

NAV-TV

INTERFACING THE FUTURE

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W205-H

NTV-KIT793



Quick Reference
(LVDS) Video Cable connects at Radio
Power/CAN T-Harness connects at Radio
Unit requires Constant 12v
Do not power camera with reverse light. Use ACC or purple wire (through relay)

Overview

The W205-H Kit interfaces a backup camera input (with active parking lines) and 1 front camera to the factory media screen in select 2014+ Mercedes vehicles with the *new* infotainment system. With an additional adapter (NTV-KIT800), this kit will also introduce an HDMI input to the OEM screen.

Kit Contents



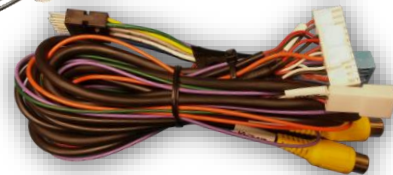
W205-H Interface



OSD Menu
remote



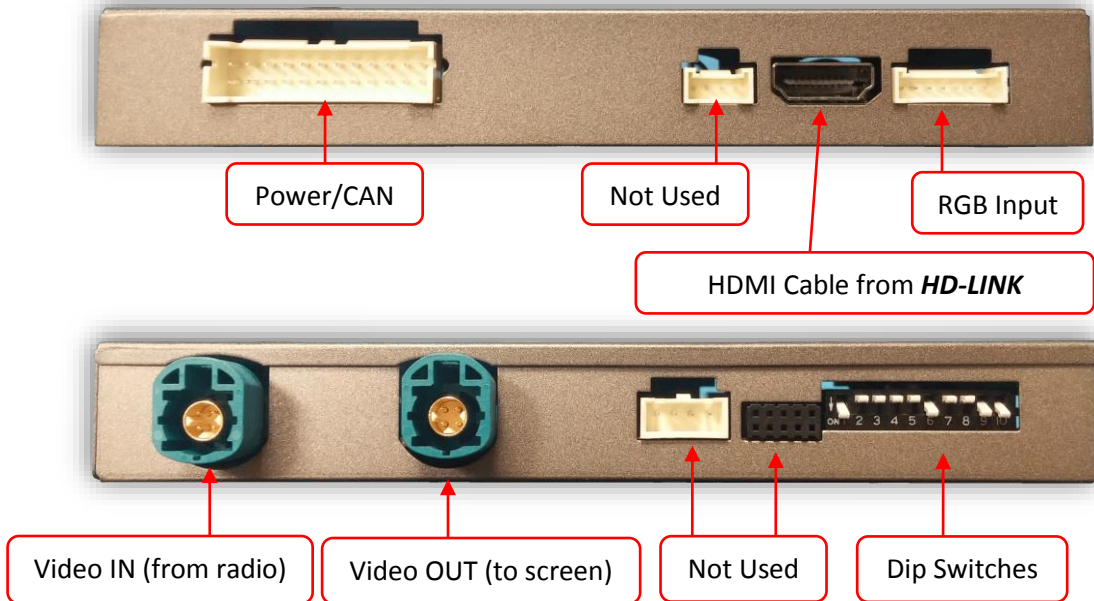
IR Receiver



Power/CAN T-Harness

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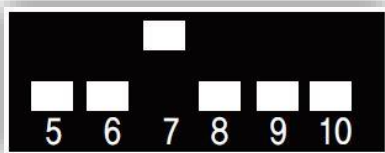
Interface Connectors



Dip Switch Settings

DIP SW	1	2	3	4	5	6	7	8	9	10
UP	NAV OFF	AV1 OFF	AV2 OFF	RVC OFF	N.C.	S-CLASS	N.C.	NOT S-CLASS	LOW RES	KEEP DOWN
DOWN	ADD NAV	AV1 ON	AV2 ON	RVC ON	N.C.	C-CLASS	N.C.	S-CLASS ONLY	HIGH RES	KEEP DOWN

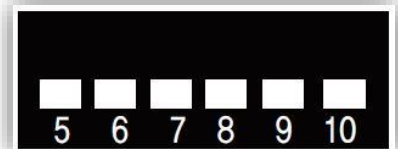
Note: Remove power to the unit prior to making adjustments to the dip switches.



