



## Installation Guide



SkyMate VMS Communicator

Release 1.0

SkyMate, Inc.  
14000 Willard Road  
Chantilly, VA 20151 USA  
Part Number IGVMS-10-001

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<http://www.skymate.com>

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# Installation

# 1

This Guide explains the basics for installing the hardware and software for your National Marine Fisheries Service Vessel Management System (NMFS-VMS) SkyMate VMS Communicator.

## Installation Overview

Thank you for choosing the Skymate VMS communicator. This document provides step by step instructions on installing and activating the Skymate VMS system for your vessel. The steps required to complete the installation and activation are:

- Install the Skymate VMS hardware on your vessel
- Install the Skymate VMS software on the PC that will be connected to your Skymate VMS Communicator
- Use a computer connected to the Internet to activate your VMS account on [www.skymate.com](http://www.skymate.com).

**NOTE** Activating your SkyMate account requires an internet connection and can be performed either before or after you install the Skymate VMS system on your vessel.

## Selecting a Location for the Communicator

Before unpacking your Communicator, you should choose a location for installing the Communicator and its back-up battery, and the VHF and the GPS antennas.

When selecting a location, consider the following:

- Select a location that is dry, well ventilated, and protected from the elements and from high temperatures and excessive vibration.
- Make sure there is enough space on either side of the Communicator for the cables.
- Locate the Communicator near a power source.
- Make sure the Communicator is not near electronic devices such as motors and generators that may cause interference.
- Make sure the Communicator is within ten feet of the PC.
- Select a location to install the back-up battery. Typically, the back-up battery is

installed on the top surface of the Communicator, within easy reach of the one foot cable that connects the back-up battery to the Communicator. If you choose a different location, ensure that the back-up battery cable is within reach.

- Select a location that provides a panel for mounting the message indicator light, which must be installed within four feet of the Communicator.

## Selecting a Location for the VHF Antenna

- 1 Choose a location with a clear view of the sky, free of any obstructions.
- 2 Position the SkyMate VHF antenna at least four feet (preferably six feet) from any other VHF band antenna and at least three feet from any metal structure. Antennas closer than four feet, whether active or not, can cause distortion of the antenna pattern and cause poor performance. The following antennas are considered VHF antennas: VHF radio, Loran, differential GPS, AIS, and 2-meter band.
- 3 You must ensure that any other installed antennas are placed an appropriate distance from your SkyMate VHF antenna. We recommend the following:

VHF radio antenna	6-8 feet
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Loran antenna	6-8 feet
---------------	----------

Differential GPS antenna	6-8 feet
--------------------------	----------

AIS antenna	6-8 feet
-------------	----------

2-meter band antenna	6-8 feet
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Structure (tower, mast)	4 feet
-------------------------	--------

GPS antenna (L-band)	1 foot
----------------------	--------

Cellular antenna	3 feet
------------------	--------

SSB or HF antenna	4 feet
-------------------	--------

GEO satellite radome	4 feet
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You must consider the following when installing the VHF antenna:

- The same guidelines that apply to standard marine VHF antennas apply to your SkyMate VHF antenna.
- The coaxial VHF antenna connects to the SkyMate antenna with a BNC VHF connector.
- If a longer cable length is required, use an RG-58 (50 OHM) coaxial cable or the equivalent, up to a maximum length of 50 feet.
- If a cable length greater than 50 feet is required, we recommend you use a low loss RG-8x or equivalent cable to avoid signal loss.
- If the RF connector or the antenna is exposed to the marine environment, apply a protective coating of grease such as Dow Corning DC-4 or the equivalent.
- Other extensions or adaptors in the cable run must also be protected by silicon grease and wrapped in waterproof tape.

## Selecting a Location for the GPS Antenna

Choose a location with a clear view of the sky, free of any obstructions. The location must be within 15 feet of the Communicator. Position the SkyMate GPS antenna at least three feet from any other antenna or electrical device.

## Unpacking Your SkyMate Communicator

When you unpack your SkyMate Communicator, make sure you have all the parts listed below. See Figure 1-1 on page 5 for an overview of the Communicator parts. If any parts are missing, contact SkyMate before proceeding with installation. We recommend that you keep the shipping material in case you need to return your SkyMate Communicator for any reason.

1. SkyMate Communicator with internal GPS receiver
2. Main harness assembly, which includes the following:
  - o 12 Volt power cable
  - o 4-pin twist lock connector for the power cable
  - o 2-pin twist lock connector for the back-up battery cable
  - o 3-pin twist lock connector for the message indicator light
3. Message indicator light
4. Backup battery
5. VHF antenna with cable assembly
6. GPS Antenna
7. Serial cable (for connection to PC)
8. Software CD
9. User documentation (not shown)

