



SWRGM-49L

Radio Replacement Interface with Steering Wheel Control Retention for
GM LAN v2 (LIN) Bus Vehicles 2014 -2018

PRODUCT MANUAL
VER.072226

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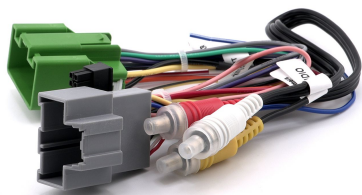
PRODUCT FEATURES:

- Retains factory features in select GM LAN V2 (LIN) Bus vehicles while functioning with an aftermarket radio.
- Retains chime functions.
- Retains factory Steering Wheel Controls.
- Provides Factory Rear Seat Entertainment activation.
- Retains RAP (Retained Accessory Power).
- Includes factory backup camera connection for the IO3 system.
(vehicles with IO4, IO5 & IO6 systems can be hard wired to retain the OEM camera. See page 4)

PARTS INCLUDED:



SWRGM-49L Module



SWRGM-49L Harness

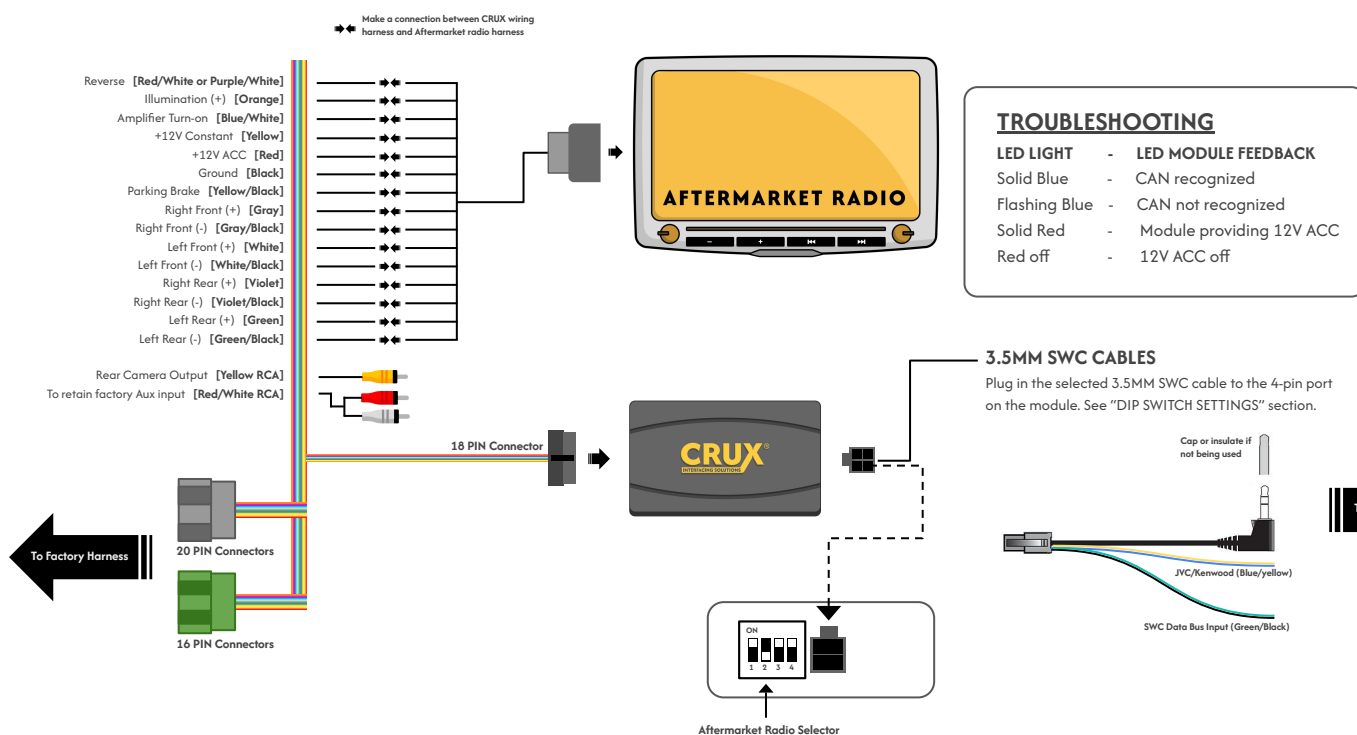


SWC Cable



Antenna Adapter

INSTALLATION DIAGRAM:



DIP SWITCH SETTINGS:

AFTERMARKET RADIO DIP SWITCH SETTINGS:

RADIO BRAND:	DIP#:	1	2	3	4
Atoto, Dual, Fahrenheit, Jensen, Nakamichi		OFF	OFF	ON	ON
Pioneer, Power Acoustik, Soundstream		OFF	OFF	ON	ON
Blaupunkt, Most off-brand Radio		OFF	OFF	ON	ON
Alpine		OFF	OFF	OFF	OFF
Clarion		OFF	ON	ON	OFF
Kenwood		OFF	ON	ON	ON
JVC		OFF	ON	OFF	ON
BOSS, Old Sony		OFF	ON	OFF	OFF
New Sony (with CarPlay)		OFF	OFF	ON	OFF
New BOSS		ON	OFF	ON	OFF

SWC TROUBLESHOOTING OPTION



Located internally, need to take plastic casing off module

If Steering Wheel Controls don't work or work properly, please switch internal DIP switch from 3v3 to 5v as shown in picture above.



SWC Module
DIP Switch

NOTE: For Atoto, Blaupunkt, Dual, Fahrenheit, Nakamichi, Power Acoustik, Soundstream, and most off-brand radios. Check the aftermarket radio's manual to see if the SWC buttons need to be programmed
 * For SWC Learning Radios specific steps are required. Please scan the QR code on the right.

For aftermarket radios that have wires for SWC connections, cut off the 3.5mm plug on the Crux SWC Cable and connect the SWC wires as follows:



Note that there are some radios that only have SWC1 and SWC2, in this case "shield" does not need to be connected.



NOTE:

If you have the previous generation hardware with 3 DIP switches, please scan the QR code below and refer to the Aftermarket Radio DIP Switch Settings guide.

STEERING WHEEL CONTROL BUTTON FUNCTIONS:

SWC BUTTON	SHORT PRESS	LONG PRESS
VOL +	Step Increment	Continuous VOL +
VOL -	Step Decrement	Continuous VOL -
Arrow Up ▲	Seek Up	Preset
Arrow Down ▼	Seek Down	Preset
SRCE	Source Change	Preset
▶	Play/Pause	Preset
Voice	Phone Pickup	Preset
End Call	Phone Hang Up	Preset

EXAMPLE APPLICATIONS:

- Chevrolet Impala 2014-2019 (8" IO5/IO6)
- Chevrolet Silverado 2018 (7" iOB / 8" IO5/IO6)

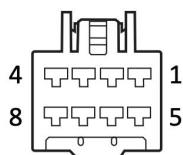
BOSE AMPLIFIER BYPASS:

For vehicles equipped with a factory Bose amplifier, extend the speaker wires of the SWRGM-49L harness and connect to the Bose amplifier output wires. Locate the Bose amplifier to find out how much speaker wires is necessary. The Bose amplifier is located as follows:

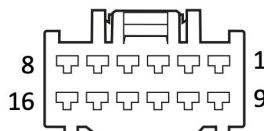
(NOTE: Bose amplifiers are commonly found in the locations listed below but the manufacturer can mount it elsewhere. Installer should verify the location before installation.)

Trucks = Center of the rear wall / SUVs = Center console or in the cargo space / Sedans = Rear deck or Trunk area

Pinout for the 8 and 16 pin OEM Bose amplifier connectors:



Pin #	Wire Color	Description
1	Dark Blue / Grey	Subwoofer +
2	Yellow	Right Front Speaker +
3	Dark Blue	Left Front Speaker +
4	Red / Yellow	Constant +12V
5	Grey / Black	Subwoofer -
6	Yellow / Black	Right Front Speaker -
7	Brown / Dark Blue	Left Front Speaker -
8	Black	Ground



Pin #	Wire Color	Description
4	Brown / Light Green	Right Front Tweeter +
5	Yellow / Dark Blue	Left Front Tweeter +
6	White	Right Rear Speaker +
7	Light Green	Left Rear Speaker +
12	Purple / Brown	Right Front Tweeter -
13	Yellow / Grey	Left Front Tweeter -
14	Dark Blue / Black	Right Rear Speaker -
15	Light Green / Black	Left Rear Speaker -

OEM CAMERA RETENTION:

The SWRGM-49L is prewired with an RCA connector to retain the OEM camera on vehicles with a IO3 system. To retain the OEM camera on IO4, IO5 and IO6 systems, you will need connect an RCA cable to the 12-pin connector on the HMI module found either by the passenger kick panel or behind the glove box. Connect the RCA as follows:

HMI Connector PIN 5 = Gray/Yellow to RCA positive PIN 6 = White/Blue to RCA shield

We recommend soldering and using heat shrink tubing these wires for a secure connection.