C-Class with 7" Screen



C-Class with 8.4" Screen



**2015 CLS, CLA, GLA,
B & E-Class**



S-Class with 12.3" Screen



S-Class with 12.3" Screen v2

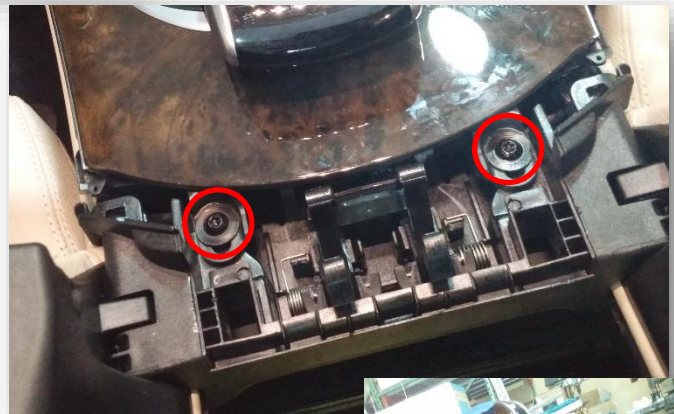
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Dash Removal ('15 C-Class)

1. Use a plastic tool to remove the silver trim behind the COMAND touchpad controller. You will have to open the center console and press the arm rest locks forwards for clearance:



2. Remove (2x) Torx 20 screws hidden beneath the silver trim piece in step 1:



3. Lift up the entire dash panel to just beneath the screen and disconnect all (6) plugs. Set the dash panel aside in a safe place.
4. Unscrew (2x) Torx 20 screws securing the radio to the sub dash. These screws are not designed to be removed from the radio clamps.

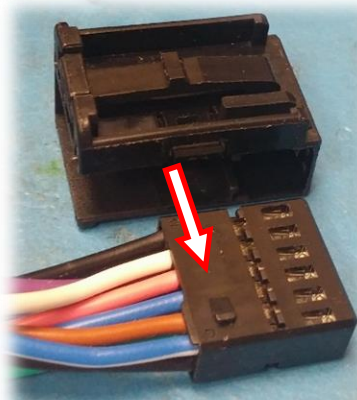
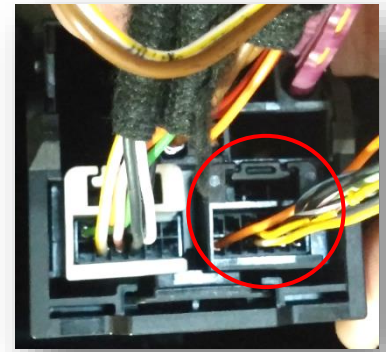


5. Remove the radio by pulling it towards you.



Installation

1. With the radio removed, disconnect all harnesses and set the radio aside.
2. In the main square radio plug, locate the 12-pin black plug and remove it (press clip on top and pull).
3. Separate the outer shell from this OEM connector and insert the provided 12-pin plug in its place (this connector only connects properly in one direction).



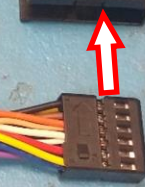
OEM 12-pin
& outer shell



OEM 12-PIN Harness



Provided 12-PIN plug & play



OEM 12-pin
outer shell

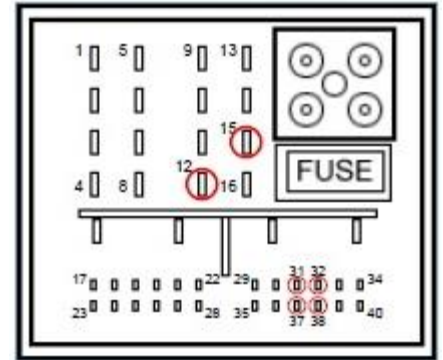
NOTE: if you insert this connector upside down, picture will not display at the monitor.

4. Connect the OEM 12-pin to the female end of the plug & play portion of the harness from step 3. Connect the new harness assembly back into the Main OEM Radio connector like shown.



