

Nunoo Nunoo-Android12

Nunoo Android 12 Car Stereo User Manual

For Lexus RX300, RX330, RX350, RX400H (2003-2009)

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Nunoo Android 12 Car Stereo. Please read this manual thoroughly before installation and use to ensure proper function and to maximize your user experience. This unit is designed for Lexus RX300, RX330, RX350, and RX400H models manufactured between 2003 and 2009.

2. PRODUCT OVERVIEW

The Nunoo Android 12 Car Stereo is an advanced in-dash navigation and entertainment system featuring an 8-core processor, 4GB RAM, and 32GB ROM. It offers a 9-inch IPS touchscreen display with 1280x720 resolution, providing clear visuals and responsive touch control. Key features include wireless CarPlay, Android Auto, AM/FM/RDS radio, AUX input, Digital Sound Processor (DSP), and Steering Wheel Control (SWC) compatibility.

2.1 Key Features

- **Operating System:** Android 12
- **Processor:** 8-Core CPU for high performance
- **Memory:** 4GB RAM + 32GB ROM
- **Display:** 9-inch IPS Touchscreen, 1280x720 resolution
- **Connectivity:** Wireless CarPlay, Wireless Android Auto, Bluetooth, Wi-Fi
- **Audio:** AM/FM/RDS Radio, Digital Sound Processor (DSP)
- **Compatibility:** Steering Wheel Control (SWC), Backup Camera (AHD 1080P included)
- **Additional:** USB ports, AUX input



Figure 2.1: Nunoo Android 12 Car Stereo main unit with included backup camera and smartphone mirroring icons.

Camera Connection

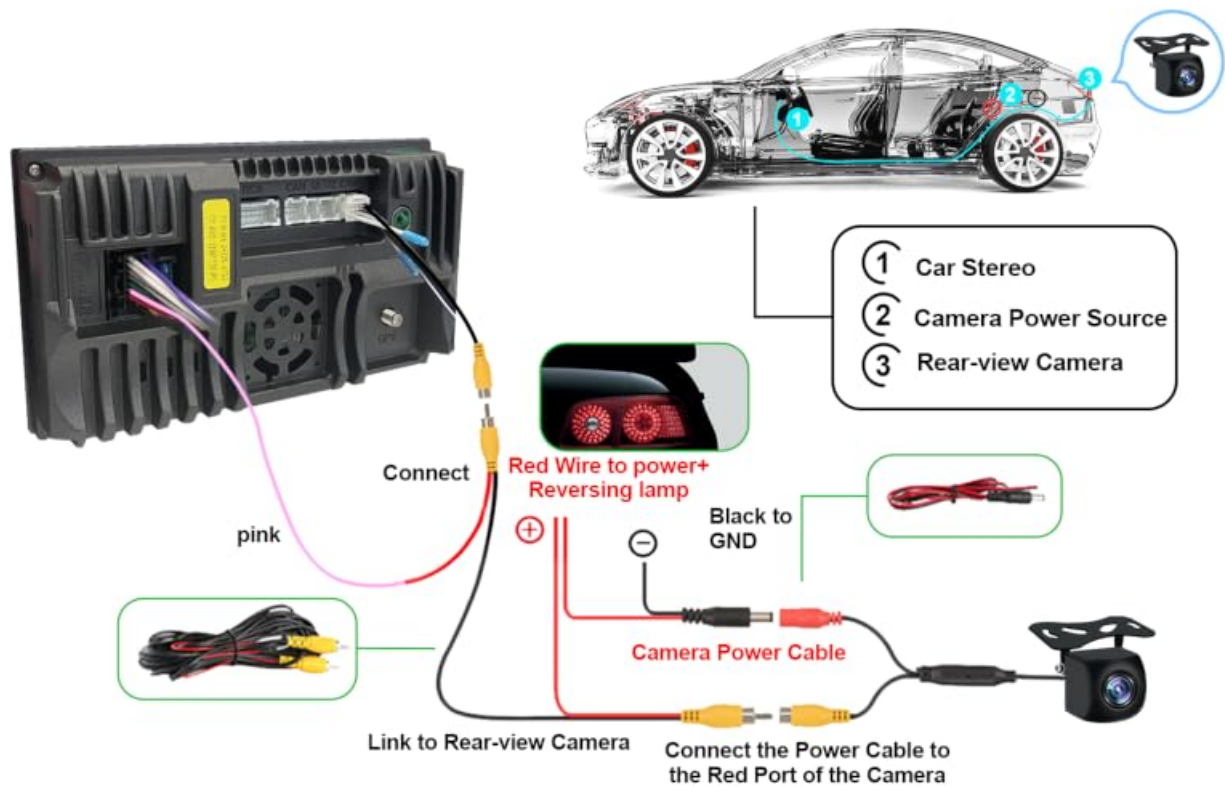


Figure 2.2: Overview of the car stereo's core features and capabilities.

