



# OS-311

## General Motors OnStar® Interface Installation Instructions For GMLAN 11bit Vehicles



The OS-311 is a plug and play interface that allows replacement of a General Motors GMLAN factory radio. It will maintain operation of the OnStar® system. The OS-311 has on board switching and audio amplifiers which allow audio from the OnStar® system to play through the two front factory speakers when OnStar® is active. This interface retains all warning chimes, the audible turn signal indicators, and provides a 12v R.A.P. (Retained Accessory Power) output circuit.

- OnStar® active LED and Ignition on LED.
- Provides +12v switched accessory output. No more searching for switched +12v in fuse box or kick panel.
- Steering wheel radio controls can be retained to control the new radio by using the SWI - X, JACK, ECL or PS.
- New radio will operate with the vehicle RAP (Retained Accessory Power) circuit. The radio stays on after the key is turned off and stays on for approximately 10 minutes or until the drivers door is opened.

### Notes

1. The OS-311 does not retain the factory XM receiver. You will lose the XM option when the factory radio is replaced with an aftermarket radio.
2. If you are not retaining the OnStar® system, use the C2R-GM11 instead of this OS-311 interface.
3. Built in Smart Mute Circuitry will play OnStar® audio through the front speakers while muting the radio or turning the radio off if a mute input circuit is not present

### Supported Vehicles

The Following General Motors Vehicles using the GMLAN 11bit Data Bus with or without a Factory Amplifier.

- Pontiac:** G5 (2007) Solstice (2006-2007)  
**Saturn:** Aura (2007) Sky (2007)  
**Chevrolet:** Cobalt (2007) HHR (2006-2007)

### Installation

- Step 1-** Pre wire the OS-3RAD wire harness to the aftermarket stereo wire harness.  
**Step 2-** After connecting the OS-3RAD and OS-LAN11 wire harness to the OS-311 main interface, connect the OS-LAN11 connector to the factory harness.

**Note:** Connect the Purple/White wire (pin 18) from the OS-3RAD to the radios mute input. If a mute input is not available, connect the Purple/White wire (pin 18) to the Red/White wire (pin 16) of the OS-3RAD connector.

The Lt. Green wire is a SWC output. Connect this wire to a SWI - X, JACK, ECL, or PS green interface wire. The interface will need to be programmed for version 1. Do not cut the brown loop. Use the Step by Step programming instructions included with the SWI interface.

## Wire locations and Description

### OS-3RAD

WIRE COLOR	CIRCUIT	PIN NUMBER	CIRCUIT	WIRE COLOR	
White/Black	Left Front(-)	9	18	Mute Output	Purple/White
Grey/Black	Right Front (-)	8	17	Left Front (+)	White
Green/Black	Left Rear (-)	7	16	Mute Sense	Red/White
Purple/Black	Right Rear(-)	6	15	Right Front (+)	Grey
Black	Ground	5	14	Chime Module	To CM - X
N/A	N/A	4	13	Left Rear (+)	Green
Orange	Illumination	3	12	Chime Module	To CM - X
Blue/White	Amp Turn On	2	11	Right Rear (+)	Purple
Red	+12v Accessory Output	1	10	+12v Constant	Yellow

