



Inmarsat BGAN M2M Hughes 9502 Terminal Setup Guide

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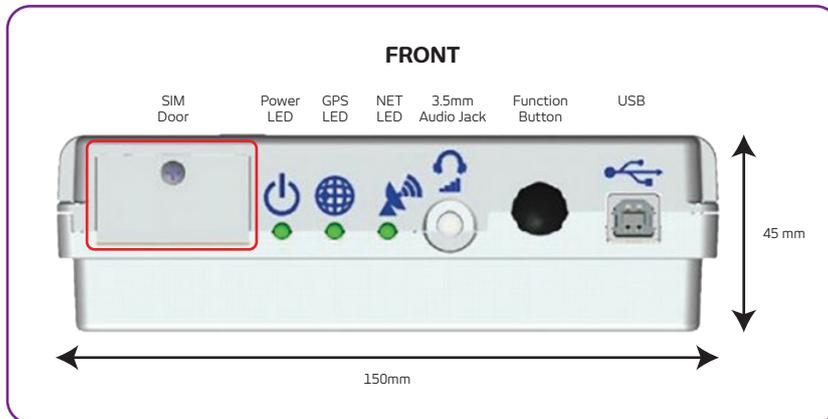
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Basic Terminal Setup

Step 1: Insert your Pivotel BGAN M2M SIM card into the 9502 terminal.

Open the SIM door of the Hughes 9502 modem and insert the Pivotel Inmarsat SIM card.

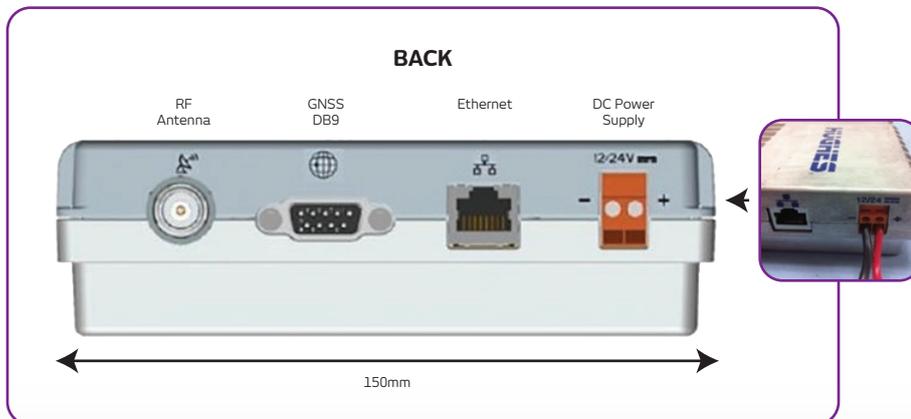
Note: If you are using the 9502 one piece terminal you will need to remove the end panel first.



Step 2: Connect the terminal to a power source.

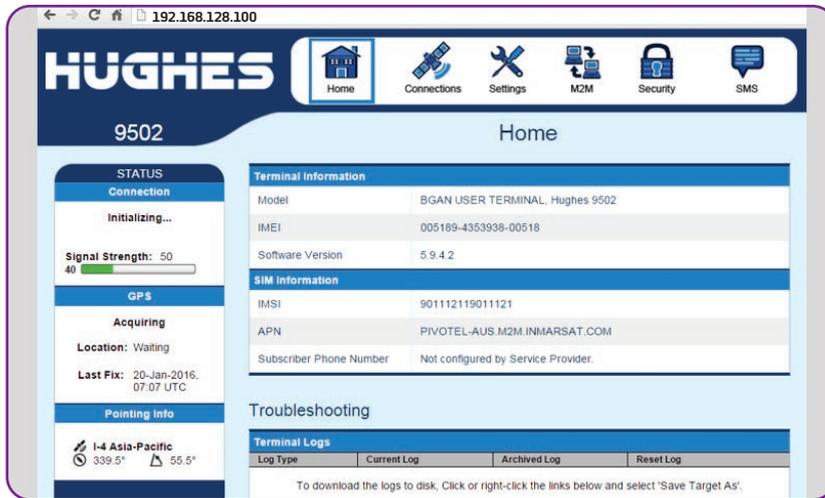
Connect a +12/24VDC power supply to the terminal. LEDs will conduct a boot up sequence and the power LED will begin flashing.

