

CARPURIDE W502S Pro

Carpuride W502S Pro Motorcycle GPS User Manual

Model: W502S Pro

1. INTRODUCTION

The Carpuride W502S Pro is a wireless motorcycle GPS system designed to integrate smartphone functionalities like CarPlay and Android Auto directly onto your motorcycle. This manual provides detailed instructions for installation, operation, and maintenance to ensure optimal performance and a safe riding experience.



Image 1.1: Carpuride W502S Pro Motorcycle GPS and included accessories.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Wireless CarPlay and Android Auto:** Seamless integration with your smartphone for navigation, calls, music, and messages via voice assistants (Siri/Google Assistant).
- **Flexible Bluetooth Connectivity:** Supports both single and dual Bluetooth connections for pairing with motorcycle helmets or headsets.
- **Secure and Durable Mounting:** Features a metal BM05 mount with a quick-release mechanism for easy attachment and removal, enhancing security against theft.
- **Automatic Brightness Adjustment:** An integrated light sensor automatically adjusts screen brightness based on ambient light conditions, protecting your eyes and ensuring visibility.
- **Intercom and Music Sharing:** Dual Bluetooth technology allows simultaneous connection of two Bluetooth helmets for rider-passenger intercom and shared music playback.
- **Integrated Navigation Aids:** Includes a compass for direction and a barometer for real-time altitude monitoring.
- **Wired Controller:** Provides convenient control for answering calls, managing screen power, and

switching between home and active interfaces.

- **5-inch HD IPS Touchscreen:** High-definition display with 800x600 resolution, 65K vibrant colors, and up to 1000 nits brightness for clear visibility in direct sunlight.
- **IP67 Waterproof Rating:** Robust design ensures reliable performance in various weather conditions, operating effectively from -20°C to 80°C.
- **Local Media Playback:** Supports TF/SD card for playing music and videos directly on the device.



Image 2.1: Visual representation of the Carpuride W502S Pro's main features.

2.2 What's in the Box

- Carpuride W502S Pro Motorcycle CarPlay Screen (x1)
- BM05 Metal Mount and Key (x1)
- Extension Rod Bracket (x1)
- Wired Controller (x1)
- Spanner (x1)
- Power Cable (x1)
- USB Power Line (x1)

- User Manual (x1)
- Silicone Gasket Set (x1)



Image 2.2: Contents of the Carpuride W502S Pro package.

3. SETUP AND INSTALLATION

3.1 Mounting the Device

The Carpuride W502S Pro comes with a universal BM05 metal mount designed for various motorcycle handlebars. Follow these steps for installation:

1. Select the appropriate silicone gasket thickness (12mm, 22mm, 25.4mm, or 28mm) to match your handlebar diameter.
2. Attach the metal mount to the handlebar using a Phillips screwdriver.
3. Adjust the extension rod bracket to your desired viewing angle and secure it.
4. Slide the BM05 mount onto the handlebar clamp and tighten the screws.
5. Insert the metal key into the slot on the mount, push it in until it locks, then turn it left to secure.
6. Align the Carpuride W502S Pro screen with the BM05 mount and slide it into place until it clicks securely.
7. To remove, re-insert the key, push it in, turn it right, and slide the screen off.



Image 3.1: Installation Mode 1 - Detailed steps for mounting the device.



Image 3.2: Installation Mode 2 - Alternative mounting method.

3.2 Wiring and Power Connection

The device can be powered via a direct battery connection or a USB port.

- **Direct Battery Connection:** Connect the red wire of the power cable to the positive terminal of your motorcycle's battery (ACC), and the black wire to the negative terminal.
- **USB Power Connection:** Use the provided USB power line to connect the device to a motorcycle USB port.

Ensure all connections are secure and waterproof. The wired controller connects to the main unit via its dedicated port.



Image 3.3: Installation Diagram - Power connection options.

4. OPERATION

4.1 Power On/Off

To power on the device, press and hold the power button for more than 5 seconds. To power off, press and hold the power button again for more than 5 seconds.

4.2 Wireless CarPlay and Android Auto

Connect your smartphone to the Carpuride W502S Pro via Bluetooth for wireless CarPlay or Android Auto functionality.

- **For Apple CarPlay:**

1. On the W502S Pro, open the CarPlay application.
2. On your iPhone, search for the Bluetooth device named "carpuride xxxx" and pair.
3. Confirm by tapping "Allow" and "Use CarPlay" on your iPhone.
4. The connection will be established.

