Wire to external alarm

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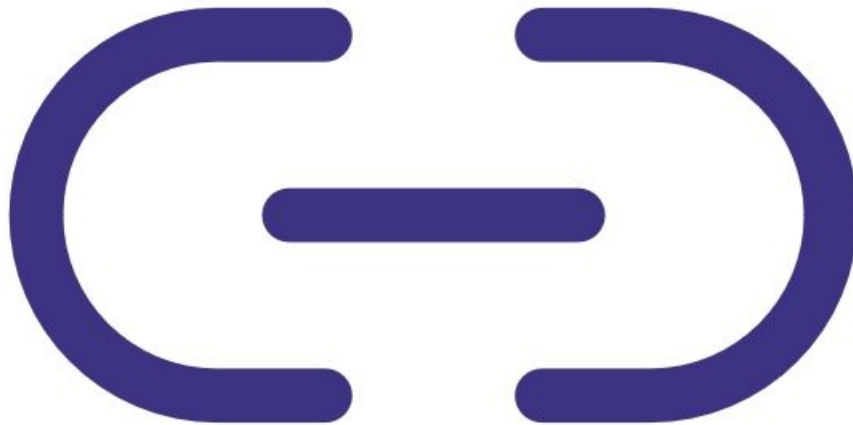© 2022   support.aeroqual.com/   Page 1 of 6
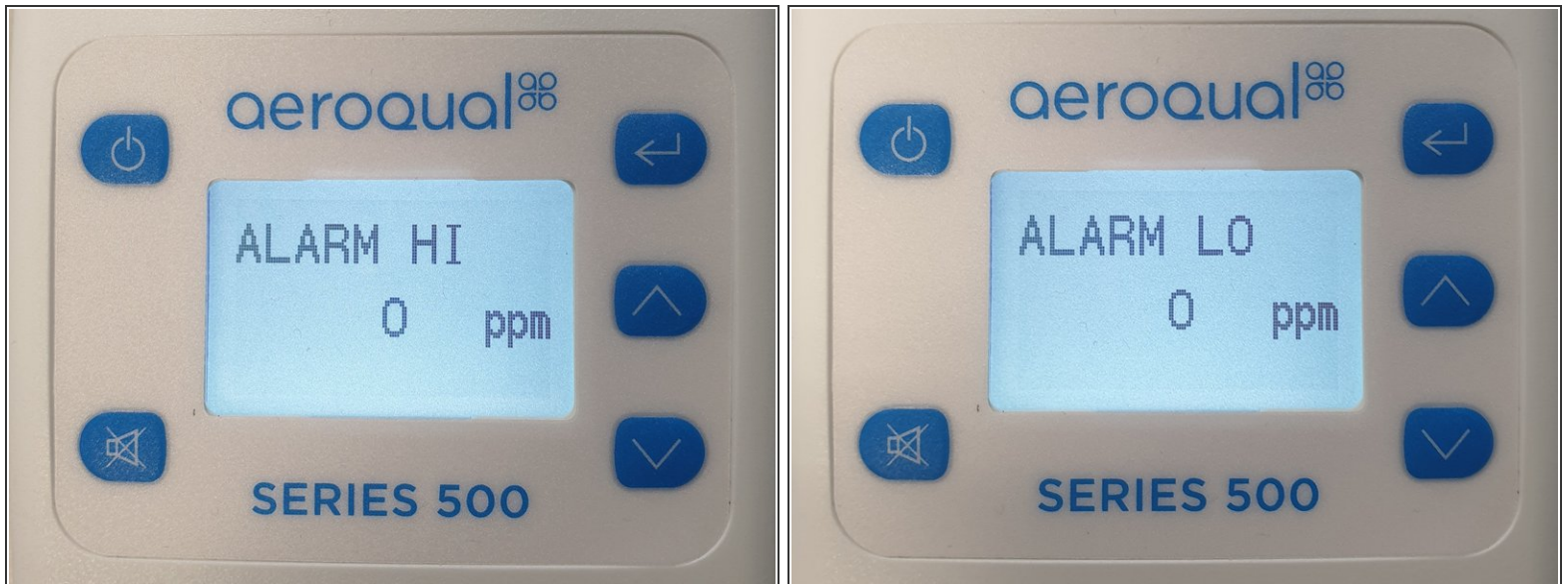
INTRODUCTION

