

Acknowledgments!

Thank you for buying two-way radios manufactured by BEIFENG TELECOM for mobile communication, which are believed to be capable of providing you with convenient and reliable communication and producing the best possible results.

BEIFENG TELECOM two-way radios adopt advanced technologies and it is believed that quality and function of the product will make you satisfied.

Applicable model

BF-TD501: UHF digital two-way radio

Need-To-Know

- ◆ Operation of a radio transmitter is banned by a government decree within its jurisdiction area without prior permission.
- ◆ Apply to the local radio management committee for a frequency before using two-way radios; otherwise, illegal operation will be penalized or arrested.
- ◆ Only a professional technician is allowed for maintenance.

Safety: It is important that a user keeps good understanding and knowledge of general danger information about two-way radios.

Warnings:

Explosive environment (gas, dust or smoke)

When filling or parking in a filling station, please power the two-way radio off.

If secondary development is performed on the product, please contact BEIFENG TELECOM or BEIFENG TELECOM vendors.

Precautions

Please follow following precautions to prevent fire, personal injury or damage to two-way radio:

- It is recommended to use the two-way radio with 1 minute of TX and 4 minutes of RX. Long-term continuous TX may result in heating of the rear of the product. Do not place the rear of the product on the surface of a plastic object.
- Under no circumstances can the product be modified.
- Do not expose the product to the direct sunlight for a long time or place it near a heating unit.
- Do not place the product in an extremely dusty, damp or smoky place or put it on an unstable surface.

- If unusual odor or smoke is sensed from the product, please cut the power source off immediately, and then remove the battery pack or battery case from the product. After this, contact local BEIFENG TELECOM vendors for information.

Unpacking and Inspection

Note: following unpacking descriptions are only for BEIFENG TELECOM vendors, authorized BEIFENG TELECOM service centers or factories.

Please carefully take the product out of the package. It is recommended to check accessories contained in the package according to the following table before discarding its package. If any article is missed or damaged, please immediately submit a claim letter to the freighter.

■ Supplied Accessories

Items	Attachment No.	Quantity
Antenna		1
Harness		1
Belt clip		1
Operating Instruction	BF-TD501	1
Charger BF-TD	501	1
Battery bay	BF-TD501	1
Battery cell	BF-TD501	1
Screw		2

Preparation

Warnings:

- Do not make the battery cell overcharged!
If charging for the battery pack is not completed in a specified time, please stop charging; otherwise, the battery pack may be overheated, cracked or on fire.
- Do not put the battery pack into a microwave oven and high-pressure container!
Otherwise, the battery pack may be overheated, cracked or on fire.
- Do not put a cracked and leaked battery pack near fire source!

If the battery pack is leaked (or smells acrid fume), please immediately keep it away from the flammable area, as electrolyte leaked from the battery pack may easily result in fire, thus causing smoke or sudden fire.

- Do not use an abnormal battery pack!
If the battery pack smells acrid fume and exhibits different color, deformation or exception due to any reason, please remove the battery pack from the charger or two-way radio and discard it.
- Use a dedicated charger.
BF-P118 charger is specially designed for the product, providing reasonable, safe and reliable charging.

■ Use of Lithium Battery

- Charge the battery pack before use.
- To minimize battery discharge, please remove it from the product if it is left unused and keep it in a cool place.
- If the battery pack is left unused for a long time:
 1. Remove it from the product.
 2. If possible, discharge the battery pack.
 3. Store the battery pack in a cool and dry place (lower than 25°C).

■ Characteristics:

- The capacity is gradually reduced after repeated charging and discharging.
- It is also aged if left unused.
- It requires longer charging time in a cool place.
- Charging in a heat place will shorten its service life. It is aged more quickly if stored in a heat place. Do not leave the battery pack in a car or next to a heating unit.
- If its service time shortens, even though it is fully charged, replace it with a new one. Continuous charging and discharging will result in leakage of the electrolyte.

Charging

After the charger is energized, the charger indicator lights green. Install the battery pack, contact properly, and then the red indicator is on to start charging. After the battery is fully charged, the green indicator is on. If the temperature is beyond the allowable range during charging, the red indicator flashes; if the battery is damaged or poorly contacted, the red indicator flashes.

■ Installation/Removal

- ◆ Do not have battery terminals short circuited and do not put the battery in the fire.
- ◆ Do not remove the case of the battery pack.
- ◆ Do not install the battery pack in a dangerous environment; otherwise, spark may result in explosion.

1. Gently press the battery pack into the rear of the product and push horizontally it till you hear “click” until the battery is locked by the latch at the bottom of the rear of the product.
2. To remove the battery pack, press the latch at the bottom of the rear of the product and lift it off.

■ Antenna

Grasp the antenna base, and turn the antenna clockwise to the connector on the top until it is tightened.

■ Belt clip

Install it along the slot till you hear “click” until it is locked by the slot.

■ Harness

Pass the harness through the runner on the top.

About the product

① Power /Volume

Power switch — Volume controller

1. Rotate it clockwise to power on. Rotate the knob to adjust the volume. If being configured to cancel all mute modes, the two-way radio will broadcast channel number in a voice manner. If the channel transmits no frequency, you will be prompted with a short message prompt instead of voice.
2. Rotate the knob to the end counterclockwise to switch the power off.

② Channel selector

1. Rotate to select a channel depending on different areas, each of which has 16 channels. If a channel selector is available for a channel, you will be prompted with a channel number voice prompt. If not, you will be prompted with a short message.
2. If the product is to establish a connection, channel switching will make the product send a disconnection signal.

③ LED indicators

1. LED lights red for Tx.
2. LED lights green for Rx.
3. LED lights red and green during power-on.
4. If a channel has no frequency, the red indicator and green indicator alternate flashing.
5. If the phase-locked loop is loss of lock, the orange indicator flashes.

④ Orange key

Enable a user to change programmable items (see following section for details)

⑤ Key 1

Enable a user to change programmable items (see following section for details)

⑥ Key 2

Enable a user to change programmable items (see following section for details)

⑦ Key 3

Enable a user to change programmable items (see following section for details)

⑧ PTT (press-to-talk) ON

Press to talk to the microphone for Tx.

⑨ MIC-SP-USB Interface

Connect to optional speaker/microphone and USB cable.

⑩ MIC-SP-USB Plug

The protective interface can ensure a better contact of speaker/microphone and USB cable.

Numeric key

Input letters and numbers

MENU key

Set functions of the two-way radio

Back key

Return to the previous operation

- OK key**
Confirmation key
- Left key**
Move to the left side
- Right key**
Move to the right side

Basic Operations

- **Power ON/OFF**
Rotate Power switch/Volume controller clockwise to switch the power ON.
Rotate Power switch/Volume controller counterclockwise to switch the power OFF.
- **Adjust volume**
Rotate Power switch/Volume controller to regulate the volume. Rotate it clockwise to increase the volume, i.e. the volume status bar showing full. Rotate it counterclockwise to reduce the volume, i.e. the volume status bar showing null.
 - When communicating with the other party, it is required to adjust volume accurately.

