

**Spot Satellite Communicator** 

for Earthmate® PN-60w

User Manual





# Welcome

The SPOT Satellite Communicator uses GPS signals and communication satellites to relay your message—no cell phone coverage is necessary.

Use your SPOT Communicator with the Earthmate® PN-60w GPS, to send one-way text messages, share your location, and send SOS messages with the SPOT satellite system.

## What You Need to Know

- The SPOT Communicator needs a clear view of the sky to obtain a GPS signal and provide the most accurate location information. It is not reliable indoors, in a cave, or in very dense woods.
- Orient the SPOT Communicator so that the SPOT logo faces toward the sky—this provides optimal performance as the antenna is located under the logo.
- Keep the SPOT Communicator at least 12 inches away from other GPS devices as it can interfere with signal reception of other GPS devices.

For detailed information about how the SPOT Communicator works and its coverage area, go to findmespot.com.

## Resources

#### **DeLorme**

- ▶ DeLorme website (delorme.com)
- ▶ User Manuals (manuals.delorme.com)
- ▶ DeLorme Community Forums (forum.delorme.com)
- ▶ The DeLorme Weblog (blog.delorme.com)

#### **SPOT Communicator**

▶ SPOT website (findmespot.com)

# **Getting Started**

### **SPOT Satellite Communicator Interface**



For more information about the buttons on the device, see Using the SPOT Communicator on page 4.

# **Set Up the SPOT Communicator**

You must activate your SPOT Communicator and set up an account at findmespot.com before you can use it.

### To activate your device

To activate your SPOT Communicator, you need the device's ESN (serial number) and Authorization Code located in the battery compartment. To remove the cover, unscrew the D-ring on the back of the device and swing the belt clip aside.

- Go to findmespot.com and click **Activate Your SPOT**.
   Then, click the picture of your SPOT device.
- If you already have a SPOT account, log in. If not, click New Account and create one.

The website will walk you through the steps to set up your account; you'll provide device details, personal and emergency contact information, and select and pay for your services.

## To set up contacts and messages

Set up contact groups and predefined messages and export them to your Earthmate PN-60w before you head outside.

- Log in to your account at findmespot.com and click the My SPOT Devices tab.
- 2. Under Contact Details:

- » Click View/Edit under Contact Groups. Add some contacts and create a contact group.
  - **Tip** For testing, create a group called *Test* and add yourself as a contact.
- » Click View/Edit under Predefined Messages and add up to 14 messages.
- Under Social Networks, click View/Edit and link to Facebook®, Twitter™, Geocaching.com, and Fire Eagle™.
- 4. Connect your PN-60w to your computer and click Export to PN-60w. You may have to install the DeLorme GPS Plugin before you can export the file. Just follow the on-screen instructions.

# To pair the SPOT Communicator with the PN-60w

The PN-60w should be set up and have a GPS fix before you pair it with the SPOT Communicator.

- 1. On the PN-60w, open the SPOT Communicator Page.
- 2. Press MENU and select Pair SPOT Communicator.
- Press and hold the **Power** button on the SPOT Communicator until the blue Wireless light turns on.
- 4. On the PN-60w, press **ENTER**. When the Wireless light flashes rapidly, the devices are paired.
- Send a test Check-in/OK message to yourself to make sure that everything is working correctly.

# **Using the SPOT Communicator**

The SPOT Satellite Communicator has two buttons— **Power** and **SOS**—and five LED light indicators that let you know what the device is doing. It can operate alone to send emergency messages when the PN-60w is not available.

#### **Buttons**

#### **Power**

The **Power** button is on the side of the SPOT Communicator above the **SOS** button.

- Press and hold the **Power** button for three seconds to turn the device on and off.
- With the SPOT Communicator turned off, press and hold the **Power** button for five seconds to enter Pairing Mode. Pairing Mode cannot start unless the device is turned off.

## SOS

The **SOS** button is on the side of the SPOT Satellite Communicator below the **Power** button. It has a protective cover to prevent accidental activation.

