



SWRGM-50N

Radio Replacement Interface with Steering Wheel Control and CGI Screen
Retention (Monochrome & Color) for select GM LAN Bus Vehicles 2010–2017

PRODUCT MANUAL
VER.062926

CONTACT

ADDRESS:

CRUX Interfacing Solutions
21541 Nordhoff St. Unit C,
Chatsworth, CA 91311

PHONE:

(818) 609-9299

E-MAIL:

support@cruxinterfacing.com
sales@cruxinterfacing.com

WEBSITE:

www.cruxinterfacing.com

PRODUCT FEATURES:

- Retains factory features in select GM LAN Bus vehicles while functioning with an aftermarket radio.
- Retains factory monochrome screen and display button functionality in select applications
- Retains backlight for the factory color display and button functionality
- Retains factory Steering Wheel Controls via built-in, preprogrammed interface.
- Navigational output: Amp-Turn On, Illumination, Parking Brake, Reverse gear and VSS.
- Retains RAP(Retained Accessory Power) and is compatible with amplified and non-amplified audio systems.
- Retains chime functions.
- Retains factory Backup Camera, includes antenna adapter.

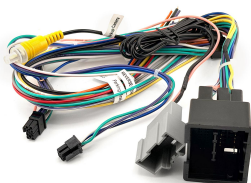
NOTE:

1. **DO NOT** connect the amplifier turn-on lead from the aftermarket radio. The interface supplies the necessary amplifier activation.

PARTS INCLUDED:



GM-50N Module



GM-50N Harness

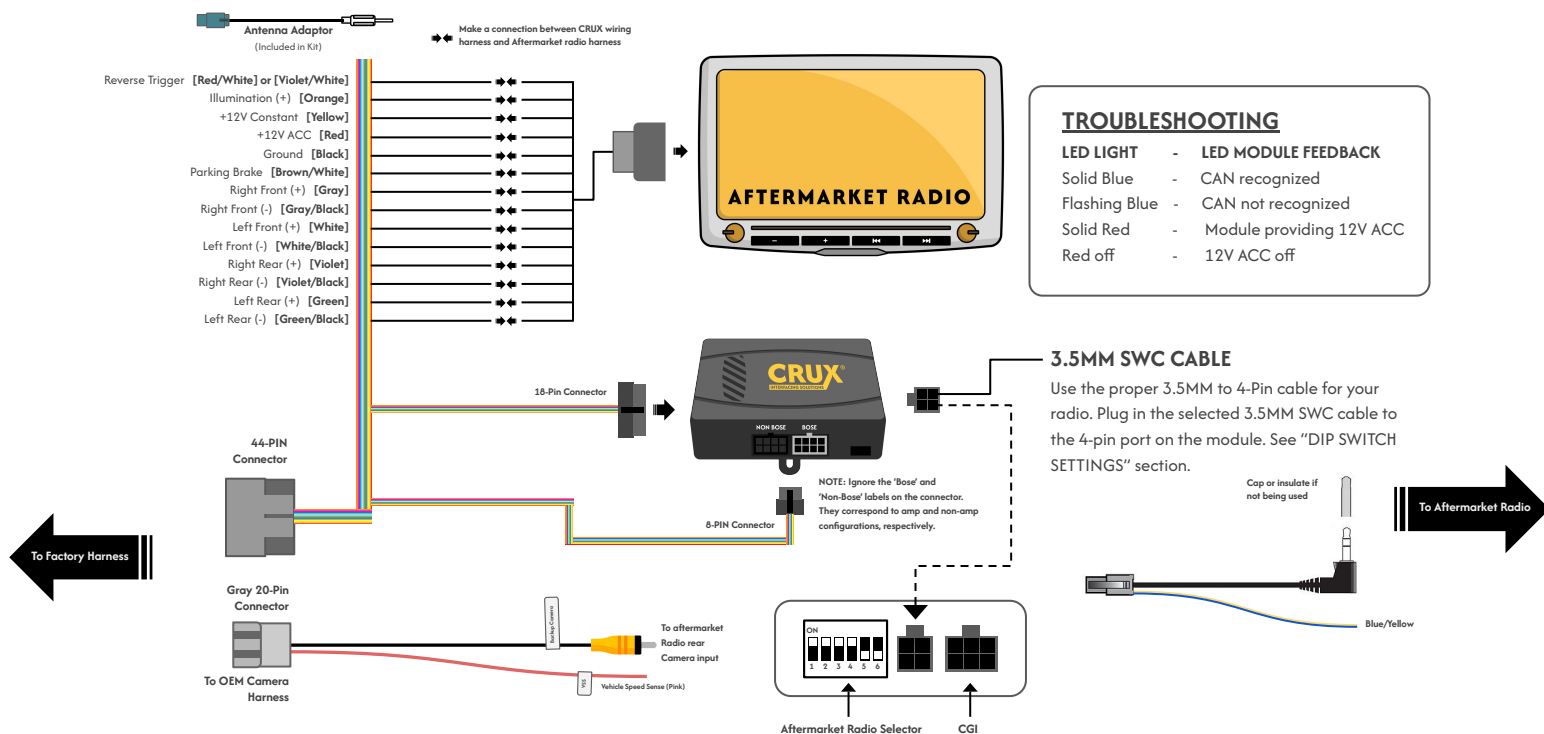


SWC Cable



Antenna Adapter

INSTALLATION DIAGRAM:



TROUBLESHOOTING

LED LIGHT	LED MODULE FEEDBACK
Solid Blue	- CAN recognized
Flashing Blue	- CAN not recognized
Solid Red	- Module providing 12V ACC
Red off	- 12V ACC off

AUDIO CONNECTION



Plug in the 8-pin Molex connector of the SWRGM-50N harness to the Black, NON BOSE, port of the module

CGI CONNECTION & UPPER DASH BUTTON RETENTION:

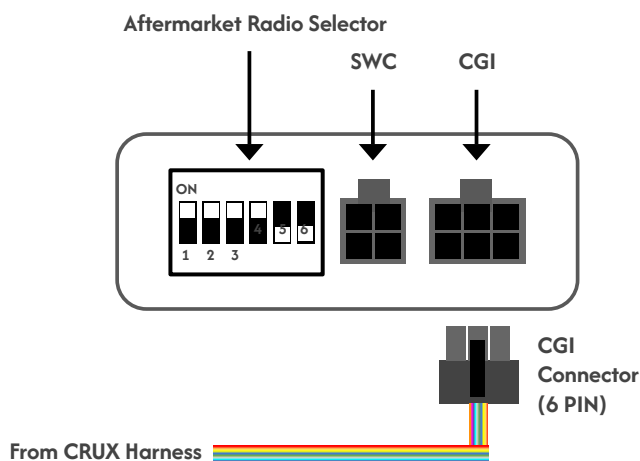
To retain Upper Dash buttons, use dip switch 6 on the 6 set of DIP switches

DIP 6: ↑ ON = Chevrolet Cruze / Chevrolet Malibu
 ↓ OFF = Chevrolet Equinox / GMC Terrain
 (Monochrome screen upper dash button retention)



Note: DIP Switch 5 is NOT used.

To retain the factory monochrome and color screen features (Color Graphic Information display - CGI), connect the 6-PIN CGI connector to the port.



CGI CONNECTION & UPPER DASH BUTTON RETENTION (Continued):

Monochrome Screen Retention

This interface retains the factory OEM monochrome screen along with all its functions and submenus. To access the monochrome screen, press the Configure button.

Date and Time Settings

The module has its own clock. If the car battery is disconnected, the date and time will reset and must be set again.

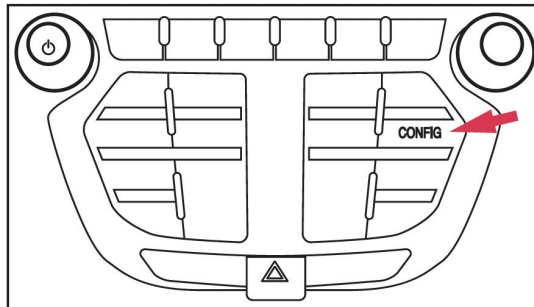
To set or change:

Config Button >> Time and Date Settings

Options:

- Set Date
- Set Time
- 12/24 Hour Format
- Month/Day Format

Use the menu knob to adjust and press to confirm.



Select "CONFIG" in the upper dash control to enter monochrome screen OEM buttons

Alternate Configuration Menu Access (Configuration Button Inaccessible)

NOTE: Personalization features can only be accessed or adjusted if the vehicle is equipped with factory steering wheel controls.

1. Turn OFF the radio then turn the key to ACC.
2. Press and hold the End Call button on the steering wheel controls for 3 seconds to enter configuration mode.
 - In this mode, the Seek Up and Seek Down buttons are used to navigate the menu.
 - The Source button is used to select a menu option.
 - A short press of the End Call button functions as a back button.
3. To save your settings and exit configuration mode and return to normal steering wheel control operation, press and hold the End Call button again for 3 seconds. Start the vehicle.

