

# NAV-TV

INTERFACING THE FUTURE

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BHM  
02/10/17  
NTV-DOC290

## BMW-EVO KIT

NTV-KIT804



### Overview

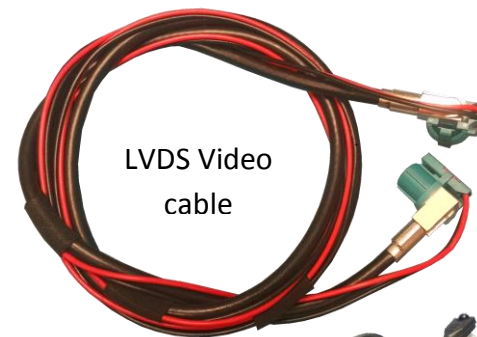
The BMW-EVO kit interfaces 2 video inputs (including a backup camera) to the factory media screen in select 2017 BMWs with the **NEW GUI (NON-TOUCH SCREEN)**. This interface generates steering-based guidelines while in reverse for added convenience. *NOTE: the touch-screen models with this OEM system are not compatible.*

### Kit Contents

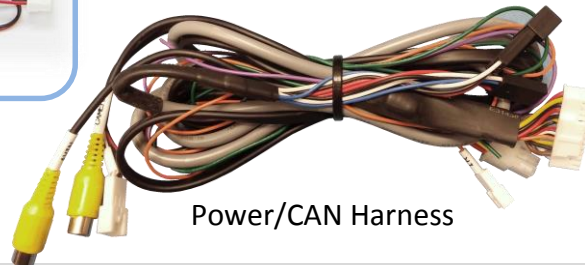
#### Optional HDMI Adapter



BMW-EVO Interface



LVDS Video cable



Power/CAN Harness



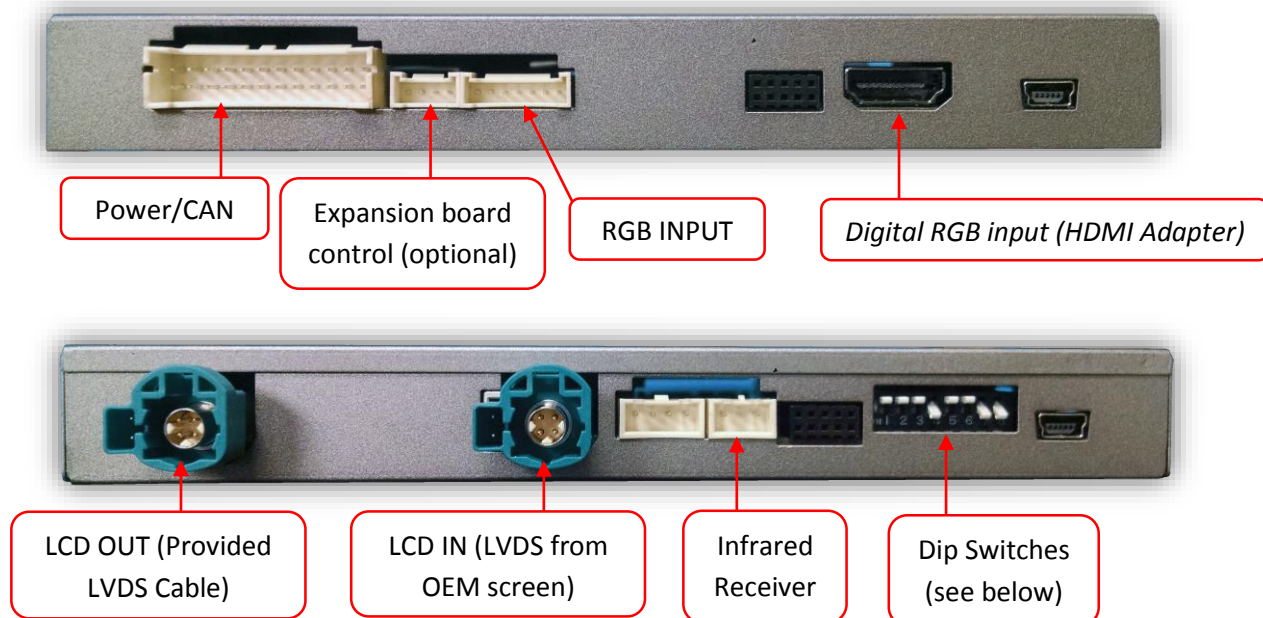
Remote  
(menu control)



