100% SATELLITE TECHNOLOGY

SPOT TRACE USER GUIDE

THEFT-ALERT TRACKING DEVICE







SECTION 1: WELCOME

Welcome to the SPOT Family! **SPOT TRACE** provides satellite-based messaging capabilities so you can track anything, anytime, anywhere.

HERE ARE A FEW IMPORTANT THINGS TO REMEMBER ABOUT YOUR SPOT TRACE

- Mount the unit with logo pointed toward the sky. It can be mounted beneath fiberglass, fabric, or glass, but metal obstructions should be avoided.
- Keep **SPOT TRACE** at least 12 inches away from GPS devices, as it can interfere with the signal reception of your GPS device.
- Activate your **SPOT TRACE** before mounting or placing on an asset by visiting **FindMeSPOT.com/Activate.**

To begin using **SPOT TRACE**, we recommend you spend a few minutes reading through this User Guide, then visit **FindMeSPOT.com** to select a service plan and activate your SPOT device.

SECTION 2: GETTING STARTED

Your **SPOT TRACE** requires an active SPOT subscription to communicate. To do this, simply activate your device using the instructions outlined below.

WHAT YOU NEED

- Personal contact information, including a valid email address for yourself and other people you would like to receive notifications
- **SPOT TRACE** electronic serial number (ESN) and authorization code located at the bottom of the Quick Start Guide and inside the SPOT Trace battery compartment (keep in a safe place as a reference tool)
- Credit card information

ACCOUNT SETUP AND ACTIVATION

1. Go to **FindMeSPOT.com/Activate.**
2. Existing SPOT customers should login to their current SPOT account to add their new device.
3. New customers will need to select: Begin Activation, then Set Up New Account.
4. Follow the instructions provided within the activation portal. Do not skip forms or pages.
5. Choose the services you wish to add to your **SPOT TRACE** device and confirm your order. These services include: Basic Service, Extreme Tracking, and Product Replacement.
6. Edit your device features, message alerts, and contact information for the necessary message alerts. For more details on **SPOT TRACE** features, view page 7.

IMPORTANT NOTE: An update of **SPOT TRACE** is required after certain features are edited. **SPOT TRACE** must be plugged into your computer with the included USB cable to successfully complete an update.

ELECTRONIC SERIAL NUMBER (ESN) AND AUTHORIZATION CODE

These codes are located on the Quick Start Guide included in your **SPOT TRACE** box as well as inside the battery compartment of your **SPOT TRACE**. You will need these codes when setting up your account on **FindMeSPOT.com/Activate.**

SECTION 3: USING SPOT TRACE

POWER

One of these power sources:

- (4) AAA Energizer® Ultimate Lithium 8x batteries (L92) – installed
- (4) AAA Energizer® NiMH rechargeable batteries (NH12) – sold separately
- Waterproof – DC Power Cable sold separately

REPLACING BATTERIES

1. Loosen the screws to open the back cover.
2. Install 4 AAA Energizer® Ultimate Lithium 8x batteries or NiMH rechargeable batteries.
3. Replace cover ensuring that the gasket is lined up and free of debris. Tighten screws with a small screwdriver. It is important that you fully tighten the back cover to maintain **SPOT TRACE**'s waterproof seal.
4. Keep your batteries installed, even when using an external DC source to ensure proper system performance in the event that the external DC source is cut or should fail

PLEASE NOTE: NiMH batteries cannot be charged within the **SPOT TRACE** unit. If using an External DC source, SPOT Trace will NOT be waterproof unless using the Waterproof – DC Power Cable (sold separately).

REPLACEABLE BATTERIES - CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

TO TURN SPOT TRACE ON: Simply locate the Power button on the top of the device, press and hold the button; lights will illuminate. **SPOT TRACE** will perform a self-test and then enter Track mode automatically.

