Thuraya WE
User Manual
Draft rev K : 28 July 2017

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<< FRONT COVER >>

<< Inside front cover >>

Thuraya Logo/branding/….

? Thuraya Contact Details ?
    Support
    Help
    Sales
    Test number

    Version XX.XX
    Copywrite etc…

Contents

INTRODUCTION

<< *This introduction is for Thuraya to author and match to their media releases and brochures*>>

A Wi-Fi Hotspot device capable of connecting to Thuraya's Satellite Network and their 3G / 4G (LTE) Network roaming Partners

Key services
- Broadband data up to 384kbps
- Circuit switched voice over satellite
- VoIP
- SMS
- Dual mode, Satellite or LTE communication.

Using the smart phone application, the user will communicate with Thuraya WE via Wi-Fi. The user will be able to:
- Configure the Thuraya WE Device
- Send and receive SMS through the Thuraya WE device via Thuraya's Satellite Network and roaming Partners 3G/4G (LTE) Networks
- Make and receive calls through the Thuraya WE device via Thuraya's Satellite Network

SAFETY

PERSONAL RADIATION LIMITS

- Thuraya WE is a low power radio transmitter and receiver. When it is ON, it receives and sends out radio frequency (RF) signals
- Thuraya WE has an in-built transceiver and active antenna. This antenna transmits RF energy.
- International agencies have set standards and recommendations for the protection of public exposure to RF electromagnetic energy. These standards are based on extensive scientific review by scientists, engineers, and physicians from universities, government health agencies, and industry groups. They review the available body of research to develop ANSI standard. These ANSI standards are reviewed regularly for research development.

  »» International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1996

  »» Verband Deutscher Elektrotechniker (VDE) DIN-0848

  »» United States Federal Commission, Radio Frequency Exposure Guidelines (1996)

  »» National Radiological Protection Board of the United Kingdom, GS 11, 1988

  »» American National Standards Institute (ANSI) IEEE. C95. 1-1992

- Do not operate your satellite system when a person is within 57cm of the device. A person or object within 57cm of the antenna could impair call quality and may cause the device to operate at a higher power level than necessary and expose that person to RF energy in excess of that established by the FCC RF Exposure Guidelines.
- The Thuraya WE was evaluated against the FCC RF exposure requirements of 47 CFR Part 2.1091. An exclusion zone of 0.57m was required in front of the antenna, away from this area the electric field measured at 0.20m did not exceed the MPE limit.
- The Thuraya WE was evaluated against the CE RF exposure requirements of EN 62311:2008. An exclusion zone of 0.64m was required in front of the antenna, away from this area the electric field measured at 0.20m did not exceed the reference limit.
- As a precaution, please maintain the maximum body distance possible from the antenna during call transmission.

FCC NOTICES

Part 15 conditions

This device contains a Wi-Fi transmitter and associated digital circuitry that operate under Part 15 of the FCC Rules. The following notice applies to operations under Part 15: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1) This device may not cause harmful interference, and
2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

The Thuraya WE contains two FCC modular certified items with FCC ID: XPYTOBYL210 (3G/4G cellular module) and FCC ID: XF6-RS9113SB (Wi-Fi module). Both modules are internal to the product and are not user accessible. These FCC ID's can also be found written on the device label.

Radio frequency exposure
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

No modifications
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

ELECTRONIC DEVICES
Most modern electronic equipment is shielded from RF signals. However, certain equipment may not be shielded against the RF signals from your Thuraya WE.

Pacemakers
The Health Industry Manufacturers Association recommends that a minimum separation of six inches (6") be maintained between the Thuraya WE's antenna and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.
Persons with pacemakers:

- Should ALWAYS keep the Thuraya WE more than six inches from their pacemaker when device is turned ON.
- Should turn the Thuraya WE OFF immediately if you have any reason to suspect interference is taking place.

Other Medical Devices
If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information. Turn the Thuraya WE OFF in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Posted Facilities
Turn the Thuraya WE OFF in any facility where posted notices require such as hospitals and on-board aircraft.

BATTERIES
This product contains Lithium-ion rechargeable cylindrical cells. There is no user access to the battery and the device must be sent back to a service centre for replacement if required.

ACCESSORIES
Only approved accessories may be used with the device. Failure to do so may result in damaged to the device, property damage or personal injury or death.

EMERGENCY CALLS

The ability to make an Emergency Call with a missing, invalid or locked SIM is Network dependent and may not be supported

ESD

To avoid ESD (Electrostatic Discharge) damage to sensitive components, make sure you are properly grounded before touching any user interface ports: USB, SIM or Power.

HANDLING

Due to the nature of the tilting antenna, avoid putting your hand or any object between the housing and the antenna.

CARE & MAINTENANCE

Your Thuraya WE is a state-of-the-art satellite communications device designed for portable use in a wide range of operating conditions and locations. Always handle with care.
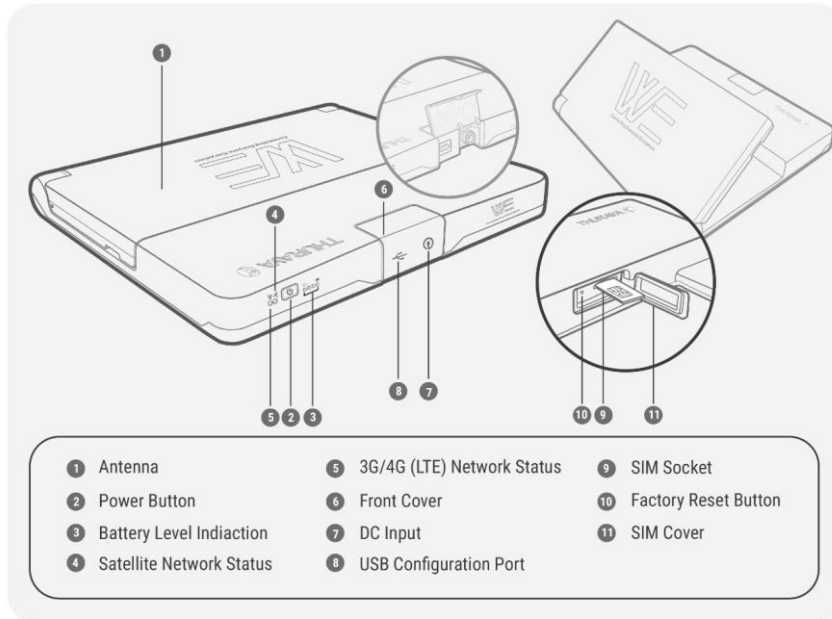
Recommendations for proper handling:
- The Thuraya WE antenna may be tilted up to 90 degrees to point to Thuraya satellite. Extending the antenna beyond 180 degrees would likely damage the hinge or electrical connections within.
- The front cover protects the USB and DC connectors. When not in use, it is recommended to put the cover back in place. Ensure that the connector is free from any foreign matter.
- The SIM cover must be firmly closed at all times to meet the IP54 rating. Avoid exposure to liquid or moisture as it can damage the internal electronic circuits.
- For uninterrupted use, avoid using the Thuraya WE beyond its specified operating temperature (refer to Product Specifications).
- Only use the provided AC plug pack with the device. Damage caused by unapproved accessory may void warranty.

