



## Satellite Communication

We'll give you a great reception!



# BGan Help Guide

# Setting up the Bgan HNS 9201

## ▶ Installing the SIM card and battery

- ▶ To prepare the terminal for connection:
  - ▶ a. Position the terminal so that the battery door is facing you.
  - ▶ b. Open the battery door. (If you have already installed the battery, release and then remove it.)
  - ▶ c. Push the button on the left-hand side of the SIM card holder. This releases the holder from its compartment.
  - ▶ d. Remove the holder from its compartment.
  - ▶ e. Install the SIM card in the card holder making sure it snaps into place.
  - ▶ f. With the card in the holder, orient the holder with the card's gold contacts facing down. Place the holder back in its slot in the BGAN terminal.
  - ▶ g. Put the battery into its slot in the BGAN terminal and lock it in place. Close the battery door securely.



# Setting up the Bgan HNS 9201

- ▶ **Powering on and charging the battery**
- ▶ a. Insert the power adapter output connector into the DC power input jack on the back of the terminal.
- ▶ b. Insert the plug end into any AC outlet between 100 and 240 VAC.
- ▶ Note The battery charges automatically whenever the terminal is connected to a power source.
- ▶ **Obtaining a GPS fix**
- ▶ The BGAN network requires a valid GPS fix to successfully register your BGAN terminal.
- ▶ **To obtain a GPS fix:**
- ▶ a. Take the Hughes 9201 outside and place the terminal on a flat surface, facing upwards and with an open view of the sky. Ensure that the GPS antenna in the terminal is pointing in the direction of the satellite.
- ▶ b. Press the Power button. The GPS LED starts to flash green indicating that the terminal is acquiring a GPS fix.
- ▶ Leave the terminal to acquire a GPS fix. This may take a few minutes. Once the GPS fix has been acquired the GPS LED turns solid green.



# Setting up the Bgan HNS 9201

- ▶ Use this information to further adjust the antenna position to obtain maximum signal strength.
- ▶ In addition, you can use the terminal's indicator lights and audio buzzer to assist in pointing the terminal:
  - Note the Pointing indicator lights as you adjust the compass and graduated scale. The light on the right of the scale lights first. The others then light from right to left as the signal improves. If all lights are on, the signal is at its strongest.
  - To assist in pointing, you can also use the audio button to turn the buzzer on. The higher the pitch and the shorter the interval between the tones, the stronger the signal.
- ▶ 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.
- ▶ 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.
- ▶ 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.**



# Setting up the Bgan HNS 9201

- ▶ **Connecting the terminal to your computer**
- ▶ When you first connect the terminal to your computer, Inmarsat recommends that you use either Ethernet or USB.
- ▶ Note USB can operate over a distance of up to 5m with standard cables. Ethernet can operate over a distance of up to 100m with standard cables.
- ▶ **Connecting over Ethernet**
- ▶ Note For the Ethernet interface to work without any further setup, your computer must be configured to obtain an IP address and a DNS server address automatically. To check that these settings are configured on your computer, refer to the documentation for your operating system.
- ▶ Note: When you install BGAN LaunchPad, the USB driver for the terminal is also installed. When you plug in the USB cable for the first time, your computer's operating system uses this driver to connect to the terminal.
- ▶ 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](http://www.inmarsat.com/bg-an-updates) and follow the on-screen instructions.



# BGAN LaunchPad Software

**BGAN LaunchPad 3.7.0**

File Terminal BGAN services Update Help

Setup Data Phone Text(0) Usage Services Support

**Registration status**  
You are registered with Inmarsat  
Latitude: **51°31'N**  
Longitude: **0°48'W**  
Nearest city: **London**

Recommended: Antenna angle: 16° Compass direction: WSW (240°)  
Alternative: Antenna angle: 9° Compass direction: ESE (109°)

Connected to Hughes 9201

**Status**  
Registered with the network.  
Ready for phone and text. Select Data to enable IP Data.

**Signal strength**

bgan inmarsat

# Using BGAN LaunchPad, you can:

- ▶ Register with the BGAN network.
- ▶ Open and close data connections using a simple point and click interface.
- ▶ Monitor the logs of received, dialed and missed calls.
- ▶ Send and receive text messages (SMS).
- ▶ Manage your contacts list.
- ▶ Check for and download software updates.
- ▶ Access diagnostic reports and log files, and view service provider support information.
- ▶ Perform management functions such as setting up new data connections and managing the
- ▶ Interface between LaunchPad and the terminal.

