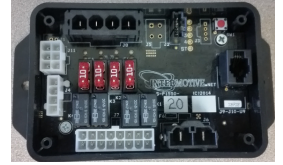


## **A-PIM602-A (Police Interceptor Module)**

2015 - 2016 Chevy Tahoe SSV and PPV (U.S. Police Vehicle Only)

2017\*-2018 Chevy Tahoe PPV Only (U.S. Police Vehicle Only)



\* The PIM602 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 Police Interface Module is intended to provide the Chevy Tahoe with multiple desired functions within a single module. The Blackout Mode feature has the ability to eliminate all exterior lighting to aid in covert operations. When activated, it will eliminate the parking lamps, reverse lights, Service Brake lights, and the daytime running lights. It utilizes the Tahoe's "Surveillance Feature" to eliminate the interior lights. Maximum speed can be set between 5-20 mph to automatically return brake lights for safety purposes.

The Surveillance Mode feature 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 and a chime 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.

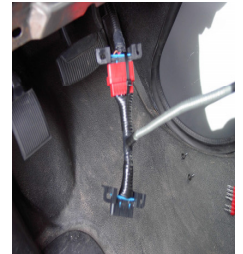
It is important to avoid placing the module where it could encounter strong magnetic fields from high current cabling connected to motors, solenoids, etc. Also avoid radio frequency energy from antenna's or inverters next to the module. Finally, avoid high voltage spikes in vehicle wiring by always using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

## PIM602 Module

Remove the lower dash panel below the steering column area and find a suitable location to mount the PIM 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 PIM602 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 PIM602 Data Link Harness in the former location of the vehicle's OBDII connector.
4. Secure the PIM602 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 PIM602 module.



### 16w Minifit Jr (Red and Black Jumpers)

Connect S-H30FX connector into the 16-pin connector on module.

Grey Wire - Pin 1, Connect the male bullet to the female bullet (Grey Wire) from the included **lighted** momentary push button (photo on page 3).

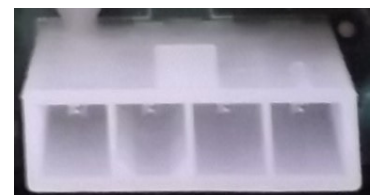


Black Wire - Pin 3, Connect the female bullet to the male bullet (Black Wire) from the included momentary **non-lighted** push button (photo on page 3).

### 4w Minifit J

Connect S-H119HX connector into the mating 4-pin connector on module.

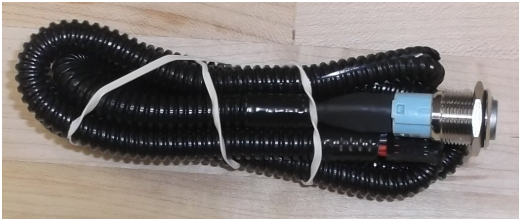
Green/White wire - Pin 1, connect the male bullet to the female bullet (Green White wire) from the included **lighted** momentary push button (photo on page 3).



Violet/White wire - Pin 2, connect the female bullet to the male bullet (Violet/White wire) from the included momentary **non-lighted** push button (photo on page 3).

## Momentary Push Buttons

Drill a 16mm (0.630") hole in the desired mounting location. Route the momentary push button harness through the hole and mount the button in the hole. Connect the bullets to the mating bullets from the PIM602 module.



**Lighted Switch**



**Non-Lighted Switch**

## 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: Connect the male bullet to the female bullet (Yellow wire) from the included **lighted** momentary push button (photo above).

Pin 2: SMM Tripped Output (Orange Wire).

Pin 3: Shift Lock Solenoid Output (Blue Wire).



**4 Pin Sabre Connector**

### BOM Output

Pin 4: BOM Output (Purple) Ground (instructions on page 4).

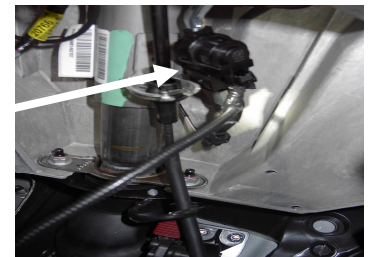
## Output Installation

### SMM Tripped Output (Pin 2)

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, light bar or other vehicle equipment.

