

# BelFone

[www.belfone.com](http://www.belfone.com)



## **BF-SC500UV**

**Professional FM Radio**



### 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!

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-SC500UV series

### Warning!

- ◆ In explosive atmospheres (flammable 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, do not 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.

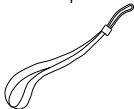
## Standard Accessories

Items	Quantity
Antenna	1
Strap	1
Battery	1
power adapter	1
Data cable	1
Belt clip	1
Screw set	1
User Manual	1
Warranty Card	1
Certificate	1

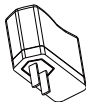
Antenna Strap



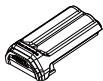
Strap



Power adapter



Battery



Data Cable



Belt Clip



Screw set



# Installation of Accessories

## Install/Remove the Antenna

Hold the bottom of the antenna and screw it clockwise into the interface on the top of the radio until it is tightened. Turn the antenna anti-clockwise to remove it.



## Install/Remove Belt Clip

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



## Attach the Strap

Thread the hand strap into the loop on the top of the back of the radio.

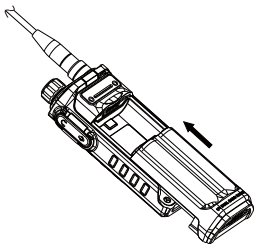


## Install/Remove the Battery

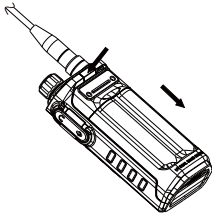
### Warning!

- Do not short-circuit the battery contacts, as it may cause the battery to burn out or catch fire;
- Do not attempt to remove the casing of the battery to prevent a short circuit.
- 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 battery with the corresponding grooves on the back of the radio, and then push the battery in parallel until a "click" is heard to lock it in place.



To remove the battery, first turn off the radio, then press down the latch on the top of the back of the radio, at the same time push down the battery and then take out the battery.



**Note: Do not install or remove the battery while 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 BeIFone, 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°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

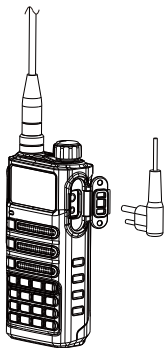
Please use the charger specified by BeIFone to charge the battery: the charger indicator indicates the charging status.

### Charging steps:

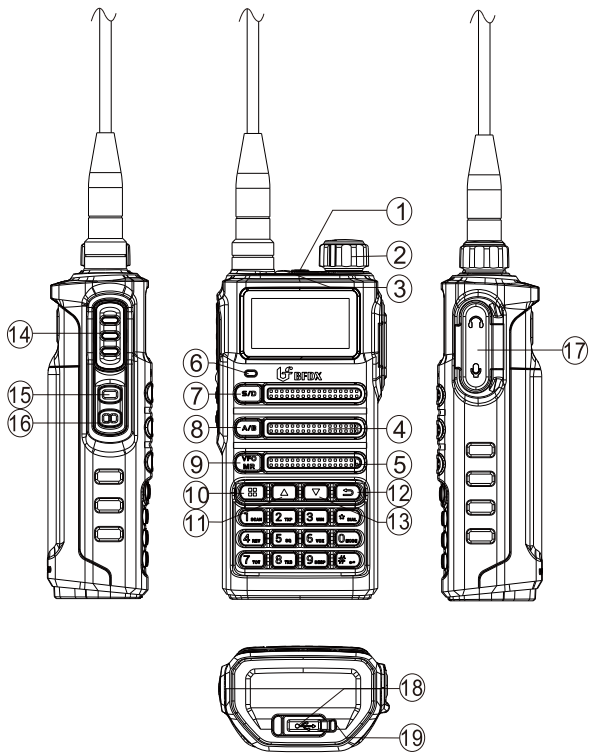
1. Insert the AC plug of the power adapter into the AC power output socket;
2. Align the connector of the power adapter with the Micro USB port at the bottom of the battery and insert it;
3. The indicator light at the bottom of the battery is red, indicating the start of charging;
4. The indicator light at the bottom of the battery is green, indicating that charging has been completed.

## Attach the Speaker/Microphone

Open the headphone cover and insert the speaker/microphone headphones directly into the speaker/microphone jack.