Note: Power consumption while idle is < 1W. Power consumption while transmitting is < 20W and receiving is < 3W.



Step 3: Connect the terminal to your computer.

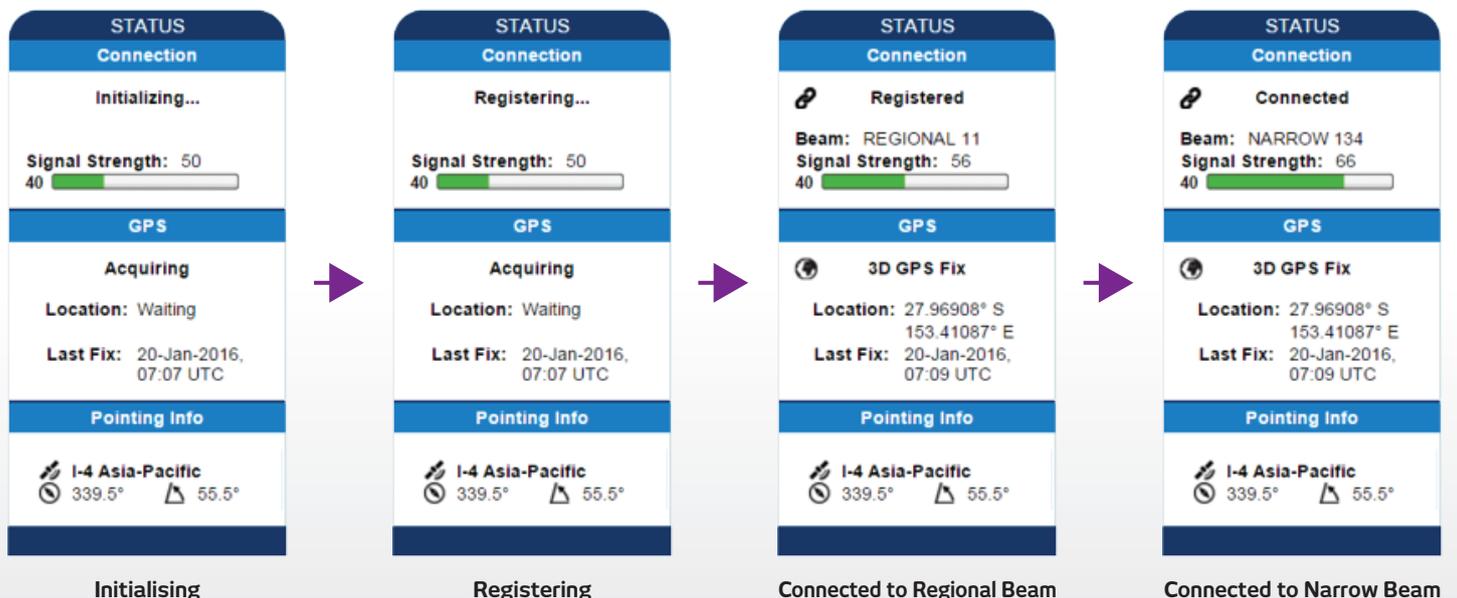
Connect a computer to the terminal via a 'straight through' RJ45 Ethernet cable. Open a web browser and type **192.168.128.100** in the address section to obtain the Web User Interface (UI). We recommend using Firefox.



Step 4: Point the antenna.

In Australia, New Zealand or the Asia Pacific Region point the 9502 antenna towards Inmarsat satellite I-4 Asia-Pacific at 339.5 degrees. Adjust the antenna to achieve maximum signal strength using the Signal Strength meter on the left-hand side of the homepage. The terminal must be connected to the narrow beam to send and receive data.

