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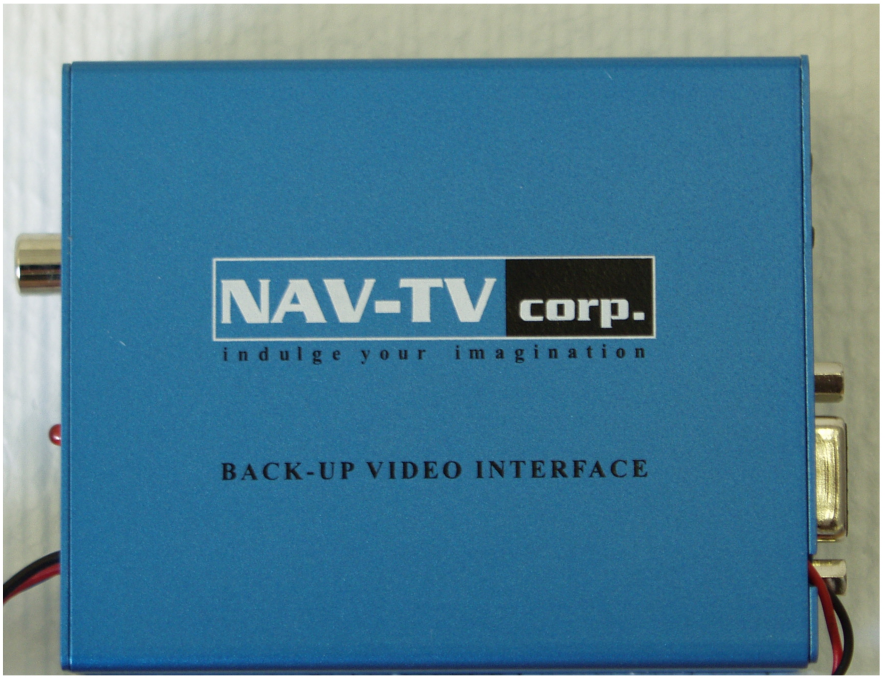
RGB2(+) Installation Instructions



Thank you for purchasing this NAV-TV product. Please obey all laws and regulations when installing and using our products. By purchasing our products, you agree that NAV-TV cannot be held liable for any tickets or accidents caused by the driver's lack of attention. Our products are intended for off-road use and passenger entertainment only.

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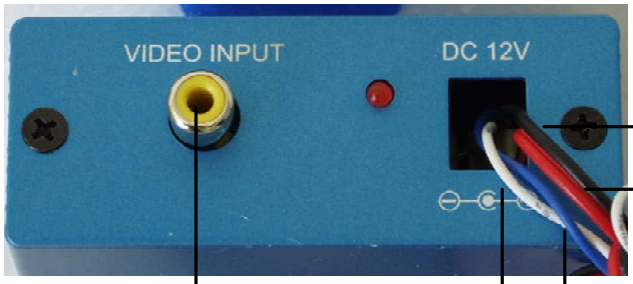
RGB2/RGB2+ INSTRUCTIONS

Illustration A



2)Black wire: Chassis ground

1)Red wire: Accessory +

Video Input 1

3)Blue wire: Positive+ trigger for Video Input 1

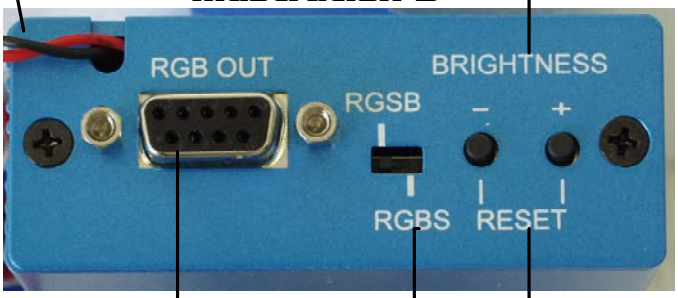
4)White wire: Positive+ trigger for Video Input 2*

***Video 2 only applies for RGB2+**

Attached toggle switch to toggle from **Nav. / Video Input 1. Do Not Apply Power To These Wires!**

Brightness Up / Down

Illustration B



DB9 connector for **Video In/Out Wires**

Brightness Reset- press both simultaneously to reset to default

RGBs(4-wire setup) / **RGsB**(3-wire setup) selector (keep this switch in the RGBS position.)