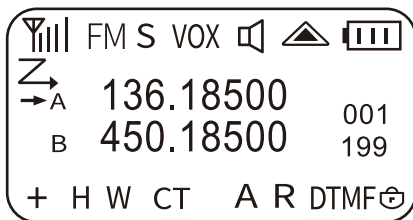


## Getting Acquainted










①	Flashlight	⑪	Up key, DTMF encoding represents B
②	Power switch/Volume controller: switch channels in channel knob mode	⑫	Return key, Representing letter B in DTMF encoding
③	Orange button	⑬	Down arrow key, Representing letter C in DTMF encoding
④	Speaker	⑭	PTT key
⑤	Microphone (MIC)	⑮	Button 1
⑥	LED indicator light	⑯	Button 2
⑦	Single/Dual standby switch key (S/D)	⑰	MIC-SP socket
⑧	A/B band switch key (A/B)	⑱	Micro USB interface
⑨	User mode switch key (VFO/MR) Delete key when manually dialing DTMF	⑲	Charging indicator light
⑩	Menu key (MENU), Represents letter A in DTMF encoding		

## LCD Display Screen



## LCD Icon

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	Signal intensity
FM	FM radio on
S/D	Single/Dual standby
VOX	VOX on
	All prompt sounds are turned on
	All prompt sounds are turned off
	Emergency alarm
	Battery level
+	The receiving frequency is higher than the transmission frequency
-	The receiving frequency is lower than the transmission frequency
H/M/L	Transmission power high/medium/low
W/N	Wide/Narrow Band
CT	CTCSS
DCS	CDCSS
A	Add scan
	Enable scanning
R	Reverse frequency
DTMF	DTMF
	Keyboard lock

## Basic Operation

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### Power on/off

Press and hold the Power switch - Volume controller for about 2 seconds to power on, a beep prompt tone will be sounded.




Press and hold the Power switch - Volume controller for about 2 seconds to power off, a beep prompt tone will be sounded.

## Adjust volume

Press the Power switch -Volume controller to switch to volume knob mode, and then rotate the Power switch -Volume controller to adjust the volume (00%~100%). Clockwise rotation can increase the volume, while counterclockwise rotation can decrease the volume.

**Note:** Press and hold the side up key to monitoring the background noise, and adjust the appropriate volume according to the background noise

## Select channel

Press the Power switch -Volume controller to switch to channel knob mode, and then rotate the Power switch - Volume controller to select the channel. Clockwise rotation increases the channel number, counterclockwise rotation decreases the channel number. In the standby interface, press the key   to increase channel number, press the key  to decrease channel number.

## Transmitting

1. First, make sure that no radio is transmission on the current channel.
2. Hold down the PTT key and speak into the microphone.
  - Please keep a distance of 3~4cm from the microphone and speak in a normal tone to make the radio obtain the best sound quality.
  - When the PTT key is pressed, the LED indicator lights up red, indicating that it is transmitting.
3. Release the PTT key, and the radio will exit the transmission state and enter the receiving state.

## Receiving

When the radio receives the signal, the LED indicator will light green.

- If the signal of the call is weak and the radio is set to a higher squelch level, the call will not be received.
- If the radio has set CTCSS/CDCSS signaling, it can only receive calls from radios with the same CTCSS/CDCSS signaling.

## Programmable Buttons

**None:** No function assigned to programmable keys.

**Call 1:** Press to send the set DTMF code to make signaling calls.

**Call 2:** Press to send the set DTMF code to make signaling calls.

**Storage dialing:** This function is used to implement fast signaling calls, and can be sent directly by entering the number of the signaling code.

**Monitoring:** Press to open the monitoring function and monitor the current channel activity. Monitoring helps to hear weak signals. Release this key to turn off the monitoring function.

