

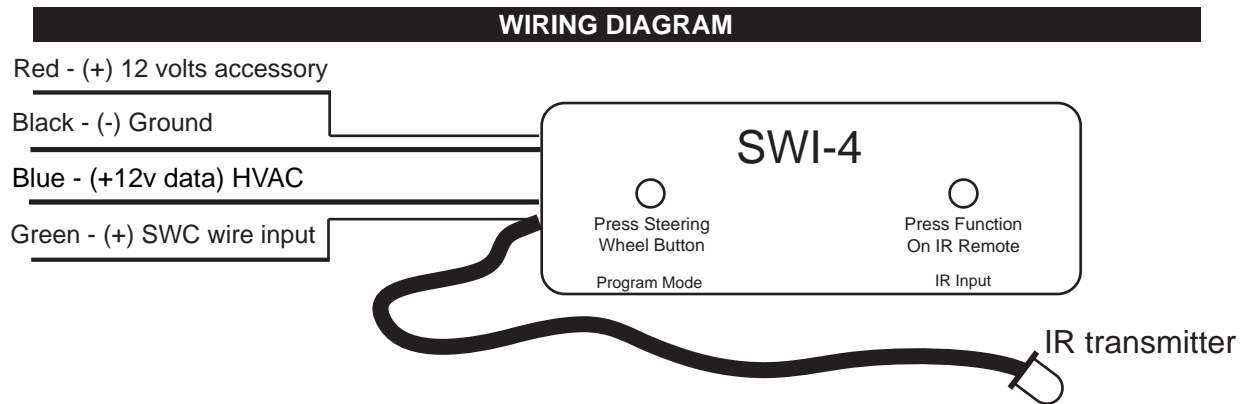
# SWI-4

rev 7-11-01

## Steering Wheel Radio Control Interface Installation instructions.

- General Motors 1992 & newer with steering wheel airbag and heater/ air controls.  
Note: Cadillacs vehicles, please use SWI-2. Catera 1998-2001, please use SWI-3

The Steering Wheel Interface (SWI) will control most aftermarket head units with an infrared remote by still utilizing the factory steering wheel radio control buttons. The SWI has non-volatile memory which can store from between 1 to 17 functions from the steering wheel and wireless remote. The SWI-4 will also control the heater and fan when using the buttons on the steering wheel. \*The SWI interfaces will only work with infrared remotes that use a 40kHz carrier frequency. Consult with equipment manufacture to determine the carrier frequency.



RED (+) switched power input: Connect to a fused source accessory 12v.

BLACK (-) chassis ground input: Connect this to the vehicle chassis.

BLUE (+12v data) HVAC output: This wire provides data to control the climate control.

GREEN (+) SWC input: Connect this to the steering wheel button control wire. This input needs to see positive voltage with different value resistance inline on each button on steering wheel. DO NOT connect directly to 12v.

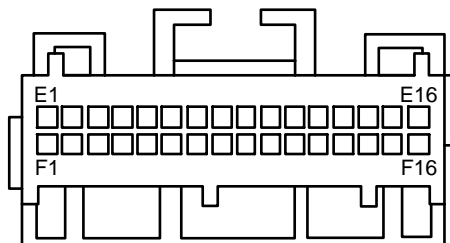
### IMPORTANT!

**How to verify input control wire from steering wheel:** The correct wire can be verified by connecting a voltmeter to the suspected wire (+) and to vehicle ground (-). The meter should read close to ignition voltage whenever a button is held down on the steering wheel and 0 volts with no buttons pressed. Make measurements without the SWI-4 connected.

### Steering wheel button control wire

**GM 32 pin connector:** Locate **light** green wire in pin# E5 (in some vehicles, pin# E6) and connect to green wire of SWI-4. Locate **dark** green wire in pin# E1 and connect to blue wire of SWI-4.

**Note:** For some Buick vehicles, the light green and dark green wires maybe in a seperate 7 pin connector.



32 pin plug

Front view of plug  
removed the from back of radio

## Programming

**Programming the SWI-4 to control the new aftermarket head unit and regain operation of the steering wheel heater / air controls:** After terminating the red, black, green and blue wires the interface is ready to be programmed to operate the heater controls and the new stereo. First check that the IR remote that was supplied with the new head unit works properly. If the remote does not properly control the head unit the interface cannot be programmed. Weak batteries in the remote may cause programming errors, even if the remote seems to operate properly.

The SWI-4 “learns” the HVAC buttons specific to your car and the radio buttons on the steering wheel. The HVAC function buttons must be programmed first followed by the radio functions.

- 1) Turn on the vehicle ignition to supply power to the SWI-4.
- 2) Use a pen to depress the “program mode” button. Remove pen when left LED light comes on.
- 3) Press and **hold** the **TEMP UP** steering wheel function button. When the left LED turns off release the steering wheel button.
- 4) The left LED will turn on again, press and **hold** the **TEMP DOWN** steering wheel function button. When the left LED turns off release the steering wheel button.
- 5) Repeat steps 3 and 4 above if the vehicle has **FAN UP** and **FAN DOWN** buttons. If the vehicle does not have **FAN speed** function buttons press the “program mode” button on the interface. This will cause the interface to move to the radio function program mode. The left LED will flash to indicate it is ready to “learn” the radio functions.
- 6) Within 10 seconds press and hold one of the steering wheel radio function buttons. Continue to **hold** the steering wheel button until the left LED turns off. Release the steering wheel button and the right LED will turn on.
- 7) Place the stereo’s IR remote within 3” of the “IR Input” port on the side of the SWI-4 next to the program button. Press the remote’s button that corresponds to the steering wheel button that was previously pressed. The LED should turn off and the left LED will turn on.
- 8) Repeat steps 6 and 7 until all radio steering wheel functions are programmed.
- 9) When programming is complete, and the left LED is on, wait 10 seconds and both LED’s will flash 3 times. This indicates an automatic program exit. Do not stop more than 10 seconds while programming the radio functions or there will be an automatic program exit and you will have to start over at step number 2 above. Turning off ignition before the automatic exit will require starting over at step 2 above.

## Testing

- Test the SWI-4 by holding it’s infrared LED (LED on the end of 4’ lead) close to the stereo and verify that it works properly. Experiment with various locations for the LED. You should be able to find a hidden and convenient mounting location. Try along the top front and /or bottom of the stereo as well as it’s sides. The LED can be replaced with most any IR LED, like Radio Shack’s # 276-143. The longest lead of the LED must be soldered to the blue wire in the 4’ cable.

**Troubleshooting:** If the SWI-4 does not work properly try the following:

- If the SWI-4 seems to be continuously sending out a command without pressing any buttons. Reprogram and be sure that the steering wheel buttons are held down until the red LED turns off on the SWI-4.
- The heater / air control buttons operate the wrong function. Reprogram the SWI-4 and be sure to press the heater / air control buttons in the proper order. TEMP UP, TEMP DOWN, and if equipped, FAN UP, FAN DOWN.