

## **SMM601 Surveillance Mode Module™**

2015-2016 Chevy Tahoe SSV and PPV (U.S. Vehicle Only)  
2017\* Chevy Tahoe PPV Only (U.S. Vehicle Only)



\* The SMM601 will only work properly on a 2017 Chevy Tahoe PPV if the BCM has been updated with Service Update #17189 (May, 2017). To confirm if the BCM has been updated, open and close a rear door before or during operation of the vehicle. Turn the ignition to the On position and then turn the ignition Off. If a chime sounds and a driver information center (DIC) message "Look in Rear Seat" appears on the cluster, the update has **not** been completed.

### **Introduction**

The SMM601 for Chevy Tahoe uses the vehicle's OEM Back up sensors and camera to inform an officer if anyone is behind the vehicle. Anytime Surveillance Mode is active, the reverse sensors will be turned on. If any of the sensors are tripped while in Surveillance mode, the system will turn on the Rear View Display, a chime will activate indicating a sensor has been tripped, all the door's will lock, the driver's window will roll up, and the reverse lights will turn on.

### **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.

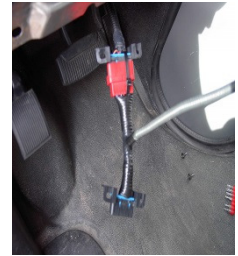
It is important to avoid placing the module where it could encounter strong magnetic fields from high current cabling connected to motors, solenoids, etc. Also avoid radio frequency energy from antenna's or inverters next to the module. Finally, avoid high voltage spikes in vehicle wiring by always using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

### **SMM601 Module**

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

## Data Link Harness

1. Locate the vehicle OBDII Data Link Connector. It will be mounted below the lower left dash panel.
2. Remove the mounting screws for the OBDII connector. Plug the Red connector from the SMM601 Data Link Harness into the vehicle's OBDII connector. Ensure the connection is fully seated and secure the connectors together with the supplied wire tie.
3. Mount the Black pass-through connector from the SMM601 Data Link Harness in the former location of the vehicle's OBDII connector.
4. Secure the SMM601 Data Link harness so that it does not hang below the lower dash panel.
5. Plug the free end of the Data Link harness into the mating 6-pin connector on the SMM601 module.



## 16w Minifit Jr (Red Jumpers)

Connect S-H30EX red wire connector into 16-pin connector.

**WARNING DO NOT USE BLACK WIRE JUMPER VERSION!**



**16 Pin Connector Connector**

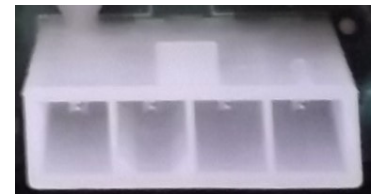
## 4w Minifit Jr

Pin #1 - Green/White wire to momentary low true input to enable Surveillance mode. (momentary switch not included in kit)

Pin #2 - Not Used

Pin #3 - Not Used

Pin #4 - Not Used



**4 Pin MiniFit Connector**

## 4W SABRE Outputs for Rear Lights

Surveillance mode will provide 12 Volt Outputs Rated at 2 Amps each.

## SMM Outputs

Pin 1: SMM Enabled Output (Yellow Wire)

Pin 2: SMM Tripped Output (Orange Wire)

Pin 3: Shift Lock Solenoid Output (Blue Wire)



**4 Pin Sabre Connector**

## 4W SABRE Pin-out Definition

This connector contains the Surveillance Mode output pins. Each output is rated at 2A and is intended to drive low current loads.

### SMM Outputs

Pin 1: SMM Enabled Output (Yellow Wire)

Pin 2: SMM Tripped Output (Orange Wire)

Pin 3: Shift Lock Solenoid Output (Blue Wire)



**4 Pin Sabre Connector**

### Output Installation

#### SMM Enabled Output

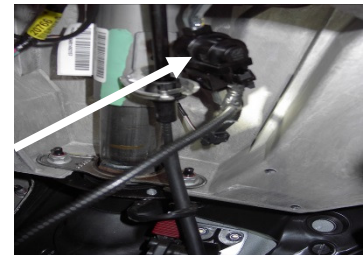
This output will be active when Surveillance Mode is enabled. This is intended to drive an LED to inform the user the module is in Surveillance Mode. The LED is not included in kit. All preconditions must be met before activating Surveillance Mode. Refer to page 6.

