

WATEROUS

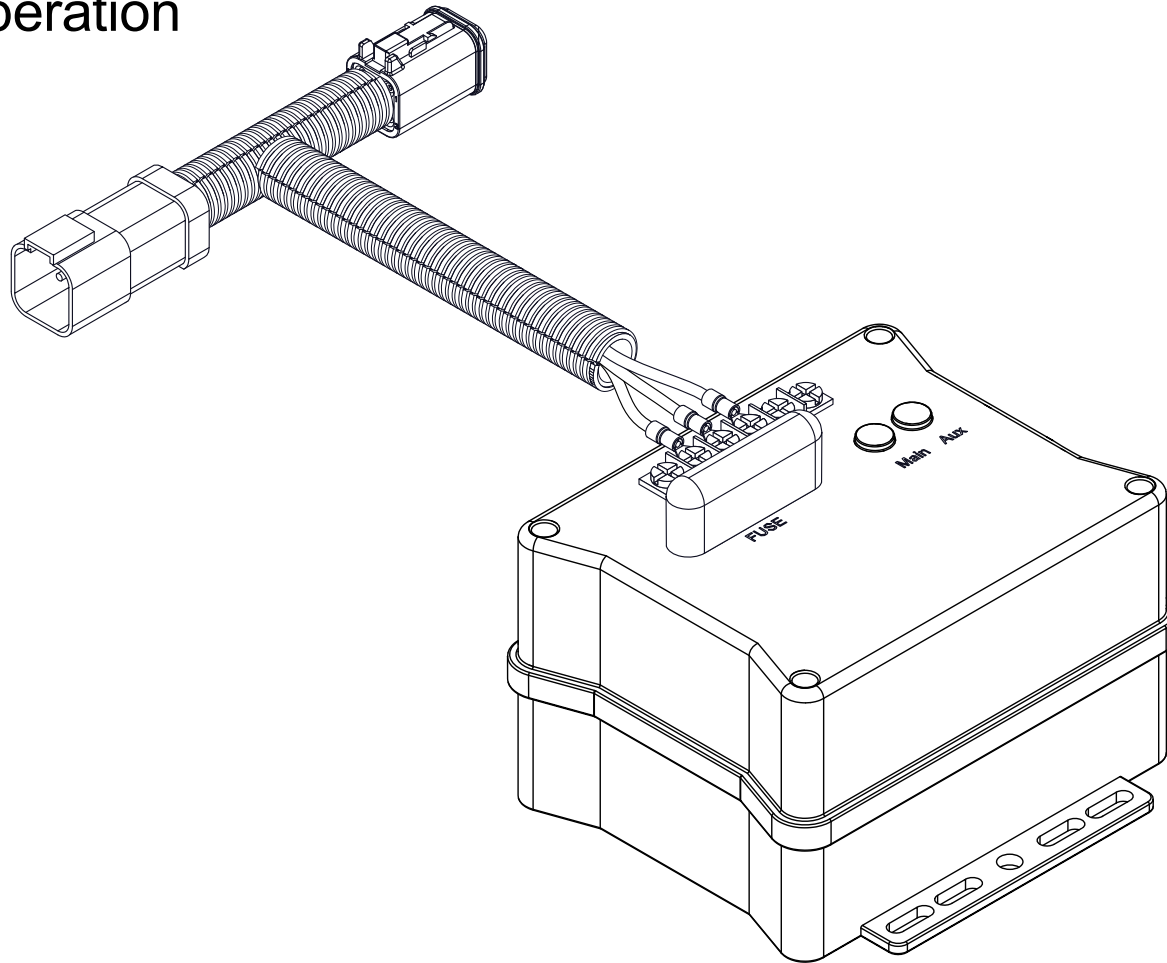
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Uninterruptible Power Supply Kit

Installation and Operation



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Safety Precautions

- Read and understand all the associated documentation before you begin installing the product.
- Contact Waterous when you have questions about installing the equipment.
- Read and understand all the notices and safety precautions.
- Do not operate the equipment when safety guards are removed.
- Do not modify the equipment.

NOTICE

Before Operation

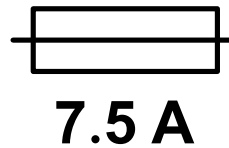
- Read and understand all the instructions provided.
- Check all fluid levels and replenish if necessary.
- Remove all shipping plugs and install the operation plugs or caps.



NOTICE

Equipment Damage

- Using the wrong fuse may damage the equipment.
- Only use the specified fuse rating.



NOTICE

High Current

- High current from welding or plasma cutting can damage components.
- Disconnect all ground wire connections before applying high current.



