NAV-TV
INTERFACING THE FUTURE
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BMW56CAN

NTV-KIT109

Overview

The BMW56CAN kit allows the user to add up to 3 video inputs and a backup camera input to the factory media screen in select '04-'08 BMWs. This kit requires connecting wires behind the radio and screen and is not fully plug and play at this time. The kit comes with an external toggle switch and if desired, forced rear camera action is an option. ****The Alpine 6.5" screen is not supported with this kit.***

Kit Contents

AV Input Harness

BMW56CAN Interface

LVDS Video cable

RGB Input cable

Keypad Harness

Power/CAN Harness

Input Toggle Switch

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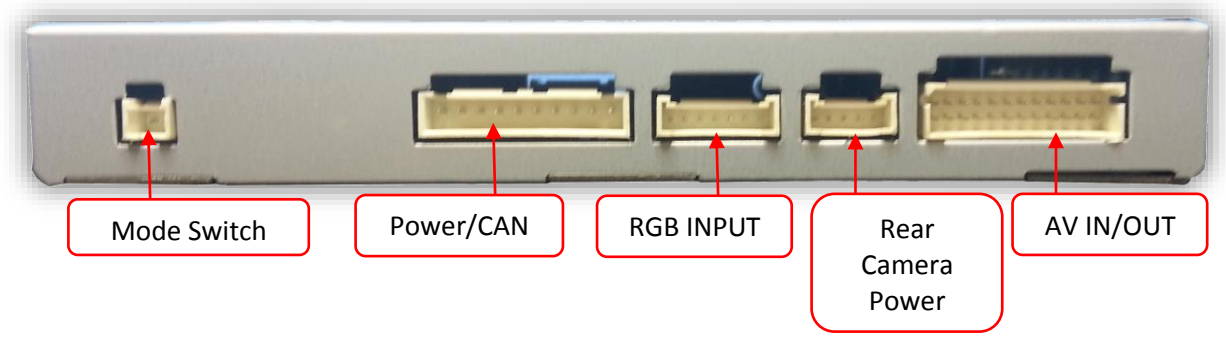
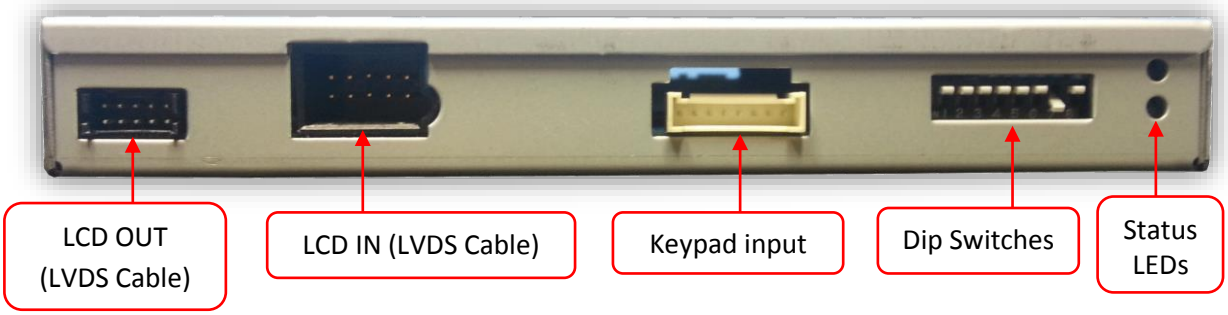
Interface Connectors





Dip Switch Settings*

Dip SW:	1	2	3	4	5	6	7	8
UP	Enables RGB	Enables V1	Enables V2	Enables V3	8.8" Screen	*See Below*	Deactivates Rev-Cam	N/A
DOWN	Skips RGB	Skips V1	Skips V2	Skips V3	6.5" Screen	*See Below*	Activates Rev-Cam	N/A

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

Dip SW:	5	6
UP	X	X
DOWN		

E60 8.8" Screen

Dip SW:	5	6
UP		
DOWN	X	X

E60 Siemens 6.5"

Dip SW:	5	6
UP	X	
DOWN		X

2008.5 series

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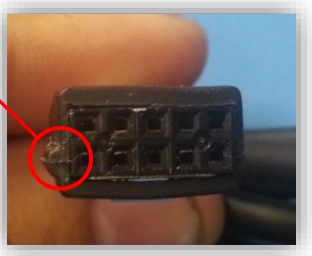
Installation

