

# Uniden®

## Welcome

to the world of sophisticated, microprocessor controlled Marine VHF radio communications. Your Uniden HH 978XL is one of the most technologically advanced Marine VHF radios available today. It gives you the full complement of all USA and International channels, instant channel 16 access, all NOAA International weather channels, rechargeable batteries, and more. The HH 978XL features Phase Locked Loop frequency synthesis for precise transmit a receive frequency control and long term stability. This radio has been accepted and certified by the FCC for marine use.

### Warning

The Marine Radiotelephone Service is under the jurisdiction of the Federal Communications Commission (FCC). Any adjustments or alterations which would alter the performance of the transceivers original FCC type acceptance or would change the frequency determining method are strictly prohibited.

Replacement or substitution of crystals, transistors, IC's, regulator diodes or any other part of a unique nature, with parts other than those recommended by us may cause violation of the technical regulations of the FCC rules or violation type acceptance requirements of the rules.

**Before operating the radiotelephone, you must obtain your license. It is illegal to transmit without the appropriate license which can be obtained by submitting a completed FCC Form 506 (included) to the FCC. Furthermore, you are required to understand Part 83 of the FCC Rules and Regulations prior to the operation of your radiotelephone. It is the user's responsibility to see that this unit is operating at all times in accordance with the FCC Rules and Regulations.**

### Warning

Uniden does NOT warrant this unit to be waterproof. When using this unit in a marine environment, care must be taken to prevent spray or water from entering the unit, which may damage it.



CHANNYR BYY 6603001  
SPARK BATTERY BP 978  
SPARK MISC SPN W WHITE  
G GRAY

# HH978XL MARINE RADIOTELEPHONE OWNER'S MANUAL

## Installation

### Handheld Use

Installing your HH 978XL for handheld use is easy. Just connect the flexible antenna to the antenna connector on the top of the unit, connect the battery pack by sliding it on, and you're ready to go for handheld operation.

### Using with External Power

You can also operate your HH 978XL from a negative ground boat using a cigarette lighter plug (optional). Simply plug the large end into the cigarette lighter, and the small end into the jack on the battery, or on the unit itself (usable only when the battery pack is removed). When plugged into the battery pack, the battery will also be charged.

### Warning

Operating this unit at a voltage other than the one specified, or operating from a positive ground source may cause permanent damage to the unit.

### Using with an External Antenna

The HH 978XL can also be used with an external antenna which will provide greater transmission and reception. The external antenna must be designed for Marine VHF use and have an impedance of 50 ohms. To use an external antenna, simply remove the flexible antenna from the top of the unit, and connect the external antenna to the antenna connector. **Note:** An adaptor may be required to connect the external antenna.

### Warning

When using an external antenna, power to the unit **must** be supplied from the battery pack or a negative ground system only. Operation of the unit with an external antenna and power supplied from a positive ground system may cause permanent damage or create a fire hazard.

### Charging the Battery

Charging the battery on your HH 978XL is easy — Just plug the AD-978 AC adapter into any 120 V AC outlet, and plug the other end into the charging jack on the rear of the battery pack. If the batteries are completely dead, it will take approximately 10 hours to fully charge them.

**Note:** You may operate the receiver or transmitter while the batteries are being charged, but this will increase the time it takes to charge the batteries. If the batteries are very low, the transmitter may not operate at all, since the AD 978 adapter will not provide sufficient current to charge the batteries and operate the transmitter at the same time.

## Features

**All USA and International Channels** — No matter where you go, the HH 978XL has got a full complement of the channels that you need.

**Nine weather channels** — Gives you all of the latest weather forecasts, so you're not taken by surprise.

**Thumbwheel Switch Channel Select** — Gives you positive selection of channels. No fooling around with hard to use buttons.

**Dual Output Power Settings** — Select either a 5 watt output for maximum range, or 1 watt for minimum range and maximum battery life.

