

BTECH DMR-6X2 PRO

BTECH DMR-6X2 PRO DMR & Analog Two-Way Radio Instruction Manual

Model: DMR-6X2 PRO

INTRODUCTION

This manual provides detailed instructions for the operation and maintenance of your BTECH DMR-6X2 PRO DMR & Analog Two-Way Radio. Please read this manual thoroughly to ensure proper usage and to maximize the performance and longevity of your device. The DMR-6X2 PRO offers advanced communication capabilities, supporting both analog and digital (DMR Tier 1 & 2, MOTOTRBO compatible) networks, along with features like Bluetooth, GPS, APRS, and robust encryption.

WHAT'S IN THE BOX

The BTECH DMR-6X2 PRO package includes the following items:

- DMR-6X2 PRO Radio Unit
- Bluetooth PTT Switch
- 3100 mAh High Capacity Battery
- Belt Clip
- Programming Cable
- Charger Base
- Charger Transformer
- Earpiece Kit
- 6" Dual Band Antenna
- Wrist Strap
- User's Manual (this document)

AES256 + ARC4 DIGITAL ENCRYPTION

COMPATIBLE WITH
MOTOTRBO
DMR TIER 1 +
DMR TIER 2
STANDARDS



Image: All items included in the BTECH DMR-6X2 PRO package.

SETUP

1. Battery Installation and Charging

The DMR-6X2 PRO comes with a 3100 mAh high-capacity Lithium Ion battery. Ensure the battery is fully charged before first use.

1. Align the battery with the back of the radio and slide it into place until it clicks securely.
2. To charge, connect the charger transformer to the charger base. Place the radio (with battery attached) into the charger base. The LED indicator on the charger will show charging status (typically red for charging, green for fully charged).
3. The battery also supports USB-C charging directly. Connect a USB-C cable to the port on the battery for convenient charging without the base.

