

# NAV-TV

INTERFACING THE FUTURE

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## GM IO3-PRG

Dual camera interface for select GM vehicles equipped with 4.2" IO3 Infotainment Screen

*NTV-KIT627*

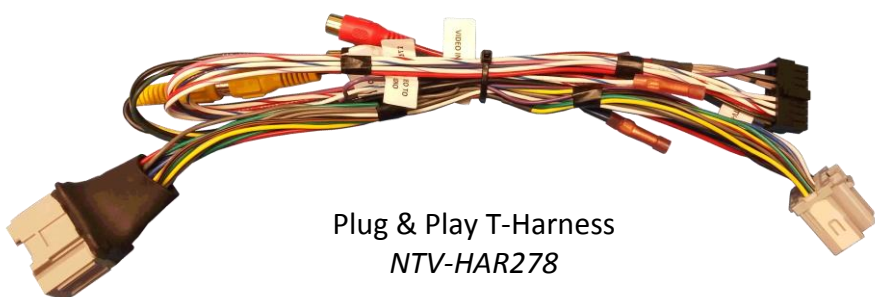


BHM  
11/16/15  
NTV-DOC240

## Overview

The GM IO3-PRG interfaces a reverse and (optional) front facing camera on select GM vehicles equipped with the (model IO3) 4" color media screen. Forcing the rear camera to display at any time is activated with a wire trigger if desired. *The radio code may be confirmed by locating the sticker typically found inside the glove box.*

## Kit Content



Plug & Play T-Harness  
NTV-HAR278



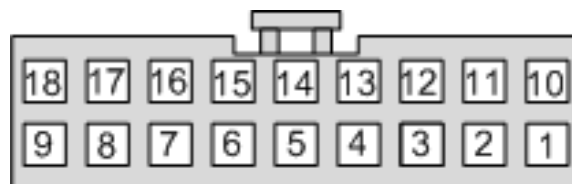
GM IO3-PRG Module  
NTV-ASY161



USB Cable (updates)  
NTV-CAB009

## GM IO3-PRG Pinout

Pin #	Description	Color
1	12v Constant Power (+)	Yellow
2	Input 1 (Force Rear Cam)	Red
3	Input 2 (Force Front Cam)	Blue
4	Input 3 (Not Used)	Pink
5	--Not Used--	Gray
6	RCA Signal (+) (Out to radio)	Red
7	RCA Shield (common)	Gray
8	--Empty--	--
9	GM-LAN (Radio Side)	Green
10	Ground (-)	Black
11	Reverse 12v (+) OUT	White/Red
12	Output 1 (ACC 12v +)	White/Blue
13	--Not Used--	White/Purple
14	--Not Used--	White/Gray
15	RCA Signal (+) Input (front cam)	Yellow
16	RCA Signal (+) Input (rear cam)	Black
17	--Empty--	--
18	GM-LAN (Vehicle Side)	Purple



Wire Side

Any wires not mentioned here are not used for this installation.

## Dash Disassembly (Impala)

*This disassembly is for vehicles where the radio tuner is located beneath the glove box (sedan). In trucks, the radio tuner may be located near the screen in the main dash.*

