Settings

● Settings

Users can configure the following frequently used features on the settings menu.

- Language:** The radio supports two languages: Chinese and English.
- LED indicator:** Allows a user to enable or disable the LED indicator via menu. All LED indicators including: TX LED, RX LED, Scan/ Roam LED, Low Battery LED, Call Hang LED.
- Backlight:** Set the backlight parameters, the radio supports three modes: on, off or automatic. while "automatic on" is selected, the light will become dark within preset time not operating the key, and the light will keep on all the time when "on" is selected, the backlight will be disabled when "off" is selected.

- Tone/Alerts: Set tones and tone volume level for the radio, the following tones can be set:

Types	Description
Tone Disable	If tone disable is on, all alerts will be off except emergency alarm.
Call Out Tone	Off: The radio does not give any tone indication for transmission. On: The radio gives tone indication for transmission on both analog and digital channels; Analog: The radio gives tone indication for transmission on analog channel; Digital: The radio gives tone indication for transmission on digital channel.
Voice End Tone	Set whether the radio will give tone indication when the radio ends receives voice.
Private Call Tone	Set whether the radio will give tone indication when the radio receives a private call.
Group Call Tone	Set whether the radio will give tone indication when the radio receives a group call.
Call End Tone	Set whether the radio will give tone indication when the radio releases PTT key and the hang time expires.
SMS Tone	Set whether the radio will give tone indication when the radio receives a message.
Call Alert Tone	Set whether the radio will give tone indication when the radio receives a call alert.
Prior Channel Tone	Set whether the radio will give tone indication when scan function is enabled and the radio receives activity on priority channel.
Keypad Tone	Set whether the radio will give tone indication when key is

	pressed.
Channel Tone	Set whether the radio will give tone of channel name when a channel or a zone is selected.
Low Battery Tone	Set whether the radio will give tone indication when the radio battery gets low.
Power On/Off Tone	Set whether the radio will give tone indication when the radio turns the power on or off.
Emergency Alarm	Set whether the radio will give tone indication when the radio transmits or receives emergency information.

• **Vibration:** Enable or disable vibration feature, if it is enabled, the radio will vibrate for an incoming private call, a new message or a call alert.

Note: The vibration function is an optional feature.

• **VOX:** While this function is enabled, users can enjoy hands-free communication. The radio will automatically begin transmitting when speaking, and terminate transmitting when stopping talking with no need of PTT press. Allow user to set the VOX level and VOX delay via menu. When VOX is on it indicates : .

Note: The VOX feature is only activated by plugging in a headphone.

• **Keypad Lock:** Allow a user to enable or disable keypad lock via menu. While Keypad is locked it indicates: , and keypad operation is not allowed . Press the key "OK +# " to unlock.

Note: The keyboard auto lock delay time can be set the programming software.

• **Man Down:** Enable or disable man down function via settings menu

• **Power-on Password:** If power-on password feature is enabled via programming software, the password can be modified by this menu. First input the old password correctly, then input a new password twice to modify the password successfully.

Note: This menu is effective if power on password is set via programming software.

• **Boot Interface:** Allow a user to enable or disable the boot screen via menu. If the

Intro screen is enabled, while the radio is power on, the screen displays BelFone Logo and device name; while the Intro screen is disable, the screen only displays device name.

- **Covert Mode:** If enabled, the radio will be totally silent without any UI indication.

- **Lone Worker:** Enable or disable lone worker function via settings menu

- **Talk Around (conventional mode):** When the repeater malfunctions, or the radio is out of repeater's range, communications can be continued in talk around mode. While enabled, the screen displays:  , by this time TX frequency will be set the same as to RX frequency. Switching channel, enabling scan feature or restarting radio will disable the feature.

Note:

To enable this function, TX frequency should be different from RX frequency, and the channel should be set as allowing talk around on the programming software.

Press the programmed Talk Around key to switch DM mode and RM mode.

- **Monitor (conventional mode):** It allows users to receive more weak signals, and helps users to recognize the weak voice in the speaker.

- **Time Zone Set:** Set the current time zone.

- **Set Date and Time:** View real time or modify the time via settings menu.

- **Channel Lock:** Allow a user to lock the channel via the menu. If channel is locked , it indicates:  , and remains in the current channel, rotating the channel knob cannot switch to other channels.

- **Noise Reduction:** Enable or disable noise reduction function via settings menu.

- **Standby display device name:** Display device name when standby.

