

Getting started with the **EXPLORER®** 100/110

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1 Introduction

1.1 About this guide

This document introduces the EXPLORER 100/100 terminal, and explains how to set up the terminals for use on the BGAN network, register with the network, and set up data, voice and text connections. It is intended for first time end-users, Distribution Partners, Service Providers and anyone who wants to use a BGAN terminal to connect to the BGAN network and use network services. A previous knowledge of satellite communications is useful, but not essential.

The sections include:

- Introducing the terminal – a brief overview of the physical features and interfaces of the terminal, and of the available services.
- Setting up the terminal – includes installing the battery and SIM card, connecting to a computer and registering with the network
- Making voice, data and text connections – an explanation of how to make a voice call, how to make IP data connections, how to set up and open Bluetooth connections, and how to send and receive a text message.

1.2 Other sources of information

- This is one of a series of PDF documents in the BGAN Solutions Guide. The Solutions Guide is designed to help you make the most of your BGAN terminal. Other documents in the series are available for download from www.inmarsat.com/bgan. Click on BGAN support, then click on How to guides.

This Web site also gives further information on the BGAN service, including Industry solutions.

- For help in using BGAN LaunchPad, refer to “BGAN LaunchPad Help”, available from within BGAN LaunchPad by clicking Help > LaunchPad Help.
- For further information on the EXPLORER 100/110 terminal, refer to the documents available for download from www.thane.com.

1.3 Upgrading software

- To download the latest USB drivers and BGAN LaunchPad software, go to www.inmarsat.com/bgan-updates.
- To download the latest terminal firmware, use BGAN LaunchPad, or go to the Thrane & Thrane web site at www.thrane.com

2 Introducing the terminal

This section introduces the physical characteristics, interfaces and services available on the Thrane & Thrane EXPLORERTM 100/110 (called the terminal in the rest of this document).

2.1 Physical characteristics

Item	Specification
Manufacturer	Thrane & Thrane
Physical dimensions	200 mm x 144 mm (7.9 in. x 5.7 in.)
Weight (including battery)	<1kg (2.2 lbs)
External power	12 Volts DC, 110-240 Volts AC
Battery life	Transmit time: 5 hours Stand-by time: 36 hours
Ingress protection	IP 44

2.2 Interfaces

Interface	Equipment needed
USB v1.1 (adapter required for EXPLORER 110)	IP data device, USB-enabled
Ethernet RJ45 (EXPLORER 110 only)	IP data device, LAN-enabled
Phone/fax RJ45	RJ45/ISDN handset
Bluetooth v1.2	Bluetooth handset, or Bluetooth data device

2.3 Services

Services	Specification
Standard IP data	Up to 384kbps (receive) and 240kbps (send)
Streaming IP data	32kbps, 64kbps (symmetrical)
Phone/fax	4kbps voice
Text	To other BGAN terminals or cellular mobile phones. From other BGAN terminals, and some mobile phones, depending on service provider.

3 Setting up the terminal

This section explains how to set up the EXPLORER 100/110 terminal, and connect to the BGAN network. The steps described are:

- a. Installing BGAN LaunchPad on your computer.
- b. Installing the SIM card and battery.
- c. Obtaining power and charge the battery.
- d. Connecting the terminal to your computer, using USB or Ethernet (EXPLORER 110 only). For a USB connection, you must first install the supplied drivers.
- e. Obtaining a GPS fix.
- f. Pointing the terminal and register with the BGAN network.

Pre-requisites

Before you start, make sure that you have:

- The BGAN terminal.
- The AC mains power adapter, supplied with the terminal.
- The rechargeable battery, supplied with the terminal.
- A USIM card, supplied by your Service Provider.
- The BGAN LaunchPad installation CD, supplied with the terminal. Make sure that the PC or Mac has the minimum system requirements for BGAN LaunchPad (refer to page 5 for details).
- The USB cable supplied with the terminal, and the USB drivers supplied on the installation CD.
- The Ethernet cable supplied with the terminal (EXPLORER 110 only).
- A Bluetooth-enabled computer with a supported profile, if you intend to connect using Bluetooth.

3.1 Minimum system requirements for BGAN LaunchPad

The following are the minimum hardware and software requirements for using BGAN LaunchPad to manage the EXPLORER 100/110 on your computer.

Hardware requirements

You must have the following on your computer:

- Support for either USB, Bluetooth or Ethernet (EXPLORER 110 only).
- Intel Pentium III CPU, or equivalent.
- 100Mb of free hard disk space.
- 128Mb of RAM.
- CD-ROM drive.

Operating systems

You must have one of the following operating systems on your computer:

- Microsoft Windows 2000 with SP4.
- Microsoft Windows XP with SP2.
- Linux Red Hat 9 - KDE 3.1.10 (Kernel Version 20.4.20-8).
- Mac 10.x.
- Mac 9.2.

3.2 Installing BGAN LaunchPad

To install BGAN LaunchPad on your computer:

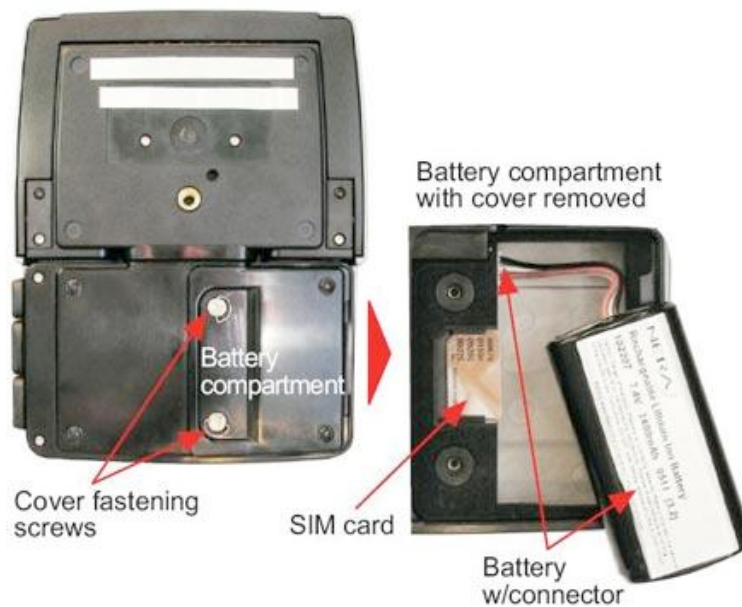
- a. Insert the BGAN LaunchPad Installation CD into your computer's CD-ROM drive.
- b. Follow the on-screen instructions.

3.3 Installing the SIM card and battery

To prepare the terminal for connection:

- a. Remove the battery compartment cover by loosening the two fastening screws.

Tip If you do not have a screwdriver to hand, use a coin to loosen the fastening screws.