1. Beneath the glove box on the passenger side, remove the under-dash panel. It may be held in by (2x) 7mm screws.



2. The radio tuner necessary for the GM IO3-PRG integration is mounted vertically, high in the passenger kick.



3. Disconnect the Gray, 20-PIN plug located next to the green plug in the radio tuner.

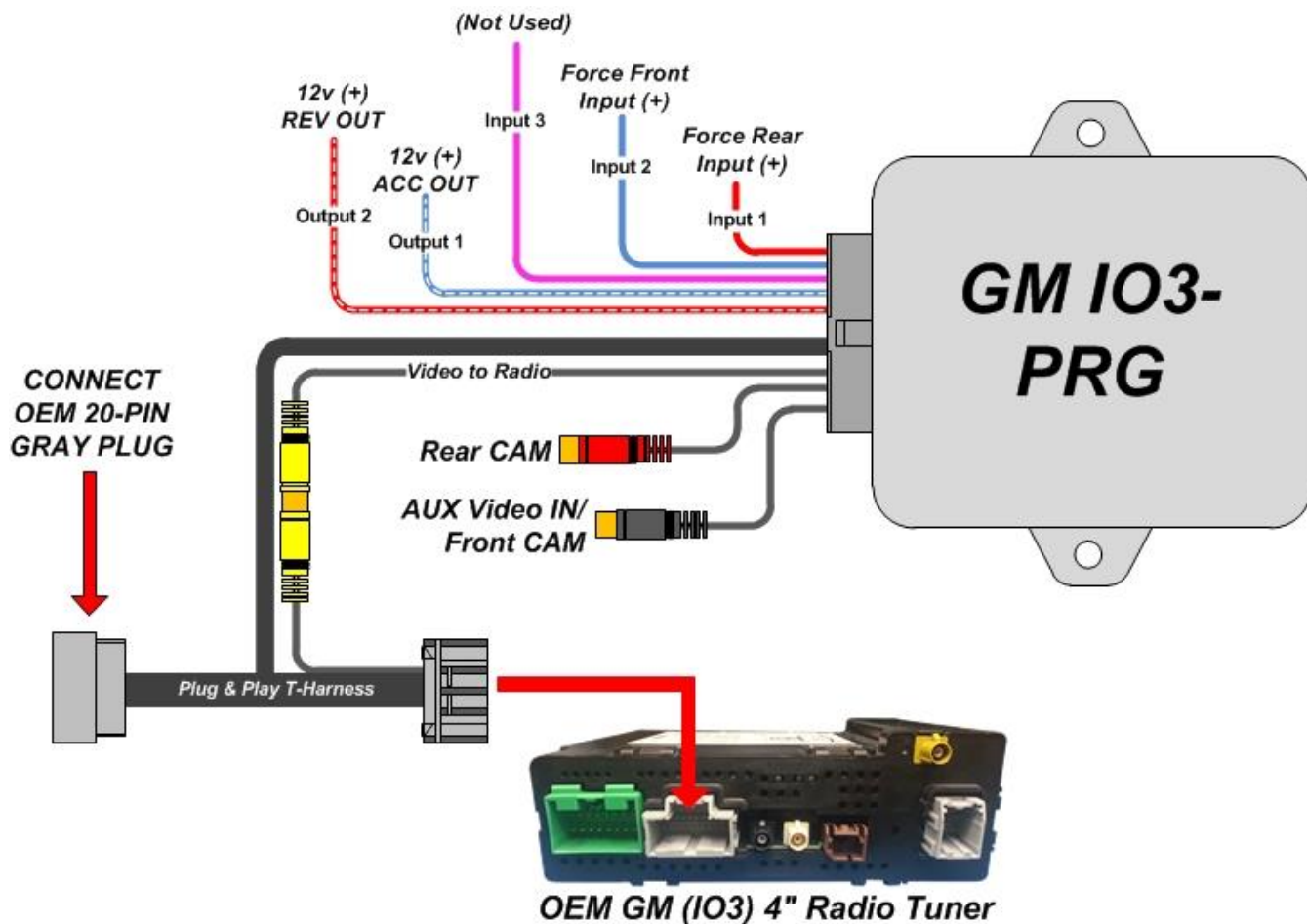


GM IO3-PRG installation

1. With the Gray 20-PIN plug disconnected, connect the male end of the provided **Plug & Play T-Harness** into the radio. Connect the factory 20-PIN plug to the female end of the Plug & Play T-Harness.



2. Mount camera(s) and run signal and power into the dash opening. If using the forced feature for either video source, make sure it's powered with **ignition and not a reverse light**.
3. Connect the reverse camera video signal to the RCA at the interface labeled 'REAR'.
4. **Optional:** connect the front camera or AUX video source to the RCA at the interface labeled 'FRONT'.
5. Connect the GM IO3-PRG Module to the 18-PIN connector among the provided **Plug & Play T-Harness**.
6. Connect the male side of the provided **Plug & Play T-Harness** to the radio tuner. Fully test unit before replacing panels.
7. Proceed to **GM IO3-PRG Programming & Operation** (Page 5).



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.