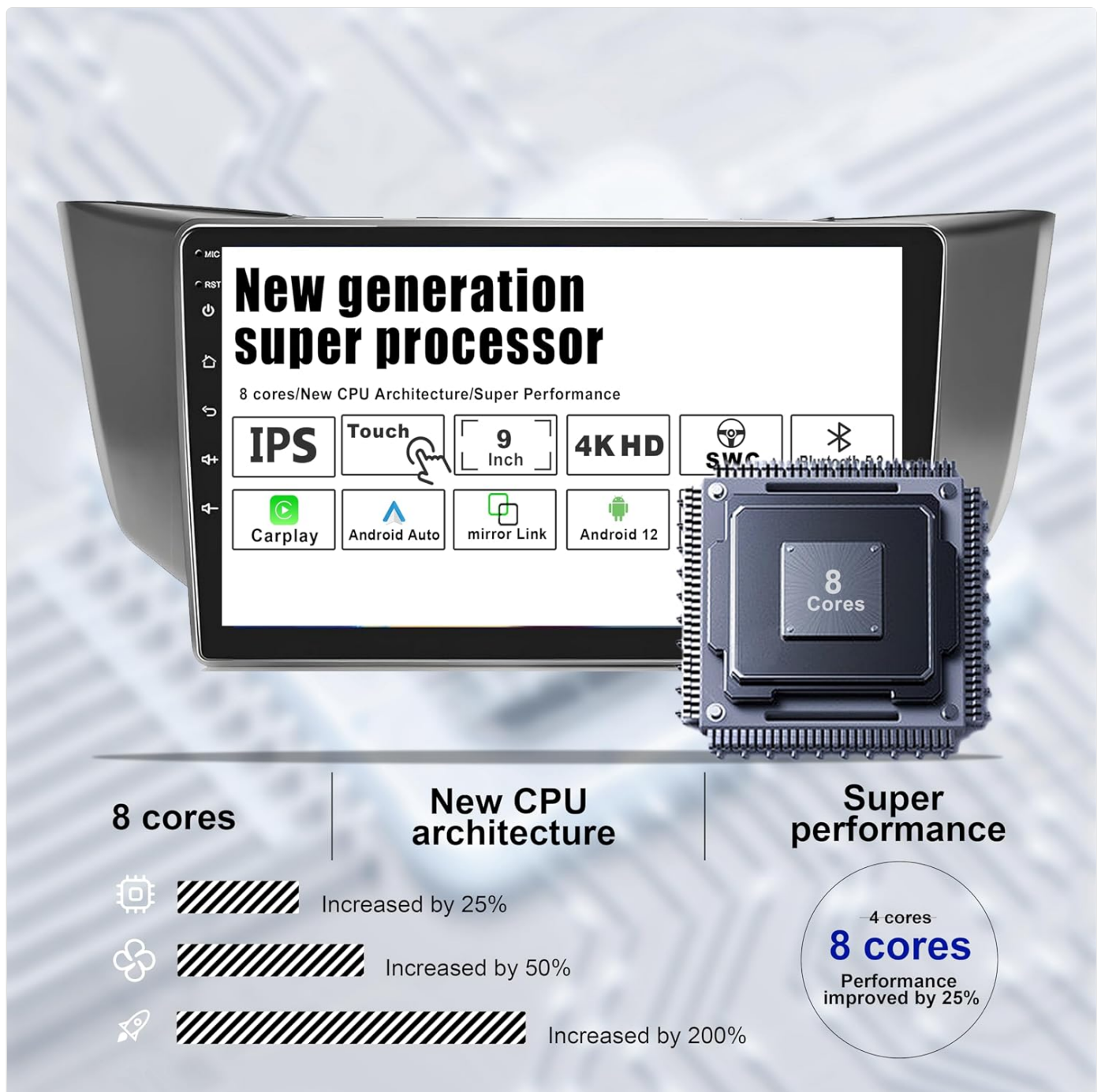


Figure 2.3: Illustration of the 8-core processor and its performance benefits.