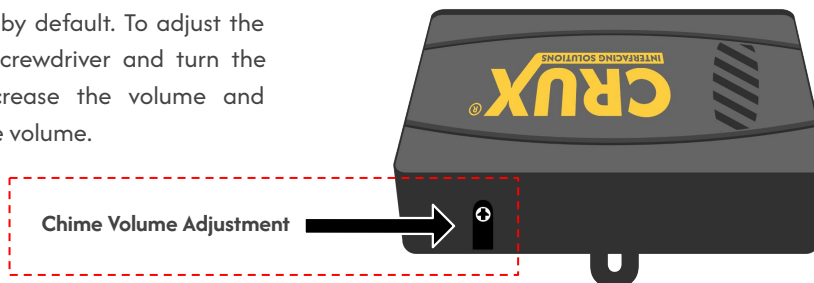
NOTE: Failure to save and exit the menu correctly will prevent the clock from saving and leave the system stuck in Clock Personalization, which may disable some steering wheel controls.



Scan this code: Learn more by scanning the QR code for a quick video guide.

CHIME VOLUME ADJUSTMENT:

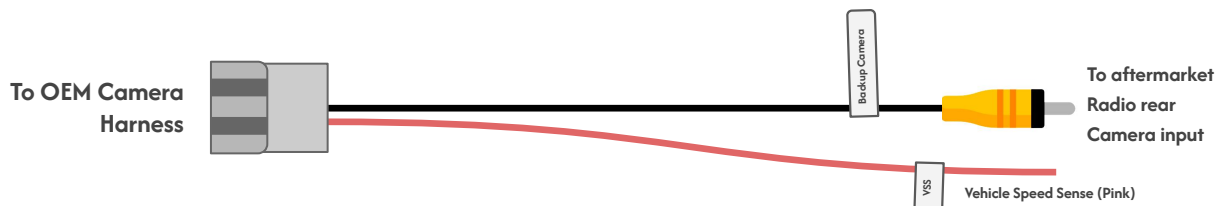
The SWRGM-50N has a potentiometer to adjust the chime volume. It is set at the half way by default. To adjust the volume, simply use a suitable screwdriver and turn the potentiometer clockwise to increase the volume and counter-clockwise to decrease the volume.



BACKUP CAMERA CONNECTION:

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

1. Connect the 20-PIN back-up camera harness to the vehicle's 20-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.



NOTE:

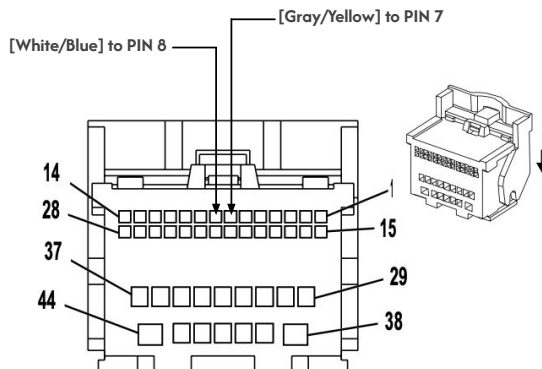
**** 2015–2016 Chevrolet Trax Troubleshooting:**

The rear view camera (RVC) is not on the 20-pin connector. It is on the main 44-pin connector.

Pin 7: Camera positive (+) — wire color can be Gray/Yellow or Brown/Yellow

Pin 8: Camera negative (–) — White/Blue

Re-pin the factory Gray/Yellow wire to Pin 7 and the factory White/Blue wire to Pin 8. See the diagram for reference.



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
SWC Learning Radios*		ON	OFF	OFF	ON
New Boss*		ON	OFF	ON	OFF

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 the new Boss and SWC Learning Radios make sure the firmware on the module is SW1.0.2, if not please update

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:



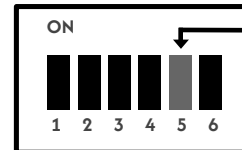
Note that there are some radios that only have SWC1 and SWC2, in this case "shield" does not need to be connected.

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.



NOTE:
DIP Switches
5 is not used



Troubleshooting for SWC Learning Radios

VEHICLE APPLICATIONS:

CHEVROLET

2011-2015	Cruze
2016	Cruze Classic/Limited
2010-2017	Equinox
2013-2015	Malibu*
2016	Malibu Classic*
2012-2016	Sonic
2012-2015	Spark
2016	Spark Classic

CHEVROLET

2015-2016	** Trax
2015	Volt
BUICK	
2017	Cascade
2015-2016	Encore
GMC	
2010-2017	Terrain

NOTES:

- Does not retain factory satellite radio.

* Not compatible on Malibu models with navigation radio

Color Screen



Mono Chrome screen



NOTE:

** See page 5 for 2015-2016 Trax note.