

NAV-TV

INTERFACING THE FUTURE

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MBUX-RVC

NTV-KIT901



Overview

The MBUX-RVC adds rear camera & front camera to the factory 7" & 10" equipped in 2019+ Mercedes A-Class, C-Class and Sprinter. *This interface features active moving guidelines and front camera selectable using either OEM button or preset timer.*

Kit Content



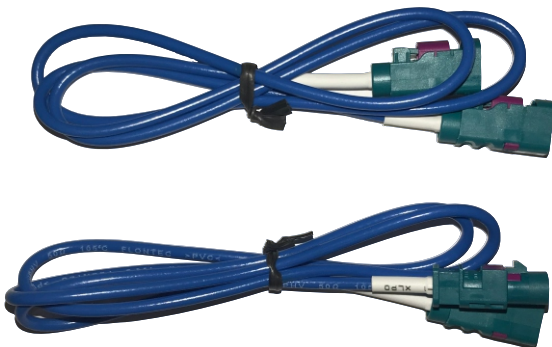
Interface



iR Remote



iR Remote sensor

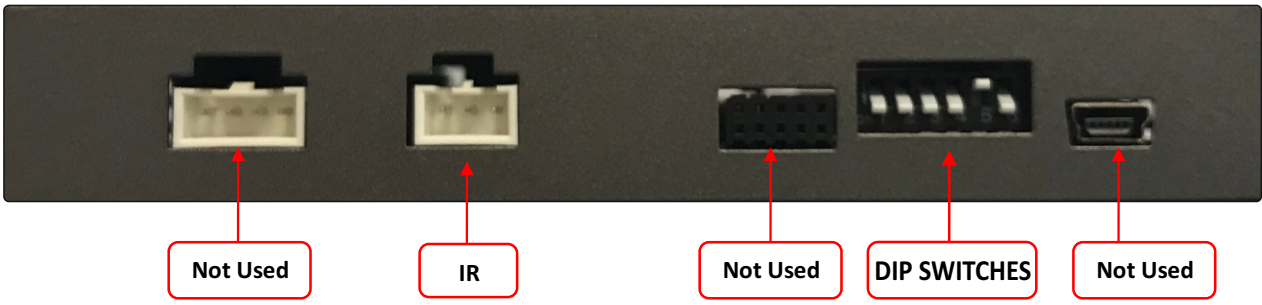
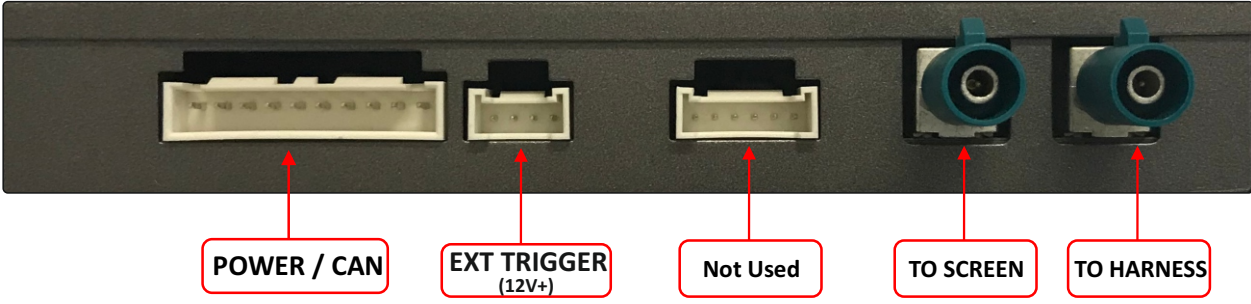


LVDS
Video
Cables



Power/CAN Harnesses

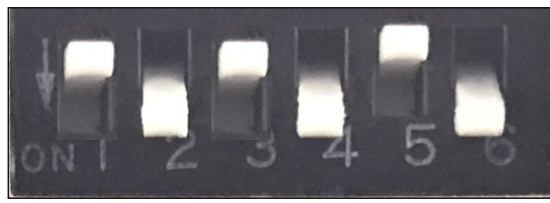
Interface



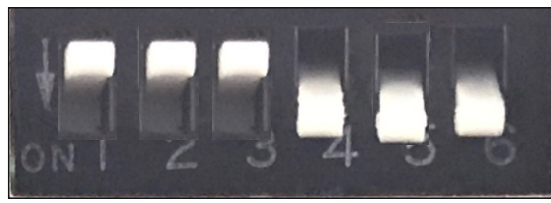
Dip Switch Settings

Dip SW:	1	2	3	4	5	6
UP	F CAM OFF	SCREEN RES	Keep UP	OEM RVC	SCREEN RES	Keep DOWN
DOWN	F CAM ON	SEE BELOW		ADDING RVC	SEE BELOW	

7" SCREEN



10" SCREEN



FOR FRONT CAMERA ENSURE "DIP SWITCH 1" IS IN THE DOWN POSITION

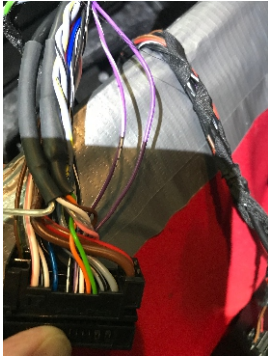
**Note: Remove power to the unit prior to making adjustments to the dip switches.*

Installation

This installation requires access to the rear of the screen and the radio (located above the drivers footwell). Certain screws and panels must be removed in order to access the sub-dash areas. Continue below for further installation instructions.

