VINLAND

CUSTOM-FIT CAR STEREO FOR JEEP GRAND CHEROKEE 2014-2020



VISION series

INSTALLATION MANUAL

Important Notice!

Please read this installation guide carefully before disassembling your vehicle or making any wire connections. Installing this product requires technical expertise, experience and specialized tools.

If you are unsure about performing the installation steps outlined in this manual, we strongly recommend having the product professionally installed by an authorized VINLAND dealer.

Important Compatibility Notice Before Purchase



Factory 5-inch display

Figure A



Factory 8.4-inch display

Figure B



Figure C

Please verify your vehicle's center console configuration before purchasing this product. This device is compatible only with higher-trim models featuring **the factory 8.4-inch display** (see Figure B).

It is not compatible with base (low-trim) models equipped with **the factory 5-inch display** (see Figure A). The primary visual distinction between the two configurations lies in the layout of the center control panel—specifically, the spacing between the climate control buttons and the hazard light switch (see Figure C).

Retain Your Factory Features with Vinland Vision (via Maestro RR)

Upgrade without compromise—Vinland Vision, when paired with the Maestro RR module, preserves select OEM features so you can enjoy modern technology while keeping the conveniences you love.

Explore the table below for a complete overview of retainable functions.

Note: Listed features are for reference only. Actual retained functions may vary by vehicle model year, trim, and regional specifications.

Features	Retention Status
Steering Wheel Controls	Retained
Navigation Outputs	Retained
Factory Amplifier	Retained
Vehicle Settings	Retained
Advanced Camera Features	Retained
Climate Controls	Retained
Gauges	Retained
Park Assist	Retained
Vehicle Info	Retained

Content

Chapter 1 Tool Needed & Packing List 1
Chapter 2 Maestro RR Configuration 2
Chapter 3 Ports Function Overview 6
Chapter 4 Installation Process 7
1. Disassembly and Assembly 7
2. Cable Harness Connection 9
2014-2017 Jeep Grand Cherokee 9
2018-2021 Jeep Grand Cherokee 12
Chapter 5 Troubleshooting Table 14

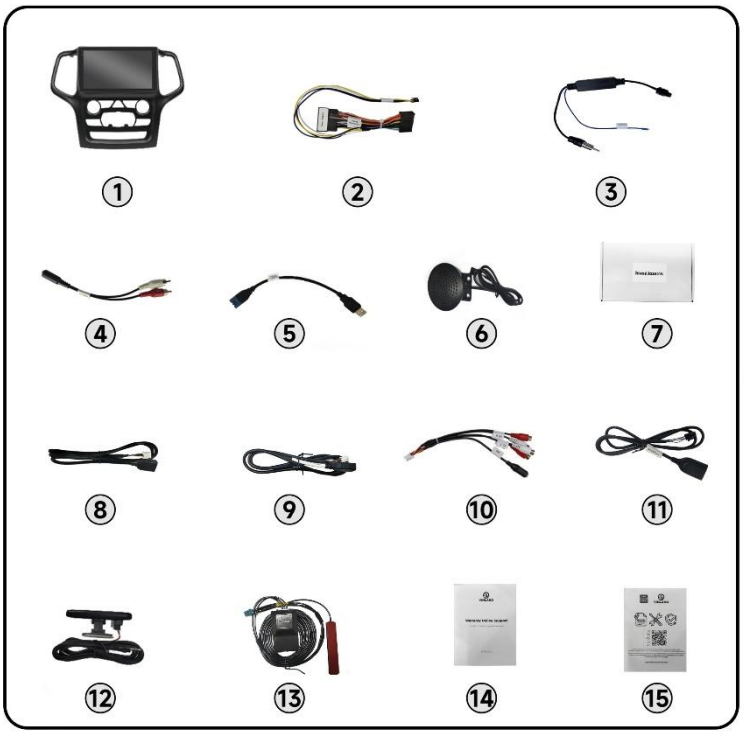
Chapter 1 Tool Needed & Packing List

Tools needed for installation: Plastic pry tools, Socket wrench (7mm or 10mm, depending on your stereo), Screwdriver, Electrical tape, Scissor, Wrench, Screw Tray/Box, Cable Ties.

Warning:

- We regularly release system updates that may introduce new features or changes not covered in this manual. Always refer to the latest release notes for comprehensive details.
- Download the latest Installation Manual from our website or contact customer support for assistance.
- We strive for comprehensive documentation. If you have questions or encounter issues with your car stereo not covered in this manual, please get in touch with customer support.

