



UV-PRO

INSTRUCTION MANUAL

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law. For permission requests, write to the publisher.

Disclaimer: Due to changes in the development of this radio, there will be functions or options which are removed or added. This will not be noted in this manual, as manual re-writes are not done with each change.

THANK YOU FOR YOUR PURCHASE OF THE UV-PRO.

THIS VHF/UHF RADIO (WITH NOAA WEATHER CHANNELS) WILL DELIVER YOU SECURE, INSTANT, RELIABLE COMMUNICATIONS.

PLEASE READ THIS MANUAL CAREFULLY BEFORE USE

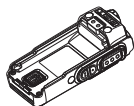
Copyright © 2024 by BTECH

CONTENTS

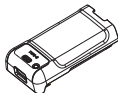
What's in the Box	4
Using the Radio	5
Turning the radio on/off	5
Volume Adjustment	5
Display Screens	5
Main and Sub Channel Switching	7
VFO/Memory Channel switching	7
Locking the Keypad	7
Setting the VFO frequency	7
Storing Memories	7
Saving Frequencies with CTCSS/DCS	8
Editing Channels	8
Frequency Scanning	8
Tone Scanning	8
FM Radio	9
Sending Memory Content to Other Units	9
Signaling Settings	9
Digital Location Send/Receive	10
Digital Mode	10
Format	11
Using the App to Control the Radio (iOS and Android)	11
iOS	11
Android	14
Network Channels	16
Radio Menu Descriptions	20
Programmable Buttons Options	27
Radio Setting (General Settings Menu List)	30
Technical Specifications	37

What's in the Box

Please take some extra time to make certain that the important safety and technical requirements detailed in this chapter are followed closely.



Radio Body



Battery



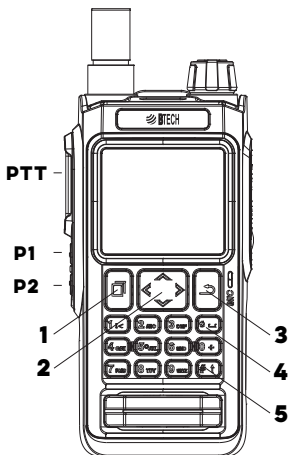
Antenna



Belt Clip



Power Cable



1 Menu/Confirm key

2 In standby mode, press the left and right buttons to switch the screen display state. Press the up and down buttons to switch frequencies or channels up and down

3 (Return) In the dual-watch state, press and hold the return button to switch between the main band and the sub-band

4 (*), in standby mode, long press the * key to switch between VFO and channel mode

5 (#) In standby mode, press and hold the # key to lock the keyboard. Press and hold the # key again to unlock the keyboard

Using the Radio

Turning the Radio On/Off

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, and the display becomes active.

When the radio is on, turn the [Power/Volume] switch counterclockwise until the radio makes a “click” and the information displayed on the screen disappears.

Volume Adjustment

When the radio is on, turn the [Power/Volume] adjustment (turn clockwise to increase the volume; counterclockwise to decrease the volume) and set the desired volume level. The screen will indicate the current volume level through the progress bar.

Display Screens

In standby mode, press the left and right arrows to switch through the standby displays.



This is the **Main display** when both Main and Sub channels are active. The radio name is shown on the lower left. In this example the “CTC” to the right shows the main band is in CTCSS receive mode. The DCS shows the Receive mode (DCS) of the Sub band. The “02” indicates which memory channel is in use.



RX (shows this symbol and number of bars relating to signal strength)

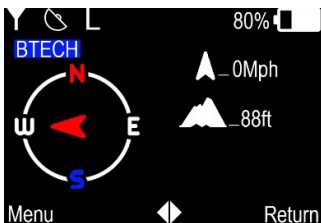


TX Power Level (L, M, H)



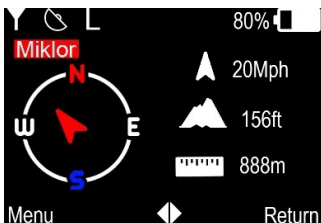
RX Ready - Switches to ^ (2) on TX and v (2) on RX

Pressing the **right arrow** from the main display will show this screen



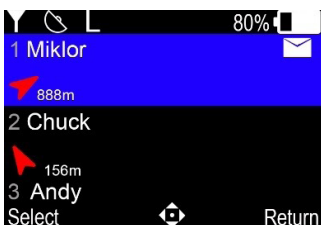
The user's name or call sign is displayed in single channel mode. The compass shows the direction of movement, The up-arrow icon shows speed of movement, below that is altitude.

