

G-5 Pro

Installation Guide



LIVEVIEWGPS



Activation

Activate your account prior to installing your tracking device.

Visit www.LiveViewGPS.com and choose the "Activate" link at the top right of the site.

Select The "Activate G5" link and E-Sign your activation form. This process takes about 3 minutes.

Activations are done from 7 am - 4 pm PST. Once your activation has been processed we will email you your username/password and URL for login. The entire process can take between 1 - 3 hours.

All activations are billed on a pro-rated term for the current month of service. We will auto-bill you on the first of every month.

If you wish to cancel, please submit your request to us no later than the 25th day of the month you wish to discontinue service. A service cancellation form is available at www.LiveViewGPS.com - top right of site "Cancel".



Installation

Installation of your LiveViewGPS - G5 Pro Live Trac Vehicle Tracking device is as easy as it gets - just follow these simple steps.

Wiring and installation guidelines. The G5 Pro requires a standard 3-wire installation to operate effectively.

Color	Signal/Desc.	In - Out
Red	12 VDC constant	
Black	Ground	
White	Ignition	In - 1
Blue	Input 2 - Panic Button	In - 2
Orange	Input 3 - bias low	In - 3
Green	Output 1 / starter	Out - 1
Brown	Output 2 / horn	Out - 2
Yellow	Output 3 / doors	Out - 3

The **Red Wire** (Power) should be directly wired to a constant power source found under the dash. Do not wire to vehicle accessories like Radios, Cigarette Lighters, etc. but directly to the key cylinder or main steering column power found in the Ignition Wiring Harness. This connection point should be fuse protected to not more than 5 Amps.

The **Black Wire** (Ground) should be securely fastened to a grounded screw under the dash.

The **White Wire** (Ignition) is the Ignition Event wire that is best installed directly to the Ignition Wire which extends the length of the steering column and is best connected where the dash and steering column meet. All makes and models of vehicles are different. For that reason, we recommend visiting <http://www.the12volt.com> prior to installing the device to learn your particular vehicle's Constant & Ignition wires and their specific color(s). Ensure that power to the ignition wire is available **ONLY** when the vehicle ignition is turned on.

The **Blue** and **Orange** wires are Input wires and can be used to monitor PTO activity (Power Take Off) such as emergency lights, doors opening, flat-bed operation, buckets, etc.

The **Green**, **Brown** and **Yellow** wires are output wires and can be used for enable / disabling the starter, lock / unlocking the doors, honking the horn etc.

IMPORTANT: DO NOT cut wiring harness to shorten length of cable as this will void warranty. After installing, carefully coil any excess cable length and secure with a zip-tie up under the dash. Be sure the cables are not bent or constricted in any way.

Preferred method for completing connections to the power and ignition sources is a "poke & wrap" connection. Do not solder or use T-Tap Connectors. Use standard commercial wiring practices to create a permanent installation whenever possible. Refer to Page 4 for wiring schematics.

Status LED's to indicate service



Status LED lights (**Green & Red**) on the front of the G5 Pro device can provide valuable information about the operation of the unit. When possible, install the unit in such a way that these lights can be seen with reasonable ease for future troubleshooting.

After installing the unit, and prior to securing under the dash area, make sure the unit has a solid Green light and a blinking Red light that goes solid for 4 seconds, then repeats the pattern. See table below for troubleshooting when one, or both, does not occur.

