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› ZWNAV Qualcomm Car Radio Android Auto User Manual for Dodge RAM 1500 2500 3500 (2019-2021)

ZWNAV Qualcomm Car Radio 8GB+128GB

ZWNAV Qualcomm Car Radio Android Auto User Manual

For Dodge RAM 1500, 2500, 3500 (2019-2021 Models)

1. PRODUCT OVERVIEW

This manual provides instructions for the ZWNAV Qualcomm Car Radio Android Auto system, designed as a replacement multimedia unit for Dodge RAM 1500, 2500, and 3500 trucks manufactured between 2019 and 2021. This system features an Android 11 operating system, a powerful Qualcomm Snapdragon 665 processor, and a large 12.1-inch touch screen display, integrating advanced navigation, entertainment, and connectivity features into your vehicle.

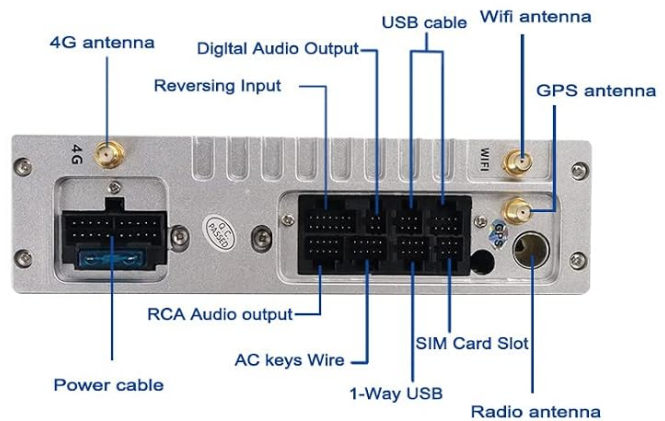


Image 1.1: Front view of the ZWNAV Qualcomm Car Radio Android Auto unit.

2. PACKAGE CONTENTS

Verify that all items listed below are included in your package. If any components are missing or damaged, please contact customer support.

Package List



Power cable



Audio cable



Rca cable



GPS antenna



Microphone



USB cable



Wifi antenna



4G antenna



Camera



Canbus

Image 2.1: Visual representation of the ZWNAV Car Radio package contents.

- GPS Navigation Unit (Main Head Unit)
- Power Cable
- Audio Cable
- RCA Cable
- GPS Antenna
- Microphone
- USB Cable
- Wi-Fi Antenna
- 4G Antenna
- Camera (if included in your specific package)
- Canbus Decoder

