

wideyeTM

liberating communications

Installation Guide

for SABRETM RANGER

Rev 5.0



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SABRE™ Ranger Installation Guide [January 2012]

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)
- AC/DC power adapter with power cable
- 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.



SABRE™ Ranger-V1:

This terminal has only one cable gland hole on the connector cover to connect the Multi-function cable.

SABRE™ Ranger-IS:

This terminal with IECEx Zone 2 certified has only one cable gland hole on the connector cover to connect the Multi-function cable.

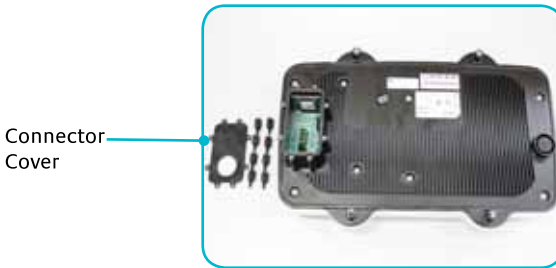
2 Installing SIM Card

Follow these steps to install the SIM card:

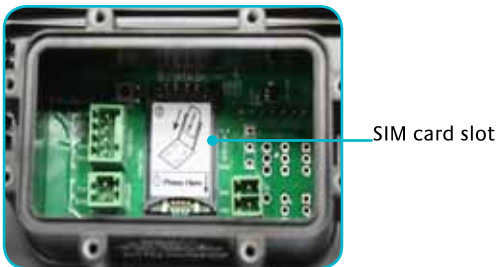
1. Remove the eight thumb-head screws securing the connector cover.



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



3. Slot the SIM card into the SIM card holder.



3 Connecting the Multi-function Cables

Follow these steps to connect the Multi-function cables:

1. Remove the running couplers and rubber gaskets from the cable gland attached to the Multi-function cables.



SABRE™ Ranger-V1
Multi function cable



SABRE™ Ranger-IS
Multi function cable

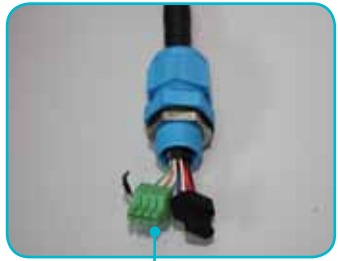
2. Thread the connectors of the Multi-function cable through the connector cover.
3. Install running couplers and the rubber gaskets to secure the Multi-function cable to the connector cover.



4. Install running couplers and the rubber gaskets to secure the Multi-function cable to the connector cover.

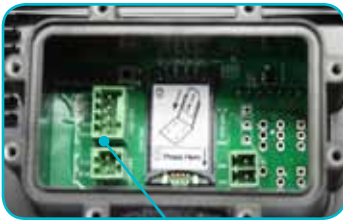


SABRE™ Ranger-V1
Multi function cable plug



SABRE™ Ranger-IS
Multi function cable plug

5. Install the Multi-function cable plugs to the respective headers on the SABRE™ Ranger terminal.



SABRE™ Ranger-V1
Multi function cable header



SABRE™ Ranger-IS
Multi function cable header

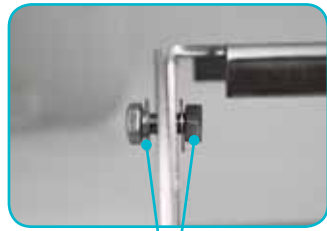
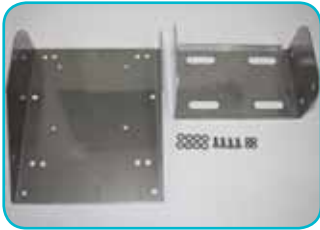
6. Install and secure the connector cover with the eight thumb-head screws.



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.



Bolts and washers

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.

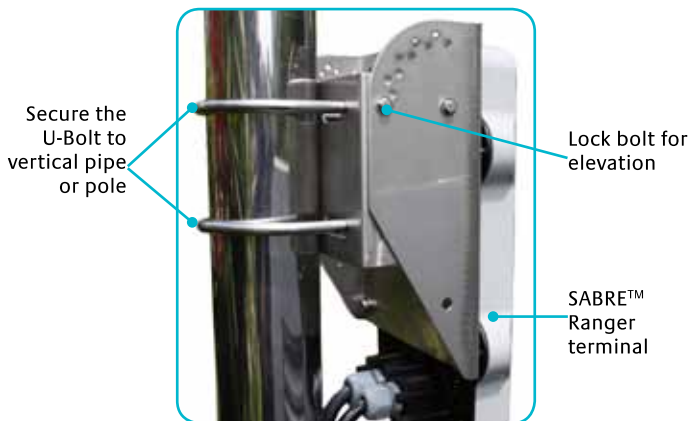


Position of the screw,
nut and washers

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 cable to the pole or column using cable ties.

Note:

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

8 Powering Up the SABRE™ Ranger

Follow these steps to power up the SABRE™ Ranger 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.

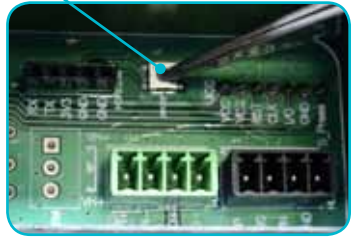
9 Powering Up the SABRE™ Ranger in Safe Mode

Tact switch will be used only if firmware recovery under Safe Mode is required, after an unexpected firmware corruption during firmware upgrade.

