

FreedConn T-COM VB

FreedConn T-COM VB 800M Bluetooth Motorcycle Helmet Intercom User Manual

Model: **T-COM VB** | Brand: **FreedConn**

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your FreedConn T-COM VB Bluetooth Motorcycle Helmet Intercom. Please read this manual thoroughly before using the device to ensure proper function and safety. Keep this manual for future reference.

2. PRODUCT OVERVIEW

The FreedConn T-COM VB is a Bluetooth 5.0 intercom system designed for motorcycle helmets, offering communication, music, GPS navigation, and FM radio capabilities. It supports intercom communication for up to 3 riders, with 2 riders talking simultaneously, over a range of up to 800 meters at speeds up to 120 km/h.

Key Features:

- Bluetooth 5.0 for stable and fast connections.
- Intercom for up to 3 riders (2 simultaneous conversations) with an 800m range.
- Music sharing between two TCOM-SC or T-COMVB devices.
- Hands-free calling with automatic answer, rejection, and last number redial.
- Stereo music playback and FM radio.
- GPS voice navigation integration.
- DSP and CVC noise cancellation for clear audio.
- Multitasking audio: simultaneous calls, intercom, music, and radio.
- Waterproof and sun-protected design.
- Rotary jog wheel for easy control with gloves.

Components:



Figure 2.1: FreedConn T-COM VB Intercom Components. This diagram illustrates the main parts of the intercom unit, including the charging port, headset connection, control buttons, microphone, and speakers.

The unit features a Multi-function Button (MFB), a Jog Wheel for intuitive control, and dedicated On/Off and Intercom buttons. It connects to a headset with ear speakers and a microphone via a soft cable and a headset plug. A charger and headset socket are also present for power and audio connections.

3. SETUP

3.1 Charging the Device

Before first use, fully charge the intercom unit. The device uses a Lithium Polymer battery. A full charge takes approximately 2 hours and provides up to 13 hours of average battery life.

3.2 Installation on Helmet

The intercom unit can be mounted to your helmet using the provided clamp or velcro band. Position the unit on the side of your helmet for easy access to controls. The ear speakers attach inside the helmet using velcro pads, aligning with your ears. The microphone can be either a boom microphone (suitable for jet and modular helmets) or an adhesive microphone (for full-face helmets). Ensure the microphone is positioned close to your mouth for optimal voice pickup.



Figure 3.1: Helmet Installation and Device Connection. This image demonstrates how the intercom unit attaches to a helmet and connects wirelessly to a smartphone and GPS for integrated communication and navigation.

3.3 Device Pairing

The T-COM VB uses Bluetooth 5.0 for wireless connections.

- **Pairing with Phone/GPS:** Activate Bluetooth on your smartphone or GPS device. Put the T-COM VB into pairing mode (refer to specific instructions in the full manual for button sequences). Select 'FreedConn T-COM VB' from the list of available devices.
- **Intercom Pairing (Rider-to-Rider):** The system supports pairing with up to 3 riders, allowing 2 riders to communicate simultaneously. Follow the specific pairing sequence for intercom mode (usually involving holding the intercom button on both units until they connect).

3 Riders Pair, 2 Riders Talk

Bluetooth 5.0 ensures faster and more stable connection



Figure 3.2: Multi-Rider Intercom Pairing. This image illustrates the capability of the FreedConn T-COM VB to pair with multiple riders for group communication.

3.4 Music Sharing

Music sharing functionality is available between two latest version TCOM-SC or T-COMVB devices. This allows two riders to listen to the same audio source simultaneously.

Enjoy the Same Music with Partner

* Only work between 2 latest version
TCOM-SC or T-COMVB device



Figure 3.3: Music Sharing Feature. This image highlights the ability to share music between two compatible intercom units.

4. OPERATING INSTRUCTIONS

4.1 Basic Functions

- **Power On/Off:** Use the dedicated On/Off button.
- **Volume Control:** Adjust volume using the Jog Wheel.
- **Switching Modes:** The MFB allows easy switching between phone calls, intercom, music, and FM radio. Phone calls take priority.

