



CUSTOM-FIT CAR STEREO FOR TOYOTA Camry 2018-2020



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.

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
OEM Camera	Fully retained
Steering Wheel Controls	Fully retained
Navigation Outputs	Fully retained
Factory Amplifier	Retained
Vehicle Settings	Fully retained
Advanced Camera Features	Fully retained
Gauges	Fully retained
Park Assist	Fully retained
Vehicle Info	Fully retained

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Chapter 1 Tools 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 contact customer support.

- ①. Car Stereo with Mounting Frame
- ②. Power Adapter
- ③. TO Radio Antenna Adapter
- ④. TO3 USB Adapter
- ⑤. External Dual MIC
- ⑥. Universal Accessories Box
- ⑦. USB to 4 Pin: USB 1 Phone Link
- ⑧. USB to 6 Pin: USB 2 External Storage
- ⑨. Tri-band Audio with Remote Receiver
- ⑩. 4G SIM Slot Cable
- ⑪. SIM Slot (not included)
- ⑫. 4-in-1 Antenna (GPS/WIFI/4G-ANT)
- ⑬. Product Manual
- ⑭. Warranty Online Support

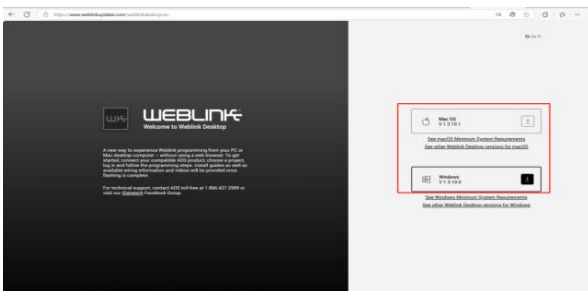


To Retain OEM Features

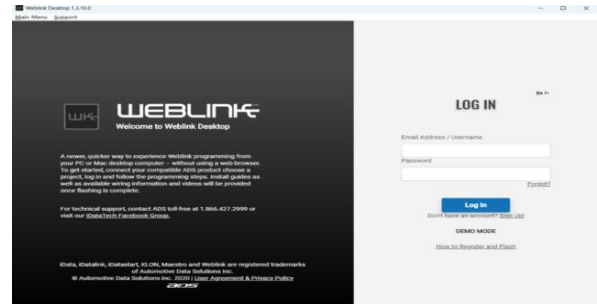
You'll need the Maestro RR interface and the vehicle-specific T-Harness (sold separately).

Chapter 2 Maestro RR Configuration

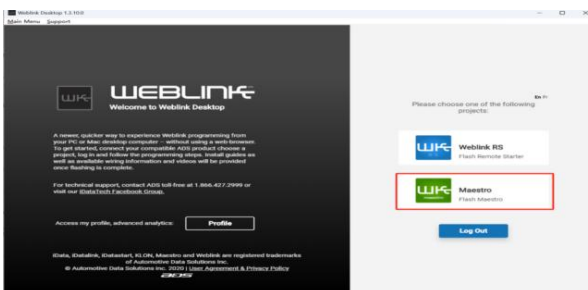
To ensure optimal operation and seamless communication with your vehicle, Weblink Desktop must be installed before using the Maestro RR. This software is essential for device configuration, data transfer, and remote management.



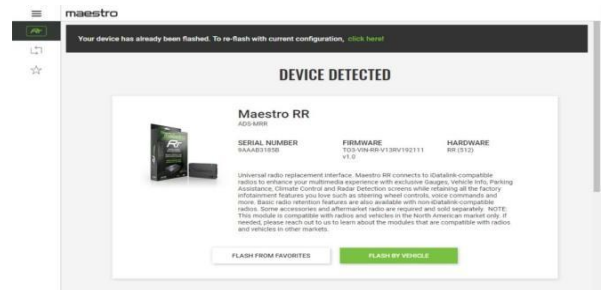
1. Go to <https://www.weblinkupdater.com/weblink/desktop/en> and download the Weblink Desktop software.



