

iSavi Model: SH-100 User Guide

Sat**Hub**

inmarsat The mobile satellite company** 0

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SAFETY INSTRUCTIONS

For safety and protection, please read the user guide before using the Satellite Terminal iSavi[™] Model: SH-100. In particular, do read this safety section carefully. Keep this safety information where you can refer to it, if necessary.

The following general safety precautions must be observed during all phases of operation, service and repair of this equipment. Failure to comply with these precautions or with specific warnings elsewhere in this user guide violates safety standards of design, manufacture and intended use of the equipment.

Addvalue Innovation Pte Ltd assumes no liability for the customer's failure to comply with these requirements.

HAZARD SYMBOLS

Your iSavi[™] terminal can generate a significant amount of heat depending on the system activities such as continuous transmission over a period of time and the underside surface will be hot.

Note: Reduce the risk of heat related injury by adhering to the following:

- 1. Handle with caution when touching the underside surface of the terminal, especially when in use or just after powering down.
- 2. Wait for the terminal to cool after powering down before stowing the device in an unventilated manner.
- 3. Do not leave children unattended within reach of the terminal.

Votre récepteur/terminal "iSavi"[™] peut générer une grande quantité de chaleur selon les activités du système, telles que la transmission continue pour une longue période, et la surface inférieure sera chaud.

Veuillez noter qu'on peut diminuer le risque d'une blessure causée par la chaleur en vous conformant aux directives suivantes:

- 1. Manipuler avec précaution lorsqu'on touche la surface inférieure du récepteur/terminal, en particulier au moment de l'utilisation ou juste après avoir éteint le récepteur/terminal.
- 2. Attendre jusqu'à le récepteur/terminal se soit refroidi après l'avoir éteint, avant l'entreposage dans un espace non ventilé.
- 3. Ne laissez pas les enfants sans surveillance à portée du récepteur/terminal.



ANTENNA RADIATION WARNING

During transmission the embedded antenna in the terminal radiates high power levels of radio frequency energy. This radiation is considered a health hazard to any personnel that come close to the antenna.

It is important to maintain a distance of at least 1 metre between the transmitting antenna and any personnel.



SERVICE

Users should not attempt to access the interior of the transceiver. Only qualified personnel authorized by its manufacturer may service the device. Failure to comply with this rule will result in the warranty being void.

BATTERY SAFETY

Use only Addvalue-supplied or approved AC adapters with the terminal and for recharging the batteries. The use of batteries that are not Addvalue-supplied or approved may pose increased safety risks.

Do not dispose of batteries in a fire, as they may explode.

Batteries may burn or explode if damaged.

Do not dismantle, open, bend or cut cells or batteries.

Do not attempt to modify or remanufacture the battery.

Do not immerse or expose the battery to water or other liquids.

In the event of a battery leak, avoid the contents coming into contact with the skin or the eyes. If this does happen, flush the affected areas with water and seek medical help as appropriate.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

ATTENTION

IL Y A DANGER D'EXPLOSION S'IL Y A REMPLACEMENT INCORRECT DE LA BATTERIE, REMPLACER UNIQUEMENT AVEC UNE BATTERIE DU MEME TYPE OU D'UN TYPE ÉQUIVALENT RECOMMANDÉ PAR LE CONSTRUCTEUR. METTRE AU REBUT LES BATTERIES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.

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iSavi[™] Model: SH-100 User's Guide [Nov 2014]

REGULATORY INFORMATION

FC Federal Communication Commission Notice

FCC Identifier: **QO4-ISAVISH100** USE CONDITIONS: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

NOTE:

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 radiates 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 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.

IMPORTANT NOTE: EXPOSURE TO RADIO FREQUENCY RADIATION

This Device complies with FCC & IC radiation exposure limits set forth for an uncontrolled environment. The Antenna used for this transmitter must be installed to provide a separation distance of at least 1 metre from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC CAUTION:

Any Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by FCC, to operate this Satellite Terminal, iSavi[™] Model: SH-100.

Industry Canada Statement:

IC Identifier: 5023B-SH100ISAVI

This device complies with Industry Canada license-exempt RSS-170 and RSS-GEN210 standard(s). Operations subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IMPORTANT NOTE: Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This antenna used for this transmitter must be installed to provide a separation distance of at least 1 metre from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

NOTE IMPORTANTE: l'exposition aux radiations

Cet appareil est conforme aux limites d'exposition aux rayonnements définies pour un environnement non contrôlé. Cette antenne utilisée pour ce transmetteur doit être installé pour fournir une distance de séparation d'au moins 100cm de toutes les personnes et ne doit pas être co-localisées ou opérant en conjonction avec une autre antenne ou émetteur.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a built-in patch and maximum 8dBi gain (or lesser) approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un 8dBi gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée quivalente (p.i.r.e.) ne dépassepas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Declaration of Conformity:

Addvalue Innovation Pte Ltd., 8, Tai Seng Link, Level 5 (Wing 2), Singapore 534158 declares under our sole responsibility that the Product, brand name as Wideye and model: SH-100 Satellite Terminal, iSavi[™] to which this declaration relates, is in conformity with the following standards and/or other normative documents:

ETSI EN 301 489-1, -17, -19, -20, ETSI EN 301 681, ETSI EN 300 328, EN 50385, EN 62311, ITU-R M.1480, IEC 60950 – 1 and EN 60950-1.

We hereby declare that all essential radio test suites have been carried out and that the above named product is in conformity to all the essential requirements of Directive 1999/5/EC.

The Conformity Assessment procedure referred to Article 10 and detailed in Annex [III] or [IV] of Directive 1999/5/EC has been followed with involvement of the following notified body(ies):

TIMCO ENGINEERING, INC., P.O BOX 370, NEW BERRY, FLORIDA 32669, U.S.A. Identification mark: 1177 (Notified Body number)

C E 1177 ①

The technical documentation relevant to the above equipment is held at:

- Addvalue Innovation Pte Ltd., 8, Tai Seng Link, Level 5 (Wing 2), Singapore 534158.
- Signed by

Mr. Tan Khai Pang (Chief Technology Officer, July 17, 2014) and

Mr. Prabakar Kuttaniseeri (Manager-Quality Management, July 17, 2014).

Your iSavi[™] satellite terminal is specially designed to be compact and easy to use with a standby battery lifespan that is comparable to laptops and smart phones. Together with a corresponding service package from Inmarsat, your iSavi[™] can meet the data and voice communications needs for the modern global business traveller, NGO field workers and many more types of user.

KEY FEATURES

- Built-in 802.11 b/g/n access point with 30 metre range (with built in Wi-Fi antenna)
- Data connectivity using Wi-Fi
- Voice connectivity using VoIP over Wi-Fi
- iSavi[™] terminal management via web console or smart phone and tablet Control app
- Detachable rechargeable battery module with built-in charging circuit
- Single unit with integrated antenna (all-in-one)
- Easy antenna pointing (with audio tone and LED feedback)
- Lightweight, robust, reliable
- IP65 Compliant (dust tight and protected against water jets)

CONFIGURATION INTERFACE

The user may configure the iSavi[™] terminal via three different configuration interfaces:

- i. Web Console
- ii. Smart phone and tablet Control app*
- iii. Voice app* (VoIP configuration for voice calls)

*Supplied separately- Search for IsatHub on your iOS or Android device (App Store or Google Play).

SYSTEM REQUIREMENTS Network Requirements	 IEEE 802.11b/g/n wireless clients Inmarsat IsatHub Micro-SIM card
Browser based Web Console Requirements	 Smart devices or personal computer with the following operating systems: iOS or Android[™], Windows[®], Macintosh[®], or Linux-based operating system
	 Recommended Browsers: Google Chrome[™] Safari[®] Internet Explorer[®] Firefox[®] Users have to ensure they have the latest version of Java[™] installed where necessary. Visit www.java.com to download the latest version.
IsatHub Control app and Voice app Requirements	Smart phone or tablet: iOS 6 or higher (minimum requirement: iPhone 4 / iPad 3) Android 4.1 or higher

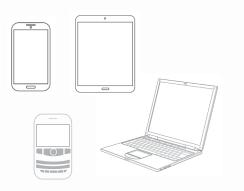
02 **GETTING STARTED**

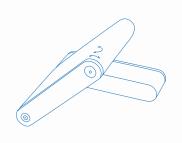
WELCOME

Congratulations on purchasing the Addvalue's Wideye[™] iSavi[™]satellite terminal.

