



Radio Replacement with Steering Wheel Control Retention for LEXUS & TOYOTA Vehicles with JBL Systems

PRODUCT FEATURES:

- Retains factory features in select Lexus and Toyota vehicles with JBL Harman-Becker Digital-Synthesis Amplifier, including JBL (Pioneer-made) amplifiers while functioning with an aftermarket radio.
- Pre-programmed to retain factory Steering Wheel Controls.
- Retains factory backup camera (if present).
- Retains OEM 3.5mm Auxiliary Audio Input.
- iPhone Voice Recognition (VR) feature from SWC on select Kenwood, Pioneer, Alpine and JVC radios.
- Variable audio gain adjustment to level match the aftermarket radio and factory amplifier.
- Supports BT-HF/A2DP/AVRCP profile on select aftermarket radio models.
- Supports Pick Up/End Call, Pick up and Toggle between 1st and 2nd incoming call, AVRCP Track, Seek.
- EIA color coded wiring for easy installation.

NOTES:

- 1. Left-Right Balance Audio Control is supported. Front-Rear Audio Fading is not supported.
- 2. Please make sure to set the factory radio volume to 70% and balance and fade options are centered before removing the radio.

PARTS INCLUDED:



SWRTY-61J Module



3.5MM to 4-pin SWC Cables



TY-A Harness (For Newer Models)



OEM Camera Retention Harness



TY-B Harness (For Older Models)



16 to 24 Pin Camera Adapter

IMPORTANT INSTALLATION NOTES:

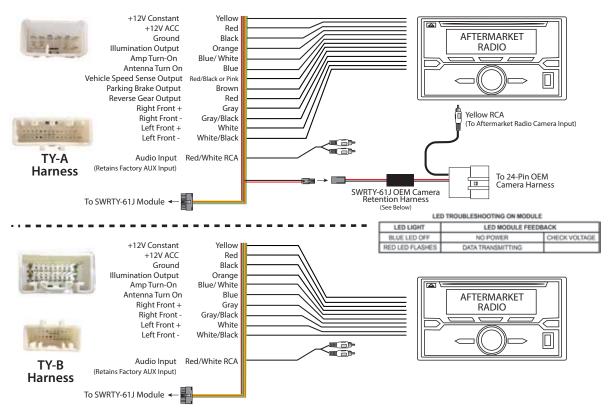
- 1. In some Lexus/Toyota vehicles 2006 and older, the mute circuit is located in the same pin location as the amplifier turn-on on the OEM harness. If no audio is heard after the installation is complete, disconnect the BLUE/WHITE wire on the TY-61J T-Harness from the aftermarket radio AMP Turn-on wire. Insulate with tape to avoid short circuits.
- 2. Before connecting the 3.5mm SWC Cable, thoroughly wipe it clean with the alcohol cleansing pad provided. This will ensure a solid contact with the aftermarket radio SWC circuit.
- 3. To retain the factory AUXILIARY INPUT option in the vehicle, the aftermarket radio must have an "Auxiliary Audio Input" feature. Please check your aftermarket radio manual for details.



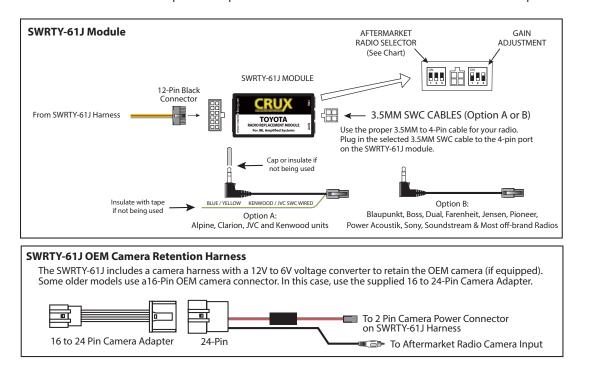


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INSTALLATION DIAGRAM:



NOTE: Aftermarket radio rear speaker output leads are not used on both harnesses. Insulate with tape.



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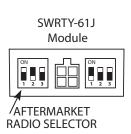
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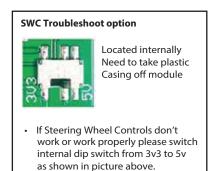
DIP SWITCH SETTINGS:

SETTING THE AFTERMARKET RADIO BRAND

This step is done on the SWRTY-61J Module. With the key in the off position, set the DIP switches to the corresponding radio listed below.

| RADIO BRAND: | DIP: | 1 | 2 | 3 |
|------------------------------------|--------|-----|-----|-----|
| Atoto, Dual, Fahrenheit, Jensen, P | ioneer | OFF | ON | ON |
| Power Acoustik, Soundstream | | OFF | ON | ON |
| Blaupunkt, Most off brand Radios | | OFF | ON | ON |
| Alpine | | OFF | OFF | OFF |
| Clarion | | ON | ON | OFF |
| Kenwood | | ON | ON | ON |
| JVC | | ON | OFF | ON |
| Sony, Boss | | ON | OFF | OFF |





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.

• Some Blaupunkt use DIP Switch setting OFF ON OFF

4-PIN SWC CABLE

Use the proper 3.5MM to 4-Pin SWC cable for the aftermarket radio you are using.

OPTION A is used for ALPINE, CLARION. For JVC and KENWOOD use the Blue/Yellow wire.
OPTION B is used for ATOTO, BLAUPUNKT, BOSS, DUAL, FARENHEIT, JENSEN, POWER ACOUSTIK,
PIONEER, SONY, SOUNDSTREAM and Most Off-Brand Radios.

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 and connect the SWC wires as follows:



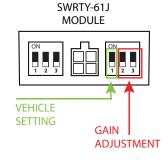
Note that there are some radios that only have SWC1 and SWC2, in this case "shield" does not need to be connected.

