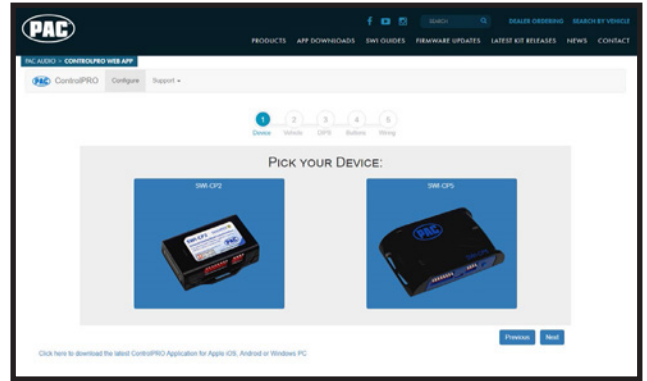


Simple, clear, and specific installation information is provided through our ControlPRO Web APP!

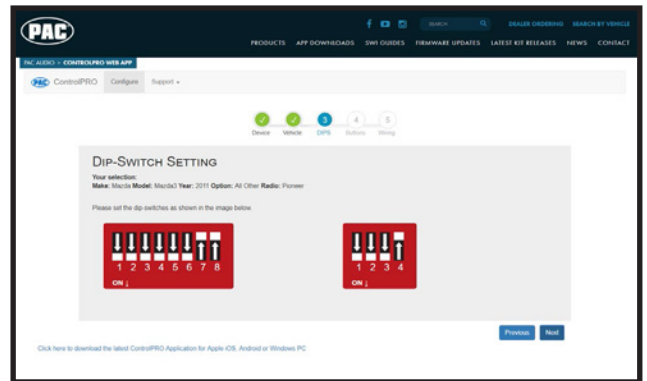
## Step 1:

Go to: pac-audio on your PC or mobile device and select your device, vehicle, and radio.



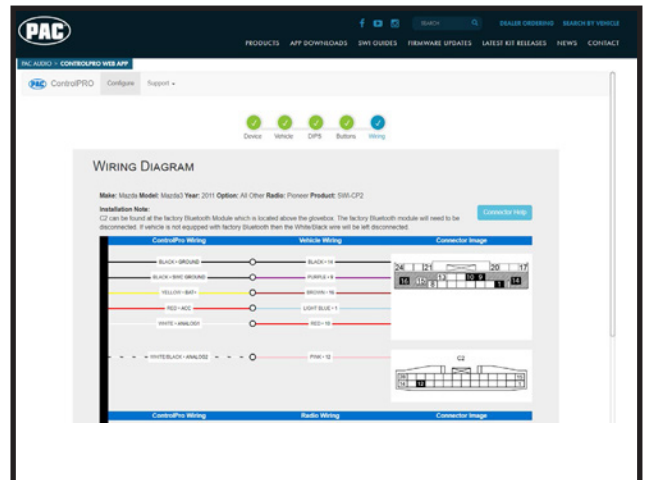
## Step 2:

Set the DIP switches



## Step 3:

Wire up the module according to the diagram



# You're finished!!

Mobile applications are also available for Apple and Android in their respective store. Just search "controlpro" with no spaces.



**Troubleshooting and FAQ**

LED Legend			
Color	During Normal Operation	During Manual Programming Mode	During Optional Programming
Solid Red	Accessory on	Waiting on short press button release	Waiting on short press button release
Solid Green	N/A	Waiting on button to be pressed	Waiting on button to be pressed
Solid Amber	Update required - Please call tech support	N/A	N/A
Flashing Green	Button is being pressed	N/A	N/A
Flashing Amber every 5 seconds	Module is connected to the PC via USB	N/A	N/A
Flashing Red/Amber	<b>Error</b> - Dipswitch setting on vehicle switches set to unknown config	Long Press Button detected	Long Press Button detected
Flashing Green/Red	<b>Error</b> - Dipswitch setting on radio switches set to unknown config	N/A	N/A
Flashing Green/Amber/Red	<b>Error</b> - Button not pressed long enough or value of button is too close to rest value	N/A	N/A

- Q. The module's LED is flashing a pattern that is not consistent with normal operation.  
A. Please reference the LED legend above for your specific case.
- Q. What all can I connect to the Red/White (Accessory Output) wire on the module?  
A. The interface's accessory output (Red/White) is only rated at 2 Amp. If you require more current capacity an external relay must be used.
- Q. Is there a way to perform a master reset to the module?  
A. The interface can be reset, when not connected via USB, by pressing and holding the programming button on the side of the interface for seven seconds until the LED turns amber. This reset can only be done while the module is connected to the vehicle.
- Q. I have connected all of the wires and set the DIP switches as instructed. I am having an issue where some or all of the buttons are not functioning correctly or at all.  
A. Verify that all of the ground wires (radio, CP2, and steering wheel circuit) are connected at the same place. In some vehicles the factory ground may not be a sufficient ground for all of these wires. In this case please make all ground connections to chassis ground.

