FUSION

screen replacement

Custom-Fit Car Stereo for Mercedes Benz
A-Class (W176) / GLA (X156)
with NTG4.5/4.7 System 2013-2015

VINLAND

Overview

The Vinland **VMBGA412C8** car stereo features a 12.3-inch HD touchscreen and supports wireless Apple CarPlay and Android Auto.
This system is specifically designed for 2013-2015 Mercedes Benz A-Class W176/GLA-Class X156 models equipped with the factory NTG 4.5/4.7 system and is engineered to retain the original factory vehicle functions. The availability of retained functions may vary depending on the vehicle's configuration.

Needed Tools

Tools needed for installation: Plastic pry tools, socket wrench (7mm or 10mm, depending on vehicle configuration), screwdriver, electrical tape, scissors, wrench, screw tray/box, and cable ties.

Important Notes

- Before installation, disconnect the vehicle's negative battery terminal to prevent electrical short circuits or damage.
- It is recommended to update the firmware after installation to ensure optimal performance.
- For the latest installation instructions or additional assistance, download the latest manual from our website or contact Vinland customer support.

Package Contents

Power Harness

Car Stereo

Dash Bezel

CAN Bus Decoder

Chime Speaker

RCA Cable

GPS Antenna

4G Antenna

USB to 4Pin

USB to 6Pin

Rear-view Camera Cable

9.84FT/3M Lavalier Microphone

Audio Cable

AMI Cable

Product Care Online Support

Online Resources Quick Guide

1. Product Appearance

This section describes the layout and connection ports of the **VMBGA412C8** car stereo to assist with proper installation.

① **Power Port:** Supplies power to the car stereo via the vehicle harness.

② **AV / Audio Input & Output Port:** Supports SUB, CVBS-IN, MIC, AUX-IN, SPDIF-OUT, RCA, AMP, and SIM connections.

③ **Reserved Port:** Currently not in use.

④ **CAN Bus Decoder Port:** Connects to the CAN Bus decoder to retain factory vehicle functions.

⑤ **Phone Link (USB):** Supports smartphone connection, hands-free calling, and multimedia projection.

⑥ **External Storage (USB):** Supports USB storage devices and accessories.

⑦ **Rear View Camera Input:** Connects to the rear-view camera.

⑧ **Wi-Fi Antenna Port:** Connects to the Wi-Fi antenna.

⑨ **GPS Antenna Port:** Connects to the GPS antenna.

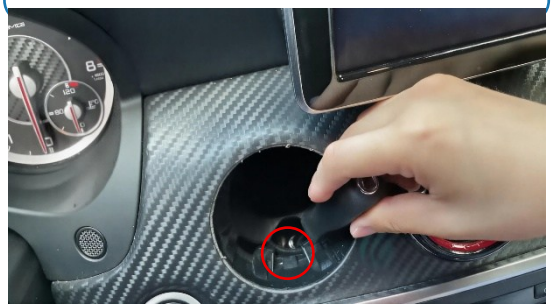
⑩ **4G Antenna Port:** Connects to the 4G LTE antenna.