3. SETUP AND INSTALLATION

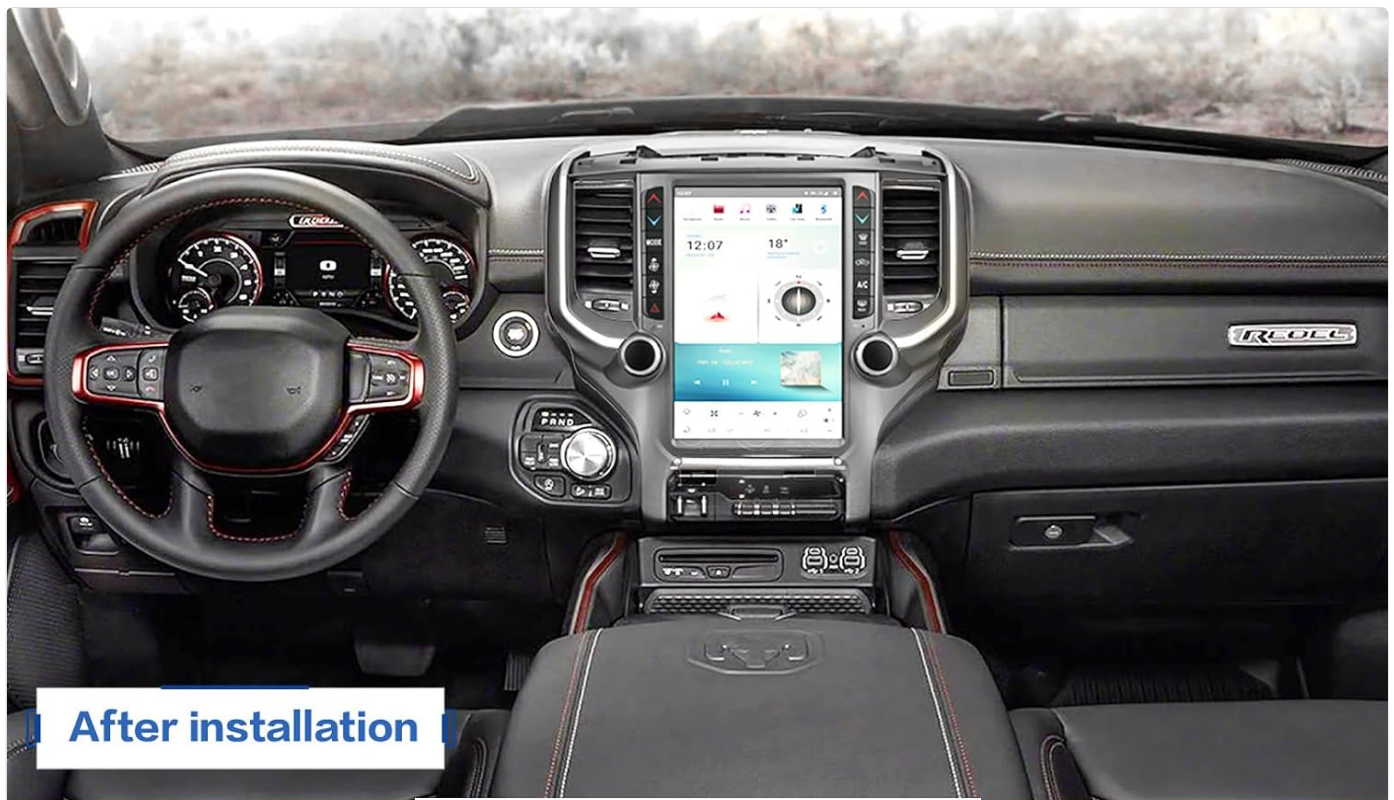
Installation of this car radio system requires technical knowledge and experience with automotive electronics. It is highly recommended to have the unit installed by a qualified professional to ensure proper functionality and to avoid damage to your vehicle or the product.

3.1 Compatibility Check

Ensure your vehicle is a Dodge RAM 1500, 2500, or 3500 model from the years 2019, 2020, or 2021. This unit is designed to integrate with your vehicle's existing systems, including support for Alpine amplifiers and factory seat heating/ventilation controls.

3.2 Basic Installation Steps (Professional Installation Recommended)

1. **Disconnect Battery:** Before starting, disconnect the vehicle's battery to prevent electrical shorts.
2. **Remove Factory Unit:** Carefully remove the existing factory radio and trim panels.
3. **Connect Wiring Harness:** Connect the provided power cable and Canbus decoder to the vehicle's wiring harness. Ensure all connections are secure.
4. **Connect Antennas:** Attach the GPS antenna, Wi-Fi antenna, and 4G antenna to their respective ports on the main unit. Position antennas in locations with clear signal reception.
5. **Connect Peripherals:** Connect the microphone, USB cables, RCA cables, and any optional camera inputs.
6. **Test Functionality:** Before fully reassembling the dashboard, reconnect the battery and perform a basic test of the unit's functions (power on, audio, touch screen, basic controls).
7. **Secure Unit and Reassemble:** Once tested, securely mount the ZWNAV unit and reassemble all trim panels.



After installation

For Dodge RAM 1500 2500 3500 2019 - 2021



Before installation



Image 3.1: Comparison of the dashboard before and after installing the ZWNAV Car Radio.