Use this document to install and operate your Waterous equipment. Understand the following conditions before continuing with the document:

- The instructions may refer to options or equipment that you may not have purchased with your system.
- The illustrations in this document are intended to convey concepts. Do not use the illustrations to determine physical attributes, placement, or proportion.
- Understand that your application may require additional steps, that are not described in the illustrations or instructions, to perform the installation.
- The equipment described in this document is intended to be installed by a person or persons with the necessary skills and knowledge to perform the installation.
- The equipment described in this document is intended to be operated by a person or persons with the basic knowledge of operating similar equipment.
- The information in this document is subject to change without notice.

This document is divided into the following sections:

SAFETY

This section describes general precautions and alert symbols in the document.

INTRODUCTION

This section is an overview of the document.

OVERVIEW

This section describes the components that makeup the system.

INSTALLATION

This section describes the installation and initial setup procedures.

OPERATION

This section describes the equipment operation.

Using this Document

Use the guidelines below when viewing this document.

Viewing the Document Electronically

- View this document in landscape orientation.
- Use the table of contents to navigate directly to that section.
- Text **with this appearance** is linked to a reference.

Printing the Document

- The document is best viewed when printed on both sides and in color.
- Use a 3-ring binder to store the document.

Additional Documentation

Additional documentation is available through the MyWaterous login at [Waterousco.com](https://www.waterousco.com). Use your serial number to gain access to the service parts list associated with your system. Dimensional drawings are available through the Waterous Service department.

Symbols

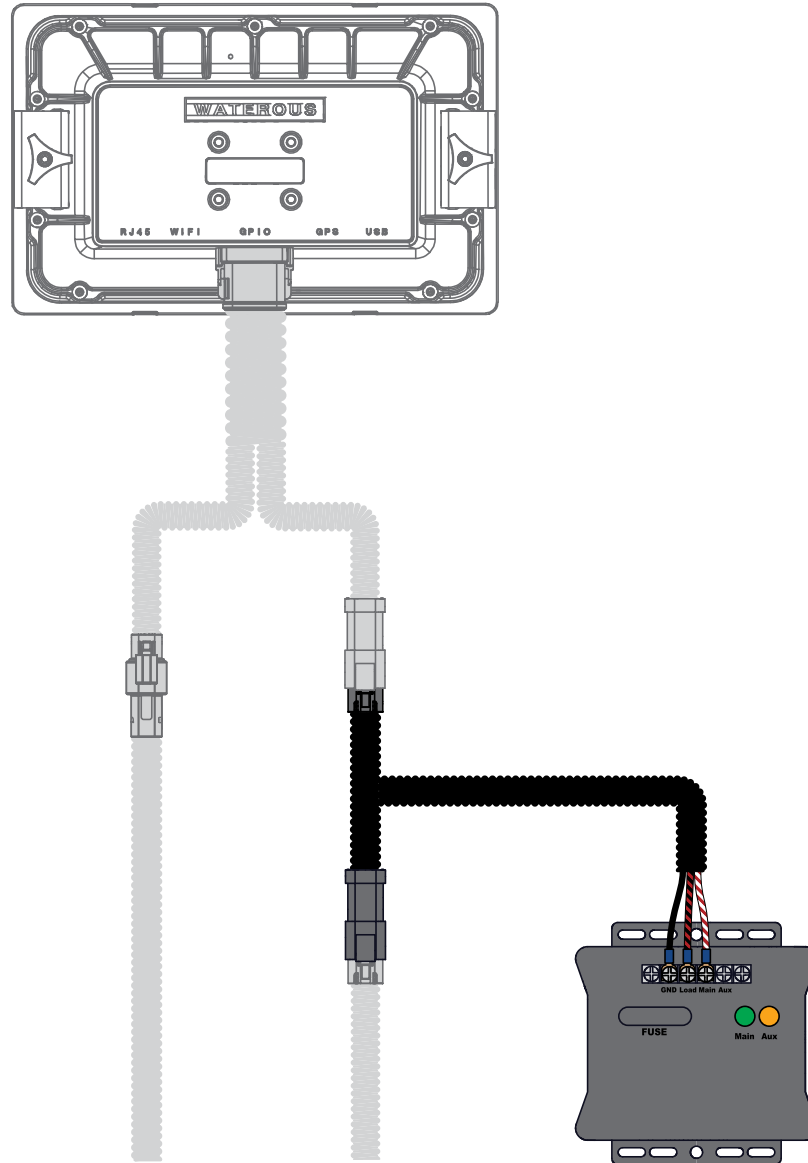
Here are the symbols found in the document and their definitions.