SHARE ACCESS TO DATA CONNECTIVITY

Devices connected to your iSavi[™] satellite terminal over Wi-Fi can access data and calls.

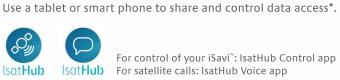




CONTROL SHARED ACCESS

The features of your iSavi[™] terminal can be conveniently controlled remotely.





For control of your iSavi[™]: IsatHub Control app For satellite calls: IsatHub Voice app

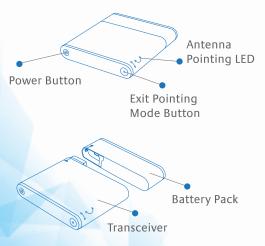


DOWNLOAD NOW Apps are available for iOS & Android.

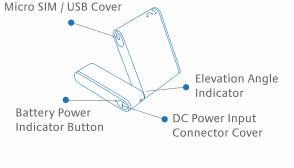
Alternatively use any web browser to control your iSavi[™] satellite terminal.

* Apps are supplied by Inmarsat

QUICK REFERENCE



Note: The antenna is embedded inside the transceiver.



Other contents in the box

Cable



Micro USB **USB** Drive



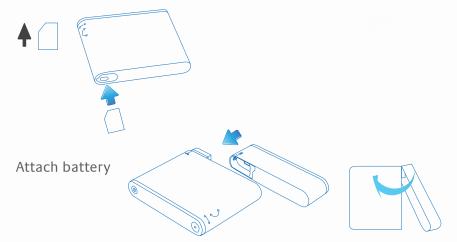
Guide



My iSavi™ Bag

iSavi[™] User Guide

Insert the Micro-SIM card with its gold-contacts facing down.



Attach the battery gently in the direction as shown until a click is heard.



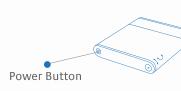
The charging time will be longer when $iSavi^{m}$ is switched ON

Insert charger lead and then plug in the adapter.

Your iSavi[™] should be charged for eight hours before first use.

Charging will cease automatically once the battery is fully charged.

You can check the battery level by pressing the 'Battery Power Indicator Button'.





After charging, place your iSavi[™] outside in a position with a clear view of the sky.

Switch your iSavi[™] on and leave it for a minimum of 1 minute.

Your iSavi[™] must acquire a GPS fix before you can connect to the network for the first time.

iSavi[™] TERMINAL CONTROL
Your iSavi[™] can be controlled in 2 ways:
i. Web console: Any browser provides access to configure and operate the terminal. Refer to page 13, NAVIGATING THE WEB CONSOLE.

ii. IsatHub Control app: The application is designed for everyday administration of your iSavi[™] terminal including managing data usage and sharing the data connection with other devices. It provides a more limited set of functionality than via the web console. The app for smart phones and tablets is available from App Store or Google Play for iOS or Android devices respectively.

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POINTING THE TERMINAL AND CONNECTING TO THE NETWORK

Make sure you place your iSavi[™] outside with a clear view of the sky. Your iSavi[™] needs be pointed towards the sky in the correct direction to ensure connection to the Inmarsat satellite network.

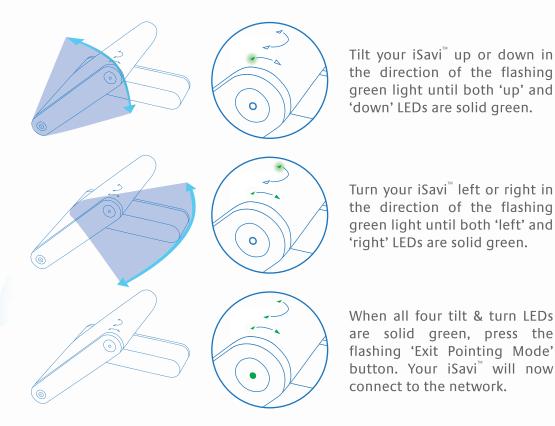
Turn on the terminal by pressing the Power Button for five seconds. It takes around one to two minutes for your iSavi^{\mathbb{M}} to power up and enter antenna pointing mode.

There are three methods for antenna pointing:

- i. LED visual pointing mode
- ii. Audio assisted pointing mode
- iii. Control app pointing assist

LED VISUAL POINTING MODE

By default, the antenna pointing is in LED Mode.



Note:

Once the network is available, all the four antenna pointing LEDs will turn off after one minute. The LEDs of 'Power' button and 'Exit Pointing Mode' button may sometimes be hard to see under bright sunlight. Use the signal strength indicator in the Control app or web console in bright environments.

If LEDs display any other pattern of illumination, please refer to Appendix A: Antenna Pointing LED Status Table



For safety reasons, never stand closer than one metre in front of your iSavi[™] terminal's transceiver when it is connected to the network.



Handle with caution when touching the underside surface of the terminal, especially when in use or just after powering down.

AUDIO ASSISTED POINTING MODE

- 1. The terminal is in LED visual pointing mode by default. To switch into Audio assisted pointing mode, press and hold 'Exit Pointing Mode' button for 5 seconds.
- 2. The four antenna pointing LEDs will change into a flashing green pattern when antenna pointing audio mode is activated, refer Appendix A: Antenna Pointing LED Status Table.
- 3. The beeping sound indicates the signal strength. The frequency of the beeping will become higher when the signal is stronger.
- 4. First, tilt the terminal up to 45 degrees from the horizontal.
- 5. Now turn the terminal slowly until the beeping frequency is maximized.
- 6. Finally, tilt the terminal up or down and fine tune the position until a further increase the beeping frequency is heard.
- 7. 'Exit Pointing Mode' button will turn to flashing green when the signal strength is good enough for network registration.
- 8. Press the 'Exit Pointing Mode' button to exit antenna pointing mode and start network registration.
- 9. Once network registration is completed, all the LEDs will turn off after one minute.

Note:

You are recommended to use Appendix A: Antenna Pointing LED Status Table as a guideline.

The LEDs of 'Power' button and 'Exit Pointing Mode' button may sometimes be hard to see under bright sunlight.

ANTENNA POINTING USING THE ISATHUB CONTROL APP

i. Before using this method, download the application from App Store or Google Play for iOS or Android devices respectively. Data downloaded over the iSavi[™] is chargeable, so use a free data service to acquire these apps where possible.

Refer to page 7 for GETTING STARTED.

- ii. Open the Control app on the smart phone or tablet.
- iii. Follow the on screen instructions and press 'Pointing assist' for specific help.

ACCESSING DATA AND CALLS

STEP 1

Connect to your iSavi[™] over Wi-Fi by selecting it from the list of available Wi-Fi networks.

The default Wi-Fi network name (SSID) and password can be obtained from the product label on the back of the iSavi^T terminal.

STEP 2

For smart device control of your iSavi[™], open the IsatHub Control app and follow the instructions presented to get started.

iOS and Android apps are available from App Store and Google Play respectively.

For control of your iSavi[™] from a web browser, access the web console by opening any web browser and typing http://192.168.1.35 (http://iSavi) into the address bar.

STEP 3

To access your chosen control interface, the default credentials are:

USERNAME: admin PASSWORD: 1234

STEP 4

Once your iSavi[™] is connected to the network, you are ready to start making and receiving calls on any iOS or Android smart device.

The IsatHub Voice app is available from App Store and Google Play. It is advised to install the application before connecting to the iSavi[™] satellite terminal.

Before you first access data over the network, you may need to enter the APN username and password supplied to you with your SIM card by your service provider. Please make sure you have these available.

