

# Thuraya IP+<sup>PLUS</sup>

QUICK SETUP GUIDE



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[www.thuraya.com](http://www.thuraya.com)

# Quick Setup Guide

## Readiness

### ► Pre Requisites

1. Location readiness
2. Thuraya IP+ readiness
3. Computer readiness

## Setting up

1. Obtaining a GPS fix
2. Connecting to the computer
3. Pointing to the satellite
4. Connecting to the network

# Location Readiness

## Location with a clear line of sight is critical

- ▶ Be aware of the location of the satellites.
- ▶ Obtain a clear line of sight with the satellite.
- ▶ Avoid obstruction of any objects in front of the Thuraya IP+ terminal or the external antenna (if used).
- ▶ Ensure enough power supply & sockets or power extension

# Thuraya IP+ Readiness

## Appropriately provisioned and active SIM Card is vital

- 1 - Thuraya IP+ satellite modem with a fully charged battery and the latest firmware version (2.0.1.1 – as of April 2013).
- 2 - Power adapter and cable (included in package).
- 3 - Ethernet cable (included in package).
- 4 - Appropriately provisioned and active Thuraya IP+ SIM card containing sufficient credit to be inserted into the SIM slot of the Thuraya IP+ terminal.
- 5 - Be aware of the details of the Thuraya IP+ terminal and the SIM Card.  
*IMEI number of the Thuraya IP+ terminal*  
*Firmware version*  
*MSISDN and serial number of the SIM card*

# Computer Readiness

## **Ensure that the browser is Java-enabled and the proxy settings are disabled**

1 - Desktop PC/laptop with any standard internet browser and Java installed.

2 - Ensure the proxy server settings in your browser are disabled.

(If using Internet Explorer, select Tools > Internet Options > Connections > LAN Settings and uncheck the box labeled 'Use a proxy server for your LAN').

3 - Disconnect any other active LAN connection on your PC.

(Control Panel>Network and Dial-Up Connections>Local Area Network>Click on Internet Protocol (TCP/IP)>Select 'Obtain an IP address automatically' and 'Obtain DNS server address automatically'>OK).

# Setting up – Step-by-Step Guide

**Follow each step to obtain a fix on the satellite and connect to the network**



- ▶ Obtaining a GPS fix.
- ▶ Connecting to the computer.
- ▶ Pointing to the satellite.
- ▶ Connecting to the network.

## Step 1 - Obtaining a GPS Fix

### **Clear line of sight with no obstructions is essential to obtaining a GPS fix**

- 1 - Place the Thuraya IP+ terminal outside on a flat surface with a clear view of the sky (avoid buildings, trees and other objects that may cause obstruction).
- 2 - Power on the Thuraya IP+ terminal by pressing the power button.
- 3 - Thuraya IP+ will automatically attempt to locate itself using GPS. This may take up to five minutes. The small GPS satellite icons on the display (shaded area in the illustration) illustrate how many GPS satellites are in view at any given time. You need all three satellite icons to be solid to obtain a GPS fix.

If any of the GPS satellite icons are missing or flashing, then the GPS signal is being blocked. When the GPS icon stops flashing, then the Thuraya IP+ terminal has successfully updated the GPS position.

## Step 2 - Connecting to the Computer

### Connect Thuraya IP+ to a computer via Ethernet or WLAN



#### 1 - Using Ethernet

Connect the Ethernet cable to your laptop's network interface and insert the other end of the cable into the Thuraya IP+ terminal as illustrated.



#### 2 - Using WLAN

Press and hold the WLAN button on the Thuraya IP+ terminal until the WLAN icon is displayed.

