VIM910

2017 Mercedes Benz Sprinter

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Introduction

The VIM will allow the OEM steering wheel switches to control aftermarket radios: Sony, Pioneer, Jensen, and Xite. In addition, the VIM will provide +12V outputs for the doors, turn signals, and when the transmission is in reverse.

Installation Instructions

Disconnect the battery before proceeding with the installation.

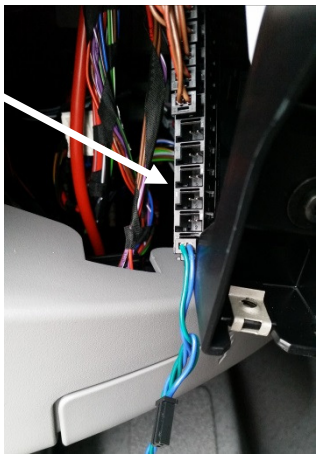
It is the installer's responsibility to route and secure all wiring harnesses where they cannot be damaged by sharp objects, mechanical moving parts and high heat sources. Failure to do so could result in damage to the system or vehicle and create possible safety concerns for the operator and passengers.

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 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.

VIM910 Module

Remove the lower dash panel below the steering column and find a suitable location to mount the VIM910 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.

Data Link Harness (6-pin connector)

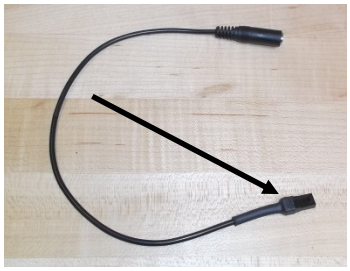


1. Locate the OEM Data Link bus connector behind the driver's side kick panel.
2. Plug the 2-pin Black connector from the S-H127AX Data Link harness into an open cavity.
3. If an Intermotive TLC910 is installed, plug the 4 pin connector from the S-H127AX harnessinto the mating 4-pin connector for the TLC910.
4. If an Intermotive TLC910 is **not** installed, cut the Red and Black wires from the 4 pin connector on the S-H127AX and supply +12V to the Red wire and a chassis ground to the Black wire.
5. Plug the White 6-pin connector into the VIM910 module.

Installation Instructions (continued)

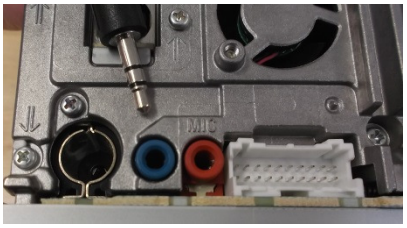
Radio Installation

Xite Radio: XSG2NA-X2S



1. Locate the Black, 2-pin connector attached to the Brown/White wire (Steering Wheel 2) on the back of the Xite radio.
2. Connect the mating Black 2-pin connector from the S-H126AX harness to the radio.
3. Plug the 3.5mm connector into the mating connector on the S-H126AX harness and plug the White two pin connector into the VIM910 module.

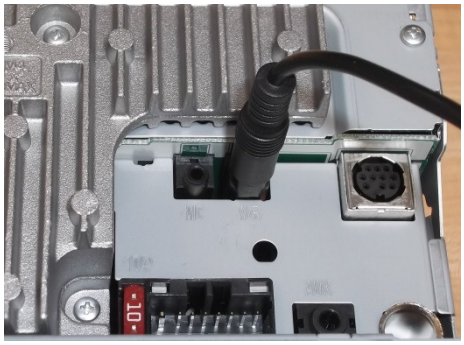
Sony Radio: XAV-602BT



1. Locate the Blue 3.5mm plug on the back of the Sony radio.
2. Plug the 3.5mm jack from the S-H126AX into the Blue plug on the back of the radio.
3. Plug the White 2-pin connector into the VIM910 module.

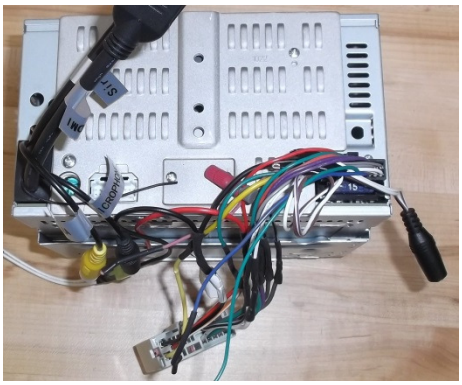
Pioneer Radio: AVH-2800BS

1. Locate the 3.5mm plug labeled "W/R" on the back of the Pioneer radio.
2. Plug the 3.5mm jack from the S-H126AX into the plug on the back of the radio.
3. Plug the 3.5mm connector into the mating connector on the S-H126AX harness and plug the White two pin connector into the VIM910 module.



