VINLAND

CUSTOM-FIT CAR STEREO FOR Ford F-150 2015-2020



Titan 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.

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Retain Factory Features with Vinland TITAN

Upgrade without compromise—Vinland TITAN series, when paired with the CAN Bus Decoder, 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	Status
Door Reminder	Retained
Backlight Control	Retained
Auto Switch to Backup Camera	Retained
Parking Sensor	Retained
Steering Wheel Controls	Retained
A/C Display & Control (vehicle dependent)	Retained

A/C Control Function Notes:
A/C display and control functions vary by factory climate control type. For vehicles with manual A/C, the TITAN car stereo can display only the A/C on/off status; temperature display and direct A/C control from the car stereo are not supported. For vehicles with automatic A/C, the TITAN car stereo can display temperature information and support A/C control directly.



Manual A/C



Auto A/C

Chapter 1 — Tools and Package Contents

Tools needed for installation: Plastic pry tools, Socket wrench (7mm or 10mm, depending on your stereo), Screwdriver, Electrical tape, Scissors, 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.

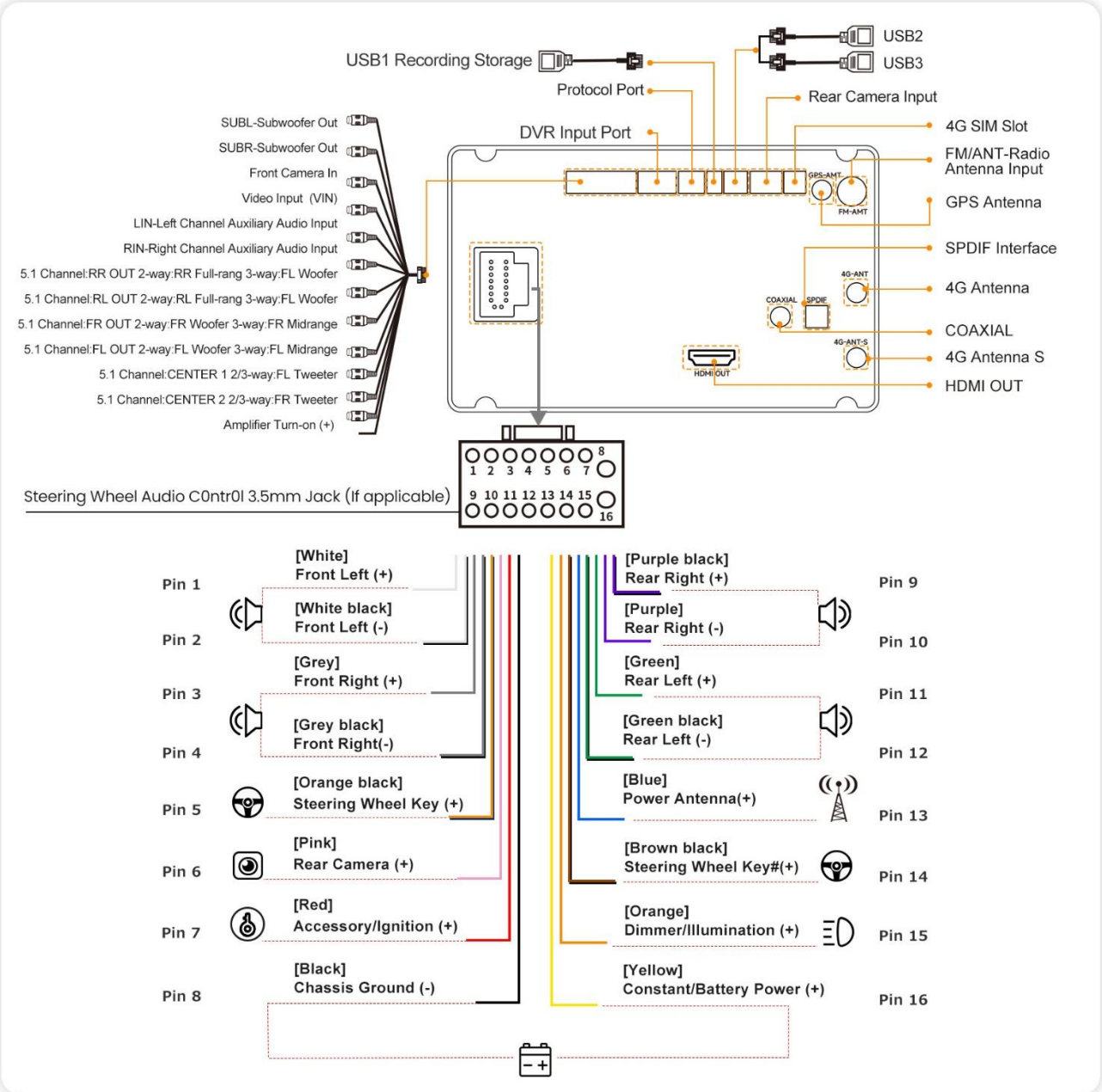
1. Car Stereo (T14FO1-12)
2. Power Harness 1
(For vehicles without B&O audio system)
3. Power Harness 2
(For vehicles with B&O audio system)
4. Radio Antenna Cable
5. USB Adapter Cable
6. 6-pin USB2 Cable
7. 4-pin USB1 Cable
8. 4G SIM Slot Cable
9. RCA Harness
10. 4G Antenna
11. GPS Antenna
12. Rear Camera Input
13. External Microphone
14. 4G Right-Angle Antenna
15. AMP Control Connector Cable
16. CAN Bus Decoder (for Case 1)
17. CAN Bus Decoder (for Case 2)
18. Manual A/C Trim Bezel
19. Mounting Screws
20. SIM Card Eject Tool
21. User Manual
22. Warranty Card



Note: Auto A/C Trim Bezel is pre-installed on the Vinland car stereo.

Chapter 2 — Rear Ports Overview

The diagram below identifies the rear ports on the Vinland car stereo. Refer to this page when connecting accessories and harnesses during installation.