QB-44HL USB-C BATTERY

FOR DMR-X2-PRO AND DMR-6X2

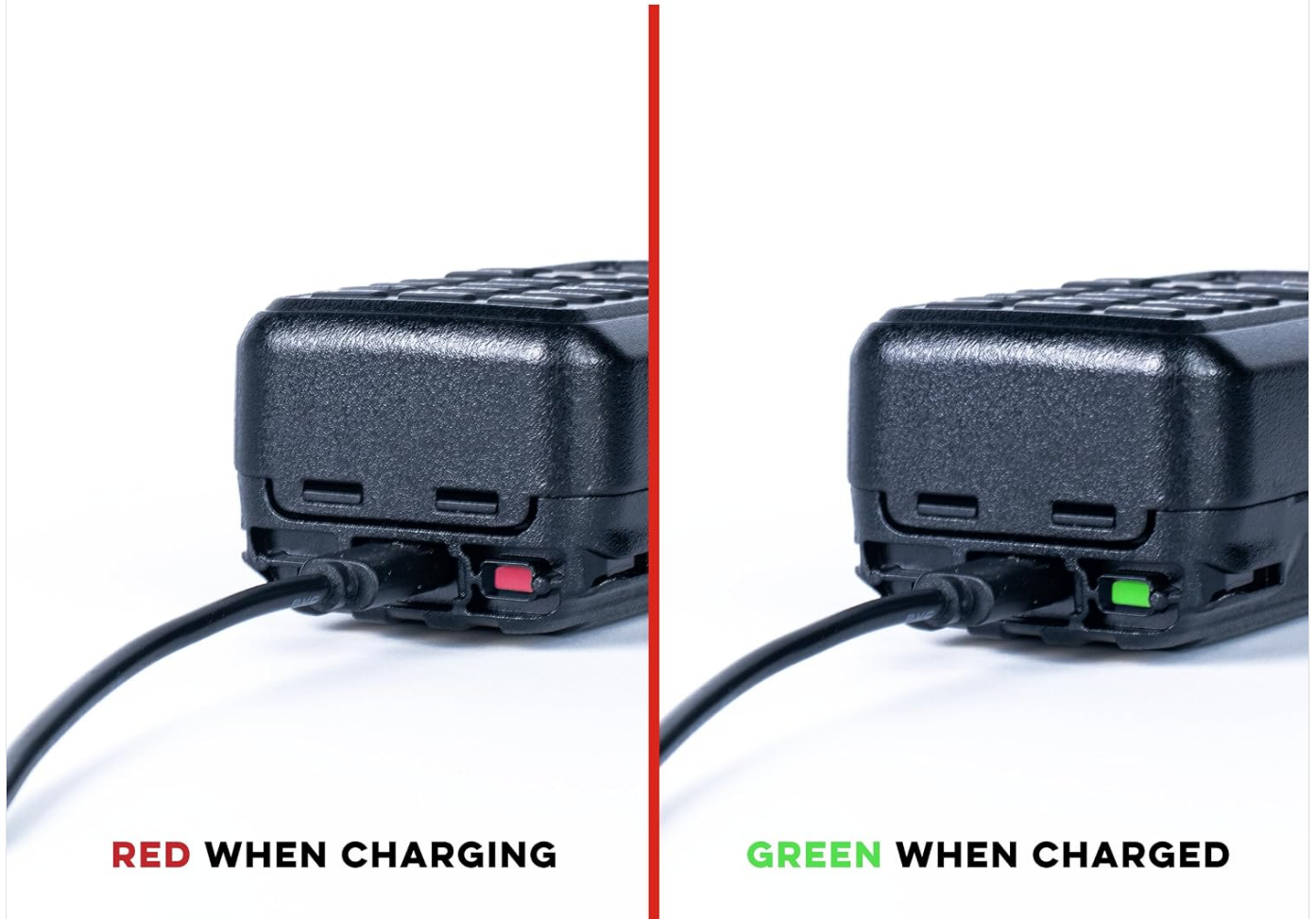


Image: The DMR-6X2 PRO battery showing USB-C charging port and indicator lights.

2. Antenna Attachment

Carefully screw the 6" dual band antenna onto the antenna connector on top of the radio. Ensure it is finger-tight but do not overtighten.

3. Initial Programming (Codeplug)

While the radio can be operated with basic settings, its full potential is unlocked through programming. This typically involves using a Computer Programming Software (CPS) and a programming cable to create a 'codeplug' (a configuration file) that defines channels, talk groups, zones, and other advanced features. Refer to the BTECH website for the latest CPS software and detailed programming guides.

Video: An Easy Intro to DMR Codeplugs on the GD-88. This video provides a general overview of DMR codeplug programming, which is applicable to the BTECH DMR-6X2 PRO.

BASIC OPERATION

1. Power On/Off and Volume Control

To power on the radio, rotate the top-most knob clockwise. Continue rotating to adjust the volume. To power off, rotate the knob counter-clockwise until it clicks.

2. Channel/Zone Selection

The DMR-6X2 PRO supports 4000 channels and 250 customizable zones. Use the navigation buttons and menu to select desired channels or zones. The large TFT color display provides clear visibility of current settings.

3. Push-to-Talk (PTT)

To transmit, press and hold the PTT button on the side of the radio. Speak clearly into the microphone. Release the PTT button to listen.

KEY FEATURES

Advanced Communication Compatibility

The DMR-6X2 PRO supports both Analog and DMR Tier 1 & 2 networks, including MOTOTRBO compatibility. The Talker Alias feature displays the speaker's identity on the device, enhancing communication clarity. It also supports both Analog and Digital APRS (TX & RX) for data sharing and real-time location tracking.

Exclusive BTECH Firmware

Our proprietary BTECH firmware enhances the dependable 868/878 platform with additional features for an intuitive user experience and improved performance stability. BTECH provides continuous firmware updates to add new features and enhance existing ones based on user feedback.