1. Car Stereo with Mounting Frame
2. Power Adapter
3. Radio Antenna Adapter
4. AUX Adapter
5. Mini USB Adapter
6. Small Speaker
7. Universal Accessories Box
8. USB to 4 Pin: USB 1 Phone Link
9. USB to 6 Pin: USB 2 External Storage
10. Tri-band Audio with Remote Receiver
11. 4G SIM Slot Cable
12. External Dual Microphone
13. 4-in-1 Antenna
14. Online Resources Quick Guide
15. Warranty Online Support

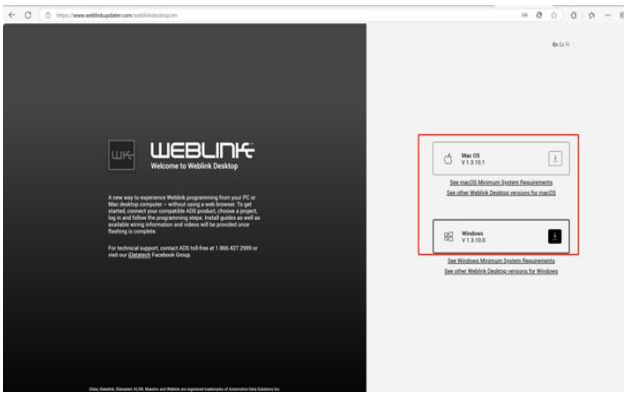


To Retain OEM Features

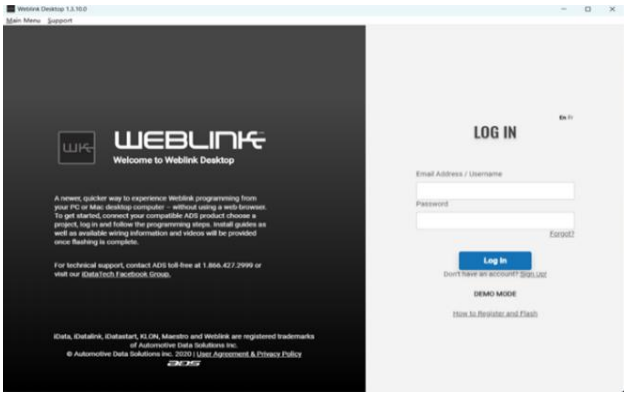
You'll need the Maestro RR interface and the vehicle-specific T-Harness (sold separately).

Chapter 2 Maestro RR Configuration

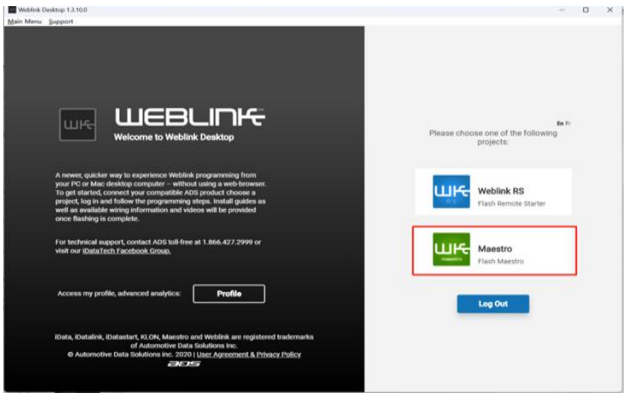
To ensure optimal operation and seamless communication with your vehicle, Weblink Desktop must be installed prior to using the Maestro RR. This software is essential for device configuration, data transfer, and remote management.



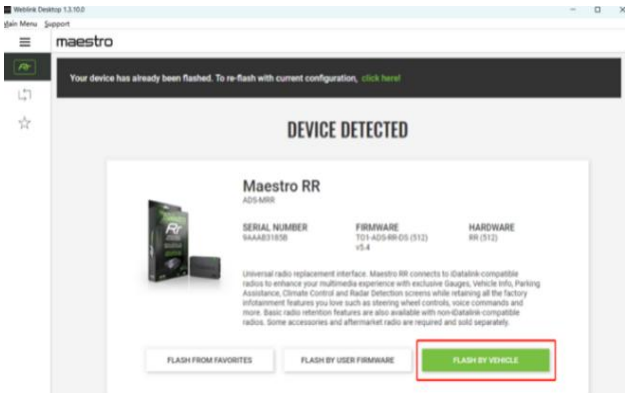
1. Go to https://www.weblinkupdater.com/weblinkdesktop/en and download the Weblink Desktop software.