Condition	LED 1 (Red) GSM/Cell	LED 2 (Green) GPS
Modem off	Off	
Cell search	Slow blink	
Network available	Fast blink	
Registered but no acknowledgement	Solid to fast blink	
Registered and recv'd acknowledgement	Blink, blink, solid repeating pattern	
GPS off		Off
GPS on		Slow blink
GPS time sync		Fast blink
GPS fix		Solid

GPS/GSM Combo Antenna When Installing Unit



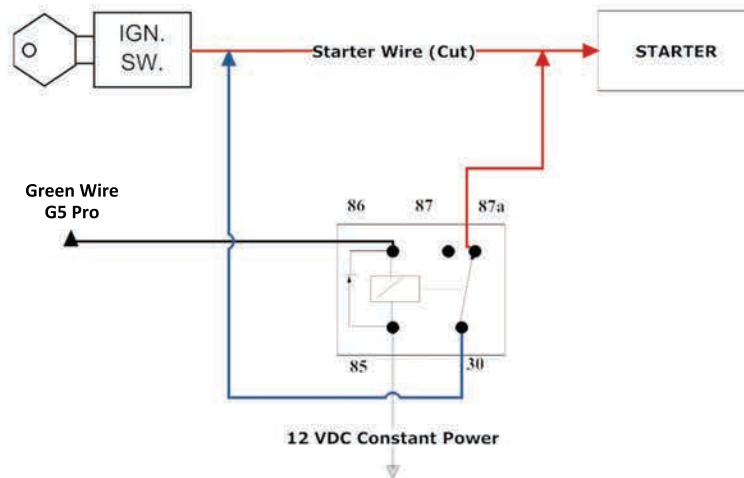
The G5 Pro uses an internal antenna for both GPS and GSM (cellular) signals. The GPS and GSM antennas are located on the right hand side of the unit when looking at the front.

When installing, it is more important to consider GPS performance over cellular (GSM) performance. GPS signal strengths are much lower than typical cellular networks supported by the G5 Pro. Refer to Page 5 for proper device placement.

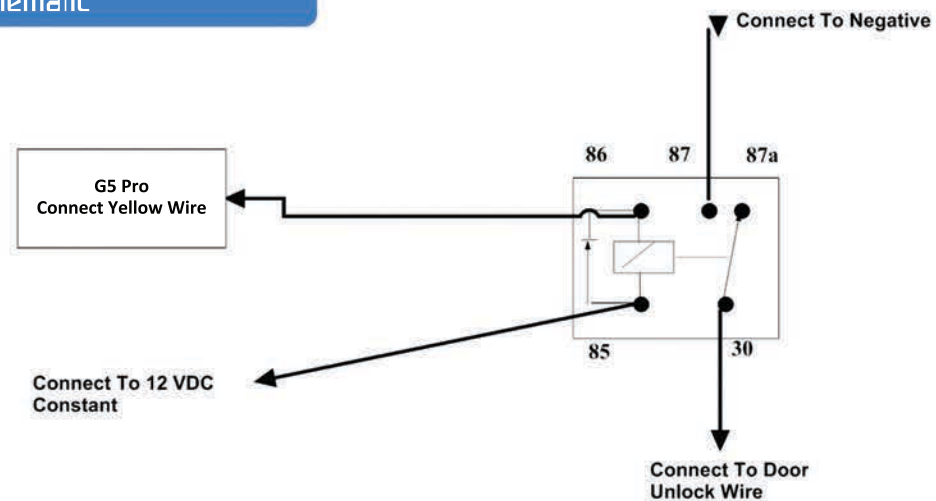
To begin viewing the vehicle's location, simply go to www.LiveViewGPS.com and provide your User Id and Password to login. Our device transmits once every 30 minutes if sitting still, or once every 5 or 10 seconds (depending on your rate plan) when the vehicle is moving faster than 3 mph so bear this in mind while waiting for the vehicle marker to appear on your map. Driving the vehicle around the block will assist in its first data transmission.