Battery Recommendations:
- To maximize the life of the battery, avoid use in high or low temperature environments, outside the operating temperatures.
- Another way to keep the battery healthy, avoid completely discharging the battery. Leaving it partially charged, is good practice.
- If storing the device away for more than 1 month, ensure that the battery is charged between 30% - 50%. Make sure to store the device in a cool, dry place.
- Do not charge below freezing. The battery will only charge within the battery charging temperature (0°C and 40°C)
- Keep the device cool whenever possible. Move it away from heat-generating environments.

GETTING STARTED

DEVICE OVERVIEW

①	Antenna	⑤	3G/4G (LTE) Network Status	⑨	SIM Socket
②	Power Button	⑥	Front Cover	⑩	Factory Reset Button
③	Battery Level Indiaction	⑦	DC Input	⑪	SIM Cover
④	Satellite Network Status	⑧	USB Configuration Port		

BOX CONTENTS

- ☐ Thuraya WE (device)
- ☐ SIM card adapters
- ☐ User Manual
- ☐ AC plug pack (includes four international adapters)

External Power
The Thuraya WE should only be powered by the supplied AC plug pack.

PRODUCT SETUP

CHARGE THE DEVICE / POWER INDICATIONS

The Thuraya WE partially charged, when shipped. Prior to initial use, it is required to charge the Thuraya WE for at least 3 hours. To charge the device for the first time:

1. Fit the AC plug pins for in your region to the world to the plug pack.
2. Open the front cover and plug the DC cable to the Thuraya WE. With a gentle push, turn the lock ring clockwise to ensure a waterproof seal. See photo below.
3. The Thuraya WE will begin charging whenever the DC plug pack is connected. The four battery level indicators will show the charge state of the battery.
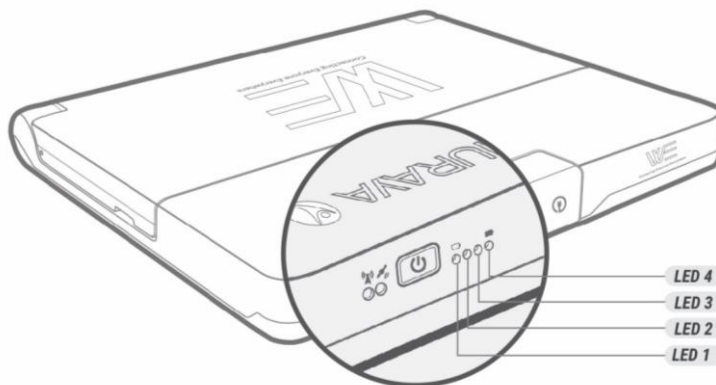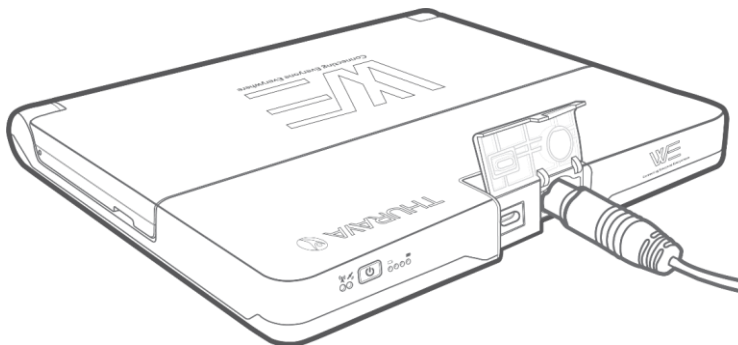

LED 4
LED 3
LED 2
LED 1

BATTERY CHECK					CHARGING PROCESS				
🔋		🔋			🔋		🔋		
LED 1	LED 2	LED 3	LED 4	Current Battery Life	LED 1	LED 2	LED 3	LED 4	Current Battery Level
🟢	🟢	🟢	🟢	91% ~100%	🟢(flashing)	◯	◯	◯	Less than 10%
🟢	🟢	🟢	◯	61% ~90%	🟢	🟢(flashing)	◯	◯	11% ~30%
🟢	🟢	◯	◯	31% ~60%	🟢	🟢	🟢(flashing)	◯	31% ~60%
🟢	◯	◯	◯	11% ~30%	🟢	🟢	🟢	🟢(flashing)	91% ~100%
🔴(flashing)	◯	◯	◯	Less than 10%	🟢	🟢	🟢	🟢	Fully Charged

NOTE: Slow flashing red LED will be accompanied with a short tone to indicate dropping below 10%.
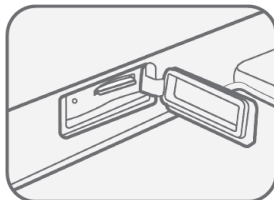
Insert the SIM

The Thuraya WE can readily accept a standard size SIM. Adapters are provided for a Micro or Nano sized SIMs.
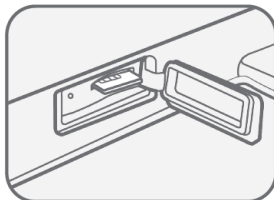
Insert SIM card with contacts facing up, as pictured below. Push the SIM card in to lock. To Eject, push the SIM card in again.
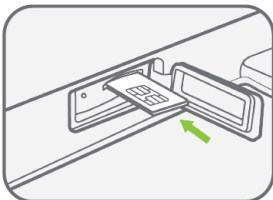
Insert the SIM card with
the contacts facing up.
Push the card in until it
'clicks' into position

When completely inserted,
the SIM card sits recessed
as seen above

Removal:
Push the SIM card and it
will be ejected as seen
above.

Return the SIM cover to its closed position to protect it from liquid spills and dust.
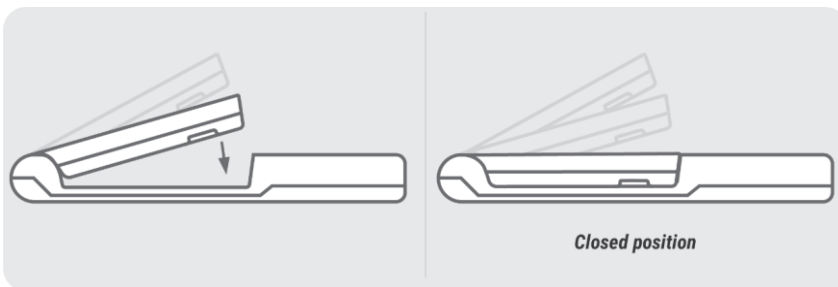
TURNING THE DEVICE ON

To turn the Thuraya WE on, press the power button for 3 seconds or until you hear a beep. A steady green power LED means the device is ready for use.

To check the battery charge level, press the power button for 1 second.

TURNING THE DEVICE OFF

Press the Power button for 3 seconds until you hear a single beep. Flip the antenna back to its closed position for safekeeping.

Closed position

RESTARTING THE DEVICE

Hold down the Power button for greater than 8sec and the device will restart.

