CAM807
Camera Aftermarket Module
2027 Blue Bird Vehicles

Introduction

The Camera Aftermarket Module (CAM) is a vehicle camera controller system which will turn on up to eight cameras by providing eight different 12V @ 1/2A signals when the ignition switch is in Run and the appropriate camera conditions are met.

Installation Instructions

Disconnect the battery before proceeding with the 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.

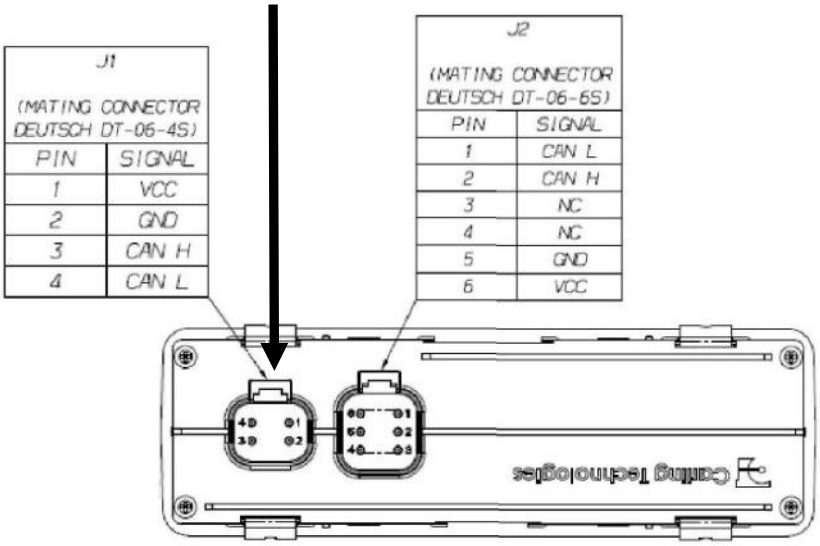
It is important to avoid placing the module where it could encounter strong magnetic fields from high current cabling connected to motors, solenoids, etc. Also avoid radio frequency energy from antennas or inverters next to the module. Finally, avoid high voltage spikes in vehicle wiring by always using diode clamped relays when installing upfitter circuits.

CAM807 Module

Remove the lower dash panel below the steering column and find a suitable location to mount the CAM807 module. Do not mount the module where it will be exposed to excessive heat. Do not mount the module until all wire harnesses are routed and secure. The last step of the installation is to mount the module.

6-Pin Connector (840-00239)

Locate the switch module installed on the driver's right hand side. There will be a 4-pin connector located behind the switch module. Plug the mating connector from the CAM807 harness (840-00239) into the 4-pin connector on the back of the switch module.



Connect the **Black wire** from the 6-Pin connector (840-00239) to a ground source.

Connect the **Red wire** from the 6-Pin connector (840-00239) to a hot at all times or hot in run +12V source.

Plug the 6-pin connector into the mating connector on the CAM807 module.

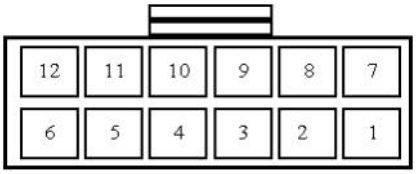
12 pin connector (S-H64AX) **pin-out definition**

This connector contains the CAM's 8 output pins. Each output is rated at 1/2A and is intended to drive relay coils or other low current loads. **Note: when driving relays, a diode-protected type must be used. InterMotive recommends DigiKey #PB682-ND Relay.**

The 8 outputs are defined as follows:

- Pin #1 (Purple wire) Front Door Open, Active High
- Pin #2 (Green wire) Red Warning Lights, Active High
- Pin #3 (White wire) Left Turn Signal, Active High
- Pin #4 (Gray Wire) Right Turn Signal, Active High
- Pins #5-6 are no-connects
- Pin #7 (Red Wire) fixed jumper to pin 12
- Pin #8 (Brown Wire) Yellow Warning Lights, Active High
- Pin #9 (Orange Wire) Service Brake, Active High
- Pin #10 (Blue Wire) TR = Reverse, Active High
- Pin #11 (Yellow Wire) Stop Arm Out, Active High
- Pin #12 (Red Wire) fixed jumper to pin 7

12 Pin IO

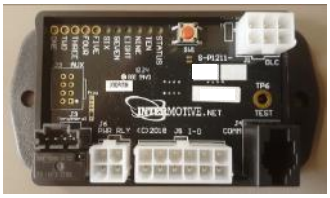


Back of Connector

Extend these output wires and connect to vehicle equipment as needed. Tape unused leads. When connecting to relays, use relays with appropriate kick-back suppression, such as Digikey #PB682-ND. Unsuppressed relays will induce very high voltage spikes throughout modern vehicle's sensitive computer electronics and should not be used, per Ford, GM, SAE, etc.

