

# **DECEMBER 2017**





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Date	Revision	Description	Author
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# CHAPTER 1

## **INTRODUCTION & SAFETY**

#### **INTRODUCTION**

This installation guide provides instructions for proper installation and initial start-up of the VesseLINK system and also gives a basic system overview. It contains critical information and safety guidelines for those who install the system and perform initial system activation and test. After initial start-up, for more detailed operational procedures, reference the VesseLINK User Manual (Document # 84469) located on the Thales website.

This VesseLINK system contains the Below Deck Unit (BDU), the Above Deck Unit (ADU) or antenna, an AC/DC power supply, a Wi-Fi antenna, mounting hardware and connection cables. The Thales VesseLINK product has been designed with simplicity in mind but more details may be found in the in-depth User Manual.

The following terminology is used throughout the manual.

- ADU: Above Deck Unit (antenna)
- BDU: Below Deck Unit
- POE: Power Over Ethernet
- POTS: Plain Old Telephone Service
- SIM: Subscriber Identity Module
- VOIP: Voice Over Internet Protocol
- WAN: Wide Area Network
- Wi-Fi: Wireless Network

### SAFETY

The VesseLINK system should only be installed by a qualified professional installer of Maritime electronic systems. Improper installation could lead to system failure or could result in injury to personnel on board the vessel. The following are general safety precautions and warnings that all personnel must read and understand prior to installation, operation and maintenance of the VesseLINK system. Each chapter may have other specific warnings and cautions.



#### SHOCK HAZARD

The VesseLINK system is a sealed system and is not meant to be opened for repair in the field by operators or technicians. Covers must remain in place at all times on the BDU and ADU to maintain the warranty terms. Make sure the system is correctly grounded and power is off when installing, configuring and connecting components.



## DO NOT OPERATE IN AN EXPLOSIVE ATMOSPHERE

This equipment is not designed to be operated in explosive environments or in the presence of combustible fumes. Operating this or any electrical equipment in such an environment represents an extreme safety hazard.



## **ANTENNA RADIATION HAZARDS**

During operation, the antenna radiates high power at microwave frequencies that can be harmful to individuals. While the unit is operating, personnel should maintain a minimum safe distance of **1.0 meters (3.3 ft.)** from the antenna. The antenna should be mounted in an area that prevent the possibility of close exposure to the antenna's radiation.



Figure 1-1: MINIMUM Safe Distance From Antenna

### **KIT CONTENTS**

While unpacking the system, please verify that the following contents are included. If anything is missing, please contact Thales Customer Service at 1.800.324.6089.

VesseLINK Kit VF350BM includes:

- Below Deck Unit (BDU) (PN 4102947-501)
- BAA (PN 1600901-1)
- AC/DC Power Supply (PN 84670-001)
- AC Cables US (PN 854024-001) and EU (PN 854025-001)
- Wi-Fi Antenna (PN 85728-001)
- 25m (82 ft.) BDU to ADU RF Coaxial Cable (PN 855023-082)
- 10ft Ethernet Cable (PN 855026-010)
- BDU Standard Mounting Hardware Kit (PN 1100789-501)
- ADU Maritime Mounting Hardware Kit (PN 1100791-501)
- ADU and BDU Mounting Templates (PN 3900014 and 3900011)
- Quick Start Guide (PN 3402131-1)

VesseLINK Kit VF700BV includes everything in the VL350BM kit plus:

• Thales IP Handset with 6' coil cord

**Note:** The SIM card is provided by the airtime service provider and may be packaged separately from this kit.

#### **OPTIONAL ACCESSORIES**

- Thales Stainless Steel Antenna Mounting Plate (PN 85736-001)
- 50m (164 ft.) BDU to ADU RF Coaxial Cable (PN 855033-164)
- AC power cable UK (PN 854027-001)
- AC power cable AUS (PN 854026-001)
- 10-32V DC Power cable (20ft) with ignition on/off (PN 855024-020)
- 19" Rack Mount Shelf Kit (PN 1100796-501)
- Thales IP Handset with 6' coil cord

#### **TOOLS NEEDED FOR INSTALLATION**

List of tools you may needed to install this system:

- 4mm Hex Drive Wrench
- 6mm Hex Drive Wrench
- M10 (16mm) Wrench or Socket
- #2 Phillips Screwdriver
- Adjustable Wrench
- Torque Wrench





## **BELOW DECK UNIT (BDU)**



Figure 1-3: Below Deck Unit (BDU)

The BDU front has a main power switch, one RJ-14 jack for POTS (Plain Old Telephone Service) Phone, three POE (Power over Ethernet) RJ-45 connections for VoIP phones or Ethernet, and one WAN (Wide Area Network) connection.



