# BelFone

www.belfone.com





## 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.

## Acknowledgement!

Thank you for choosing BelFone series professional radio communication products!

Since 1989, BelFone has been dedicated to research and exploration in the field of radio communication technology throughout the decades, and has developed leading smart technology in the industry. Underpinned by research, development and design geared towards modern complicated and changeable communication environment, it is capable of tailoring specific communication solutions to your needs based on features of your industry. Superior products with outstanding performance may help you control the overall situation, while providing you with the best choice for smart scheduling and instructions communicating.

This operation manual is applicable to VHF /UHF FM Walkie Talkie: BF-532

#### Warning!

•In explosive atmospheres(inflammable gas, dust particles, powder-covered area, etc.), Please turn the power off.

## Instructions before Use

Following the safety precautions below may prevent damage to this product and personal injuries. To avoid potential risks, please read these instructions carefully before using the product, and operate the product as instructed.

- ◆The recommended usage rate is 1 minute for TX and 4 minutes for RX, Continuously TX will let the radio rear surface be in a high temperature state, When placing the radio, do not make the rear part touch the surface of objects with low melting point and low ignition point (such as plastic, etc.);
- ◆The radio shall be protected from exposure to the sun directy for long-time, kept in a place away from high temperature, high humidity, high dustiness or water splashes, and put on a stable surface:
- •Where use of the radio is prohibited or use of intercommunication may cause interference or danger, the radio shall have its power turned off as required by relevant regulations;
- •Please avoid to use the radio while driving, which may be against the Traffic Rules:
- •If you find any fault of the product, please turn off the power immediately, and then contact the local distributor of BelFone; unless otherwise specified in this Manual, maintenance shall not be performed by any person other than a maintenance worker authorized by BelFone Company;
- If this product is needed for further development, please contact BelFone Company or BelFone's distributor;
- ◆Do maintain the product surface clean and dry; for cleaning, use a piece of soft cloth dipped with mild detergent or clear water (without water dripping) to wipe the product surface.

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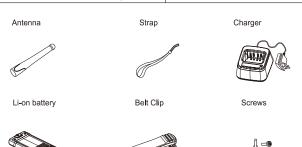
## **Unpacking and Device Inspection**

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

Be careful when taking the device out of the packing box. You'd better count the accessories against the following list before discarding the packaging. If you find any item is missing or damaged, please contact the local distributor of BelFone or directly contact BelFone Communication immediately.

#### Accessories

Items	Quantity
Antenna	1
Lanyard	1
Lithium batteries	1
Charger	1
Belt clip	1
Screw set	1
Instruction booklet	1
Warranty card	1
Certificate of Conformity	1



## **Intercom Accessory Installation**

## Installing/ removing the antenna

Hold the bottom of the antenna and screw it into the connector on the top of the walkie-talkie in a clockwise direction until it is tight.

To remove the antenna, turn it in a counter-clockwise direction to remove the antenna.



## Attaching/removing the belt clip

Secure the belt clip with the two supplied 3 x 4mm screws



## Attaching the lanyard

Thread the intercom lanyard through the loop at the top of the back of the intercom.



## Attaching/Removing the Battery

## Warning!

- 1. Don't short-circuit the battery, which may cause damaged or catch fire:
- 2. Never to remove the case of the battery, prevent battery short circuit;
- 3. Battery is flammable and explosive, don't throw it into fire or don't use it in dangerous area, such as gas stations

Insert the two slots on the bottom of the battery into the two corresponding slots on the bottom of the back of the walkie-talkie, then press down firmly on the top of the battery until you hear a "click" and the latch on the top of the back of the walkie-talkie locks the battery in place.



To remove the battery, switch off the intercom, then push the latch at the top of the back of the intercom down so that the top of the battery comes out of the intercom, then remove the battery.

Note: Do not load or unload the battery while the intercom is switched on.



#### Characteristics of lithium batteries

Original battery is activated before leaving the factory, please charge the lithium battery before use, charging/discharging cycle two or three times can make the battery capacity reach the best state.

- The general life of battery is: the number of charge/discharge cycles is limited, so you should try to avoid charging the battery when it has spare charge, and using it when it is not fully charged, this will shorten the life of the battery, try to use it up and recharge it, and use it again when it is full.
- To minimize battery power consumption, please remove the battery from the intercom when not in use and store the battery in a cool, dry place.
- For long-term storage, it is better to keep the battery charged. Please pre-charge the intercom lithium battery by about 50% of the power first, this will help prevent the battery's performance from decaying and affecting future use.
- Battery packs are repeatedly charged and discharged, their capacity gradually decreases, even if the battery is never used it will age (appear battery capacity decreases) and other phenomena. When storing batteries at high temperatures, the batteries will age even faster and will shorten their service life.

