

Introduction & Features

The RP4-AD11 interface allows the replacement of a factory radio in select Audi vehicles with LSFT-CAN databus radios. Using this interface will retain factory features such as steering wheel controls (SWC) and the factory audio amplifier whenever the original radio is removed. Use of this interface also allows you to program two radio functions to each SWC button by using short press long press dual command functionality. The RP4-AD11 also provides data bus driven outputs such as retained accessory power (RAP), vehicle speed sensor (VSS), illumination, reverse trigger and parking brake.

Important Notes

1. The radio select rotary switch on the side of the interface must be adjusted to the proper radio setting before plugging the interface into the vehicle (see next page for setting chart).
2. The interface comes pre-programmed for all of the vehicles factory SWC functions and does not require programming unless you wish to re-assign the SWC functions or utilize short press long press dual command functionality. The SWC can always be restored to default settings by pressing and releasing the program button on the side of the interface once and waiting 7 seconds for the LED to flash 4 times.
3. The LED will flash whenever a SWC button is pressed.

Wiring Connection Chart

Interface Connector

Red / White	Parking Brake Output (-)
Purple / White	Vehicle Speed Output
Red	Accessory Output (1 amp)
Orange / White	Illumination Output (+)
Green	Reverse Output (+)

Vehicle Connector

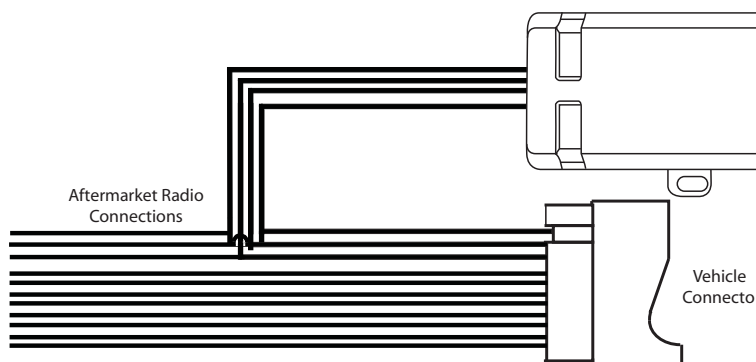
Yellow	Battery +12v
Black	Ground
Blue/White	Amp Turn On Input
White	Front L + input
White / Black	Front L - input
Grey	Front R + input
Grey / Black	Front R - input
Green	Rear L + input
Green / Black	Rear L - input
Purple	Rear R + input
Purple / Black	Rear R - input

SWC Connector

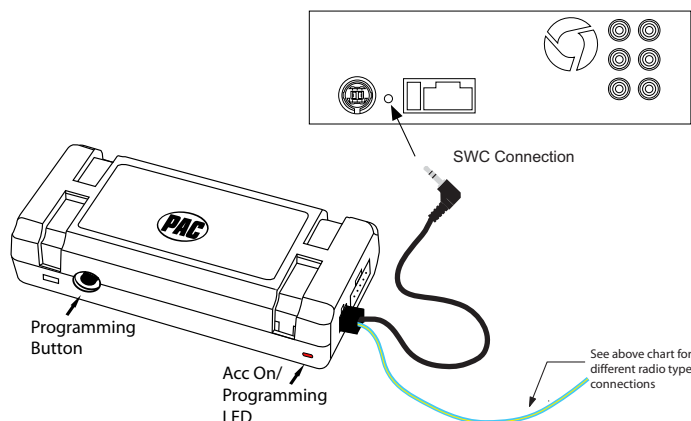
Blu/Yel	Kenwood, Newer JVC
3.5mm Jack	Alpine, JVC, Clarion, Fusion, Pioneer, Sony Boyo, Dual, Lightning Audio, Visteon or Advent

Illustration / Schematic

Wiring



SWC Connection



Installation Steps



SET RADIO SELECT SWITCH

Alpine	JVC	Kenwood	Clarion	Pioneer/Other	Sony	Fusion
1	2	3	4	7	8	9

Other = Advent, BOYO, Dual, Lightning Audio, Rockford Fosgate, Visteon

- The radio select rotary switch on the side of the interface must be adjusted to the proper radio setting before plugging the interface into the vehicle.
- Only one of the two provided radio harnesses will be used. Remove the factory installed radio to determine the correct harness for your particular vehicle.
- Make all connections as described in the connection chart on page 1. **Vehicles without a factory amplifier:** Connect the aftermarket radio's front and rear speaker wires to the vehicle connector. **Vehicles with a factory amplifier:** To determine whether the amplifier needs RCA or speaker level input, check the OEM side of the 22/20 pin plug to see if the speaker wires are populated. If so hook the front speaker outputs to the 22/20 pin plug and the rear RCA outputs to the 12 pin plug (dock-n-lock connector) or 20 pin plug (ISO Connector). If there are no factory speaker wires located in the OEM 22/20 pin plug then you will need to hook all 4 of the aftermarket radios RCA outputs to the 12/20 pin plug. The blue RCA has no function at this time (dock-n-lock connector only).
- Connect the SWC wire according to the chart on page 1 (aftermarket radio MUST support a wired remote input)
- If you wish to reassign functions to the SWC follow the programming instructions in the next section.