SPOT TRACE SELF-TEST: SPOT TRACE performs a self-test when you initially turn on your device. During self-test, all lights will blink green in an alternating manner to indicate self-test is in progress.

If all visible lights flash red, the **SPOT TRACE** self-test has found a failure, please call SPOT Customer Care.

TO TURN SPOT TRACE OFF: Press the power button for 3 seconds. When the device leaves Track Mode and enters Off Mode from the Power button being pressed, **SPOT TRACE** will send out a message indicating the power has been turned off. This is to let you know someone has powered off the device.

Your SPOT TRACE is always in track mode when powered on. The lights will stop blinking after 20 minutes in order to be unnoticeable. A quick press of the power button will resume blinking for another 20 minutes.



SPOT TRACE mounted inside a fiberglass compartment of a boat using the included Velcro strip and mounting bracket. Notice the unit is angled toward the sky for optimal performance.



SPOT TRACE mounted under the fiberglass fairing of a motorcycle using the included Velcro strip and mounting bracket.

INITIAL SYSTEM TEST

After activating service and powering on, **SPOT TRACE** will perform an initial system test to evaluate your messaging system, the chosen location of the unit and profile settings.

1. Turn **SPOT TRACE** on - press and hold the Power button; lights will illuminate.
2. Power and GPS lights will blink green as the unit performs a self-test and starts the tracking process.
3. Leave **SPOT TRACE** outdoors. During the initial 20 minutes, the GPS light will blink green as **SPOT TRACE** acquires a GPS fix. Once **SPOT TRACE** acquires your GPS location, the GPS light will rapidly blink green to notify you that your message is being transmitted with your GPS location.
4. Verify that the track point/location was received in your account at **FindMeSPOT.com.**
5. If the GPS light blinks red during initial system test, this means that either the GPS location fix has failed or the GPS signal is low. You should move your **SPOT TRACE** to a new location.

MOUNTING SPOT TRACE

- Use the reversible mounting bracket, double sided industrial strength tape, adhesive grip pad or adhesive velcro strips (all included) to affix the **SPOT TRACE** to your asset
- Ensure the SPOT logo is pointed toward the sky
- The unit can be mounted beneath fiberglass, fabric or glass, but metal obstructions should be avoided (see examples on page 5 & 6)
- If using an external DC source, ensure that the unit will be mounted close enough to the power source
- If using an External DC source, **SPOT TRACE** will NOT be waterproof unless using the Waterproof – DC Power Cable (sold separately).
- Experiment with mounting options to determine what works best for your asset and your needs

NOTE: Before permanently affixing **SPOT TRACE** to your asset, verify that the track point/location was received in your account at **FindMeSPOT.com** to ensure there are no physical barriers that may interfere with the GPS location acquisition or message transmission.

PLACEMENT OF YOUR SPOT TRACE

The placement of your **SPOT TRACE** can make a difference. For best reception, always mount the unit with the SPOT logo pointed towards the sky (the satellite antenna is located under the logo).

SPOT TRACE is not designed to be attached or worn on a person's body. **SPOT TRACE** should only be used when located at least 20 cm (7.9 inches) away from the human body

SECTION 4: SPOT TRACE FEATURES

SPOT TRACE utilizes several features to help you track your assets. Features can be enabled/disabled and edited during activation and by logging into your **SPOT TRACE** account. Each of the following features is explained in more detail in the following pages.

FEATURES:

- Motion Activated Tracking
- Dock Mode
- Movement Alerts
- Status
- Low Battery
- Power Off

TRACKING

With **SPOT TRACE**, you can track your asset in near real-time, providing a virtual breadcrumb trail of your asset's location. GPS locations will be sent on predetermined tracking intervals based on your selection in your **SPOT TRACE** account. Get the most out of **SPOT TRACE** and track every 2 ½ minutes with Extreme Tracking for maximum asset security. Additional service fees apply. Learn more at **FindMeSPOT.com/Trace**

MOTION-ACTIVATED TRACKING

A built in vibration sensor sends GPS locations only when the asset is moving. When the device is stationary for more than five minutes, **SPOT TRACE** will enter Suspended Track mode. **SPOT TRACE** will automatically send a Stop message from the resting location at the next tracking interval. The next interval will be 2 ½, 5, 10, 30, or 60 minutes based on your tracking plan and interval selection (see next section for more information on tracking intervals). While at rest, **SPOT TRACE** will not send GPS locations. Tracking will automatically resume after the vibration sensor has sensed movement.

