Phillips Connect Asset Trackers

Troubleshooting Guide

April 2022





Table of Contents

Revision History	2
Common Issues	3
Light Depletion on the Device	3
EZTrac, EZTrac HE & StealthNet	3
SolarNet	3
AssetTrac	3
AsseTrac Not Reporting	4
Battery Depletion	4
Issues with Activation	4
GPS Issues	4
Device Not Showing on the Map	4
Faulty Harnesses	5
Available harness types include:	5
Provisioning Issues	5
SIM Card Issues	5
LED Lights Overview	6
LED Lights In Detail	7
RMAs	Error! Bookmark not defined.
Jersey Telecom IoT Coverage Map	8
Carriers Jersey Telecom Roams On	9
Rogers	9
SaskTel	9
Videotron	9
T-Mobile	9
Sprint	9
AT&T	9
Other Carriers	9
Additional Resources	10



Revision History

PLEASE NOTE: This document is classified as **INTERNAL**. All information contained herein is confidential to Geotab. Do NOT share this document or any subset of this document outside Geotab without the permission of the document owner and confirmation that a valid NDA is in place.

Version	Date	Name	Revision
1.0	Mar 15, 2022	Tamara Bouchard	Document created.
1.1	Apr 6, 2022	Samantha Richarz	 Document re-formatted according to Geotab style standards, reviewed, and content edited.
1.2	Apr 14, 2022	Samantha Richarz	Updated links.



Common Issues

The purpose of this document is to provide troubleshooting guidance for common issues with Phillips Connect asset trackers:

- StealthNet, SolarNet, AssetTrac (battery)
- EZTrac and EZTrac HE (no battery; hard-wired)

Light Depletion on the Device

The following steps can assist in troubleshooting light depletion on

Please refer to the relevant asset tracker for specific steps.

EZTrac, EZTrac HE & StealthNet

- 1. Check the installation for loose connections.
- 2. Confirm the power source the device is connected to is working.
- 3. Use a voltmeter to measure output. The range should be:
 - EZTrac/EZTrac HE: 6-18V,
 - StealthNet: 10-32V
- 4. Install an alternative device to check power.
- 5. Install the device on a different power source to check for lights.
- 6. For EZTrac and StealthNet specifically:
 - a. Confirm the device is receiving power from the truck. Reference <u>StealthNet & EZTrac</u> <u>Running Without Primary Power.</u>
- 7. If there are still no lights on the device, please submit for an <u>RMA</u>.

SolarNet

- 1. If the lights on the SolarNet do not appear when the device is in motion and the device isn't communicating, ensure the solar panel is unobstructed and able to receive solar charge.
- 2. Check the solar panel for physical damage.
- 3. For hardwired SolarNet devices, check the connections for loose or damaged wires.
- 4. If there is no damage to the solar panel, the device or the optional harness, and there are no lights on the device, submit for <u>RMA</u>.

AssetTrac

- 1. If lights do not appear on the front of the AssetTrac device when the yellow ship model plug is removed, reinsert the plug and remove it again until the lights flash.
- 2. If the lights quit appearing on the device after successful activation, check the number of reports the device has sent.







- 3. This information will be available in the MS2 (Maintenance Server V2) once released but can be obtained from Phillips Connect support in the interim.
- 4. This information may be able to be calculated in MyGeotab under **Engine & Maintenance** Measurements.

AsseTrac Not Reporting

Battery Depletion

- AssetTrac devices come "pre-loaded" with 5,000 events on them: 1 Report = 1 Event. Once those events are depleted, the device is rendered unusable.
- The battery is not rechargeable or changeable.
- The number of events/reports may be able to be calculated in **Engine & Maintenance** Measurements and can also be requested from Phillips Connect support team.
- For AssetTrac devices depleted *before* 5,000 events, please <u>RMA</u> (Return Merchandise Authorization) the device.
- Events can be calculated in the MS (Maintenance Server) internally.

Issues with Activation

- 1. To activate the device, remove the yellow ship plug. Three LED lights should begin to appear on the device.
- 2. If lights do not appear after removing the ship mode plug, please reinsert and remove the plug again.
- 3. If lights still do not appear, please submit for a <u>RMA</u>.

GPS Issues

GPS issues can refer to: inaccurate/no location, breadcrumb trail errors, and intermittent tracking.

Device Not Showing on the Map

Phillips Connect devices need a clear view of the sky or the ground to communicate with GPS. Devices that are not able to connect to GPS will not show accurate location or trips.

- 1. Ensure there is nothing obstructing the device where it is installed, specifically metal.
- 2. Ensure the asset is not inside a shop or building.
- 3. Ensure the device is in an area with good coverage (see <u>attached cell coverage map</u>)
- 4. Check the LED lights for confirmation of Cell and GPS lock.
- 5. To confirm whether the device is getting a signal, contact Phillips Connect for support:
 - a. <u>ResellerHelpDesk@phillips-connect.com</u>
 - b. (833) 213-5839 Option 3 (Reseller Support)



Faulty Harnesses

If there is physical damage to the harness identified through visual inspection, or through troubleshooting it is discovered that replacing the harness fixes the issue, <u>RMA</u> the harness or request a replacement.

If a customer is unable to test another harness and they have exhausted all the troubleshooting steps for the device, \underline{RMA} the device with the harness.