- **For Android Auto:**

1. On the W502S Pro, open the Android Auto application.
2. On your Android phone, go to Bluetooth settings and find available devices.
3. Select "carpuride xxxx" and tap "Pair" to connect.
4. The connection will be established.



Image 4.1: Apple CarPlay Connection Guide.



Image 4.2: Android Auto Connection Guide.

4.3 Bluetooth Headset Connections

The W502S Pro supports various Bluetooth audio configurations:

- **Bluetooth Trans (Single-Connection Mode):** Pair your Bluetooth helmet or headset directly with the W502S Pro. Ensure the headset is in pairing mode. Do not connect your mobile phone directly to the Bluetooth helmet/headset, as this may interfere with the pairing process.
- **Bluetooth Trans (Dual-Connection Mode):** The W502S Pro can transmit audio from CarPlay or Android Auto to two separate Bluetooth helmets/headsets (Bluetooth 1 and Bluetooth 2) simultaneously. This allows both rider and passenger to listen to music or communicate.
- **iPlay/Auto (Bluetooth Audio):** Connect your phone to your Bluetooth headset/helmet, and use CarPlay or Android Auto on the W502S Pro to play audio through your headset/helmet.

How to Set Up Helmet and Headset?

Bluetooth Trans (Single-Connection Mode)

- Note:**
1. The helmet or earphone must be turned on and in an active state in order to be discovered by the Carpuride screen for pairing.
 2. Do not connect your mobile phone to the Bluetooth helmet or earphone, as this may interfere with the pairing process.



Bluetooth Trans (Dual-Connection Mode)

BT Trans Bluetooth Transmission Function. Through the Bluetooth transmission function of Carpuride screen, the audio in the TF card of Carpuride screen's Carplay or Android Auto is transmitted to Bluetooth1 and Bluetooth 2.



iPlay/ Auto (Bluetooth Audio)

Connect your phone to the Bluetooth Headset or Helmet. and use CarPlay or Android Auto to play audio through the Bluetooth Headset or Helmet.



Image 4.3: Bluetooth Headset Connection Modes.

4.4 Wired Controller Functions

The included wired controller provides quick access to essential functions:

- **Cycle Button:** Short press to answer incoming calls. Long press (over 5 seconds) to power on/off the screen.
- **Photo Button:** Short press to hang up calls.
- **Home Button:**
 - When connected to Apple CarPlay, a short press switches between the main interface and the CarPlay interface.
 - Long press (over 5 seconds) to lock the screen. In heavy rain, press the screen lock button to prevent accidental touches.

Music Sharing & Intercom Mode

Connect 2 BT helmet headsets to your device simultaneously, even if they are from different brands, to share music or use the intercom feature



Max distance 10M



Image 4.4: Wired Controller and its functions.

4.5 Voice Control

Utilize Siri or Google Assistant through the device for hands-free operation, including navigation, making calls, and playing music.

The Phone Features Free Your Hands



Image 4.5: Hands-free operation with voice control.

4.6 Music Sharing and Intercom

With the dual Bluetooth feature, the rider and passenger can share music and use the intercom function. Connect two Bluetooth helmets to the W502S Pro via BT Trans mode. This allows for shared audio experiences and instant communication during rides.

Wired Controller

You can switch between home page and current interface by click the button of the wired controller. Can answer the phone.



Wider Compatible



Image 4.6: Music Sharing and Intercom Mode.

4.7 Compass and Barometer

The W502S Pro includes a digital compass to help maintain your bearing and a barometer to monitor real-time altitude changes, useful for understanding environmental conditions, especially in mountainous terrain.



Image 4.7: Compass and Barometer displays.

4.8 Light Sensor and Equalizer

The integrated light sensor automatically adjusts the screen's brightness to optimize visibility and reduce eye strain in varying light conditions. The device also features a built-in equalizer with various musical styles and sound effects for audio customization.