1280*720 IPS & MULTI-TOUCH 9 INCH SCREEN

IPS

Touch 

9
Inch

4K HD

Generation

1st:800*480

2nd:1024*600

3rd:1280*720

Pixel

384000

614400

921600

Difference



$614400/384000=1.6$ times

$921600/614400=1.5$ times

The 3th Generation IPS Sereen:**1280*720**

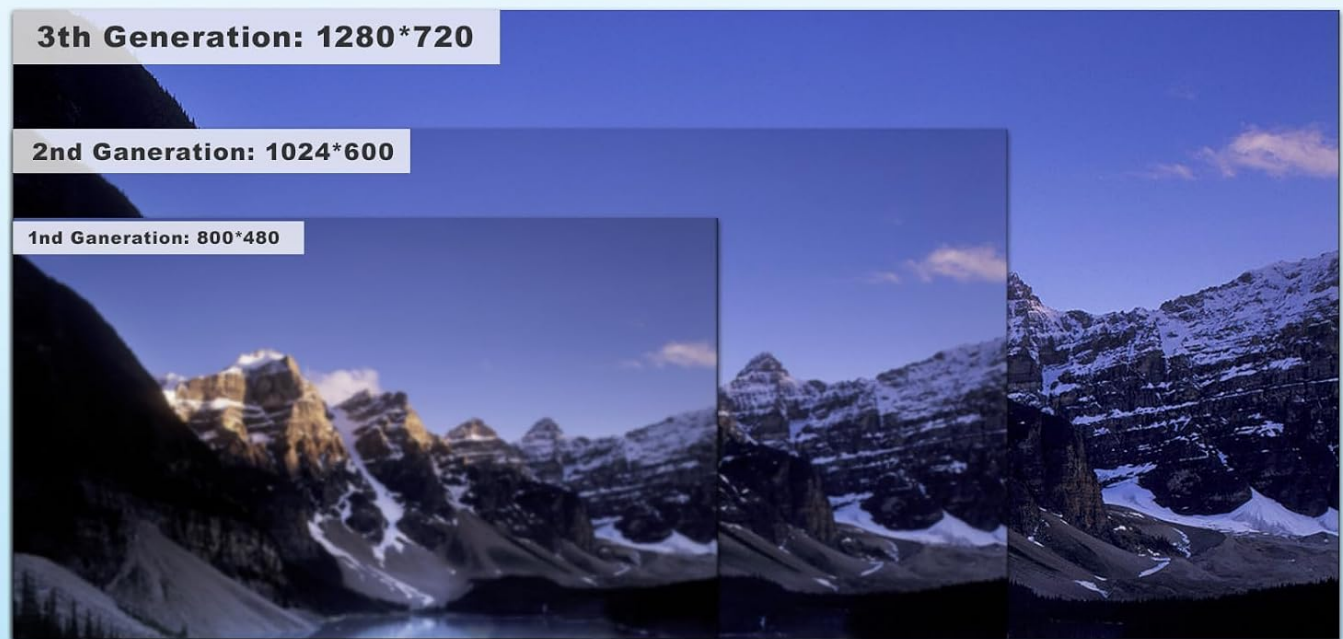


Figure 2.4: Display resolution comparison, highlighting the 1280x720 IPS screen.

2.2 Vehicle Compatibility

This car stereo is specifically designed for Lexus RX300, RX330, RX350, and RX400H models from 2003 to 2009. It is important to verify your vehicle's dashboard configuration matches the compatible types shown below. This unit is intended for vehicles with the original CD-ROM unit and is not compatible with large-screen style car systems.

Suitable for installation



Please note:

This machine can only install the original CD-ROM,no large-screen style car!



Figure 2.5: Vehicle compatibility guide for Lexus RX models (2003-2009).

High-end 8 Core car stereo with 4+32G For Lexus RX 2003-2009

8-core high-speed operation speed, larger memory and
better user experience!



BEFORE

AFTER



Figure 2.6: Before and after installation comparison in a compatible Lexus RX dashboard.

3. WHAT'S IN THE BOX

Please check the contents of your package against the list below. If any items are missing or damaged, contact customer support immediately.

- Car Radio (1280*720) with Frame x1
- User Manual x1 (This document)
- Power Cord x1
- USB 4Pin Cable x1
- USB 6Pin Cable x1
- GPS Antenna x1
- AHD 1080P Rear View Camera x1
- Cleaning Cloth x1