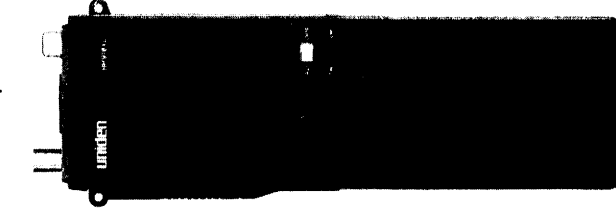
**Rechargeable Batteries** — No need to constantly buy batteries. Extra battery packs are also available.

**Compact Size** — The small size of the HH 978XL means that you can conveniently carry it anywhere.

**Light Weight** — With the batteries the entire unit weighs only 19 1/2 ounces! **Instant Access to Channel 16** — The instant access switch for channel 16 lets you find channel 16 instantly, even in the dark!

**Electret Microphone** — The built-in electret microphone gives you exceptional transmit clarity, unlike other radios that use a speaker as a microphone.

**Reliability** — The Uniden HH 978XL is backed by the world's largest manufacturer of personal communications products.



HH 978XL Front View

HH 978XL Front View  
Battery pack partly  
removed

## Features

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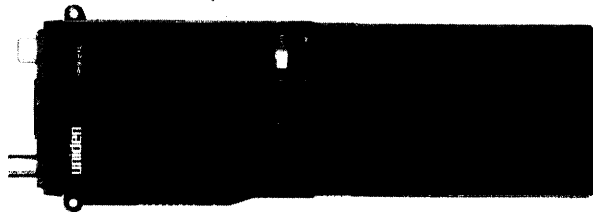
**Rechargeable Batteries** — No need to constantly buy batteries. Extra battery packs are also available.

**Compact Size** — The small size of the HH 978XL means that you can conveniently carry it anywhere.

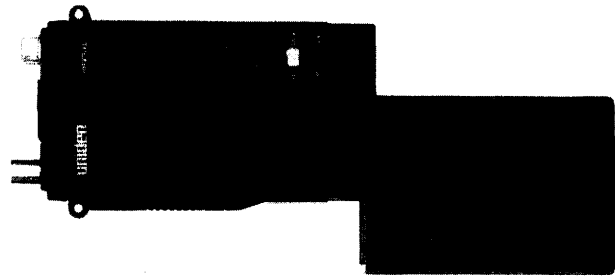
**Light Weight** — With the batteries the entire unit weighs only 19 1/2 ounces!  
**Instant Access to Channel 16** — The instant access switch for channel 16 lets you find channel 16 instantly, even in the dark!

**Electret Microphone** — The built-in electret microphone gives you exceptional transmit clarity, unlike other radios that use a speaker as a microphone.

**Reliability** — The Uniden HH 978XL is backed by the world's largest manufacturer of personal communications products.



HH 978XL Front View



HH 978XL Front View  
Battery pack partly removed

## Controls and Functions

**1. On/Off/Volume Control** — Turns the unit on or off and adjusts the volume.

**2. Squelch Control** — Use this to eliminate the "rushing" sound heard when there is no transmission to hear.

**3. Antenna Connector** — This is used to connect the flexible rubber antenna. **Warning:** Do not transmit without the correct antenna connected. Doing so may cause permanent damage to the transmitter.

**4. MIC & SP Connectors** — You can use these to connect an external microphone and or an external speaker (optional accessories).

**5. TX/BATT. LED** — This LED lights when transmitting or when the battery is low.

**Note:** This LED will not light when transmitting if the battery is low.

**6. USA/INTL Switch** — This switch is used to switch between USA and International frequency allocations. (See the frequency tables for more information.)

**7. ALL/CH 16 Switch** — Placing this switch in the CH 16 position gives you immediate access to channel 16 for calling or emergencies. When this switch is in the "ALL" position, the channel indicated on the channel selector is used.