- b. If you have already installed the battery, release and then remove it.
- c. Install the SIM card with the gold contacts facing inwards.
- d. Install the battery supplied with the terminal.
- e. Replace the battery cover by tightening the two fastening screws

3.4 Powering on and charging the battery

To power on the terminal:

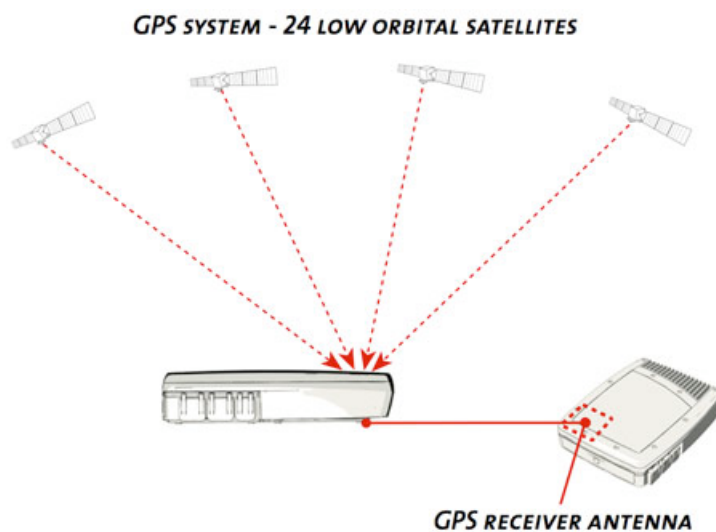
- a. Insert the power adapter output connector to the DC power input jack on the back of the terminal.
- b. Insert the plug end into any AC outlet between 110 and 240 VAC.

Note The battery automatically charges whenever the terminal is connected to a power source. The first time you install the battery, it must be charged for 24 hours before use.

3.5 Obtaining a GPS fix

The BGAN network requires a valid GPS fix to successfully register the BGAN terminal. To obtain a GPS fix:

- Power on the terminal by pressing and holding the Activate button. During start up, all the indicators light green for approximately 15 seconds, and the buzzer in the antenna beeps slowly. When the Signal indicator blinks red (or yellow if it has a stored GPS fix), the terminal is ready to obtain a GPS fix.
- Take the EXPLORER 100/110 outside and open the stand so that the terminal is facing upwards with an open view of the sky. The following diagram shows the location of the GPS antenna in the terminal:



- Check the signal to see if the terminal has a GPS fix. The table below gives possible statuses:

Indicator panel

All indicators light GREEN for approx. 30 secs when powering ON		<div> <div>Activate</div> <div> <div>Battery</div> <div>Signal</div> <div>Bluetooth</div> <div>Message</div> </div> </div>		All indicators light RED for approx. 10 secs when powering OFF
Signal	<div> <div>No satellite signal:</div> <div>no GPS fix</div> <div>stored GPS fix</div> <div>new GPS fix</div> </div>	<div> <div>Antenna pointing</div> <div>No satellite signal: no GPS fix</div> <div>" stored GPS fix</div> <div>" new GPS fix</div> <div>Satellite signal OK: no GPS fix</div> <div>" stored GPS</div> <div>" new GPS</div> </div>		<div> <div>Blink rate 2 secs</div> <div>Beep rate 2 secs</div> <div>Blink rate 0.3 sec</div> <div>Continuous sound varying with received signal strength.</div> </div>
	<div> <div>Registration in progress or lost satellite sync</div> <div>Attached to BGAN</div> <div>Network rejection</div> </div>	<div> <div>Operational mode</div> <div>Registration in progress or lost satellite sync</div> <div>Attached to BGAN</div> <div>Network rejection</div> </div>		<div> <div>Beep every 1 sec during registration</div> </div>

- If the terminal does not have a GPS fix, leave the terminal to acquire a GPS fix. This may take a few minutes. While the interface unit is searching for a GPS fix, the Signal indicator flashes green and red alternately and the audio buzzer emits a high pitched tone.

Note If the Signal indicator lights yellow, the terminal has a stored GPS fix. You may be able to use this GPS fix if you have not changed location since you last registered with the network. However, Thrane & Thrane recommends that you wait for a new GPS fix.

About GPS

The Global Positioning System (GPS) uses 24 orbital satellites to fix the position of the terminal anywhere on the globe.

- In normal operation, a GPS receiver, such as that built in to the Terminal, needs to be able to receive signals from at least three satellites so that it can then calculate latitude, a longitude and an altitude – this position fix is referred to as a 3-dimensional or 3-D fix. If only two GPS satellites can be seen by the GPS receiver, then the last available altitude measurement is assumed and the GPS receiver calculates a position fix based on latitude and longitude only. This simpler position fix is referred to as a 2-dimensional or 2-D fix and is quicker and easier to obtain than a 3-D fix, but may be less accurate.

Note You can register with the BGAN network with a 2-D or a 3-D fix.

- The GPS receiver may take between a few seconds and 20 minutes to obtain a GPS fix, depending on how frequently the GPS receiver is being used. The frequency of use determines the how quickly the GPS Terminal is able to start.
 - Hot start - if the GPS receiver is being used frequently, (that is, at least every two to six hours), it is regularly updated with data from the GPS satellites, and so only takes a short time to obtain a GPS fix after being switched on.
 - Warm start - if a GPS receiver has not been used for more than six hours, then it will take longer to obtain a GPS fix, perhaps up to 45 seconds.
 - Cold start - if the GPS receiver has not been used for some time or is 300 km or more from where it was last used, it can take between 10 and 20 minutes to obtain a valid position fix.
 - Following successful registration and providing the Terminal is left switched on and remains stationary, the GPS is no longer needed. Periodically, the BGAN terminal contacts the BGAN network to inform the network that it is still switched on. In addition, the BGAN network periodically checks each terminal for activity, and if there has been no traffic through the terminal, and the terminal has not automatically contacted the BGAN network as described above, then the terminal will be de-registered from the network.
- e. When the Signal indicator lights yellow, the terminal has obtained a GPS fix.

3.6 Connecting the terminal to your computer

When you first connect the terminal to your computer, Inmarsat recommends that you use either the USB interface (EXPLORER 100, or EXPLORER 110 with a USB adapter), or the Ethernet interface (EXPLORER 110 only).

Connecting over USB

To connect your computer to the terminal using the USB port:

- a. Install the USB drivers from the supplied installation CD, following the instructions provided. Two USB drivers are installed, creating two COM ports for the computer.

Tip To check if the installation was successful, display the list of modems on your operating system (refer to the documentation supplied with your operating system for details on how to do this). If the installation was successful, two ports called Thrane dual port 1 and Thrane dual port 2 are displayed.

- b. Connect the supplied USB cable between the USB port on your computer and the USB port on the interface unit (or the USB adapter port on the EXPLORER 110).

The first time an EXPLORER 100/110 is connected to a computer, it is detected as new hardware.

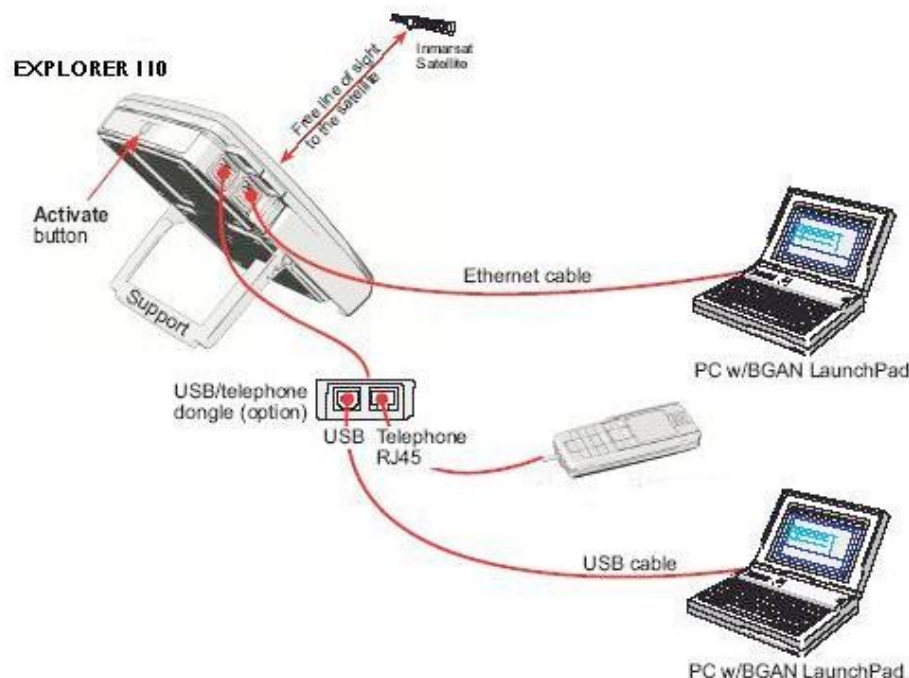
c. Click on the found new hardware message, and follow the on-screen prompts.