Chapter 3 — Installation

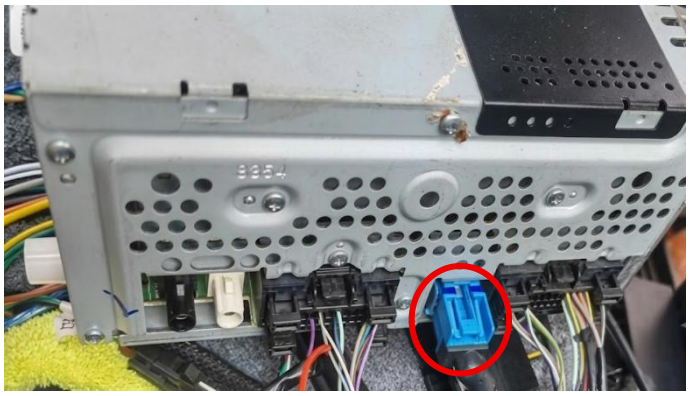
Dashboard trim and panel layouts may vary by model year. The disassembly steps in this guide are intended as a general reference only. Follow the actual vehicle configuration during removal. If you encounter difficulty during disassembly, seek assistance from a qualified automotive installer.

IMPORTANT: Before you begin, park the vehicle, turn off the ignition, remove the key, and disconnect power if required.
Do NOT connect or disconnect any wiring while the vehicle is powered on.

Part 1 — Dash Disassembly

Important:
Before proceeding with the disassembly, identify whether the vehicle is equipped with the factory B&O premium audio system to ensure the correct removal procedure is followed.

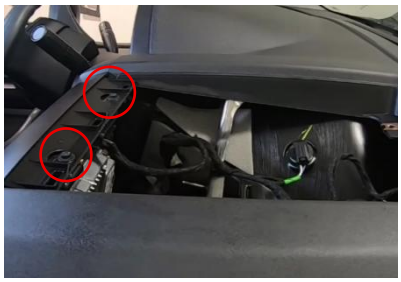
How to identify: Vehicles with the B&O system typically have a **specific blue connector** on the rear of the factory radio head unit (see image below).





Step 1

Remove the rubber pad and cover on the center dashboard.



Step 2

Remove the two screws securing the factory button panel.



Step 3

Remove the factory button panel, then disconnect all electrical connectors from the rear of the panel.



Step 4

Remove the six screws securing the factory display.



Step 5

Remove the factory display and disconnect all the connectors on the rear of the factory display.



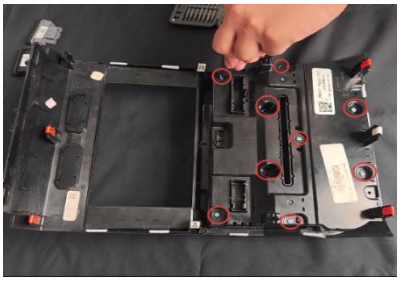
Step 6

Remove the screws securing the factory radio, then remove the radio. (*Skip for 2017-2020 models with B&O amp.*)



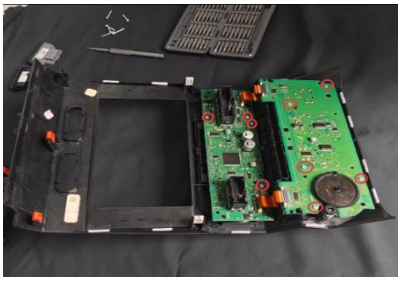
Step 7

Remove the two or three buttons from the upper section of the factory trim panel.



Step 8

Release these securing screws and remove the rear cover of the climate control module.

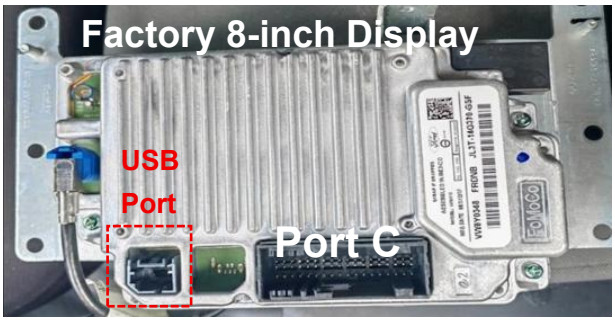


Step 9

Remove the securing screws and transfer the A/C control panel to the Vinland car stereo panel.

Factory Radio Rear Port Reference







Part 2 — Wiring Connections

Complete all factory-side harness connections first. Then connect the supplied harnesses to the Vinland car stereo and test the system before reinstalling the trim panels.

Case 1: Vehicles Without B&O Premium Audio System

Applicable to all 2015–2017 models and 2017–2020 models not equipped with the factory B&O Premium Audio System.

Wiring Instructions (refer to diagram 1)

Step 1 Factory Harness Connections

24-pin Black Connector

- Connect the 24-pin black connector (labeled **ST12-A 2015-2020 Ford F-150 Power Harness**) from the power harness to the factory connector removed from port A on the factory radio.

54-pin/12-pin Black Connector with Backup Camera Connector

1) The vehicle may be equipped with either an **8-inch factory display** or a **4.3-inch factory display**. Two connectors (54-pin and 12-pin) are provided.

- Factory 8-inch Display: Connect the 54-pin black connector (labeled **OEM 8-inch Screen Adapter**) to the factory connector, removed from port C of the factory display.

OR

- Factory 4.3-inch Display: Connect the 12-pin black connector (labeled **OEM 4.3-inch Screen Adapter**) to the factory connector, removed from port D of the factory display.

2) Backup Camera Connector

- After completing the connection above, locate the **yellow backup camera RCA cable** on the other end of the selected connector.
- Connect this RCA cable to the **yellow backup camera RCA cable** on the harness from the **10-pin port** on the rear of the new car stereo.

Step 2 — AMP Control Connector

Note: This step applies only to 2015–2017 vehicles equipped with a factory amplifier when the audio output is not functioning properly. If audio output is normal, skip this step.

- Connect the 26-pin black connector (labeled **AMP Control Connector**) to the factory amplifier connector removed from the factory radio.
- Connect the wire labeled "Amplifier Turn-on (+)" from the AMP Control Connector harness to the blue wire with the same label on the RCA harness. Insulate the connection properly after wiring.