2. Dash Disassembly

1. Turn off the vehicle's ignition.

2. Using a hook tool, carefully remove the left and right air vents.

3. Remove the screws holding the factory head unit in place.



4. Manually slide the factory CD player forward.

5. Disconnect the white wiring connector located on the side of the factory CD unit.

6. Disconnect all wiring connectors from the rear of the CD player.

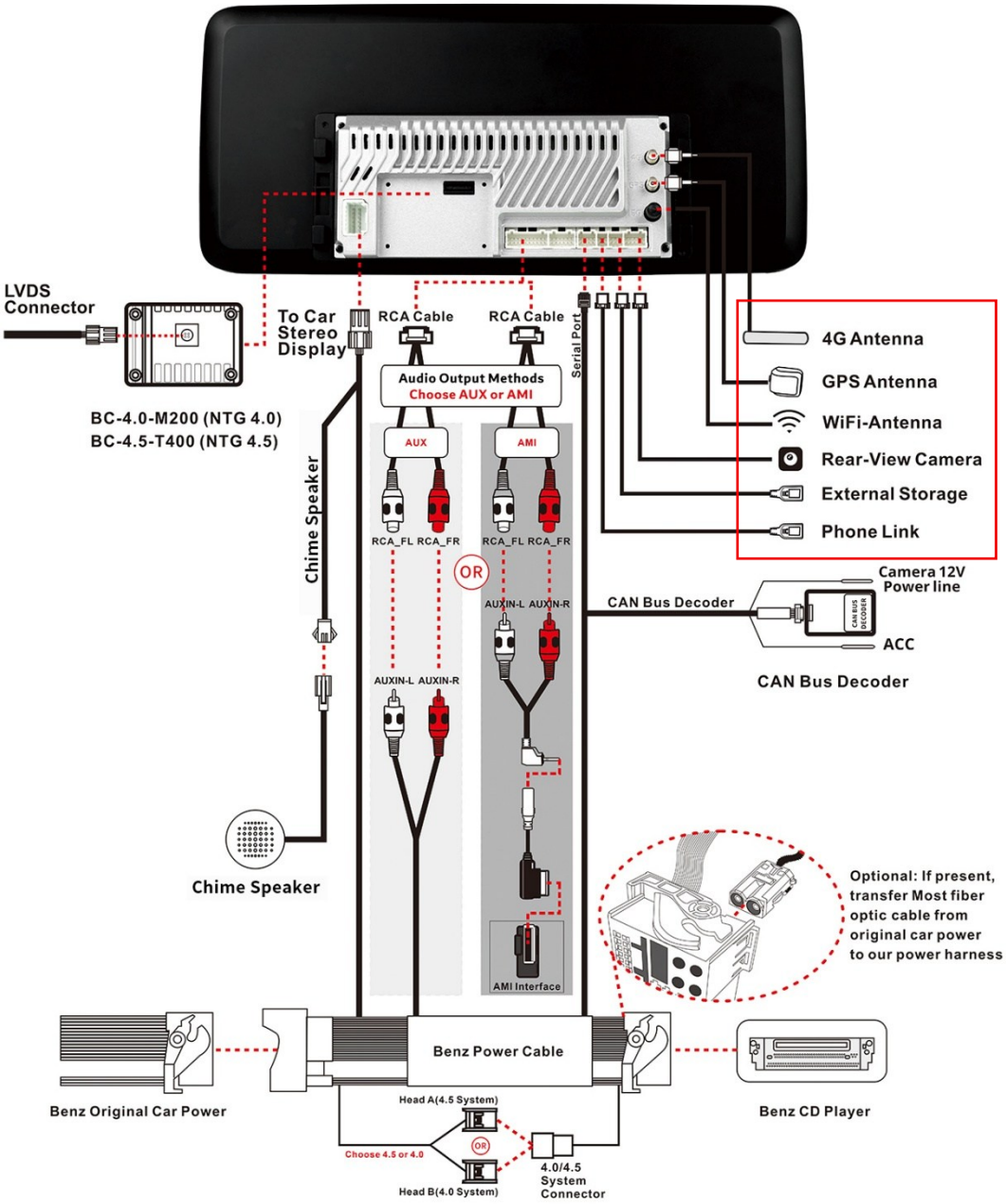
7. Remove the two mounting screws from the rear of the factory display.

