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Hardwired GPS Installation Guide



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Product Overview

The Hardwired GPS Device is a self-supporting tracking unit that requires only constant power and ground to operate. The unit contains two antennas: one for GPS data and the other for LTE communication. You can easily install this unit under the dash of the vehicle for concealment.

Installing the Unit

Mounting the unit

To mount the unit, make sure the label side is facing the ground (down). Do not place the unit below a metal object as metal objects can interfere with the internal antennas' signals. Plastic, glass, and other materials do not cause interference with the signal. Underneath the dash is a preferred location, however other locations may work.

NOTE: Use of a Digital Multi-meter is highly recommended when probing electrical systems in the vehicle to prevent damage to other components. Once wiring sources are found you may want to disconnect the positive and negative terminals from the battery to ensure deactivation of airbags and other critical components.

3-Wire Installation

This is a simple 3-Wire installation guide that can easily be done by anyone with experience in wiring stereos, car alarms or other similar components. If you do not feel qualified, please seek the help of an installation professional for installation for a nominal fee.



Diag. 1

Ground Connection:

Connect wire #7 (black wire) to a grounding source. Make sure this is connected to a solid chassis ground free of plastics and paint. **Do not use floating grounds from the vehicles electrical system.** Secure with a bolt or screw.

12-Volt/DC Power Connection:

Connect wire #3 (red wire) to a **constant** 12-volt source from the vehicle. **It is important that this source always maintains 12 volts and does not shut off with the ignition power.**

Ignition Switch Connection:

Connect wire #4 (white wire) to a **switched** 12-volt source wire from the vehicle. This connection is used to monitor the ignition on/off status. **It's important to make sure that the switched 12-volt source you have chosen drops to (0) zero with the ignition in the "off" position and returns to 12-volts with the switch in the "on" position.**

Remaining Harness Wires

Using wire cutters, trim the remaining wires on the harness that were not needed to a manageable length. Make sure you secure any exposed wire on the ends with electrical tape or wire nuts to prevent contact that could cause shorts in the electrical circuit of your vehicle.

Powering up the unit

After attaching the wires and mounting the unit, reconnect the battery terminals and power up the unit by connecting the harness. When powered up, the LED status indicators on the unit light up. See Table 1 below for descriptions on what these LED status indicators mean.

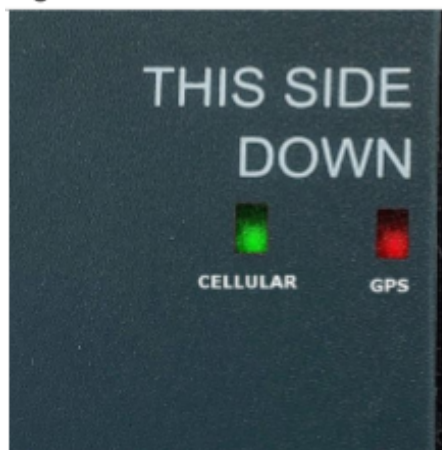
It may take up to five minutes to lock in a GPS signal. If you cannot obtain a GPS signal, wait for two more minutes, reposition the unit, and then try again.

LED Status Indicators

Table 1 below describes the status of the unit based on the LED indicators. **Table 1: LED status descriptions**

Color	Condition	Description
Red	OFF	GPS is asleep
	SOLID	GPS is fixed
	Fast Flashing	Device is searching for GPS
Green	1 sec flash, 15 sec off	Good cellular coverage
	1 sec flash, 1 sec off	No cellular coverage