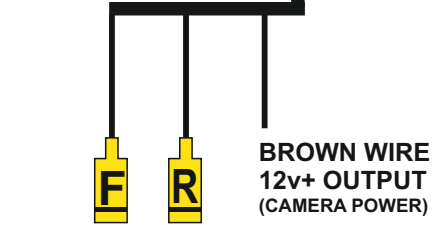
Installation Diagram

HARNESS AT THE REAR OF HEAD UNIT



CAN CONNECTIONS	
Interface wires	Connect to vehicle
WHITE (CAN LOW)	PURPLE or PURPLE / BLACK
BLUE (CAN HIGH)	PURPLE / WHITE

CAN / POWER CONNECTIONS (AT HEAD UNIT)



RCA (CAMERAS IN)



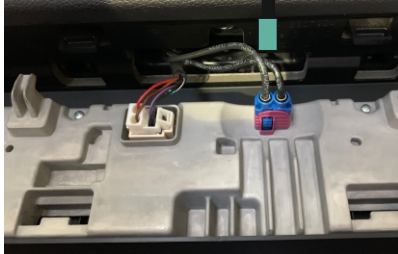
IR REMOTE



GREEN WIRE 12v+ REVERSE TRIGGER (ONLY IF NOT SWITCHING VIA CAN)

SUPPLIED HARNESS

SCREEN FACTORY HARNESS (POWER)



REAR OF SCREEN

SCREEN FACTORY HARNESS (VIDEO)

WIRE FUNCTIONS

<u>INTERFACE</u>	<u>FUNCTION</u>
RED	- ACC 12v+
BLACK	- GND
BROWN	- 12v+ OUTPUT (CAMERA POWER)
GREEN	- 12v+ REVERSE WIRE (only if it will not switch via CAN)
WHITE	- CAN LOW
BLUE	- CAN HIGH

NOTE : for Manual gearbox cars you will have to use the green wire to trigger reverse.

HOW TO REMOVE THE DASH

REMOVE THE 2 X T20 SCREWS AT THE REAR OF THE SCREEN

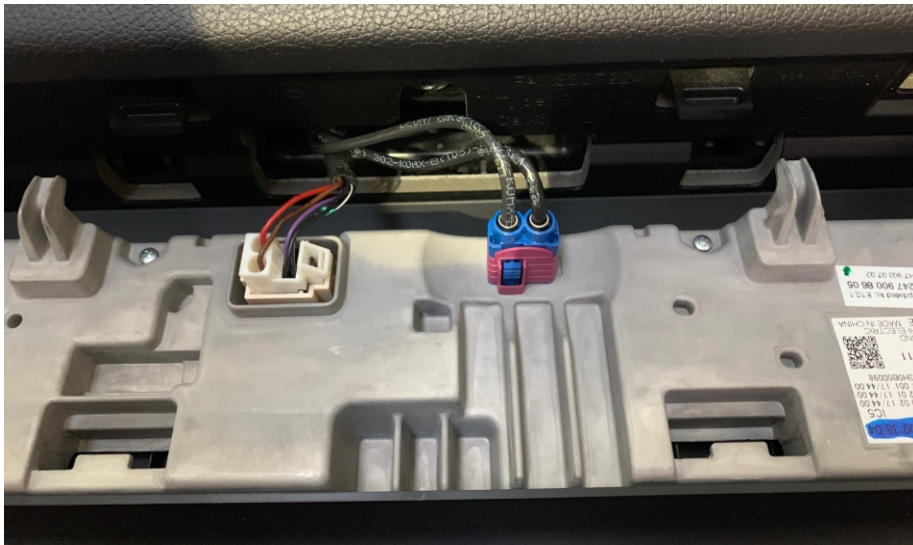


THE SCREEN WILL JUST LIFT UP ONCE YOU HAVE REMOVED THE 2 X T20 SCREWS, THIS WILL THEN GIVE YOU ACCESS TO THE REAR OF THE SCREEN