Accessories

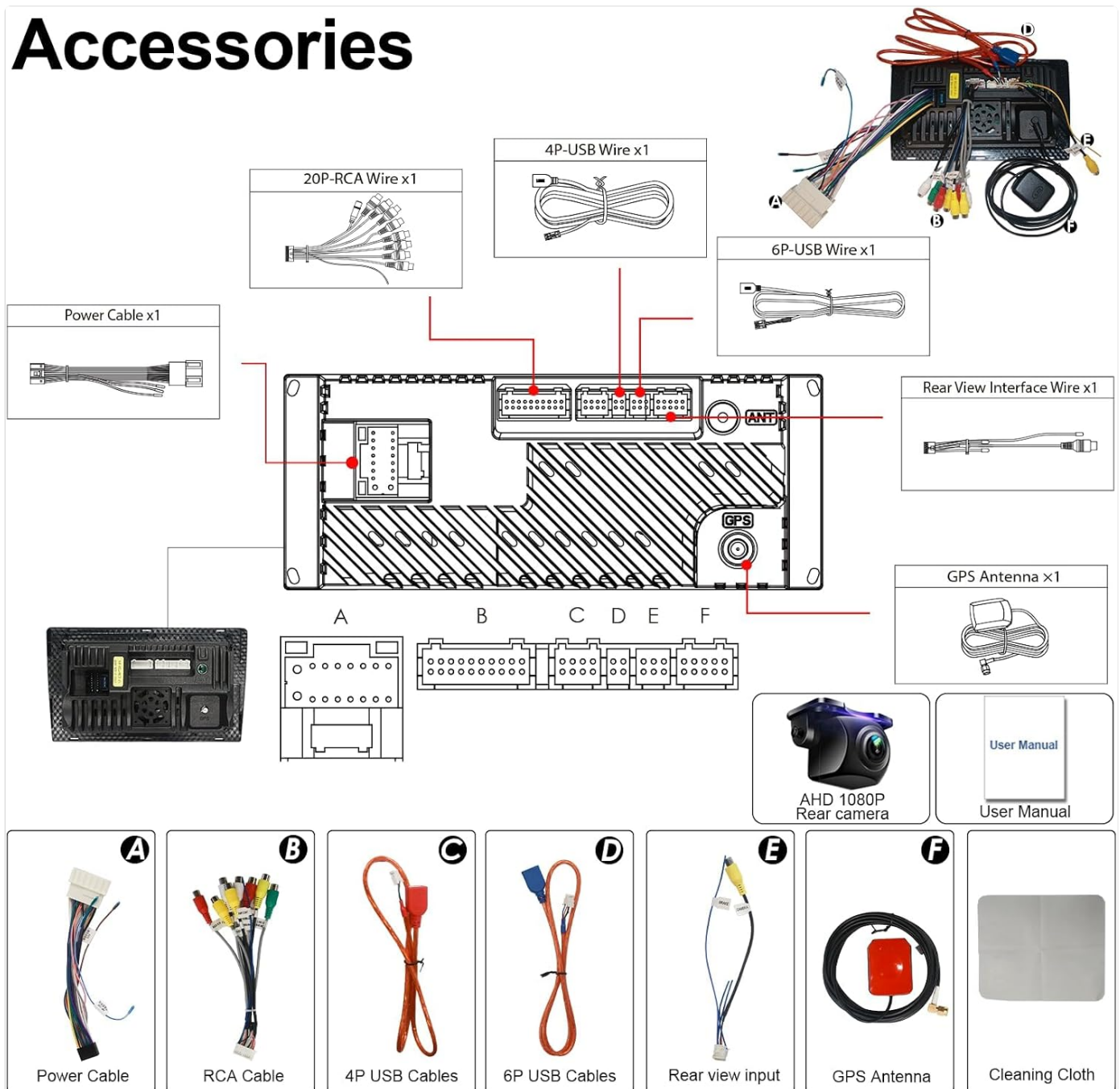


Figure 3.1: Included accessories and wiring diagram.

4. SETUP AND INSTALLATION

Professional installation is recommended. Before beginning, ensure the vehicle's battery is disconnected to prevent electrical damage. Refer to your vehicle's service manual for specific dashboard removal instructions.

4.1 Wiring Connections

Connect the provided power cord, USB cables, GPS antenna, and RCA cables to their respective ports on the car stereo. Ensure all connections are secure.

- **Power Cable:** Connects to the vehicle's power harness.
- **USB Cables (4Pin & 6Pin):** For external USB devices and data transfer.
- **GPS Antenna:** Mount in a location with a clear view of the sky for optimal signal reception.
- **RCA Cables:** For audio output (e.g., external amplifier) and video input/output.

4.2 Rear View Camera Connection

The included AHD 1080P rear view camera enhances safety during reversing. Follow the diagram below for proper connection.

1. Connect the camera's video output cable to the "Rear View Input" on the car stereo.
2. Connect the camera's power cable (red wire) to the vehicle's reversing lamp power source (+12V).
3. Connect the camera's ground wire (black wire) to a suitable ground point (GND) on the vehicle chassis.
4. Connect the "pink" reversing signal wire from the car stereo's harness to the reversing lamp's positive wire. This signal tells the stereo to switch to the camera view when reverse gear is engaged.



