
R24F Hardware Manual

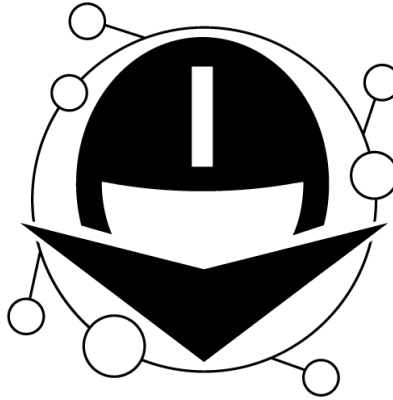
Release 1.0

Embention

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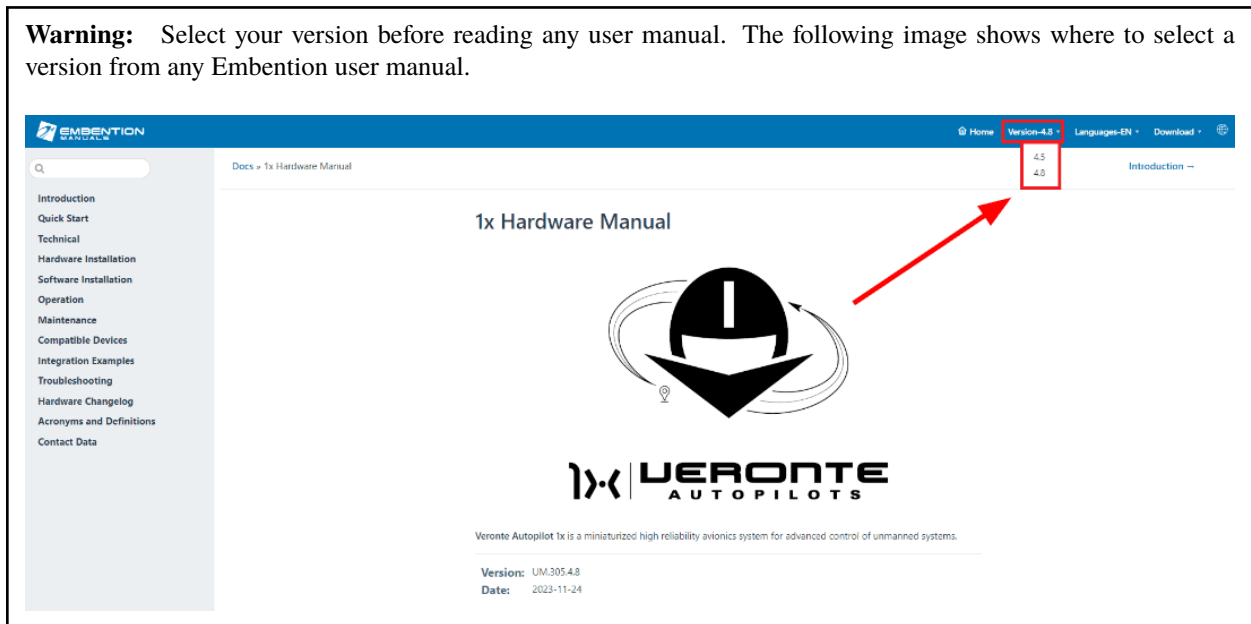
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R24F | VERONTE A V I O N I C S

Veronte R24F is a DC-DC converter with input voltage supply variable.

Warning: Select your version before reading any user manual. The following image shows where to select a version from any Embention user manual.



INTRODUCTION



Fig. 1: **Veronte R24F**

Veronte R24F is a DC-DC converter, with an input power supply variable from 14 to 160 V and 24 V of output voltage.

QUICK START

This user manual covers the *mechanical assembly* of **Veronte R24F**. To use it, weld input and output wires according to the *Pinout* section, then fix it to the assembly frame.



Fig. 1: Input and output diagram

2.1 Warnings

- In saline environments such as coastal and oceanic, the screw material must be stainless steel.
- Unlike **Veronte R12S**, this device does not support redundancy.