1. **Red wire** must have accessory power. This is not a trigger for video input 1. This is main power for the unit since it is digital.
2. **Black wire** must have constant ground.
3. **Blue wire** is positive trigger 12v for video input 1. You may leave the attached toggle switch off and connect this wire directly to the reverse lights for automatic turn-on in reverse.
4. **White wire** is positive trigger 12v for video input 2 (RGB2+).

***Video Input 2 overrides Video Input 1. This means you must power Video 2 up while Video 1 is active.**

Note: If you have 2 inputs, and you're using the second input for back-up camera, you can twist the White wire and Blue wire together and connect them to the reverse lights to activate Video Input 2. The attached switch will activate Video Input 1.

DB9 Connector

	Input (Nav. Computer)	Output (Screen)
Red Video	**Yellow Wire**	**Red Wire**
Green Video	**Green Wire**	**Blue Wire**
Blue Video	**Orange Wire**	**Purple Wire**
Sync	**Brown Wire**	***Black Wire**
***Shield**	***Dark Gray Heatshrink**	

***Do not mistake the dull gray heatshrink for the shiny black sync output wire.**

Questions? Need vehicle-specific wiring information? Tech support available through our toll-free number- 1-866-477-3336

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NAV-TV Back-Up Camera Interface Instructions

Video In / Out Connections

There are *4 video wires, called RGBS wires on almost every factory navigation screen* – **Red** *video*, **Green** *video*, **Blue** *video* and *Sync*). The fifth wire that is needed is the *video shield.* Not ground, but video shield.

Use a light bulb-type test light and test the wires behind the navigation screen. There are **three wires** that will change the colors on the screen while you probe them. These wires are the **RGB** wires. The **fourth** wire that will make the screen *scroll* or *shift* is the **Sync** wire.

Check to see if you have a wire that turns the screen *yellow*. If you do, you will have to wire it as follows:

On Screen (while probing w/ t.light)	**Back-Up Cam Interface**
Cyan (Aqua)	**Red** video wire
Magenta (Purple / Redish)	**Green** video wire
Yellow	**Blue** video wire
Scrolling or Shifting	**Sync** wire
Shield	**Shield**

	Input (Nav. Computer)	Output (Screen)
Red Video	Yellow Wire	Red Wire
Green Video	Green Wire	Blue Wire
Blue Video	Orange Wire	Purple Wire
Sync	Brown Wire	*Black Wire
*Shield	*Dark Gray Heatshrink	

*Do not mistake the dull gray heatshrink for the shiny black sync output wire.

If you test the wires between the navigation computer and screen and you see **Red**, **Green** and **Blue** appear on the screen, wire it as follows:

On Screen	**Back-Up Cam Interface**
Red	**Red** video wire
Green	**Green** video wire
Blue	**Blue** video wire
Scrolling or Shifting	**Sync** video wire
Shield	**Shield**

After you've found all **R, G, B** and **Sync** wires, cut them. Connect the **Screen side** of the **R, G, B** and **Sync** wires to the **Output** *wires*, *Red, Blue, Purple* and *Black*. Connect the **Navigation side** of the **R, G, B** and **Sync** wires to the **Input** wires, *Yellow, Green, Orange and Brown.*

If you find that you've connected all the wires properly and the video still scrolls, the vehicle might have *two sync wires*. If you find two wires that make the screen scroll, it probably does.

The necessary process for wiring an Interface with a vehicle that has two Sync wires is as follows:

One wire might make the screen scroll vertically after probing or cutting it. We'll call this "**Sync 1**". Another wire might make the screen scroll horizontally after probing it or cutting it. We'll call this "**Sync 2**". First, connect Sync 1. If the video scrolls, then jump Sync 2 to Sync 1 on the display side, either directly or through a resistor. You will have to find the resistance value that gives you the best results. Start at about 30 ohms and work your way up to around 100 ohms. Sometimes there is no need for a resistor at all. The navigation side of Sync 2 usually doesn't need to be connected. If the picture is perfect in video input mode, but rolling in normal navigation mode, then you will need to use a relay to have sync 2 normally connected. Once activated, the relay will cut sync 2 and connect it to sync 1 whenever the interface is powered up.

If you're using multiple monitors or displays, you **will** need to use a video amplifier. The Back-Up Cam Interface needs a direct video input.

Power / Ground wires

When making power connections, tap into heavy gauge wires. It is recommended to go straight to the ignition harness whenever having difficulty finding good power sources. Solder all connections.