**Note:** This function can only be set by long pressing.

**Emergency alarm:** turn on or off the emergency alarm function.

**Power switching:** Press to switch transmission power.

**Frequency band switching:** switch the V/M/U band frequency in frequency mode.

**FM radio switch:** turn on or off the FM radio function. The adjustable FM reception range is 87-108MHz.

**Lighting switch:** turn on or off the lighting function.







**Backlight:** switch the backlight to on or automatic mode.




























































**Power saving mode switch:** turn on or off the power saving mode.













































**Rescue mode switch:** turn rescue mode on or off.

**Note:** The orange button, button1 and button2 can be set as short press and long press.

## Function Shortcut Key

Menu NO	Function Name	Key Operation
0	Mode switching	
1	Scanning	
2	Power selection	
3	Bandwidth settings	
4	Inverted frequency setting	
5	Squelch level	

6	VOX level	 → 
7	TOT	 → 
8	Transmission selection	 → 
9	Prompt tone	 → 
10	Contact	 →  → 
11	Communication records	 →  → 
12	Local alarm	 →  → 
13	Transmission prompt tone	 →  → 
14	Backlight	 →  → 
15	Flashlight	 →  → 
16	Receive CTCSS/CDCSS	 →  → 
17	Transmission CTCSS/CDCSS	 →  → 
18	Language selection	 →  → 
19	LCD contrast ratio	 →  → 
20	Power saving switch	 →  → 
21	Keyboard automatic lock	 →  → 
22	Battery level	 →  → 
23	Step frequency	 →  → 
24	CTCSS Scanning	 →  → 
25	CDCSS Scanning	 →  → 
26	Channel name editing	 →  → 

27	Channel deletion	 →  → 
28	DTMF switch	 →  → 
29	Side tone switch	 →  → 
30	ANI code	 →  → 
31	PTT ID	 →  → 
32	Busy Channel Lock (BCL)	 →  → 
33	Scan add	 →  → 
34	Beat frequency	 →  → 
35	Abnormal frequency setting	 →  → 
36	Channel preservation	 →  → 
37	Interference frequency setting	 →  → 
Other functions	Single/Dual standby switching	
	A/B switching	
	One key frequency reading	Long press 
	One key frequency matching	Long press 
	Manual keyboard lock	Long press 
	Transmitting 1750Hz single tone	PPT+ 
	Storage dial-up	Long press 
	DTMF dialing	Short press 
	DTMF redialing	Long press 
	Copy	Button+  Simultaneously power on
	Reset	Button+  Simultaneously power on




# Function and Operation

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## Mode Switching - Menu 0

There are four display modes: frequency mode, channel mode, channel+frequency mode and channel+name mode.

## Scan - Menu 1

Scanning is used to monitor the signals of channels added to the scanning list and only stays on the channel with signal. When scanning, the icon  is displayed on the screen. Scan defaults to scanning up by channel number or frequency increasing. Users can also press the up key to scan up, press the down key to scan down, and press  or  to exit the scan.

## Power Selection - Menu 2

This function is used to set the transmission power of high, medium and low. The screen displays "H" for high power, "M" for medium power and "L" for low power.

## Bandwidth Settings - Menu 3

This function is used to set the channel bandwidth between broadband (25KHz) and narrowband (12.5KHz). The screen displays "W" for broadband and "N" for narrowband.

## Inverted frequency setting - Menu 4

This function is used to realize the exchange of the receiving and transmitting frequency and CTCSS/CDCSS of current channel. When the inverse frequency function is enabled the screen displays "R".

## Squelch level - Menu 5

The squelch function is used to mute the speaker when not receiving a signal. Squelch level can be set as 0~9, and default to level 3. The higher the squelch level, the stronger the noise suppressed. Enter the squelch level menu and press the up or down keys to adjust the level.

## **VOX - Menu 6**

The VOX allows user not to press the PTT button during transmission. When this function is enabled, users can directly start transmission through voice, and automatically end transmission after voice stops. The adjustment range of VOX level is 1~9. When the VOX is enabled, the screen displays "VOX".



## **TOT - Menu 7**

This function is used to set the transmission limit time. When the radio continues to transmission for more than the limit time, the radio will automatically end the transmission. The setting range of TOT is 10~300 seconds, or select off.

## **Transmission selection - Menu 8**

This function is used to select the last receiving channel or the main channel as the transmission channel.

## **Prompt Tone - Menu 9**

This function is used to set the button operation prompt tone, which will display  on the screen if enabled. When the prompt tone is disabled, the screen displays .