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

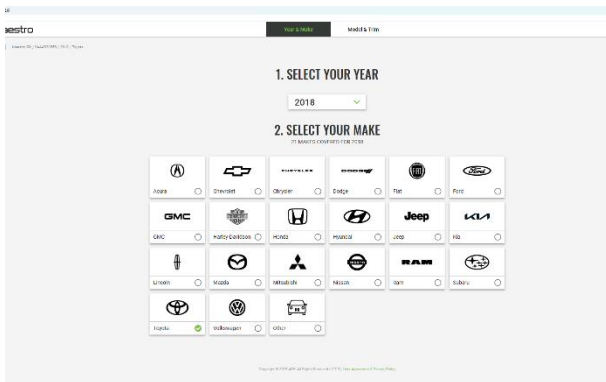


3. Connect the Maestro RR module to your computer using the included USB cable, then select the "Flash Maestro" option.

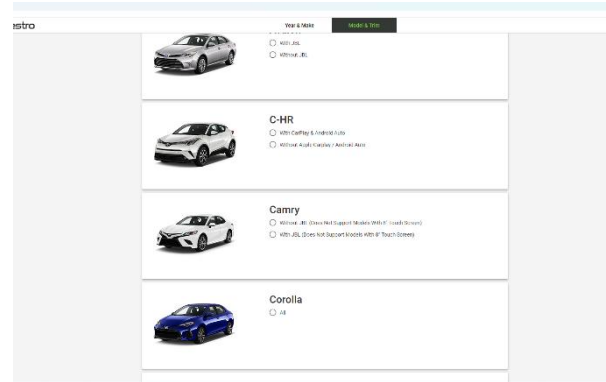


4. Weblink Desktop will automatically detect the connected Maestro RR module and display its corresponding details, such as the serial number and current firmware version. Then, select "FLASH BY VEHICLE" to proceed with the configuration process.

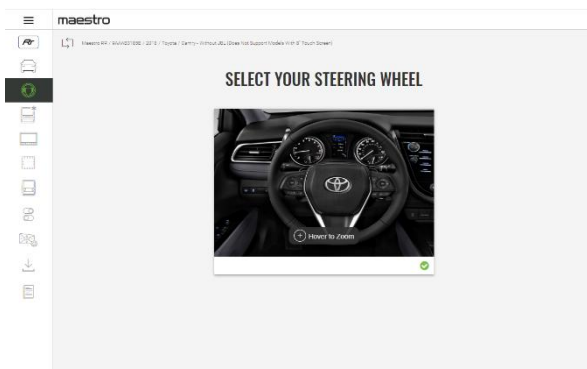
5. Specify the vehicle and car stereo information by entering the required details in the sequence outlined below:



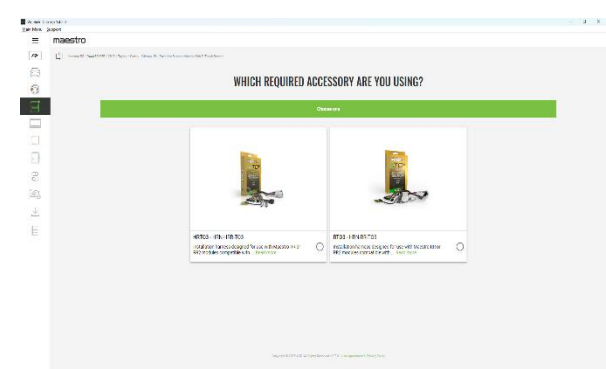
① Select the vehicle model year and make.