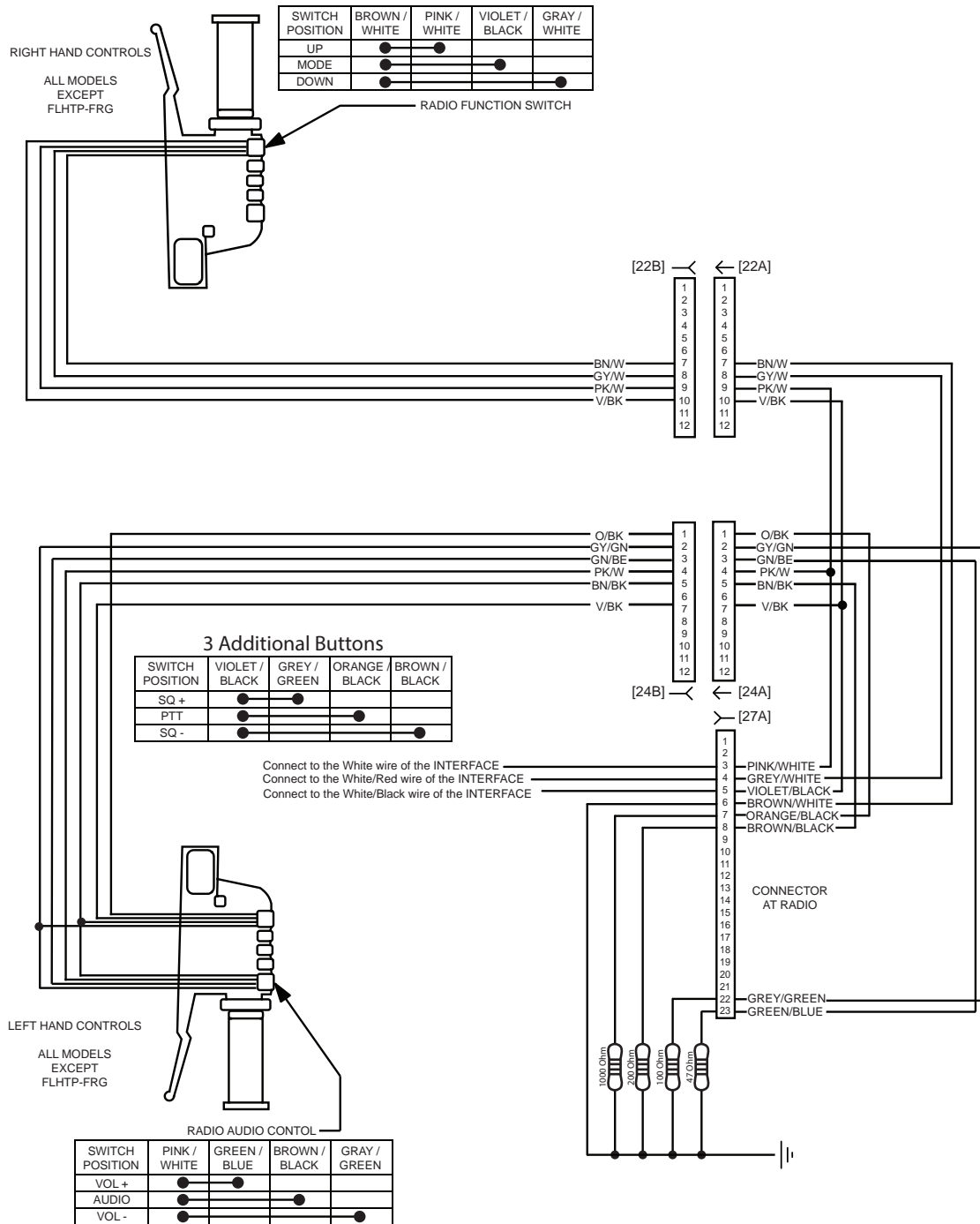


# Steering Wheel Control Interface

1998 -2013 Harley Davidson Wiring Diagram

With or Without SQ+, SQ- & PTT Buttons

## Connection Diagram



1. Connect Pin 3 (Pink/White) to the INTERFACE's White wire.
2. Connect Pin 4 (Grey/White) to the INTERFACE's White/Red wire.
3. Connect Pin 5 (Violet/Black) to the INTERFACE's White/Black wire.
4. Connect Pin 6 (Brown/White) to chassis ground.
5. Connect one end of a 1K Ohm resistor to Pin 7 (Orange/Black). Connect the other end to chassis ground.\*\*
6. Connect one end of a 200 Ohm resistor to Pin 8 (Brown/Black). Connect the other end to chassis ground.
7. Connect one end of a 100 Ohm resistor to Pin 22 (Grey/Green). Connect the other end to chassis ground.
8. Connect one end of a 47 Ohm resistor to Pin 23 (Green/Blue). Connect the other end to chassis ground.