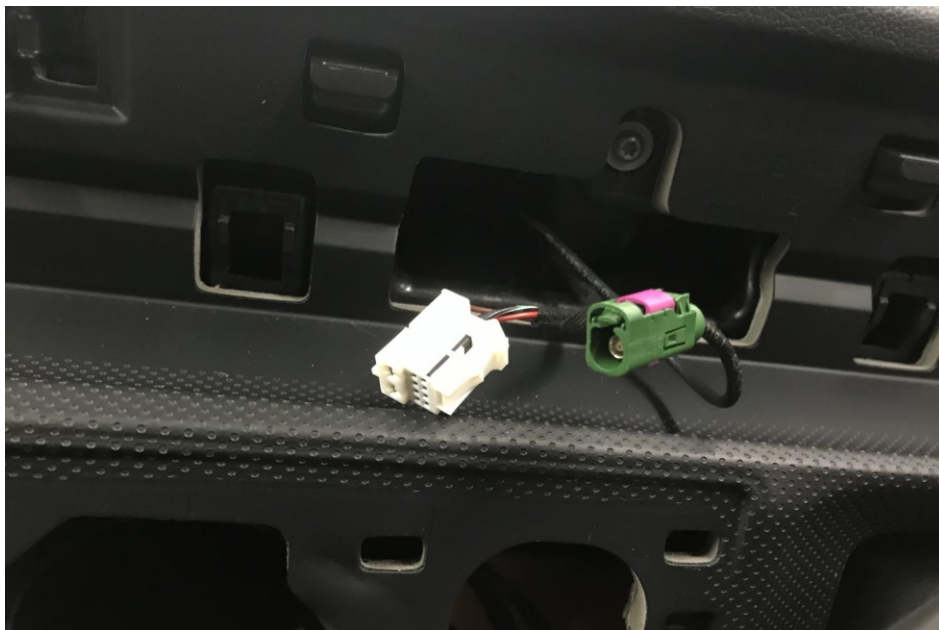
LVDS CONNECTIONS (VIDEO)

THERE ARE 2 DIFFERENT TYPES OF 7" SCREENS FOR THE A CLASS. THE CONNECTIONS ARE AT THE SAME PLACE (*REAR OF THE SCREEN*). HOWEVER AS YOU SEE FROM THE FOLLOWING PHOTOS THE PLUGS ARE DIFFERENT.

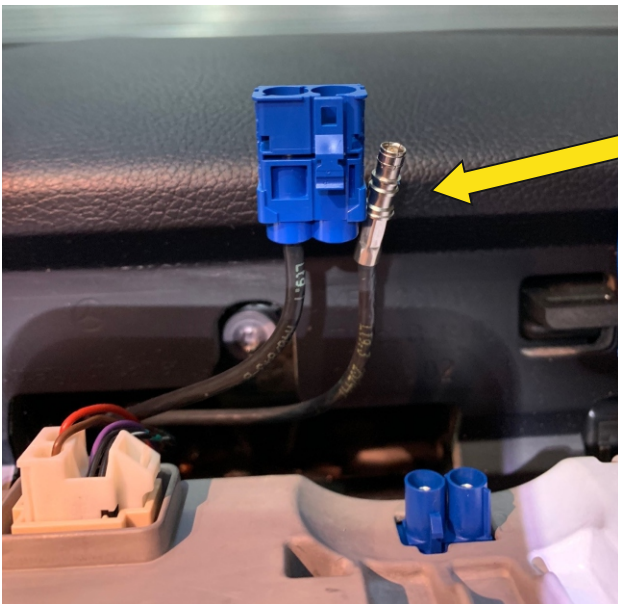
TYPE 1 (2 Fakra connectors)



TYPE 2 (1 Fakra connector)

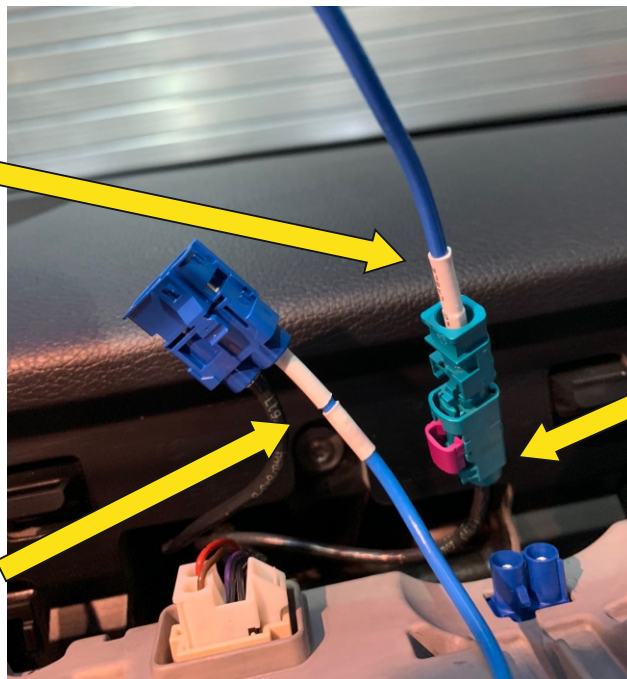


TYPE 1 (2 Fakra connectors)