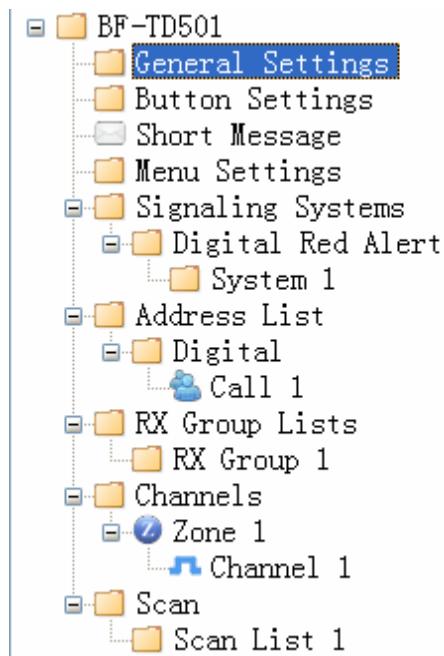
Note: when regulating the volume, the volume of channel reporting number is not controlled.
- **Channel Selection**
Rotate the channel selector - channel 1—16:
 - Reporting number: rotate the channel selector and the two-way radio broadcasts the current channel in a voice manner or displays the current channel, where it is located, magnitude of power, received or transmitted frequency on the screen.
- **Make a Call**
 - 1) Press PTT switch and talk to the microphone, the red indicator is ON;
 - 1) Keep the voice source about 3-4cm away from the microphone and talk a normal tone to allow the receiving station to obtain the best voice quality.
 - 2) When pressing PTT switch, the red indicator is ON.
 - 3) When pressing PTT switch, call type and call number display.
 - 2) Release PTT switch for receiving signals.
- **Receiving**
When the channel you are using is called, the green indicator is ON. This call can be heard only when the right code is received. After receiving the signal, the two-way radio will display receiving frequency, call type and number of the calling party.
- ◆ **Receiving Alarms**
 - Emergency alarm indication: check if the two-way radio sends audio or video indication after an emergency alarm is received. If this check box is not checked, the two-way radio will not display any information when receiving the emergency alarm.
 - Emergency alarm confirmation: check if the two-way radio sends out audio or video indication after an emergency alarm is received. If this check box is not checked, the

two-way radio will not display any information when receiving the emergency alarm.

- Emergency call prompt: check if the two-way radio sends video indication after an emergency call is received.

Functions

Settings



2. General Settings

General Settings

Device Name	<input type="text" value="BF-TD501"/>
Device ID	1 <input style="width: 20px; height: 20px; border: 1px solid #ccc; border-radius: 5px; vertical-align: middle;" type="button" value="▲"/>
Repeater ID	1 <input style="width: 20px; height: 20px; border: 1px solid #ccc; border-radius: 5px; vertical-align: middle;" type="button" value="▲"/>
Program Password	<input type="text"/>
Voice Encryption Type	OFF <input style="width: 20px; height: 20px; border: 1px solid #ccc; border-radius: 5px; vertical-align: middle;" type="button" value="▼"/>
Voice Encryption Key	<input type="text"/>
Locale	English <input style="width: 20px; height: 20px; border: 1px solid #ccc; border-radius: 5px; vertical-align: middle;" type="button" value="▼"/>
TX Preamble Duration(ms)	960 <input style="width: 20px; height: 20px; border: 1px solid #ccc; border-radius: 5px; vertical-align: middle;" type="button" value="▲"/>
Talkaround Group Call Hang Time(ms)	2000 <input style="width: 20px; height: 20px; border: 1px solid #ccc; border-radius: 5px; vertical-align: middle;" type="button" value="▲"/>
Talkaround Private Call Hang Time(ms)	2000 <input style="width: 20px; height: 20px; border: 1px solid #ccc; border-radius: 5px; vertical-align: middle;" type="button" value="▲"/>
Battery Saver	1:2 <input style="width: 20px; height: 20px; border: 1px solid #ccc; border-radius: 5px; vertical-align: middle;" type="button" value="▼"/>
Disable All LEDs	<input type="checkbox"/>
Frequency Visible	<input checked="" type="checkbox"/>
Reject Strange Call	<input type="checkbox"/>
Direct Mode	<input type="checkbox"/>
Menu Button Disable	<input type="checkbox"/>

Tone Alerts

Disable All	<input type="checkbox"/>
Channel Free Indication	<input type="checkbox"/>
Talk Permit Indication	<input style="width: 100px; border: 1px solid #ccc; border-radius: 5px; vertical-align: middle;" type="button" value="Digital"/> <input style="width: 20px; height: 20px; border: 1px solid #ccc; border-radius: 5px; vertical-align: middle;" type="button" value="▼"/>
RX Low Battery Interval(sec)	120 <input style="width: 20px; height: 20px; border: 1px solid #ccc; border-radius: 5px; vertical-align: middle;" type="button" value="▲"/>

1) Device name

- Device Name: enable a user to name the two-way radio he or she uses, such as BF-DH200.
- Set an alias for the two-way radio. When turning it on, it displays welcome message. A user can input up to 8 characters at most.

Valid characters include alphanumeric characteristics, space and special characters. Both Chinese and English are supported.

2) Device ID

- Set a unique ID for the two-way radio. Other two-way radios will call this ID for intercom (for example, private call or sending a text message).

- The valid set bit for device ID contains 8 digits. Decoding is possible when device ID matches calling ID of a private call (RX).

Each device shall have a unique ID to dial the number of the other party when realizing point-to-point communication (including private call and SMS), such as 1, 2,, 16776415.

3) Repeater ID

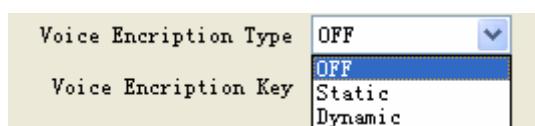
- The valid set bit for Repeater ID contains 8 digits. Decoding is possible when Repeater ID matches repeater system ID (TX).
- If a user is to communicate with the other party via the repeater, connection to the repeater can be realized only when the repeater ID (such as 123456) in the general setting is same as repeater ID to be connected (such as 12345).

4) Programming Password

- The encryption key to ensure data security.
- This function is used to protect parameters set for the two-way radio from being modified randomly. If a user wants to change parameters, a right key is required before programming. This password is a pure 8-digit number. It is null by default. (Note: a user shall remember this programming key if available. Forgetting this key will result in failure to program the two-way radio. To restore the key, it shall be returned to the factory for resetting. A user shall pay due attention to this.)

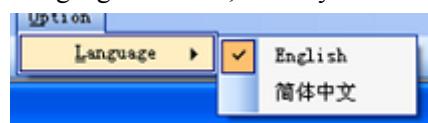
5) Voice Encryption Type

- The encryption mode to ensure safe voice communication.



6) Language environment

- The handset displays the language interface, where you can select a language to be used.



7) GPS

- GPS is used by the control center to keep track of locations of system members to arrange them scientifically.
- The model provides optional GPS. For details, consult with your local vendor.

8) Duration of TX Preamble (ms)

- Preamble is a bit string added before data message or control message (text message transfer, position message transfer, registration, two-way radio detection, single-call, etc) before transmission. This preamble increases SMS length to reduce probability of missing message for RX two-way radio. The duration of TX preamble is set to be the duration of preamble. When scanning number increases for the target two-way radio, increase of the duration of preamble is also required accordingly. If the scanning two-way radio loses data message often, increase this value in all the TX two-way radios. Nevertheless, a higher preamble will occupy the channel for a longer time. Thus, increase of the duration of TX preamble (0-8640 ms) can increase the success rate of receiving data when other two-way radios are scanning, but data volume able to be transmitted in the channel will be reduced.

