

wideyeTM

liberating communications

Installation Guide

for SABRETM RANGER

Rev 1.0



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SABRE™ Ranger Installation Guide [May 2009]

1 Getting Started

Congratulations on the purchase of your SABRE™ Ranger terminal.

When you unpack the package, please check that the following items are present:

- SABRE™ Ranger terminal
- AC/DC power adapter with power cable
- Mounting Frame (including four allen screws with washers, four bolts with nuts and washers)
- Two U-bolts with four washers and nuts
- Ethernet cable (RJ45, Cat 5 Straight, 1.5m)
- Phone cable (RJ11, 1.8m)
- Multi-function cable (10 metres, packed separately)
- Heater power cable (only for SABRE™ Ranger-V2)*
- AC/DC power adapter with power cable (additional unit only for SABRE™ Ranger-V2)*
- Installation guide
- Product CD (software utilities and documentations)

If any of the items are missing from the package, please contact your reseller where you have purchased the SABRE™ Ranger terminal package.

Note:

There are two variants of the SABRE™ Ranger terminal:



SABRE™ Ranger-V1:
Terminal without the heater option has only one cable gland hole on the connector cover to connect the Multi-function cable.



SABRE™ Ranger-V2*:
Terminal with the heater option has two cable glands holes on the connector cover to connect the Multi-function and Heater power cables.

Note*:

The pictures used in this guide shows the SABRE™ Ranger-V2 terminal with the heater option.

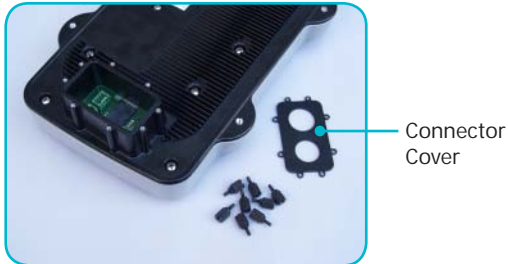
2 Installing SIM Card

Follow these steps to install the SIM card:

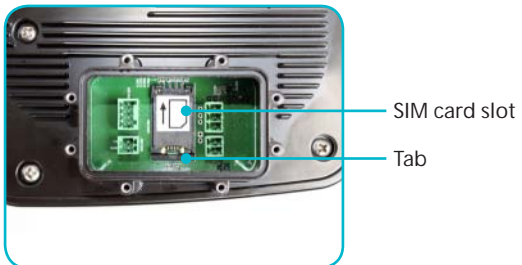
1. Remove the eight thumb-head screws securing the connector cover.



2. Remove and keep the connector cover and the eight thumb-head screws in a safe location.



3. Push tab and lift up the SIM card slot.



4. With the gold-contacts facing down, position the SIM card as indicated and slide the SIM card into the slot.



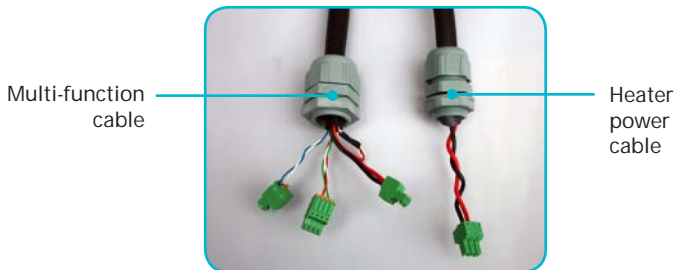
5. Push the SIM card slot down until it clicks and lock in place.



3 Connecting the Multi-function and Heater Power Cables

Follow these steps to connect the Multi-function and Heater power cables:

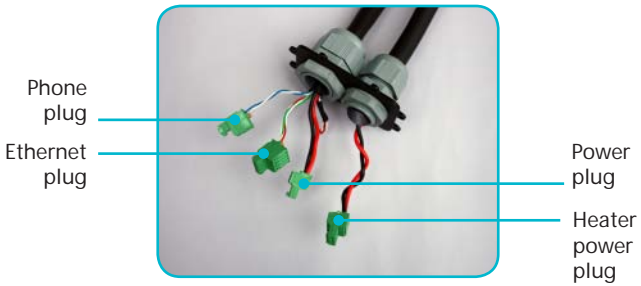
1. Remove the running couplers from the cable glands attached to the Multi-function and Heater power cables.