**REMOVE THE FAKRA
FROM OEM PLUG**

**CONNECT THE
SUPPLIED
CABLE (TO
HARNESS - IN)
TO THE OEM
HARNESS**



**CONNECT THE
OEM CABLE
THAT WAS
REMOVE FROM
THE OEM PLUG
TO THE
SUPPLIED
HARNESS
USING THE
PLASTIC FAKRA
HOUSING.**

**CONNECT TO
SUPPLIED
CABLE (TO
SCREEN - OUT)
TO THE OEM
PLUG**





THE HEAD UNIT IS LOCATED UP IN THE DASH ABOVE THE DRIVERS THROTTLE. DROP THE UNDER DASH PANEL TO GAIN ACCESS

Installation

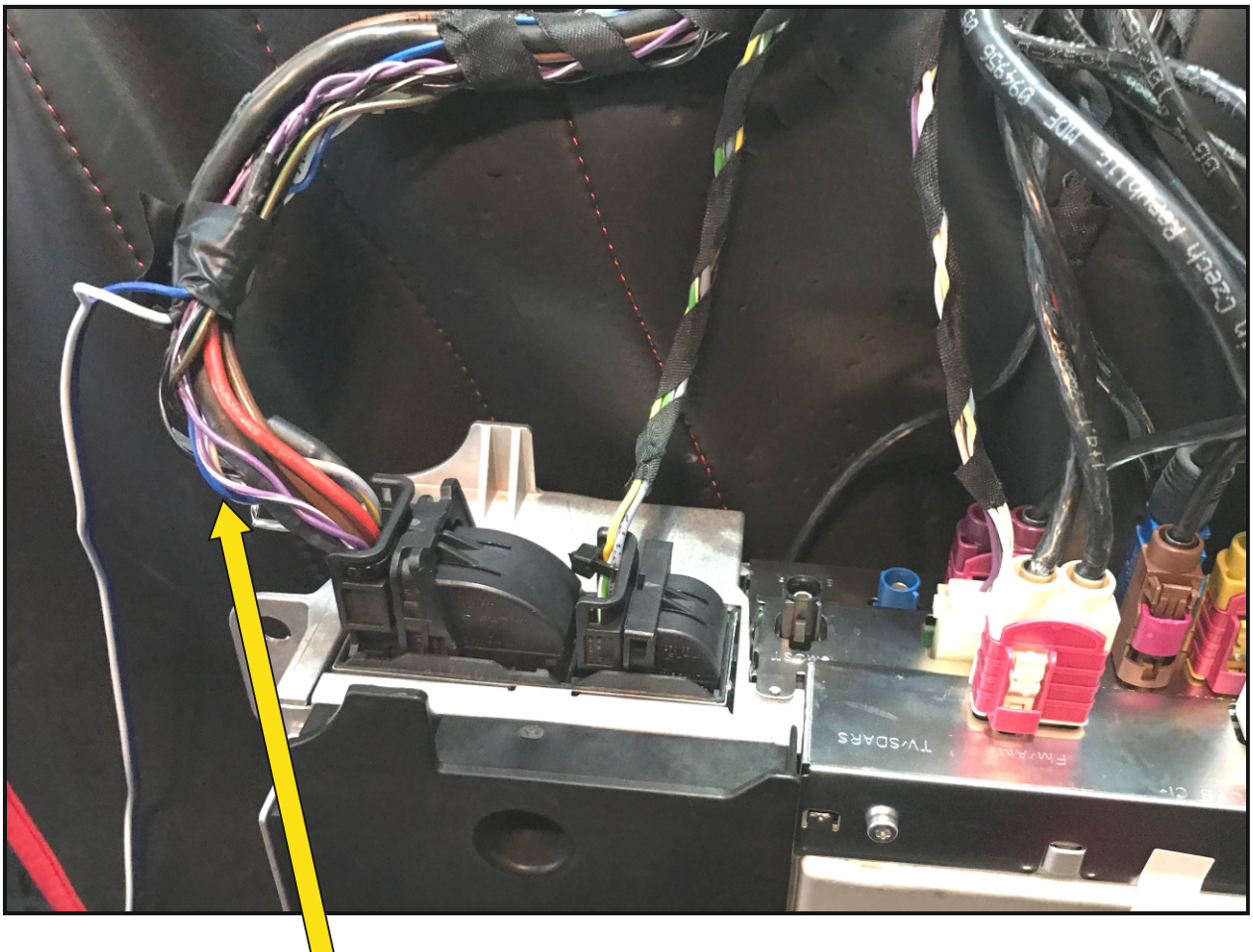


**CONNECT THE POWER /
CAN HARNESS AT THE
HEAD UNIT.**

CAN CONNECTIONS

THERE ARE 2 DIFFERENT TYPES OF HEAD UNIT FOR THE A CLASS. THE CAN CONNECTIONS ARE CONNECTED AT THE SAME PLACE (*REAR OF THE HEAD UNIT*). HOWEVER AS YOU SEE FROM THE FOLLOWING PHOTOS THE PLUGS ARE DIFFERENT.