Figure 4.1: Rear View Camera Connection Diagram.

5. OPERATING INSTRUCTIONS

Once installed, power on the unit. The Android 12 operating system will boot up. Navigate the interface using the 9-inch touchscreen.

5.1 Basic Navigation and Settings

- **Home Screen:** Access various applications and widgets.
- **Settings:** Tap the "Settings" icon to configure Wi-Fi, Bluetooth, display, sound, and other system preferences.
- **Volume Control:** Use the physical buttons or touchscreen controls to adjust volume.
- **Speed Unit Settings:** You can change the speed unit display (km/h or mph) in the factory settings menu.



Figure 5.1: Adjusting Speed Unit Settings.



Figure 5.2: Examples of various user interface themes.

5.2 Wireless CarPlay and Android Auto

Connect your smartphone wirelessly to access CarPlay (for iOS devices) or Android Auto (for Android devices). This allows for seamless integration of navigation, music, calls, and messages directly on the car stereo display.

- Ensure Bluetooth and Wi-Fi are enabled on your smartphone and the car stereo.
- Follow the on-screen prompts on the car stereo to pair your device.
- Once connected, the CarPlay or Android Auto interface will appear.

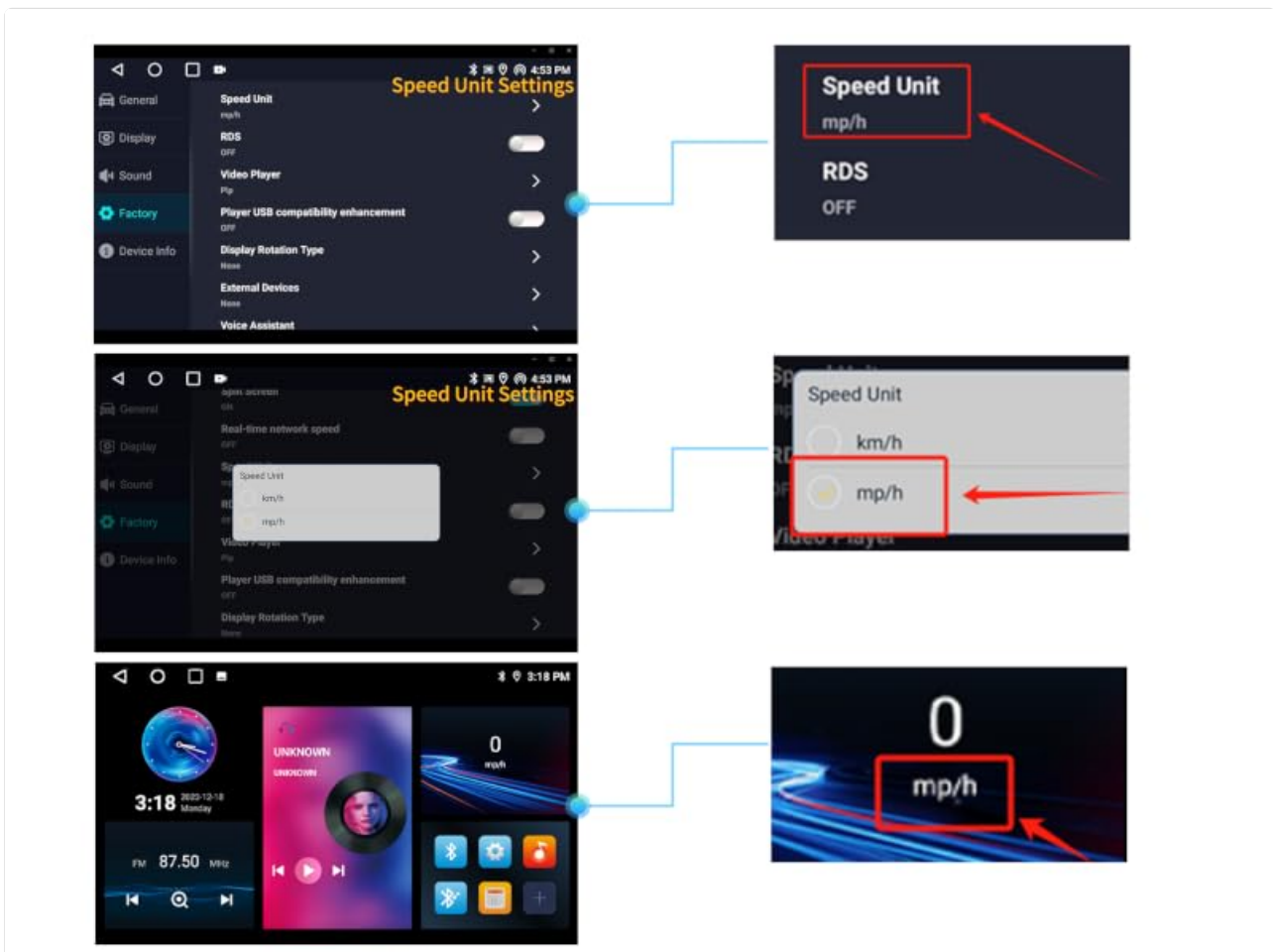


Figure 5.3: Wireless CarPlay and Android Auto connectivity.