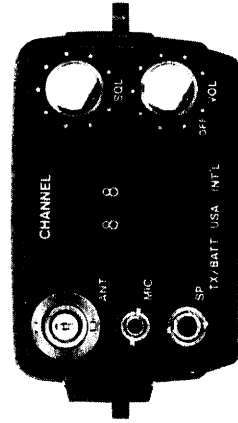
**8. 1W/5W Switch** — The 1W/5W switch is used to change the transmit power. Use the unit with the switch in the 1W position to conserve battery life when long transmission range is not required. Use your HH 978XL in the 5W position when you need maximum range.

**9. Channel Selector** — This is used to select any of the USA or International Marine VHF frequencies or NOAA and International weather channels.

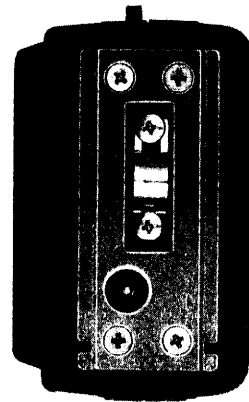
**10. Charge Connector** — You can connect the AD-978 AC Adaptor to this jack to charge the batteries. See the sections on battery charging and external power for more information.

**11. External Power Connector** — This connector (visible only with the battery pack removed) can be used with the cigarette lighter plug (optional) when operation from a vehicle or boat electrical system is desired. See the sections on battery charging and external power for more information.

**12. Push to Talk Switch** — Press this to transmit on the selected channel. Release it to receive.



HH 978XL Top View



HH 978XL Bottom View  
Battery Pack Removed

## Operation

Ensure that either the supplied flexible antenna or a suitable external antenna is connected.

Place the 1W/5W switch in the desired position. (1W to conserve the batteries, or 5W when maximum range is required.)

Set the channel selector to the desired channel. (**Note:** If operation is desired on a channel other than 16, make sure that the ALL/16 switch is in the ALL position.) Also make sure that the USA/INTL switch is set to the appropriate position.

Adjust the squelch control clockwise until the background noise just disappears. This is the proper squelch setting and the control should not be rotated beyond this point or receiver sensitivity will be degraded.

When a message is received, adjust the volume control to the desired listening level.

To transmit, press the push to talk switch and hold in while you give your message. Speak slowly and distinctly into the speaker grille.

When you have finished transmitting your message, release the push-to-talk switch so incoming messages can be received.

## Operation for maximum range

To increase the transmission and reception range, the following has been found to be effective.

Orient the antenna vertically.

Rotate the squelch control counterclockwise allowing some background noise to be heard.

Move the unit away from shielding caused by nearby structures.

Elevate the unit as high as possible over the surrounding terrain.

Speak slowly and distinctly into the microphone.

Be sure the unit has fully charged batteries.

Use an external antenna.

## Specifications

### General Channels

USA: All  
International: All  
Weather: All  
Phase Locked Loop  
±0.001% -20°C to +50°C  
-20°C to +50°C  
2.51"W x 1.37"D x 8.26"H  
20 oz.

Frequency Control  
Frequency Stability  
Operating Temperature Range  
Dimensions  
Weight

### Transmitter

Frequency Range  
Power Output  
Spurious and Harmonic  
Suppression  
Current Drain

70 dB typical  
5 Watts = 1.0 A typical  
1 Watt = 0.5A typical

### Receiver

Receiver Type  
Frequency Range  
Sensitivity  
Current Drain  
Image Rejection  
Audio Output Power

Dual Conversion Superheterodyne  
156.025 MHz to 162.550 MHz  
0.2µV @ 12 dB SINAD typical  
Squelched = 40mA typical  
Maximum Volume = 200 mA typical  
60 dB typical  
500 mW typical