### Installation of Shift Lock Solenoid Harness (Pin 3).

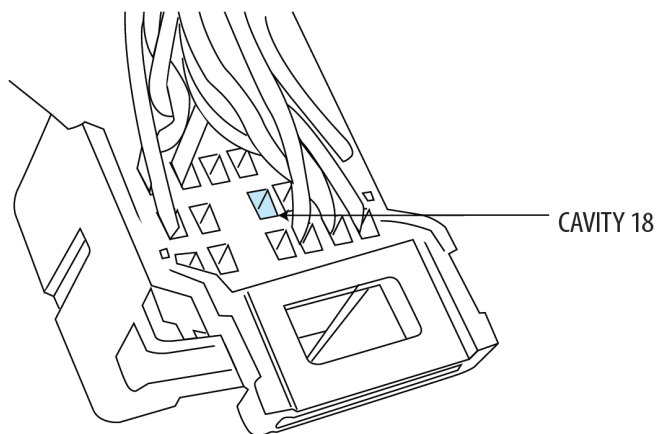
1. Remove the lower steering column trim cover.
2. Locate the OEM shift lock solenoid to the right side of the steering column.
3. Remove the OEM 2-pin black connector.
4. Locate the Black T-harness Blue wire Pin 3 of the 4 pin connector.
5. Plug the Black connectors into the Shift Lock Solenoid.
6.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



## BOM Output

The BOM output (pin 4) must be hooked up to the Tahoe Surveillance feature which disables exterior and interior lighting.

1. Locate the Light Blue colored BCM connector near the service brake.
2. Take the Purple wire included in the kit and place in cavity 18 as shown below.
3. Ground wire and verify the cluster dims.
4. Securely route the wire to the Blackout output Pin4 of the 4 pin black connector.



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 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, select "OFF"
7. Shift out in and out of park and verify door locks aren't automatic.



## 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. Push the **lighted** momentary button.
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 it fails any step in the Post Installation Test, call InterMotive Technical Support at (530) 823-1048.

## Blackout Mode Post Installation Instructions

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

1. Turn ignition key on (to "Run").
2. Apply the Parking Brake and Turn Off all lights (High Beams, Low Beams, and Parking Lights).
3. Press the **non-lighted** momentary push button.
4. Blackout output (Purple) will be Ground, verify cluster dims.
5. Hold Service Brake and verify the Brake lights are disabled.
6. Turn on Low Beams , Blackout output (Purple) will be floating.
7. Hold Service Brake and verify the Brake Lights are ON.
8. Turn Off all lights (High Beams, Low Beams, and Parking Lights).
9. Press the **non-lighted** momentary push button.
10. Blackout output (Purple) will be Ground
11. Place transmission in Reverse and verify the reverse lights are not ON.
12. Turn on Low Beams and Cluster lights will turn back on
13. Verify that the Reverse Lights are On.

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

## PIM602 Module Mounting

Ensure all harnesses are properly connected and routed, and are not hanging below the dash area. Mount the PIM602 module using screws or double sided tape. Reinstall the lower dash panel.



# Surveillance Mode

## SMM Input

- The Green/White wire (Pin 1 of the 4 pin connector) input is used to enable Surveillance Mode. The wire is connected to the included lighted momentary push button.

## SMM Tripped Output (Pin 2)

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

## Surveillance Mode Operating Instructions:

To enter Surveillance Mode, ALL five 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.
- Push the **lighted** momentary button.

To exit Surveillance Mode, any condition may be applied:

- Push the **lighted** momentary button.
- 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 LEDs 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	Low Beams	SMM Ready	Blackout Enabled
LED 2	Service Brake	VSS<2	High Beams	SMM Enabled	Blackout Disabled
LED 3	Driver Door	Reverse Sensors	VSS < Max Speed	SMM Tripped	Not used
LED 4	Passenger Door	n/a	Speed Cancel	SMM REV only	Not used

## Blackout Mode

- The PIM602 has the ability to eliminate all exterior lighting to aid in covert operations. This includes parking lamps, reverse lights, and Service Brake lights. Its intended use is for Police Chevy Tahoe's. A maximum speed can be set to automatically return brake lights for safety purposes.

### Blackout Input

- The included non-lighted momentary button attached to the Violet/White wire (Pin 2 of the 4 pin connector) is used to enable Blackout Mode.

### Blackout Status Output

- The Purple wire will be ground when Blackout mode is active. Connect to BCM (see instructions on Page 4)

### Blackout Mode Operating Instructions

To enter Blackout Mode. ALL five preconditions must be met.

- Headlamp Switch must be in the OFF position.
- Speed must be below configured maximum speed (5-20).
- Low Beams, High Beams, Parking Lamps must be turned off.
- Press the non-lighted button attached to the Violet/White wire (pin 2 of the 4 pin connector).

