Nautilus LifeLine VHF-GPS Radio for Divers

OPERATIONS MANUAL

Model: DIVER

DOMESTIC USE OF THIS RADIO IN MOST COUNTRIES REQUIRES A RADIO OPERATORS CERTIFICATE CHECK WITH YOUR LOCAL AUTHORITIES BEFORE USING THE LIFELINE THE LIFELINE CAN BE USED IN AN EMERGENCY ANYTIME, ANYWHERE IN THE WORLD

- 1. LifeLine (RED) button is not functional until an MMSI number is entered.
- 2. LifeLine must be charged to 100% before first use.
- 3. Splash proof in all sea conditions, when upper cap is open.
- 4. Avoid submerging your LifeLine with the upper cap open. Speaker performance will be temporarily affected.

Web: www.nautiluslifeline.com Email: info@nautiluslifeline.com Call: 001-604-241-1918 Skype: nautiluslifeline

Nautilus LifeLine DIVER

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AT	DE	GB	MT	BE	GR	IS	NL
CY	HU	LI	PL	CZ	IE	NO	PT
DK	IT	СН	SK	EE	LV	BG	SI
FI	LT	RO	ES	FR	LU	TR	SE

WARNING! The Nautilus LifeLine is an aid to your safety. It is not a life-saving device. It is not intended to save your life.

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INTRODUCTION

Thank you for your purchase of a Nautilus LifeLine VHF-GPS Radio for Divers! Your unit is ready for immediate use as a fully functional marine VHF radio and GPS. You can talk on the radio using either of the following buttons:

Green Chat Button: Channel 68 by default, and adjustable to any marine VHF frequency.

Orange Hail + Distress Button: Pre-set to channel 16. the international hail and distress channel.

NOTE: Before first use, be sure to charge your Nautilus LifeLine battery to 100%. Additional features are available once your LifeLine unit is registered using the Nautilus LifeLine Setup Utility which you can download from the Nautilus LifeLine website at: http://wwww.nautiluslifelinesetup.com.

Connect your unit to your computer using the included USB cable and run the Setup Utility in order to register your warranty, activate distress mode, and enter a Maritime Mobile Service Identity (MMSI) number. See Register Your Nautilus LifeLine on page 7.

About this Manual

We encourage you to read through this operations manual before using your Nautilus LifeLine VHF-GPS Radio for Divers. This will help you access the latest features of your LifeLine and understand the safe and proper way to use it.

The label "WARNING!" identifies conditions that could result in personal injury or loss of life, or cause damage to your Nautilus LifeLine.

The labels "IMPORTANT" and "NOTE" alert you to information that is important to proper assembly, operation, or maintenance of your Nautilus LifeLine. The label "*UPDATE*" notifies of changes to the menu operation and new features available in firmware newer than 0.80. See New Firmware Features at the end of this manual for full information on the new features available.

IMPORTANT SAFETY CONSIDERATIONS

WARNING! The Nautilus Lifeline is an aid to your safety. It is not a life-saving device. It is not intended to save your life.

USAGE IN NORTH AMERICA - FEDERAL COMMUNICATIONS COMMISSION NOTICE

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

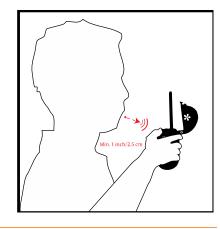
- Increase the separation between the equipment and receiver.
- Connect the equipment to a different electrical circuit from the receiver.
- Consult the dealer or an experienced marine electronics technician for help.
- This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.
- Unauthorized changes or modifications to this equipment may void compliance with the FCC Rules.

RADIO FREQUENCY EXPOSURE SAFETY STATEMENT

Your wireless handheld portable transceiver (LifeLine) contains a low-power transmitter. When the push-to-talk button is pushed, the transceiver sends out radio frequency (RF) signals. In August 1996, the FCC adopted RF exposure guidelines with safety levels for handheld wireless devices. This device is authorized to operate at a duty factor not to exceed 50% (this corresponds to 50% transmission time and 50% reception time).

WARNING! In order to maintain compliance with the FCC's RF exposure guidelines, this transmitter and its antenna must maintain a separation distance of at least 1 inch (2.5 centimeters) from your face. Speak in a normal voice, with the antenna pointed up and away from your face at the required separation distance. Use only the supplied antenna. Unauthorized antennas, modifications, or attachments may damage the transmitter and violate FCC regulations.

Min. 1 inch/2.5 cm



OPERATOR WARNINGS

WARNING! Unauthorized use, changes, or modifications to the Nautilus LifeLine may result in violations of FCC Rules.

WARNING! Disassembly and repair of the Nautilus LifeLine should only be performed by the manufacturer. Any modification of the serial number or attempt to repair the original equipment or accessories by unauthorized individuals will void the warranty.

WARNING! The Nautilus LifeLine radio is capable of transmitting on the very high frequency (VHF) marine band. Use of the VHF marine band is permitted on water only. Use of the VHF marine band on land is prohibited. If the VHF marine band is used on land and interferes with others communicating, authorities may be notified and search for the interference. Responsible parties found to be transmitting on the VHF marine band on land may be fined.

The following communications are prohibited:

- False distress or emergency messages.
- General messages (messages not addressed to a particular station), except in an emergency or if you are testing your radio.
- Transmission while on land.
- Messages containing obscene, indecent, or profane language (potential fine of \$10,000).