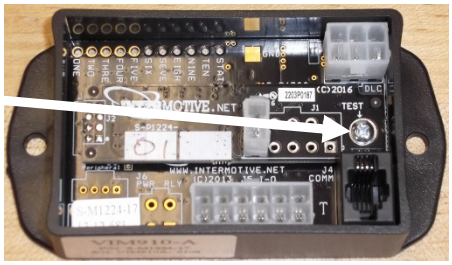
Jensen Radio: VX4022A and JRV9000

1. Connect the 3.5mm adapter provided by Jensen to the back of the radio following the instructions in the Jensen installation manual.
2. Plug the 3.5mm jack from the S-H126AX into the adapter on the back of the radio.
3. Plug the 3.5mm connector into the mating connector on the S-H126AX harness and plug the White two pin connector into the VIM910 module.



Selecting the Radio

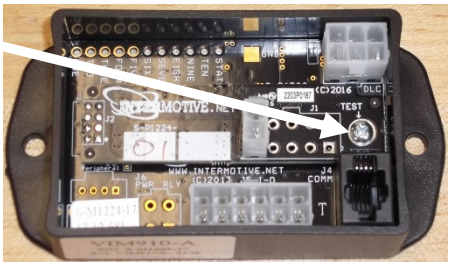
The VIM910 module will come preprogrammed from the factory with the radio that it is intended for. If a change is necessary, follow the procedure below:



1. Set the Parking Brake.
2. Place the key in the Run position with the engine Off.
3. Jump a momentary ground to the "Test" pad on the module to put it into Diagnostic Mode.
4. Look at LED's 9 and 10 to verify the configured radio. Performing the steps below will sect the radio (table below).
5. Shift the transmission into Neutral.
6. Apply the Left Turn Signal.
7. Quickly press the volume down button about 5 times until all the LED's on the module flash once.
8. LED's 9 and 10 will display the new radio configuration (table below).
9. Repeat step 7 until the desired radio is selected
10. Place transmission into Park and cycle the ignition.

Radio	SONY	PIONEER	XITE	JENSEN 4022A	JENSEN 9000
LED10	OFF	OFF	ON	ON	FLASHING
LED9	OFF	ON	OFF	ON	ON

Diagnostics



1. Jump a momentary ground to the "Test" pad on the module to put it into Diagnostic Mode Page 1 (Status LED will flash a 1-1). Verify the information is correct using the table below.
2. Jump another momentary ground to the "Test" pad on the module to put it into Diagnostic Mode Page 2 (Status LED will flash a 2-2). Verify the information is correct using the table below.

Status LED	1-1	2-2
LED10	Radio	n/a
LED9	Radio	n/a
LED8	Hang-Up	n/a
LED7	Answer	n/a
LED6	Vol-	n/a
LED5	Vol+	n/a
LED4	Passenger Door	n/a
LED3	Driver Door	Reverse
LED2	Puddle Input	Left Turn
LED1	CAN1 RX	Right Turn

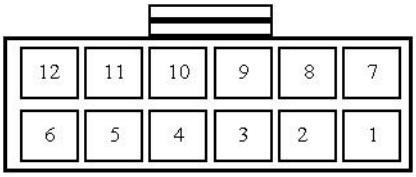
Reconnect the vehicle battery

12 pin connector pin-out definition

The pins are defined as follows:

- Pin #1-2 are no connects
- Pin #3 Right Puddle Light Output, +12V
- Pin #4 Left Puddle Light Output, +12V
- Pin #5-7 are no-connects
- Pin #8 Reverse Output, +12V
- Pin #9 Right Turn Output, +12V
- Pin #10 Left Turn Output, +12V
- Pin #11 Puddle Light Input, GND
- Pin #12 is a no connect

12 Pin I/O



Back of Connector

Outputs:

This connector contains the VIM's 5 output pins. Each output is +12 volts rated at 1/2A and is intended to light LED's, drive relay coils, or other low current loads.

Connect the desired outputs to vehicle equipment as needed. Tape up unused leads. When connecting to relays, be sure to use relays with appropriate kick-back suppression, such as Digikey #PB682-ND. Unsuppressed relays will induce very high voltage spikes throughout modern vehicles sensitive computer electronics and should not be used, per Ford, GM, SAE, etc.

Input:

Pin 11 is an Active Low Input which means external devices must pull the input to ground. The input has it's own internal pull up resistors so they can be left floating when not used or not active. When grounded the Right and Left puddle light outputs will be active.