Fit for All Riding Environments

- ◆ Withstand all kinds of weather
- ◆ Anti-glare vehicle gauges screen
- ◆ IP67 waterproof sunscreen design
- ◆ Works between -4°F and 158°F

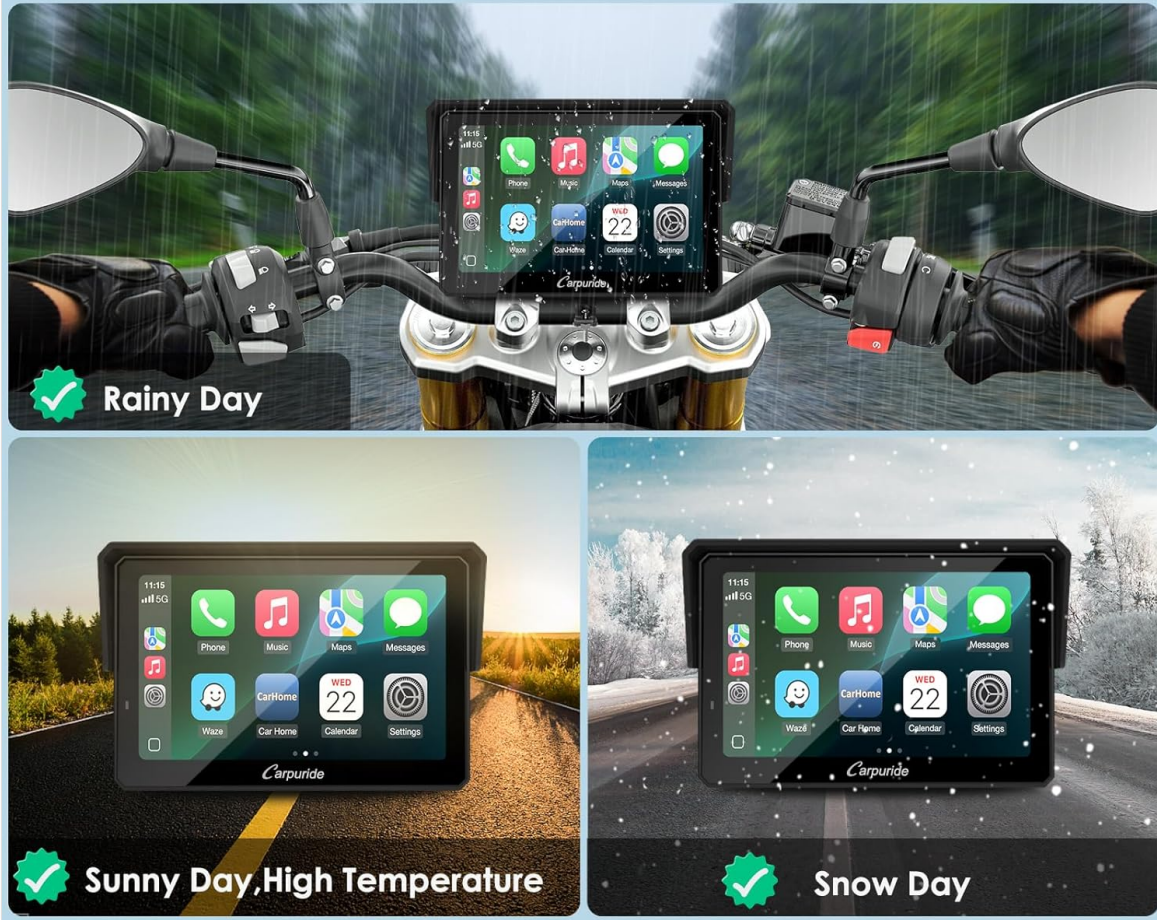


Image 4.8: Light sensor functionality and local playback.

4.9 Local Media Playback

The W502S Pro supports local playback of music and videos from a TF/SD card (not included, purchased separately). Insert the card into the designated slot to access your media files.



Image 4.9: TF Card support for local media playback.

5. MAINTENANCE

5.1 Cleaning

To clean the screen and device body, use a soft, damp cloth. Avoid abrasive cleaners or solvents that could damage the screen or casing.

5.2 Water Resistance and Durability

The Carpuride W502S Pro is rated IP67 waterproof, meaning it is protected against dust and can withstand immersion in water up to 1 meter for 30 minutes. It is designed to operate reliably in temperatures ranging from -20°C to 80°C.



Image 5.1: Device performance in various riding environments.

