

# NAV-TV

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## VOLVO-CAM 15 (NTV-KIT748)



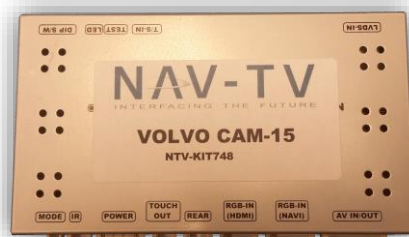
### Overview

The VOLVO-CAM 15 interfaces up to 3 video inputs and a backup camera input (with dynamic guidelines) to the factory media screen in 2015+ Volvo XC60 & S60 vehicles. Audio integration requires that the vehicle have a factory audio input.

### Kit Contents



AV Input Harness



VOLVO-CAM 15 Interface



GVIF Video cable



Remote



RGB Input cable



IR Eye Harness



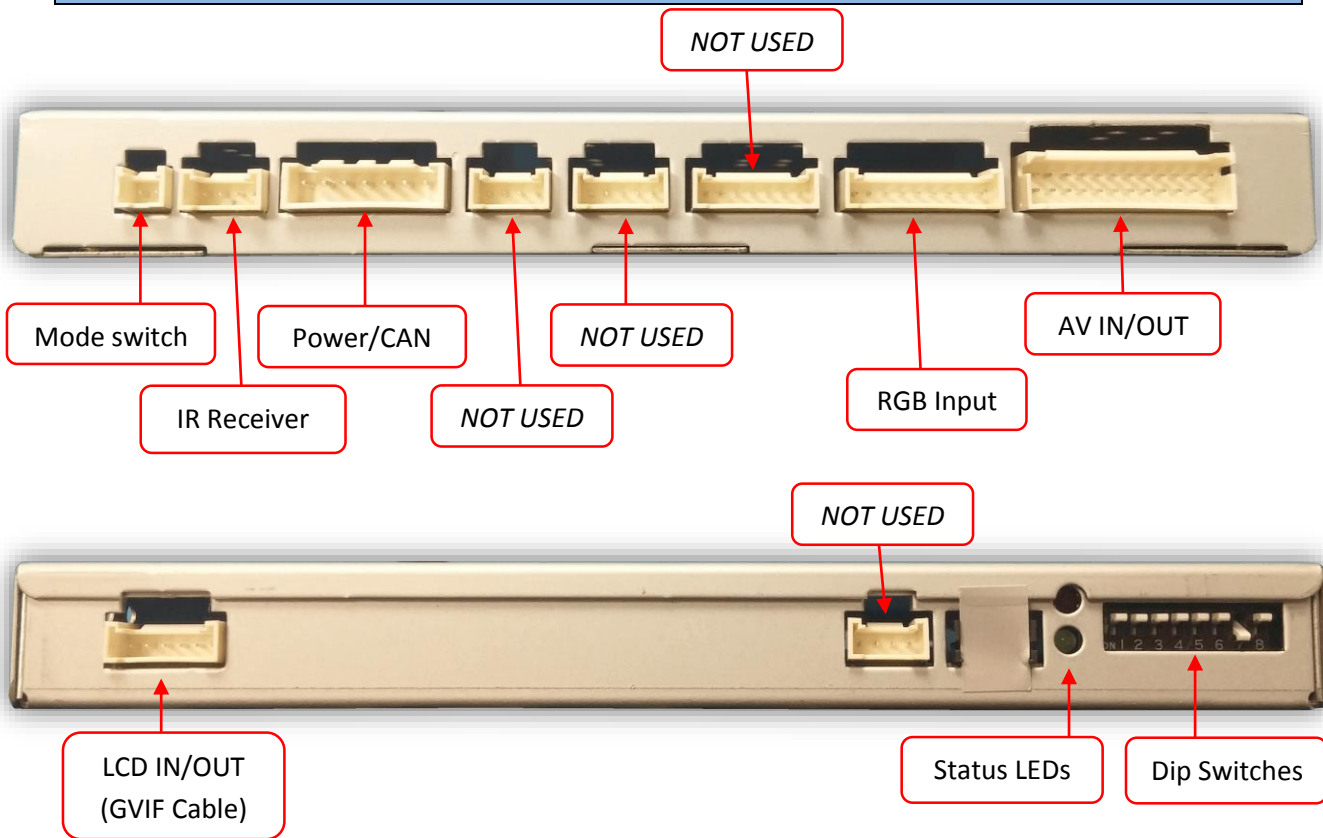
Plug & Play T-Harness



Input Toggle Switch

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Interface Connectors



Dip Switch Settings\* Configure prior to installation

Dip SW:	1	2	3	4	5	6	7	8
UP	Enables RGB	Enables V1	Enables V2	Enables V3	CAN setting	CAN setting	Factory or no Rev-Cam	N/A
DOWN	Skips RGB	Skips V1	Skips V2	Skips V3	CAN setting	CAN setting	Activates aftermarket Rev-Cam	N/A