Note USB drivers are provided with your BGAN terminal. You can also download the latest USB drivers from the Inmarsat Web site. Go to www.inmarsat.com/bg-an-updates and follow the on-screen instructions.

Connecting over Ethernet

For the Ethernet interface to work without further configuration, you must set up a network connection on your computer using the static IP address information supplied by your Internet Service Provider. To do this, refer to the documentation supplied with your computer's operating system.

To connect your computer to the EXPLORER 110 using the Ethernet port:



- Connect one end of the supplied Ethernet cable to the Ethernet connector on your terminal.
- Connect the other end of the cable to the LAN port on your computer.

The default IP address of the terminal is 192.168.0.1. If you want to test connectivity between your computer and the terminal, ping 192.168.0.1 from your computer. If a reply is received, your computer is connected to the terminal. If a reply is not received, you may need to enable the Ethernet interface. Refer to BGAN LaunchPad Help for details.

Tip Some corporate computers are configured with a static IP address. If your computer has a static IP address, you must go into the IP Properties option, and change your computers settings to obtain an IP address automatically.

This is only necessary the first time you connect. You can then change the IP settings to use a static IP address, if required.

3.7 IP addressing on the Explorer 110

- In normal operation, the terminal uses its built-in DHCP server to allocate IP addresses automatically. If you want to manually set up IP addressing, you can use the terminal's default range of IP addresses, as shown below:

Terminal IP address	192.168.0.1
Default IP address	192.168.0.100
Subnet mask	255.255.255.0
DNS	If you use BGAN.INMARSAT.COM as your APN, the default DNS addresses are 172.30.66.7 and 172.30.34.7 If you use another APN, your Distribution Partner supplies you with a DNS address for your APN.

- To test connectivity between your computer and the terminal, ping 192.168.0.1 from your computer. If a reply is received, your computer is connected to the terminal.

Refer to the Solutions Guide document "BGAN and IP data connections" for further details.

Interfacing with the BGAN terminal

You have two ways of interfacing with the BGAN terminal when using the EXPLORER 100/110.

- BGAN LaunchPad – Inmarsat's easy to use software interface, that provides step by step instructions on connecting to the BGAN network and setting up satellite connections. You can use BGAN LaunchPad to manage data connections, send and receive text messages, monitor telephone usage and upgrade software. The interface can be installed on any computer connected to the terminal and accessed by double-clicking on a desktop icon. With BGAN LaunchPad, you have access to all the latest customization options and features of the BGAN service. You can also update firmware automatically using BGAN LaunchPad.

Note If you use only the USB connection, you must install the USB drivers before you can use BGAN LaunchPad.

- The EXPLORER ISDN handset (optional) has a display and keypad that enables you to point the antenna and monitor signal strength, enter the SIM PIN, monitor phone and data interfaces and log files, as well as make and receive a telephone call and send and receive a text message.

Inmarsat recommends that only one interface be used to ensure that settings and configurations are not overwritten. This guide assumes use of BGAN LaunchPad.

3.8 Registering with the network

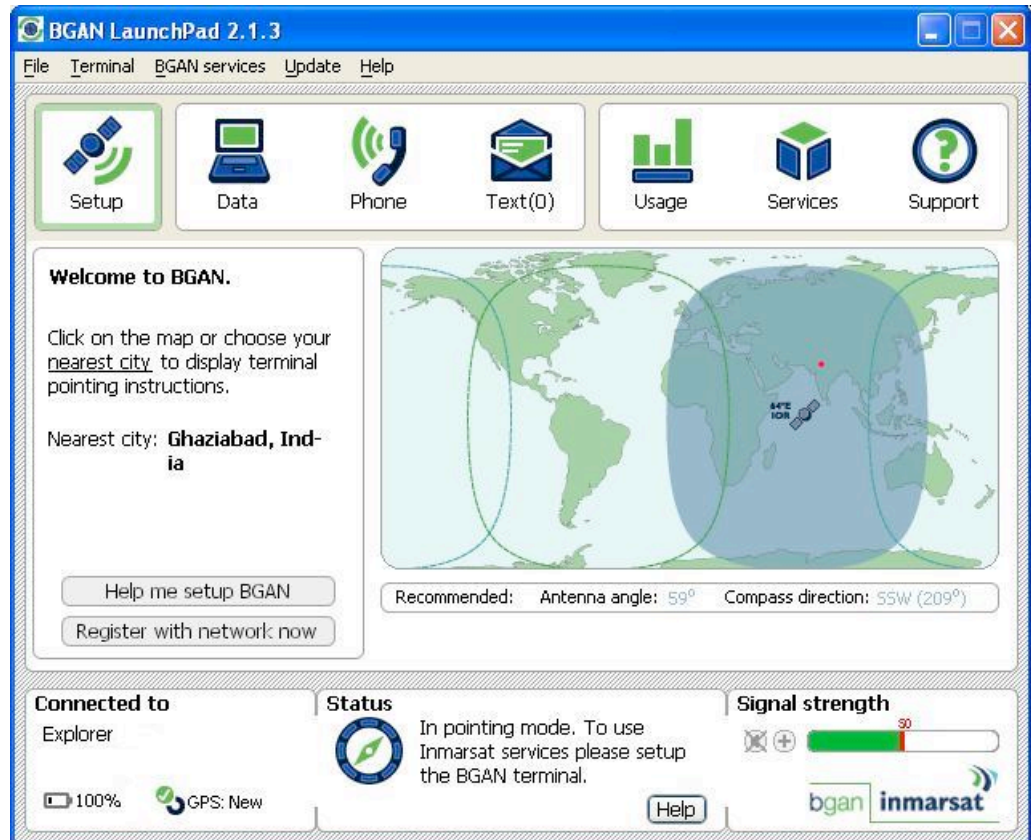
Establishing a connection with the BGAN network requires the careful orientation of the BGAN terminal towards the satellite, a process called pointing. Accurate and precise pointing is important, because a badly-pointed antenna can reduce the data rate achievable over the network. When pointing is complete, you can register the terminal with the BGAN network.

Use the BGAN LaunchPad pointing wizard to step through the process of pointing the terminal and registering with the network. In addition, you can use the BGAN terminal's signal strength indicator lights and, optionally, the terminal's audio buzzer to point the terminal. To do this:

- a. Open BGAN LaunchPad, by clicking on the BGAN LaunchPad icon on your desktop.



