

## **StreetEagle Customer Support Guide**

This guide is provided to help InSight USA customers answer questions and quickly resolve problems with their StreetEagle GPS Tracking system. The most commonly encountered problems and solutions are discussed in the following Troubleshooting Guide. These are exactly the same troubleshooting steps that our on-call support staff will suggest to isolate a listed problem. If these steps do not resolve the problem, please contact us by phone, voicemail, email, or use our online Support Request to get further assistance. Most support requests are handled immediately, but no later than the next business day.

### **StreetEagle Phone Support**

For immediate assistance, please contact us during normal business hours at the numbers below. Our normal business hours are 8 AM to 5 PM Eastern time, Monday through Friday. If we are unavailable to take your call, please leave a voice message or send an email, and we will contact you as soon as possible.

<b>For Questions Regarding</b>	<b>Phone</b>	<b>Email</b>
Hardware installation and troubleshooting	(301) 866-1990 x208	help@mds-inc.com
Software installation and operation	(301) 866-1990 x204	support@mds-inc.com
StreetEagle Web support	(301) 866-1990 x205	seweb@mds-inc.com
General technical support	(301) 866-1990 x207	tech@mds-inc.com
Sales	(301) 866-1990 x201	sales@mds-inc.com
Billing	(301) 866-1990 x203	billing@mds-inc.com

### **StreetEagle Online Support**

For problem assistance anytime, please use our StreetEagle support website at

<http://www.mds-inc.com/StreetEagle-Service-Assistance.htm>

This is also available directly from the StreetEagle software by simply clicking the Help button on the main screen. By submitting a Support Request, you are assured of timely response to your question or problem by our support staff.

### **StreetEagle User Guide**

The StreetEagle User Guide is available on your PC when you install the StreetEagle software. The Guide shows how to use all of the functionality of the StreetEagle software, and will answer most questions regarding operation of the system. The guide can be found at Start > Programs > StreetEagle > StreetEagle User Guide, and can be printed for future reference.

## StreetEagle Troubleshooting Guide

The most commonly encountered StreetEagle problems are listed in the Table below. Most problems can be resolved by taking the action recommended in the appropriate Possible Cause section. If the problem persists, contact the appropriate InSight support department by phone, voicemail, email, or online support request.

Problem	Possible Causes (See Troubleshooting Steps Below)							
	Hardware Installation	Weak Cellular Coverage	Weak GPS Signal	Antenna Placement	Cellular Data Outage	Internet Connectivity	Map Data Limitations	StreetEagle Server Down
Vehicle reporting inconsistently, other vehicles reporting correctly	<b>X</b>	<b>X</b>		<b>X</b>				
Vehicle not reporting at all, other vehicles reporting correctly	<b>X</b>	<b>X</b>						
No vehicles reporting current location and status					<b>X</b>	<b>X</b>		<b>X</b>
Get 'Server busy' message when starting StreetEagle software						<b>X</b>		<b>X</b>
Sometimes get wrong street addresses in reports							<b>X</b>	
Vehicle location a block or two off from where it should be			<b>X</b>	<b>X</b>			<b>X</b>	

### **Hardware Installation**

If the Tracking Unit is intermittently reporting, or not reporting at all, the connections to the box should be thoroughly checked to insure that power is properly supplied to the Tracking Unit. In most cases, this is due to wires being unplugged or improperly connected.

**Solution** – Use the Installation Instructions provided in the installation kit to verify correct operation of the indicator lights on the Tracking Unit with vehicle ignition off and on, and insure antenna connections. Repair wiring or connections as necessary. If the problem persists, and power is being supplied correctly to the Tracking Unit connector, and the antenna is properly connected, this may indicate a bad Tracking Unit or Antenna. Call InSight for technical support for assistance. If the Tracking Unit connector is unplugged, use tamper sealant lacquer, provided in the installation kit, to discourage and provide evidence of further tampering.

### **Weak Cellular Coverage**

Often when a vehicles actual location is significantly off from where the map shows it, it is due to not receiving the most recent location update from the vehicle, which is due to poor cellular coverage at the current vehicle location. This usually occurs when a car is parked in a garage or in an area blocked from cellular reception. Although the location report cannot be sent in real time in these situations, it will be reported as soon as the vehicle is again in a area with good cellular coverage, such that you will always have a complete record of vehicle location in the reports and on the history map. If there are gaps in the history for the vehicle (in the reports or on the history map), it is either due to a bad GPS or an intermittent wiring problem to the tracking unit.