IR Eye  
Harness

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## Interface Connectors



## Dip Switch settings\*

Dip SW:	1	2	3	4	5	6	7	8
UP	NO NAV	N/A	N/A	RVC OFF	N/A	N/A	KEEP DOWN	KEEP DOWN
DOWN	ADDING NAV	N/A	N/A	RVC ON	N/A	N/A	KEEP DOWN	KEEP DOWN



**\*Note: after adjusting Dip Switches, you must disconnect and reconnect power to the interface or the change will not be implemented.**

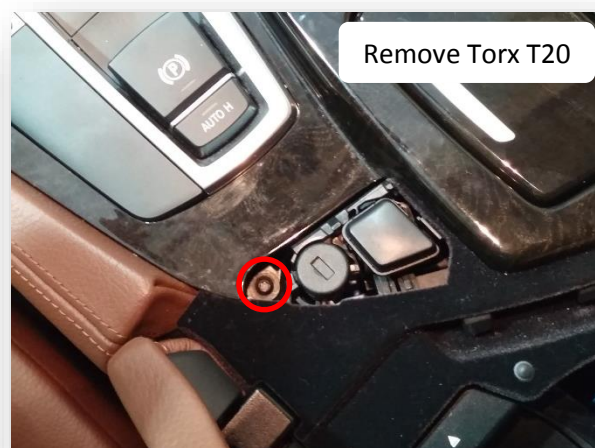
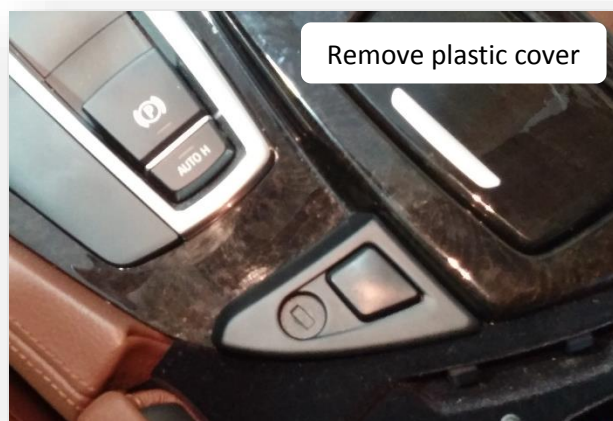


### BMW-EVO Interface Installation (5 Series example)

1. The BMW-EVO intercepts **two OEM plugs in two locations**: the iDRIVE knob and the screen. You must gain access to both places for proper installation.
  - a. Access the rear of the screen by removing the dashboard panel (clips only) and then removing (2x) Torx T20 screws securing the screen to the sub-dash.



2. To access the iDrive harness, remove the panel surrounding it (may have Torx screw securing to sub dash)



3. Lift up the lower dash panel and disconnect 4-PIN plug powering the iDrive knob.

4. Connect provided 4-PIN T-Harness in between iDrive knob and OEM harness as shown.



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4. Replace the lower dash panel (with iDrive knob) back to sub-dash.

5. Disconnect the OEM screen LVDS video cable and connect it to the port on the BMW12-N labeled 'LCD-IN'.



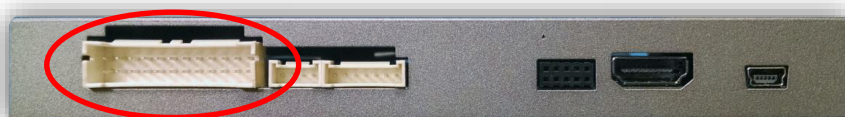
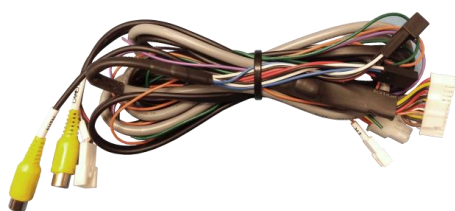
6. Connect the provided LVDS Video Cable to the port on the BMW12-N labeled 'LCD-OUT' and the other end back to the screen.



