

NAV-TV

INTERFACING THE FUTURE

BHM
03/05/15
NTV-DOC101

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RGB2+

NTV-KIT038



Overview

The RGB2+ allows the user to add an aftermarket backup camera to the factory navigation screen in select navigation-equipped vehicles. A secondary video input is included on the RGB module and can be viewed at any time via the provided toggle switch (optional).

Kit Contents



RGB Power Harness
NTV-CAB034

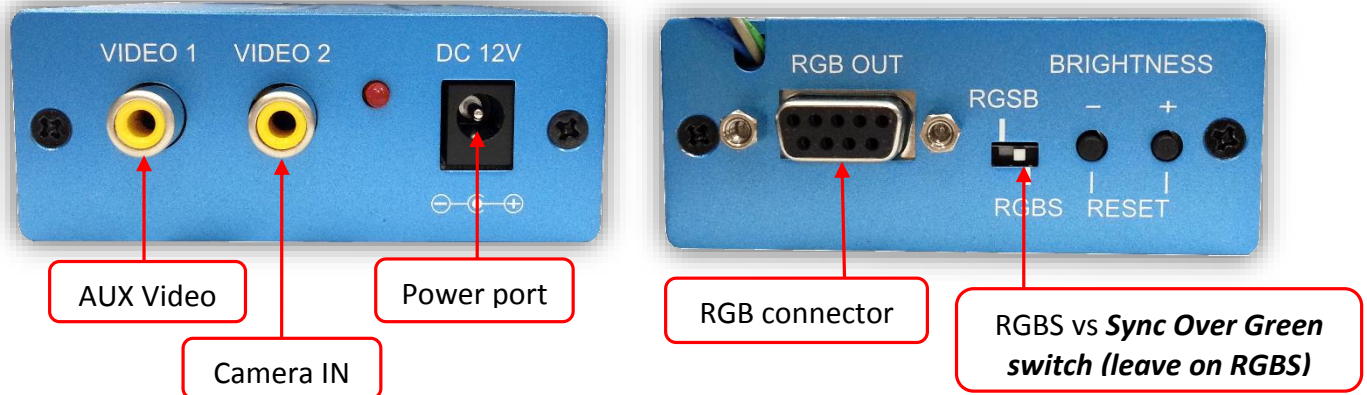


RGB Converter
NTV-INT005



RGB Video Harness
NTV-HAR209

Interface Connectors



Installation

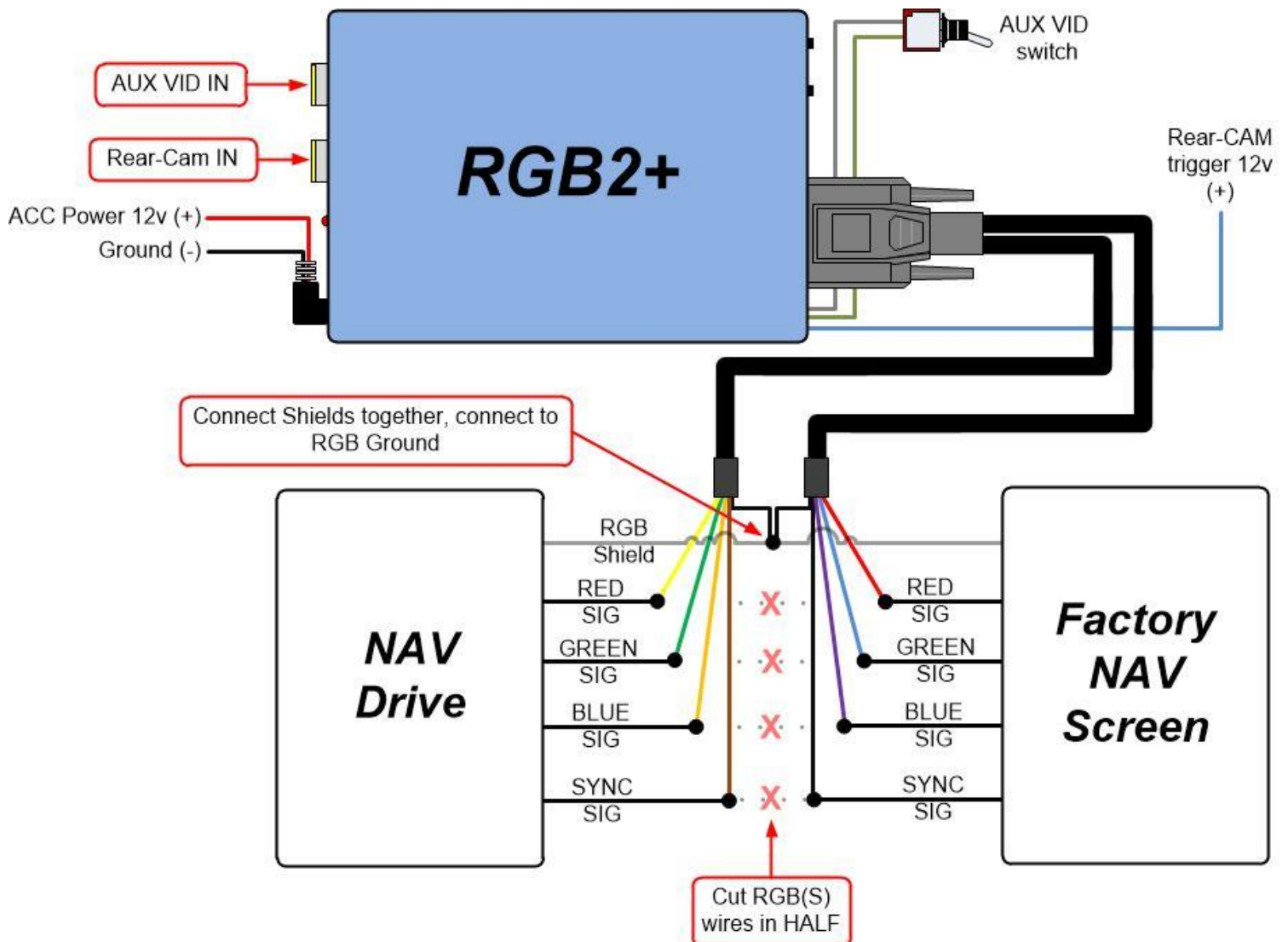
1. If this vehicle has a **navigation unit** separate from the radio, connect this interface there. If this vehicle has **no navigation unit**, connect this interface at the screen.
2. Gain access behind the screen/navigation unit and disconnect all connected harnesses before cutting any wires.
3. Gather the provided **RGB Video Harness** and examine the wires available. These wires are for separating the **red, green, blue and SYNC signals** like you would with a relay.
4. Find the RGSB wires connecting the NAV drive (or radio stack) to the screen. Make sure you have the correct harness by disconnecting the plug while the radio is in the NAVIGATION mode: *the image should disappear immediately*. The RGSB wires will typically be surrounded by sheathing to block interference.
5. Cut the **Red, Green, Blue and Sync SIGNAL wires in half, one at a time**. **The colors of these wires are rarely red for red, green for green etc.** The best way to do this:
 - a. Strip sheathing back and gain access to the wires
 - b. Make sure nothing is shorted
 - c. Turn the car on and put the radio in NAV mode (if available)
 - d. Cut each wire you suspect to be Red sig, Green sig, Blue sig and SYNC sig **one at a time**, and with each cut you should **lose the corresponding signal color on the NAV screen**.
 - e. Severing the SYNC wire will make the image stutter and/or scroll lines either horizontally or vertically.
