Digital Radio
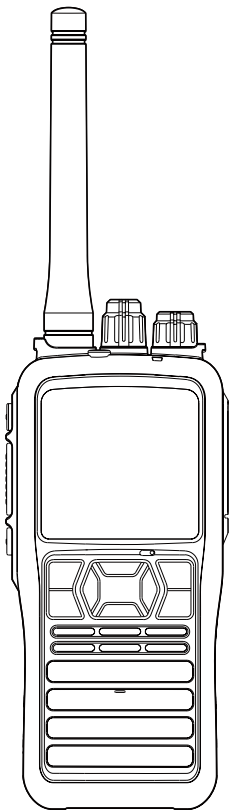
User's Manual

To Users

Thank you for purchasing our product! This Manual is designed to make you quickly grasp use of this device. In order to avoid physical injury or property loss due to improper operation, please read this Manual carefully before using this device.

Notice

The device meets the requirements of FCC PART 90, PART 97 and PART 15. Local laws and regulations shall be complied with when setting up or using the equipment, and corresponding qualifications and relevant procedures shall be obtained if necessary. Consulting the relevant authorities is suggested.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
‧ Reorient or relocate the receiving antenna.
‧ Increase the separation between the equipment and receiver.
‧ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
‧ Consult the dealer or an experienced radio/TV technician for help. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

ISEDC RSS warning

This product meets the applicable Industry Canada technical specifications. / Le présent matériel est conforme aux specifications techniques applicables d'Industrie Canada.

This device complies with ISEDC RSS standard (s).

Operation is subject to the following two conditions: (1) this device may not cause interference,and (2) this device must accept any interference,including interference that may cause undesiredoperation of the device.

Le présent appareil est conforme aux CNR d'ISEDCapplicables aux appareils radio.

L'exploitation est autorisée aux deux conditionssuivantes:

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Radiation Information

1. This product is limited to occupational applications that can meet RF energy radiation requirements. The user must be fully aware of the RF radiation hazards and can take corresponding measures to meet the RF radiation limitation requirements.
2. Radio frequency (RF) refers to the electromagnetic frequency that can be radiated into space. It is a widely used technology in the fields of communication, medical treatment, and food processing. It will generate certain RF radiation during use.

Safety Information

In order to use the radio safely and efficiently, please read the following safety information:

・The radio can only be maintained by professional technicians. Do not disassemble the radio without permission.
・Only the batteries and chargers specified by our company can be used.
・To avoid problems caused by electromagnetic interference and electromagnetic compatibility, please turn off the radio in places where the "Please turn off the radio" sign is displayed, such as hospitals and other health care places. When taking the flight, please turn off the radio if the crew requests to do so.
・In vehicles with airbags, do not place the radio in the area where airbag deployment may be involved.
・Please turn off the radio before entering flammable or explosive environment.
・Do not replace or charge the battery in a flammable or explosive environment.

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- Please turn off the radio before approaching the blasting area and the detonator area.
- Do not use the radio with damaged antenna. A damaged antenna may cause minor burns when it comes into contact with the skin.
- Do not expose the radio to direct sunlight for a long time or place it near the heating Radio.
- If you wear a portable radio, make sure the antenna is at least 2.5 cm away from your body when the radio is transmitting.

WARNING:

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.

CAUTION:

Use the approved charger to charge the battery. The remaining lithium-ion battery is limited to 30% pursuant to the new lithium battery shipment regulation approved by International Air Transport Association (IATA). Before use, charge the battery. It is recommended that the radio remain powered off during charging.

Use of battery not recommend or replaced with incorrect type of battery may result in a risk of fire and explosion or personal injury.

Maximum ambient temperature around the power supply equipment including charger must not exceed 40°C (104ºF) and device operating temperature not exceed 55°C (131ºF).

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

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transferred to other users.
- Do not use this device if the operational requirements described herein are not met.

