

NAV-TV

INTERFACING THE FUTURE

BHM
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NTV-DOC337

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RGB-LEXv2

NTV-KIT904



Overview

The RGB-LEXv2 adds an aftermarket backup camera to the factory navigation screen in select Lexus vehicles. A secondary video input is included on the RGB module and can be viewed at any time by supplying power to an input wire (optional).

Kit Content

RGB Power Harness
NTV-HAR324



Remote Control
NTV-REM004



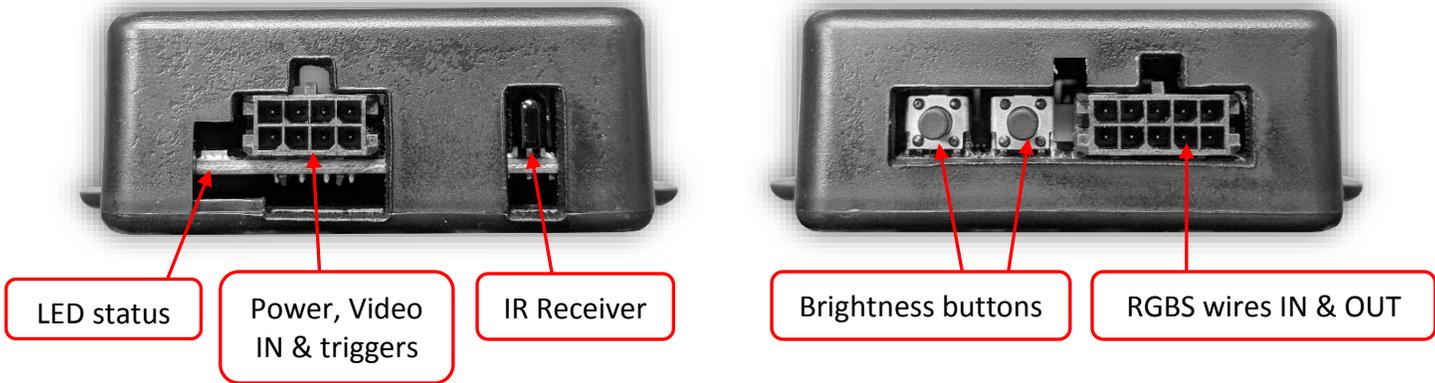
RGB Converter
NTV-ASY254



RGB-LEXv2 Video
Harness
NTV-HAR323



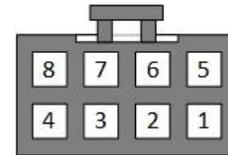
RGB-LEXv2 Interface Connectors



RGB-LEXv2 Pin Out

| PIN # | Description | Color |
|-------|----------------------|------------|
| 1 | Ground (-) | Black |
| 2 | INPUT 2 (AUX VIDEO) | White/Blue |
| 3 | Shield (VIDEO 2) | Black |
| 4 | Signal (VIDEO 2) | Yellow |
| 5 | 12v (+) ACC IN | Red |
| 6 | INTPUT 1 (CAM VIDEO) | White/Red |
| 7 | Shield (VIDEO 1) | Black |
| 8 | Signal (VIDEO 1) | Yellow |

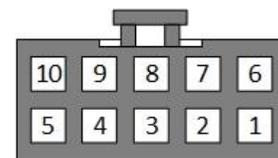
Power Harness



Wire Side

| PIN # | Description | Color |
|-------|--------------------------|--------------|
| 1 | RGB Ground | Black/Shield |
| 2 | SYNC (screen) | Gray |
| 3 | Blue Signal (screen) | Blue |
| 4 | Red Signal (screen) | Red |
| 5 | Green Signal (screen) | Green |
| 6 | RGB Ground | Shield |
| 7 | SYNC (radio/NAV) | Brown |
| 8 | Blue Signal (radio/NAV) | Purple |
| 9 | Red Signal (radio/NAV) | Orange |
| 10 | Green Signal (radio/NAV) | Yellow |