2. Initiate a new Weblink account or sign in to an existing one.

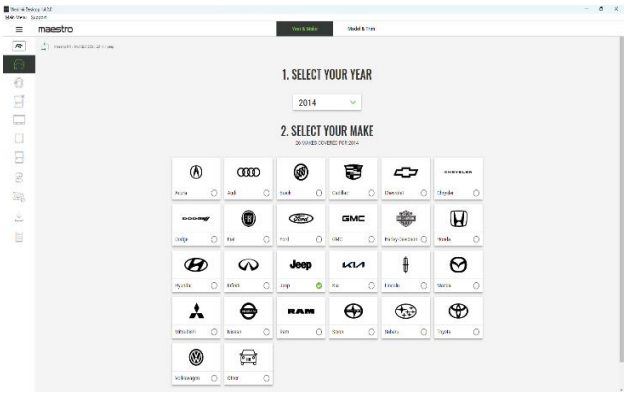


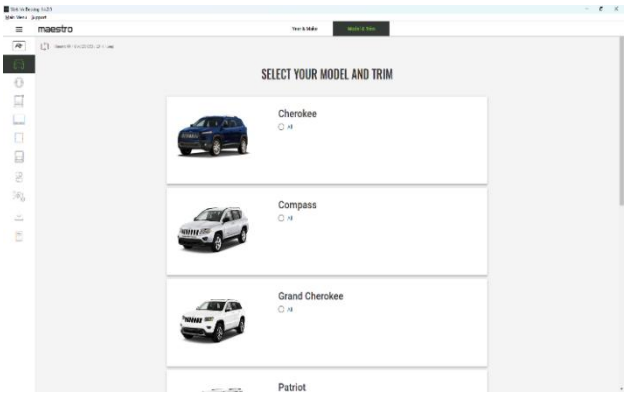
3. Connect the Maestro RR module to your computer using the included USB cable, then select the “Flash Maestro” option.



4. Weblink Desktop will automatically detect the connected Maestro RR module and display its corresponding details, such as the serial number and current firmware version. Then, select "FLASH BY VEHICLE" to proceed with the configuration process.

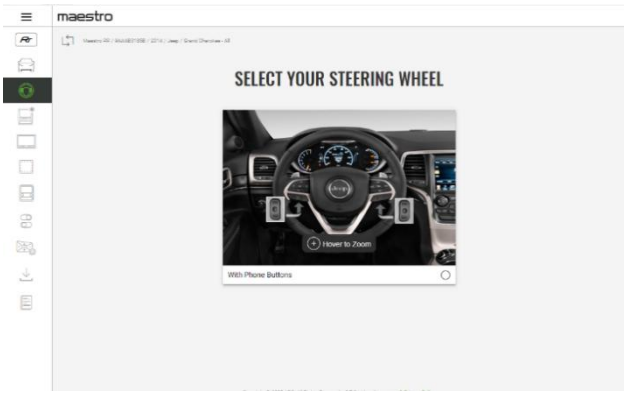
5. Specify the vehicle and car stereo information by entering the required details in the sequence outlined below:

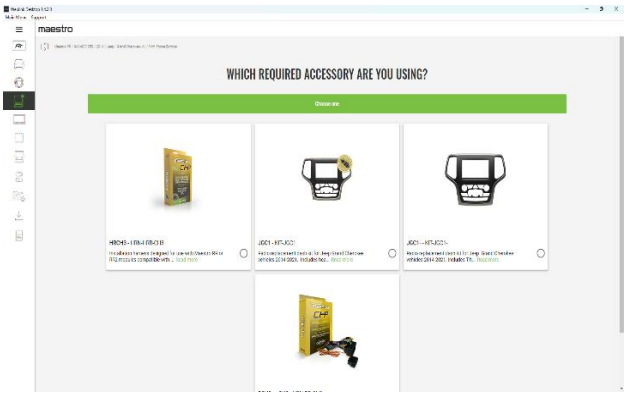




① Select the vehicle model year and make.

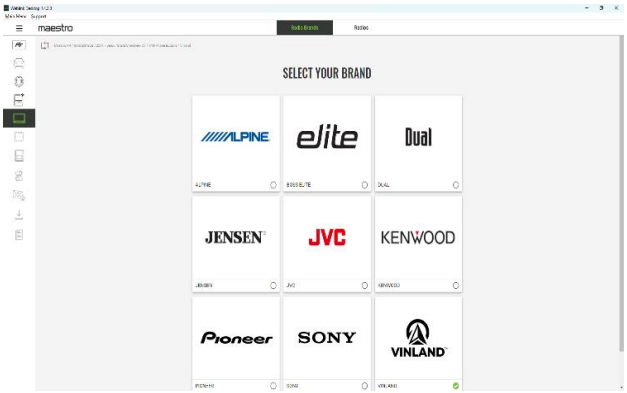
② Select the appropriate vehicle model.



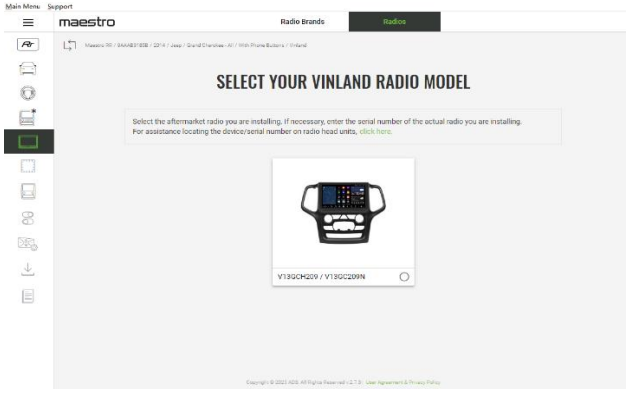


③ Select the appropriate steering wheel for your vehicle's make and model.

④ Select the required accessories for the Maestro RR interface.