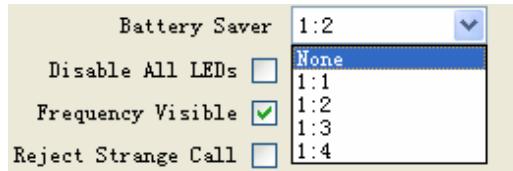
9) Suspension Duration of Talk around Group Call (ms)

- It is used to set the duration the two-way radio uses previously received or previously transmitted digital group ID to answer received calls or continue transmitted talk around group calling. After the timer of talk around group calling becomes invalid, the two-way radio uses the TX address book (digital group) specified by the channel for transmission. The duration range from 0 to 7000 ms. It is 2000 ms by default. If the repeater is used, change this duration to 4000 ms to prevent frequent connection applications. If communication is realized via the repeater, please manually disconnect it after call to release repeater resources.

10) Suspension time of talk around private call (ms)

- It is used to set the duration the two-way radio keeps talk around private call setting after a user presses the (PTT) key. This can prevent re-setting the call each time a user presses PTT for transmission. During this, the channel in fact is occupied, so other two-way radios are still capable of transmission. After the suspension timer becomes invalid, the two-way radio uses the TX address book specified by the channel for transmission. The duration ranges from 0 to 7000 ms. It is 2000 ms by default. If the repeater is used, change this duration to 4000 ms to prevent frequent connection applications. If communication is realized via the repeater, please manually disconnect it after call to release trunk resources.

11) Power Save Mode



- If this feature is enabled, an unoccupied two way radio will automatically enter the battery save mode, i.e. making certain features in standby mode. After a certain time or when a user presses any key, the two-way radio returns to normal operation and checks if any incoming call in the channel. If it is not detected, the two-way radio will return to the battery save mode, which will extend battery life (depending on chemical property of the battery and its application condition), but it delays the response time.
- It shall be noted that if this feature is enabled, for TX two-way radio, after the PTT key is depressed, a call will be established with a slight time lag (within ms). For RX two-way radio, it has lower possibility of correct synchronization in battery save mode, which may make delay more serious, thus resulting in loss of first-second message transmitted by some audios when the two-way radio has poor RF. Nevertheless, in a good RF coverage, this will not happen, but for extension of battery life, the delay is negligible. Therefore, it is recommended to enable battery-save mode for all two-way radios.

12) All LEDs Disabled

When the two-way radio is started and used, turn all indicators off except for TX red indicator and RX green indicator. Irrespective of backlight setting, all indicators are disabled (including backlight and start indicator).

3. Voice Prompt

1) All mute:

- When the two-way radio is enabled and used, turn off all prompt tones. Number reporting and prompt tones are disabled irrespective of number reporting or other prompt tone setting. Startup prompt tone 2 is enabled by default).

2) Channel unoccupied indication

- If this feature is enabled, you will hear a prompt tone after a voice call ends. You will also hear a prompt tone when the voice call in the current channel is interrupted (for example, an incoming impolite call from the two-way radio from the third party or sending an emergency alarm). However, a voice call ends when the calling party releases the PTT key irrespective of suspension time. This feature will prompt the receiver with when to answer it before a voice call from the other party ends to ensure a smooth talk.

3) Call allowed indication

- The two-way radio sounds this prompt tone after the PTT key is pressed. After this, the two-way radio can transmit it in the channel. The purpose is to prompt a user with successful connection for communication. Null and digital modes are available.

4) RX battery low prompt interval (s)

- When the two-way radio receives a call or is unoccupied, if it reaches the battery low threshold, you will hear a battery low prompt tone. RX battery low prompt tone sounds an alarm in a set interval to prompt a user to charge it. Allowable range is from 0 to 635 s.

4. Key Definitions

Button Settings

Long Press Duration(ms) 1000		
Orange Button	Short Press	Long Press
Button 1	Emergency On	Emergency Off
Button 2	Manual Dial For Private	Remote Monitor
Button 3	Scan On/Off	Backlight Auto On/Off
	High/Low Power	Repeater/Talkaround

One Touch Call

	Call member	Call Type	Short Message
1	None		
2	None		
3	None		
4	None		
5	None		
6	None		

1) Duration of long press (ms)

- Set the duration of pressing and holding a key when the key is seen as a long-press key, ranging from 250 to 3750 ms. The key sounds a prompt tone after pressing takes effect and it also sounds a prompt tone after timeout.

◆ Key Functions

- All prompt tones ON/OFF: enable a user to enable or disable all prompt tones.
- Battery capacity prompt: enable a user to check charging status via LED (ignorable).
- Emergency mode ON/OFF: enable a user to establish or terminate an emergency call.
- High/low power: enable a user to switch between high power and low power.
- Monitor: enable a user to enable or disable monitor function. A user can enable the

monitor function to monitor the channel. In digital mode, a user can only check if there is any activity before transmission. If yes, the two-way radio will transmit the voice, but not to ongoing actual voice or data communication.

- f) Permanent monitor: it has the same function as that of monitor (only for a handset), i.e. allowing a user to monitor the channel to ensure that there is no activity before transmission. The difference is that once permanent monitor is enabled, the two-way radio will be kept in this mode before pressing this key to disable this function.
- g) Unused channel deletion: enable a user to temporarily delete unnecessary channels from the scan list (excluding selected channels). For example, when the two-way radio is powered off and on again, deleted unused channels will resume in the scan list.
- h) Manual dialing: enable a user to flexibly choose to dial any individual number unavailable in the address book (only for digital display model).
- i) Address book: enable a user to access contact list (depending on the current channel) for conversation or enabling a random conversation function.
- j) Single-key call 1: enable a user to perform digital group call, digital private call, call prompt or send quick SMS.
- k) Single-key call 2: same as single-key call 1.
- l) Single-key call 3: same as single-key call 1.
- m) Single-key call 4: same as single-key call 1.
- n) Single-key call 5: same as single-key call 1.
- o) Single-key call 6: same as single-key call 1.
- p) Repeater/talk-around: enable a handset to connect or communicate via the repeater or enable talk-around communication beyond the repeater.
- q) Unset: not assign any function to programmable keys.
- r) Area switching: enable a user to switch between two areas. Note: each area has 10 channels. It has two areas totally.
- s) Scan ON/OFF: allow a user to enable or disable scan feature.
- t) Access authentication ON/OFF: enable a user to operate in normal mode and safe mode.
- u) Disconnection: enable a user to disconnect from the repeater.

Note: above key functions can be realized by long or short press on keys.

◆ Keys

1) Short press of orange key

- Enable a user to change short press of orange key. It has the same function as above.

2) Long press of orange key

- Enable a user to change long press of orange key. It has the same function as above.

3) Short press of key 1

- Enable a user to change short press of key 1. It has the same function as above.

4) Long press of key 1

- Enable a user to change long press of key 1. It has the same function as above.

5) Short press of key 2

- Enable a user to change short press of key 2. It has the same function as above.

6) Long press of key 2

- Enable a user to change long press of key 2. It has the same function as above.

● Short press of key 3

- Enable a user to change short press of key 3. It has the same function as above.

● Long press of key 3

- Enable a user to change long press of key 3. It has the same function as above.

