



Installation of GPS Tracking Device with External Antenna

Overview

This installation guide is a walkthrough on how to successfully install and troubleshoot GPS Devices that have an External Antenna. Devices with External Antennas will come with an additional DUAL GPS and Cell Antenna piece, which is not included for GPS Units with Internal Antennas.

Power Harness

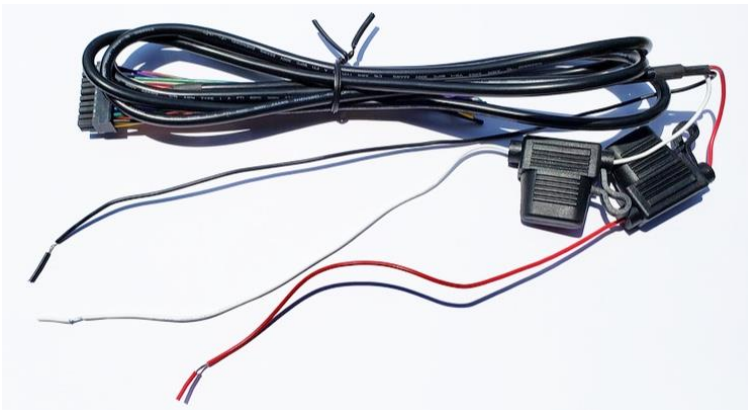
The device has a power harness with only 3 wires that need to be connected:

- Red Wire → Constant 12 Volt Power Source
- Black Wire → Ground
- White Wire → Vehicle Ignition

DUAL GPS and Cell Antenna

The device has a DUAL GPS and Cell Antenna with only 2 wires that need to be connected:

- Red Fakra Antenna → Red Fakra Connector on GPS
- Blue Fakra Antenna → Blue Fakra Connector on GPS



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





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Installation Steps:

Step 1) Locate the spot where the Antenna will be mounted

Step 2) Locate the Constant 12 Volt Power Source, Ignition and Ground connections.

Step 3) Connect the Dual GPS / Cell Antenna to the device.

Step 4) 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 5) Place the Antenna where it will be mounted. Watch 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 antenna to get a better signal. See "Green & Red LED reference," and "Red Light Error Codes" below for more information.

Step 6) Once the Red LED light has stopped flashing, secure the position of the Antenna and Device.

Step 7) Login with your username and password at <http://www.easitrack.net>. Your vehicle should be live and reporting on the map. Your installation is now complete.

*** PLEASE READ ***

Easitrack makes information available on its web site to enhance customer knowledge and promote a better understanding of the hardware and its setup and configuration. When applicable, Easitrack recommends using a professional installer with knowledge of car electronics.



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If the 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 on top of the dashboard of the vehicle. The antenna must be secured in a location where it has line of sight to the sky with no metallic obstruction. Most vehicle interiors today consist of fiberglass, plastics and other nonmetallic materials making the antenna placement quite easy under the dash. In many cases the device will operate well if mounted vertically or at other angles.

The unit should be secured and prevented from sliding when the vehicle is in motion. The unit should be mounted in the interior of the vehicle and not on the exterior or within the engine compartment.

The device will power on once power is connected to both the RED and WHITE wires.

This device is not weather resistant or proof.



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Green & Red Light 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.

- 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.



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Red Light Error Codes

1 – X error codes : unit specific errors

1-2 Low supply voltage. This could be caused by a true low voltage condition

1-3 Data usage provision issue. Contact EasiTrack for support

2 – X error codes: Modem related error codes

2-1 Modem module fault. Contact EasiTrack at for support.

2-2 No SIM. Contact EasiTrack for support

2-3 No signal. Check that the cellular antenna is correctly connected. If the 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.



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3 – X error codes: GPS related 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 the 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 less 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) are connected to a reliable constant power source. Device(s) not connected properly will under-perform

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