**CAN SETTING  
(DS 5 & 6)**

<b>V40</b>	5	6
		X
	X	

<b>S60/XC60</b>	5	6
	X	X

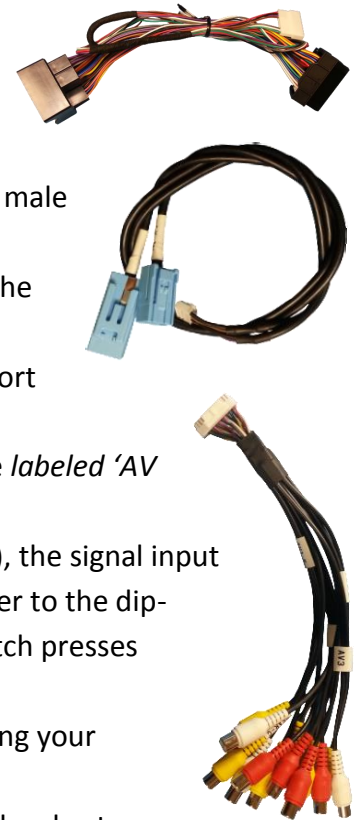


**\*Note: If the dip switches are not configured prior to installation you must remove power to the unit prior to making adjustments to the dip switches.**

## VOLVO-CAM 15 Installation

**THIS INTERFACE INSTALLS AT THE RADIO, NOT AT THE SCREEN!**

1. Remove the factory radio (disc drive) beneath the media screen.
2. Connect the provided **Plug & Play T-Harness** between the main radio connector and the radio itself.
3. Disconnect the factory blue GVIF cable from the radio, and connect the male end of the provided **GVIF video cable**.
4. Connect the free end (removed in step 3) of the factory video cable to the female side of the provided **GVIF video cable**.
5. Connect the white end of the **GVIF video cable** to the interface at the port labeled 'LVDS IN'.
6. Connect the AV Input cable to the port on the VOLVO-CAM 15 interface labeled 'AV IN/OUT'.
  - a. 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).
  - b. The interface provides **reverse** 12v (+) and ground (-) for powering your camera, if desired.
7. Adjust dip switches on the VOLVO-CAM 15 interface properly, refer to the chart on page 2 for qualifications.
8. Connect the white plug from the **Plug & Play T-Harness** to the port on the interface labeled 'POWER'.
9. **Optional:** Connect the remote eye to the port labeled 'IR' on the interface and leave it in clear view of the driver (often it can be stuck inside a vent). This connection would be necessary if you want to be able to adjust anything from the VOLVO-CAM 15 interface's menu.
  - a. **While in any AV mode other than factory** (on the display screen), press the **MENU** button for **Menu 1** , or hold the **left arrow** to enter **MENU 2**.
  - b. To switch between AV modes, press the '**OK**' button.



10. **Optional:** Connect the provided momentary toggle switch to the port on the VOLVO-CAM 15 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**. Please refer to the dipswitch section on page 2 for input settings.