The following screen is displayed:

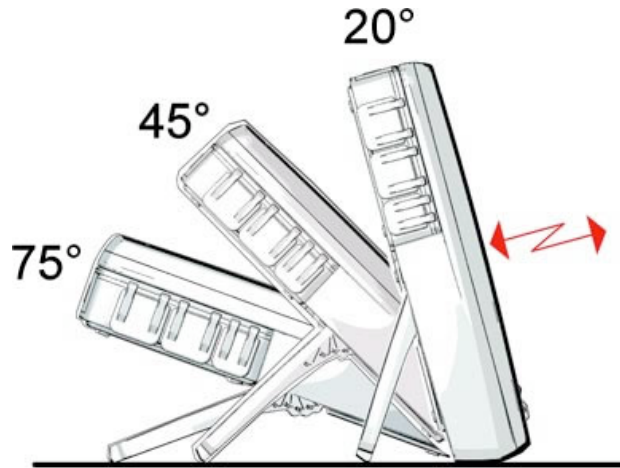


The status bar displays the message In Pointing Mode.

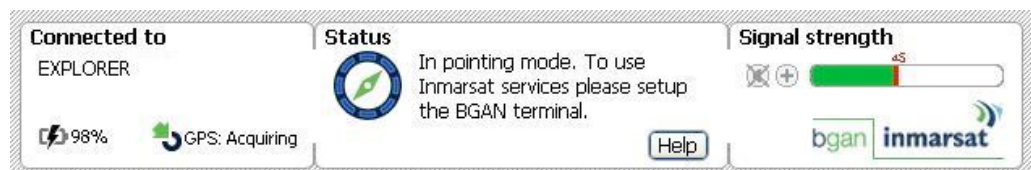
Note The coverage map and “Welcome to BGAN” area are provided to assist you in pointing, but the location shown may not correspond to your GPS fix, and does not affect network registration.

- b. Click on Help me setup BGAN and step through the on-screen instructions. BGAN LaunchPad suggests the recommended pointing angle and direction to correctly position the terminal.
- Rotate the terminal left or right until it points in the correct horizontal direction, known as the azimuth.

- Set the vertical angle of the terminal to the recommended position (the angles 75°, 45° or 20° are shown below). Free line of sight to the satellite is required.



- c. Monitor the signal strength on the status bar:



Use this information to further adjust the antenna position to obtain maximum signal strength. Remember not to touch the antenna.

In addition, you can use the satellite Signal indicator on the terminal to monitor the signal strength. It flashes green when searching for the signal, flashes more rapidly as the signal improves and lights solid green when the signal strength is acceptable. At the same time, the alignment buzzer in the antenna unit sounds with increasing pitch as the signal improves.

Note If the signal strength is not sufficient, registration may not be possible and the terminal may not be able to open a data connection.

- d. When you have positioned the terminal to obtain the maximum signal strength, you are ready to register with the network. Click on Register with Network now.

Tip You can also register with the network by pressing the Activate button at any stage in the pointing process.

By default, BGAN LaunchPad opens a standard IP data connection after successful registration. The status zone reads Standard Data Connection Open. Ready for Phone, Text and Data.

3.9 Using BGAN LaunchPad during pointing and registration

Note the following about BGAN LaunchPad during pointing and registration:

- During pointing, the location shown on the coverage map is based on your previous location. The coverage map displays your current position only after you exit pointing and register with the network.

- During pointing, signal strength information is provided by the satellite's global beam. Once you have registered, the signal strength is provided by the satellite's regional beam. Therefore the signal strength bar shown in BGAN LaunchPad may change after registration. Once you have opened a data connection, signal strength is provided by the spot beam.
- To check the actual signal strength, go to Help > Diagnostic Report in BGAN LaunchPad. The actual signal strength is given in the dialog box that is displayed.

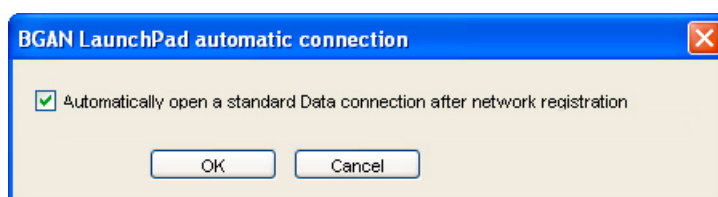
Tip You can make or receive phone calls, or send and receive a text message even if you do not have an IP data connection.

Automatic mode

By default, the terminal automatically opens a data connection after you register with the network. However, there may be a minimum charge for opening an IP data connection (depending on your Service Provider), and data may be transferred across the connection even if you are not actively using an application (for example, your computer may be receiving automatic updates).

If you do not want to incur these charges, you can switch off the automatic connection feature using BGAN LaunchPad, as follows:

- Select BGAN Services > LaunchPad Automatic Connection from the BGAN LaunchPad main menu. The BGAN LaunchPad automatic connection window is displayed



- Uncheck the check box to turn off automatic data connection.

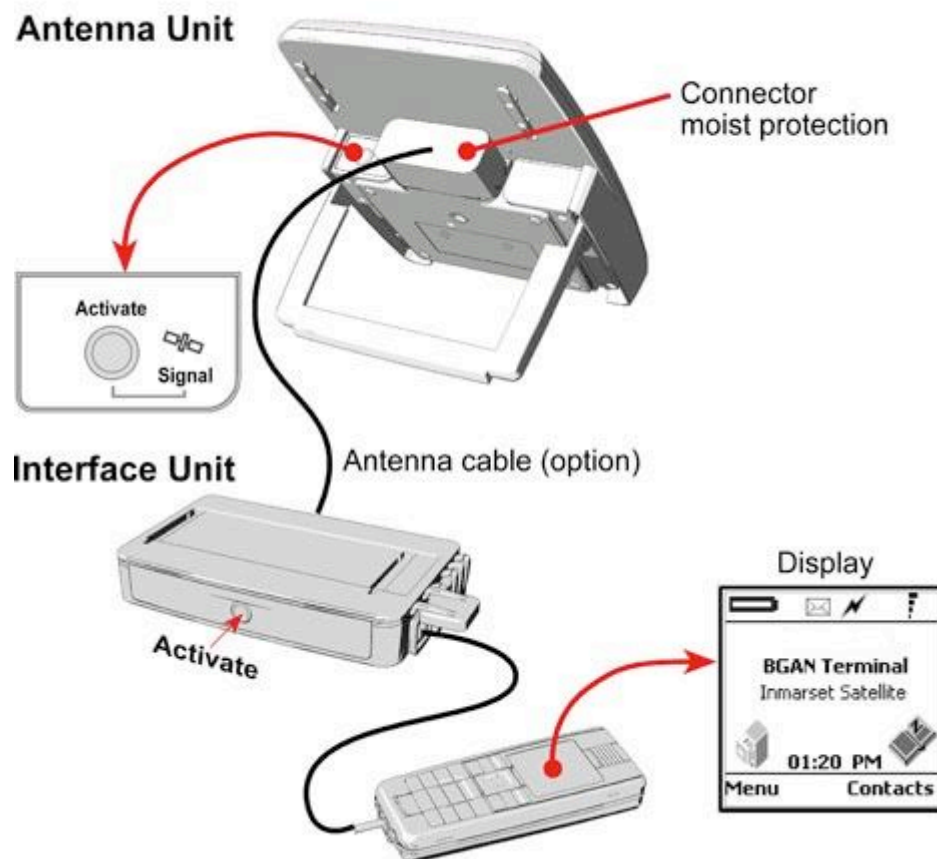
3.10 Split operation of the EXPLORER 100/110

The EXPLORER 100/110 can be operated with the Interface Unit (or Indoor unit) separated from the Antenna Unit (Outdoor unit). The Thrane & Thrane split cable (not supplied) interconnects the two units, allowing for example, the Interface Unit to be placed inside a building and the Antenna Unit outside. The split cable is a specially designed 9-pin RS232 cable and operates over a distance of up to 20 m.