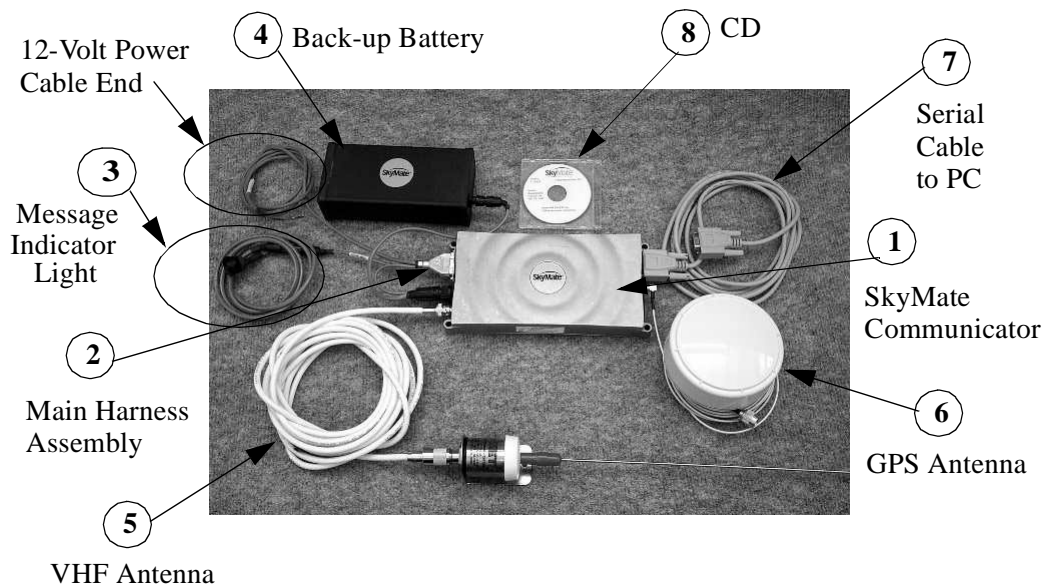


Figure 1-1. Overview of Communicator Parts

**IMPORTANT** Make a note of the Dealer code and the SCID code for your SkyMate VMS. You must have this information available when you install your SkyMate software and activate the unit. See Figure 1-2 for the location of the SCID code. You will find the Dealer code listed in your Quick Start guide and a space to write the SCID code.



**Figure 1-2.** SCID Code Location

## Installing the SkyMate Communicator

Typically the Communicator is mounted on a shelf, in a cabinet, or on a bulkhead.

- 1 Place the Communicator on the mounting surface.

**IMPORTANT** If you are installing the back-up battery on the top surface of the Communicator (as recommended) perform this step now, before attaching the Communicator to the mounting surface. This allows you to secure the back-up battery to the Communicator with the supplied dual lock fasteners.

- 2 Attach the flange to the mounting surface.

## Installing the Back-up Battery

Typically the back-up battery is attached to the Communicator using the supplied Dual Lock Reclosable 3M fasteners and cable ties. See Figure 1-3. To install the back-up battery:

- 1 Place the back-up battery on the top surface of the Communicator.

**IMPORTANT** Make sure that back-up battery is oriented to face the power connector on the Communicator labeled “PWR”.

- 2 Attach the back-up battery to the Communicator’s top surface using the dual lock fasteners.
- 3 Place the cable ties around the back-up battery and secure the cable ties.



**Figure 1-3.** View of Installing the Back-up Battery

### Installing the GPS Antenna

- 1 Mount the GPS antenna on a standard 1 1/4 inch threaded mount.  
There must be a clear view of the sky and the location must be within 15 feet of the Communicator. See also Selecting a Location for the GPS Antenna on page 5.

### Installing the VHF Antenna

- 1 Connect the coaxial cable to the base of the VHF antenna using the black tool provided. (The other end of the cable plugs into the Communicator.)
- 2 Mount the VHF antenna on a standard 1 1/4 inch threaded mount.  
There must be a clear view of the sky. You must ensure that no other VHF antenna (active or inactive) is within four feet (preferably six feet) of the SkyMate VHF antenna.

### Connecting the Serial Cable and GPS Antenna Cable

- 1 Attach the serial cable to the serial cable connector on the Communicator marked "Serial".
- 2 Attach the GPS antenna cable to the connector marked "GPS".

# 1

## Installation

### Connecting the VHF Antenna Cable and the Main Harness Assembly



Figure 1-4. View of Serial Cable and GPS Antenna

### Connecting the VHF Antenna Cable and the Main Harness Assembly

The main harness assembly includes cables for power, for the back-up battery, and for the message indicator light. Figure 1-5 shows an overview of the main harness assembly, the back-up battery, and the VHF antenna cable.

1. Main harness assembly
2. Back-up Battery
3. Message indicator light cable
4. Power cable
5. Back-up battery cable
6. VHF antenna cable

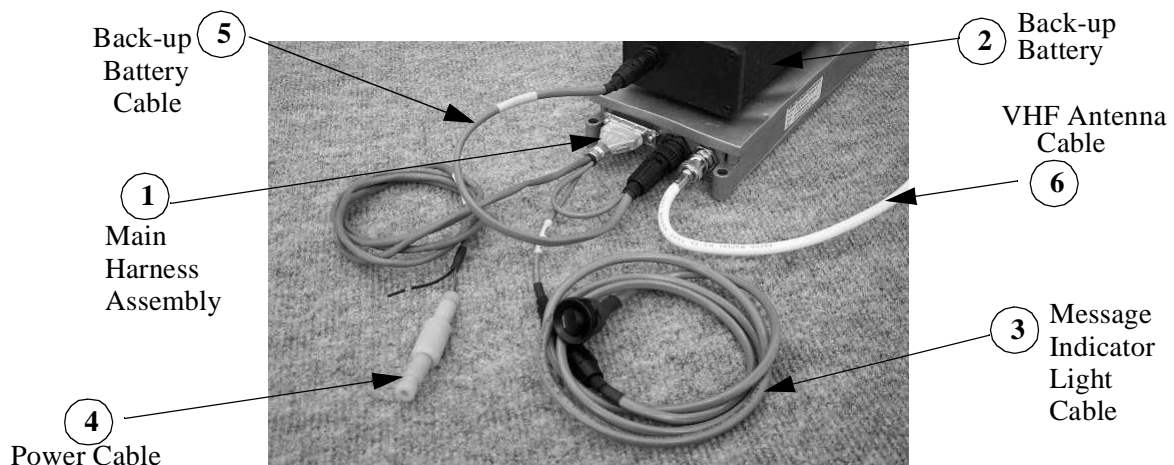


Figure 1-5. Overview of Main Harness Assembly, Back-up Battery, Power, and VHF Antenna

### Connecting the Main Harness Assembly

To connect the main harness assembly:

- 1 Connect the main harness assembly to the connector marked “I/O “on the

Communicator.

