## **Vehicle Troubleshooting**

If the ASWC-1's auto detect feature was used and at the end of the programming sequence the ASWC-1's light flashes **Red/Green** instead of going solid **Red**, this means that the ASWC-1 idin't detect the vehicle. Follow the steps below to trace down where the problem may lie. If any of the following steps are performed, reset and reprogram the ASWC-1 according to the vehicle specific document. Scroll down to the end of the document for a physical layout of the ASWC-1 showing the reset button location.

- Ensure that the ASWC-1 is programmed correctly according to the vehicle specific document. In general, there are 3 different ways to program the ASWC-1 depending on the vehicle, "press and hold", "tap", and "do nothing". For applications to "press and hold" the Volume Up button on the steering wheel, ensure that the Volume Up button is held all the way to the end of the programming sequence. Sometimes pressing and holding the Volume Up button before resetting the ASWC-1 helps. For applications to "tap" the Volume Up button on the steering wheel, ensure that the Volume Up button is tapped at a heartbeat pace. Don't tap too slow, or too fast. Try tapping the Volume Up button at different speeds if no success after a couple attempts. For applications that don't require any intervention with the Volume Up button on the steering wheel ("do nothing"), ensure that no buttons are pressed during the programming sequence.
- Ensure that the factory equipment functions properly, and still functions properly after attempting to install the aftermarket equipment. Temporarily reinstall the factory radio, then test the steering wheel controls for functionality. Take note which button is for **Volume Up**. Some vehicles may have this button behind the steering wheel, and this button may be upside down if the steering wheel is turned. Make sure that all of the steering wheel control buttons function, and that none of them are smashed down. There should be spring-like feel to the buttons. The factory radio may function with a bad button(s), but the ASWC-1 most likely will not. Especially important is the **Volume Up** button, which the ASWC-1 uses for programming. Also worth mentioning is optional "non-audio" buttons. Some Ford and Subaru vehicles that do not have Bluetooth repurpose the secondary steering wheel control wire. Do not connect "steering wheel control wire 2" in these applications.
- Check power and ground at the ASWC-1. With the key in the accessory position, connect the red and black leads from a multimeter to the **Solid Black** wire, and the **Red** wire, from the ASWC-1, directly at the 12-pin connector. The meter should read roughly 12-volts DC.
- Confirm that the ASWC-1 has a good ground in the vehicle. Due to the nature of how microprocessors function, sometimes having the ASWC-1's ground shared with the factory ground in the wiring harness is not sufficient and could cause problems. The use of a chassis ground solely by itself is highly recommended, especially in data communication vehicles (Pink wire applications). Attach the Solid Black wire from the ASWC-1 to a good chassis ground, all by itself. Ensure that this wire is straight from the ASWC-1 without any extensions, and make sure that a ring terminal (not supplied) is used, and crimped properly. This will alleviate any grounding issues that could prevent the ASWC-1 from programming. Most cases of the ASWC-1 not programming comes from the lack of this step performed.
- Recheck that the wires connected from the ASWC-1 to the vehicle are correct. Reference the vehicle specific document, and double check that the proper document is used. Some vehicles have more than 1 document for different trims. If it is a non-data communication vehicle, test the factory steering wheel control wires with a multimeter by applying the negative from the meter to the steering wheel control ground wire, and the positive to the steering wheel control positive wire. With no load connected to the wires. Have the meter on a resistance setting (OHM Ω), then test each steering wheel control button one at a time. Each button should show a solid reading with little fluctuation, and there should be a noticeable difference between each button. Note that the Volume Up button is crucial to be 100% proper as this is the button used for programming. Write these values down if Tech Support will be contacted.
- Verify that the wires connected from the ASWC-1 to the vehicle are connected directly, copper to copper, i.e., solder, crimp cap, military splice. No tapping style connectors or butt connectors are permitted due to increased resistance and poor performance. If a pre-wired ASWC-1 harness is being used, (and all troubleshooting steps have been tried and the ASWC-1's light still doesn't go solid **Red**), remove the pre-wired ASWC-1 harness and use the harness that came with the ASWC-1 instead.
- If the ASWC-1's light still doesn't go solid **Red** at the end of the programming sequence, refer to the **Manual Programming** document to manually program the ASWC-1 to the vehicle (non-data vehicles only).
- **For data communication vehicles:** If the ASWC-1's light still doesn't go solid **Red** at the end of programming, ensure that all factory electronic modules are connected to the vehicle, i.e., climate control, upper display, push-to-start button. Reconnect the factory radio and ensure that the steering wheel controls still function. Remove the key from the ignition, reinstall the aftermarket equipment, then reset and reprogram the ASWC-1. If the ASWC-1's light finally went solid **Red**, cycle the key off/on, then test the steering wheel controls for functionality.
- For Metra Euro kits with an included ASWC-1: The ASWC-1's 3rd, 4th, 5th and 6th Red light flashes should be longer. If any of these flashes are not longer, inspect that the following wires are connected (pin-out diagram shown to the right): Pin-4, Pin-5, Pin-8, Pin-11.
- If all steps have been performed and the ASWC-1 still doesn't go solid Red at the end of the programming sequence, update the ASWC-1 to
  the latest software via <u>AxxessInterfaces</u>. After updating the ASWC-1, program it to the vehicle following the vehicle specific document.
  If the ASWC-1 still doesn't go solid Red at the end of the programming sequence after being updated, contact Tech Support at 1-800-253-TECH.
  Take note to be prepared to perform some tests in the vehicle when you contact Tech Support.

## **Vehicle L.E.D. Feedback (Green light)**

Longer Light Flash	ASWC-1 Wire
1	White/Green
2	Yellow/Green
3	Green/Orange
4	Gray/Red
5	Black/Green
6	Gray/Blue
7	Pink

## Kevnotes

- a. Long **Green** light flashes represent wire(s) that are connected from the vehicle to the ASWC-1.
- Short Green light flashes represent wire(s) that <u>are not</u> connected from the vehicle to the ASWC-1.
- c. Note that there will always be 7 Green flashes, in every application. But what is important is the length of the Green flashes. An example is data communication vehicles. In these vehicles the 7th Green flash should be longer, indicating that the Pink wire is connected. Some may be confused by this process because it is assumed that 7 Green flashes total means that the Pink wire is connected. This assumption is false. The 7th Green flash must be longer than the prior 6 Green flashes.
- d. In data communication vehicles that require 2 wires (**Blue/Pink** & **Pink**) connected to the ASWC-1, only the **Pink** wire will show up in L.E.D. feedback.
- In "press and hold" vehicles that require more than 1 wire connected to the ASWC-1, only the primary wire will show up in L.E.D. feedback.



