

# NAV-TV

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## GVIF-CTS

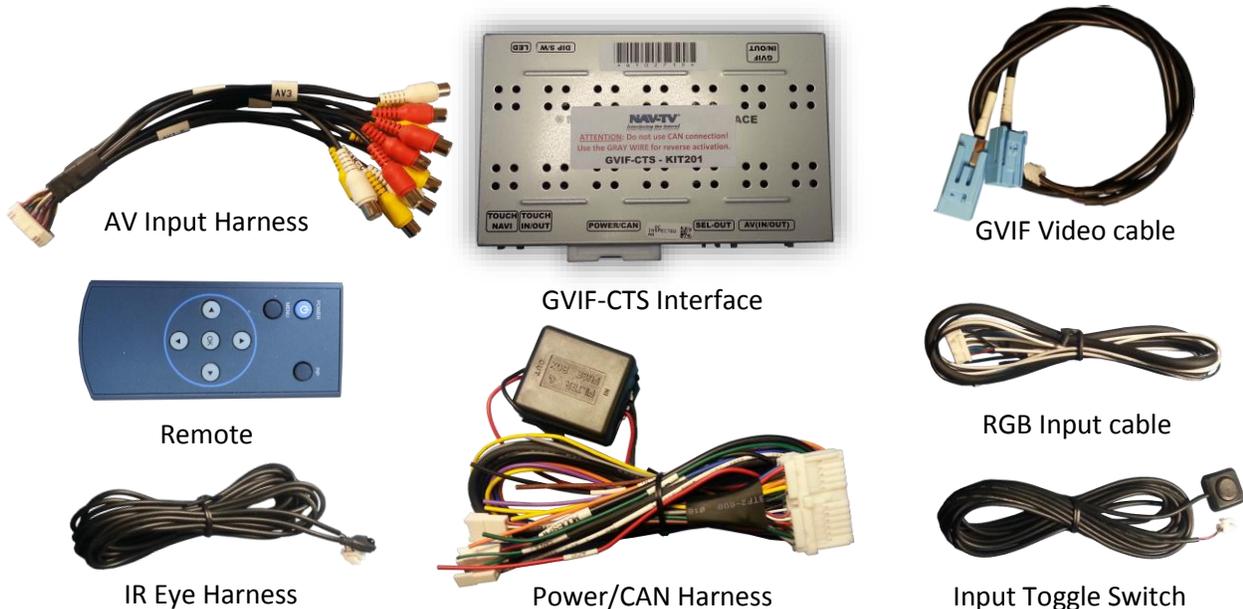
NTV-KIT201



### Overview

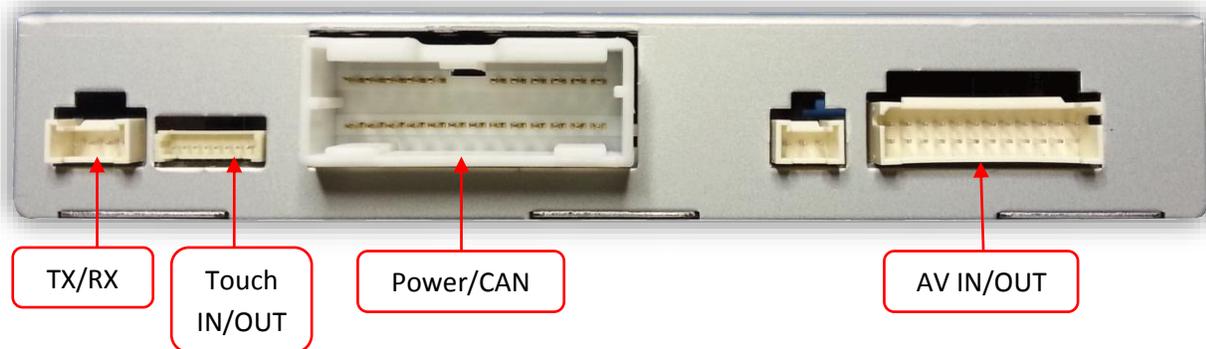
The GVIF-CTS Kit allows the user to add up to 3 video inputs and a backup camera input to the factory media screen in select GM vehicles. Audio integration requires that the vehicle have a factory audio input.

