

Radio Replacement with OnStar, SWC Retention, & Dash Kit for GM LAN 29 Bit Vehicles 2006 - 2014

#### **PRODUCT FEATURES:**

- Retains factory features in select GM LAN 29 Bit vehicles while functioning with an aftermarket radio.
- Pre-programmed to retain factory Steering Wheel Controls.
- Retains OnStar, factory rear view camera and chime functions.
- Retains factory backup sensors / park assist system.
- Supports Bose, non-Bose and Y-91 audio systems.
- EIA color coded wiring for easy installation.
- Includes Double DIN Radio Replacement Dash Kit.

#### PARTS INCLUDED:











SOOGM-16 Module

SOOGM-16 Harness

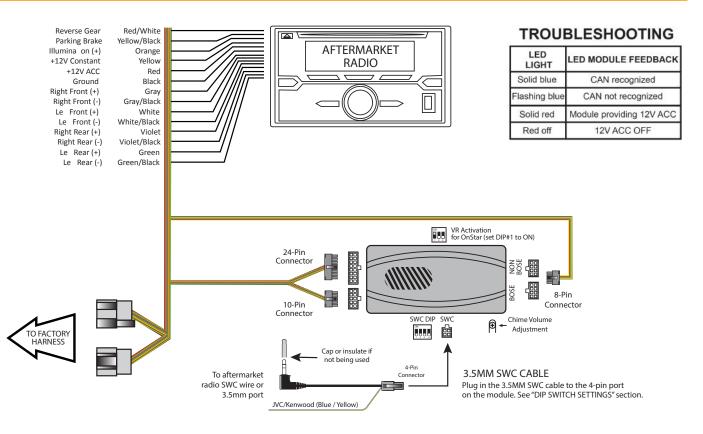
Backup Camera Harness

SWC Cable

Antenna Adapter

Dash Kit

#### **INSTALLATION DIAGRAM:**





rev.070822



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#### **DIP SWITCH SETTINGS:**

RADIO BRAND: DIP#:	1	2	3	4	
Atoto, Dual, Fahrenheit, Jensen, Pioneer, Power Acoustik, Soundstream Blaupunkt, Most off-brand Radio Alpine Clarion	OFF OFF OFF OFF OFF	OFF OFF OFF OFF ON	ON ON ON OFF ON	ON ON ON OFF OFF	SWC MODULE DIP SWITCH
Kenwood JVC Boss, Old Sony New Sony	OFF OFF OFF OFF	ON ON ON OFF	ON OFF OFF ON	ON ON OFF OFF	1 2 3 4

NOTE: For Atoto, Blaupunkt, Dual, Farenheit, Power Acoustik, Soundstream, and most off-brand radios, check the aftermarket radio's manual to see if the SWC buttons need to be programmed.

### 3.5MM SWC CABLE

Plug in the 3.5MM to 4-Pin SWC cable to the SWC module.

NOTE: Insulate the Blue/Yellow wire or 3.5mm plug if not being used.

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:



RED to SWC Key 1 WHITE to SWC Key 2 SHIELD to SWC Ground

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

#### **SELECTING THE AUDIO SYSTEM:**

If the vehicle is equipped with an amplified audio system, the SOOGM-16 has a built-in audio level adaptor that outputs the proper audio level from the aftermarket radio to the factory amplifier. To use this feature, plug in the male 8-pin connector on the SOOGM-16 harness to the GRAY female 8-pin connector on the SOOGM-16 module. The module is also labeled "Bose" and "Non Bose" to avoid confusion. (see picture below)

If the vehicle is NOT equipped with a factory amplified system, plug in the male 8-pin connector to the BLACK female 8-pin on the SOOGM-16 module.



BOSE (Amplified) Connection Non-BOSE (Non-Amplified) Connection



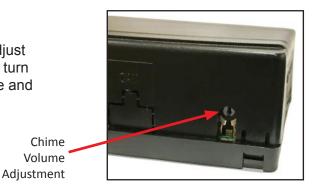
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#### CHIME VOLUME ADJUSTMENT:

The SOOGM-16 has a potentiometer to adjust the chime volume. It is set at half way by default. To adjust the volume, simply use a suitable screw driver and turn the potentiometer clockwise to increase the volume and counter-clockwise to decrease the volume.



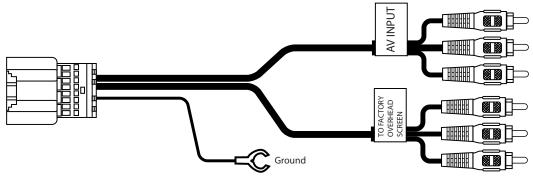
**ONSTAR VOLUME ADJUSTMENT:** 

To adjust the OnStar volume, turn on OnStar and adjust the volume using the Steering Wheel Control volume adjustment. Once it is set, the SOOGM-16 will memorize this level.

#### **REAR SEAT ENTERTAINMENT (RSE) (Optional Cable):**

Part# CRUX2333A can be special ordered to retain the Rear Seat Entertainment (RSE).