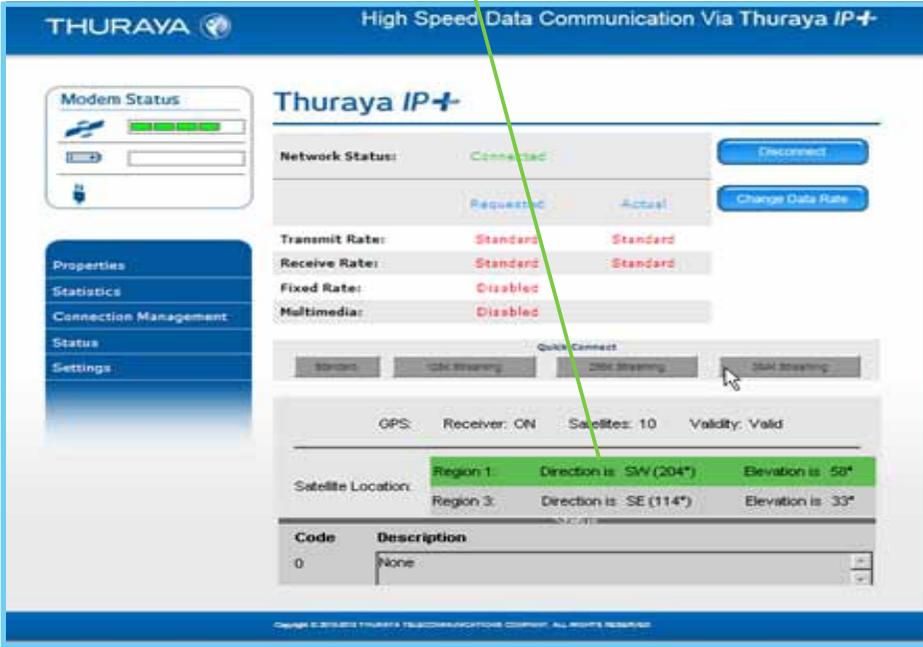
Switch on Wi-Fi on your computer and refresh the "Available Wireless Networks". Once Thuraya IP+ is displayed, press "Connect" to Thuraya IP+.

## Step 3 - Pointing to the Satellite

**Location with a clear line of sight is critical for a successful setup**

(Compass direction)

1 - Open the internet browser on your laptop/computer and enter <http://192.168.128.100>.



The screenshot displays the Thuraya IP+ web management interface. The main heading is "Thuraya IP+" and the sub-heading is "High Speed Data Communication Via Thuraya IP+". The interface is divided into several sections:

- Modem Status:** Shows a green progress bar and a signal strength indicator.
- Network Status:** Shows "Connected" with a "Disconnect" button. Below it are "Requested" and "Actual" fields, and a "Change Data Rate" button.
- Transmit Rate:** Shows "Standard" for both Requested and Actual.
- Receive Rate:** Shows "Standard" for both Requested and Actual.
- Fixed Rate:** Shows "Disabled".
- Multimedia:** Shows "Disabled".
- Quick Connect:** Includes buttons for "Standby", "GPRS Streaming", "2G Streaming", and "3G Streaming".
- GPS:** Shows "Receiver: ON", "Satellites: 10", and "Validity: Valid".
- Satellite Location:** Shows two regions:
  - Region 1: Direction is SW (204°), Elevation is 58°
  - Region 2: Direction is SE (114°), Elevation is 33°
- Code Description Table:**

Code	Description
0	None

A green line points from the text "(Compass direction)" to the "Direction is SW (204°)" field in the Satellite Location section.

The above is displayed in the browser (wMMI).

## Step 3 - Pointing to the Satellite

### Location with a clear line of sight is critical for a successful demo

- 2 - You must have a valid GPS location for the compass direction and antenna angle to be displayed. If the GPS is not valid, go back to step 1 and allow Thuraya IP+ to obtain GPS fix.
- 3 - Observe the wMMI home page display and note the compass direction and elevation for both the satellites in the "Satellite Location" section. The recommended satellite for your location will be highlighted in green. With the Thuraya IP+ terminal upside down, use the integrated compass to determine the direction of the recommended satellite that will be highlighted in green.



You must be able to obtain a clear view of the satellite in the sky for Thuraya IP+ to connect to the network. If the view to the recommended satellite is obstructed from your location, consider using the alternate satellite instead. If neither satellite is accessible from your location, you will need to move to a location that has visibility to at least one of the satellites.