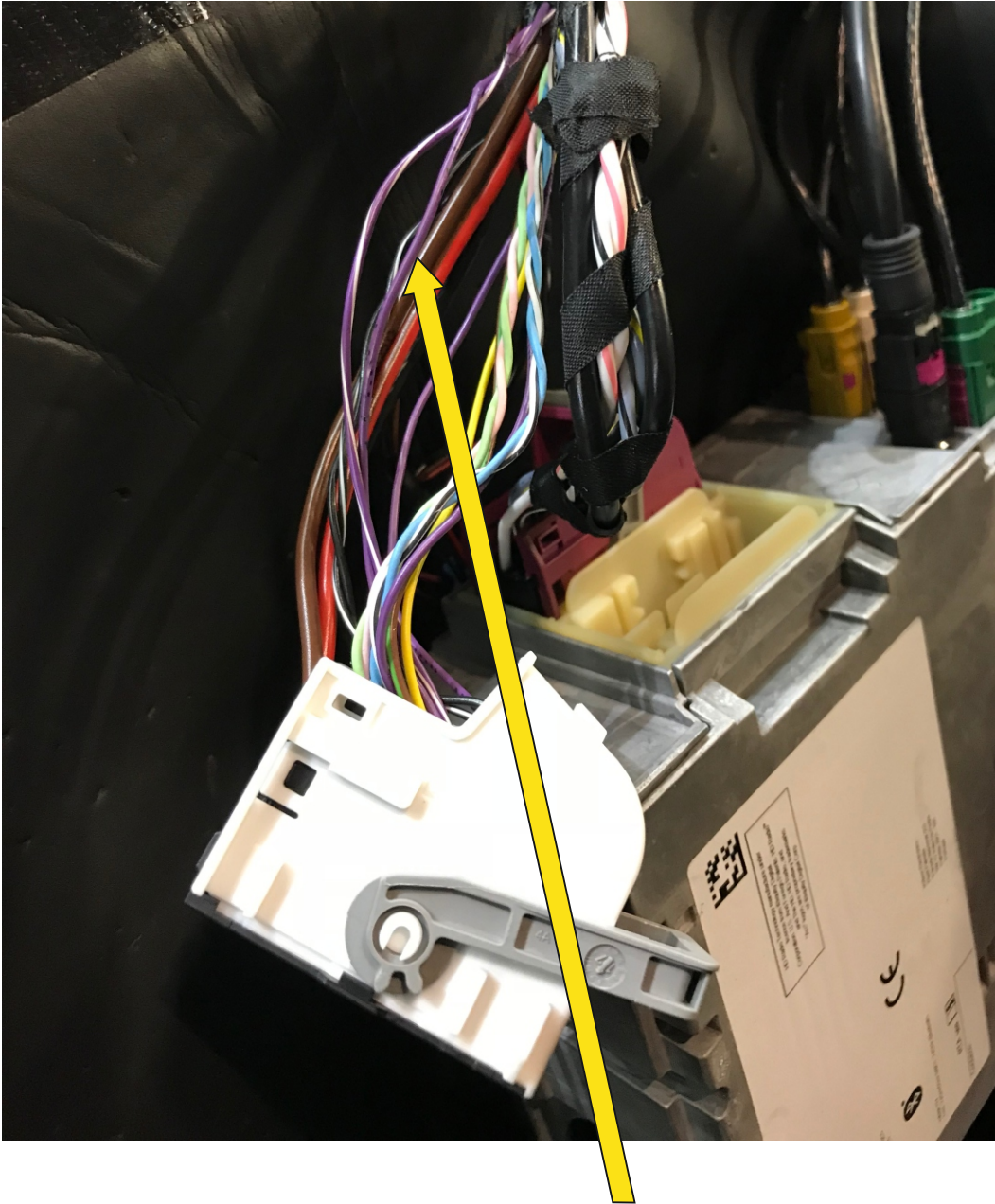
TYPE 1



CAN CONNECTIONS	
Interface wires	Connect to vehicle
WHITE (CAN LOW)	PURPLE or PURPLE / BLACK
BLUE (CAN HIGH)	PURPLE / WHITE