## Charging of lithium batteries

- •When the intercom low battery alarm indicates that the battery is below the normal operating voltage, please charge the battery in time to avoid affecting your normal use.
- •Be sure to charge the battery using the charger that comes standard with the intercom battery.
- •When charging the battery together with the unit, please turn off the intercom power first.
- •Do not remove the battery until charging is complete, as this may affect the charging efficiency and life of the battery.

Please remove the battery in time after normal charging is completed to avoid overcharging the battery and affecting its life.

Note: Please keep the temperature of the battery at around 20°C before charging, while keeping the ambient temperature between 4°C and 40°C for charging, otherwise it will affect the battery's service life and charging efficiency.

## **Charging Steps:**

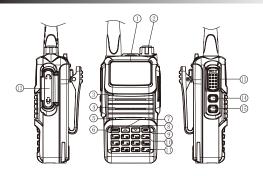
- 1.Plug the AC connector of the charger into the AC outlet socket.
- 2.Plug the battery or the radio with battery into the charger.
- 3.Making sure the battery plugs the charger, the charging process initiates when the charger indicator glows red.
- 4.The charger indicator glows green when the battery is fully charged, please remove the battery then.

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

## Installing an external speaker/microphone

Lift the headset cover and plug the speaker/microphone headset directly into the speaker/microphone jack.

#### Get Familiar with the Device



#### 1 Lighting

Torch illumination function.

#### 2 Power switch/Volume control

Turn the intercom power on or off. In the on state, turn clockwise to increase the volume. Turn counterclockwise to lower the volume.

#### 3 Microphone

#### 4 Speaker

#### (5) LED indicator

Lights up red when transmitting, green when receiving.

#### **6 MENU key**

Function menu key, DMTF signalling code for A.

#### ① Up key

Incremental selection of channel number, function menu, etc., DMTF signalling code represents B.

#### **8 Down key**

Decreasing selection of channel number, function menu, etc., DMTF signalling code for C.

#### 9 EXIT key

Exit (return) key, DMTF signalling code for D.

#### 10\* key

Short press to enter DFMF dialling (DTMF on), long press to redial.

#### 11)#

Long press to lock and unlock the keyboard.

#### 12 MIC-SP jack

Connects to an optional speaker/microphone, or an external writing cable.

#### 13 PTT key

Press the PTT key to transmit.

#### 14 Kev two

Allows the user to change the programmability. (See key definitions section for details)

#### 15 Key three

Allows the user to change the programmability. (see key definitions section for details)

## **LCD Display**

Yııl A DCS VOX ➪ 🖎 🚥

→Rx:450.18500

Tx:450.18500<sub>01</sub>

+ H W R DTMF ス 🙃

## **LCD ICON**

Will	Signal strength			
vox	Voice control on			
Ф	All tones on			
A.	All tones off			
<b>A</b>	Emergency alarm			
<b>—</b>	Battery level indication			
+/-	Transmit and receive different frequencies			
H/L	Transmit power high/low			
W/N	Broad/narrow band			
CT	Analogue subsonic			
DCS	Digital sub-tone			
A	Add/priority scan			
Z,	Turn on scanning			
R	Inverted frequency			
DTMF	Dual tone multi-frequency			
⊕	Keyboard lock			

## **Basic operation**

## Turning the power on/off

Turn the Power switch-Volume control clockwise to switch the intercom on.

Turn the Power switch-Volume control counterclockwise to switch the intercom off.

Volume adjustment

In the power-on state, turn the Power switch-Volume control to adjust the volume. Turn clockwise to increase the volume, counterclockwise to decrease it.

Note: You can turn on the monitor function to listen for background noise and adjust the volume according to the amount of background noise.

## Channel/Frequency selection

Press v to Select channel or frequency. Channel mode. Press channel number increments., Press v channel number decrements; in frequency mode, Press incremented according to the set step frequency, v decremented.

