Raymarine Axiom+ 12 RV

Raymarine Axiom+ 12 RV - 12-inch Chartplotter/Fishfinder User Manual

Model: Axiom+ 12 RV (E70639)

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1. INTRODUCTION

The Raymarine Axiom+ 12 RV is a high-performance 12-inch Chartplotter/Fishfinder designed for marine navigation and sonar applications. This multifunction display (MFD) features a powerful quad-core processor for rapid responsiveness, enabling seamless chart redraws, augmented reality navigation, and RealVision™ 3D sonar capabilities. Its upgraded IPS display technology offers enhanced visibility with 25 percent more brightness and wide viewing angles, complemented by a HydroTough™ nano-coated screen for durability and clear touch control. The Axiom+ 12 RV operates on the intuitive LightHouse 3 OS, providing a user-friendly experience for all marine activities.

2. SAFETY INFORMATION

Please read all safety information and instructions carefully before installing and operating the Axiom+ 12 RV. Failure to follow these instructions may result in product damage, personal injury, or improper operation.

- **Installation:** Ensure all electrical connections are made correctly and securely to prevent fire or electrical shock. Consult a qualified marine electronics technician if unsure.
- **Power Supply:** Connect the unit only to a power source within the specified voltage range. Incorrect voltage can damage the device.
- **Navigation:** This device is an aid to navigation. Always use official government charts and exercise caution. Do not rely solely on the Axiom+ 12 RV for navigation decisions.
- **Water Exposure:** While designed for marine environments, avoid direct high-pressure water jets on the unit.
- **Maintenance:** Disconnect power before performing any maintenance or cleaning.

3. SETUP AND INSTALLATION

3.1 Package Contents

Verify that all items are present in the package:

- Raymarine Axiom+ 12 RV Display Unit
- Surface Mounting Kit
- Trunnion Mounting Kit
- Mounting Hardware
- Power/Data Cable
- Installation Instructions (this manual)

3.2 Mounting Options

The Axiom+ 12 RV supports two primary mounting methods:

- **Surface Mount:** For flush installation into a panel or dashboard.
- **Trunnion Mount:** For bracket mounting, allowing for adjustable viewing angles.

Refer to the detailed installation instructions provided with the mounting kits for specific steps and template usage. Ensure adequate ventilation around the unit.

3.3 Electrical Connections

Connect the supplied Power/Data Cable to the appropriate port on the back of the Axiom+ 12 RV and to your vessel's 12V DC power supply. Ensure proper polarity. Additional data connections for transducers, radar, and other peripherals should be made according to their respective manuals.

3.4 Initial Power On

Once installed and connected, press the power button to turn on the unit. Follow the on-screen prompts for initial setup, including language selection, time zone, and basic network configuration.

4. OPERATING INSTRUCTIONS

4.1 LightHouse 3 Operating System

The Axiom+ 12 RV runs on the LightHouse 3 OS, known for its intuitive interface and ease of use. Navigate through menus and applications using the responsive touchscreen. Swipe gestures and tap controls allow quick access to various functions.

4.2 Display Features

The 12-inch IPS display offers superior clarity and viewing angles. Its 1,800 nits brightness ensures visibility in direct sunlight, while day/night color palettes optimize viewing in varying light conditions. The HydroTough™ nano-coated screen repels water, oil, and smudges, maintaining touch accuracy and display clarity.