7. Install and run the reverse camera video source power and signal to the BMW-EVO interface location and connect to the RCA labeled 'CAMERA'. Power your camera with an ACC source or use the **violet wire** for reverse 12v (+) only. *NOTE: this wire outputs 500 mA MAX – do not use to supply power to more than 1 camera. Use this wire to trigger a relay if you're concerned with current supply.*

8. **Optional:** If installing a secondary camera or AUX video source, connect signal RCA to the RCA on the BMW-EVO interface labeled 'AVIN'.

7. After DIP switch settings have been set (see page 2), connect the 24-PIN power connector to the BMW-EVO interface labeled 'POWER CAN'. Proceed to **Menu Options** section if necessary (front camera settings, etc) or to **BMW-EVO Operation**.





## Menu Adjustments

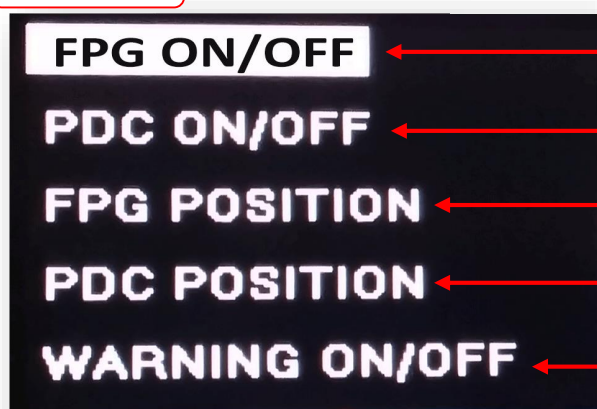
Before you start:

- 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 **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

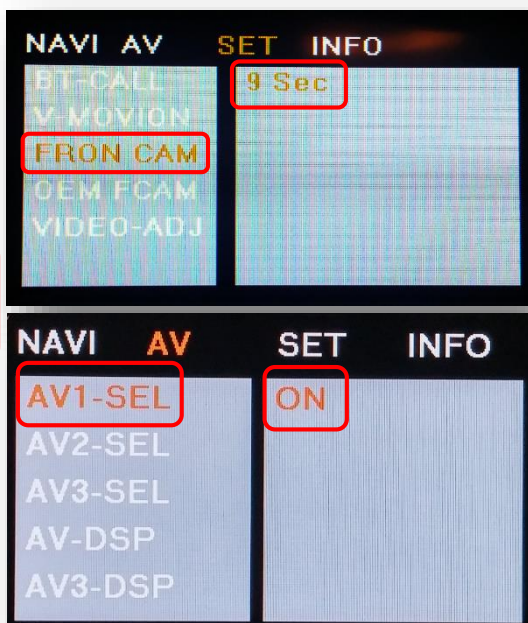
Adjust PDC Position

'Safe to move?' ON/OFF

PDC



AUX  
VIDEO  
Menu



**If adding a front camera OR Aux Video source:**

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

**SET – FRON CAM** must be turned on if adding a *front camera* **and the user wishes for automatic front camera switching**. Options for 5, 7, 9 or 11 seconds are user-selectable for the length of time the front camera input stays active once the vehicle is placed out of reverse.

If the user wants only an AUX video input **without front camera**, set **AV1-SEL** to **ON**

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

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## Adding Optional HD-LINK Adapter (HDMI Input)