 - f. **Do not cut the RGB ground in half**. Connect the ground wires together from the RGB Video harness and splice into the RGB ground. See diagram on next page.



6. Connect each wire from the **RGB Video Harness** to the NAV/Radio side and Screen side of each signal (red, green, blue, SYNC). Connect the RGB ground wires together and splice them to the RGB ground (sometimes the sheathing itself). See diagram for visual aid below.
7. From the provided **RGB Power Harness**, connect the **black wire** to chassis ground (-) and the **red wire** to an ACC 12v source.
8. Connect the stand-alone **blue wire** to a 12v **reverse wire**. Any time this wire sees 12v, the video signal provided to **Video 2** will be displayed on the media screen (while in NAV mode).
9. **Optional:** If adding a secondary AUX Video source to this vehicle, connect the video signal RCA to the **Video 1** port on the RGB. This source can be viewed at any time with a flip of the attached **toggle switch**.



Basic connection diagram



Notes

- In some cars (typically Lexus), reverse camera/aux video will only display while in **NAV MODE**
- Some cars utilize a sync-over-green system (some BMW) instead of a separate sync wire (for these cars, use the **RGSB** setting on the side of the RGB module and *do not cut the SYNC wire*).
- For cars with no navigation, the installation happens at the screen. For cars with navigation, installation happens at the navigation unit (trunk, under pass seat etc.)

RGB2+ Operation

- When the **blue wire** on the interface sees 12v, the navigation screen will switch to **Video 2** source. ***This wire should be connected to a reverse lamp 12v (+).***
- Toggling the provided switch will switch the factory navigation screen to **Video 1** source. *Note: if not adding a second video source, leave the switch in whichever position where the factory NAV displays properly on the media screen.*

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