

EONON E46A12S-6G-U

Eonon E46A12S Car Stereo User Manual

Model: E46A12S-6G-U | Brand: EONON

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Eonon 6+64GB Car Stereo, Model E46A12S QCM6125. This head unit is designed to enhance your driving experience with advanced features such as Android 13, Wireless CarPlay, Android Auto, GPS navigation, and more.

Please read this manual thoroughly before installation and operation to ensure proper use and to maximize the product's capabilities.



Figure 1.1: Eonon E46A12S Car Stereo Main Unit

2. SETUP AND INSTALLATION

2.1. Vehicle Compatibility

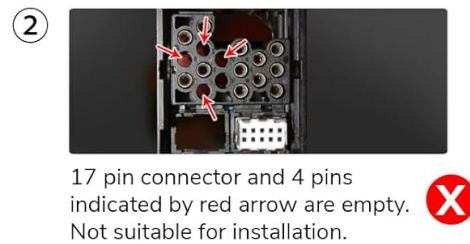
The E46A12S head unit is compatible with BMW E46 3 Series models manufactured between 1999 and

2005. This includes models such as 325i, 330i, and M3. The unit is designed for a plug-and-play installation, requiring no additional frame or cable changes for compatible vehicles.

Applicable Models: 1998-2006 BMW 3 Series E46 2000-2006 BMW M3



Please confirm the car radio's **power cable connector** in center console. There are 3 types of connectors:



③ Blue & white connector. You need to check the connector in the trunk.



a. If the connector in the trunk is 17 or 40 pin like picture ①, Eonon [A0590](#) extension harness (not included) is required to install the unit.



b. If the connector is 17 pin and 4 pins are empty like picture ②, it's not suitable for installation.



You can find the the power cable connector in the trunk at these positions.

Figure 2.1: Examples of Compatible BMW E46 Dashboard Configurations

2.2. Power Cable Connector Verification

Before installation, confirm the type of power cable connector in your car's center console. There are typically three types of connectors:

- **17-pin or 40-pin connector (without empty pins):** The unit can be installed directly.
- **17-pin connector with 4 empty pins:** This configuration is NOT suitable for direct installation.
- **Blue & white connector in the trunk:** If the connector in the trunk is a 17-pin or 40-pin type, an additional Eonon A0590 extension harness (not included) is required for installation. If this trunk connector is a 17-pin type with 4 empty pins, it is not suitable.



Figure 2.2: Power Cable Connector Types and Compatibility

2.3. AC Control Panel Relocation

If your car's air conditioning control panel is located in the center console where the new stereo will be installed, you will need to remove it and relocate it to the position below the new car stereo. This ensures proper fitment and access to controls.



Figure 2.3: AC Control Panel Relocation for Installation

3. OPERATING INSTRUCTIONS

3.1. System Overview

The E46A12S operates on the Android 13 system, powered by an Octa-core processor with 6GB RAM and 64GB ROM. This configuration ensures responsive performance for all tasks and ample storage for media and applications. The 11nm LPP processing technology contributes to efficient operation.



Figure 3.1: System Specifications and Android 13 Interface

3.2. Display Features

The unit features a 9-inch QLED capacitive touch screen with a 1280x720 HD resolution. This display provides vibrant colors and clear visuals from various viewing angles. It includes three brightness modes (Light, Dark, and Auto) for optimal visibility in different lighting conditions, enhancing driving safety and comfort.



Figure 3.2: QLED Display with Day and Night Brightness Modes

3.3. Wireless CarPlay & Android Auto

Enjoy seamless integration with your smartphone via Wireless CarPlay and Android Auto. Once connected wirelessly through Bluetooth and Wi-Fi, the system will automatically connect on subsequent uses. This allows access to navigation, hands-free calling, music playback, and other applications directly from the head unit's display. The unit also supports wired/wireless Mirror Link for apps not supported by CarPlay or Android Auto.



Figure 3.3: Wireless CarPlay and Android Auto Functionality

Your browser does not support the video tag.

Video 3.1: Demonstration of Eonon E46A12S Features, including CarPlay and Android Auto.