Tact Switch



SABRE™ Ranger-V1
Tact Switch

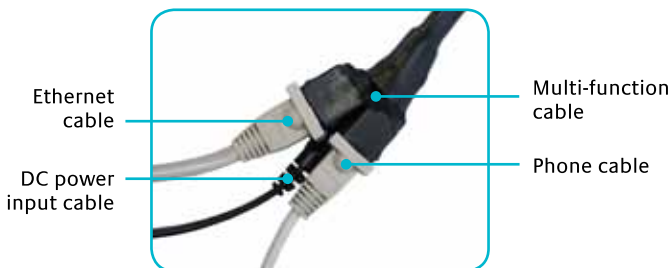


SABRE™ Ranger-IS
Tact Switch

10 Connecting to your Computer via Ethernet

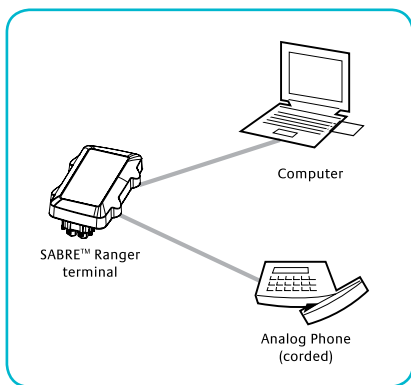
Follow these steps to connect the SABRE™ Ranger terminal to your computer using Ethernet:

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.

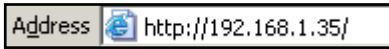


11 Obtaining GPS Co-ordinates

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**.



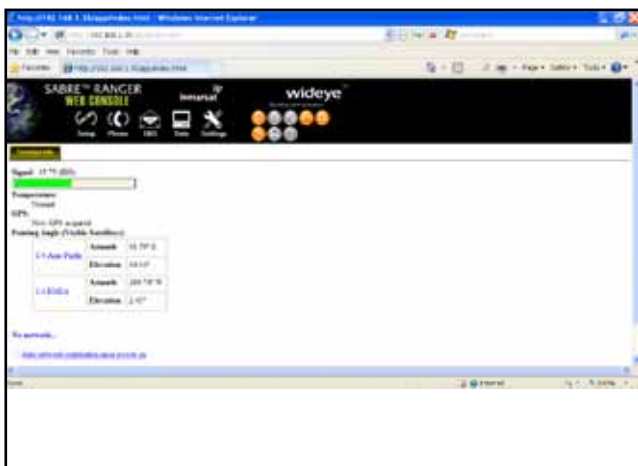
5. The SABRE™ Ranger Web Console will appear on your screen.



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.

Note:

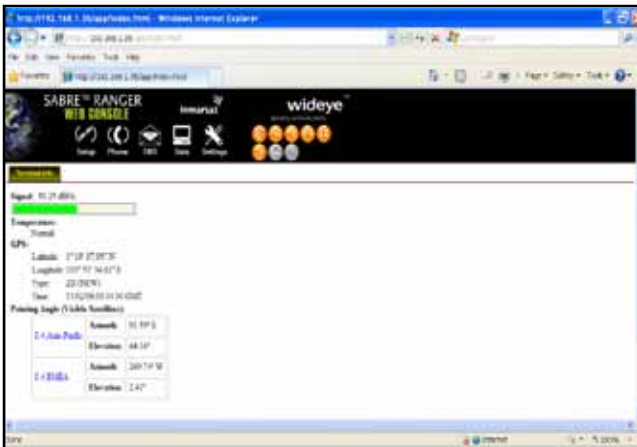
SABRE™ Ranger is set to auto network registration by default. For the first antenna pointing, we suggest that user should turn off the auto network registration and follow the instruction below to obtain the maximum signal strength. To turn off the auto network registration, simply click on the Settings icon and select Network.

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.



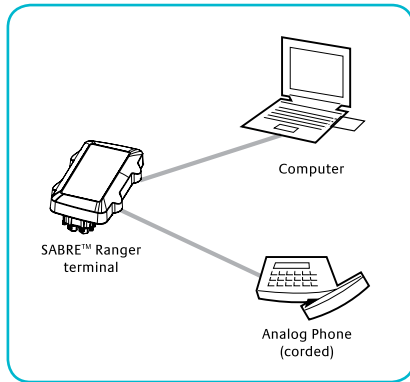
13 Making a Phone Call

Note:

This SABRE™ Ranger terminal is not intended to be connected to any North American (U.S., Canada) T1V 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

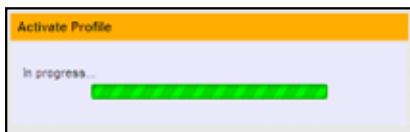
Follow these steps to activate the default profile:

1. Click **Activate Default Profile**.

The PDP context will be activated.



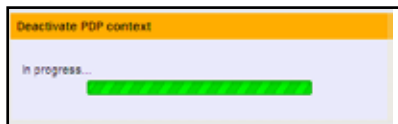
When connected, **APN** and **IP Address** details will be displayed. You can proceed to use the Internet features.



Follow these steps to disconnect the data connection:

1. Click **Disconnect**.

The PDP context will be deactivated.



Note: By default, the Auto PDP context is set to auto activation.