If no GPS location is found within 4 minutes, **SPOT TRACE** will not send this particular waypoint and the GPS light will blink red. **SPOT TRACE** will try to obtain your GPS coordinates again at your next scheduled tracking interval.

TRACKING INTERVALS

SPOT TRACE's tracking options allow tracking messages to be sent every 2 ½, 5, 10, 30, or 60 minutes (depending on your plan and preference) for as long as your **SPOT TRACE** is powered on or until the batteries run out.

To set your rate of tracking, sign in to your SPOT account at **FindMeSPOT.com** and choose 'View/Edit' **SPOT TRACE** Features from the My SPOT Devices tab.

NOTE: An update using **SPOT TRACE** Updater is necessary after making changes to tracking intervals (see page 11 for instructions on using the SPOT Device Updater)

SUSPENDED TRACK MODE

SPOT TRACE is designed to only send track messages when it detects movement. When it is stationary for more than five minutes, Trace will enter Suspended Track mode. It will automatically send one more track message from the resting location as part of the suspension process. While at rest, Trace will not send track messages. Tracking will automatically resume after the vibration sensor detects movement again.

DOCK MODE

For assets stored on the water, where vibration would cause false tracking, enable Dock Mode to help eliminate tracks caused by waves while the boat is safely docked. When Dock Mode is enabled, Trace uses the vibration sensor and location to determine if track messages should be sent. Based on the assumption that a boat will be moving continuously when docked, Trace compares GPS readings to determine if the boat is actually changing locations. When a couple of GPS readings are the same, it will suspend Tracking. The device will continue to obtain readings from the GPS at whatever rate Tracking is set to (2.5 min, 5 min etc.) When two readings are more than 200 meters apart, Tracking will resume. If the boat is stationary and motion is low enough that vibration is not detected, Tracking can also be suspended due to lack of movement.

NOTE: An update using the **SPOT TRACE** Updater is necessary after enabling/disabling dock mode (see page 11 for instructions on using the SPOT Device Updater)

MOVEMENT ALERTS

Receive a notification when new movement is detected on the asset. During the account setup, you will be able to select if you want Movement Alerts enabled/disabled and how long your **SPOT TRACE** must remain at rest before a Movement Alert will be sent. You can select either 30 minutes (default) or 12 hours for the time period that the unit must be at rest in order to receive a Movement Alert once Trace has detected movement. When Trace has been at rest longer than the selected time period and the asset moves, the first track message and an alert that the asset has moved will be sent to the text/email destination selected during account setup.

NOTE: An update using **SPOT TRACE** Updater is necessary after making changes to Movement Alerts (see page 11 for instructions on using the SPOT Device Updater)

STATUS
Receive a daily alert so you know your asset is secure. The daily alert with GPS coordinates will be sent every 24 hours (based on time of day when the unit was most recently powered on). The Status feature is DISABLED by default unless otherwise changed during account setup.

The following features are ENABLED by default unless otherwise changed during account setup:

LOW BATTERY Receive a notification when the device's batteries are low.

POWER OFF Receive a notification if your device is powered off.

FACTORY SETTINGS FOR SPOT TRACE FEATURES
All feature settings may be changed in your SPOT Account at anytime.