**\*Note:** Features and specifications are subject to change without notice.

# VHF FM Marine Radiotelephone Channels and Functions

(U.S.A. CHANNELS)

| CHANNEL<br>DESIG | FREQUENCY (MHZ) |         | TYPE<br>TRAFFIC   | SHIP<br>TO SHIP | SHIP<br>TO SHORE | PERMANENT<br>SCAN LIST |
|------------------|-----------------|---------|-------------------|-----------------|------------------|------------------------|
|                  | SHIP            | SHORE   |                   |                 |                  |                        |
| WX1              | 162.550         | 162.550 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX2              | 162.400         | 162.400 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX3              | 162.475         | 162.475 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX4              | 162.425         | 162.425 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX5              | 162.450         | 162.450 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX6              | 162.500         | 162.500 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX7              | 162.525         | 162.525 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX8              | 161.650         | 161.650 | Can. Weather      | RX Only         | RX Only          | Weather                |
| WX9              | 161.775         | 161.775 | Can. Weather      | RX Only         | RX Only          | Weather                |
| 01               | 156.050         | 156.050 | VTS               | Yes             | Yes              |                        |
| 02               | 156.100         | 156.100 | Port Ops          | Yes             | Yes              |                        |
| 03               | 156.150         | 156.150 | Port Ops          | Yes             | Yes              |                        |
| 04               | 156.200         | 156.200 | Port Ops          | Yes             | Yes              |                        |
| 05               | 156.250         | 156.250 | VTS               | Yes             | Yes              |                        |
| 06               | 156.300         | 156.300 | Safety            | Yes             | No               | Coast Guard            |
| 07               | 156.350         | 156.350 | Com'l             | Yes             | Yes              |                        |
| 08               | 156.400         | 156.400 | Com'l             | Yes             | No               | Fish                   |
| 09               | 156.450         | 156.450 | Com'l & Non Com'l | Yes             | Yes              |                        |
| 10               | 156.500         | 156.500 | Com'l             | Yes             | Yes              |                        |
| 11               | 156.550         | 156.550 | Com'l             | Yes             | Yes              |                        |
| 12               | 156.600         | 156.600 | Port Ops          | Yes             | Yes              |                        |
| 13               | 156.650         | 156.650 | Navigational      | Yes             | Yes              |                        |
| 14               | 156.700         | 156.700 | Port Ops          | Yes             | Yes              |                        |
| 15               | 156.750         | 156.750 | Environmental     | RX Only         | RX Only          | Environmental          |
| 16               | 156.800         | 156.800 | Safety Calling    | Yes             | Yes              |                        |
| 17               | 156.850         | 156.850 | State Control     | Yes             | Yes              |                        |
| 18               | 156.900         | 156.900 | Com'l             | Yes             | Yes              |                        |
| 19               | 156.950         | 156.950 | Com'l             | Yes             | Yes              |                        |
| 20               | 157.000         | 157.000 | Port Ops          | Yes             | Yes              |                        |
| 21               | 157.050         | 157.050 | Coast Guard       | Yes             | Yes              | Coast Guard            |
| 22               | 157.100         | 157.100 | Coast Guard       | Yes             | Yes              | Coast Guard            |
| 23               | 157.150         | 157.150 | Coast Guard       | Yes             | Yes              | Coast Guard            |
| 24               | 157.200         | 161.800 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 25               | 157.250         | 161.850 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 26               | 157.300         | 161.900 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 27               | 157.350         | 161.950 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 28               | 157.400         | 162.000 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 60               | 156.025         | 156.025 | Port Ops          | Yes             | Yes              |                        |
| 61               | 156.075         | 156.075 | Port Ops          | Yes             | Yes              |                        |
| 62               | 156.125         | 156.125 | Port Ops          | Yes             | Yes              |                        |
| 63               | 156.175         | 156.175 | Port Ops          | Yes             | Yes              |                        |
| 64               | 156.225         | 156.225 | Port Ops          | Yes             | Yes              |                        |
| 65               | 156.275         | 156.275 | Port Ops          | Yes             | Yes              |                        |
| 66               | 156.325         | 156.325 | Port Ops          | Yes             | Yes              |                        |
| 67               | 156.375         | 156.375 | Com'l             | Yes             | No               |                        |
| 68               | 156.425         | 156.425 | Non Com'l         | Yes             | Yes              | Fish                   |
| 69               | 156.475         | 156.475 | Non Com'l         | Yes             | Yes              | Fish                   |
| 70               | 156.525         | 156.525 | Non Com'l         | Yes             | No               | Fish                   |
| 71               | 156.575         | 156.575 | Non Com'l         | Yes             | Yes              | Fish                   |
| 72               | 156.625         | 156.625 | Non Com'l         | Yes             | No               | Fish                   |
| 73               | 156.675         | 156.675 | Port Ops          | Yes             | Yes              |                        |
| 74               | 156.725         | 156.725 | Port Ops          | Yes             | Yes              |                        |
| 77               | 156.875         | 156.875 | Port Ops          | Yes             | No               |                        |
| 78               | 156.925         | 156.925 | Non Com'l         | Yes             | Yes              | Fish                   |
| 79               | 156.975         | 156.975 | Com'l             | Yes             | Yes              |                        |
| 80               | 157.025         | 157.025 | Com'l             | Yes             | Yes              |                        |
| 81               | 157.075         | 157.075 | Coast Guard       | Yes             | Yes              | Coast Guard            |
| 82               | 157.125         | 157.125 | US Gov Only       | Yes             | Yes              |                        |
| 83               | 157.175         | 157.175 | Coast Guard       | Yes             | Yes              | Coast Guard            |
| 84               | 157.225         | 157.225 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 85               | 157.275         | 157.275 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 86               | 157.325         | 157.325 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 87               | 157.375         | 157.375 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 88               | 157.425         | 157.425 | Com'l             | Yes             | No               | Busy Tel.              |