LICENSING

You may need a license to operate your handheld VHF radio in some countries. Contact your local authorities before using your unit to ensure that you are complying with the rules and regulations in your area. Regulations may vary between countries, please contact local authorities before using your Nautilus LifeLine in another country.

See Country Specific Regulations and Certifications on Page 11 for information about regulations or certifications that are required by certain countries. As this information may change, please check our support page at http://www.nautiluslifeline.com/support for the most up-to-date information regarding certification requirements in different countries.

USAGE IN THE EUROPEAN UNION

In the EU, the Nautilus LifeLine Radio for Divers is a class 2 device. Not all frequencies in the EU are harmonized throughout the Community, and users are advised to select their country or region of diving in order to ensure that the correct table of channels is available.

MARITIME MOBILE SERVICE IDENTITY

IMPORTANT: Your Nautilus LifeLine is not fully functional unless an MMSI number has been entered. The Red Button will not be enabled.

A Maritime Mobile Service Identity (MMSI) number is a nine-digit number used on marine radios that are capable of using digital selective calling (DSC). It is used similar to a telephone number to identify the user.

Many countries (but not all) allow use of MMSI numbers. You must apply to your local authorities to obtain an MMSI number.

In the United States, visit: http://www.boatus.com/mmsi or http://www.usps.org/php/mmsi/rules.php

In Canada, visit: http://www.ic.gc.ca/eic/site/sd-sd.nsf/eng/00009.html and fill out the form labelled "Annex I" to apply for and register for an MI number. NOTE: An MI number is identical to an MMSI number in function but is for handheld radios that are not specific to any vessel.

In the UK, visit: http://licensing.ofcom.org.uk/radiocommunication-licences/ships-radio/faq/759544 to apply for an MMSI number.

In the European Union, you must apply for a Call Sign and MMSI number from the Federal Network Agency responsible for the assignment of numbers in your country.

In Germany, you must apply for a Call Sign and MMSI number from the Federal Network Agency, branch Hamburg

http://www.bundesnetzagentur.de/seefunk under the heading "Seefunk/Binnenschifffahrtsfunk"

Using the form: "Antrag auf Nummernzuteilung Sportschifffahrt (pdf)

Be sure to select "portable radio equipment" > "for handling of radio communication and DSC", "tragbare Funkanlage" > "zur Abwicklung von Sprechfunk und DSC".

The BNA is currently of the opinion that an assignment of numbers to persons (whereas it should correctly read "maritime radio equipment") without direct relation to a maritime or ship station is not possible in Germany while a detailed justification is not made. This is likely because in the respective international rules the term "Ship Station License" is used which simply did not consider a newly designed apparatus such as the Nautilus LifeLine DIVER.

It could be beneficial if as many users of the Nautilus LifeLine DIVER as possible request a number assignment for this unit at the Federal Network Agency to prove the necessity of a separate number allocation for handheld devices.

In France, you must apply for a ship station licence (Call Sign) and MMSI number from the National Frequency Agency (ANFR)

http://www.anfr.fr/fr/autorisations-certificats/radiomaritime.html using the form: "Demande de Licence et MMSI" (pdf)

ANFR will not likely assign an MMSI number to a person because they are not a "ship station". This is due to an interpretation of recommendations that did not consider a device like the Nautilus LifeLine DIVER.

It could be beneficial if as many users of the Nautilus LifeLine DIVER as possible request a number assignment for this unit from the Agence Nationale des Fréquences (ANFR) to prove the necessity of a separate number allocation for handheld devices.

To enter your MMSI number, see Register Your Nautilus LifeLine on page 7. International regulations require that you contact the manufacturer to change your MMSI. This can be done by contacting our technical support team. Please visit http://www.nautiluslifeline.com/support_troubleshooting for full details.

PARTS SUPPLIED

Before using your Nautilus LifeLine VHF-GPS Radio for Divers, make sure that the following parts are included in the box:

One Nautilus LifeLine DIVER

- 1 USB adapter cable
- 2 USB port covers (one spare)
- Clip (attached to unit)
- Antenna (installed on unit)
- Quick Start Guide

If any of these items are missing, contact your dealer or Nautilus LifeLine (see Customer Support on page 11).

OPTIONAL ACCESSORIES

The following optional accessories are available for the Nautilus LifeLine:

- DIVER Pouch
- Spare DIVER O-rings, USB caps, and USB cables
- Extended Warranties
- T-shirts and Mask Straps

NOTE: These accessories are available online at http://www.nautiluslifeline.com or by calling customer support at 001-604-241-1918. You can also check with your local dealer to place an order.

HOW THE RADIO AND GPS WORK

<u>Very High Frequency Radio (VHF)</u>: VHF radio is the most common method of communication between boats. As such, part of the radio spectrum has been allocated specifically to maritime users, and this VHF marine band is the same worldwide.

<u>Digital Selective Calling (DSC)</u>: DSC is an advanced, computerized form of VHF radio designed for marine use. When a distress call is made by pressing just one button on the radio, your identification and location may be automatically transmitted to the Coast Guard and other vessels in the area with a modern VHF radio. This function is primarily for emergency use but can be configured for non-emergency use as well.