NOTE: Changing rate of Tracking and Movement Alerts and enabling or disabling Dock Mode or Status messages will require an update of the **SPOT TRACE** unit (see page 11 for instructions)



FEATURES	DEFAULT SETTINGS
Tracking	ENABLED*
Movement Alerts	ENABLED
Dock Mode	DISABLED
Power Off	ENABLED
Status	DISABLED
Low Battery	ENABLED

*2 ½ MINUTES FOR EXTREME TRACKING AND 5 MINUTES FOR BASIC TRACKING

USING SPOT DEVICE UPDATER
PLEASE NOTE: making any change to the rate of tracking and Movement Alerts and enabling or disabling Dock Mode and Status features requires you to update your **SPOT TRACE** with the new feature settings. **SPOT TRACE** must be plugged into your computer with the included USB cable to successfully complete an update.

1. Have your **SPOT TRACE** and USB cable with you
2. Click on the orange star burst that appears on every page once a feature is changed that requires a device update
3. Download the SPOT Device Updater
4. Open the program and enter your authorization code located at the bottom of the Quick Start Guide (included in box) and inside the battery compartment
5. Click the Update button in the program
6. Refresh your account settings

SECTION 5: SYSTEM FUNCTION AND INDICATORS

SPOT TRACE MESSAGE SCHEDULE

SPOT TRACE is designed to provide outstanding quality and reliability. For optimum reception always affix your **SPOT TRACE** with the logo pointed toward the sky. The device will transmit through fiberglass, fabric, and glass. Reception can be inhibited due to hills, buildings, metal roofs or other obstructions so it is normal that some messages may not go through. That is why **SPOT TRACE** automatically sends multiple messages in every mode, giving you excellent overall reliability. In some modes, this means multiple attempts to send the same message, while in other modes it means regularly updating GPS coordinates and sending a new message with the most up to date information. Power Off, Stop and Status Messages are all cases of sending multiple attempts of the same message until the message has been received.

GPS

When **SPOT TRACE** is first powered on or with a quick press of the power button the GPS light notifies you whether or not **SPOT TRACE** is able to see the GPS satellites and obtain a GPS location.

GREEN –The GPS light blinks green for 20 minutes if the unit sees the GPS satellites and is looking for/has found a GPS location.

RED – The GPS light blinks red for a short time if **SPOT TRACE** cannot see the GPS satellites and / or cannot find a GPS location. If the GPS light blinks red, you should move your **SPOT TRACE** to a location with a clearer view of the sky.

NOTE: Both lights will stop blinking after 20 minutes to be unnoticeable but the device will remain tracking and sending the GPS location.

MESSAGE INDICATORS

INDICATOR	BLINKING GREEN	BLINKING RED
GPS	• Searching for GPS signal • Message transmission schedule in progress	• GPS location fix failed; move **SPOT TRACE** to a new location
POWER	• On	• Low battery



NOTE: The GPS light will fast-blink green after a message transmission.

GPS PERFORMANCE

SPOT TRACE uses an advanced GPS chipset with extremely high sensitivity to give you maximum performance. While the **SPOT TRACE** message transmitter is also very high quality, there may be times when the device will have a GPS signal, but the message won't be able to reach the satellites due to environmental blockage. Make sure that your **SPOT TRACE** is mounted with the logo pointed toward the sky at all times and remember, reception can be inhibited due to hills, buildings and metal obstructions.



SECTION 6: CARE AND SUPPORT

BATTERY LIFE AND USAGE

For reliable performance, use AAA Energizer® Ultimate Lithium 8x batteries (L92), NiMH rechargeable batteries, or an external DC source. Using an external DC source will NOT charge rechargeable batters and will NOT be waterproof unless using the Waterproof – DC Power Cable (sold separately). A battery low text/email can be set up on the account. Colder conditions and extreme heat can impact battery life. Once a low battery message is received, go to your asset ASAP and replace the batteries. Non-lithium batteries will work with **SPOT TRACE** but are not recommended for optimal performance. Using non-recommended battery types may degrade the performance of your **SPOT TRACE** message transmissions.