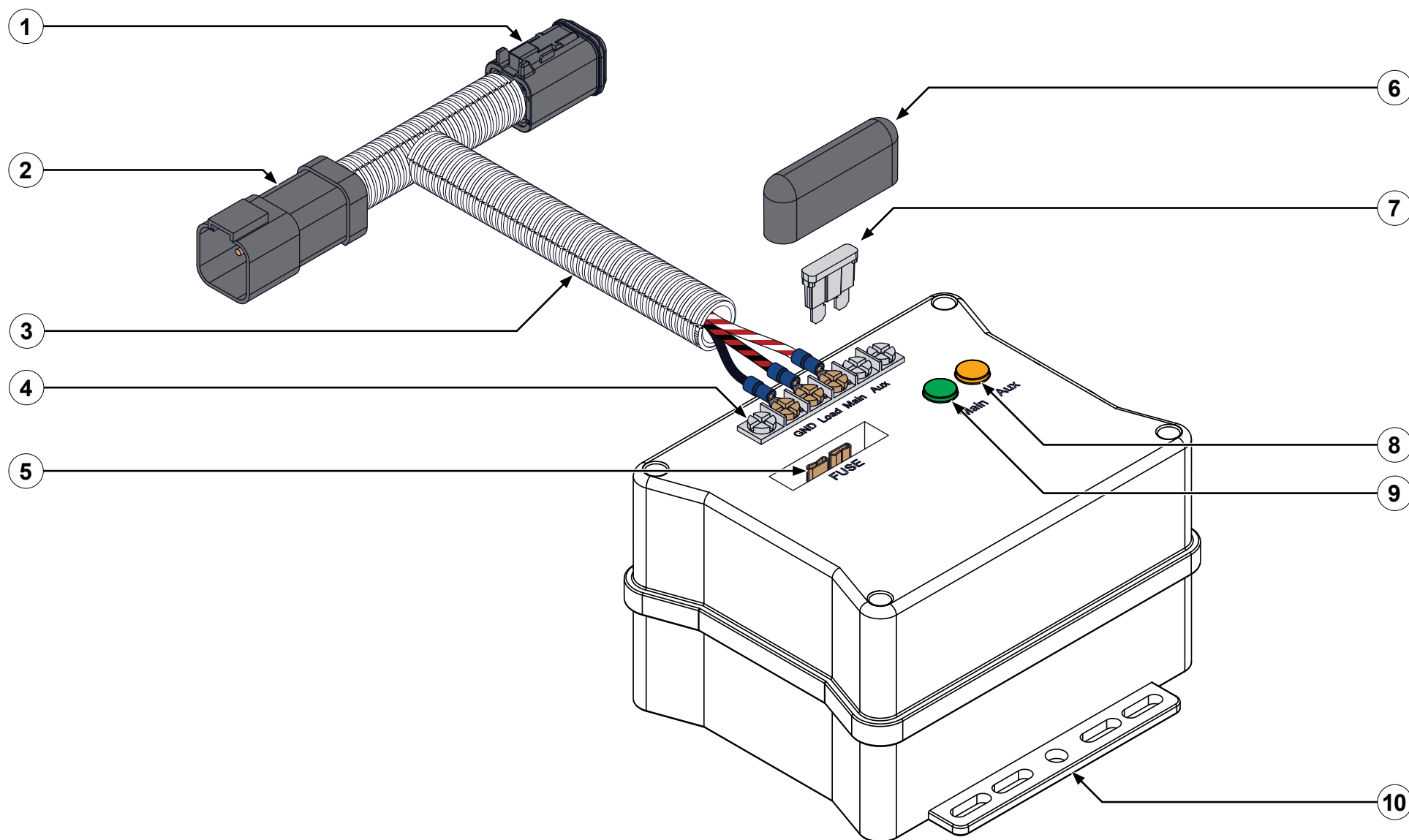
Drill—This symbol tells you to drill the mounting holes in the apparatus.

System Overview

The uninterruptible power supply (UPS) kit stabilizes the power provided to the Tellurus. The UPS prevents the voltage from dropping below the Tellurus operating threshold, this prevents a forced reboot.



Main Components



Main Components

Feature		Description
1	Tellurus power connector	This connects to the power connector on the Tellurus power connector.
2	Apparatus power connector	This connects to the power connector on the apparatus power connector.
3	Wire harness	This is the wire harness for the UPS.
4	Terminal strip	This connects the wire harness to the UPS battery.
5	Fuse compartment	This houses the UPS fuse—7.5 A, automotive blade style fuse, 5 amp maximum load.
6	Fuse compartment cap	This covers the fuse compartment.
7	Fuse	This protects the UPS from over-current.
8	Aux LED	This indicates that the UPS battery is powering the Tellurus.
9	Main LED	This indicates that the apparatus is powering the Tellurus.
10	Mounting holes	This secures the UPS to the apparatus.