# Opening BGAN LaunchPad

- ▶ Double-click on the desktop icon:
- ▶ If this is the first time you have connected to the terminal, the following screen

The screenshot shows a Windows-style dialog box titled "Select BGAN terminal". The dialog has a blue title bar with a close button (X) in the top right corner. The main area is light beige and contains the following text and controls:

Welcome To BGAN Launchpad.

Please select the BGAN terminal type and interface you wish to connect to and search:

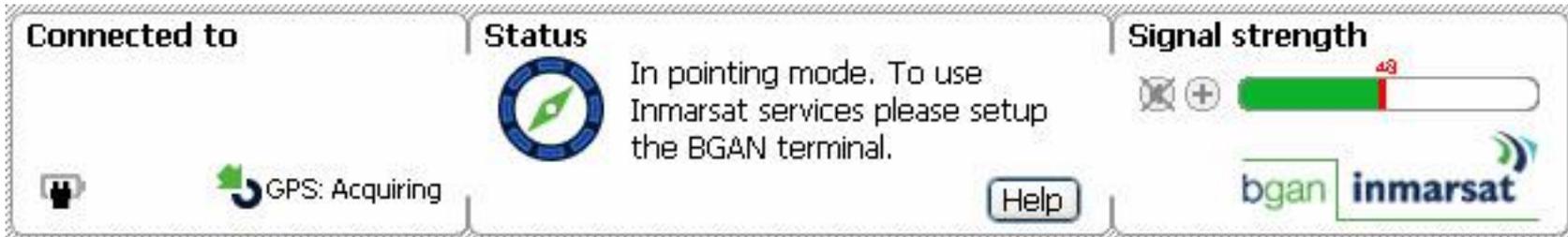
Below this text are two dropdown menus. The first is labeled "Select Terminal" and the second is labeled "Select Interface". To the right of these dropdowns is a "Search" button.

Below the search controls, the text reads: "To use BGAN LaunchPad without being connected to a terminal select cancel."

At the bottom of the dialog, there are three buttons: "Help" on the left, "Connect manually" in the center, and "Cancel" on the right.

# Opening BGAN LaunchPad

- ▶ Select the correct terminal type and interface from the drop down lists, and click on **Search**.
- ▶ When LaunchPad finds the terminal, the following panel displays on the main screen:



- Ensure to set your IP settings before attempting your first connection:
- At the top of the Launchpad application click on Terminal and then select IP configuration.
- In the opening fields enter 212.165.108.67 at the top.
- And 212.165.108.70 at the bottom.
- Click ok and then continue.



# Registering with the network

- ▶ Establishing a connection and registering successfully with the 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.
- ▶ If you have not yet registered the terminal with the network, you can use BGAN LaunchPad to help you point the terminal and register. To do this:
  - ▶ a. In BGAN LaunchPad, click on **Help me setup BGAN**. The first page of an on-screen wizard displays.
  - ▶ b. Follow the instructions given, and move through the steps of the wizard. Monitor the signal strength on the right of the status bar as you point the terminal

# Registering with the network

- ▶ When you have obtained the maximum possible signal strength, click on **Register with network now**. The BGAN terminal now tries to register with the BGAN network. When the terminal has registered successfully, the following screen displays:

The screenshot displays the BGAN LaunchPad 3.7.0 software interface. The window title is "BGAN LaunchPad 3.7.0" and the menu bar includes "File", "Terminal", "BGAN services", "Update", and "Help".

