



FleetTraks™

Internal Antenna

General Installation Guide

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FleetTraks™

By On-Board Communications, Inc.



Thank you for selecting the FleetTraks™ Wireless Tracking, Monitoring and Remote Control, Vehicle Management Solution. The FleetTraks™ unit is designed to provide efficient, affordable, nationwide vehicle tracking.

This guide describes how to install, activate and use your unit. Following these instructions, you should 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 or contact us at the address or contact number below:

On-Board Communications, Inc.
Attn: Customer Support
12850 Spurling Rd, Suite 280
Dallas, TX 75230
877-340-0300 ext. 290

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

Notes:

- **Failure to install the FleetTraks™ unit 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.**
- **You MUST call On-Board Communications to activate the unit after completing the installation.**

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Introduction to GPS

The Global Positioning System (GPS) is a satellite-based navigation system developed by the United States Department of Defense, initially for the military, and is managed by the United States Air Force's 50th Space Wing. The official name given to the system is "Navstar (Navigation Satellite Timing and Ranging) Global Positioning System", and is now commonly referred to as "GPS". The military released the Navstar system for civilian use in 1995, and can be used by anyone, anywhere on Earth.

The Navstar system sends and receives radio signals while a GPS receiver, such as your FleetTraks™ unit, acquires these signals and provides you with relevant location information. Using today's GPS technology, you can determine location, velocity, and time. The system is active 24 hours a day worldwide and in any weather conditions. This system utilizes a collection of between 24 and 32 satellites that are in a constant orbit around the earth. The satellites are spaced so that there should be at least 4 satellites in view of a receiver. Each satellite constantly sends coded radio signals to earth for the receivers to interpret and display. These signals can pass easily through clouds, glass, and plastic. The signals have a significantly decreased ability to pass through objects that contain a significant amount of metal or objects that are underwater.

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Safety Statement

This guide covers the installation of the FleetTraks™ 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 follow the manufacturer's instructions. These instructions do NOT supersede the manufacturer's instructions.**
- **Never tap into wires that may impact the safety of the vehicle such as an airbag wire.**
- **Always use a multi-meter.**
- **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.

Additional Support

- Over the phone Support is available. - 877.340.0300 Ext. 290

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FleetTraks™ Installation Kit Contents

White label must face skyward upon install



FleetTraks™ Internal Antenna Unit



Power Cable

Electrical Connections/Mounting Kit

- | | |
|--------------------------------|---|
| 3 Small Cable Ties | 2 Mini Fuse-Tap Connectors |
| 1 #10 Ring Terminal | 1 2" x 1 ½" Velcro™ Self-Adhesive Strip |
| 2 Posi-Tap™ Connectors | 2 Alcohol Prep Swabs |
| 2 128" Female Quick-disconnect | |

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Tool List

(Not included with unit unless noted)

- Power drill AC/DC (Cordless recommended)
- Magnetic bit holder that houses Phillips and flat-head bits
- Wire stripper and cutters
- Crimpers for insulated connectors
- Multi-Meter (Electronic voltage meter w/ Digital display recommended)
- Tools to disconnect and reconnect vehicle battery (Crescent wrench, open end wrenches, 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 (included)
- Wire ties (included)
- Soldering iron & solder
- Torque Seal (recommended to identify tampering issues)

Using Your Digital Multi Meter

On-Board Communications recommends that you ALWAYS use a multi meter when installing your FleetTraks unit. DO NOT damage vehicle computers and airbag systems by 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.

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Selecting the Mounting Location for the FleetTraks™ Unit

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

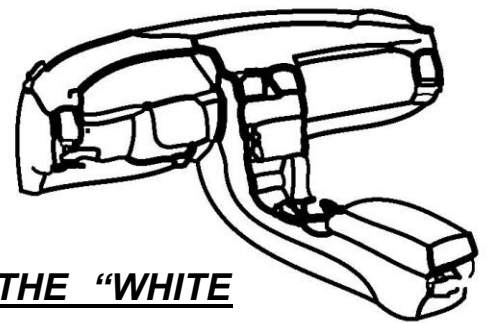
- Not be exposed to damage from people or objects
- Not impede any of the vehicle's operational systems such as steering, brake or gas pedals

In addition, the 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
- Behind the glove compartment
- In the trunk.



THE UNIT MUST BE MOUNTED FLAT WITH THE "WHITE LABEL" FACING SKYWARD.

If the vehicle window has a solid dark metallic coating around the edge, do not place the unit near 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 FleetTraks™ Unit 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 unit and the satellites will degrade the signal and reduce the overall performance.