### **Blackout Output will be Ground when Blackout Mode is active.**

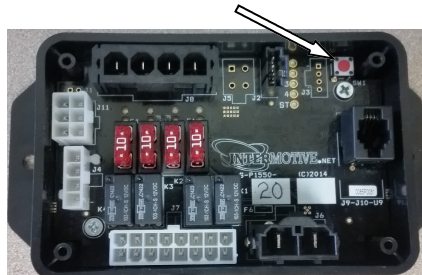
To exit Blackout Mode any condition may be applied:

- Turn on any lights (DRL, Low, High, Parking).
- Vehicle is moving above maximum speed.

### Diagnostics

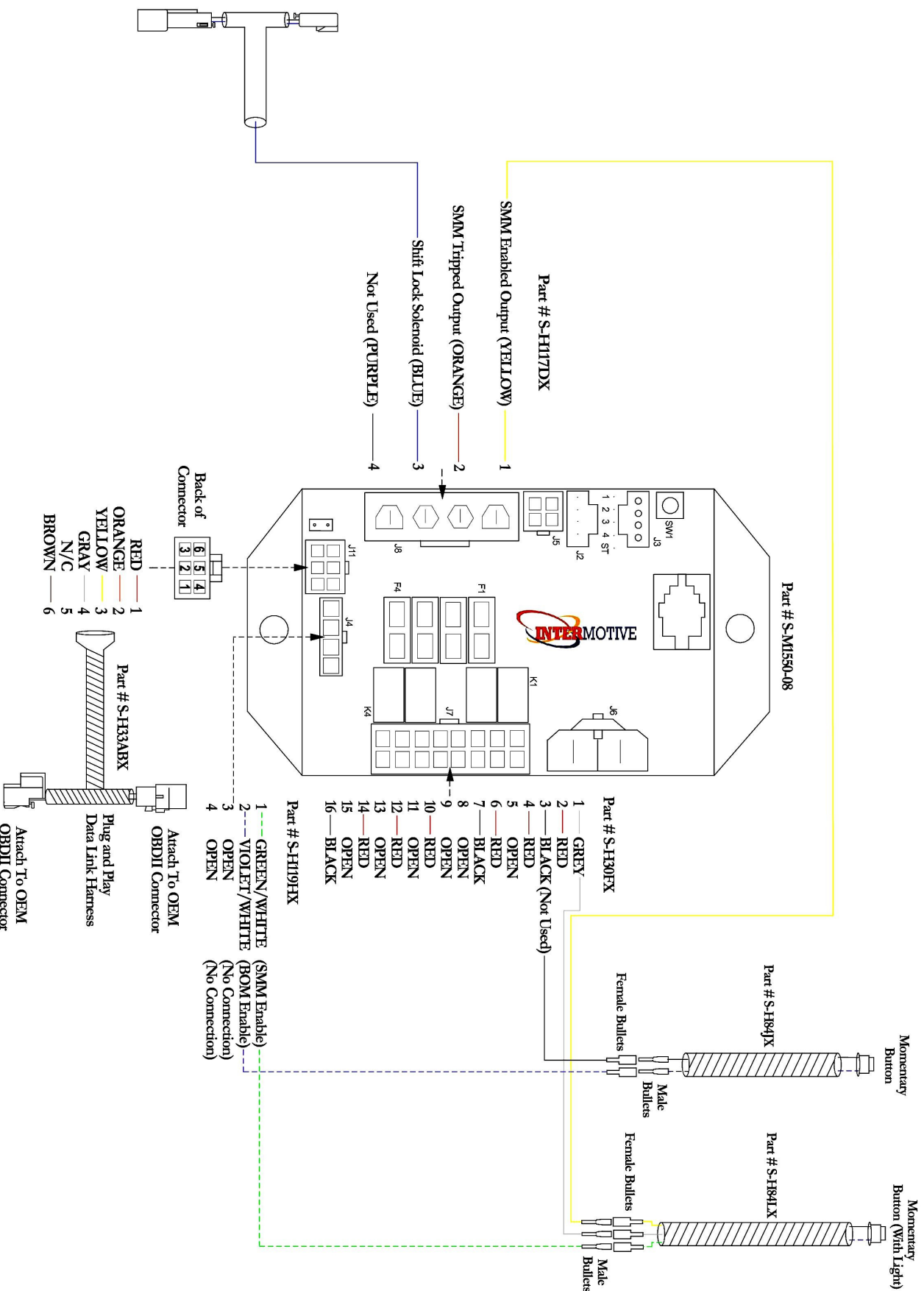
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LED 3	Driver Door	Reverse Sensors	VSS < Max Speed	SMM Tripped	Not used
LED 4	Passenger Door	n/a	Speed Cancel	SMM REV only	Not used



U.S. Patent #9,469,261





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

If the PIM 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