Global Positioning System (GPS): GPS is a means for locating any point on the earth. On your Nautilus LifeLine, it allows your latitude and longitude position to be acquired as long as you have a clear view of the sky. This ensures that you can be found even without communicating your position.

Maritime Mobile Service Identity (MMSI): An MMSI is a nine-digit number used on marine radios like your Nautilus LifeLine that are capable of using digital selective calling (DSC). It is used like a telephone number to selectively call other vessels.

To obtain an MMSI number, go to our support page http://www.nautiluslifeline.com for information about registering for an MMSI in different countries. To enter your MMSI number, see Register Your Nautilus LifeLine on page 7.

CONTROLS AND FEATURES

Front of Unit

Latch LCD Display Position Indicating Light Green Charging Light

<u>Polycarbonate Housing</u>: Waterproof protection to a depth of 425 feet (130 meters) so that you can take your Nautilus LifeLine with you on every dive.

<u>Clip</u>: Conveniently and securely attaches the Nautilus LifeLine to a D-ring. For ultimate convenience, order a DIVER Pouch.

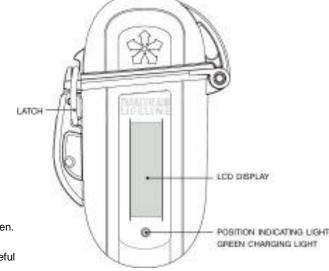
Charging Light: A green charging light is illuminated when the LifeLine charging.

GPS Reciever: Jupiter 3 GPS receiver shows your latitude and longitude on the LCD screen.

Position Indicating Light: Flashes in distress mode to indicate diver position: especially useful

<u>LCD Screen</u>: Shows GPS coordinates, number of satellites in view, channel in use, and battery level. When scrolling through the menu, the screen shows volume, squelch, and channel selection.

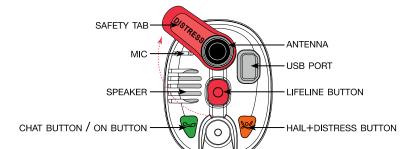
Rechargeable Battery: 1850 mAh Lithium ion battery connects to any USB charger. The battery provides 30 minutes of talk time plus 24 hours of distress mode.



LCD Screen

GPS Coordinates West Number of Satellites In View Signal Lock Green Charging Light Transmitting Battery Meter Channel Name and Number Position Indicating Light

GREEN CHARGING LIGHT GPS COORDINATES WEST NUMBER OF SATELLITES IN VIEW SIGNAL LOCK AUTILU IFELIN 123° 05. 8594'W 49 07.5965'N Й2 Ó T [BOAT] 08 T [ROAT] 08 TRANSMITTING BATTERY METER CHANNEL NAME AND NUMBER POSITION INDICATING LIGHT



Top of Unit with Cap Open

Safety Tab
Microphone
Speaker
Chat Button / On Button
Antenna
LifeLine Button
Hail + Distress Button

<u>VHF Whip Antenna</u>: Waterproof to IP67 standards. The antenna's range can be further extended by holding the unit straight up above your head in distress mode. When your unit is not in use, store it with the cap open and the antenna fully extended.

Speaker / Microphone: Splash-proof and functional in all sea conditions. Do not submerge. If incoming transmissions are muffled, hold unit upside down and gently tap on speaker grill to dislodge trapped or standing water.

<u>Chat Button</u>: Allows you to chat to your dive boat or other divers on a regular transmission channel, or to change the channel to any supported marine VHF frequency.

Hail + Distress Button: Allows you to talk to every boat within range on channel 16, the universal hail and distress channel on every marine radio worldwide. Users can change this channel to any marine VHF frequency. Software embedded in the unit prevents you from accidentally jamming the channel.

<u>LifeLine Button</u>: Allows you to transmit a distress message and your GPS coordinates by using LocateMe[™] Technology. Your message will be shown on the screen of all boats with modern marine radios. Their radios should automatically switch to channel 16, alarms will sound, lights will flash, and your GPS coordinates and emergency message should be shown on the screen of each radio. Regulations regarding the use of DSC distress messages vary according to country and certification. Please check with local authorities before using this function.

<u>USB Port</u>: For recharging the battery and connecting to the LifeLine Setup Utility on your computer to change advanced settings or download a GPS log of dive sites.

BEFORE YOU START

Your unit is ready for immediate use as a fully functional marine VHF radio and GPS. You can talk on the radio using either of the following: Chat Button: Pre-set to channel 68 or adjustable to any marine VHF frequency

Hail + Distress Button: Pre-set to channel 16, the international hail and distress channel

To activate all applicable features, follow the instructions under each section below.

Check the Unit

Check the O-ring carefully for dust or contaminants before submerging the unit. Very sparing application of silicone grease can be beneficial. Also make sure the USB cover is firmly in place.

Charge the Unit

Your Nautilus LifeLine comes from the factory with a partial charge. You can charge it by connecting it to a USB charger, to any computer, or to a USB wall adapter using the supplied USB cable.

To charge your unit:

- 1. Open the cap on the unit.
- 2. Remove the protective cover over the USB port.
- 3. Plug the USB cable into the unit and into a USB charger, into a computer, or into a USB wall adaptor.
- 4. Leave the unit plugged in until it is fully charged. Charging usually takes 4–5 continuous hours. A green LED indicator will indicate that the unit is charging. Charge the unit to 100%.
- Once your Nautilus LifeLine is charged, disconnect the USB cable and carefully replace the cover over the USB port on the unit. Ensure that the USB cover is clean and properly placed to ensure protection of the USB port.

