CRUX®
INTERFACING SOLUTIONS

RADIO REPLACEMENT + SWC RETENTION

SWRCR-59D
Radio Replacement with Steering Wheel Control Retention
for Select Dodge, Fiat, Jeep and RAM Vehicles

PRODUCT FEATURES:

- Retains factory features in select Dodge, Fiat, Jeep and RAM vehicles while functioning with an aftermarket radio.
- Retains Steering Wheel Controls via built-in, pre-programmed interface.
- Provides accessory power (2A Max).
- Retains factory backup camera (non LVDS systems only).
- Retains factory Aux input in select vehicles.
- Retains factory Digital (Alpine amplifier) and analog amplifier.
- Retains factory SWC phone button functionality in select vehicles.
- EIA color coded wiring for easy installation.
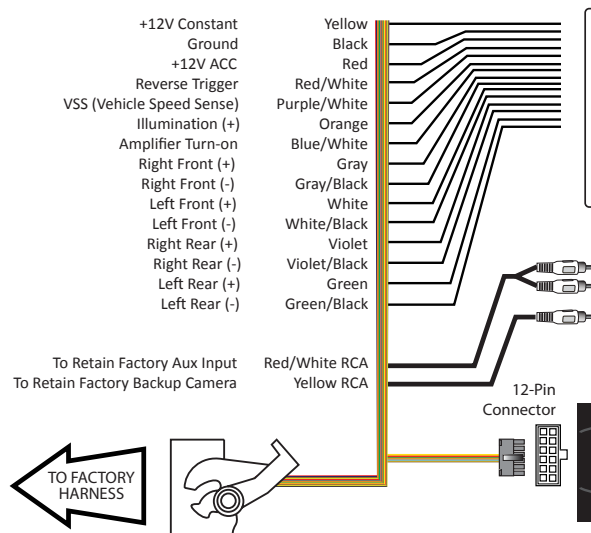
PARTS INCLUDED:

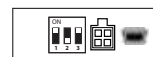SWRCR-59D Module   SWRCR-59D Harness   SWC Cables
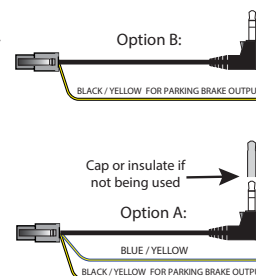
INSTALLATION DIAGRAM:

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

Signal	Wire Color
+12V Constant	Yellow
Ground	Black
+12V ACC	Red
Reverse Trigger	Red/White
VSS (Vehicle Speed Sense)	Purple/White
Illumination (+)	Orange
Amplifier Turn-on	Blue/White
Right Front (+)	Gray
Right Front (-)	Gray/Black
Left Front (+)	White
Left Front (-)	White/Black
Right Rear (+)	Violet
Right Rear (-)	Violet/Black
Left Rear (+)	Green
Left Rear (-)	Green/Black
To Retain Factory Aux Input	Red/White RCA
To Retain Factory Backup Camera	Yellow RCA

AFTERMARKET RADIO

TO FACTORY HARNESS

12-Pin Connector

4-Pin Connector

3.5MM SWC CABLES (Option A or B)
Use the proper 3.5MM to 4-Pin cable for your radio.
Plug in the selected 3.5MM SWC cable to the 4-pin port on the module. See "DIP SWITCH SETTINGS" section.

Option B:
BLACK / YELLOW FOR PARKING BRAKE OUTPUT

To the aftermarket radio 3.5mm SWC port or SWC wires

TO AFTERMARKET RADIO

Cap or insulate if not being used

Option A:
BLUE / YELLOW
BLACK / YELLOW FOR PARKING BRAKE OUTPUT

Insulate with tape if not being used

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DIP SWITCH SETTINGS:

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

SWC MODULE
DIP SWITCH

ON
1 2 3

SWC Troubleshoot 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: For Atoto, Blaupunkt, Dual, Farenheit, 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.

Use the proper 3.5MM to 4-Pin SWC cable for the aftermarket radio that is being used. Plug the 4-pin Molex connector to the SWRCR-59D module and connect the 3.5mm plug or Blue/Yellow wire to the aftermarket radio's SWC input.

OPTION A is used for ALPINE, CLARION, (JVC and KENWOOD units will use the Blue/Yellow wire).
OPTION B is used for ATOTO, BOSS, BLAUPUNKT, DUAL, FARENHEIT, JENSEN, POWER ACOUSTIK, PIONEER, SONY, SOUNDSTREAM and most off-brand units.

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

For aftermarket radios that have wires for SWC connections, cut off the 3.5mm plug on the Crux SWC Cable (option B) 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.

