

# General Motors OnStar® Interface Installation Instructions.



The OS-2 is a plug and play interface that allows replacement of a General Motors Class II factory stereo and maintain operation of the OnStar® system. The OS-2 has on board switching, and amplification to allow audio from the OnStar® system to play through the two front factory speakers when OnStar® is active, and mute the new replacement radio. Retains door chimes when used with PAC's optional CM1 chime module. The OS-2 can also be used when a stereo and amplifier combination system is installed. Separate speakers can be added if desired.

- Safe & Sound Class II circuitry will not disable vehicle data bus even if interface loses power.
- OnStar® active LED and Ignition on LED
- · Volume adjustment for OnStar® Audio

2003-2007 Savana, Express

2003-2007 Ascender

- Provides +12v switched accessory output. No more searching for switched +12v in fuse box or kick panel.
- Smart Sense Mute output to either mute the aftermarket radio or to turn if off when OnStar® is active.
- New radio will operate with the vehicle RAP (Retained Accessory Power) system. The radio stays on after the key is turned off and stays on for approximately 10 minutes or until a door is opened.

#### Note:

1. The OS-2 does not retain the factory XM receiver, rear seat controls/headphones or rear seat DVD. You will lose these options when the factory radio is replaced with an aftermarket radio.

Supported Vehicles

2000-2005 Impala, Monte Carlo	2003-2006 Sierra, Silverado
2001-2005 Montana, Venure, Silhouette	2004-2007 Rainier
2002-2004 Bravada	2004-2008 Grand Prix
2002-2008 Envoy, TrailBlazer	2006-2007 Terreza, Montana SV6, Uplander

2007 Sierra Classic, Silverado Classic 2006-2008 H3

Note: This interface can be used in vehicles with BOSE listed below, only if the BOSE amplifier is not used. 2003-2006 Avalanche, Escalade, Sierra Denali, Suburban, Tahoe, Yukon Denali, Yukon SLT, 2002-2007 TrailBlazer, Envoy, H2

#### Installation

There are two installation options for the OS-2. Select one of the options below.

**Option 1**: Connect aftermarket stereo to factory speakers.

Option 2: Connecting aftermarket stereo to aftermarket amplifier and using external speakers for OnStar®.

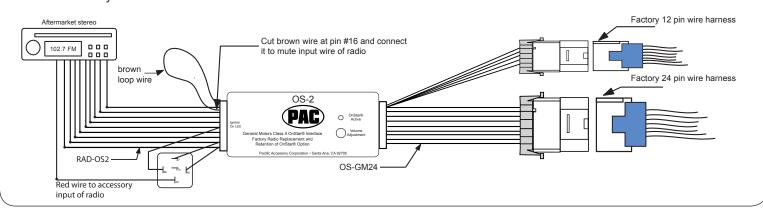
# OPTION 1: Connecting the aftermarket stereo and OS-2 to the vehicle's factory speakers.

### Step 1.

Pre wire the RAD-OS2 wire harness to the aftermarket stereo wire harness. If the aftermarket stereo has a mute wire, cut the brown wire as close as possible to pin #16 of the RAD-OS2 and connect it to the stereo's mute wire.

#### Step 2.

After connecting the RAD-OS2 and OS-GM24 wire harness to the OS-2 main interface, connect the OS-GM24 connector to the factory harness.



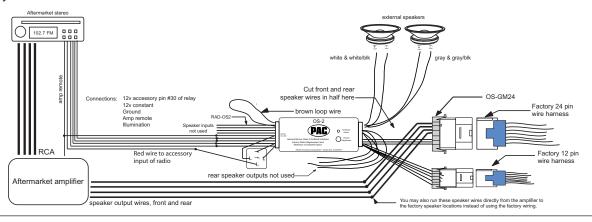
# OPTION 2: Connecting OnStar® and OS-2 to external speakers and aftermarket amplifier.