SERVICE MODES

Upon turning on the Thuraya WE device, by default it will attempt to connect to the satellite network.

Users have the option to switch between Satellite and Cellular networks.

Important! *Only certain functionalities are available on a particular mode.*

The Thuraya WE will enable users to select one of the following modes:

1) **SATELLITE MODE**
   Voice (default mode): Allows users to make/receive satellite voice call and SMS using their smart devices running the Thuraya WE APP.
   Data: Allows users to access the internet via Satellite network using Wi-Fi connected smart device or a computer.

2) **CELLULAR MODE**
   Data: Allows users to access and the internet via cellular 3G or 4G/LTE using Wi-Fi connected smart devices.
   Allows users to send and receive SMS messages using their smart devices running the Thuraya WE APP.

Note:
1. Only one mode can operate at a time.
2. Data usage counter may be used as a guide but is not an accurate representation of the actual usage.
3. In Cellular mode, additional network selection options can be configured by tapping the network registration area in the dashboard

Mode Switching:
A user can switch between Satellite and Cellular mode manually. Switching modes may interfere with active services. Switching between modes may take up to 3 minutes. Icons and status messages will indicate the progress of the transition.

Smart (Auto) Switching:
When enabled, the Thuraya WE will always choose the best available service (either satellite or cellular network) on every power on or restart depending on the type of service the SIM supports.
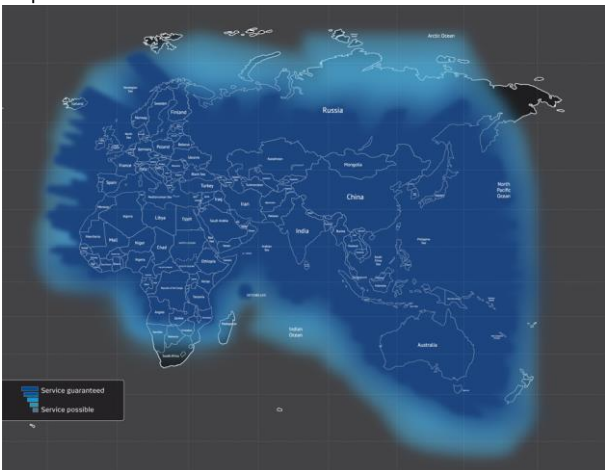
SATELLITE MODE

Satellite mode includes two sub modes "Voice" mode (default) and "Data" mode.
In Voice mode, the users can place phone calls as well as send SMS's. Only a single phone call can be made at any given time.
Switching to Data mode only allows the users to access the Internet.

Take the Thuraya WE outdoors. Make sure the antenna has a clear and unobstructed view of the sky in a region serviced by the Thuraya network. Refer to image below for the Thuraya satellite coverage map.


Pointing to the Satellite
The Satellite Antenna Pointing Assistance (S.A.P.A .), can be used to guide the user to point the device to the satellite.
The Thuraya WE will emit a tone indicating signal strength. The higher the pitch/more continuous the beep, the better the signal strength.
A visual guide (S.A.P.A. bar) is also available on the APP and Web Portal to show the signal strength while pointing to the satellite.

| Short beeps | longer beeps | Continuous tone |
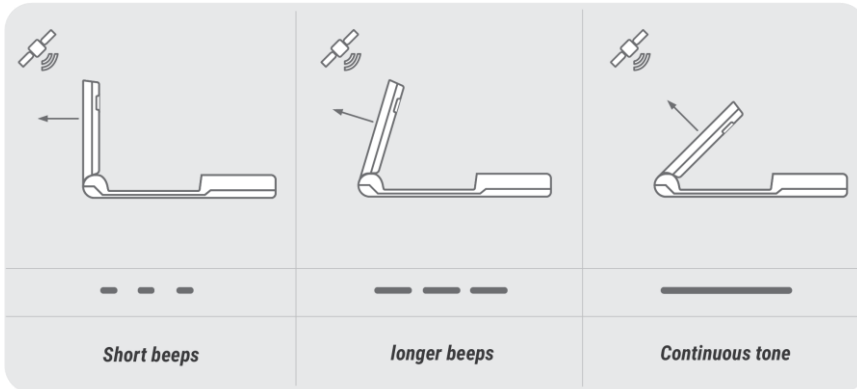
The signal strength is represented in different colours. When the S.A.P.A bar is:
RED, the terminal will not be able to register with the Satellite network.
YELLOW, the satellite signal is marginal and registration and service may not be available.
GREEN, the terminal will be able to register with the network to access voice or data services.

Tip on efficient operation:
Do not move the Thuraya WE when it has been positioned to receive the best signal available.

CELLULAR MODE

Switch to Cellular mode. In cellular mode, the Thuraya WE allows the user to send SMS messages and browse the web, if Data service in enabled in the Dashboard. SMS's can be sent by different smart devices simultaneously, however as only one SMS can be sent out at a time, newly written SMS's will be added to an outbound queue.

NOTE: SMS's can be sent while Data services is active, all connected smart devices can browse the Internet concurrently with the only limitation being the connection bandwidth.

Thuraya Partner Network Roaming Services Coverage Map
For a complete list of roaming partner services see …<add Thuraya link>

CONNECTION OPTIONS

The Thuraya WE device allows up to 10 smart devices to be connected simultaneously via Wi-Fi.

HOW TO CONNECT TO THE THURAYA WE

On your smartphone, tablet or computer open your Wi-Fi settings. With the Thuraya WE device ready for use, connect to the SSID WE-TCFxxxxx (where 'xxxxx' is a number).   SSID can be found on the label at bottom of the device. Default Wi-Fi password is 'password1234' (sans quotes).
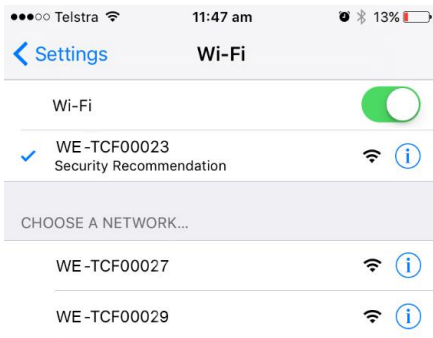
Once connected you can begin using 'The WE APP' or the Web Portal.

Commented [FS3]: Thuraya to notify the correct term eg. WE App, Thuraya WE APP or The App??

A menu map is provided below to guide users within The WE App or Web Portal.