Installation Overview

This equipment is intended to be installed by a person or persons with the basic knowledge of installing similar equipment. Contact Waterous with questions about installing the equipment. The installation may require the following tasks and abilities:

- Locating, drilling, mounting holes into the apparatus.
- Routing and securing the wire harnesses.
- Constructing wire harnesses.
- Final testing.

Preparing for the Installation

Read and understand all the installation instructions before installing the equipment. Prepare a suitable, well-lit area, and gather all the necessary tools before you begin the installation.

Determining the Install Location

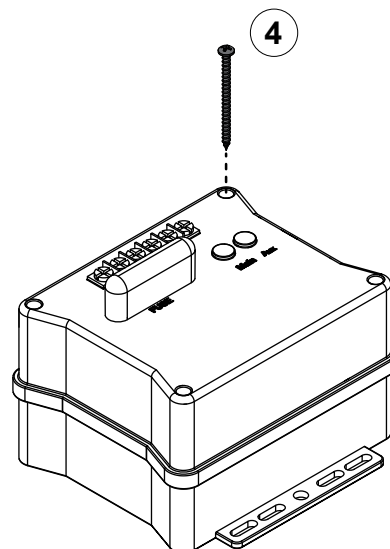
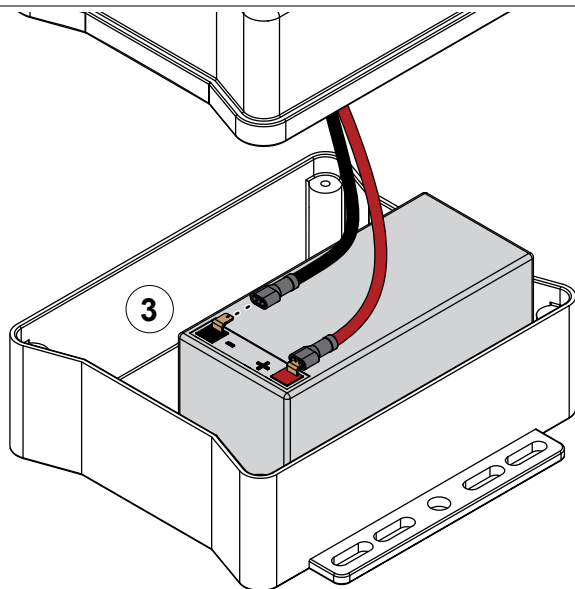
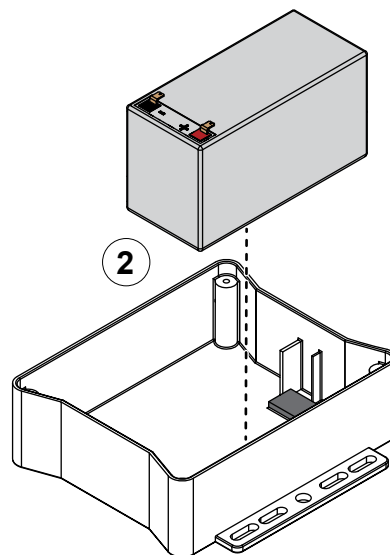
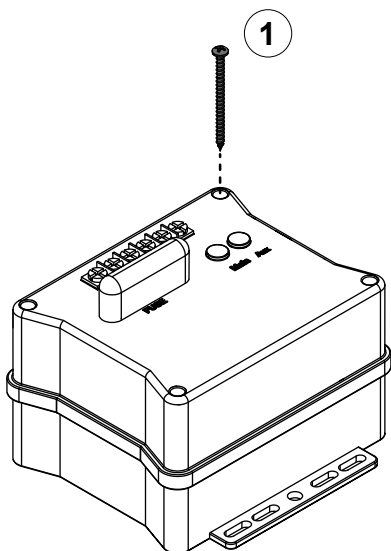
Use the following guidelines to determine a location for the inlet connection:

- Consider the hose, cable, wire harness routing.
- Consider accessibility for operation and maintenance.
- Mount the UPS in a dry location where it has minimal exposure to excessive dirt, road debris, and heat buildup.

Determining Cable and Wire Routing

Use the *Wiring Best Practices* document, available at www.waterousco.com, as a guide to select and route wiring for your application.