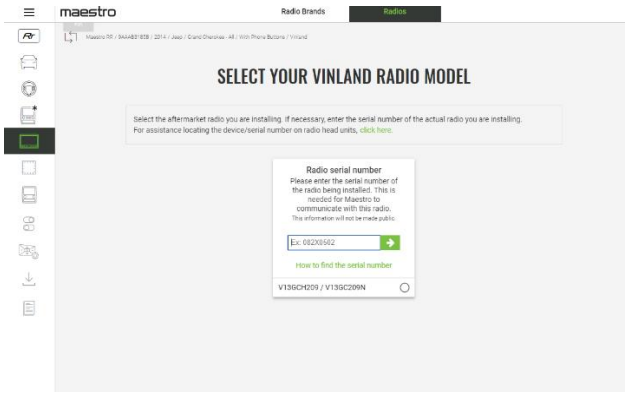
⑤. Choose VINLAND as the brand of the car stereo.



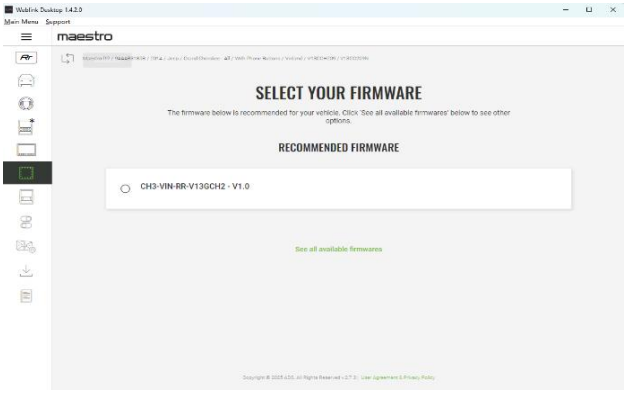
⑥. Select the exact model corresponding to the car stereo you have purchased.



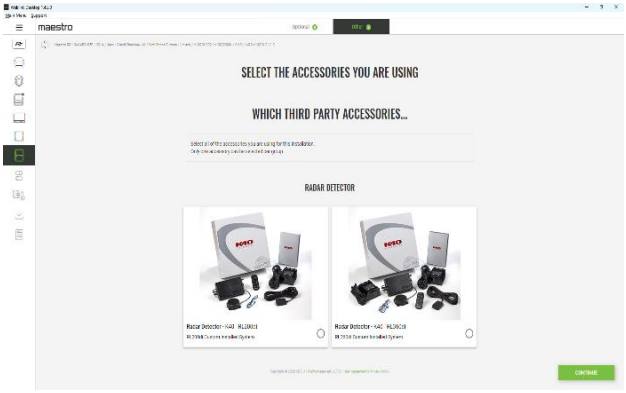
Every car stereo carries a unique serial number—please locate and reference the one found on your car stereo.



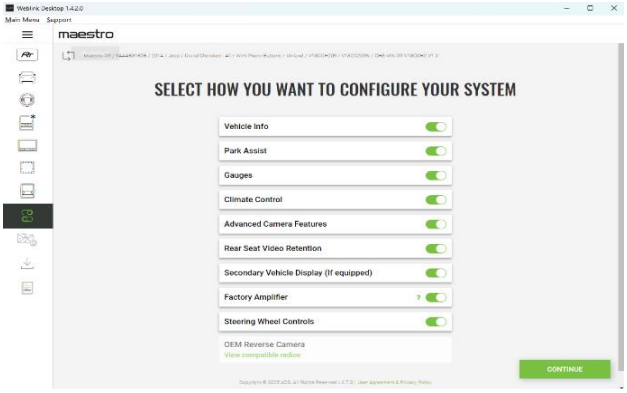
⑦. Enter the 8-digit serial number located on the rear of the car stereo.



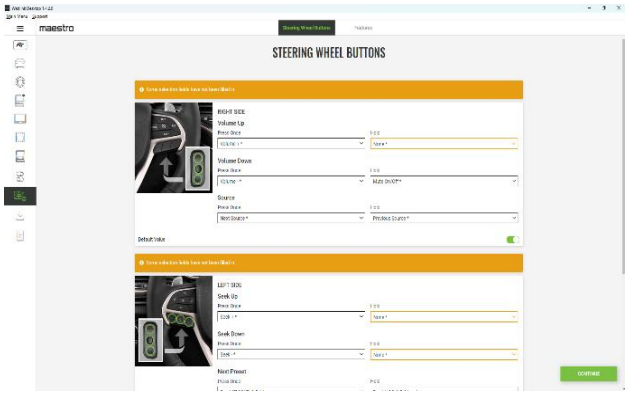
⑧. Select the correct firmware version from the available options.



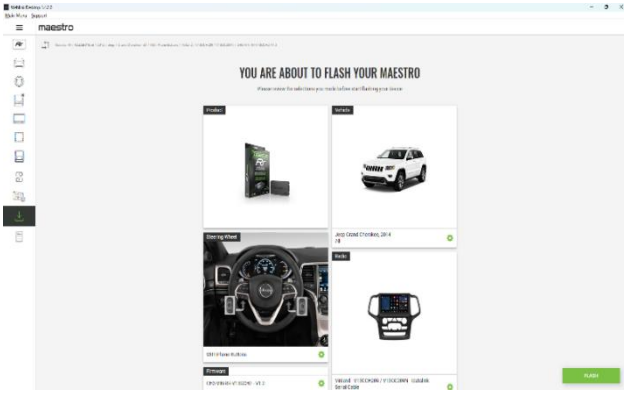
6. Select the accessories currently in use.