Figure 1-4: BDU Front Panel Detail

The BDU back panel (left to right) has a Wi-Fi antenna connector, SIM Card slot, GPIO connector, 10-32Volt DC input connector, 12Volt DC power input, antenna connector, and chassis grounding lug.



Figure 1-5: BDU Back Panel Detail

## **ABOVE DECK UNIT (ADU)**

The ADU (also referred to as antenna) is a standalone unit that connects to the BDU through a single coaxial cable. DC power, RF transmit and receive signals, control data and GPS data are communicated between the ADU and BDU using this single coaxial cable. Connect provided cable to the antenna after installing the antenna and before connecting it to the BDU. The connector is shown in Chapter 2.



Figure 1-6: ADU

# CHAPTER 2

### **MOUNTING THE ABOVE DECK UNIT (ANTENNA)**

The VesseLINK antenna is designed to fit the Thales stainless steel antenna mounting plate and many existing mounts on similar sized antennas. If replacing an existing L-band system, it may be possible to use the same mounting plate and hardware that is already in place. The VesseLINK has two sets of industry standard mounting configurations, each with four mounting points. Included in each kit are mounting templates if custom mounting hardware becomes needed for your application.

It is important to note that a new coaxial cable, provided in the VesseLINK kit, must be installed for proper operation of the VesseLINK system. Otherwise, the system may not calibrate correctly and will result in a failure at start-up. Install the cable using best practices for cable bend radius and to avoid pinching the cable. It is also important to ensure the cable does not get cut by or rub on nearby sharp objects.

For new installations refer to Page 2-4 for pole mounting instructions.

Keys to successful installation of the VesseLINK Antenna:

- Mount where antenna is at least the minimum safety distance away from vessel personnel (1.0 m).
- Mount antenna with unobstructed (Full View) of the sky (Figure 2-1). Any blockage to part of the sky by metal objects could result in loss of connection and/or poor data speeds.
- Mount antenna level (parallel) to Main Deck.
- Keep antenna away from large metallic surfaces when possible to increase performance.
- Mount as far away from other antennas (especially radar and magnetic compasses) as possible. See Figure 2-2 for recommendations on distance and horizontal displacement from radar arrays.
- Ground the antenna using a heavy ground cable (not included) from the ground terminal on the bottom of the antenna to the vessel's ground to protect the system from unwanted surges and voltage differentials.
- Use the supplied RF cable designed for Maritime use. Do not alter the provided cable prior to installation. Always completely weather seal the connection at the antenna with sealing tape (supplied with Maritime kit # 1100791-501). Not applying the weather seal tape will void the warranty.
- Mounting should be in an area that minimizes vessel vibration



Figure 2-1: Placing Antenna for optimum performance



d = 4.0m for X & C-Bands up to 50kW



**IMPORTANT:** Antenna cable connection should be secured tightly and covered with protective rubber boot or supplied self-vulcanizing tape to prevent corrosion. It is also important to connect the antenna GND lug to Vessel Chassis GND for safety.



Figure 2-3: Maritime 25m RF Cable Connector detail

The antenna is mounted with either four M6 torque to 6 N\*m (4.4 ft-lbs.) or four M10 torque to 28 N\*m (20.6 ft-lbs.) stainless steel bolts (included with KIT #1100791-501) as appropriate for the chosen mounting pattern on the base of the antenna. Anti-seize compound (included) should be applied to the stainless hardware immediately prior to installation. Never exceed the recommended torque values on mounting bolts as this will damage the unit.



Figure 2-4: Mounting Holes in Bottom of Antenna and Mounting Template (Included In Kit)

## POLE MOUNTING (OPTIONAL)

An optional 316 stainless steel antenna mounting bracket is available from Thales (PN 85736-001). The bracket is designed to work on standard 1.9-inch (with included bushing), 52mm and 3-inch poles (poles not included). This bracket has mounting holes that match the M6 mounting points on the bottom of the antenna. The mounting bracket can be ordered by calling Thales at 1-800-914-0303, Option 3."