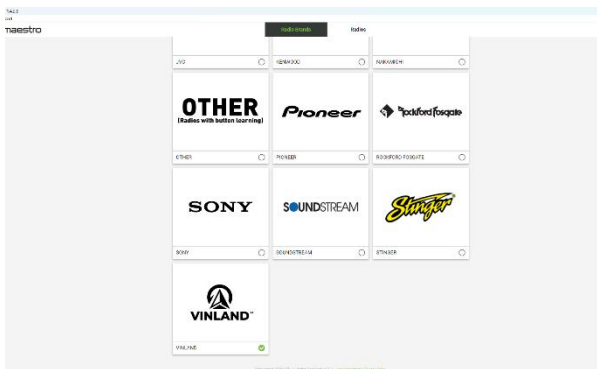
② Select the appropriate vehicle model.



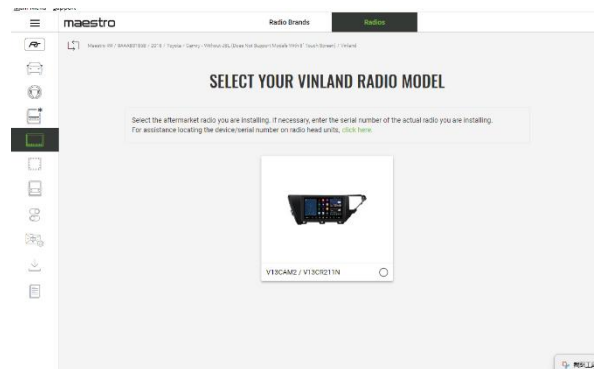
③ Select the appropriate steering wheel for your vehicle's make and model.



④ Select required accessories for the Maestro RR interface.



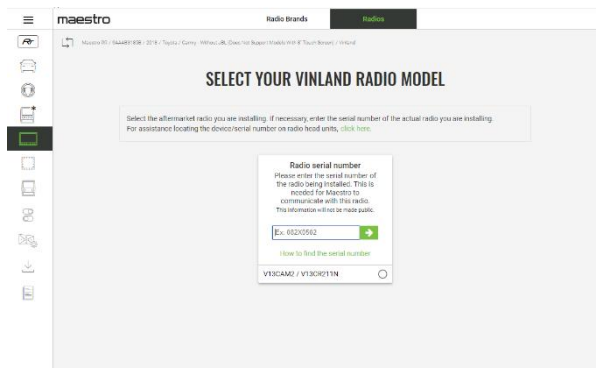
⑤ Choose VINLAND as the brand of the car stereo.



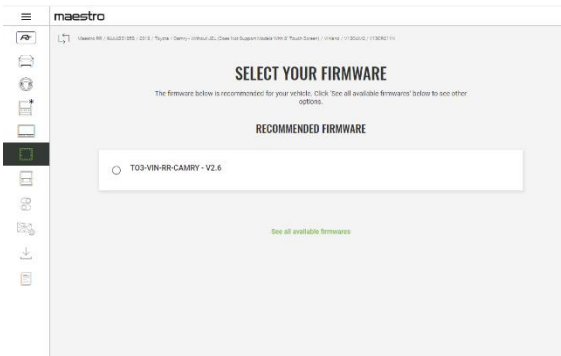
⑥ Select the exact model corresponding to the car stereo you have purchased.



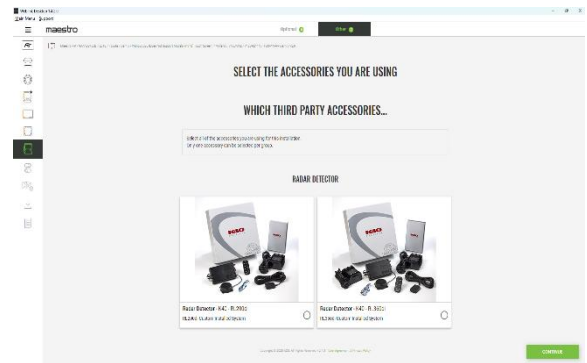
Every car stereo carries a unique serial number—please locate and reference the one found on your car stereo.