Operating Instructions:
- Transmit no more than the rated duty factor of 50% of the time. To transmit (talk), push the Push-To-Talk (PTT) button. To receive calls, release the PTT button. Transmitting 50 % of the time, or less, is important because this radio generates measurable RF energy exposure only when transmitting (in terms of measuring for standards compliance).
- Hold the radio in a vertical position in front of face with the microphone (and the other parts of the radio, including the antenna) at least one inch (2.5 cm) away from the nose. Keeping the radio at the proper distance is important because RF exposures decrease with distance from the antenna. Antenna should be kept away from eyes.
- When worn on the body, always place the radio in approved clip, holder, holster, case, or body harness for this product. Using approved body-worn accessories is important because the use other manufacturer's non-approved accessories may result in exposure levels, which exceed the 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 approved supplied or replacement antennas, batteries, and accessories. Use of non-manufacturer-name approved antennas, batteries, and accessories may exceed the FCC and IC RF exposure guidelines.

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- For a list approved accessories please consult your local dealer for information.

European Union (EU) Waste of Electrical and Electronic Equipment (WEEE) directive：

The European Union's WEEE directive requires that products sold into EU countries must have the crossed out trash bin label on the product (or the package in some cases). As defined by the WEEE directive, this cross-out trash bin label means that customers and end-users in EU countries.

EXPOSURE RF compliance et Lignes de contrôle et Instructions opérationnelles

contrôle et Instructions opérationnelles

Pour contrôler votre exposition et garantir le respect des limites d'exposition dans un environnement professionnel / contrôlé, suivez toujours les procédures suivantes.

Des lignes directrices:

- Ne retirez pas l'étiquette d'exposition RF de l'appareil.
- Les instructions de sensibilisation des utilisateurs doivent accompagner l'appareil lors de leur transfert à d'autres utilisateurs.
- N'utilisez pas cet appareil si les exigences opérationnelles décrites ici ne sont pas remplies.

Mode d'emploi:

- Ne transmet pas plus que le facteur de marche nominal de 50% du temps. Pour transmettre (parler), appuyez sur le bouton Push-To-Talk (PTT). Pour recevoir des appels, relâchez le bouton PTT. La transmission 50% du temps, ou moins, est importante car cette radio génère une exposition mesurable à l'énergie RF uniquement lors de la transmission (en termes de mesure pour la conformité aux normes).

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- Tenez la radio en position verticale devant le visage avec le microphone (et les autres parties de la radio, y compris l'antenne) à au moins 2,5 cm du nez. Garder la radio à la bonne distance est important car les expositions RF diminuent avec la distance de l'antenne. L'antenne doit être tenue à l'écart des yeux.
- Lorsqu'il est porté sur le corps, placez toujours la radio dans un clip, un support, un étui, un étui ou un harnais de corps approuvé pour ce produit. L'utilisation d'accessoires approuvés par le corps est importante car l'utilisation d'accessoires non approuvés par d'autres fabricants peut entraîner des niveaux d'exposition qui dépassent les limites d'exposition aux RF des environnements professionnels / contrôlés.
- Si vous n'utilisez pas d'accessoire porté sur le corps et n'utilisez pas la radio dans la position d'utilisation prévue devant le visage, assurez-vous que l'antenne et la radio sont maintenues à au moins 2,5 cm (un pouce) du corps lors de la transmission. . Il est important de garder la radio à la bonne distance, car les expositions RF diminuent avec l'éloignement de l'antenne.

