
SMSFinder™

Turnkey SMS Server

Model SF100-G

Quick Start Guide



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SF100-G
Quick Start Guide
82100360L Rev. A

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A	01/25/08	Initial release.

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Introduction

This guide shows you how to set up your SMSFinder and how to send a short message. For detailed information, product specifications, and more, see the User Guide, available on the SMSFinder CD and the Multi-Tech Web site.

Safety Warnings

Ethernet Port Caution

The Ethernet port is **not** designed to be connected to a Public Telecommunications Network.

Handling Precautions

All devices must be handled with certain precautions to avoid damage due to the accumulation of static charge. Although input protection circuitry has been incorporated into the devices to minimize the effect of this static build up, proper precautions should be taken to avoid exposure to electrostatic discharge during handling and mounting.

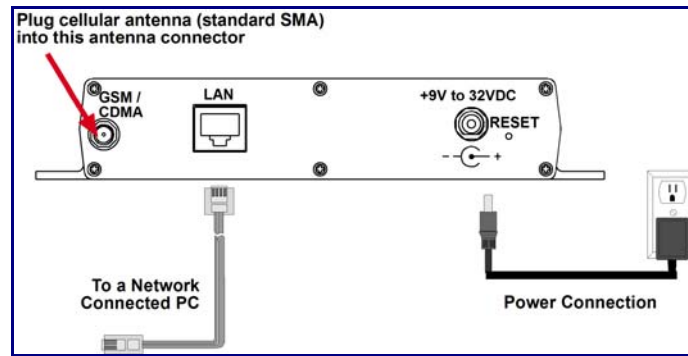
Caution: Maintain a separation distance of at least 20 cm (8 inches) between the transmitter's antenna and the body of the user or nearby persons. The modem is not designed for, nor intended to be, used in applications within 20 cm (8 inches) of the body of the user.

Ship Kit Contents

The SMSFinder ship kit contains the following items:

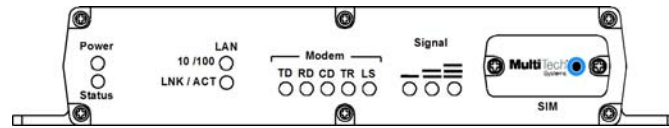
- One SMSFinder
- Power Supply
- RJ-45 Ethernet Cable
- Cellular Antenna (not included with all models)
- A set of four self-adhesive plastic feet
- The Quick Start Guide
- One SMSFinder CD which contains the SMSFinder documentation in Acrobat format and a link to the Adobe Web site from which you can download Acrobat Reader.

Cabling Your SMSFinder



1. Turn the power off on the PCs and the SMSFinder.
2. Plug one end of a RJ-45 cable into the LAN port on the SMSFinder and the other end into the Ethernet port on a network-connected PC.
3. Connect the provided power supply cable to the 9 volt power port on the back of the SMSFinder, and plug the other end into an AC power outlet.
4. Attach the cellular antenna.
 - Be sure to locate this appliance where there is wireless coverage.
 - The antenna must be attached in order for the SMSFinder to be operational.

Front Panel



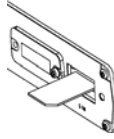
Front Panel LEDs and Other Features

LEDs	Description
Power	Lights when power is being supplied to the SMSFinder.
Status	When functioning normally, the LED blinks. The LED is a solid light when the SMSFinder is booting up, saving the configuration, restarting, or updating the firmware.
LAN 10/100	Lights when a successful connection to the 100BaseT LAN is established. Off when connected at 10BaseT.
LAN LNK/ACT	Lights when the LAN port has a valid Ethernet connection. Blinks when it is receiving or transmitting data.
Modem	TD Transmit Data. This LED blinks when the modem is transmitting data to your wireless carrier. RD Receive Data. This LED blinks when the modem is receiving data from your wireless carrier. CD Carrier Detect. This LED lights when the modem detects a valid carrier signal from a wireless carrier. TR (Data) Terminal Ready. This LED lights when the modem is trying to establish a wireless connection. LS Link Status. This LED flashes when the network registration is OK. If the network registration is invalid, the LED will be On/Off.
Signal	Indicates the wireless signal strength. See the Signal Strength Chart on the next page.
SIM	Location of the SIM card.

Install the SIM Card

A SIM (Subscriber Identity Module) card is required in order for the SMSFinder to operate on a GPRS network. To install the SIM card:

1. Use a small screwdriver to remove the screw closest to the outside edge of the SMSFinder. Then swing the SIM slot cover up and over to the left.
2. Insert the SIM card into the SIM card slot. The following graphic illustrates the correct SIM card orientation.