8. Carefully pull the factory display away from the dash, then disconnect the two connectors from the rear.

9. Detach the outer mounting bracket from the factory display.

10. Remove the securing screws on both sides, then detach the inner mounting bracket.

3. Connection Diagram



Connection Instructions:

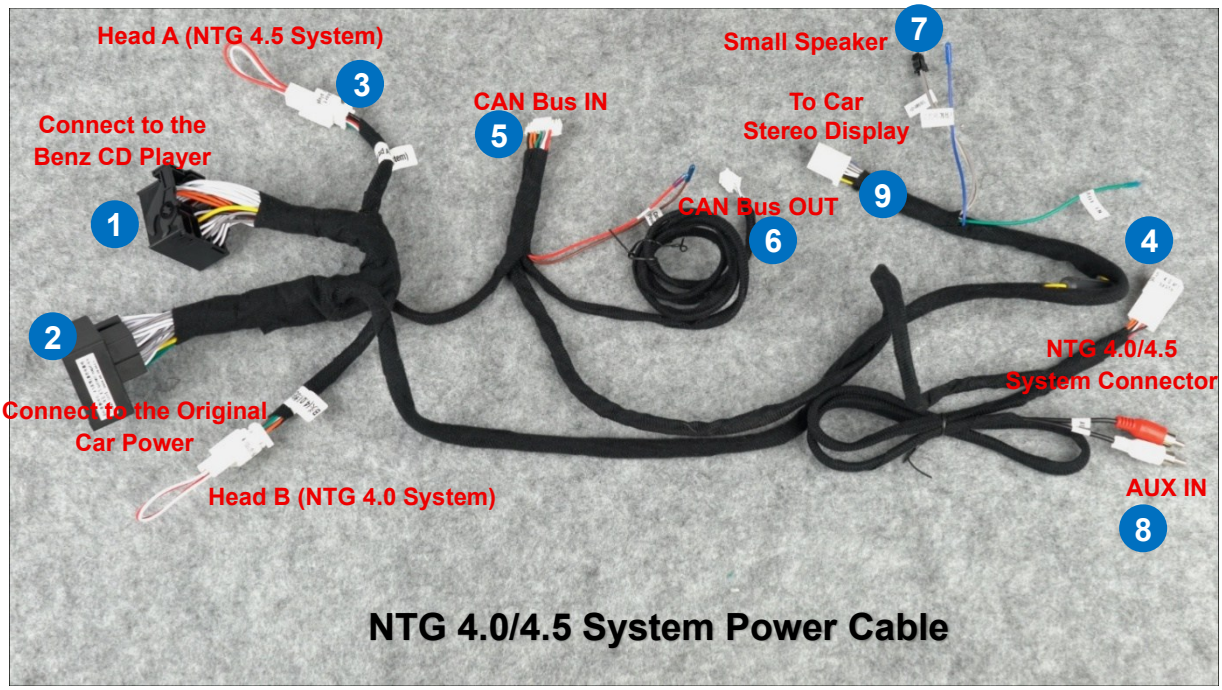
Step 1 – Main Harness Connection

Connect the six cables inside the red box, along with the RCA cable, to the corresponding ports on the back of the car stereo, following the labels printed on each cable.

Step 2 – LVDS Connection

Plug the vehicle's original LVDS connector into the LVDS adapter module on the back of the car stereo.

Wiring and Connection of the Power Cable:



Step 3 – MOST Fiber Optic Connection (If equipped)

If the original vehicle power harness includes a MOST fiber optic cable, remove it and insert it into the fiber optic interface on the new power cable harness (①)

(If the vehicle is not equipped with a MOST fiber optic cable, skip this step.)

Step 4 – Power Cable Routing

Connect **one end of the new power cable**(②) to the original vehicle power harness.

Then connect the **other end of the new power cable (①)** to the original CD player (refer to the diagram above for details).

Finally, reinstall the CD player into the center console.

Step 5 – Head A Connection (NTG 4.5 System)

Remove the short-circuit plug from **Head A (NTG 4.5 system)** (③).

Then connect the Head A connector to the **System Connector** (④) on the power cable.

Step 6 – CAN Bus Connection

Plug the **CAN Bus IN connector** (⑤) of the power cable into the CAN Bus decoder.
Then connect the **CAN Bus OUT connector** (⑥) to the corresponding CAN Bus port on the back of the car stereo.

Step 7 – Speaker Connection

Connect the "**To Small Speaker connector"** (⑦) of the power cable harness to the female connector of the small speaker.

