

BHM 10/18/18 NTV-DOC327

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The VOLVO-CAM17 kit interfaces 2 video inputs (including a backup camera) to the factory media screen in 2017+ Volvo V90, S90, XC60 & XC90 vehicles with the new, portrait-style monitor. This interface generates steering-based guidelines while in reverse for added convenience.



Agreement: End user agrees to use this product in compliance with all State and Federal laws. NAV-TV Corp. would not be held liable for misuse of its product. If you do not agree, please discontinue use immediately and return product to place of purchase. This product is intended for off-road use and passenger entertainment only.

### Interface Connectors



Dip Switch settings\*

Dip SW:	1	2	3	4	5	6	7	8
UP	MENU	KEEP	KEEP	RVC	KEEP	VEH	HIGH	KEEP
	OFF	UP	UP	OFF	UP	SETTING	RES	DOWN
DOWN	MENU	KEEP	KEEP	RVC	KEEP	VEH	LOW	KEEP
	ON	UP	UP	ON	UP	SETTING	RES	DOWN

NOTE: reset power after adjusting dip switches.







ALL Vehicles with SMALL screen

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- 1. Remove all panels and screws to gain access behind the screen.
- 2. From the provided *Power/CAN Harness*, connect the following wires to the car:

Interface wire	Description	Volvo Connection
Red (ACC)	12v ACC (+)	Cigar lighter
Black (GND)	Ground (-)	Cigar lighter
White (HAND)	LIN (data)	PIN 11, Gray/Yellow (monitor)
Blue (CAN1-H)	CAN HIGH	White/Green (OBD - extend)
White (CAN1-L)	CAN LOW	Green/Yellow (OBD - extend)

NOTE: Connect the provided white (2-pin, single wire) LIN cable to the 2-pin (black & red) connector off the main harness, if not already connected.

 Disconnect the OEM LVDS screen cable and connect it to the interface at the port labeled 'LVDS IN'. NOTE: Use the LVDS extension provided if necessary.



4. Connect the provided *LVDS Cable* from the interface port labeled *'LVDS OUT'* and back to the monitor



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Return

(AUX VID

menu

control)

#### 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 <u>4 times</u> (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).



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. Hold the *HOME* (hard) button on the radio to activate 'NAVI' screen
- 4. Press OK button on remote 4 times, then press POWER

If the user wants only an AUX video input *without front camera*, set *AV1 SELECT* to *ON*, scroll to the end (right side) of the menu and exit menu.

**FRONT CAMERA** setting is used when **the user wants 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.

**Once finished with settings,** place DIP SWITCH 1 back into the **UP position** and reset power to interface (if this step is not taken, the unused 'NAVI' input will show as an additional video input when cycling video inputs)

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# 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 'HOME' button (bottom middle, beneath screen)
- 3. Once 'NAV INPUT' shows on the screen, on the remote press the **OK BUTTON** <u>4 times</u>, then press **POWER**.
- 4. Navigate to the 'NAVI' section.
  - a. Select 'HDMI'
  - b. Choose 'HD95E'
  - 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.
- 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.

SELECT	
DISPLAY SETTING	OFF
AUDIO OUT SELECT	USER
	Jan 3 2017
OFF HD95	
HD95E	
	Jan 32017

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## VOLVO-CAM17 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 activation using factory buttons.



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