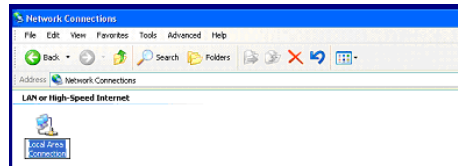


Establish a TCP/IP Connection

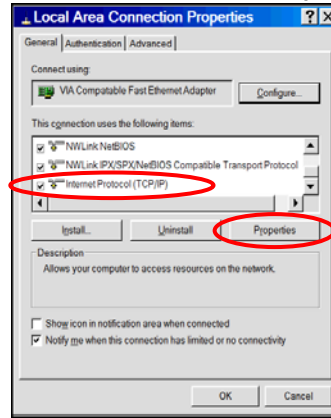
The following directions establish a TCP/IP connection at the workstation so the PC can communicate with the SMSFinder. The following directions were written using a Windows 2000+ / XP operating system.

Setting a Fixed IP Address

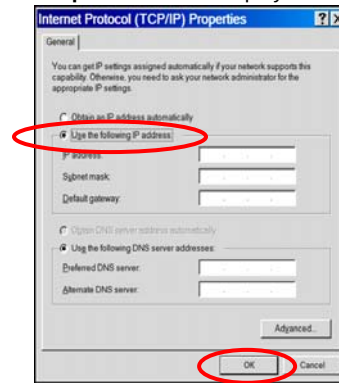
1. Make the SMSFinder connections as described on the previous two pages.
2. Click **Start | Settings | Control Panel**. Double-click the **Network Connections** icon.
3. The **Network Connections** screen displays. Right-click **Local Area Connection** and choose **Properties** from the drop down list.



4. The **Local Area Connection Properties** dialog box displays.



- Select **Internet Protocol (TCP/IP)**.
- Click the **Properties** button. The **Internet Protocol (TCP/IP) Properties** screen displays.



5. On the **Internet Protocol (TCP/IP) Properties** screen complete the following:

Important: If this screen opens and displays your current IP configuration, we suggest you record this information for future reference (i.e., after the SMSFinder is configured, you may wish to return this PC to its original settings).

- To set a Fixed IP Address for the workstation, select **Use the following IP address**.
 - * Enter the workstation **IP Address**. Example: 192.168.2.x.
 - * **Note:** The **x** in the address stands for numbers 101 and up.
 - * Enter the workstation **Subnet Mask**. Example: 255.255.255.0
 - * Enter the workstation **Default Gateway**. Ex: 192.168.2.2

Note: The workstation settings must be in the same subnet range as the SMSFinder.

The default factory settings for the SMSFinder are:

IP Address: 192.168.2.1; **Subnet Mask:** 255.255.255.0;

Default Gateway: 192.168.2.2

- Select **Use the following DNS server addresses**.
 - * Enter the IP Address of the **Preferred DNS Server**. Ex: 205.171.3.65
 - * Click **OK**.
- Close the Local Area Properties screen by clicking **OK**.
- Close the **Control Panel**.
- Repeat these steps for each PC on your network.

Obtain and Activate a Wireless Account

Before you can use the cellular feature, you must obtain a wireless account through a service provider and then activate the account. Please see the wireless account **Activation Notices** located on the SMSFinder CD. Choose the one for your wireless network provider and follow the directions to activate your account.

Important Note About Service Provider Fees

Your provider will charge you for your data usage. Please check with your provider to make sure you are aware of the charges.

If you plan to use the router for large amounts of data transfers, Multi-Tech recommends an unlimited data plan with your account. Multi-Tech will not be responsible for any charges relating to your cellular bill.

Direct Communication to the Cellular Modem

You may want to communicate directly to the cellular modem to activate the modem, verify network registration, and/or troubleshooting your connection. To do this:

1. Open a PC's command window by clicking the **Start** button and selecting **Run**.
2. Type **CMD** to open the command window. Click **OK**.
3. When the command window opens, type **IPCONFIG**.
4. Type **Telnet 192.168.2.1 5000** (Note: 5000 is the port number).

AT commands can be used to check network registration status. See the User Guide.

See the GPRS AT Commands Reference Guide and the GPRS-F4 Reference Guide for AT commands.

Start the SMSFinder

Open a Web Browser

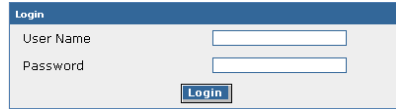
1. Be sure that the SMSFinder is cabled and that the power is connected.
2. Then open a Web browser.
3. Type the default gateway address line: `http://192.168.2.1`



4. Press **Enter**.

Login

The Login screen for the SMSFinder Web Interface displays.

A screenshot of a web-based login form. The form has a blue header bar with the word "Login" in white. Below the header, there are two input fields: "User Name" and "Password". To the right of each label is a text input box. At the bottom of the form is a blue button with the word "Login" in white.

- Type **admin** (*admin* is the default user name) in the user name box.
- Type **admin** in the password box.
- Click **Login**.