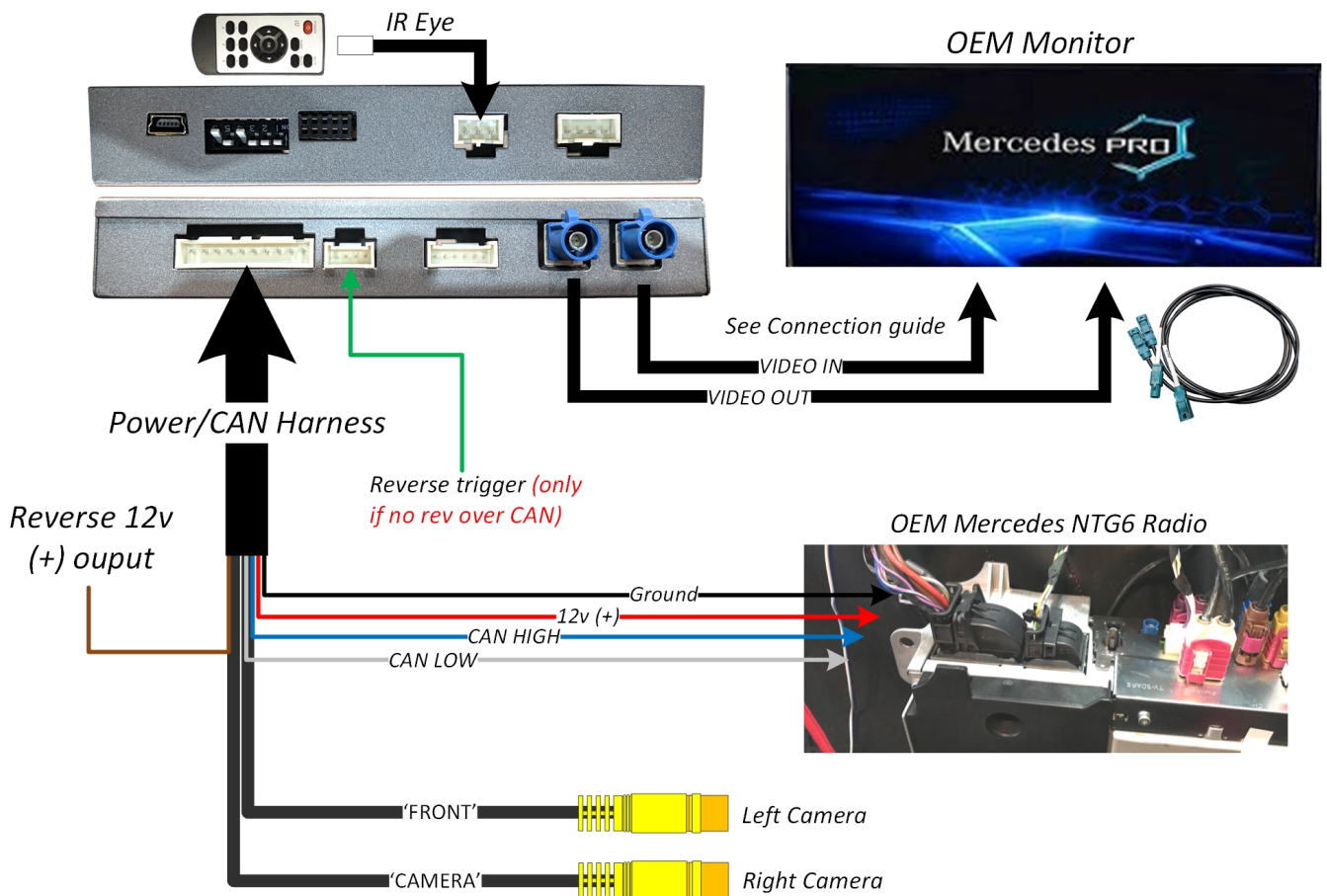
CAN CONNECTIONS

TYPE 2



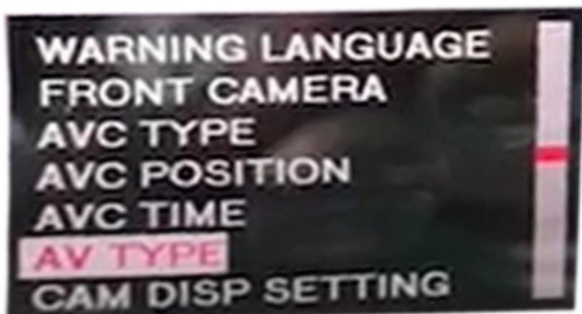
CAN CONNECTIONS	
Interface wires	Connect to vehicle
WHITE (CAN LOW)	PURPLE or PURPLE / BLACK
BLUE (CAN HIGH)	PURPLE / WHITE

If you're installing turn signal cameras and the vehicle already has an OEM reverse camera, make connections according to this diagram below:

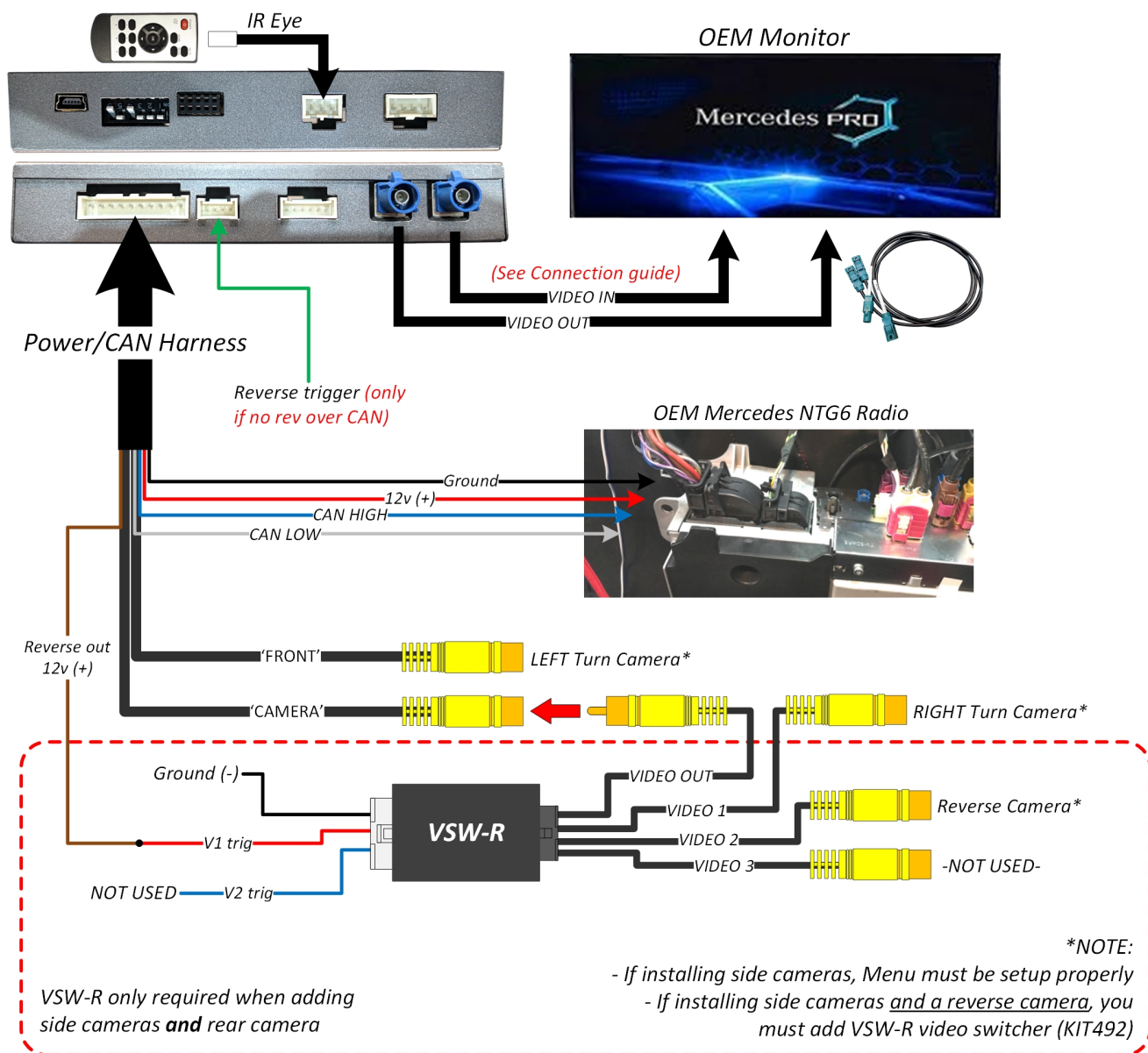


If you're installing turn signal cameras **and a reverse camera, a VSW-R is required** and you must make connections according to the diagram on the next page.

- For this installation scenario, set up the 'AV-TYPE' menu to 'L-AV + R-CAMERA':
 1. With DIP 4 DOWN, place vehicle in reverse
 2. Press 'OK' on remote 4 times, then press POWER (IR eye must be connected)
 3. Scroll down to 'AV TYPE', set to 'L-AV + R-CAMERA'
 4. Press 'MODE' and wait for menu time out
 5. Return DIP Switch #4 back to UP, disconnect and reconnect power plug once