### Kit Contents



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\* Configure prior to installation

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



**\*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. When power is reconnected after the dip switch adjustment the new settings will be stored into memory.**

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## Installation

1. Remove the factory radio. This usually requires pulling panels and removing a series of screws. Disconnect any associated harnesses and set the radio aside.
2. Gather the provided **'Power/CAN Harness'** from the GVIF-CTS kit. Connect the following wires to the car:

Interface wires	Connect to car
Black (GND)	Chassis Ground
Red (ACC)	Accessory
Gray (Rear)	Reverse lamp 12v (Pin 2, Pink conn @ BCM) (only if adding rear camera)



**Note: CAN connection is not supported at this time. You must connect the GRAY wire to a reverse lamp for reverse activation!**

3. Disconnect the factory GVIF cable from the factory radio, this is square, blue connector.
4. Connect the male side (labeled 'LXIN') of the provided **GVIF video cable** to the factory radio.
5. Connect the free end (removed in step 3) of the factory GVIF video cable to the female side of the provided **GVIF video cable** (labeled 'LXOUT').
6. Connect the white end of the GVIF video cable to the interface at the port labeled **'LVDS IN/OUT'**.
7. Connect the AV Input cable to the port on the GVIF-CTS 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).
8. Adjust dip switches on the GVIF-CTS interface properly, refer to the chart on page 2 for qualifications.
9. Connect the white plug from the **'Power/CAN Harness'** to the port on the GVIF-CTS interface labeled **'Power/CAN'**.



10. **Optional:** Connect the remote eye to the port labeled '**IR**' (on the power harness) 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 GVIF-CTS interface's menu. **Refer to 'Menu Adjustments' for menu options.**

11. **Optional:** Connect the provided momentary toggle switch to the port on the GVIF-CTS 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.



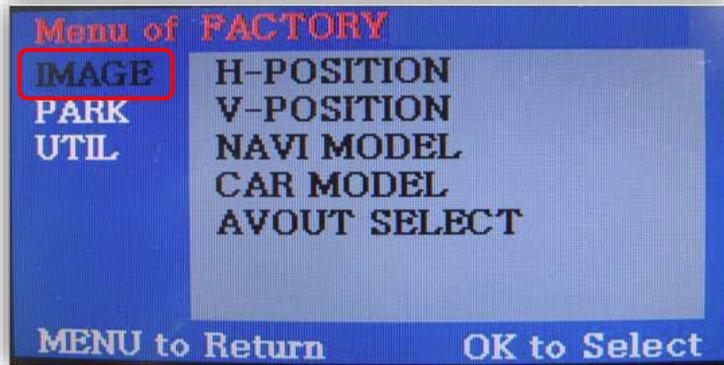
12. Start the car and test for proper functionality before replacing dash pieces.

13. **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.*

## Menu Adjustments

Before you start:

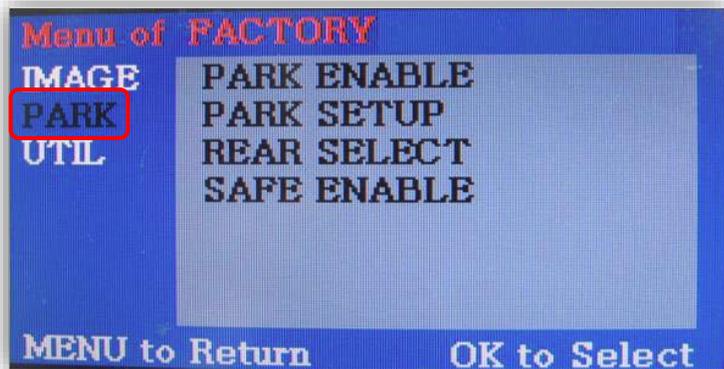
- Make sure the car's ignition is on and radio is booted/settled
- You must be in '**NAVI**' (**RGB**), '**AV1**', '**AV2**' or '**AV3**' mode (on display screen)
- Use the remote '**OK**' button to switch modes, or use the provided input toggle switch
- Hold the **LEFT ARROW** for 3 seconds. The **Menu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

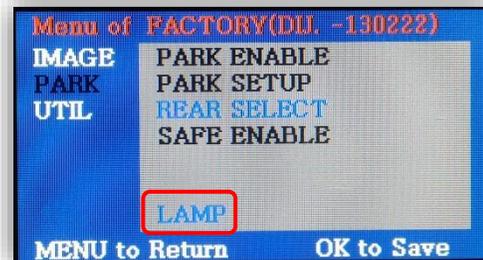
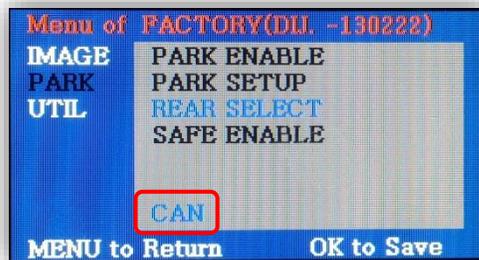
-The remaining settings are optional and install dependent.



**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.