Main OEM
Radio Connector

5. Locate the **black** and **red** wires labeled (GND) and (ACC) and solder these wires to the **ground wire (PIN 12)** and **constant 12v power wire (PIN 15)** from the same quad-lock connector:

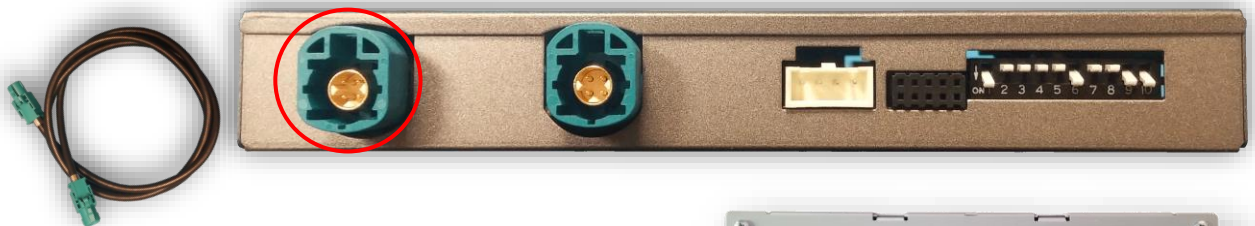


6. Locate the OEM, typically **Dark Blue**, 4-pin round connector (LVDS) that was removed from the radio in step 1 from the port on the radio typically labeled '**DISP**'. Connect this factory plug to the W205-H RVC interface at the port labeled '**VIDEO OUT**'.



NOTE: If there is no dark blue LVDS video plug present, use the cable that (when removed) makes the OEM screen disappear (while radio is on).

7. Connect one end of the provided **LVDS Video Cable** to the port on the W205-H interface labeled '**VIDEO-IN**'.



8. Connect the other end of the provided **LVDS Video Cable** back to the factory radio at the '**DISP**' (typically dark blue) port.



9. Power your reverse camera with an accessory 12v source, or use the **purple wire** for **reverse 12v only**. Splice ground (-) to the black wire provided to the interface, or find another ground point/wire in the car.

10. Connect signal from the rear camera to the RCA labeled 'CAMERA' among the main Power/CAN harness.
11. Connect the white plug from the Power/CAN Harness to the port on the W205-H RVC interface labeled 'POWER/CAN'.
12. **Optional:** If adding an additional video input (including front camera), use the provided RCA labeled 'AV IN' for signal input. This video source *must* be powered with an ACC source. *NOTE: If the user desires for automatic front camera-switching, this option must be set upon installation. See MENU Settings on page 8.*



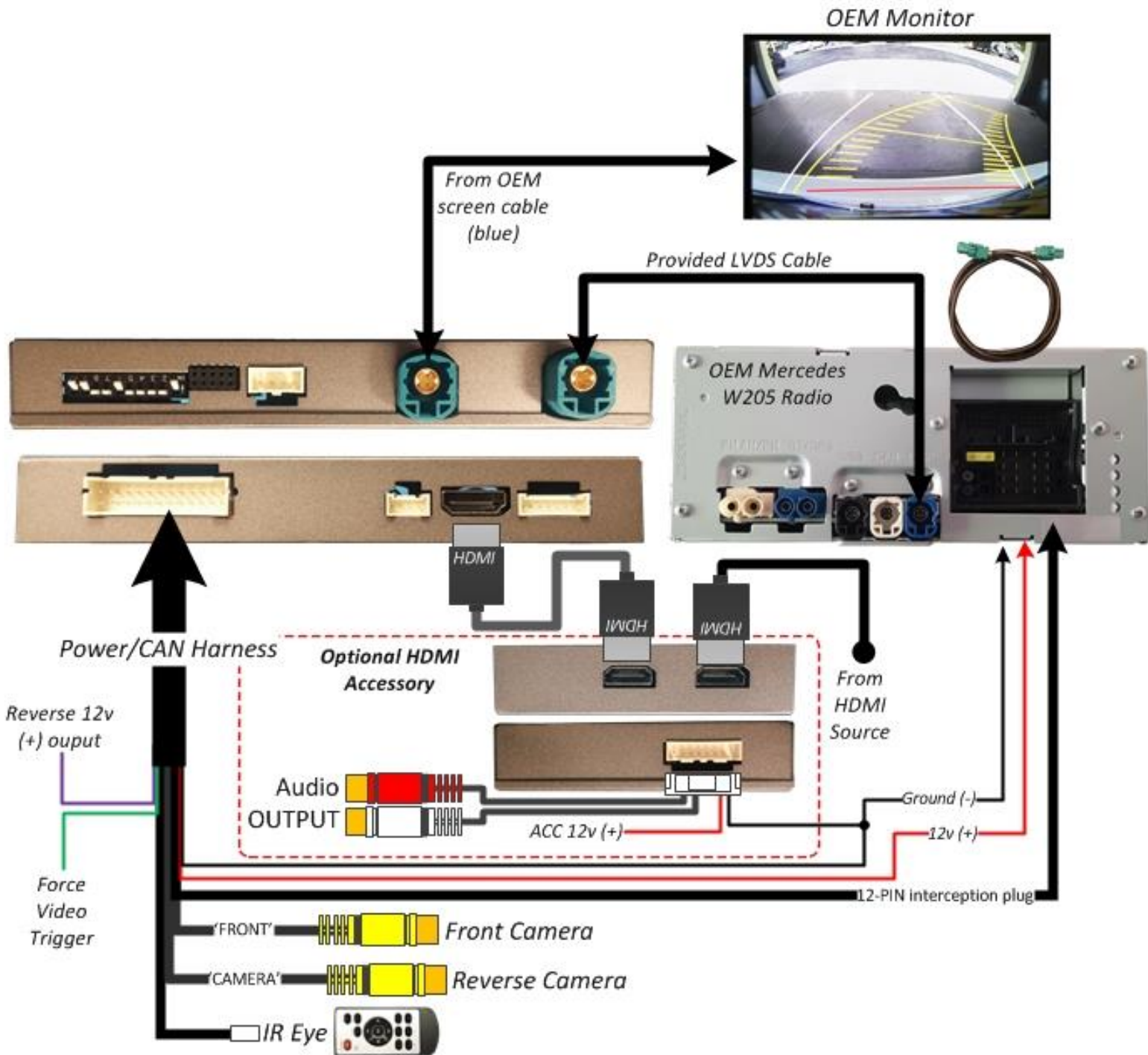
13. **Optional:** If adding the HD-LINK Adapter to allow HDMI input, connect the following:
 - a. ACC 12v (+) must be tapped from the *cigarette lighter harness 12v*
 - b. Ground (-) must be tapped from the *cigarette lighter harness (-)*
 - c. Connect the provided *HDMI Cable* from the 'VIDEO OUT' HDMI connector on the HD-LINK to the 'DIGITAL RGB' connector on the W205-H interface.
 - d. Connect your provided HDMI signal source to the 'HDMI IN' port on the HD-LINK
 - e. Set AV1 (or AV2) to 'HD95E' in the W205-H menu settings (see page 8).