5.3 Bluetooth Functionality

Pair your smartphone via Bluetooth for hands-free calling and audio streaming.

1. Go to the Bluetooth settings on the car stereo.
2. Enable Bluetooth on your smartphone and search for available devices.
3. Select the car stereo from the list and confirm the pairing code.
4. Once paired, you can make/receive calls and play music wirelessly.



Figure 5.4: Bluetooth pairing and operation.

5.4 Radio (AM/FM/RDS) and DSP

Access the built-in radio tuner for AM/FM stations. The RDS (Radio Data System) feature displays station information where available. The Digital Sound Processor (DSP) allows for advanced audio customization.

- **Radio:** Select the "Radio" app to scan for stations, save presets, and view RDS information.
- **DSP:** Access the DSP settings to adjust equalizer, balance, fader, and surround sound configurations for an optimized audio experience.

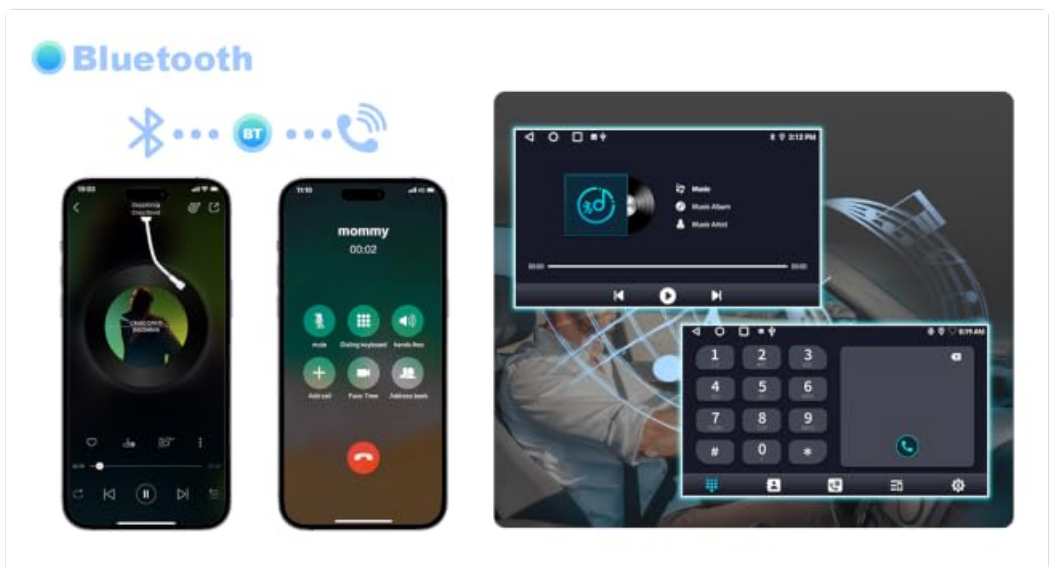


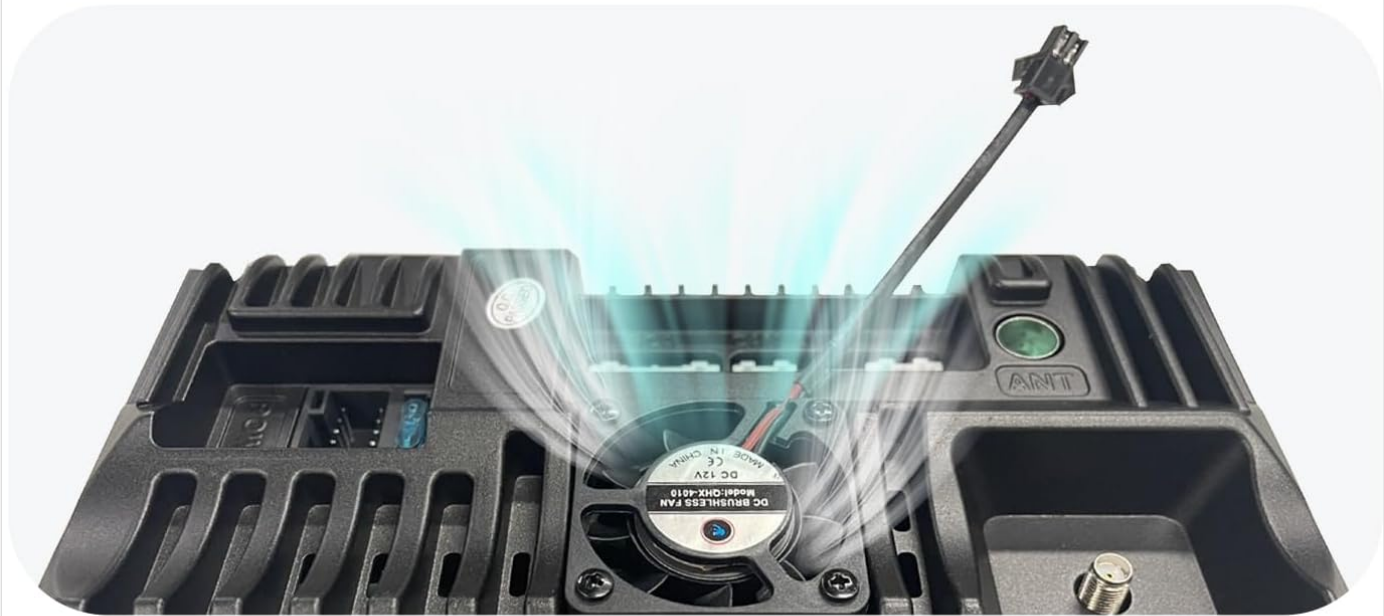
Figure 5.5: Radio and DSP interface.

6. MAINTENANCE

To ensure the longevity and optimal performance of your car stereo, follow these maintenance guidelines:

- **Cleaning:** Use the provided cleaning cloth or a soft, dry cloth to wipe the touchscreen and unit exterior. Avoid abrasive cleaners or solvents.
- **Software Updates:** Periodically check for system software updates via Wi-Fi to ensure the latest features and bug fixes.
- **Cooling Fan:** The unit features a small cooling fan that automatically adjusts speed based on ambient temperature to maintain optimal operating temperature (-40°C to +65°C). Ensure the fan vents are not obstructed.

Small Cooling Fan



It can automatically adjust the fan speed according to the ambient temperature to achieve stepless speed regulation.

Temperature regulation:
