

# MARINE RADIO **VHF5**

*OPERATIONS MANUAL*



# TABLE OF CONTENTS

Parts Supplied	2
Accessories	3
Batteries	3
Section 1: ASSEMBLING THE RADIO	4
Section 2: CONTROLS	5
Section 3: BASIC OPERATION	6
Section 4: SCANNING FEATURES	9
Scanning All Channels	9
Dual and Triple Watch Scanning	10
Section 5: MEMORY CHANNELS	11
Section 6: MAINTENANCE AND WARRANTY	12
Maintenance	12
Service Policy	13
Warranty	14
Customer Support	14
Specifications	15
Section 7: TABLE OF MARINE CHANNELS	16

## ***PARTS SUPPLIED***

Before using the VHF5, please ensure the following parts are included in the box:

- VHF5 Radio and Battery Pack
- Antenna
- Waterproof Pouch
- Operations Manual

If any of these items are missing, call our Customer Support Hotline.

# ASSEMBLING THE RADIO

## **OTHER ACCESSORIES**

The following accessories are available from most Humminbird dealers, or direct through Humminbird Customer Support:

### **Accessory**

- 12V Cigarette Lighter Adapter/Battery Eliminator
- Speaker/Microphone Headset
- Waterproof Pouch
- Bulkhead Mount
- NiCd Battery Pack and Battery Charger

### **Battery Installation and Removal.**

The VHF5 (models A and C) uses 8 AA Alkaline batteries to power the radio. These batteries (not included) are installed in the battery pack at the bottom of the radio.

To install new batteries, move the Battery Release button up, and slide the battery pack off as shown in the illustration. Using your finger, disengage the snap lock feature on the top of the battery pack, and gently separate the battery pack into two halves.



Install four new batteries in each half of the battery pack. Assure the positive and negative orientation of the batteries match the engraving on the inside of the battery back. To reassemble the battery pack, first mate the two halves together at the bottom and then snap shut. Slide the battery pack onto the radio. When the battery is low, a battery icon appears on the LCD. The battery pack can be charged on or off the VHF5 unit.

**Note: For longest battery life use only new Alkaline batteries. Battery life varies greatly by brand and length of time the radio is used for transmitting and receiving.**

# ASSEMBLING THE RADIO

## **Antenna**

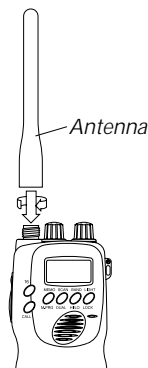
To install the antenna on the VHF5, ensure the antenna and the threads on the unit are free from debris, and screw the antenna onto the base. Finger tighten only.

## **Headset Jacks**

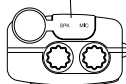
Jacks on top of the VHF5 can be connected to an external speaker/microphone headset. Connect this accessory to the proper jacks.

## **Waterproof Pouch**

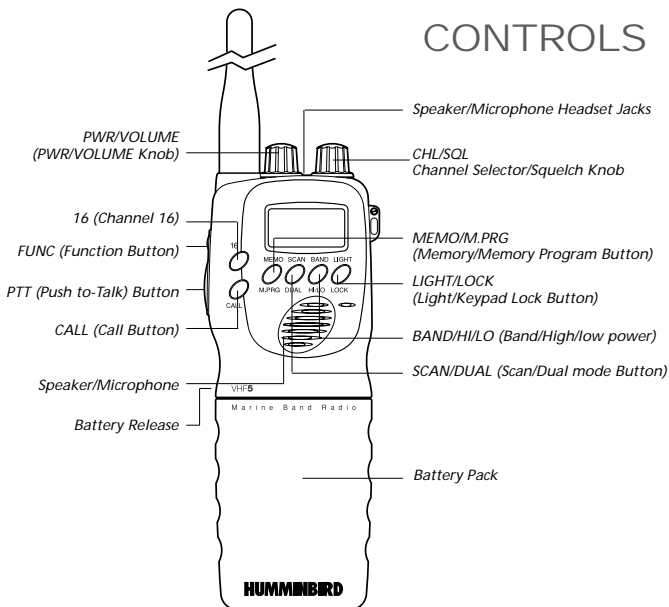
The waterproof pouch protects the radio from water while permitting access to all radio controls. To use the pouch, remove the sealing clamp from the bottom. Note how the clamp attaches to the bag. Insert the radio into the bag and reattach the clamp, taking care to reseal in the original manner.