## **Contact - Menu 10**

This function is used to view the list of contacts stored through the programming software. A maximum of 128 contact lists can be stored. In the contact, users can view the name and ANI code of the contact.

## **Call Records - Menu 11**

This function is used to view the latest 10 DTMF dialing call records received.

## **Local Alarm - Menu 12**

If the local alarm is enabled, the radio will sound an alarm sound when sending an emergency alarm. If the local alarm is disabled, the radio will not sound an alarm sound when sending an alarm.

## Transmission Prompt Tone - menu 13

The transmission prompt tone can be set to the beginning of transmission, end of transmission, both, or close. When the prompt tone is set to the beginning of transmission, pressing PTT, the receiver will sound a prompt tone of "tick". When the prompt tone is set to the end of transmission, releasing the PTT key, the receiver will sound the prompt tone "tick". When the prompt tone is set to both, there will be a prompt tone at the beginning and the end of transmission. If the prompt tone is set to close, there will be no warning sound.

## Backlight - Menu 14

This function is used to set the backlight of the screen and keyboard which can be set to three states: automatic, normally on, and off. When the backlight is set to automatic, if no operation is carried out within 5 seconds, the backlight of the radio will turn off automatically.

## Flashlight - Menu 15

Users can choose to turn on or off the flashlight, or the light flashes (once on and once off).

## Receive CTCSS/CDCSS - Menu 16

This function is used to set the receiving CTCSS/CDCSS type and code. Enter the receiving CTCSS/CDCSS menu, and press the **[A/B]** key to switch between different CTCSS/CDCSS types. When CTCSS is set, the interface displays CT; when CDCSS is set, the interface displays DCS.

**Note:** The radio supports non-standard CTCSS/CDCSS, which can be manually input.

## Transmission CTCSS/CDCSS - Menu 17

This function is used to set transmission CTCSS/CDCSS type and code. Enter transmission CTCSS/CDCSS menu and press **[A/B]** key to switch different CTCSS/CDCSS types.

## Language Selection - Menu 18

This function is used to set the LCD screen to display Chinese or English.


## LCD Contrast - Menu 19

This function is used to set the LCD brightness. Adjustable levels 1-5 and the default setting is 3. If the level setting is too high or too low, the screen display will be blurry.

## Power Saving Switch - Menu 20

This function is used to enable or disable the power-saving mode. When the power-saving mode is enabled, the radio will automatically enter the power-saving state without any operation for a period of time. Enabling the power-saving function can extend the use time of the battery.

## Keyboard Automatic Lock - Menu 21

When the automatic keyboard lock is enabled, if no operation is performed within 5 seconds, the radio keyboard will be locked automatically. Long press the key  can unlock the keyboard.

## Battery Level - Menu 22

This function is used to check the remaining battery level.

## Step frequency - Menu 23

This function is used to adjust the step value in frequency mode. Optional step frequency: 5/6.25/10/12.5/25/30/50/100kHz.

## CTCSS Scan - Menu 24

When the CTCSS scanning is enabled, if the carrier is received, the radio will automatically scan in the order of the CTCSS standard frequency table, and the screen will display the scanned CTCSS frequency and serial number. If the effective CTCSS frequency is scanned, the scanning stops and the CTCSS frequency is set as the temporary received and transmission CTCSS of the channel.





**Note: This function does not support non-standard CTCSS.**

## CDCSS Scan - Menu 25

When the CDCSS scanning is enabled, if the carrier signal is received, the radio will automatically scan according to the positive code sequence of the CDCSS standard frequency table, and the screen will display the scanned CDCSS frequency and serial number. If the effective CDCSS code is scanned, the scanning stops and the CDCSS code is set as the temporary received and transmission CDCSS of the channel.

**Note:** This feature does not support non-standard CDCSS.

## Channel Name Editing - Menu 26

The radio supports editing channel names, with a maximum of 10 characters. Enter the channel name editing menu, press the  /  key to select numbers 0-9, uppercase and lowercase letters, symbols -, \_, +, -, \*, /. Press the key  to switch the input cursor position, and then press the  key to save.

## Channel Deletion - Menu 27

This function is used to delete useless channels. After the current channel is deleted, it will automatically jump to the next valid channel, and exit the menu function.