CALL (WE App only)
>Dial a number
>View previous calls
>Re-dial a previous number
>Message a previous called number
>Clear all previous calls

SMS (WE App only)
>View a previous conversation
>Create a new message
>Delete a conversation
>Delete a single message

DASHBOARD
>Change to satellite
>>Switch to voice mode
>>Switch to data mode
>>Turn on / off SAPA
>Change to cellular
>Use smart switching
>Change the cellular network
>Enable / disable broadband data
>View data usage
>Restrict / allow cellular data service
>Restrict / allow satellite data service
>View diagnostics
>>View power on test results
>>View hardware info
>>View battery info
>>View GNSS info
>>Download logs
>Disconnect

CONTACTS (WE App only)
>View a contacts numbers
>Call a contact
>Message a contact
>Edit a contact
>Add a contact to Favourites
>View Favourites
>Remove a Favourite

SETTINGS/SYSTEM
>Refer to the CONFIGURATION & SETTINGS section of the manual.
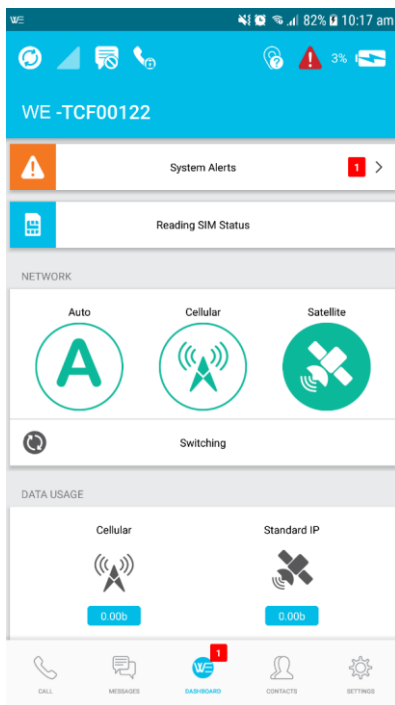
THE WE APP

The WE APP can be used to control and manage the Thuraya WE on Android and iOS, phones and tablets.

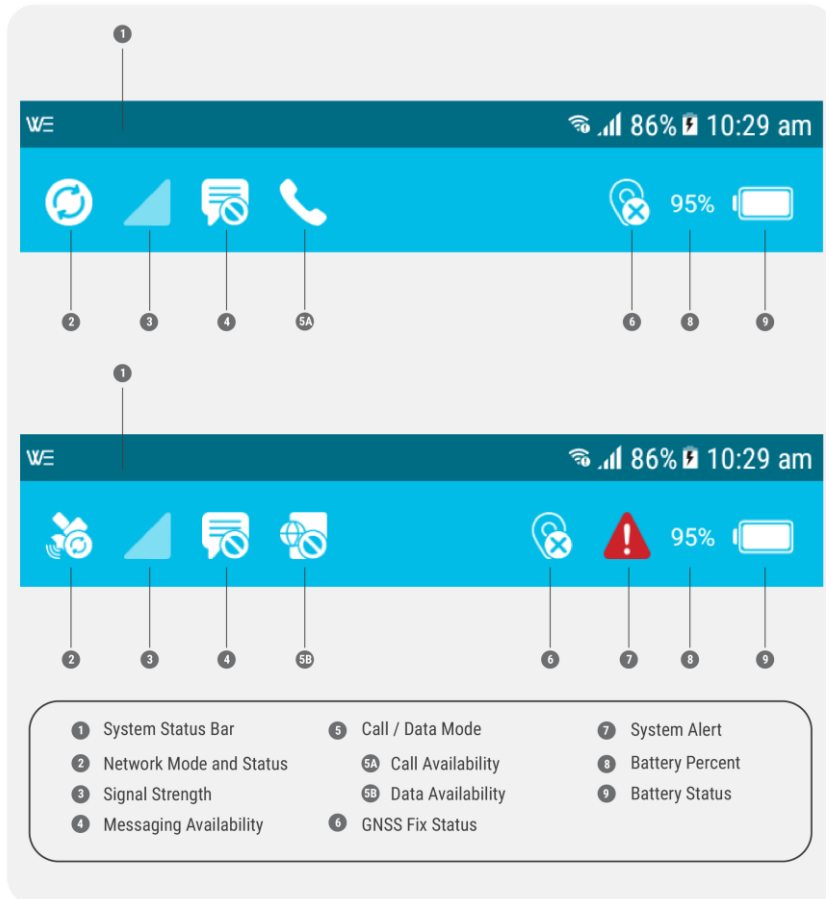Download 'Thuraya WE' from either the App Store or Google Play

The APP is available in eight languages. The language used by the APP will be based from the system language of the Smart Device. If the Smart Device language is not one of the eight available, the APP will default to English.

See the following basic Dashboard layout:

Thuraya WE APP status bar

1	System Status Bar	5	Call / Data Mode	7	System Alert
2	Network Mode and Status	5A	Call Availability	8	Battery Percent
3	Signal Strength	5B	Data Availability	9	Battery Status
4	Messaging Availability	6	GNSS Fix Status		

Satellite Mode – Voice

Make sure the Thuraya WE has registered before you proceed. On the dashboard, "Thuraya" will appear after the registration process is successful.

How to make a call

- To make a call, enter the full dialling sequence: 00 or + [Country Code] [Area Code] [Phone Number] using the country drop-down if required, or select a Contact. Press the phone button to initiate the call and press the red "hang up" button to end the call.
- Recent calls can be viewed from the 'Call' tab and Favourites can be stored and re-arranged to provide quick access to frequently used contacts.
- Smart Dialling can be enabled in settings which automatically adds the country prefix to a phone number. Please note that this will only be applied to numbers that don't already contain a country code prefix.

NOTE: With a valid SIM, calls to the Emergency number will always be available regardless of restrictions.
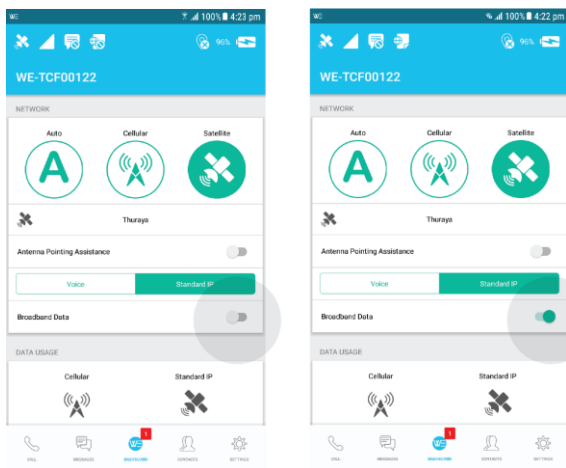
How to send an SMS

- SMS can be sent to a phone number or to an email address.
- To send an SMS to a phone number, enter the international dialling sequence of the intended recipient: 00 or + [Country Code] [Area Code] [Phone Number] or use the Smart Dialling country selection.
- To send to an email address, type in the email address in the 'To' field.

Satellite Mode – Data
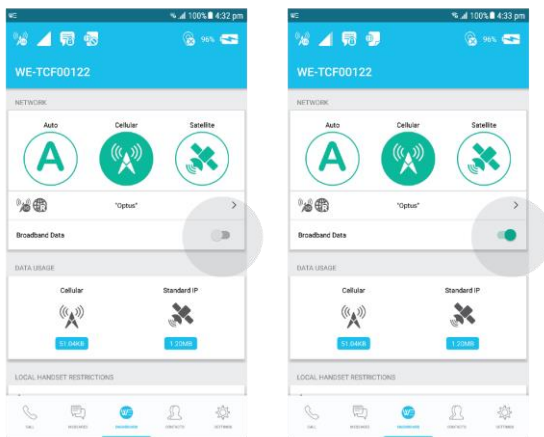
How to connect to the internet

- Switch to Satellite Mode – Data to connect to the internet via Satellite. Make sure the Thuraya WE is registered before you proceed. On the Dashboard, "Thuraya" will appear after the registration process is successful on the Satellite Network.
- Toggle the Data "Enable" switch to begin data session.