VIM Post Installation Test

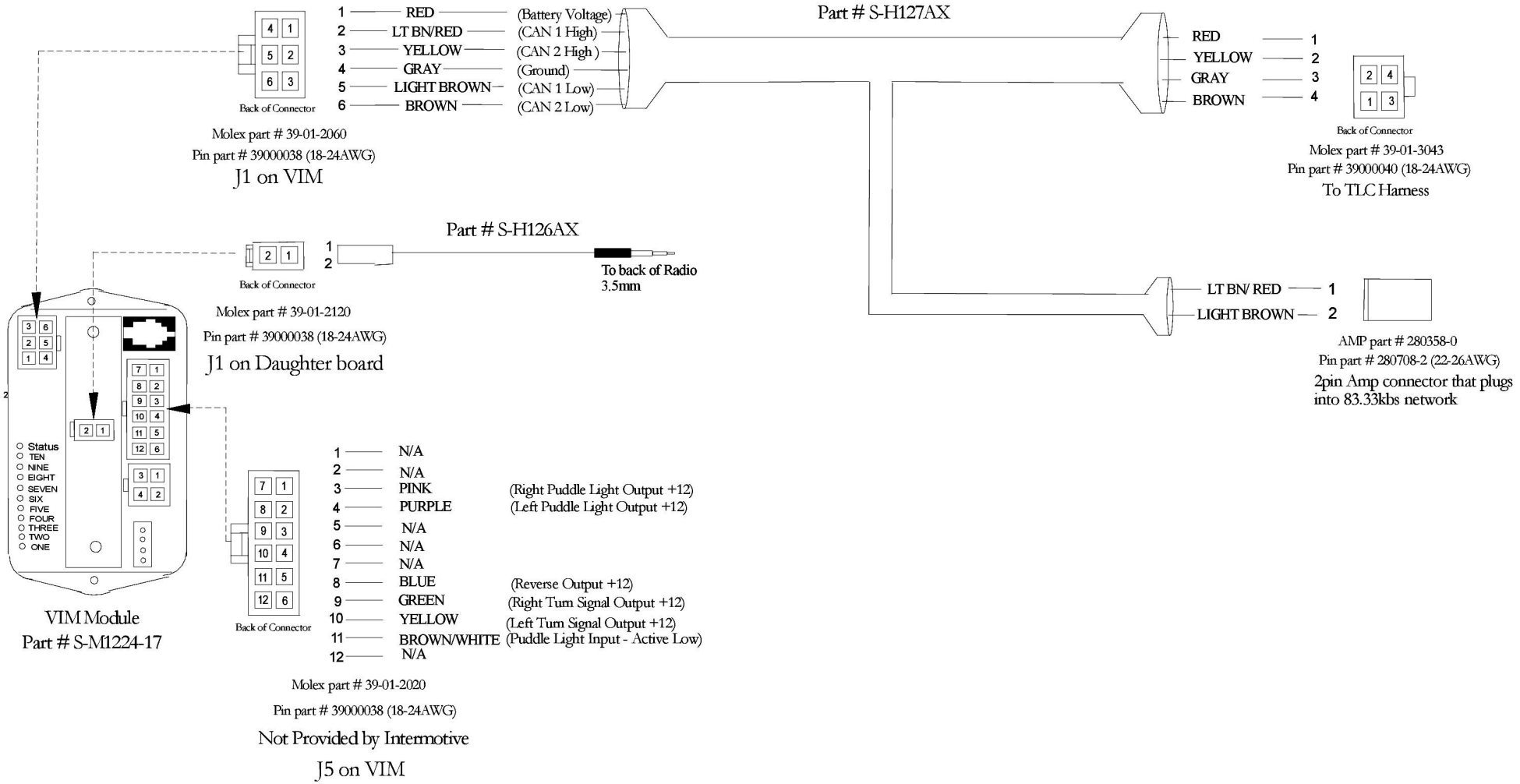
1. Turn the ignition ON to wake up and initialize the VIM module.
2. Open passenger door, verify Right Puddle Output +12V (Pin 3)
3. Open driver door, Verify Left Puddle Output +12V (Pin 4)
4. Place vehicle in Reverse, Verify Reverse Output +12V (Pin 8), put back in park.
5. Apply Right Turn Signal, Verify Right Turn Output +12V (Pin 9)
6. Apply Left Turn Signal, Verify Left Turn Output +12V (Pin 10)
7. Ground Puddle Lights Input (Pin 11), verify +12 Volts on Pin 3 and Pin 4.
8. Press Volume up for **less than a second** and verify volume goes up on the radio.
9. Press Volume down for **less than a second** and verify volume goes down on the radio.
10. Press Volume up for **more than a second** and verify preset station goes forward on the radio.
11. Press Volume down for **more than a second** and verify preset station goes back on the radio.
12. Press Bluetooth answer, verify it on the aftermarket radio.
13. Press Bluetooth hang up, verify it on the aftermarket radio.

If the VIM910 fails any of the above tests, check harnesses and review instructions, or check diagnostics below. If necessary, call Intermotive Technical Support at (530) 823-1048.

Diagnostics

1. Jump a momentary ground to the "Test" pad on the module to put it into Diagnostic Mode Page 1 (Status LED will flash a 1-1). Verify the information is correct using the table below.
2. Jump another momentary ground to the "Test" pad on the module to put it into Diagnostic Mode Page 2 (Status LED will flash a 2-2). Verify the information is correct using the table below.

Status LED	1-1	2-2
LED10	Radio	n/a
LED9	Radio	n/a
LED8	Hang-Up	n/a
LED7	Answer	n/a
LED6	Vol-	n/a
LED5	Vol+	n/a
LED4	Passenger Door	n/a
LED3	Driver Door	Reverse
LED2	Puddle Input	Left Turn
LED1	CAN1 RX	Right Turn



Submit product registration at www.intermotive.net

If the VIM910 fails any step in the Post Installation Test, review the installation instructions. If necessary, call InterMotive technical support at (530) 823-1048.