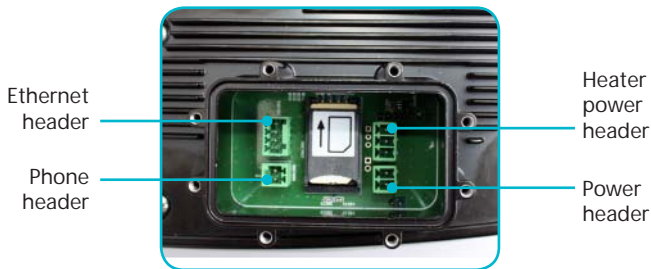
2. Thread the three connectors of the Multi-function cable and the connector of the Heater power cable through the connector cover.



3. Install running couplers to secure the Multi-function and Heater power cables to the connector cover.



4. Install the Multi-function and Heater power cable plugs to the respective headers on the SABRE™ Ranger terminal.



5. Install and secure the connector cover with the eight thumb-head screws.



4 Setting Up the Mounting Frame

Follow these steps to setup the mounting frame:

1. Align the mounting frame.
2. Install four bolts with washers to secure the mounting frame together.



5 Installing the Mounting Frame

Follow these steps to install the mounting frame:

1. Place mounting frame on the back end of the SABRE™ Ranger terminal.

Note:

The mounting frame can be installed in the vertical or horizontal position as shown below.

2. Orientate the mounting frame to desired position.
3. Install four allen-screws with washers to secure mounting frame to the SABRE™ Ranger terminal.



Vertical position

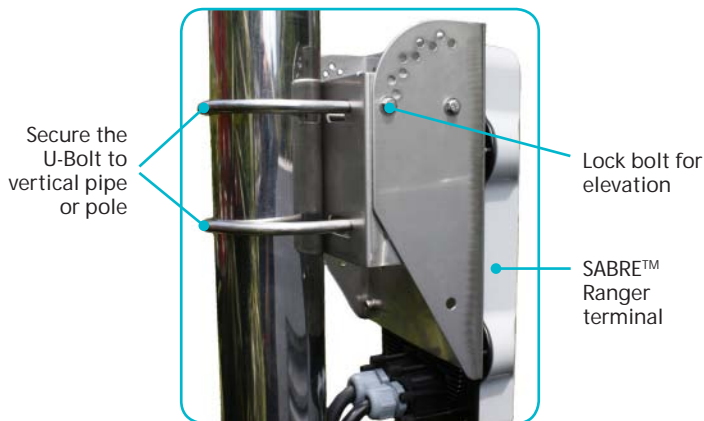


Horizontal position

6 Mounting the SABRE™ Ranger

Follow these steps to mount the SABRE™ Ranger terminal:

1. Locate a vertical pole or column to mount the SABRE™ Ranger terminal.
2. Mount the SABRE™ Ranger terminal to the vertical pole or column using two U-bolts, four nuts and washers.
3. Tighten the four nuts evenly to secure the SABRE™ Ranger terminal to the vertical pole or column.



7 Positioning the SABRE™ Ranger

Follow these steps to position the SABRE™ Ranger terminal:

1. Remove two lock bolts and nuts on either side of the mounting frame.
2. Adjust the elevation of the SABRE™ Ranger terminal and secure its position using the two lock bolts and nuts on either side of the mounting frame.



3. Secure the length of the Multi-function and Heater power cables to the pole or column using cable ties.



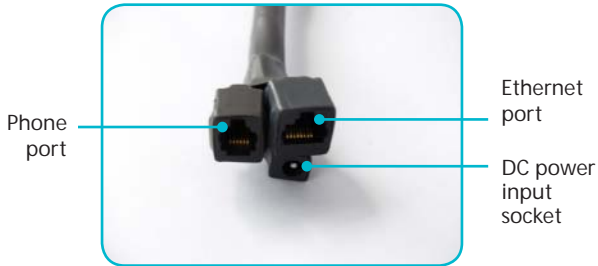
Note:

Ensure there is some slack at both ends of the Multi-function and Heater power cables to avoid any stress build-up, which may damage the cable glands.

