



SafetyTraks™

General Installation Guide

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Thank you for selecting the SafetyTraks™ Driver Safety Solution System.

This guide describes how to install and use your SafetyTraks™ unit. Following the instructions in this guide will enable you to get your unit operating quickly and easily. In the event that you require additional assistance, please contact customer support via e-mail at support@obccom.com.

CAUTION: On-Board Communications, Inc. is not responsible for damages to any vehicle due to SafetyTraks™ unit installation.

Notes:

- **Failure to install in accordance with these instructions may result in damage to the vehicle and may void the unit's warranty.**
- **Read all instructions before attempting installation.**

Safety Statement

This guide covers the installation of the SafetyTraks™ unit to ensure a safe and functional install of the unit by either a professional or novice installer.

- **Before attempting to add anything electrical to your vehicle, refer to the Owner's Manual for additional information.**
- **Always disconnect the vehicle battery while installing this or any other automotive electronic product.**
- **Make sure the unit and all associated cables are securely mounted and do not impede any of the vehicle's controls. Do not mount the unit near brake and gas pedals.**
- Use care when routing the unit's cables. Route the cables where they will be protected. Use commonly accepted install practices for after-market automotive electronic devices. Here are three acceptable methods of making a wire connection:
 - Soldering your connections (recommended)
 - Crimp connectors (with the use of the proper crimping tool)
 - Posi-Tap™ Connectors (no tools required)

Regardless of the method you choose, ensure that the connection is mechanically sound and properly insulated. Use high quality electrical tape and shrink tubing where necessary.

This product is connected directly to the vehicle's 12-volt system. There is no on-off switch on the unit. The installed device operates 24 hours a day and must be energized to log vehicle events or send data as required by anyone using the service.

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SafetyTraks™ Installation Kit Contents



SafetyTraks™ Unit



Power Cable

White tape must face skyward upon install



Cellular & GPS Antenna Combined & 3ft. Cable

Electrical Connections / Mounting Kit:

- 3 Small Cable Ties
- 1 #10 Ring Terminal
- 2 Posi-Tap™ Connectors
- 1 2" x 1 ½" Velcro™ Self-Adhesive Strip
- 2 Alcohol Prep Swabs

Antenna Mounting Kit:

- 1 ½" x 1" Velcro Self Adhesive Strip

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Recommended Tool Installation List

- Power drill AC/DC (Cordless recommended)
- Magnetic bit holder that houses Phillips and flat-head bits
- Wire stripper and cutters
- Crimpers for insulated connectors
- Electronic voltage meter (Digital display recommended)
- Tools to disconnect and reconnect vehicle battery (Crescent wrench, open end wrenches, etc.)
- Tools to remove internal vehicle trim (Panel poppers, sockets, ratchet, screwdrivers, torx bits, hex bits, etc.)
- Ring terminal connectors (For grounding wire)
- Self tapping screws (Various sizes)
- Star washers for grounding (Strongly recommended)
- Electrical tape (Black)
- Wire 20 gauge
- Velcro and/or double sided tape
- Wire ties (Various sizes)
- Soldering iron & solder

Using Your Digital Multi Meter

On-Board Technical Support hears more and more often about damaged computers and airbag systems as a result of probing with a test light. Not all air bag wires are in yellow tubing, and not all transistorized outputs can light a test light bulb without shorting out! The best solution, as it has always been, is a good digital multi meter.

Introduction to GPS

Satellites are in a 12-hour orbit at 12,000 miles above the earth. There are 24 satellites in the system and generally there are at least 5 satellites orbiting overhead at any one time. This antenna must be positioned to receive signals from these satellites. The antenna location must be selected carefully so that the antenna can receive the satellite signals. The standard GPS antenna is designed to be located inside the vehicle. The ideal location is in a place that allows line of sight reception from the GPS satellites in orbit above. The satellite signals will pass through glass. Both the radio transceiver antenna and GPS antenna are designed to be mounted inside the vehicle, (not exposed to the outside weather).

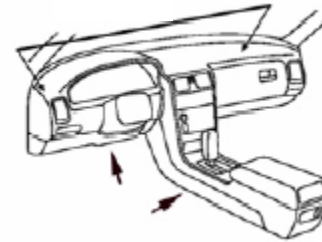
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Selecting the Mounting Location for the SafetyTraks™ Unit

The SafetyTraks™ unit and the cables that connect to it must be mounted so it will:

- Not be exposed to damage from people or objects
- Not impede any of the vehicle's operational systems such as steering, brake or gas pedals

In addition, the SafetyTraks™ unit itself must not be exposed to direct sunlight or excessive heat generated by the vehicle's operation.