The fan system can stabilize the operating temperature of the machine within the temperature range of -40°C to +65°C.

Temperature problem during high-speed operation:
When the machine is running at high speed, the ambient temperature will be generated in the chassis, and the temperature may rise by about 20°C. Because the back shell is made of metal, the heat of the motherboard needs to be conducted away. So it is normal for the back shell to get hot, please don't worry.

Temperature limit of PCB board:
The maximum ambient temperature that the PCB board actually needs to withstand is up to +85°C. If this temperature is exceeded, the PCB board may be damaged.

Compared with low-end machines on the market, it is generally not equipped with a cooling fan.

Figure 6.1: Integrated Cooling Fan for temperature regulation.

7. TROUBLESHOOTING

If you encounter issues, refer to the following common problems and solutions. If the problem persists, contact customer support.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Unit does not power on.	Incorrect wiring, blown fuse, vehicle battery disconnected.	Check power cable connections. Verify vehicle fuses. Ensure battery is connected.
No sound.	Volume too low, incorrect audio settings, speaker wiring issues.	Increase volume. Check DSP/audio output settings. Verify speaker connections.
Backup camera not displaying.	Camera not powered, incorrect video input, reversing signal not connected.	Check camera power and ground. Ensure video cable is connected to "Rear View Input". Verify pink reversing signal wire connection.
CarPlay/Android Auto not connecting.	Bluetooth/Wi-Fi off, phone not paired, software glitch.	Ensure Bluetooth and Wi-Fi are active on both devices. Re-pair the phone. Restart the car stereo.
GPS signal weak or inaccurate.	GPS antenna obstructed or improperly placed.	Relocate GPS antenna to a position with a clear view of the sky.