- 2 Connect the 4-pin twist lock connector of the main harness assembly to the connector labeled “PWR” on the Communicator.
- 3 Connect the 2-pin twist lock connector of the main harness assembly (labeled battery) to the connector on the back-up battery.

### Installing the Message Indicator Light

The message light indicator lights up when a message or weather report is received by the Communicator and is being held in memory.

#### To install the message light:

- 1 Select a location within four feet of the Communicator.
- 2 Release the lock-nut on the message indicator light.
- 3 Drill a 3/4 inch hole at the desired location of a panel or bulkhead and insert the light.
- 4 Connect the 3-pin twist lock cable from the main harness assembly to the message indicator light by plugging the cable into the 3-pin round connector on the Communicator cable.

**NOTE** The Message Indicator Light *must* be installed for your SkyMate to work properly

- 5 See Figure 1-5 for a view of the back-up battery and the message indicator light.

### Connecting the VHF Antenna Cable

To connect the VHF antenna cable:

- 1 Connect the cable marked VHF antenna to the connector marked “VHF” on the Communicator.

## Connecting the Communicator to the PC

To connect the Communicator to the PC:

- 1 Connect the female end of the serial cable to the serial port on your PC.
  - If you prefer to use a USB cable, you can purchase the USB to Serial RS-232 DB-9 Adapter Cable accessory. This cable converts a USB port into a 9-pin male RS-232 port.

## Connecting DC Power

Connect your SkyMate Communicator to the nearest primary source of DC power (12 to 24 volts). A typical source is a circuit breaker on the power panel or a fuse block near the Communicator.

You must consider the following:

- When connecting to either of these sources, make sure the circuit breaker or in-line fuse is rated at 3 amps (fast acting).
- We recommend that you use crimp or lug connectors to connect the power cable to the DC supply.
- Special grounding is not required, but it is good marine practice to properly ground all electronic equipment to the ship's earth ground system.

**CAUTION** Reversing the connections described below can damage the Communicator. Check the polarity with a Voltage Ohm Meter before connecting the wires.

- 1 Connect the red (+) wire to the positive terminal of the power supply.
- 2 Connect the black (-) wire to the negative terminal of the power supply.
- 3 Connect the SkyMate Communicator to ground by running number 20 AWG wire from one of the mounting screws to the nearest ground connection point.

## Applying Power

Apply power to the Communicator.

## Verifying that Communicator is Operating

Verify that the Communicator is working properly by observing the LEDs on the side of the unit. If LED 1 is flashing red or amber, the Communicator is currently searching for a satellite above the horizon. When LED 1 turns green, a satellite is in view. See Figure 1-6 for the location of the LEDs.

**IMPORTANT** The SkyMate Communicator must remain continuously powered and connected to the antenna to comply with VMS requirements, even when the vessel is in port.



**Figure 1-6.** Location of the LEDs

## Installing the Software

- 1 Insert the CD in the CD drive of your computer. See Table 1-1 for the system requirements.

**Table 1-1.** System Requirements

	<b>Recommended</b>	<b>Minimum</b>
Operating System	Windows ME/XP/NT/2000	Windows 98
Browser	Internet Explorer 6.0	Internet Explorer 5.0
Processor	1GHz Pentium III, Celeron, Duron, Athlon or equivalent	400MHz Pentium II, Celeron, K6 or equivalent
Memory	256MB Memory	64MB Memory
Screen Resolution	1024X768	1024X768
Disk Space	250MB	50MB

- 2 If the Setup.exe file does not begin automatically, navigate to the CD drive location and open the software folder on the CD. Double-click the setup.exe file. The setup.exe automatically begins to run.
- 3 Follow the on-screen prompts.
- 4 When the software is installed, a SkyMate icon appears on your desktop. You can start the SkyMate program by double-clicking the icon, or by going to Start>Programs>SkyMate.
- 5 When you start the SkyMate program, you will see a Welcome screen, as shown in Figure 1-7.



**Figure 1-7.** SkyMate Welcome Screen

## Activating Your SkyMate Communicator Account

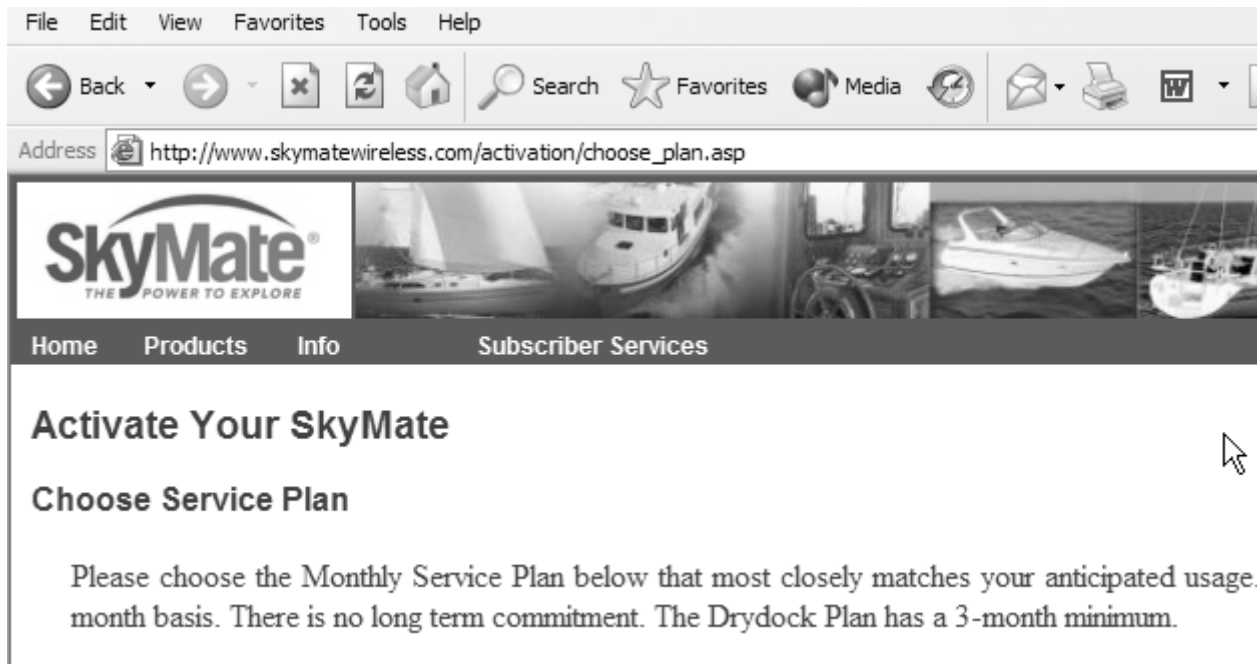
You must activate your SkyMate Communicator account to use your Communicator's data services.