Step 8 – AMI Audio Connection (If equipped)

If the vehicle is equipped with an AMI interface, connect **AUX IN-L** and **AUX IN-R** (⑧) from the audio cable to the corresponding RCA-FL and RCA-FR connectors of the RCA cable connected to the car stereo.
Then connect the other end of the audio cable to the AMI cable, and plug the AMI cable into the AMI interface located in the armrest compartment.

Step 9 – Audio Connection (Without AMI Interface)

If the vehicle is not equipped with an AMI interface, connect AUX IN-L and AUX IN-R from the power cable directly to the RCA-FL and RCA-FR connectors of the RCA cable connected to the car stereo.

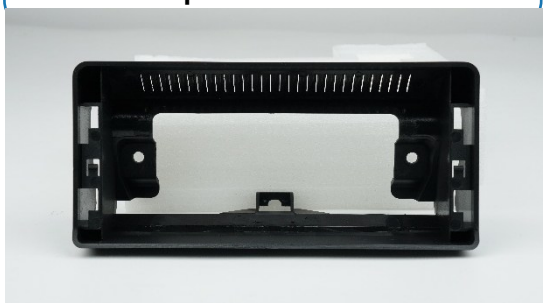
Step 10 – Final Power Cable Connection

Finally, plug the power cable harness connector labeled "**To Car Stereo Display**" (⑨) into the car stereo.

4. Assembly Process

Note: After completing all wiring connections, start the vehicle and verify that all functions operate correctly. Once confirmed, reinstall all removed components in their original positions.

1. Secure the mounting bracket to the center console opening using the provided screws.



2. Insert the four rear mounting clips into the bracket slots and press firmly to secure the unit.

3. Reinstall the factory main unit into the center console.

4. Reinstall the air vents into their original location.

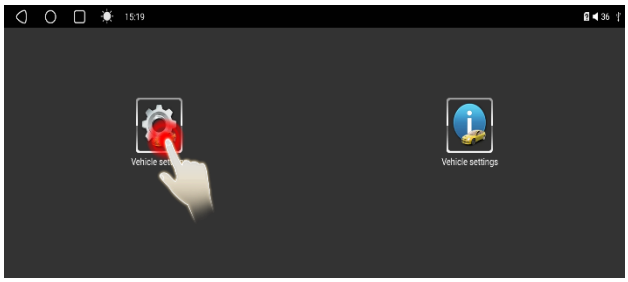
5. Relevant Settings

● Enable AUX Audio

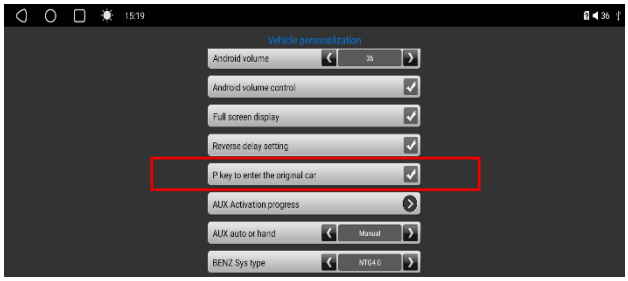
If the vehicle's main unit does not have a physical AUX port and the AMI media interface does not display the AUX audio option, follow the steps below to activate the factory AUX function.

Note: This feature is available only on vehicles equipped with the original main unit running the NTG 3.0 / 3.5 / 4.0 / 4.5 / 4.7 system.

① Tap "**NTG settings**" option.



② Tap the first "**Vehicle settings**" option.



③ Enter the Vehicle Settings menu, scroll down, and tap the "**Activate AUX progress**" option.

④ After waiting 10 seconds, remove the car key and restart the vehicle. The factory CD player will reboot automatically. The "AUX" option will then appear in the audio section of the original system interface, as shown in the image above.