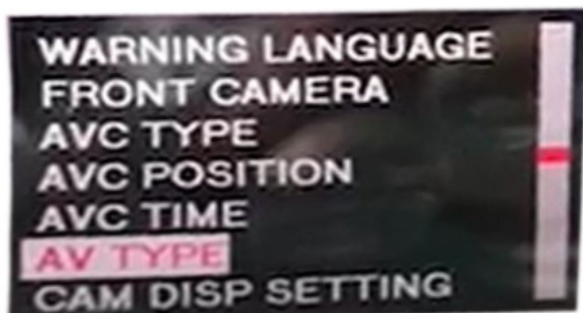


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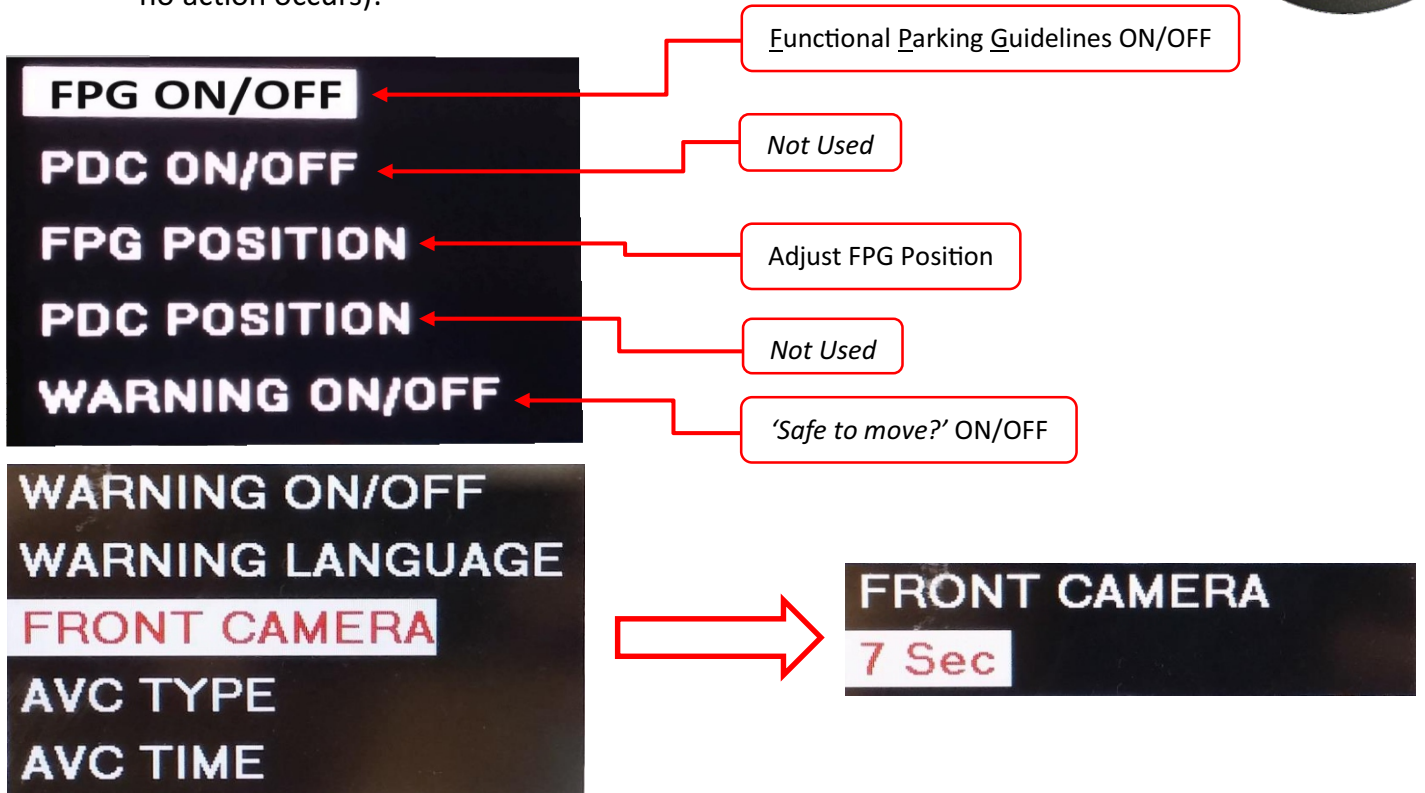
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2. Press 'OK' on remote 4 times, then press POWER (IR eye must be connected)
3. Scroll down to 'AV TYPE', set to 'L-AV + R-CAMERA'
4. Press 'MODE' and wait for menu time out



Menu Adjustments

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 (place vehicle in reverse)
- 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).



To activate **Front Camera timer**, scroll down using the remote arrow keys when in the menu to **FRONT CAMERA**. Once in this setting, press OK and choose (up/down) between 5, 7, 9 or 11 seconds for **auto-front switching timeout** (once the vehicle leaves reverse gear, the front camera input will stay active for pre-defined amount of time).

NOTE: ENSURE "DIP SWITCH 1" IS IN THE DOWN POSITION

NOTE: Once you have finished adjusting your settings, you must press the "POWER" button to save your settings.

REAR CAMERA

Once the interface 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 or screen is distorted, check dip switch settings on page 2.

Note: If all dip switch settings have been tried, connect the provided 'Reverse Trigger Input' wire (green) and supply this wire with an OEM reverse 12v (+) signal.



FRONT / SIDE CAMERA

NOTE: ENSURE "DIP SWITCH 1" IS IN THE DOWN POSITION

To select Front / Side camera, press and hold the return button (on the steering wheel) for 2 secs. To cancel the camera either press and hold the return button for 2 sec or turn off IGN, and open the drivers door.