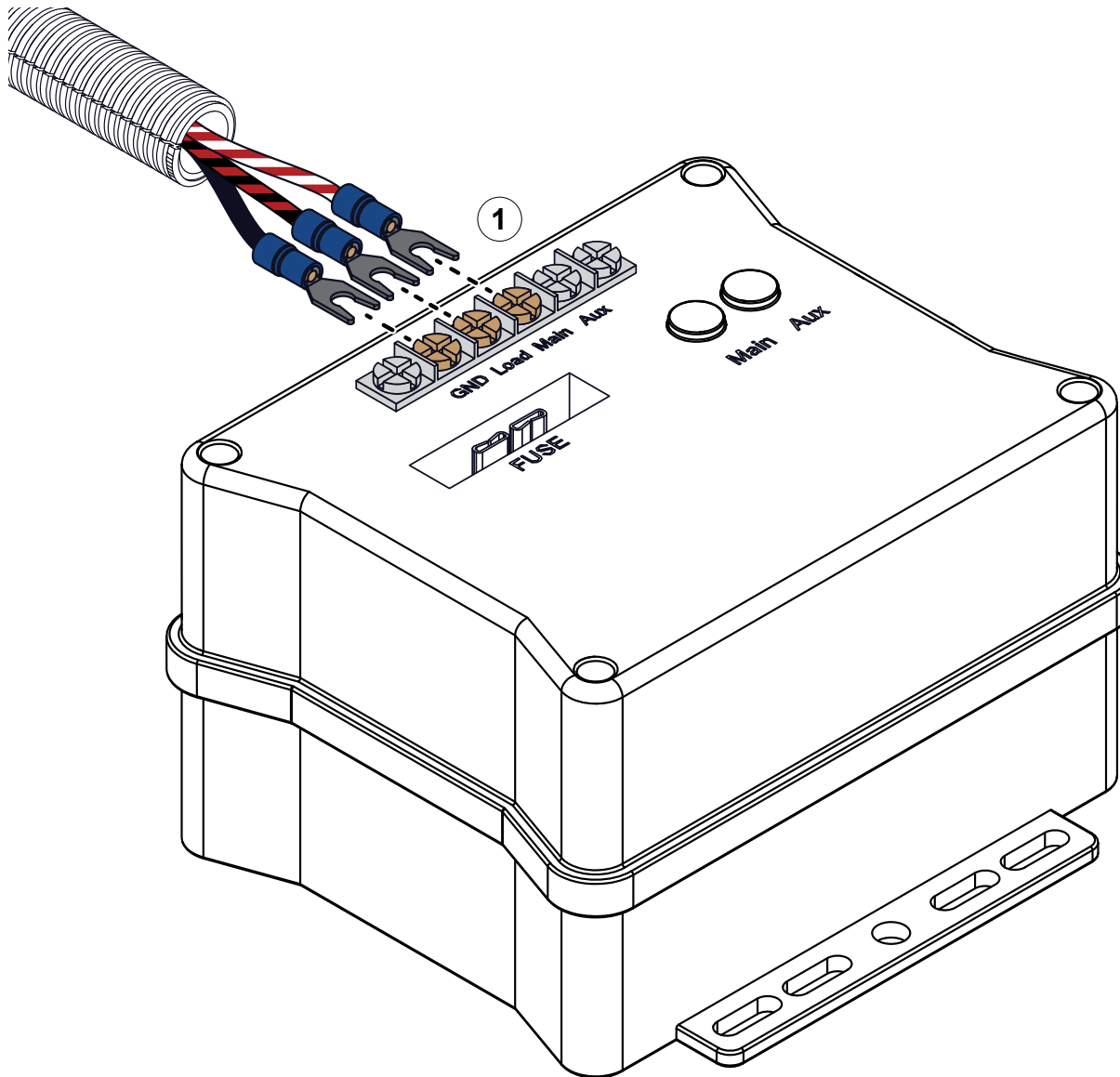
Installing the Battery



Use the illustrations and instructions to install the battery.

- 1 Remove the screws securing the cover to the base.
- 2 Install the battery on the foam.
- 3 Connect the red wire to the + terminal, then install the black wire – terminal.
- 4 Use the screws to secure the cover to the base.

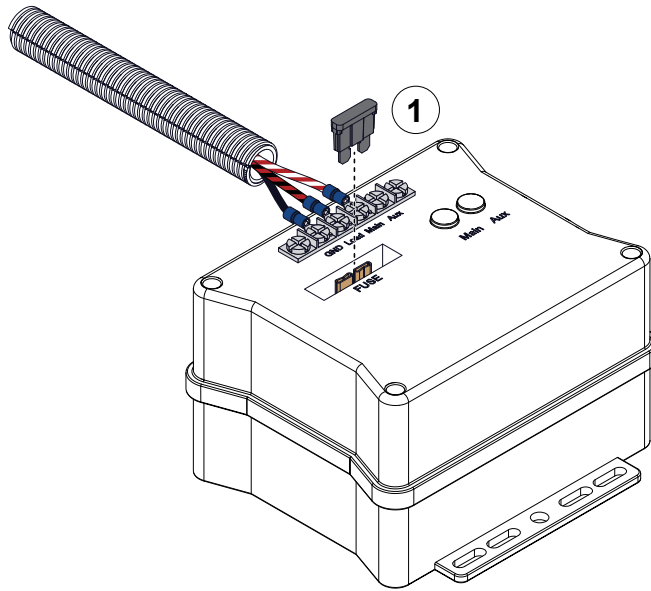
Connecting the Wire Harness



Use the illustration and instructions to install the wire harness to the terminal block on the UPS housing.