4.2 Phone Calls

When connected to your smartphone, the T-COM VB supports hands-free calling. Incoming calls can be set to auto-answer, rejected, or you can redial the last number. You can also disable the auto-answer feature if preferred.

4.3 Music and FM Radio

Enjoy stereo music from your paired device. Use the AVRCP controls (forward, back, play, pause) via the MFB or Jog Wheel. The integrated FM radio allows you to listen to local stations.

4.4 GPS Navigation

Receive clear voice instructions from your GPS device or smartphone navigation app directly through the intercom speakers.

4.5 Multitasking Audio

The T-COM VB features multitasking audio technology, allowing you to listen to music or GPS instructions while on an intercom call or receiving a phone call. The system intelligently manages audio priorities.



Figure 4.1: Connectivity and Features Overview. This diagram shows the diverse functions of the intercom, including various intercom modes, GPS, FM radio, MP3, and phone connectivity.

5. MAINTENANCE

The FreedConn T-COM VB is designed to be waterproof and sun-protected, ensuring durability in various weather conditions. To maintain optimal performance:

- Wipe the unit with a soft, damp cloth to remove dirt and dust.
- Avoid using harsh chemicals or abrasive cleaners.
- Ensure all ports are dry before charging.
- Store the device in a cool, dry place when not in use for extended periods.



Figure 5.1: Weather Resistance and Functionality. This image highlights the intercom's ability to withstand rain and sun, and its seamless switching capabilities.

6. TROUBLESHOOTING

If you encounter issues with your FreedConn T-COM VB, refer to the following common solutions:

- **No Power:** Ensure the device is fully charged. Check the charging cable and adapter.
- **No Sound/Poor Sound Quality:** Verify that the headset plug is securely connected. Adjust the volume. Ensure speakers are correctly positioned over your ears inside the helmet. The device features DSP and CVC noise cancellation for clear audio, even at high speeds.
- **Bluetooth Disconnection:** Ensure the device is within range of your phone/intercom partner. If disconnected after being out of range, manually reconnect through the device's pairing mode.
- **Intercom Pairing Issues:** Ensure both units are in pairing mode simultaneously. Refer to the specific pairing sequence in the detailed manual.
- **Connectivity Note:** All T-COM VB intercoms have been updated to 5-pin connectors. Confirm your headset ports are 5-pin for compatibility.
- **Cable Connection Sensitivity:** If experiencing intermittent sound or connection issues, particularly with the headset cable, ensure the connection is firm and stable.



Figure 6.1: DSP Noise Control. This image demonstrates how DSP technology reduces ambient noise for improved audio clarity during communication.

7. SPECIFICATIONS

- **Model Number:** T-COM VB
- **Bluetooth Version:** 5.0
- **Intercom Range:** Up to 800 meters
- **Max Speed for Intercom:** 120 km/h
- **Battery Type:** Lithium Polymer
- **Battery Life (Average):** 13 hours
- **Charging Time:** 2 hours
- **Dimensions:** 8.2 x 3.2 x 2.2 cm
- **Weight:** 50 g
- **Water Resistance:** Yes
- **Noise Control:** DSP (Digital Signal Processing) & CVC (Clear Voice Capture)

- **Connectivity:** Wireless (Bluetooth), USB
- **Compatible Devices:** Smartphones, MP3 players, GPS devices, Car audio systems
- **Impedance:** 32 Ohms
- **Frequency Range:** 2.4 GHz
- **Control Type:** Media control, Call control, Volume control
- **Control Method:** Voice, Buttons (MFB, Jog Wheel)
- **Number of Items:** 2 (units, for the dual pack)

8. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided with your purchase or contact your retailer. For technical support or further assistance, please reach out to FreedConn customer service through their official website or the contact information provided in your product packaging.