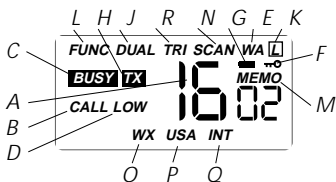
*Headset jacks*



# CONTROLS



## LCD Display



- |    |                                 |    |                                     |
|----|---------------------------------|----|-------------------------------------|
| A. | Channel in Use                  | J. | DUAL - Dual watch mode              |
| B. | CALL - Call Function            | K. | L - Channel is deleted from scan    |
| C. | BUSY - Signal is being received | L. | FUNC - Function button is activated |
| D. | LOW - Low power function        | M. | MEMO - Memory channel selection     |
| E. | WA - Weather Alert signal       | N. | SCAN - Scan mode                    |
| F. | Key Icon - Keypad locked        | O. | WX - Weather receive mode           |
| G. | BATTERY ICON - Battery is low   | P. | USA - USA band                      |
| H. | TX - Transmitting               | Q. | INT - International band            |
|    |                                 | R. | TRI - Triple watch mode             |

# BASIC OPERATION

The **MEMO/M.PRG**, **SCAN/DUAL**, **BAND/HI/LO**, and **LIGHT/LOCK** buttons are dual-function buttons. The primary function is printed above, and secondary function is printed below.

## **TURNING THE UNIT ON/OFF**

Rotate the **PWR/VOLUME** knob clockwise until it clicks to turn the unit on. To turn the unit off, rotate the knob counter-clockwise until it clicks.

## **SELECTING A BAND**

Three bands are available on the VHF5 - USA, International and Weather. The USA band are frequencies for use in US boundaries. The International band are frequencies for use outside US boundaries. The Weather band monitors NOAA/Canada weather broadcasts. To switch between bands, press the **BAND/HI/LO** button until the desired band is reached. The band in use is indicated on the LCD by USA, INT or WX. When tuned to the WX band and the active weather channel for your area, the VHF5 will sound NOAA Weather Alert tones as they are received. **Note: The VHF5 will sound NOAA Weather Alert tones even when the volume is turned down. You must turn volume up to hear specific weather alerts for your area.**

## **SELECTING A CHANNEL**

Select the appropriate band - USA, International or Weather. Once the band is selected, rotate the **CHL/SQL** knob either clockwise or counter-clockwise to scroll through the available channels. **Note: Not all channel numbers are available in all bands. Certain channels are receive only, while others transmit and receive on different frequencies (not duplex channels). Additionally, several channels broadcast on LOW power only. See Table of Marine Channels for detail.**

## **TRANSMITTING A CALL**

The **PTT** (Push-To-Talk) button is located on the side of the VHF5. Before transmitting, make sure the channel is not a "receive-only" channel. To transmit a message press and hold the **PTT** button. Talk clearly into the speaker/microphone area of the radio. When finished, release the **PTT** button. During a transmission, TX appears on the LCD. **Note: while transmitting a message, the radio can not receive a call.**

# BASIC OPERATION

## ***ADJUSTING SQUELCH***

Squelch is used to eliminate static and background noise and allows for silent operation of the VHF5 until a transmission is received. If the Squelch is too high, only the strongest transmissions are heard, and when too low, intermittent static and noise are heard.

To adjust the squelch, press and hold the **FUNC** button then turn the **CHL/SQL** knob until the background noise is quiet. The LCD displays the squelch setting from 00 to 08.

## ***HI/LO POWER***

Press and hold the **FUNC** button then press the **BAND/HI/LO** button to toggle between high and low power. High power is 5.0 watts, and low power is 1.0 watts. When the unit is operating at low power, LOW appears on the LCD and disappears when operating at high power. **Note: Some channels are limited to LOW power output only.**

## ***CHANNEL 16***

Channel 16 is the standard channel for placing a call or for an emergency broadcast. The **16** button selects Channel 16 immediately. To exit, press the **16** button again. Channel 16 is the same frequency on both the USA and International bands.

# BASIC OPERATION

## ***CALL BUTTON***

The **CALL** button allows for quick access to a frequently used channel referred to as the Call Channel. Once the **CALL** button is pressed, CALL appears on the LCD. To exit, press the **CALL** button again.

## ***Programming the Call Channel***

1. Press the **CALL** button. CALL appears in the LCD.
2. Press and hold the **FUNC** button then press the **CALL** button. The display will flash. Release all buttons.
3. Rotate the **CHL/SQL** button to the desired call channel.
4. Press and hold the **FUNC** button then press the **CALL** button to store the Call Channel.

## ***BACKLIGHT***

To use the backlight, press the **LIGHT/LOCK** button. The backlight stays illuminated for a few seconds.