## Making a call

- First make sure that no intercom is transmitting on the channel you have selected.
- 2. Press and hold the PTT key and speak into the microphone.
- Keep a distance of 3 to 4 cm from the microphone and speak in a normal tone
  of voice to get the best sound quality from the intercom.
- When the PTT button is pressed, the LED lights up red to indicate that it is transmitting.
- 3. Release the PTT button and the intercom exits the transmitting state and enters the receiving state.

## Perform reception

When the channel your intercom is on is being called, the LED lights green and vou can hear the call.

If the call is weak and you have set a high squelch level for your intercom, you will not be able to receive the call.

If your intercom has CTCSS/CDCSS signalling edited, you will only hear calls from intercoms with the same CTCSS/CDCSS signalling, other calls will not be heard

## **Key definitions**

The corresponding functions for long or short presses of keys 2 and 3 can be set in the key definitions using the frequency writing software.

## The programmable keys contain the following functions.

- None: no function is assigned to the programmable keys.
- Call 1: Allows the user to make a signalling call using the single key function Call 1.
- Call 2: allows the user to make a signalling call using the one-touch function call 2.
- Stored dialling: This function is used to enable fast signalling code calls. The function is performed by writing the stored dialling function in the programmable keys and entering the serial number of the stored signalling code table.
- Listening: allows the user to turn on or off the listening function to listen for current channel activity, listening helps to hear weak signals (this function can only be set in long presses)
- $\bullet \mbox{Emergency alarm: allows the user to turn the emergency alarm function on or off.}$
- Power switch: allows the user to set the transmit power to high (H) or low (L).
- Light switch: Turns the light function on and off.
- Backlight: Turns on the backlight auto function. When no operation is performed for more than 5 seconds, the backlight will automatically turn off.

## Function shortcuts operation procedure

List	Function	Key operation
0	Mode switching	MENU - 0
1	Scanning	MENU → 1
2	Power selection	MENU → 2
3	Bandwidth setting	MENU → 3
4	Inverted frequency setting	MENU → 4
5	Squelch level	MENU → 5
6	Sound control level	MENU → 6
7	Transmit time limit	MENU → 7
8	Backlight	MENU → 8
9	Веер	MENU → 9
10	Address Book	MENU - 1 - 0
11	Communication log	MENU → 1 → 1
12	Local alarms	MENU - 1 - 2
13	Transmit beep	MENU - 1 - 3
14	Illumination	MENU - 1 - 4
15	Receiving sub-tone	MENU → 1 → 5
16	Transmitting sub-tone	MENU - 1 - 6
17	Language selection	MENU - 1 - 7
18	LCD contrast	MENU - 1 - 8
19	Power save switch	MENU - 1 - 9
20	Auto lock (keypad)	MENU → 2 → 0
21	Battery level	MENU - 2 - 1
22	Stepping frequency	MENU - 2 - 2
23	Analogue sub-tone scanning	MENU - 2 - 3
24	Digital sub-tone scanning	MENU → 2 → 4
25	Channel name editing	MENU - 2 - 5
26	Channel Delete	MENU - 2 - 6
27	DTMF Switch	MENU - 2 - 7
28	Side Tone Switch	MENU → 2 → 8

List	Function	Key operation		
29	ANI Code	MENU → 2 → 9		
30	PTT ID	MENU - 3 - 0		
31	Busy Channel Lockout (BCL)	MENU - 3 - 1		
32	Scan Add	MENU → 3 → 2		
33	Beat Frequency	MENU - 3 - 3		
34	Heterodyne setting	MENU → 3 → 4		
35	Channel Save	MENU → 3 → 5		
	Manual Keypad Lock	Long press •		
	Transmit 1750HZ single tone	PTT → •		
Auxiliary	Speed dial	Short press * • • • • • • • • • • • • • • • • • •		
functions	Redial	Long press * ttt		
	Сору	Key 2+ EXIT Simultaneous start-up		
	Clear data	Key 2+ MENU Simultaneous start-up		

## **Function description and operation**

## Mode switching - menu 0

This function selects the cyclic switching of the four display modes: frequency mode, channel, channel + frequency and channel + name.

The operational steps are as follows.

#### Scan - Menu 1

Scan is used to listen to the signals programmed on the intercom channels. When scanning, the intercom detects the signal on each channel to which the scan is added and can receive calls on all channels. When scan is on, the bottom of the screen shows:  $\Rightarrow$  icon.Press or  $\Rightarrow$  or  $\Rightarrow$  , Stop scanning. Scan out returns the last valid channel (frequency) received or the channel (frequency) that was scanned on.