**Note:** Emergency alarm channels and rescue channels cannot be deleted.




## DTMF - Menu 28

This function is used to enable or disable DTMF functionality. When the DTMF function is enabled, the screen will display "DTMF".

## Side Tone Switch - Menu 29

This function is used to enable or disable the side tone function. When the side tone, is enabled, there will be a corresponding encoding sound when sending DTMF encoding.

## ANI Code - Menu 30

This function is used to edit ANI codes. Enter the ANI code menu and press  or  key to select ANI codes from 0 to 9, A to D, \*, and #. Press the  key to switch the cursor input position. The ANI code can be set up to 8 digits.

## PTT ID - Menu 31

This function is used to set the ANI code to be sent at the beginning of transmission or the end of transmission. When both are selected, the ANI code will be sent both at the beginning of transmission and the end of transmission.

**Note: This function is only effective when DTMF is enabled and ANI code is set.**

## Busy Channel Lock (BCL) - Menu 32

This function is used to limit the transmission when the PTT key is pressed but there is activity on the current channel. Three states can be selected: carrier, carrier+CTCSS/CDCSS or off for busy channels. When the BCL is set to carrier or carrier+CTCSS/CDCSS, if there is activity on the channel, press PTT, there will be a beep to prohibit transmission and the interface will display: busy locking. Release the PTT button to restore the receiving state.

## Scan Add - Menu 33

This function is used to add channels to the scanning list in channel mode. When delete is selected, the channel will not appear in the scan list, when add or prioritize is selected, the channel will appear in the scan list. (The function is invalid in frequency mode)


## Beating Frequency - Menu 34

This function is used to enable or disable the beat frequency function.

## Different Frequency Settings - Menu 35

The transmission frequency can be input for the different frequency setting. When the transmission frequency is greater than the receive frequency, the symbol "+" is displayed on the screen; When the transmission frequency is less than the receiving frequency, the symbol "-" is displayed.

## Frequency Saving - Menu 36

Frequency saving is a manual frequency writing function. Users can enter the frequency saving menu, input the frequency, then input the channel number, and then select the CTCSS/CDCSS (press the  key to switch between different CTCSS/CDCSS types).

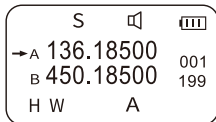
## Scramble Setting - Menu 37

Setting the scrambling frequency can ensure the confidentiality of the call, and only by setting the same scrambling frequency value can normal calls be conducted. If the interference frequency values are different, the signal can be received but there is no sound during the call. Enter the interference frequency setting menu, press the **A/B** button to switch the values in the range of 2600~3300Hz, and the step is 50Hz.

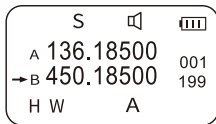
## AB switching

This function allows users to switch the working frequency band by pressing the **A/B** key.

When band A is the working frequency, the screen displays:



When band B is the working frequency, the screen displays:




## Single/Dual Switching

This function can select two frequencies or two channels to standby and wait for reception simultaneously. Press the **S/D** button to switch, the screen displays the symbol "D" when dual standby, otherwise it displays "S".

## One Key Frequency Reading




Long press the **S/D** key to enter the one key frequency reading mode, then the transmitter starts transmission. After 5s, the receiver displays the read frequency and CTCSS/CDCSS. Press the **BB** key to save the read frequency, and the "beep" prompt will sound if success.

## One Key Frequency Matching



One key frequency matching is to copy the data of channels 246~251 of the transmitter. Lone presses the  key to enter the frequency matching mode. The transmitter presses the number key 1 to transmission, and the receiver presses the number key 2 to receive. After receiving successfully, the receiver will automatically go back to the main interface and sound a prompt tone of "beep".

**Note: When transmitting data over the air, there is a possibility of losing some data. Multiple repeated operations can be performed to ensure complete data reception.**




## Manual Keyboard Lock

Long press  keys can directly lock the keyboard. After the keyboard is locked, an icon  will be displayed on the screen. Except for the PTT key and programmable key, no other keys can be operated. Long press the key  again to unlock.