3.4. Audio Features (Built-in DSP)

The E46A12S car radio includes a built-in Hexagon 686 DSP and a max ST TDA7851 4*48W output power amplifier, providing an immersive sound experience. It features a 15-band graphic equalizer and 6 preset EQ modes, allowing for detailed audio customization to suit your preferences.

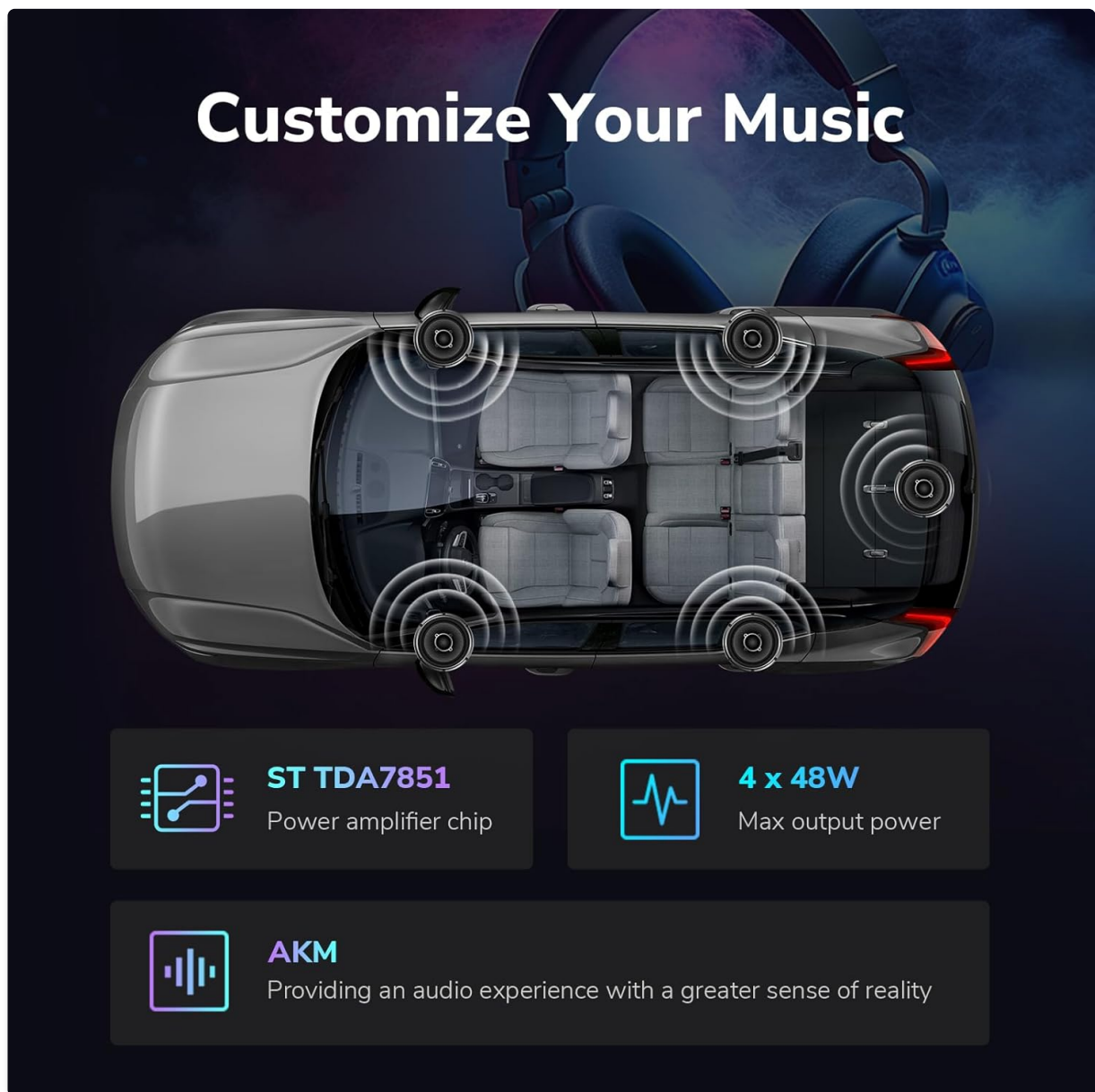


Figure 3.4: Audio Customization with Built-in DSP

3.5. Internet Connectivity

The unit supports both 2.4G/5G Wi-Fi and 4G SIM card internet access. Simply insert a Micro-SIM network card to enjoy 4G connectivity anywhere, or connect to a Wi-Fi hotspot for internet access.