● Screen Resolution Setup

① Tap " " > Tap " "

② Refer to the **"Screen Display Resolution"** option

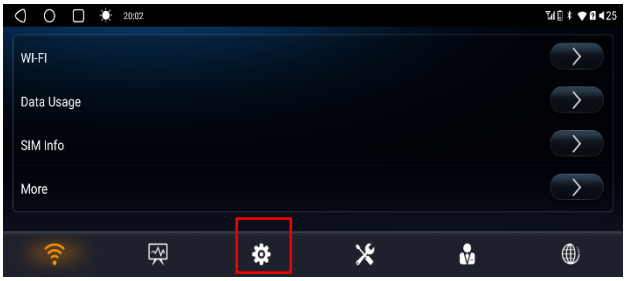
③ Under **Screen Display Resolution**, select the appropriate option according to the installed COMAND configuration.

● Setup Camera

Note：

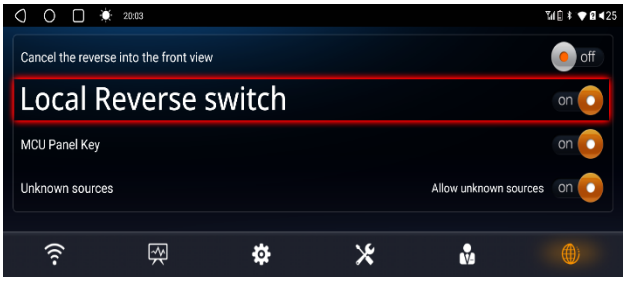
This section applies only when installing an aftermarket rear-view camera.

If the vehicle uses the factory-installed rear-view camera, skip this section.



① Tap " "

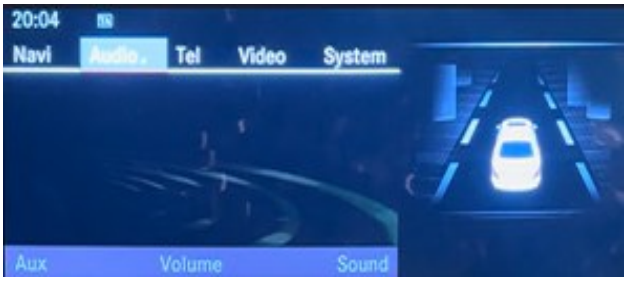
② Tap " "



③ Find the "**Local Reverse Switch**" option and switch to the rearview camera.

- **Setup Sound**

① Tap " " to enter the original COMAND system



② Select "**Audio**" option.

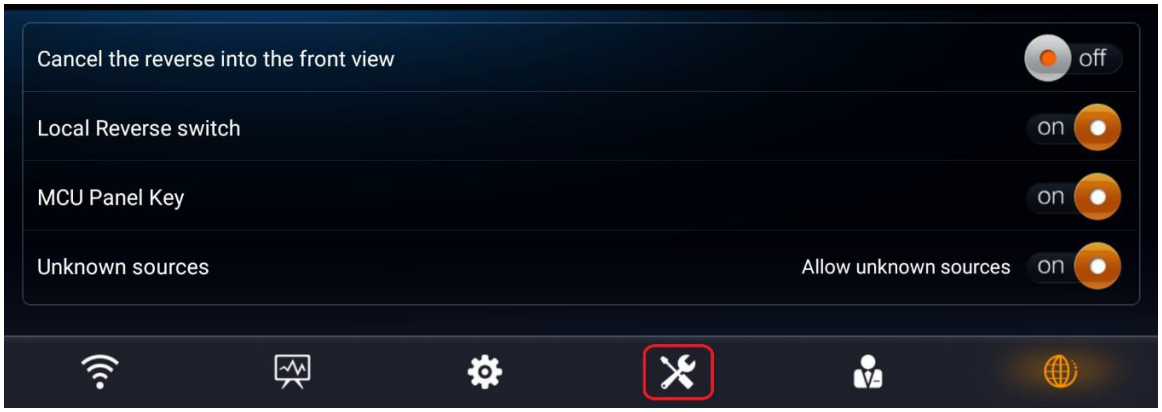
③ Select "**AUX**".