A flat surface is recommended for the unit's placement. The installation Velcro is designed to hold the unit in place; however additional mounting items may be needed to help secure the unit if a flat surface is not available. Do not hang the unit from the installation Velcro without additional mounting hardware as vibration from the vehicle's use will cause the unit to fall.

Some examples of mounting locations include: under the dash above the knee bolster, under the center console, behind the glove compartment, and in the trunk.

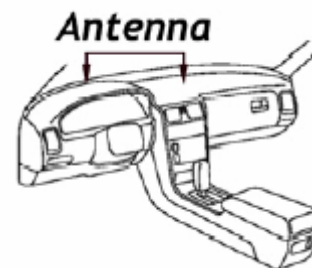
Selecting the Cellular / GPS Antenna Location

The SafetyTraks™ antenna combines the Cellular and GPS antennas into one antenna package. The antenna does not require a ground plane to function properly.

THE ANTENNA MUST BE MOUNTED FLAT WITH THE "WHITE 3M TAPE" FACING SKYWARD. The ideal location is under a non metallic dashboard. It can be placed under the dash pad as long as the pad or covering is not metallic or a barrier to the GPS satellite signals. If the antenna is placed under the dash, the 3M tape can be used to secure or hang the antenna from the dash. Otherwise the small piece of Velcro can be placed on the back side of the antenna and the antenna stuck to a flat surface with the 3M tape facing skyward.

If the vehicle window has a solid dark coating around the edge, do not place the GPS antenna behind the coating. The GPS signals will travel through the clear glass but will be reduced if the window has any metallic coating or tint applied.

The GPS antenna will work best if it has a clear view to the sky and as much of the horizon as possible. Any metallic objects between the antenna and the satellites will degrade the signal and reduce the overall performance.

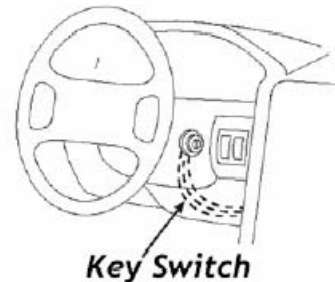


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Locating Vehicle Power

Connect the red lead to the +12VDC vehicle power. The power cable can be shortened if needed. Connect the black lead to the vehicle chassis (ground). **The White lead is not required for this installation and may be left hanging**

***Improper connection could result in numerous “Reboot” notifications, and increased usage on monthly billing.**



Powering the Unit for the First Time

After you have wired the power harness to the vehicle, connect the dual Cellular and GPS antenna connections to the SafetyTraks™ unit matching the color of the connectors on the cable to the appropriate connectors on the unit (i.e – silver to silver and gold to gold). Then connect the power harness cable to the SafetyTraks™ unit. Once the power harness cable is attached the Orange Cellular LED (closest to the power connection) will flash once. After approximately 1 to 2 minutes the light will come on and glow steadily indicating the unit has cellular coverage. The Yellow GPS LED (closest to the edge of the case) will not light until it locks onto the GPS signals. **Please note – the Antenna must have a clear view of the sky and not be blocked by any metal in order for the unit to lock onto the GPS signals. When installing the unit for the first time – it may take as long as 15 minutes for the unit to acquire the initial GPS lock. This delay is due to the unit searching for the satellites.** When it locks on, the LED glow steadily. The unit is now functioning properly.

Congratulations!