(INTERNATIONAL CHANNELS)

| CHANNEL<br>DESIG | FREQUENCY (MHZ) |         | TYPE<br>TRAFFIC   | SHIP<br>TO SHIP | SHIP<br>TO SHORE | PERMANENT<br>SCAN LIST |
|------------------|-----------------|---------|-------------------|-----------------|------------------|------------------------|
|                  | SHIP            | SHORE   |                   |                 |                  |                        |
| WX1              | 162.550         | 162.550 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX2              | 162.400         | 162.400 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX3              | 162.475         | 162.475 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX4              | 162.425         | 162.425 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX5              | 162.450         | 162.450 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX6              | 162.500         | 162.500 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX7              | 162.525         | 162.525 | NOAA Weather      | RX Only         | RX Only          | Weather                |
| WX8              | 161.650         | 161.650 | Can. Weather      | RX Only         | RX Only          | Weather                |
| WX9              | 161.775         | 161.775 | Can. Weather      | RX Only         | RX Only          | Weather                |
| 01               | 156.050         | 160.650 | VTS               | Yes             | Yes              |                        |
| 02               | 156.100         | 160.700 | Port Ops          | Yes             | Yes              |                        |
| 03               | 156.150         | 160.750 | Port Ops          | Yes             | Yes              |                        |
| 04               | 156.200         | 160.800 | Port Ops          | Yes             | Yes              |                        |
| 05               | 156.250         | 160.850 | VTS               | Yes             | Yes              |                        |
| 06               | 156.300         | 156.300 | Safety            | Yes             | No               |                        |
| 07               | 156.350         | 160.950 | Com'l             | Yes             | No               |                        |
| 08               | 156.400         | 156.400 | Com'l             | Yes             | No               |                        |
| 09               | 156.450         | 156.450 | Com'l & Non Com'l | Yes             | Yes              | Fish                   |
| 10               | 156.500         | 156.500 | Com'l             | Yes             | Yes              |                        |
| 11               | 156.550         | 156.550 | Com'l             | Yes             | Yes              |                        |
| 12               | 156.600         | 156.600 | Port Ops          | Yes             | Yes              |                        |
| 13               | 156.650         | 156.650 | Navigational      | Yes             | Yes              |                        |
| 14               | 156.700         | 156.700 | Port Ops          | Yes             | Yes              |                        |
| 15               | 156.750         | 156.750 | Environmental     | Yes             | Yes              | Environmental          |
| 16               | 156.800         | 156.800 | Safety Calling    | Yes             | Yes              |                        |
| 17               | 156.850         | 156.850 | State Control     | Yes             | Yes              |                        |
| 18               | 156.900         | 161.500 | Com'l             | Yes             | Yes              |                        |
| 19               | 156.950         | 161.550 | Com'l             | Yes             | Yes              |                        |
| 20               | 157.000         | 161.600 | Port Ops          | Yes             | Yes              |                        |
| 21               | 157.050         | 161.650 | Coast Guard       | Yes             | Yes              |                        |
| 22               | 157.100         | 161.700 | Coast Guard       | Yes             | Yes              |                        |
| 23               | 157.150         | 161.750 | Coast Guard       | Yes             | Yes              |                        |
| 24               | 157.200         | 161.800 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 25               | 157.250         | 161.850 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 26               | 157.300         | 161.900 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 27               | 157.350         | 161.950 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 28               | 157.400         | 162.000 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 60               | 156.025         | 160.625 | Port Ops          | Yes             | Yes              |                        |
| 61               | 156.075         | 160.675 | Port Ops          | Yes             | Yes              |                        |
| 62               | 156.125         | 160.725 | Port Ops          | Yes             | Yes              |                        |
| 63               | 156.175         | 160.775 | Port Ops          | Yes             | Yes              |                        |
| 64               | 156.225         | 160.825 | Port Ops          | Yes             | Yes              |                        |
| 65               | 156.275         | 160.875 | Port Ops          | Yes             | Yes              |                        |
| 66               | 156.325         | 160.925 | Port Ops          | Yes             | Yes              |                        |
| 67               | 156.375         | 156.375 | Com'l             | Yes             | No               |                        |
| 68               | 156.425         | 156.425 | Non Com'l         | Yes             | Yes              | Fish                   |
| 69               | 156.475         | 156.475 | Non Com'l         | Yes             | Yes              | Fish                   |
| 70               | 156.525         | 156.525 | Non Com'l         | Yes             | No               | Fish                   |
| 71               | 156.575         | 156.575 | Non Com'l         | Yes             | Yes              | Fish                   |
| 72               | 156.625         | 156.625 | Non Com'l         | Yes             | No               | Fish                   |
| 73               | 156.675         | 156.675 | Port Ops          | Yes             | Yes              |                        |
| 74               | 156.725         | 156.725 | Port Ops          | Yes             | Yes              |                        |
| 77               | 156.875         | 156.875 | Port Ops          | Yes             | No               |                        |
| 78               | 156.925         | 161.525 | Non Com'l         | Yes             | Yes              |                        |
| 79               | 156.975         | 161.575 | Com'l             | Yes             | Yes              |                        |
| 80               | 157.025         | 161.625 | Com'l             | Yes             | Yes              |                        |
| 81               | 157.075         | 161.675 | Coast Guard       | Yes             | Yes              | Coast Guard            |
| 82               | 157.125         | 161.725 | US Gov Only       | Yes             | Yes              |                        |
| 83               | 157.175         | 161.775 | Coast Guard       | Yes             | Yes              | Coast Guard            |
| 84               | 157.225         | 161.825 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 85               | 157.275         | 161.875 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 86               | 157.325         | 161.925 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 87               | 157.375         | 161.975 | Public Corresp.   | No              | Yes              | Busy Tel.              |
| 88               | 157.425         | 162.025 | Com'l             | Yes             | No               | Busy Tel.              |

# Channels and Functions

(INTERNATIONAL CHANNELS)