To activate or cancel SOS messaging mode from

the SPOT Communicator, press and hold the **SOS** button for three seconds. A message dialog appears on the PN-60w. An SOS message triggered by the SPOT Communicator can be canceled by the SPOT Communicator or by the paired PN-60w.

**Note** The **SOS** button should be used only for life-threatening or other critical situations.

# **Light Indicators**

The SPOT Communicator uses lights to tell you what it's doing. Every time you turn the SPOT Communicator on, it performs an automatic self-test.

**Important!** If the SPOT Communicator's self test fails, the four LEDs at the top of the device simultaneously blink red.

#### Power **o**

The **Power** light blinks and changes color to indicate various states:

 Green-The SPOT Communicator is on and it passed the self test. ▶ Red-The batteries have less than 100 transmissions remaining.

#### Wireless Connection &

The **Wireless Connection** light blinks blue when a wireless connection is established between the PN-60w and the SPOT Communicator. The blue light goes off if the SPOT Communicator has not heard from the PN-60w in 30 seconds. The **Wireless Connection** light blinks rapidly when the PN-60w and SPOT Communicator are being paired.

## GPS 🕏

- Green-The GPS light blinks green for 15 seconds when the SPOT Communicator is in view of three or more GPS satellites and is actively sending a message.
- Red—The GPS light blinks red for 15 seconds when the SPOT Communicator is unable to see at least three GPS satellites and is attempting to send a message.

## Message Sending **≅**⊠

- ▶ Green-Any SPOT message is being sent.
- ▶ Red-A casual message was not sent. The casual message type includes Check-in/OK, Reference Point, Track Progress, and Geocache messages.

## SOS sos

- ▶ Green-The SPOT Communicator is in SOS mode.
- ▶ Red-Cancelling SOS mode.

## **Batteries and Connector**

#### **Batteries**

The SPOT Communicator is powered by two Lithium batteries (Energizer® Ultimate Lithium).

#### Connector

The SPOT Communicator has a mini-USB connector located in the battery compartment. The mini-USB connector is used to transfer firmware upgrades to the SPOT Communicator.

# **Using the Earthmate PN-60w**

The SPOT Communicator Page on the PN-60w gives you an easy way to use and manage your SPOT Communicator.



SPOT Communicator Page

### Wireless Antenna

The wireless antenna must be on to pair the devices.

#### To turn the antenna on or off

From the SPOT Communicator Page, go to **MENU > Turn Wireless Antenna Off** or **Turn Wireless Antenna On**. OR

From the Settings Page, select **Wireless** and then select or clear the **Wireless Antenna On** check box.

# **Pairing the Devices**

To connect a SPOT Communicator that is paired with the PN-60w or to initiate the pairing process, go to **MENU** > **Pair Communicator**. To unpair a paired device, go to **MENU** > **Unpair Communicator**.

At the top of the SPOT Communicator Page, a message displays the current status of the SPOT Communicator.

# **Sending Messages**

Your SPOT account at findmespot.com is the link between your PN-60w and your SPOT Communicator. When you set up your account, you will add your contacts and create groups of contacts; write pre-defined messages to quickly update your status when you're out in the field; and send the information to your PN-60w. You can also purchase additional recommended service options, such as support for Track Progress and Type & Send messages.

**Important** Make sure you set up your account and export the configuration file to your PN-60w before you use the SPOT Communicator.

### Message Priority Levels

Each type of message you can send is assigned a priority so that if you have multiple messages to send, each one is sent in order of importance.

- Critical—An SOS message is the highest priority message type and is sent to the GEOS Rescue Coordination Center for emergency response. A critical message supersedes both casual and urgent messages.
- Urgent-Help messages are the second highest priority message types. They are sent to one of the contact groups that you can select on the PN-60w; these are the contact groups you set up in your SPOT account. An urgent message supersedes a casual message.
- Casual—Check-in/OK, Reference Point (marking a waypoint), or Geocache messages are sent to a contact or social network that you have set up in your SPOT account. Track Progress messages are sent to your SPOT account for logging or to online maps. A casual message has the least priority.