Refer to the Data Profile section for the setting if required.





Note: For your security, please change the Wi-Fi password at the first opportunity.











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STEP 5

Once your iSavi[™] is connected to the network, you are ready to start a data session. Press the 'Data On' button to begin and 'Data Off' to end all connection to the Internet.





The web console provides data access through the 'Activate data connection' button on the Home page.



To stop access to data press 'Deactivate data connection'

Refer to the section Status of Terminal.

Note:

Signal strength needs to be at least 42dB and above for an acceptable service to commence. You may check the signal strength and registration status using the home page of the web console or the smart phone Control app.

If the signal strength level indicated in the web console is low under registered conditions, you can slowly adjust the terminal angle and monitor the signal strength displayed in web console.

Turn off the terminal by pressing the 'Power' button for five seconds.

MENU OVERVIEW

HOME DATA -	TELEPHONY -	SMS 🔻	SETTINGS -	LOGOUT
DATA	TELEPHONY	SMS	SETTINGS	
Data Profile	SIP Settings	Compose	Accounts	Terminal Settings - Reboot Terminal - Factory Reset - Firmware Upgrade
Firewall - Setup		Inbox	Wi-Fi - System Info - Wireless Setting	Terminal Info
Device Management		Sent	- Security Setting	- Information - Logs - Call Log
		Drafts	SIM Security - SIM Pin - Terminal to SIM	Language
				Support

STATUS OF TERMINAL

The **Home** page provides the status information of the terminal, pointing information and allows a data connection to be established.

3

Navigate to Home page in order to check for the following status:



Status	Indicates registration and data connection status.
Signal	Indicates terminal received signal strength.
GPS	Indicates GPS information.
Battery	Indicates available capacity of the battery.
Temperature	Indicates current operating temperature status.

Click "Activate Data Connection" or "Deactivate Data Connection" in order to activate or deactivate data connection.

Note:

Signal strength must be 42dB or above for the iSavi[™] terminal to successfully connect or register to the network. Signal strength can be improved by pointing more accurately.

If the signal strength level indicated in the web console is low under registered condition, you can slowly adjust the terminal's elevation and azimuth angles and monitor the signal strength displayed in web console.

DATA DATA PROFILE SETTING

Navigate to **Data > Data Profile** in order to modify the connection type.

Data Profile	iSaví	
Set as default		
Profile Name: default		
Access Point Name (APN):		
○ SIM	bgan.inmarsat.com	
User Defined	bgan.inmarsat.com	
Static IP		
Address APN Username:		
Static IP		
Address APN Password:		
WebConsole. They are those		are not those used to login to the fer for a static IP address subscription. If you ease leave them blank.
Limited Connection:		
Traffic Volume:	MB (1 ~ 1024)
Usage Warning:	%	
Update Settin	gs Delete Cancel	

Connection profile defines the connection type. User can select from a list of profiles to be the default primary profile and connection type.

Note:

From a smart phone or tablet, the Control app will always use the connection profile defined as default.

You can create your customized primary profile.

Profile Name

Change the profile name as desired.

Access Point Name (APN) By default, the APN from your SIM card will be selected.

Follow these steps to change the Access Point Name (APN):

- i. Select User Defined.
- ii. Enter the new APN in the field space provided (e.g. BGAN.INMARSAT.COM).
- iii. Enter the username and password if required (these details have been supplied by your service provider) if required.

IP Configuration

By default, a Dynamic IP Address is selected.

To use a Static IP Address:

i. Select Static IP Address and enter the IP Address in the space provided.

Limited Connection

By using the control app, you can configure and control the data usage of the user using limited volume options. Usage warning percentage is used to remind the user when the usage meet the required percentage of the data limit.

Note:

The data connection will be automatically deactivated when the volume used has reached the defined limit. The usage warning will prompt in the Web Console and the Control app.

FIREWALL PROTECTION SETTING

The firewall function is disabled by default and users need to navigate to the firewall setup page to enable it.

Setup

Navigate to Data > Firewall > Setup to change the Firewall protection profile setup.

HOME DATA	▼ TELEPHONY ▼	SMS -	SETTINGS 👻	LOGOUT
Firewal	l iSavi [*]			
Setup				
Firewall:	Disabled			
Profiles: Email Only (SMTP, All Internet Custom 1 Custom 2	IMAP,POP3)			

Note:

The Data Connection has to be re-activated in order for the new firewall setting to take effect.

Follow these steps to change the profile setting.

- i. Select profile name.
- ii. Click Edit to modify the predefined profile settings.

You can edit the profile name and predefined rules to allow or reject incoming packets.

Setup		
Name: low	Update Refresh Close	
Incoming Rule Default Action for Inco	ming Packets ⊚ Accept ⊚ Reject	
Rule Name	Enabled	
	<< < 1 2 3 4 5 > >>	
	Add Update Refresh Close	

16

You can edit the predefined outgoing rules by selecting the rule name.

Outgoing Rule				
Default Action for Outgoing Packets O Accept Reject	st			
Rule Name	Enabled			
+ FTP Data	Z			
+ FTP Ctrl	V			
+ SSH				
Telnet	V			
+ SMTP	Z			
+ DNS	V			
+ нттр	V			
+ POP3	V			
🕂 Ping				
44 4 1 2 3 4 5 56				
Add Update Refresh	Close			

Note:

Re-activate your data connection for the new firewall setting to take effect.

ACCESS RIGHTS SETTING ACCORDING TO MAC ADDRESS

Navigate to **Data > Device Management** to set the allowed MAC address and the access rights.

The MAC address is a number that uniquely identifies any device connected to a network. Once the device is connected to the terminal, the MAC address will be shown on the page.

From this page, you can also check the number of connected devices, their MAC addresses and the data usage of the terminal.

Name		MAC Address	Admin
Default Rule			
C0F8DA223F34		C0:F8:DA:22:3F:34	
		1 2 3 4 > >>	
	Add	Edit Delete Refresh	
😭 - Device connected			
Device connected:	1/128		
Upload:	1.66 MB		
Download:	0 byte		

You can add a new MAC address by clicking **Add** or creating a nickname for the existing MAC address by clicking on the **Edit** button. Data usage of the device is available at the bottom of the page.

Temporary Entry	
Name:	C0F8DA223F34
MAC Address:	C0:F8:DA:22:3F:34
Access Level:	Admin
Permissions:	 ✓ Incoming Call ✓ Outgoing Call ✓ Data
Update	Cancel
🚖 - Devices connected	
IP Address:	192.168.1.40
Upload:	214.72 KB
Download:	0 bvte

- i. Define a nickname for the device.
- ii. Check if the MAC address belongs to the smart phone or tablet used to host the Control app. Only one device is allowed to use the Control app at a time.
- iii. You can define access rights selecting the relevant permission options.
- iv. The settings are stored temporarily and are not retained after terminal is rebooted. If you plan to keep the same access rights settings, deselect **Temporary entry** so that the access rights are stored even after the terminal is rebooted.



TELEPHONY SIP SETTINGS

Navigate to Telephony > Call Setting > SIP setting > SIP Server to change the RTP Codec.

SIP Settings	iSavi
SIP Server	
Server Port:	5060
Register Expiry Time:	3600 second(s)
RTP Codec:	G.711u G.711u SILK

Note:

SIP calls with the iSavi[™] terminal require a special SIP client application on your smart phone or tablet. The IsatHub Voice app is available from the App Store or Google Play.

SIP calls from a Windows or Macintosh PC are not supported. For best results, please use the Isathub Voice App although other SIP clients may work but are not recommended and will need configuration.

SMS COMPOSING A NEW SMS

Navigate to SMS > Compose to enter compose page.

Compose	iSavi	
Phone no.:	0 /160	
		^
		~
	Send Save Clear	

Store a sent copy in SIM

- i. Enter the recipient's phone number in the Phone no. box. Type the message in the text editor box.
- ii. Click Send to send the SMS.
- iii. To save an unsent SMS, click Save and the unsent SMS will be saved in Drafts.
- iv. Check the box 🖌 if you wish to store a sent SMS on to the SIM card.