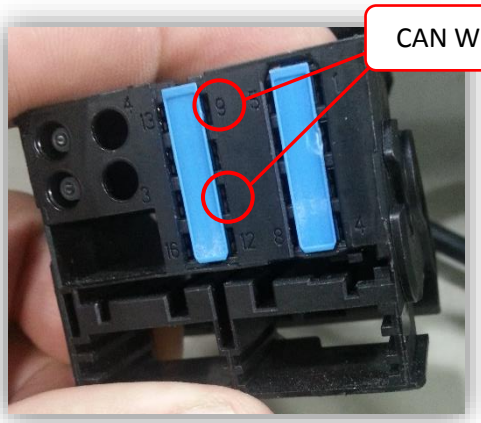
1. Remove the factory radio from the dash. This usually requires pulling dash panels, and removing Torx screws. Disconnect all harnesses and set the radio aside.
2. Remove the upper media screen from the dash. There are often (2x) Torx screws firing up into the hood covering the screen that must be removed. Disconnect the power and video harness from the screen.
3. Gather the provided LVDS harness labeled 'F-TYPE' and connect the ***larger, 10-pin*** plug to the factory monitor. This connector is keyed and will only insert fully in one direction:



4. The other end of this LVDS cable (from step 3) must be connected to the interface at the port labeled ***'LCD OUT'.***

5. Gather the Power/CAN harness, solder the following wires to the main factory radio plug:

   a. ***Black wire: Ground (-) Pin 12***
   b. ***Red wire: ACC (+) Source***
   c. ***Yellow (CAN L) wire: Pin 9 (CAN L)***
   d. ***White (CAN H) wire: Pin 11 (CAN H)***
   e. ***Optional: Gray wire*** *(labeled 'REAR-C'):* ***to 12v (+) reverse trigger*** (If you've connected the CAN wires, connecting this wire is not necessary)



6. Connect the factory LVDS cable (disconnected in step 2) to the BMW56CAN interface at the port labeled ***'LCD-IN'***.

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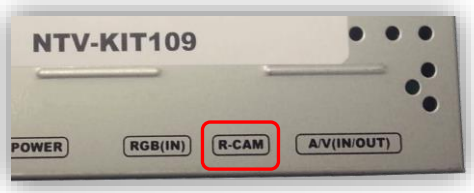
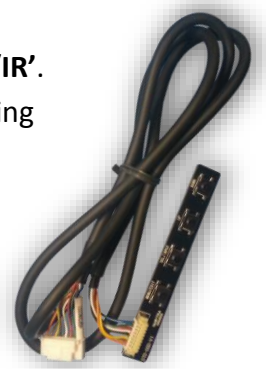
7. Connect the AV Input cable to the port on the BMW56CAN interface labeled **'AV IN/OUT'**. If you're only connecting a reverse camera (and no other inputs), the signal input from the camera must connect to the RCA labeled **'REAR-C'**. Refer to the dip-switch settings chart to skip/enable AV sources upon toggle switch presses (optional. Page 2).



   a. If you're installing a Nav-TV ***CAM 6*** or ***Handle Cam*** as well, the power connector plugs directly into the BMW56CAN interface port labeled **'R-CAM'**.
   b. **Note:** The BMW56CAN kit should come defaulted to use CAN to activate the rear camera. If not, refer to step (8 a.) to adjust to your needs.

8. ***Optional:*** Connect the keypad harness to the port labeled **'KEYPAD/IR'**. This keypad would be needed if you want to be able to adjust anything from the BMW56CAN interface's menu.



   a. ***While in any AV mode other than factory*** (on the display screen), press the **MENU** button for **Menu 1** , **or** press the following buttons quickly to enter **MENU 2: ▲ → ▼ → ▲ →**MENU
   b. To switch between AV modes, press the **'SEL/INPUT'** button.

9. ***Optional:*** Connect the provided momentary toggle switch to the port on the BMW56CAN interface labeled **'MODE'**. Pressing this switch with the ignition on will cycle the screen modes as follows: **factory screen > NAVI (RGB) > AV1 > AV2 > AV3 > factory screen**.

10. Connect the BMW56CAN Power harness to the interface at the port labeled **'POWER'**. Start the car and test for proper functionality before replacing dash pieces.

11. Note: *All other included harnesses not mentioned in this manual are not needed for most installations. If you would like to know more about the full capability of this interface, contact NAV-TV tech support at 561-955-9770. Additional features not mentioned in this manual are not supported by NAV-TV at this time.*

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Menu Adjustments

Before you start:

- Make sure the car's ignition is on and radio is booted/settled
- You must be in ***'NAVI' (RGB), 'AV1', 'AV2' or 'AV3'*** mode (on display screen)
- Use the remote ***'SEL/INPUT'*** button to switch modes, or use the provided input toggle switch

- **Press the following: ▲ → ▼ → ▲ →**MENU. The ***Menu of FACTORY*** will appear.

