



CUSTOM-FIT CAR STEREO FOR RAM 2013-2018 (AUTO AC)



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.

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.

Feature	Retention Status
Steering Wheel Controls	Retained
Navigation Outputs	Retained
Factory Amplifier	Retained
OEM Reverse Camera	Retained
Vehicle Settings	Retained
Advanced Camera Features	Retained
Climate Control	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.....	11
2013-2017 RAM 1500	11
2018 RAM 1500	14
2013-2017 RAM 2500&3500	16
Chapter 5 Troubleshooting Table	18

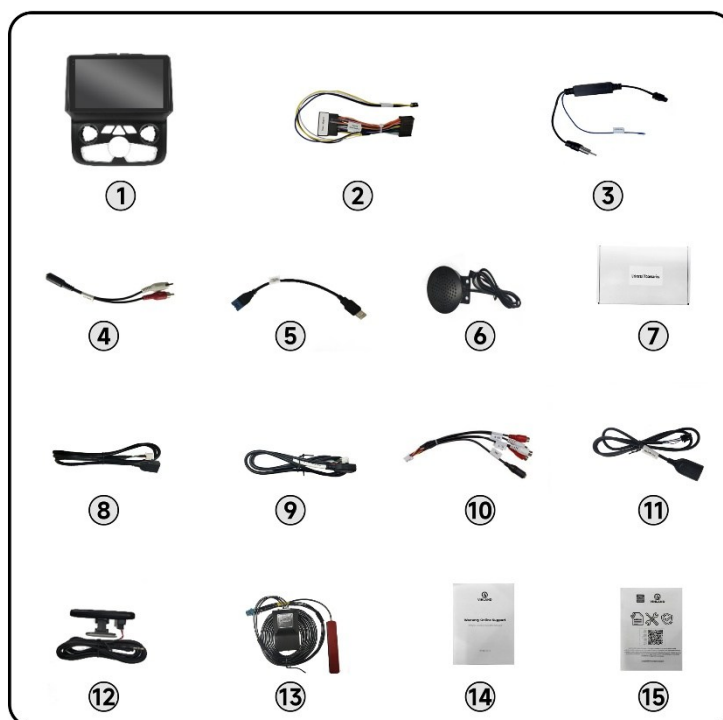
Chapter 1 Tool Needed & Packing List

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. Warranty Online Support
15. Online Resources Quick Guide

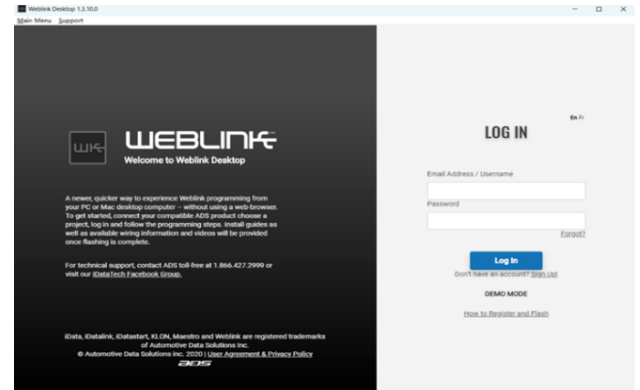
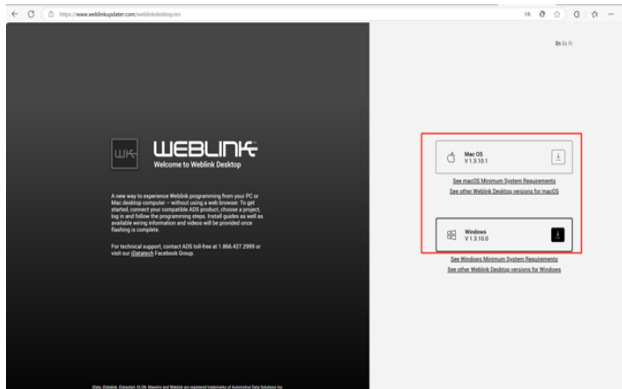