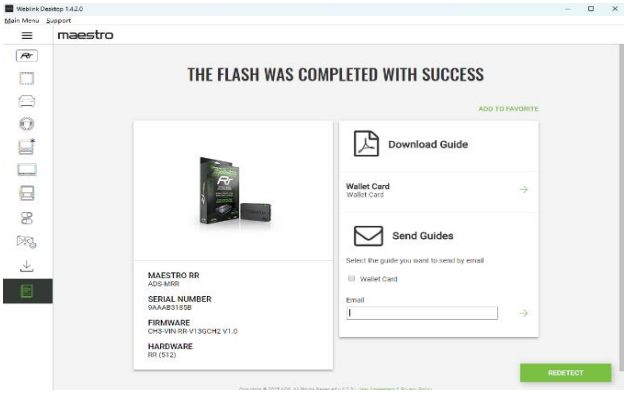


7. The system will automatically apply the recommended settings. If no adjustments are required, simply click “CONTINUE” to proceed to the next step.



8. The default steering wheel button functions will be displayed on the interface. If needed, adjust the button assignments according to user preferences and save the settings.

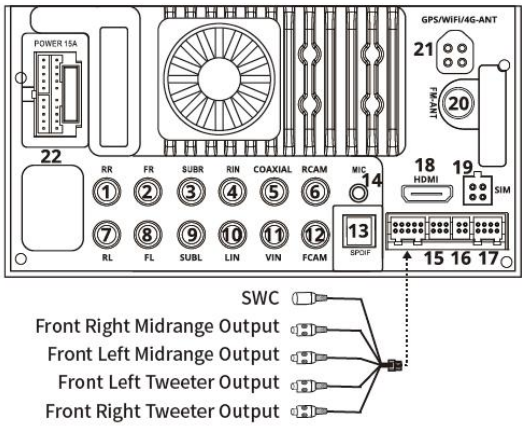




9. Verify the firmware version, user-defined settings, and vehicle or car stereo information. To begin updating the Maestro RR module, click “FLASH”. Ensure that neither the module nor the USB connection is interrupted during the process.

10. Once the firmware update is complete and the “Flash Successful” message appears, download the module’s installation guide and follow the remaining steps to complete the in-vehicle installation.

Chapter 3 Ports Function Overview



1. Rear Right Audio Output
2. Front Right Audio Output
3. Subwoofer Output Right
4. Right Channel Auxiliary Audio Input
5. Coaxial Output
6. Rear Camera Input
7. Rear Left Audio Out
8. Front Left Audio Out
9. Subwoofer Output Left
10. Left Channel Audio Input
11. Video Input
12. Front Camera Input
13. Optical SPDIF Output
14. Microphone Input
15. USB2 External Storage
16. USB1 Recording Storage
17. Rear Recording Camera Input
    Front Recording Camera Input
18. HDMI Input
19. 4G LTE Adapter Interface
20. F-M-ANT-Radio Antenna input
21. 4-in-1 Antenna-4G/WiFi/GPS
22. Car Stereo Fuse

Chapter 4 Installation Process

1. Disassembly and Assembly

This part provides a brief overview of the procedures required to remove the factory stereo and install the new car stereo. The instructions are specifically designed for 2014-2020 Jeep Grand Cherokee models and are intended to guide you through the process safely, accurately, and efficiently.

Part One Radio Removal



Step 1

Switch off the vehicle's ignition.



Step 2

Carefully pull the radio trim bezel outward by hand, or use a plastic pry tool to carefully pry it off.



Step 3

Disconnect the electrical connectors from the back of the climate control panel, then proceed to remove the radio bezel.



Step 4

Remove the four screws securing the factory display in place.



Step 5

Gently slide the factory display out and disconnect the electrical connectors. Then remove the factory display.

Part Two Detach Radio Trim Bezel



Step 1

Carefully detach the factory air vents from the bezel.



Step 2

Release the retention clips on the rear of the radio bezel.



Step 3

Remove the back cover of the climate control module, then detach the climate control circuit board.

Part Three Assembling New Radio Trim Bezel



Step 1

Install the factory left and right air vents into the new radio bezel.



Step 2

Transfer the factory clips to the new radio trim bezel.



Step 3

Install the factory climate control panel and hazard light switch into the new radio bezel.

Part Four Cable Harness Connection

Refer to the detailed wiring instructions outlined below for the different configurations of the Jeep Grand Cherokee (2014-2020).

Part Five Assembly



Install the Vision car stereo with its corresponding panel kit onto the dashboard.

2. Cable Harness Connection

Follow the wiring instructions that match your vehicle's configuration for installation.

2014-2017 Jeep Grand Cherokee

Step 1

① Connect the **Main Harness** of the HRR-CH3 T-harness directly to the car stereo.