Pressing the **right arrow again** shows the information of the last radio to send data



Display the last contact information received. Their name is in the upper left, the compass shows their heading from your location, next is how fast they are traveling, their altitude, and distance from your radio.

The **next press of the right arrow** shows this screen:



It displays a list of recently received contact information. Press the [Select] key to view the detailed location information and direction from your location of the other party you have received. Press the up/down arrows to scroll through the page (only the last 30 locations are displayed, they will disappear when is the radio is turned off, and will not be saved).

Main and Sub Channel Switching

In standby mode, press and hold the Red Return Button to switch between the main and sub-channels, and the channel with large fonts displayed on the screen is the currently operating channel (main channel).

VFO/Memory Channel switching

In standby mode, press and hold the *** key** to switch between VFO and memory channels.

Locking the Keypad

In standby mode, long press the # key to lock the keyboard, long press the # key again to unlock the keyboard.

Setting 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 446.00000MHz, just input **(4) (4) (6) (0) (0) (0) (0) (0)**.

Press the * key to set the channel steps frequency for the VFO
Press the # key to switch between AM/FM modes.

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

When the radio is in VFO mode, press the up and down arrows to adjust the frequency/channel by increasing/decreasing the frequency by the channel step value. Up arrow increases the frequency, and down arrow decreases the frequency.

Storing Memories

In VFO mode, enter the frequency you want through the number

keyboard, such as 146.520, press OK to confirm, press the menu “save to channel”, use the middle 4-way button select a blank channel to save to, using the up/down arrows.

Saving Frequencies with CTCSS/DCS

In VFO mode, input the frequency you want through the number keyboard, such as 446.000, 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.

Tips: In the CTCSS selection interface, use the keyboard to input the corresponding CTCSS number within 1 second, and you can quickly adjust to the corresponding CTCSS value.

For example: 754N. You only need to enter 75, 754N will be displayed. Select it to set it successfully.

Editing Channels

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

Frequency Scanning

Open the frequency scan menu, input the start frequency that you want, then press the * 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 in up frequency, and right to scan down.

Tone Scanning

Set the frequency to be scanned on the standby page, open the Tone scan menu, use the up arrow to set a frequency and it will start scanning when a signal is received.

Once the valid frequency is received it will stop scanning and display the received tone frequency.

Write this down to add when programming- it does not automatically store this tone frequency or code.

FM Radio

Open the FM radio menu and press the up and down buttons to automatically search for FM radio frequencies. You can also enter your radio frequency directly using the keypad.

Sending Memory Content to Other Units

To share the channel list with other units, turn on the radios to be programmed one by one, switch the menu on the new or unprogrammed radio to "receive channels". Both radios must be on the same channel.

Open the programmed radio menu and select "send channel ", when each radio to be programmed is displayed as completed, the frequency of the current list will be copied to the other radios and available.

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 feedback 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 will allow the ALLOW CHECK to be effective, enter the ID to be searched.

Nearby People *(UV-PRO radios only)*

This option sends the CHECK command on the current selected frequency, and all radios on the same frequency will reply with their current position option please after receiving the command. This option requires the receiver ALLOW CHECK to be effective. UV-PRO units only, non-UV-PRO radios do not have this capability.

Digital Location Send/Receive

Call Sign

Please input your Call Sign.

Path

Choose the path for APRS.

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. A Amateur (Ham) license is required.

BSS

Use the manufacturers BSS protocol, suitable for people who have not obtained an Amateur (Ham) Radio license and call sign. This should be used only by LMR and Non-Ham users. This can only be used by UV-PRO radios.


Digital Mute

The radio does not play data transmission sounds over the speaker when transmitting data.

Using the App to Control the Radio (iOS and Android)

The full capabilities of the radio can be controlled via the App on both iOS and Android phones.

iOS

The App can be obtained from the App Store Search for “BTECH UV Programmer” Once installed, verify Bluetooth is enabled on your phone. Open the app, and you should see the main screen (Figure 1). Clicking the 3 lines (Hamburger)  in the lower left will open the connect window, and available radios will be shown in the “Bindable Device” option list (Figure 2). Select your device and it should pair the phone and radio. Once a radio is connected you will see the operating screen (Figure 3). Your screen will look different and show the factory default channel listings.

