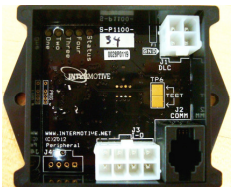
CAMxxx

2013-2017 RAM 1500-5500 (CAM751)
2018-2019 Ram 1500-5500 (A-CAM752-A)
2008-2017 GM Express (CAM610)
2014-2017 GM Silverado (CAM610)
2009-2017 Ford E-Series (CAM510)
2015-2017 Ford Transit (CAM515)
Contact InterMotive for specific applications



Introduction

The CAMxxx is a vehicle camera controller system which will turn on up to three cameras by providing three different 12V @ 1/2A signals when the ignition switch is in Run, and the appropriate camera conditions are met. The left and right side cameras will be enabled continuously when the respective turn signals are activated, and the rear back up camera will be enabled when the transmission is in Reverse. A fourth output goes active (Low) when the transmission is in Park and Park Brake is set, which can be used to interlock any desired vehicle functions.

Installation Instructions

Disconnect vehicle battery before proceeding with installation.

WARNING
Disconnect the battery to prevent setting a check engine light.

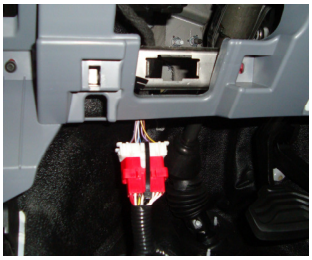
IMPORTANT—READ BEFORE INSTALLATION

It is the installer's responsibility to route and secure all wiring harnesses where they cannot be damaged by sharp objects, mechanical moving parts and high heat sources. Failure to do so could result in damage to the system or vehicle and create possible safety concerns for the operator and passengers. Avoid placing the module where it could encounter strong magnetic fields from high current cabling connected to motors, solenoids, etc. Avoid radio frequency energy from antennas or inverters next to the module. Avoid high voltage spikes in vehicle wiring by always using diode clamped relays when installing upfitter circuits.

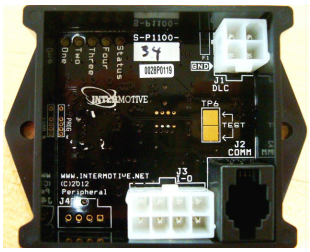
CAMxxx Module

Remove the lower dash panel below the steering column area and find a suitable location to mount the module. Locate the module in an area away from any high external heat sources (engine heat, heater ducts, etc.). Do not actually mount the module until all wire harnesses are routed and secure. The last step of the installation is to mount the module.

Data Link Harness



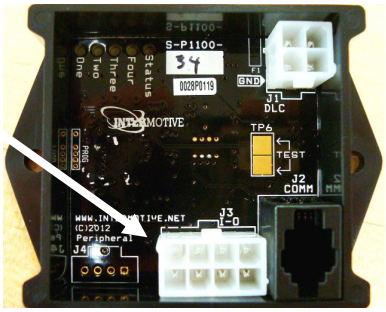
The provided CAM Data Link harnesses vary from model to model, depending on which chassis the CAM is being installed.



1. Locate the vehicles OBDII Data Link Connector. It will be located below the lower left dash panel.
2. Remove the OEM Data Link connector, and mate it to the CAM Data Link harnesses red connector. Ensure the connection is fully seated and secure with the supplied wire tie.
3. Mount the pass-through connector from the CAM Data Link Harness in the former location of the vehicle's OBDII connector.
4. Secure the CAM Data Link harness so that it does not hang below the lower dash panel.

CAM752 Only - The Red wire from pin 1 needs to be connected to a Hot in Run output.

8-Pin CAMxxx Connector Pin-Out Definition (Key in Run)



Pin #1 (White) Continuous Left Turn Output (High True)
Pin #2 (Blue) Continuous Right Turn Output (High True)
Pin #3 (Green) Transmission=Reverse Output (High true)
Pin #4 N/C
Pin #5 N/C
Pin #6 N/C
Pin #7 (Yellow) (Trans=Park)&(Park Brake=ON) Output (Low True)
Pin #8 N/C

Post Installation

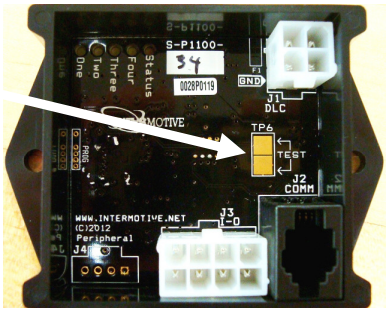
The following checks must be made after installation of the system, to ensure correct and safe operation. If any of the checks do not pass, do not deliver the vehicle. Recheck all connections as per the installation instructions.

1. Place the ignition switch in the Run position.
2. Ensure that the Right and Left camera's turn on with the Right/Left Turn Signals
3. Place transmission in Reverse and verify the back up camera turns on.
4. Place Transmission in Park and apply the Park Brake. Verify output is tracking conditions.
5. Turn the key to ACC/OFF and verify that all cameras turn off.

