# RP4-VW11

## Introduction and Features

**The RP4-VW11 interface allows the replacement of a factory radio in select Volkswagen vehicles with LSFT-CAN databus radios. Using this interface will retain factory features such as steering wheel controls (SWC) and the factory Volkswagen amplifier when 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-VW11 also provides data bus driven outputs such as retained accessory power (RAP), vehicle speed signal (VSS), illumination, reverse trigger and parking brake.**

## Important Notes

1. These instructions apply to R.1.5.4.7 or later revisions. The revision info can be found on a small white sticker on the interface and packaging.
2. 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).
3. 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.
4. The LED will flash whenever a user programmable SWC button is pressed.
5. The SWC will not function when the vehicle is in Accessory mode.
6. **When used in any of the following vehicles equipped with a Multi Function Display (MFD):** The audio screen will display the SWC functions as they are pressed on the steering wheel. It will also display "Programming Mode" whenever the programming button on the side of the interface is pressed. The Blue / White remote input wire must be hooked up, and the MFD must be in audio mode for these features to be displayed.

   | | | | |
   |---|---|---|---|
   | A. 2009-2014 CC | C. 2010-2014 Golf | E. 2010-2015 Jetta | G. 2010-2011 Rabbit |
   | B. 2010-2012 Eos | D. 2010-2014 GTI | F. 2010-2014 Passat | H. 2011-2014 Tiguan |

7. **When used in any of the following vehicles equipped with a MFD:** The up and down arrows on the SWC that also control the MFD come programmed with functions, but the SWC will control both the radio and the MFD. These buttons can be removed by reprogramming the interface and not programming these buttons.
   A. 2006-2009 Golf, GTI, Jetta, Passat
   B. 2007-2009 Eos, Rabbit
8. In vehicles equipped with factory Bluetooth, the telematics module must be disconnected in order to use the Phone and Voice buttons. Not disconnecting the telematics module will result in the MFD switching to phone mode every time the Phone or Voice buttons are pressed.The telematics module can usually be found under the passenger seat.
9. The RAP feature is not available in 2010+ vehicles equipped with a premium amplified system.
10. The parking brake wire will output a negative (-) trigger at all times until the vehicle is moving at a speed of approximately 3 mph or faster.

## Wiring Connection Chart

### Interface Connector

| | |
|---|---|
| Red / White | Parking Brake Output (-) |
| Purple / White | Vehicle Speed Output |
| Red | Accessory Output (10 amp) |
| Orange / White | Illumination Output (+) |
| Green | Reverse Output (+) |

### Vehicle Connector

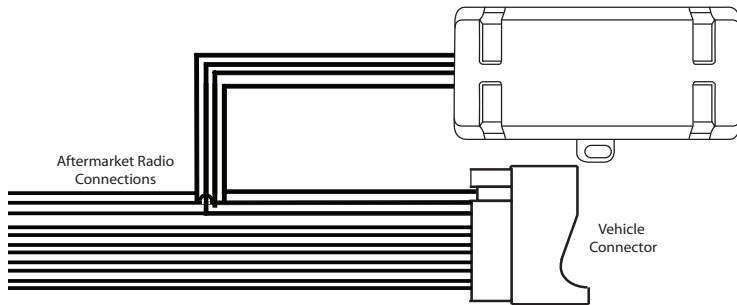| | |
|---|---|
| Yellow | Battery +12v |
| Black | Ground |
| Blue/White | Amp Turn On Input |
| White | Front L + input |
| White / Black | Front L - input |
| Grey | Front R + input |
| Grey / Black | Front R - input |
| Green | Rear L + input |
| Green / Black | Rear L - input |
| Purple | Rear R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

### SWC Connector

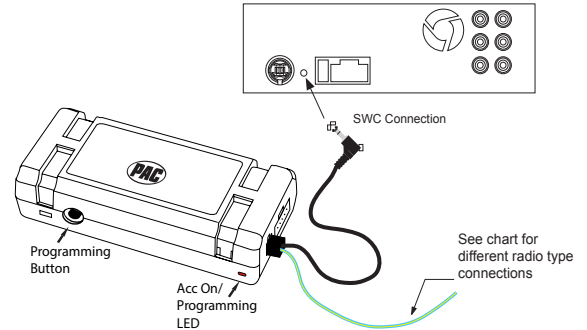| | |
|---|---|
| Blue / Yellow | Kenwwod, Newer JVC |
| 3.5mm Jack | Alpine, JVC, Clarion, Fusion, Pioneer, Sony, Boyo, Dual, Lightning Audio, Visteon or Advent |

**Rev: 5**
**Date: 050918**

## Illustration / Schematic

### Wiring



Aftermarket Radio
Connections

Vehicle
Connector

### SWC Connection



SWC Connection

See chart for
different radio type
connections

Programming
Button

Acc On/
Programming
LED

## Installation Steps

### SET RADIO SELECT SWITCH



| | Alpine | JVC | Kenwood / Lightning Audio | Clarion / Nakamichi | Pioneer / Other* | Sony | Fusion |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 7 | 8 | 9 |

***Other - Dual / Axxera, Jensen, Rockford Fosgate**

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.**

2. Make all connections as described in the connection chart on page one. **Vehicles with a premium factory amplifier:** The factory amplifier only accepts two channels of audio input (left and right). Fading is not supported in this application. The factory amplifier's fading is controlled by data communication from the factory radio. Neither the aftermarket radio or the RP interface have the ability to control the amplifier's fader.