Figure 3.5: Wi-Fi and 4G SIM Card Internet Access

3.6. Additional Features

- **Fast Boot Time:** The system is designed for quick startup.
- **USB Ports:** Equipped with three USB interfaces for charging devices or playing media from USB sticks.
- **Steering Wheel Control:** Supports analog steering wheel control signals, allowing you to manage basic functions without taking your hands off the wheel.
- **Split Screen Function:** Enables simultaneous display of two applications, such as navigation and music.
- **OEM Feature Retention:** Retains factory features like Harman Kardon sound system integration, door information display, and driving data.
- **HDMI HD Video Output:** For connecting external displays.

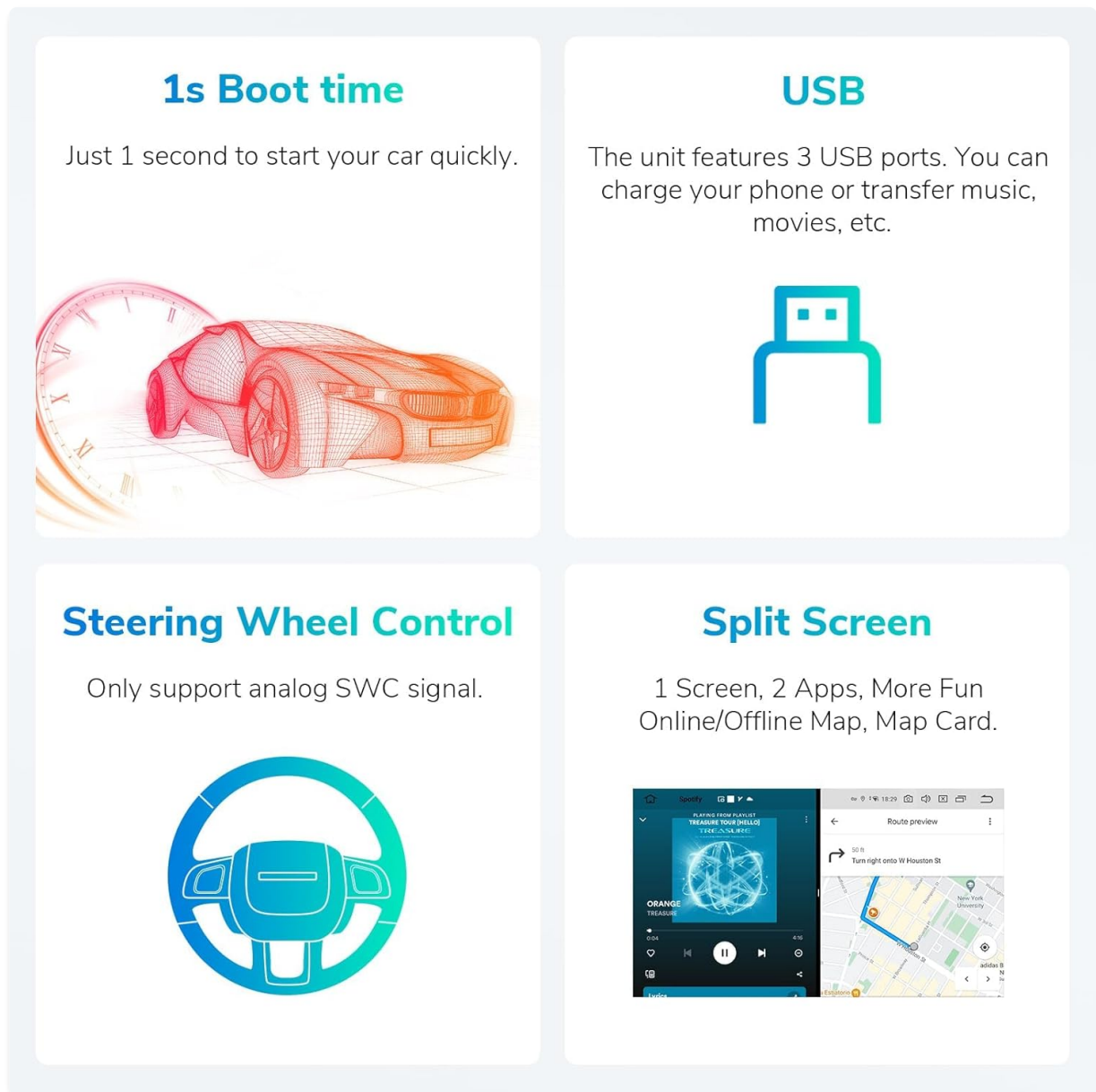


Figure 3.6: Overview of Key Operational Features