## ***KEY PAD LOCK***

To active the keypad lock, press and hold the **FUNC** button then press the **LIGHT/LOCK** button. The **PTT, 16** and **LIGHT/LOCK** buttons still operate while the keypad is locked. To unlock the keypad, press and hold the **FUNC** button then press the **LIGHT/LOCK** button. The key icon appears on the LCD when the keypad is locked.

## ***MONITOR***

The monitor function allows faint signals on a channel to be heard. To activate the monitor function, press and hold the **FUNC** button to hear all traffic on the current channel. Release the **FUNC** button when finished listening.



# SCANNING FEATURES

## ***SCANNING ALL CHANNELS***

The VHF5 scans all channels in one of two modes: normal or priority scan. You may program the VHF5 to scan in either mode.

In normal scanning, the VHF5 rapidly scans through channels, either in the USA or International band. The VHF5 stops scanning on busy channels and remains stopped several seconds after the signal disappears allowing time to answer the call if necessary.

In priority scanning, the scanning operation is the same as normal scanning except Channel 16 is constantly checked for activity, allowing for much quicker response to Channel 16 traffic.

To scan channels, press and hold the **SCAN/DUAL** button for a few seconds. The VHF5 begins scanning channels using the scan method programmed in the radio. The word **SCAN** appears on the LCD. To stop scanning, press the **SCAN/DUAL** button.

### ***Programming for Normal or Priority scanning:***

1. Turn the unit off. Press and hold the **FUNC** button while turning the power on. The unit displays **02** or **03**. Release the **FUNC** button.
2. Press the **FUNC** button again. The radio displays **n-sc** or **p-sc**.
3. Rotate the **CHL/SQL** knob to choose **n-sc** for normal scan, or **p-sc** for priority scan.
4. Press the **16** button twice to store programming.

### ***Deleting Channels from Scan***

To delete a channel from scan, select the channel to be deleted. Press the **FUNC** and **SCAN/DUAL** buttons at the same time. **L** appears on the LCD, indicating the channel is locked out of scan. This is useful for bypassing channels that are continuously busy. To activate a deleted channel, select the channel to be activated then press the **FUNC** and **SCAN/DUAL** buttons at the same time.

# SCANNING FEATURES

## **DUAL AND TRIPLE WATCH SCANNING**

To scan selected channels, there are three options: Dual Watch, Dual Watch with NOAA Weather Alert, and Triple Watch.

In Dual Watch scanning, the VHF5 toggles between Channel 16 and the current channel. In Dual Watch with Weather Alert scanning, the VHF5 toggles between Channel 16, the current channel, and monitors the current weather channel for a NOAA Weather Alert signal. **Note: The VHF5 monitors the last selected weather channel in this mode.** In Triple Watch scanning, the VHF5 toggles between Channel 16, the Call Channel, and the current channel.

### **Programming for Dual, Dual with Weather, or Triple Watch Scanning**

1. Turn the unit off. Press the **FUNC** button while turning the power on. Release the **FUNC** button.
2. Rotate the **CHL/SQL** knob until **02du** (for Dual Watch), **03du** (for Dual Watch with Weather Alert), or **03tr** (for Triple Watch) appears on the LCD.
3. Press the **16** button twice to store programming.

To scan channels, press the **SCAN/DUAL** button. The VHF5 begins scanning channels using the scan method programmed in the radio. The word DUAL or TRI appears on the LCD.

The VHF5 rapidly scans through channels, and stops scanning on busy channels. The VHF5 remains stopped several seconds after the signal disappears allowing time to answer the call if necessary.

Press the **SCAN/DUAL** button again to exit.

# MEMORY CHANNELS

## ***USING MEMORY CHANNELS***

The VHF5 has 10 memory locations (00-09), to quickly access frequently used channels.

To access the memory channels, press the **MEMO/M.PRG** button. The LCD displays the channel number on the left, and the memory location in smaller numbers to the right. Turn the **CHL/SQL** knob to select a memory channel. To exit the memory channel mode, press the **MEMO/M.PRG** button again.

## ***Programming Memory Channels***

To enter channels into memory:

1. Press the **MEMO/M.PRG** button.
2. Press and hold the **FUNC** button then press the **MEMO/M.PRG** button. The memory location number begins to flash.
3. Rotate the **chl/sql** knob to the desired memory location.
4. Press the **MEMO/M.PRG** button. The channel number begins to flash.
5. Press the **BAND/HI/LO** button to select either the USA, Weather, or International band for the channel you wish to store.
6. Rotate the **CHL/SQL** knob to the desired channel for this memory location.
7. Press and hold the **FUNC** button then press the **MEMO/M.PRG** button to save the memory location and exit programming.
8. To store additional memory channels, repeat the above procedure.