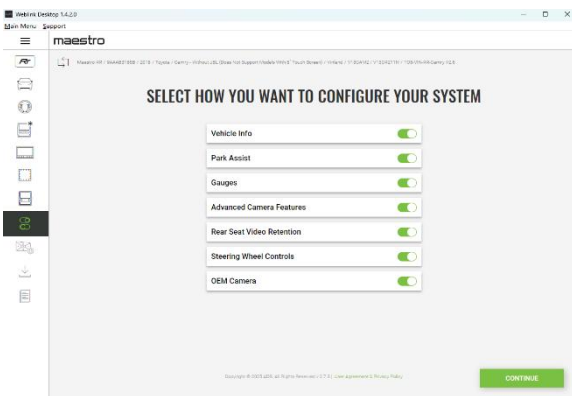
⑦ Enter the 8-digit serial number located on the rear of the car stereo.



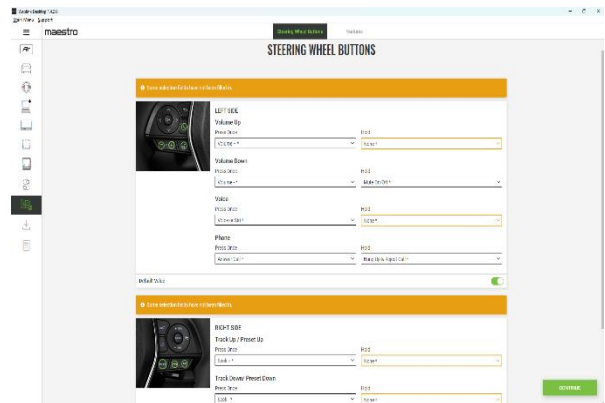
⑧ Select the correct firmware version from the available options.



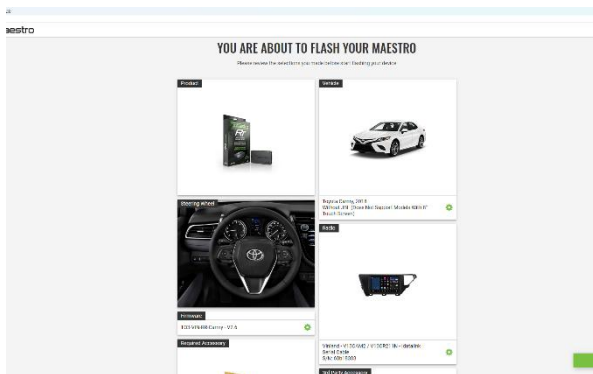
6. Select the accessories currently in use.



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.

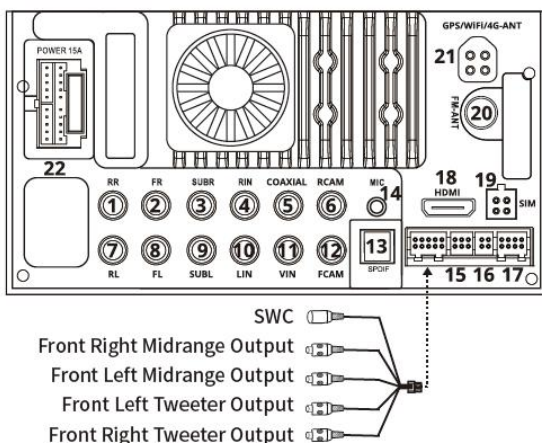


9. Verify the firmware version, user-defined settings, and vehicle or car stereo information. To begin updating the Maestro RR module, click “FLASH”. Ensure that neither the module nor the USB connection is interrupted during the process.



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 apply specifically to 2018-2020 Toyota Camry models and are designed to guide you through the replacement process in a safe, accurate, and efficient manner.

Part 1 Disassembly



Step 1

Switch off the vehicle's ignition.



Step 2

Insert a plastic trim tool into the seam of the silver center dash trim strip. Apply a gentle prying force to release the retaining clips, and then remove the trim strip.