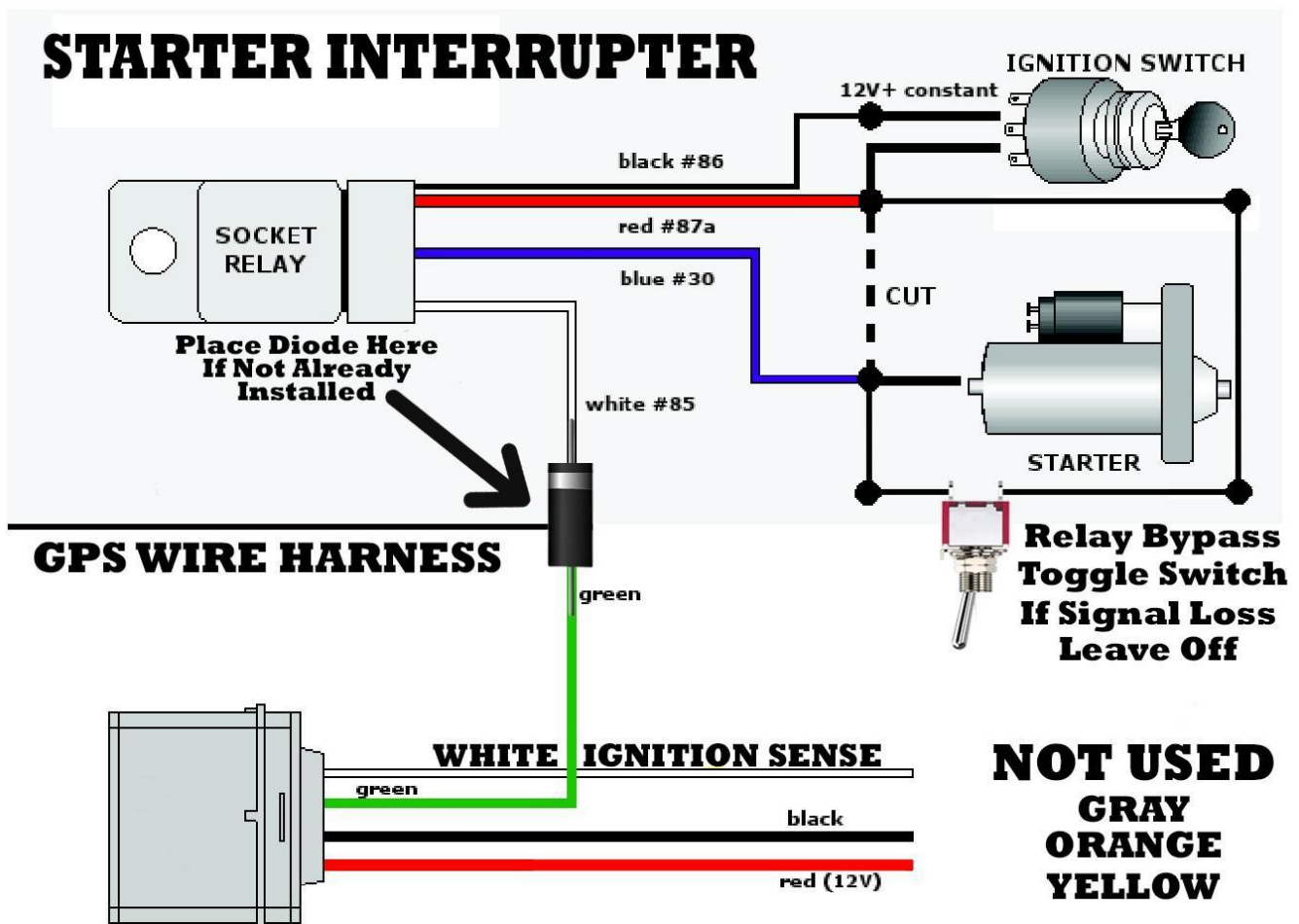
Figure 1: LED status indicators



Installing the Standard Starter Disable

NOTE: Wiring a Starter Relay in a Push Button ignition vehicle can be tricky. In some vehicles it may be hard to access the correct wires due to the location and design of the push button. Some installers will accept the installation and others may decline, it's up to the installer. Also, there could be an additional fee for push button starter installations. **ALWAYS CALL AHEAD AND ASK IF YOUR INSTALLER HAS INSTALLED GPS TRACKING DEVICES WITH THE START RELAY ON A PUSH BUTTON STARTER.** If not, you may want to call around to find someone more experienced with push button starters.

1. Black #86 wired to a constant 12V+ source.
2. The wire from the Ignition Switch to the Starter will need to have Red #87a spliced with the Blue #30 to complete the circuit relay.
3. Connect the White #85 wire from the socket relay to the green wire from the harness device. Add diode circle facing white wire.
4. Connect the starter disable relay to the 12V starter wire. Follow Diagram.
5. Optional relay bypass switch included, leave in off position. Show location of switch to the owner of the vehicle.



Installing the Starter Disable with ECM

Vehicles with an engine control module (ECM) installed between the ignition and the starter, require a different method when installing the starter disable. For these vehicles, connect the starter wire to the onboard computer, which typically carries a low voltage instead of the standard 12V.

WARNING: You must use a voltage meter and not a test light to measure voltage. If you tap a wire with low voltage (3 to 5 volts), you may lock down the vehicle.

Track the low voltage wire from the ignition to the ECM. Make sure that a 12V supply is coming out using the voltage meter. After locating the correct 12V wire on the ECM, perform the steps as described in “Installing the standard starter disable” on page 4.

Tips on Installing

To ensure proper installation of the Hardwired GPS Device unit, follow the listed recommendations:

- Ground the unit directly to the frame. Do not use small screws which are not attached to the frame for grounding.
- Splice the wires correctly and properly insulate them. Do not splice carelessly and without proper insulation.
- Make sure the device and all wiring are secured. Do not let the device and wiring hang haphazardly.
- Make sure you have proper light sequence before closing the dash.
- Use a **constant** 12V power supply for main power. **Do not use a pulsating 12V power supply. Avoid tapping into power sources with a rheostat or anything else on the line that could provide a power spike when used. This will cause the device to simulate a Power UP event each time and could possibly short out the device! (ex: connecting to CB radio power wire for main power can cause a power spike each time the microphone is keyed by the user to talk).**
- Make sure the unit is mounted with the label side facing down for antenna reception.