To know more about redundancy, read [Redundancy - Hardware Installation](#) section of the **R12S Hardware Manual**.

TECHNICAL

3.1 Variants

Veronte **R24F** is offered in two versions: **R24F** and **R24F OEM**.

Name	Reference	Description
R24F	P003957	Protected by an enclosure made of diecast aluminum, with watertight enclosure.
R24F OEM	P003956	Smaller, lighter and with better heat dissipation, but mechanical protection may be required.

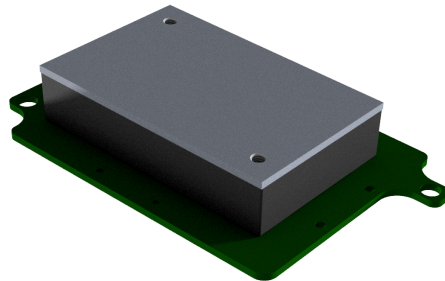


Fig. 1: **R24F OEM version**

3.2 Mechanical and Electrical Specifications

Property	Value
Output voltage	24 V DC
Input voltage range	14 - 160 V DC
Maximum output current	2.5 A
Operating temperature	From -40°C to 75°C
Enclosure protection	IP 66
Efficiency	90 %

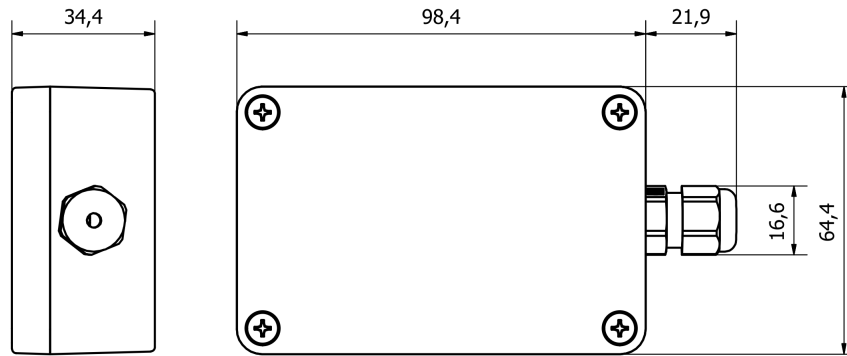


Fig. 2: R24F dimensions (mm)

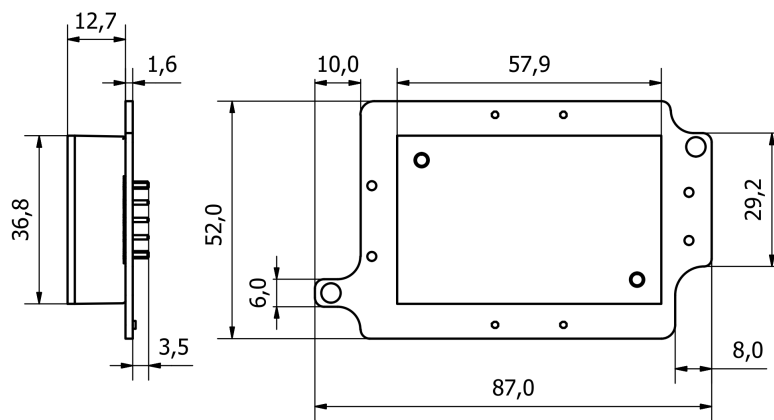


Fig. 3: R24F OEM dimensions (mm)

