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# Installation Manual Marine Pro Series

RP 480i Remote Panel

# Marine Watch S Series

S-ONE Alarm Panel

**auto**  
**MASKIN**



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# 1 Preface

## 1.1 About this Manual

This manual has been published primarily for professionals and qualified personnel. The user of this material is assumed to have basic knowledge in marine systems, and must be able to carry out related electrical work.



Work on the low-voltage circuit should only be carried out by qualified and experienced personnel.

Installation or work on the shore power equipment must only be carried out by electricians authorized to work with such installations.

## 1.2 Responsibilities



It is the sole responsibility of the installer to ensure that the installation work is carried out in a satisfactory manner, that it is operationally in good order, that the approved material and accessories are used and that the installation meets all applicable rules and regulations.



Auto-Maskin continuously upgrades its products and reserves the right to make changes and improvements without prior notice.

All information in this manual is based upon information at the time of printing. For updated information, please contact your local distributor.



The crossed-out wheeled bin symbol indicates that the item should be disposed of separately. The item should be handed in for recycling in accordance with local environmental regulations for waste disposal.

By separating a marked item, you will help reduce the volume of waste sent to incinerators or land-fill and minimize any potential negative impact on human health and the environment.

## 1.3 Revisions

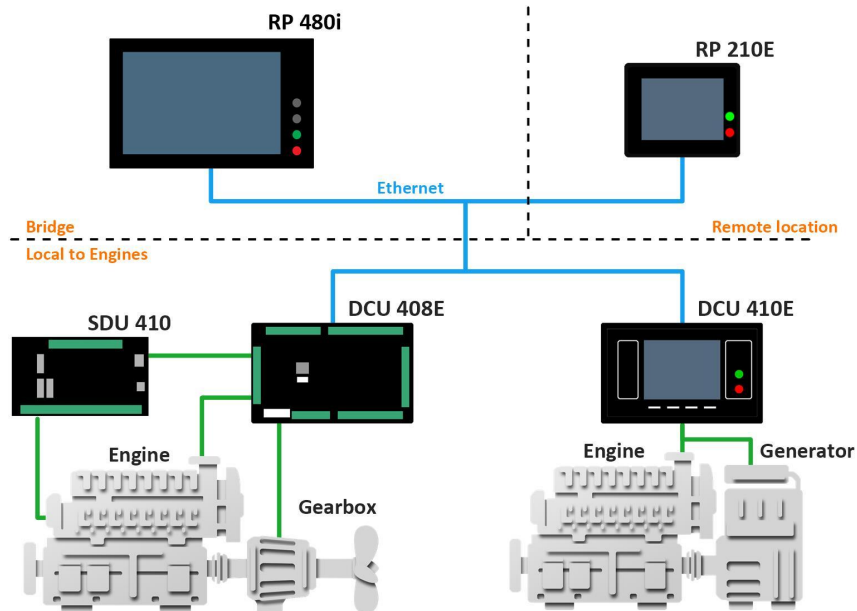
Manual revision: January 2026

## 2 Ordering Information

The Marine Pro and Marine Watch series covers a wide range of compatible products within both the series. Please visit our website for more information.

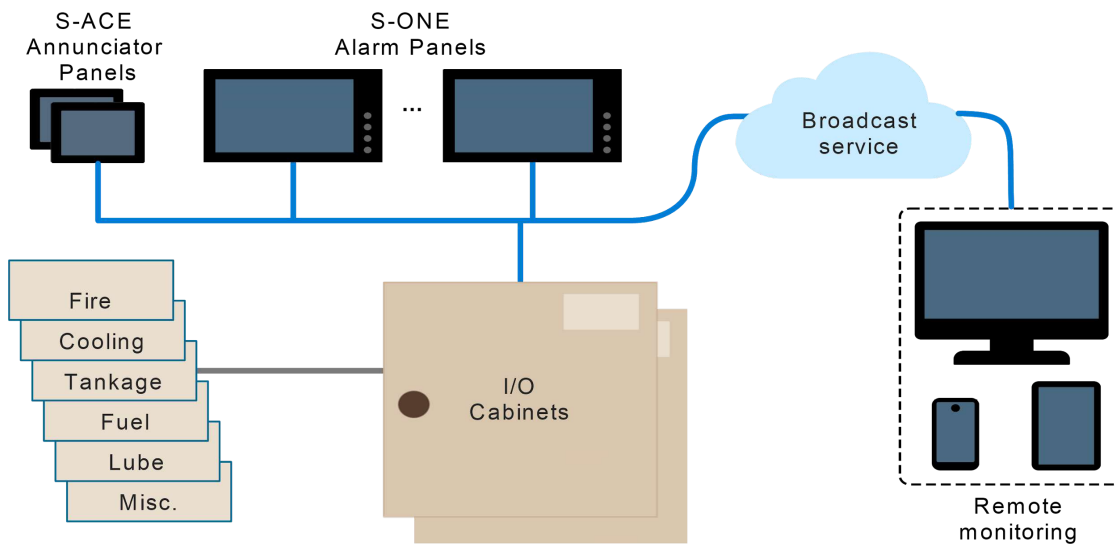
### 3 Overview

#### 3.1 Overview of the Marine Pro Series



#### 3.2 Overview of the Marine Watch S Series

Typical installation shown below.