- **Alias display:** When receiving a call from a contact not in the contact, the transmitter's device alias will be automatically displayed.

- **Alias editing:** Modify the alias of radio.

•**Squelch level(conventional mode):** Adjust the threshold value of the received signal to eliminate unwanted noise by filtering the incoming signal whose strength is not enough to generate clear transmission. The higher the Squelch Level, the stronger the received signal strength is required.

2. Channel Settings

In conventional mode, channel configure function is used to modify the current channel parameters, on digital channel, it is allowed to modify Channel Name, Sending Timeout, RX/TX frequency, Color Code, Slot Selection, Encrypt Setting, TX contacts, RX Group List, Single Freq Repeater and AD Hoc network.; on analog channel it is allowed to modify Channel Name, Sending Timeout, RX/TX frequency, Subsonic.

•**Channel Name:** Set current channel alias, it contains 16 characters at most.

•**TX Power:** Set current channel transmitting power level, high power indicates  and lower power indicates .

•**Sending Timeout:** Set current channel TOT, the available time range is 15 to 495(s), the time 0 is off.

•**TX/ RX Frequency:** Set TX or RX frequency of current channel, and only when current channel displays frequency that this option is available.

•**Subsonic:** Set the RX or TX subsonic type and values of current channel

•**Color Code:** Set current channel color code, the available value range is 0~15, if TDMA direct mode feature is enabled, the color code range is 0~14.

•**Slot Selection:** Set current channel time slot, the available time slot is: Slot 1, Slot 2, Virtual Cluster TX slot Auto, Virtual Cluster TX slot 1, Virtual Cluster TX slot 2.

•**Encrypt Setting:** Set the encryption feature of current channel, if enabled, the icon  appears, and encrypt key can be manually typed or select from the encryption key list. When creating a new key, first edit the key name and then edit the key. The key name consists of Chinese characters, uppercase and lowercase letters, numbers or

symbols, and the key is composed of uppercase and lowercase letters or numbers. The key length is 10 characters.

● **TX Contacts:** Select a contact from all contacts list as current channel default address.

● **RX Group List:** Set current channel RX group list.

3. System Info

View relevant information of the radio, in conventional mode, the system info including the battery status, RSSI info, my number, device name, firmware, CP version, UI version, date& Time, memory info; in trunking mode, the system info including battery status, my number, device name, firmware, CP version, UI version, Net info, product info, date& time.

Accessory

Location

The radio supports satellite location which allows users to query the location information of the radio.

● Enable Location

Go to **Menu→Accessory→GPS→GPS Mode→Power Save/High Perf** to enable the location feature.

Press preprogrammed [Location On/Off] to turn on the location feature.

When location is enabled, the icon  appears, if effective location data is received the icon  appears.

● View Location

Go to **Menu→Accessory→GPS→Location**, and then view the location information of the radio, including longitude, latitude, time, data, speed and the number of visible satellites.

● Send Location Data

Go to **Menu→Accessory→Send GPS Data**, and report to a private contact.

● **Report GPS Message in trunking mode**

The location data of the radio is reported via the trunking system, when the radio enables the location feature, users can position the radio on the map via the dispatch client. The radio will report location information to the system based on time or distance, and the dispatch system can display the location information of the radio in real time.

Note: Location is an optional feature.

Voice Recording

The radio supports voice recording. When the feature is enabled, it will continuously record all transmitted and received voice calls.

● **Enabling Voice Recording**

Go to **Menu→Accessory→Voice Record →Voice Record Set** to enable the voice recording feature.

Press preprogrammed [Record Sound On/Off] to turn on the voice recording feature.

● **Viewing Recordings**

Go to **Menu→Accessory→Voice Record →Voice Record List** to view or play the recordings. Also it can be read by the programming software and played on the PC.

● **Searching Recordings**

Go to **Menu→Accessory→Voice Record →Quick Find** to search the recordings based on the call type or date.

Note: Recording is an optional feature.

Emergency

In an emergency situation, the radio can initiate an emergency alarm at any time and on any operating interface. Alarms are supported in both conventional mode and trunking mode.

Conventional Mode

In emergency, the radio transmits at high power by default, the radio supports five emergency types.