Available harness types include:

StealthNet

- 5-pin ABS Harness
- 4-pin ABS Harness
- 3-wire 15/ Nosebox Harness
- 12V Car Adaptor

SolarNet

Nosebox Harness

AssetTrac

• 2-wire Harness

Provisioning Issues

- 1. Confirm that the IMEI number is provisioned to the correct Geotab serial number.
- 2. Confirm that the device is only added to one database.
- 3. Confirm there are no errors in the data flow.

SIM Card Issues

- SIM card issues for non-carrier Order Now purchases must be diagnosed by Phillips Connect.
- Contact Phillips Connect for support:
 - <u>ResellerHelpDesk@phillips-connect.com</u>
 - o (833) 213-5839 Option 3 (Reseller Support)
- SIM card issues for carriers must be diagnosed by the carrier.



LED Lights Overview

- Red GPS
- Green Cellular Data
- Orange Vibration detection/firmware updating
- Green Blinking: Attempting to lock Cellular Data Session
- Green Solid: Cellular Data Session Locked
- Green Off: Sleeping
- **Red Blinking**: Attempting to lock GPS Coordinates
- Red Solid: GPS Coordinates Locked
- **Red Off:** GPS disconnect
- Orange Blinking: Vibration detection/firmware update
- Orange Off: Sleeping
- * Orange is never solid.



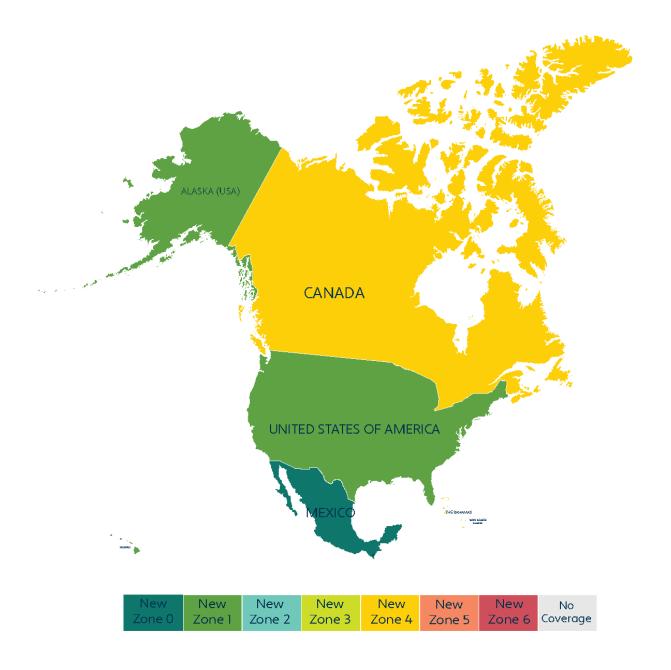
LED Lights In Detail

Lights	What it Means	Questions/Tips for Customer
Green, Red, & Orange OFF	GPS disconnected, cellular data session is off, device is either turned off (sleeping) or in low power mode (standby)	 Once the device starts moving, it will look for GPS and cellular data.
Green Blinking, Red Solid, Orange Blinking	Attempting to lock cellular, GPS locked, vibration detected	 Could be a cellular coverage issue. Make sure that the device has a clear view of the sky or the ground.
Green Solid, Red Solid, Orange Blinking	Perfect health; that's how it should be. Locked to cellular and GPS.	• N/A
Green Blinking, Red Blinking, Orange Blinking	Attempting to lock to cellular and GPS; this is the combination you should see when the device wakes up (vibration detected)	 If this combination persists, please make sure the device has a clear view of the sky or the ground.
Green Solid, Red Blinking, Orange Blinking	Locked to cellular and attempting to lock to GPS	 Could indicate an issue with device interference. Make sure the device has a clear view of the sky or the ground.
Green Blinking, Red Off	Attempting to connect to cellular, GPS off	• This indicates a cellular coverage issue.
Green Solid, Red Off	Locked to cellular, GPS off	• This indicates a device interference issue.
Green Off, Red Blinking	Not connected to cellular, attempting to connect to GPS	• This indicates a cellular coverage issue.
Green Off, Red Solid	Not connected to cellular, connected to GPS	• This indicates a cellular coverage issue.



Jersey Telecom IoT Coverage Map

We structure our global roaming coverage into zones 0-6. Higher zones automatically include the zones below them. For example, Zone 2 includes networks in Zone 0, 1 and 2.





Carriers Jersey Telecom Roams On

Explore the following links to see enhanced details of area coverage near you:

Rogers

https://www.rogers.com/mobility/network-coverage-map?icid=R_WIR_NTW_HEUQFZ

SaskTel

https://www.sasktel.com/wps/wcm/connect/content/home/wireless/coverage-and-travel/coveragetravel (Includes multiple maps based on coverage type, but the 4G map is the best one to reference.)

Videotron

https://www.nperf.com/en/map/CA/-/19589.Videotron-Mobile/signal/?ll=47.931066347509784&lg=-91.66992187500001&zoom=4

T-Mobile

https://www.t-mobile.com/coverage/coverage-map

Sprint

https://coverage.sprint.com/IMPACT.jsp?ECID=vanity:coverage

AT&T

https://www.att.com/maps/wireless-coverage.html

Other Carriers

- Alaska
- AR Mexico
- Telefonica Moviles
- Mexico



Additional Resources

- Please refer to KCS for additional support for Phillips Connect.
- <u>Click here</u> to review the approved RMAs for Phillips Connect asset trackers.