To Retain OEM Features

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

Chapter 2 Maestro RR Configuration

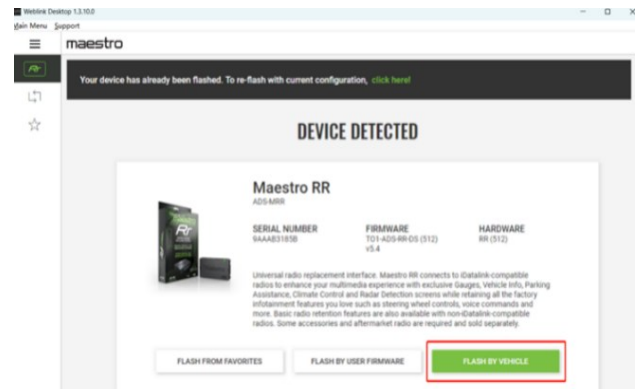
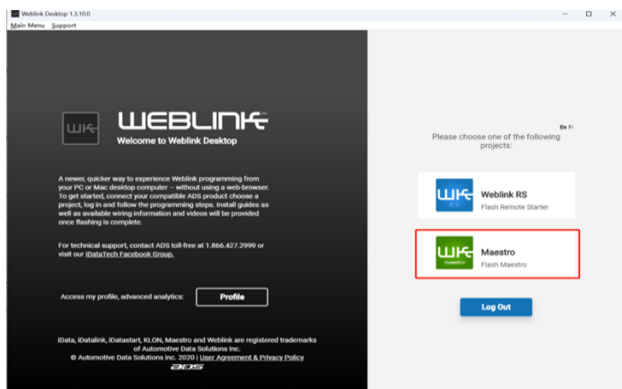
To ensure proper functionality and seamless integration with your vehicle, Weblink Desktop must be installed before setting up the Maestro RR. This software is required for device configuration, firmware updates, data synchronization, and remote management.



1. Go to

<https://www.weblinkupdater.com/weblinkdesktop/en> and download the Weblink Desktop software.

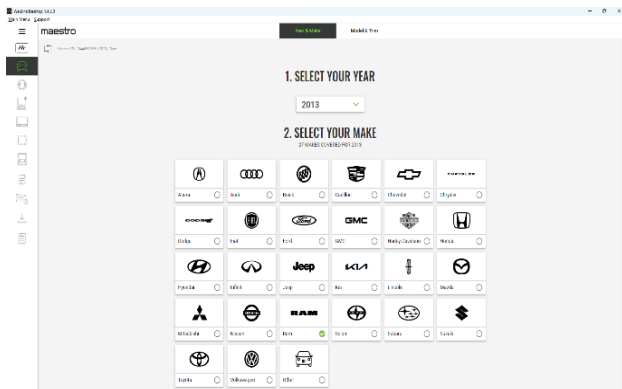
2. Initiate a new Weblink account or sign in to an existing one.



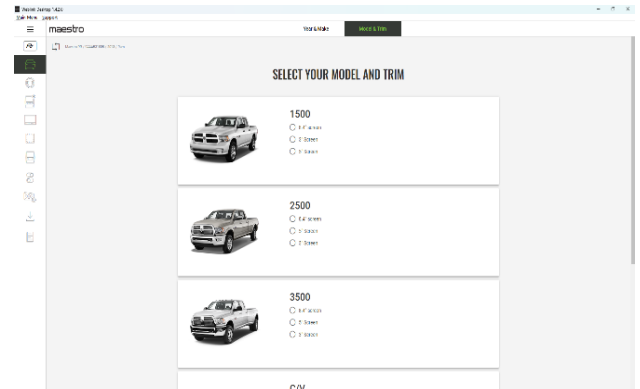
3. Connect the Maestro RR module to your computer using the included USB cable, then select the "Flash Maestro" option.

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.

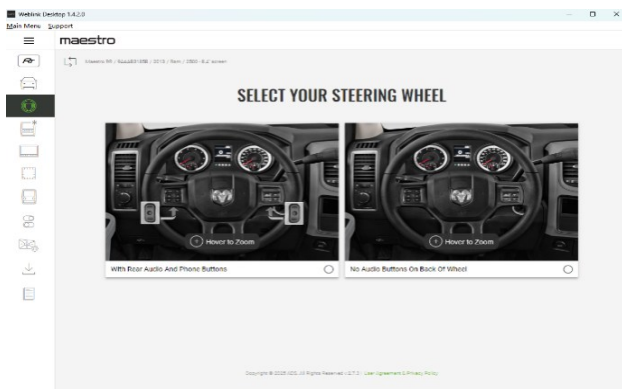
5. Specify the vehicle and car stereo information by entering the required details in the sequence outlined below:



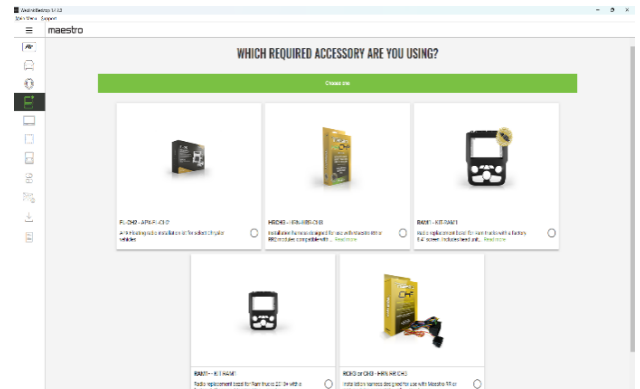
① Select the vehicle model year and make.



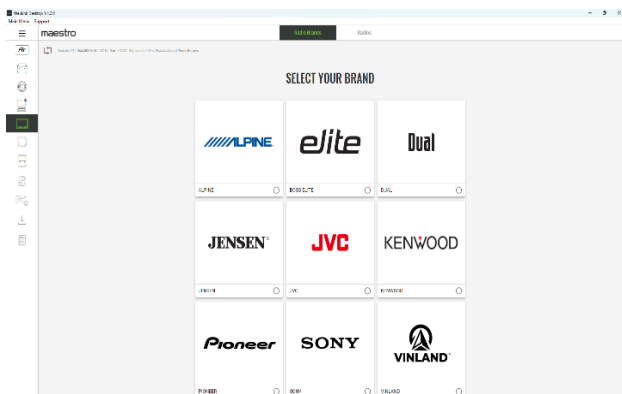
② Select the appropriate vehicle model.



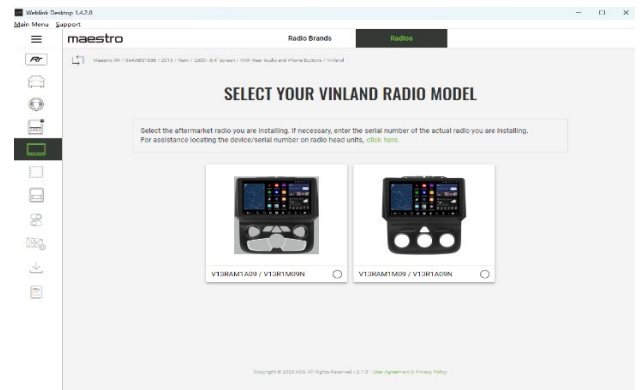
③ Select the appropriate steering wheel for your vehicle's make and model.



④ Select required accessories for the Maestros RR interface.



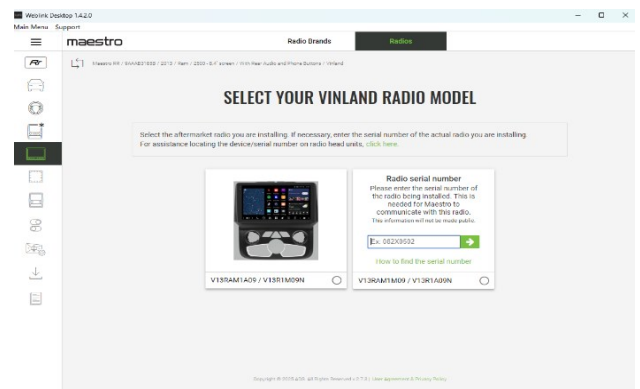
⑤ Choose VINLAND as the brand of the car stereo.



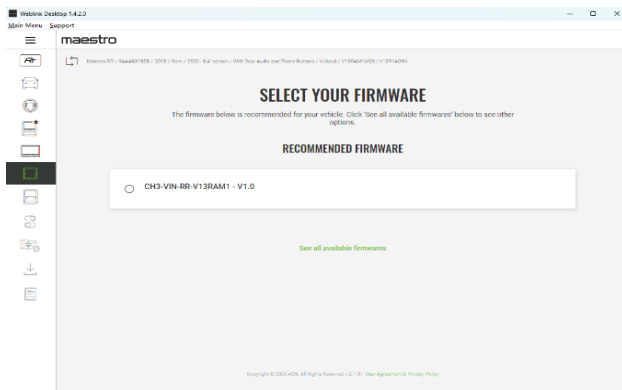
⑥ Select the exact model corresponding to the car stereo you have purchased.