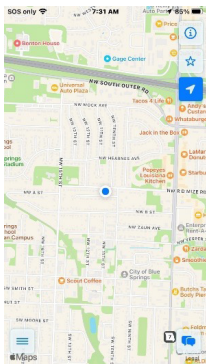


Figure 1

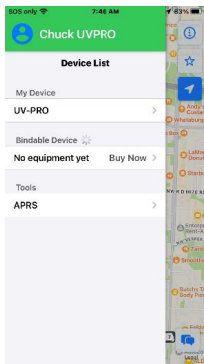


Figure 2

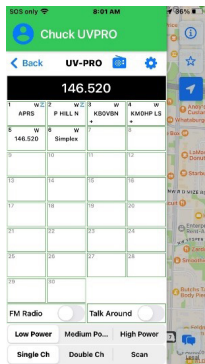


Figure 3

Clicking the “gear”  will open the main settings window (Figure 4).

The options will be covered starting on page 30. Next is connection management (Figure 5). Use this to scan for Bluetooth devices to connect to. Next there is “General Settings” (Figure 6), The next option is “channels and groups” (Figure 7). Here changes are made to the memory channels and memory banks. Next is Band Scan (Figure 8) this allows you to scan through a range of frequencies to find activity. In the next option window (Figure 9) you can set the different functions of the programmable buttons.



Figure 4

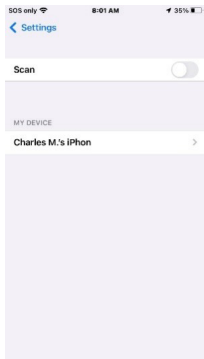


Figure 5

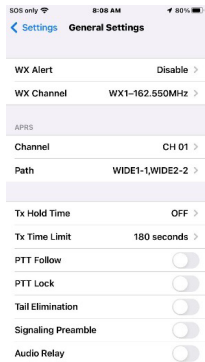


Figure 6

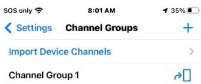


Figure 7

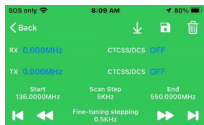


Figure 8

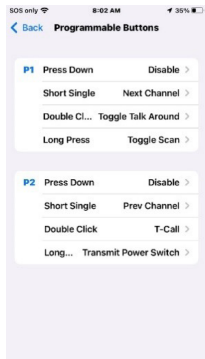


Figure 9

Android

The Android app can be found in the Google Play store- search for "BTECH UV Programmer". Once installed, verify Bluetooth is enabled on your phone. Open the app, and you should see the main screen (Figure 10). Clicking the 3 lines (Hamburger) in the lower left will open the connect window available radios will be shown in the "Bindable Device" option list (Figure 11). Select your device and it should pair the phone and radio. Once a radio is connected you will see the operating screen (Figure 12). Your screen will look different and show the factory default channel listings. Clicking the "gear" will open the main settings window (Figure 13).

The options will be covered in a later chapter. Next is Connection Management (Figure 14). Use this to scan for Bluetooth devices to connect to. The next option is "Channels and Groups" (Figure 15). Here changes are made to the memory channels and channel banks. Next is Band Scan (Figure 16) this allows you to scan through a range of frequencies to find activity. In the next window (Figure 17) you can set the different functions of the Programmable Buttons. The options are shown in Figures 17 and 18.