Figure 2-5: Thales Antenna Mounting Bracket (Shown With Poles, Not Included)

## **INSTALLING THE BELOW DECK UNIT**

The VesseLINK BDU is designed for ease of installation with four corner mounting locations for direct mounting or mounting to the optional 19" rack shelf. It is *strongly* advised to replace all existing hardware, cabling, power supplies and wiring with those supplied in the VesseLINK kit. Not doing so may not only affect the system performance but may also void the warranty.

To start, secure BDU to vessel using the four corner mounting slots (Figure 2-6) and provided hardware. Included in each kit are mounting templates if custom mounting hardware becomes needed for your application. VesseLINK can be mounted in any orientation but for best performance, it is recommended to be mounted horizontally with the Thales logo facing up. This will give the best protection against any spills or dripping water and allows for the best heat transfer.



Figure 2-6: Top View: BDU Mounting Slots and Template (Included In Kit)

Note: It is recommended that the BDU be mounted in a cool dry place below deck leaving sufficient room (3 in. or 8 cm) between the BDU and other equipment to allow for proper airflow.

Connect the provided Wi-Fi antenna, install the SIM Card (from service provider) into slot as shown in Figure 2-7, connect the provided AC/DC 12V power supply cable and connect the provided 25m RF cable that goes to the antenna. All connections are shown in Figure 2-8.



Figure 2-7: Installing SIM Card and Engaging The Lock



Figure 2-8: Wi-Fi Antenna, SIM Card, AC/DC Power Adapter and Antenna Cable Installed



The BDU should be grounded. Use a 14 AWG (or larger) ground wire to connect the BDU to earth ground during normal use.

## **CONNECTING POWER TO THE BDU**

The BDU has 2 connections for direct power depending on the vessel power available:

- AC Operation: Supplied external AC/DC supply with power cord
- DC Operation for vessels operating from battery power: 10-32 Volts DC (optional DC power cable available (Part # 855024-020):
  - $\circ$  RED + (10-32VDC)
  - BLACK (GND)
  - Yellow (Ignition Switch)
    - Turns BDU on/off through a remote switch connection or vessel ignition
    - Leave unconnected for BDU front panel switch operation on/off

VesseLINK Maritime kits come standard with universal power (100-240 VAC 50/60 Hz) AC mains to 12 Volt DC adaptor (#84670-001) and US and EU standard AC plugs. Optional UK Type G and AUS Type I plugs are available.



Figure 2-9: AC/DC Power Supply

Installations using the DC power cable (PN 855024-020) are recommended to connect the yellow ignition line as the primary ON/OFF source. The BDU will only turn OFF with this line, so it is important to connect to an ignition line in the fuse panel or external switch that is dedicated to the BDU for operating when the vessel's main ignition is off. See Figure 2-10 for further details.

Take special note that when connected to a battery for operation and the yellow ignition line is tied directly to main power (red line) the only method to power down the BDU will be to turn off the main power connection on the BDU and this is NOT recommended for normal operation.



Correct use of VesseLINK DC Power cable

Connecting Yellow Wire directly to system power will disable VesseLINK power off capability.



Figure 2-10: 24V DC Power Connection



Extra care and consideration must be taken when powering any device from 24V DC systems. It is important that 24V systems use the correct GND scheme that ensures unit is connected to the system's lowest potential (usually chassis GND). Otherwise damage to the BDU and antenna are likely and could void the warranty.



Figure 2-11: 24V DC Power Connection

### SYSTEM STATUS INDICATORS

After starting the BDU three status indicators will show on top of the unit. In Figure 2-12, from Left to Right these are: System (Overall System Status), Satellite (Satellite Connection Status) and Wi-Fi (Wireless Network Status).



Figure 2-12: System Status Indicators (Top View of BDU)

Indicator	Description
ථ System	
Solid GREEN	System functioning properly
Flashing GREEN	System busy (Booting up)
Solid RED	Fault (minor issue)
Flashing RED	Critical fault (major issue)
Satellite	
Solid BLUE	Connected and passing data (over satellite)
Solid GREEN	System functioning properly
Flashing GREEN	Acquiring satellite
Solid RED	Fault (minor issue)
Flashing RED	Critical fault (major issue)
후 Wi-Fi	
OFF	Wi-Fi OFF
Flashing GREEN	Wi-Fi busy
Solid Green	System functioning properly
Solid RED	Fault (minor issue)
Flashing RED	Critical fault (major issue)



The Indicator Colors are:

Solid Green: all is OK

<u>Flashing Green</u>: start-up or in progress of configuring or acquiring service.