OR

② Connect the HRR-CH3 harness to the **Power Adapter**. Then plug the other end of **Power Adapter** into the aftermarket car stereo.

Step 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash

that indicate the presence of an amplifier.

If the vehicle DOES NOT have a factory amplifier:

• Plug the female BLACK connector to the male BLACK connector of your HRR-CH3 T-harness.

• Plug the female WHITE connector to the male WHITE connector of your HRR-CH3 T-harness.

If the vehicle DOES have a factory amplifier:

• Plug the female BLACK connector to the male WHITE connector of your HRR-CH3 T-harness.

• Plug the female WHITE connector to the male BLACK connector of your HRR-CH3 T-harness.

• Connect the factory radio harness to the HRR-CH3 T-harness.

Step 3

• Plug the **mini USB Adapter** into vehicle, and other end to **USB1** cable.

Step 4

• Plug the harness into the aftermarket car stereo.

• Connect the backup cam cable into the aftermarket car stereo (if equipped).

• Insert the **CH3 Radio Antenna Adapter** into the aftermarket car stereo's FM-ANT port and Power ANT of HRR-CH3 T-harness separately, and connect the other end to the vehicle.

• Connect the **AUX Adapter** cable as follows:

Two RCA connectors → Plug into the car stereo's RIN and LIN ports.

Other end → Insert the audio jack from the **Audio Cable**.

• Plug the **USB1** cable into the car stereo.

Step 5

• **ADS Data Cable Connection:**

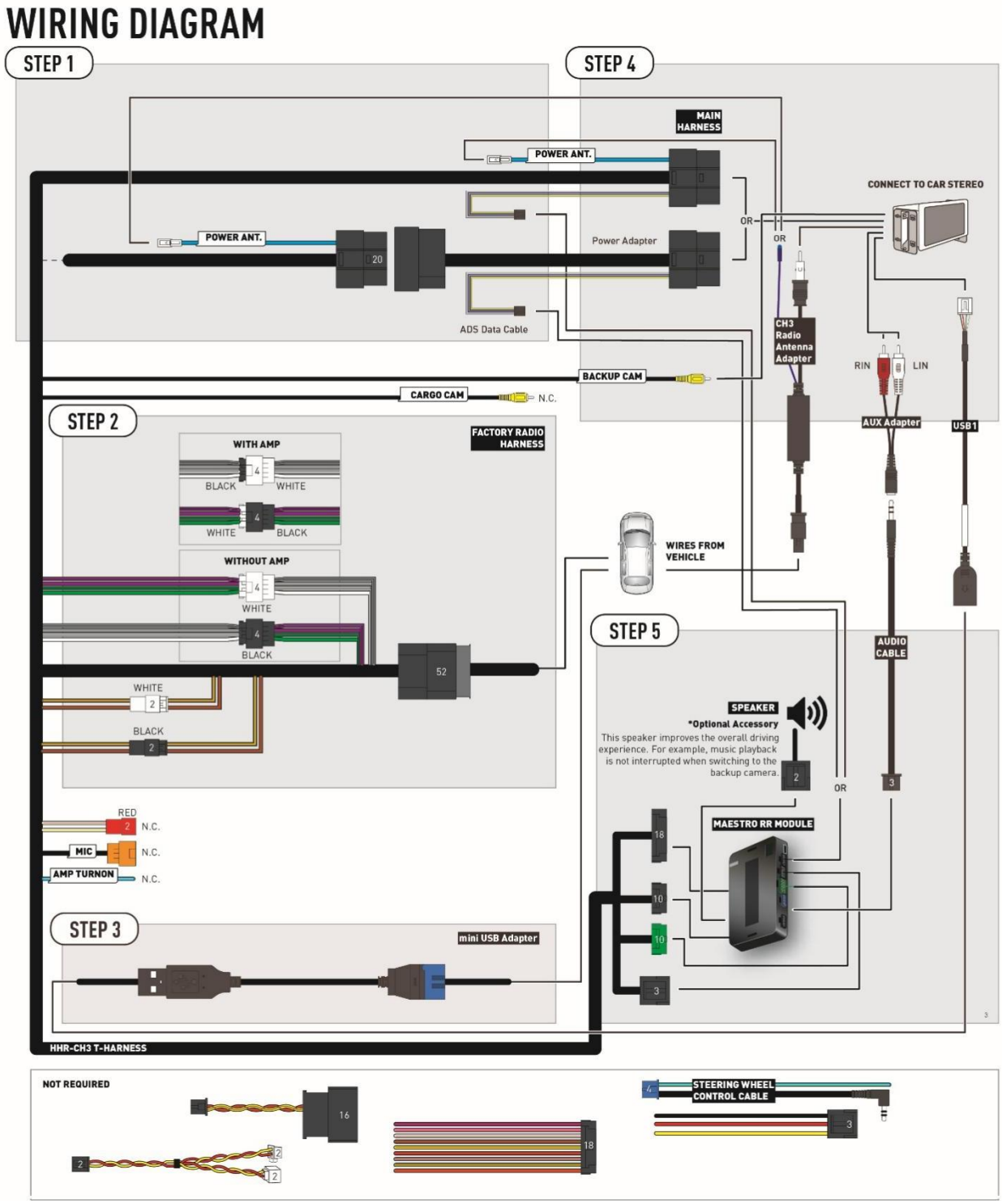
Male Connector: If the ADS Data Cable (from either the **Power Adapter** or the Main Harness) is equipped with a male connector, plug the **ADS Data Cable** directly into the data port of Maestro RR module.