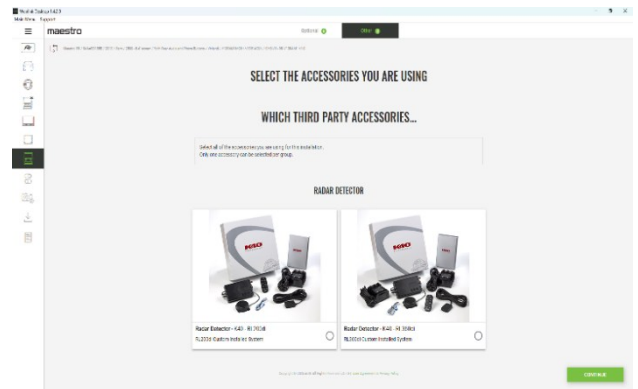
Every car stereo carries a unique serial number—please locate and reference the one found on your car stereo.



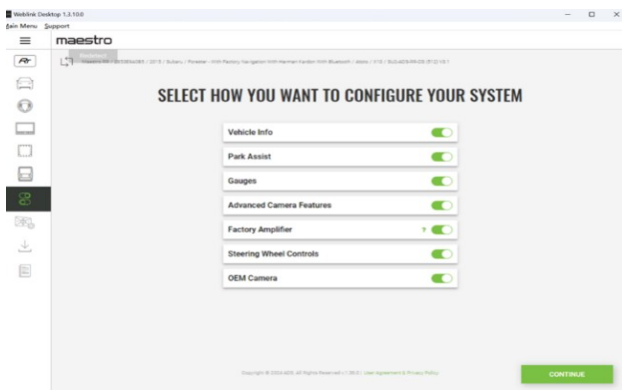
⑦ Enter the 8-digit serial number located on the rear of the car stereo.



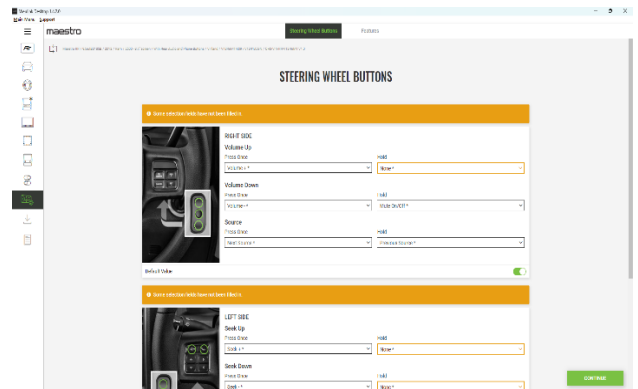
⑧ Select the correct firmware version from the available options.



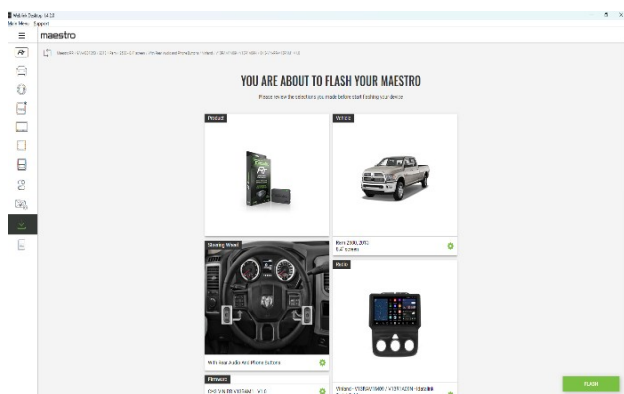
6. Select the accessories currently in use.