User Interface
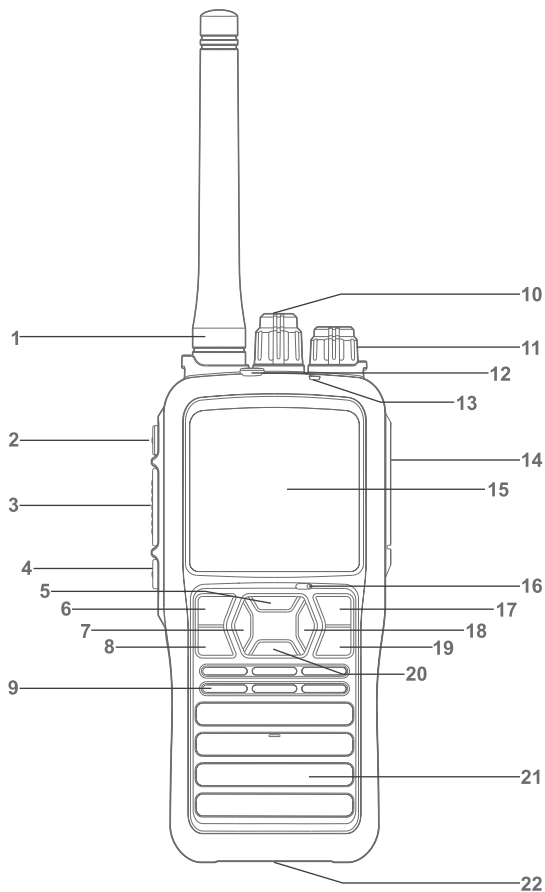
About the Device

1	Antenna	12	Alarm key
2	P1 key	13	LED indicator
3	PTT key	14	Accessory port
4	P2 key	15	LCD display
5	Up key	16	Microphone
6	Menu/OK key	17	Return key
7	Left key	18	Right key
8	Contact shortcut	19	Exit key
9	Speaker	20	Down key
10	Channel knob	21	Alphanumeric keypad
11	Power switch/volume control knob	22	Charging contact

LCD Icon

Signal strength identification		Battery level identification	
$\mathbb{Y}_{\text{Il}}$	Strong	▬	3 grids
$\mathbb{Y}_{\text{I}}$	Medium	▬	2 grids
$\mathbb{Y}$	Weak	▭	1 grid
$\mathbb{Y}_{\times}$	No signal	▭	0 grid
Transmitting power identification		**Scanning function identification**	
Ⓗ	High	⟳	Scanning
Ⓛ	Low	P₁	Receiving priority channel
		⟳	Receiving non-priority channel
GPS/Bluetooth identification (for specific models only)		**Other identifications**	
🛰	Valid GPS signal	🎤	Recording enabled
🛰	Invalid GPS signal	⚠	Emergency alarm enabled
✳	Bluetooth	DM	Direct mode
		RM	Relay mode

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Radio LED Indicators

Radio Status	LED Indication
Standby	Green Slow Flash
Low Battery	Red Fast Flash
Transmit (TX)	Solid Red
Receive (RX)	Solid Green
Programming Mode (Read from Radio)	Red Fast Flash
Programming Mode (Write to Radio)	Green Fast Flash

Power On/Off and Volume Control

Power on/off:

Turn the power switch knob to turn on/off the radio normally.

Note: The battery needs to be charged, otherwise the radio cannot be turned on under low power state. The startup screen will be displayed after start up.

Volume control:

In standby state, turn the knob clockwise/counterclockwise to adjust the volume that fits your ears.

Battery Installation
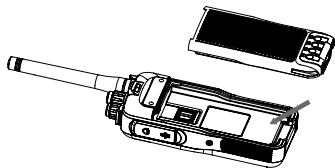
Note: If you need to remove the battery, please turn off the radio first, then lift up the bottom battery latch and take out the battery pack.

Antenna Installation
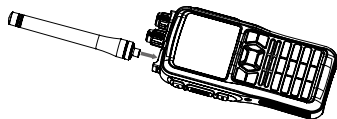
Note: Do not hold the radio by its antenna; otherwise, the performance and service life of radio may be affected.

Belt Clip Installation
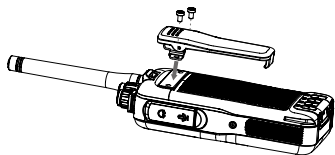
Step 1: Remove the belt clip screws from the device.
Step 2: Align the radio screw holes on the belt clip, and then tighten the screws.

Accessory Installation
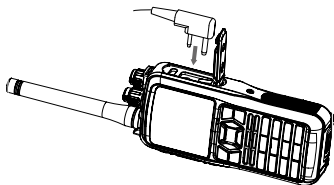
Step 1: Open the accessory connector cover.

Step 2: Align the plug of the accessory (matching headset or programming cable) with the accessory connector.