Install the Setup Utility

In order to activate all applicable features, you will need to download the Setup Utility from the Nautilus LifeLine website and install it to activate all functions. To download and install the Nautilus LifeLine Setup Utility on your computer:

Windows Users

- 1. Download the latest windows software from http://www.nautiluslifelinesetup.com and run the installer Lifeline-Setup.exe.
- 2. Follow the installer instructions and plug in your LifeLine with the USB cable when you are prompted to do so.
- 3. Windows may ask if you want to install a Device Driver from Nautilus LifeLine Ltd; choose "Install" to install the device driver for your Nautilus LifeLine. If you do not install the driver your computer will be unable to connect to the Nautilus LifeLine. If you have previously installed the LifeLine Setup Utility you will not need to re-install the device driver.
- 4. Once installed, run the Setup Utility with your Nautilus LifeLine plugged into your computer.
- 5. When finished, disconnect the USB cable and carefully replace the cover over the USB port on the unit.

Mac Users:

- 1. Download the latest Mac software from http://www.nautiluslifelinesetup.com and mount the disk image "Lifeline-Setup.dmg".
- 2. Drag NautilusLifeline.app to the Applications shortcut. You may also double click the "Add to Dock" icon to add a shortcut to your Dock.
- 3. Run the Setup Utility and plug your Nautilus LifeLine into your computer.
- 4. When finished, disconnect the USB cable and carefully replace the cover over the USB port on the unit.

NOTE: Running the LifeLine desktop software in virtual environments such as: Parallels, VMWare, VirtualBox, or other virtualization technologies will not enable you to connect to your LifeLine. Communication between the Nautilus LifeLine device and the virtual computer will not work.

NOTE: On Mac OS X 10.8 Mountain Lion you may be warned that this application is from an Unidentified Developer and be prevented from running it by Apple Gatekeeper software. Please see the following Apple support page: http://support.apple.com/kb/HT5290 for information on how to allow this application to run. See the section: "If you are confident the app downloaded from the Internet is the latest version and is from a source you trust" for relevant information.

NOTE: Firmware updates are currently not possible using a Mac. Please use a Windows PC (or borrow a friends PC) to update your firmware if you are prompted to do so. If you are unable to find a PC, see our support section for information about using our Live CD to upgrade firmware.

Register Your Nautilus LifeLine

Additional features are available once you've registered your Nautilus LifeLine. You will need to use the Nautilus LifeLine Setup Utility to register your unit, validate warranty, select your country or dive region, activate the distress mode red button, enter an MMSI number, and make other configuration changes. To do this:

- 1. Make sure the unit is connected to the computer with the USB cable.
- Open the Nautilus LifeLine Setup Utility on your computer. If your LifeLine is not registered the Registration form will be displayed when the software connects to your LifeLine. You can also open the Registration form from the Updates > Software Settings tab by clicking on "Update Registration".
- 3. Follow the instructions for validating your warranty. Be sure to accurately fill out the required fields and carefully read the Limited Liability.
- 4. You must register your Nautilus LifeLine to activate the distress mode function on your unit. Regulations regarding the use of distress mode vary by country and certification. Contact local authorities before using this function.
- 5. Enter your MMSI number using the Setup Utility software under the Apps > Customize Settings tab.

After Registration

- 1. Select your region.
 - IMPORTANT: Your unit must always be set to the country where you are using it. If you travel to a different country make sure to choose the correct dive region on your LifeLine before you dive to ensure the list of channels available is correct for your location.
- 2. If you have already obtained an MMSI number, be sure to enter the 9-digit number correctly. For information on obtaining an MMSI number, go to http://www.nautiluslifeline.com.
 - NOTE: You must enter an MMSI number to have full use of the distress mode function. You can only enter your MMSI number once, and you can only enter one MMSI number. If you need to change the MMSI number for any reason, contact Nautilus LifeLine to reset your units MMSI. See Customer Support on page 11 for our support contact information.
- 3. When finished, disconnect the USB cable and carefully replace the cover over the USB port. This cover must be clean of all contaminants and carefully fitted in place to maintain waterproof integrity.

GETTING STARTED

To start using your Nautilus LifeLine, follow the instructions under each section below.

Open the Cap

IMPORTANT: Only open the cap if you are at the surface. Do not open the cap underwater. GPS and radio functions may only be used at the surface. When the cap is open the unit is splash-proof and can be used at the surface in any sea state. Do not submerge the unit with the cap open. If the LifeLine is submerged, speaker volume may temporarily be affected until it has been cleared of water; hold the LifeLine upside down and gently tap on the speaker grill to dislodge trapped water. No other functions are affected.

When the cap is closed, the unit is submersible to 425 feet (130 meters).

Extend the Antenna

The whip antenna can be flipped up when the cap is opened.

NOTE: Maximize the range of your unit in distress mode by fully extending your arm upwards and holding the unit as high above your head as possible.