Step 3 USB Adapter Connection

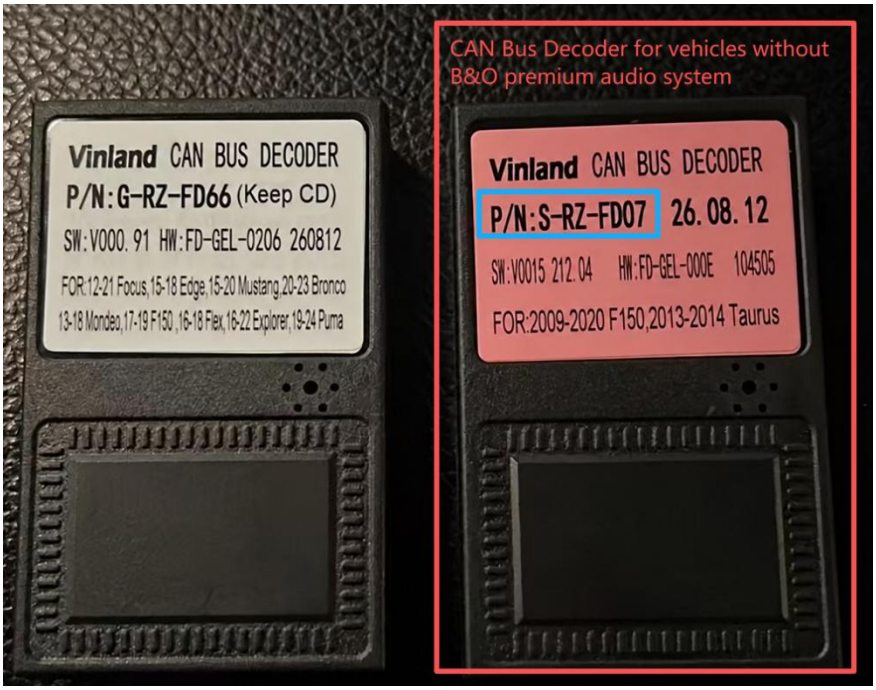
Note: For **non-B&O vehicles equipped with the Sony Audio System**, skip the USB adapter connection in this step and route the USB cables to the passenger-side glove box.

For **non-B&O vehicles without the Sony Audio System**, complete the USB adapter connection below.

- Connect the larger, standard USB connector of the supplied USB Adapter to the factory USB plug removed from the factory radio.
- Then, insert the other smaller Micro-USB end of the supplied USB adapter into the 4-pin USB1 cable.

Step 4 CAN Bus Decoder and Protocol Port Cable

- Connect the 20-pin white connector from the harness to the matching port on the **CAN Bus Decoder（P/N:S-RZ-FD07）**.
- Locate the **8-pin white Protocol Port connector** attached to the **20-pin connector assembly**, then connect it to the **8-pin port** on the rear of the **Vinland car stereo**.



Step 5 Vinland Car Stereo Connections

- Plug the 16-pin black connector from the Power Harness into the 16-pin port on the rear of the Vinland car stereo.
- Connect the cylindrical connector of the radio antenna adapter to the factory radio antenna removed from the factory radio.
- Then insert the L-shaped end of the radio antenna adapter into the FM/AM port on the rear of the Vinland car stereo.
- Connect the other end of the supplied 4-pin USB1 cable to the 4-pin port on the rear of the Vinland car stereo.

Step 6 — Test the System

Before reinstalling the trim panel, verify that the following functions operate normally before proceeding with the remaining installation steps:

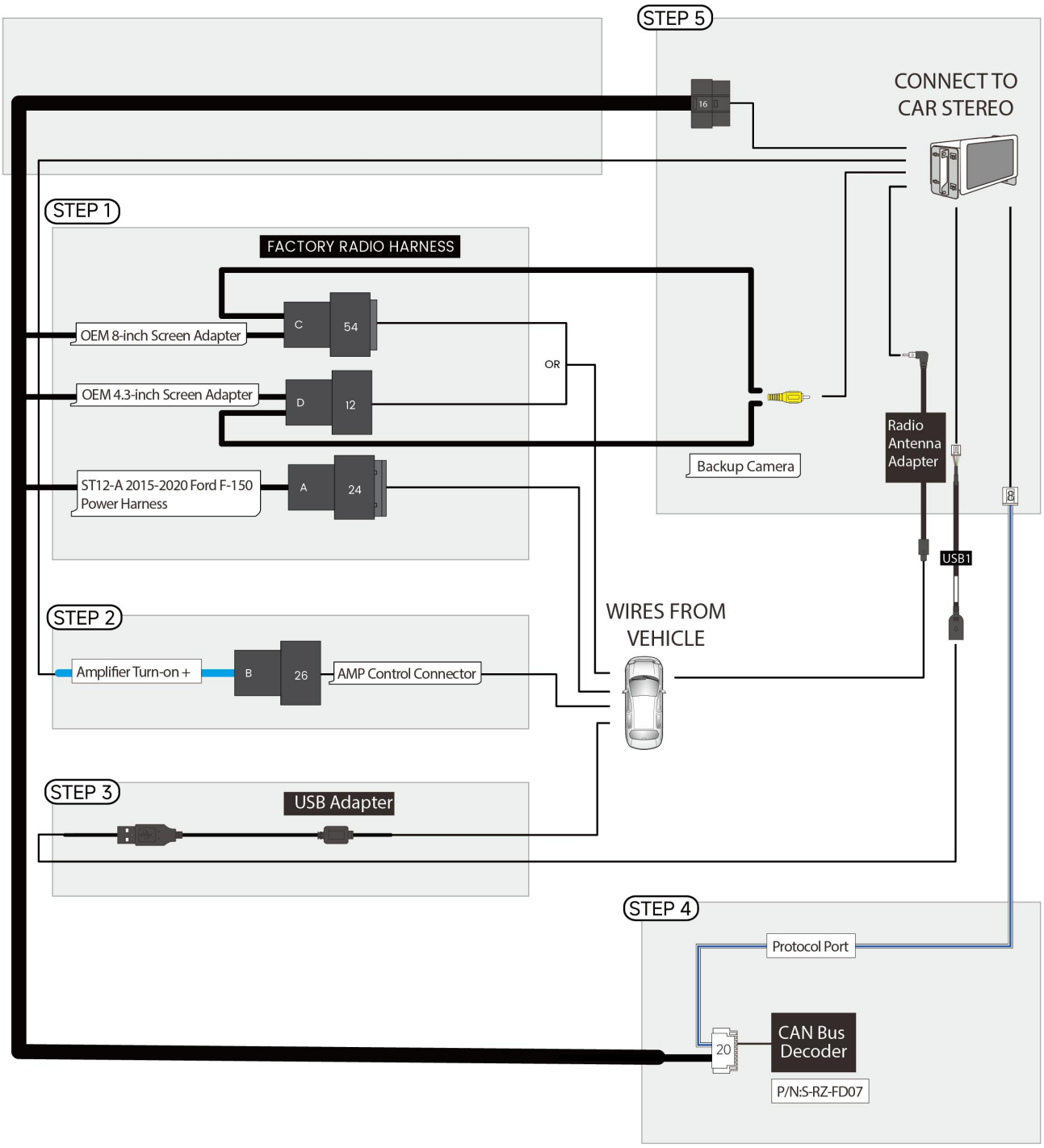
- Power
- Audio
- Backup Camera
- Panel Buttons
- Climate Control Functions
- Radio Reception

Important Note:

The factory USB port is not compatible with this wiring method. Route the USB cables from the rear of the Vinland car stereo to the passenger-side glove box instead.