OR

Female Connector: If the ADS Data Cable (from either the **Power Adapter** or the Main Harness) is equipped with a female connector, use the extension cable. Connect the ADS Data Cable to the extension cable, and then plug the extension cable into the Maestro RR module.

• Plug the other 3-pin connector of **Audio Cable** into the Maestro RR module.

• Connect all the harnesses to the Maestro RR Module, then test your installation.



[Connection Diagram of 2011-2013 Jeep Grand Cherokee]

2018-2021 Jeep Grand Cherokee

Step 1

①. Connect the Main Harness of the HRR-CH3 T-harness directly to the aftermarket car stereo.

OR

②. Connect the HRR-CH3 harness to the **Power Adapter**. Then plug the other end of the **Power Adapter** into the aftermarket car stereo.

Step 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier.

If the vehicle DOES NOT have a factory amplifier:

• Plug the female BLACK connector to the male BLACK connector of your HRR-CH3 T-harness.

• Plug the female WHITE connector to the male WHITE connector of your HRR-CH3 T-harness.

If the vehicle DOES have a factory amplifier:

• Plug the female BLACK connector to the male WHITE connector of your HRR-CH3 T-harness.

• Plug the female WHITE connector to the male BLACK connector of your HRR-CH3 T-harness.

• Connect the factory radio harness to the HRR-CH3 T-harness.

Step 3

• Connect the black 2-pin connector from the extension cable to the CH3 main harness. Route the white ends to the CAN junction block in vehicle (see diagram for location). Unplug any one of the 2-pin white connectors in it. Insert the male white end from the Maestro harness into the junction block and plug the factory 2-pin connector back into the Maestro female white 2-pin.

Step 4

• Plug the **mini USB Adapter** into the vehicle, and the other end into the **USB1** cable.

Step 5

• Plug the harness into the car stereo.

• Connect the backup cam cable to the car stereo (if equipped).

• Plug the **CH3 Radio Antenna Adapter** into the car stereo's FM-ANT port and Power ANT of the Main harness separately, and connect the other end to the vehicle.

• Connect the **AUX Adapter** cable as follows:

Two RCA connectors → Plug into the car stereo's **RIN** and **LIN** ports.

Other end → Insert the audio jack from the **Audio Cable**.

• Plug the USB1 cable into the car stereo.

Step 6

• **ADS Data Cable Connection:**

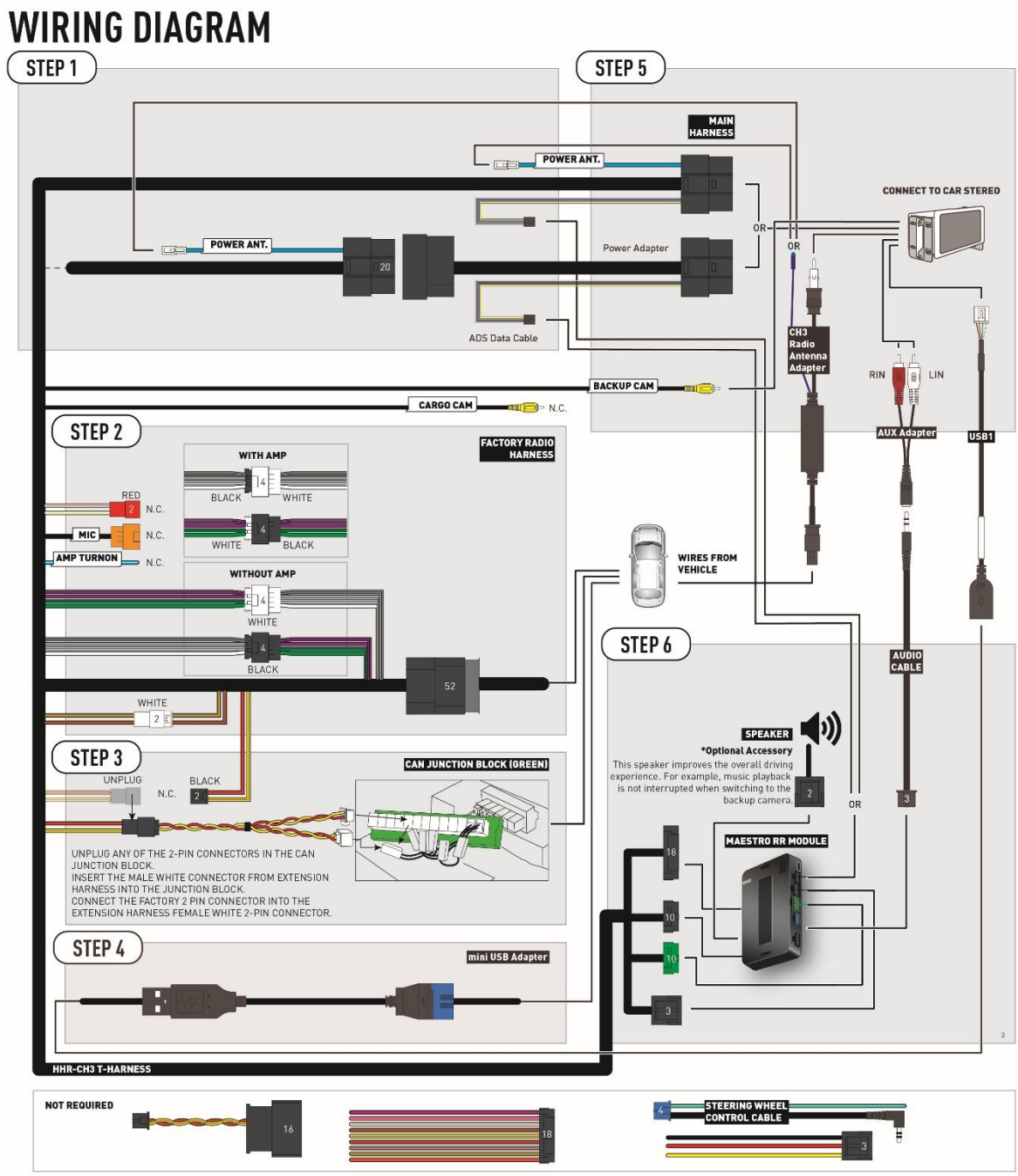
Male Connector: If the ADS Data Cable (from either the **Power Adapter** or the Main Harness) is equipped with a male connector, plug the **ADS Data Cable** directly into the data port of Maestro RR module.