14. Start the car and test for proper functionality before replacing any dash pieces.

NOTE: *If after verifying DIP Switches and you still don't get reverse activation (screen switching to cam-image while in reverse), re-test with ALL dash-board pieces connected properly.*

NOTE: *If the above was tried and you still are not getting anything on screen, providing the **green wire** among the **CAN 2 Harness** with a (+) reverse signal will switch the screen manually.*

W205-H RVC Install Diagram



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Setting/Navigating OSD Menu

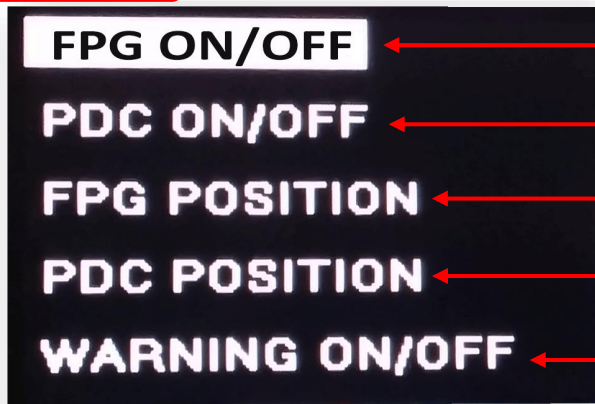
Before you start:

- The IR-Eye must be connected
- Make sure the car's ignition is on and radio is on
- You must be in **Reverse Camera** mode **OR AUX Video** mode (see below):
 - **Reverse Camera Mode** adjusts Reverse Camera Settings
 - **AUX Video Mode** adjusts AUX Video Settings
- Press the **OK BUTTON 4 times** (numbers will display per press), then press **POWER**.
- The **OSD Menu** will appear on screen (auto-time out in about 5 seconds if no action occurs).