◆ Single-key call

- Enable a user to press the key once to establish online group call, private call and call prompt. Except for talk-around group call, you will hear a prompt tone from the call bell, and then press PTT for conversation. If the single-key is set as SMS, quick SMS will be sent by pressing the key once. Single-key call can be assigned to a short press or long press programmable key.

- 6 lines can be used to configure single-key call, with each line containing a parameter used for a single-key call. Then, each line can be assigned to a short press or long press programmable key.

- Configure a single-key call and then assign to programmable keys;

1. Call object

Enable a user to select a call member from all available digital call types in the “address book” folder (i.e. private call, group call and repeater call, except for all call).

2. Call type

Enable a user to select a call type from selected call members in the “call object” list.

3. SMS

If “SMS” is selected, a user can select SMS content from the “SMS” list.

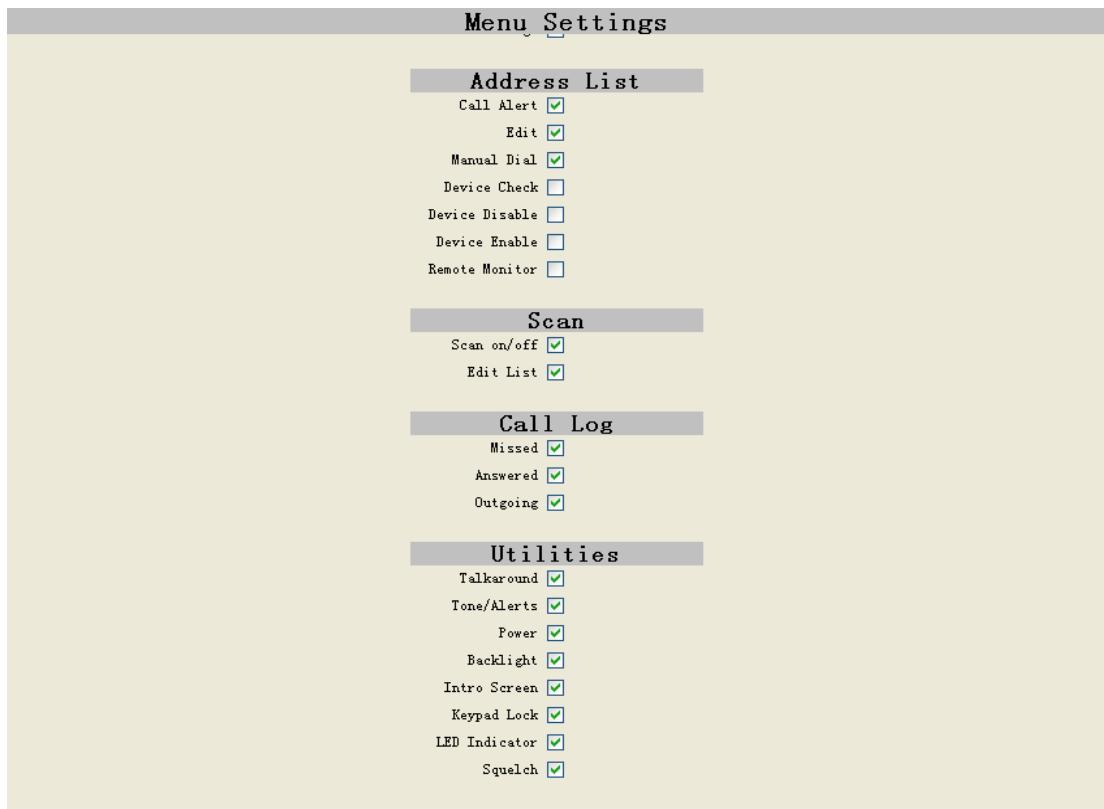
5. SMS Function

- Enable a user to select quick SMS. These SMS are selected from SMS setting.
- A user can input up to 140 characters. Valid characters include alphanumeric characters, space and special characters. A user can send SMS by setting short press or long press of programmable key (SMS) or accessing the menu.

This feature can be used to predefined SMS. These SMS (also known as quick SMS) are common ones repeatedly sent and stored in the two-way radio. A user does not have to input same contents repeatedly. A user can add up to 10 SMS to the “predefined SMS” list. For digital LCD two-way radios, a user can access the SMS feature and send SMS by accessing SMS menu or assigning long press or short press to SMS programmable keys. For non-digital LCD two-way radios, a user can only assign long press or short press to single-key call to realize this. This model has no menu to receive or display incoming SMS, nor a menu to select quick SMS.

Short Message	
	Message
▶ 1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

6. Menu Definitions



Menu Suspension Time

- Set the time the two-way radio keeps in menu mode. After this, the two-way radio returns to main screen. If this time is set to “0”, the two-way radio always keeps in this mode which is its built-in feature. The time ranges from 0- 30 s with step 1s.

SMS

- Enable a user to access “SMS” feature via menu or key. A user can check inbox, edit SMS, and send SMS or quick SMS.

7. Address Book

One, Call Prompt

- Enable a user to send a call prompt via menu. A call prompt allows a user to prompt other users to request them (receiver) to call back (calling party) when

communication is available. A call prompt can be received only when a channel is available. In digital mode, a user can only send out a call prompt to a single two-way radio.

Two、Edit

- Enable a user to edit alphanumeric characters on the screen. A user can add new items to the contact list and edit existing items in the contact list.

Three、Manual Dialing

- Enable a user to access “Manual Dialing” function via menu. Even though target ID is not in the address book, a user can input target ID to initiate a call or send a SMS via keyboard by “Manual Dialing” (such as a private call or call prompt).

Four、Device Detection

- Enable a user to send “detection” request via menu. “detection” allows a user to determine whether the two-way radio in the system is active without displaying any indicator to the user.

Seven、Remote Destroy

- Enable a user to send a “remote destroy” command to the target two-way radio via menu. If the request is sent successfully, all user interfaces will be disabled by the target two-way radio (for example, all indicators including backlight, prompt tones and all user inputs including PPT, excluding “Volume/ON/OFF” knob on the handset and “Power ON/OFF” on the onboard set). An emergency alarm or data received by the two-way radio or external device will be ignored to make voice received mute and the function of transmitting data or command is disabled. If the two-way radio is lost or stolen, enable this feature to disable the two-way radio. Nevertheless, the two-way radio will continue to monitor air interface to receive “activation” command.

Eight、Activation

- Enable a user to send “Activation” command to the target two-way radio via menu. “Activation” command is used to enable the disabled target two-way radio.

Nine、Remote Monitor

- Enable a user to send a “remote monitor” request to target two-way radio via menu. If the request is sent successfully, the microphone and transmitter of the target two-way radio will be activated for remote monitor.

8. Scan

a. Scan ON/OFF

- Allow a user to enable or disable scan feature for the current channel via menu. This feature allows the two-way radio to search the scan list connected to the current channel to find available channels for receiving or voicing.

b. Edit List

- Enable a user to edit the scan list via menu. “Edit List” allows a user to execute some operations on the scan list, such as viewing the scan list, changing priority of scan members, adding new items to the scan list or delete items from the scan list. Do not create a new scan list or delete existing scan list to or from the two-way radio.

9. Call Log

a. Missed calls

- Enable a user to track 10 last missed or failed incoming calls. A user can access the call log via menu. In addition, this log provides a user with a shortcut for initiating a call.

b. Answered calls

- Enable a user to track 10 last answered incoming calls. A user can access the call log via menu. In addition, this log provides a user with a shortcut for initiating a call.

c. Outgoing calls

- Enable a user to track 10 last outgoing calls initiated. Redialing function is provided and a user can access the call log via menu. In addition, this log provides a user with a shortcut for initiating a call.