| CHANNEL<br>DESIG | FREQUENCY (MHz) |         | TYPE<br>TRAFFIC   | SHIP<br>TOSHIP | SHIP<br>TOSHORE | PERMANENT<br>SCAN LIST |
|------------------|-----------------|---------|-------------------|----------------|-----------------|------------------------|
|                  | SHIP            | SHORE   |                   |                |                 |                        |
| WX1              | 162.550         | 162.550 | NOAA Weather      | RX Only        | RX Only         | Weather                |
| WX2              | 162.400         | 162.400 | NOAA Weather      | RX Only        | RX Only         | Weather                |
| WX3              | 162.475         | 162.475 | NOAA Weather      | RX Only        | RX Only         | Weather                |
| WX4              | 162.425         | 162.425 | NOAA Weather      | RX Only        | RX Only         | Weather                |
| WX5              | 162.450         | 162.450 | NOAA Weather      | RX Only        | RX Only         | Weather                |
| WX6              | 162.500         | 162.500 | NOAA Weather      | RX Only        | RX Only         | Weather                |
| WX7              | 162.525         | 162.525 | NOAA Weather      | RX Only        | RX Only         | Weather                |
| WX8              | 161.650         | 161.650 | Can. Weather      | RX Only        | RX Only         | Weather                |
| WX9              | 161.775         | 161.775 | Can. Weather      | RX Only        | RX Only         | Weather                |
| 01               | 156.050         | 160.650 | VTS               | Yes            | Yes             |                        |
| 02               | 156.100         | 160.700 | Port Ops          | Yes            | Yes             |                        |
| 03               | 156.150         | 160.750 | Port Ops          | Yes            | Yes             |                        |
| 04               | 156.200         | 160.800 | Port Ops          | Yes            | Yes             |                        |
| 05               | 156.250         | 160.850 | Port Ops          | Yes            | Yes             |                        |
| 06               | 156.300         | 160.900 | Safety            | Yes            | No              |                        |
| 07               | 156.350         | 160.950 | Com'l             | Yes            | Yes             |                        |
| 08               | 156.400         | 156.400 | Com'l             | Yes            | No              | Fish                   |
| 09               | 156.450         | 156.450 | Com'l & Non Com'l | Yes            | Yes             |                        |
| 10               | 156.500         | 156.500 | Com'l             | Yes            | Yes             |                        |
| 11               | 156.550         | 156.550 | Com'l             | Yes            | Yes             |                        |
| 12               | 156.600         | 156.600 | Port Ops          | Yes            | Yes             |                        |
| 13               | 156.650         | 156.650 | Navigation        | Yes            | Yes             |                        |
| 14               | 156.700         | 156.700 | Port Ops          | Yes            | Yes             |                        |
| 15               | 156.750         | 156.750 | Environmental     | Yes            | Yes             | Environmental          |
| 16               | 156.800         | 156.800 | Safety Calling    | Yes            | Yes             |                        |
| 17               | 156.850         | 156.850 | State Control     | Yes            | Yes             |                        |
| 18               | 156.900         | 161.500 | Com'l             | Yes            | Yes             |                        |
| 19               | 156.950         | 161.550 | Com'l             | Yes            | Yes             |                        |
| 20               | 157.000         | 161.600 | Port Ops          | Yes            | Yes             |                        |
| 21               | 157.050         | 161.650 | Coast Guard       | Yes            | Yes             |                        |
| 22               | 157.100         | 161.700 | Coast Guard       | Yes            | Yes             |                        |