Note:

When sending an SMS with your iSavi[™] terminal you should always enter the full international phone number format for your recipient. This is true even if you are located in the same country as the recipient when sending the message.

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VIEWING RECEIVED SMS

Navigate to SMS > Folders > Inbox to view Received SMSs.

Reply to an SMS from Inbox:

- i. Select the SMS you plan to reply to by selecting the particular SMSs.
- ii. Click Reply.
- iii. The inbox console will switch over to **Compose** mode. Enter your reply in the text box. Click **Send** to send the SMS.

Forward an SMS from the Inbox:

- i. Select the SMS you plan to forward and click Forward.
- ii. The inbox console will switch over to **Compose** mode. Enter your reply in text box. Click **Send** to send the SMS.

Delete an SMS from the Inbox:

- i. Select the SMS you plan to delete and click **Delete**.
- ii. A single SMS or multiple SMSs can be deleted based on the selection.
- iii. Click **OK** to confirm the deletion, or **Cancel** to abort.

To Refresh the Inbox list:

i. Click **Refresh** and the list will be refreshed.

VIEWING SENT SMS

Navigate to **SMS > Folders > Sent** to view Sent SMS.

Resend a sent SMS:

- i. Select the SMS you plan to resend and click Resend.
- ii. The SMS will be sent to the recipient.

Forward a sent SMS:

- i. Select the SMS you plan to forward and click Forward.
- ii. The Sent console will switch over to the **Compose** mode.
- iii. Enter the recipient's number in the Phone No. field.
- iv. Click Send.
- v. The SMS will be sent to the recipient.

Delete a sent SMS:

- i. Select the SMS you plan to delete.
- ii. Click Delete.
- iii. Click **OK** to confirm the deletion, or **Cancel** to abort.

VIEWING DRAFT SMS

Stored SMSs are saved inside the draft folder. Navigate to SMS > Folders > Draft to view Draft SMSs.

Send a draft SMS:

- i. Select the draft SMS you plan to send and click Send.
- ii. The SMS will be sent to the recipient.

Forward a draft SMS to other recipient:

- i. Select the draft SMS you plan to send and click Send.
- ii. Click Forward.
- iii. The draft console will switch over to the **Compose** console.
- iv. Enter the recipient's number in the Phone No. field.
- v. Click Send.
- vi. The SMS will be sent to the recipient.

Delete a draft:

- i. Select the draft SMS you plan to send and click Send.
- ii. Click Delete.
- iii. Click **OK** to confirm the deletion, or **Cancel** to abort.

SETTINGS CREATING ACCOUNT FOR WEB CONSOLE ACCESS

Navigate to **Settings** > **Account** to create or edit an account for Web Console and Control app access. By default, the password for admin is **1234**.

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Only one User and one Admin account are allowed for your iSavi[™].

Accounts		iSavî [™]
Users: 1/2 admin		Add
		Delete
		Change Password
	Ŧ	

Add a new account:

i. Click Add.

Accoun	ts	iSavi
Username:	user	
New Password:		
Re-type Password:		
Add	Cancel	

- ii. Fill in New Password and Re-type Password.
- iii. Click Add.
- iv. The new account will be added into the account list.

Delete an account:

- i. Select the account which you want to delete.
- ii. Click Delete.
- iii. Account name is deleted successfully it is removed from the account list.

Change account password:

i. Select the account which you want to change the password (example: admin).

Username:		admin
Old Password:		
New Password	:	
Re-enter New I	Password:	
	Update	Cancel

- ii. Fill in the Old Password, New Password and Re-type Password.
- iii. Click Update for the new password to take effect.

CHANGING SSID AND WI-FI PASSWORD

Navigate to **Settings > Wi-Fi> Wireless Settings** to change network mode and network name.

Wireless Settings	
Network Mode:	802.11b 👻
Network Name (SSID):	
Allow SSID Broadcast	
Channel:	Auto 👻
	Update

Note:

SSID network name is the Wi-Fi network name that other users will see on their smart phone, tablets or personal computers when they view a list of available networks.

You can get the default SSID of your iSavi[™] from product label.

After changing the Wi-Fi setting, please ensure to re-establish the Wi-Fi connection again.

Navigate to **Settings > Wi-Fi> Security Settings** to set password of your Wi-Fi network.

Security Settings	
Security Mode: O Disabled WEP	
Authentication Type:	Open Key 🔻
Default Key:	1 -
Key: © WPA - Personal Encryption Type:	Auto -
Passphrase: • WPA2 - Personal Encryption Type:	Auto
Passphrase:	• 1010
	Update

Security Mode: **Disabled** or select the security mode for the wireless local area network.

Three different security modes are available:

• Wired Equivalent Privacy (WEP)

For 64-bit encryption - You can enter either 5 ASCII characters or 10 hexadecimal digits (any combination of 0-9, a-f, A-F, empty string is not permitted).

For 128-bit encryption - You can enter either 13 ASCII characters or 26 hexadecimal digits (any combination of 0-9, a-f, A-F, empty string is not permitted)

- Wi-Fi Protected Access[®] Personal (WPA) You can enter 8-63 characters of keys for the password.
- Wi-Fi Protected Access[®] 2 Personal (WPA2) You can enter 8-63 characters of keys for the password.

WPA2 is highly recommended over WEP for a higher level of security.

Note:

The default SSID password of your iSavi $^{\scriptscriptstyle\rm M}$ is configured under WPA2 mode.

To help safeguard your data connection and the associated bill, please change the default SSID password printed on the product label of your iSavi[®] to your preferred password as soon as possible.

CONFIGURING SIM SECURITY

SIM PIN

If the security feature is enabled, a prompt requests you to enter the SIM PIN each time you power up your iSavi[™]. This helps prevent unauthorised use of your SIM. Disable this feature to skip the PIN entry process.

Navigate to Settings > Security> SIM Security> SIM PIN to enable SIM PIN.

- 1. Click SIM PIN to configure the SIM PIN settings.
- 2. Select **Disabled** if you do not need to set the SIM PIN.
- 3. Select Enabled to set the SIM PIN.
- 4. Enter the PIN number in the space provided and click Apply.

Note:

The SIM PIN depends on the SIM card. Consult your service provider if necessary.

IOME	DATA	*	TELEPHONY	*	SMS	*	SETTINGS	•	LOGOUT
SIM	Se	CL	ırity		iSav	vî [™]			
SIM PIN	1								
PIN [©] Enabl Enter PIN	N:	Disa Apply	bled						

TERMINAL TO SIM

Once Terminal to SIM is activated, your iSavi[™] will prompt for the password everytime when you reboot the terminal. The same password is used for the Factory Reset PIN.

Navigate to **Settings > Security> SIM Security> Terminal to SIM** to enable Terminal to SIM PIN.

- 1. Click Terminal to SIM to configure the Terminal to SIM settings.
- 2. Select **Disabled** if you do not need to enable Terminal to SIM.
- 3. Select **Enabled** to enable Terminal to SIM locking.
- 4. Enter the PIN number in the space provided and click Update PIN.

Terminal To S	IM		
PIN © Enabled @ Enter PIN:	Disabled Apply		

TERMINAL SETTINGS

Navigate to **Settings > Terminal Settings > Reboot Terminal** to reboot the terminal.

Reboot Terminal	
Click on the button to reboot the Terminal:	

Navigate to **Settings > Terminal Settings > Factory Reset** to factory reset the terminal.

Enter security code for factory reset (Default:0000).

Factory Reset	
Security code:	Factory Reset
-	ry Reset" will reset all of the system configuration settings to default values and clear all e non-volatile memory.

Note:

By default, the security code is 0000. Once you change Terminal to SIM PIN, Factory Reset password is depends on the Terminal to SIM PIN.

FIRMWARE UPGRADING

iSavi[™] User Guide

Firmware upgrade allows you to update your iSavi^m with the latest operating software. Your iSavi^m has to be in Safe Mode for firmware upgrading.