8. SPECIFICATIONS

Feature	Detail
Model Number	Nunoo-Android12
Operating System	Android 12
CPU	8-Core
RAM	4GB
ROM	32GB
Display Size	9 inches
Display Type	IPS Touchscreen
Resolution	1280x720
Wireless Connectivity	Bluetooth, Wi-Fi, Wireless CarPlay, Wireless Android Auto
Audio Output Mode	Stereo (4.0 Surround Sound Channel Configuration)
Special Features	Built-In Bluetooth, DSP, AM/FM/RDS, SWC Support
Included Accessories	AHD 1080P Rear View Camera, GPS Antenna, Power Cord, USB Cables
Package Dimensions	13.7 x 10.2 x 5.9 inches
Item Weight	3.6 pounds

9. WARRANTY AND SUPPORT

For technical assistance, installation questions, or warranty inquiries, please contact Nunoo customer support. You can typically find support contact information on the seller's page where you purchased the product.

Accessories

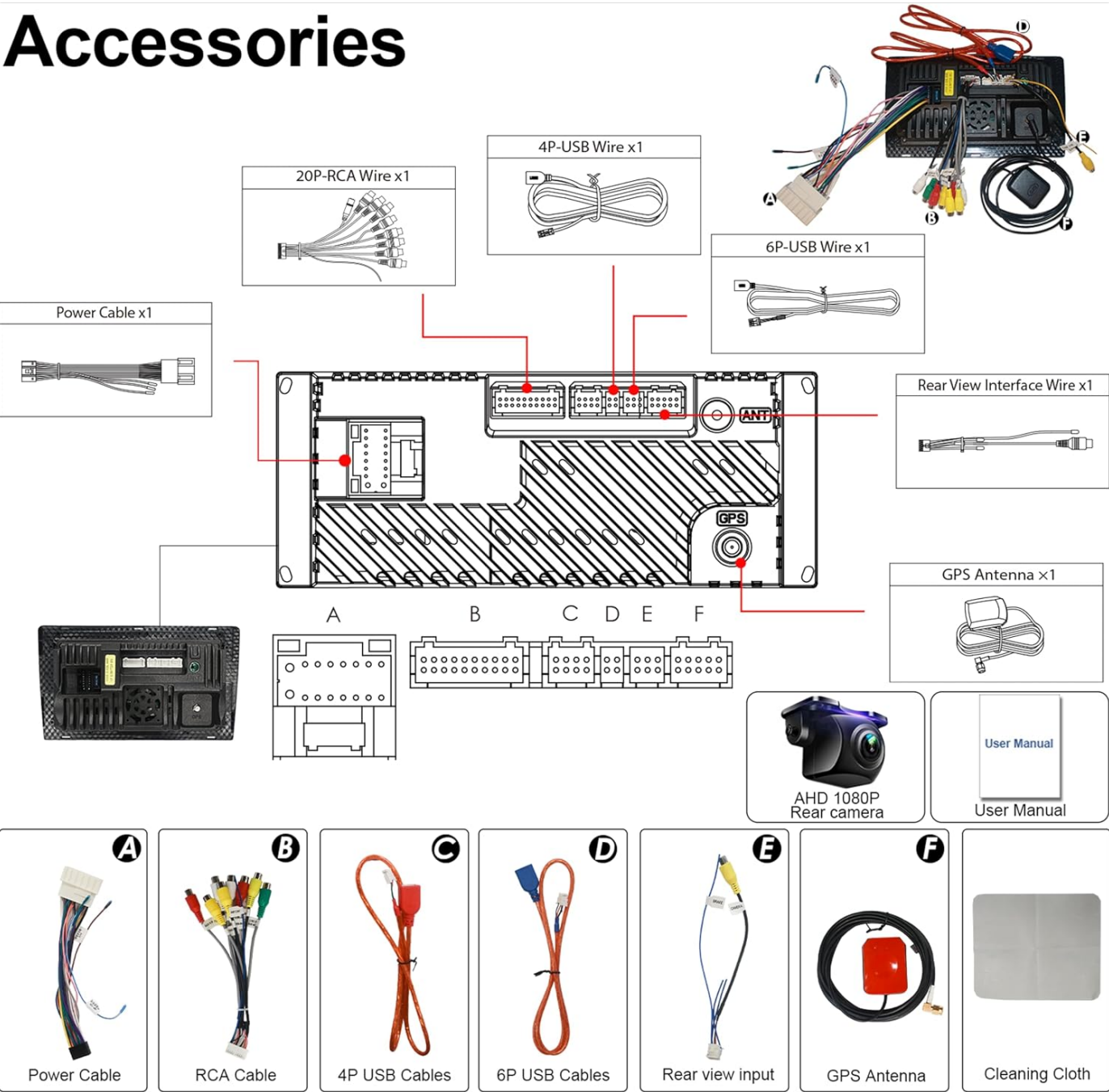


Figure 9.1: How to contact Nunoo for support.

When contacting support, please provide your product model number (Nunoo-Android12) and a detailed description of the issue, including any relevant pictures or videos.

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