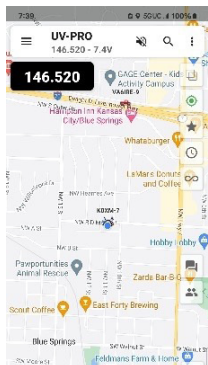


Figure 10

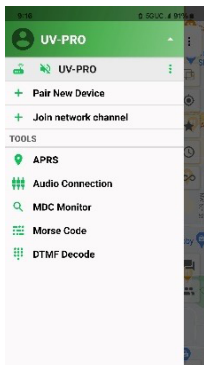


Figure 11

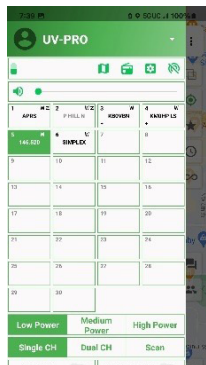


Figure 12

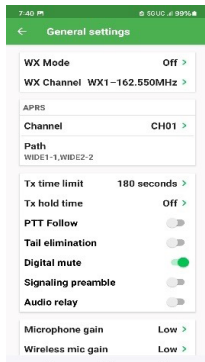


Figure 13

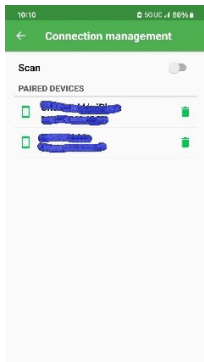


Figure 14

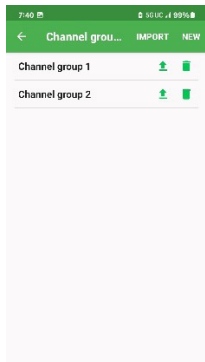


Figure 15

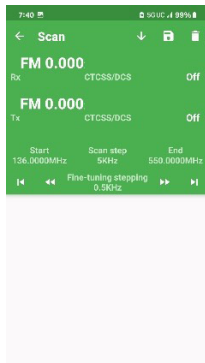


Figure 16

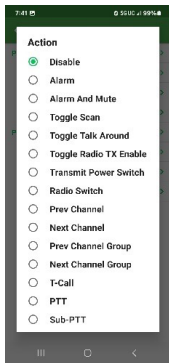


Figure 17



Figure 18

Network Channels

BTECH radios have the unique capability of being involved in an online network. Individual groups can be created. This expands the capabilities of the radio. An example is a member is outside of radio coverage, but is logged into the network and group- you can still communicate with them via the Network Channel. Info can be found here:

<https://baofengtech.com/harnessing-the-power-of-community-with-btech-gmrs-programmers-networking-groups/>.

The information is the same for the HAM and GMRS usage.

Here are some excerpts from that page:

Getting Started with Your Account

Accessing Sign-In Options

If you're new or haven't set up an online profile yet, start by selecting the "Sign In" button located beside your "Nickname"

Creating a New Account

If you need to create an account, choose the option to "Sign Up". This will allow you to setup a Username and password with the email address of your choice. You can create an account here at:

<https://account.benshikj.com/user/register>

Using OAuth Authentication

For a quicker setup, you can also use OAuth authentication with Google or Apple.

This will link to your existing Google or Apple account for a seamless sign-in experience with no additional username or password to use.

General Profile Account Options

Nickname and Identification

Customize your nickname and identification details to be recognized by fellow users within groups.

Privacy Settings

Adjust your location sharing preferences in the 'User Settings' to manage your footprint and privacy.

Engage with the UV Pro Community through Network Groups

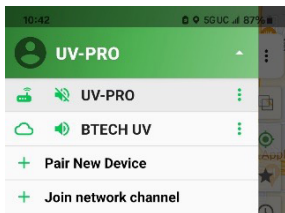
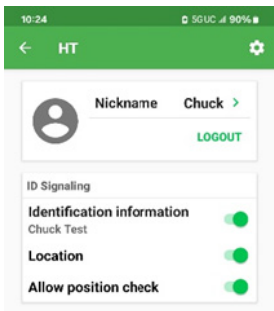
Before diving into group chats, you'll need to connect to a network channel.

Join a Network Channel

Navigate to the main menu and select 'Join Network Channel'. Here, you'll find a list of available channels.

Select the Default Group

Choose 'BTECH UV', which is the default network channel for all app users. This is the primary hub for BTECH community interactions. The 'BTECH UV' default network group is your gateway to the community.



Connection Status

The cloud icon's appearance is your indicator of connection status — a slashed cloud means you are offline, while a clear icon signifies active connection.

Notification Settings

Control the audio alerts for new messages and conversations with the speaker icon. A slashed speaker denotes silent mode, allowing you to browse the log without interruption.

Real-Time Communication at Your Fingertips

The app's interface is designed for real-time interaction:

Voice Communication

Use the 'Hold to Speak' button for instant voice messaging with other group members, visible in the chat as audio waveforms.

Text Messaging

Tap the keyboard icon to compose and send text messages to the group, facilitating quick and convenient typed communication.