- 1. Connect the CRUX 2333A's 16-pin connector to the vehicle's 16-pin factory RSE connector at the radio location.
- 2. To view videos from the aftermarket radio on the factory overhead screen, connect the RCAs labeled TO FACTORY OVERHEAD SCREEN to the aftermarket radio's AV output.
- 3. To retain the use of the factory rear panel AV input, plug the RCAs labeled AV INPUT to the aftermarket radio's AV Input (optional).
- 4. Test the audio and video on the overhead screen before installing the radio back into the dashboard.



Part# CRUX2333A (Sold Separately)







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#### **BACKUP CAMERA CONNECTION:**

You can retain the factory back-up camera by using the CRUX 2543 harness included in the kit.

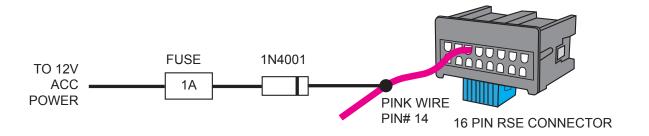
- 1. Connect the 16-pin back-up camera harness to the vehicle's 16-pin factory backup camera connector.
- 2. Connect the Yellow video RCA to the new aftermarket radio camera input.
- 3. Test the video feed before installing the radio back into the dashboard.



VEHICLE SPEED SENSE (VSS)

#### **ENABLING THE IR SYSTEM:**

To retain the use of the IR headphones with the factory overhead entertainment system you will need to connect a +12 volt switched accessory power wire to the rear entertainment panel wire harness located in the rear of the center console. You will need a 1 amp fuse and a 1N4001 diode to complete the installation. Remove the RSE control panel in the center console. Tools will be required such as a panel remover tool and/or 7mm socket. Locate the (pink) wire located in pin 14 of the (gray) connector. Connect the diode's stripe side to the pink wire. Connect the other end of the diode to one side of the 1 amp fuse. Connect the remaining side of the fuse to a +12 switched accessory wire. Refer to the wiring diagram below.







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### **STEERING WHEEL CONTROL BUTTON FUNCTIONS:**

SWC Button	All radios except Sony	Sony			
Short Press					
VOICE	Mute	Mute			
VOLUME DOWN	Volume Down	Volume Down			
VOLUME UP	Volume Up	Volume Up			
TRACK UP	Track Up / Seek Up	Track Up / Seek Up			
TRACK DOWN	Track Down / Seek Down	Track Down / Seek Down			
SOURCE	Source	Source**			
RIGHT ARROW	Preset Up	Preset Up			
Long Press					
VOICE	VR / OnStar*	VR / OnStar*			
VOLUME DOWN	Volume Down Continuous	Volume Down Continuous			
VOLUME UP	Volume Up Continuous	Volume Up Continuous			
TRACK UP	Answer Call				
TRACK DOWN	End Call	Reject Call			
SOURCE					
RIGHT ARROW					

- 1 = VOICE 2 = VOLUME UP/DN
- 2 = VOLUIVIE UP/DN 3 = TRACK UP/DN
- S = TRACK UP/L4 = SOURCE
- 5 = RIGHT ARROW



### DASH KIT INSTALLATION:

A double DIN radio replacement dash kit is included in the kit to make the installation quick and easy. You have the option of installing a Double DIN or two Single DIN radios. The DKGM-49 kit includes:



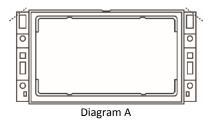


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#### **INSTALLATION:**

NOTE: Suzuki XL7 trim top corners of radio housing. See diagram A.



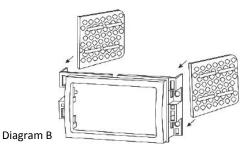
#### Before installation:

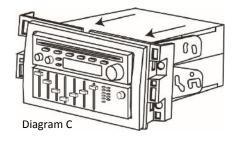
1. Locate the main trim.

2. Locate the left and right mounting brackets.

3. Slide the appropriate mounting bracket into the trim ring, aligning the holes in the trim ring to the clips on the bracket. (See Diagram B)

4. For two Single DIN radio installation, slide the stacked ISO DIN unit into the trim ring bracket assembly and secure the unit to the kit using the screws supplied with the radio. (See Diagram C)





### **VEHICLE APPLICATIONS:**

BUICK		GMC	
2008-2017	Enclave	2007-2016	Acadia
2006-2011	Lucerne	2017	Acadia Classic
CADILLAC		2008-2017	Savana
2007-2014	Escalade	2007-2014	Sierra 1500-3500 Pickup*
2007-2009	SRX	2007-2014	Yukon*
CHEVROLET		HUMMER	
2007-2013	Avalanche*	2008-2009	H2
2007-2009	Equinox	PONTIAC	
2008-2016	Express Van	2007-2009	Torrent
2006 -2013	Impala	SATURN	
2006-2007	Monte Carlo	2007-2010	Outlook
2007-2014	Silverado 1500-3500 Pickup*	2008-2010	Vue
2007-2014	Suburban*	SUZUKI	
2007-2014	Tahoe*	2007-2008	XL7
2009-2017	Traverse		

\*2012-2014 Vehicles with Navigation Units are not Supported. Use Crux# DKGM-16W instead.

