1.1 Turn on/off the radio

Turn on the radio: When the radio is off, turn the [Power/Volume] switch clockwise. After the radio makes a "click", the power of the radio is turned on. The screen displays the model of the radio. After a few seconds, the radio emits a beep.

Turn off the radio: When the radio is turned on, turn the [Power/Volume] switch counterclockwise until the radio makes a "click" and the information displayed on the screen disappears, that is, turn off the power of the radio.

1.2 Volume adjustment

When the radio is turned on, turn the [Power/Volume] switch to adjust the volume and the screen will indicate the current volume level through the progress bar.

Turn clockwise to increase the volume;

counterclockwise to decrease the volume.

1.3 Split screen display

In standby mode, press the left and right arrows to switch the standby display

1,The user's name or call sign is displayed in single standby.

2, Display the last contact information received.

Such as the name or call sign of the other party plus location information and location direction. (2,756 m)

3,Display a list of recently received contact information.

Press the key to select the list of information to be viewed.

Press [Select] key to enter to view the detailed location information and location direct ion of the other party when communicating.Press up/down arrows to scroll page.

(only the latest 10 lists to be displayed, it will disappear when is turned off, and will not be saved)

1.4 Main and sub channel switching
In standby mode, press and hold the [Back key] to switch between the main and sub-channels, and the channel with large fonts displayed on the screen is the currently operable channel (main channel).

1.5 VFO/Channel switching
In standby mode, press and hold the * key to switch between VFO and channel.

1.6 Set the VFO frequency

※ Set the VFO frequency of the radio through the keyboard:

When the radio is in VFO mode, you can input the frequency of the main channel through the number keys, if you want to input

For 434.62500MHz, just input 【4】【3】【4】【6】【2】【5】【0】【0】.

Press * key to set step frequency, press # key to switch AM/FM

※ Adjust the VFO frequency/channel by the up and down arrow buttons:

When the radio is in VFO mode, click the up and down arrows to adjust the frequency/channel by increasing/decreasing the step value. Up adjustments increase frequency values/channels, and down adjustments decrease frequency values/channels.

1.7 Storage frequency

In VFO mode, enter the frequency you want through the number keyboard, such as

438.500, press OK to confirm, press the menu "save to channel", select a blank channel to save.

1.8 saving frequencies with CTCSS/DCS

In VFO mode, input the frequency you want through the number keyboard, such as 438.500, press OK to confirm,Open the radio setting menu, enter the transmit TX/RX subtone menu, select the required subtone frequency, press OK to exit, press the menu "save to channel", select a blank channel to save.

1.9 Edit channel

Open the channel list menu, click Edit, edit the channel content, and save it

1.10 Frequency Scanning

Open the frequency scan menu, input the start frequency that you want, * key to switch the input frequency step, # key to switch the scan step, press the left and right arrows to start scanning, left to scan the frequency up, and right to scan the frequency down

1.11 Tone Scanning
Set the frequency to be scanned on the standby page, open the Tone scan menu,it start working.

1.12 Bulk air copy
Turn on the radios to be programmed one by one, switch the menu to " receive channels", open the programmed radio and switch the menu to "send channel ", when each radio to be programmed is displayed as completed, the frequency of the current list will be was copied to another radios.

2.0 Signaling Settings

ID: Please input your call sign or your ID
Allow Check: Allow your partner to send instructions to check your current location, and your location will be fedback to the partner's device.
Signaling Preamble : When sending signaling, add a preset code to make the end tone sound more rounded

Send Message: Send text message to partners

Call: When the receiving device receives the CALL command, the radio will ring, please enter the ID to be searched

Check: When the receiving device receives the CHECK command, the radio will feed back the current location, This requires the receiver ALLOW CHECK to be effective, enter the ID to be searched

Nearby People: This option sends the CHECK command at the current frequency, and all radios of the same frequency will feedback their current position option please after receiving the command.This option requires the receiver ALLOW CHECK to be effective

3.0 ,APRS settings

Call Sign: Please input your Call Sign

Path: Choose the path for APRS

3.1 Digital Mode

Enable: Turn On/Off the digital mode.

Share Location: Set the transmission time of the shared location. When the sharing time is turned off and Enable is turned on, it means that only data is received at this

time.

Digital Channel : The channel currently used for data transmission

Format:

     APRS: When using APRS protocol for transmission, the call sign must be obtained in advance before it can be used.

     BSS: Use our own BSS protocol, suitable for people who have not obtained a call sign.

Digital Mute: The radio does not make data transmission sounds when transmitting data.

Programmable Buttons   Description

Programmable Buttons, different shortcut operations can be realized through programming. [PF1] key/[PF2] key, this function can only be operated through APP,

  Some button states will restrict each other, so after setting, please confirm that all functions are available.