Step 3: Insert the accessory properly into the accessory connector.

Charging Function

The charger tray can support to charge either radio or battery pack.
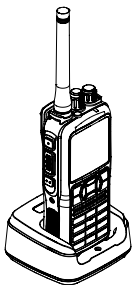
Device charging
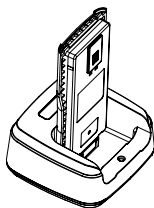
Battery pack charging

Charging precautions:

· Please use the original charger tray of the model for charging.
· When charging, it is recommended that the radio remain powered off during charging.
· To obtain the best battery performance, please charge for at least 5 hours for the first time.
· Do not charge the battery pack overnight, otherwise it will affect

the battery pack life. When the battery is fully charged, please stop charging in time.

· The charger can only be used to charge the battery pack of the product. Do not use it to charge other battery packs, otherwise the charger and battery pack may be damaged.

· The battery pack should be stored in a cool and dry place after being fully charged. Do not expose the battery pack near the fire or to the sun, otherwise there are safety risks.

· During charging, it is not recommended to transmit the radio.

· The battery pack may slightly heat up during charging, which is a normal phenomenon.

Channel and Zone Selection

Rotate the [Channel Selection] knob clockwise or counterclockwise to switch to the desired channel.

Zone:

A zone is a group of channels. Users can include the channels with same property into a zone, which facilitates users to effectively manage existing channels. This product supports a maximum of 32 zones and 16 channels in each zone. Users can select the zone by the following means:

Menu: Enter the "Zone" menu, press [Up]/[Down] key to select the

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required zone, and press [OK] key to switch to the selected zone.
P1/P2: If the dealer has configured [Zone Up]/[Zone Down] shortcut keys for user, the shortcut key can be used to switch to the require zone. (Function not confirmed)

Note:

1. Configure the required zone through programming software.
2. Configure channel for each zone through programming software. All channels of the zone will be displayed after switching to the zone, and the zone before switching will be displayed after switching back from another zone.

Transmitting/Receiving

After starting up successfully, the user can conduct various call operations.

Precautions for radio use:

・When the radio is transmitting, keep the radio in a vertical position, and keep the microphone 2.5-5 cm away from the mouth. When transmitting, the radio should be at least 2.5 cm away from the head or body.

・Do not turn on/off the radio repeatedly during use, and adjust the volume to a level suitable for your hearing.

Precautions for radio operation:

1. Before using the radio for communication, please set the transmitter and receiver to the same frequency point.

2. After the analog channel is configured with the same sub-code frequency, the radios can communicate normally; radios with mismatched sub-code cannot communicate.

3. After encrypting the digital channel, the receiver and transmitter need to set the same password in order to perform normal communication.

4. If the digital channel sets the color code, only when the transmitting color code and receiving color code are the same can the radios communicate.

5. Transmit/receive at high/low power (switch by P1/P2 key).

6. After inserting the headset, press the [PTT] key to transmit and receive speech through the headset.

7. Transmit with VOX headset after enabling VOX (turn on/off VOX through side key and insert the VOX headset).

Programmable Key

1. Configure the functions of programmable key through programming software.

2. The [P1/P2] key includes the following functions: Scan On/Off, High/ Low Power Switch, VOX On/Off, DM On/Off, One Touch Call, Zone Selection, Emergency Alarm, etc.
3. Write the set parameters to the radio and press the corresponding programmable key to enter the corresponding function.

Device Name Configuration and Modification

1. Enter the basic setting interface of programming software to configure or modify the device name.
2. Device name can support: Letters, numbers, Chinese, special characters, etc.
3. After the device name is configured, device information can be viewed through the device menu.

Device ID

1. The device ID is related to the private call contact, and the ID range is 1 to 16776415.
2. When using a private call contact to call the other party, enter the device ID of the other party and then call.
3. To view local ID, enter the device menu and view the device information.

Password Configuration

1. To prevent information leakage, you can set the reading and writing password through programming software.
2. Each time you read or write, you must enter the correct 8-digit password before operating.
3. To cancel the password, clear the password and confirm.
4. To change the password, key in the old password first, and then

enter the new password to rewrite.
5. When you forget the password, you can perform factory reset or reprogram it.