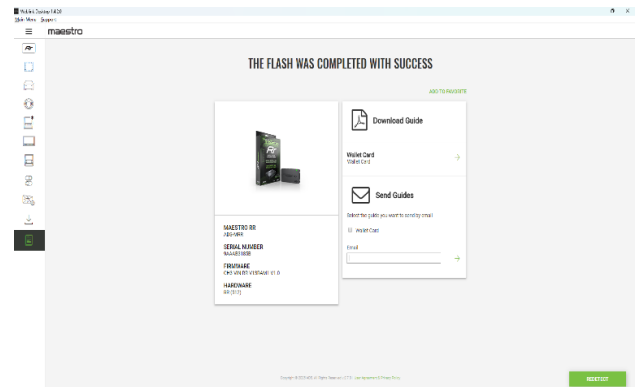
7. The system will automatically apply the recommended settings. If no adjustments are required, simply click "CONTINUE" to proceed to the next step.



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.

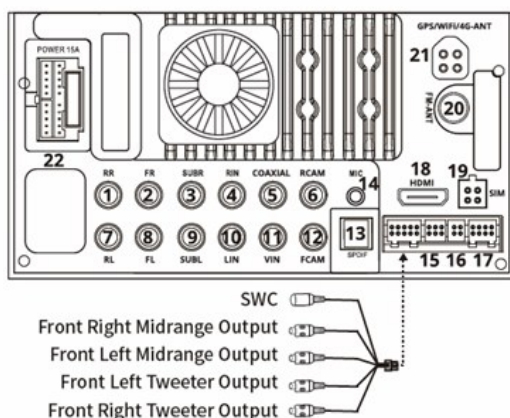


9. Verify the firmware version, user-defined settings, and vehicle or car stereo information. To begin updating the Maestro RR module, click “FLASH”. Ensure that neither the module nor the USB connection is interrupted during the process.



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
18. Front Recording Camera Input
19. HDMI Input
20. 4G LTE Adapter Interface
21. F-M-ANT-Radio Antenna input
22. 4-in-1 Antenna-4G/WiFi/GPS
23. Car Stereo Fuse

Chapter 4 Installation Process

1. Disassembly and Assembly

Note: Ram 1500&2500&3500 2013-2018 may have minor interior design differences across model years, such as dashboard layout, audio system interfaces, or mounting methods. However, the overall disassembly process remains similar. If unsure, consult a professional.

Part One: Radio Removal



Step 1

Switch off the vehicle's ignition.



Step 2

Remove the small rubber pad above the radio.



Step 3

Remove the two screws of storage compartment above the radio.



Step 4

Remove the screw of small storage compartment below the right vent.



Step 5

Remove the rubber pad from the front of the center console storage compartment.



Step 6

Remove the two screws securing the storage compartment panel in place.



Step 7

Remove the rubber pad at the base of center console storage compartment and then remove the screw.



Step 8

Remove the center storage compartment for handy detaching the dashboard panel.



Step 9

Detach both side panels under the driver seat and passenger seat.



Step 10

Use a plastic tool to pry outward the dash bezel and release the clips securing it in the dash.



Step 11

Disconnect the wiring harnesses from the back of the dash bezel.



Step 12

Remove the four screws securing the factory radio in dash, then lift the radio out of the radio cavity and disconnect the wiring harnesses.

Part Two Climate Control Module Removal



Step 1

Remove the thirteen screws shown with a Phillips screwdriver and then detach the radio bezel from the dash assembly.



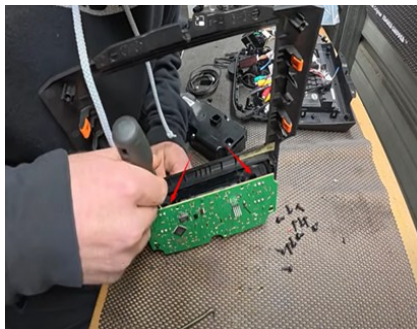
Step 2

Remove the four screws securing the factory climate control module in place.



Step 3

Remove the plastic back cover of climate control module.



Step 4

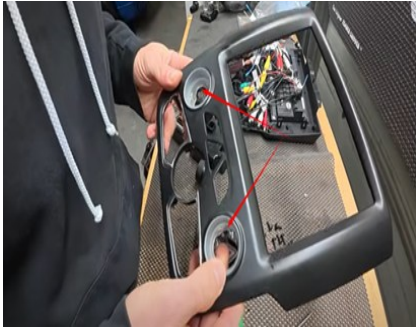
Use a slotted screwdriver to remove the left and right knobs from the side of panel. (Pay attention to protect the control circuit board)



Step 5

Detach the factory climate panel control module.

