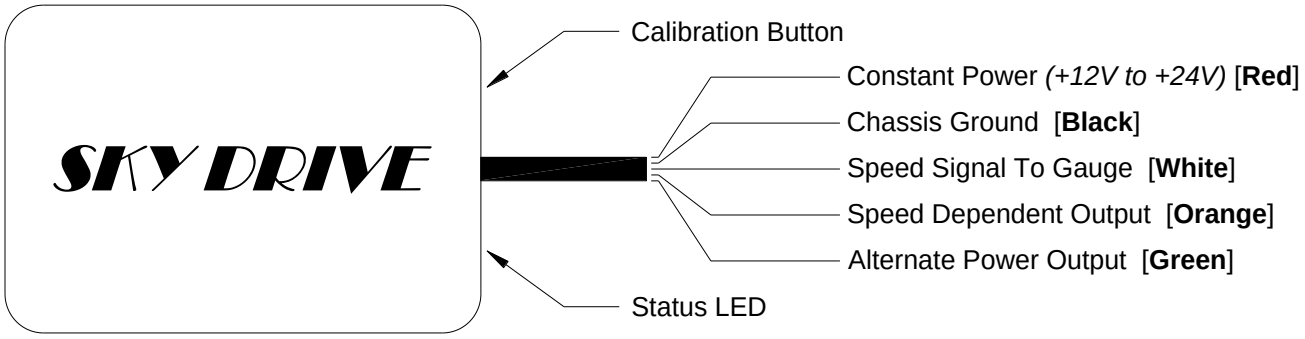
Classic Instruments

Low Speed Speedometer

Installation Manual



Sky Drive GPS Speed Sensor Mounting

- The optimum mounting location for the Sky Drive is any location inside the car where it will have a clear view of the sky. This will guarantee a good satellite signal and trouble free speedometer operation.
- In some cases, the Sky Drive will still get adequate satellite reception even without a clear view of the Sky. If you are planning on "hiding" the Sky Drive somewhere where it doesn't have a clear view of the sky, we recommend that you thoroughly test the Sky Drive in that location before permanently fixing it in place. Leave the wiring harness long to allow for repositioning in case the Sky Drive does not perform well enough and needs to be moved. Once a good location is established, you can then permanently mount the Sky Drive.
- The best way to determine if a mounting location is adequate for the Sky Drive is to test it for a day. Make sure the speedometer operation is smooth, accurate and uninterrupted.
- The status LED is invaluable when setting up the Sky Drive. The status LED will be RED when the Sky Drive is powered but has not acquired a satellite signal. The status LED will be GREEN when the Sky Drive is powered and has acquired a satellite signal.