10. Settings

1 Language environment

- Both English and Chinese are supported.

2 Talk-around

- Enable a user to set the two-way radio in talk-around mode via menu or keys. (The communication object shall be used within the communication distance without use of a repeater).

Scope of Applications

- 1) Communicate with the other party for a long time to prevent making the repeater busy to invite the other party for communication on-frequency communication in talk-around mode.
- 2) Communicate beyond the effective coverage area of the repeater.
- Immediately release it after communication; otherwise, communication of other members in the network will fail.

3 Tone/Prompt

- Enable a user to turn on or off sounds and prompt tones via menu.

4 TX Power

- Enable a user to adjust the TX power of the two-way radio via menu.

5 Backlight

- Enable a user to change backlight setting via menu or keys, i.e. OFF, AUTO, and ON.

6 Startup Interface

- Enable a user to enable or disable the startup interface via menu.

7 Keyboard Lock

- Enable a user to turn on or off keyboard lock via menu or keys.

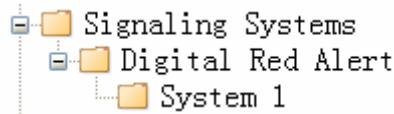
8 LED Indicator

- Enable a user to turn on or off LED indicators via menu.

9 Squelch

Allow a user to enable or disable the squelch feature.

11. Signaling System



1) Device remote destroy decoding: If this feature is checked, the two-way radio with the function of remote destroy or activation can be remotely destroyed or activated. TX and RX are disabled for a remotely destroyed two-way radio. The purpose is that if the two-way radio is lost, remotely destroy it to disable TX and RX functions to prevent information leakage.

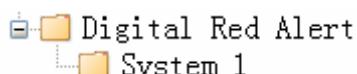
2) Remote monitor decoding: If this feature is checked, the two-way radio with the function of remote monitor can realize remote monitor. When this feature is enabled, the microphone is ON and voice from the two-way radio will be sent to the other party via the microphone. This feature is enabled in a specific condition to facilitate monitoring message from the other party.

3) Emergency remote monitor decoding: If this feature is checked, the two-way radio with the function of remote monitor can perform remote monitor over an alarm of the emergency system irrespective of whether the remote monitor decoding is checked. This feature allows a user to monitor an emergency alarm from the other party to understand his (her) dangerous environment and provide a rescue.

4) Duration of remote monitor (s): this feature is to set the time to open the microphone after the remote monitor is enabled. It is 10 s by default and set from 10 - 110s.

Digital Emergency Alarm

- ◆ The digital emergency alarm system is used as communication signaling protocol for two-way radios in digital mode. You can create up to 4 groups.

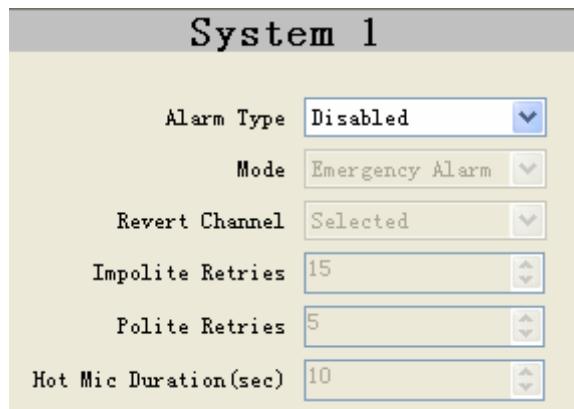


1) Add alarm

1. Right click “Emergency System” folder in the tree view.
2. Select “Add (A) -> Alarm (1)”.

2) Delete alarm:

1. Right click an alarm in the tree view.
2. Select “Delete (D)”.



◆ Alarm Type

- ◆ An alarm is a non-voice signal capable of triggering prompt or indication to the other two-way radio. This feature is to specify the alarm behavior of the two-way radio when a user presses the emergency alarm key.
 - 1) Disable: the two-way radio is disabled for transmitting an alarm signal.
 - 2) General: The two-way radio sends an alarm signal and provides audio indication that it is in emergency mode.
 - 3) Quiesce: the two-way radio sends an alarm signal, but not to provide audio indication that it is in emergency mode. In addition, it will not voice any received audio.
 - 4) Quiesce with voice: the two-way radio sends an alarm signal, but not to provide audio indication that it is in emergency mode. Then, it will voice legal channel activities.

◆ Modes:

- 1) Emergency alarm: the two-way radio sends an emergency alarm and then exits from emergency mode. This alarm is a non-voice signal capable of triggering prompt or indication for the other two-way radio.
- 2) Emergency alarm and call: the two-way radio will send an emergency alarm and an emergency call can be transmitted by press the PTT key.
- 3) Emergency alarm and voice: this option will enable Hot Mic to allow remote controlling of Hot Mic related functions, i.e. Hot Mic duration. The two-way radio will send an emergency alarm and activate microphone for an emergency call. A user does not have to press the PTT key to transmit voice.

◆ Response channel

- The channel is used for digital emergency alarm or voice. Any digital channel can be set to a response channel, including a channel specified by the channel selector.

◆ Impolite re-try

- Impolite transmission refers to transmission performed when there is an

activity in the current channel. The two-way radio will try impolite transmission several times to obtain confirmation and then try polite transmission several times. This feature is to set number of times trying impolite transmission of an emergency alarm. (1-15 times)

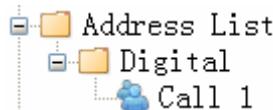
◆ **Polite retry**

- Polite transmission refers to transmission performed when there is no activity in the current channel. The two-way radio will try impolite transmission several times to obtain confirmation and then try polite transmission several times. This feature is to set number of times trying polite transmission of an emergency alarm with step of 1. (0 - ceaseless).

◆ **Mic activation time:**

- If "Emergency alarm and voice" is selected, after the two-way radio transmits an emergency alarm, the Hot Mic will be activated and the two-way radio will automatically start to transmit voice in specified Hot Mic duration. During this period, a user does not have to press the PTT key to transmit voice. After the duration elapses, the two-way radio stops automatically. A call initiated during this duration is an emergency call.

◆ **Address book**



◆ **Call type**

1. Private call (P): a call sent by a two-way radio to the other two-way radio.
2. Group call (G): a call sent by a two-way radio to a group of two-way radios.
3. All call (A): a one-way call sent by a two-way radio to all two-way radios in the channel.
All call will not cross different time slots or channels in the system for communication.
Only the two-way radio used by an administrator is configured with the capability of starting all call. All other two-way radios are set to monitor all call transmission by default.
4. Repeater call (RS): a call sent to the repeater by a two-way radio.