SPOT TRACE performance and battery life may be degraded in operating environments where the **SPOT TRACE** GPS chip must take a longer time to acquire your asset's GPS location, such as trying to send a GPS location under dense foliage. For optimal performance, operate your **SPOT TRACE** with the logo pointed toward the sky and avoid metal obstructions.

SPOT TRACE is designed to be durable for outdoor use. Dropping the unit on hard surfaces (while not recommended) should not damage it, but can cause a loss of power and may damage the batteries. Power loss turns off your **SPOT TRACE**, stopping any current mode of operation. If dropped, perform a system test on the device by following the steps on page 6 of this guide. If the system test fails, replace the batteries following the steps on page 4.



EXPECTED BATTERY LIFE

SPOT TRACE WITH 4 AAA ENERGIZER® ULTIMATE LITHIUM BATTERIES (L92)

MODE	100% CLEAR VIEW OF SKY AND STORED IN ROOM TEMPERATURE	50% CLEAR VIEW OF SKY/50% OBSTRUCTED
5 Minute Track Progress (if constantly moving)	~8 Days	~4 Days
5 minute Track Progress (with 8 hours of movement per day)	~25 Days	~13 Days
5 Minute Track Progress with 1 hour of movement per day)	~4 ½ Months	~2 Months
2 ½ Minute Track Progress (if constantly moving)	~6 Days	~3 Days
2 ½ Minute Track Progress (with 8 hours of movement per day)	~18 Days	~10 Days
2 ½ Minute Track Progress (with 1 hour of movement per day)	~2.7 Months	~1.3 Months

COVERAGE

SPOT TRACE works around the world, including virtually all of North America, Europe and Australia; portions of South America, North Africa and Asia; as well as hundreds of thousands of square miles off-shore from these areas. It is important that you check **SPOT TRACE**'s coverage before mounting the device on your asset. Visit **FindMeSPOT.com/Coverage** to view the latest coverage map.

OPERATING CONDITIONS AND CLIMATE

Like all electronic devices, **SPOT TRACE** has its limits. **SPOT TRACE** relies on GPS and low Earth orbit satellites to fix your asset's location and send messages. The transmitter (located underneath the SPOT logo) needs to be pointed toward the sky, either outdoors or beneath fiberglass, fabric or glass. For safety, keep the following in mind regarding the care and usage of **SPOT TRACE**:

- IP67 waterproof: Up to a depth of 1 m for up to 30 minutes
- If using an External DC source, SPOT Trace will NOT be waterproof unless using the Waterproof – DC Power Cable (sold separately).
- Operating temperatures: -22 F to 140 F (-33 C to 60 C)
- Operating altitude: -328 ft to 21,320 ft (-100 m to 6,500 m)
- Humidity and Salt Fog rated
- If you exceed 700 mph (Mach 1) GPS accuracy degrades

TEXT/SMS MESSAGES

Standard text messaging charges from your mobile phone provider may apply.

CLEANING

Follow these general rules when cleaning the outside of your **SPOT TRACE**:

- Make sure the power is off
- Use a damp, soft, lint-free cloth and avoid excess moisture near buttons or openings
- Do not use aerosol sprays, solvents, alcohol or abrasives
- Do not attempt to open the **SPOT TRACE** case

TROUBLESHOOTING

- **SPOT TRACE** performs a self-diagnostic test each time it is powered on
- Mount the unit with logo pointed toward the sky and avoid metal obstructions
- Keep **SPOT TRACE** at least 12 inches away from other GPS devices, as it can interfere with the signal reception
- Activate your **SPOT TRACE** before mounting or placing on an asset by visiting **FindMeSPOT.com/Activate**

LEARN MORE

Visit **FindMeSPOT.com** for the latest information on **SPOT TRACE** and other SPOT products and services. We encourage you to visit the FAQ section on **FindMeSPOT.com** for more helpful tips. If you can't find what you're looking for, please do not hesitate to contact us.