Press the **MEMO/M.PRG** button to exit the memory channel mode.

## ***Scanning Memory Channels***

To scan the memory channels, press the **MEMO/M.PRG** button, then press and hold the **SCAN/DUAL** button for a few seconds. SCAN appears on the LCD as the radio scans the memory channels, stopping on an active channel. Press the **SCAN/DUAL** button again to exit.

# MAINTENANCE AND WARRANTY

## **MAINTENANCE**

The VHF5 is designed to provide years of trouble free operation with virtually no maintenance. Follow these simple procedures to ensure the VHF5 continues to deliver top performance.

While the VHF5 is generally water resistant, it is NOT waterproof. **Avoid exposing the unit to water spray or rain. Do not immerse the unit in water.** Use the waterproof pouch to protect the radio.

If the unit comes into contact with salt spray, simply wipe the affected surfaces with a cloth dampened in fresh water. Do not use a chemical glass cleaner on the lens. Chemicals in the solution may cause cracking in the lens of the unit.

When cleaning the LCD protective lens, use a chamois and non-abrasive, mild cleaner. Do not wipe while dirt or grease is on the lens. Be careful to avoid scratching the lens.

Never leave the VHF5 in a closed car or trunk - the extremely high temperatures generated in hot weather can damage the electronics.

# MAINTENANCE AND WARRANTY

## **SERVICE POLICY**

*This Service Policy is valid in the United States only. This applies to Humminbird units returned to our factory in Eufaula, Alabama, and is subject to change without notice.*

All repair work is performed by factory-trained technicians to meet exacting factory specifications. Factory serviced units go through the same rigorous testing and quality control inspection as new production units.

Even though you'll probably never need to take advantage of our incredible service guarantee, it's good to know that we back our units this well. We do it because you deserve the best. We will make every effort to repair your unit within three working days from the receipt of your unit. This does not include shipping time to and from our factory. Units received on Friday are usually shipped by Wednesday, units received Monday are usually shipped by Thursday, etc.

We reserve the right to deem any product unserviceable when replacement parts are no longer reasonably available or impossible to obtain.

After the original warranty period, a standard flat rate service charge will be assessed for each repair (physical damage and missing parts are not included). Please call our Customer Support Department to verify the service charge for your unit.

If shipping charges are not prepaid, the unit will be returned C.O.D.

# MAINTENANCE AND WARRANTY

## ***HUMMINBIRD ONE YEAR FULL WARRANTY***

First year repairs (from original date of purchase) on your VHF5 are absolutely free. This does not include physical damage to the unit or its accessory items. Any modification or attempt to repair the original equipment or accessories by unauthorized individuals will void the warranty. Return the warranty registration card and retain your bill of sale for warranty verification. Accessories not manufactured under the Humminbird trade name are not covered by our warranty. **The customer is responsible for shipping charges to Humminbird.** Humminbird will provide ground UPS or Parcel Post shipping back to the customer free of charge. This warranty applies to the original purchaser only.

This warranty is in lieu of all other warranties expressed or implied and no representatives or persons are authorized to provide for any other liability in connection with the sale of our products. Humminbird reserves the right to perform modifications or improvements on its products without incurring the obligation to install the changes on units previously manufactured, sold, delivered, or serviced.

THIS IS A FULL WARRANTY AS DEFINED BY THE FEDERAL WARRANTY ACT, EFFECTIVE JULY 4, 1975.

## ***CUSTOMER SUPPORT***

If you have any questions, call our Humminbird Customer Support Hotline: **1-334-687-0503**

Throughout the U.S. and Canada, hours are Monday-Friday, 8:00 a.m. to 5:00 p.m. Central time.

If you determine your unit needs factory service, please attach a description of the problem and send it with the unit to the address below. If you are including a check, please attach it to the unit.

**Humminbird  
Service Department  
Three Humminbird Lane  
Eufaula, AL 36027**

# SPECIFICATIONS

Size	.11 1/8" H x 2 3/4" W x 1 3/4" D
Power Source	.12 VDC 8 AA Alkaline
Channel Capacity	
Receive	.50 US, 54 INT, 10 WX
Transmit	.49 US, 54 INT
Frequency Stability	± 10ppm
Operating Temperature	-20 °C to +50 °C
Channel Spacing	.25 KHz
Current Drain	
Transmit	
@ 5 Watts	.1300mA
@ 1 Watt	.600mA

## Transmitter

Power Output	.5 Watt/1 Watt variable
Modulation Distortion +/- 3kHz	.7%
Spurious/Harmonic emissions	-.60db
FCC ID Number	.KLLTM868A