# **Message Types**

You can send a pre-defined message or you can create a new text message using the optional Type & Send

service and send it to the contact groups you have set up with your SPOT account.

You can even share with social network websites— Facebook®, Twitter™, or Fire Eagle™—that you've set up a connection to on findmespot.com. In addition, SPOT Adventures (spotadventures.com) provides a location for you to share your SPOT messages, tracks, videos, and photos, as well as notes, from your adventures.

For each message sent, a message icon is placed on the map.

#### SOS

Use the SOS message to notify emergency services of your GPS location and that you need assistance when you have a life threatening or other critical emergency.

- Send a pre-defined message or create a new Type & Send message.
- ▶ SOS messages are sent using the critical priority level.
- ▶ If a GPS fix is obtained, an SOS message with the GPS position will be sent every five minutes. If there is no GPS acquisition, the SPOT Communicator will send your message without coordinates while continually trying to obtain a GPS fix.
- If the PN-60w loses communication with the SPOT Communicator, the SPOT Communicator will continue

- to send messages using its own GPS every five minutes until the PN-60w is turned on and a new command is issued or the SPOT Communicator batteries are depleted.
- As a backup, the SPOT Communicator can send SOS messages by itself; simply hold the SOS button on the side of the SPOT Communicator for three seconds.
- You can send an SOS message while in any other mode, but sending an SOS message cancels any modes in progress. SOS and Help messages can be sent at the same time.

# Help

A Help message notifies your contacts that you need assistance in a non life-threatening situation.

- Send a pre-defined message or create a new Type
   Send message.
- Help messages are sent using the urgent priority level.
- ▶ If a GPS fix is obtained, a Help message with the GPS position is sent every five minutes for one hour. If the PN-60w loses communication, the SPOT Communicator will continue to send messages every five minutes until the PN-60w is turned on and a new command is issued, the one hour timer expires,

- or the SPOT Communicator batteries are depleted, whichever happens first.
- ▶ You can send a Help message while in Check-in/OK, Track Progress, or SOS modes, but sending a Help message cancels any Check-in/OK or Track Progress messages that are in progress. Help and SOS messages can be sent at the same time.

#### Check-in/OK

Send a message to your contacts or upload field notes to Geocaching.com.

- Send a pre-defined message or create a new Type & Send message.
- Check-in/OK messages are sent using the casual priority level.
- ▶ If a GPS fix is obtained, the Check-in/OK message will be sent three times within a 20 minute window.
  Important To increase the probability of a successful message transmission from the field and out to contact lists, allow your SPOT Communicator to transmit until the message cycle is complete.
- You can send a Check-in/OK message while a Track Progress message in in progress, but it will interrupt the Track Progress messages until the Check-in/OK message cycle is complete.

You cannot send a Check-in/OK message when an SOS or Help message is in progress.

## Track Progress (Optional Service)

A Track Progress message sends your location to your SPOT account (My Account at findmespot.com). You also have the option to share your location data in near real-time via web links to a Shared Page or a Live Map at spotadventures.com.

- ▶ Track Progress messages are sent using the casual priority level.
- If a GPS fix is obtained, a Track Progress message will be sent every 10 minutes for 24 hours unless canceled.
- ➤ You cannot send this type of message when an SOS or Help message is in progress.

# **Sending Messages**

# To send a Check-in/OK, Help, or SOS

- 1. From the SPOT Communicator Page, select the message type.
- On the Message Composition page, select a contact or group from the **Send To** drop-down list.
- To send a copy of the message to Facebook or Twitter, select one or both check boxes.