| 23               | 157.150         | 161.750 | Coast Guard       | Yes            | Yes             |                        |
| 24               | 157.200         | 161.800 | Public Corresp.   | No             | Yes             | Busy Tel.              |
| 25               | 157.250         | 161.850 | Public Corresp.   | No             | Yes             | Busy Tel.              |
| 26               | 157.300         | 161.900 | Public Corresp.   | No             | Yes             | Busy Tel.              |
| 27               | 157.350         | 161.950 | Public Corresp.   | No             | Yes             | Busy Tel.              |
| 28               | 157.400         | 162.000 | Public Corresp.   | No             | Yes             | Busy Tel.              |
| 60               | 156.025         | 160.625 | Port Ops          | Yes            | Yes             |                        |
| 61               | 156.075         | 160.675 | Port Ops          | Yes            | Yes             |                        |
| 62               | 156.125         | 160.725 | Port Ops          | Yes            | Yes             |                        |
| 63               | 156.175         | 160.775 | Port Ops          | Yes            | Yes             |                        |
| 64               | 156.225         | 160.825 | Port Ops          | Yes            | Yes             |                        |
| 65               | 156.275         | 160.875 | Port Ops          | Yes            | Yes             |                        |
| 66               | 156.325         | 160.925 | Port Ops          | Yes            | Yes             |                        |
| 67               | 156.375         | 156.375 | Com'l             | Yes            | No              | Fish                   |
| 68               | 156.425         | 156.425 | Non Com'l         | Yes            | No              | Fish                   |
| 69               | 156.475         | 156.475 | Non Com'l         | Yes            | Yes             | Fish                   |
| 70               | 156.525         | 156.525 | Non Com'l         | Yes            | No              | Fish                   |
| 71               | 156.575         | 156.575 | Non Com'l         | Yes            | No              | Fish                   |
| 72               | 156.625         | 156.625 | Non Com'l         | Yes            | No              | Fish                   |
| 73               | 156.675         | 156.675 | Port Ops          | Yes            | Yes             |                        |
| 74               | 156.725         | 156.725 | Port Ops          | Yes            | Yes             |                        |
| 77               | 156.875         | 156.875 | Port Ops          | Yes            | No              |                        |
| 78               | 156.925         | 161.525 | Non Com'l         | Yes            | Yes             |                        |
| 79               | 156.975         | 161.575 | Com'l             | Yes            | Yes             |                        |
| 80               | 157.025         | 161.625 | Com'l             | Yes            | Yes             |                        |
| 81               | 157.075         | 161.675 | Coast Guard       | Yes            | Yes             | Coast Guard            |
| 82               | 157.125         | 161.725 | US Gov Only       | Yes            | Yes             |                        |
| 83               | 157.175         | 161.775 | Coast Guard       | Yes            | Yes             | Coast Guard            |
| 84               | 157.225         | 161.825 | Public Corresp.   | No             | Yes             | Busy Tel.              |
| 85               | 157.275         | 161.875 | Public Corresp.   | No             | Yes             | Busy Tel.              |
| 86               | 157.325         | 161.925 | Public Corresp.   | No             | Yes             | Busy Tel.              |
| 87               | 157.375         | 161.975 | Public Corresp.   | No             | Yes             | Busy Tel.              |
| 88               | 157.425         | 162.025 | Com'l             | Yes            | No              | Busy Tel.              |