4.3 Core Functions

- **Chartplotter:** Seamlessly redraws Raymarine LightHouse Charts, Navionics, and C-MAP. Plan routes, mark waypoints, and monitor your vessel's position.
- **Fishfinder (RealVision™ 3D Sonar):** Experience detailed underwater imaging with RealVision™ 3D sonar. This technology provides a clear, three-dimensional view of the seafloor, structures, and fish.
- **Augmented Reality Navigation (ClearCruise™):** When connected to a compatible camera, ClearCruise™ overlays AIS targets, waypoints, and navigation objects directly onto a live video feed, enhancing situational awareness.
- **Radar:** Integrate with compatible Raymarine radar systems for enhanced collision avoidance and weather tracking.
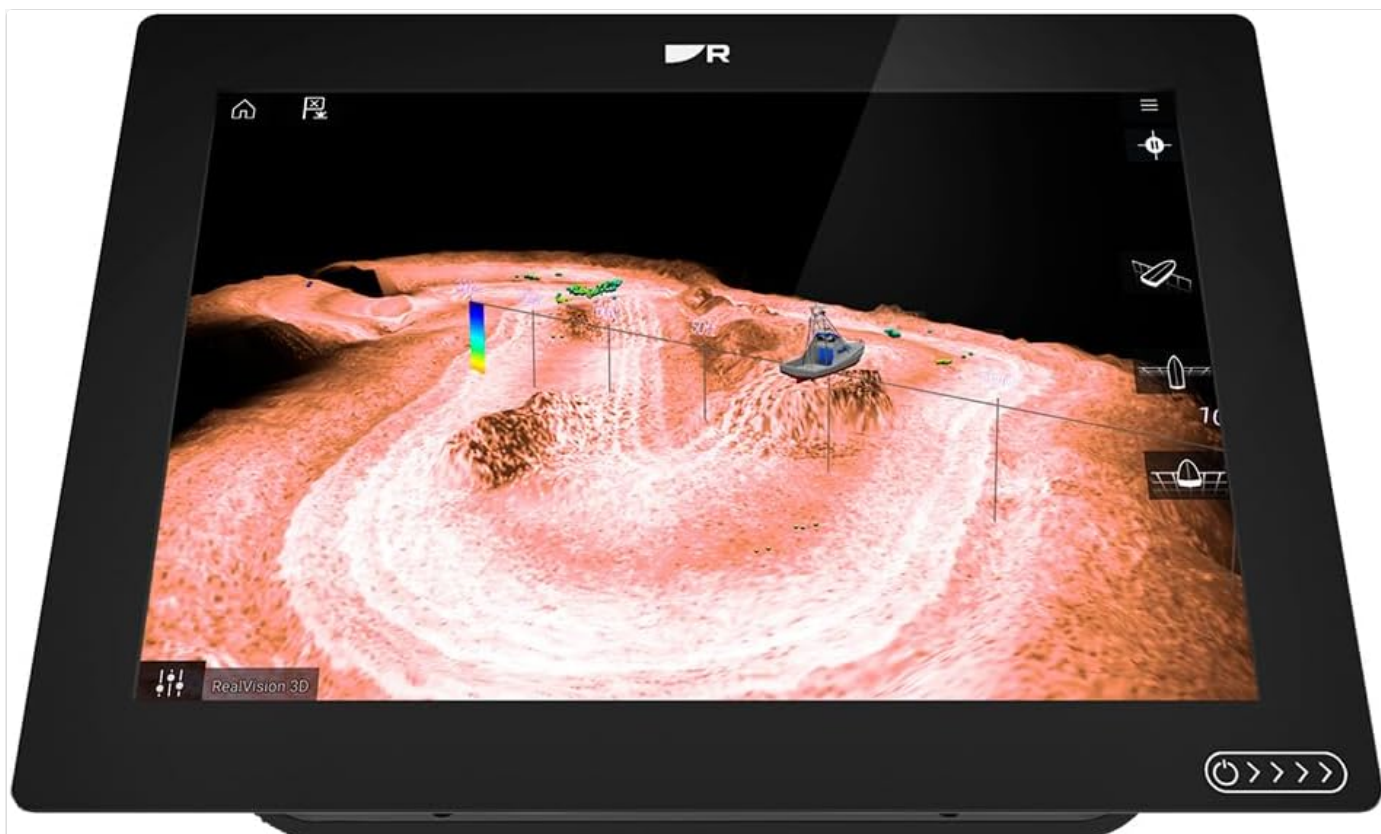
Figure 1: The Raymarine Axiom+ 12 RV display showing a RealVision 3D sonar view. The screen illustrates detailed underwater topography, including contours and structures, with a boat icon positioned on the map. Depth information and other navigational elements are visible on the display.

4.4 Customization

Customize your display with various LightHouse 3 color themes, including light, dark, and night modes, to suit your preferences and ambient lighting conditions.