Wiring Diagram 1

WIRING DIAGRAM



Case 2: 2017-2020 models with B&O Play Premium Audio System (retain the factory radio)

For vehicles equipped with the B&O Premium Audio System, the factory radio must remain connected and installed in the vehicle.

Temporarily remove the factory radio/CD unit only as needed to disconnect and reroute the factory radio antenna. Do not disconnect or modify any other factory wiring.

After the antenna connection is completed, reinstall and securely fasten the factory radio/CD unit in its original location.



Note:

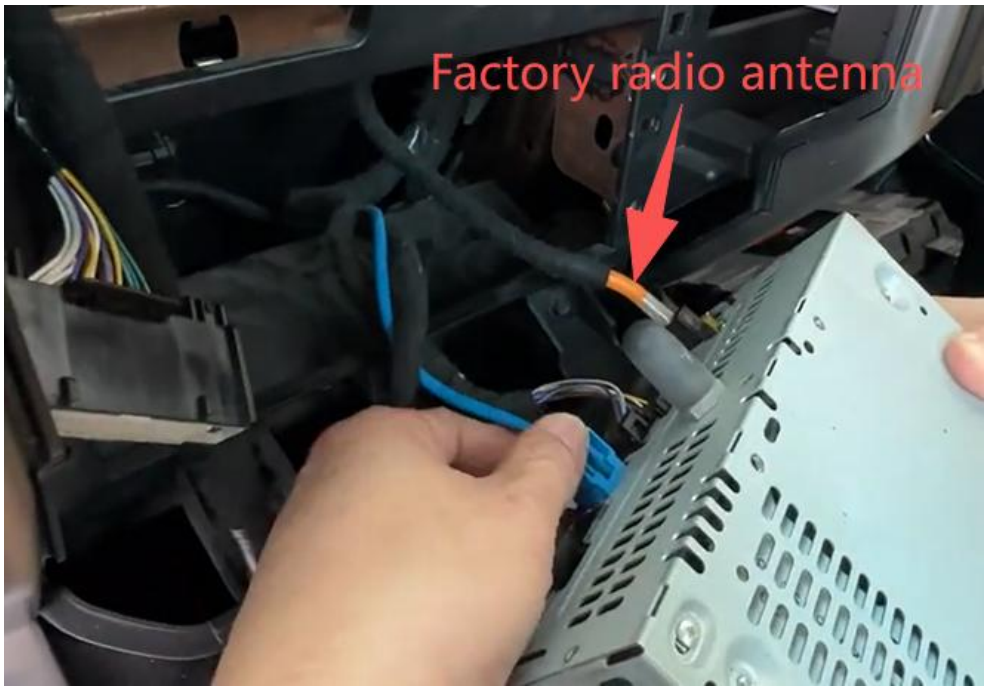
Only connect the cables specified in the steps below. Leave all other factory connectors unchanged. Keep the factory radio connected and securely fixed in place.

Step 1 Backup Camera Connection

- Connect the 54-pin black connector (labeled **ST12-B Ford F-150 2017-2021 with B&O Sound System Power Harness**) from the power harness to the factory plug removed from port A on the factory radio.
- Then, identify the yellow RCA connector (labeled **Backup Camera**) and connect it to the yellow RCA connector with the same label on the harness at the 10-pin port of the Vinland car stereo.

Step 2 Vinland Car Stereo Connection

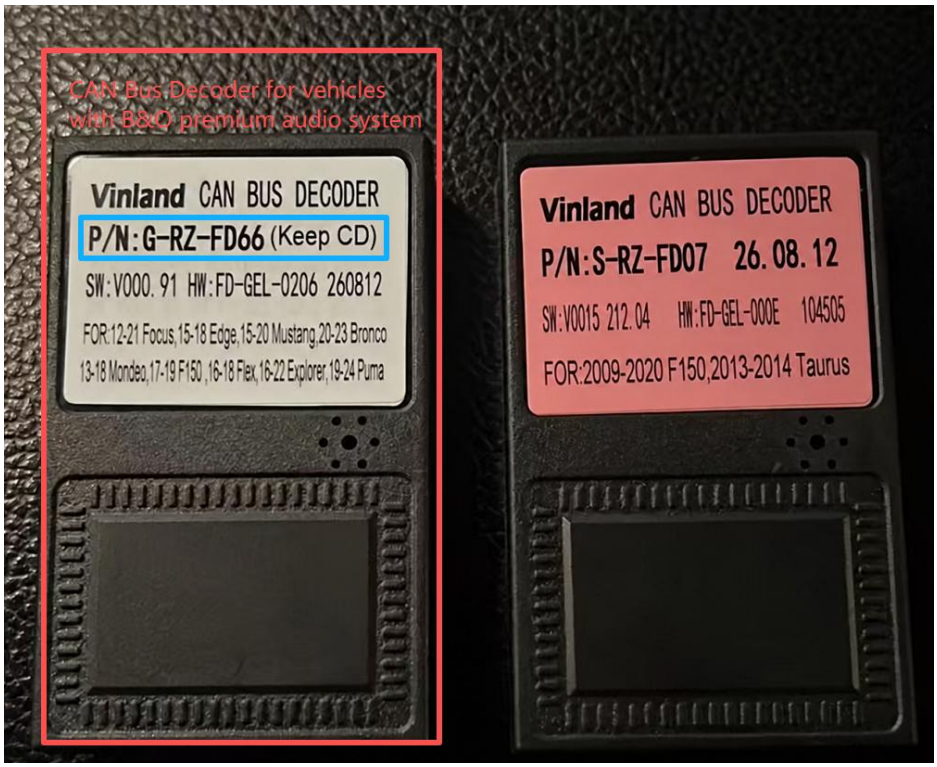
- Plug the 16-pin black connector from the Power Harness into the 16-pin port on the rear of the Vinland car stereo.
- Connect the cylindrical connector of the radio antenna adapter to **the factory radio antenna** removed from the factory radio.



- Then, insert the L-shaped end of the radio antenna adapter into the FM/AM port on the rear of the Vinland car stereo.

Step 3 CAN Bus Decoder and Protocol Port Cable

- Connect the 20-pin white connector from the harness to the corresponding port on the **CAN Bus Decoder (P/N:G-RZ-FD66, Keep CD).**
- Locate the **8-pin white Protocol Port connector** attached to the **20-pin connector assembly**, then connect it to the **8-pin port** on the rear of the **Vinland car stereo**.