The GPS signal passes easily through glass and plastic making underneath the dash an excellent location for installation of the FleetTraks™ unit.

Your FleetTraks™ unit should NOT be mounted directly next to, or on top of the radio as it may cause interference between cellular signal and radio quality.

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Identifying Vehicle Wiring

Proper vehicle wiring is a MUST and so is a good connection. On-Board Communications strongly suggests a good chassis ground for your FleetTraks™ unit. When a chassis ground is unavailable you should ground the unit directly to the black (negative) terminal of the vehicle's battery. Improper connection with either the +12VDC (red) wire or the ground (black) wire can result in numerous "reboot" notifications and increased usage on monthly billing, as well as improper and/or failed reporting of your unit. Improper connection of the Ignition/Switched (white) wire can result in improper and/or failed reporting of vehicle mileage and idle time. There are many sources online to help you identify wiring for specific vehicle makes and models such as www.bulldogsecurity.com. It is recommended you always verify wiring with a multimeter.

Locating (+) 12VDC Constant with your Multi Meter

1. Set your meter to DCV or DC voltage (12VDC or 20 VDC is fine)
2. Attach the (-) probe of the meter to chassis ground.
3. Probe the wire you suspect of being the (+) 12 VDC Constant wire. The steering column is an excellent place to find this wire. Your meter should read (+) 12V
4. Turn the ignition key to the "ON" position. Your meter should still read (+) 12V. If it doesn't, go back to step 3 and try again with another wire.
5. Now turn the key to the start position. The meter display should stay steady (+) 12V, If it drops close to or all the way to zero, go back to step 3. If it stays steady at (+) 12V you have the (+) 12VDC Constant wire.

Locating (+) 12VDC Ignition with Your Multi Meter

1. Set your meter to DCV or DC voltage (12VDC or 20VDC is fine)
2. Attach the (-) probe of the meter to chassis ground.
3. Probe the wire you suspect of being the ignition wire. The steering column is an excellent place to find this wire. Your meter should read (+) 0V.
4. Turn the ignition key to the "ON" position. If your meter reads (+) 12VDC, go to the next step. If it doesn't, probe another wire.
5. Now turn the key to the start position. The meter display should stay steady (+) 12V, not dropping by more than a few tenths of a volt. If it drops close to or all the way to zero, go back to step 3. If it stays steady at (+) 12VDC you have the ignition wire.

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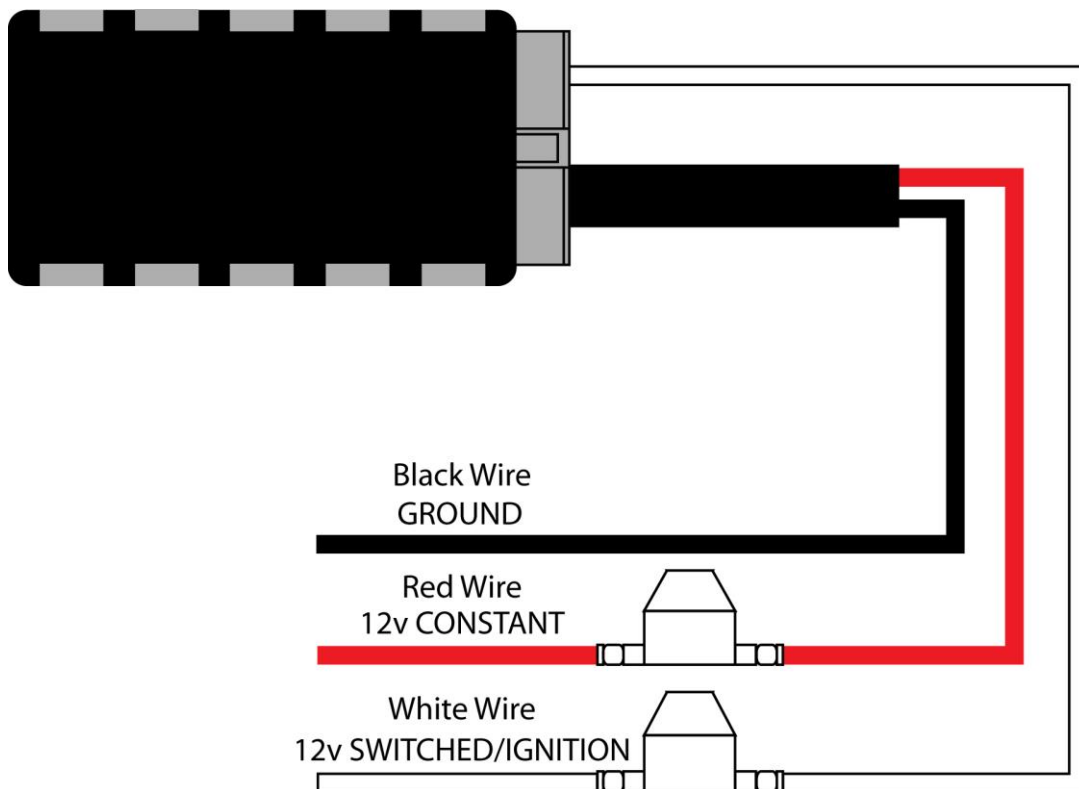
Connecting the FleetTraks™ Unit