Step 3

Release the retaining clips, then remove the passage-side trim panel.



Step 4

Remove the two side covers from the lower-left portion of the factory CD player.



Step 5

Using a power tool, remove the four 10mm bolts securing the factory CD player.



Step 6

Remove the passenger-side center dashboard trim panel and air vent assembly.



Step 7

Carefully remove the factory climate control panel and disconnect the wiring connector from its rear.



Step 8

Disconnect the negative battery terminal. Remove the factory CD player from the dashboard and disconnect all the rear connectors.



Step 9

Remove the seatbelt reminder switch from the right side of the factory CD panel.



Step 10

Install the seatbelt warning switch onto the dash panel of the new car stereo. Select the appropriate trim piece for the new panel (LE/SE/XLE) that matches the factory structure of dashboard, then secure it with screws.

Part 2 Cable Harness Connection

Refer to the detailed wiring installation steps for the Toyota Camry (2018-2020) of different configurations provided below.

Part 3 Assembly



Install the Vision car stereo along with its panel kit into the vehicle.

2. Cable Harness Connection

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

Toyota Camry With JBL 2018-2021

STEP 1

- Connect the Main Harness of **HRR-TO3 T-harness** directly to the aftermarket car stereo.

OR

Connect the HRR-TO3 T-harness to the Power Adapter. Then plug the other end of the Power Adapter into the aftermarket car stereo.

- Unplug the 4-pin white speaker connector and connect the RCA adapter.

STEP 2

- Connect the factory harness to the **HRR-TO3 T-harness**.

STEP 3

- Plug the harnesses into the aftermarket car stereo.
- Connect the backup camera RCA cable to the aftermarket car stereo (if equipped).
- Plug the RCA cables into the car stereo.
- Plug the **TO Radio Antenna Adapter** into the car stereo and Power ANT of **HRR-TO3 harness** separately, and connect the other end to the vehicle.

- Insert the USB1 into the car stereo and connect the other end to the **TO3 USB Adapter**. Then connect the other end of the **TO3 USB Adapter** to the vehicle.