Navigate to **Settings > Terminal Settings> Firmware Upgrade** to perform a firmware upgrade. Your iSavi[™] will reboot in Safe Mode once you click the Firmware Upgrade button. Refer to page 26, Web Console in Safe Mode for details.

Firmware Upgrade
Need to reboot in the Firmware Upgrade Mode (Safe Mode). Please do it manually if reboot failed.
Firmware Upgrade
Disclaimer
Please be informed that firmware upgrading is done at your own risk and the equipment manufacturer will not be held responsible for any possible malfunction or damage to the system due to upgrading the firmware.
If you encounter any problems or have any questions, please contact the equipment distributor for technical support.

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IMPORTANT INFORMATION AND LOG FILES

Navigate to **Setting > Terminal Info> Information** in order to check for the detail of the terminal. You may need to supply this information when contacting your service provider.

Event Logs and Error Logs Navigate to **Setting > Terminal Info> Logs** to view the Event Log or Error Log of the terminal. Click **Export all Logs** in order to export the logs.

LANGUAGE SELECTION

Select the desired language for the Web Console. The default language is English.

SUPPORT

Navigate to **Settings > Support** to get the contact information of your service provider's support team.

ENABLING SAFE MODE

There are two methods of enabing Safe Mode.

Method 1: Enter Safe Mode by Web Console (Normal Mode)

- i. With the terminal on, connect your smart devices or personal computer to the Wi-Fi of your iSavi[™].
- ii. Login to Web Console by typing http://192.168.1.35 or http://iSavi into the address bar of any web browser.
- iii. Navigate to Settings > Terminal Settings> Firmware Upgrade to perform firmware upgrade. Your iSavi[™] will reboot in safe mode once you click the Firmware Upgrade button.
- iv. If Safe Mode is enabled successfully, all of the four Antenna Pointing LEDs are amber, refer to Appendix A: Antenna Pointing LED Status Table.
- v. Connect the computer to the Wi-Fi of your iSavi * .
- vi. Login to the Web Console in safe mode by typing http://192.168.1.35 or http://iSavi into the address bar of any web browser.

Method 2: Enter Safe Mode by physical buttons.

- i. With the terminal off, press and hold 'Exit Pointing Mode' button.
- ii. Press the 'Power' button for 5 seconds.
- iii. Release both 'Exit Pointing Mode' button and 'Power' button.
- iv. If Safe Mode is enabled successfully, all the four Antenna Pointing LEDs will turn to Amber colour, refer to Appendix A: Antenna Pointing LED Status Table.
- v. Connect the computer to the Wi-Fi of your iSavi $^{\text{\tiny M}}$.
- vi. Log in to the Web Console by typing http://192.168.1.35 or http://iSavi into the address bar of any web browser.

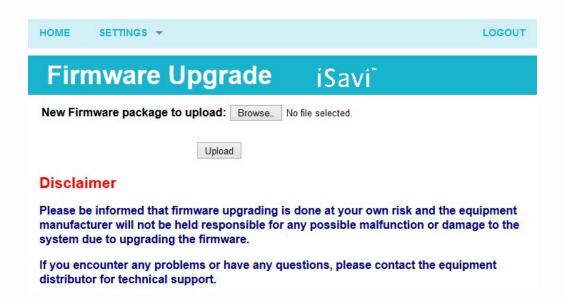
MENU OVERVIEW

HOME SETTIN	IGS 🔻	LOGOUT
SETTINGS		
Factory reset		
Terminal Info		
Logs		
Calibration		
iSavi [™] User Guide	26	

Firmware Upgrading

The **Home** page of Safe Mode is for the firmware upgrade purpose. Navigate to **Home** page in order to perform a firmware upgrade.

- i. Browse to the location of the new firmware, select and click Upload.
- ii. Firmware upgrade will take approximately 10 to 12 minutes to complete. You will be prompted with the **Result: Firmware Upgrade Completed** message.



Firmware upgrade by Micro USB

Besides a Wi-Fi connection, a firmware upgrade can be performed by using the Micro USB connection. Driver installation is required for the first time setup.

- i. Ensure the Safe Mode is enabled successfully, with all the four Antenna Pointing LEDs in Amber colour, refer to **Appendix A: Antenna Pointing LED Status Table**.
- ii. RNDIS USB driver file is available on the USB drive which is included in the iSavi[™] packaging box. You are required to copy the file into your personal computer (Windows XP or Windows 7).
- iii. Unzip the attached file and select the .inf as the driver file
- iv. Connect the Micro USB cable to your personal computer.
- v. The USB installation should complete with a new network adapter created as USB Remote NDIS device.
- vi. Disconnect or remove any physical ethernet/ Wi-Fi connections of your personal PC and leave only the Micro USB cable which is connected between your personal computer and your iSavi[™].
- vii. Log in to Web Console by typing http://192.168.1.35 or http://iSavi into the address bar of any web browser. Proceed the firmware upgrade steps as normal.

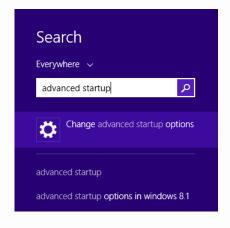
Note:

Ensure the battery level is at least 50% before performing the firmware upgrade or have the terminal on charge. The driver installation is only required for first time use.

You are highly recommended to perform firmware upgrade over Wi-Fi. Firmware upgrade by safe mode over Micro USB is only required when the firmware is corrupted.

Micro USB installation steps for Windows 8 How To Install An Un-Signed 3rd Party Driver in Windows 8

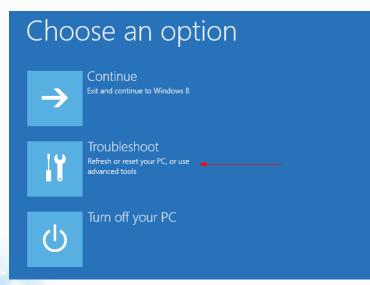
i. Search for "Advanced Startup" using search tool.



ii. Click for **Restart now**, your computer will reboots to a startup menu.

PC settings	Available storage You have 22.7 GB available. See how much space your apps are using. View app sizes		
Personalize Users Notifications Search Share	Refresh your PC without affecting your files your PC iso't memory well, you can refresh it without losing your photos, music, wideo, and other personal files. Get same Remove everything and reinstall Windows it you want to recycle your PC or start over completely, you can reset it to its factory refrige		
General Privacy Devices Ease of Access Sync your settings	Get started Advanced startup Start up from a divise or DVDI, change Windows strutus prom a divise or DVDI, thange Windows strutus promising, or restore Windows from a system image. This will restart your PC. Restart now		

iii. Select Troubleshoot from the list.



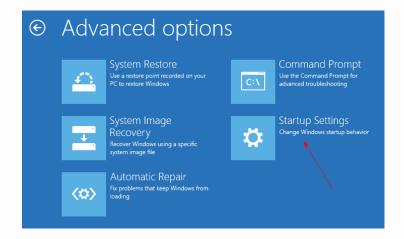
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iii. Select Advanced Options from the next screen.

¢	Troubleshoot			
	<u>.</u>	Refresh your PC If your PC isn't running well, you can refresh it without losing your files		
	Ð.	Reset your PC If you want to remove all of your files, you can reset your PC completely		
	¥≡	Advanced options		

iv. Select Startup Settings.



v. Select Restart button.

€	Startup Settings
	Restart to change Windows options such as: • Enable low-resolution video mode • Enable debugging mode • Enable boot logging • Enable Safe Mode • Disable driver signature enforcement • Disable early-launch anti-malware protection • Disable automatic restart on system failure
	Restart

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- iii. Your computer will reboots and prompts another menu to choose. Press number **7** or **F7** to continue booting to Windows 8 with digital sign enforcement disabled.
- iv. Select Startup Settings.



v. Windows Security warning window will prompt out. Select Install this driver software anyway.



vi. The driver is installed successfully now.