#### 3.3 Networking

The products use Ethernet as a communication medium. Either connect the products directly, or use Ethernet switches to expand the network.



For redundant Ethernet connection, *managed* Ethernet switches must be used.

## 4 Installation

This chapter covers the installation of the RP 480i and Marine Watch S-ONE panels.

### 4.1 Mounting

Panels with a screen should be mounted so the operator can easily view and operate the panel.

Ensure easy access to the rear wiring.



Use the included mounting frame and the most appropriate fastening method.

The panel may be mounted on the engine's supporting structure provided shock absorbers are used either between the structure and the engine, or between the structure and the panel enclosure.



Mount the panels with a screen with care to avoid

- mechanical damage
- exposure to water or other liquids

When mounting the panel in a cutout there are two options. Either use fixed length screws (8 mm screws included) or headless set screws with a serrated flange nut.

#### 4.1.1 Panel Cut-out

The cut-out size is:

- 321.0 mm width, 190.5 mm height

#### 4.1.2 Mounting with Screws

When mounting the panel with screws, the thickness of the wall where the cutout is determines the screw length. It is important to follow this guide to avoid damage to the panel.

Wall Thickness	Screw length	Included in package
0 - 2 mm	8 mm	Yes
3 - 5 mm	10 mm	No
6 - 8 mm	12 mm	No
9 -	Wall thickness + 6 mm. The gap between the screw head and the mounting frame must be 3 mm or less when the screw is just inserted into the threads.	No
0 - 25 mm	See section below about Headless Set Screws	No

Screw thread size: M3.



#### 4.1.3 Screw Torque

The threads in the unit are pre-fitted with threadlocker. Use only two fingers on the screwdriver as the image above shows to tighten the screws with a fair torque.



Do not over tighten the mounting screws.

#### 4.1.4 Mounting with Screw kit (P/N 1501498).

Using the headless set screws to mount the panel provides greater flexibility regarding wall thickness. This kit supports wall thicknesses up to 25 mm.

Step 1: Fasten all 15 supplied set screws into the panel. Observe that three of the supplied set screws are longer than the others. These three longer screws must be installed along the left short side of the panel (when the panel is oriented upside down, with the top side facing away).