4. OPERATING INSTRUCTIONS

4.1 Power On/Off

The unit will typically power on automatically when the vehicle's ignition is turned on. To manually power off or restart, use the designated power button or menu option on the screen.

4.2 Touch Screen Interface

The 12.1-inch G+G Full-Fit Multi-Touch Capacitive Screen allows for intuitive control. Navigate through menus, select applications, and adjust settings by tapping, swiping, and pinching gestures, similar to a tablet device.

4.3 Android 11 System

The unit runs on Android 11, providing access to a wide range of applications and features. You can customize the home screen, download apps from the Google Play Store (internet connection required), and manage system settings.

Android 11.0 SYSTEM

Qualcomm Octa-Core Qcm6125 (Snapdragon 665)
Processor, 11nm Chip Process, Including 4 Large Cores With A Main Frequency of 2.0ghz And 4 Small Cores With A Main Frequency of 1.8ghz, Built-In Qualcomm Adreno™ 610 Gpu,
Compatible With H.264/H.265, Can Decode 4k@30fps HD Video

Android 11

Carplay

Built-in DSP

4G LTE

Qualcomm snapdragon

Image 4.1: Depiction of the Android 11 system powered by the Qualcomm Snapdragon processor.

4.4 Wireless Carplay & Wired Android Auto

Connect your smartphone for seamless integration of navigation, music, calls, and messages. Wireless Carplay is supported for Apple devices, and wired Android Auto is supported for Android devices.

- **For Wireless Carplay:** Enable Bluetooth and Wi-Fi on your iPhone. Pair your iPhone with the car radio via Bluetooth. Follow the on-screen prompts to activate Carplay.
- **For Wired Android Auto:** Connect your Android phone to the car radio using a USB cable. Ensure Android Auto is installed on your phone and follow the on-screen prompts.

Built-In Carplay And Android Auto

You Can Cast The Software On Your Phone to
Our Products And Control The Software On
Your Phone On The Screen.



Image 4.2: User interface showing Wireless Carplay and Wired Android Auto functionality.

4.5 GPS Navigation

The unit comes with built-in GPS navigation, supporting North America map types. You can use pre-installed navigation apps or download others from the Google Play Store. Ensure the GPS antenna is properly installed for optimal signal reception.

4.6 Audio System and DSP

The integrated 7850 Power Amplifier IC provides 4-channel audio output up to 50W. Utilize the 16-segment EQ adjustment and crossover settings for subwoofer, treble, midrange, and bass to customize your audio experience.

4.7 4G LTE Connectivity

Insert a compatible SIM card into the designated slot to enable 4G LTE connectivity. This allows for online features such as streaming music, video, and real-time navigation updates without relying on a Wi-Fi hotspot from your phone.



Image 4.3: Details of the SIM card slot for 4G LTE and the Smart Voice Control 3.0 interface.

4.8 Voice Control

The system supports offline voice control in multiple languages. Activate voice commands to control various functions, such as navigation, music playback, and system settings, for a hands-free experience.

Note:

The default voice control language is English. To switch to other languages, access the voice control software settings and select your preferred language.

4.9 Split Screen Functionality

Utilize the split-screen feature to run two applications simultaneously. For example, you can have navigation displayed on one side and music controls on the other, enhancing multitasking capabilities.

Split Screen

Freely define upper and lower split-screen applications, drag up and down to select different combinations, two applications are displayed on a split screen, while swiping videos, while navigating; listening to music and watching webpages; more combinations, more freedom.

12.1 " Tesla-Style Screen

G+G Full-Fit Multi-Touch Capacitive Screen
IPS Full Viewing Angle Display Screen
1024*768 Ultra-Clear Resolution



Image 4.4: Demonstration of the split-screen feature on the 12.1-inch display.