Note The Thrane split cable is designed for use with the EXPLORER 100/110. Other 9-pin cables will not work optimally with the terminal, and may affect performance.

Note Turn the terminal off before separating the Interface Unit and the Antenna Unit.

Note EXPLORER 100/110 terminal units are interchangeable. You can use any Indoor unit with any Outdoor unit.



4 Making voice, data and text connections

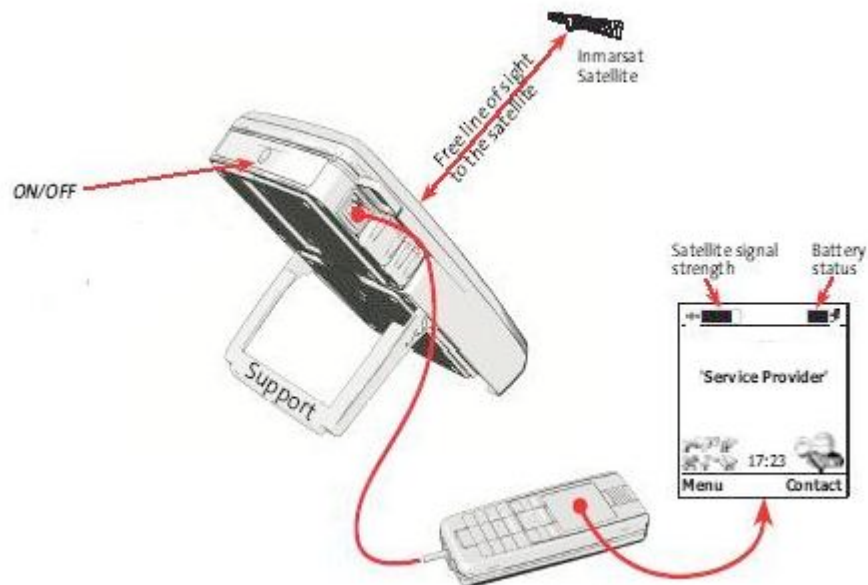
- You can connect to the terminal using any of the following interfaces:
- USB, for IP data connections (you require an adapter for the EXPLORER 110).
- Ethernet, for IP data connections (EXPLORER 110 only).
- Telephone, for voice connections at 4kbps (ISDN handset required).
- Bluetooth, for Bluetooth voice or data connections.

If required, you can connect to more than one interface simultaneously.

4.1 Making a voice call

You must be registered with the network before you can make a telephone call.

To make a telephone call on the terminal, connect the EXPLORER ISDN handset (or another ISDN handset) to the terminal's telephone port using an ISDN cable, as shown below:

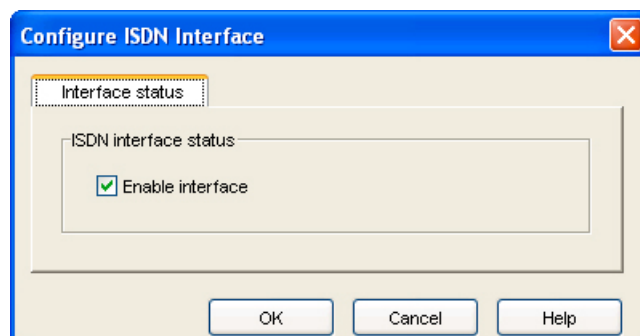


You are now ready to make or receive telephone calls.

If you can't make a telephone call ...

If you can't make a 4kbps voice call with an ISDN or RJ45 handset, check that the interface is enabled in BGAN LaunchPad. To do this:

- Select Terminal > ISDN Interface Settings in BGAN LaunchPad. The Configure ISDN Interface dialog box is displayed, as shown below:



- Select the Enable Interface check box to activate the ISDN interface and click OK.

Tip To check your MSISDN number(s) and SIM card details whilst connected to the terminal, open the diagnostic report from BGAN LaunchPad. To do this, select Help > Diagnostic Report from the BGAN LaunchPad main menu.

4.2 Making an IP Data Connection

Pre-requisites

Before you can open an IP data connection, ensure that you have done the following:

- Installed a provisioned SIM card, supplied by your Service Provider. The SIM card contains Access Control Point (APN) information, therefore Inmarsat recommends that you do not change the APN after installing the SIM card.
- Connected your computer to the BGAN terminal, using one of the terminal's interfaces.
- Pointed the terminal to obtain the maximum possible signal strength.
- Registered with the BGAN network

You can make an IP data connection using either of these interfaces:

- USB (EXPLORER 100, and EXPLORER 110 with an adapter)
- Ethernet (EXPLORER 110 only)
- Bluetooth

4.3 Opening a standard data connection

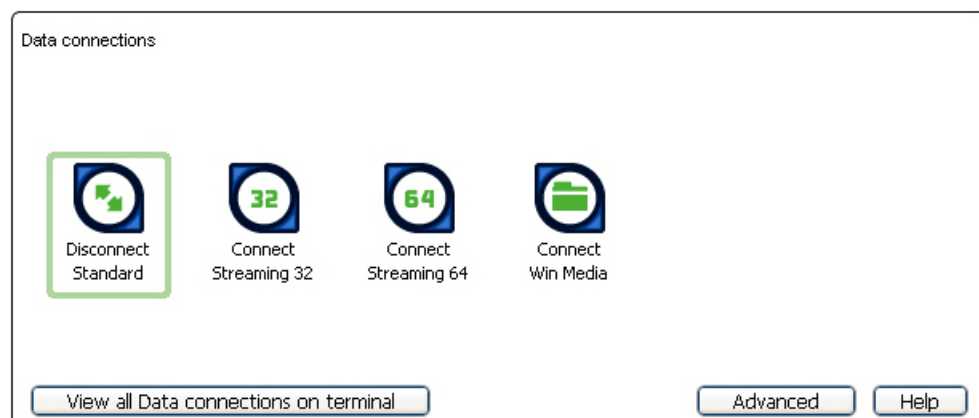


By default, when you first register with the BGAN network, the terminal opens a standard data connection. The standard connection is an always on, best effort connection and is suitable for most basic data requirements. It is charged by the amount of data sent and received.

To check that the standard connection is open, select the Data tab in BGAN LaunchPad.



The following screen is displayed:



If the standard connection is open, the words Disconnect Standard display below the connection icon.

Note If the standard connection is closed, the words **Connect Standard** display below the connection icon. Click on the icon to open the standard connection.

You can now browse the Internet, send and receive email and use other IP applications. All traffic is transferred across the standard connection.

4.4 Opening a streaming data connection



If you require a guaranteed data rate for your connection (if, for example, the application is time critical), you can connect using one of the two dedicated streaming connections, at the following data rates:

- 32kbps streaming
- 64kbps streaming

Tip By default, error correction (also called network packet retransmission) is switched on. Inmarsat recommends that you turn error correction off for UDP/IP connections, as this feature is not required for this connection type. Refer to “BGAN and IP data connections” for details.

