CRUX ®
INTERFACING SOLUTIONS

RADIO REPLACEMENT + SWC RETENTION
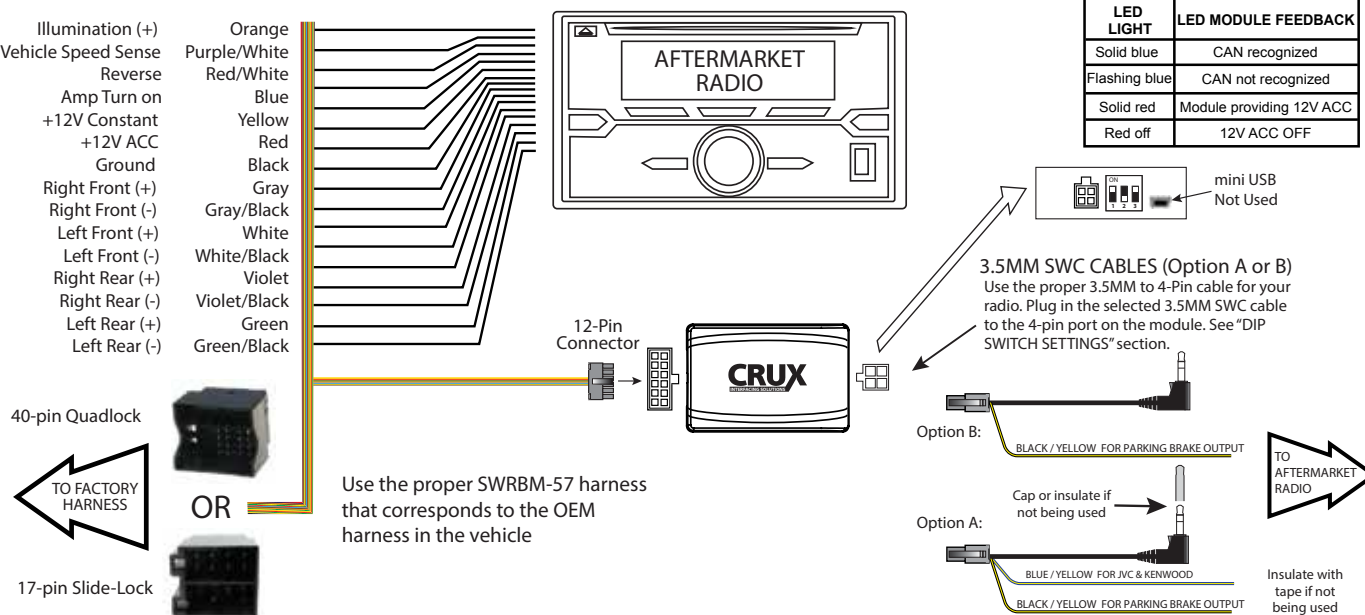
PRODUCT FEATURES:

- Retains factory-installed amplified systems (non fiber optic amps only)
- Retains Steering Wheel Controls via built-in, pre-programmed interface
- Reverse gear, Illumination and Speed signal outputs
- Provides 12V Accessory Power Output (2A MAX)
- Includes BOTH Quadlock and ISO harneses

PARTS INCLUDED:

SWRBM-57 MODULE

SWC Cables

40-Pin Quadlock Harness

ISO Harness

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
Illumination (+)	Orange
Vehicle Speed Sense	Purple/White
Reverse	Red/White
Amp Turn on	Blue
+12V Constant	Yellow
+12V ACC	Red
Ground	Black
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

AFTERMARKET RADIO

mini USB Not Used

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.

12-Pin Connector

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Option B:
BLACK / YELLOW FOR PARKING BRAKE OUTPUT

TO AFTERMARKET RADIO

Cap or insulate if not being used

Option A:
BLUE / YELLOW FOR JVC & KENWOOD
BLACK / YELLOW FOR PARKING BRAKE OUTPUT

Insulate with tape if not being used

40-pin Quadlock

TO FACTORY HARNESS

OR

Use the proper SWRBM-57 harness that corresponds to the OEM harness in the vehicle

17-pin Slide-Lock

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DIP SWITCH SETTINGS:

AFTERMARKET RADIO DIP SWITCH SETTINGS:

RADIO BRAND:	DIP#:	1	2	3
Atoto, Dual, Fahrenheit, Jensen		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		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, 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 or use the Blue/White wire for JVC and Kenwood.