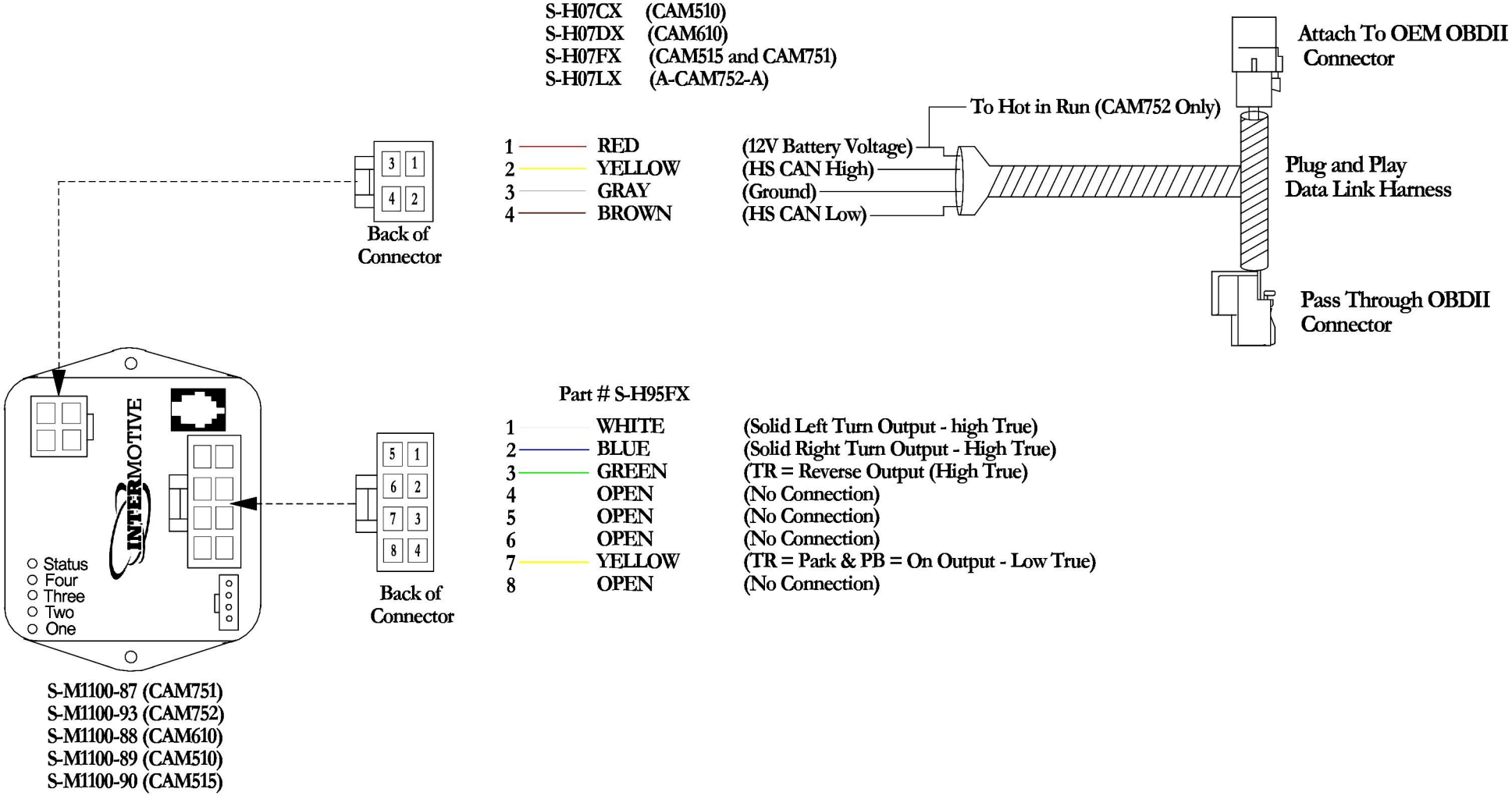
Diagnostics

Diagnostic mode can be helpful when debugging problems. It is entered by shorting the two "Test" pads together on the module while the Key is in Run. The module provides diagnostic LED's which illuminate according to the following table.

Settings	LED	ON	OFF
Trans=Reverse	LED1	True	False
(Trans=Park) & (Park Brake=ON)	LED2	True	False
Left Turn	LED3	Active	Inactive
Right Turn	LED4	Active	Inactive



S-H07CX (CAM510)
S-H07DX (CAM610)
S-H07FX (CAM515 and CAM751)
S-H07LX (A-CAM752-A)



S-M1100-87 (CAM751)
S-M1100-93 (CAM752)
S-M1100-88 (CAM610)
S-M1100-89 (CAM510)
S-M1100-90 (CAM515)

If the CAMxxx fails any step in the Post Installation Test, review the installation instructions and check all connections. If necessary, call InterMotive Technical Support at (530) 823-1048.