NOTE acquir

<u>Solid Red</u>: fault requires user attention (Open management portal for Alerts)

<u>Flashing Red</u>: critical fault requiring immediate attention (Open Management portal and contact service provider.

# CHAPTER 3

### **GENERAL GUIDELINES & TROUBLESHOOTING**

General Guidelines for Installation

- It is recommended to turn on the BDU only after the antenna and all system cables have been installed and connected.
- Do not attempt to service items such as BDU and Antenna
- Always use Ground Lugs as separate connections to chassis
- Always torque hardware to specified values
- Always use thread locking or anti corrosive compounds provided with kit
- If mounting antenna near radar array it's a general guideline to raise VesseLINK Antenna approximately 15 degrees above radar array centerline and mount as far away as possible to reduce the possibility of interference

<b>TROUBLESHOOTING</b>
------------------------

PROBLEM	SOLUTION
Unit does not power-ON	Check BDU for Green lights, If green light is on Unit has Power Push Power Button on front of BDU Check at least 1 input power option is secured to BDU Check AC/DC Power supply Brick is connected to AC Power Check Power D-SUB 10-32V DC cable polarity is correct Check to ensure Ignition line is connected to switched line or connected to Red( Positive line) for continuous operation
No or Weak WI-FI Signal	Connect Wi-Fi antenna
TOP LED Flashing Green	Start-up in progress. Wait until unit has run diagnostics and completed start procedure. This may take more time than usual when acquiring satellites for the first time
TOP LED Solid Red	Fault Detected. Open management portal http://portal.thaleslink for more information
TOP LED Flashing RED	Critical Fault Detected. Open management portal http://portal.thaleslink and contact service provider
VesseLINK management portal does not work	Ensure BDU is powered ON Ensure Wi-Fi is enabled and connected to VesseLINK If not ensure Cat 5 cable is connected to Ethernet port (NOT WAN or POTS Port) Open web browser and type <u>http://portal.thaleslink</u> May Have to disable LTE or Wireless data to ensure connection is to VesseLINK on mobile devices Update Browser on device

Table 3-1: Troubleshooting

### **CONNECTOR DETAILS:**

<u>General Purpose Inputs / Outputs (GPIO)</u> D-SUB 15 Pin Standard



Figure 3-1 GPIO Connector Pin Detail

Pin No	Name	Description
1	GND1	Ground
2	Audio_In +	Radio Gateway functionality, differential (+) Hi-Z Audio Input from
		external Radio
3	Audio_Out +	Radio Gateway functionality, Differential (+) Low-Z Audio Output
		to external radio (mic input)
4	RadioCOR	Radio Gateway functionality, Radio initiated voice into terminal
		(optional)
5	SOS_IN	SOS remote functionality, Ground pin to activate internal SOS
6	GPI01	Software configurable GPIO pin #1 (future)
7	RS232_TD	RS232 Output (future)
8	GND2	Ground
9	Audio_In -	Radio Gateway functionality, differential (-) Hi-Z Audio Input from
		external Radio
10	Audio_Out -	Radio Gateway functionality, Differential (-) Low-Z Audio Output
		to external radio (mic input)
11	RadioPTT	Radio Gateway functionality, Putput PTT from terminal eo external
		radio, short to ground for PTT enabled, Open drain requires external
		10k pullup resistor
12	GND3	Ground
13	GPI02	Software configurable GPIO pin #2 (future)
14	RS232_RD	RS232 Input (future)
15	12V	=12V output, 100mA

BDU 12V Connection Detail

Type: KPPX-4x connector (or similar)



Figure 3-2 12V Input and Mating Connector Detail

BDU 10-32VDC Connection Detail Type: 680M7W2103L201 connector (or similar)

A1 = V + /10-32VDCA2 = V - /GNDPin 5 = Ignition



Figure 3-3 10-32 VDC and Mating Connector Detail

# CHAPTER 4

## **DECLARATION OF CONFORMITY**

Contact your Thales representative for a copy of the FCC Compliance statement

# CHAPTER 5

VESSELINK QUICK START GUIDE (PN 3402131-1)



up to and including making a basic phone call and accessing the internet. This QSG is only for use on VesseLINK systems that have been successfully installed per the Installation guide (Document # 84464). After initial start-up, for more detailed operational procedures, reference

the VesseLINK User Manual (Document # 84469) located on the Thales website and can also be

accessed through the VesseLINK Management Portal.