The main interface is divided into several sections:

- Navigation Bar:** A row of icons for "Setup", "Data", "Phone", "Text(0)", "Usage", "Services", and "Support".
- Registration status:** A panel on the left showing "You are registered with Inmarsat" and the following details:
  - Latitude: **51°31'N**
  - Longitude: **0°48'W**
  - Nearest city: **London**
- Map:** A world map showing satellite coverage areas. Two satellite icons are visible: "51°W AOB-W" and "84°E IOB". A red circle highlights the current location in the North Atlantic.
- Antenna Settings:** Two rows of settings:
  - Recommended: Antenna angle: 16°, Compass direction: WSW (240°)
  - Alternative: Antenna angle: 9°, Compass direction: ESE (109°)
- Connected to:** A panel at the bottom left showing "Hughes 9201".
- Status:** A panel at the bottom center showing a satellite icon and the text: "Registered with the network. Ready for phone and text. Select Data to enable IP Data." A "Help" button is located below this panel.
- Signal strength:** A panel at the bottom right showing a signal strength indicator (a bar with four segments) and the logos for "bgan" and "inmarsat".

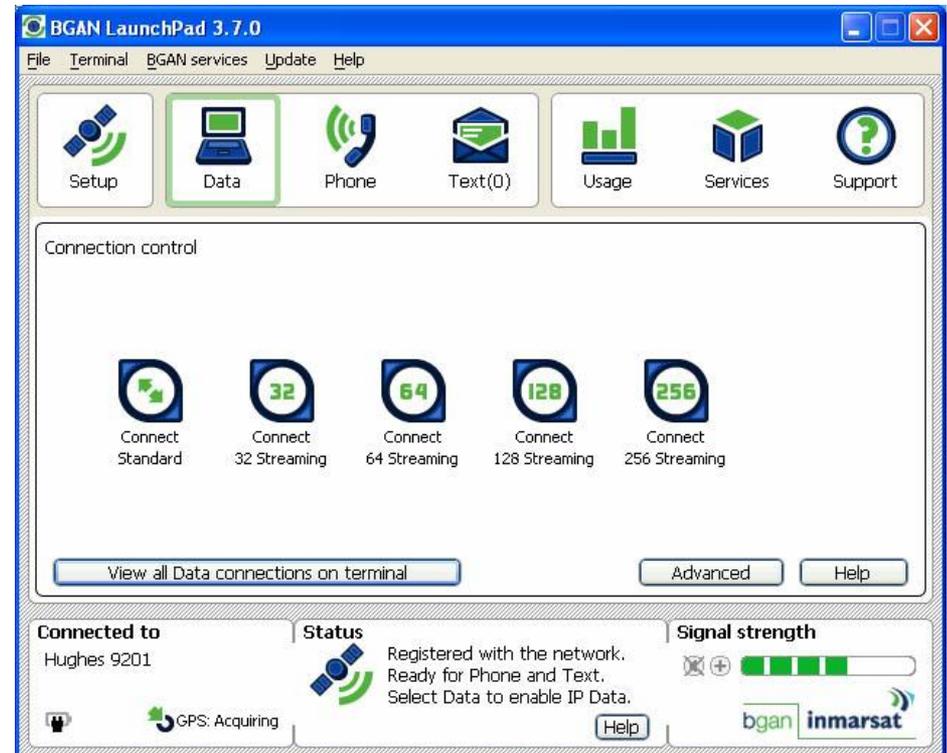
# Opening a standard IP data connection

- ▶ By default, LaunchPad does not automatically open a standard IP data connection. Therefore, you must manually open a connection before you can use data services.
- ▶ Click on the **Data icon in LaunchPad:**
- ▶ A screen similar to the below displays:
- ▶ Click on **Connect Standard**.



In addition, the Status message will read “Standard Data connection open. Ready for Phone, Text and Data.”

You are now ready to open a web browser, check and send emails and perform other basic data functions.