Sub-Code Frequency Configuration

1. The sub-code frequency supports CTCSS, DCS positive code, DCS reverse code, standard sub-code and non-standard sub-code.
2. Only when the transmitting sub-code and receiving sub-code are the same can they communicate to each other.
3. A radio with sub-code can transmit to radio without, but cannot receive signal without sub-code.

Channel Spacing

1. There are one type of channel spacing: 12.5K.

2. Radios with same frequency point and different channel spacing can communicate to each other.

Frequency Configuration

1. Frequency range: 430MHZ-470MHZ.
2. The frequency can be set to any value within this range.
3. In DM mode, you can only communicate when the transmitting frequency and receiving frequency are the same.
4. In DMR relay mode, the transmitting frequency and receiving frequency are different, but it needs to be supported by repeater.

Scan List Configuration

1. The scan list can contain analog channels and digital channels.
2. After configuring the scan list, the scan switch should be turned on.

3. Turn on/off the scan list through menu operation or the preset [P1/P2] key.
4. After scanning is turned on, a scan icon will flash on the screen.
5. During scanning, the channels scanned include the channels in the scan list and the current main channel.
6. When any channel in the scan list is transmitting a signal, it will stay on that channel upon signal detection.

High/Low Power

1. Set the high/low power through menu options.
2. The programming software can set the high/low power for each channel according to the use condition.
3. If set to high power (4W), the transmission distance is long, but with higher power consumption, which may shorten the battery life.
4. If set to low power (1W), the transmission distance is short, but the low power consumption.

DTMF Configuration

1. The DTMF interface of the programming software can configure the DTMF function related parameters, such as side tone, duration, interval time, online telegram code, offline telegram code, transmission start sound, transmission end sound, transmission start and end sound.
2. After the transmitter turns on the side tone, when the [PTT] key is pressed to transmit, the transmitter itself will also give DTMF sound.
3. DTMF coded content only supports numbers 0~9, letters: ABCD, and characters: * #.

Emergency Call

1. Configure functions of the alarm system through programming

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software, such as alarm channel, re-transmission times, and alarm type.
2. Emergency call supports the digital channel and analog channel.
3. Set the side button as the"Emergency Call" button in the "programmable button".
4. When Analog or Digital channel triggers emergency call, an emergency call code will be sent. Emergency call will be automatically transmitted after remaining re-transmit call becomes 0, and automatic emergency calls will repeat transmit twice.
5. The transmitter will sound the alert tone after the emergency call is sent. Receiver side also will receive an alert tone after receiving the emergency call.

Digital Encryption

1. Add encryption through programming software, which only supports basic encryption, maximum 8 characters.
2. Supported characters include: numbers, uppercase letters, lowercase letters.
3. The same encryption template must be configured for transmitter and receiver for normal intercom, otherwise the speech content cannot be heard clearly.
4. The main purpose is to prevent the content of the speech from being monitored by other people at the same frequency.

Color Code

The color code can identify a system. Users who need to communicate with each other must set the same color code. The radios does not respond to channel activities that do not match the preset color code.
1. Set the color code by matching programming software.
2. The color code range of this product can be set: 0~15.

Contacts

1. Contacts are only valid for digital channels.
2. There are three kinds of contacts: private call, group call and all call; and each digital channel needs to be set through programming software.
3. When making private call, only when the frequency is the same, the other party's ID exists and is in standby state communication can be made.
4. When making group call, pay attention to whether the contact is in the receiving group, and all radios in the same receiving group can receive the speech.
5. When making all call, all channels with the same frequency can receive the speech, and the all call ID is fixed.
6. Manually enter the number to call the other party (know the ID number of the other party).
7. The contact name or ID number is displayed on the screen when the contact is called or answered.

