



indulge your imagination

NAV-TV Back-Up Camera Interface Instructions

Video In / Out Connections

There are 4 colored wires on our Back-Up Camera Interfaces – Red (Red signal), Blue or Yellow (Blue Signal), Green (Green Signal), and Black (Sync). The fifth braided wire is the video shield and should be connected to the video shield in the navigation system’s harness without interrupting it. In addition to connecting all the video shielding together, you should add chassis ground to these as well. All connections must be soldered.

Use a light bulb-type test light and test the wires behind the navigation screen. There will be three wires that change the colors on the screen. The wires that change colors on the screen are the R, G and B wires. There will also be a wire that will make the screen scroll or shift. This 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	Back-Up Cam Interface- RGB2, RGB2v, RGB47 etc.
Cyan (Aqua/Blue)	Red wire
Magenta (Purple/Red)	Green wire
Yellow	Yellow (RGB2 or RGB47) or Blue wire (RGB2v)
Scrolling or Shifting	Black (RGB2 or RGB47) or Yellow wire (RGB2v)

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

On Screen	Back-Up Cam Interface
Red	Red wire
Green	Green wire
Blue	Yellow (RGB2 or RGB47) or Blue wire (RGB2v)
Scrolling or Shifting	Black (RGB2 or RGB47) or Yellow wire (RGB2v)

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 cable marked “S”. Connect the Navigation side of the R, G, B and Sync wires to the cable marked “N”.

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 more than likely 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 2. If the video scrolls, then put Sync 2 back together. Try using only Sync 1. If it’s still scrolling, then jump Sync 2 to Sync 1 on the display side, either

through a 15K ohm resistor or directly. The navigation side of Sync 2 usually doesn't need to be connected.

If you're using multiple monitors or displays, you will need to use a video amplifier. The Back-Up Cam Interfaces need a direct video input without degrading the integrity of the video signal therefore needing the video amplifier.

Power / Ground

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.

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|---------------------------------|---|
| Red | (+) Positive Trigger (Activate Video Input) |
| Yellow (RGB2v) | (+) Jump to Red Wire Above (Activate Video Input) |
| Black or Brown | (-) Constant Chassis Ground |
| Blue or Light Gauge Wire | (+) Second Positive Trigger for <i>Video 2 Input</i> |