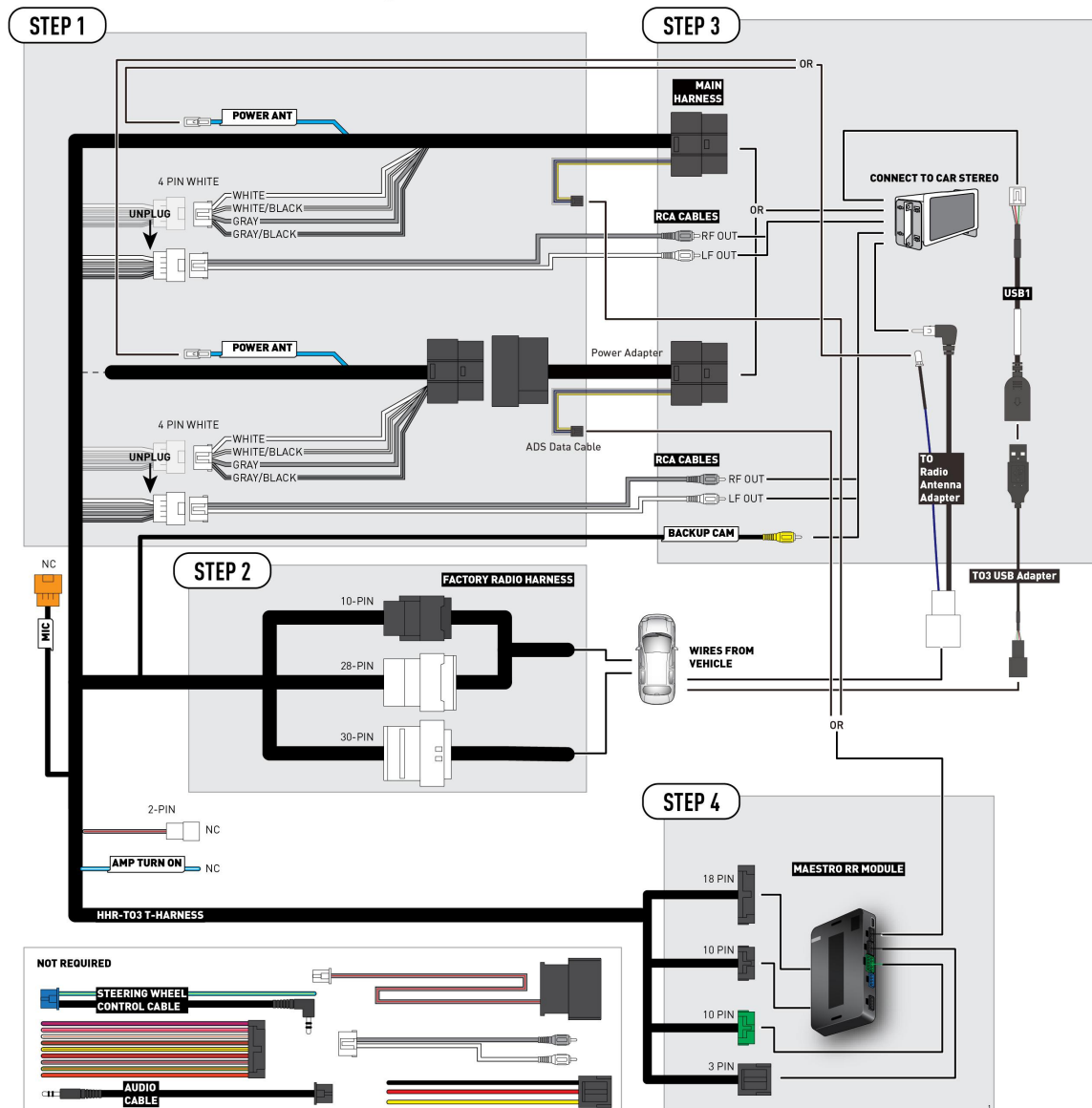
STEP 4

- Plug the ADS Data Cable of the **Power Adapter** into the data port of the Maestro RR module.

OR

- Plug the ADS Data Cable from the Main Harness into the Maestro RR module.
- Connect all the harnesses to the Maestro RR module, then test your installation.

WIRING DIAGRAM *with JBL*



[Connection Diagram of 2018-2021 Toyota Camry with JBL]

Toyota Camry Without JBL 2018-2021

STEP 1

- Connect the Main Harness of **HRR-TO3 T-harness** directly to the aftermarket car stereo.
- OR**

- Connect the HRR-TO3 T-harness to the Power Adapter. Then plug the other end of the Power Adapter into the aftermarket car stereo.

STEP 2

- Connect the factory radio harness to the HRR-TO3 T-harness.

STEP 3

- Plug the harnesses into the aftermarket car stereo.
- Connect the backup camera RCA cable to the aftermarket car stereo (if equipped).
- Plug the RCA cables into the aftermarket car

stereo outputs.

- Plug the **TO Radio Antenna Adapter** into the car stereo and Power ANT of the **HRR-TO3 harness** separately, and connect the other end to the vehicle.
- Insert the USB1 into the car stereo and connect the other end to the **TO3 USB Adapter**. Then connect the other end of the **TO3 USB Adapter** to the vehicle.