VEHICLE APPLICATIONS:

DODGE
2014-2016	Dart
2015-2022	Challenger
2015-2022	Charger
2014-2021	Durango

FIAT
2014-2020	500L
2016-2020	500X

JEEP
2014-2015	Cherokee
Late 2017-2020	Compass
2021-Up	Compass**
2014-2015	Grand Cherokee
2015-2021	Renegade**
2022-Up	Renegade
2018-2022	Wrangler (JL model)*
2020-Up	Gladiator

RAM
2013-2017	1500
2018-2022	1500*
2013-2017	2500
2018-2021	2500*
2013-2017	3500
2018-2021	3500*
2014-2020	Promaster 3" screen
2015-2021	Promaster 5" screen✦
2015-2022	Promaster City 3" screen
2015-2022	Promaster City 5" screen✦

*Note: Applications with an (*) may be equipped with the OEM LVDS digital camera. Please use the CRUX Part# SWRCR-59LV to convert the digital signal to composite to retain the factory camera. Does NOT retain Beats Audio System.

For Fiat:
1) Will not retain backup sensor on Fiat vehicles (if equipped).
2) Once Factory radio is removed, the outside temperature will no longer be present on the cluster.

For RAM ProMaster:
1) Will not retain Phone and Voice button.

**Some Jeep Renegade & Jeep Compass vehicles have an issue with the factory dashboard so door chimes, interior/alarm, turn signals, & hazard audible chimes do not work or are inaudible. Therefore, when you use this interface those issues will still persisit. This is a factory speaker wire issue NOT SWRCR-59D interface. Does not retain factory backup camera with LVDS connection

✦ NOTE: 2018 and newer RAM Promaster and RAM Promaster City have a digital camera, Please use the CRUX Part# SWRCR-59LV to convert the digital signal to composite to retain the factory camera.

Please use the QR code to view the **SWRCR-59D** video instructions

Crux Interfacing Solutions • Chatsworth, CA 91311
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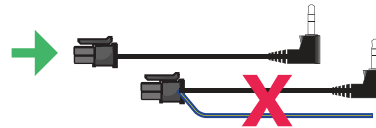
STEERING WHEEL CONTROL TROUBLE SHOOTING:

Note: Identify Alpine SWC learning radios by checking for three SWC cables and a SWC learn menu, instead of a 3.5mm SWC input.
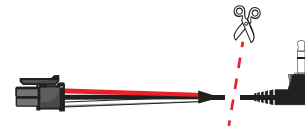
If Interface has one SWR-100 Cable included	If Interface has two SWR Cables included
1 - **Find the included SWC adapter cable.**	1 - **Identify appropriate SWC adapter cable.** Do not use cable with Blue / Yellow wire.

2 - **Prepare the SWC Cable:** Cut the SWC cable. You will find a red wire, a white wire, and a ground (shield) wire inside.

3 - **Adjust the Module Settings:** Set the module to the Pioneer dip switch setting. This configures the module to communicate correctly with the Alpine radio.
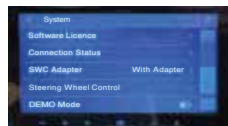
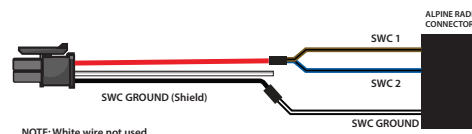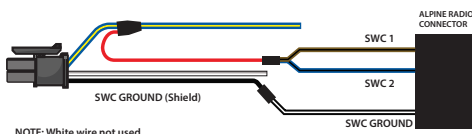| DIP:	1	2	3
On Alpine iLX series radios use Pioneer settings	OFF	ON	ON

SWC MODULE

1 2 3

4 - **Configure the Alpine Radio:** On your Alpine radio, select the setting that includes "Without adapter" for SWC. This ensures the radio will recognize the steering wheel controls.

Select "SWC Adapter"

Select the setting "Without Adapter"

5 - **Connect the Wires:** Connect both the SWC1 and SWC2 wires from aftermarket radio to the red wire from our SWC cable. Connect the SWC ground wire to the shield (ground) wire of our SWC cable. These steps should enable the steering wheel controls on your Alpine iLX series radio.

ALPINE RADIO CONNECTOR

SWC 1
SWC 2
SWC GROUND (Shield)
SWC GROUND
NOTE: White wire not used

ALPINE RADIO CONNECTOR

SWC 1
SWC 2
SWC GROUND (Shield)
SWC GROUND
NOTE: White wire not used

6. Program the SWC: Navigate to the SWC settings on your Alpine radio to assign and test each control function.

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