

SWI-6

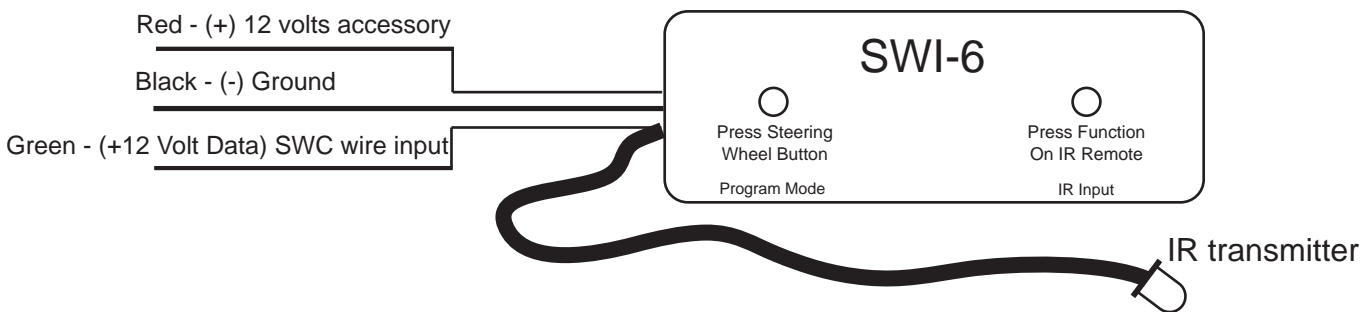
rev 8-24-01

Steering Wheel Radio Control Interface Installation instructions.

- Dodge Stealth and Mitsubishi all years
- Ford, Lincoln and Mercury vehicles: Aerostar 1996-1997, Econoline 1994-1996, Taurus and Sable 1992-1995 (dash controls), Windstar and Villager 1993-1998
- BMW all series 1997-1999 and 2000-2001* all series
- Nissan Quest 1993-1995

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 interfaces will only work with infrared remotes that use a 40kHz carrier frequency. Consult with equipment manufacture to determine the carrier frequency.

WIRING DIAGRAM



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

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

GREEN (+) SWC input: Connect this to the steering wheel button control wire. This wire reads data from the steering wheel. DO NOT connect directly to 12v.

IMPORTANT!

How to verify input control wire from steering wheel or rear seat controls: The correct wire can be verified by connecting a voltmeter to the suspected wire (+) and to vehicle ground (-). The meter should read close to 12 volts with no buttons pressed. Whenever a button is held down, the voltage should drop 1-2 volts. Make measurements without the SWI-6 connected.

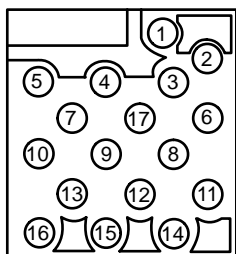
Steering wheel button control wire

GM 7 pin connector: Locate green wire in pin# 6 or 7. In some vehicles the location of the wire will be in a 15 pin connector.

Ford and Nissan 2 pin connector: Connect SWI to pin# 2. Wire color maybe tan, pink/wht, Lt. blu/red or Lt. blu/blk

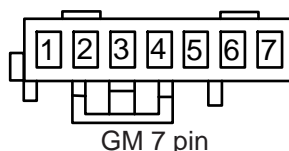
BMW: 97-99 Connect SWI to pin 7. *2000-01 you will need to cut the wire at the steering wheel column and connect SWI to the steering wheel side. Wire colors vary, please verify wire. If the car is equipped with a cellular phone you will need to put a diode (1N4148 fast switching diode) in line (with stripe towards steering wheel side) of the data wire in the steering column and tap the SWI green wire in between the diode and steering wheel. You will need to shunt the diode for about 5 seconds during initial starting and running of car.

Mitsubishi and Dodge Stealth: Locate yel/wht wire in separate 6 pin plug from factory radio

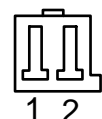


BMW *

Front view of plugs removed from the back of radio



GM 7 pin



Ford 2 pin

Programming

Do not mount the IR LED at this time. Wait until the SWI-6 is programmed and operation is verified.

Programming the SWI-6 to control the new aftermarket head unit: After terminating the red, black and green wires the interface is ready to be programmed. 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.

- 1) Turn on the ignition to supply power to the SWI-6 and the steering wheel radio control pad.
- 2) Use a pen to depress the "program mode" button. Remove pen when left LED light comes on.
- 3) Within 8 seconds press and hold one of the steering wheel 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.
- 4) Place the stereo's IR remote within 3" of the "IR Input" port on the side of the SWI-6. Press and hold the remote's button that corresponds to the steering wheel button that was pressed. Continue to hold the remote's button until the right LED turns off. Release the button and the left LED will turn on.
- 5) Repeat steps 3 and 4 until all radio steering wheel functions are programmed. Do not turn off ignition until all buttons are programmed.
- 6) When programming is complete and the left LED is on, wait 8 seconds and both LED's will flash 3 times. This indicates an automatic program exit. Do not stop for more than 8 seconds while programming 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.

Ford Vehicles: if the left LED turns off and the right LED turns on, before you have pressed a button on the steering wheel or rear seat control then a invalid command was received by the SWI-6 and must be erased. Press the "program" button on the side of the SWI-6 before pressing the button on the IR remote. This will turn off the right LED and turn on the left LED for you to again press a button on the steering wheel or rear seat control. This erase or backup feature can be used as many times as needed but it only erases the last command sent from the vehicle data buss.

This feature can also be used if the last button pressed on any vehicle steering wheel was not the intended button.

Testing

- Test the SWI-6 by holding it's infrared LED (LED on the end of 4' lead) close to the front of 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 connects to the blue wire of the 4' cable.

Troubleshooting: If the SWI-6 does not work properly try the following:

- The SWI-6 controls the radio without pressing a button. Reprogram the SWI-6 and be sure the left LED does not turn off before you have pressed a button on the steering wheel. If the LED does turn off before pressing a button on the steering wheel use the erase feature described above in the programming section.
- The MUTE button works intermittently. Program the MUTE function button on the steering wheel 2 times. In some applications there are 2 different signals sent by the steering wheel control pad every other time it is pressed. The SWI-6 must learn these 2 signals for it to work properly.
- Some times a function works intermittently. Check that the IR remote used to program the SWI-6 has fresh batteries.