Power On

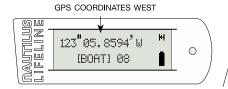
Opening and closing the cap on your unit does not turn it on or off. To turn on your unit, open the cap and press the green, orange or red button once. The LifeLine takes about 1 second to power up.

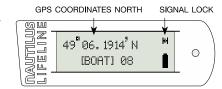
Once your unit is turned on, the home screen will appear and the GPS will automatically start to acquire your latitude and longitude position if you have a clear view of the sky.

Home Screen: The screen flashes coordinates from west to north. Coordinates are locked when the screen shows your position and a plus sign |+| in the top right corner.

UPDATE: An upcoming firmware change will change the home screen and menu operation. For full details, see page 11 - New Firmware Features.

GPS Coordinates West GPS Coordinates North Signal Lock





NOTE: When the unit is turned on for the first time, triangulation may take longer than normal. The next time, the GPS will take less time to lock. We recommend turning on your radio when arriving at a new dive destination so it acquires an accurate position.

USING THE RADIO

To use the radio on your Nautilus LifeLine, follow the instructions under each section below.

Chat to Other Boats or Divers

Use the Green Chat Button to talk to your dive boat or other divers on a regular transmission channel.

To talk on the Green Chat Button channel:

- 1. Press and hold the Chat Button. The radio will switch to transmit mode when the channel is clear.
- 2. Talk clearly into the speaker / microphone area of the radio. When you are transmitting, the screen shows the channel it is transmitting on and the letter "T".
- 3. When finished transmitting, release the button. You must release the button in order to listen to incoming transmissions. Transmission will automatically stop after 20 seconds to prevent the LifeLine from blocking the channel.

NOTE: If incoming transmissions are muffled, hold unit upside down and gently tap on speaker grill to dislodge trapped water.

NOTE: The Green Chat Button channel is not available at lower battery power levels. Your LifeLine is programmed to reserve power for emergency transmissions so it prevents voice communication at lower battery levels. While transmitting a message, the LifeLine cannot receive a call. The default chat-off battery percentage is 40% but this can be adjusted using the LifeLine Setup Utility software.

Hail Boats in the Area

Use the Hail + Distress Button to talk to boats within range on channel 16, the universal hail and distress channel on every marine radio worldwide. Every boat in the world is required to monitor this channel.

To talk on channel 16:

- 1. Press and hold the Orange Hail + Distress Button.
- 2. Talk clearly into the speaker / microphone area of the radio. When you are transmitting, the screen shows the channel it is transmitting on and the letter "T". Wait until you see a "T" before speaking.
- 3. When finished transmitting, or in order to listen for a response, release the button. Transmission will automatically stop after 30 seconds to prevent the LifeLine from blocking the channel.

NOTE: While transmitting a message, the radio cannot receive a call. Software in the unit prevents you from accidentally jamming the channel.

NOTE: If incoming transmission is muffled, hold the LifeLine upside down and gently tap on the speaker grill to dislodge trapped water.

TRANSMITTING A DISTRESS MESSAGE

Use distress mode to transmit a distress message and indicate your GPS position and alert message to stations within range that are equipped with a modern VHF marine radio.

NOTE: Regulations regarding use of the distress mode vary according to country and certification. Contact local authorities before using this function.

NOTE: This feature is not activated until your Nautilus LifeLine has been registered and you have entered an MMSI number using the LifeLine Setup

Utility software. Please visit http://www.nautiluslifeline.com to download the latest LifeLine Setup Utility for your Mac or Windows PC.

Turn Distress Mode On

To turn distress mode on, slide the RED safety tab over, then press and hold the LifeLine Button for at least 3 seconds.

NOTE: The distress mode function is available as long as there is any battery life.

With successful activation, the Position Indicating Light starts flashing and the screen shows the message "distress mode on."

Stations within range that are equipped with modern VHF marine radios and receive your distress messages will automatically switch to channel 16, alarms will sound, lights will flash, and your GPS coordinates and a brief message will be shown on the screen of each radio.

NOTE: To maximize the range of your unit in distress mode, fully extend your arm upwards and hold the unit as high above your head as possible.

Turn Distress Mode Off

To turn distress mode off, press and hold the LifeLine Button for more than 3 seconds. The screen will show the message "distress mode off". You can also disable the distress mode by plugging the LifeLine into a computer with the supplied USB cable.

IMPORTANT: Remember to turn distress mode off if you are not in a state of distress, as it will continue to broadcast emergency messages until Distress Mode is de-activated or the battery is completely drained.

UPDATE: See New Firmware Features at the end of this manual for upcoming changes to Distress Mode de-activation.

TEST MODE

- 1. Ensure that you are outside and can get GPS reception.
- Enter Menu mode by pressing the Green and Orange buttons simultaneously.
- 3. Scroll through to the Distress Test screen.
- 4. Press the Orange button to select the menu item and again to confirm activation of the Distress Test Mode.
- 5. Position Indicating Light will flash within 3 minutes confirming test.
- 6. Press Red Distress button for a minimum of 3 seconds to turn off.
- 7. Either turn test mode off from the menu or wait 5 minutes for the LifeLine to automatically turn off.

SELECTING AND ADJUSTING SETTINGS ON THE COMPUTER

You can select and adjust LifeLine settings on the computer or on the unit; see Selecting and Adjusting Settings on the Unit below.