Short Message

1. Modify the default quick message content to other characters by programming software.
2. You can delete the quick message content by programming software.
3. Up to 8 quick messages are supported.
4. New short message content can be created through the radio menu.
5. You can send a quick message to a private call contact.
6. You can send a quick message to the group call contact, and all the radios in the group can receive the message.
7. After creating a new message, you can send it to a private call contact, group call contact or manually key in contact and send to a private call or group call contact.

Call Alert (Private call only)

Call alert can be used to get a hold of someone quickly for requesting the recipient to call back. Call alert are repeated until response to. To respond, the recipient can talk back.

1. The methods of sending "Call Alert" are as follows:
   - ・Enter "Menu" – "Contacts" – "Contact List", select the contact to whom a call alert will be sent for confirmation, enter "Server", and select "Call Alert" for sending.
   - ・Enter "Menu" – "Contacts" – "Dial", enter the other party's device ID for confirmation, and select "Call Alert" for sending.
   - ・Press "#" on the standby interface to enter the dial-up interface, enter the other party's device ID under the private call type for confirmation, and select "Call Alert" for sending.
   - ・Configure "One touch call" through CPS and send "Call Alert".
2. After "Call Alert" is sent successfully, it will prompt "Send OK", otherwise it will prompt "Send Fail".
3. After "Call Alert" is received, a display interface will pop up, showing the sender's ID or alias, and the alert tone will continue to sound.

Remote Monitor (Private call only)

Remote monitor is used to send a command to the other party, and the other party's device sends a voice to the command sender in a secret state to achieve the purpose of monitoring the other party.

1. The transmission duration of monitoring voice can be configured through CPS.
2. The monitored party's device sends voices secretly without any alert on the interface.
3. The interface for receiving remote monitor voices is the same as the interface for receiving private calls.
4. The methods of sending "Remote Monitor" are as follows:
   - ・Enter "Menu" – "Contacts" – "Contact List", select the contact to

whom the remote monitor will be sent for confirmation, enter "Server", and select "Remote Monitor" for sending.
- ・Enter "Menu" – "Contacts" – "Dial", enter the other party's device ID for confirmation, and select "Remote Monitor" for sending.
- ・Press "#" on the standby interface to enter the dial-up interface, enter the other party's device ID under the private call type for confirmation, and select "Remote Monitor" for sending.
- ・Configure "One touch call" through CPS and send "Remote Monitor".

Radio Check (Private call only)

Radio check is used to check whether it can communicate normally with the other party.
1. The method of sending "Radio Check" is as follows:
- ・Enter "Menu" – "Contacts" – "Contact List", select the contact to whom Radio Check will be sent for confirmation, enter "Server", and select "Rad Check" for sending.
- ・Enter "Menu" – "Contacts" – "Dial", enter the other party's device ID for confirmation, and select "Radio Check" for sending.
- ・Press "#" on the standby interface to enter the dial-up interface, enter the other party's device ID under the private call type for confirmation, and select "Radio Check" for sending.
- ・Configure "One touch call" through CPS to send "Radio Check".
4. After "Radio Check" is sent successfully, it will prompt "Send OK", otherwise it will prompt "Send Fail".
5. After "Radio Check" is received, there will be no interface alert, and the device will automatically reply.

Radio Disable/ Kill (Private call only)

In case of loss of the device or other circumstances, in order to prevent the other party from using the device, the device remotely deactivated

by execute "Rad Disable" command.

1. The methods of sending "Kill" are as follows:
   ・ Enter "Menu" – "Contacts" – "Contact List", select the contact to whom will be sent for confirmation, enter "Server", and select "Rad Disable" for sending.
   ・ Enter "Menu" – "Contacts" – "Dial", enter the other party's device ID for confirmation, and select "Rad Disable" for sending.
   ・ Press the "#" key on the standby interface to enter the dialing interface, enter the other party's device ID under the individual call type for confirmation, and select "Rad Disable" for sending.
   ・ Configure "one touch call" through CPS to send "Rad Disable".
2. After "Rad Disable" is sent successfully, it will prompt "Send Successfully", otherwise it will prompt "Send Failed".
3. The interface will display "Rad Disable" immediately after receiving it. At the same time, no "Menu" and "Buttons" except ON / OFF device. It can only be restored to normal through configure software CPS or receiving the "Rad Enable" command.