IMPORTANT:

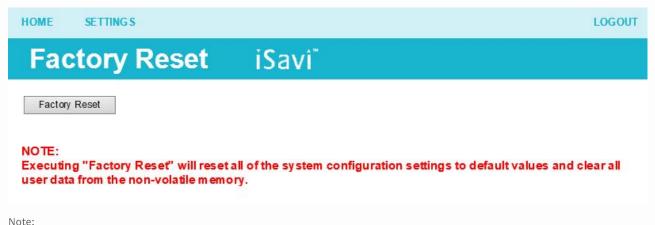
Once the driver is installed, restart your computer once again to re-enable the digital sign enforcement.

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FACTORY RESET of SAFE MODE

Navigate to **Settings >Factory Reset** to factory reset the terminal.

Enter security code for factory reset (Default: 0000).



By default, the security code is 0000. Once you change Terminal to SIM PIN, the Factory Reset password is depends on the Terminal to SIM PIN.

IMPORTANT INFORMATION AND LOG FILES

Navigate to **Setting > Terminal Info** in order to check for the details of the terminal's operation. You may need to supply this information when contacting your service provider.

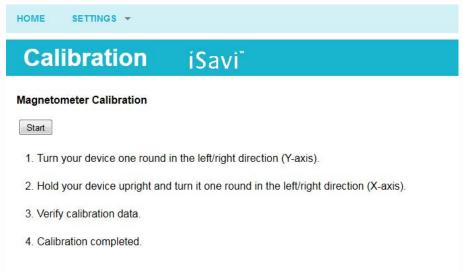
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Event Logs and Error Logs Navigate to **Setting > Logs** to view the Event Log or Error Log of the terminal. Click **Export all Logs** in order to export the logs.

Magnetometer Calibration

Navigate to Settings >Calibration to perform magnetometer calibration to your iSavi[™].

i. Click on the Start button and check the 'left' and 'right' of the Antenna Pointing LEDs are flashing green.



ii. Rotate your terminal in a clockwise direction around the Y-axis.

Note:

Depending on the strength of the magnetic interference, you may be required to rotate the iSavi[™] terminal for more than one revolution in this axis.

HOME SETTINGS -
Calibration iSavi [®]
Magnetometer Calibration
Recalibrate Stop
⇒ 1. Turn your device one round in the left/right direction (Y-axis).
2. Hold your device upright and turn it one round in the left/right direction (X-axis).
3. Verify calibration data.
4. Calibration completed.
8%

HOME	SETTINGS -		
Cal	ibration	iSavi⁼	
Magneto Recalibra	meter Calibration		
➡ 1. T	'urn your device one	round in the left/right direction (Y-axis).	
	lold your device uprigl /erify calibration data.	nt and turn it one round in the left/right direction	(X-axis).
	calibration completed.		
		48%	

- iii. Once the Y-axis calibration has been completed, check that the 'left' and 'right' LEDs remain steady green and the 'up' and 'down' LEDs are flashing green.
- iv. Rotate your terminal in a clockwise direction around the X-axis.

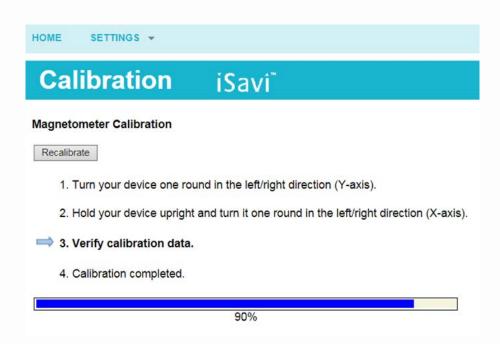
Note: Depending on the strength of the magnetic interference, you may be required to rotate the iSavi[™] terminal for more than one revolution in this axis.

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	iSavi [*] Ind in the left/right direction (Y-axis). Int and turn it one round in the left/right direction (X-axis). X X X Z
3. Verify calibration data.	
4. Calibration completed.	
	71%

iSavi[™] User Guide

- v. Once the X-axis calibration has been completed, check that all the four Antenna Pointing LEDs remain steady green.
- vi. Once the calibration is completed, check that **Verify Calibration Data** is displayed. All the four Antenna Pointing LEDs are flashing green.



vii. Once the verification is completed, check that the message Calibration completed. Result: Successful is displayed

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HOME	SETTINGS -
Cal	libration iSavi [®]
Magneto	ometer Calibration
Recalibra	ate
1. T	Furn your device one round in the left/right direction (Y-axis).
2 . ⊢	Hold your device upright and turn it one round in the left/right direction (X-axis).
3. V	/erify calibration data.
	Calibration completed. lesult: Successful

viii. If the calibration process fails, all the four Antenna Pointing LEDs will flash red. Check that the message Calibration completed. Calibration failed! Please change your existing location and recalibrate again is displayed.

Please repeat the procedure by clicking on the **Recalibrate** button.

Note:

Failure of the calibration can be caused by magnetometer interference from the surrounding area. You need to change to a new location for recalibration process.



1. My iSavi[™] does not turn on successfully.

- i. Check if the battery is attached correctly. Press and hold the Power Button for 5 seconds.
- ii. Check battery level. If battery level is low, the battery should be charged for at least 20 minutes to have sufficient power to switch on the terminal.

2. How do I turn off my iSavi[™]?

Press and hold the Power Button for 5 seconds.

Note: Do not remove the battery when powering down is in progress, otherwise the terminal logs may not be saved correctly.

3. When can I turn off my iSavi[™]?

You can turn off your iSavi[™] once the Power button LED is in solid green or solid red.

4. Where can I check the default SSID and password of the Wi-Fi connection?

The information is available on the product label, below the serial number.

5. LED Status indicates SIM card is not detected.

Power button LED is red. Ensure that a correct SIM card is inserted before turning on your iSavi[™]. Your iSavi[™] terminal is only compatible with an Inmarsat IsatHub SIM card. Connect to Web Console to check for the error statements, example: SIM card not inserted, SIM PIN entry is required, terminal PIN entry is required, etc.)

Contact your service provider if you are unable to resolve the problem.

6. Where can I check the IMSI (SIM card number) of my iSavi[™]?

In the Control app, navigate to Setting>About; alternatively, in the Web Console, navigate to Setting>Terminal Info>Information to check the details of the terminal (Serial Number, IMEI, IMSI number). It is suggested you record your iSavi[™] IMEI number and SIM card number when you first use the device.

7. My iSavi[™] and/or SIM card have/has lost or stolen.

You will need your details as in FAQ 6. Contact your service provider as soon as possible so that your iSavi[™] and/or SIM can be barred.

8. I cannot connect to the Wi-Fi.

Ensure that both the Wi-Fi SSID and password are correct. Disable 3G or 4G service from your smart devices, and try to connect to the Wi-Fi again. The password is case-sensitive. If your password has uppercase or lowercase letters, they must be entered in the appropriate case.

9. Where should I place the terminal for the best results?

Please ensure your iSavi[™] is placed outside with a clear, unobstructed view of the sky. To acquire GPS, power on your iSavi[™] and place the terminal flat on the ground, facing the sky. Leave it for approximately one minute. Once the GPS coordinates have been acquired, your iSavi[™] will automatically enter into the LED Visual Pointing Mode for optimal signal strength (refer to LED Status Quick Reference Guide). The GPS fix status can now be found in the Web Console.

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Refer to Appendix A: Antenna Pointing LED Status Table for LED patterns.



10. GPS not available after time-out.

Power off your iSavi[™] by pressing and holding the Power Button for 5 seconds. Repeat the procedure as describe in **FAQ 9**.

11. Magnetic interference detected.

Move your iSavi[™] to new location. Ensure that your iSavi[™] is placed outside and away from electrical devices, metal objects, or appliances that generate RF noise, and with an unobstructed view of the sky. Press the Exit Pointing Mode Button once to return back to LED Visual Pointing Mode and repeat set up procedure.

Alternatively, login to the Control app. Follow the on screen instructions and press 'Pointing assist' for specific help. Adjust until you get optimal signal strength and register to the network from the Control app.