- 1 Connect the individual wires from the wire harness to the terminal block in the following combination:
 - Connect the black wire to the terminal marked GND.
 - Connect the black and red wire to the terminal marked Load.
 - Connect the red and white wire to the terminal marked Main.

Installing the Fuse and Fuse Cap



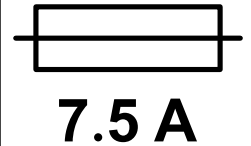
Use the illustrations and instructions to install fuse and fuse cap to the UPS housing.

- 1 Install the fuse into the fuse holder on the UPS housing.
- 2 Install the fuse cap to the UPS housing.

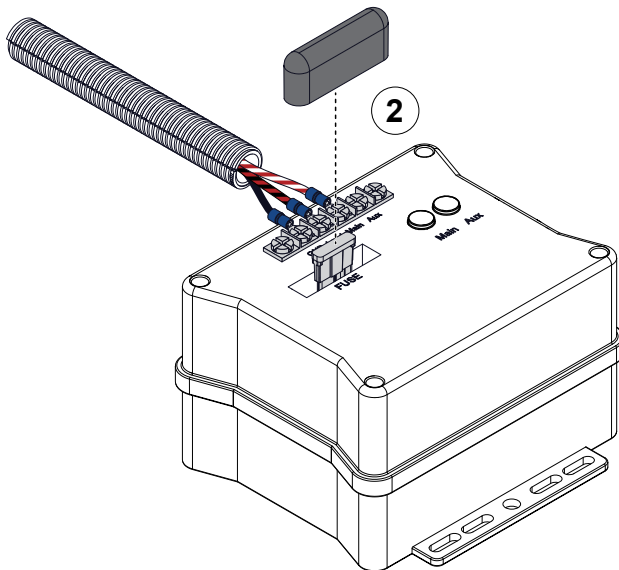
NOTICE

Equipment Damage

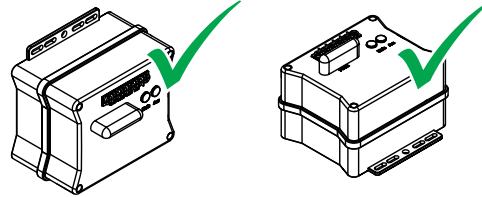
- Using the wrong fuse may damage the equipment.
- Only use the specified fuse rating.



Note: Only replace the fuse with a fuse that has the same specification.

