



## Scientific Limited

TECHNICAL MEMORANDUM

PRODUCT :GP/Precision

No : 0098

FROM : Contherm Scientific Ltd  
TO : ALL AGENTS

DATE : 01/09/2006

**SUBJECT:** External Alarm Connection Kit – suits Precision and GP Cabinets.

The Mitre 4000, GP1000 & 2000 series, CSL and Precision cabinets are either already fitted with an external alarm relay contact connect on the ZP21 or ZP22 PCB or in the case of the PLCS5 Precisions can have an alarm PCB added. The standard cabinets however do NOT have any provision for an external alarm cable to be connected on the OUTSIDE of the cabinet.

This EXTERNAL ALARM CONNECTOR KIT may be added in the field to provide for external alarm connections on the outside of the cabinet.

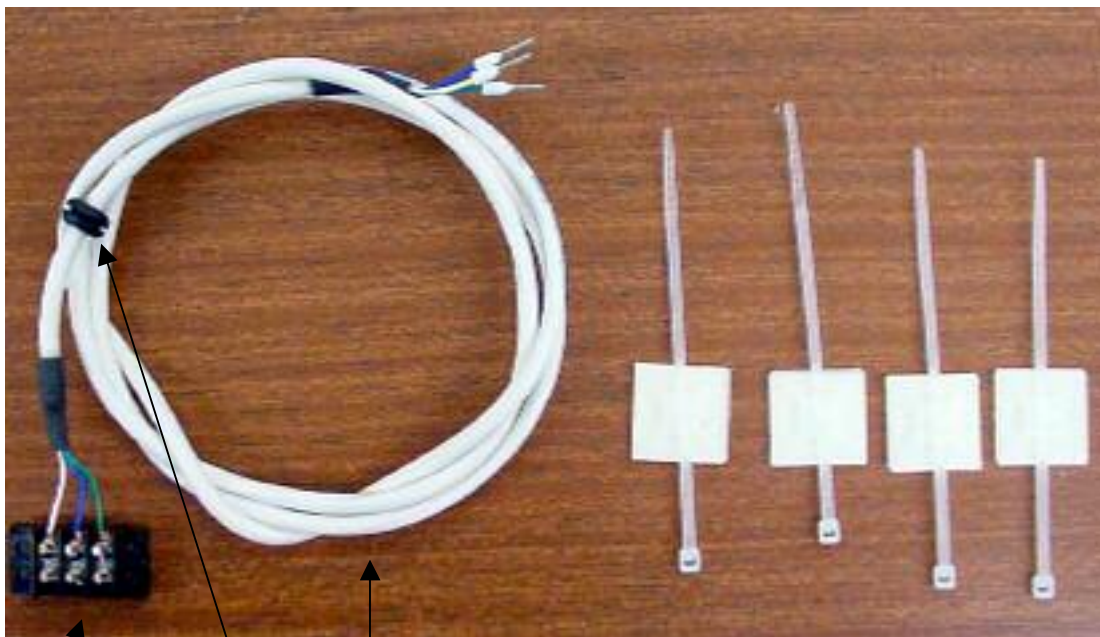
The kit consists of the following items:

1 x 1200mm length of cable prewired to one side of the terminal strip and provided with a cable grommet.

4 x 'sticky' pads complete with cable ties to enable the cable (and any excess) to be fastened to the cabinet inside.

1 x 3way terminal strip (fitted with double sided adhesive tape) to enable the terminal strip to be fastened to the outside wall of the cabinet.

1 x Label 'ALARM NO NC C' to be attached below terminal strip.



Terminal Strip

grommet

wire

cable ties and sticky pads

The easiest method to add the cable to an existing installation without having to drill any holes is as follows:

Ensure that before any work is carried out that the cabinet is **TURNED OFF** and **DISCONNECTED** from the wall socket.

Utilise one of the 'slotted' holes at the rear of the cabinet, feed the free end of the cable through the slotted hole from the outside until just enough is showing to enable the terminal strip to be fastened nicely to the cabinet exterior wall.

Using a flat bladed screwdriver, carefully work the grommet into the slot to hold and protect the wire as it passes through the slot.

Lay the cable so that it is segregated from any other cables as far as possible.

Connect the wires on the free end to the Alarm Contact outputs on the ZP21/ZP22 PCB using the following colors:

Green = COM (Common)

White = NO (Normally Open)

Blue = NC (Normally Closed)

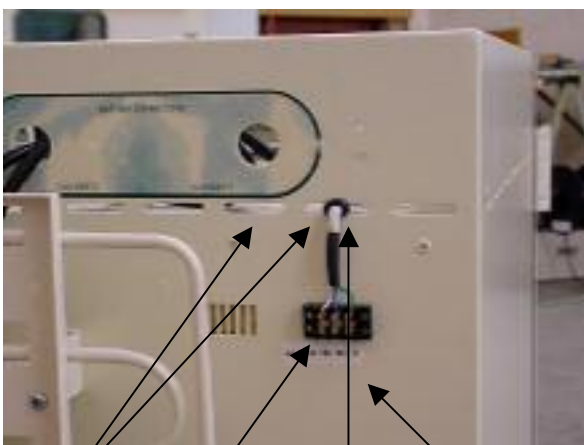
Locate the 'sticky' pads ensuring that there is a pad located close to each end of the cable and at convenient places along the length, coil up any excess length.

Use the cable ties to fasten the cable to the 'sticky' pads to ensure that it is securely held.

Replace the cabinet top, and check that the cabinet operates normally.

Place supplied label directly below terminal strip so that the contact designations line up correctly.

Connect any external alarm to the desired 'clean contact' using the 'COM' connection and either NO or NC as desired.



Slotted holes (ZP22)      terminal      grommet      label



'Sticky Pad'      Cable tie      PCB Connector

The photos above show the terminal strip fitted to a Mitre 4150 series CO2 incubator.