- 1 From a computer that is connected to the internet, open Internet Explorer.

**NOTE** At this time, you cannot activate your account over the Satellite network.

- 2 Enter the following URL in Internet Explorer's Address field:  
[www.skymatewireless.com/activation](http://www.skymatewireless.com/activation)

The Activate Your SkyMate screen opens as shown in Figure 1-8 on page 13.



**Figure 1-8.** Activate Your SkyMate Screen

- 3 Enter the dealer code. The dealer code is a seven character alphanumeric code that uniquely identifies your Communicator. You will find the Dealer code in your Quick Start guide.
- 4 Enter the SCID code. The SCID code is a Satellite Communicator identification code that uniquely identifies your Communicator.  
An SCID code typically begins with ST25 followed by eight digits. For example:  
SCID2500000000
- 5 Click the Submit button.
- 6 Choose your service plan using the radio button in the next screen.
- 7 Follow the on-screen prompts to accept the terms of the Service Agreement.
- 8 Choose a username.  
The username can be any combination of letters, numbers and the dot, dash, and underscore characters ('.', '-', and '\_').  
**NOTE** It is not necessary to enter *@skymate.com* when entering your username.  
The username will be your email address (for example, *username@skymate.com*) and will gain you access to the SkyMate web site to view usage, billing and configuration information.
- 9 Click the submit button after choosing your user name.
- 10 Follow the on-screen prompts to enter a password. Make a note of the username.  
The password can be any combination of letters, numbers and the dot, dash, and underscore characters ('.', '-', and '\_').

- 11 Click the submit button after choosing your password.  
**NOTE** Make note of your username and password and keep it in a safe location.
- 12 Follow the on-screen prompts to enter information about your vessel and to enter your credit card information.
- 13 Click the continue button after entering this information.
- 14 Verify that the information you entered is correct. Choose the Complete order radio button to finish activating your Communicator.
- 15 The Activation complete screen provides a summary of your order information. You can print a copy for your records from this screen.

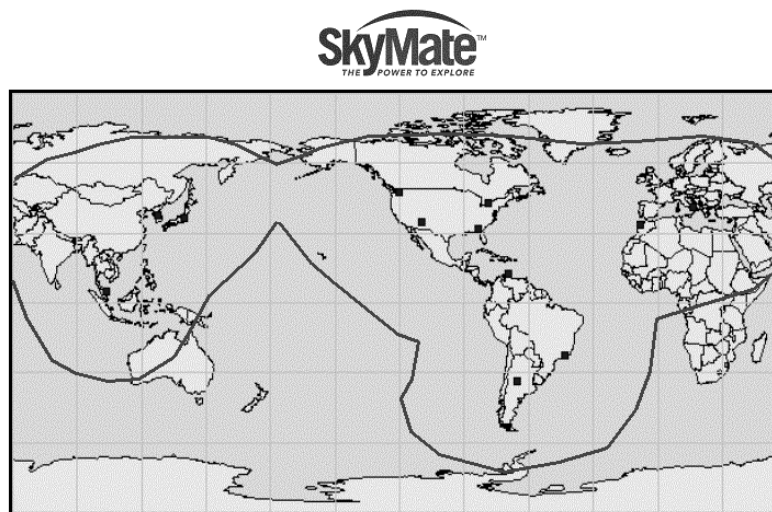
## Checking Satellite Availability

To check Satellite availability:

- 1 Go to System>Statistics.
  - The parameter “Satellite Availability” is the average amount of time a satellite has been in view since the communicator has been powered on or rebooted.
  - For a reliable measurement, leave the unit powered on for at least 3 hours. Satellite availability should be greater than 50 percent for reliable service. If satellite availability is less than 50 percent, check the VHF antenna location and all coax cable connections.

## Coverage

The coverage map in Figure 1-9 identifies where SkyMate services are available. Please contact [support@skymatewireless.com](mailto:support@skymatewireless.com) if you plan to leave the area surrounding the United States, as you must have authorization to receive service in other locations.



Global Satellite Service Area

**Figure 1-9.** Global Satellite Service Area

# Service and Maintenance

# 2

## Adjustments or Repair

Adjustments require specialized service procedures and tools only available to qualified service technicians – there are no user serviceable parts or adjustments. The operator should never remove the cover or attempt to service the equipment. SkyMate products are supported by the manufacturer. For product information contact:

SkyMate, Inc.

14000 Willard Road

Chantilly, VA 20151, USA

Telephone: 703-636.4220, Toll free: 866-646-4932

Fax: 703-814-8585

Email: support@ skymate.com.