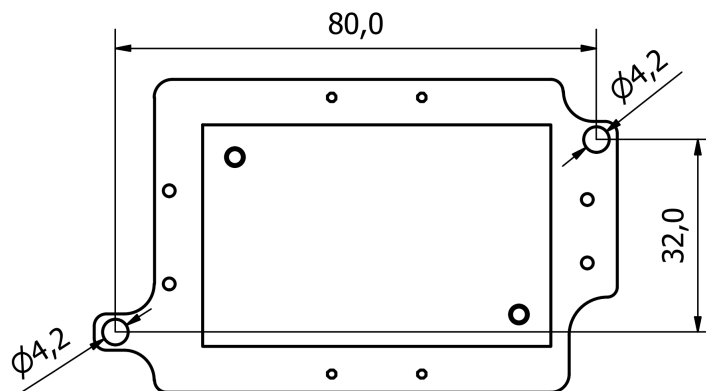


Fig. 4: R24F OEM mounting holes position (mm)

HARDWARE INSTALLATION

4.1 Mechanical

4.1.1 R24F OEM Assembly

M4 screws are recommended for mounting. In saline environments such as coastal and oceanic, the screw material must be stainless steel.

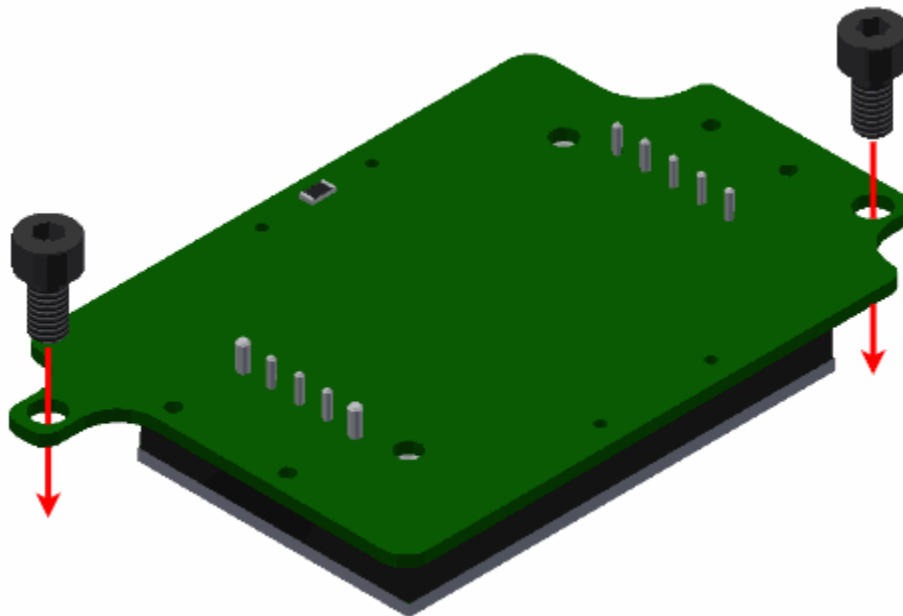


Fig. 1: R24F OEM assembly

To weld the cables read the *Pinout* section of this manual

4.1.2 R24F Assembly

1. First of all, unscrew the box and the PCB.

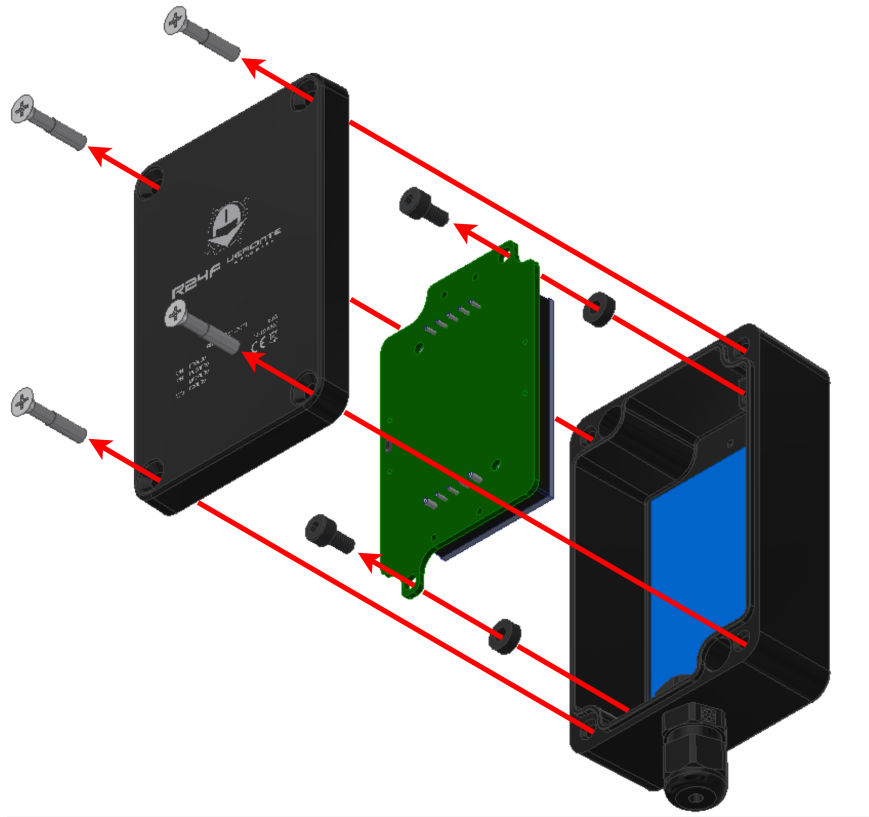


Fig. 2: Unscrew R24F

2. Then, weld the cables to the PCB following the *Pinout* section of this manual.
3. Next, pass the cables through the cable gland and screw the PCB back.

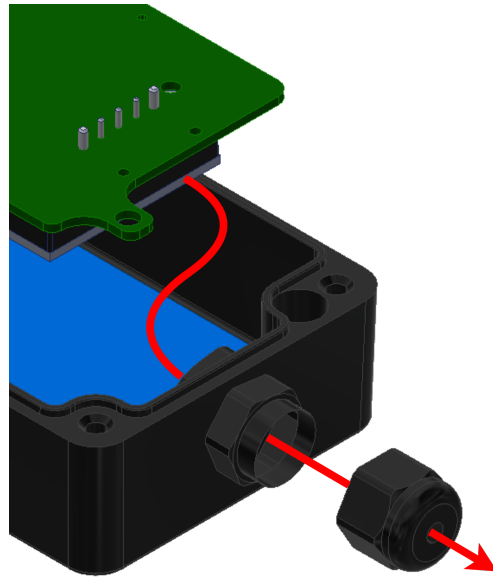


Fig. 3: Cables assembly

4. For mounting, **M3** screws are recommended. In saline environments such as coastal and oceanic, the screw material must be stainless steel.



Fig. 4: R24F assembly

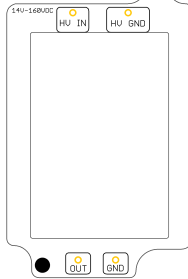
5. Finally, screw the box back.

4.2 Pinout

The following diagram shows the holes to weld each cable.

- **HV IN:** Positive of the input power supply (from 14 to 160 V DC).
- **HV GND:** Ground of the input power supply.
- **OUT:** Positive of the output voltage (24 V DC).
- **GND:** Ground of the output supply.

Note: Grounds are not common.



MAINTENANCE

Apart from cleaning, no extra maintenance is required to guarantee the correct operation of **Veronte R24F**.

In order to clean **Veronte R24F** properly follow the next recommendations.

- Turn off the device before cleaning.
- Use a clean, soft, damp cloth to clean the unit.
- Do not immerse the unit in water to clean it.

ACRONYMS AND DEFINITIONS

DC	Direct Current
DC-DC	Direct Current to Direct Current
GND	Ground
OEM	Original Equipment Manufacturer

CONTACT DATA

For support-related inquiries, customers have access to a dedicated portal through the [Joint Collaboration Framework](#). This platform facilitates communication and ensures traceability of all support requests, helping us to address your needs efficiently.

For other questions or general inquiries, you can reach us via email at sales@embention.com or by phone at (+34) 965 115 421