Cellular Mode - Data

How to connect to the Internet

- Make sure the Thuraya WE is registered with Cellular network before you proceed. On the dashboard, Cellular network provider will appear after the registration process is successful on the Cellular network.
- Toggle the Data "Enable" switch to begin data session.

How to send an SMS

- With the Thuraya WE, SMS's can be sent to a phone number.
- To send an SMS to a phone number, enter the international dialling sequence of the intended recipient: 00 or + [Country Code] [Area Code] [Phone Number] or use the Smart Dialling country selection.
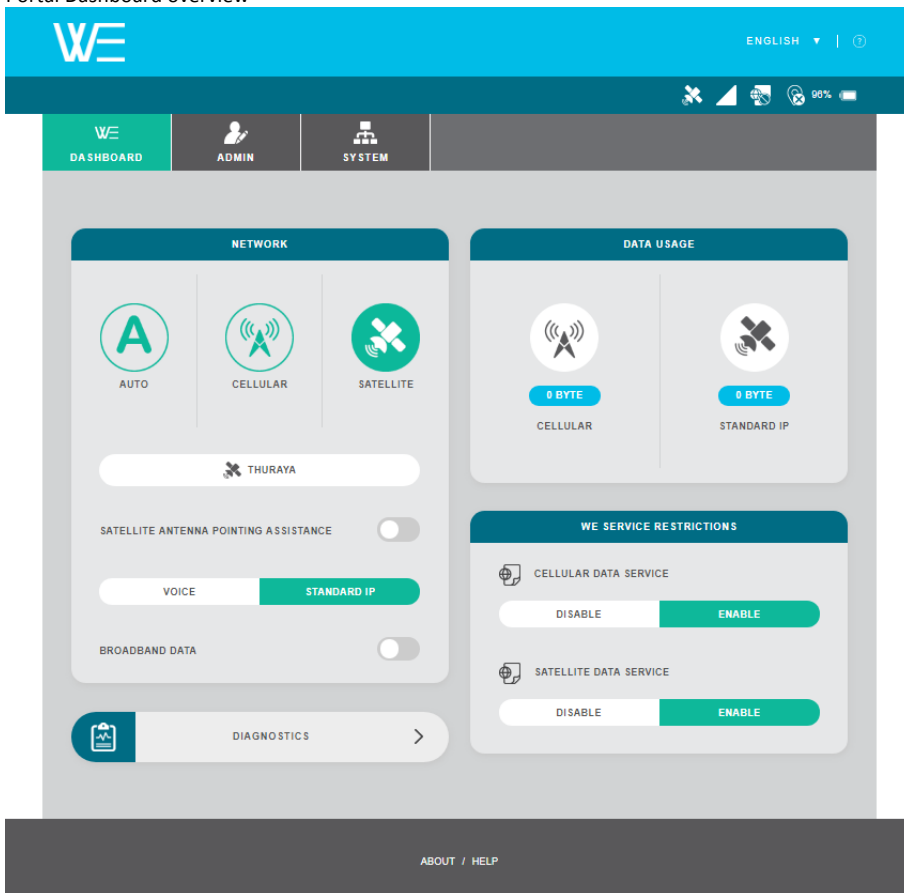
WEB PORTAL

Make sure that your computer is connected to your Thuraya WE via Wi-Fi.

To connect to the Thuraya WE, open a web browser and type in '**http://we.local**' (without the quotes) in the address bar.

The Web Portal offers the same functionality as the Thuraya WE APP but, it does not provide access to call and messaging features.

The language settings can be changed by using the drop down at the top right of the page.

Portal Dashboard overview

Thuraya WE web portal status bar

❶ Title Bar	❸ Signal Strength	❺ GNSS Fix Status	❼ Battery Percent	❾ Languages
❷ Network Mode and Status	❹ Data Mode	❻ System Alert	❽ Battery Status	❿ Help

Satellite Mode – Data
How to connect to the internet
- Switch to Satellite Mode – Data to connect to the internet via Satellite. Make sure the Thuraya WE is registered before you proceed. On the Dashboard, "Thuraya" will appear after the registration process is successful on the Satellite Network.
- Toggle the Data "Enable" switch to begin data session.
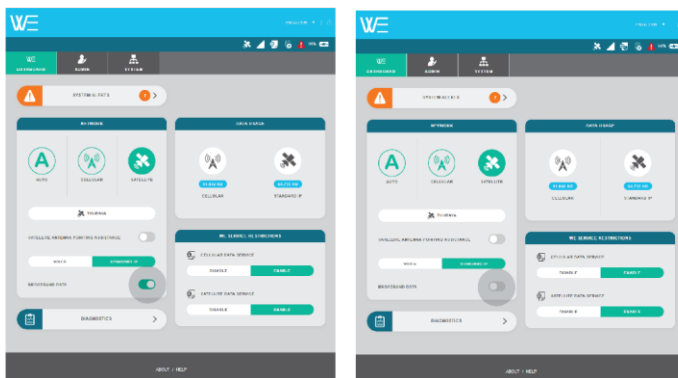
Cellular Mode - Data
How to connect to the Internet
- Make sure the Thuraya WE is registered with Cellular network before you proceed. On the dashboard, Cellular network provider will appear after the registration process is successful on the Cellular network.

- Toggle the Data "Enable" switch to begin data session.

CONFIGURATION & SETTINGS

USER CONTROL/RESTRICTIONS
Some features of the Thuraya WE can be configured by the Administrator to require a password to use. The default password is 'password'. These include:
- Making and receiving calls
- Sending and receiving SMS's
- Access to the Internet

Passwords are saved in the users smart device.

DASHBOARD
WE Service Restrictions
Cellular Data
Enable or Disable Cellular Data
Satellite Data
Enable or Disable Satellite Data

> **Commented [JZ4]:** Added this section as it was not mentioned anywhere in the user manual.

SETTINGS
Allows the end user to configure the Thuraya WE App and the device settings.

App Settings (Available on the WE APP Only)
App settings can be changed at any time and relate only to the current smart device.
Smart Dialling
When enabled it will automatically apply to contact numbers without an international prefix.
Clear Passwords
This will remove all saved passwords on the smart device.
Help
Help and usage guide
About
Version and legal information

Device Settings
Refers to the Thuraya WE device settings available on The WE App and Web Portal
Audible Alerts
Set the volume or turn off the sounds for alerts.
Automatic S.A.P.A
The automatic Satellite Antenna Pointing Assistance (S.A.P.A) can be enabled or disabled.
GNSS Configuration
Set the preferred and secondary GNSS services.
Power
Restart or turn off the Thuraya WE device.
Recent Call Logs
View the history of calls made, received and missed.
Logs
This is a file where events that occur in the Thuraya WE are recorded. This file may be requested for troubleshooting.