Default Steering Wheel Control Programming

IMPORTANT! The interface comes pre-programmed for all of the vehicles factory SWC functions and does not require programming unless you wish to re-assign the SWC functions or utilize short press long press dual command functionality. The SWC can always be restored to default settings by pressing and releasing the program button on the side of the interface once and waiting 7 seconds for the LED to flash 4 times.

Default SWC Button Assignments

	Alpine	JVC	Kenwood	Clarion	Sony/Pioneer	Fusion
Volume +	Volume +	Volume +	Volume +	Volume +	Volume +	Volume +
Volume -	Volume -	Volume -	Volume -	Volume -	Volume -	Volume -
Mode	Source	Source	Source	Source	Source	Source
Track +	Track +	Track +	Track +	Search +	Track +	Track +
Track -	Track -	Track -	Track -	Search -	Track -	Track -
Voice/Phone	Mute	Mute	Mute	Mute	Mute	Mute
Volume Wheel	Preset +	Band	Disc +	Band	Preset +	Audio
Track Wheel	Preset -	Preset +	Disc -	Send/End	Preset -	Power

Short Press Long Press Dual Command Functionality

This feature allows you to assign two aftermarket radio functions to each of the vehicles SWC buttons. It can be used with as many of the buttons as the user likes or none at all. When this functionality is implemented, quickly pressing and releasing a SWC button will initiate the short press command while pressing and holding a SWC button for longer than two seconds will initiate the long press command. Please note that no long press commands are programmed by default. If you wish to assign dual command functionality to the SWC please follow the programming steps on the next page.

Optional Steering Wheel Control Programming

If you wish to re-assign the SWC functions, the interface must be programmed in the specific order shown in the chart on the next page. If you come across a function in the chart that your steering wheel does not have, or you do not want to program, press and release the program button on the side of the interface to skip that function. The LED will flash off and on confirming that you have successfully skipped that function and are ready to proceed to the next one.

- The scroll wheels cannot be programmed for short press long press dual command functionality.

SET RADIO SELECT SWITCH



Alpine	JVC	Kenwood	Clarion	Pioneer/Other	Sony	Fusion
1	2	3	4	7	8	9

Other = Advent, BOYO, Dual, Lightning Audio, Rockford Fosgate, Visteon

- Turn the key to the ignition position.
- Press and release programming button on the side of the interface.
- Within 7 seconds, press the button that is to be learned on the steering wheel. The LED will turn off when the button is pressed.
At this point you have two options:
 - For short press functionality:** Release the button within 1.5 seconds. The LED will turn back on.
 - For long press functionality:** Hold the button until the LED starts blinking. Release the button and the LED will go back to solid.
- If you need to program more buttons, repeat step 3 for each additional audio function on the steering wheel.
- If you come across a function in the chart that your steering wheel does not have, or you do not want to program, press and release the program button on the side of the interface to skip that function.
- Once programming is completed, wait seven seconds. The LED will flash three times indicating end of programming.
- Test the interface for proper functionality. Whenever a SWC is pressed the LED on the interface should blink. If any function does not work, repeat the programming steps

Optional Programming Order

	Alpine	JVC	Kenwood	Clarion	Other*	Pioneer	Sony	Fusion
1	Volume +	Volume +	Volume +	Volume +	Volume +	Volume +	Volume +	Volume +
2	Volume -	Volume -	Volume -	Volume -	Volume -	Volume -	Volume -	Volume -
3	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute
4	Preset +	Source	Source	Source	Preset +	Preset +	Preset +	Source
5	Preset -	Track +	Play	Search +	Preset -	Preset -	Preset -	Track +
6	Source	Track -	Track +	Search -	Source	Source	Source	Track -
7	Track +	Band/Disc +	Track -	Band	Track +	Track +	Track +	Audio
8	Track -	Preset/Disc -	Disc/FM +	Send/End	Track -	Track -	Track -	Power
9	Power	Select	Disc/AM -	Send	Band	Band	Band	
10	Enter/Play	Attenuation	Answer	End	N/A	Phone Menu	Reject Call/Source (Bluetooth equipped radios only)	
11	Band/Program	Phone Receive	Voice Dial			Answer Call	Answer/End Call	
12	Receive	Phone Reject	On Hook			End Call		
13	End	Voice Dial	Off Hook			VR		
14	VR	Power	Mute (Multimedia units only)					
15			Preset +					

*Other = Advent, Boyo, Dual, Lightning Audio, Rockford Fosgate, & Visteon

Testing & Verification

1. Turn the ignition on. The LED on the interface will turn on & the +12v accessory wire will turn on.
2. Turn on the radio & check balance & fade. Note: **Factory amplified Systems** will not fade as neither the aftermarket radio or the RP interface have the ability to control the amplifier's fader.
3. Verify that the factory subwoofer (if present) is playing
4. Verify that all SWC are functioning properly.
5. Turn off vehicle & remove key. The radio will shut off as soon as the key is removed from the ignition.

Product Updates (Firmware)

The RP4-AD11 can be updated with new firmware as it becomes available using the PAC-UP interface updater (sold separately). Please visit www.pac-audio.com/firmware for available updates.