Part Three Assembling the Radio Trim Bezel



Step 1

Use a slotted screwdriver to pry out the two illumination rings of the original bezel while applying downward pressure and reinstall the rings into the new car stereo bezel.



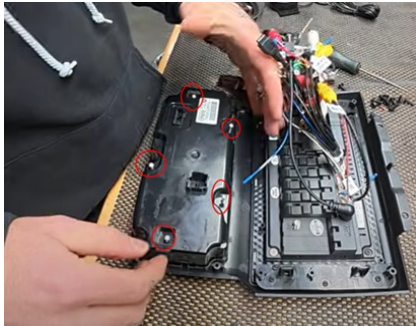
Step 2

Install the factory climate control module assembly in new car stereo bezel.



Step 3

Match the left and right knobs of bezel with their respective retention clips on the mainboard and then snap them into the dash bezel.



Step 4

Install the plastic cover on the back of climate control module and use five screws securing it in place. After installation, please check all buttons click smoothly.



Step 5

Remove the factory bezel clips and install them into the new radio bezel.

Part 4 Cable Harness Connection

Refer to the detailed wiring instructions outlined below for the different configurations of the 2013-2018 Ram 1500&2500&3500 (Auto A/C).

Part 5 Assembly



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

2. Cable Harness Connection

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

2013-2017 RAM 1500

Step 1

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

OR

- ② Connect the HRR-CH3 harness to the **Power Adapter**. Then plug the other end of **Power Adapter** into the 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 the other end to **USB1** cable.

Step 4

- Plug the harness into the car stereo.
- Connect the backup cam cable into the car stereo (if equipped).
- Plug the **CH3 Radio Antenna Adapter** into the car stereo's **FM-ANT** port and **Power ANT** from the HRR-CH3 harness separately, and 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 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 black extension cable. Connect the ADS Data Cable to the black extension cable, and then plug the other end of extension cable into the Maestro RR module.

- Connect the other end of **Audio Cable** to Maestro RR module.
- Connect all the harnesses to the Maestro RR module then test your installation.

[illegible]

13

2018 RAM 1500

Step 1

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

OR

- ② Connect the HRR-CH3 harness to the **Power Adapter**. Then, plug the other end of **Power Adapter** into the 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 vehicle, and other end to **USB1** cable.

Step 5

- Plug the harness into the car stereo.
- Plug **CH3 Radio Antenna Adapter** into the car stereo and **Power ANT** separately, and the other end to the vehicle.

- Connect the **AUX 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 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 black extension cable. Connect the ADS Data Cable to the black extension cable, and then plug the other end of extension cable into the Maestro RR module.

- Plug the other end of **Audio Cable** into Maestro RR module.
- Connect all the harness to the Maestro RR module then test your installation.

STEP 1

STEP 5

STEP 2

STEP 3

STEP 4

STEP 6

CONNECT TO CAR STEREO

Wires from Vehicle

MAESTRO RR MODULE

SPEAKER

AUDIO CABLE

CH3 Radio Antenna Adapter

BACKUP CAM

CARGO CAM

POWER ANT.

Power Adapter

ADS Data Cable

MAIN HARNESS

FACTORY RADIO HARNESS

WITH AMP

WITHOUT AMP

CAN JUNCTION BLOCK (GREEN)

mini USB Adapter

UNPLUG

NOT REQUIRED

STEERING WHEEL CONTROL CABLE

3

[Connection Diagram of 2018 RAM 1500]

2013-2017 RAM 2500&3500

Step 1

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

OR

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

- Connect the backup cam cable into the car stereo (if equipped).
- Connect the cargo cam cable into the car stereo (if equipped).
- Plug the **CH3 Radio Antenna Adapter** into the car stereo's **FM-ANT** port and **Power ANT** separately, and 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 car stereo.