#### Power selection - menu 2

This function is used to select the amount of transmitting power. It supports high and low power switching of 1W and 5W. High power screen display: "H", low power display "L".

## Bandwidth setting - menu 3

This function is used to set the width of the bandwidth, you can select wide band (25KHz), narrow band (12.5KHz).

For wide band, "W" is displayed on the screen, for narrow band, "N" is temporarily displayed on the screen.

Note: The bandwidth setting is a temporary setting, when you exit the setup menu, the parameter settings cannot be saved and the intercom automatically returns to the default settings.

## Inverted Frequency Setting - Menu 4

This function is used to achieve the current channel receive frequency, transmit frequency and receive sub-tone, transmit sub-tone interchange. When the inverted frequency function is switched on, the screen displays "R".

Note: When the intercom switches channels or is switched on and off again, it automatically exits the inverted frequency function.

#### Squelch level - menu 5

The squelch function is used to mute the speaker when you are not receiving a signal. When the squelch level is 0, the LED is always green and the intercom emits a "swish swish" background noise. The higher the squelch level, the better the squelch suppression, but as the squelch level increases, the reception of the intercom decreases. The default setting for the intercom is 3. Press increase Levels, value decrease.

#### Voice Control Levels - Menu 6

VOX Voice Control allows you to launch without pressing the PTT button, when this function is activated, the launch operation can be initiated directly by voice and will automatically end when the voice stops. vox levels can be adjusted from 1 to 9 or off, turn on voice control and the screen will display "VOX". Press increase Levels, decrease.

Note: The voice-activated function is only valid when a dedicated headset is plugged in.

#### Transmit time limit - menu 7

This function is used to set a continuous transmit time limit to prevent the intercom from occupying a channel for too long. For busier channels, the user can set a shorter transmit time limit. The transmit time limit can be set from 10 to 300 seconds, in steps of 10 seconds, or selected off. When the transmit time limit is set and the intercom continues to transmit for longer than the set time limit, the intercom screen will display: transmit timeout and automatically end the transmission.

## Backlight - Menu 8

This function is used to set the backlight of the screen and keypad, you can choose three states: auto, normally on and off. When the backlight is set to auto, the backlight of the intercom will automatically go off if no operation is performed within 5 seconds, and will automatically turn on when the key operation is performed again; select normally on and the backlight will remain on, off and the backlight will always be off.

## Beeps - Menu 9

This function is used to set the keyboard beep, with the option to turn the sound beep on and off. The prompt is turned on and the screen displays.  $\mathbf{q}$ ; The beep turns off and the screen displays.  $\mathbf{q}$ 

#### Address Book - Menu 10

This function is used to view the address book list stored by the writing software, up to 128 contact lists can be stored, in the address book you can view the address book name and the corresponding ANI code.

## Communication logs - menu 11

This function is used to view the latest 10 dialed call records received. If the received ANI code exists in the address book, the name of the address book is displayed, otherwise the address record only shows the received ANI code.

#### Local Alarm - Menu 12

The Local Alarm switch controls the sounding of the alarm for the police. When the emergency alarm is switched on via the side button, the screen displays an accon, the torch flashes and the LED indicator flashes alternately red and green. When the local alarm is switched on, a siren will sound. When the local alarm is switched off, the alarm does not sound.

Note: If local alarms are checked in the "Edit" "Emergency Alarms" section of the writing software, local alarms are turned on by default.

## Launch Beep - Menu 13

This function is used to set when a tone is sent to notify the user, with the option of transmit start, transmit end, both (transmit start and end) or select off. When set to Launch Start, the intercom will beep when the PTT key is pressed, and when set to Launch End, a beep will be sent when the PTT key is released.

#### Illumination - menu 14

This function is used to turn the lighting on or off.

14

## Receiving subsonic - Menu 15

This function is used to set the receive sub-tone value and allows you to set the analogue sub-tone, digital sub-tone forward and reverse codes or turn off the sub-tone. To enter the receive sub-tone setting, Press Switchable between different subsonic types, and then Press Select different standard analogue subtones, digital subtones or enter the subtonic values directly via the keypad. The receiving sub-tone is set to analogue sub-tone and the screen display shows: CT, the digital sub-tone display shows: DCS.

Note: This intercom supports non-standard subtones, which can be entered manually by entering non-standard subtone values.