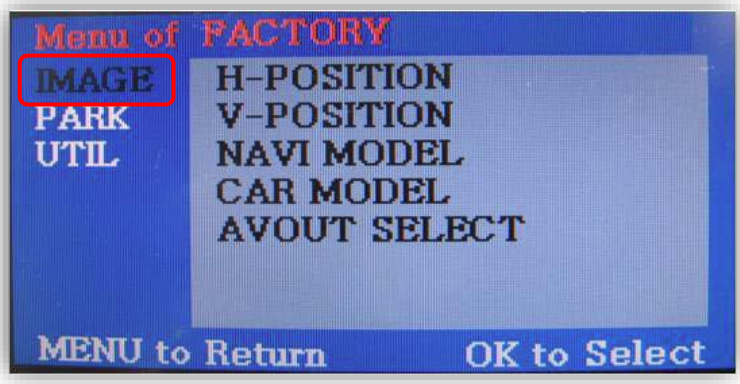


IMAGE MENU

-The only setting that may need necessary adjustment here would be ***CAR MODEL*** (BMW/AUDI KITs) ***Note: on some kits, this option is located under 'UTIL'***

-The remaining settings are optional and install dependent.

PARK MENU

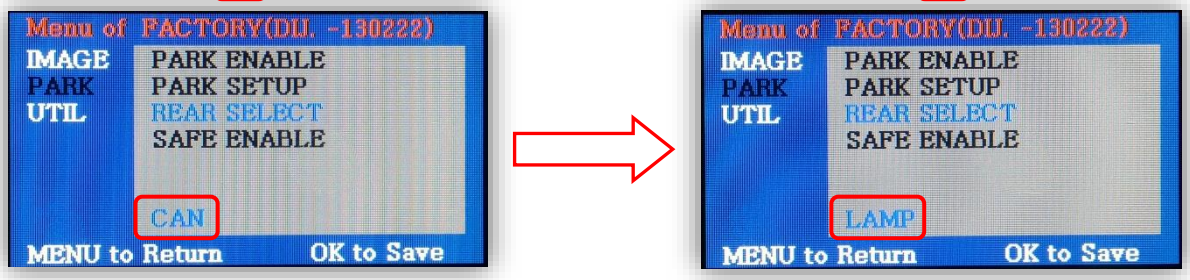
PARK ENABLE: Rear-CAM guidelines ON/OFF

PARK SETUP: Rear-CAM guideline positioning

REAR SELECT: Change ***rear camera activation*** from CAN to LAMP (gray wire) ***Note: on some kits, this option is located under 'UTIL'***

SAFE ENABLE: If ***'ON'***, prevents AV sources from showing (unless you ground ***Blue 'PARKING' wire***)

1 ***Rear-Select CAN to LAMP adjustment*** ***2***



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FAQs

Q. I cannot switch A/V sources.

A. Check IR or toggle switch connection. Check the LEDs on the interface, if nothing is lit up with vehicle ignition, check power/ground connections.

Q. All I see on the display is a black screen (no factory image pass-through).

A. Make sure the video cables (IN/OUT) are connected at the proper location (Screen/Radio/NAV DRIVE).

B. Make sure the video cables are seated all the way.

C. Make sure Dip Switches 5 & 6 are set correctly (resolution or screen size).

Q. Displayed image color is not proper (too dim or color seems wrong).

A. Try to select 'INITIAL' in OSD menu.

Q. Rear camera image does NOT appear.

A. Make certain Dip Switch #7 in set ***down*** for aftermarket camera, or ***up*** for a factory camera.

B. Try swapping the CAN connection wires. This will not do damage, if it is hooked up wrong it will only not work.

C. Make certain the camera is properly powered. Check voltage ***at the camera itself.***

D. Try an alternative video source, don't assume the power/ground is correct unless you've checked it ***with a multi-meter!***

E. If this is a CAN-connected module and you've connected the CAN wires, try using the gray wire *(not all interfaces have this wire!)* instead of the CAN connection for reverse activation. You'll also need to change the ***Rear Select*** option in the ***Menu of Factory (MENU 2)*** under ***UTIL*** or ***PARK***. Refer to the ***Menu Adjustments*** section.

Q. Unwanted A/V mode is displayed upon a toggle press (A/V source switching order: OEM->RGB->AV1->AV2->AV3->OEM).

A. Check DIP Switch Setting. Refer to page 2.

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