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:

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

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

VEHICLE APPLICATIONS:

TYPE A: 40 Pin Quadlock Connector

BMW
2007 – 2013   1 Series (E81/82/87/88)
2006   3 Series (E90/91) Sedan/Wagon
2007 – 2012   3 Series (E90/91/92/93)

MERCEDES BENZ
2004 – 2010   A Class (W169) with Quadlock
2004 – 2010   B Class (W245) with Quadlock
2007 – 2014   C Class (W204)
2005 – 2006   C Class (W203)
2005 – 2009   CLK Class (W209)
2004 – 2010   CLS Class (W219)
2010 – 2017   E Coupe (W207)
2009 – 2012   E Class (W212)
2005 – 2011   M Class (W164)
2016   Metris (W447)
2006 – 2011   R Class (W251)
2004 – 2008   SLK (R171) Non Fiber-Optic
2009 – 2011   SLK (R171)
2014 – 2018   Sprinter (W906)*
2019 – 2020   Sprinter(W907/W910)

MINI
2013   Cooper S

PORSCHE**
2004 – 2011   911
2004 – 2016   Boxster
2004 – 2012   Cayman
2010 – 2016   Panamera

TYPE B: ISO Connectors

MERCEDES BENZ
2004 – 2010   A Class (W169) with Audio5
2004 – 2010   B Class (W245) with Audio5
2000 – 2004   C Class (W203)
1999 – 2002   CLK Class (W208)
2003 – 2004   CLK (W209)
1999 – 2000   E Class (W210)
2001 – 2002   E Class (W211)
2001 – 2004   SL Class (R230)

*To retain the factory Sprinter camera after replacing the radio, use Crux part# FAK-RCAM (sold separately)
** Does not retain fiber optic amplifier.

Crux Interfacing Solutions • Chatsworth, CA 91311
phone: (818) 609-9299 • fax: (818) 996-8188 • www.cruxinterfacing.com

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RADIO REPLACEMENT + SWC RETENTION

SWRBM-57
Radio Replacement with Steering Wheel Control Retention for
Select BMW, Mercedes Benz and Porsche Vehicles
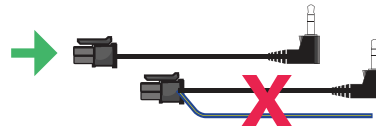

STEERING WHEEL CONTROL TROUBLE SHOOTING:

Note: Identify Alpine SWC learning radios by checking for three SWC cables and a SWC learn menu, instead of a 3.5mm SWC input.
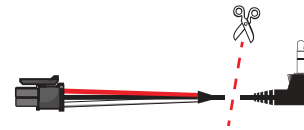
If Interface has one SWR-100 Cable included	If Interface has two SWR Cables included

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.
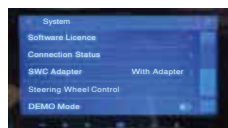
SWC MODULE

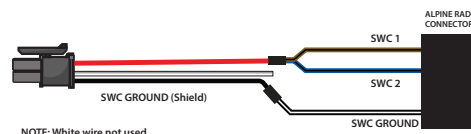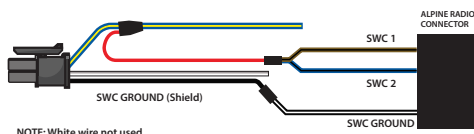| DIP:	1	2	3
On Alpine iLX series radios use Pioneer settings	OFF	ON	ON

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"

System
Software Licence
Connection Status
SWC Adapter   With Adapter
Steering Wheel Control
DEMO Mode

SWC Adapter
With Adapter
Without 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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