## Maintenance

Your SkyMate Communicator is designed to be virtually maintenance free. Your attention to a few basic points should assure many years of service.

1. Keep the Communicator as dry as possible.
2. Clean the exterior of the Communicator with a tissue or soft non-abrasive cloth.

**NOTE** Do not use solvents or other chemicals for cleaning the equipment.

3. Inspect the case and antenna periodically for any damage.

## Requirements and Notices

This section describes the FCC compliance, the safety notice, and maintenance information.

**NOTE** System requirements are listed in the Installation chapter. You can also find system requirements on the CD that is shipped with the SkyMate system, and on the SkyMate Web site at this URL:

[http://www.skymate.com/products/system\\_req.asp](http://www.skymate.com/products/system_req.asp)

**FCC Compliance Statement**

This device complies with Parts 15 and 80 of the FCC Rules. Operation is subject to the conditions that this device does not cause harmful interference. Changes or modifications to this equipment not expressly approved in writing by SkyMate, Inc., could violate compliance with FCC rules and void the operator's authority to operate the equipment.

**Safety Notice**

This device is only an aid to operation of your boat. Its performance can be affected by many factors including equipment failure or defects, environmental conditions, and improper handling or use. It is the user's responsibility to exercise common prudence and navigational judgment, and this device should not be relied upon as a substitute for such prudence and judgment. Your SkyMate Communicator generates and radiates radio frequency (RF) electromagnetic energy (EME). This equipment must be installed and operated in accordance with the instructions contained in this handbook. Failure to do so can result in personal injury or product malfunction or both.

**Warranty**

Your SkyMate equipment is covered by a one year warranty. If the equipment fails within one year, it will be repaired or replaced. If the equipment requires service, return it to your authorized dealer or to SkyMate's Product Repair Center at the address below:

SkyMate, Inc.

Product Repair Center

14000 Willard Road, #2

Chantilly, VA 20151

**Contacting SkyMate**

You can contact SkyMate in a number of ways if you need assistance with your SkyMate Communicator.

**Technical Support**

Call 1-866-SkyMate or 1-703-636-4220.

Service hours are Monday to Friday from 8am to 6pm Eastern Standard Time. Our technical support specialists are available to answer installation, operation, and troubleshooting questions about your SkyMate Communicator.

### Internet Support

You can reach customer support by sending email to:

support@skymatewireless.com

Login using your SkyMate user name and password and you will have access to the subscriber services area of the web site. There, you can view and change your email options, update your payment information, view your message history, and view your previous service bills. You can also view your vessel's position plotted on a map and have web access to your SkyMate mailbox.

### Accessories and Parts

You can obtain SkyMate accessories and parts through your authorized dealer or from our web site at [www.skymatewireless.com](http://www.skymatewireless.com). In addition, feel free to contact our Customer Service department at 1-866-SkyMate Monday through Friday from 8am to 6pm Eastern Standard Time.

### Specifications

Table 2-1 lists the specifications.

**Table 2-1.** Specifications

Frequency band	VHF
Transmit frequency	148 - 150 Mhz
Receive frequency	137 - 138 Mhz
Antenna impedance	50 Ohms
Input voltage	8-15V DC
Transmit current	2.5 A (1% duty cycle)
Receive current	170 milliamps
Data interface	DB9 female RS232 level
Satellite network	ORBCOMM
Operating conditions	-40 to 185°F
Humidity	95%
Length	7.08 in (180 mm)
Width	4.06 in (104 mm)
Height	1.42 in (30 mm)
Weight	24.9 oz (800 grams)

# 2

## Service and Maintenance Specifications

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# Appendix



By accessing any areas of the SkyMate Internet site, using the SkyMate communication system, loading the SkyMate Software on your computer, user agrees with SkyMate that user is bound by the terms set forth below. The terms of this agreement include terms on use of the SkyMate Internet site (The Internet Site) and communication system, terms on the purchase of products and services, and terms regarding copyright and trademark matters.

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#### 6. Security Policy

SkyMate uses reasonable precautions to protect the privacy of your credit card and other ordering information by utilizing a Secure Socket Layer ("SSL") connection. Accordingly, your credit card and other ordering information, such as your name and address, is encrypted using the SSL connection and is not expected to be read in an intelligible form as it travels to SkyMate's order processing system.

Many web browsers support the use of an SSL connection, but if your browser does not support the use of an SSL connection or if you prefer not to send your credit card number over the Internet, you can place your order by calling SkyMate toll free at 1-866-SKYMATE (U.S. only).

#### 7. Privacy Policy

SkyMate respects the privacy of its customers, and other individuals and businesses using the Web sites owned and operated by us and our affiliates.

SkyMate protects the privacy of its customers consistent with the Federal Telecommunications Act and rules and regulations issued by the Federal Communications Commission.

SkyMate may ask you to provide personally identifiable information such as your name, address, telephone number and e-mail address when you use our site to: purchase a service or product online, ask to receive information, respond to a survey, register for service, access your account, ask for a personalized service, request customer service online, or apply for a job. You always have the alternative of mailing or calling SkyMate with the information requested if you do not wish to provide it online. Personally identifiable information provided at our site to order services will be protected in the same manner as when the information is provided by other means such as over the telephone or by mail. We use personally identifiable information provided at on our site in the following ways unless otherwise specified: 1. For its intended purpose (such as to complete an online order for service), 2. To provide you with information about new SkyMate products and services or products and services offered in conjunction with SkyMate business partners. DISCLOSURE TO THIRD PARTIES SkyMate will not sell or disclose to outside parties any personally identifiable information obtained from a SkyMate online service or the registration at our site without your consent except under the following circumstances: 1. When required by law, 2. When disclosure is necessary to protect the safety of a customer, third party or SkyMate's property, 3. If it is required in connection with any sale or transfer of all or a portion of SkyMate's assets. When SkyMate uses agents, contractors or other companies to perform services on its behalf, we will require that they protect your personally identifiable information consistent with this Privacy Policy. SkyMate may share the anonymous information described in this Privacy Policy with third parties from time-to-time. E-MAIL COMMUNICATIONS E-mail is an increasingly popular communication tool through which you and your business may communicate with SkyMate. Likewise, SkyMate may use e-mail to communicate with you, respond to your e-mail, and to tell you about new products and services. If you do not wish to receive e-mail promotions and new products and service announcements from SkyMate, please contact us to have your name removed from the list.