Location Sharing

Share and request locations with group members to enhance your collaborative experience, especially useful during events or meet-ups.

Understanding Data Privacy and Access in Real-Time

As you engage with the community through the BTECH UV Programmer app, it's essential to understand how your data is handled:

Real-Time Access

The app operates on a real-time access model. This means that to view conversations and archives, you must be online. This design ensures that you have immediate and continuous access to the group's dialogue as it unfolds.

Online Presence

To ensure you don't miss any part of the conversation, maintain your online status. Being online is crucial as it allows the app to sync and display the latest communications from other users in real-time.

Data Privacy

BTECH takes your privacy seriously. No logs or conversation data are stored on our servers. All information is relayed live and is only stored locally on your device. BTECH does not store conversations, but simply relays them to active users.

Archiving Conversations

If you wish to review past conversations, you must be part of the network channel when the conversations occur, as the app does not retroactively provide chat logs for periods when you were offline. This approach not only respects your privacy but also aligns with the real-time nature of radio communication. It ensures that your communications remain private, secure, and under your control.

Create Exclusive Groups for Focused Communication

For those desiring more private and focused discussions:

Private Group Creation

Establish your own private group and safeguard it with a passcode. Only members with the passcode can join, ensuring exclusivity and control.

Searchable Database

Your private group will be listed in the app's searchable database, making it discoverable to users you choose to share the passcode with.

Continuous Connectivity

Stay connected to the conversation by keeping the app active on your device, ensuring you never miss a message with the cloud icon enabled.

Radio Menu Descriptions

Main Menu

Channel

Select channels using left/right arrows, Pressing the green button on this screen will allow editing the channel, pressing the previous screen or menu function.

Signaling

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 *(UV-PRO radios only)*

When the receiving device receives the CHECK command, the radio will feed back the current location, this option requires the receivers ALLOW CHECK to be effective, please 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 after receiving the command. This option requires the receiver ALLOW CHECK to be active.

Radio Settings

Dual-Watch

If active, it will be watching activity for two channels, Press the up

and down keys to switch between the main band and sub band, and press the side key to switch to the active channel.

Scan

If active, the radio will be in a scanning state, and all channels that are set to be scanned will be.

Talk Around

On a channel with an offset frequency, if the option is activated, The TX becomes the same as the RX frequency.

Power

Change the output power (H-M-L).

Channel Group

Change the Channel Group in use.

Squelch Level

Adjust the squelch level of the received signal, level 0-9, the smaller the number, the easier it is to receive weak signals.

TX Time Limit

Limit the maximum time of each transmission.

PTT Follow

When this option is on, and the sub band receives a signal, press the PTT to reply within 10 seconds, you can transmit on the sub band frequency without switching to the main band.

Tail Elimination

Turn on this option, no end tone will be heard between radios of the same brand.

PTT Release

This places an audio transmission when you release the PTT button.

The options are: NONE, ID+GPS (ANI ID must be entered and GPS must be on and showing your location, ID sends the ANI ID, GPS Sends your location, Roger Beep places a beep at the end of your transmission. All of these will NOT be audible on your radio- only the radios receiving your transmissions will hear them.

Connections

Pairing

Pair the unit with your phone, or Bluetooth device.

Available Devices

In pairing mode shows available Bluetooth Devices.

Scanning

Shows the status of Bluetooth Device Search.

Paired Devices

Shows a list of devices paired with the radio via Bluetooth.

Signaling Settings

ID

Please input your call sign.

Allow Check

Allow your partner to send instructions to check your current location, and your location will be sent to the partner's device.

Signaling Preamble

When sending signaling, add a preset code to make the end tone sound more rounded.

APRS settings

Call Sign

Please input your Call Sign.

Path

Choose the path for APRS:

WIDE1-1,WIDE2-2

WIDE2-1

WIDE 2-2

ARISS, SGATE, WIDE2-1 (For use with the International Space Station ISS)

CUSTOMIZE

Digital Mode

Enable

Turn On/Off the digital mode.

Share Location

Set the transmission interval 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- TX of your location will not be sent.

Digital Channel

The channel currently used for data transmission. Choose from programmed channels or use the current channel which can be changed via the channel selection function.

Format

APRS

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

**HAM RADIO USE ONLY- License required*

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.