Settings

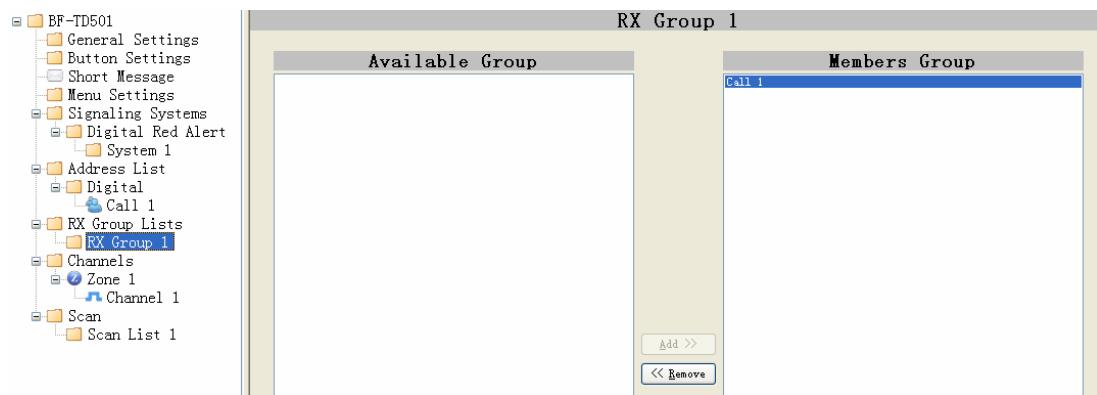
- 1、Right click “Address Book” in the tree view.

2、Select “Add (A) ->Group Call (G)(ID: *****)/Private Call (P) (ID: *****)/All Call (ID:16777215)/Repeater Call (R) (ID: *****)” .

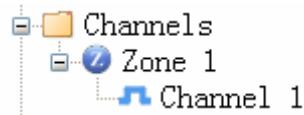
3、Right click a call member and select Rename (M) to assign a unique name for the call. Valid characters include alphanumeric characters, space and special characters. A name cannot be a null character.

◆ RX group list

The purpose of setting a RX group list is to realize inter-group calls. By adding a RX group and setting group call for the address book, add the group call in the available group to the included group. Setting of RX group list allows two-way radios simultaneously to be added to multiple member lists to receive group call communication initiated by the other group.



◆ Channel



◆ Area

The two-way radio supports 50 areas, each of which supports 16 channels. Total 160 channels are supported.

1) Add area

1. Right click “Channel” folder in the view.
2. **Select “Add (A)”.**
3. Assign a unique name for the area.

2) Add a channel in an area

1. Right click an area.
2. Select “Add (A)” to create a digital (channel 1).
3. Assign a unique name for the channel.

3) Delete area

1. Right click “Area” folder in the view.
2. Select “Delete (D)”.
3. The area is deleted.

4) Delete an channel in an area

1. Right click a specific channel in the view.
2. Select “Delete (D)”.
3. The channel is deleted.

◆ **Channel Functions**

Digital Channel

Channel 1

Scan List: <input style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px;" type="button" value="Scan List 1"/> Auto Scan: <input type="checkbox"/> Color Code: <input style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px;" type="button" value="0"/> Repeater Slot: <input style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px;" type="button" value="1"/> Allow Talkaround: <input type="checkbox"/> Receive (RX) Only: <input type="checkbox"/>	
RX TX	
RX Frequency (MHz) <input type="text" value="400.00000"/>	Offset (MHz) <input type="text" value="0.00000"/>
<input type="button" value="Mapping >>"/>	
RX Group List: <input style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px;" type="button" value="RX Group 1"/>	Default Address: <input style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px;" type="button" value="Call 1"/>
Emergency Alarm Indication: <input type="checkbox"/>	Emergency System: <input style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px;" type="button" value="None"/>
Emergency Alarm Ack: <input type="checkbox"/>	Power Level: <input style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px;" type="button" value="High"/>
Emergency Call Indication: <input type="checkbox"/>	TOT (sec): <input style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px;" type="button" value="495"/>
	TOT Rekey Delay (sec): <input style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px;" type="button" value="0"/>
	Admit Criteria: <input style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px;" type="button" value="Always"/>

1) Scan List

- ◆ Link the scan list to the channel. All members will be scanned in the list during scanning. A user can select any available scan list (including auto scan). If the channel scans no scan list, pressing the scan switch will prompt a user with an invalid key tone.

2) Auto scan

- ◆ Enable a two-way radio to start auto scan when a user selects the current channel. If auto scan is disabled, a user can still call scan feature by long press or short press of programmable key (scan ON/OFF) or Scan in the scan menu; this option can be set only by programming operations.

3) Color code

- ◆ This feature enables a color code to be assigned to a specified channel. A color code for each channel may be same or different. Each repeater can only have one color code. Different color codes are used to identify different systems. Switch channels by using different color codes. This feature enables a two-way radio to roam between different systems. A two-way radio uses different color codes to scan different channels. It ranges from 0 to 15.

4) Repeater Time Slot

- ◆ Digital time division multiple access (TDMA) technology divides a 12.5 kHz channel to two alternating time slots, which bear one call respectively when

working in repeater mode. Thus, A digital repeater channel can be completely described only when set frequency and set time slot are simultaneously specified. The intercommunication two-way radios or groups should have the same frequency and time slot.

◆ **Notes:**

- ◆ This feature applies only in repeater mode.
- ◆ Regardless of the time slot being monitored in repeater mode, i.e. time slot 1 or 2, the two-way radio will always monitor two-way radios transmitting in talkaround mode. RX two way radio in talkaround mode will monitor all talkaround calls and repeater calls in the configured repeater time slot.

5) **ARS**

◆ **None**

6) **Talk-around Allowed**

- ◆ During transmission, use RX parameters instead of TX parameters. The feature enables adjacent two-way radios to realize communication without a repeater, especially for a situation that two-way radios are adjacent and a repeater is beyond the range. The feature can switch between repeater and talk-around modes by short press or long press of programmable key (repeater/talk around) or talk around (Setting menu).

Note: For a digital two-way radio, this feature shall be enabled and TX frequency is different from that of RX.

7) **RX only**

- ◆ Configure a channel to RX only and disable any TX feature. All RX features for this channel also shall be disabled.

8) **RX frequency**

- ◆ Set the signal RX frequency of the current channel in MHz.

9) **Offset (MHz)**

- ◆ Create TX Frequency. The method is to add offset value to RX Frequency, which can ensure consistency of offset of the two-way radio and that of the repeater. A user can input up to 14 numbers or characters, including decimal point and minus sign. Click “Cloning” key to set the TX terminal.

10) **Mapping**

- ◆ Add offset to RX frequency to obtain TX frequency.

11) Reference frequency

- ◆ Down offset for RX and TX frequency difference.

12) Rx group list

- ◆ Select group call communication available for the current channel.

13) Default communication address

- ◆ A call initiated in the channel when pressing PTT key. If “null” is selected, it will stop initiating a call in the channel and prompt a user with an invalid call prompt tone.

14) Emergency System

- ◆ Link all available digital emergency alarm systems to the channel for use in emergency. If “null” is selected, a user is prohibited to transmit an emergency call in the channel.

Note:

- ◆ Configure the digital emergency alarm system in the “signaling system” folder before selecting; otherwise, the default value is used (null).
- ◆ “RX only” function should be disabled.

15) TX power

- Set TX power level of the two-way radio in the channel. A user can switch between high power and low power by long press or short press of programmable keys (High/low power) or power (“Setting” menu).

Note:

High: used when a stronger signal is required to increase TX distance.

Low: used for short range communication and preventing TX into other geographical groups.

16) TX Timeout timer (s)

- TX timeout timer (TOT) is the time the two-way radio continues transmission before transmission automatically ends. This feature can ensure that a channel will not be exclusively occupied by any one of two-way radios. For a busy channel, a user can set shorter TX timeout. It ranges from 15 to 495 s.