12. How do I switch into Audio Assisted Pointing Mode?

By default, your iSavi[™] is in LED Visual Pointing Mode. To switch to the Audio Assisted Pointing Mode, press and hold the Exit Pointing Mode Button for 5 seconds. Please note that your terminal will automatically revert to the default LED Visual Pointing Mode whenever you reboot your iSavi[™].

13. Azimuth and elevation are correct, but global beam (satellite signal) is not available.

Ensure that there is no blockage in between your $iSavi^{\mathbb{T}}$ and the Inmarsat satellite. There must be a clear line of sight between your $iSavi^{\mathbb{T}}$ and the satellite. Shift the location of your terminal until the Exit Pointing Mode LED shows flashing green, indicating that the global beam (satellite signal) has been detected.

14. Network Registration failure.

Try the network registration again by pressing and holding the Exit Pointing Mode Button for 3 seconds to repeat the LED Visual Pointing Mode procedure again for network registration. Contact your service provider if you are unable to resolve the problem.

15. iSavi[™] terminal is registered to the network but failed in data activation.

- i. Your iSavi[™] needs a signal strength of at least 42dB to perform at an acceptable service level. Check the signal strength of your iSavi[™] on the Control app or Web Console and if the signal strength is below 42dB, power down the terminal and repeat the set up procedure again. Take extra care to ensure that you have a signal strength of at least 42dB during the set up.
- ii. If you have a prepaid subscription, check your balance to ensure you have sufficient credit to make a data connection. Check the APN settings on the Data Profile under Data via the Web Console. By default, the APN settings should be read from the SIM card, unless you have specified to use another APN instead of the one defined on the SIM card.

16. No internet access even though data connection is activated.

- i. Please ensure that there is no problem with the Wi-Fi connectivity. Verify that the Wi-Fi signal of your smart devices or personal computer is good.
- ii. Check firewall settings to ensure that it does not prevent the required internet (IP) access.

17. All LEDs are off after the terminal registered to network. How do I check the terminal status?

You can check the LED status by pressing the Exit Pointing Mode Button once. Please refer to LED Status Quick Reference Guide. Alternatively, you can check the status via the Web Console or Control app.

Refer to Appendix A: Antenna Pointing LED Status Table for LED patterns.

iSavi[™] User Guide

18. Web console could not receive a text message.

Maximum SMS storage is dependent on SIM card memory. If the memory is full, delete text messages to free up memory for new SMSes. Text messages cannot be sent to and from some service providers who may not have an interconnect agreement with Inmarsat. Please try another network or use the Inmarsat website tool to send the SMS.

19. I am having a problem in accessing the Web Console.

Please ensure that there is no problem with the Wi-Fi connectivity. Make sure that the hostname is entered correctly: http://192.168.1.35 or http://iSavi .

20. I cannot enter "Safe Mode".

With the terminal powered off, first press and hold the Exit Pointing Mode Button followed by pressing and holding the Power Button. Release both Exit Pointing Mode button and Power button after 5 seconds simultaneously.

21. Firmware upgrading failure.

A firmware upgrade failure may be due to using an incorrect upgrade package file. Check that the correct firmware upgrade package has been selected. You can refer to www.wideye.com.sg. The latest firmware is available under Support>Downloads. Failure can also be due to an interruption of the power supply during firmware upgrade. If the firmware upgrade is unsuccessful, repeat the procedure.

22. Problem with incoming/outgoing call.

Check that the Voice app status shows "Phone Ready". If it shows "Registering...", check your Wi-Fi connection to ensure that your iSavi[™] is connected to smart phone or tablet. Check that the number format you dialled has included the full international prefix. Check your iSavi[™] when the device used for VoIP calls is given the correct access rights for incoming /outgoing call functionality. If you have a prepaid subscription, check your prepaid balance to ensure you have sufficient credit to make a call.

23. How do improve the incoming/outgoing call quality?

Verify that the Wi-Fi signal of your smart devices or personal computer is good. You are recommended to stay within 5 meter to your iSavi[™] during calling session.

24. Where do I download the Quick Start Guide, User Guide and LED Status Quick Reference Guide?

You can get these documents from www.wideye.com.sg. Navigate to Support>Downloads>Manual to search and download the documents.

25. What should I do if I have forgotten the admin password?

Contact your service provider.

26. How do I send text messages using the Voice app?

First, login to the Control app before using the Voice app to send or receive SMSes.

27. Control app or Web Console is disconnected during login session.

Control app or Web Console is the user interface for configuration settings of your iSavi[®]. As such, it is designed to allow only one control device to login to the Control app and another control device to login to the Web Console at the same time. When a first device is logged into the Control App or the Web Console, it will automatically be disconnected when you use a second device to login to the user interface. Note that except for the Control app and the Web Console which is limited to one control device to be connected at any one time, multiple devices can simultaneously access all other functions of your iSavi[®].

28. What is the safety distance to prevent radiation from the terminal?

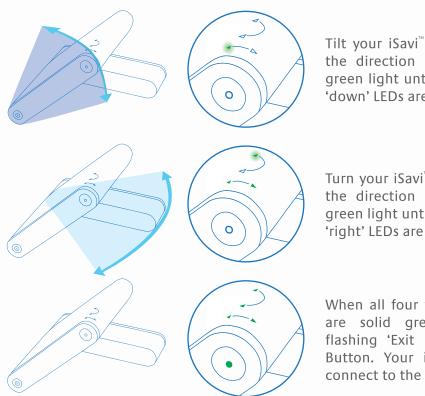
For safety reason, never stand closer than one metre in front of your iSavi[™] terminal's transceiver when it is connected to the network.

Caring for your iSavi[™]

Your iSavi[®] is a highly sophisticated electronic device. Complying with the following recommendations will help you to protect your warranty coverage and extend your terminal's life:

- Keep your terminal dry. Liquids or moisture can contain minerals that will damage electronic circuits. If your iSavi[™] does get wet, dry it with a soft absorbent cloth as soon as possible, remove the battery module and allow your transceiver and battery to dry completely before reassembling it.
- The connector covers are intended to protect your terminal. Keep these covers firmly closed at all times. Ensure that the connectors are free from dust or dirt before connecting any accessory. When closing the connector cover, ensure the area around the connectors, and the rubber sealing surfaces of the cover are clean and free from dirt. Ensure that the cover is fully closed to give maximum protection to your terminal.
- Do not store your terminal in dusty, dirty or damp areas as this may shorten its life.
- Do not store your transceiver and battery in extreme cold or hot areas exceeding a certain temperature range. Storage temperature range for the transceiver is -40°C to +80°C (-40°F to +176°F) whereas for the battery it is -20°C to +40°C (-4°F to +104°F). Extreme temperatures can shorten the life of your terminal and damage the battery.
- Your terminal's operating temperature range is -25°C to +55°C (-13°F to +131°F). The charging temperature range is 0°C to +40°C (+32°F to +104°F).
- Avoid regular use in high or low temperature environments. Lithium ion batteries have an optimal working and storage temperature. If they are continually used an extreme temperature environment, it will negatively affect the battery's use time and useful number of recharging cycles.
- If you don't need to use your iSavi[™] for a long time where the lithium ion battery might be left unused for 3 months or more, partially recharge the lithium ion battery, then store the device (recharge the battery to around 30-70% of capacity) to prevent battery damage. You may need to take the device out of storage and charge again after a few months.

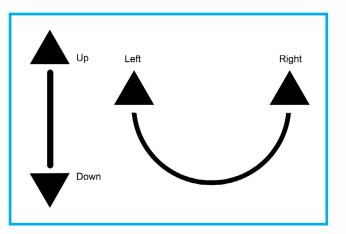
APPENDIX A: ANTENNA POINTING LED STATUS TABLE



Tilt your iSavi[™] up or down in the direction of the flashing green light until both 'up' and 'down' LEDs are solid green.

