

# **Installation of GPS Tracking Device with internal antenna**

#### Overview:

The device has a power harness with only 3 wires that need be connected:

- -- Red Wire to a constant 12 volt power source
- -- Black Wire to Ground
- -- White Wire to vehicle ignition
- \*\* please note, the additional wires in the harness are not used .

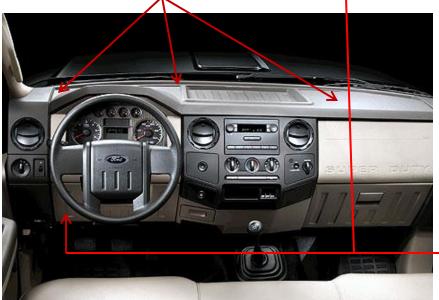
# NOTE: It is imperative that device(s) be connected to a reliable constant power source. Device(s) not connected properly will under perform.

If vehicle ignition cannot be located or used, you may connect the white wire and red wire together to a constant power source. The unit will then interpret the ignition of the vehicle based upon the voltage change when the engine is running versus not running.\*

The typical location of the unit and antenna is under or with in the dash board of the vehicle. This device is equipped with a very sensitive GPS receiver and cellular antennas inside the unit. The device should be secured in a location where the top has line of sight to the sky with no metallic obstruction. Most vehicle's interiors today consist of fiberglass, plastics and other nonmetallic materials making device placement quite easy under the dash. In many cases the device will perform well if mounted vertically or at other angles. Best efforts should be made to have the top of unit face the sky with little to no metallic obstruction.

The unit should be mounted securely and not allowed to move freely within the vehicle. The unit should be mounted in the interior of the vehicle and not on the exterior or within the engine compartment. This device is not weather resistant or proof.

The device will power on once power (+12VDC) is connected to both the RED and WHITE wires and the black wire has Ground.





<sup>\*</sup> Voltage based ignition is will not be as accurate as wired ignition. Ignition OFF and ON events may be delayed up to 3 minutes

# **Installation Steps:**

- Step 1) Locate the spot where the Device will be mounted
- Step 2) Locate the constant power, ignition and ground connections.
- Step 3) Connect the Ground wire to Ground, the Red wire to a constant 12v + power source and the ignition line to an ignition source or to constant power.\*
- Step 4) place the device where it will be mounted. Now look at the RED LED light on the unit. After approximately 5 minutes, the RED LED light should stop flashing. If it does not, you may need to reposition the device to get a better signal. See "Green & Red LED reference," below for more information on the RED LED codes.
- Step 5) once the RED LED light has stopped flashing, mount / secure the device.
- Step 8) login with your username and password at <a href="http://www.easitrack.net">http://www.easitrack.net</a> you should now see your vehicle on the map! Your installation is now complete.

# **Green & Red LED reference**

The green and red LED lights are intended to troubleshoot installations. Below is a summary of their behavior.

#### **Green LED**

When the ignition is first turned on the unit will power up. The Green LED will show solid for approximately 30 seconds (there may be some brief flickers initially while the processor initializes). At no other time should the green LED remain on solid for such a long period.

After 30 seconds the green LED will start to flash at the following rates:

Slow with ignition off

Fast with ignition on

Rapidly when ignition is and when WHITE and RED wires are tied together (ignition being interpreted by vehicle voltage)

-Very short blip once every 3 seconds when napping (ignition is off)

#### **Red LED**

The RED LED flashes 2-digit codes. Roughly speaking the first digit tells you what general area is having a problem (hardware, modem, GPS, etc.). The second digit gives specific error information. Since there can be more than one error condition the Unit rotates through the error codes (for example if GPS is tracking no satellites and the modem is not registered).

NOTE: it is normal for the RED LED Light to flash when the unit first power up for up to 5 minutes.

# 1 – X error codes : unit specific errors

- **1-2** Low supply voltage. This could be caused by a true low voltage condition (<8v) or a high impedance supply that dips in voltage when the current draw spikes due to modem transmit.
- 1-3 data usage provision issue, contact easiTrack at (888) 713-8548 for support

#### 2 - X error codes: Modem relatad error codes

- 2-1 Modem module fault. Contact easiTrack at (888) 713-8548 for support.
- 2-2 No SIM , Contact easiTrack at for support.
- 2-3 No signal. Check that the cellular antenna is correctly connected . If problem persists contact easiTrack for support
- 2-4 Network not found. This can occur from time to time based upon unit location and cellular service. Contact easiTrack for support if this condition persists or is interrupting service.
- 2-5 Last data session failed. This means that an attempt to establish a data session failed This could be simply due to network loading, temporary network outage, or poor radio coverage. This failure will occasionally happen in a working unit, but if the problem is persistent and interrupts service then contact easiTrack for support.
- 2-6 Cellular Service is not available is not available.

### 3 - X error codes: GPS relatad error codes

- 3-1 GPS module fault: Contact easiTrack for support.
- 3-2 GPS antenna fault: Contact easiTrack for support
- 3-3 GPS not tracking any satellites. Check that the GPS antenna has a clear, unobstructed view of the sky, and has been operating for at least 5 minutes. Check that the GPS antenna is facing the correct way up.
- 3-4 GPS no fix (<3 satellites). If antenna has only partial view of sky due to the position of the vehicle (under a cover, close proximity to a building) then try to move the vehicle to ensure that it will be able to make fixes when standing in the open. If the vehicle has a full view of the sky and the error condition persists then try to reposition the GPS antenna to get les obstructed view of the sky.
- 3-5 GPS has no time. The GPS receiver sets its internal clock from the satellite signals. If the GPS receiver has no time then it has never seen a single satellite since the device has powered up.

NOTE: It is imperative that device(s) be connected to a reliable constant power source. Device(s) not connected properly will under perform.

Thank you!
Please contact support for any further assistance at (888) 744-6449 or Support@easiTrack.com