#### SECURITY

SkyMate utilizes encryption methods to ensure that the data you submit on our site is secure. Through this "secure session," information that you input into a SkyMate online order form will be sent and will arrive privately and unaltered at to our server. This security prohibits access to your information by other companies and Web users.

#### ACCOUNT INFORMATION

You may always contact us at support@skymatewireless.com or by telephone or mail to verify your name, address, e-mail address, telephone number and/or billing information. SkyMate will correct any information that is inaccurate.

#### QUESTIONS

If you have questions or comments regarding this Privacy Policy, you may contact us at support@skymatewireless.com. If you have submitted personally identifiable information, and would like that information deleted from our records, please contact us at our e-mail address, support@skymatewireless.com. We will use reasonable efforts to delete that information from our files.

#### UPDATES

SkyMate may amend this Privacy Policy from time-to- time. These changes will be posted online.

#### 8. Purchases

Limitation of Liability. Neither SkyMate nor any of its affiliates, nor the directors, employees or other representatives of any of them, is liable for damages arising out of or in connection with the use of the products or services obtained through this Internet site and communication system. This is a comprehensive limitation of liability that applies to all damages of any kind, including compensatory, direct, indirect or consequential damages, loss of data, income or profit, loss of or damage to property and claims of third parties.

**Charging Your Credit Card.** SkyMate charges your credit card within one day after it receives your order and performs the credit check. If a product cannot be shipped within 3 business days of your order, SkyMate will notify you of the planned ship date and will undertake all reasonable efforts to ship the product on the planned date. If the product is still not available for shipment five business days after the planned ship date, you may cancel your order and SkyMate will refund your money. If your credit card is rejected when SkyMate charges it, SkyMate is not obligated to ship any products or activate any service for your account. SkyMate will contact you by email or any other reasonable means to advise you of the situation and will request you to call SkyMate at 1-866-SKYMATE. Prices, Taxes and Shipping & Handling. All prices are stated and payable in US dollars. The prices for products and services quoted on this Internet site and communication system do not include taxes. SkyMate charges all applicable taxes on products and Services. A shipping and handling charge of \$15.00 will be applied all orders up to 10 lbs. For larger orders, shipping and handling will be charged at 20% above the actual shipping costs. **Return Policy.** If the user is dissatisfied with a product purchased directly from SkyMate, product may be returned within 30 days of purchase (or 10 days of activation, whichever is earlier) for a refund of the purchase price. Activation fees and service charges are not refundable. Product must be in original condition with all receipts, product packaging, disks, and documentation. Products purchased from SkyMate resellers and authorized dealers must be returned to the dealer. **Warranty.** SkyMate warrants to the original purchaser or, for products purchased from a reseller or authorized dealer, to the original end-user, that SkyMate products will be free from defects in materials and workmanship from the date of shipment for 12 months from the date of shipment or invoice. During the warranty period, SkyMate will, at its option: (1) provide replacement parts necessary to repair the product, (2) repair the product, (3) replace the product with a comparable product, or (4) refund the amount you paid for the product. In order to obtain warranty service for a SkyMate product, you must return the product at your expense in a undamaged condition and complete with all accessories that came with the product in the original box with all materials and package inserts. A copy of your receipt must accompany the return. 9. **SkyMate Terms and Conditions of Service** If you have questions about your SkyMate Service, call SkyMate Customer Service at 1-866- skymate or visit our Web site at [www.sky-mate.com](http://www.sky-mate.com). **Agreement.** Your agreement ("Agreement") with SkyMate and any of its affiliates providing SkyMate Service ("Services") to you is made up of these Terms and Conditions of Service ("Terms") and the Service Plan that we agree to provide you. Your "Service Plan" is described in our marketing materials, and includes the rates and features we set for that Service Plan.

**Provision of Service.** Your purchase of SkyMate Communicator or other equipment does not mean that we must provide Services to you. We may decide not to provide Services to you for any lawful reason. We may request that you provide us with any information we reasonably require to determine whether you qualify for Services. Some Services may not be available or may operate differently in certain international areas.

**Credit Verification.** You must have and keep satisfactory credit to receive and continue to receive Services. We will verify your credit before agreeing to provide Services to you and we may verify your credit at any time while we provide Services to you. Credit verification may include a review of credit reports that we receive from commercially available credit bureaus. We may require a guarantee of payment by an individual or entity approved by us. If at any time we determine, in our sole discretion, that payment for Services may not be made when due, we may suspend Services to your Communicator and require that you provide payment on account or a guarantee of payment before we resume Services.

**Changes to Agreement.** We may change this Agreement at any time (but see Service Plan). Any changes to the Terms are effective when we publish the revised Terms. If you use our Services or make any payment to us on or after the effective date of the changes, you accept the changes. If you do not accept the changes, you may terminate Services (but see Termination and Changing Service Plans). For purposes of the Agreement, "use" includes keeping the right to access SkyMate Services by not terminating Services. You may not modify the Agreement except for your Service Plan (see Termination and Changing Service Plans).