Emergency Type	Description
Siren Only	After the radio enters the emergency status, the siren only sounds locally, and the icon  appears.
Regular	The radio sends emergency alarm and gives visible indication, and the icon  appears.
Silent	The radio sends emergency alarm and gives no audible or visible indication upon receiving an emergency call, and will not play any incoming voice calls that match the reception.
Silent with voice	The radio sends emergency alarm and gives no audible or visible indication upon receiving an emergency call, but will play incoming voice.
Alarm Whistle	After the radio initiates an emergency alarm, it emits a local alarm sound. Emergency Icon is displayed on the screen and the alarm bell is continuously played.

In addition, the different emergency modes can be combined with different emergency types.

Emergency Mode	Description
Emergency Alarm	The radio sends an emergency alarm message and exits the "emergency" mode when it receives confirmation or reaches the number of attempts.
Emergency Alarm and Call	The radio sends an emergency alarm message and enters "emergency mode", then press [PTT] key can initiate an emergency call.
Only Emergency Call	The radio enters "emergency mode" and press [PTT] key to initiate an emergency call .

● **Initiating Emergency Alarm:** Short press the orange button which is programmed as [Emergency On] to send emergency information, LED indicator glows red, the icon

 shows in the status bar and LCD displays: Sending Alarm.

● **Initiating an emergency call:** When the emergency mode is set as emergency alarm with call, after entering emergency state, press PTT key to initiate an emergency call, and the LCD displays: Emergency Call. If the Alarm with call to follow is enabled via the programming software, user can talk without having to press PTT key.

● **Exiting Emergency Alarm:** The transmitter can long press the orange button which is programmed as [Emergency Off] to exit emergency state, or if the emergency alarm retry count is used up, the transceiver will exit alarm mode automatically in some alarm mode. The receiver can only long press the orange button programmed as [Emergency Off] to exit emergency mode.

Note: Emergency alarm on analog channel only supports the emergency type as siren only, and the feature and operation are the same as digital emergency.

Trunking Mode

Trunking mode also supports emergency alarm, emergency alarms can be sent to other radio or dispatcher. When the emergency type is Normal, there are three emergency modes are available. Short press orange key [Emergency On] to initiate an emergency alarm, and long press orange key [Emergency Off] or press [Hang Up] key to ending an emergency alarm.

Emergency Type	Description
Emergency Alarm	The radio sends emergency status message.
Emergency Alarm and Call	The radio sends emergency status message. Then press [PTT] key to initiate an emergency call
Only Emergency Call	The radio initiates an emergency call only

Note: when the emergency type is alarm whistle, the radio sounds emergency alarm tones in the native.

Lone Worker

This function is useful for persons who work alone situation. When the user

encounters an incident and doesn't press any keys or transmit audio within the preset period time, the radio will alarm automatically to ask help.

● **There are three modes to enable lone worker feature:**

- (1) Go to [Settings] menu → [Settings] → [Lone Worker] → On
- (2) Press preprogrammed [Lone Worker On/Off] key to enable it;
- (3) Via the programming software, enable the Lone Worker On/ Off.

● **To disable lone worker feature:**

- (1) Go to [Settings] menu → [Settings] → [Lone Worker] → Off
- (2) Press preprogrammed [Lone Worker On/Off] key to disable it;
- (3) Via the programming software, disable the Lone Worker On/ Off.

Man Down

When this feature is enabled, the radio will automatically send an alarm for help if the radio tilts to a specified gradient or stays motionless within a preset period, users can terminate such alarm by put radio upright otherwise it will enter emergency mode.

● **There are three modes to enable man down feature:**

- (1) Go to [Settings] menu → [Settings] → [Man Down] → On
- (2) Press preprogrammed [Man Down On/Off] key to enable it;
- (3) Via the programming software, enable Man Down On/ Off

● **To disable man down feature:**

- (1) Go to [Settings] menu → [Settings] → [Man Down] → Off
- (2) Press preprogrammed [Man Down On/Off] key to disable it;

(3) Via the programming software, Man Down On/ Off item is not checked

Encryption

The encryption feature can encrypt the audio signals and data to guarantee the privacy of the communication, via the programming software encryption type can be set as XOR, enhanced XOR, ARC4 and AES256. XOR and enhanced XOR encryption only encrypt the audio. ARC4 and AES256 can support encrypt the audio and data. If the encrypt feature is enabled, icon  appears, the transmitter and receiver should be set as the same encryption type and encryption key, otherwise the receiver cannot get the normal audio and data.