**Tip** To send messages to ONLY Facebook or Twitter, create a group on findmespot.com and don't add any

- contacts to it. Name it something you'll remember (like "Social Networks") and select that group from the list in step 2.
- From the Message drop-down list, select a pre-defined message or Type & Send Text.
- 5. If you selected Type & Send Text, use the arrow keypad to highlight the text area and press ENTER to open the on-screen keyboard. As you enter your message, note that the remaining number of characters allowed displays. When you finish entering the message, select OK.
- On the Message Composition page, select **Send Message**.



Message Composition Page



On-Screen Keyboard

**Note** When you send an SOS message, a 10-second countdown timer starts. To cancel the sending of the message, press **QUIT** before the timer stops.

## **To Track Progress**

From the SPOT Communicator Page, select **Track Progress**. You can press **QUIT** to exit the page and the messages will continue to be sent.

# **Sharing Point Information**

Use the SPOT Communicator to send information about a reference point (defined as any point on the map other than where you are), geocache, Find search result, or map point from the PN-60w to your contacts. While viewing details for a point or search result, go to MENU > Send Waypoint/Geocache/GIS Point/Point with SPOT.

# **Logging Geocaches**

With the SPOT Communicator and PN-60w, you can log a geocache find and immediately send the information to Geocaching.com.

Link your premium Geocaching.com account to your account at findmespot.com before you go into the field and make sure you export the updated configuration file to your PN-60w. This will allow you to log a geocache in

near real-time from virtually anywhere with a SPOT Communicator using the Geocaches Page on the PN-60w.

# **Send Progress Page**

Once you have sent a message, the Send Progress page displays information about the message currently in progress. When the SPOT Communicator status indicates that a message mode is in progress, you can select that message type to view the Send Progress page.

The Send Progress page displays the following information about the message:

- Message—The message recipient and the content of the message.
- ▶ Times Sent-The number of times the message has been sent. While a single message transmission has a good probability of being received, waiting for the full three message transmission to complete gives the highest probability of a successful delivery.
- ▶ Time Started—The time the message was initiated.
- ➤ Time to Next Send-Displays the amount of time remaining until the SPOT Communicator sends the next message.
- Time Remaining—Displays the amount of time remaining until the message is complete.

Send Progress Family I just made it to the summit!	
Times Sent	Time Started
1 of 3	07:29 AM
Next Send	Time Remaining
00:04:54	00:11:06
Cancel Sending	

Send Progress Page

# To cancel sending

You can cancel a message that is in progress. Select **Cancel Sending** and press **ENTER**. If the Message Progress page is still active after all of the messages for a message type have been sent, the Cancel button changes to Done. Returning to the SPOT Communicator Page after all of the messages have been sent shows the Message Composition page.

- Casual messages—Canceling Check-in/OK, Reference Point, Geocache, and Track Progress messages cancels the message and begins a three minute timer before the next message can be sent.
- Urgent and Critical messages—Canceling inprogress Help and SOS messages cancels the

message and sends a Cancel Help, Cancel SOS, or Cancel Help and SOS message.

For Help and SOS messages, the Send Progress page shows that the SPOT Communicator is sending a cancel message. If the first message had not yet been sent, a cancel message is not sent.

# Message History

You can view a list of messages that have been sent from the PN-60w with the SPOT Communicator. See all the messages you've sent, when you sent them, and who you sent them to.

## To view message history

 From the SPOT Communicator Page, go to MENU > Message History.

The Message History Page displays a list of messages; the message type is indicated by an icon.

- From the list, select the message you want to view to open its details page.
- You can mark a waypoint at the message location or view it on the map:
  - » Select Mark to create a waypoint at the message location.
  - » Select View to view the message location on the map.

**Note** You can also view your message history from the last 30 days in your account at findmespot.com.

## To export message history

From the Message History page, go to **MENU > Export Message History**. You can save the message history
on the internal drive or to an SD card in the device.

## To clear message history

From the Message History page, go to **MENU > Clear Message History**. All the messages in the history are cleared and the message waypoint icons are removed from the map.

# **Specifications & Warranty**

## **Physical Specifications**

▶ Case: IPX-7 waterproof, impact resistant, and rugged

▶ Size: 2.6" x 3" x 1.25"

▶ Weight: 3.7 oz.