Reconnect the vehicle battery

CAM807 Module Mounting



Ensure all the harnesses are properly connected and routed, and are not hanging below the dash area. Locate the CAM807 module in an area away from any external heat sources (engine heat, heater ducts, etc.). Mount the module using two screws, Velcro, or double backed tape.

CAM Post Installation Testing

1. Turn the ignition ON to wake up and initialize the CAM807 module.
2. With the conditions met, ensure that the specific output has the desired output.

The CAM807 is properly installed only if it passes the above tests. If any irregular operational issues persist, recheck the data configuration.
Contact InterMotive at 530-823-1048 for technical assistance.

Diagnostics:

To enter diagnostic mode, momentarily press the Red "Test" button on the CAM807 printed circuit board while the ignition is on. The on-board LEDs will light when a corresponding load is active:

LED1 = Pin1	LED2 = Pin2	LED3 = Pin3	LED4 = Pin4
LED5 = Pin8	LED6 = Pin9	LED7 = Pin10	LED8 = Pin11

Output Trouble Codes:

If there is an issue with one of the CAM outputs, the status LED will flash a two digit code while in diagnostic mode. A 1-1 code means everything is working properly. The first digit will correspond to the output number and the second digit will indicate the specific problem. The second digit can be:

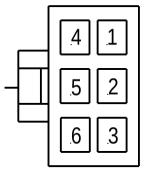
- 2 - Output fault (overcurrent or overvoltage)
- 3 - Invalid data (The data associated with the output is invalid)
- 4 - Data timed out (The data associated with the output has timed out)
- 5 - Unsupported data (The data associated with the output is not supported on the current vehicle)

CAM Operation:

Turning the vehicle ignition ON will wake up and initialize the CAM807 module.

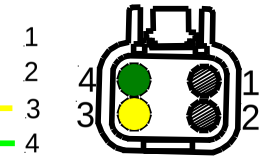
When the key is turned OFF, the CAM807 module will go into a low power sleep mode. This may take up to five minutes, and the LEDs on the module will go out once in sleep mode. Other vehicle activity such as opening doors, inserting key in the ignition, etc. may delay sleep mode.

Part # 840-00239

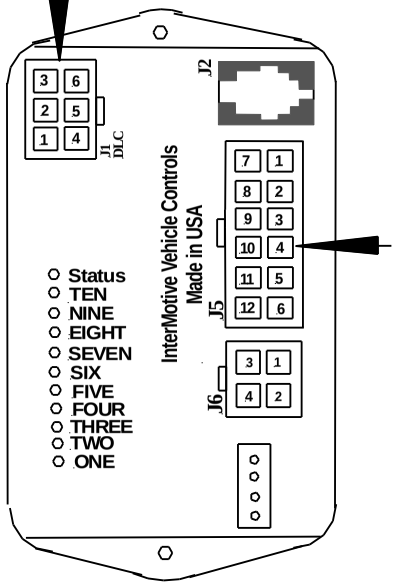


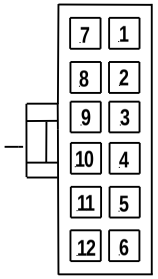
Back of Connector

1	RED	(Battery Voltage)
2	YELLOW	(CAN 1 High)
3	N/C	
4	BLACK	(Ground)
5	GREEN	(CAN 1 Low)
6	N/C	



Plug into the mating connector on the back of the switch module (See Instructions)





Back of Connector

Part # S-H64AX

1	PURPLE		Output 1 - Front Door Open (12V)
2	GREEN		Output 2 - Red Warning Lights (12V)
3	WHITE		Output 3 - Left Turn Signal (12V)
4	GRAY		Output 4 - Right Turn Signal (12V)
5	NOT USED		
6	NOT USED		
7	RED		
8	BROWN		Output 5 - Yellow Warning Lights (12V)
9	ORANGE		Output 6 - Service Brake (12V)
10	BLUE		Output 7 - TR = Reverse (12V)
11	YELLOW		Output 8 - Stop Arm Out (12V)
12	RED		

CAM807

Part # 820-1211-264

Submit product registration at www.intermotive.net

If the CAM fails any step in the Post Installation Test, review the installation instructions and the loaded configuration by running the Graphical User Interface application. If necessary, call **InterMotive technical support @ (530) 823-1048.**