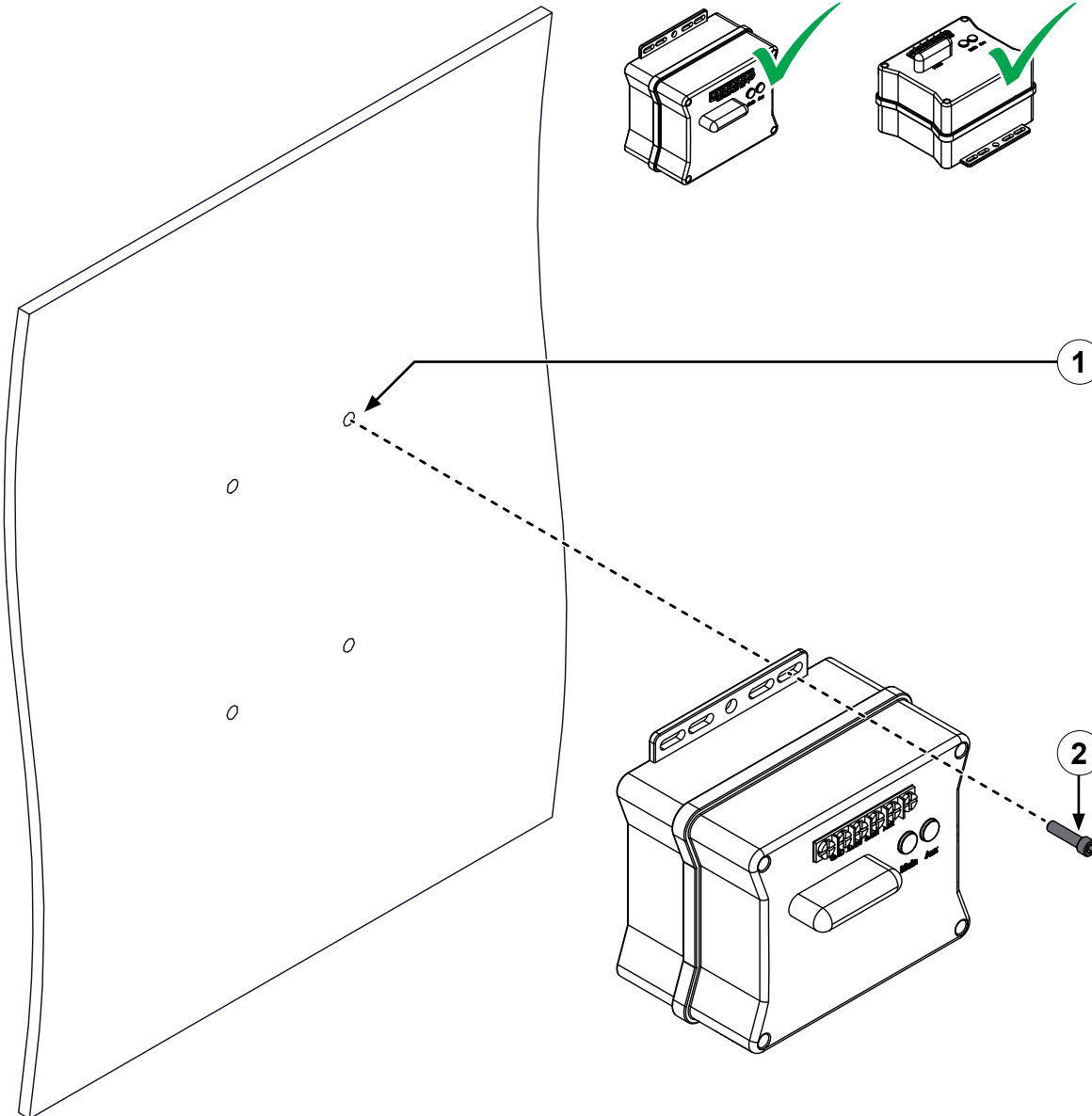


Installing the UPS

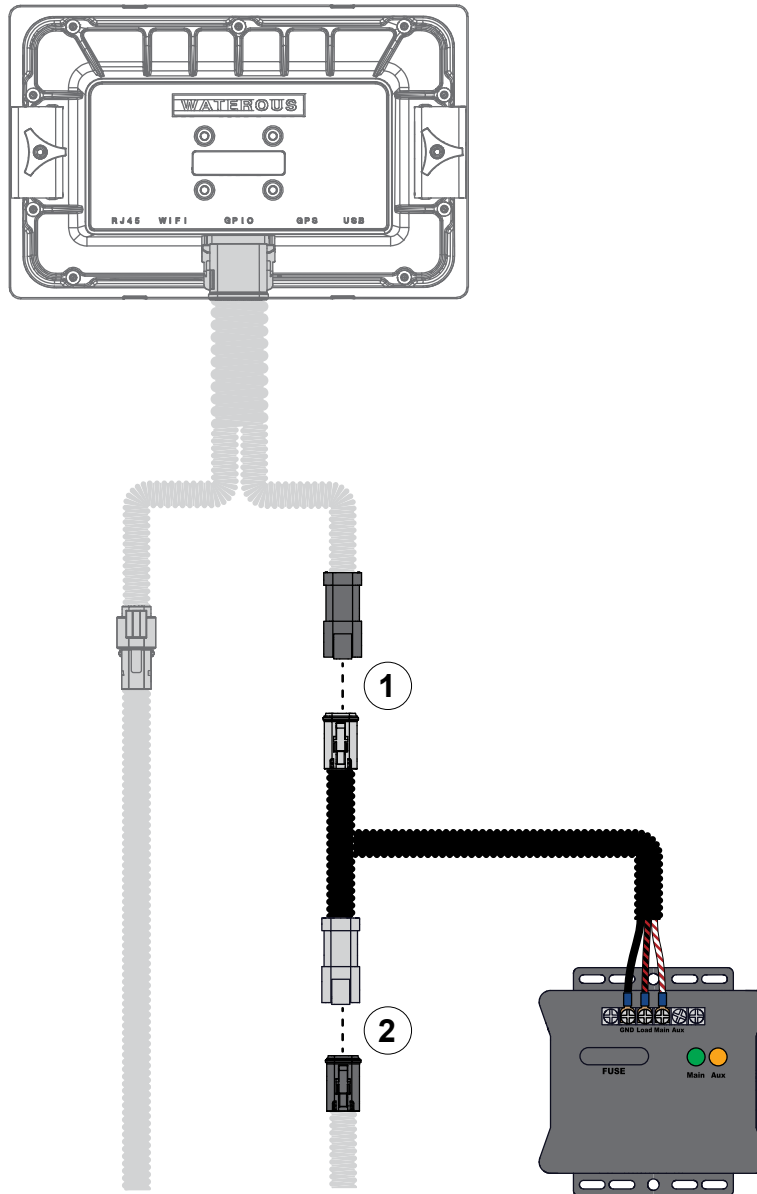


Use the illustration and instructions to install the UPS to the apparatus.