Sound Settings

Speaker

ON/OFF

Mic Gain

Low, Medium, High

BT MIC Gain

Same as above but for the Bluetooth mic (when connected).

Keep Connected

Maintain a connection with the Bluetooth device.

Tone

Creates a tone when the buttons are pressed.

Display Settings

Brightness

Set the display brightness from 1 to 15.

Screen Timeout

Set the time on how long the display is on and visible.

Time Zone

Set your local Time Zone referenced to GMT (Greenwich Mean Time).

Imperial Units

Check to use Miles/Feet.

Low Power Mode

Turn Battery Saving on/off.

Reset Settings

Reset user entered settings.

Restore Factory Settings

Clear all settings and return radio to settings from factory

NOAA

WX Scan

Scan for local NOAA WX Channel.

WX Channel

Manually Set NOAA WX Channel.

WX Alert

Turn on NOAA WX Alert.

WX Monitor

Turn on/ off WX Audio.

Sync Settings

Send Channels

Send your Channel groups to Team Mates. (Users must all have UV-Pro radios for this to be done)

Receive Channels

Receive Team Mates channels. (UV-PRO users only)

Frequency Scan

Manually Scan Frequencies using front panel keys.

Tone Scanning

On the Selected Frequency, scan for RX tone Frequency when a signal is received. The scan will not become active until there is a signal present. It will stop on the correct frequency. This will scan CTCSS frequencies and the DCS frequencies.

GPS Status

This will show your location as received from the GPS Satellites. If no location is seen, make sure you are outside with a clear view of the sky.

Compass

This is used to calibrate then shows the compass.

Status

Battery level (Percentage left in batteries)

Battery Voltage

Installed Firmware Version

Unit Part Number

Pairing

Checking this will place the unit in Bluetooth Pairing Mode (Red/Green light on top will start flashing until paired).

FM Radio

This will place the radio in FM Broadcast reception mode- use the center up/down buttons for search direction- unit will stop when signal is received.

Programmable Buttons Options

Different shortcut operations can be set by programming [PF1] key/ [PF2] key, this function can only be performed through APP. Some button states will restrict each other, so after setting, please confirm that all functions are available

Factory default settings are:

[PF1] key: Short Press Turn On /Off FM Radio
Long Press Sub Channel PTT

[PF2] key: Short Press Power Level Switch
Long Press Turn On/off Monitor

Disable	Turn off functions for the desired button
Alarm	According to the current frequency, an alarm warning will be issued, and the speaker will also issue an alarm sound
Alarm & Mute	According to the current frequency, an alarm warning will be issued, but the speaker will be muted
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 (same transmit and receive frequencies) and repeater mode (separate transmit and receive frequencies).
Toggle Radio TX Enable	In standby mode, press the button programmed as "Toggle Radio TX Enable" to quickly disable or enable transmitting.
Transmit Power Switch	In standby mode, press the button programmed as "Transmit Power Switch" to select high power, medium power, or low power.
Radio Switch	In standby mode, press the button programmed as "Radio Switch" to quickly turn on/off the FM Broadcast 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 on the main channel.
Sub-PTT	Press the key programmed as "Sub PTT" in standby mode to quickly transmit on the Sub channel.
Send Location	Manually send APRS location once
Toggle Dual CH	Switch between single watch and double watch status
Dual CH Main Channel Switch	Switch Main Band between A/B Band
Toggle Monitor	In standby mode, press the button programmed as "Radio Switch" to quickly Turn on/off the squelch

Radio Setting (General Settings) Menu List

Channel	Edit	Use the up and down buttons to switch the AB Band, and the left and right buttons to switch channels
Signaling	Send Message	Send a paragraph of text, Call and Check need a stored username to be functional.
	Call	Select a call sign or name then PTT will send an alert to that user's radio.
	Check	Select a call sign or name then PTT will check for a reply from that user's radio.
	Nearby People <i>UV-PRO users only</i>	Nearby people will use the current frequency to transmit a search code If the device with the same function receives this code, it will display their location. For details, please click the APP settings page