RGB Video Harness



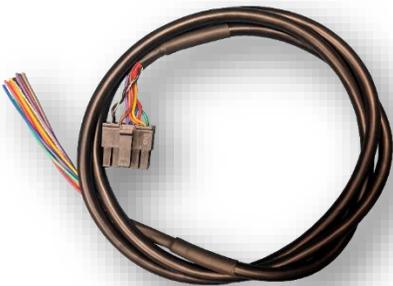
Wire Side

RGB-LEXv2 Installation

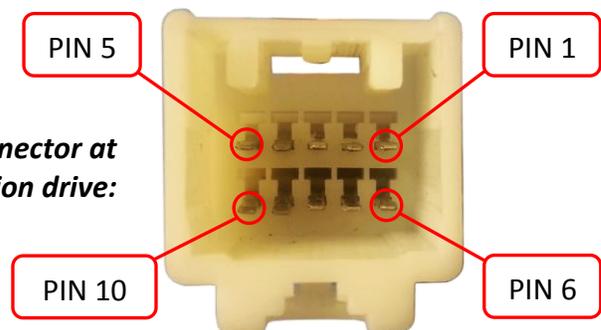
1. Locate the factory navigation drive. These can usually be found in the trunk, glove compartment or under the passenger seat. Disconnect all connected harnesses before cutting any wires.
2. From the provided **RGB Video Harness** and refer to the chart below for your specific vehicle RGBS pin outs. (If your vehicle is not listed, contact NAV-TV tech support at 561-955-9770 for vehicle specific diagrams)
3. Cut the **Red, Green, Blue and Sync wires in half (one at a time)**. Refer to the diagram on page 3 and make connections. **Note: RGB Ground should not be cut. Splice the ground leads to the RGB ground (or other ground).** **Note 2: While these pin locations should be accurate, we recommend testing each wire! Refer to video if unsure:**
<https://www.youtube.com/watch?v=mAKbOZSv1Uo>

| Year(s) | Make | Model | Red Signal | Green Signal | Blue Signal | Sync Wire | RGB Ground |
|-----------|-------|-------|------------|--------------|-------------|-----------|------------|
| ALL* | ALL* | ALL* | PIN 2 | PIN 7 | PIN 3 | PIN 8 | PIN 6 |
| 1998-2000 | Lexus | GS300 | PIN 1 | PIN 4 | PIN 5 | PIN 2 | PIN 7 |
| 1998-2000 | Lexus | GS400 | PIN 8 | PIN 7 | PIN 6 | PIN2 | PIN 5 |

*All RGB-LEXv2 compatible Toyota/Lexus models

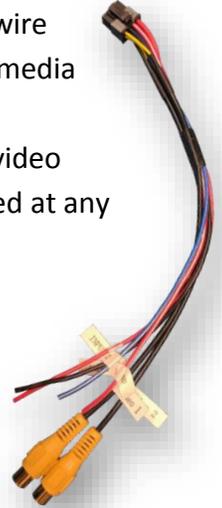


Factory connector at Navigation drive:



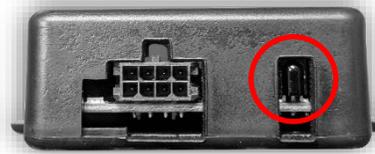
RGB-LEXv2 Power Connections

1. From the provided **RGB Power Harness**, connect the **black wire** to chassis ground (-) and the **red wire** to an ACC 12v (+) source (cigarette lighter, etc).
2. Connect the **white/red wire (INPUT 1)** to a 12v (+) reverse wire. Any time this wire receives 12v (+), the video signal provided to **VIDEO 1** will be displayed on the media screen (while in NAV mode from the radio).
3. **Optional:** If adding a secondary AUX Video source to this vehicle, connect the video signal RCA to the **VIDEO 2** port on the *Power Harness*. This source can be viewed at any time when the **white/blue (INPUT 2)** wire receives 12v (+).

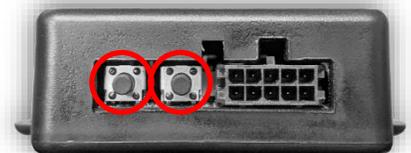


RGB-LEXv2 Remote Control / Brightness Setting

- The RGBv2 uses a (provided) remote for the following optional adjustments:
 - Arrow keys adjust (shifts) VIDEO 1 or 2 image *LEFT, RIGHT, UP & DOWN (OEM pass through image is not adjustable)*
 - Zoom/Page arrows adjust brightness
 - Pressing **MENU>MAP>BACK** (in order) will *default all settings*.



- To adjust brightness of VIDEO 1 or 2 image, use the buttons on the RGB side of the module and adjust to suit. **NOTE:** *when completing install, mount the RGBv2 module so that the buttons are not being pressed.*



RGB-LEXv2 Operation

After all connections are properly made:

- When the vehicle is placed into reverse (white/red wire on the interface receives 12v +), the navigation screen will switch to **Video 1** source (reverse camera).
- In any other gear (but reverse) toggling the white/blue wire (12v (+) to the white/blue wire) will switch the factory navigation screen to **Video 2** source*.