G. Advanced setups may have Cellular Modem or network connected (not included)

**POTS Phone connection** By default the POTS phone(s) can simply be plugged into the RJ-14 connector without any setup. The BDU can accept up to 2 POTS phones (with RJ-14 Splitter).

parameters.

VoIP 1:(will recei

VoIP 2:(will rece

VoIP 3:(will recei

2

## Terminology / Acronyms: The following terminology is used throughout

ADU: Above Deck Unit (antenna)	SIM: Subscriber Identity Module
BDU: Below Deck Unit	VOIP: Voice over Internet Protocol
POE: Power Over Ethernet	WAN: Wide Area Network
POTS: Plain Old Telephone Service	Wi-Fi: Wireless Network

## **GETTING STARTED**

this QSG.

#### STEP 1: Connect Phone (standard POTS handset) or Ethernet VOIP Phone to BDU.

The BDU front has a main power switch, one RJ-14 jack for POTS (Plain Old Telephone Service), three POE (Power over Ethernet) RJ-45 connections for VoIP phones or Computers, and one WAN (Wide Area Network) connection.



**BDU Front Panel Detail** 

#### VoIP or Thales IP Phone connection

By default the BDU has (3) lines preconfigured for use with the Thales IP handsets. If using a VoIP phone, Thales recommends CISCO SPA504G and Grand Stream GXP2140 models for ease of use with VesseLINK. Other brands and models may be supported but functionality cannot be guaranteed. Follow your VoIP phone configuration guide to connect using the following

#### A typical VoIP phone configuration is shown below:

ive calls on line 1 of your SIM)	User: "1001"
	Password: "1001"
	Host: "sip.thaleslink"
	Protocol: udp or tcp
ive calls on line 2 of your SIM)	User: "1002"
	Password: "1002"
	Host: "sip.thaleslink"
	Protocol: udp or tcp
ive calls on line 3 of your SIM)	User: "1003"
	Password: "1003"
	Host: "sip.thaleslink"
	Protocol: udp or tcp

#### VesseLINK IMEI and IMSI from mobile device

#### STEP 2: Know your VesseLINK.

It may be necessary to know details about your VesseLINK system when calling for help or service.

IMEI is unique to each unit and can be found on the bottom plate of the BDU. This IMEI can also be found in the http://portal.thaleslink under the ABOUT tab.

IMSI is a unique identifier to each SIM card. This IMSI can also be found in the <u>http://portal.thaleslink</u> under the STATUS  $\rightarrow$  SIM tabs. (SIM must be inserted)

ی (م	lh 🕸 h h h 🧧	portal.that	eslink			
About		THALES   VesseLINK admin   Log				
Intenna		=	0 X 🗟 Å Å Å Ø			
Software Version	Not Connected	<u></u> ≝ Statu	s: SIM			
Hardware Version	Not Connected	SIM Info				
Antenna Type	Not Connected					
Model	Not Connected	SIM Card	Present			
Serial #	Not Connected	IMSI	901037050000094			
		Max Data F	Rate (bps) 0			
atellite modem		Data Rates	(bps)			
Software Version	CX 1.5.5-860					
Hardware Version	5042-PCB-01 ver 5	Voice Lines				
Serial #	42290035	Number	Time MOIODN			
	200002020005020	Number	Type MSISDN			

#### VesseLINK IMEI and IMSI from mobile device

#### STEP 3: Install SIM

Install SIM card from Air-time provider as below. Insert card with contacts down as shown until it clicks into place. Be sure to engage the lock for the SIM Card



Installing SIM card and engaging the lock

#### STEP 4: Power the VesseLINK unit.

This is simply done by pressing and releasing the power button on the BDU (see Figure on page 2). NOTE: After the button is pressed and released, a few seconds will pass before the power LED (left) starts flashing. It may take a few minutes on initial startup for all 3 LED's on the unit top to turn solid **GREEN** or **BLUE**.