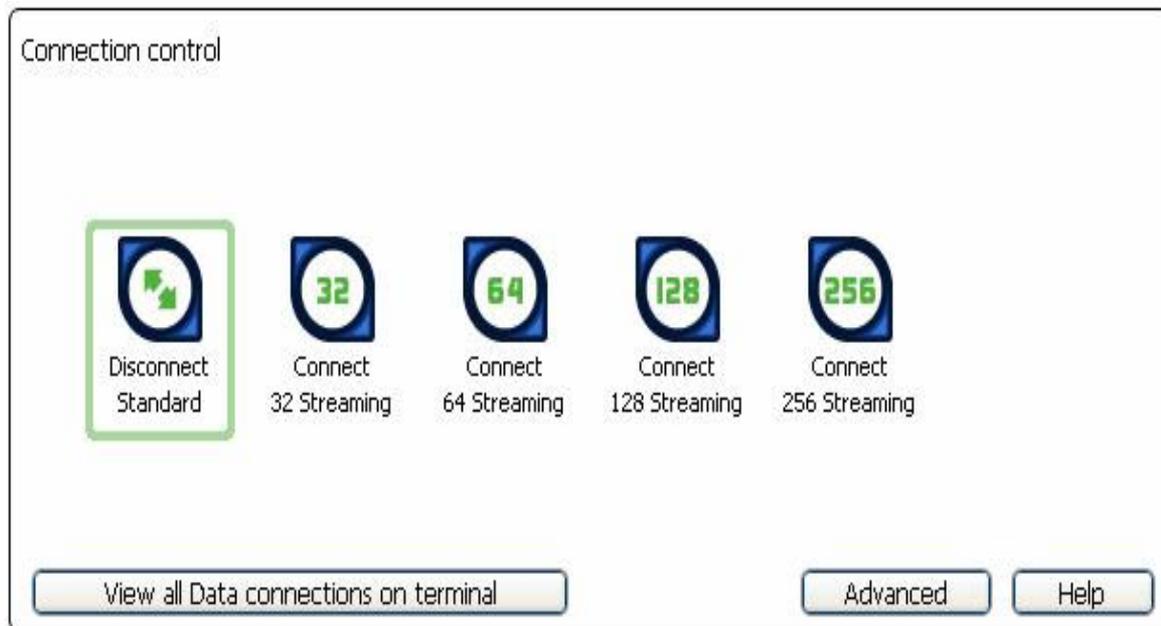


# Opening a streaming IP data connection

- ▶ Streaming IP data connections are optimized for use with time-critical applications such as audio and video.
- ▶ *Note: The streaming IP data connections are normally charged by the length of time they are open rather than the amount of data transferred. Therefore only use this connection type when needed for audio or video data transfer.*
- ▶ Streaming connections are available at one of the following guaranteed data rates:
  - ▶ • 32 kbps (shown as **Connect 32 Streaming**).
  - ▶ • 64 kbps (shown as **Connect 64 Streaming**)
  - ▶ • 128 kbps (shown as **Connect 128 Streaming**). This connection is not available on all terminals.
  - ▶ • 256 kbps (shown as **Connect 256 Streaming**). This connection is not available on all terminals.

# Opening a streaming IP data connection

- ▶ To open a streaming connection:
- ▶ From the Connection control window, simply click on the required streaming IP data connection.



For example, click on **Connect 64 Streaming** to open the 64kbps streaming connection. A message displays, informing you that the connection will be **charged by time** rather than volume. Click on **OK**.

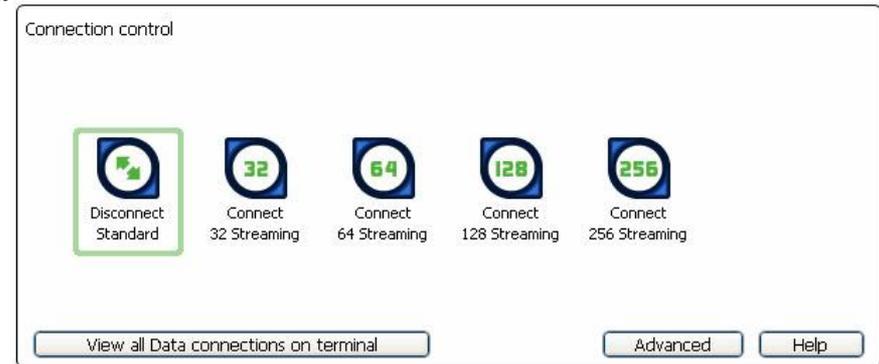
# Setting the standard IP data connection to open automatically