OR

Female Connector: If the ADS Data Cable (from either the **Power Adapter** or the Main Harness) is equipped with a female connector, use the extension cable. Connect the ADS Data Cable to the extension cable, and then plug the extension cable into the Maestro RR module.

• Plug the other end of **Audio Cable** into Maestro RR module.

• Connect all the harnesses to the Maestro RR Module, then test your installation.



[Connection Diagram of 2018-2021 Jeep Grand Cherokee]

Chapter 5 Troubleshooting Table

Before contacting technical support, please consult the troubleshooting table below to quickly resolve common issues.

IMPORTANT SAFETY WARNINGS:

- **Disconnect Power:** Always disconnect the vehicle's negative battery terminal and wait at least 5 minutes before handling any wiring to ensure the system is fully powered down.
- **Professional Installation Recommended:** To prevent damage to the device or vehicle, and to avoid personal injury, disassembly or repair should only be performed by a qualified technician.
- **Verify Compatibility:** Ensure all components—including the antenna, wiring harness, car stereo and firmware—are fully compatible with your specific vehicle model and regional standards.

No.	Problem Description	Reason and Solution
1	**GPS signal reception issues**	Check that the GPS antenna is securely connected. The recommended position is on the interior of the vehicle's A-pillar.
		GPS functionality may be limited in signal-obstructed environments. Please avoid parking your vehicle in places such as underground garages, mountainous areas, or other areas with poor signal reception.
2	**No rearview image or failure to switch to rearview**	Verify proper connection of the reverse detection wire and camera harness. Ensure all connections are secure and correctly seated.
3	**The car stereo fails to power on**	Verify that the B+ (constant 12V), ACC (ignition signal), and chassis ground wires are securely and correctly terminated.
		Use a multimeter to confirm that the voltage at the B+ and ACC terminals is within the operational range of 9V-16V. Incorrect wiring connections can lead to abnormal voltage readings, and prevent the stereo from powering on.

		If no voltage is detected on B+ or ACC, inspect the power supply circuit. Check the power cables for any visible damage or loose connections and verify the integrity of the fuse.
		If no voltage is present at the ACC terminal: (1) Verify that the ADS protocol module is properly connected to the computer. (2) Flash the module using software configured for the vehicle model. (3) Confirm that all wiring connections comply with the vehicle-specific installation manual.
4	**Protocol communication malfunction**	Connect the ADS interface module to the computer and ensure that the configuration matches the specific vehicle model. Then, flash the module using the appropriate software and a valid authorized serial number.
		Verify that all wiring connections align with the dedicated installation manual. Check for any loose or improperly seated connectors.
5	**Car stereo and mobile device pairing failure**	Verify if the mobile device is connected to other Bluetooth devices. If so, unpair all other devices to prevent signal interference.
		Verify cellular signal strength and network connectivity.
6	**Touchscreen clock desynchronized from actual time**	Verify the network connectivity.
		Verify that the location settings in the car stereo are correctly configured.
7	**Audio output issues after installation in vehicles with and without factory JBL sound systems**	Verify that the audio harness is properly connected according to the correct wiring diagram for your vehicle.