5. MAINTENANCE

5.1 Cleaning the Display

The HydroTough™ screen is designed to repel water and smudges. For cleaning, gently wipe the screen with a clean, soft, damp cloth. For stubborn marks, use a mild glass cleaner applied to the cloth, not directly to the screen. Avoid abrasive cleaners or solvents.

5.2 Software Updates

Periodically check the Raymarine website for software updates. Keeping your Axiom+ 12 RV's software up-to-date ensures optimal performance, new features, and bug fixes. Updates can typically be performed via Wi-Fi or USB.

5.3 General Care

Ensure all cable connections are secure and free from corrosion. Inspect the unit periodically for any signs of damage. When not in use for extended periods, consider covering the unit to protect it from harsh environmental elements.

6. TROUBLESHOOTING

This section provides solutions to common issues. For more complex problems, contact Raymarine customer support.

- **Unit does not power on:**

- Check power cable connections at both the unit and the power source.
- Verify the vessel's battery voltage and fuse.

- **No GPS signal:**

  - Ensure the unit has a clear view of the sky.
  - Check external GPS antenna connection if applicable.

- **Sonar not displaying:**

  - Verify transducer connection to the unit.
  - Ensure the transducer is properly submerged and free from obstructions.
  - Check sonar settings within the LightHouse 3 OS.

- **Touchscreen unresponsive:**

  - Clean the screen to remove any dirt or moisture.
  - Restart the unit.

7. SPECIFICATIONS

Feature	Detail
Brand	Raymarine
Model Name	Axiom+ 12 RV
Part Number	E70639
UPC	723193836989
Screen Size	12 Inches
Display Type	IPS LCD
Mounting Type	Surface Mount, Trunnion Mount
Processor	Quad-core
Operating System	LightHouse 3 OS
Sonar Capability	RealVision™ 3D Sonar
Cartography Support	Raymarine LightHouse Charts, Navionics, C-MAP
Screen Brightness	Up to 1,800 nits
Screen Coating	HydroTough™ Nano-coated, impact-resistant glass
Item Package Dimensions	15 x 13 x 8 inches
Package Weight	189.6 Ounces

8. WARRANTY & SUPPORT

The Raymarine Axiom+ 12 RV is manufactured by Raymarine. For detailed warranty information, including terms and

conditions, please refer to the official Raymarine website or the warranty card included with your product. Raymarine provides customer support for technical assistance, service, and parts.

For the most current support resources, including FAQs, software downloads, and contact information, please visit the official Raymarine support portal.

Related Documents - Axiom+ 12 RV

[Raymarine Axiom Pro Installation Instructions](#)
Comprehensive installation guide for the Raymarine Axiom Pro multifunction display, covering setup, connections, and troubleshooting.

[Raymarine LightHouse 3: Advanced Operation Instructions (Version 3.12)](#)
Comprehensive guide to operating the Raymarine LightHouse 3 system, version 3.12, covering advanced features, setup, and applications for marine navigation. Includes details on Axiom, Axiom Pro, and Axiom XL models.

[Raymarine Axiom 2 Pro MFD/Chartplotter Installation Instructions](#)
Detailed installation instructions for the Raymarine Axiom 2 Pro multifunction display (MFD) and chartplotter, covering setup, connections, power, networking, and troubleshooting for marine navigation systems.

[Raymarine Axiom Installation Guide](#)
Comprehensive installation instructions for Raymarine Axiom multifunction displays (MFDs), covering setup, mounting, connections, and troubleshooting for marine navigation and sonar systems.

[Raymarine ELEMENT HV: Guida all'Installazione e Manuale Tecnico](#)
Guida completa all'installazione e all'uso del sistema di navigazione Raymarine ELEMENT HV. Include specifiche tecniche, collegamenti, risoluzione problemi e accessori per chartplotter/ecoscandaglio.

[Raymarine Dragonfly / Dragonfly 7 Installation and Operation Instructions](#)

Comprehensive guide for installing and operating Raymarine Dragonfly and Dragonfly 7 series marine fishfinder and chart plotter combo devices, covering setup, features, and troubleshooting.