## Transmission Single Tone

Transmission single tone frequency is a way to start repeater. The single tone frequency can be changed in the range of 288~3000Hz through programming software. Both press the PTT and the  key simultaneously to transmit the set single tone, and the radio will give a beep. Release the  key to end transmitting a single tone.

## Copy

This function supports the channel data replication function of two radios. Firstly, connect the two radios through the special data cable. Secondly, press and hold the programmable key 1 and key  simultaneously in the shutdown state, and long press the Power switch/Volume controller to power on. Thirdly, the radio to copy the data enters the copy function, and the screen displays "Copy", then press the key  to transfer the channel data to the other radio. Lastly press the  key to exit the copy mode.

## Reset


This function is used to clear radio data. Simultaneously press and hold the programmable key 1 and  key, long press the Power switch/Volume controller to power on, and the screen will display: Reset?. Press the  key again to confirm and all data of the radio will be cleared.

## Analog Signaling Function


### Dual Tone Multi Frequency (DTMF)

DTMF coded transmission and receive can only be realized by setting various parameters of DTMF on the programming software and configuring them to the channel. When sending the DTMF code, users can manually input the DTMF code directly through DTMF dialing menu or input the number of the code table through the storage dialing menu. The transmission can be decoded successfully only when the encoding is consistent with the decoding of the receiver.

### DTMF Dialing

This function is used to directly dial the DTMF code using the numeric keypad. Short press the button  to access the dialing menu, then input DTMF code and press PTT to transmit the code. If the decoding prompt tone of the receiver is "on", a ringtone will sound after successful decoding.

### Storage Dialing

Press and hold  to enter the storage dialing, and the interface displays ET: —. Press the number key to directly input the signaling number 01~32 (the number corresponding to the signaling code set by the programming software), and directly send the DTMF code.

### Redial

Long press the  key to implement the last DTMF code redialing.

## Remote Stun

The radio can send a remote stun command so that the receiver cannot transmit but can receive. It can also send a wake-up code to remove the remote stun status or the receiver can reset the status through programming software.

## Remote Kill

The radio can send a remote kill command so that the receiver cannot transmit or receive. The receiver can reset the status through programming software.

## Emergency Alert

Set various parameters of the emergency alarm through the programming software, including the alarm channel, alarm ID, alarm cycle, alarm time, and alarm interval. Then press the orange emergency alarm key to send the alarm, and the alarm will sound when receiving the emergency alarm.

## CTCSS Standard Frequency Table

CTCSS No.	Freq. [Hz]	CTCSS No.	Freq. [Hz]	CTCSS No.	Freq. [Hz]	CTCSS 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

CDCSS NO	Positive Code	Negative Code	CDCSS NO	Positive Code	Negative Code	CDCSS 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			

# Technical Specifications

General	
Frequency Range	136-174 MHz, 400-480MHz 350-390 MHz (receive only) 87-108 MHz (receive only)
Channels	255
Channel Spacing	25 KHz /12.5 KHz
Working Temperature	-20°C ~ +60°C
Dustproof and Waterproof	IP54
Antenna Impedance	50Ω
Working Voltage	DC 7.4V (±20%)
Battery Capacity	2600mAh
Frequency Stability	±2.5 ppm
Dimensions	59 (L) *36 (W)* 124 (H)mm
Weight	270g (including battery)
Transmitter	
RF Output Power	Low: 1W Middle:3W High: 5W
Modulation Mode	16K0F3E/8K50F3E
Noise and harmonics	≤-36dBm
FM noise	≤-40dB
Audio Distortion	≤5%
Adjacent Channel Power	70dB (wide)/65dB (narrow)
Modulation Limiting	±5 kHz (wide)/± 2.5kHz (narrow)
Receiver	
Sensitivity	≤ 0.2 μ V (wide)/0.2 μ V (narrow)
Adjacent Channel Selectivity	70dB (wide)/60dB (narrow)
Inter-modulation Immunity	70dB (wide)/65dB (narrow)
SNR	≥ 45dB (wide)/40dB (narrow)
Audio Output Power	Rated power 500mW, maximum power 900mW
Audio Distortion	≤5%
Receive Remaining	≥40dB

### 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, BeFone reserves the right to modify product design and specifications without further notice. We appreciate your understanding.

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