If you have any questions or encounter difficulties with this system, we encourage you to use our "LIVE support" feature built into our system. Technical Support is available 7 a.m. to 5 p.m. PST, Monday through Friday by calling 661.294.6805

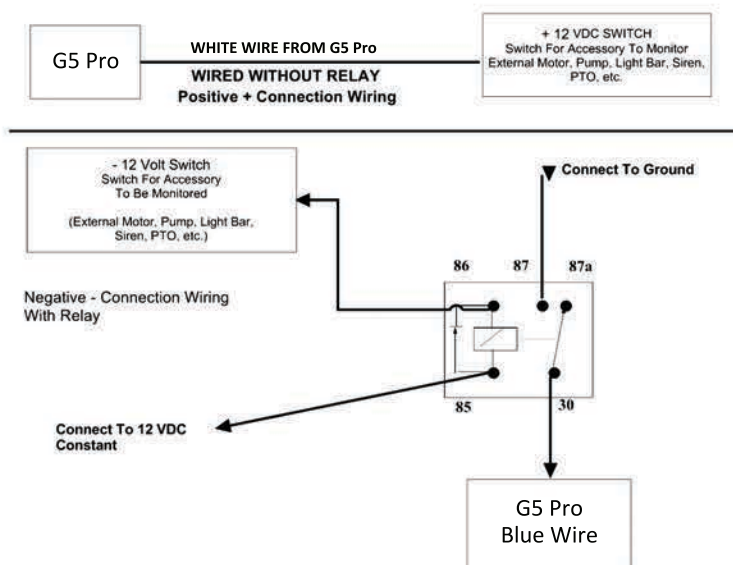
Starter Disable - Wiring Schematic



Door Unlock Wiring Schematic



Panic Button Wiring Schematic





Ideal Device Placement

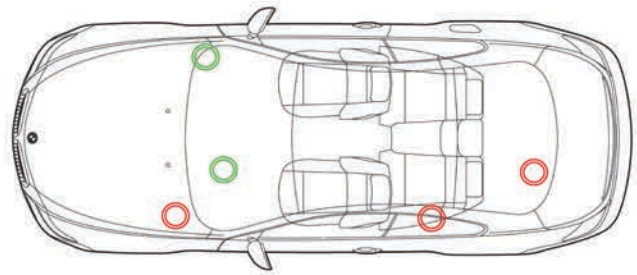
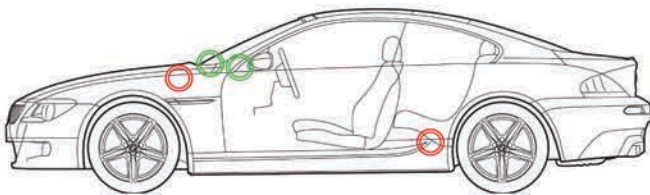
To maximize the performance of the G5 Pro, placement of unit should have a clear view of the sky when possible. Ideally, when installing, nothing should block the GPS antenna with the best location being under the dash, above the instrument cluster with a full view of the sky through the front windshield.

Make sure the device is kept free from direct exposure to the elements (sun, heat, rain, moisture, etc.)

When installed inside a building, your unit may not receive a GPS Signal or cellular signal. We highly recommend driving the vehicle around for a minimum of 5 minutes to assure optimal installation and performance of your device.

 **Poor Location**

 **Ideal Location**



Above and forward of instrument cluster hidden under dash.



Base of windshield, with device either exposed or hidden.



Base of windshield, no metallic obstructions (windshield wipers, wires, etc.).



Exterior mount or under fiberglass cab.



Note: GPS signals **WILL** penetrate glass, plastic, foam, fiberglass and wood.

GPS signals **WILL NOT** penetrate metal. For this reason, it is important to place the device where it is not obstructed by metal or wiring. Placement of the antenna in a position which might be even slightly obscured by metal – including wires, wiper blades, or aluminum foil (used in some high-end vehicles on the underside of the dash to reduce the effects of the sun's heat) - may compromise antenna visibility of the GPS satellite constellation.

Device will not transmit data location with less than 4 satellites in view.



