

### Basic Wiring and Installation Guidelines

PestPacGPS requires a standard 3-wire installation to operate efficiently. Refer below when installing devices and the next page when utilizing the Inputs and/or Outputs including Garmin Nuvi interface functionality.

Wire Color	Signal/Description
Red Wire	12 VDC Constant
Black Wire	Ground Wire
White Wire	Ignition Wire

**The Red Wire** (Power) should be directly wired to a constant power source found within the **Ignition Wiring Harness**. **DO NOT** wire to vehicle accessories like Radios, Cigarette Lighters, etc. but directly to the **constant wire found in the Ignition Wiring Harness** and as a last resort to the Fuse Box. This connection point should be fuse protected to not more than 5 Amps (*supplied*).

**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 found within the **Ignition Wiring Harness** 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 creating an account at <http://techservices.audiovox.com> prior to installing the devices to learn your particular vehicles' Constant & Ignition identifying wire colors. **Always ensure that power to the ignition wire is available ONLY when the vehicle ignition is turned on.**

**For Inputs /Outputs** please refer to second page for utilizing the input/output functions of the PestPacGPS device.

Inputs: PTO usage, light bars, doors, panic, etc.

Outputs: Lock/Unlock doors, Honk Horn, Remote Start, Disable/Enable Starter.

**IMPORTANT** **DO NOT** cut wiring harness to shorten length of cable(s) 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 power & ignition sources is a **"Poke & Wrap"** connection. **DO NOT** solder, use T-Tap Connectors, or Barrel Ends to secure wiring. Use standard commercial wiring practices to create a permanent installation whenever possible.

### PestPacGPS



Front

### Status LED's to indicate service

Status LED lights (Red & Green) are on the front of the PestPacGPS device and 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.

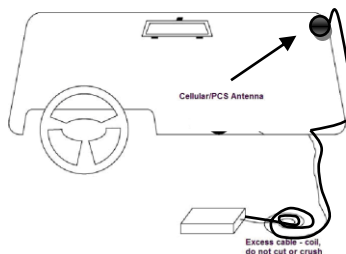
After installing the unit, and prior to securing under the dash area, make sure the unit has a solid Green light and a blinking Red light that goes solid for 4 seconds, then repeats the pattern. See table below for troubleshooting when one, or both, does not occur.

Condition (left LED light)	LED 1 – Red - GSM/Cellular
Modem Off	Off
Cellular On - Searching	Slow Blinking
Network Avail.	Fast Blinking
Registered but no inbound Acknowledgement	Alternates from Solid to Fast Blink every 1s
<b>Registered and Received Acknowledgement</b>	<b>Solid Red – Cellular OK</b>
Condition (right LED light)	LED 2 – Green - GPS
GPS Off	Off
GPS On	Slow Blinking
GPS Time Sync.	Fast Blinking
<b>GPS Fix</b>	<b>Solid – GPS OK</b>

### IMPORTANT

### Ideal Placement of PestPacGPS Antenna

Upper right-hand corner of Windshield



### GPS/GSM Combo Antenna when installing unit

PestPacGPS uses an external, windshield mounted antenna for both GPS and GSM (cellular) signals.

**NOTE** 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 PestPacGPS device.

To maximize the performance of PestPacGPS, placement of the antenna should have a clear view of the sky when possible.

Ideally, when installing antenna, nothing should block the GPS antenna with the best location being the **upper right corner of the windshield** (passenger's side) with a full view of the sky through the 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.

**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 antenna 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.

A good placement of antenna will yield a minimum of 9 – 14 satellites. Our device will not transmit data location when less than 4 satellites are in view because the location of device would be inaccurate.

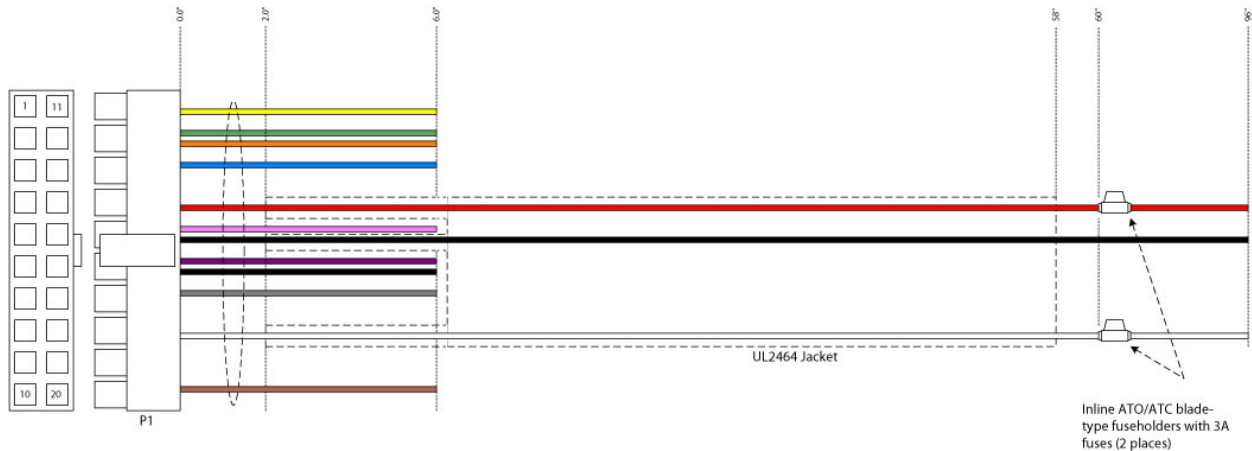
When installing your tracking device, if you need technical assistance contact **Technical Support @ 866-495-9240**. Tech Support is available 24/7/365.