Radio Enable /Activate (Private call only)

It is used to restore the device that was inhibited to normal.

1. The methods of sending "Activation" are as follows:
   ・ Enter "Menu" – "Contacts" – "Contact List", select the contact to whom "Rad Enable" will be sent for confirmation, enter "Server", and select "Rad Enable" for sending.
   ・ Enter "Menu" – "Contacts" – "Dial", enter the other party's device ID for confirmation, and select "Rad Enable" for sending.
   ・ Press the "#" key on the standby interface to enter the dialing interface, enter the other party's device ID under the individual call type for confirmation, and select "Rad Enable" for sending.
   ・ Configure "one touch call" through CPS to send "Rad Enable".
2. After "Rad Enable" is sent successfully, it will prompt "Send Successfully", otherwise it will prompt "Send Failed".

3. After receiving "Rad Enable", the remotely inhibited device will automatically restart and return to normal. After receiving "Rad Enable", the device that is not remotely inhibited will have no other reaction except for automatic reply.

VOX Function

When voice control function is enabled, the radio will automatically transmit after the microphone picks up enough sound input, and exit the transmit mode after not picking up sound input.

1. Preset the [Program] key to [VOX On/Off] key through programming software.
2. The side key is equipped with a VOX switch and has an "On"/"Off" prompt sound. VOX levels can be preset through programming software: Level 1, Level 2, and Level 3, where Level 3 is the most sensitive. When the radio VOX function is on, the preset VOX level is used.
3. After VOX is enabled, it works on both analog and digital channels.
4. VOX needs to insert the VOX headset, and the speech can be directly transmitted by speaking to the headset MIC without needing to press the [PTT] key. On the contrary, IVOX transmits directly by obtaining the sensitivity through the radio MIC. If the sensitivity of radio is low, VOX transmission will not be triggered. The speech can be transmitted only after the sensitivity reaches the transmission threshold.
5. VOX delay detection time refers to the waiting time after VOX is transmitted.

TOT Function

In order to prevent some users from occupying the same channel for a long time, users can set to enable the TOT function. When the user's continuous transmission time on the current channel reaches

the set time, the radio will stop transmitting and the speaker will give a time-limit prompt tone. You can set the time limit for transmitting by programming software. 0~180 seconds are available. When 0 is selected, the user can keep on transmitting.

Squelch Step (SQ)

1. SQ is only valid for analog channels.
2. After SQ is set to 0, the speaker will automatically turn on and be in the monitoring state.
3. The higher the SQ step, the better the noise floor suppression effect.
4. SQ can be configured by programming software, or directly set by entering the radio menu.

Key Lock

1. After the key is locked, the function of the key cannot be used, and can only be operated normally after unlocking.
2. Unlocking: First press [Menu] key and press [*] key again to unlock.
3. Lock time can be set in the programming software, ranging from 5s to 255s.
4. You can also set to lock [P1/P2] key and [PTT] key, etc. at the same time. If [PTT] key is locked, the radio cannot transmit.

Roger Beep Tone Elimination

Only valid for analog channels
1. When the roger beep tone elimination function is enabled, the receiver will not have roger beep tone after the transmission is completed; otherwise, there will be tail tone.
2. There are two types of transmit end tone elimination: 55HZ and 62HZ.

3. Roger beep tone elimination can also be enabled directly through the radio menu.

Power saving function

To extend battery life, the user can enable power saving mode. When the power saving function is enabled, When the display backlight is turn off, , the radio will automatically enter the power saving mode. In the power saving mode, the user can press [PTT] key to transmit or the radio can receive normally when a signal is detected. The power saving function can be enabled/disabled by programming software.

1. The power saving function supports three settings (ratio of sleep to wake up), i.e. 1:1, 1:2 and 1:4.
2. After the power saving function is enabled, both the analog channels and digital channels can enter the power saving mode normally in standby state.
3. When a signal is received during sleep, it will wake up quickly.