Return
(AUX VID menu control)

RVC Menu



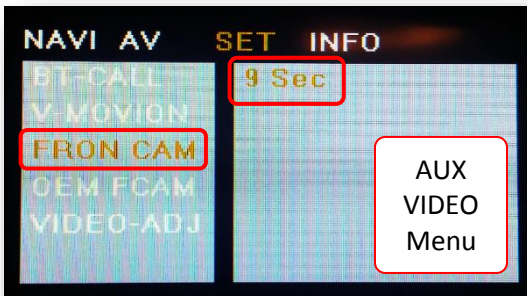
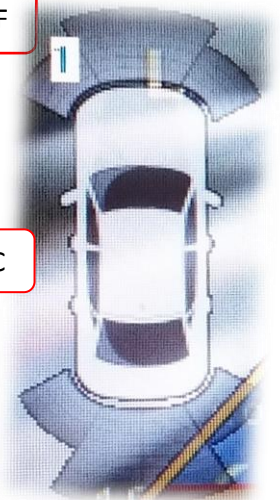
Functional Parking Guidelines ON/OFF

Parking Distance Control ON/OFF (while in reverse)

Adjust FPG Position

Adjust PDC Position

'Safe to move?' ON/OFF



If adding an AUX video or HDMI source:

1. Disconnect POWER/CAN Harness from interface
2. Place DIP SWITCH 1 in the DOWN position, reconnect power
3. Press and hold the **BACK or MENU** button on the dash to activate 'NAV input'
4. Press **OK** button on remote 4 times, then press **POWER**



SET – FRON CAM: Front camera timer option setting (5, 7, 9 seconds etc). This shows after leaving reverse gear. If the user wants only an AUX video input **without front camera (or front cam without timer)**, leave these options OFF and use DIP SWITCH 2 instead.

AV1-SEL: Set to 'HD95E' if adding the HD-LINK adapter for HDMI Input.

Once finished with settings, place DIP SWITCH 1 back into the **UP position** and reset power to interface.

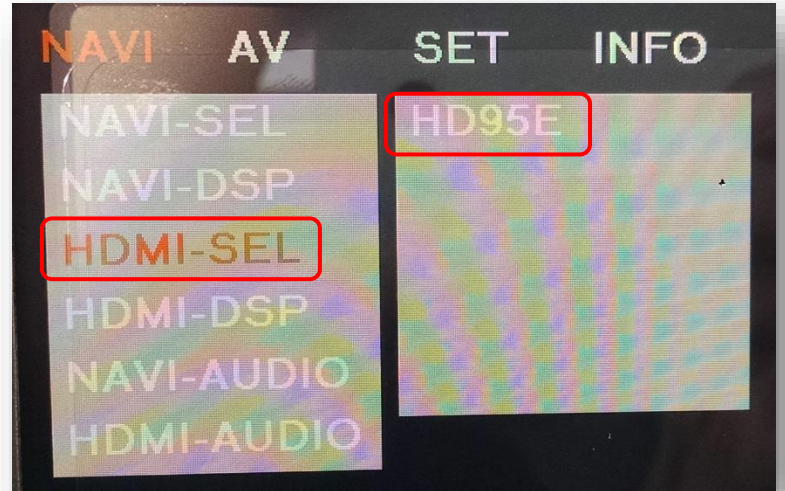
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Adding HD-LINK Adapter (HDMI Input)

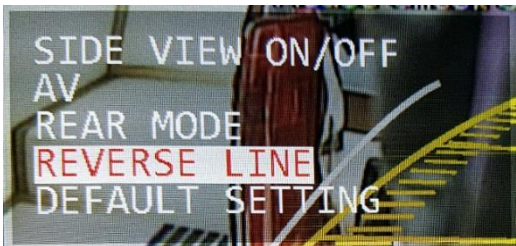
Follow the instructions below when adding the HDMI adapter (HD-LINK) to enable HDMI input to the OEM screen:



1. Put dip switch #1 in the **DOWN** position.
2. Activate the 'NAV INPUT' by holding the button on the steering wheel for AUX activation (see next page).
3. Once 'NAV INPUT' shows on the screen, on the remote press the **OK BUTTON 4 times**, then press **POWER**.
4. Navigate to the 'NAVI' section.
 - a. Select 'HDMI-SEL'
 - b. Choose 'HD95E'
 - c. Press **MODE** on the remote to return and exit the OSD menu (or let it time out).
5. Replace dip switch #1 to the **UP** position.
6. Connect the **black wire** to ground (-) and the **red wire** to ACC power (+) from the main power connector on the HD-LINK adapter. The RCA's on this plug provide audio from the HDMI source.