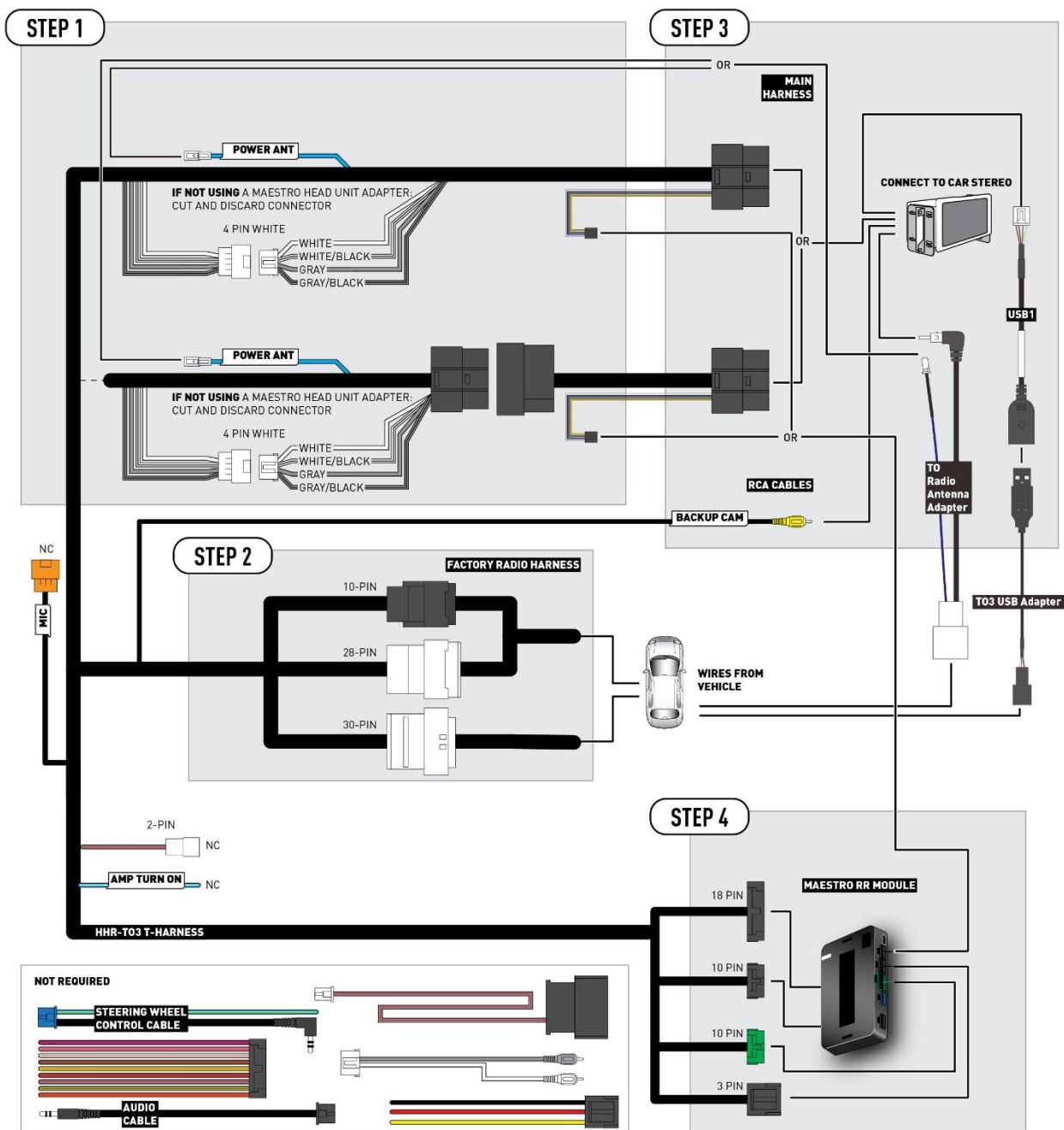
STEP 4

- Plug the ADS Data Cable of the Main Harness into the data port of the Maestro RR module.

OR

- Plug the ADS Data Cable from the **Power Adapter** into the Maestro RR module.
- Connect all the harnesses to the Maestro RR module, then test your installation.

WIRING DIAGRAM *without JBL*



[Connection Diagram of 2018-2021 Toyota Camry without JBL]

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	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.