You have just installed the SafetyTraks™ Teen Driver Safety Solution system

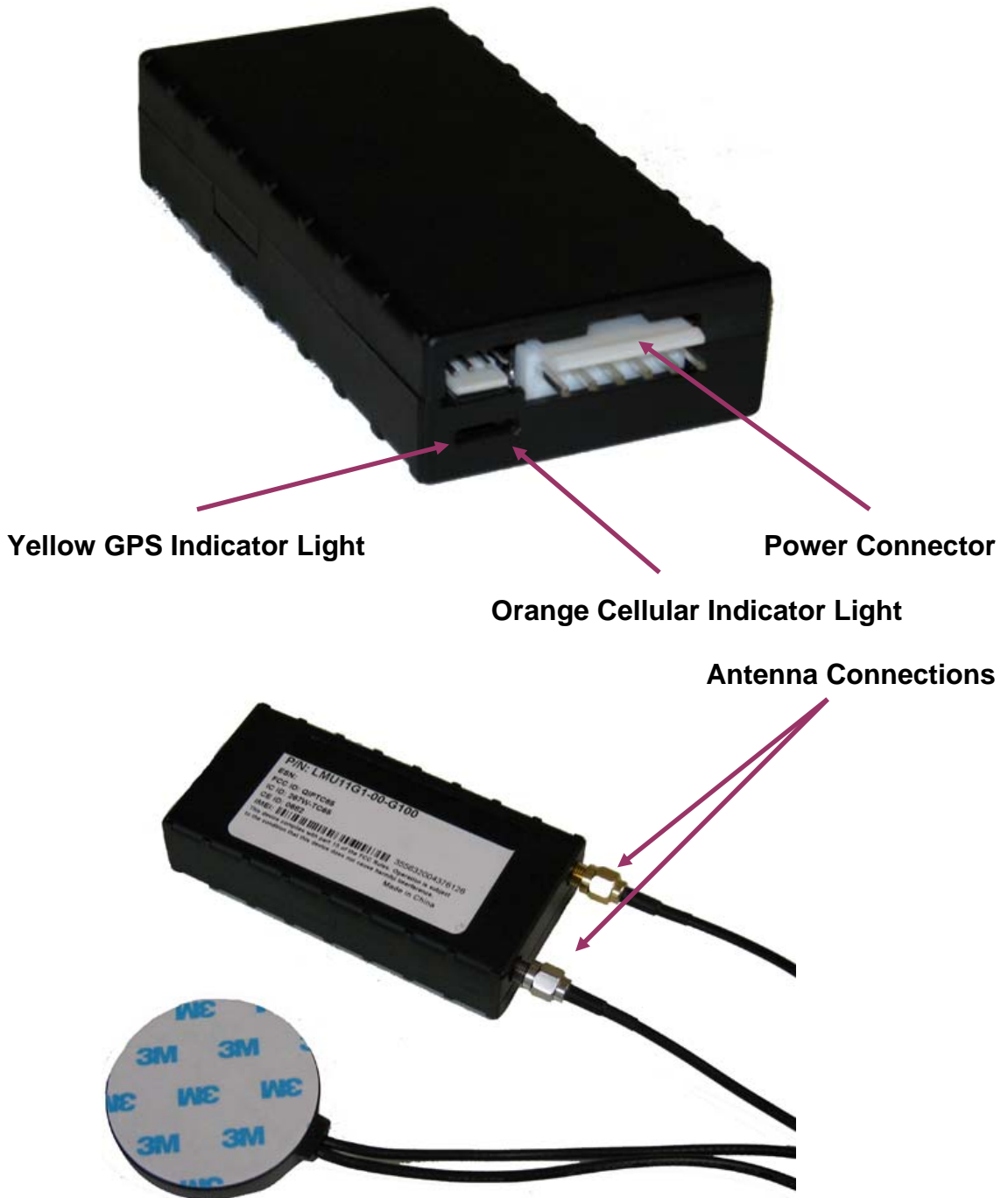
Please record the following information:

- **ESN ID # (located on the back of the SafetyTraks™ unit- This is the 10 digit number located next to the words “ESN”)**

Now that the unit is installed, here is how to use the system. Turn on your computer and log on to the Internet using your standard Internet browser. Go to the SafetyTraks™ login page at www.Safetytraks.com. Enter your login id and password that you received on the notification email sent by on-Board Communications and click the login button.

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SafetyTraks™ Wiring Diagram



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Unit with Antenna Connected

TROUBLESHOOTING GUIDE

SYMPTON	PROBABLE CAUSE	SOLUTION
All LED's Dark	Lack of Power	Check to make sure +12VDC power is applied to the power leads. Directly applying a voltage over +24VDC to the unit may cause damage.
Cellular LED does not light	Unit is trying to locate the cellular network	Upon power being applied, the unit may take up to 2 minutes to acquire a cellular lock.
	Coverage Issue	If the unit does not acquire a cellular lock within five minutes of power being applied – there may be a coverage issue. Although most of the US has coverage, there are a few locations that do not. Please contact On-Board's technical support line.
GPS LED does not light	Insufficient time to achieve a lock on the GPS satellite Signals	Upon power being applied, the unit may take up to 15 minutes to acquire a GPS lock.
	Coverage Issue due to: A) Poor Antenna Connection B) Blockage	Ensure the GPS antenna is securely attached to the unit Ensure the GPS antenna has a clear view of the sky and the white 3M tape on the antenna is facing up. Ensure the GPS antenna is not covered by any metallic or conductive materials Ensure the vehicle is outdoors and away from tall buildings which can block the GPS satellite signals.

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