1. Connect the red lead to the +12VDC vehicle power.
2. Connect the black lead to the vehicle chassis (ground)
3. Connect the white lead to the Ignition/Switched +12VDC power
4. Connect the power harness to the FleetTraks Unit.



- **Do NOT plug unit in until after connecting all other leads to the vehicle (red, black, and white). Failure to connect unit in the proper order may damage the unit.**
- **Please note that the standard power cable comes with in line 3 amp fuses. Do not bypass the fuses during installation.**
- **Make sure the unit gets constant 12v power even when the ignition is off by testing with a multi-meter.**

FleetTraks™ Wiring Diagram



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Powering the Unit for the First Time

After you have wired the power harness to the vehicle and plugged the unit into the harness:

- The Orange Cellular LED (closest to the edge of the unit) will glow steady for a few seconds, then begin to flash slowly as it attempts to locate a cellular network. When it begins to acquire cellular coverage, the Orange LED will blink rapidly. When the unit locks to a cellular network the Orange LED will glow steady.
- The Green GPS LED (closest to the power source of the unit) will glow steady for a few seconds, then begin to flash slowly as it attempts to locate a GPS signal. When it begins to acquire GPS coverage, the Green LED will blink rapidly. When the unit locks to the GPS signals the Green LED will glow steady.

Please Note – The unit must have a clear view of the sky and not be blocked by metal in order for it to lock onto GPS signals. The unit may take up to 15 minutes to acquire a GPS lock. This delay is due to the unit searching for and downloading information regarding the location of the GPS satellites. For more information regarding locations of installation please refer back to page 8.

When both LEDs glow steadily the unit has acquired both GPS and Cellular locks and can report properly.

To activate your unit you MUST call the On-Board Communications Tech Support line at 877-340-0300 ext. 290

Now that the unit is installed:

1. Turn on your computer and log on to the Internet using your standard Internet browser.
2. Go to the FleetTraks™ login page at www.fleettraks.com.
3. Enter your customer login id and password and click the login button.

Please record the following information:

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

Congratulations!

You have just installed the FleetTraks™ Internet based vehicle location system.

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TROUBLESHOOTING GUIDE

SYMPTOM	PROBABLE CAUSE	SOLUTION
All LED's Dark	Lack of Power	Check to make sure +12VDC power is applied to the power leads and you have a good solid ground. Also check the inline fuses to make sure they have not blown. Applying a voltage over +24VDC to the unit may cause damage.
Cellular LED Flashing (ORANGE 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.
	Cellular Network Coverage Issue	If the unit does not acquire a cellular lock within five minutes of power being applied – there may be a cellular network coverage issue. Although most of the US has coverage, there are a few locations that do not. Attempt to power cycle the unit once and if the unit will still not acquire a lock on the cellular network (solid orange light) please contact On-Board's technical support line.
GPS LED Flashing (GREEN 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. If after 15 minutes the unit is still flashing, cycle power on the unit once. If, after another 15 minutes, the unit has not acquired a GPS lock (solid green light) check to make sure that there is no GPS Signal Blockage (see below)
	GPS Signal Blockage	Ensure that the white label on the unit faces skyward, the unit has a clear view of the sky and is not covered by any metallic materials. If your unit will still not get a GPS lock move the vehicle outdoors away from tall buildings which can degrade GPS readings until the unit locks onto the satellite signal. If the unit will not acquire a GPS lock after these steps contact On-Board's technical support line.
Idle time and Mileage are not registering properly on the web site.	White (Switched Power) lead is not hooked up correctly	The white (Switched Power) lead must be hooked up to the item you are trying to track in order to record vehicle mileage and idle time. The white wire will show a voltage when the key is on and nothing when the key is off.

On-Board Communications Technical Support: 877-340-0300 ext. 290

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