Wire the high alarm and low alarm pins to supply simple on/off switching to operate equipment which requires only an on, or off signal, such as an alarm.
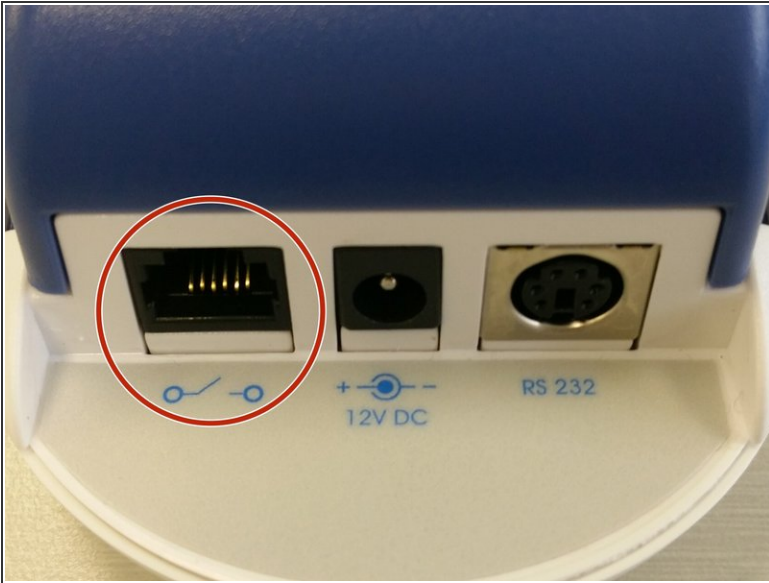
Note: All transistor outputs are open collector current sink. The maximum rating of these transistor outputs is 12VDC at 150mA. If you connect a relay or any other inductive load to the transistor outputs, a back EMF suppression diode must be fitted across the load.

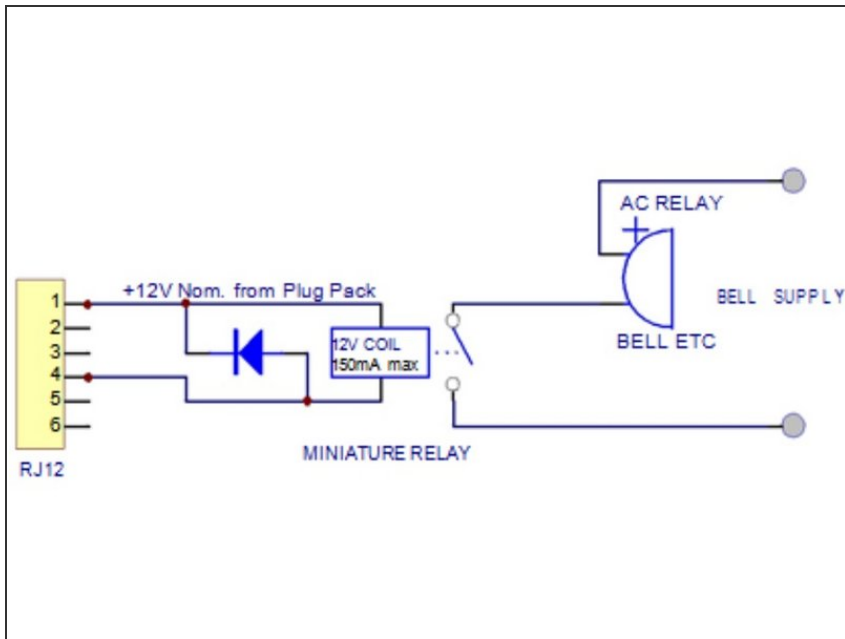This document was generated on 2022-05-12 06:14:35 PM (MST).

Step 1 — Configure set points

- [Configure the alarm set points on your handheld monitor](#) .

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Step 2 — Identify pins

- The external connector requires an RJ12 connector. The pin designations for the external output connector are numbered 1 to 6.

  - 1 = 12VDC (closest to the 12V DC power jack)

  - 2 = Analogue output 0-5V

  - 3 = Control

  - 4 = High alarm

  - 5 = Low alarm

  - 6 = Ground (furthest from the 12V DC power jack)

- The RJ12 connector offers two possibilities for wiring, either a switch to GND, or a switch to 12V output.

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Step 3 — Switch to 12V output

- To switch to 12V output, wire to pins:

  - 4 (High alarm) or 5 (Low alarm)

  - 1 (12VDC).

- If the 12V output is used, the power for the relay coil is supplied by the Aeroqual AC/DC adapter. In this case, make sure the relay coil doesn't draw more than 150 mA and that a protection diode is inserted across the relay coil.

- The shown diagram is a typical wiring for a high gas level alarm.

⚠ Failure to insert a circuit protection diode may result in the circuit not working, and damage to the monitor if a voltage spike is created by the relay.

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Step 4 — Switch to GND

- To switch to GND, wire to pins:
  - 4 (High alarm) or 5 (Low alarm)
  - 6 (Ground).

- (i) If the switch to GND output is used, make sure the relay coil doesn't draw more than 150 mA, that the voltage doesn't exceed 24V and that a protection diode is inserted with correct polarity across the relay coil.

- (i) Wiring for alarm will only operate while the handheld monitor is powered by the supplied AC/DC adapter.

For further support, contact [Technical Support](#).

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