Pin 6
White/Blue

Pin 5
Gray/Yellow

INSTALLATION INSTRUCTIONS:



1. Connect the aftermarket radio's power/speaker harness to the SWRGM-49L T-Harness using the Installation Diagram on page 1. Use good quality crimp caps or butt splice for a secure connection. Solder and heat shrinking the connections is highly recommended.



2. Carefully remove the radio trim with a plastic pry tool and pull outward.



3. Remove the radio bezel by removing the 4 screws on the corners.



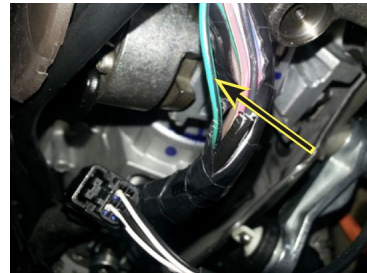
4. Unplug the GREEN and GRAY connectors from the headunit



5. Plug the GREEN and GRAY connectors to the SWRGM-49L T-Harness.



6. Use the supplied antenna adapter to plug between the OE antenna connector and aftermarket radio antenna port.

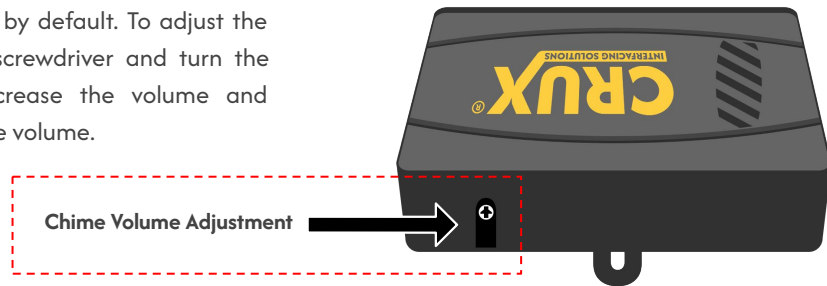


7. Remove plastic trim under the steering wheel column and locate a GREEN/BLACK wire in the bundle. Tap the GREEN/BLACK from the SWC Cable. We recommend soldering the wires together for a reliable connection.

8. Use a dash kit (not included) for a clean install. Test the radio for functionality. Test the chime and Retained Accessory Power (RAP) functions. Reverse the process to install the new aftermarket radio.

CHIME VOLUME ADJUSTMENT:

The SWRGM-49L has a potentiometer to adjust the chime volume. It is set at the half way by default. To adjust the volume, simply use a suitable screwdriver and turn the potentiometer clockwise to increase the volume and counter-clockwise to decrease the volume.



VEHICLE APPLICATIONS:

YEARS	MAKE	MODEL	YEARS	MAKE	MODEL
2017	BUICK	Envision	2015-2016	CADILLAC	ATS
2016	BUICK	Lacrosse	2014-2015	CADILLAC	CTS
2014-2015	BUICK	Regal	2015	CADILLAC	Escalade
2016-2018	CHEVROLET	Camaro (with 8" IO5/IO6)	2015-2016	CADILLAC	SRX
2018	CHEVROLET	Camaro (with 7" IOB)	2017	CADILLAC	XT5
2015-2016	CHEVROLET	Colorado	2017	GMC	Acadia (with 8" IO5/IO6)
2016-2017	CHEVROLET	Cruze	2015-2016	GMC	Canyon
2018	CHEVROLET	Cruze (with 7" IOB)	2014-2016	GMC	Sierra
2014-2016	CHEVROLET	Impala Non Classic (with 8" IO5/IO6)	2017	GMC	Sierra (with 7" IOB)
2017-2019	CHEVROLET	Impala (with 8" IO5/IO6)	2017-2018	GMC	Sierra (with 8" IO5/IO6)
2016	CHEVROLET	Malibu Non Classic	2015-2017,2019	GMC	Sierra HD
2017-2018	CHEVROLET	Malibu	2015-2019	GMC	Yukon
2014-2017	CHEVROLET	Silverado	2015-2017,2019	GMC	Yukon XL
2018	CHEVROLET	Silverado (with 7" IOB)			
2018	CHEVROLET	Silverado (with 8" IO5/IO6)			
2019	CHEVROLET	Silverado Classic (with 7" IOB)			
2019	CHEVROLET	Silverado Classic (with 8" IO5/IO6)			
2015-2019	CHEVROLET	Silverado HD			
2017	CHEVROLET	Sonic			
2015, 2018	CHEVROLET	Spark			
2015-2019	CHEVROLET	Suburban			
2015-2019	CHEVROLET	Tahoe			

NOTES:

1. Does not retain Bose amplifier.
2. Does not retain OnStar. Use Crux part# SOOGM-19L instead.