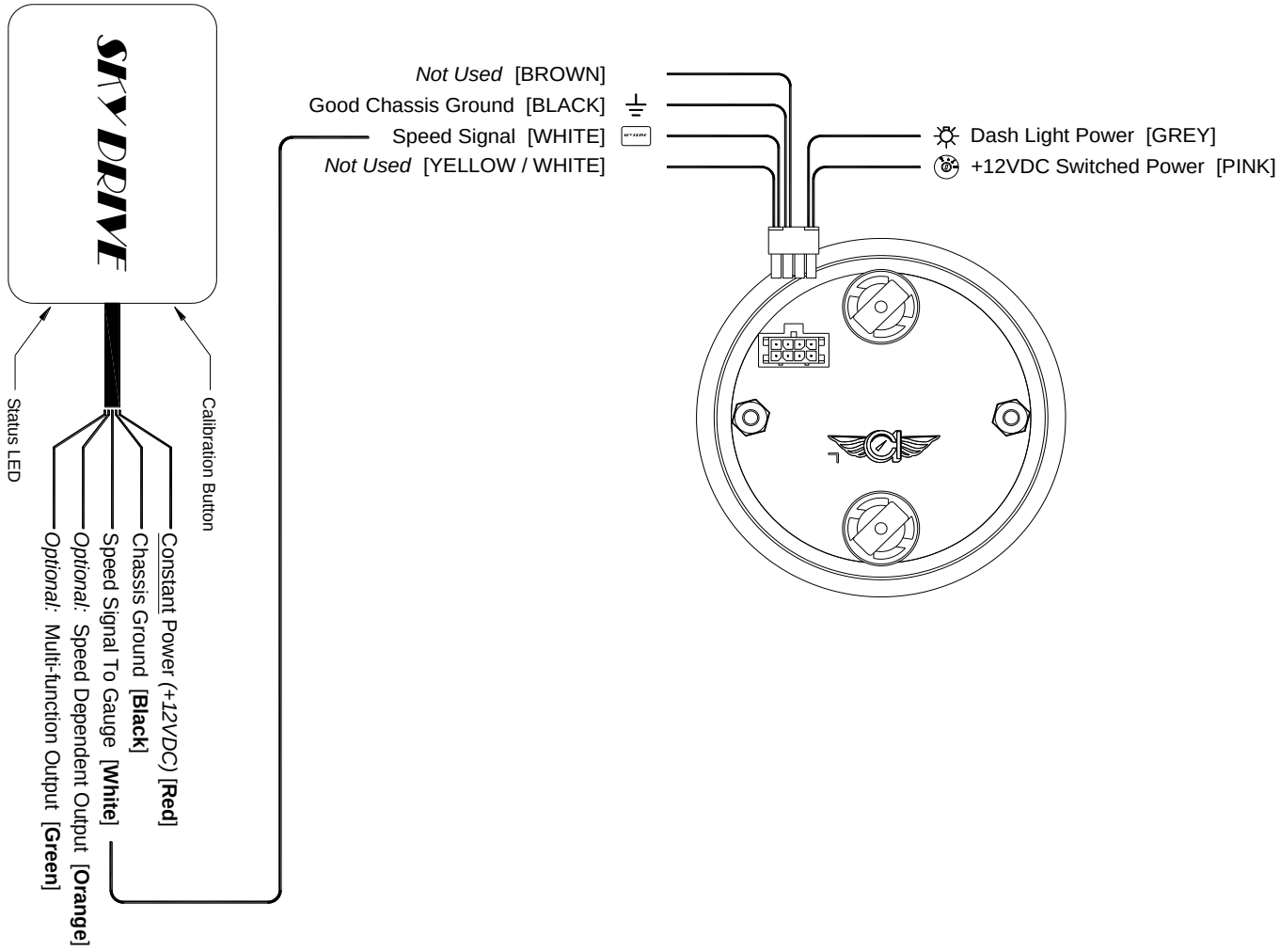
Sky Drive GPS Speed Sensor Wiring

- Connect +12VDC or +24VDC constant power to the **RED** wire of the Sky Drive harness. The Sky Drive requires between 1 and 4 minutes to acquire a good satellite signal upon power-up. If switched power is used, this initial signal acquisition will be required every time power is applied before your speedometer will work. The Sky Drive requires very little power (approximately 60mA) and will not run your battery down under normal driving conditions. Power should be removed, however, if the vehicle will be in storage for any length of time.
- Connect a good chassis ground to the **BLACK** wire of the Sky Drive harness.
- Connect the **WHITE** wire of the Sky Drive harness to the signal wire (or terminal) of your speedometer.
- Connect the **BARE** wire (used for shielding) of the Sky Drive harness to a good chassis ground.
- Optional Over-speed Function: The **ORANGE** wire of the Sky Drive harness is capable of driving a load (such as an indicator light) up to 1.5A at a user definable speed. The trigger speed for this output is programmed by running the calibration routine (described later in these instructions) while the **ORANGE** wire is tied to a constant power source. Be sure to disconnect the wire from the power source (and re-connect it to your load) when the calibration is finished.
- Optional: The **GREEN** wire of the Sky Drive outputs +12VDC (up to 1.5A) when the vehicle is moving and stays on for 5 minutes after the vehicle is stationary. This is useful in situations where an ignition wire is difficult to locate or non-existent.

Low Speed Speedometer Wiring

- Connect +12VDC switched power to the **Pink** wire of the speedometer harness.
- Connect a good chassis ground to the **Black** wire of the speedometer harness.
- Connect dash light power to the **Grey** wire of the speedometer harness.
- Connect the **White** speed signal wire from the Sky Drive harness to the **White** wire of the speedometer harness.
  - *The speedometer harness white wire may be labeled "Tach" since the same harness is used for Classic Instruments tachometers.*
- The **Yellow / White** and **Brown** wires of the speedometer harness are NOT USED.

Low Speed Speedometer Wiring Diagram



Sky Drive Calibration Procedure

CAUTION: When calibrating the Sky Drive, press the internal calibration button ***lightly*** to avoid damage! The calibration switch is delicate and if broken off will void warranty.

- Ensure the Sky Drive is connected to the speedometer and the speedometer and Sky Drive are powered.
- Hold the Sky Drive in your hand and locate the internal calibration button through a hole located beside the harness *opposite* of the LED.
- Gently press and hold the calibration button (*using the black calibration stylus provided*). Continue holding the button until the speedometer pointer begins to rise (about 5 seconds).
- Continue holding the calibration button until the speedometer comes close to 50mph (for speedometers using miles) or 80kph (for speedometers using kilometers).
- Release the calibration button and begin "bumping" the button for fine adjustment.
- If you pass the target speed, simply allow the pointer to return to zero and try again. There is no limit to the number of times the Sky Drive can be calibrated.
- Once the pointer reads as close as possible to 50mph (80kph), release the calibration button for 5 seconds. The pointer will return to zero. The Sky Drive has now been calibrated.
- The Sky Drive calibration is retained even after a loss of power. There is no need to recalibrate the Sky Drive once it has been successfully calibrated.

Over-Speed Calibration Procedure

- Repeat the standard calibration procedure while the over-speed warning output wire (**ORANGE**) is tied to constant power.
- Instead of holding the calibration button until the speedometer pointer indicates 50mph (80kph), hold the calibration button until the speedometer pointer indicates your desired over-speed limit.
- Release the calibration button for 5 seconds, the pointer will return to zero.
- The Sky Drive's over-speed limit has now been calibrated.
- Remember to disconnect the over-speed output wire (**ORANGE**) from the power source. You can now re-connect the output to your relay, lamp, etc…

Safety Warning: Using the Sky Drive speed signal (WHITE) for cruise control may cause the vehicle's cruise control module to stop working if the satellite signal is lost and begin working again unexpectedly once the signal is restored. This is a potential safety hazard and we do not recommend using the Sky Drive in this way.