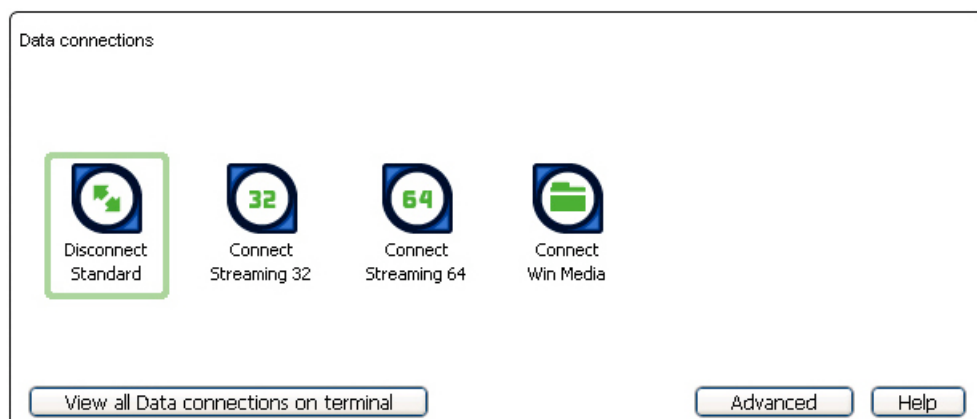
Each streaming class connection is charged by the length of time that the connection is live. When you open a streaming connection, the standard connection is closed.

To open a streaming connection:

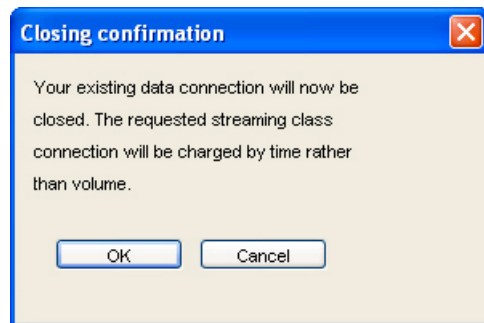
- a. Select the Data tab in BGAN LaunchPad:



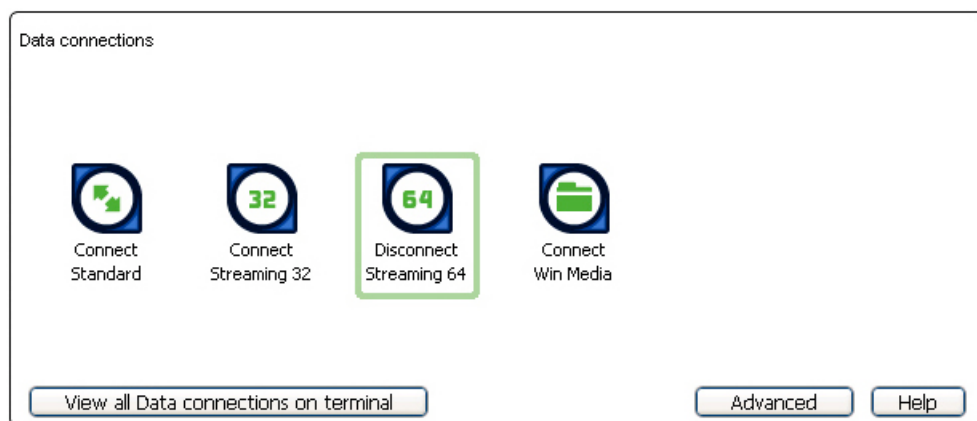
The following screen is displayed:



- b. Select the required streaming connection, for example Streaming 64. The following message is displayed, asking you to confirm that you want to close your current connection and open a new connection, charged by time:



- c. Click on OK. The new data connection opens, and the following screen is displayed:



The Standard connection is closed, and the Streaming 64 connection is open. All traffic is transferred across the selected streaming connection.

Note If you subsequently want to close the streaming connection and open another streaming connection, or reopen the standard connection, repeat steps 1 to 3.

Note If you want to close all connections, click on the currently open connection.

4.5 Opening a dedicated streaming connection



In addition to the default connections, BGAN LaunchPad enables you to configure and open one or more dedicated streaming connections (you can associate one of the icons shown above with a dedicated streaming connection). These are assigned to specific applications, for example Win Media, to ensure that the connection for this application's data is not shared with any other application.

You must have a pre-configured standard or streaming connection open before you can open a dedicated streaming connection. This is because each dedicated streaming connection creates a virtual IP data connection which shares the IP address of the pre-configured standard or streaming connection.

For details on configuring dedicated streaming connections, refer to “BGAN LaunchPad Help”.

4.6 Traffic Flow Templates

Each dedicated streaming connection is associated with a Traffic Flow Template (TFT). A TFT, also called an Application Template, assigns a priority to a selected type of traffic in order to maximize performance.

BGAN LaunchPad supports the following pre-configured TFTs, any one of which can be selected when you configure a dedicated streaming connection to ensure that the defined traffic has its own dedicated connection:

- FTP
- QuickLink
- QuickTime
- Real Media
- Streambox
- WinMedia

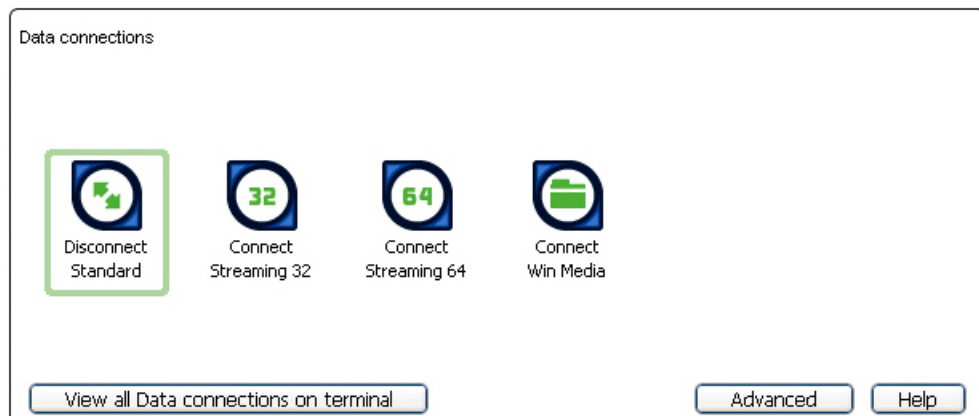
If you wish to want to define your own TFT for another application, contact your Service Provider for assistance.

To open a dedicated streaming connection:

- a. Select the Data tab in BGAN LaunchPad.