Radio Settings	Dual Watch	Activate both the Main and Sub channels
	Scan	Turn on the channel scanner- Channels MUST have "Allow Scan" checked
	Talk Around	Set the TX and RX to the same frequency
	Power	Set Low/Medium/High TX power
	TX Subtone	Set the TX Subtone (CTCSS or DCS)
	RX Subtone	Set the RX Subtone (CTCSS or DCS)
	Offset	Set the TX frequency by this amount from the RX frequency
	Channel Group	Switch between programmed channel groups
	Squelch Level	Set Squelch level (0 for Open Squelch, 9 for Tight squelch)
	TX Time Limit	Set Maximum continuous TX time. Select from Off to 300 seconds

Radio Settings	Tail Elimination	Automatically eliminate the noise after the end of transmission
	Digital Mute	Turn off audio in Digital receive packets
	PTT Follow	With this checked (on), when the sub band receives a signal, press PTT to reply within 10 seconds, you can send directly at the sub band frequency without switching to the main band

General Settings	Connection	Pairing	Check to turn on Bluetooth Pairing
		Scanning	Shows Bluetooth is scanning for devices
		Paired Devices	Shows devices you have already paired to radio

General Settings	Signaling Settings	ID	Set your ID
		Allow Check	Allow other unit to check for your radio
		Signaling Preamble	When sending signaling, add a preset code to make the end tone sound more rounded
	APRS Settings	Call Sign	Your call sign with SSID
		Path	Choose the path for APRS (see page 38)
	Digital Mode	Enable	Digital mode on/off
		Share Location	Set the time to share location with other users (and APRS beacons), From OFF to 1800 seconds
		Digital Channel	Choose which channel is used for Digital Transmissions

General Settings	Digital Mode	Format	APRS: When using APRS protocol for transmission, the call sign must be obtained in advance before it can be used. (Preferred for HAM use) BSS: Use BTECH BSS protocol, suitable for people who have not obtained a call sign.
	Sound Settings	Mic Gain	Set the gain of the internal Mic (Low/Medium/High)
		BT Mic Gain	Set the gain of the external Bluetooth Mic (Low/Medium/High)
		Keep Connected	Keep Bluetooth connected
		Tone	Keypad tones on/off

General Settings	Display Settings	Language	Select language
		Brightness	Set display level (1 to 15-15 being the brightest)
		Screen Timeout	Set screen time to turn off display (Never, up to 300 secs)
		Time Zone	Set your time zone
		Imperial Units	Use Feet/Miles
		Low Power Mode	Reduce overall current draw on battery to extend battery operating time
	Reset Settings	Reset user's settings	
Restore Factory Settings	Complete reset to factory settings- CAUTION this will remove ALL settings made by user. You will need to reload your settings from the app after performing this.		
NOAA	WX Scan	Scan for the closest NOAA transmitter	
	WX Channel	Manually select a NOAA channel	

NOAA	WX Alert	Turn On/Off NOAA Weather Alerts
	WX Monitor	Turn On/Off NOAA Weather Audio
Sync Settings	Send Channels	Share your channel settings
	Receive Channels	Receive your partners channel settings
Frequency Scan	Press the left button to scan down, press the right button to scan up, press the up button to increase the frequency in steps, and press the down button to decrease the frequency in steps.	
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 Range

VHF:136-174MHz

UHF:400—520MHz

Channel Steps

2.5KHz/5KHz/6.25KHz/10KHz/12.5KHz/25KHz/50KHz/100KHz

Channel Bandwidth

12.5/25 kHz

Frequency Stability

±2.5ppm

Number of Channels

6 Banks of 30 channels each

Battery Voltage

7.4V

Battery Capacity

2600 mAh

Operating temperature

-20~+60°

Size

60mm (W) x 40mm (D) x 130mm (H) (not including antenna)

2.36in (W) x 1.57in (D) x 5.12in (H) (not including antenna)

Weight

312 g

Antenna Impedance

50Ω

Transmitter

RF Output Power	Low 2W Medium 5W High 7W
Adjacent Channel Power Suppression	$\leq -68\text{dB}$
Clutter and Harmonics	$\leq -60\text{dB}$
FM noise	45 dB
FM distortion	$\leq 3\%$

Receiver

Sensitivity (12dB SINAD)	0.16uV
Adjacent channel selectivity	$\geq 68\text{dB}$
Intermodulation Immunity	$\geq 65\text{dB}$
Spurious Response Immunity	$\geq 65\text{dB}$
Audio distortion	$\leq 3\%$
Audio Output Power	2W