17) TOT key update delay (s)

- Set the time after the TX TOT fails (which will terminal two-way radio TX) and before a user is allowed for transmission again the two-way radio waits in the channel. It ranges from 0 to 255 s.

18) Permission condition

- Define when to allow transmitting voice or data in the channel. This feature can prevent the two-way radio transmitting in a used channel. If the two-way radio has different TX and RX frequencies, it monitors activity of RX frequency only. If there is no activity in RX frequency, even though the TX frequency is used, the two-way radio will still allow a user to use this TX frequency for transmission.
 1. Always: the two-way radio always transmits signals when pressing PTT key.
 2. Channel unoccupied: before transmission, the two-way radio will check if there is an unoccupied channel. If the channel has voice, it will prompt a user with prompt tone if the transmission is disabled.
 3. Available color code: before allowing transmission, the two-way radio will check if a specified color code is not used. If it is the same as available color code for receiving, the transmission is disabled.

Operating Instructions of BF-TD501 Two-way Radio Programming Software

Startup Interface Settings

Settings for programming software

Enable the programming software and create a new window. Select BF-TD501 and a proper frequency range, and click OK button to enter operating interface (the same below).

1、Left click the tree view “General Settings” to enter “General Settings” editing interface.

2、Under “Device Name”, set information to be displayed during start-up. Valid characters include alphanumeric characters, space and special characters. A name cannot be a null character.

3、Left click the tree view "Menu Definition" to enter "Menu Definition" editing interface.

4、Check “Startup Interface” at the bottom of the “Setting” operation under “Menu Definition”.

Notes:

1. for a function to be set, a user shall check the related option in the programming software before the function is enabled.

2、After all functions are set, please be sure to write setting information to the two-way radio via the programming software.

Operating Instructions of Two-way Radios

12. Legends

H/L	High power/low power
	Keyboard lock
	Missed calls
	Unread SMS
	SMS full
	Digital mode
	Analog mode
	Sound OFF
	Voice sign
	Address Book
	Scan
	Area
	SMS
	Call log

	Settings
	Battery state
	Talkaround ON

Manual Setting of ON and OFF of Startup Interface

- 1、Click “MENU” key to access the function list.
- 2、Press left and right “—” key to select “Setting” to enter “Setting” interface.
- 3、Press left and right “—” key to select “Two-way Radio Setting” option and press “OK” to confirm it.
- 4、Press left and right “—” key to select “Startup Interface” and press “OK” key to confirm it.
- 5、Press left and right “—” key to select “ON” or “OFF” to open or close the startup interface.

Function setting table

Display Description		Icon
Address Book	Record preset communication numbers	
Scan	Scan a channel added to the scan list	
Area	Select a channel with an area already set	
SMS Edit	SMS	
Call Log	View call log	
Settings	Settings of the two-way radio	

Display Description		Setting
Call 1	The first call set for the two-way radio	
Number	A call ID responding to call*	Display a 1-8 digits number
New contact	Establish a new call	Able to set a new private call or group call
Input a number	Input and store name of a new call ID	Input a random group of numbers from 1 to 16776415
Input a name	Input and store name of a new contact	Input random letters, numbers or texts
Manual Dialing	Input device ID to be called directly on the display	

Two-way Radio Settings

- 1、Click “MENU” key to access the function list.
- 2、Select “Address Book” and press “OK” key to enter “Address Book” option.
- 3、Press “—” key to select new contact and press “OK” key to enter new contact editing interface.
- 4、Edit new contact: private call (P) (ID:1-16776415). Press “OK” key to enter the new contact editing interface.
- 5、Edit a name: assign a unique name for a call. Valid characters include alphanumeric

characters, space and special characters. A name cannot be a null character . Press “OK” key to select the “Ring Tone” for the new contact.

6、Select tone: unselected ring tone, tone 1-10

Manual Dialing Setting

- 1、Click “MENU” key to access the function list.
- 2、Select “Address Book” and press “OK” key to enter “Address Book” option.
- 3、Press “—” to select “Manual Dialing” function and press “OK” key to enter “Manual Dialing” editing interface.
- 4、Input ID to be called in the LCD manual dialing interface (ID:1-16776415).
- 5、Press PTT key to send dialed ID.

Scan	
Display Description	
ON	Scan is OFF
Channel 1, 2, 3...	Scanning channels added to the scan list
OFF	Scan is ON
View/edit the scan list	View/edit information in the scan list
Scan group (selected)	Select edited scan group list
Editing priority	Set the scan priority for scan groups
Priority 1	This scan group will be scanned in the top priority

Priority 2	This scan group will be scanned in the second priority
Priority OFF	Disable scan priority for scan groups
Scan group 1 (channel 1)	Edit channel 1 in scan group 1
Editing priority	Edit channel priority in the scan list
Delete	Delete channels in the scan list

Scan setting

Settings for programming software

Left click “Menu Definition” to check “Scan ON/OFF” and “Editing List” options under “Scan”, and then select “Scan Group” in the “Scan List” on the “Channel” editing interface.

Manually set channel scan

- 1、Click “MENU” key to access the function list.
- 2、Select “Scan” and press “OK” key to enter “Scan” editing interface.
- 3、Press “—” to select “Open” option and press “OK”, and the two-way radio enters scan mode.
- 4、To exit from the scan function, repeat above steps, and select “Close” and press “OK” key.

Manually set scan group/scan channel priority

If channel 1 of the preset “Scan Group 1” is “Priority 1”, and channel 2 is “Priority 2”, to change them to “Priority 2” and “Priority 1” respectively:

- 1、Enter “Scan” editing interface.
- 2、Press “—” key to select “View/Edit List” function and press “OK” key to confirm it.
- 3、Press “—” key to select “Channel 2”, select scan group/channel and press

“OK” key to confirm it.

- 4、Select “Edit Priority” and press “OK” key to confirm it.
- 5、Press “—” key to select “Priority: 1” and press “OK” key to confirm it. Then the priority of channel 1 is “OFF” and the priority of channel 2 is “1”.
- 6、Repeat above steps to set the priority of channel 1 and select channel 1 “Priority: 2”.

Note: “Scan Group *” of the channel shall be preset in the programming software. The scan list of the scan group can be set only when the two-radio switches to the channel.

Manually add a scan channel

- 1、Enter “Scan” editing interface.
- 2、Press “—” key to select “View/Edit List” function and press “OK” key to confirm it.
- 3、Press “—” key to select “Add a Scan Channel” and press “OK” key to confirm it.
- 4、Press “—” key to select “Channel *”, press “OK” key and enter the priority editing interface of the added channel.
- 5、Press “—” key to select “Priority 1, 2, Off” and press “OK” key to confirm it.

Manually delete a scan channel

- 1、Enter “Scan” editing interface.
- 2、Press “—” key to select “View/Edit List” function and press “OK” key to confirm it.
- 3、Press “—” key to select “Channel *”, and press “OK” key to confirm it.
- 4、Press “—” key to select “Delete”, press “OK” key for confirmation, and enter the “Delete Items” editing interface to determine whether to delete the scan

channel.

5、Press “—” key to select “Yes” or “No” and press “OK” key to confirm it.

Area	
Display Description	
* Area*	A preset area in the two-way radio
Area* saved	A channel in the current setting area* that can be used by the two-way radio

“Area” switching

1、Click “Key Function” option.
2、Select any one of key definitions from four programmable key definitions, drop down the function menu and select “Area Selection” key .