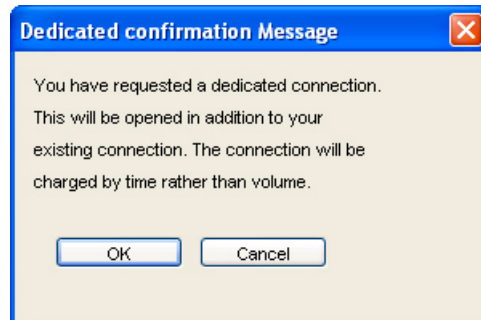


The following screen is displayed:

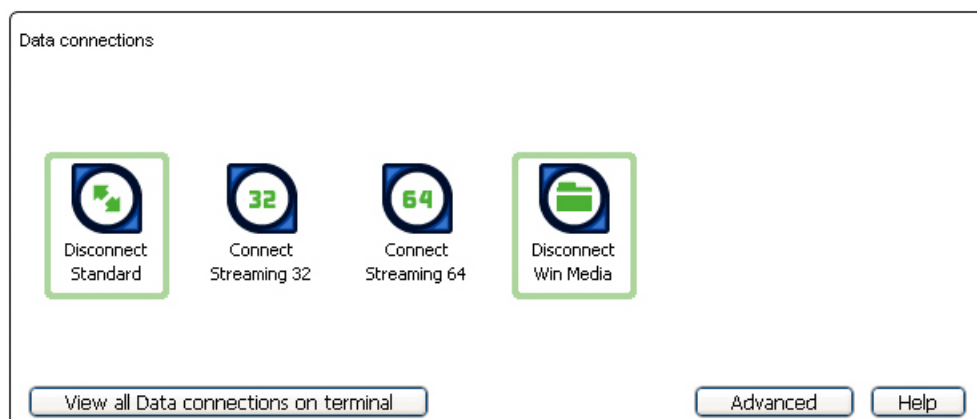


In this scenario, you have set up a dedicated streaming connection for Win Media. The Standard connection is currently open.

- b. Select the required dedicated streaming connection, for example Win Media. The following message is displayed, asking you to confirm that you want to open a dedicated connection in addition to your current connection:



- c. Click on OK. The new data connection opens and the following screen is displayed:



The Standard and the Win Media connections are both open. All traffic other than Win Media data continues to use the standard connection.

You can open up to 10 dedicated streaming connections in addition to your default connection.

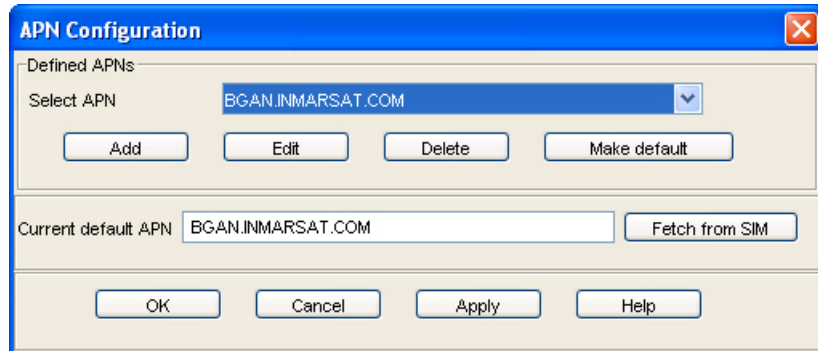
If you can't make a data connection...

If you can't open a data connection, check that the default Access Point Name (APN) is set correctly. The APN is stored on your SIM and must be configured as the access point for each of your data connections for the data connection to open successfully.

Tip If you want to open a dedicated streaming connection, the APN of the dedicated streaming connection must be the same as that of the standard or streaming connection already open.

To check the default APN is set correctly:

- a. Select BGAN Services > LaunchPad APN Options in BGAN LaunchPad. The APN Configuration screen is displayed, as shown below:



Check the Current Default APN text box to ensure you are connected to the correct APN. If not, either

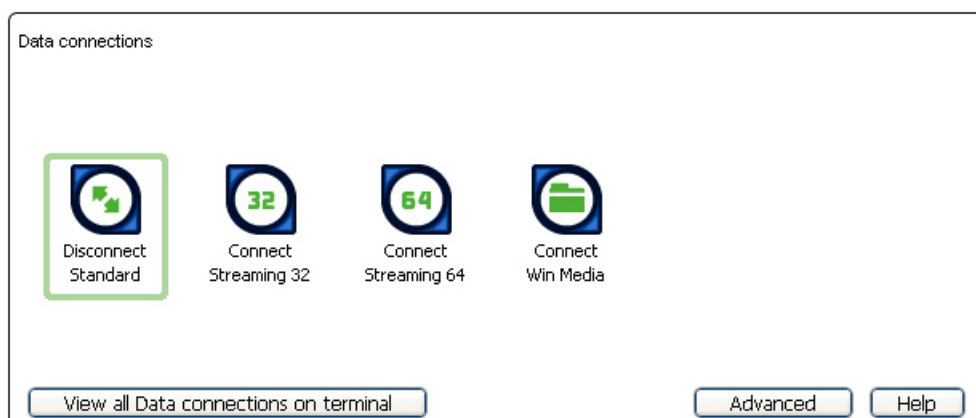
- Click on Fetch from SIM.
- Select the required APN from the Select APN drop-down list and click on Make default,

To check that the APN for a specific data connection is set to the default:

- a. Select the Data tab in BGAN LaunchPad:



The following screen is displayed:



- b. Right-click on the connection you want to check and select Edit. The Primary Connection screen is displayed, as shown below:

- c. Check the APN displayed in the Select APN field. If it is not correct, select the required APN from the drop-down list and click on OK.

Tip Some Distribution Partners assign usernames and passwords to the APN. You may need to enter these when accessing or changing APN details.

4.7 Making a Bluetooth connection

Bluetooth and the EXPLORER 100/110

Interface	Built-in antenna, Bluetooth class 1 v1.2
Supported Profiles	Cordless Telephone Profile (CTP)
	Serial profile
	Dial-up networking
Distance to device	Maximum 20m

- Your Bluetooth device must be paired with the terminal's built-in Bluetooth modem before you can make Bluetooth calls or transmit Bluetooth data. If you want to pair your device with the terminal, the default device name is "NERA-GW", and the default passkey is 0000 (four zeroes).

Connecting from your device to the terminal

The Bluetooth device must be placed within a maximum distance of 20m from the BGAN terminal. Note that this is the absolute maximum distance; the actual maximum distance may be shorter, depending on the conditions.

To pair with the terminal and open a connection using the Bluetooth software on your Bluetooth device:

- Enable the Bluetooth interface in the terminal (by default, the interface is disabled). To do this, you must be connected to the terminal via the USB interface. From the BGAN LaunchPad main menu, select Terminal > Bluetooth Interface Settings to display the Configure Bluetooth Interface dialog box. Then select the Enable radio button and click OK.

- b. Enable your Bluetooth device, and search for devices in range. The terminal's default Device Name is "E100<IMSI number>" or "E110<IMSI number>", where <IMSI number> is the IMSI number of your individual terminal.
- c. Enter the terminal's passkey when prompted to pair with the terminal. By default, the passkey is 0000 (four zeroes). When you have paired the device and the terminal, the Bluetooth software automatically installs two Bluetooth modems on your computer, one for BGAN LaunchPad and one for dial-up networking.
- d. Open BGAN LaunchPad. BGAN LaunchPad automatically detects the Bluetooth connection and you can use your device to access Bluetooth services.