Terminal (WE) Firmware Upgrade (Web Portal only)

This is available in the Web Portal only. Please refer to 'How to Upgrade the Firmware' in the FAQ.

Transceiver Firmware Upgrade (Web Portal only)

This is available in the Web Portal only, allows the user to update the Satellite and Cellular transceiver firmware. Please refer to 'How to Upgrade the Firmware' in the FAQ.

Reset Factory Defaults (Web Portal only)

This allows the user to reset to factory defaults.

Admin (This is a separate tab on the Web Portal)

Admin settings are a set of advanced options for configuring the Thuraya WE device. This requires an administrator password to access from The APP. By default, this is set to 'password' but can be changed in the restriction settings.

Network

Enable Cellular network roaming or change the pre-defined emergency number.

Emergency Number (Web Portal)

A user can nominate a local or international emergency number.

APN

An Access Point Name (APN) is a gateway between a cellular network and Thuraya WE device. To utilise data services a valid APN should be provided. Thuraya WE automatically fill-up the APN details based on the selected cellular network. However, user can provide custom APN details. Please contact your SIM/service provider for APN details.

Wi-Fi

Change the Thuraya WE device's Wi-Fi settings.

Reset Usage (Web Portal only)

This allows the user to reset the data usage counters.

Router

Configure the Thuraya WE device's IP, QoS, DMZ, Port forwarding, firewall, or MAC address settings.

Configure IP Address

Configure the Thuraya WE's IP address

Quality of Service (QoS)

Enable QoS to prioritise an RTP port range for VoIP traffic

DMZ

Enable DMZ and specify an IP address to forward all UDP and TCP traffic except for any rules listed in Port Forwarding

Port Forwarding

Enable/disable Port Forwarding and specify port mappings

Inbound Firewall

Enable inbound firewalls and exception rules

Outbound Firewall

Enable outbound firewalls and exception rules

MAC Filtering

Enable MAC filtering to block or allow all addresses with exception rules

SIM Lock

Enable/disable SIM lock to access network services.
Set up or change SIM PIN.

Restrictions

Restrictions allow the administrator to limit access to important features, consisting of three areas.
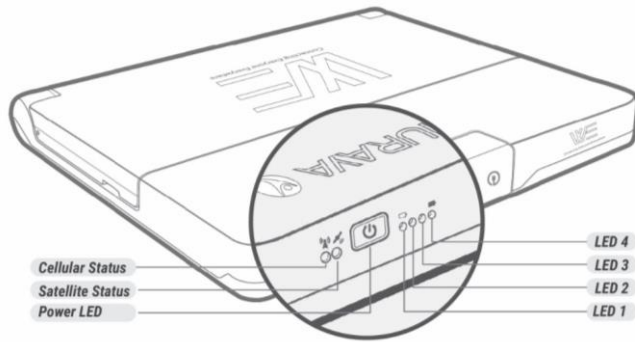
Admin Password
Update/change the Admin password

Call Services
Enable/Disable call restriction by requiring a password. Calls to emergency numbers will not be restricted regardless of the restriction setting.

SMS Services
Enable/Disable SMS restriction by requiring a password.

STATUS INDICATORS

SATELLITE/CELLULAR STATUS

LEDS	COLOUR	STATUS
🟢	Green	registered with GOOD signal strength
🟡	Yellow	registered with MEDIUM signal strength
🔴	Red	registered with POOR signal strength
🔴	Slow Red Flash	registration status UNKNOWN
🔴 🔴	Fast Red Flash	SIM error

POWER BUTTON

BUTTON	COLOUR	STATUS
⏻	Green	External power being supplied
⏻	Slow Green Flash	either - 3 sec display of Battery Level - Remaining battery capacity less than 10%
⏻	Slow Red Flash	Device in START UP or SHUT-DOWN process
⏻	Fast Red Flash	Charging Fault or System error

PRODUCT SPECIFICATIONS

POWER SPECIFICATIONS

Rated Input:	12V DC, 3A max	12V ± 0.6V
Battery Type:	Lithium Ion, rechargeable	
Battery Capacity:	7.4V, 6Ah, (2S2P)	
Min Charge cycles:	300	At 75% Depth of Discharge (DoD)

RUN TIMES (BATTERY)

Cell - standby:	20 hrs
Cell - Data:	9 hrs
Sat - standby:	6 hrs
Sat - voice:	5 hrs
Sat – Data:	3 hrs

PHYSICAL

Weight:	1.0Kg	
Size:	230mm x 197mm x 24mm	
DC input Connector	2.5mm ID / 5.5 OD Jack	Centre Positive.
SIM Port	Mini	

ENVIRONMENTAL

Operating Temperature	-20°C to +55°C	Device ambient temperature
Transport Temperature	-20°C to +60°C	With Battery
Storage Temperature	-20°C to +60°C	With Battery
Battery Charging Temperature	0°C to +45°C	Battery Cell Temperature
Humidity	5% to 95% RH	At a temperature of 40degC
Ingress protection	IP54 compliant	Device only

SATELLITE SERVICES

Voice calls	Circuit Switch
Data	Up to 384Kbps
SMS	Voice mode only

CELLULAR SERVICES

Data	3G, 4G(LTE)
SMS	3G, 4G(LTE)

WI-FI

Range	30+ meters Clear line of sight
Number of clients	At least 10
Security	WPA2 Personal Authentication

GNSS SUPPORTED SYSTEMS

	GPS
	Glonass
	Beidou

REGULATORY & APPROVALS

FCC		FCC ID: YP9CIOF1701
CE		
Safety IEC 60950 & CB certificate		
ITU		
RCM		
REACH		
RoHS		
IP54		

ll
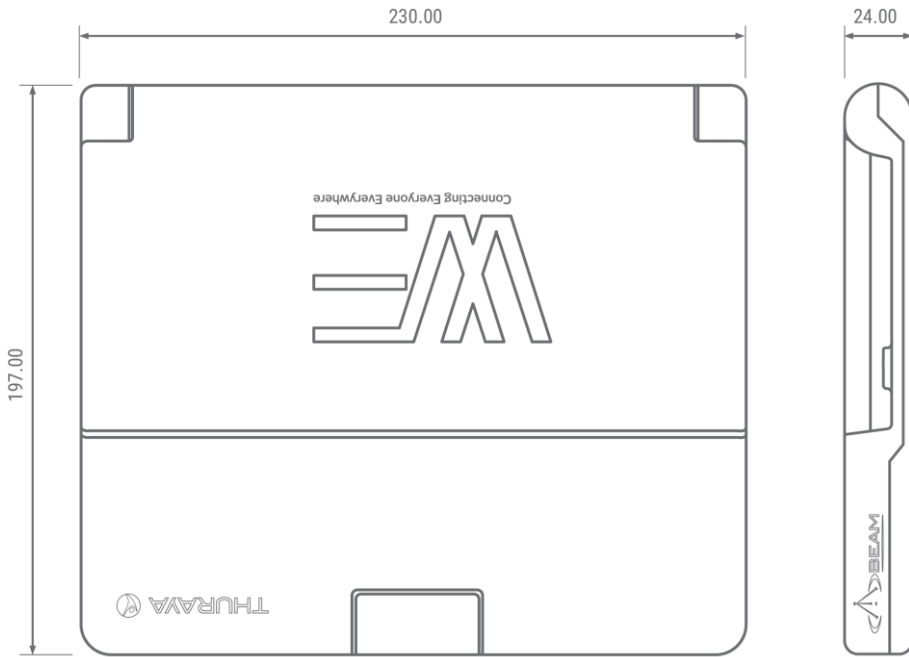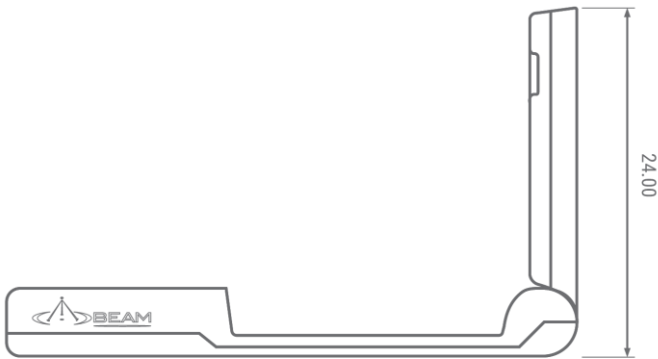
FAQs