Language Selection

Supported language: Chinese and English.
1. Language can be set by programming software and radio menu.
2. After switching the language, all menu options will be changed to the selected language.
3. The radio voice announcement is defaulted to English.

Backlight Time

1. Backlight refers to the time when the LCD screen of the radio is on, and the screen is off after waiting for the set time in standby state.
2. The backlight options are: on, 5s, 10s, 15s, 30s, maximum 180s.
3. After the screen is off, the screen will be on when a signal is received.

4. Backlight time can be written directly by programming software or set by radio menu.

LCD Screen Brightness

LCD screen brightness can be set from level 1 to 6, where 1 is the darkest and 6 is the brightest.

Equalizer

1. The radio supports equalizer function, which means the radio will perform gain processing for the audio signal received, so as to get better call results.
2. In the process of using the radio, user can adjust the audio loudness of the high frequency, middle frequency and low frequency of the equalizer through the menu settings according to their preference for the listening sound quality.

Receiving Companding Function

1. Companding refers to the suppression of the noise floor when the analog channel receives voice. After enabling companding, the noise floor is smaller, so the sound effect will be better.
2. The companding function can be enabled/disabled through radio menu.

Recording Function

1. After the recording function is enabled, both transmission and receiving will be recorded automatically.
2. Support recording playback function. The recording can be played back directly through the menu.
3. The recording time is about 30 seconds (the latest 30 seconds), and

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the previous recording will be automatically overwritten.
4. TF card recording is not supported.

GPS Function
(for specific models only)

1. After turning on GPS, you can get the latitude, longitude, current time, date, number of satellites, speed, etc. of the current time zone in the open field.
2. During outdoor sports, GPS information will be updated automatically during buffer time.
3. GPS information will stop updating when the signal is unstable, and will be reconnected and updated again when the signal is better.
4. GPS function should have corresponding antenna and hardware support.

Bluetooth Function
(for specific models only)

1. User can set the Bluetooth headset to be used to pairing mode first.
2. Select "Accessory -> Bluetooth -> Switch" in the call menu settings of this radio, and enter the lower menu to select "On" or "Off".
3. When the Bluetooth function is "On", the display screen of the radio will display the Bluetooth icon, and the Bluetooth icon disappears when you select "Off".
4. Then select "Bluetooth pairing" to pair with the Bluetooth headset, and "Pairing..." will be displayed during the pairing process.
5. After the radio and the Bluetooth headset are successfully paired, the radio display will show "Bluetooth connected". At this time, the radio can receive and transmit through the Bluetooth headset.
6. When the user wants to unpair or pair other Bluetooth headsets, select "Unpair".

Vibration Function
(for specific models only)

You can set whether to enable the vibration function, which will be applicable to short message, private call prompt, call prompt, etc.

Factory Reset

1. After restoring factory settings, all functions of the radio will become default setting.
2. Enter the radio menu to directly perform restoring operation.
3. The previous setting data of the radio will be lost after restoring factory settings, so please be careful in using this function.

Optional Accessories

Default accessories of the device are included in the product packaging box. For more information about accessories, please consult your local dealer.

Disclaimer

This manual strives for the accuracy and completeness of its content during the preparation. Repeated review has been carried out, and the company will not assume any responsibility for errors or omissions that may occur during the output and printing process. In addition, due to the continuous development of technology, the company reserves the right to change the product design and specification without prior notice.

GUARANTEE CARD

Model Number:——————————————————

Serial Number:——————————————————

Purchasing Date:——————————————————

Dealer:———————————— **Telephone**:——————

User's Name:———————— **Telephone**:——————

Address:———————————— **Post Code**:——————

REMARKS:

1. This guarantee card to be kept by the user ,no replenishment if lost.
2. This guarantee card to be filled & chopped by the dealer,or it is invalid.
3. Don't alter the guarantee card,please confirm the serial number on the guarantee card is same as that on the machine.
4. Warranty void if seal broken.
5. 1 year guarantee for product, 6 months for charger,battery and antenna .
6. The user can get repairing service from the following ways:
   a. Go to the shop where you buy the machine
   b. Our local repairing agent

Chop by Dealer