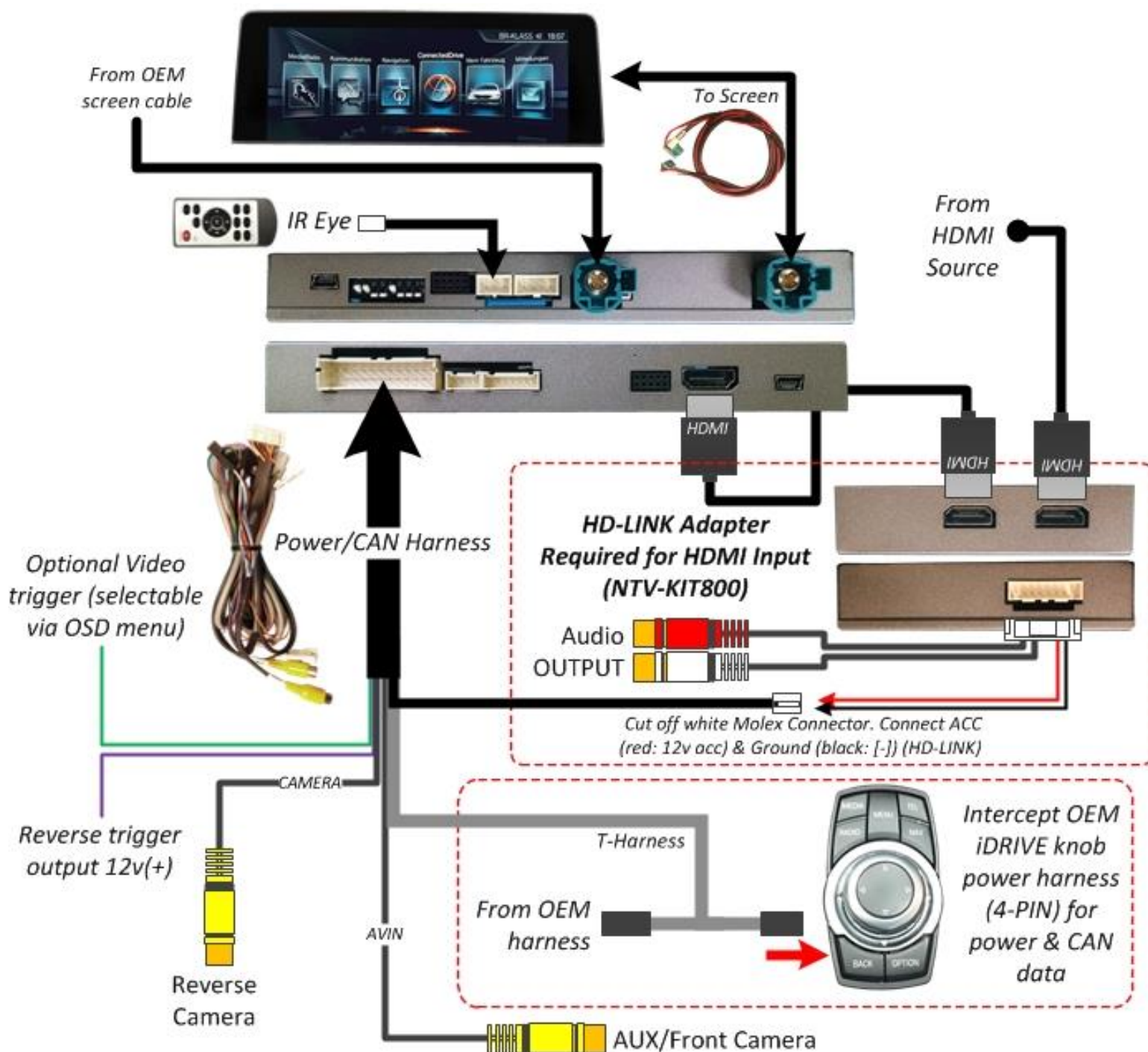
**Follow the instructions below when adding the HDMI adapter (HD-LINK) to enable HDMI input to the OEM screen:**



1. Put dip switch #1 in the **DOWN** position.
2. Activate the 'NAV INPUT' by pressing the 'MENU' button (iDRIVE knob)
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. See page 7 for a connection diagram.



# BMW-EVO Installation Diagram



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## BMW-EVO Operation

- Once all connections are made and dip switches are set properly, placing the vehicle in reverse will display the connected camera with dynamic guidelines for convenience.
- Additionally, see below for AUX/Front camera/HDMI activation using factory buttons.

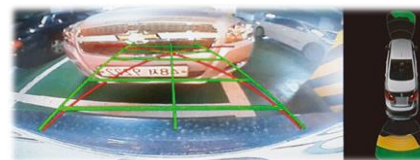


**Hold (3 sec):** Activate  
AUX/Front Camera  
video input

**Hold (3 sec):** Change  
AUX/Front Camera view  
(60/40 split, etc)

**Hold (3 sec) WHEN  
IN REVERSE:** 2013-  
2015 3,5,7,X series:  
Change Rear  
Camera view  
(60/40 split, etc)

**Hold (3 sec) WHEN IN  
REVERSE:** 2013-2015 1  
series/MINI: Change  
Rear Camera view  
(60/40 split, etc)



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