To use the included Setup Utility on your computer:

- 1. Connect your unit to the computer using the USB cable.
- 2. Run the Nautilus LifeLine Setup Utility. For information on downloading and installing the Setup Utility, see Install the Setup Utility on page 7.
- Change the settings on your Nautilus LifeLine from your computer using the Setup Utility. The latest operating instructions are always available
 online at http://www.nautiluslifeline.com/support_software_readme.

From the setup utility, you can:

- Register your LifeLine to enter an MMSI number and enable distress mode
- 2. Upload GPS Points: Upload your points to our Google Maps interface
- 3. Share GPS Points: Share your recent points using social media or email
- 4. Group Call: Set up a Group Call or Position Report (non-distress) mode
- 5. Buried Treasure: Set up a long power-off time to mark underwater sites LifeLine must be at the surface to acquire GPS signal
- 6. Customize Settings: Set your volume, squelch, timeout, and MMSI number or customize your channel lists
- 7. Perform Software and Firmware Updates to access the latest features and performance improvements

When finished with the Setup Utility, disconnect the USB cable and carefully replace the cover over the USB port on the unit.

NOTE: Firmware updates are currently only available on Windows PCs. Firmware updates on Mac are only possible by booting from our Live CD which you can find on our http://nautiluslifeline.com/support_troubleshooting_mac page.

SELECTING AND ADJUSTING SETTINGS ON THE UNIT

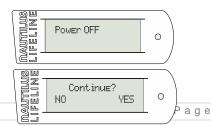
UPDATE: New menu operation and features are available in firmware versions newer than 0.80. See New Firmware Features at the end of this manual for more information.

Power Off

If no buttons are pressed for more than 5 minutes while your unit is on, it automatically turns off. You can change this power-off time using the Setup Utility on your computer.

To manually turn off the Nautilus LifeLine:

- 1. From the menu screen, scroll (using the green button) until the screen says "Power Off"
- 2. Press and hold the Orange Button until the "Confirm" prompt appears.



Press the Orange Button to Confirm.

Adjust Squelch

Squelch is used to eliminate static and background noise between transmissions, and allows silent operation of the radio until a transmission is received. Your LifeLine comes from the factory preset to auto squelch. On this setting, you should never need to worry about squelch. To manually change the squelch go to the Setup Utility and select "Manual" from the Squelch Adjustment dropdown box and adjust the Squelch setting.

To adjust squelch:

- From the menu, scroll (using the Green Button) until the display reads "Squelch," press the Orange Button to enter the adjustment screen.
- Adjust your Squelch levels by quickly pressing the Green Button to go lower, and the Orange button to go higher. 2.
- Once you've reached your preferred Squelch setting, press and hold the Orange button to confirm and return to the home screen.

Adjust Volume

- From the menu, scroll (using the Green Button) until the display reads "Volume", then press the Orange Button to enter the adjustment screen. 1.
- Adjust your Volume levels by quickly pressing the Green Button to go lower, and the Orange button to go higher.
- Once you've reached your preferred Volume setting, press and hold the Orange button to confirm and return to the home screen.

Change the Green Chat Button channel

Your Nautilus LifeLine can store any VHF channel. The Green Chat Button is pre-set to channel 68. To change the Green Chat Button channel to any marine VHF frequency:

- Press the Green button 3 times very quickly until you see "Select Channels."
- Scroll through available Chat Channels by quickly pressing the Green Button to go lower, and the Orange button to go higher.
- Once you've reached your preferred channel, press and hold the Orange button to confirm and return to the home screen.

UPDATE: See New Firmware Features at the end of this manual for new channel selection instructions on firmware newer than 0.80.

Reset the Radio

To perform a hard-reset on the Nautilus LifeLine, press the Green Chat Button, Orange Hail + Distress Button, and Red LifeLine Button at the same time for about 1 second. The screen will momentarily go blank and the LifeLine will start up again.

MAINTENANCE

Maintain the O-Rings

To lengthen the life of your unit and prevent accidental flooding, keep the O-rings clean of dirt, hair, and debris. WARNING: Any dirt or contamination on the O-ring may result in damage or permanent failure of your Nautilus LifeLine.

Replace the Battery

An 1850 mAh lithium ion battery is used to power the Nautilus LifeLine. Return your unit to the manufacturer if the battery needs to be changed. Any attempt to replace the battery by the user will void the warranty.

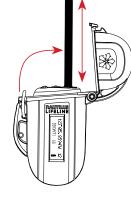


Gently rinse your Nautilus LifeLine in fresh water after each use. Do not blow-dry with pressurized air.

Store the Unit Open

Store the unit in a clean dry environment, clear of dust and contaminants and out of direct sunlight.

To prolong the life of the O-ring and antenna, always store the unit with the top cap open and the antenna fully extended.



TROUBLESHOOTING

Please read the following troubleshooting guidelines. This may enable you to solve a performance problem yourself and avoid sending your unit back for repair. Also check our website support page at: http://www.nautiluslifeline.com/support and frequently asked questions (F.A.Q.) at: http://www.nautiluslifeline.com/support_troubleshooting for common problems and their solutions.

If problems persist, do not attempt to repair the unit yourself. See the warranty for factory service information.