Keep OEM Features

Plug & play and retain factory features easily. No need to set up.

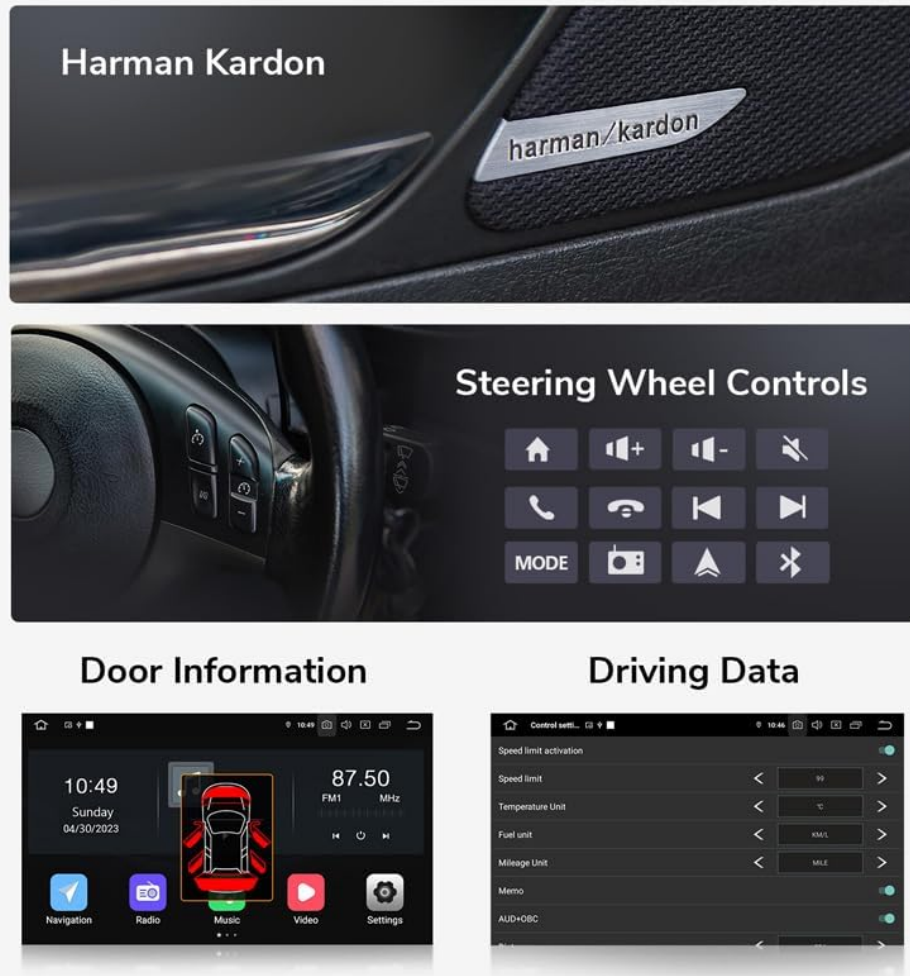


Figure 3.7: Integration with Original Equipment Manufacturer (OEM) Features

3.7. Optional Accessories Integration

The E46A12S supports various optional accessories to further enhance your driving experience:

- **AHD Reversing Camera (A0125):** Supports 1080P HD rear camera input for improved parking and reversing safety. This camera is sold separately.
- **Dash Camera (R0020):** Supports dash camera input for recording driving footage. This camera is sold separately and requires an SD card.
- **Bluetooth OBD2 Scanner (V0056):** Allows for real-time vehicle information display and diagnostics. This scanner is not included.