CUSTOMER CARE

Visit **FindMeSPOT.com** or call:

- North American Customers: 866.0K1.SPOT (866.651.7768)
- European Customers: Tel: +353 1 290 9505

LIMITED WARRANTY

Your **SPOT TRACE** has a Limited Warranty for 12 months (24 months for European Customers) from the date of purchase against defects in materials and workmanship only. For full details regarding the Limited Warranty and warranty claim procedures, visit **SPOTwarranty.com** or **FindMeSPOT.com.**

DECLARATION OF CONFORMITY FOR EUROPEAN CUSTOMERS

Hereby, Globalstar Europe Satellite Services Ltd., declares that this **SPOT TRACE**, is in compliance with the essential requirements and other relevant provisions of Directive 1995/5/EC. The declaration of conformity may be consulted at FindMeSPOT.eu/trace

CE1313 **Not to be Marketed in the Republic of Ireland**

EXCEPT AS PROVIDED ABOVE, THE PRODUCT IS SOLD "AS IS" WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES FOR THE PRODUCT WHATSOEVER, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES REGARDING THE CONDITION, DESIGN, SPECIFICATIONS, WORKMANSHIP, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT, OR ANY WARRANTIES THAT THE PRODUCT IS FREE FROM LATENT DEFECTS OR DEFICIENCIES, OR THAT THE PRODUCT IS FREE FROM INFRINGEMENT OF ANY PATENT, TRADEMARK, COPYRIGHT OR PROPRIETARY RIGHT OF ANY THIRD PARTY AND SUCH WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED.

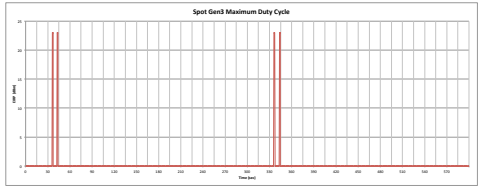
THIS LIMITED WARRANTY PROVIDES THE SOLE AND EXCLUSIVE REMEDY FOR ANY DEFECTS IN THE PRODUCT. IN NO EVENT SHALL WE BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL, SPECIAL, INCIDENTAL OR PUNITIVE DAMAGES, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE. OUR LIABILITY IS LIMITED TO THE AMOUNT YOU PAID FOR THE PRODUCT THAT IS THE SUBJECT OF A CLAIM. THE APPLICABILITY OF THE ABOVE LIMITATIONS AND EXCLUSIONS MAY VARY FROM STATE TO STATE, OR COUNTRY TO COUNTRY.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: a) Reorient or relocate the receiving antenna. b) Increase the separation between the equipment and receiver. c) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. d) Consult the dealer or an experienced radio/TV technician for help.

This device generates radio frequency energy at a low duty cycle (<1%). Transmitter on-time is dependent on configurable operational modes with a maximum of two 1.44 second long transmissions per five minute period. Satellite transmissions are 23.5 dBm EIRP. Based on these figures, the device has been exempted from SAR testing. Example Max Duty Cycle Timing Diagram:



Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This Class B digital apparatus complies with Canadian ICES-003.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This device complies with the requirements for Radio Astronomy Site avoidance as specified by the Globalstar National Science Foundation agreement of 2001. It is compliant with CFR25.213

This device automatically adjusts its transmission frequency according to its location and is compliant with international regulatory requirements.



FindMeSPOT.com

© 2013, SPOT, LLC. For more information visit **FindMeSPOT.com**
The official language of this User Guide is English. The translations are provided for your convenience only. In the case of any contradiction between a translation and the English, the English version shall take precedence.

SPOT™ is neither an affiliate of nor has any connection to Spot Image.

USERG-ENG-V1

- ROHS and WEEE compliant
- Verified to FCC emissions, immunity and safety regulations
- Meets FCC part 25 regulations, Canada type approval, CISPR Publication 22 (1985 1st Edition)