NOTE: Do not attempt to repair the Nautilus LifeLine yourself as there are no user serviceable parts inside, and special tools and techniques are required for reassembly to maintain waterproof integrity of the housing. Repairs should be performed only by authorized Nautilus LifeLine technicians.

Unit Does Not Power On

If your Nautilus LifeLine does not turn on:

- Try hard-resetting the radio by pressing all three buttons at once.
- 2. Connect your unit to a computer using the USB cable.
- If the problem persists, contact Nautilus LifeLine directly. See Customer Support on page 11.

WARRANTY

The Nautilus LifeLine comes with a limited warranty. This warranty only applies if the unit has been registered online.

The Nautilus LifeLine limited warranty covers the correction of manufacturing defects and resulting damage only and is valid for 1 year from the date you take delivery of your unit. Without limiting the generality of the foregoing, this warranty does not cover physical misuse or abuse of your unit, including tampering by unauthorized persons or repair facilities, flooding as a result of customer misuse/neglect or improper care and maintenance, damage or flooding if the unit is submerged without the lid being properly latched or if the O-ring is not clean and clear of contamination.

IMPORTANT: THE LIMITED WARRANTY IS ONLY AVAILABLE TO THE ORIGINAL OWNER ON UNITS BOUGHT FROM AN AUTHORIZED DEALER AT MANUFACTURER SUGGESTED RETAIL PRICE (MSRP) OR MINIMUM ADVERTISED PRICE (MAP).

This warranty does not apply to a unit that has been:

- Improperly used for a purpose other than that recommended in the product installation and operation instructions.
- Damaged or has failed because of an accident or abnormal operation.
- Repaired or modified by entities other than Nautilus LifeLine.

Please keep your original receipt as proof of the purchase date. You must register your unit within 30 days of purchase to qualify for the limited warranty.

Extended Warranty

NOTE: Extended Warranties are not limited to the original owner. If you have purchased a LifeLine second-hand or from a dive buddy, contact our Sales Team to find out how our Extended Warranties can help you.

Our Extended Warranties options are:

- 1 Year Extended Warranty includes all benefits and terms of limited warranty for an additional 12 months.
- 2 Year Extended Warranty extends the benefits of the limited warranty for two years after the limited warranty expires.
- 2 Year Extended Warranty + Accidental Flooding covers accidental flooding as well as all other Extended Warranty benefits.

CUSTOMER SUPPORT

Please review our support page at http://www.nautiluslifeline.com/support and search the FAQ for common technical issues and how to resolve them. Contact Customer support:

- On the web: http://www.nautiluslifeline.com
- By email: <u>techsupport@nautiluslifeline.com</u>
- By telephone: 001-604-241-1918
- On Skype: nautiluslifeline

COUNTRY SPECIFIC REGULATIONS AND CERTIFICATIONS

To operate a VHF marine radio in most countries, a Short Range Certificate, SRC, is required.

Canada: A Radio Operator's Certificate is required to operate a VHF marine radio in Canadian waters. Please see the Transport Canada website regarding "Radiocommunications" and the Frequently Asked Questions there for more information about obtaining a Radio Operator's Certificate – Maritime Commercial.

European Union: In the EU, the Nautilus LifeLine Radio for Divers is a class 2 device. Not all frequencies in the EU are harmonized throughout the Community, and users are advised to select their country or region of diving to ensure the correct channels are available.

Regulations regarding the use of VHF frequencies are different between EU member states. Nearly all member states require additional certification to use a VHF radio with DSC such as a VHF Operators' Licence, a Short Range Certificate, or similar. Check with the local authorities before using VHF marine frequencies.

IMPORTANT: The information published here is accurate at the time of publishing but does not include specific regulations from all member states. Check with your local authorities regarding the use of VHF marine radios with DSC in your country and whether additional certification is required.

Germany: An SRC is required to operate a VHF marine radio in Germany. Documents regarding certification requirements and regulations for mobile radiotelephone service at sea and on inland waterways can be found on the website of the German Federal Network Agency at http://www.bundesnetzagentur.de/seefunk/.

France: A CRR or a pleasure boat license (permis de conduire les bateaux de plaisance) is required to operate a VHF marine radio in France. Use of DSC on rivers and inland waterways is prohibited in France.

Documents and information regarding certification requirements and regulations for Marine Radio in France can be found at: http://www.anfr.fr/fr/autorisations-certificats/radiomaritime.html. You can find information regarding Restricted Radiotelephone Operator Certificate (CRR) courses and examinations.

NEW FIRMWARE FEATURES - FIRMWARE NEWER THAN 0.80

An update to the LifeLine firmware will significantly improve menu navigation and features accessible through the menu. If your LifeLine is running firmware newer than version 0.80, please review the new information below regarding use of the menu and the new features available on your LifeLine.

DSC distress mode operation has changed somewhat in how it is enabled and disabled, as well as the addition of new DSC message modes.

IMPORTANT: Distress mode can no longer be de-activated by pressing and holding the Red LifeLine button; it is now only deactivated:

- by disabling distress mode from the LifeLine menu
- by plugging the device in with the USB cable to a wall charger, USB adapter, or USB port on a computer
- · when the LifeLine receives a Distress Acknowledge message from another DSC enabled radio, or
- when the battery has been completely exhausted

Button Press Information

A short press on the Orange or Green button cycles through menu options or selects a menu item.