Figure 3.8: Support for Optional AHD Reversing Camera



Figure 3.9: Support for Optional Dash Camera



Figure 3.10: Support for Optional Bluetooth OBD2 Scanner

4. MAINTENANCE

4.1. Software Updates

The E46A12S supports Over-The-Air (OTA) software updates. Regularly checking for and installing updates can help fix software issues, enhance security, and improve overall performance. When an update is detected, follow the on-screen prompts to download and install it.

Support Software Updates

With OTA updates, you can keep the unit up-to-date by fixing software issues and enhancing security. Just a few taps, and your device is on the path to improvement!

Note: Some car stereos run on Android 12 since they're made before Android 13 ones are released. You can upgrade it to Android 13 via OTA updates.

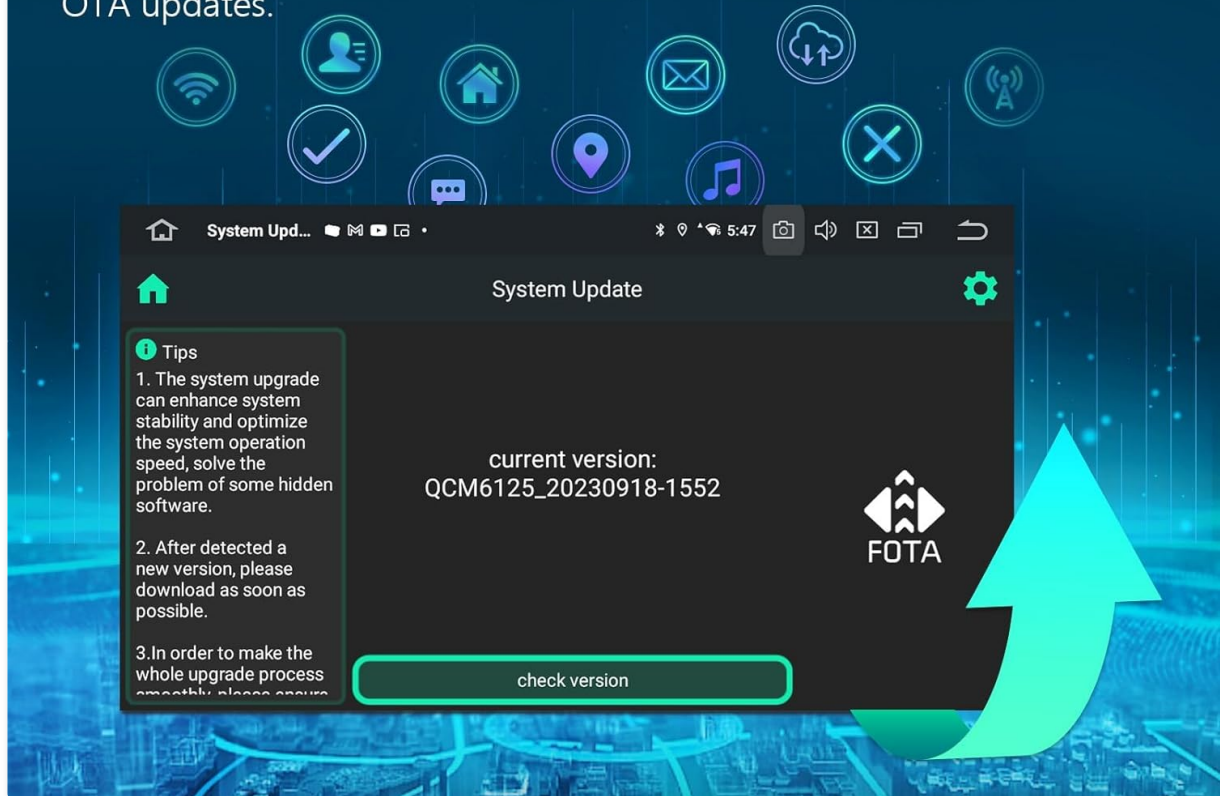


Figure 4.1: Software Update Interface

5. TROUBLESHOOTING

If you encounter issues with your Eonon E46A12S car stereo, please refer to the following common troubleshooting steps:

Problem	Possible Cause / Solution
Unit does not power on.	Check power cable connections. Ensure vehicle ignition is on. Verify fuse integrity.
No sound output.	Check speaker connections. Verify amplifier connections (if applicable). Adjust volume settings. Ensure the correct audio source is selected.
CarPlay/Android Auto not connecting.	Ensure Bluetooth and Wi-Fi are enabled on your phone and the head unit. Restart both devices. Check for software updates on the head unit.
GPS signal weak or inaccurate.	Ensure GPS antenna is properly installed and has a clear view of the sky. Avoid obstructions.