# Warranty

**WARRANTOR:** UNIDEN CORPORATION OF AMERICA ("UNIDEN").

**ELEMENTS OF WARRANTY:** UNIDEN warrants, for the duration of this warranty, UNIDEN HH 978XL VHF Marine Radio (hereinafter referred to as the Product) to be free from defects in materials and craftsmanship with only the limitations or exclusions set out below.

**WARRANTY DURATION:** This Warranty shall terminate and be of no further effect one (1) year after the date of the original purchase of the Product or at the time the Product is (A) damaged or not maintained as reasonable or necessary, (B) modified, (C) improperly installed, (D) repaired by someone other than warrantor for a defect or malfunction covered by this warranty, (E) used in a manner or purpose for which the Product was not intended, or (F) sold by the original purchaser.

**STATEMENT OF REMEDY.** In the event that the Product does not conform to this warranty at any time while this warranty is in effect, warrantor will repair the defect and return it to you without charge for parts, service, or any other cost incurred by warrantor or its representatives in connection with the performance of this warranty. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OF PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow this exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

**WARRANTY REGISTRATION CARD:** In order to facilitate the servicing of this warranty by warrantor, the Warranty Registration Card should be returned to the warrantor. However, return of the Warranty Registration Card is not a precondition of this warranty, and this warranty will be observed by the warrantor whether or not the Warranty Registration Card is returned, provided that other satisfactory evidence of the date of purchase is provided.

**PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY:** In the event that the Product does not conform to this warranty, the Product should be shipped or delivered, freight prepaid, to warrantor at UNIDEN Customer Service Center, 9340 Castlegate Drive, Indianapolis, IN 46256 with evidence of original purchase.

**LEGAL REMEDIES:** This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty is void outside of the United States of America.