Adjusting green camera trigger wire



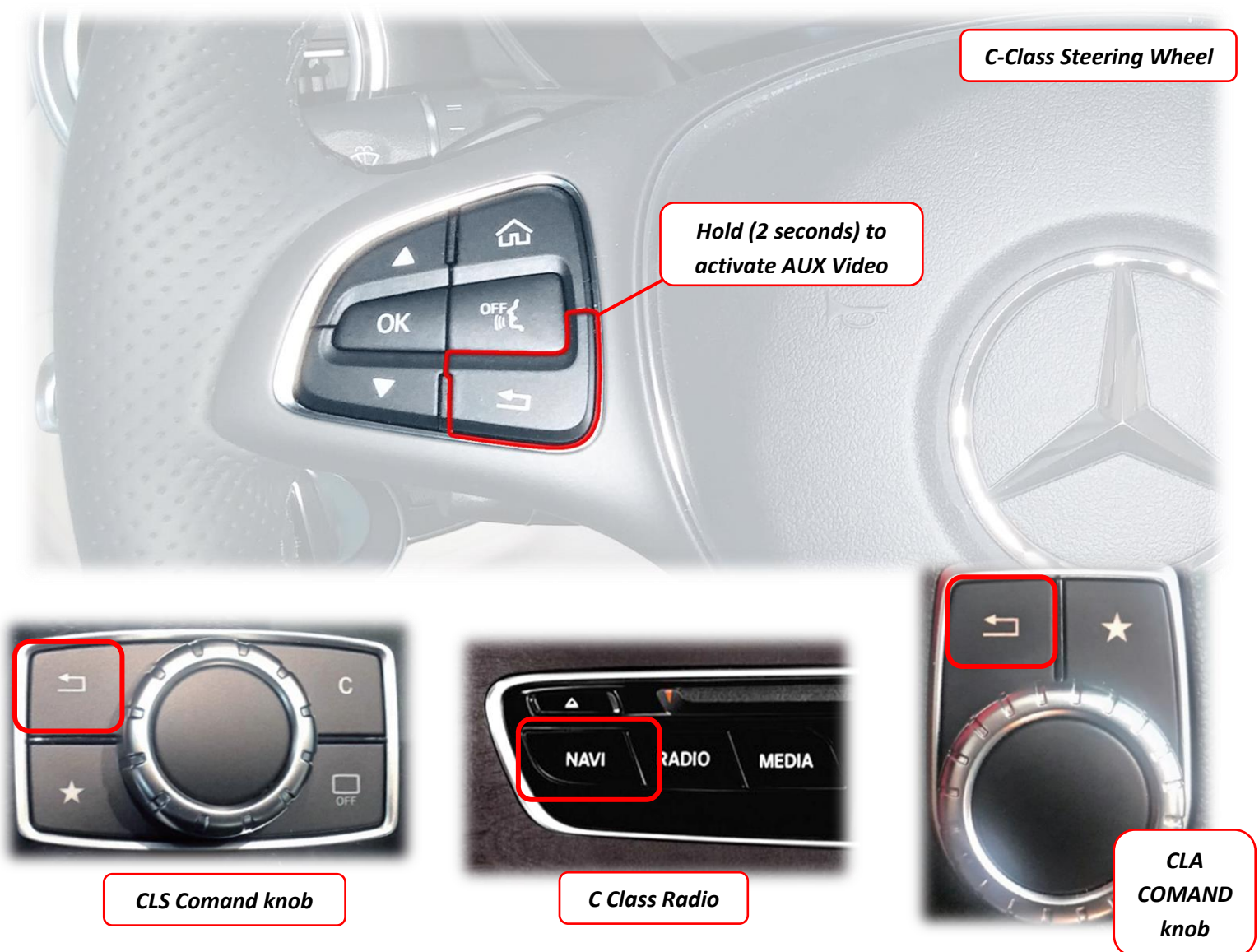
To set custom **green wire trigger**, find 'REVERSE LINE' option and set to 'REAR PORT' or 'AV1' depending upon your preference. Every time the green wire receives 12v (+), the selected RCA port will display on screen.

W205-H Operation

- **Once the W205-H RVC is connected properly, reverse activation is automatic. Placing the vehicle in reverse will display the connected camera's image automatically.**

Note: If display doesn't switch to reverse image when shifting into reverse, check dip switch settings on page 2.

- **For forcing the AUX video (front camera or HDMI input, if HD-LINK was added) at any time, press the clear button OR the NAVI button on the radio. On some vehicles, this is located on the steering wheel, others this is located near the COMAND knob. Otherwise, the front camera will display for as long as the setting was programmed (5,7,9 seconds, etc) once you leave Reverse gear.**



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