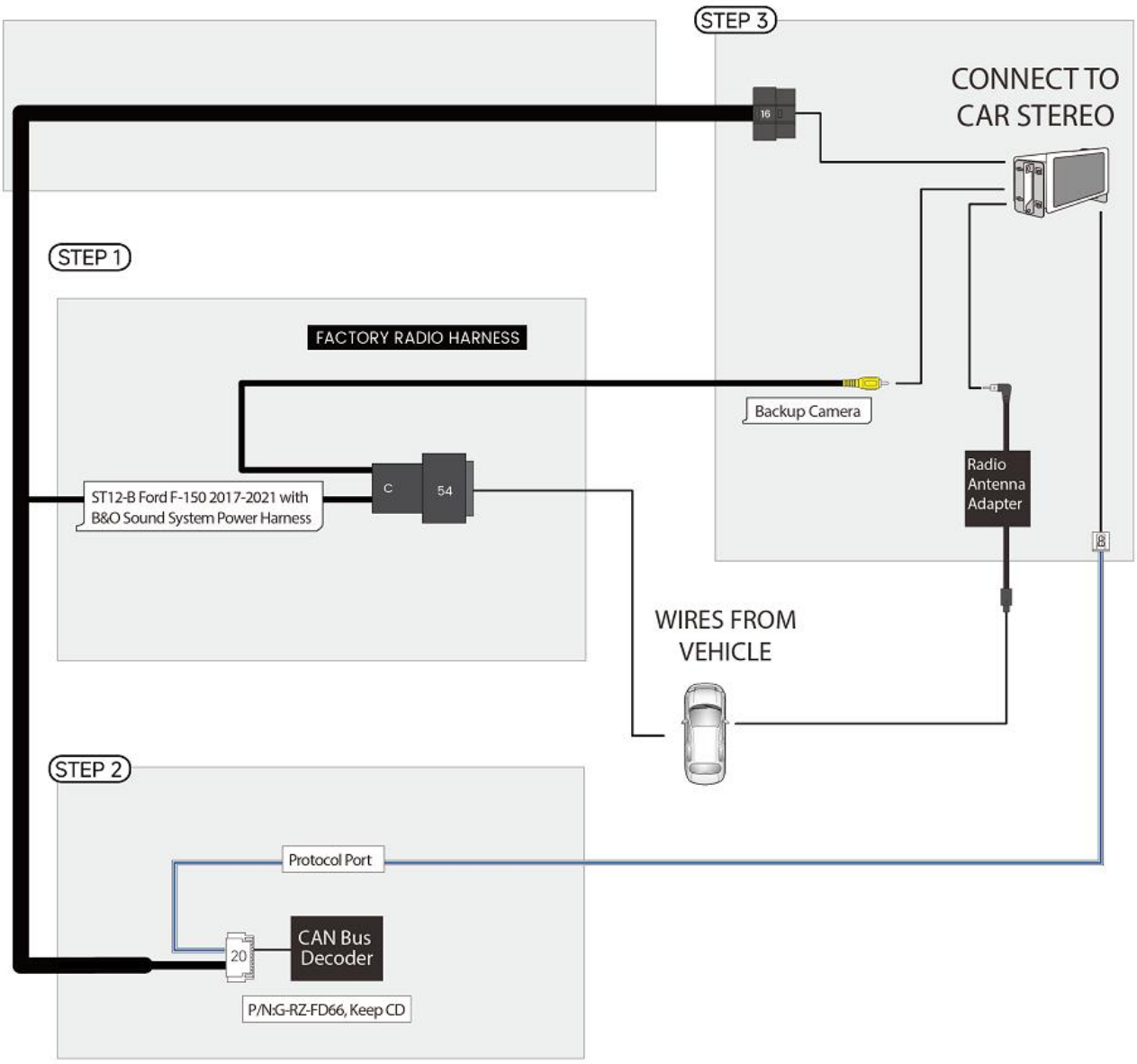


Important:

The factory USB port is not compatible with this installation. Do not connect the supplied USB Adapter. Route the USB cables from the rear of the Vinland car stereo to the passenger-side glove box for convenient access.

Wiring Diagram 2

WIRING DIAGRAM

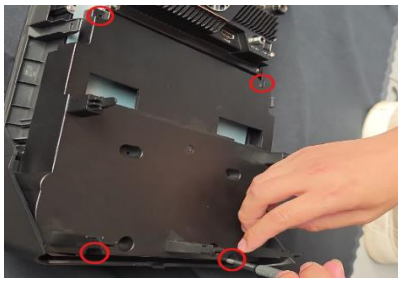


Part 3 — Dashboard Assembly



Step 1

Install the two factory buttons into the corresponding positions on the Vinland car stereo trim panel.



Step 2

Remove the four screws securing the rear cover of the Vinland car stereo, then remove the rear cover.



Step 3

Remove the screws and change the A/C control trim panel. (Skip this step for vehicles equipped with automatic A/C.)



Step 4

Install the factory A/C panel onto the rear of the Vinland trim and secure with factory screws.



Step 5

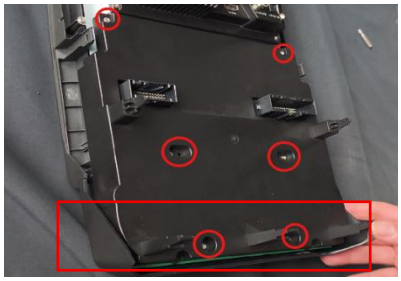
Check that all panel buttons and knobs operate normally.

Important Note:
When installing the factory A/C control panel, ensure the buttons and knobs are properly aligned and move freely. Before continuing, check that no button is stuck, misaligned, or restricted.
Do not fold, pinch, or sharply bend the yellow ribbon cables on the left and right sides of the factory A/C control board. These ribbon cables and their connectors are fragile and may be damaged if handled with excessive force.



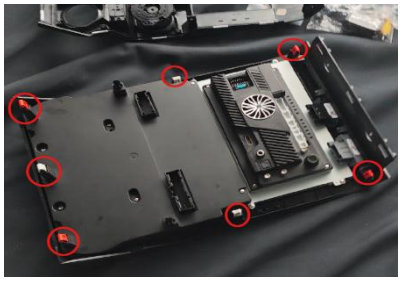
Step 6

Reinstall the rear cover of the Vinland car stereo.