#### Transmit Sub Tone - Menu 16

This function is used to set the transmit sub-tone value and allows you to set the analogue sub-tone, digital sub-tone forward and reverse codes or turn off the sub-tone. To enter the transmit sub-tone setting, Press Switchable between different subsonic types.and then press Select different standard analogue subtones, digital subtones or enter the subtonic value directly via the keypad. The transmitting sub-tone is set to analogue sub-tone and the screen displays when the PTT key is pressed for transmitting: CT, the digital sub-tone displays: DCS.

Note: This intercom supports non-standard subtones and transmitting subtones can be done by manually entering non-standard subtone values.

## Language selection - Menu 17

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

The operational steps are as follows.

Note: The voice selection operation can only be performed on the intercom if the voice environment is ticked on the frequency writing software to switch between English and Chinese.

#### LCD Contrast - Menu 18

This function is used to set the LCD brightness of the screen display. The level can be adjusted from 1 to 5. The level is set too high or too low and the screen display is blurred. The default setting is level 3.

## Power saving switch - menu 19

This function is used to set the power saving mode, which can be selected on or off. When the power saving is on, the intercom automatically enters the power saving state when no operation is performed within 5 seconds.

## Keypad Auto Lock - Menu 20

When the keypad auto-lock is on, no operation is performed within 5 seconds, the intercom keypad is automatically locked, the keypad is locked and the bottom right corner of the screen shows: 😙 , Except for the side keys and the PTT key, the other keys will not be operable.Long press 🖫 Keypad lock can be unlocked

## Battery level - menu 21

This function is used to check the remaining battery charge.

## Step frequency - menu 22

This function is used to adjust the step value size in the frequency mode. Stepping frequency can be selected: 2.5/5.0 /6.25/10.0/12.5/25.0/50.0/100.0kHz.

## Analogue Sub-Tone Scan - Menu 23

This function is used to scan all standard analogue sub-tones to determine if the transmitter has an analogue sub-tone rate.

When Analogue Sub-tone Scan is turned on, when a carrier signal is received, the intercom is automatically scanned in order of the CTCSS standard frequency

table and the screen displays the scanned sub-tone rates and serial numbers. When a valid analogue sub-tone rate is scanned, the sub-tone scan stops, at which point the sub-tone is the temporary analogue sub-tone received and transmitted by the channel, and no analogue sub-tone scan is performed if no carrier signal is received.

Note: This function does not support non-standard analogue sub-tone scanning.

## Digital sub-tone scanning - menu 24

This function is used to scan all standard digital sub-tones to determine if the transmitter has a digital sub-tone code.

When digital sub-tone scanning is switched on, the intercom is automatically scanned in order of the CDCSS standard code list when a carrier signal is received. The screen displays the scanned sub-tone code and serial number. When a valid digital sub-tone code is scanned, the sub-tone scan stops, at which point the sub-tone is a temporary sub-tone received and transmitted by the channel, and no digital sub-tone scan is performed if no carrier signal is received.

Note: This function does not support non-standard digital sub-tone scanning.

#### Channel Name Edit - Menu 25

This function is used to set the channel name that is displayed when the user mode is Channel + Name. In non-frequency mode, enter the Channel Name Edit menu and press

▲ v to select a space, 0-9, \_, -, a-z, A-Z, or a number or character in the range and press Toggle the cursor input position and edit up to 12 characters.

Note: Channel name editing can only be done on the intercom if channel editing is ticked on the frequency writing software.

Chinese channel names can only be entered directly into the channel edit name via the frequency writing software.

#### Channel Delete - Menu 26

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

Note: Channel deletion can only be performed on the intercom if channel deletion is checked on the frequency writing software.

If the current channel is set as an alarm channel, the channel cannot be deleted.

#### DTMF switch - menu 27

This function is used to switch the DTMF function on or off. When the DTMF function is switched on, the screen displays: DTMF. transmitting ANI code, manual dialling or stored dialling is only possible when DTMF signalling is set.

#### Side tone switch - menu 28

This function is used to turn the sidetone function on or off. By switching on the side tone, a corresponding sound will be generated when the DTMF code is sent.

#### ANI Codes - Menu 29

This function is used to add or change the ANI code set by the user in the frequency writing software. To access the ANI Code menu, press  $\bigcirc$  ,  $\bigcirc$  , Selectable from 0 to 9, A to D, \*, #, space  $\bigcirc$  or press Toggle the cursor input position, ANI code can be set from 3 to 8 digits. When a space is selected, the character that follows is deleted by default.