Device Specifications

Dimensions	4.3"W x 3.2"L x 1.6"H
Operating Temperature	-30° C to +75° C (-22F to +158F)
Power Source	6 - 32 Volts DC - (up to 10 days) 3.8 AH Li-on re-chargeable backup battery
Typical full-power current	70mA at 12 Volts DC
GSM Channels	850/1900 (United States) 900/1800 (Europe, Australia, Asia, & Middle East)
Communication Protocol	SMS, GPRS (UDP)
Update Frequency	1-second, 5-second, or 10-second position updates (truly LIVE tracking!)
Binary I/O	3 output and 3 input
Antenna	Internal dual-mode GSM/GPRS+GPS
Notifications	20 + reports available
Historical Playback	90 days of historical playback stored on server
Reporting	Individual Vehicle Report, Enhanced Vehicle Report, Start/Stop Report, and more...
Diagnostics	Diagnostics via SMS or TCP diagnostic messages
Applications	Ranges from everyday tracking to complete fleet solutions
Shock and Vibration	US Military Standards 202G and 810F,SAEJ1455



Installation Best Practices

Power for the G5 Pro should be taken directly off of the ignition column.

There you will find constant power and ignition. This is the cleanest source of power for the device.

As much as possible, keep all G5 Pro system wires away from speakers and speaker wires, as well as high powered electrical components.

Do not use the radio as a source of power for any of the power leads to the G5 Pro, interference may result.

We recommend soldering all connections.

Secure G5 Pro with zip-ties or other strapping - so it will not move around.



Technical Support

Please contact us toll free [1-888-544-0494](tel:1-888-544-0494) or direct at [1-661-294-6805](tel:1-661-294-6805), Monday Through Friday From 7 am - 5 pm PST.

You can also email:
info@liveviewgps.com
for any support questions.





Troubleshooting Guide

By nature, any device placement will deteriorate signal reception even if only slightly.

If installed too far below the dash, the device may still function in areas where strong wireless data coverage is available. Despite the fact that it functions, such poor device placement may deteriorate signal quality from 5 bars to only 2 bars (hypothetical). In such an installation where the installation deteriorates signal quality by 3 bars, when your vehicle moves into an area where wireless data coverage only provides 4 bars of service, your device would have only 1 bar of service. Similarly, in an area where wireless coverage provides only 3 bars of service, your device would be unable to communicate due to signal deterioration based on poor device placement.

It is for this reason that a quality install and good device placement is critical.

Our objective is to install the device in a place where signal deterioration is kept to an absolute minimum.



Common Problems

1. The map shows my vehicle to be stopped, but the vehicle is moving.

Answer: This is caused by either of two potential issues:

- 1) The device is not transmitting.
 - a) Poor (or no) wireless data coverage.
 - b) Poor device location resulting in deteriorated wireless data signal.
- 2) The GPS unit cannot see the sky (If lat=0 and lon=0, the unit will not transmit).
 - a) Device facing downward.
 - b) Poor device placement (GPS device cannot see sky through metal).
 - c) Device is placed too far below the dash to have a good view of the sky.
 - d) On a new install, it may take several minutes for the GPS to establish location.

NOTE: The unit transmits more frequently when the vehicle is moving.

- The device transmits every 30 minutes if the vehicle is stationary.
- The device transmits every 5 (or 10) seconds if the vehicle is moving.

2. The system shows my vehicle to be hundreds of yards from its actual location.

Answer: The GPS unit does not have a good view of the sky.

1) Under normal circumstances (with a good view of the sky) our devices are accurate to within 10-12 inches. There are 26 satellites in the GPS constellation. The more satellites the device can see, the more accurate the location.

2) When vehicles are parked facing tall buildings (or in indoor garages or under metal awnings) large portions of the sky are often obscured.

3) Device placement is critical to ensure reliable and accurate operation.

3. When the device came on this morning, it showed the location from (another time).

Answer: The white wire is not correctly connected to the accessory 12v (ignition) power source. When the device shuts down, it stores its last known location in a buffer. If the white wire is not connected, the device cannot perform a graceful shutdown and thus cannot store its last known location properly.