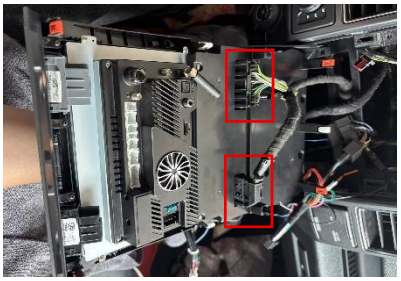
Step 7

Secure the rear cover using four supplied Vinland screws for the upper holes and reusing 2 factory screws for the lower holes (refer to the red square).



Step 8

Transfer the retaining clips from the rear of the factory center trim bezel to the matching positions on the rear of the Vinland trim bezel.



Step 9

Connect the two factory climate control plugs to the corresponding ports on the rear of the Vinland stereo.



Step 10

Complete the wiring connections as instructed in Part 2, then reinstall the car stereo into the dashboard.

A/C Trim Bezel Type: Manual vs Auto



Manual A/C Trim Bezel



Auto A/C Trim Bezel

Chapter 4 — CANBUS Protocol Settings Guide

1. Select the Correct CANBUS Configuration

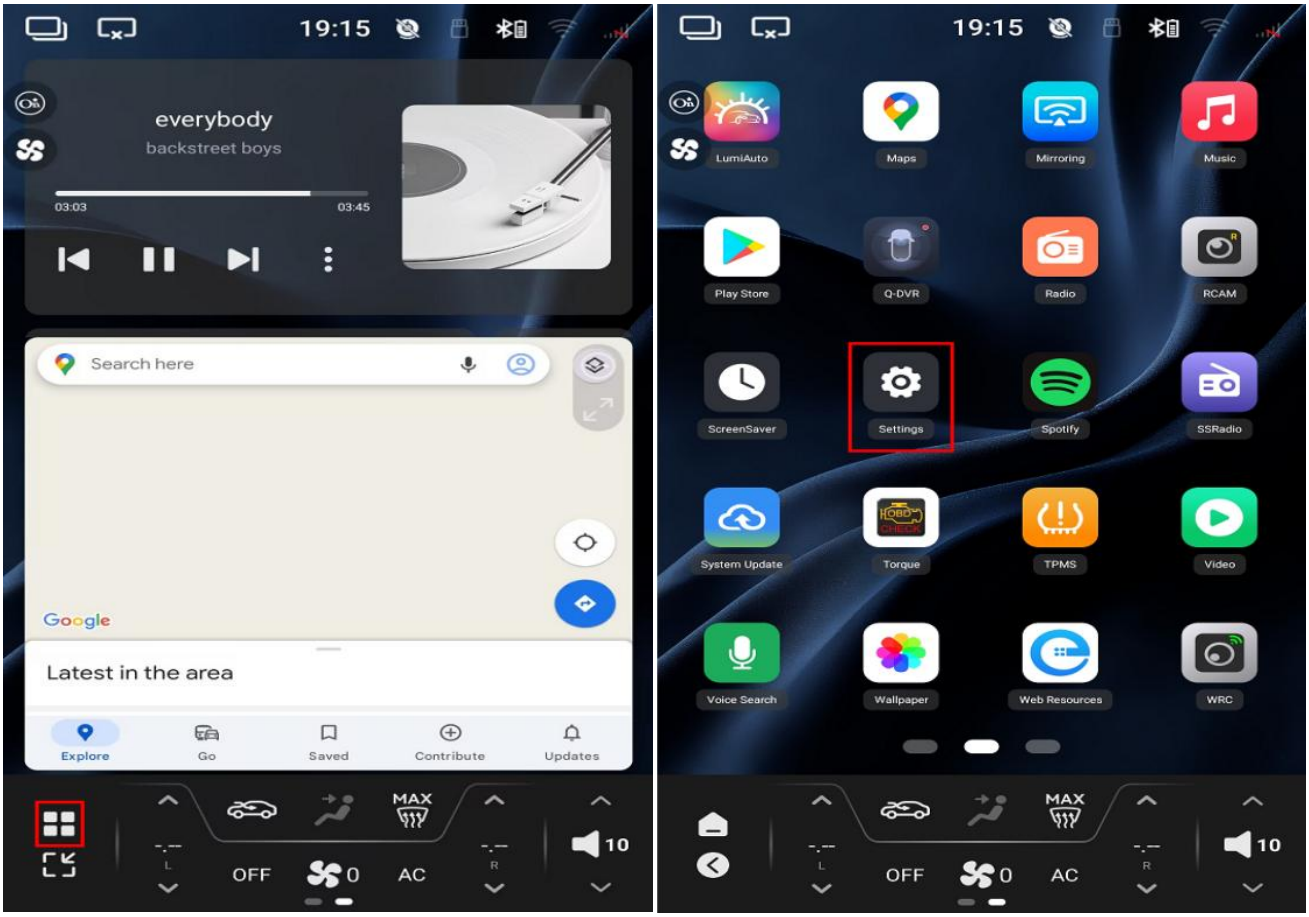
After installation, select the correct CANBUS configuration according to the vehicle's factory equipment. The CANBUS setting must match the vehicle's model year, factory display type, climate control system, and audio configuration to ensure proper operation of retained factory features.

Vehicle Configuration Setup Procedure

Step 1 — Open Settings

From the home screen, tap the Menu icon to access the application menu.

Select Settings.



Step 2 — Select CANBUS Configuration

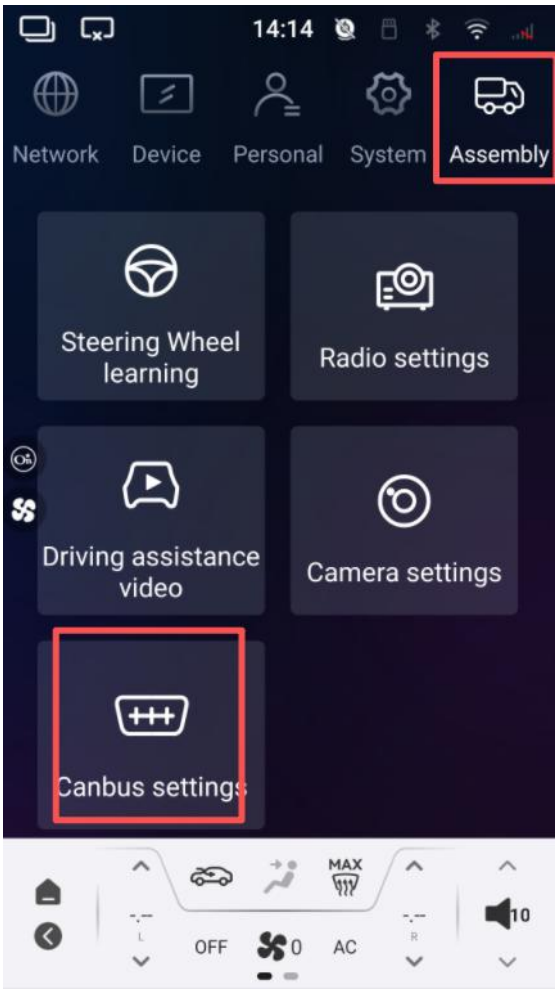
Go to:

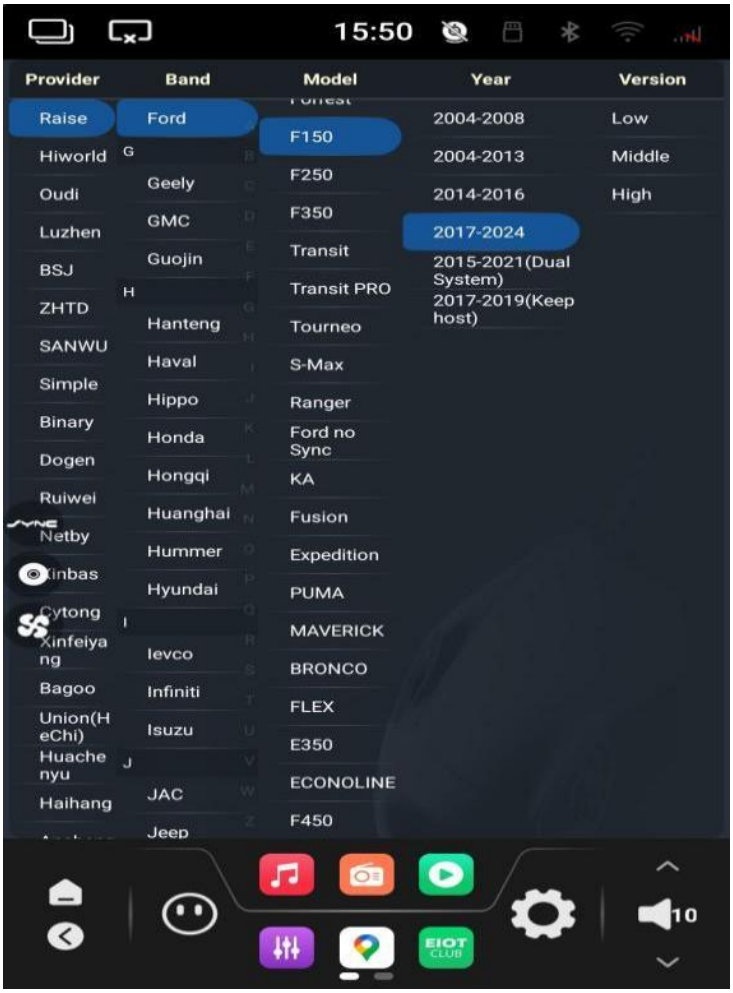
Settings → Assembly → CANBUS Settings

Select the corresponding:

- Provider
- Band
- Model
- Year

according to the installed vehicle.





2. Identify Vehicle Configuration

Before selecting the CANBUS setting, confirm the original factory equipment installed in the vehicle.

Option 1 — 4.2-Inch Factory Display + Manual Climate Control

For vehicles equipped with:

4.2-inch factory display

Manual climate control

Select:

Ford → F-150 → Model Year → LOW



Option 2 — 8-Inch Factory Display + Manual Climate Control

For vehicles equipped with:

8-inch factory display

Manual climate control

Select:

Ford → F-150 → Model Year → Middle



Option 3 — 8-Inch Factory Display + Automatic Climate Control

For vehicles equipped with:

8-inch factory display

Automatic climate control

Select:

Ford → F-150 → Model Year → High



Option 4 — 8-Inch Factory Display + Automatic Climate Control + B&O Audio System

For vehicles equipped with:

8-inch factory display

Automatic climate control

B&O premium audio system

Select:

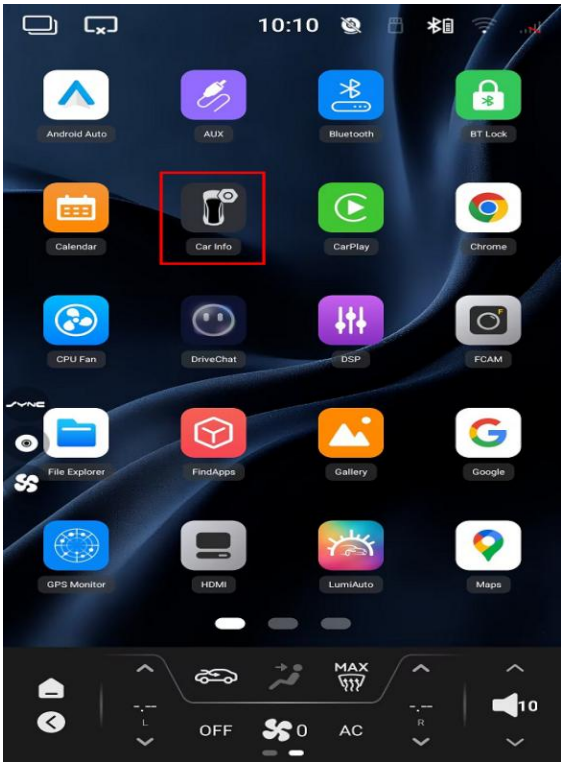
Ford → F-150 → 2017–2019 (Keep Host) → High


5:45 18°
Vehicle Transport Mode Active
Please contact your dealership
PASSENGER AIRBAG OFF
MEDIA
AUTO
DUAL
A/C
AC 230 V
400W MAX

3. Enable Factory Amplifier Settings for B&O Audio System

For vehicles equipped with the B&O Premium Audio System, after selecting the correct CANBUS configuration, the Factory Amplifier setting must be enabled in the head unit to ensure proper audio output. Follow the steps below:

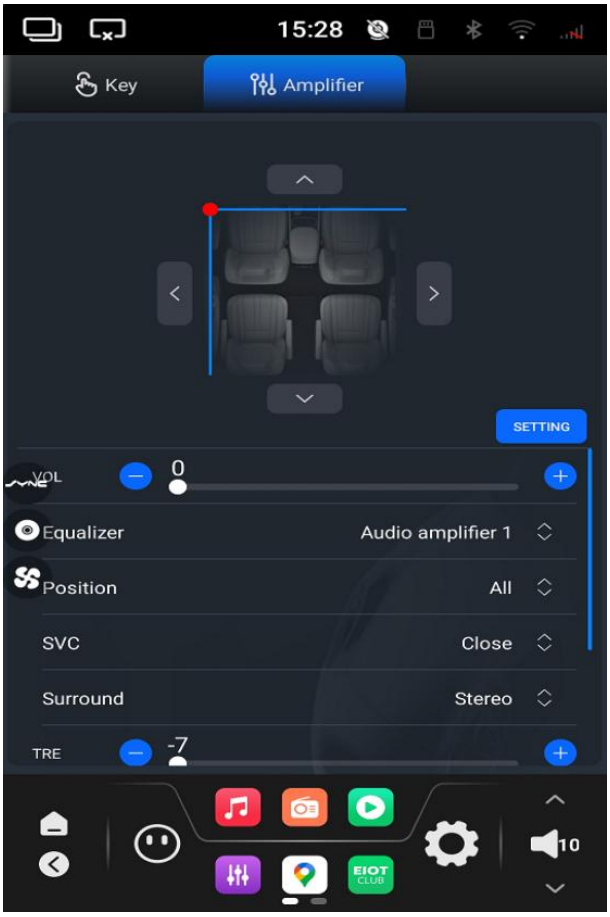
Step 1 — Open Vehicle Information
Tap Car Info to enter the vehicle information interface.



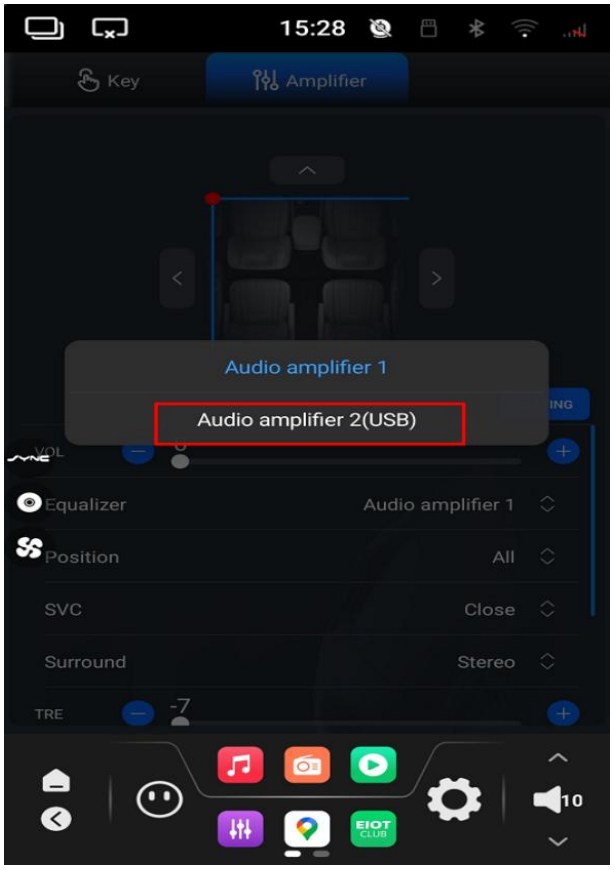
Step 2 — Access the Factory Amplifier Setting
On the top function bar, swipe the icons from right to left until reaching the last page.



Step 3 — Open Equalizer Settings
In the Factory Amplifier Settings interface, tap:
Equalizer



Step 4 — Select Audio Amplifier Mode
Set:
Audio Amplifier → 2 (USB)
Then increase the VOL (Volume) level as needed.



Chapter 5 — Troubleshooting

No.	Problem Description	Solution
1	Vinland Car Stereo Does Not Power On	①. Verify that the **yellow B+ wire** in the **16-pin power plug** on the power harness has constant 12V power. If no power is present, inspect the corresponding factory fuse and check the vehicle wiring for damage or open circuits. ②. Check that the **24-pin connector** on the power harness and the **20-pin white connector** for the **CAN Bus decoder** are fully connected. Make sure the connectors are seated properly and that no terminals are loose or making poor contact. ③. Verify that the **red ACC wire** from the **20-pin CAN Bus decoder connector** on the power harness is providing the correct switched power output to the aftermarket car stereo.
2	GPS signal reception issues	① Verify the GPS antenna is securely connected. The recommended mounting location is the interior A-pillar or above the center console. ② GPS functionality may be limited in high-rise density areas or by adverse weather.
3	Reverse camera malfunction	① If the vehicle is **not equipped with a factory backup camera** and no aftermarket camera has been installed, a backup camera must be added. Verify that the aftermarket camera video signal cable is securely connected and that the camera is receiving proper power. ② If the vehicle is equipped with a factory backup camera, verify that the backup camera video wire from the matching screen-side adapter is correctly connected to the backup camera video input on the aftermarket car stereo.

4	No Audio After Installation on Vehicles Equipped with a Factory Sony Amplifier	① Verify that the **amplifier control wire** on the **RCA harness** is properly connected to the matching amplifier control wire on the **AMP Control Connector**. Make sure the connection is insulated properly. ② Also make sure the **amplifier control setting** in the **Vinland** car stereo is turned on.
5	Poor radio reception or no reception	① Verify that the antenna is properly and firmly connected.
6	DVR recording issues	① Use a USB 2.0 (or faster) card reader with a TF/MicroSD card rated U3 or higher. ② Connect the storage device to the USB1 cable only. The recording function will not work when connected to USB 2 or USB 3. ③ If the DVR app is missing, go to Settings > Assembly > Driving Assistance Video > “DVR Camera Mode”, then tap “Restart.”
7	No Bluetooth or Wi-Fi Signal, or Poor Reception	① Verify that the 10-pin connector on the Rear Camera Input Cable (with integrated Wi-Fi and Bluetooth antennas) is properly plugged into the corresponding port on the rear of the car stereo.
8	CAN Bus / Vehicle Protocol Functions Not Working	① Check that the **Protocol Port** cable on the power harness is fully connected to the **8-pin protocol port** on the car stereo. Make sure the connector is not reversed and that no required connection has been left unplugged.

9	A/C Controls Not Responding	① Verify that the factory A/C connectors are fully seated and securely locked into the corresponding A/C port on the rear of the Vinland car stereo. ② Check the ribbon cables to ensure they were not accidentally pulled or loosened during the panel transfer. Verify both ends are securely seated.

Note: Because vehicle configurations vary, some functions may require additional adjustment after installation. If a vehicle-specific function does not operate as expected, review the wiring connections carefully and verify that all applicable settings in the car stereo are configured correctly.