**Service Plan.** We may offer non-identical Service Plans to different individuals or entities. Services and coverage under some Service Plans may be more limited than available under other Service Plans. Your Service Plan sets out the charges for Services and is your Service Plan until that Service Plan is changed, you switch to a different Service Plan, or your Services terminate.

**Changing Service Plans.** You may change to a different Service Plan no later than 15 days before the end of the current billing cycle. Any change is effective at the start of your next full billing cycle. If you change or add a different Service Plan or service feature and the change is effective prior to the start of your next full billing cycle, you will be invoiced a prorated amount. We may require a service charge for implementing any change directed by you as well as the Service Plan or optional service features you select.

**Use of Services and Equipment; Availability.** You must be at least 18 years old to subscribe to our Services. We may require you to provide proof of your age and identity. Services and equipment may not be used for any unlawful, fraudulent or abusive purpose. By requesting Services, you agree that you will not use Services and equipment in any unlawful, fraudulent or abusive manner. You may not resell or lease Services or equipment to anyone. Services are available within the operating range of the ORBCOMM Satellite Network. Coverage and quality of Services may be affected by conditions within or beyond our control, including atmospheric, geographic, or topographic conditions. We do not guarantee that there will be no interruptions or delays in Services.

**Username.** We assign a Username to the Communicator used by you on the SkyMate system. We may change the Username without compensation by giving you prior notice. You do not own the Username. You may not modify the Username we program into any equipment, transfer or duplicate the Username to any equipment other than that authorized by us.

**Activation Fee.** You may be required to pay a non-refundable activation fee when you activate a new account, have us switch a Username to a different Communicator, we activate a different Communicator on your existing account or your Service Plan says so. Details on any applicable activation fee are set out in your Service Plan or can be obtained by calling SkyMate Customer Care.

**Usage accounting.** SkyMate will keep an accounting of the number of email and data characters used by you during the billing cycle. This will be used to determine your billing amount. Monitoring messages that are sent autonomously from a Communicator equipped with a Monitoring Kit are not included in the accounting of usage charges. Position reports are counted as 20 characters each.

**Invoicing.** Invoicing cycles follow the calendar month. Except as otherwise provided in your Service Plan, monthly recurring charges (MRCs) and charges for usage are invoiced at the end of the month.

**Payment.** If you have authorized payment for Services or equipment by credit card or by debiting a bank account, no additional notice or consent is required before we invoice the credit card or debit the bank account for all amounts due to us or billed by us on behalf of a third party. You must promptly notify us of any change in your invoicing address or of the credit card or bank account used for payment. We reserve the right to require payment by money order, cashier's check or other secured form of payment. If we take action to receive payment beyond invoicing you for charges for Services or equipment, you must pay our costs and expenses of collection, including attorneys' fees and expenses, the fees of any collection agency and court costs. If we act as an invoicing agent for a third-party service provider, payments received are first applied to amounts due and owing to us and any remaining amounts are applied to sums due and owing to the third-party service provider. We may charge an additional fee for any check or other negotiable instrument endorsed by you and returned unpaid by a financial institution for any reason. You may be charged fees for certain methods of payment.

**Late Payment Charges.** Payment is past due if we do not receive it by the due date shown on your invoice. Any payment for Services and equipment not made when due accrues late charges until paid at the rate of 5% per month or at the highest rate allowed by law. Acceptance of late or partial payments (even if marked "paid in full") does not waive our right to collect all amounts that you owe us.

**Disputed Charges.** You must raise any dispute that you have about any charges invoiced to you within 15 days of the date of the invoice or you have accepted the invoice. You may notify us of any dispute by notifying SkyMate Customer Care. Calls to our sales or general business offices are not notice of a dispute. If disputed invoice procedures are described on the invoice, you must follow them.

**Termination.** You may terminate Services at any time by giving us notice. Subject to the terms of this Agreement, we may terminate Services at any time, with or without notice. We may deactivate any Username before you receive notice of termination without liability to you.

Termination by either of us may be with or without cause. We may terminate or suspend Services to you without liability (1) if you breach any provision of this Agreement (including if you fail to pay any charges for Services), or (2) if you fail to pay any charges due us for equipment or otherwise. If you promptly cure the breach, we may, but are not obligated to, reactivate Services to you. You must pay all charges for (a) Services provided before termination of a Number, and (b) equipment, regardless of who terminates Services. If Services are terminated before the end of your current invoicing cycle (i) the monthly recurring charge is not prorated to the date of termination, and (ii) you will not receive a credit or refund for any unused usage in your Service Plan.

**Taxes and Other Regulatory-Related Charges.** We invoice you for taxes, fees and other charges levied by federal, state or local authorities, or foreign government on Services. If you claim any tax exemption, you must provide us with a valid tax-exempt document. Any tax exemption applies only from the date we receive a valid tax-exempt document.

**Roaming.** System usage obtained outside of North America is called "roaming" usage. Your SkyMate Communicator is provisioned to operate on the US Gateway of the ORBCOMM satellite system. It works in other ORBCOMM Gateway regions (Europe, South America, Asia) only when it has been specifically provisioned for roaming in the designated Gateway region. Certain features are not available when roaming. Roaming rates may be different from and higher than the rates you pay for usage within the US Gateway region. When roaming, you are subject to the limitation of liability provisions and other applicable rules imposed by the roaming service provider.

**Interruption of Service.** We may give credit for a continuous interruption of Services for more than 24 hours on a case-by-case basis. Interruptions caused by your negligent or willful actions, or by failure of equipment or service not provided by us, or by causes beyond our reasonable control, do not qualify for credit.