8 Powering Up the SABRE™ Ranger (V1 Variant)

Follow these steps to power up the SABRE™ Ranger (V1 variant) terminal:

1. Insert the power adapter output plug into the DC power input socket on the Multi-function cable.



2. Insert the plug end of the power adapter into an AC outlet.
3. Turn on the power to power up the SABRE™ Ranger terminal.

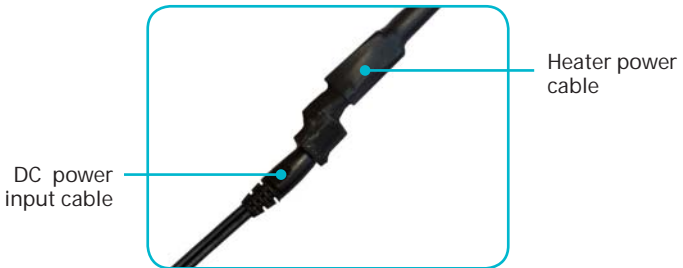
9 Powering Up the SABRE™ Ranger (V2 Variant)

Note:

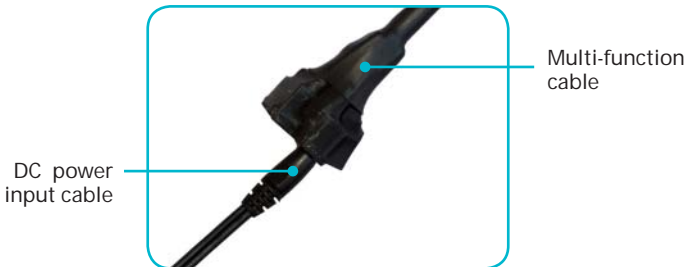
The following steps are applicable only if you are using the SABRE™ Ranger (V2 variant) terminal:

Follow these steps to power up the SABRE™ Ranger (V2 variant):

1. Insert the power adapter output connector into the DC power input socket on the Heater power cable.



2. Insert the plug end of the power adapter into an AC outlet.
3. Insert the power adapter output connector into the DC power input socket on the Multi-function cable.

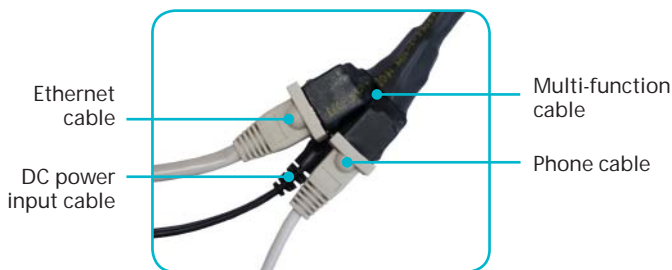


4. Insert the plug end of the power adapter into an AC outlet.
5. Turn on the power to power up the heater and SABRE™ Ranger terminal.
6. Allow 30 minutes for the heater to warm up the SABRE™ Ranger terminal.
7. Check to see if the SABRE™ Ranger terminal is working normally.
8. If the SABRE™ Ranger terminal is not working properly, proceed to power cycle the terminal. After this process, the SABRE™ Ranger terminal should be working normally.

10 Connecting to your Computer via Ethernet

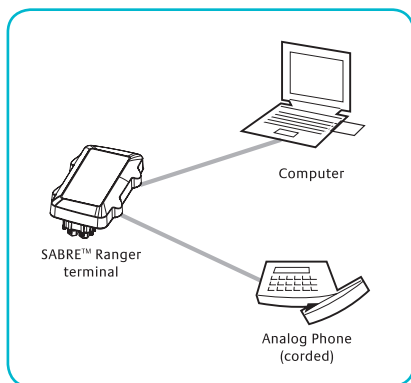
Follow these steps to connect the SABRE™ Ranger terminal to your computer using Ethernet:

1. Insert one connector end of the Ethernet cable to the Multi-function cable's Ethernet port.



2. Insert the other connector end of the Ethernet cable to your computer's Ethernet port.

A message confirming connection is displayed on your computer.