- ▶ From the LaunchPad main menu, select **BGAN services > LaunchPad Automatic Connection**. The **BGAN LaunchPad automatic connection** dialog box displays:
- ▶ Check the **Automatically open a standard Data connection after network registration** check box to enable automatic connection (or uncheck the check box to enable automatic connection).
- ▶ Click on **OK** to save the settings, or **Cancel** to exit without saving.
- ▶ The next time you open LaunchPad, the standard IP connection opens automatically, without you needing to click on **Connect**.



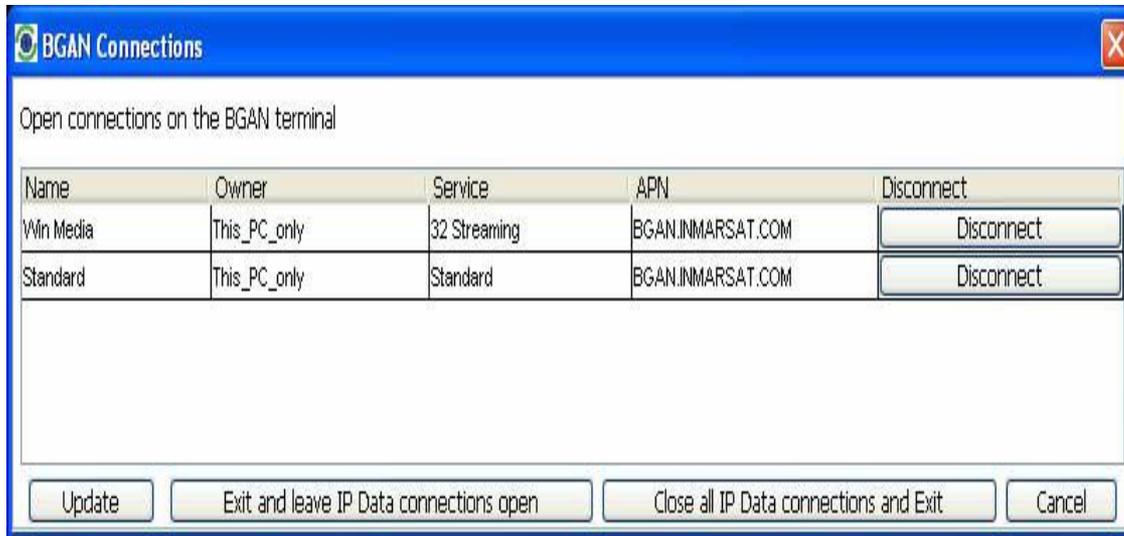
# Closing an IP data connection

- ▶ To close an individual connection, simply click on the individual data icon that you want to close.
- ▶ There are a number of ways to close all open IP data connections. The simplest is to click on
- ▶ the **BGAN services > Close all data connections** option in **BGAN LaunchPad** main menu.
- ▶ The following screen displays:
- ▶ You can either:
  - ▶ • **Close all Data connections for all users and click OK, which will close every open data**
  - ▶ connection on the terminal.
  - ▶ • **Close all my Data connections and click OK, which only closes the connections that you**
  - ▶ opened.



# Closing BGAN LaunchPad

- ▶ To close BGAN LaunchPad, select **File > Exit BGAN LaunchPad** from the BGAN LaunchPad main menu. You are prompted to confirm the close down.
- ▶ If you have any data connections open when you try to exit LaunchPad, a screen similar to the following displays:



- In this screen you can do the following:
- Click on **Close all IP Data connections and Exit** to close all the listed data connections, and exit LaunchPad.
  - Click on the **Disconnect** button alongside a particular data connection to close that particular connection, but leave other connections open.
  - Click on **Exit and leave IP Data connections open** to exit LaunchPad, but leave all the listed data connections open.