System, Satellite and Wi-Fi status LED's

ep 4 (Cont.)					
BDU Status LED's					
Indicator	Description				
り System					
olid GREEN	System functioning properly				
ashing GREEN	System busy (Booting up)				
olid RED	Fault (minor issue)				
lashing RED	Critical fault (major issue)				
Satellite					
olid BLUE	Connected and passing data (over satellite)				
olid GREEN	System functioning properly				
lashing GREEN	Acquiring satellite				
olid RED	Fault (minor issue)				
lashing RED	Critical fault (major issue)				
🔶 Wi-Fi	·				
FF	Wi-Fi OFF				
lashing GREEN	Wi-Fi busy				
olid Green	System functioning properly				
olid RED	Fault (minor issue)				
lashing RED	Critical fault (major issue)				

#### STEP 5: Connect to VesseLINK Management portal to configure system. Option A: Via Wi-Fi.

- 1. With your mobile device connect to "Thaleslink" on Wi-Fi via the settings on your mobile operating system.
- 2. Open a web browser and type: <u>http://portal.thaleslink</u> (do not type .com or any other extension)

Click LOGIN button. Enter "admin" for Username and "admin" for Password.

- 3. As a default, no changes to setup are necessary, but advanced users may want to configure to their preferred system settings.
- 4. At this time it is advised that all users change your username and password. To Change Password: Go to Settings-->General and change the password for the Admin User

Option B: Via (PC, Mac or Linux) Ethernet connection

- 1. With your computer connect the Ethernet RJ-45 Cable (included) to any of the 3 Ethernet ports on the BDU. (Shown on page 2) (Do not connect to the WAN port on the BDU)
- 2. Via the network settings on your computer's operating system, select and connect to VesseLINK connection.
- 3. Open a web browser and type: <u>http://portal.thaleslink</u>
- 4. Click LOGIN button. Enter "admin" for Username and "admin" for Password.
- 5. As a default, no changes to setup are necessary, but advanced users may want to configure to their preferred system settings.
- 6. At this time it is advised that all users change your username and password. To Change Password: Go to Settings-->General and change the password for the Admin User

#### NOTE: If you forget the password, press and hold the reset pin on the back of the box (while powered on) in order to reset the system to factory settings.



#### VesseLINK User Interface Login

#### STEP 6: Place a phone call.

# STEP 7: Access the internet.

#### Verify:



- SIM card.
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- •

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1. Choose either POTS or VoIP handset. 2. Remove the handset from the base and ensure a dial tone is present. 3. Call a known number to test call and voice clarity Dial 9, Country code, area code and phone number

#### FOR EXAMPLE (do not dial this number): 9-1-555-555-5555

Once your device has successfully connected to the BDU, open the management portal http://portal.thaleslink to verify the satellite connection.

• No active alerts (DASHBOARD or ALERTS page on the Management Portal) Satellites detected (go to STATUS  $\rightarrow$  SERVICE), signal strength bars (top right of screen) should show more than 1 bar as available.

Try loading a small website such as <u>www.google.com</u> to verify your internet connection.

If the page loads successfully you are ready to browse the internet.

#### THALES MANAGEMENT PORTAL

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Dashboard						
Current Alerts						
Alert Name		Level	Time		Description	
ANT_MISSING - Unable to detect antenna		FAULT	8/23/2017 4:28:11 PM			
Services						
Satellite Data Session	Off On					
Satellite Connection	Disconnected					
Signal Strength	-70 dBm					
WAN Connection	Disconnected					
Data Conferention						
Dua congulation						
Disable Data On Boot TODO	Off On					
·	Thales Defense & Sr	ecurity inc. All Rights R	eserved			
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When you first log into the Thales Management Portal, you will notice on the left hand side of the screen. Each of these menu options will be discussed in detail.

• Status – Provides status of each of the Devices, GPS, LAN, Phones, Services, and the

Alerts – Provides a listing of system alerts

Calls – Provides information relating to Calls, including current calls, call history, and call management.

Distress – Allows the operator to send a distress signal.

Settings – This section is where the operator can set operating parameters/ settings for sending messages, using Wi-Fi, WAN, LAN, Satellite, data, and phone.

• System – This section allows the operator to perform system backups, view data usage, rest the system, and view/update system firmware.

Diagnostics – The section enables the operator to run self-test, check system status, and view diagnostics logs entries.

About – Provides system level information for the antenna, modem, power supply, system, VOIP Module, and Wi-Fi

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