

[Manuals.plus](#) /

› [STANDARD HORIZON](#) /

› Standard Horizon HX890 Handheld VHF Radio User Manual

STANDARD HORIZON HX890

Standard Horizon HX890 Handheld VHF Radio User Manual

Model: HX890

1. INTRODUCTION

The Standard Horizon HX890 is a high-end floating Class H DSC VHF/GPS handheld two-way radio designed for marine use. This manual provides essential information for the proper setup, operation, and maintenance of your HX890 radio, ensuring reliable communication and safety on the water.



Figure 1: Standard Horizon HX890 Handheld VHF Radio. This image shows the front view of the black handheld radio with its antenna, display screen, and keypad.

2. WHAT'S IN THE BOX

Upon opening the package, verify that all the following components are included:

- HX890 Handheld VHF Radio Unit
- Rechargeable Li-Ion Battery
- Alkaline Battery Tray
- 110V Wall Charger
- 220V Adapter
- Charging Cradle
- 12V Charger
- PC Programming Cable
- Belt Clip with Lanyard
- Owner's Manual (this document)

3. SETUP

1. **Attach the Antenna:** Carefully screw the antenna onto the top connector of the radio until it is finger-tight. Do not overtighten.
2. **Install the Battery:**
 - For the rechargeable Li-Ion battery: Align the battery with the back of the radio and slide it into place until it clicks securely.
 - For the alkaline battery tray: Insert appropriate alkaline batteries into the tray, then slide the tray into the radio as you would the Li-Ion battery.
3. **Charging the Battery:**
 - Connect the 110V wall charger (or 220V adapter if applicable) to the charging cradle.
 - Place the radio with the installed Li-Ion battery into the charging cradle. Ensure the charging indicator light illuminates.
 - Alternatively, use the 12V charger for in-vehicle or on-boat charging.
4. **Attach Belt Clip and Lanyard:** Secure the belt clip to the designated slot on the back of the radio. Attach the lanyard for added security, especially when operating near water.
5. **MMSI Registration:** To utilize the Digital Selective Calling (DSC) features, you must register for a Maritime Mobile Service Identity (MMSI) number. Refer to your local maritime authority or a recognized service provider (e.g., BoatUS in the US) for registration procedures. Once obtained, program the MMSI number into your radio as per the detailed instructions in the full owner's manual.

4. OPERATING INSTRUCTIONS

The HX890 features an easy-to-operate menu system with a large full-dot matrix display. Familiarize yourself with the keypad and display for efficient operation.



Figure 2: Standard Horizon HX890 Handheld VHF Radio being held, showing the display and keypad in use.

4.1 Basic Communication

- **Power On/Off:** Press and hold the **POWER** button (usually orange or red) to turn the radio on or off.
- **Channel Selection:** Use the **UP/DOWN arrow** buttons to change channels.
- **Channel 16/9:** Press the dedicated **16/9** button to quickly switch between Channel 16 (international distress and calling) and Channel 9 (recreational calling).
- **Transmit Power:** Use the **H/L** button to select high (6W), medium (2W), or low (1W) transmit power. High power is for maximum range, low power for short-range communication to conserve battery.
- **Transmit:** Press and hold the **PTT (Push-To-Talk)** button on the side of the radio to transmit. Release to listen.
- **Volume Adjustment:** Use the **VOL UP/DOWN** buttons to adjust the speaker volume.
- **Squelch Adjustment:** Use the **SQL** button and arrow keys to adjust the squelch level, which filters out background noise.

4.2 Advanced Features

- **DSC (Digital Selective Calling):** After MMSI registration, the DSC feature allows you to send distress alerts with your GPS position and make direct calls to other DSC-equipped vessels. Access DSC functions via the menu.
- **GPS Receiver:** The built-in 66-channel WAAS GPS receiver provides accurate position information, crucial for DSC distress calls and navigation.
- **Waypoint and Route Navigation:** Utilize the GPS capabilities for basic waypoint and route navigation. Refer to the full manual for detailed instructions on setting and following routes.
- **Scanning Operation:** The radio supports versatile scanning operations, including Dual Watch and Triple Watch. You can program specific channels to scan, such as Channel 16 and a working channel (e.g., Channel 78 for recreational ship-to-ship communication).
- **Man Over Board (MOB) Feature:** In an MOB situation, activate this feature to mark the position and initiate a distress

call if configured.

- **Water Activated Emergency Strobe Light:** If the radio is dropped in water, a white strobe light will automatically activate, aiding in recovery.
- **FM Broadcast Radio Receiver:** Tune into FM broadcast stations for entertainment.
- **Scrambler Systems:** Two built-in scrambler systems (4-code CVS2500A & 32-code FVP-42) are available for private communication.
- **Display Modes:** Switch between Day and Night modes for optimal display visibility in varying light conditions.

5. MAINTENANCE

- **Cleaning:** Regularly clean the radio with a soft, damp cloth. Avoid abrasive cleaners or solvents. Ensure the battery contacts are clean and dry.
- **Battery Care:**
 - Charge the Li-Ion battery fully before first use and after each use.
 - Do not store the radio with a completely discharged battery for extended periods.
 - If using the alkaline battery tray, replace batteries as needed.
- **Waterproofing:** The HX890 is submersible (IPX8). Ensure the battery cover and all port covers are securely closed to maintain its waterproof integrity. Rinse with fresh water after exposure to saltwater.
- **Antenna:** Inspect the antenna for any damage. A damaged antenna can reduce performance.

6. TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|--------------------------------------|--|---|
| Radio does not power on. | Discharged battery, incorrect battery installation. | Charge the Li-Ion battery or replace alkaline batteries. Ensure battery is correctly installed. |
| No reception or poor audio. | Squelch too high, antenna loose/damaged, out of range. | Adjust squelch. Check antenna connection. Ensure you are within range of other vessels or shore stations. |
| GPS unit not computing position fix. | Obstructed view of sky, initial acquisition time. | Move to an area with a clear view of the sky. Allow sufficient time for initial GPS position acquisition. |
| Cannot transmit. | Low battery, incorrect channel selected, PTT button issue. | Check battery level. Ensure you are on a valid transmit channel. Contact support if PTT button is unresponsive. |

For more detailed troubleshooting, refer to the comprehensive owner's manual or contact Standard Horizon customer support.

7. SPECIFICATIONS

- **Model Number:** STH-HX890BK
- **Transmit Power Output:** 6W (Selectable 6/2/1 W)
- **Audio Output:** 700mW Loud Audio with Noise Canceling Function (TX/RX)
- **Construction:** Rugged case, Submersible IPX8, Floats
- **DSC Operation:** ITU-R M.493 Class-H
- **GPS Receiver:** Built-in Integrated 66 channel WAAS GPS
- **Display:** Large (1.7" x 1.7") Full-dot matrix, Selectable Day & Night Mode

- **Dimensions (D x W x H):** 1.5" x 2.6" x 5.43"
- **Frequency Range:** 136-174 MHz
- **Number of Channels:** 66
- **Special Features:** Man Over Board (MOB), Water Activated Emergency White Strobe Light, Two Scrambler Systems, Versatile Scanning (Dual Watch, Triple Watch), FM Broadcast Radio Receiver, Micro USB Data Jack.

8. WARRANTY AND SUPPORT

The Standard Horizon HX890 is backed by an industry-leading **3-year waterproof warranty**. For warranty claims, technical support, or service inquiries, please refer to the contact information provided in your full owner's manual or visit the official Standard Horizon website.