6. TROUBLESHOOTING

6.1 Connection Issues

- **Bluetooth Pairing Interference:** When pairing a Bluetooth helmet or headset, ensure your mobile phone is not simultaneously connected to the headset, as this can cause interference.
- **Incompatible Android Phones:** Some Android phone models may not be fully compatible with wireless Android Auto. These include, but are not limited to: OnePlus Nord 2T, OnePlus Nord CE2 5G, Oppo CPH2161, Oppo A16S, Oppo Reno 2, Oppo Reno 2Z, Samsung S23, Samsung Note 20, Samsung S20, Samsung M22, Samsung S23 Ultra, Galaxy A20 (model SM-A205g), Huawei P30, Huawei P30 Pro, Huawei P40 Pro, Huawei P20, Huawei P20 Pro, Huawei P30 Lite MAR-LX1A, Huawei Mate 20, Huawei Mate 20 Pro, Huawei P Smart 2019 - POT-LX1, Huawei Nova 5T, Huawei Mate Lite 10, Honor 90, Xiaomi 11 Lite, Xiaomi 12 Pro, Redmi 9, Xiaomi 9.

- **Motorcycle 'Start & Stop' Feature:** If your motorcycle has a 'Start & Stop' feature and the device is powered via USB, the screen may turn off when the engine stops. This is because the USB port might lose power. To avoid this, disable the 'Start & Stop' feature or use direct battery wiring.

6.2 Wired Controller Limitations

- When connected to an Android phone, the wired controller's cycle button may not be able to answer calls.







7. SPECIFICATIONS

Feature	Specification
Brand	CARPURIDE
Model	W502S Pro
Product Dimensions	2.75 x 13.4 x 9 cm
Product Weight	998 g
Screen Size	5 inches
Display Type	IPS HD Touchscreen
Resolution	800x600
Brightness	Up to 1000 nits
Waterproof Rating	IP67
Operating Temperature	-20°C to 80°C
Connectivity Technology	Bluetooth
Compatible Devices	Smartphone (iOS, Android)
Audio Output Mode	Stereo (Headphones, Speaker)
Surround Sound Channel Configuration	5.1
Video Encoding	H.264, H.265/HEVC

8. WARRANTY AND SUPPORT

Carpuride offers 12 months of technical support for the W502S Pro GPS navigator. For any questions or concerns, please contact Carpuride customer service. They aim to provide a satisfactory solution within 24 hours.

Related Documents - W502S Pro

	<p>Carpuride CarPlay Android Auto Touchscreen Motorcycle Manual</p> <p>Comprehensive user manual for the Carpuride CarPlay and Android Auto Touchscreen for motorcycles, featuring IPS display, IP67 waterproofing, dual Bluetooth, TF-Audio, compass, barometer, and BMW Wonder Wheel control. Includes installation, interface navigation, audio settings, and connectivity guides for iOS and Android devices.</p>
	<p>Carpuride Motorcycle CarPlay/Android Auto Display User Manual</p> <p>Comprehensive user manual for the Carpuride IPS touchscreen display, featuring wireless CarPlay and Android Auto for motorcycles. Includes installation, interface guide, connectivity, audio settings, and troubleshooting.</p>
	<p>Carpuride 2.5HD-Touchscreen Portable Wireless Carplay & Android Auto Autoradio User Guide</p> <p>Comprehensive user guide for the Carpuride 2.5HD-Touchscreen portable wireless Carplay and Android Auto Autoradio. This guide details setup and usage for Carplay, Android Auto, AirPlay, Android Cast, and dashcam features, including connection steps, settings, and troubleshooting tips.</p>
	<p>Carpuride Motorcycle CarPlay/Android Auto Screen User Manual</p> <p>Discover the Carpuride Motorcycle CarPlay/Android Auto Screen user manual. This guide covers installation, wiring, main interface functions, connecting iOS and Android devices wirelessly, volume adjustments, audio output methods, EQ settings, SD card usage, Bluetooth calls and music, brightness control, and after-sales support for your detachable, IP67 waterproof, IPS touchscreen display.</p>
	<p>Carpuride 6.3-inch Wireless CarPlay and Android Auto Motorcycle Display User Manual</p> <p>This user manual provides comprehensive instructions for installing and operating the Carpuride 6.3-inch wireless CarPlay and Android Auto display unit for motorcycles. It covers mounting, wiring, connecting smartphones via CarPlay and Android Auto, Bluetooth audio, system settings, and after-sales support.</p>
	<p>Manuale Carpuride W712D: Sistema di Intrattenimento e Dash Cam per Moto</p> <p>Guida completa al Carpuride W712D, uno schermo touchscreen da 7 pollici per moto con Apple CarPlay e Android Auto wireless, doppia fotocamera 1080p HD, Bluetooth, impermeabilità IP67, controller cablato e registrazione in loop.</p>