

Cautions



ELECTRICAL HAZARD: Disconnect power from equipment prior to making any internal adjustments. Service should only be performed by qualified personnel.

FRAGILE: Inspect the equipment prior to installation. Do not install the equipment if damage is apparent. Do not attempt to disassemble this equipment. If damaged, return to the supplier.

ELECTROSTATIC HAZARD: This is sensitive electronic equipment. Apply safe ant-static practices when handling this equipment.

Introduction

The 220 output module connects wirelessly to compatible smoke, gas and heat alarms, and provides an extended alarm output function to external ancillary equipment.

The output is provided by a low-power magnetic latching relay. A control provides a hush and test function. Indicators display alarm and fault conditions.

220 wireless interconnect output modules are powered by a replaceable long-life replaceable lithium-ion battery, and do not require external power.

These instructions provide trained installation personnel with details to install and commission 220 relay output modules for optimum performance.

Preparation

Before commencing installation, ensure all equipment and tools to mount and connect the equipment are available, such as drills, mounting screws, cables and ladders.

Installation

Body

1. Securely fix the body to mounting surface using fixing screws through the mounting lugs on the sides of the body.
2. Remove the top cover (see Fig. 1).

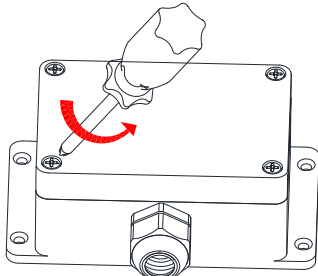


Fig. 1: 220 body and cover removal

Battery

Install the battery in the holder and secure it in place using the battery clip (see Fig. 2).

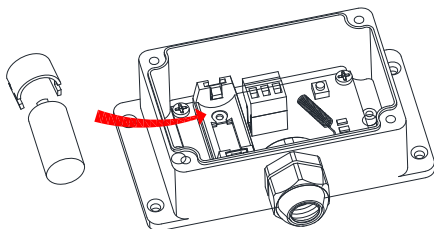


Fig. 2: Fit battery and clip

Wiring

The terminals accept (0.4 ~ 2.5) mm² conductors.

1. Strip the conductor insulation to expose 5 mm of the conductor.

WARNING: Take care to ensure the insulation does not get clamped by the terminal contact.

2. Connect the wiring to the external equipment.



Voltage-free Relay Output (220-001)

Feed the wiring through the cable gland and connect wiring to the relay output terminals (see Fig. 3).

Note: Common, normally-open and normally-closed terminals are available.

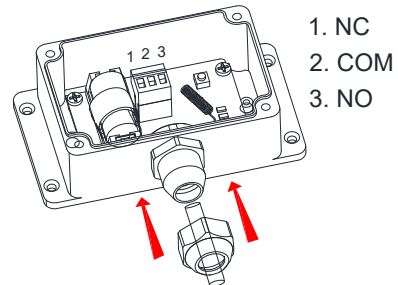


Fig. 3: Relay output wiring and terminals

Pulsed Voltage Output (220-002)

Feed the wiring through the cable gland and connect wiring to the relay output terminals (see Fig. 4).

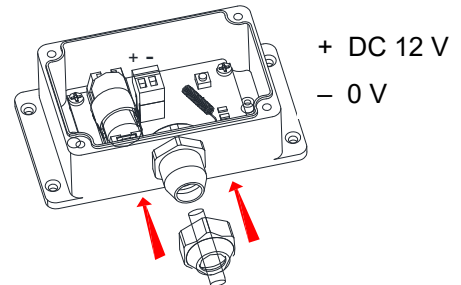


Fig. 4: Pulsed voltage output wiring and terminals

Assembly

Refit the cover to the body.

Commissioning

Group Interconnection

Units must be connected to a Group of at least one alarm device so it can receive alarm signals. The output relay will operate when any device in the Group releases an Alarm condition.

There is no limit to the number of units that can be interconnected using the wireless interconnection function.

1. Enter Group mode by pressing and releasing the Test/Hush button 5 times within 5 s on an alarm device. The red LED will flash every 0.5 s on the alarm device. Group mode configuration will last 50 s (unless cancelled earlier).
2. To add a 220 relay output module to the Group, press and release the Test/Hush button twice within 2 s (see Fig. 5). The red LED will flash twice in 1 s.
3. Repeat Step 2 to add additional units to the Group.

NOTE: Group configuration must be completed within 50 s, after which time all units will return to the normal condition.

4. When all units are added to the Group, press and release the Test/Hush button on the alarm device to end the Group configuration mode.

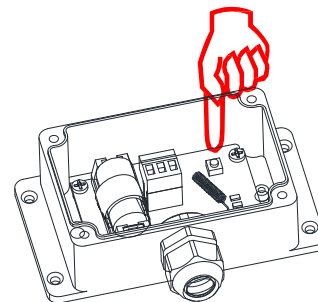


Fig. 5: 220 body and cover removal

Remove a Unit from the Group

To remove a unit from the Group, press and release the Test/Hush button 8 times within 5 s. The yellow LED will flash twice to confirm removal from the Group.

Test the Module

Voltage-free Relay Output (220-001)

1. Press the Test/Hush button for 2 s, then release.
2. Check that the output relay operates for 8 s and the red Alarm LED flashes every 1 s.
3. After 8s, check that the output relay returns to the quiescent condition and the red Alarm LED is off.
4. Activate an Alarm condition on an alarm device connected to the Group.
5. Check that the output relay operates and the red Alarm LED flashes every 1 s.
6. Press the Test/Hush button.
7. Check that the output relay resets, the red Alarm LED and the yellow Hush LED flash every 1 s.
8. Repeat Steps 4 ~ 7 for other alarm devices connected to the Group.

Pulsed Voltage Output (220-002)

1. Press the Test/Hush button for 2 s, then release.
2. Check that the output voltage rises within 10 s from DC 0 V to DC 12 V, and the red Alarm LED flashes once.
3. Check that the output voltage falls to DC 0 V 1 s after activation.
4. Activate an Alarm condition on an alarm device connected to the Group.
5. Check that the output voltage rises from DC 0 V to DC 12 V within 10 s and the red Alarm LED flashes once.
6. After 1s, check that the output voltage falls to DC 0 V.
7. Reset the Alarm condition on the alarm device connected to the Group.
8. Repeat Steps 4 ~ 7 for other alarm devices connected to the Group.

Final Conditions

Ensure all the connected devices are in the quiescent condition.

References

Document	Description
31-0123	220 wireless interconnect output module datasheet

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