● To enable the encryption feature

(1) Go to [Settings] menu → [Channel Settings] → [Encrypt Setting] → [Encrypt Switch] → On

(2) Press preprogrammed [Encrypt] key to enable it;

● New Encrypt Key

Select “New Encrypt Key” from “Encrypt” menu, and then edit name and key:

The key value of XOR or enhanced XOR encryption consists of digits or letters, the key length is 10 characters;

The key value of ARC4 consists of digits or capital letters A~F, the key length is 10 characters;

The key value of AES consists of digits or capital letters A~F, the key length is 64 characters.

● Encrypt Key

Select the required encrypt key from the key list when the encryption feature is enabled.

TDMA Direct Mode

If TDMA direct mode is enabled on digital channel in conventional mode, the members in the same group call must use the same slot, one frequency supports calls in two slots synchronously in order to avoid interfering communications in the other slot.

Note: This function is available only in digital operation.

Direct Mode with Different Frequency

In conventional mode, if direct mode with different frequency feature is enabled, the radio can transmit with different frequency directly, only the transmitter and receiver are set direct mode with different frequency simultaneously and the TX frequency of the transmitter is the same as the RX frequency of the receiver can the radio directly communicate.

Keypad Input

The radio supports keyboard input feature. Enter the number directly on the standby interface and press the PTT key to initiate a call, or long press the 0-9, *, and # keys on the numeric keypad to initiate a single key call.

In conventional mode, on the digital channel, the radio support initiating a group call, private call or sending a quick text to a group or private contact, sending alert call command to a private contact; In trunking mode, the radio support initiating a private call, group call or sending a quick text or a status message to a group or private contact, or switching to a function menu such as: message, call log, contact list, status, private contact, group contact, modes switch, location Information, scan.

Reject Stranger Call

In digital channel of conventional mode, when the reject strange call feature is

enabled, the radio can successfully receive the call only if the device ID and call ID of the transmitter exist in the contact list.

Alias Display

The radio supports alias display function. When receiving a call from a contact not in the contact list, the transmitter's device alias will be automatically displayed, and the stranger can be automatically added to the contact list.

Priority Interrupt

In conventional mode, the call priority feature is allowed to interrupt the on-going call on current forcibly. This means a higher priority call can interrupt other on-going calls with lower priority to release the channel for itself. There are 4 voice priorities available, level 1 is lower, level 3 is higher, and emergency call is the highest.

Interrupt feature is divided into priority interrupt manually and priority interrupt automatically. The emergency priority interrupt, message priority interrupt, kill priority interrupt, all call priority interrupt belong to priority interrupt automatically.

- **Priority Interrupt Manually:** Press the programmed [Priority Interrupt] key to terminate the ongoing activity on the current channel forcibly, so as to initiate a new call or a new service.

- **Priority Interrupt Automatically:** In this way, the priority interrupt is triggered by the call priority level, if the priority level of current service is higher it will interrupt the ongoing activity automatically.

- **Emergency Priority Interrupt:** If there is an active call on the current channel, a user with higher priority level to send emergency service will terminate the ongoing activity automatically.

- **Message Priority Interrupt:** If there is an active call on current channel, a user with higher priority level to send a short message will terminate the ongoing activity automatically, so as to make sure the message is sent successfully.

•**Kill Priority Interrupt:** If there is an active call on current channel, a user with higher priority level to send kill command will terminate the ongoing activity automatically, so as to make sure the kill command is sent successfully.

•**All Call Priority Interrupt:** If there is an active call on current channel, a user with higher priority level to initiate an all call will terminate the ongoing activity automatically.

Note: This function is available only in digital channel.

TOT

In conventional mode, the purpose of TOT is to prevent any user from occupying a channel for an extended period. If the preset time expires, the radio will automatically terminate transmission and keep beeping, release PTT key to stop beeping.

In trunking mode, all timers are: Wireless Call total time, wired call total time, emergency call total time, single voice time. If the preset time expires, the radio will automatically terminate transmission.

TX Permission

Conventional Mode

TX permission can restrict the channel to transmit if it is already in use. If "always" is set, whenever pressing PTT key the radio can transmit directly. If "channel free" is set, the radio will be unable to transmit on the channel if the channel is already in use. If "color code free" is set in digital channel, the radio will be unable to transmit on the channel if a radio with the color code is already in using the channel. If "CTCSS/CDCSS" is set in analog channel, the radio will be unable to transmit on the channel if a radio with the same the CTCSS/CDCSS code is in using the channel.

Trunking Mode

In trunking mode, users must press the PTT key to apply for the right to talk. After the call is established, users can press the PTT key to talk after hearing “di” tone.