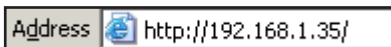


11 Obtaining GPS Co-ordinates

The BGAN network requires valid GPS co-ordinates to successfully register your SABRE™ Ranger terminal for the first time or after you have performed a Factory Reset. The terminal will perform the GPS acquisition automatically.

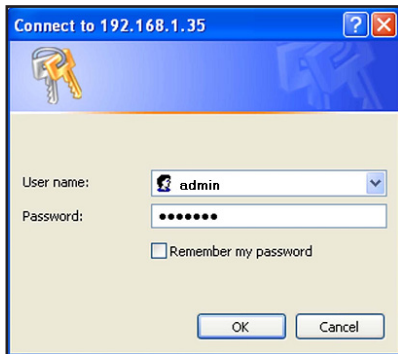
Follow these steps to obtain GPS co-ordinates:

1. Ensure that the SABRE™ Ranger terminal is facing upwards and with an open view of the sky.
2. Start your Internet browser.
3. Type `http://192.168.1.35` in the Address field and press Enter.



The Connect to 192.168.1.35 login screen appears.

4. Type in `admin` in the Username field and `wideye` in the Password field. Click OK.



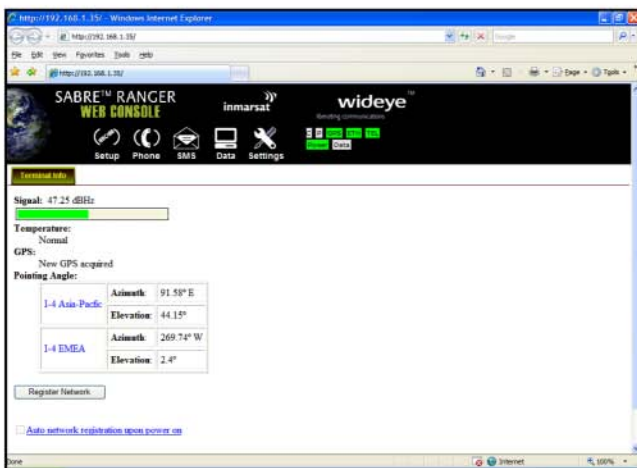
5. The SABRE™ Ranger Web Console will appear on your screen.



6. Allow the terminal a few minutes to acquire the GPS co-ordinates. Once the GPS co-ordinates is acquired, the **New GPS acquired** message is displayed.

Note:

The GPS co-ordinates will not be displayed until you click **Register Network** to register to Inmarsat's BGAN network. The **GPS display prohibited** message will be displayed if the GPS coordinates are prohibited by the BGAN network. It is recommended to register to the BGAN network after acquiring new GPS co-ordinates before powering down the terminal. This will ensure the GPS co-ordinates are stored in the terminal's memory.



12 Registering with the BGAN Network

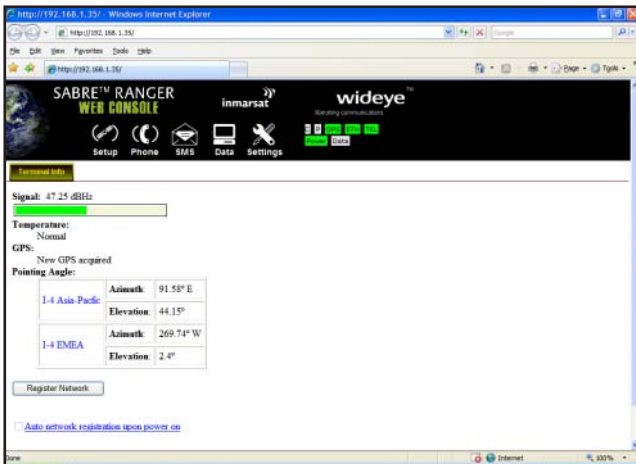
Establishing a connection with the BGAN network requires the careful orientation of the SABRE™ Ranger terminal towards the satellite, a process called antenna pointing.

