9. Wiring Schematic

Installation Instructions

Technical Support 877-477-3463
support@guidepointsystems.com

NOTE: PLEASE READ INSTALLATION INSTRUCTIONS CAREFULLY AS CHANGES HAVE BEEN MADE IN AN EFFORT TO IMPROVE QUALITY & SERVICES

For additional installation information visit the Guidepoint Dealers Resource page @
www.guidepointsystems.com
8. System Testing

The Diagnostic Test L.E.D. is used to verify that the Guidepoint System has been properly installed after being powered up. It is recommended that each system be tested prior completing the installation.

Each device is equipped with two L.E.D. lights that are built into the control module that are used for testing the Guidepoint System.

**Note:** With the Ignition “ON” the Diagnostic Test L.E.D. built into the control module will blink Green (off 1 second, on 1 second) indicating the control module is working properly

**GREEN L.E.D. TIMING**

<table>
<thead>
<tr>
<th>Timing</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO FLASH</td>
<td>The ignition has not been turned on</td>
</tr>
<tr>
<td>OFF FOR 1 SECOND</td>
<td>GPS Module is powered and signal is valid, Cell Module is powered, ignition is on</td>
</tr>
<tr>
<td>OFF FOR 3 SECONDS</td>
<td>GPS Module is powered and signal is valid, Cell Module is powered, ignition is off</td>
</tr>
</tbody>
</table>

**RED L.E.D. BLINKING**

<table>
<thead>
<tr>
<th>Blinks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 BLINK</td>
<td>The modem is not detecting a SIM card.</td>
</tr>
<tr>
<td>2 BLINKS</td>
<td>The modem is not detecting a cellular signal</td>
</tr>
<tr>
<td>3 BLINKS</td>
<td>The GPS receiver is not tracking any satellites.</td>
</tr>
<tr>
<td>4 BLINKS</td>
<td>The modem has no cellular signal AND GPS is not tracking any satellites.</td>
</tr>
<tr>
<td>5 BLINKS</td>
<td>The modem is not detecting a SIM card and GPS is not tracking any satellites.</td>
</tr>
<tr>
<td>6 BLINKS</td>
<td>The modem is not responding, and may be defective.</td>
</tr>
<tr>
<td>7 BLINKS</td>
<td>The modem is not responding, and may be defective and GPS is not tracking any satellites.</td>
</tr>
</tbody>
</table>
1. Introduction

This installation manual covers the installation of the Guidepoint Control Module. This manual is for the professional and novice installer and should be used to ensure a safe and functional install of the Guidepoint Control Module.

IMPORTANT NOTE: Prior to starting the installation, please make sure to paste the spare copy of the module label (which can be found inside the packaging with the module) on inside front cover of the Guidepoint Owner’s Manual in the spot indicated. You’ll need to give this Owner’s Manual and information to your customer so that they can activate their system properly.

6. Selecting the Antenna Locations

The GPS/RF Combo antenna must be mounted flat with the GPS Receiver faced up.

The ideal location is directly underneath the seat, relatively close to the control module mounting location. It can be placed under the seat as long as the antenna only has the foam or plastic of the seat between the antenna and the sky, and there are no any metallic barriers to the GPS satellite signals. Additionally, a person’s body also will not block GPS signal from reaching the antenna, so underneath the seat is ideal both for ease of installation and for security.

The GPS/RF Combo antenna 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 antenna and the satellites will degrade the signal and reduce the overall performance.

Figure 4: Sample antenna location. Most bikes should have the antenna mounted in a similar location such as under the main seat, or under the jump seat.

Note: Be sure that the antenna lead wires are not bound together; if the wires are bound together the cellular signal going into the control module will be degraded.

7. Powering the Control Module for the First Time

Connect the two coax cables from the combo antenna (securely), then connect the bike’s 12-volt power to the red wire on harness, next connect the black wire on the harness to constant ground, then connect brown ignition wire on harness to ignition, finally turn bike ignition on and observe the Diagnostic Test LED’s on the Control Module will begin flashing.

Note: Power, Ground and Ignition are always required for operation of the Guidepoint System

Within ten minutes (while the ignition is on) the flash rate of the green L.E.D. will change to approximately one second off and one second on to indicate that RF coverage is present and that the GPS Receiver has established a location “lock”. If you do not get the results above, ensure proper 12-volt bike power, check the antenna placement and repeat the test.
3. Selecting the Control Module Location

The Guidepoint System is supplied with a 3 ft. power cable. The control module should be mounted so it will not be exposed to damage from people or objects. The cables that connect to the Control Module should also be routed to protect them from possible damage. For most bikes, you’ll need to use wire ties or double stick tape to secure the control module to the bike. In a typical motorcycle, the unit can be mounted underneath the seat. Below you’ll find some pictures of potential mounting locations for various bikes.

4. Antenna Description

The Guidepoint System uses one antenna. The antenna is for receiving GPS signals from the Navistar GPS satellites and for communication with the Cellular network. The antenna does not require a ground plane to function properly.

There are two antenna cables in addition to the main cable harness that must be connected to the control module, so be sure there is room to access the connectors for installation and service.

Satellites are in a 12-hour orbit at 12,000 miles above the earth. There are 29 Navistar GPS satellites in the system and generally there are at least 5 satellites orbiting overhead at any one time. This antenna must be positioned to receive signals from these satellites. The antenna location must be selected carefully so that the antenna can receive the satellite signals.

Note: The ideal location is in a place that allows line of sight reception from the GPS satellites in orbit above. The satellite signals will pass through glass or plastic if not coated with a film or metallic obstruction.

5. Locating the Power Wires

The Guidepoint Control Module has an internal power management program that monitors the bike power at all times. The management program is continuously looking at the condition of the bike battery in order to detect the state of the bike operation. The Guidepoint Control Module determines the state of the bike power by detecting changes in the battery voltage over time. It is critical in this installation that the bike power be taken from a source as close to the battery as possible. Possible sources besides the direct connection to the battery are the main fuse block panel or the point where the bike charging circuits are connected to the 12-volt system.

Note: In most motorcycle applications, the control module can be installed close enough to the battery to allow for the power and ground wires to be connected directly to the battery.

Connect the red lead or fuse end of the power cable to the +12 volt bike power. The power cable can be shortened if needed but be sure to also install the in line fuse.

Connect the black lead to the bike chassis (ground).

Connect the brown lead to an ignition wire in the bike. The ignition wire of the bike should have power when the motorcycle is turned on and in the run position, but will not have power when the key is in the off position. Most motorcycles will have an ignition wire available underneath the seat, or at the fuse panel.

Figure 1: Suzuki SV650S – The control module is underneath the jump seat, just below the fuse panel. This is a typical location for street bikes.

Figure 2: Yamaha Royal Star – The control module is on top of the battery, underneath the seat. In most cruiser and larger style bikes, the best location for the control module is underneath the seat.

Figure 3: In this Harley-Davidson bike, the ignition wire can be found in the highlighted harness. Most motorcycles will have an ignition wire close to the battery or at the fuse panel.