4. I log in, and all I get is a map of the US. My vehicle doesn't show.

Answer: In almost every case, this is because it's a newly installed device and the unit hasn't yet transmitted its first packet of data (and thus cannot appear on the map because we don't yet know its location). It generally takes approximately 5 minutes after a new device has been powered up to begin transmitting.

This process can be hastened by driving the vehicle. Under normal circumstances, the device transmits every 5-10 seconds (depending on your wireless plan) when the vehicle is moving, but only once every 15-30 minutes if the vehicle is stationary. For this reason, it could take up to 30 minutes to make its first transmission if the vehicle remains stationary.



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U.S. Patent Number 5,963,956 and 6,647,269. U.S. Patents Pending.

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WARRANTY COVERAGE

LiveViewGPS, Inc. (LVGPSI)'s warranty obligations for this G5 Pro series tracking unit are limited to the terms set forth below:

LVGPSI warrants the LVGPSI G5 Pro series tracking unit against defects in materials and workmanship for a period of one (1) year from the date of original purchase ("Warranty Period").

Specifically, the date the equipment is shipped to the customer.

If a defect arises and a valid claim is received by LVGPSI within the Warranty Period, at its option, LVGPSI will (1) repair the product at no charge, using new or refurbished replacement parts, (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product, or (3) refund the purchase price of the product.

LVGPSI warrants replacement products or parts provided under this warranty against defects in materials and workmanship from the date of the replacement or repair for ninety (90) days OR for the remaining portion of the original product's warranty, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes LVGPSI's property. When a refund is given, your product becomes LVGPSI's property.

This Limited Warranty does not apply to any non-LVGPSI hardware product or any software.

LVGPSI is not liable for any damage to or loss of any programs, data, or other information stored on any media contained within the vehicle tracking or navigation systems.

This warranty does not apply: (a) to damage caused by accident, abuse, misuse, misapplication, or non-LVGPSI products; (b) to damage caused by electrical connection not conforming to instructions; (c) to a product or a part that has been modified without the written permission of LVGPSI; (d) if any LVGPSI serial number has been removed or defaced; (e) in the event of interruption or discontinuation of GPS satellite signal; or (f) in the event of interruption or discontinuation of the wireless coverage.

To the maximum extent permitted by law, this warranty and the remedies set forth above are exclusive and in lieu of all other warranties, remedies and conditions, whether oral or written, express or implied. LVGPSI specifically disclaims any and all implied warranties, including, without limitation, warranties of merchantability and fitness for a particular purpose. If LVGPSI cannot lawfully disclaim or exclude implied warranties under applicable law, then to the extent possible any claims under such implied warranties shall expire on expiration of the warranty period. No LVGPSI reseller, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

SPECIFIC LIMITATION OF LIABILITY

To the maximum extent permitted by law, LVGPSI assumes no liability for direct, special, incidental or consequential damages of any kind under any circumstance resulting from the use of or inability to use LVGPSI products. Use of LVGPSI products constitutes your agreement to and acceptance of this limitation of LVGPSI liability.

As a knowledgeable and informed person, the user specifically acknowledges LVGPSI is not responsible for direct, special, incidental or consequential damages resulting from any breach of warranty or condition, or under any other legal theory, including any costs of recovering or reproducing any program or data stored in or used with the LVGPSI product, and any failure to maintain restricted airtime usage or failure to maintain the confidentiality of data stored on the product. LVGPSI specifically does not represent that it will be able to repair any product under this warranty or make a product exchange without risk to or loss of programs or data.

OBTAINING WARRANTY SERVICE

Please email info@liveviewgps.com with your LVGPSI model and serial number, and describe the anomaly in detail. LVGPSI will respond to your email with proper user diagnosis and repair or provide you with an authorization number and instruction for shipment for authorized repair. Use care and original shipping container to prevent shipping damage. No repair work will be done and your tracking unit will not be returned if an authorization number is not obtained in advance.