When navigating the menu, a long press of 1 second will confirm or activate a menu or setting selection.

A long press > 1 second on the Orange or Green button will transmit on the currently selected channel. If you were in a menu before pressing and holding the button your menu selection will be confirmed before switching to transmit mode on the current channel.

Previous firmware versions cycled through the display values for latitude and longitude every 1 second. The display does not change on its own in the new firmware but requires a short press on the Green button to change between latitude, longitude, and time (UTC).

Using the new Menu

- A short press on the Orange button will enter the LifeLine Menu
- A short press on the Green button will cycle through menu items
- Press the Orange button to select a menu item
- A short press on the Orange or Green button will change settings up (Orange) or down (Green)
- Press the Orange or Green button for 1 second to confirm a menu item selection

Menu Options

Chat Channel - Change the chat channel more easily from the menu

Squelch - Change the radios squelch setting

Volume - Change the radios speaker volume

Messages - Several DSC message features are available

- · Start Distress Start the DSC distress cycle
- Received: (number of messages) Access and read DSC messages received and stored on the radio
- TX Group Chat Transmit a Group Chat DSC message to the selected group and change chat channel on receiving radios
- TX Indiv. Chat Transmit an Individual Chat DSC message to the selected group and display the chat channel on receiving radios
- TX Pos. Report Transmit a DSC Position Report message to the selected group
- TX Pos. Request Transmit a DSC Position Request message to the selected group
- TX Test Call Transmit a DSC Test Call message to the selected group

Status - See the current values for:

- MMSI
- Latitude / Longitude
- UTC / GMT / Zulu Time
- Battery: charge percentage, voltage, temperature and charge/discharge status
- · GPS Search Status
- Serial Number
- Hardware and Software (firmware) versions
- Service Code

Settings - Change how the device operates

- Sleep timeout How long in minutes the unit will stay awake with no buttons being pressed.
- Voice timeout How long the Orange button channel will transmit before it automatically halts transmission.
- Chat cutoff % Percentage of battery charge below which chat on the Green button will be disabled to preserve battery life for distress mode.
- Screen Contrast Change the screen contrast

Procedures - Useful procedures

- Self Test Run through the self-diagnostic test to ensure the LifeLine is in good working order for diving; recommended prior to each dive trip.
- Distress Simulation Run through a distress cycle simulation but do not transmit any distress messages.
- SOS Flash Flash SOS in Morse code on the LED light; deactivate SOS Flash by transmitting on any channel.

New Icons

Some new icons have been created to more closely approximate their intended message and/or use.

New Screens

Some examples of the new screen display are shown below with the new icons

49°00.00N ∑ 0	17:03:55z <u>ŏ∎</u>	17:03:04z ₫	Battery: 94%	
)68 16}	TX 16}) 68 TX	4100mV 25° disch	
Main Screen Display	Transmit on Hail + Distress Channel	Transmit on Chat Channel	Battery Status Display	

SPECIFICATIONS

NOTE: Product specifications and features are subject to change without notice.

Size And Weight				
Weight	9.88 Oz (280 grams)			
Dimensions (H x W x D)	2.6 x 5.72 x 1.8 inch (67 x 145 x 46 mm)			
Power & Battery				
Battery	1850 mAh Li-on			
Battery Capacity	24 Hrs +			
Maximum RF Power	1.85 Watts + 0 dB / -3.5 dB			
Depth Rating & Communication Range				
Depth Rating	425 Feet (130 Meters)			
Voice Communication Range	2-6 miles (3-10 km) depending on antenna height			
Distress Range (Red Button)	Transmits DSC alerts / GPS within 4000 square miles (10,000 sq km)			
Frequency Range	All Marine Channels, depending on Region selected			
GPS	Stores up to 32 Waypoints			
Channel Spacing	25 kHz			
Exterior				
Material	Polycarbonate, 316 L Stainless Steel			
Floating	YES with Cap Closed			
Display Type	LCD			

NOTE: Product specifications and features are subject to change without notice.



R&TTE Declaration of Conformity **(€**

TEL: 001-604-241-1918 info@nautiluslifeline.com

MAILING ADDRESS: PO Box 97182 Richmond, British Columbia Canada V6X 8H3

COURIER ADDRESS: #17 - 11191 Horseshoe Way, 2nd Floor Richmond, British Columbia Canada V7A 4S5

NautilusLifeLine.com

We, Nautilus Lifeline Ltd.

#17 – 11191 Horseshoe Way 2nd Floor Richmond, British Columbia Canada, V7A 4S5

hereby declare under our sole responsibility that the product to which this declaration relates is in compliance with all the applicable essential requirements and other relevant provisions of the European Council Directives listed.

Manufacturer: Nautilus Lifeline Ltd.
Product Name: Nautilus Lifeline

Product Model: Diver

Directives: 1999/5/EC (R&TTE Directive)

Product compliance has been demonstrated on the basis of Standards:

EN 302 885-2 V1.1.1 – partially applied EN 302 885-3 V1.1.1 – partially applied EN 301 843-1 V1.3.1 – partially applied EN 60945:2002 – fully applied EN 60950-1:2006 – fully applied EN 62311:2008 – fully applied

Notified Body Involved: TIMCO Engineering Inc. - Notified Body Number 1177

3 September 2013

Richmond, British Columbia

Mike Lever, President