## Receiver

Sensitivity:	
12dB SINAD	.0.5uV or less
Squelch @ 01 on CHL 3	.0.3uV or less
IF Frequency	
1st IF	.21.6 MHz
2nd IF	.455 KHz
Audio Output Power (10% THD)	.200mW Min

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

# TABLE OF MARINE CHANNELS

## USA MARINE CHANNELS

### USA Band

1 Port Operation, Commercial  
 3 Port Operation, Commercial  
 5 Port Operation  
 6 Intership Safety  
 7 Commercial  
 8 Commercial  
 9 Commercial/NonCommercial  
 10 Commercial  
 11 Commercial  
 12 Port Operation  
 13 Navigational\*\*  
 14 Port Operation  
 15 Environmental (receive only)  
 16 Distress, Safety, and Calling  
 17 Maritime Control\*\*  
 18 Commercial  
 19 Commercial  
 20 Port Operation\*  
 21 US Government Only  
 22 Coast Guard Liaison  
 23 US Government Only  
 24 Public Correspondence\*  
 25 Public Correspondence\*  
 26 Public Correspondence\*  
 27 Public Correspondence\*  
 28 Public Correspondence\*  
 61 Port Operation, Public Correspondence  
 63 Port Operation, Commercial  
 64 Port Operation, Public Correspondence\*  
 65 Port Operation  
 66 Port Operation  
 67 Commercial\*\*  
 68 Non Commercial  
 69 Non Commercial  
 71 Non Commercial  
 72 Non Commercial  
 73 Port Operation  
 74 Port Operation  
 77 Port Operation, Intership  
 78 Non Commercial  
 79 Commercial  
 80 Commercial  
 81 US Government Only  
 82 US Government Only  
 83 US Government Only  
 84 Public Correspondence\*  
 85 Public Correspondence\*  
 86 Public Correspondence\*

87 Public Correspondence\*  
 88 Commercial

### International Band

1 Public Correspondence, Port Operation  
 2 Public Correspondence, Port Operation\*  
 3 Public Correspondence, Port Operation\*  
 4 Public Correspondence, Port Operation\*  
 5 Public Correspondence, Port Operation\*  
 6 Safety Compulsory  
 7 Public Correspondence, Port Operation\*  
 8 Commercial, Intership  
 9 Commercial, Non Commercial  
 10 Commercial  
 11 Commercial, VTS  
 12 Port Operation, VTS  
 13 Navigational\*\*  
 14 Port Operation, VTS  
 15 Environmental\*\*  
 16 Distress, Safety, and Calling (Low)  
 17 (Low)  
 18 Port Operation\*  
 19 Commercial\*  
 20 Public Correspondence\*  
 21 Public Correspondence\*  
 22 Public Correspondence\*  
 23 Public Correspondence\*  
 24 Public Correspondence\*  
 25 Public Correspondence\*  
 26 Public Correspondence\*  
 27 Public Correspondence\*  
 28 Public Correspondence\*  
 60 Port Operation, Public Correspondence\*  
 61 Port Operation, Public Correspondence\*  
 62 Port Operation, Public Correspondence\*  
 63 Port Operation, Public Correspondence\*  
 64 Port Operation, Public Correspondence\*  
 65 Port Operation, Public Correspondence\*

66 Port Operation, Public Correspondence\*  
 67 Commercial, VTS\*\*  
 68 Non Commercial  
 69 Non Commercial  
 71 Port Operation, Non Commercial, Intership  
 72 Non Commercial  
 73 Port Operation, VTS  
 74 Port Operation, VTS  
 77 Port Operation, Intership  
 78 Port Operation, Public Correspondence\*  
 79 Port Operation, Public Correspondence\*  
 80 Port Operation, Public Correspondence\*  
 81 Port Operation, Public Correspondence\*  
 82 Port Operation, Public Correspondence\*  
 83 Port Operation, Public Correspondence\*  
 84 Public Correspondence\*  
 85 Public Correspondence\*  
 86 Public Correspondence\*  
 87 Public Correspondence\*  
 88 Port Operation, Public Correspondence\*

### WEATHER MARINE CHANNELS

WX1 Weather-NOAA / Canada  
 WX2 Weather-NOAA / Canada  
 WX3 Weather-NOAA / Canada  
 WX4 Weather-NOAA  
 WX5 Weather-NOAA  
 WX6 Weather-NOAA  
 WX7 Weather-NOAA  
 WX8 Weather-Canada  
 WX9 Weather-Canada  
 WX0 Weather

\*Channel transmits and receives on different frequencies. Generally used for Ship to Shore communication.

\*\*Low power transmit only