Turn your iSavi[™] left or right in the direction of the flashing green light until both 'left' and 'right' LEDs are solid green.

When all four tilt & turn LEDs are solid green, press the flashing 'Exit Pointing Mode' Button. Your iSavi[™] will now connect to the network.



State	Power Button	Antenna Pointing LEDs	Exit Pointing Mode Button	Actions / Status
OFF				Terminal is OFF.
Power On		↓ · · · ↓ · ·		Turn ON by pressing the Power Button for 5 seconds. The Antenna Pointing LEDs will turn on in Red / Amber for about 4 seconds, followed by all in Green for approximately 30 seconds before going into the next state.
Firmware Loading	*			Powering up in progress – this may last up to 30 seconds.
GPS Acquiring		↓ ↓		This LED state (Antenna Pointing LEDs in Amber) is only applicable for first time fresh terminal setup. The GPS acquisition will take 30 seconds to 5 minutes depending on each setup location.
		↓ * → ↓		Tilt your iSavi [™] in upward direction (follow "Up" LED flashing green light). Stop when both "Up" and "Down" LEDs are solid green.
LED Visual Antenna Pointing		↓ * → ↓		Tilt your iSavi [™] in downward direction (follow "Down" LED flashing green light). Stop when both "Up" and "Down" LEDs are solid green.
				Turn your iSavi [™] in clockwise direction (follow "Left" LED flashing green light). Stop when both "Left" and "Right" LEDs are solid green.
				Turn your iSavi [™] in counterclockwise direction (follow "Right" LED flashing green light). Stop when both "Left" and "Right" LEDs are solid green.

Situation	Power Button	Antenna Pointing LEDs	Exit Pointing Mode Button	Actions / Status
Exit Pointing			*	All Antenna Pointing LEDs are solid green, Azimuth and Elevation are in correct positions. Press the flashing Exit Button once to exit Antenna Pointing mode and register to the network. Note: Pressing the Exit Button for 3 seconds will put your iSavi [®] into the alternative Audio Pointing mode.
Network Registering				Azimuth and Elevation are correct. Press Exit Button to exit Antenna Pointing and register to network.
Ready for Service				Network registration successful and ready for service. All LEDs will turn off after about 1 minute. Note: When all LEDs are off, you can always check the LED state by pressing the Exit Button once.
Data Activated		↓ ↓ †		Data activated successfully through web console/ Control app. You can now connect your smart devices to your iSavi [™] terminal and start accessing the internet. Note: For LED status check, you can always press the Exit Button once.
Audio Pointing Mode ON- Global Beam available		•••	*	Audio Pointing Mode is enabled. Satellite signal found.
Safe Mode				Safe Mode is enabled.
Powering Down	() *			Pressing the Power Button for 5 seconds. The Antenna Pointing LEDs flashing red in sequence for approximately 30 seconds before turning off.

LED Legend * LED Flashing † LED Flashing in sequence

Others LED Status Refer to TROUBLESHOOTING AND FAQ

Situation	Power Button	Antenna Pointing LEDs	Exit Pointing Mode Button	Actions / Status
SIM not detected				SIM card not recognized or SIM card not detected. Check whether correct SIM card is used.
Audio Pointing Mode- Global Beam not available				Audio Pointing Mode ON- Global beam is not available
Network Registering failure			*	Network registering failure.
Global beam not available			*	Satellite signal is not detected. Ensure the antenna pointing direction is correct and no blockage in between the terminal and the satellite.
GPS not available				GPS not available (timeout). Ensure no blockage in between the terminal and GPS satellite.
Magnetic interference detected			*	Magnetic interference detected from the surrounding area. You need to change to a new location and press 'Exit Antenna Pointing' button once to exit from this status
Data activation failure				Data activation failure.

APPENDIX B: TECHNICAL SPECIFICATIONS

Operating Frequency:

Satellite Transmit: 1626.5 – 1660.5 MHz and 1668 – 1675 MHz Satellite Receive: 1518 – 1559 MHz GPS Frequency: 1574.42 – 1576.42 MHz

Dimensions (L x W x H)			
Overall Terminal			
180 x 170 x 30 mm 7.09 x 6.69 x 1.18			
Transceiver			
130 x 170 x 30 mm	5.12 x 6.69 x 1.18 in		
Standard Battery Pack			
50 x 170 x 30 mm	1.97 x 6.69 x 1.18 in		

Weight			
Overall Terminal			
880g	1.94lb		
Transceiver			
620g	1.37lb		
Standard Battery Pack			
260g	0.57lb		

Environmental:

Operating Temperature: -25°C to +55°C, -13°F to +131°F (with DC supply) -20°C to +55°C, -4°F to +131°F (with battery)

Storage Temperature:-40°C to +80°C, -40°F to +176°F (Transceiver)
-20°C to +40°C, -4°F to +104°F (Battery)
-20°C to +40°C, -4°F to +104°F (Transceiver with battery)

Battery Charging Temperature: 0°C to +40°C, +32°F to +104°F Storage Humidity: 95% RH (non-condensing at +40°C or +104°F) Ingress Protection: IP65 Compliant UV resistant

Services	
Standard IP:	Up to 240/384kbps (send & receive)
SMS:	Using VoIP Apps or WebMMI; Standard 3G (up to 160 characters)
Voice Connectivity:	SIP server using Apps on Smart Devices
Data Connectivity:	Wi-Fi 802.11 b/g/n Access Point with internal Wi-Fi Antenna

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Power Requirement Power adaptor input: Output:

100 - 240 VAC +18VDC, 65 watt

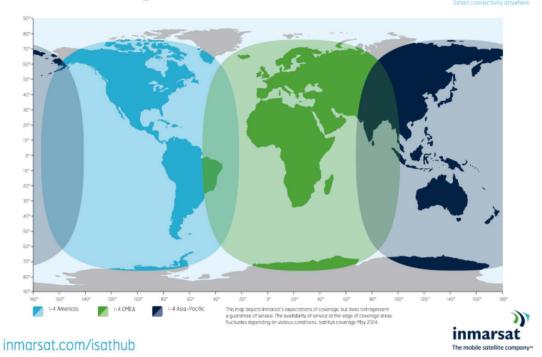
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Battery Standard: 10.8V @ 3Ah Li-ion Battery Pack High Capacity (Optional accessory): 10.8V @ 6Ah Li-ion Battery Pack

ITEM	SPECIFICATION	
Battery Type	Lithium ion, rechargeable	
Nominal Voltage	10.8V	
Standard Battery Capacity	3Ah	
Charging temperature	0°C to +40°C	
Operating temperature	-20 °C to +55 °C, -4°F to +131°F	
Min. charge cycles	300	
Storage Temperature 1 month 6 months 1 year	-20 °C to +45 °C, -4°F to +113°F -20 °C to +40 °C, -4°F to +104°F -20 °C to +35 °C, -4°F to +95°F	

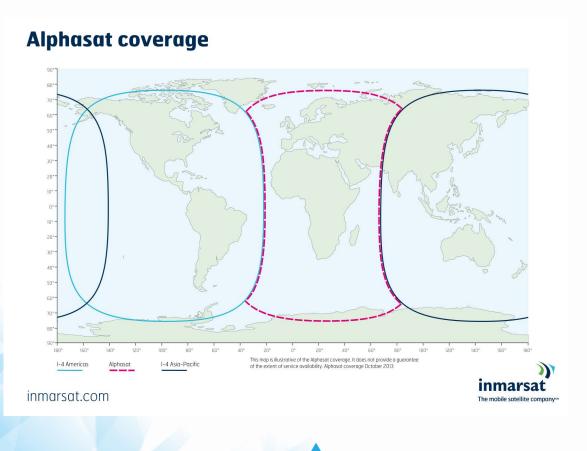
APPENDIX C: ISATHUB COVERAGE MAP

IsatHub coverage



lsat**Hub**

At the time of printing Inmarsat has announced that the change to the Alphasat satellite in the EMEA region has been postponed until March 2015. The coverage will change to the following when the satellite swap-over occurs.



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