Voice with Location Information

When the transmitter is configured with the "voice with location information"

function, location information will be sent simultaneously with the voice. When both sides have valid location data, the receiver's communication interface will display the transmitter's location information.

Noise Reduction

The noise reduction function can filter out environmental noise, accurately obtain human voices in noisy environments, so that the receiver can hear a clear and loud voice.

Battery Saver

This function allows an idler radio to automatically enter battery saver mode, which will extend battery service life, but response time may be delayed.

Low Battery Warning

When the battery gets low, LED indicator glows red and there will be a warning tone: “low battery” , please replace the battery or charge the battery in time, otherwise the radio will turn off automatically while battery is too low.

Battery Detect

When the radio is powered on, it will automatically detect whether the battery is an original one and pop up a window to prompt "Original Battery". If it is detected as a non-original battery, the radio will not be able to display the battery level normally and will pop up a window to prompt "Non-original Battery" at regular intervals.

Monitor

In conventional mode, if the Monitor feature is enabled, the icon:  appears. Press and hold down the programmed [Monitor Momentary] key to activate the monitor

function, release the key to exit monitor mode; or press programmed [Monitor On/Off] key to enable the monitor feature, the radio will remain on monitor mode until press it again to exit.

Adjusting the Squelch Level

In the analog channel of conventional mode, the squelch threshold required for the radio to un-mute can be adjusted. If two radios are at a close distance and the signals are strong, squelch level can be adjust higher; If two radios are at a long distance and the signals are weak, squelch level can be adjust lower, the appropriate squelch level depends on the ambient RF noise conditions.

Componder

In conventional mode, the compander can be enabled only for analog channel, transmitted signals are compressed before being sent and received signals are expanded when received. This background feature allows higher clarity of signals, avoiding excessive noise.

CTCSS/CDCSS

In the analog channel of conventional mode, unique CTCSS/CDCSS can be set to guarantee the privacy of the communication, digital compatible analog channel or analog compatible digital channel CTCSS/CDCSS must be set. If CTCSS/CDCSS has been set on the current channel, CTCSS/CDCSS match the transmitting radio is required for the radio to receive an incoming signal.

Decode: Only when the received call matching the decode, it can be heard;

Encode: The CTCSS/CDCSS will be attached to the signal before transmitting. The transmitting signal will only be heard by parties whose CTCSS/CDCSS signaling matches .

Call Divert

In trunking mode, when the called party is busy, unreachable, non-responding or unregistered, the call convert can automatically convert the call to a target radio. To enable this feature, go to **MENU→Settings→Settings→Call Divert→Divert Type→**and select Divert ID from the Contacts or enter the ID using the keypad. If the call divert feature is enabled, the icon  appears on the home screen. To turn off this feature, select Cancel Transfer in the Call Divert menu.

Call Priority

In trunking mode, the priority of voice services can be set except emergency call. When all channels are occupied, the requests are put in a queue according their priorities (Preemption, High, Middle, Low).

Note: Via the programming software , set the priority:

The preemption option is available only when the preemptive call feature is enabled via the programming software.

Dynamic Group Number Assignment (DGNA)

In trunking mode, the radio can join a dynamic group by the authorized dispatcher over the air interface according to temporary task requirements. The radio will display the dynamic group ID when the dynamic group is added successfully. The added dynamic group is saved on a dynamic subgroup list under Contacts on your radio. If the dynamic group is deleted successfully the radio will work on original group.

Note: The feature and operations of Dynamic group is the same as group call.

Stun, Revive and Kill

In trunking mode, the radio can be Stunned, Revived and Killed by the dispatcher. When the radio is stunned, it displays “Device Stunned & TX Disable”, and it only waits for “Revive” command from dispatching client to restore normal operation. When the radio is killed by dispatching client, it displays “Kill 7” and all its functions will be locked out except power on/off. To restore normal operation, connect to programming software to enable radio.

Note: The stun, Revive and Kill features are enabled by default, and triggered by the trunking system. Via the programming software, the features can be disabled.