**Lost or Stolen Equipment.** If your equipment is lost or stolen, you must notify us by calling SkyMate Customer Service. You are responsible for all charges for Services provided to the Number for the lost or stolen equipment before you notify us of the loss or theft. We will deactivate Services to the Username upon notification to us of any loss or theft. You may be required to provide evidence of the loss or theft (for example, a police report or sworn statement). If the equipment is later found, we may require that you exchange it for other equipment before we reactivate Services (if we do reactivate Services), as well as require you to pay a reactivation fee. We will deactivate Services to any Username without prior notice to you if we suspect any unlawful or fraudulent use of the equipment. You agree to cooperate reasonably with us in investigating suspected unlawful or fraudulent use.

**Limitation of Liability.** Except as otherwise provided in this section, our sole liability to you for any loss or damage arising out of providing or failing to provide Services (including mistakes, omissions, interruptions, delays, errors, or defects) does not exceed (1) in cases related to a specific piece of equipment, the prorated monthly recurring charge for Services to the piece of equipment during the affected period, or (2) in cases not related to a specific piece of equipment, the prorated monthly recurring charges for Services to you during the affected period. Neither we nor our vendors, suppliers or licensors are liable for any damage arising out of or in connection with: \* a) any act or omission of any other service provider other than us; \* b) any directory listing; \* c) any lost messages or inability to send or receive email; \* d) any interruption of Services, including interruptions caused by equipment or facilities failure or shortages, transmission limitations or system capacity limitations; \* e) traffic or other accidents, or any health-related claims allegedly arising from the use of Services, equipment or accessories used in connection with the Services;

- \* f) the use of Data Services, including the accuracy or reliability of any weather or other navigational information obtained from the Internet using SkyMate;
- \* g) any late or failed message delivery;
- \* h) the installation or repair of any products or equipment by parties who are not our authorized employees or agents;
- \* i) events due to factors beyond our control, including acts of God (including, without limitation, weather-related phenomena, fire or earthquake), war, riot, strike, or orders of governmental authority;
- \* k) any act or omission of any third party or independent contractor that offers products or services in conjunction with or through the Services; or
- \* j) your negligent or intentional act or omission.

NO CONSEQUENTIAL OR OTHER DAMAGES. UNDER NO CIRCUMSTANCES ARE WE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES OF ANY NATURE WHATSOEVER ARISING OUT OF OR IN CONNECTION WITH PROVIDING OR FAILING TO PROVIDE SERVICES OR EQUIPMENT USED IN CONNECTION WITH THE SERVICES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS, LOSS OF BUSINESS, OR COST OF REPLACEMENT PRODUCTS AND SERVICES. THIS SECTION SURVIVES TERMINATION OF THIS AGREEMENT.

Indemnification. You indemnify and defend us, our partners, directors, officers, employees and agents from and against any claim, action, damage, liability and expense arising out of or in connection with: (1) your acts or omissions that occur in connection with your use of the Services or equipment used in connection with the Services, and (2) any communications you make or receive using the Services. This indemnification extends to and includes any attorney's fees and costs incurred by us arising from any actions or claims to which this indemnification applies, or from the contesting of the applicability of this provision. This section survives termination of this Agreement.

MANDATORY ARBITRATION OF DISPUTES. ANY CLAIM, CONTROVERSY OR DISPUTE, WHETHER SOUNDING IN CONTRACT, STATUTE, OR TORT, INCLUDING FRAUD, MISREPRESENTATION, OR ANY OTHER LEGAL THEORY, RELATED DIRECTLY OR INDIRECTLY TO THE SERVICES, WHETHER BETWEEN THE COMPANY AND THE CUSTOMER OR BETWEEN THE COMPANY OR THE CUSTOMER, ON THE ONE HAND, AND EMPLOYEES, AGENTS OR AFFILIATED BUSINESSES OF THE OTHER PARTY, ON THE OTHER HAND, SHALL BE RESOLVED BY ARBITRATION AS PRESCRIBED IN THIS SECTION. THE FEDERAL ARBITRATION ACT, NOT STATE LAW, GOVERNS THE QUESTION OF WHETHER A CLAIM IS SUBJECT TO ARBITRATION.

A single arbitrator engaged in the practice of law will conduct the arbitration under the rules of the American Arbitration Association. The arbitrator will be selected in accordance with AAA procedures from a list of qualified people maintained by the AAA. All expedited procedures prescribed by the AAA rules will apply, and each party will bear their own costs and attorney's fees.

The arbitrator will have authority only to award compensatory damages and will not have authority to award punitive damages, lost profits, or other non-compensatory damages. The arbitrator's decision and award will be final and binding, and judgment on the award rendered by the arbitrator may be entered in any court with jurisdiction. The arbitrator's decision must not contain findings of fact or conclusions of law.

If any party files a judicial or administrative action asserting a claim that is subject to arbitration and another party successfully stays such action or compels arbitration, the party filing that action must pay the other party's costs and expenses incurred in seeking such stay or compelling arbitration, including attorney's fees.

Notices. You may get our current address for written notice by calling SkyMate Customer Care. Written notice to you is sent to your last known address in our invoicing records. Written notice is deemed delivered 3 days after deposit in the U.S. mail, postage prepaid, and properly addressed. Unless required by this Agreement or Applicable Laws, (1) you may notify us by calling SkyMate Customer Care, and (2) we may notify you by leaving a message for you on your answering machine or with your answering service. Notice addresses may be changed by giving notice as provided in this section.

Choice of Law; Jurisdiction. This Agreement is governed by and must be construed under federal law and the laws of the State of Virginia, without regard to choice of law principles. You agree to submit yourself to the personal jurisdiction of the courts in the State of Virginia.

### 10 Change in User Agreement

This Internet site is subject to change without prior notice and your use of this site after a change means that you have agreed to that change.

SkyMate may modify this User Agreement at any time by posting the revised agreement on the Internet site. Any revised User Agreement is effective upon the user accessing this Internet.