## GM IO3-PRG Programming & Operation

**DISCLAIMER: Do NOT disconnect the programmer during programming – this may result in complete radio brick (factory limitation). NAV-TV is not responsible for failure to comply with this rule.**

1. Once everything is connected, turn the vehicle on to **IGNITION**. The radio may show briefly and **then reboot**.
2. Once the radio is booted and settled after the programming sequence is complete, place the vehicle in Reverse. Your connected camera image will appear on screen while in reverse.

*Note: Refer to LED flash chart below for troubleshooting or verification of programming.*

*Note: Once the transmission leaves reverse gear, there may be a ~5 second delay on transitioning back to the radio screen. This is normal operation.*

- Sending 12v to **INPUT 1 through a toggle** will force the rear camera on at any time, in any gear.
- Sending 12v to **INPUT 2 through a toggle** will force the front camera (or aux video) on at any time.
- If Front Camera is active and the vehicle is placed in reverse, the reverse image will show (priority). Once placed back into Drive or Park, the Front Camera will show again if still activated.

## LED Flash Code Reference

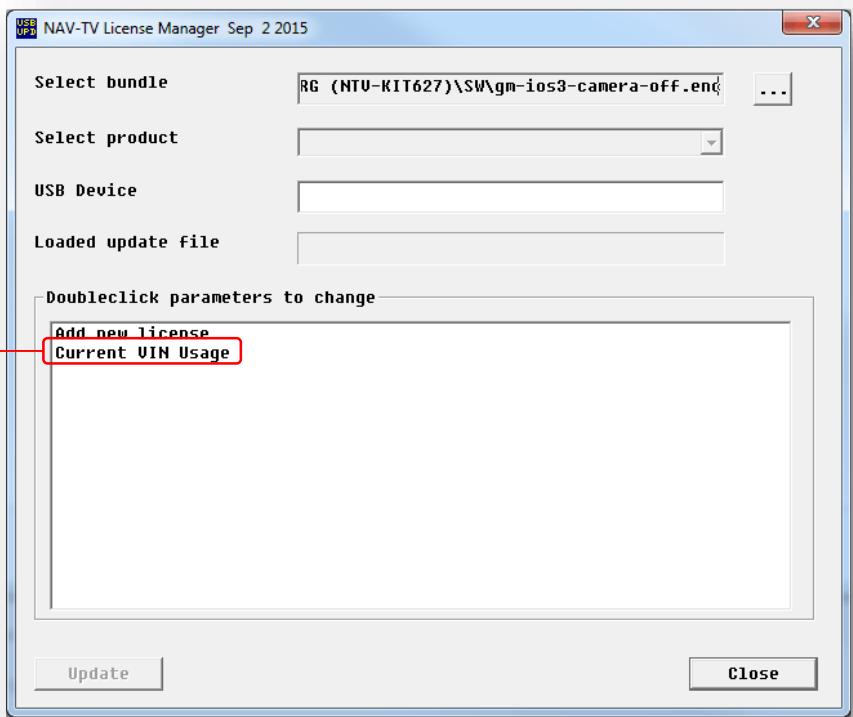
Use this chart if you'd like to follow along while the radio is being programmed, or for troubleshooting purposes.

LED Response	Description
1 flash	<b>Waiting for Ignition...</b> (Turn ignition to ON)
2 flashes	<b>Waiting for Vehicle VIN...</b>
3 flashes	<b>Query Vehicle</b> (Reading/decoding the VIN and vehicle components)
4 flashes	<b>Programming...</b>
5 flashes	<b>Programming Complete</b>
6 flashes	<b>No Programming Needed</b> (Already programmed)
7 flashes	<b>Radio Not Supported</b> (Verify this vehicle is equipped with <b>IO3 Radio Code</b> )
8 flashes	<b>Out of Licenses</b> (Contact NAV-TV to purchase more licenses)

GM IO3-PRG USB Updater

- To verify that this module has been installed previously, you may download the GM IO3-PRG proprietary USB Updater to check stored VIN's used previously, if any. The downloadable .ZIP file is located on the NAV-TV website: <https://navtv.com/products/category/2/back-up-camera-interface.html>.

Double-click to check VIN usage



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