CTCSS Frequency Table

CTCS S No.	Freq. [Hz]	CTCS S No.	Freq. [Hz]	CTCS S No.	Freq. [Hz]	CTCS S No.	Freq. [Hz]
1	67.0	14	103.5	27	159.8	40	199.5
2	69.3	15	107.2	28	162.2	41	203.5
3	71.9	16	110.9	29	165.5	42	206.5
4	74.4	17	114.8	30	167.9	43	210.7
5	77.0	18	118.8	31	171.3	44	218.1
6	79.7	19	123.0	32	173.8	45	225.7
7	82.5	20	127.3	33	177.3	46	229.1
8	85.4	21	131.8	34	179.9	47	233.6
9	88.5	22	136.5	35	183.5	48	241.8
10	91.5	23	141.3	36	186.2	49	250.3
11	94.8	24	146.2	37	189.9	50	254.1
12	97.4	25	151.4	38	192.8		
13	100.0	26	156.7	39	196.6		

CDCSS Standard Code Table

CDCS S NO	Positive Code	Negative Code	CDCS S NO	Positive Code	Negative Code	CDCS S NO	Positive Code	Negative Code
1	D023N	D023I	29	D174N	D174I	57	D445N	D445I
2	D025N	D025I	30	D205N	D205I	58	D464N	D464N
3	D026N	D026I	31	D223N	D223I	59	D465N	D465N
4	D031N	D031I	32	D226N	D226I	60	D466N	D466I
5	D032N	D032I	33	D243N	D243I	61	D503N	D503I
6	D043N	D043I	34	D244N	D244I	62	D506N	D506I
7	D047N	D047I	35	D245N	D245I	63	D516N	D516I
8	D051N	D051I	36	D251N	D251I	64	D532N	D532I
9	D054N	D054I	37	D261N	D261I	65	D546N	D546I
10	D065N	D065I	38	D263N	D263I	66	D565N	D565I
11	D071N	D071I	39	D265N	D265I	67	D606N	D606I
12	D072N	D072I	40	D271N	D271I	68	D612N	D612I
13	D073N	D073I	41	D306N	D306I	69	D624N	D624I
14	D074N	D074I	42	D311N	D311I	70	D627N	D627I
15	D114N	D114I	43	D315N	D315I	71	D631N	D631I
16	D115N	D115I	44	D331N	D331I	72	D632N	D632I
17	D116N	D116I	45	D343N	D343I	73	D654N	D654I
18	D125N	D125I	46	D346N	D346I	74	D662N	D662I
19	D131N	D131I	47	D351N	D351I	75	D664N	D664I
20	D132N	D132I	48	D364N	D364I	76	D703N	D703I
21	D134N	D134I	49	D365N	D365I	77	D712N	D712I
22	D143N	D143I	50	D371N	D371I	78	D723N	D723I
23	D152N	D152I	51	D411N	D411I	79	D731N	D731N
24	D155N	D155I	52	D412N	D412I	80	D732N	D732N
25	D156N	D156I	53	D413N	D413I	81	D734N	D734I

26	D162N	D162I	54	D423N	D423I	82	D743N	D743I
27	D165N	D165I	55	D431N	D431I	83	D754N	D754I
28	D172N	D172I	56	D432N	D432I			

Specifications

General	Frequency range	UHF: 400-480MHz
	Operating Voltage	DC 7.4Vfrom rechargeable battery DC 8.4V from desktop charger
	Battery capacity	2400mAh
	Battery Life (5/5/90)	2400mAh: Digital 21 hours, Analog 16 hours
	Frequency Stability	±0.5ppm
	Antenna Impedance	50Ω
	Dimensions (L×W×H)	57(L)* 35(W)* 131 (H)mm
	Display Screen	LCD screen, 320 * 240 pixels, 262000 colors, 2.0 inches, 10 lines
	Weight	330g(include battery)
	Recording (optional)	≤24hours
Environmental Specifications	Operating Temperature	-30°C—+70°C
	Storage Temperature	-40°C—+85°C
	ESD (electrostatic protection level)	IEC61000-4-2(Level 4) ± 8kV (contact discharge) ± 15kV (air discharge)
	Dustproof & waterproof	IP68 standard design
Location	Location Accuracy	<2.5m (CEP50, with well signal)
	TTFF (Time To First Fix) Cold Start	≤ 30 Seconds (with well signal)
	TTFF (Time To First Fix) Hot Start	≤ 1 minute (with well signal)

Note: All specifications are tested according to applicable standards, and subject to change without notice due to continuous development.

Statement

This manual is compiled to be accurate and complete for operator's use. For any doubt, please contact Belfone. We will give you professional answers. As radio communication technologies develop rapidly, Belfone reserves the right to change product design and specification without prior notice to consumers.

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