1. **What services are available for the Thuraya WE?**

    Voice call and SMS via the Thuraya WE Satellite Voice mode.
    Data (Standard IP data service up to 384Kbps) via the Thuraya WE Satellite Data mode.
    LTE (data service) and SMS via the Thuraya WE Cellular mode.

2. **Where is the service available?**

    The Thuraya satellite footprint covers more than 2/3rd of the globe and includes countries in Europe, North and Central Africa, large parts of Southern Africa, the Middle East, Central and South Asia, Asia Pacific and Australia. <Insert hyperlink from Thuraya website on Thuraya Satellite coverage map> for more information about this service.

    LTE Roaming options will be available through Thuraya Roaming networks. Please visit <insert hyperlink from Thuraya website on list of LTE roaming partners> for more information about this service.

3. **What is the default WI-FI password in the Thuraya WE?**

    The default WI-FI password is password1234
    Once a user is logged in as admin, the password can be updated.

4. **The Thuraya WE picks up satellite signal but cannot register in Satellite Mode.**

5. **The Thuraya WE require good satellite signal strength and GPS/GNSS lock before it can** register to the Thuraya network.
    It is best to take the Thuraya WE out in the open with direct line of sight to the satellite as aided by the S.A.P.A to get the best signal reception possible.

6. **On Cellular mode, the Thuraya WE cannot register to a local Cellular Network.**

    When roaming, it is best to check with Thuraya on available roaming partners on the location you are travelling to.
    Also best to check with the local roaming partner if additional network settings are required to access their network.

7. **Is the Thuraya WE IP Rated?**

    The Thuraya WE is IP54 rated when the sim rubber cover is properly put back in place covering the sim slot.
    The USB and Power ports are IP rated even if the cover is open.
    If connecting power to the Thuraya WE, to maintain the IP54 rating, the connector must be screwed in tight.

8. **What's the battery life on the Thuraya WE?**

The Thuraya WE is expected to last for 6 hours on standby on a full charge.
Refer to the Battery Run Times on the Specifications section for more details.

9. **Can I wire 12VDC from my vehicle to power the Thuraya WE?**

No. The power from a vehicle will rise above the safe voltage range of a Thuraya WE. It is not safe to wire a vehicle's 12V supply to the Thuraya WE .

10. **Can the Thuraya WE operate indoors?**

The Thuraya WE supports LTE therefore it may work indoors while on Cellular mode provided LTE signal is available.

11. **How many users can the Thuraya WE support?**

10 users can connect and remain connected to the Thuraya WE at the same time.

12. **How does the Thuraya WE manage services with multiple connected users?**
In Satellite Voice mode, only user can make a call at one time. Other connected users will see a "Call in Progress" in the WE APP and will have to wait until the call is finished to make a call. If a call is in progress, any SMS sent will wait in queue and will be sent after the call is finished. SMS are queued in the order they are sent. Calls and SMS may be restricted by the admin.

In Satellite Data and Cellular mode, all users connected to the Thuraya WE will have access to the Internet when the service is enabled.

13. **My Thuraya WE do not power up.**

Assuming the battery is fully charged, the Thuraya WE will not power up if it is too cold or too hot. Place the Thuraya WE in a cool dry place and wait until the WE's temperature is approximately between -20 to 55 degrees Celsius.

14. **My Thuraya WE does not charge.**

When you plug in the charger, check if the Battery indicator is blinking. If it does not, make sure the Thuraya WE is between 0 to 45 degrees Celsius to enable charging.

15. **My Thuraya feels warm, is this normal?**

The Thuraya WE may warm up when used. This is normal. The Thuraya WE also comes with built-in smarts to safeguard itself from overheating and will notify the connected users and will shut itself down when necessary. To prevent the Thuraya WE from overheating, make sure to keep it under the shade away from direct heat of the sun or from any heat source.

16. **What do the Status Icons on both the WE APP and the Web Portal mean?**

The dashboard for both The APP and the Web Portal use the following status icons:

Commented [FS6]: This section can be removed from the manual and shown in FAQ

Icon	Description	App / Web Portal
	Registered on the Cellular 3G network	Both
	Registered on the Cellular 4G network	Both
	Registering on the Cellular network	Both
	Cellular network unavailable	Both
	Cellular network registration error	Both
	Switching between Satellite or Cellular network modes	Both
	Registered on the Satellite network	Both
	Registering on the Satellite network	Both
	Satellite network unavailable	Both
	Satellite network registration error	Both
	Broadband data active	Both
	Broadband data restricted	Both
	Broadband data inactive	Both
	Call services available	App
	Incoming call active	App
	Outgoing call active	App
	Call services error	App
	Call services restricted	App
	Call services restricted and incoming call active	App
	Call services restricted and outgoing call active	App

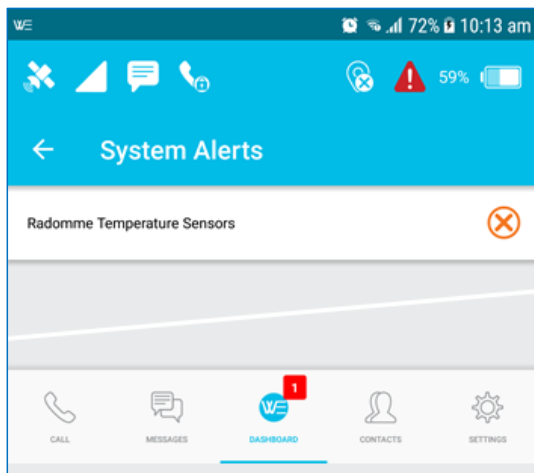| Icon	Description	App / Web Portal
	Call services unavailable	App
	Messaging available	App
	Messaging restricted	App
	Messaging unavailable	App
	Messaging error	App
	GNSS not seen	Both
	GNSS no fix	Both
	GNSS 2D fix	Both
	GNSS 3D fix	Both
	Registered on roaming network	Both
	Result OK	Both
	Result Unknown	Both
	Result Not OK	Both
	Battery remaining	Both
	Battery charging	Both
	Battery error	Both
	Battery missing	Both
	Battery unknown	Both
	Signal strength	Both
	System alert	Both