#### Step 1.

You will need to cut the speaker wires (white & wht/blk, gray & gray/blk, purple & prp/blk, green & grn/blk) in half on the OS-GM24 wire. Connect the front two pair of wires on the output side of the OS-2 to external speakers while observing polarity. The front and rear speaker inputs will not be used on the RAD-OS2 connector. Connect the rest of the aftermarket wire harness to the inputs of the RAD-OS2 harness. If the aftermarket stereo has a mute wire, cut the brown wire as close as possible to pin #16 of the RAD-OS2 and connect it to the stereo's mute wire. Connect the aftermarket amplifier speaker outputs to the OS-GM24 speaker wires on the 24 pin connector. If you do not want to use the factory wiring for the speakers, you can run new speaker wires from the amplifier to the speaker locations. If you are bypassing the BOSE amplifier, you will need to run speaker wires from the aftermarket amplifier directly to the speakers.

#### Step 2.

After connecting the RAD-OS2 and OS-GM24 wire harness to the OS-2 main interface, connect the OS-GM24 connector to the factory harness.



# Testing and Verifying Operation

- 1. Turn ignition on. The green ignition On LED on the side of the interface will turn on and the +12v accessory wire will turn on.
- 2. Turn on the radio and check balancing and fading.
- 3. Pressing the OnStar® button will mute or turn off the new radio, and allow the audio to be heard out of the two front speakers. The OnStar® active red LED will also turn on. When OnStar® disconnects, the radio will un-mute or turn back on and the OnStar® LED will turn off.
- 4. Turn off vehicle and remove key. RAP will be active and keep the radio on for 10 minutes or until a door is opened.
- 5. The green LED and radio will turn off.

### NOTES:

# Oil Life System Reset Procedures Using Accelerator Pedal.

- 1. Turn the ignition to ON, with the engine off.
- 2. Fully press and release the accelerator pedal three times within five seconds.
- 3. If the CHANGE ENGINE OIL light message flashes, the system is reset. However, if it stays on, it did not reset. You'll need to refer to the vehicle's owners manual or your local GM dealership.

DISCLAIMER: Under no circumstances shall the manufacturer or the distributors of the OS-2 parts be held liable for consequential damages sustained in connection with the OS-2. The manufacture and it's distributors will not, nor will they authorize any representative or any other individual to assume obligation or liability in relation to the OS-2 other than its replacement.

# Looking from wire side of plugs

### 16 pin OS-GM24 output harness

WIRE COLOR	CIRCUIT	PIN NUMBER		CIRCUIT	WIRE COLOR
ORANGE	ILLUMINATION	8	16	N/A	
PURPLE/WHT	CLASS II DATA	7	15	12 CONSTANT	YELLOW
BLACK	GROUND	6	14	Amplifier remote	BLUE
PURPLE/BLK	RIGHT REAR (-)	5	13	RIGHT REAR (+)	PURPLE
GREEN/BLK	LEFT REAR (-)	4	12	LEFT REAR (+)	GREEN
BROWN/WHT	OnStar Mono(-)	3	11	OnStar Mono(+)	PURPLE/WHT
GRAY/BLK	RIGHT FRONT (-)	2	10	RIGHT FRONT (+)	GRAY
WHITE/BLACK	LEFT FRONT (-)	1	9	LEFT FRONT (+)	WHITE

# 18 pin RAD-OS2 Input harness

WIRE COLOR	CIRCUIT	PIN NUMBER		CIRCUII	WIRE COLOR
WHITE/BLACK	LEFT FRONT(-)	9	18	MUTE OUTPUT (-)	BROWN loop
GRAY/BLACK	RIGHT FRONT (-)	8	17	LEFT FRONT (+)	WHITE
GREEN/BLACK	LEFT REAR (-)	7	16	MUTE Sense input	BROWN loop
PURPLE/BLACK	RIGHT REAR (-)	6	15	RIGHT FRONT (+)	GRAY
BLACK & Relay #85	GROUND	5	14		
BLUE	N/A	4	13	LEFT REAR (+)	GREEN
ORANGE	ILLUMINATION	3	12	CHIME MODULE	
BLUE/WHITE	AMP TRIGGER	2	11	RIGHT REAR (+)	PURPLE
RED Relay #86	Relay control #86	1	10	12V CONSTANT	YELLOW & Relay #87