

## Garmin 010-01010-00

# Garmin GPS 19x HVS Receiver User Manual

Model: 010-01010-00

## INTRODUCTION

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The Garmin GPS 19x HVS is a next-generation GPS receiver and antenna designed to provide highly accurate position, velocity, and time data for marine multifunctional displays (MFD), instrument displays, and autopilots. This 32-channel receiver supports multiple Global Navigation Satellite Systems (GNSS), including GPS, GLONASS, Galileo, and QZSS, ensuring enhanced position acquisition even in challenging conditions. It delivers data at update rates up to 10Hz, offering a consistent and smooth representation of your position.

## WHAT'S IN THE BOX

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Verify that all components are present before beginning installation.

- Garmin GPS 19x HVS Receiver Dome
- Pole Mount
- Flush Mount Bracket
- Power and Data Cable
- Sealing Ring



This image displays all components included with the Garmin GPS 19x HVS. Visible are the white GPS receiver dome, various mounting hardware including a pole mount and a flush mount bracket, a coiled white power and data cable with bare wire ends and a fuse holder, and a black sealing ring.

## SETUP

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### 1. Mounting Options

The GPS 19x HVS offers versatile mounting options to suit various installation requirements:

- **Pole Mount:** For elevated installations, providing an unobstructed view of the sky.
- **Flush Mount:** For a low-profile installation on a flat surface.
- **Under-Deck Mount:** The unit can be attached to the underside of many fiberglass decks, simplifying installation and protecting the unit from external elements.

Ensure the chosen mounting location provides a clear, unobstructed view of the sky for optimal satellite reception.

### 2. Wiring and Connections

The GPS 19x HVS connects via a cabled power connection and supports NMEA 0183 data output. The included power and data cable features bare wire ends for custom integration.

1. Connect the power wires (red for positive, black for negative) to a 10-32 Vdc power source. Ensure an appropriate fuse is installed on the positive line.
2. Connect the NMEA 0183 data wires to your compatible marine device (MFD, instrument display, autopilot). Refer to your device's manual for specific NMEA input connections.
3. The unit can be configured for 1 Hz, 5 Hz, or 10 Hz update rates to meet specific system requirements. Consult the Garmin utility software for configuration details.
4. If connecting to older systems requiring a slower baud rate, utilize the included jumper or a baud rate

reducer as necessary to achieve 4800 baud.

### 3. Initial Power-Up

After installation and wiring, power on your marine system. The GPS 19x HVS will automatically begin acquiring satellite signals. Allow several minutes for the unit to establish an initial position fix, especially during the first use or after a long period of inactivity.

## OPERATING INSTRUCTIONS

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### 1. Basic Functionality

Once powered and connected, the GPS 19x HVS continuously tracks multiple GNSS satellites to provide real-time position, velocity, and time data to your connected display. The high update rate (up to 10Hz) ensures smooth and accurate tracking, particularly noticeable during turns or at varying speeds.

### 2. GNSS Support and Accuracy

The receiver supports GPS, GLONASS, Galileo, and QZSS, allowing it to track more satellites simultaneously. This capability enhances accuracy and reliability, especially in challenging environments where line-of-sight to satellites may be partially obstructed.

- **WAAS Capability:** The unit is WAAS-capable, which can improve position accuracy to within 3 meters (9.84 feet) in areas with WAAS coverage.
- **GLONASS Considerations:** While GLONASS support increases satellite visibility, it is important to note that WAAS corrections are primarily for GPS. In open-sky conditions, GPS+WAAS may offer superior accuracy. In urban or rural canyons, where few satellites from a single system are visible, combining GPS and GLONASS can significantly improve the ability to obtain a fix.

### 3. Compatibility

The GPS 19x HVS is designed to integrate seamlessly with a wide range of Garmin marine devices, including chartplotters, MFDs, instrument displays, and autopilots that accept NMEA 0183 data.

## MAINTENANCE

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### 1. Cleaning

To maintain optimal performance and appearance, clean the exterior of the GPS 19x HVS receiver with a mild soap solution and a soft cloth. Avoid using harsh chemicals or abrasive cleaners, which can damage the housing or seals.

### 2. Environmental Protection

The GPS 19x HVS is built to withstand marine environments and is waterproof to IPX7 standards. Ensure all connections are properly sealed during installation to maintain its waterproof integrity. Regularly inspect cables and connections for any signs of wear or corrosion.

## TROUBLESHOOTING

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If you encounter issues with your Garmin GPS 19x HVS, consider the following:

- **No Position Fix:** Ensure the unit has a clear view of the sky. Check power connections and verify that

the unit is receiving power.

- **Inaccurate Readings:** Confirm that WAAS is enabled on your connected display if available. Ensure the unit is not mounted near sources of electromagnetic interference.
- **No Data Output:** Verify NMEA 0183 wiring connections. Check the baud rate settings on both the GPS 19x HVS (via Garmin utility) and your connected display to ensure they match.
- **Intermittent Operation:** Inspect all cable connections for corrosion or damage. Ensure the power supply is stable and within the specified voltage range.

For further assistance, refer to the official Garmin support resources or contact Garmin customer service.

## SPECIFICATIONS

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Feature	Detail
Model Number	010-01010-00
Dimensions (L x W x H)	3.56" x 3.61" x 1.94"
Item Weight	2.2 pounds (approx. 1 kg)
GNSS Support	GPS, GLONASS, Galileo, QZSS
Channels	32
Update Rate	Up to 10Hz (configurable to 1Hz or 5Hz)
Accuracy	WAAS-capable (within 3m / 9.84ft)
Connectivity	Cabled Power Connection (NMEA 0183)
Water Rating	IPX7
Mounting Options	Pole, Flush, Under-Deck
Vehicle Service Type	Boat

## WARRANTY INFORMATION

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Garmin products are designed for reliability and performance. This product is covered by Garmin's standard limited warranty. For specific warranty terms, conditions, and registration details, please refer to the warranty information included with your product packaging or visit the official Garmin website.

## SUPPORT

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For technical support, product updates, or additional resources, please visit the official Garmin support website:

**Garmin Support Center**

No official product videos were found for this item from a seller source.