Extensive Capacity and Seamless Mobility

The radio features over 4000 channels, 10,000 talk groups, and 500,000 contacts, all easily navigable on a large, user-friendly TFT color display. DMR Roaming is supported, allowing the radio to automatically switch between repeaters based on your location for continuous coverage.

DATA STORAGE

10,000 TALKGROUPS

4000 CHANNELS

250 CUSTOMIZABLE ZONES

500,000 DIGITAL CONTACTS

7W POWER OUTPUT

4 POWER LEVELS



Image: The radio's display showing its extensive data storage capabilities.

Unmatched Security with AES256 and ARC4 Encryption

Safeguard your communications with military-grade AES256 and versatile ARC4 encryption. This ensures your conversations remain private, secure, and protected from eavesdropping, essential for confidential and secure communications.



Image: The radio's screen showing digital encryption options.

Seamless Connectivity with Bluetooth Integration

Connect wirelessly with Bluetooth for hands-free communication and remote operations. This is ideal for maintaining connection in dynamic environments without the hassle of wires.



Image: The radio's display showing Bluetooth pairing in progress, alongside a Bluetooth PTT switch.

IP54 Weatherproof Rating

The radio is designed with an IP54 rating, providing protection against dust and splashing water from any direction. This makes it suitable for use in various outdoor and challenging environments.



Image: The radio shown in a wet environment, illustrating its IP54 weatherproof capabilities.

ADVANCED FEATURES

GPS Functionality

The integrated GPS allows for location tracking and services, enhancing safety and coordination in the field. This feature is particularly useful for outdoor activities or professional use where location awareness is critical.

APRS (Automatic Packet Reporting System)

The DMR-6X2 PRO supports both Analog and Digital APRS for transmitting and receiving location data and short messages. This allows for real-time tracking and communication with other APRS-enabled devices.

Video: Overview of DMR Radio - Radioddity GD-AT10G. This video provides a general overview of DMR radio features, including APRS, which is relevant to the BTECH DMR-6X2 PRO.

Voice Recording

The radio includes voice recording capabilities, allowing users to record and playback conversations. This can be useful for reviewing important communications or for training purposes.

SPECIFICATIONS

Feature	Detail
Item Weight	1 pounds
Product Dimensions	2 x 1.5 x 5 inches
Item Model Number	DMR-6X2 PRO
Batteries	1 Lithium Ion batteries required. (included)
Brand	BTECH
Color	Black
Number of Channels	4000
Frequency Range	VHF (136-174MHz) & UHF (400-480MHz)
Talking Range Maximum	5 Mile
Voltage	7.4 Volts
Water Resistance Level	IP54 Weatherproof

MAINTENANCE

Battery Care

To prolong battery life, avoid fully discharging the battery frequently. Store the battery in a cool, dry place when not in use. If storing for extended periods, charge the battery to approximately 50% capacity.

Cleaning

Clean the radio's exterior with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners. Ensure all port covers are securely closed before cleaning to maintain water resistance.

TROUBLESHOOTING

No Power

Ensure the battery is correctly installed and fully charged. Check the power knob is rotated clockwise to the 'on' position.

Cannot Transmit/Receive

Verify the antenna is securely attached. Check that you are on the correct channel and zone. Ensure the battery has sufficient charge. For digital modes, confirm correct talk group and color code settings in your codeplug.

Poor Audio Quality

Check antenna connection. Ensure you are within range of the repeater or other radios. For digital modes, verify correct digital settings (e.g., error correction, bandwidth).

WARRANTY AND SUPPORT

The BTECH DMR-6X2 PRO comes with a 1-year warranty through BaoFengTech.com. For technical support, firmware updates, or warranty claims, please visit the official BaoFengTech website or contact their customer service directly. For additional resources and community support, consider exploring online forums and groups dedicated to DMR and amateur radio.

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Details

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