

## Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

› [BTECH](#) /

› [BTECH UV-25X4 Tri-Band Mobile Radio User Manual](#)

## BTECH UV-25X4

# BTECH UV-25X4 Tri-Band Mobile Radio User Manual

Model: UV-25X4

## INTRODUCTION

---

This manual provides detailed instructions for the setup, operation, maintenance, and troubleshooting of your BTECH UV-25X4 Tri-Band Mobile Radio. Please read this guide thoroughly to ensure proper use and optimal performance of your device.

## WHAT'S IN THE BOX

---

Upon unpacking, please verify that all the following items are included:

- BTECH UV-25X4 Radio Unit
- RJ45 to K1 Audio Adapter
- Speaker Microphone
- DC Power Cable
- Radio Mounting Bracket
- Microphone Mounting Bracket
- Mounting Hardware (screws, fuse)
- User Guide (this document)



Image: All components included with the BTECH UV-25X4 radio, such as the main unit, speaker microphone, power cable, and various mounting accessories.

## SETUP

---

### Mounting the Radio

The UV-25X4 includes all necessary mounting hardware for installation in a vehicle. For home or office use, the radio can be converted into a base station with an optional RPS-30M power supply (sold separately).

### Power Connection

Connect the supplied DC power cable to the radio and to a 13.8 Volt DC power source. Ensure proper polarity. For mobile installations, connect directly to the vehicle's battery. For base station use, connect to a compatible DC power supply.

### Antenna Connection

Connect a suitable tri-band antenna (e.g., Nagoya TB-320A) to the antenna connector on the rear of the radio. Ensure the connection is secure and the antenna is properly tuned for the operating frequencies (144 MHz, 220

MHz, 430 MHz bands).

## Audio Input/Output

The UV-25X4 features an RJ45 microphone port and includes a K1 audio adapter for enhanced audio input/output. This allows for connection to a wide range of aftermarket audio accessories.



Image: Illustration of the audio input/output control via the RJ45 port, demonstrating how to connect the speaker microphone and K1 adapter.

## Computer Programming

For seamless computer programming, use a PC04 FTDI Cable (sold separately) and compatible software such as CHIRP. This allows for easier management of channels and settings.



Image: The BTECH UV-25X4 radio connected to a laptop, illustrating the setup for computer-based programming.

## OPERATING INSTRUCTIONS

---

### Basic Controls

Familiarize yourself with the radio's front panel controls:

# QUAD WATCH

SIMULTANEOUSLY MONITOR FOUR CHANNELS AT ONCE



Image: A detailed view of the BTECH UV-25X4 radio's front panel, with labels indicating the function of each button and knob, such as Power, V/M Mode Switch, Call Key, Monitor Function, and Microphone Connector.

- **Power Knob:** Turns the radio on/off and adjusts volume.
- **V/M (Channel/Frequency) Button:** Switches between VFO (Frequency) mode and Memory (Channel) mode.
- **CALL Button:** Accesses call channels or specific functions.
- **EXIT/ABCD Button:** Exits menus or switches signal types.
- **MONI (Monitor) Button:** Opens the squelch to listen for weak signals.
- **FM Button:** Activates the FM broadcast radio receiver.
- **Microphone Connector:** For connecting the speaker microphone.
- **Confirm/Menu Knob:** Navigates menus and confirms selections.

## Triple-Band Functionality

The UV-25X4 operates across three amateur radio bands: 144 MHz (VHF), 220 MHz (1.25M), and 430 MHz (UHF). You can select any of these as the primary transmit/receive band.

## Dual Watch and Quad Watch Monitoring

The radio supports simultaneous monitoring of multiple frequencies or channels. You can monitor up to 3 other frequencies or channels while operating on a primary band. The Quad Watch feature allows for simultaneous monitoring of four channels.



Image: The radio's display demonstrating the Quad Watch function, showing four distinct frequencies being monitored concurrently. When monitoring 220 MHz simultaneously with VHF/UHF, an audible relay switch noise may occur due to the antenna lowpass filter switching. This is normal operation and does not affect RF performance on 2 meter/70 cm bands.

## Display Customization

The radio allows for customization of its display, including the ability to synchronize and display up to two channels with both their channel name and frequency.



Image: The radio's display showcasing various color customization options for channel information, enhancing readability and personalization.

## MAINTENANCE

To ensure the longevity and optimal performance of your BTECH UV-25X4 radio, follow these general maintenance guidelines:

- **Cleaning:** Use a soft, damp cloth to clean the radio's exterior. Avoid harsh chemicals or abrasive cleaners.
- **Connections:** Regularly check all cable connections (power, antenna, microphone) for tightness and signs of wear.

- **Environment:** Operate and store the radio in a dry, dust-free environment. While the radio is water-resistant, it is not waterproof and should not be submerged.
- **Firmware Updates:** Periodically check the BTECH website for any available firmware updates to improve performance or add features.

## TROUBLESHOOTING

---

If you encounter issues with your UV-25X4 radio, refer to the following common problems and solutions:

- **Radio does not power on:** Check the DC power cable connection and ensure the power source is providing 13.8 Volts. Verify the fuse in the DC cable is intact.
- **No audio from speaker:** Ensure the volume knob is turned up. Check the speaker microphone connection. If using an external speaker, verify its connection and functionality.
- **Cannot transmit or receive:** Verify the antenna is properly connected and tuned. Check the selected frequency/channel and ensure it is within the radio's operating range. Confirm that the radio is not in a locked mode.
- **Radio appears to be stuck in transmit mode:** If the radio continuously transmits without the PTT button being pressed, power cycle the device. If the issue persists, consult the BTECH support resources for further assistance. This can sometimes indicate an internal fault or a stuck PTT button.
- **Poor signal quality:** Check antenna placement and condition. Ensure there are no obstructions. Verify power levels are set appropriately for the desired range.

For more complex issues, refer to the official BTECH support channels.

## SPECIFICATIONS

---

Feature	Specification
Model Number	UV-25X4
Brand	BTECH
Dimensions (H x W x D)	1.38" x 3.86" x 4.65"
Weight	2.05 Pounds
Color	Black
Number of Channels	200
Frequency Range	144-148 MHz (VHF), 220-225 MHz (1.25M), 420-450 MHz (UHF)
Talking Range Maximum	100 Miles (dependent on conditions)
Voltage	13.8 Volts DC
Water Resistance Level	Water Resistant

## WARRANTY AND SUPPORT

---

### Warranty Information

For detailed warranty information, please refer to the documentation provided with your purchase or visit the official

BTECH website. Warranty terms and conditions may vary.

## **Additional Support Resources**

For software, additional information, and video tutorials, please visit the following resources:

- [Official BTECH UV-25X4 Product Page](#)
- [BTECH YouTube Channel for Tutorials](#)