Problem	Possible Cause / Solution
Touchscreen unresponsive or inaccurate.	Restart the unit. Perform a screen calibration if available in settings. Ensure screen is clean and free of debris.

If the problem persists after attempting these solutions, please contact Eonon customer support for further assistance.

6. SPECIFICATIONS

Feature	Detail
Model Number	E46A12S-6G-U
Operating System	Android 13
Processor	Octa-core (Qualcomm Snapdragon 665)
RAM	6GB
ROM	64GB
Display Size	9 Inch QLED
Resolution	1280x720 HD
Connectivity	Bluetooth, USB, Wi-Fi (2.4G/5G), 4G LTE (Micro-SIM)
Audio Output Power	4*48W (ST TDA7851)
DSP	Built-in Hexagon 686 DSP, 15-band graphic equalizer, 6 preset EQ modes
Product Dimensions	9.69"L x 8.98"W x 5.31"H
Item Weight	2.86 pounds

6.1. Included Components

- Power cord
- GPS antenna
- 4G antenna (x2)
- USB adapter cable (x2)
- Audio/video adapter cable (x2)
- Reversing video input cable
- 15A fuse
- SIM card holder
- External microphone
- CANBUS
- Manual
- Double-sided adhesive sticker

- Radio antenna adapter cable



Figure 6.1: Included Components and Wiring Diagram

7. WARRANTY AND SUPPORT

7.1. Warranty Information

Eonon products typically come with a manufacturer's warranty covering defects in materials and workmanship. Please refer to the warranty card included with your product or visit the official Eonon website for specific warranty terms and conditions.

7.2. Customer Support





For technical assistance, troubleshooting, or any inquiries regarding your Eonon E46A12S car stereo, please contact Eonon customer support. You can find contact information on the official Eonon website or through your purchase platform.

Additional resources, including FAQs and updated drivers/firmware, may be available on the Eonon support page: www.eonon.com

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Related Documents - E46A12S-6G-U

	<p>BMW 3 Series E46 Installation Manual - Eonon Head Unit</p> <p>Step-by-step installation guide for an Eonon head unit in a BMW 3 Series 1999-2004 (E46). Covers removal of factory components and installation of the new unit.</p>
	<p>BMW E46 (1999-2004) Installation Manual for Eonon Head Unit</p> <p>Step-by-step installation guide for replacing the factory car stereo with an Eonon head unit in a BMW 3 Series E46 (1999-2004). Includes detailed instructions and visual descriptions.</p>

	<p>BMW 3 Series (E90/E91/E92/E93) 2005-2011 Eonon Head Unit Installation Manual</p> <p>Comprehensive installation manual for Eonon car stereo head units in BMW 3 Series (E90, E91, E92, E93) models manufactured between 2005 and 2011. This guide provides detailed, step-by-step instructions for removing the factory radio and air conditioning controls, wiring the new unit, and fitting it into the dashboard. It covers essential steps such as checking console compatibility, using specialized tools, connecting harnesses, and testing features.</p>
	<p>Eonon VWA12S User Manual: Features, Installation, and Operation Guide</p> <p>Comprehensive user manual for the Eonon VWA12S car infotainment system. Covers product overview, features like Wireless CarPlay and Android Auto, GPS navigation, Bluetooth, settings, and troubleshooting for your Eonon VWA12S car stereo.</p>
	<p>Eonon Q49PRO User Manual</p> <p>User manual for the Eonon Q49PRO car stereo, covering installation, features, settings, and troubleshooting.</p>
	<p>Eonon Q63Pro Installation Manual for Mazda 3 (2010-2013)</p> <p>Detailed installation guide for the Eonon Q63Pro 9-inch Android 10 car stereo head unit in Mazda 3 vehicles (2010-2013). Covers GPS, CarPlay, Android Auto, DSP, Bluetooth, and more.</p>