

# NC930 <</li> I 2V Double Gang PSU, 250mA

THIS EQUIPMENT MUST ONLY BE INSTALLED AND MAINTAINED BY A SUITABLY SKILLED OR TECHNICALLY COMPETENT PERSON

# GENERAL

The NC930 is a mains to regulated DC power supply providing 250mA at 13.5V.

The green 'ON' indicator indicates that the unit is powered up.

A remote battery back-up kit (part no. NC941B) can be connected to the NC930 to ensure it remains operational for a limited amount of time in the event of Mains failure.

When powered up, the front of the NC930 may feel slightly warm. This is normal and does not affect the operation of the unit.

# INSTALLATION

#### Location:

The power supply should be sited internally in a clean, dry area. Any likelihood of tampering or vandalism should be taken into account when deciding on it's position.

### First Fix - Back Boxes:

The unit must be fitted to a back box (minimum depth 25mm or 1") that is securely fixed to a wall. The back box, in conjunction with the front plate, comprises a fire compartment and therefore it must be made of a flame retardant material.

Any apertures must be sealed off so as not to compromise the integrity of the fire compartment. i.e any knockouts removed must be sealed with a flame retardant gland.

Any dust created during the fixing process must be kept out of the electrical and electronic systems, and care must be taken not to damage any wiring or components.

## First Fix – Mains Wiring:

#### The NC930 is a piece of Class 1 equipment and, as such, any metal parts used during installation (i.e. metal back box) MUST be earthed.

All mains wiring should be provided in accordance with the current edition of the IEE Wiring Regs, 16th Ed. (BS 7671 1993) or in accordance with the relevant national wiring rules.

The general requirement for the Mains supply to the NC930 is fixed wiring, using three core cables of not less than 0.75mm<sup>2</sup>. This should be fed from an isolating switched fused spur, fused at 3A, which is marked appropriately and secure from unauthorised operation. (As an alternative to a switched fused spur, any double pole isolating device with an air gap greater than 3mm when isolated may be used).

Live and neutral should be connected to the L and N terminals respectively. If a plastic back box is used, the earth connection should be made to the terminal marked I|- at the terminal block labelled CONN1 (see PCB layout diagram below). If a metal back box is used, the earth connection must be made to the earth bonding point on the back box.

All external wiring brought into the unit must be adequately insulated with PVC or Neoprene.

The terminal block CONN3 is provided for the connection of an optional NC941B remote battery back-up kit. <u>Do not connect</u> any other type of battery back-up facility to this unit. (See NC941B installation instructions for battery connection details).

## First Fix - Low Voltage Wiring:

All low voltage wiring coming into the NC930's +VE (12VDC supply out) and -VE (0V) connection terminals (CONN2) must segregated from the mains wiring.

Before screwing the NC930 to the wall, take care not to trap any wires.

**Important:** In the event of a short circuit (not on the mains), a low voltage fuse (F1) will blow to protect the unit from damage. When replacing this fuse, only use a 400mA T fuse, 20 x 5mm to IEC (EN60127 part 2). The NC930 is also protected by a thermal fuse in the mains winding of the transformer. This fuse will blow in the event of a serious malfunction or misuse of the unit. If this happens, the unit must be returned to the manufacturer for repair as this part is non-accessible and therefore non-replaceable by service personnel.

# **SPECIFICATIONS**

Supply In : 230 VAC  $\pm$  10% @ 50/60 Hz

Max current : 36 mA

Supply Out : 13-13.8 VDC; 250mA @ 240VAC

Physical Sizes : 147mm W x 87mm H x 34mm D. Protrusion depth into back box : 20mm. Weight: 275g.

#### NC930 PCB LAYOUT