3. Connect the SWC wire according to the chart on page 1 (aftermarket radio MUST support a wired remote input).

4. If you wish to reassign functions to the SWC or utilize short press long press dual command functionality. follow the programming instructions on the next page.

## 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. **N/P = Not programmed by default. Can be re-programmed to perform any function the user would like.**

**Default SWC Button Assignments**

| | Alpine | JVC | Kenwood | Clarion | Pioneer | Sony | Fusion |
|---|---|---|---|---|---|---|---|
| **Volume +** | Volume + | Volume + | Volume + | Volume + | Volume + | Volume + | Volume + |
| **Volume -** | Volume - | Volume - | Volume - | Volume - | Volume - | Volume - | Volume - |
| **Phone** | Receive | Receive | Answer | Send/End | Answer | Answer/End | Source |
| **Track +** | Track + | Track + | Track + | Search + | Track + | Track + | Track + |
| **Track -** | Track - | Track - | Track - | Search - | Track - | Track - | Track - |
| **Voice/Star** | Voice | Voice | Voice | Voice | Voice | Voice | Mute |
| **Preset Up** | Preset + | Band | Disc + | N/P | Preset + | Preset + | N/P |
| **Preset Down** | Preset - | Preset + | Disc - | N/P | Preset - | Preset - | N/P |
| **OK** | N/P | N/P | N/P | N/P | N/P | N/P | Audio |
| **Back** | N/P | N/P | N/P | N/P | N/P | N/P | N/P |

## 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.

**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.

**SWC Notes**
- In the following vehicles equipped with a MFD the screen must be set to audio mode for all buttons to program correctly.

    A. 2009-2014 CC        C. 2010-2014 Golf     E. 2010-2015 Jetta     G. 2010-2011 Rabbit
    B. 2010-2012 Eos       D. 2010-2014 GTI      F. 2010-2014 Passat    H. 2011-2014 Tiguan

- The OK & Back buttons can be programmed but they will also control the MFD at the same time.
- 2004-2010 Touareg can only program Volume Up & Down

**SET RADIO SELECT SWITCH**

| | Alpine | JVC | Kenwood / Lightning Audio | Clarion / Nakamichi | Pioneer / Other* | Sony | Fusion |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 7 | 8 | 9 |

*Other - Dual / Axxera, Jensen, Rockford Fosgate

1. Turn the key to the ignition position.
2. Press and release programming button on the side of the interface.
3. 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:**
      **A. For short press functionality:** Release the button within 1.5 seconds. The LED will turn back on.
      **B. For long press functionality:** Hold the button until the LED starts blinking. Release the button and the LED will go back to solid.
4. If you need to program more buttons, repeat step 3 for each additional audio function on the steering wheel.
5. 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.
6. Once programming is completed, wait seven seconds. The LED will flash three times indicating end of programming.
7. 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 Steering Wheel Control Programming (cont.)

**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 / End Call | 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 | Answer ** | Phone Menu | Power / End Call | |
| 11 | Band / Program | Phone Receive | Voice | Voice | End ** | Answer Call | Voice / Answer / End Call | |
| 12 | Receive | Phone Reject | On Hook | | PTT ** | End Call | Voice (Android Auto & Car Play) Answer / End Call*** | |
| 13 | End | Voice | Off Hook | | | Voice | | |
| 14 | Voice | Power | Mute | | | | | |
| 15 | | | Preset + | | | | | |

**\* Dual / Axxera, Jensen, Rockford Fosgate      \*\* Jensen ONLY      \*\*\* XAV-AX100 / 200 Only**

## Testing and Verification

1. Turn the ignition on. The LED on the interface will turn on and the +12v accessory wire will turn on.

2. Turn on the radio and check balance and fade. Note: **Premium 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 all SWC are functioning properly.

4. Turn off the vehicle and remove the key. Radio will turn off as soon as the key is removed from the ignition.

## Product Updates (Firmware)

The RP4-VW11 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.

**PAC**

© 2018 AAMP Global. All rights reserved. PAC is a Power Brand of AAMP Global.
PAC-audio.com

**Rev: 5**
**Date: 050918**

Page 4