Prior to viewing your vehicles, copy and paste the following link in your browser, <http://www.mds-inc.com/support/downloads.aspx> and download the following software **StreetEagle v7.0 with Bing Maps** or **StreetEagle v8.0 with Bing Maps for Driver Behavior Module**

To begin viewing your vehicle's location(s), simply log on and provide your **UserId** and **Password**. The devices update locations and/or events regularly every 2 minutes. Again, when first installing devices, driving the vehicle for 5 to 10 minutes will assist in its first data transmission.

If you have any questions or encounter difficulties with this system, we encourage you to contact the Technical Support staff at the number above.

# ADVANCED WIRING AND INSTALLATION GUIDELINES



3-Wire Install with Inputs & Outputs being used		The supplied Garmin Nuvi communication cable should only be connected to <u>AUX2</u> from harness.	
Wire Color	Signal/Description	Wire Color	Signal/Description
Black Wire	Ground Wire	Black Wire	Ground Wire
Red Wire	12 VDC Constant	Red Wire	12 VDC Constant
White Wire	Ignition Wire		
Blue Wire	Input 1 – PTO 1		
Orange Wire	Input 2 – PTO 2		
Violet Wire	Input 3 – PTO 3		
Grey Wire	Input 4 – PTO 4		
Green Wire*	Output 1 – Starter Disable Relay		
Brown Wire*	Output 2 – Honk Horn		
Yellow Wire*	Output 3 – Unlock Doors		
*Always use standard Automotive Relays when installing Outputs.			

\*Standard Automotive Relays should always be used when utilizing Output features of PestPacGPS devices.



**\*\*\*IMPORTANT\*\*\* UPDATE YOUR GARMIN DEVICE(S) FOR DISPATCHING & MESSAGING FUNCTIONALITY**

Your Garmin unit comes with preloaded software that will need to be updated to function properly with our Dispatching & Messaging features. To download the most recent software version, visit <http://www8.garmin.com/products/webupdater/howtoinstall.jsp> and simply download WebUpdater from Garmin. Use the supplied USB cable, provided by Garmin, to install the latest software version. Connect your Garmin device to your PC and run WebUpdater.

WebUpdater is a free application that lets you update your unit software from home or office. Download it once to your desktop, and you can check for and install software updates without using your Internet web browser. Simply run WebUpdater from your computer, and it will do all of the work for you.

WebUpdater's simple interface makes it easy to upgrade your operating software. Just connect your Garmin GPS to your computer, run WebUpdater, and follow the screen prompts. After confirming that you want to perform an update, WebUpdater will download that update for you and install it on your GPS. WebUpdater always checks for its own update first before performing a unit update.

## DRIVER BEHAVIOR ALERTING INSTALLATION *(Optional)*

Please read and understand proper installation of GPS tracking device for Driver Behavior module to function flawlessly.

The GPS device has a built-in Accelerometer which requires the device to be ***securely fastened*** under the dash. We recommend securing directly to a ***structural support*** via Zip-ties and/or Velcro. Do not secure to anything that has movement or could cause the unit to move freely as this will interfere with Accelerometer providing accurate data.

The PestPacGPS Driver Behavior Module includes hardware that alerts drivers of Hard, Harsh and Severe driving habits. The hardware comes pre-assembled with the main wiring harness and the "Buzzer" needs to be installed in an area that is not obstructed and will provide clear audible alerts to occupants of vehicle. The "Buzzer" should be mounted in an area which will prevent any type of tampering with as well.



The "Buzzer" has two pre-drilled holes to either secure with screws or with zip-ties near the center console of the dashboard. It is important to face the "Buzzer" towards the interior of the vehicle and not the under-dash area. In addition, the "Buzzer" should not interfere nor be place where the driver of the vehicle could potentially knock/hit when entering or exiting the vehicle.



***Ideal location for Driver Alerting Buzzer***