## Step 3 - Pointing to the Satellite

### Location with a clear line of sight is critical for a successful demo

- 4 - Once you have determined the best satellite to use, shift the antenna stand to the correct elevation angle using the integrated protractor. Refer to the elevation



angle as indicated on the wMMI home page. With the elevation angle correctly set,

place the Thuraya IP+ on a flat surface with the antenna facing in the direction of the satellite as determined in step 1. The protractor fine-tunes the pointing of the antenna to the direction of the Thuraya IP+ satellite.

- 5 - You can optimize the receive signal strength by observing the signal strength display on the terminal while slowly turning it a few degrees clockwise and counter



clockwise. Find the direction that maximizes the signal strength.

Likewise, slowly raise and lower the antenna a few degrees and find the elevation that maximizes the signal strength. This step fine tunes the pointing of the antenna in the direction of the satellite.

## Step 4 - Connecting to the Network

**Once an optimal signal is obtained, automatic network connection follows**

1 - Once the Thuraya IP+ terminal obtains sufficient signal strength from the satellite, it will automatically connect and establish a Standard IP data session. Check this on the wMMI home page by confirming that the "Network Status" line shows "Connected".



Congratulations! Your Thuraya IP+ is successfully connected. You should now be able to send and receive data from your laptop to the internet using Standard IP.

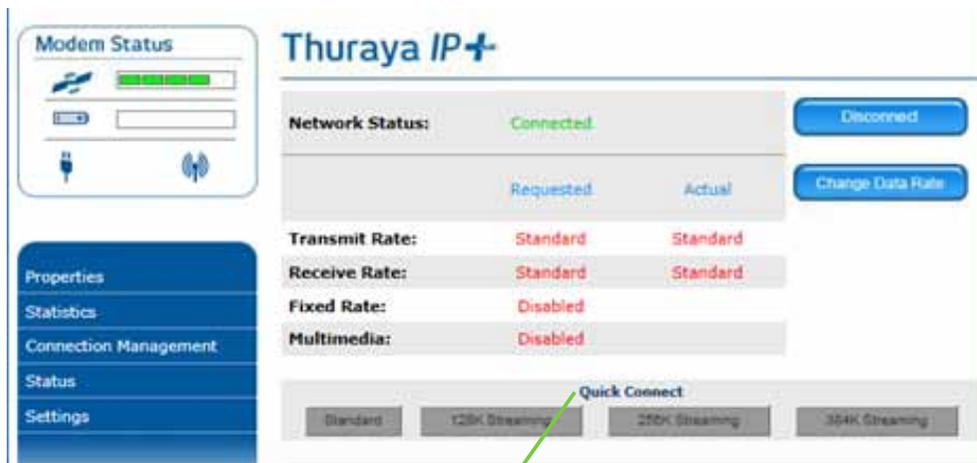
# Troubleshooting

## **There are various steps to review in the event connection is unsuccessful**

- 1 - If you are unable to successfully connect to the Internet, ensure that nothing but open sky is between the Thuraya IP+ terminal and the satellite. If the view is blocked by trees, mountains, buildings, metalized glass or similar objects, you must relocate the Thuraya IP+.
- 2 - Additional assistance can be found in the troubleshooting section towards the end of the Thuraya IP+ user guide.
- 3 - For further assistance, please contact Thuraya Customer Care at +88216100100  
Email : [customer.care@thuraya.com](mailto:customer.care@thuraya.com) and provide the "Extract Terminal Summary Log" information from the Properties page on the wMMI.

# Streaming IP Connection

**Thuraya IP+ by default will connect using Standard IP unless the default configuration is changed to Streaming IP**



Streaming IP

1 - Connecting to Streaming IP:  
On the wMMI, press the desired symmetric Streaming IP connection speed. The network status changes to "Acquiring" and then to "Connected".

2 - To connect at Asymmetric Streaming IP rates, go to "Change Data Rate" and select the desired rates and then connect.