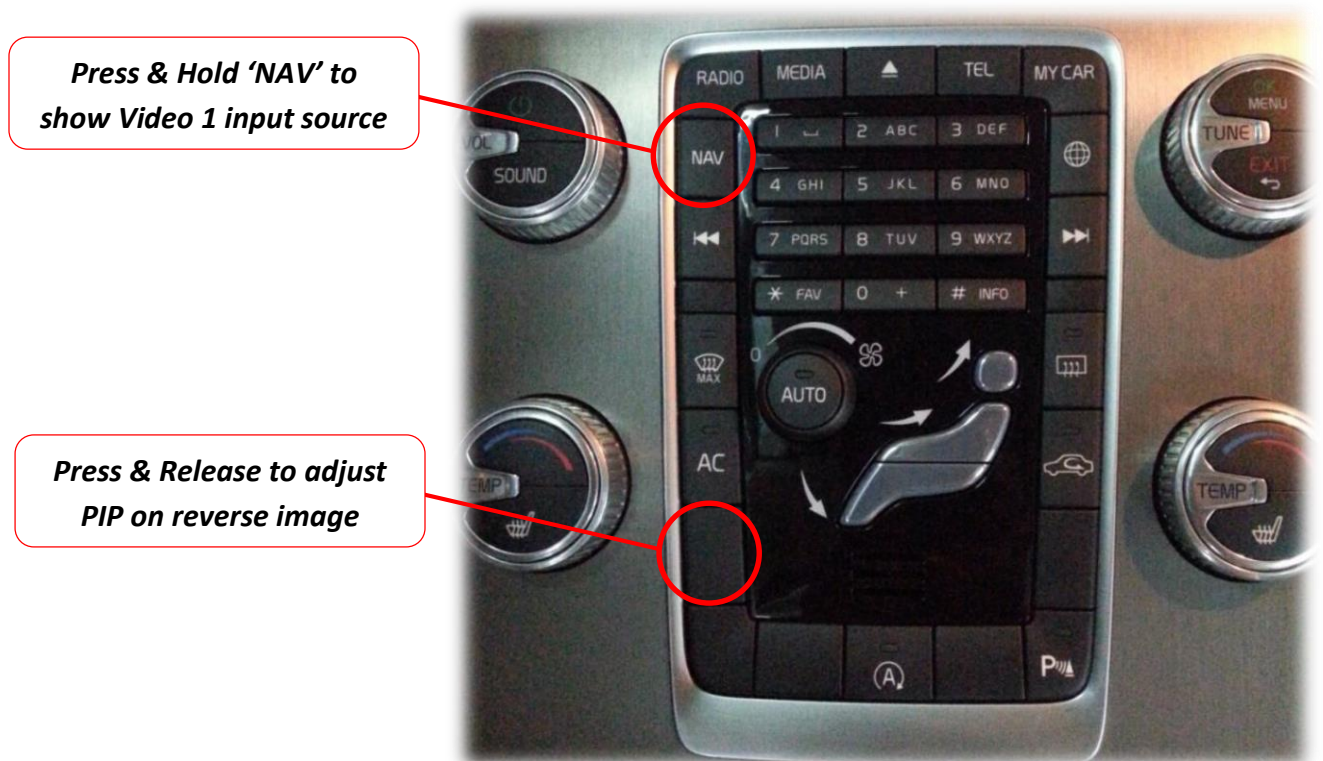


11. Start the car and test for proper functionality before replacing dash pieces.

12. **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.

### VOLVO-CAM 15 Operation

- Once all connections are made, placing the vehicle in reverse will display the connected reverse image automatically. *If an AUX video source was added to V1 RCA, press and hold the **NAV button** to source to this video input (DIP switch 2 must be DOWN).*

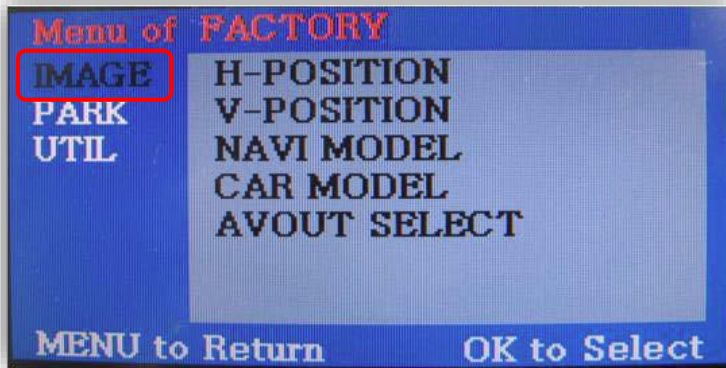


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Menu Adjustments

Before you start:

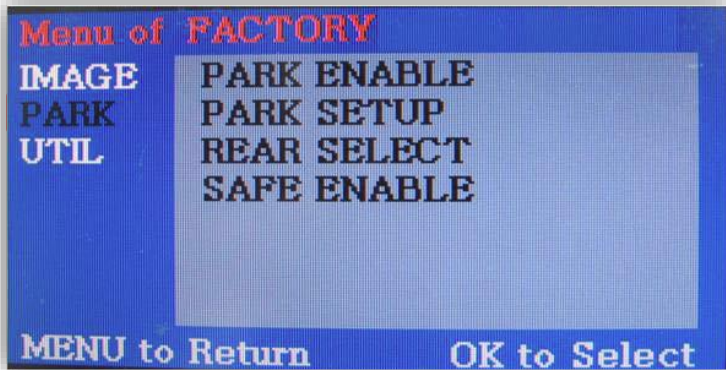
- Make sure the car's ignition is on and radio is booted/settled
- You must be in '**NAVI**' (**RGB**), '**AV1**', '**AV2**' or '**AV3**' mode (on display screen)
- Use the remote '**OK**' button to switch modes, or use the provided input toggle switch
- Hold the **LEFT ARROW** for 3 seconds. The **Menu of FACTORY** will appear on screen.



**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'*

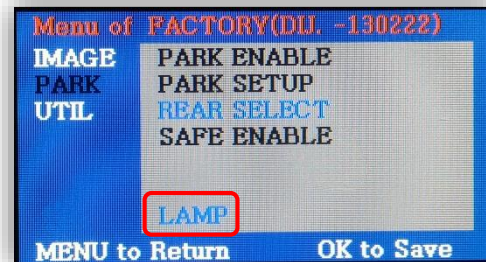
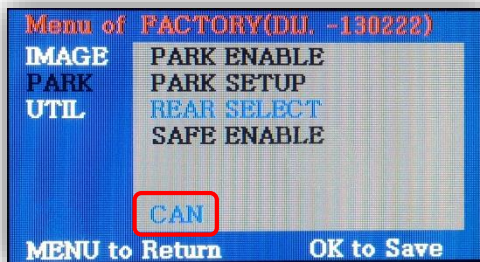
-The remaining settings are optional and install dependent.



**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.