**Solution** - A higher gain external antenna may help with cellular reception, but there are tradeoffs to consider (antenna getting torn off, cosmetic, drilling hole in trunk, etc.). Sometimes antenna placement (see below) may be the issue, but you would typically notice this soon after the unit is installed. In most cases the only thing that can be done is wait for the vehicle to drive into an area with good cellular reception, at which point the Tracking Unit will dump out any stored data that accumulated during its drive in a bad cellular area.

### **Weak GPS reception**

When vehicles travel through cities with tall buildings blocking a clear view of the sky, such as downtown New York City or Boston, the accuracy of the GPS can be diminished by what is called the 'urban canyon' effect. When this occurs, fewer GPS satellites are communicating with the antenna in the vehicle, causing a less accurate or erroneous vehicle location solution.

**Solution** – There is no quick fix for this problem. If the inaccuracy of the GPS is a problem for your application, an advance GPS receiver with 'Dead Reckoning' is available at an additional cost, and will overcome this problem.

### **Antenna Placement**

An inaccurate GPS location or weak cellular reception can may occur if the antenna's view of the sky is blocked by metal or heavy window tinting in the vehicle between the antenna and the sky.

**Solution** - Reposition the antenna so that it has an obstruction free view of the sky. For Covert style antennas, make sure that the 'GPS Side' or the antenna is oriented to face the sky, as shown in the installation instructions. An externally mounted antenna, either

mounted on the windshield or mounted on the roof or trunk of the vehicle, will also solve this problem.

### **Cellular Data Outage**

Cellular network reliability and coverage has steadily improved as wireless carriers have continued to improve their infrastructure, however there are still occasional outages which may effect one or more regions. When this occurs, the Tracking Units will store the vehicles location data, and will download the stored vehicle activity data once service is restored.

**Solution** - Insight USA is not responsible for and cannot fix cellular outages. Typically these outages are short lived, and service is quickly restored. A complete history of vehicle activity during the outage will be available once service is restored.

### **Internet Connectivity**

The StreetEagle software requires Internet connectivity to access your tracking data from our Servers. If there is a Internet outage with your Internet service provider, or an outage to the StreetEagle Servers, you will not be able to operate the StreetEagle software until the outage is resolved. Internet outages on the StreetEagle Server side are very infrequent as our Servers are connected directly to the Internet backbone. Any outage on our Internet connection is automatically detected, and service will be restored as soon as possible.

**Solution** – To verify Internet connectivity with your local Internet service provider, open an Internet Explorer browser window. If you cannot successfully connect to your home page, the problem is with your PC or your local Internet service. Restart your PC, and if the problem persists, troubleshoot your Internet connection back to your service provider.

### **Map Data Limitations**

Current generation map databases do not have exact addresses associated with the latitude and longitude of a location. Reverse geo-coding is the process of associating an address with a latitude and longitude (which we get from the GPS), is done by approximating the street address along a road segment in the map database. The map databases (all current map databases that we are aware of) are a collection of road segments, each with a starting and ending latitude and longitude and an address range covering that road segment. Map databases assume a linear distribution of addresses along each road segment, which is often inaccurate, especially in rural areas with long road segments. This is why the addresses are often skewed from the actual address your vehicles are located.

**Solution** - As a workaround for this, we have recently integrated Google Earth maps with StreetEagle, so that you can actually see the vehicles location on a satellite or aerial photography map, and you can actually see the building where the vehicle is (or was). With this capability you can see an actual picture of your vehicle at the location, regardless of the address.

For frequently visited locations, you can also specify the location as a StreetEagle Location, and define a radius around the location large enough to cover any address inaccuracy, and instead of an address, the reports will give you the location name. This may not be a definitive as the Google Earth solution above, but it may be useful in some instances.

### **StreetEagle Server Down**

The StreetEagle Server availability is typically better than 99.9%, however there may be an occasional disruption of service beyond our control. Critical processes are monitored and detected with remote 'watchdog' monitoring software, and Network Operations Center personnel are immediately notified when a problem is detected. StreetEagle Server outages are rare and short lived, and service is restored as soon as a problem is detected.