Note: The registration process may take up to 10min.



Basic Terminal Setup

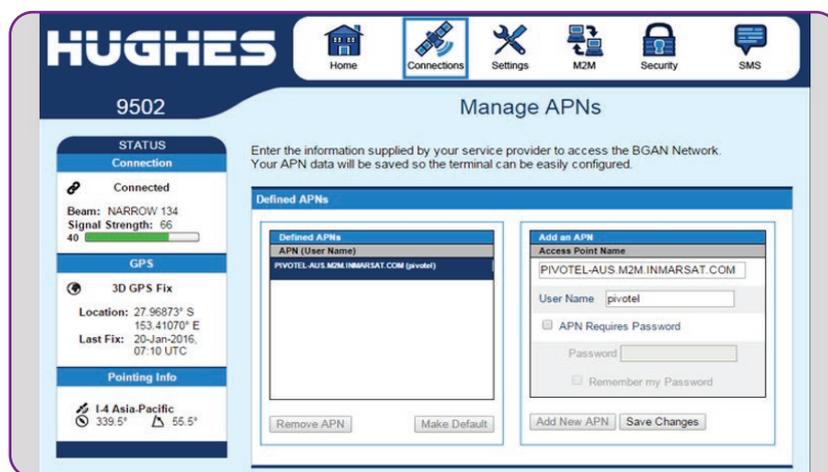
Step 5: Set up the Pivotel APN and username.

Once the 9502 terminal is registered to the Inmarsat Satellite Network you can set up the Pivotel APN and username.

Go to **Connections > Manage APNs** > select the APN **PIVOTEL-AUS.M2M.INMARSAT.COM** and enter the username **"pivotel"**. Click **Save Changes**. Check to see that the APN displayed is: **PIVOTEL-AUS.M2M.INMARSAT.COM (pivotel)**.

After the change is made, please reboot the terminal and check that all APNs displayed on all tabs are using the updated APN with the username 'pivotel'.

Note: Firmware 5.9.4.2 or later will automatically update the APN in multiple tabs, but we still recommend that you check all pages to confirm. You can check your firmware version on the UI homepage. Firmware 5.9.4.1 or earlier version will NOT update the APN in multiple pages, please check and update if required.



◀ 'pivotel' is NOT case sensitive.

Step 6: Setup SMS remote control (Default Status: OFF)

Turn on the SMS remote control to remote access the terminal from PULSAR. Go to **Security > Security Passwords** and turn on **Remote SMS Control**.

Configure the Remote SMS password, the system default password is 'remote'. Enter mobile numbers in international format (eg. +614XX XXX XXX) in the **Senders White List**. The 9502 only accepts SMS remote commands from the white-listed mobile numbers for security. If there are no white-listed mobile numbers entered, the terminal will accept SMS remote commands from any mobile numbers. When mobile numbers have been entered, click **Apply**.

Note: Please keep a record of the Remote SMS password and white-listed mobile numbers as you will need this information to remote access the terminal.



IMPORTANT:

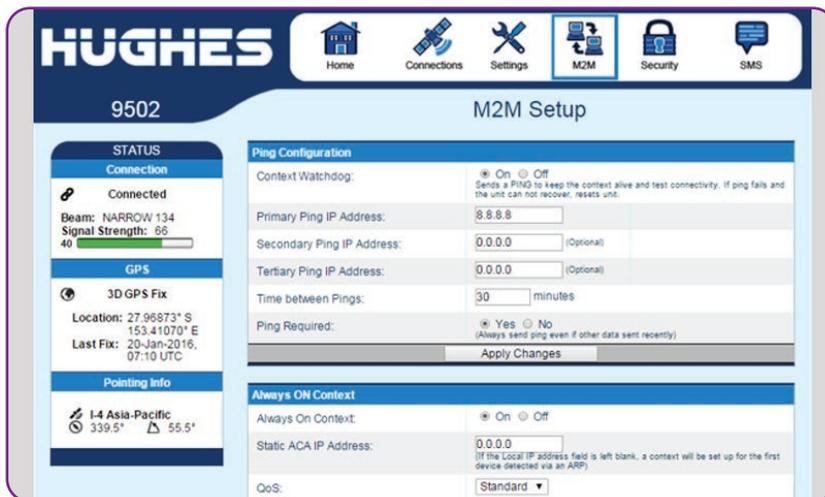
Pivotel strongly recommends setting up SMS white lists to ensure only authorised users can establish remote access.