6. Troubleshooting

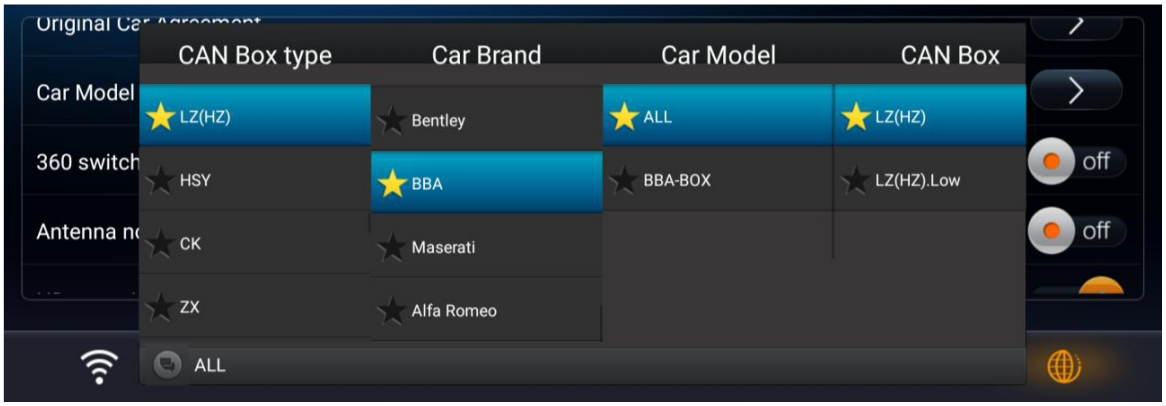
Before contacting technical support, please consult the troubleshooting table below to resolve common issues quickly.

No.	Problem Description	Solution
1	When switching to the original system, a prompt appears stating “No Appropriate Protocol.”	Reset the vehicle protocol in the Maintenance Settings.

(1) Tap the **Maintenance Settings icon**, enter the password 3368, and then tap OK to access the Maintenance menu.

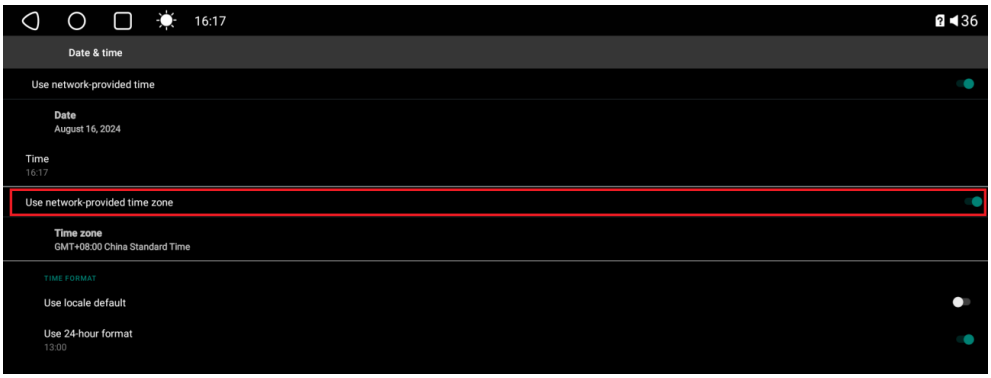


(2) Locate and select **Car Model**, then set the protocol according to the following path: **LZ (HZ)** → **BBA** → **ALL** → **LZ (HZ)**.



(3) Exit the menu and check whether the system can now switch to the factory interface correctly.

No.	Problem Description	Solution
2	The car stereo displays **Eastern Time (EST)** while the vehicle is located in the **Pacific Time Zone (PST)**, even though automatic time settings are enabled.	Verify GPS reception and enable network-provided time zone settings, as time and time zone synchronization rely on GPS positioning and network-provided time zone data. If GPS positioning or network time zone settings are not active, the time zone may not update correctly.

(1) Ensure the GPS antenna is securely connected to the GPS antenna port on the rear of the car stereo and that GPS positioning is active.

(2) Go to **Settings** > **General Settings** > **Date & Time**, and enable **Use network-provided time zone**.