- 1 Locate and drill the mounting holes.
- 2 Use locally sourced hardware to secure the UPS to the apparatus.



Connecting the UPS

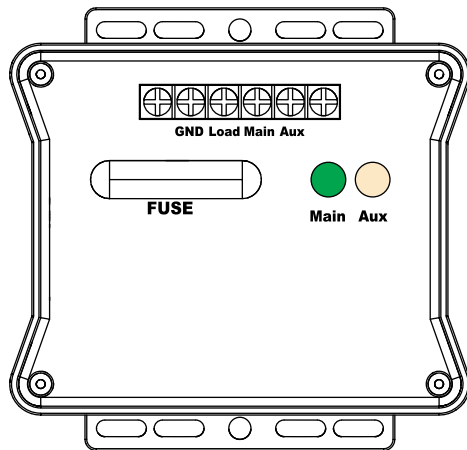
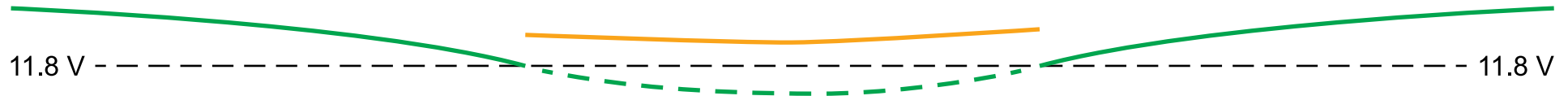


Use the illustration and instructions to connect the UPS to the apparatus power supply.

- 1 Connect the Tellurus power connector on the UPS wire harness to the power connector on the Tellurus wire harness.
- 2 Connect the apparatus power connector on the UPS wire harness to the power connector on the apparatus wire harness.

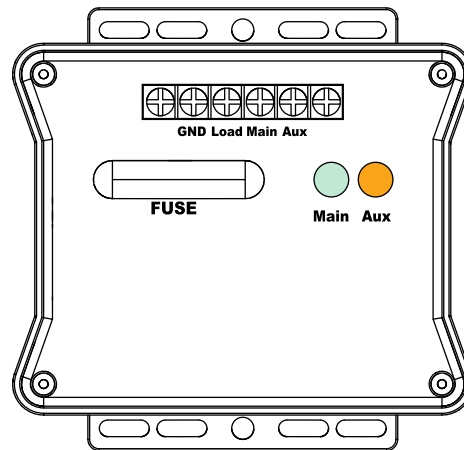
Operating the UPS

The UPS operates automatically. When the apparatus voltage drops below 11.8 V, the UPS activates and provides a stable power source for the Tellurus. The UPS continues to power the Tellurus until the apparatus power raises above 11.8 V. The UPS is not active when the apparatus power is below 1 V or off.



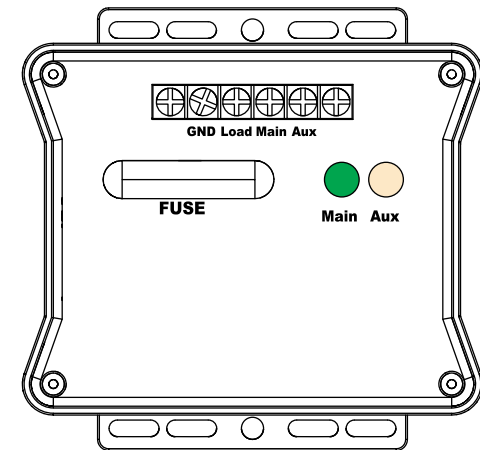
Apparatus Voltage Above 11.8 V

The UPS monitors the apparatus power supplied to the Tellurus. When the power is above 11.8 V, the green LED is illuminated to indicate that the apparatus is supplying the power to the Tellurus.



Apparatus Voltage Below 11.8 V

When the apparatus power drops below 11.8 V, the orange LED illuminates to indicate that the UPS is supplying the power to the Tellurus.



Apparatus Voltage Recovers

When the apparatus power raises above 11.8 V, the orange LED turns off, the green LED illuminates to indicate that the apparatus is supplying the power to the Tellurus.

Notes

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