To perform antenna pointing, you will need a compass and the following information from the Web Console:

- Pointing Angle (Azimuth and Elevation)
- Signal strength indicator bar

With the SABRE™ Ranger Web Console launched, follow these steps to register with the network:

1. Select the satellite that you want the SABRE™ Ranger terminal to point to.
2. Rotate the terminal left or right until it points in the correct horizontal direction as indicated in the **Azimuth** reading with the aid of a compass.
3. Tilt the terminal slowly up or down until it points in the correct vertical direction as indicated in the **Elevation** reading.
4. With the aid of the **Signal** indicator bar on the Web Console, fine tune the pointing direction to obtain the maximum signal strength.



- Secure the mounting after obtaining maximum signal strength.

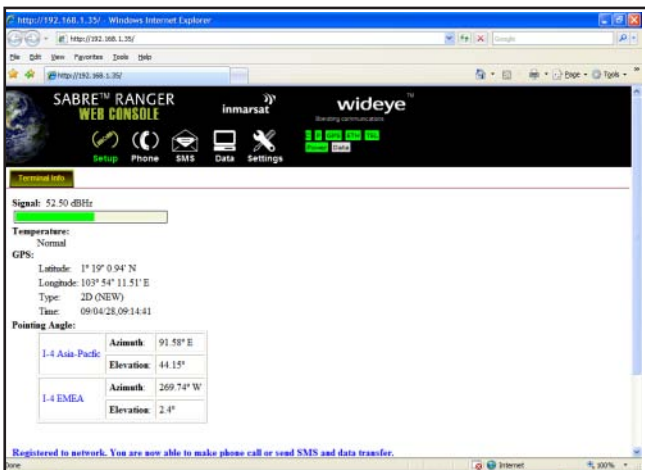
Note:

For any service to commence, minimum 45dBHz signal strength is required.

- Click **Register Network** to register to the BGAN network. Once network registration is completed, the **Registered to network**. You are now able to make phone call or send SMS and data transfer message is displayed.

Note:

The GPS co-ordinates will not be displayed until you click **Register Network** to register to Inmarsat's BGAN network. The **GPS display prohibited** message will be displayed if the GPS coordinates are prohibited by the BGAN network.



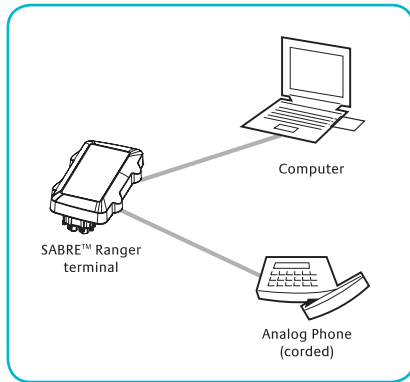
13 Making a Phone Call

Note:

This SABRE™ Ranger terminal is not intended to be connected to any North American (U.S., Canada) TNY circuit or PSTN (Public Switch Telephone Network).

Follow these steps to make phone calls:

1. Connect a corded analog phone to the Multi-function cable's Phone port.



2. Dial the other party's number using the following format:

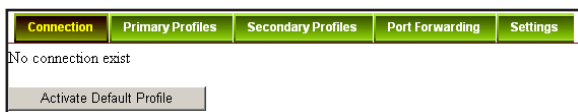
00 <country code> <phone number> followed by # key.

14 Activate PDP Connection

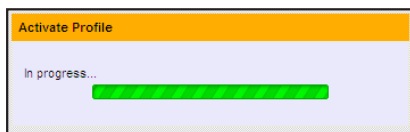
Follow these steps to activate the default profile:

1. Click **Activate Default Profile**.

The PDP context will be activated.



When connected, **APN** and **IP Address** details will be displayed. You can proceed to use the Internet features.



Follow these steps to disconnect the data connection:

1. Click **Disconnect**.

The PDP context will be deactivated.