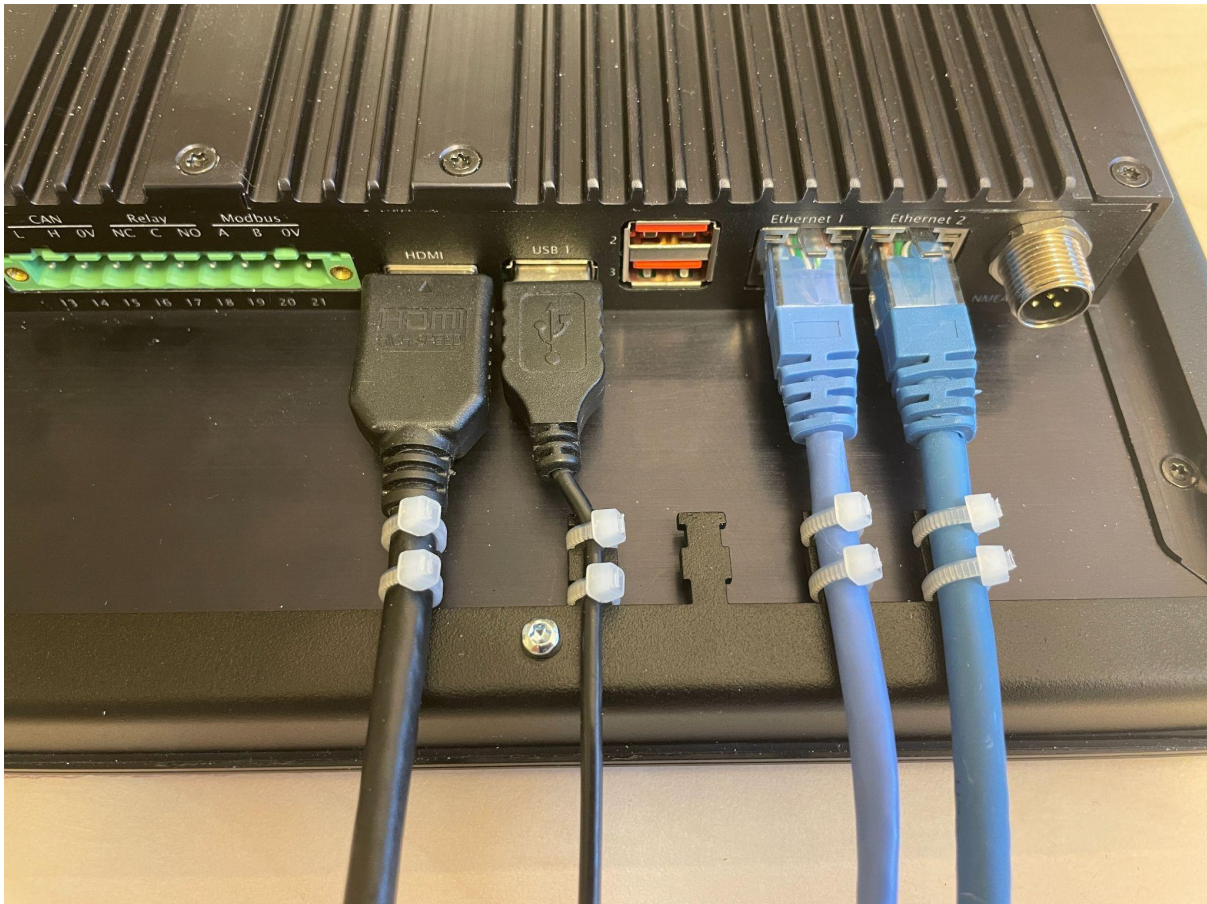


Step 2: Insert the panel into the cut-out.

Step 3: Position the mounting frame and secure it using all 15 serrated flange nuts.

### 4.1.5 Strain Relief

Secure cables that don't have built in strain relief, such as HDMI, USB and Ethernet, with double cable ties.



## 4.2 Connections & Wiring



<b>1</b>	<b>Power LED</b>
<b>2</b>	<b>Supply</b> <ol style="list-style-type: none"> <li>1. +24 V</li> <li>2. 0 V</li> <li>3. Power on<sup>2</sup></li> <li>4. Shield</li> </ol>

<b>5<sup>1</sup></b>	<b>HDMI</b>
<b>6</b>	<b>USB-A (2.0 High-speed interface)</b> <ul style="list-style-type: none"> <li>• USB 1</li> <li>• USB 2</li> <li>• USB 3</li> </ul>

<sup>1</sup> Not in use

<sup>2</sup> Not in use, connect to 24 V for future use

			Reserved for software update, event log extraction, and configuration file handling
<b>3</b>	<b>Flexible I/O</b> 5. I/O #1 6. I/O #2 7. I/O #3 8. I/O #4 9. I/O #5 10. I/O #6 11. I/O #7 12. I/O #8	<b>7</b>	<b>Ethernet</b> <ul style="list-style-type: none"> <li>• Ethernet 1, RJ45</li> <li>• Ethernet 2, RJ45</li> </ul> <p>Ethernet 1 is preferred for networking.</p>
<b>4<sup>3</sup></b>	<b>CAN bus, Relay, Modbus RTU</b> 13. CAN L 14. CAN H 15. CAN 0V 16. Relay NC 17. Relay C 18. Relay NO 19. Modbus A 20. Modbus B 21. Modbus 0V	<b>8<sup>4</sup></b>	<b>NMEA 2000 – isolated</b>

#### 4.2.1 General

Wires shall have a minimum area of 0.5 mm<sup>2</sup>, except the power supply where at least 1.0 mm<sup>2</sup> (17 AWG) wires shall be used.

#### 4.2.2 Supply [T1-4]

The panels are designed to run on 24 V supply voltage.

Use a cable with twisted pair wires to minimize the effect of noise on the supply input.

Connect the Shield to the hull.



In marine installations, the 0 V should not be connected to the Shield. In a ship installation, the hull is the Shield whilst the battery minus is the 0 V.

#### 4.2.3 Flexible I/O [T5-12]

There are 8 flexible I/O channels available. They can be used for the following types<sup>5</sup>.

- Switch input
- Switch output
- Voltage input
- 4-20 mA input

<sup>3</sup> Not in use

<sup>4</sup> Not in use

<sup>5</sup> See User Manual for respective products in order to see which functionality is available.



For analog measurements, use shielded cables to minimize disturbance. The shield shall be connected to ground/hull, not to 0 V. Connect the shield to one end of the cable only.

See the datasheet for detailed characteristics.

#### 4.2.4 CAN [T13-15]

Use shielded twisted cables for CAN, where CAN-H and CAN-L are twisted.



Connect the shield to one end of the cable only.

#### 4.2.5 Relay [T16-18]

The relay has a 0.7 A overcurrent protection on the common pin.

See the respective User Manual for relay functionality.

#### 4.2.6 Modbus RTU [T19-21]

Use shielded twisted cables for Modbus RTU, where A and B are twisted.



Connect the shield to one end of the cable only.

#### 4.2.7 HDMI

Use strain relief as shown in the [Strain Relief](#) chapter.

See the respective User Manual for HDMI functionality.

#### 4.2.8 USB

Typically, the USB interface is used for software update and file extraction.

When using the USB for other purposes, use strain relief as shown in the [Strain Relief](#) chapter.

#### 4.2.9 Ethernet

Use CAT-5 (or better) network cables.



Do not bend the Ethernet cable or pull the cable sideways more than necessary during installation.

Use strain relief as shown in the [Strain Relief](#) chapter.

#### 4.2.10 NMEA 2000

See the respective User Manual for NMEA 2000 functionality.

## 5 Appendix A - Wiring

Contact your distributor for example diagram of recommended wiring for RP 480i The Marine Watch S-ONE is similar to this diagram.