#### SMM Tripped Output

This output will be active when one of the OEM back up sensors are tripped when in Surveillance mode. This is intended to drive LED's, the light bar, or other vehicle equipment.

#### Installation of Shift Lock Solenoid Harness

1. Remove the lower steering column trim cover.
2. Locate the OEM shift lock solenoid to the right side of the steering column.
3. Remove the OEM 2-pin black connector.
4. Locate the Black T-harness Blue wire Pin 3 of the 4 pin connector.
5. Plug the Black connectors into the Shift Lock Solenoid.
6. Verify locking tabs are in the locked position.



The Chevy Tahoe has an Auto Lock/Unlock feature that will control the door lock when shifting in and out of Park. This feature must be turned off for Surveillance mode to function properly.

### Removing Auto Door Lock/Unlock

1. Press the "Home Button".
2. Scroll to the Settings tab using the Menu Wheel and press the "Menu" button to enter.
3. Scroll to the "Vehicle" tab and press "Menu" to enter.
4. Enter "Power Door Locks" , then "Auto Door Locks" and select "OFF".
5. Press "Back button" to return to previous menu.
6. Scroll to "Auto Door Unlocks" and press "Menu" to enter. Then select "OFF".
7. Shift in and out of park and verify door locks aren't automatic.



Menu Wheel

## **Surveillance Mode Post Installation Instructions**

Preferably test with two people so one person can activate the rear sensors.

1. Place car in Park, close the driver door, and do not apply the Service Brake.
2. Put the driver and passenger door windows all the way down and unlock doors.
3. Apply Surveillance Mode input.
4. Have one person trip the sensors by walking behind the vehicle.
5. Verify that the window goes up, all doors lock, and the reverse 'back-up' lights flash.
6. Verify rear camera display turns on.
7. Open driver door to exit surveillance mode and verify rear camera turns off and the reverse lights shut off.

If the SMM601 fails any step in the Post Installation Test, call InterMotive Technical Support at (530) 823-1048.

### **SMM601 Module Mounting**

Ensure all harness are properly connected and routed, and are not hanging below the dash area. Mount the SMM601 module using screws or double sided tape. Reinstall the lower dash panel.

**Leave in Vehicle  
Operating Instructions  
SMM601 Surveillance Mode Module™**  
2015-2016 Chevy Tahoe SSV and PPV (U.S. Vehicle Only)  
2017 Chevy Tahoe PPV Only (U.S. Vehicle Only)

**Introduction**

Surveillance Mode uses the Rear Backup sensors and/or Blind Spot Information System (BLIS) and the Backup Camera. If any of the sensors detect a presence while in Surveillance Mode, the vehicle will chime indicating which sensor tripped, and then the SMM will lock the doors and roll the driver's window up when Ground is momentarily applied to Pin 1 on the 4 pin connector (J6). Surveillance Mode will still be active after a sensor is tripped to allow the backup camera to stay on. To enter Surveillance Mode, ALL preconditions must be met:

- Transmission must be in park.
- Vehicle speed must be zero.
- Driver door must be closed.
- Service Brake must not be applied.
- Momentarily ground the Green/White wire Pin 3 on the 4 pin connector.

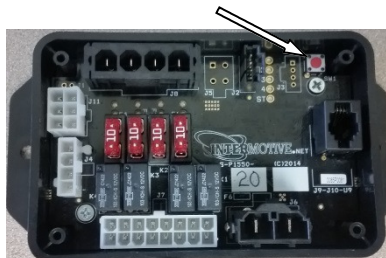
To exit Surveillance Mode, any condition may be applied:

- Pin 3 of the 4 pin connector Green/White wire momentarily grounded.
- Driver door is opened.
- Service brake is pressed.