VEHICLE SETTING AND GAIN ADJUSTMENTS:

SELECTING VEHICLE TYPE

Please set pin 1 to the ON position for Previous Hardware Firmware

Please set pin 1 to the OFF position for Latest Firmware



Use the gain adjustment to level match the aftermarket radio audio output with the OE amplifier input.

| DIP SETTING | dB | Volts |
|--------------|---------|-------|
| Position 2 3 | | |
| OFF OFF | 0 dB | +0mV |
| OFF ON | 3.5 dB | +9mV |
| ON OFF | 9.1 dB | +18mV |
| ON ON | 12.9 dB | +27mV |



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STEERING WHEEL CONTROL TROUBLE SHOOTING:

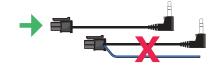
Note: Identify Alpine SWC learning radios by checking for three SWC cables and a SWC learn menu, instead of a 3.5mm SWC input.

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



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.



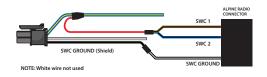


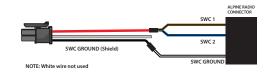


Select the setting "Without Adapter"

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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.





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



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STEERING WHEEL CONTROL BUTTON FUNCTIONS:

| SWC Button | SHORT PRESS | LONG PRESS |
|---|---|---|
| PIONEER VOL + VOL - Seek Up Seek Down Mode OFF Hook ON Hook Voice | Step Increment Step Decrement Preset Up Preset Down Source Pick Up Call* End Call Activate VR/Deactivate VR | Continuous VOL + Continuous VOL - Seek Up Seek Down Power On/Off None None None |
| *NOTE: | BT Mode Active: OFF Hook = Toggle between 1st and 2nd Call | |

| SWC Button | SHORT PRESS | LONG PRESS |
|------------|--|------------------|
| ALPINE | | |
| VOL+ | Step Increment | Continuous VOL + |
| VOL - | Step Decrement | Continuous VOL – |
| Seek Up | Seek Up | None |
| Seek Down | Seek Down | None |
| Mode | Source | None |
| OFF Hook | Pick Up Call | None |
| ON Hook | End Call | None |
| Voice | Activate VR*/Deactivate VR* | N/A |
| *NOTE | BT Mode Active: OFF Hook = Toggle between 1st and 2nd Call | |

| SWC Button | SHORT PRESS | LONG PRESS |
|------------|--|------------------|
| CLARION | | |
| VOL+ | Step Increment | Continuous VOL + |
| VOL - | Step Decrement | Continuous VOL – |
| Seek Up | Preset Up | Seek Up |
| Seek Down | Preset Down | Seek Down |
| Mode | Source | Power On/Off |
| OFF Hook | Pick Up Call | None |
| ON Hook | End Call | None |
| Voice | Mute | None |
| NOTE | BT Mode Active: OFF Hook = Toggle between 1st and 2nd Call | |

| SWC Button | SHORT PRESS | LONG PRESS |
|------------|---|--|
| JVC | | |
| VOL + | Step Increment | Continuous VOL + |
| VOL - | Step Decrement | Continuous VOL – |
| Seek Up | Seek Up | M-Seek Up |
| Seek Down | Seek Down | M-Seek Down |
| Mode | Source | Power On/Off |
| OFF Hook | Pick Up Call* | None |
| ON Hook | End Call | None |
| Voice | Activate VR | None |
| *NOTE: | BT Mode Active: User must End 1st call in order to pick up 2nd incoming call. | Deactivate VR: Say "Cancel" or remain silent until it times out Auto switch back to previous Source. |



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| SWC Button | SHORT PRESS | LONG PRESS |
|------------|--------------------------|------------------|
| KENWOOD | | |
| VOL + | Step Increment | Continuous VOL + |
| VOL - | Step Decrement | Continuous VOL - |
| Seek Up | Seek Up | None |
| Seek Down | Seek Down | None |
| Mode | Source | None |
| OFF Hook | Pick Up Call/ | None |
| | Call History On/Off | None |
| ON Hook | End Call / Deactivate VR | None |
| Voice | Activate VR | None |

VEHICLE APPLICATIONS:

| LEXUS | | TOYOTA | |
|-----------|----------------------|-----------|------------------------|
| 2004-2006 | ES300 | 2003-2020 | 4 Runner w/ Navigation |
| 2003-2005 | IS300 | 2005-2018 | Avalon |
| 2006 | LS430 w/o Navigation | 2007-2017 | Camry |
| | | 2012-2017 | Camry Hybrid |
| | | 2004-2008 | Camry Solara |
| | | 2009-2018 | Corolla |
| | | 2007-2014 | FJ Cruiser |
| | | 2008-2018 | Highlander |
| | | 2008-2018 | Highlander Hybrid |
| | | 2005-2012 | Matrix |
| | | 2004-2015 | Prius w/ Navigation |
| | | 2004-2015 | Prius w/o Navigation |
| | | 2012-2017 | Prius V |
| | | 2004-2018 | Rav4 |
| | | 2016-2018 | Rav4 Hybrid |
| | | 2013-2019 | Sequoia w/ Navigation |
| | | 2014-2019 | Sequoia w/o Navigation |
| | | 2005-2013 | Sequoia w/ RDS Radio |
| | | 2004-2017 | Sienna |
| | | 2005-2021 | Tacoma |
| | | 2004-2019 | Tundra |
| | | 2009-2015 | Venza |
| | | 2008-2011 | Yaris |

NOTE:

- Does not retain Mark Levinson, Pioneer, Nakamichi or Harmon Kardon amplifiers.
- If your vehicle is not equipped SWC, please use the CRUX SOHTL-20



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