Note: The **User name** and **Password** entries are case-sensitive (both must be typed in lower-case). The password can be up to 12 characters. Later, you will want to change the password from the default (**admin**) to something else (see the User Guide). If Windows displays the **AutoComplete** screen, you may want to click **No** to tell Windows OS to **not** remember the password for security reasons.

Web Interface Opens

This is the Home screen from which you can access all setup functions.

Note: Only the top portion of the Home screen is shown here.



See the User Guide for how to use the SMSFinder Web Interface.

Check to See if the SIM Card Is Installed Correctly and Activated

This following procedure will verify that the SIM is installed correctly and that it is activated.

1. Power up the SMSFinder. Wait until the Status LED and the LS LED are blinking before continuing. Make sure all setup procedures and connections have been made. See Chapter 2.
2. Open the Web browser, enter the IP address, and login to the SMSFinder. See Chapter 3.
3. Go to the **Network Setup > Cellular Modem** screen.

- Enter the phone number of your SIM card. Example: 6126361654.

- Click the **Save** button.
- Click **Save & Restart** under the Menu Bar. Select **Save**.

Note: You do not have to restart the SMSFinder.

4. Send a text message to yourself. Do this on the **SMS Services > Send SMS** screen.

SMS Services >> Send SMS

To Enter Phone Numbers: 6126361654 Add Delete

To Select Names from the Address Book: [Address book] Add Delete Select the entire Address Book ☐

To Select Groups: [Groups] Add Delete Select all the Groups ☐

SMS Text: add;SF100 Send (Maximum 160 characters.)

- **To – Enter Phone Numbers** – Enter the SIM phone and click **Add**. The phone number displays in the box to the right.
 - **SMS Text** – Enter an SMS Text message. The format **add;SF100** is a trigger message word that tells the SMSFinder to **add** the phone number and name to the address book. Notice the use of the semicolon in this message.
 - Click **Send**. The following message displays: **Your request is being processed.**
 - Click **OK**.
5. Check the **Outbox** and you will see that the message was sent.

SMS Services >> Outbox

To	SMS	Date&time
6126361654	add;SF100	Tue Jan 1 00:02:14 2008

6. Check the **Inbox** and you will see that the message was received. This verifies that the cellular modem is functioning.

SMS Services >> Inbox			
From	SMS	Date	Time
+16126361654	add/SF100	00/01/21	10:26:45-24

Note: Sometimes you may have to refresh this screen and wait several minutes for the cellular provider to deliver the message.

7. Go to the **SMS Services > Address Book**. You will see the trigger SMS text message was processed and the name and phone number were added to the address book.

SMS Services >> Address Book				
Name	Phone Number	Description	Edit	Delete
SF100	+16126361654	View	☐	☐
Add			Delete	
Starting with: Search				

Note: The phone number is entered with a "+1" in front of it. This indicates the phone number was entered into the address book using a trigger message.

Create a Broadcast Message for Future Use

In this example a school wants to be prepared to send a message that school is closed for the day. The Administrator creates a **Trigger Message** word *Snow* and the following **Broadcast Message**:

School is closed today.

This example assumes that a **Group** called *Parents* has been created and that **SF100** stands for the Administrator's cell phone number.

1. Go to the **Triggers > Add a Broadcast Trigger** screen.

Triggers >> Add a Broadcast Trigger

Fields marked with * are mandatory fields.

Trigger Message	Snow *
(Maximum 160 characters.)	
Broadcast Message	School is closed today. *
(Maximum 160 characters.) * [Pre-Configured Message]	
To	Parents [Group] [Delete]
Authenticate	☒
Authentic Users	SF100 [Address book] [Delete]

Save Cancel

- Enter **Snow** in the Trigger Message word box. Trigger message words or codes are not case-sensitive.
- Enter the Broadcast Message. In this case the message is **School is closed today.**
- Select the **Group** that will receive this message. In this case the group is **Parents**.
- Check the **Authenticate** box to indicate that this message can be sent by an authenticated user only.
- The **Authentic User** selected to trigger this message is **SF100**, the Administrator's cell phone.

Note: All phone numbers for Authenticated Users must be preceded by a "1" in the address book so the SMSFinder can match the phone number of the received SMS trigger message with the phone number in the Authenticated User list.

- Click **Save**. The following screen displays the Broadcast Message saved for future use.

Triggers >> Broadcast Triggers

Trigger Message	Broadcast Message	Authenticate	View/Edit	Delete
Snow	School is closed today.	Enabled		

Add

2. To trigger the broadcasting of this message to the **Parent** group, the administrator sends the SMS text message word ***Snow*** from his cell phone to the SMSFinder. When the SMSFinder receives this message, it compares the Administrator's cell phone number with the Authentication List and if they match, it broadcasts the message to everyone in the **Parent** group.



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