Note: You can only access the ANI menu for ANI code editing on the intercom if you check ANI code editing on the frequency writing software.

#### PTT ID - Menu 30

This function is used to set when to send the ANI code, with the option of transmit start, transmit end, both or select off. When the PTT ID is set to Start transmitting, the intercom will automatically transmit the ANI code when the PTT key is pressed; when the PTT ID is set to End transmitting, the ANI code will be

automatically transmitted when the PTT key is released at the end of the transmission

Note: ANI codes can only be sent when the intercom is set up with ANI codes and the DTMF switch is turned on.

## Busy Channel Lockout (BCL) - Menu 31

This function is used to prevent users from receiving unauthorised signals and sending signals to busy channels, keeping the channel free from interference. Three states can be set: Busy Channel Lock Off, Carrier + Sub Tone and Carrier. When busy channel lock is selected as carrier, press the PTT key when the intercom is in the receiving state, the screen will display: busy lock, and transmitting is prohibited.

#### Scan Add - Menu 32

This function is used in channel mode, where the channel parameter Scan Add can be selected from Add, Delete and Priority states.

Add adds the channel to the scan list, Delete does not add the channel to the scan, and Priority sets the channel as a priority scan channel.

Note: The intercom works in frequency mode and enters the scan add function option, the keys end do not work.

#### Scan Add - Menu 32

This function is used to select to turn the beat frequency function on or off when in frequency mode.

## Heterodyne setting - Menu 34

This function is used to set the heterodyne frequency of transmitting and receiving. In the frequency mode, you can set the receiving frequency directly in the standby interface and enter the heterodyne setting menu to set the transmitting frequency,

change the frequency by using the, keys ▲ or ▼ input the desired frequency directly. When setting the transmitting frequency is greater than the receiving frequency, the bottom left corner of the screen shows "+"; when the transmitting frequency is less than the receiving frequency, the bottom left corner of the screen shows "-".

Note: The transceiver heterodyne setting is only available when the intercom is working in frequency mode and the heterodyne setting function option is entered.

#### Channel Save - Menu 35

This function is a menu function in frequency mode, which saves the parameter data in frequency mode as a channel in channel mode. After successful saving, the data of the original channel will be replaced by the data of the new channel. The channel number can be entered directly via the keypad from 1-99. The channel is saved successfully and the saved channel settings are displayed when the intercom is working in channel mode.

Note: When the channel has been set as an alarm channel, the alarm channel cannot be replaced when the channel is saved. Channel save is the manual frequency writing function.

## **Auxiliary functions**

## Manual keypad lock

This function is used to directly access the data by long pressing the Turn on the keyboard lock function. Turn on the keyboard lock function and the bottom right corner of the screen shows. . Onne of the buttons can be operated except the side buttons and the PTT button. Press and hold again Unlock the keypad.

## **Transmitting Single Tone**

The transmitting mono frequency is a way to start a relay, the mono frequency can be changed by writing software in the range of 288 to 3000 Hz. in the PTT

transmitting state, At the same time press the key relation to transmit the set single tone, the intercom will then beep. Releasing the key relation to transmission of a single tone.

## **Memory Dialing**

The memory dialling function is written in the key settings by the writing software, press the side button to open the memory dialling, enter the number corresponding to the code to be sent 01~32 (the number corresponding to the code in the code table set by the writing software) and send the DTMF code directly.

## Speed dialling

This function is used to dial the called subscriber number directly using the numeric keypad. Short press  $\square$  to open speed dialing, press PTT after inputting DTMF code (3~16 digits) to achieve DTMF code transmission, or press side key two or side key three to exit DTMF dialing.

#### Redial

This function is used to implement the last DTMF transmitting code redial function.Long press to redial, DTMF dialling has not previously taken place.Long press not work.

## **Duplication**

This function supports the duplication of channel data between two radios. Connect the two radios via the dedicated data cable, press and hold the keys 2 and em, at the same time and turn on the Power switch/Volume control. Press the key em, to transfer the channel data from the master to the slave.

Note: Copy operation can only be performed on the intercom if Copy is ticked on the frequency writing software. Implement the intercom copy function.

## **Data clearing**

This function is used to clear the intercom data. Press and hold key two and simultaneously and turn the Power switch/Volume control on. The screen displays the reset operation prompt: "Reset?", Then press gain to confirm the reset. A successful reset will clear all data from the intercom.