**Diagnostics**

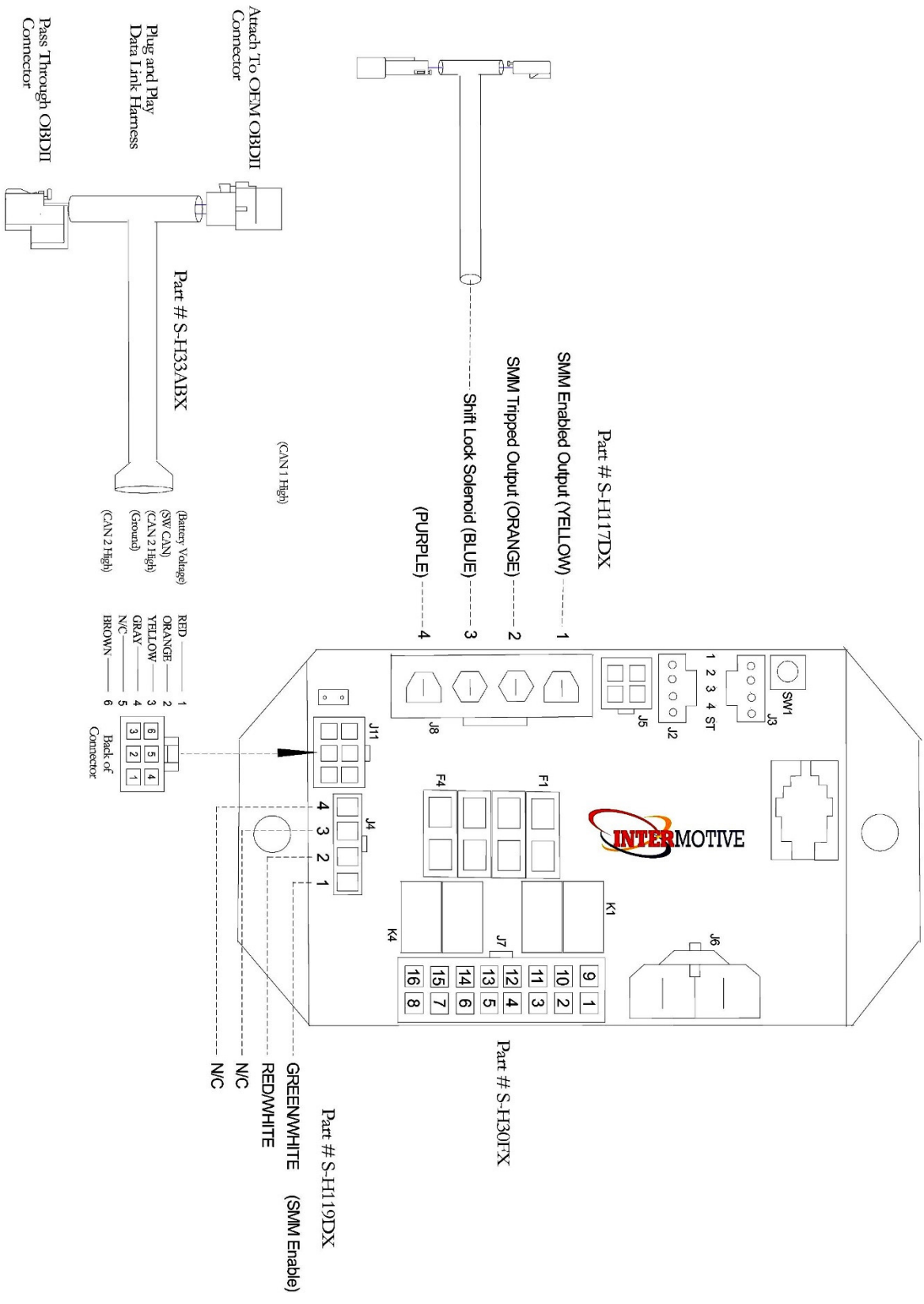
Diagnostic mode is entered by pressing the test button on the module. The module provides diagnostic LED's which illuminate according to the following table. There are multiple pages of diagnostics and the page can be determined by the Status LED. Pressing the test button will cycle through the different pages.

| STATUS LED | 1-1            | 2-2             | 3-3          | 4-4          | 5-5          |
|------------|----------------|-----------------|--------------|--------------|--------------|
| LED 1      | TR=PARK        | Internal use    | Internal use | SMM Ready    | Internal use |
| LED 2      | Service Brake  | VSS<2           | Internal use | SMM Enabled  | Internal use |
| LED 3      | Driver Door    | Reverse Sensors | Internal use | SMM Tripped  | Internal use |
| LED 4      | Passenger Door | n/a             | Internal use | SMM REV only | Internal use |



U.S. Patent #9,469,261





**Submit product registration at [www.intermotive.net](http://www.intermotive.net)**

If the SMM fails any step in the System Operation Test, review the installation instructions and check all connections.  
 If necessary, call Intermotive Technical Support at (530) 823-1048