Step 5

• ADS Data Cable Connection:

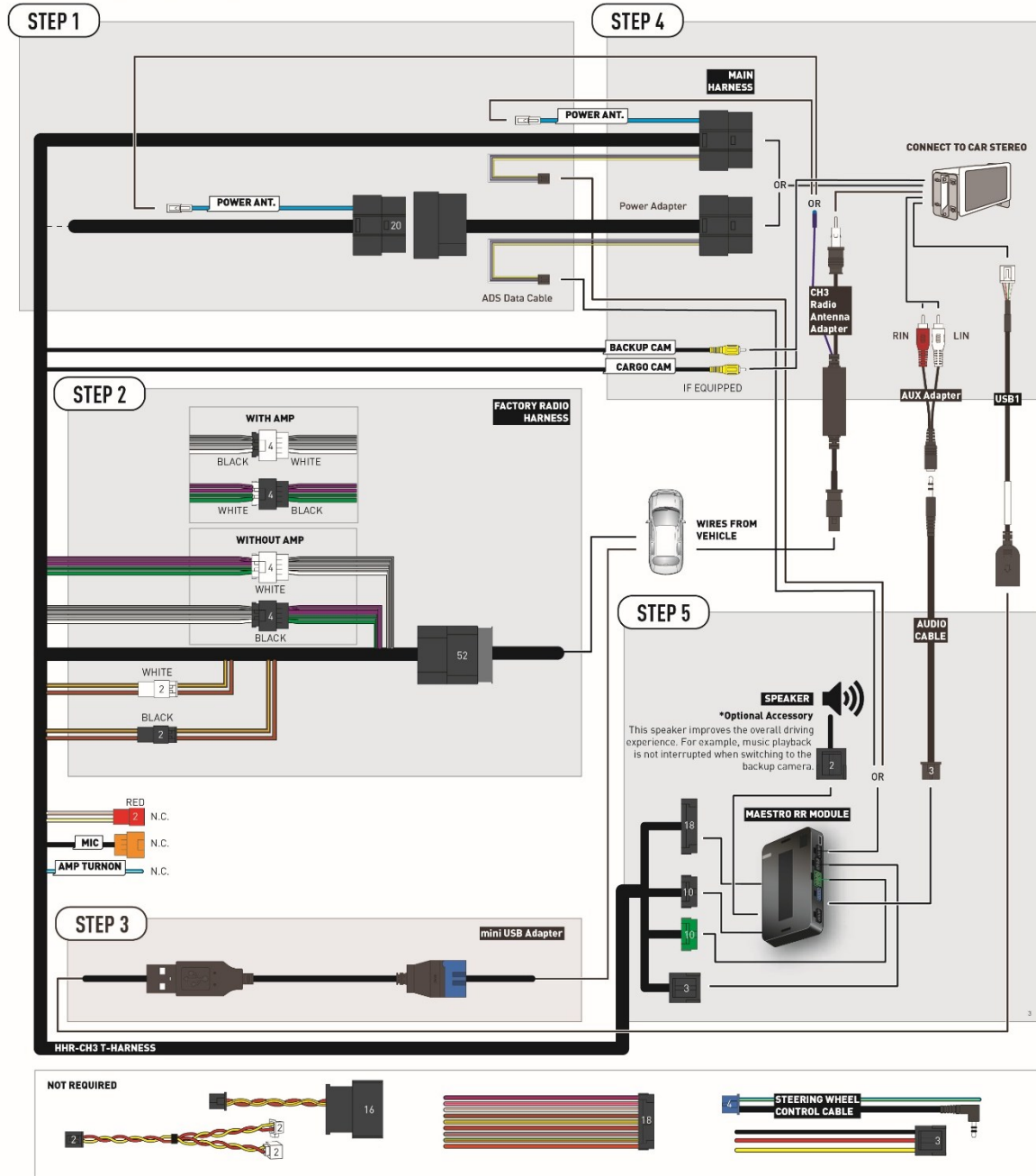
Male Connector: If the ADS Data Cable (from either the **Power Adapter** or the Main Harness) is equipped with a male connector, plug the **ADS Data Cable** directly into the data port of Maestro RR module.

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 black extension cable. Connect the ADS Data Cable to the black extension cable, and then plug the other end of 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.

WIRING DIAGRAM



[Connection Diagram of 2013-2017 RAM 2500&3500]

Chapter 5 Troubleshooting Table

Before contacting technical support, please refer to the troubleshooting table below. It can help you quickly resolve many common issues.

IMPORTANT SAFETY INFORMATION

- **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 connection 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	Check that the audio harness is properly connected in accordance with the correct wiring diagram for your vehicle.