Disable	No Function
Alarm	According to the current frequency, the alarm warning will be issued, and the speaker of this equipment will also issue an alarm sound
Alarm&Mute	According to the current frequency, the alarm warning will be issued, and the speaker of this equipment will be mute
Toggle Scan	In standby mode, press the button programmed as " Toggle Scan " to quickly turn on/off the scanning function.
Toggle Talk Around	In standby mode, press the button programmed as "Toggle Talk Around" to quickly switch

	between the talk-around mode and the repeater mode.
Toggle Radio TX Enable	In standby mode, press the button programmed as "Toggle Radio TX Enable" to quickly limit the transmission or enable the transmission function.
Transmit Power Switch	In standby mode, press the button programmed as "Transmit Power Switch" to select ultra-high power, high power, or low power.
Radio Switch	In standby mode, press the button programmed as "Radio Switch" to quickly turn on/off the radio function.
Prev Channel	In standby mode, press the button programmed as "previous

	channel" to quickly switch to the previous channel
Next Channel	In standby mode, press the button programmed as "next channel" to quickly switch to the next channel
Prev Channel Group	In standby mode, press the button programmed as "Prev Channel Group" to quickly switch to previous Channel Group
Next Channel Group	In standby mode, press the button programmed as "Next Channel Group" to quickly switch to Next Channel Group
T-CALL	Transmit 1750Hz Tone
Main-PTT	Press the key programmed as "Main PTT" in standby mode to quickly transmit the main channel.

Sub-PTT	Press the key programmed as "Sub PTT" in standby mode to quickly transmit the Sub channel.

Two Way Radio Menu List

Channel	the up and down buttons to switch the AB Band, and the left and right buttons to switch channels
Signaling	Send Message；Call；Check；Nearby People（For details, please click the APP settings page）. Note: Sending message is sending a paragraph of text,Call and Check need input username to do it. Nearby people will use the current frequency to transmit a search code. If the device with the same function receives this code, it will feedback their location information back.
Radio Settings	Dual Watch；Scan；Talk Around；Power；TX Subtone；RX Subtone；Offset；Channel Group；Squelch Level；TX Time Limit；

	Tail Eliminantion；PTT Follow； PTT Release
General Settings	Connection；Signaling Settings；APRS Settings，Digital Mode;Sound Settings；Display Settings；Reset Settings；Restore Factory Settings
NOAA	WX Scan;WX Channel;WX Alert;WX Monitor
Sync Settings	Send Channels；Receive Channels
Frequency Scan	* key to switch the step of the input frequency, # key to switch the scanning step
Tone Scanning	Enter and start working
GPS status	Click the menu button to switch the positioning system or turn off the positioning system
compass	Calibrate the compass with a figure-of-eight rotation
Status	Firmware Version, battery information
Pairing	Select pairing, the red and green lights flash alternately, and enter the pairing mode
FM Radio	enter FM radio mode

Technical SPECIFICATIONS

General	
Frequency Ranges:	VHF:136-174MHz UHF:400—520MHz
Channel Steps:	2.5KHz/5KHz/6.25 KHz/ 10KHz/12.5 KHz/25 KHz/50 KHz/100 KHz
channel bandwidth	12.5/25 kHz
Frequency Stability:	±2.5ppm
number of channels	6*30
battery voltage	7.4V
battery capacity	2600 mAh
Operating temperature	－20℃To＋60℃
Size	56(W)x125(H)x39(D) (mm) (not include antenna)
Weight	Radio Body：158g，Battery：120g
Antenna Impedance:	50Ω

Receiver	
Sensitivity:(12dB SINAD)	0.16uV
adjacent channel selectivity	≥68dB
Intermodulation Immunity	≥65dB
Spurious Response Immunity	≥65dB
Audio distortion	≤3%
audio output power	2W
Transmitter	
RF output power	5W
adjacent channel power suppression	≤-68dB
Clutter and Harmonics	≤-60dB
FM noise	45 dB
FM distortion	≤3%

FCC Warning

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.

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

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

Specific Absorption Rate (SAR) information:
This Two way radio meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health.

FCC RF Exposure Information and Statement
The SAR limit of USA (FCC) is 8.0 W/kg averaged over one gram of tissue. Device types: UV-PRO (FCC ID: 2AGND-UV-PRO) has also been tested against this SAR limit. The highest SAR value reported under this standard during product certification for use at the head face up is 2.90W/kg and when properly worn on the body worn is 4.21W/kg. This device was tested for typical body-worn operations with the back of the handset kept 0mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 0mm separation distance between the user's body and the back of the handset. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.
Body-worn Operation
This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 0mm must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.