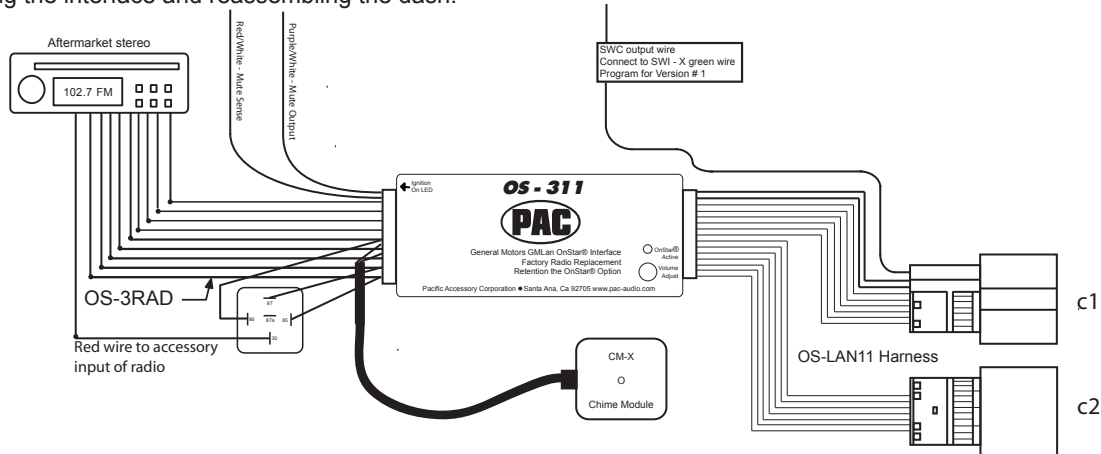
### OS-LAN11

WIRE COLOR	CIRCUIT	PIN NUMBER	CIRCUIT	WIRE COLOR	
Orange	Illumination	8	16	Amp Control	Black/White
Purple/White	GMLAN	7	15	+12v Constant	Yellow
Black	Ground	6	14	Amplifier Turn On	Blue/White
Purple/Black	Right Rear (-)	5	13	Right Rear (+)	Purple
Green/Black	Left Rear (-)	4	12	Left Rear (+)	Green
White/Brown	OnStar Mono(-)	3	11	OnStar Mono(+)	White/Purple
Grey/Black	Right Front (-)	2	10	Right Front (+)	Grey
White/Black	Left Front (-)	1	9	Left Front (+)	White

## Connecting to the Vehicle's Factory Speakers

**Step 3-** The CM-X should be plugged into the white 2-pin connector and permanently mounted. This module will retain all warning chimes and audible turn signal indications. There is no volume adjustment for this feature so keep that in mind when choosing a mounting location.

**Step 4-** The OnStar® volume is controlled from the adjustment screw on the interface. Make sure this is set to the desired level before mounting the interface and reassembling the dash.

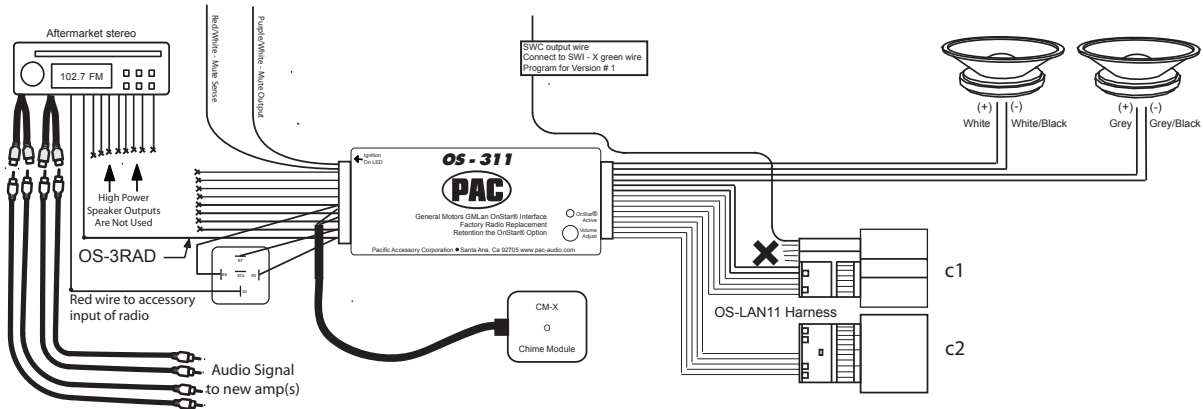


## Connecting to External Speakers

**Step 3-** The CM-X should be plugged into the white 2-pin connector and permanently mounted. This module will retain all warning chimes and audible turn signal indications. There is no volume adjustment for this feature so keep that in mind when choosing a mounting location.

**Step 4-** The OnStar® volume is controlled from the adjustment screw on the interface. Make sure this is set to the desired level before mounting the interface and reassembling the dash. The OS-3RAD speaker inputs will not be used.

**Note -** This configuration is used when aftermarket amplifier(s) are installed to power new or existing speakers.



## Testing and Verifying Operation

1. Turn ignition on. The red ignition On LED inside 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 turn off the radio (or mute it depending on the connections made) and allow the OnStar® audio to be heard in 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 the drivers door is opened.
5. The red LED and the radio will turn off when RAP turns off or the drivers door is opened.

**DISCLAIMER:** Under no circumstances shall the manufacturer or the distributors of the OS-311 be held liable for consequential damages sustained in connection with the OS-311. 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-311 other than its replacement.

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