17. Is there a list of all possible alerts and error messages with description of what they mean?

A table below lists all possible Thuraya WE alerts that will help the user interpret and make appropriate actions. The following alerts could occur during operation of the Thuraya WE and will be displayed in the System alerts section of the app.

| Alert	Description
Battery Presence	The battery could not be detected
Charger Fault	The battery is unable to charge
Device Temperature Sensors	Thuraya WE cannot read device temperature
Antenna Temperature Sensor	Thuraya WE cannot read antenna temperature
Satellite Temperature Sensor	Thuraya WE cannot read satellite temperature
Battery Temperature Sensor	Thuraya WE cannot read battery temperature
Location Data	Thuraya WE cannot receive location data
Wi-Fi Interface	Thuraya WE cannot communicate over Wi-Fi transceiver
Satellite Transceiver	Thuraya WE cannot communicate with satellite transceiver
Cellular Transceiver	Thuraya WE cannot communicate with cellular transceiver

18. Thuraya Support personnel requested me to extract and send me log files from the Thuraya WE. How do I get that?

The Thuraya WE is equipped with diagnostic logging capabilities useful for Thuraya Support personnel. The log files are not for end users to use or interpret. Follow the procedure below to download the log files:

Via the IOS App.
   a. From the Dashboard, navigate to the "Diagnostics" view
   b. Tap "Logs"

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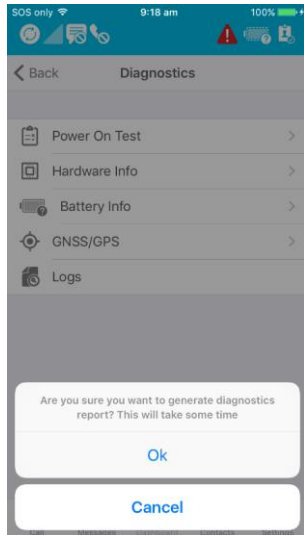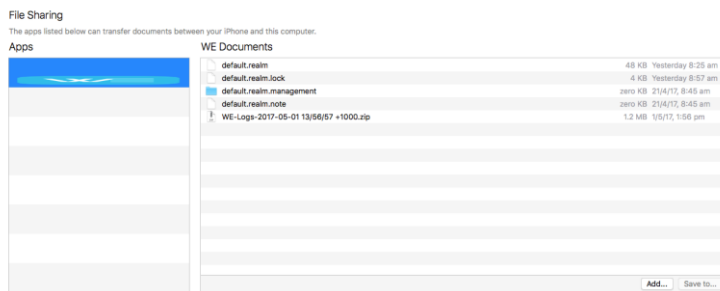
c. Tap "Ok"

d. The device will begin to package the logs and the handset will download them. This process may take some time. At the end, the handset will present a "Report Generated" message

e. Connect the handset to a PC, open iTunes. Select the device from the drop down list
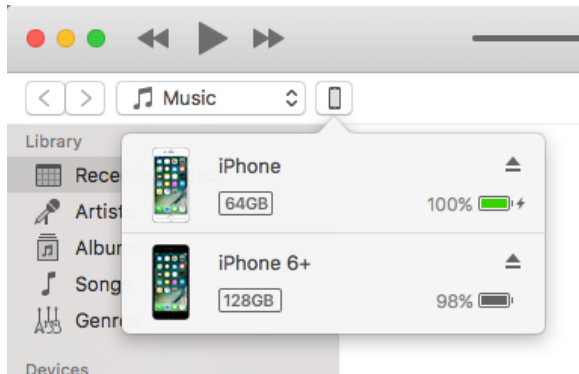
f. Select "Apps"
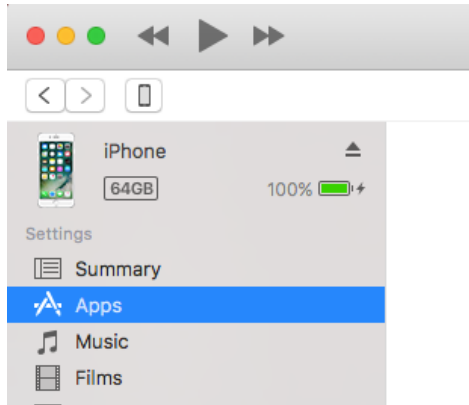
g. Scroll down to the "File Sharing" section, select "WE" from the Apps.

h. Select the latest *.zip file from the "Documents" list, select "Save to..." to save the logs

2. Via the Android App.
   a. From the Dashboard, navigate to "Diagnostics"
   b. Go to the 'Logs' item
   c. Press the download button, the logs will be downloaded to your 'Downloads' folder.
3. Via the Web Portal.
   a. From the Dashboard, navigate to the 'System' tab
   b. Click 'Logs'
   c. Click the 'Get Logs' button
   d. Depending on your browser, you will be asked where to save the log files.

The log file can be sent as an attachment to the requesting support personnel.

18. HOW TO UPGRADE THE FIRMWARE (Device, Cellular and Satellite transceivers)

The Thuraya WE firmware can only be upgraded via the Thuraya WE web portal. Contact Thuraya support for Thuraya WE firmware update. Download the firmware and save in your local drive.
Open a web browser and type in '**http://we.local**' (without the quotes) in the address bar and use the following steps:

1. Navigate to the 'System' tab.
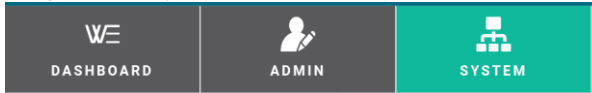
2. Select 'Terminal (WE) Firmware Upgrade' from the side bar.
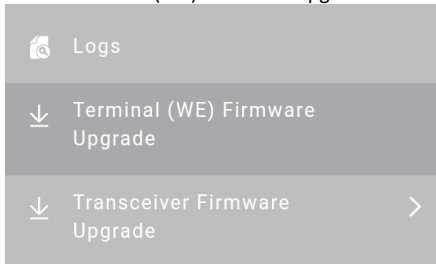
3. Press the 'Choose file' button and locate the firmware upgrade file.

4. Press the Terminal (WE) Firmware Upgrade button and wait for the process to complete.

SUPPORT CONTACT

For additional product support contact Thuraya:
Web: www.thuraya.com
Info: info@thuraya.com | Support: support@thuraya.com
Tel: +xx xxxxx xxxx | Fax: +xx x xxxxx xxxx

WARRANTY
<< Thuraya to add their Term & conditions >>

BASIC USER DETAILS

For future reference, record your Thuraya WE details here:

Serial #:   **TCF__ __ __ __ __**   *The product serial number found on the product label*

Wi-Fi SSID: _____   *The Wi-Fi SSID is written on the product label.*

Phone #: _____   *The phone number of your Thuraya WE*

Sat IMEI: _____

Cell IMEI: _____

THE END
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