# **Battery Life and Usage**

Use only AA Lithium batteries in your SPOT Communicator. Alkaline or other battery technologies, including rechargeable batteries, are not recommended. In an emergency situation, if you have access to alkaline or other battery technologies, the SPOT Communicator might work but will not offer the specified battery life or performance.

#### **Power**

▶ SOS mode: Up to 7 days of messages

▶ Type & Send mode: Up to 5 days of messages

▶ Track Progress mode: Up to 10 days of messages

▶ Standby mode: Up to 4 months

Operational and environmental conditions can decrease the battery life achieved under normal usage conditions. See findmespot.com for more details regarding battery life.

# **Operating Conditions**

The SPOT Communicator must have an unobstructed view of the sky, either outdoors or in a glass enclosed area, such as a vehicle dashboard or sunroof. Visit findmespot.com for more detailed information.

# Coverage

SPOT works around the world, including virtually all of North America, Europe, Australia, and portions of South America, Africa, and Asia, as well as hundreds or thousands of miles off shore of these areas. It is important that you check coverage for your destination at findmespot.com before traveling.

### **Premium SMS Service**

Additional charges may apply in some regions. Standard text messaging charges from your mobile phone provider may also apply. Visit findmespot.com for more information.

# **Troubleshooting**

The SPOT Communicator performs a self-diagnostic test each time it is powered on. SPOT recommends that you send and verify a Check-in/ OK message before each trip. This also allows you to evaluate your entire messaging system—from the operational condition of the SPOT Communicator to the readiness of those on your contact list. See the FAQ section on findmespot.com for more information.

#### **FCC/IC Notice**

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. 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 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 CFR 25.213.

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

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

#### Certifications

ROHS and WEEE compliant

Certified to FCC and CE emissions, immunity, and safety regulations.

Meets FCC part 25 regulations, Canada type approval, CISPR Publication 22 (1985 1st edition), RTTE Directive (1999/EC), and IEC 60950 safety standard.

Visit findmespot.com for the latest certification information.

Spot LLC (findmespot.com) is not affiliated with Spot Image (spotimage.com).

# **Limited Warranty**

Spot LLC warrants that your SPOT Satellite Communicator will be free from defects in materials and workmanship for a warranty period of 1 year from the date of purchase. If your SPOT Communicator fails in normal use, Spot LLC will, at its sole option, either repair or replace the unit with a new or refurbished comparable unit at no charge for labor and materials; however, the customer will be responsible for shipping charges. New or refurbished parts may be used for repairs and replacements. Repaired or replaced product will be warranted for the balance of the original warranty. The warranty does not cover failures

due to abuse, misuse, accidents, or unauthorized disassembly or modification or any damage sustained during shipment of the product. Spot LLC has no responsibility for any warranty claims made after the 1 year limited warranty expires.

EXCEPT AS PROVIDED ABOVE, THE PRODUCT IS SOLD "AS IS" WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES FOR THE PRODUCT, 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 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.

# **Service Plan & Contact Information**

#### **Service Plan**

Before a product can be returned, you must contact DeLorme Technical Support at 207-846-8900 to determine if a return is necessary and request a Return Material Authorization (RMA) tracking number.

For the latest warranty and repair information, visit delorme.com/gpsrepair.

# **DeLorme Technical Support**

Visit support.delorme.com to access the DeLorme Technical Support Knowledge Base, get answers to frequently asked questions, and for additional support information.

If you cannot find an answer to your problem on the site, call 207-846-8900 to speak to a Technical Support representative. DeLorme Technical Support does not provide product training.

#### **DeLorme Customer Service**

For general questions about returns, your order status, or problems with shipments, phone 800-511-2459 (Monday through Friday) or send an email to sales@delorme.com. To place additional orders, phone 800-561-5105.

#### **SPOT Communicator**

For questions about the device, call DeLorme Customer Service. For questions about SPOT products and services, visit findmespot.com.