Note: The reset operation can only be performed on the intercom if the reset is checked on the frequency writing software. Implement the intercom reset function.

## **CTCSS Standard Frequency Table**

CTCSS No.	Freq. [Hz]	CTCSS No.	Freq. [Hz]	CTCSS No.	Freq. [Hz]	CTCSS No.	Freq. [Hz]
1	67.0	11	94.8	21	131.8	31	186.2
2	69.3	12	97.4	22	136.5	32	192.8
3	71.9	13	100.0	23	141.3	33	203.5
4	74.4	14	103.5	24	146.2	34	210.7
5	77.0	15	107.2	25	151.4	35	218.1
6	79.7	16	110.9	26	156.7	36	225.7
7	82.5	17	114.8	27	162.2	37	233.6
8	85.4	18	118.8	28	167.9	38	241.8
9	88.5	19	123.0	29	173.8	39	250.3
10	91.5	20	127.3	30	179.9		

## **CDCSS Standard Code Table**

D023N	D071N	D134N	D223N	D306N	D411N	D503N	D631N	D734N
D025N	D072N	D143N	D226N	D311N	D412N	D506N	D632N	D743N
D026N	D073N	D152N	D243N	D315N	D413N	D516N	D654N	D754N
D031N	D074N	D155N	D244N	D331N	D423N	D532N	D662N	
D032N	D114N	D156N	D245N	D343N	D431N	D546N	D664N	
D043N	D115N	D162N	D251N	D346N	D432N	D565N	D703N	
D047N	D116N	D165N	D261N	D351N	D445N	D606N	D712N	
D051N	D125N	D172N	D263N	D364N	D464N	D612N	D723N	
D054N	D131N	D174N	D265N	D365N	D465N	D624N	D731N	
D065N	D132N	D205N	D271N	D371N	D466N	D627N	D732N	
D023I	D071I	D134I	D223I	D306I	D411I	D503I	D631I	D734I
D025I	D072I	D143I	D226I	D311I	D412I	D506I	D632I	D743I
D026I	D073I	D152I	D243I	D315I	D413I	D516I	D654I	D754I
D031I	D074I	D155I	D244I	D331I	D423I	D532I	D662I	
D032I	D114I	D156I	D245I	D343I	D431I	D546I	D664I	
D043I	D115I	D162I	D251I	D346I	D432I	D565I	D703I	
D047I	D116I	D165I	D261I	D351I	D445I	D606I	D712I	
D051I	D125I	D172I	D263I	D364I	D464I	D612I	D723I	
D054I	D131I	D174I	D265I	D365I	D465I	D624I	D731I	
D065I	D132I	D205I	D271I	D371I	D466I	D627I	D732l	

## **Technical specifications**

General					
Frequency range	VHF:136-174 MHz UHF:350-390/400-470MHz				
Number of channels	99				
Channel spacing	25 KHz /12.5 KHz				
Operating temperature	-20℃~+60℃				
Antenna impedance	50Ω				
Operating voltage	DC7.5V(±20%)				
Battery Capacity	2200mAh				
Frequency Stability	≤±2.5 ppm				
Dimension	60.4 (L) * 34.6 (W) * 109 (H) mm				
Weight	243g(include battery)				
	Transmitter				
RF output power	5W				
Modulation method	16K0F3E(wide)/8K50F3E(narrow)				
Spurious and harmonics	≤-36dBm				
FM noise	≤-40dB				
Audio distortion	≤5%				
Adjacent channel power	≥65 dB(wide)/60 dB(narrow)				
Modulation Limits	≤5KHz(wide)/2.5KHz(narrow)				
	Receiver				
Sensitivity	≤0.2µV(wide)/ 0.25µV (narrow)				
Adjacent channel selectivity	≥60dB(wide)/ 55dB (narrow)				
Intermodulation Immunity	≥60dB(wide)/ 55dB (narrow)				
Spurious Immunity	≥60dB(wide)/ 55dB (narrow)				
Signal to noise ratio	≥45dB(wide)/ 40dB (narrow)				
Audio output power	0.5W				
Audio distortion	≤5%				

#### Statement

To the best of our knowledge, this Manual has been prepared in an accurate and complete manner. For any doubt, please contact us timely for specific explanation. Considering the fast development of wireless communication technology, BelFone reserves the right to modify the product design and specification without any further notification. Your understanding in this respect will be much appreciated!



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