Step 7: Set up M2M settings: IP Ping Watchdog. (Default Status: OFF)

Go to **M2M > M2M Setup > Ping Configuration** and turn on the **Context Watchdog**. This will send a ping to the specified IP addresses to ensure the 9502 terminal is able to send traffic when required. If all of a list of addresses is unreachable, the terminal will automatically reboot. This avoids the need to manually reboot the terminal if it stops communicating.

Enter up to three IP addresses to ping and enter the time interval between each ping.

Select **Yes** to ping at the set interval, even if other data was sent recently. Click **Apply Changes**.

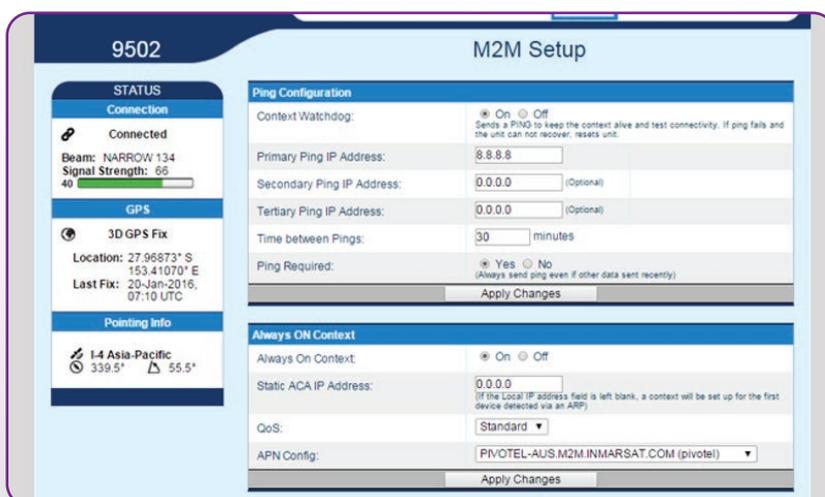


Step 8: Set up M2M settings: Always On Context. (Default Status: ON)

Enable **Always On Context** to allow the terminal to automatically establish a PDP context when it detects a device connected to its LAN port.

Static ACA IP Address: Specify if you want a specific device to activate the PDP context. For example, a PLC connected to the terminal with IP address 192.168.128.103. You can also set this to '0.0.0.0' and the system will establish a PDP context when detecting any device.

Ensure the correct Pivotal APN with 'pivotel' username is used. Click **Apply Changes**.



-  If you reset the terminal to its factory default settings, please ensure you add the username 'pivotel' to the APN. Check all settings are using the updated APN with 'pivotel' as the username. If not, reboot the terminal and check again.
-  The correct way to power cycle the device is to remove power from the unit.
-  LED status lights will go out after a period of time. To see the status of the terminal though the LED lights perform a short press of the function button. After the short press is performed the lights will temporarily come back on for 60 seconds.
-  Avoid long pressing the function button. There is a chance that with an Active PDP Context and a long press of the button could cause the firmware to become corrupt.
-  There are no SMSC settings on the Web UI.
-  IP Ping Watchdog is disabled by default. It needs to be enabled if required.
-  Always ON Context is enabled by default.
-  Remote SMS commands are disabled by default. This needs to be enabled if required.
-  DHCP Server is enabled by default. Network Operating Mode is NAT mode.
-  After making any of the changes above, reboot the terminal.