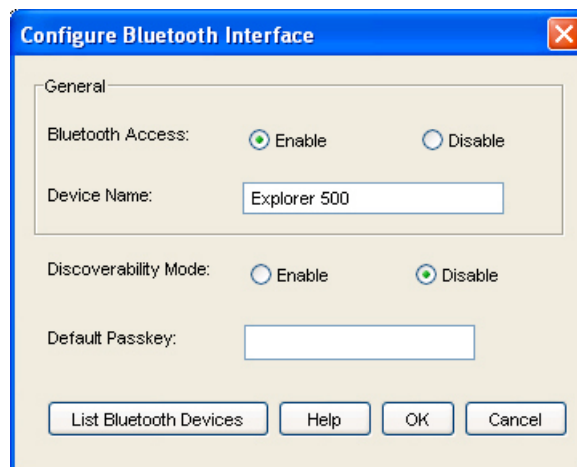
Tip If you want to open an IP data connection over Bluetooth using BGAN LaunchPad, you must un-pair from all other devices, so that your computer is paired only with the BGAN terminal. You can now open BGAN LaunchPad and access terminal services over BGAN LaunchPad.

Connecting from the terminal to your device

The Bluetooth device must be placed within a maximum distance of 20m from the BGAN terminal. Note that this is the absolute maximum distance; the actual maximum distance may be shorter, depending on the conditions.

To search for and pair with your Bluetooth-enabled device from the terminal using BGAN LaunchPad:

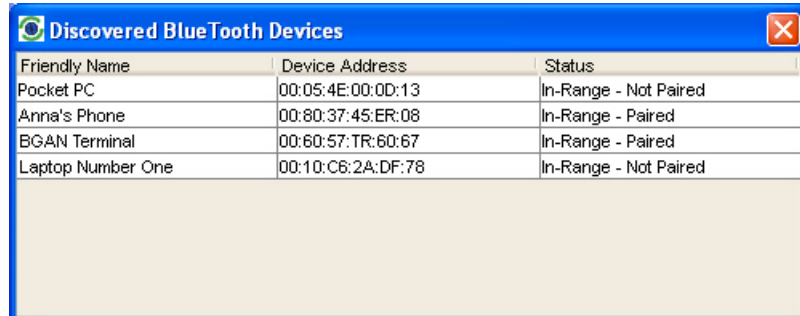
- a. From BGAN LaunchPad main menu, select Terminal > Bluetooth Interface Settings. The Configure Bluetooth Interface dialog box is displayed, as shown below:



- b. If the Bluetooth interface is not enabled, select the Enable radio button.

Note The Bluetooth device that you want to pair with must also be enabled.

- c. Click on List Bluetooth Devices to list all Bluetooth devices within range. A screen similar to the following is displayed, giving the device address and current status, including pairing information.



Friendly Name	Device Address	Status
Pocket PC	00:05:4E:00:0D:13	In-Range - Not Paired
Anna's Phone	00:80:37:45:ER:08	In-Range - Paired
BGAN Terminal	00:60:57:TR:60:67	In-Range - Paired
Laptop Number One	00:10:C6:2A:DF:78	In-Range - Not Paired

If required, either:

- Pair a device by right-clicking on an unpaired device and selecting Pair. Enter the passkey when prompted.

Or:

- Unpair a device by right-clicking on a paired device and selecting Un-pair.
- d. Click on OK to save the configured settings, or click on Cancel to exit without saving. When you have paired the device and the terminal, the Bluetooth software automatically installs two Bluetooth modems on your computer, one for BGAN LaunchPad and one for dial-up networking.
- e. BGAN LaunchPad automatically detects the Bluetooth connection and you can use your device to access Bluetooth services.

You cannot make a local call between two Bluetooth handsets using the EXPLORER 500. You can make a local call from a Bluetooth handset to an analog phone, or from an analog phone to a Bluetooth handset.

You can look up the local Bluetooth phone numbers using the terminal's display and keypad. To do this, select **PROPERTIES > BLUETOOTH DEVICES > DISPLAY** from the terminal's display.

The list shows all accepted Bluetooth devices with local number and Bluetooth name.

Tip If you want to open an IP data connection over Bluetooth using BGAN LaunchPad, you must un-pair from all other devices, so that your computer is paired only with the BGAN terminal. You can now open BGAN LaunchPad and access terminal services across the Bluetooth connection.

If you can't make a Bluetooth data connection ...

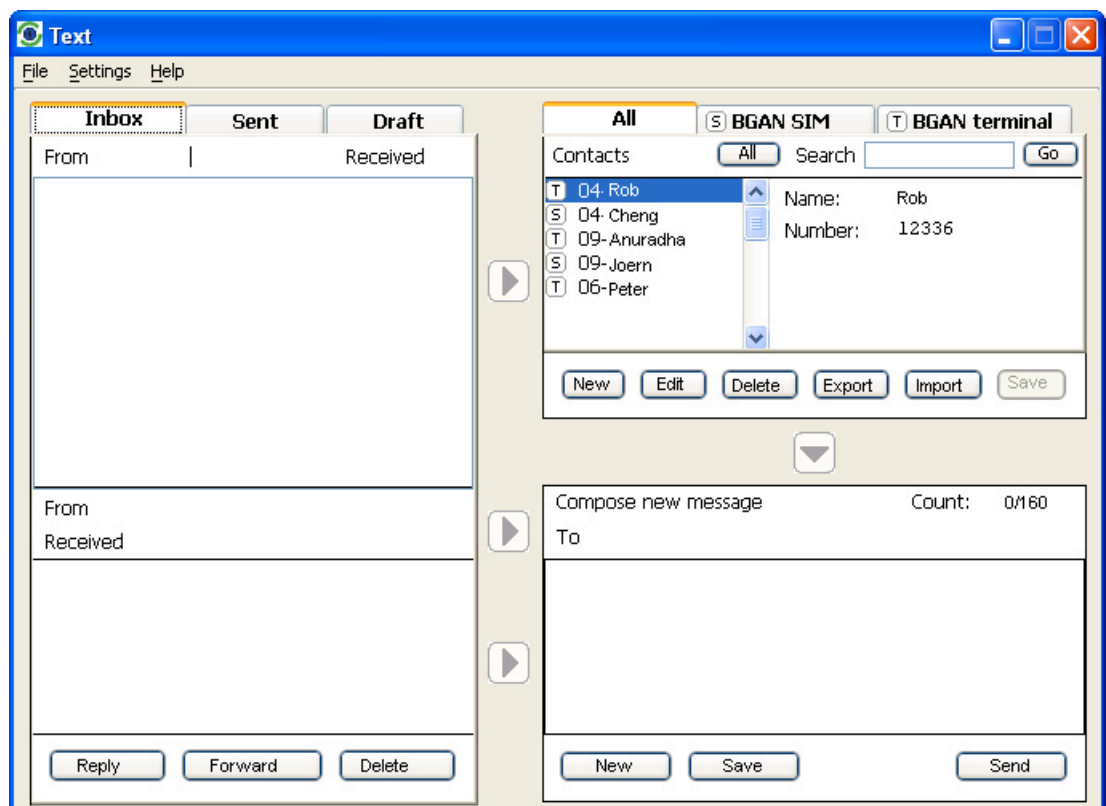
If you can't make a standard data connection over Bluetooth, check the Dial-up networking properties on your operating system to ensure that the Bluetooth standard modem is selected. Refer to the documentation for your operating system for details.

4.8 Sending or receiving a text message

You can send text messages from a BGAN terminal to another BGAN terminal and from a BGAN terminal to a mobile phone. You can also send a text messages from a mobile phone to a BGAN terminal, but only on those networks with which Inmarsat has an agreement. To access text features, select the Text tab in BGAN LaunchPad:



The following screen is displayed:



Refer to “BGAN LaunchPad Help” for details on using this screen.

Note When you receive a text message, the Text message icon in BGAN LaunchPad changes, and the number of new text messages displays.