3、Two-way radio programming

4、Click to define “Area Selection” key, and the display displays “Area” selection interface.

5、Press left and right “—” key to select switching area.

Manually set “Area” switching

1、Click “Menu” key to access the function list.
2、Press right and left “—” key to select “Area” option.
3、Press “OK” key to enter “Area” editing interface.
4、Press right and left “—” key to select “Area*” preset by a software maker and press “OK” key to confirm it.

SMS	
Display Description	
Inbox	View received SMS
New	Edit and send SMS
Preset	SMS preset in the two-way radio
Sent Record	sent SMS
Delete all	Delete all received or sent SMS

Manually edit and send SMS

- 1、Click “MENU” key to access the function list.
- 2、Press left and right “—” key to select “SMS” option.
- 3、Press "OK" key to enter “SMS” editing interface.
- 4、A、Press left and right “—” to select “Inbox”
 - B、Press “OK” key to view received SMS.
- 5、A、Press left and right “—” key to select “New” .
 - B、Press OK key to enter SMS editing interface to edit SMS.
 - C、Press OK key to enter the editing interface to edit receiver information.
 - D、Press “OK” key to send it.
- 6、A、Press left and right “—” to select “Preset SMS”
 - B、Press “OK” key to enter preset SMS selection interface.
 - C、Press left and right “—” key to select already-edited SMS.
 - D、Press “OK” key to send it.
- 7、A、Press left and right “—” key to select “Sent” .
 - B、Press “OK” key to enter preset SMS selection interface.
 - C、Press left and right “—” key to view sent SMS.

Call Log	
Display Description	
Missed calls	Display missed calls from the calling party

Received calls	Display received calls from the calling party
Outgoing calls	A call initiated by the two-way radio
FFFFFF none	

Settings for programming software

- 1、Left click “Menu Definition” in the tree view.
- 2、Check “Missed” , “Answered” and “Outgoing” under “Call Log”
- 3、Write setting information to the two-way radio.

Note: to check included options of “Call Log” , viewing of call log will be prohibited in the two-way radio.

Settings	
Two-way Radio Settings	
LCD contrast	LCD display contrast
Talk-around ON/OFF	
Tone/Prompt	Set prompt tone
All tone OFF/ON	Turn on or off all prompt tones
Conversation allowed	Prompt the other party with release of PTT and the called can break in.
Call bell	A prompt tone when initiating a call
Keyboard tone	Key tone when operating the keyboard
Increasing tone	A type of prompt tone
TX Power	High/low power used when manually adjusting transmission of the two-way radio
Backlight	A switch to set backlight
Startup Interface	Set startup interface information
Keyboard lock	Lock keys excluding channel decoder and volume switch

Language selection	Chinese/English are available
Information about two-way radio	
Battery status (%)	Display current remaining battery capacity percentage.
Your number	Display your device ID and group ID
Firmware version	
CP version	

Communication mode setting for programming software

- 1、Left click “Channel” option.
- 2、Left click to select area channel and enter channel editing interface.
- 3、On the channel editing interface, set the frequency of the two-way radio to RX and TX pilot frequency.
- 4、Check “Talk-around allowed” option.

Define a “Talk-around/online” key for one-key switching of communication mode.

- 1、Left click “Key Definition” in the tree view to enter “Key Definition” editing interface.
- 2、On the “Key Definition” editing interface, select any one of key definitions from four programmable key definitions, and drop down the function menu to select “Talk-around/online” option.

Manually set communication mode for the two-way radio

- 1、Click “MENU” key to access the function list.
- 2、Press left and right “—” key to select “Setting” to enter “Setting” interface.
- 3、Press left and right “—” key to select “Two-way Radio Setting” option and press “OK” to confirm it.
- 4、Press left and right “—” key to select “Communication Mode” and press “OK” key to confirm it.

5、Press left and right “—” key to select “Talk-around” or “Repeater mode: 2” and press “OK” to confirm it.

High/low power setting

Settings for programming software

In the “Channel Editing” interface, under TX section – “TX power” , drop down “High” and “Low” options to preset high/low TX power for the two-way radio.

Manually set the two-way radio

1、Enter “Two-way radio setting” option.

2、Press left and right “—” key to select “TX power” and press “OK” key to confirm it.

3、Press left and right “—” key to select “High” or “Low” and press “OK” key to confirm it.

Note: If it displays “High” , it means that the two-way radio is in high TX power state. Press “OK” key to set the two-way radio to “low” TX power state.

Special Features

Remote Monitor/Destory/Activation

1、Left click “General Setting” in the tree view to enter “General Setting” editing interface.

2、In the “Signaling System” editing interface, under “General Setting” , check “Remote Destroy Decoding” .

- 3、 Set the remote destroy and allow private call only (0*****), and remotely destroy a two-way radio in proper order.
- 4、 Left click “Menu Definition” in the tree view and under the “Address Book” on the menu editing interface, check "Monitor", “Remote Destroy” and “Activation” .
- 5、 Write setting information into the two-way radio through the programming software.
- 6、 Turn the two-way radio on, and on the manual dialing interface, input device ID to be remotely destroyed/activated and press “OK” key to confirm it.
- 7、 Press left and right “—” key to select “remote destroy/activation” and press “OK” key to confirm it.

Emergency alarm

“Emergency alarm mode” is generally defined in orange keys. When the mode is enabled, the two-way radio will provide different alarm modes depending on set emergency alarm mode.

Note: To enable emergency mode, the communication mode of the channel is required to be set to group call by default.

- 1、 Define ON or OFF of emergency alarm mode via key definition.
- 2、 Right click “Emergency System” in the tree view and add emergency “Alarm 1” .
- 3、 On the channel editing interface, set “Default Communication Address” to group call and set “Emergency System” to “Alarm *” .
- 4、 On the channel editing interface, check “Emergency alarm indication”, “Emergency alarm confirmation” and “Emergency alarm prompt” .
- 5、 Edit options on the “Emergency System” interface.

FCC Regulations

Federal Communication Commission (FCC) requires that all radio communication products

should meet the requirements set forth in the above standards before they can be marketed in the U.S, and the manufacturer shall post a RF label on the product to inform users of operational instructions, so as to enhance their occupational health against exposure to RF energy.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates 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

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: "Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment."

Compliance with RF Exposure Standards

Beifeng's 2-way radio complies with the following RF energy exposure standards and guidelines:

- United States Federal Communications Commission, Code of Federal Regulations; 47 CFR §§ 1.1307, 1.1310 and 2.1093
- American National Standards Institute (ANSI) / Institute of Electrical and Electronic Engineers (IEEE) C95.1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999 Edition

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 a Beifeng's approved clip, holder, holster, case, or body harness for this product. Using approved body-worn accessories is important because the use of Beifeng's or other manufacturer's non-approved accessories may result in exposure levels, which exceed the FCC's occupational/controlled environment RF exposure limits.
- If you are not using a body-worn accessory and are not using the radio in the intended use position in front of the face, then ensure the antenna and the radio are kept at least 2.5 cm (one inch) from the body when transmitting. Keeping the radio at the proper distance is important because RF exposures decrease with increasing distance from the antenna.
- Use only manufacturer's name approved or replacement antennas, batteries, and accessories. Use of non-manufacturer-name approved antennas, batteries, and accessories may exceed the FCC RF exposure guidelines.