4.10 Bluetooth 5.0

Connect Bluetooth-enabled devices such as smartphones for hands-free calling and audio streaming. Pair your device through the Bluetooth settings menu on the unit.

4.11 Steering Wheel Controls

The unit supports integration with your vehicle's factory steering wheel controls, allowing you to manage audio, calls, and other functions without taking your hands off the wheel.

4.12 AHD Reverse Camera

If a compatible AHD reverse camera is installed and connected, the display will automatically switch to the camera view when the vehicle is put into reverse, providing assistance for parking and maneuvering.

5. MAINTENANCE

5.1 Screen Cleaning

To clean the touch screen, use a soft, lint-free cloth slightly dampened with water or a screen-cleaning solution. Avoid harsh chemicals or abrasive materials that could damage the screen surface.

5.2 Software Updates

Periodically check for software updates to ensure optimal performance and access to new features. Updates can typically be performed via Wi-Fi or USB, following the instructions provided within the system's settings menu.

6. TROUBLESHOOTING

If you encounter issues with your ZWNAV car radio, refer to the following common troubleshooting steps:

- **No Power:** Check all power cable connections. Ensure the vehicle's battery is properly connected and charged. Verify fuses are intact.
- **No Sound:** Check speaker connections. Verify volume levels and mute settings. Ensure the correct audio source is selected. Check DSP settings for any misconfigurations.
- **GPS Not Working:** Ensure the GPS antenna is securely connected and placed in a location with a clear view of the sky. Check GPS settings within the system.
- **Bluetooth/Wi-Fi Connectivity Issues:** Ensure Bluetooth/Wi-Fi is enabled on both the unit and your device. Try restarting both devices. Clear paired devices and attempt to re-pair.
- **Touch Screen Unresponsive:** Try restarting the unit. If the issue persists, a factory reset might be necessary (note: this will erase all user data).
- **System Slow/Freezing:** Close unnecessary applications. Clear cache if possible. A system restart often resolves temporary performance issues.

If these steps do not resolve the issue, please contact ZWNAV customer support for further assistance.

7. SPECIFICATIONS

Feature	Specification
Model	Qualcomm Car Radio (8GB+128GB)
Operating System	Android 11
Processor	Qualcomm Snapdragon 665 (Octa-Core: 4x Cortex-A73 @ 2.0GHz + 4x Cortex-A53 @ 1.8GHz)
RAM	8GB LPDDR4
Internal Storage	128GB
Display Size	12.1 Inches
Display Type	G+G Full-Fit Multi-Touch Capacitive IPS Screen

Feature	Specification
Resolution	1024x768
GPU	Qualcomm Adreno 610
Audio Amplifier IC	7850 (4-Channel, up to 50W output)
Audio Features	16-Segment EQ, Subwoofer/Treble/Midrange/Bass Crossover Adjustment
Connectivity	Wireless Carplay, Wired Android Auto, Bluetooth 5.0, 4G LTE (SIM slot), Wi-Fi, USB
GPS	Built-in GPS Navigation (North America map type)
Vehicle Compatibility	Dodge RAM 1500, 2500, 3500 (2019-2021)
Special Features	Voice Control, Split Screen, Supports Alpine amplifiers, Seat heating/ventilation support
Included Components	GPS navigation unit, power cable, audio cable, RCA cable, GPS antenna, microphone, USB cable, Wi-Fi antenna, 4G antenna, camera, Canbus decoder

8. WARRANTY AND SUPPORT

8.1 Warranty Information

The ZWNAV Qualcomm Car Radio comes with a one-year manufacturer's warranty. This warranty covers defects in materials and workmanship under normal use.

8.2 Customer Support

For any questions, technical assistance, or warranty claims, please contact ZWNAV customer service. Lifetime after-sales service is provided.

- **Via Amazon:** Use the messaging system through your Amazon order details.
- **Via Email:** ZWNNUSGPS@outlook.com

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question