\*\*Note - The Orange/Black in Pin 7 will not be present if the bike is not equipped with the SQ and PTT buttons\*\*





### SWC Button Re-assignment Procedure

Please read each of the following steps to familiarize yourself with the process before beginning. The buttons must be programmed in the specific order shown in the chart below.

1. Turn the key to the ignition position. The LED will illuminate red.
2. Press and hold the programming button on the side of the interface until the LED illuminates green. Release the programming button.
3. Within 7 seconds, press the button that is to be learned on the steering wheel. The LED will turn red when the steering wheel button is pressed. **At this point you have two options:**
  - a. **For short press functionality:** Release the button on the steering wheel. The LED will change back to green.
  - b. **For long press functionality:** Continue to hold the button until the LED flashes between red and amber. Release the button and the LED will change back to green.
4. Repeat step 3 for each additional button 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. The LED will turn off and back on when the skip has been done successfully.
6. Once programming is completed, wait seven seconds. The LED will flash green 3 times indicating the end of programming.
7. Test the interface for proper functionality. Whenever a SWC button is pressed the LED on the interface should blink green. If any function does not work, repeat the programming steps.

The SWC can always be restored to default settings by pressing and holding the programming button on the side of the interface until the LED illuminates green. Release the programming button, then wait 7 seconds for the LED to flash 3 times.

### Button 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 Dial	VR	End **	Answer Call	Voice Dial / Answer / End Call	
12	Receive	Phone Reject	On Hook		PTT **	End Call	VR (Android Auto & Car Play) Answer / End Call***	
13	End	Voice Dial	Off Hook			VR		
14	VR	Power	Mute					
15			Preset +					

\* Advent, Boyo, Dual, Lightning Audio, Jensen, Rockford Fosgate & Visteon    \*\* Jensen & Advent ONLY    \*\*\* XAV-AX100 Only



### Manual Programming Mode

With this method the SWC values must be manually programmed into the CP2 by using the programming button. The vehicle dipswitches on the side of the interface must all be set to the up (off) position. The radio dipswitches must be set to the proper radio configuration (see below). **PLEASE NOTE: This mode is only compatible in vehicles with both analog SWC and a discrete 12v Accessory wire. Vehicles with CAN-Bus buttons cannot be manually programmed.**

1. Visit pac-audio to download the ControlPro PC application.
2. Launch the application and find the installation instructions for your vehicle.
3. Set the radio dipswitches according to the chart below.
4. Wire up the interface according to the installation instructions in the application.
5. Connect the CP2 to the vehicle
6. You can now follow the programming instructions below.

Radio Dipswitch Settings							
Alpine	Clarion/Nakamichi	Fusion	JVC	Kenwood	Other	Pioneer	Sony
Other - Advent, BOYO, Dual, Lightning Audio, Visteon, Rockford Fosgate							

Please read each of the following steps to familiarize yourself with the process before beginning. The interface must be programmed in the specific order shown in the chart below

1. Turn the key to the ignition position. The LED will illuminate red.
2. Press and hold the programming button on the side of the interface until the LED illuminates green. Release the programming button.
3. Within 7 seconds, press the button that is to be learned on the steering wheel. **At this point you have two options:**
  - a. **For short press functionality:** Hold the button on the steering wheel until the LED changes from green to red. Release the button.
  - b. **For long press functionality:** Continue to hold the button until the LED flashes between red and amber once. Release the button.
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. The LED will turn off then back on when the skip has been done successfully.
6. Once programming is completed, wait seven seconds. The LED will flash green 3 times indicating the end of programming.
7. Test the interface for proper functionality. Whenever a SWC button is pressed the LED on the interface should blink green. If any function does not work, repeat the programming steps.

### Radio Function Mapping 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 Dial	VR	End **	Answer Call	Voice Dial / Answer / End Call	
12	Receive	Phone Reject	On Hook		PTT **	End Call	VR (Android Auto & Car Play) Answer / End Call***	
13	End	Voice Dial	Off Hook			VR		
14	VR	Power	Mute					
15			Preset +					

\* Advent, Boyo, Dual, Lightning Audio, Jensen, Rockford Fosgate & Visteon    \*\* Jensen & Advent ONLY    \*\*\* XAV-AX100 Only

