



DYCON

power solutions

Installation Manual for D1500 Series Ungraded Type A Power Supplies

| D1500 Series | |
|--------------|--------------------------------------|
| D1501 | 1A |
| D1502 | 2A |
| D1503 | 3A |
| D1505 | 5A |
| D1503-X-8 | 3A fitted with 8-way output splitter |
| D1505-X-8 | 5A fitted with 8-way output splitter |

INSTALLATION

Mount the metal enclosure onto the wall.

Connect the Live, Earth and Neutral terminals to an un-switched fused spur.

Connect the tamper outputs to the control panel as appropriate (see control panel manuals for details).

Connect the 12v power output to the system. Fit the battery.

Switch on the AC supply and confirm that the LED marked "230V AC" is lit.

External power supply (AC supply)

The power supply has a three-way terminal block for Live, Earth and Neutral connections, and is protected by a 20mm anti-surge fuse. Mains earth is isolated from the 0V output, although, when supplied boxed, mains earth is connected to the metal enclosure.

Tamper output

This voltage-free output is connected to the tamper switch. These terminals will be shorted when the tamper switch is closed.

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12V power output

Terminal blocks are provided to connect to the system. The “On” LED indicates that 12V is available from these terminal blocks.

Auxiliary power supply (batteries)

These power supplies are compatible with 7AH or 8AH Sealed Lead Acid or Gel batteries which are connected to the “BATT” terminals.

If two batteries are used, they must be connected in parallel.

Battery protection

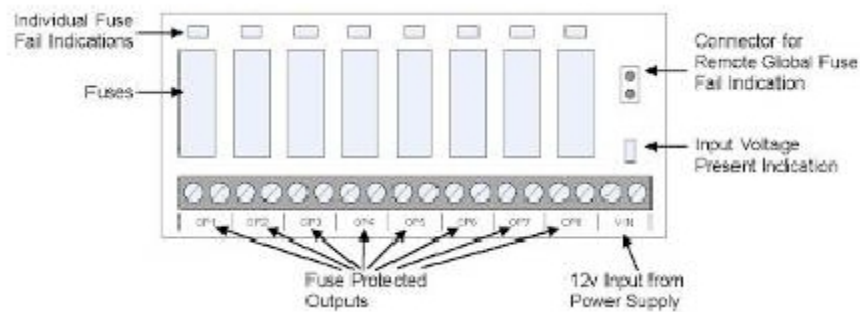
The batteries and electronic circuitry are protected against reverse polarity connection by a self resetting electronic fuse.

D15X8 output splitter

The D15X8 is designed to connect to any Dycon D1500 Series ungraded power supply to provide up to 8 individually fused outputs. The D15X8 is supplied fitted with 8 fuses rated at ½ Amp, plus 2 fuses rated at 1 Amp in a spares bag. The installer may fit any combination of fuses, provided that the overall load does not exceed that provided by the power supply.

Example: a D1503 could support outputs 1 to 6 = ½ A (3A in total) or a D1505 could support outputs 1 to 6 = ½ A and outputs 7 and 8 = 1A (5A in total).

A red LED is provided for each output, which lights if the relevant fuse ruptures. In addition, a 9th LED is provided which lights when the input voltage is present. A 2-way Molex connector is provided for an LED visible from outside the housing to indicate if ANY fuse fails.



Maintenance

This unit is only to be used by qualified service personnel; there are no user serviceable parts. No maintenance is required other than routine periodic testing and replacement of the standby batteries. For further information on routine battery replacement, please contact your battery supplier or manufacturer.

Specifications

| | |
|-----------------------------|--|
| Power supply | Type A, ungraded, Environmental Class 2 |
| AC input voltage | 230v +10% -15%, 50Hz ± 15% |
| Output voltage | 13.7 nominal |
| Output ripple | Less than 100mV (less than 0.7% @ 13.7v) |
| Battery recharge time | Less than 72 hours |
| Operating temperature range | -10°C to +40°C |

Product part numbers

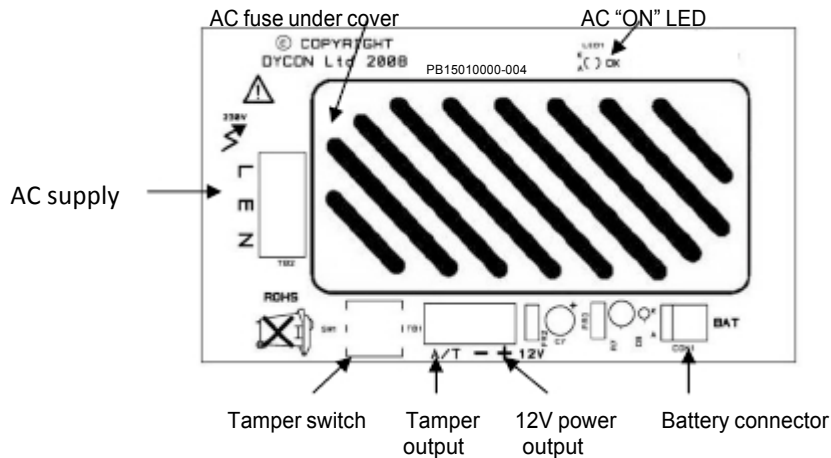
| | PCB | "A" box | "B" box |
|-----------------------------|---------|-------------|-------------|
| 1 Amp | D1501-P | D1501-A | D1501-B |
| 2 Amp | D1502-P | D1502-A | D1502-B |
| 3 Amp | D1503-P | D1503-A | D1503-B |
| 5 Amp | D1505-P | D1505-A | D1505-B |
| With 8 fused outputs | | | |
| 3 Amp | -- | D1503-X-8-A | D1503-X-8-B |
| 5 Amp | -- | D1505-X-8-A | D1505-X-8-B |

Sizes and weights

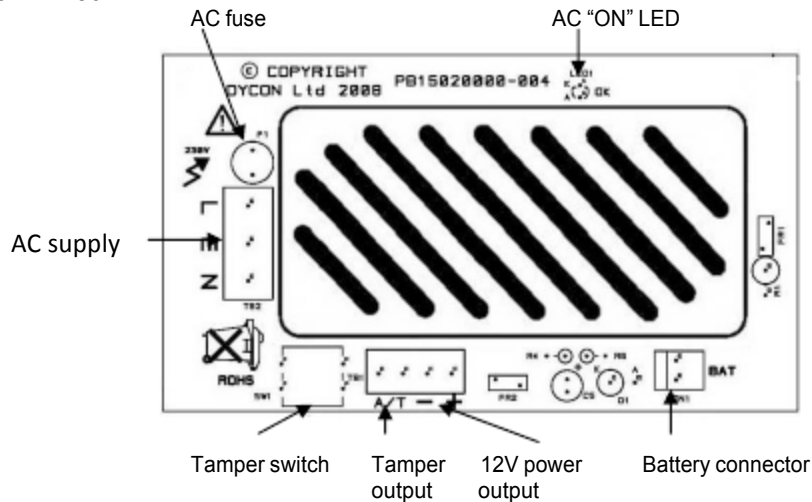
| | PCB | "A" size housing | "B" size housing |
|----------------------------|----------------|------------------|------------------|
| Size (h x w x d) mm | 130 x 100 x 38 | 235 x 170 x 85 | 260 x 320 x 87 |
| Weight (kg) | 0.19 | 2.0 | 3.2 |

All units are fused in the 230V AC supply. The D1500 Series power supply fuses require no user intervention.

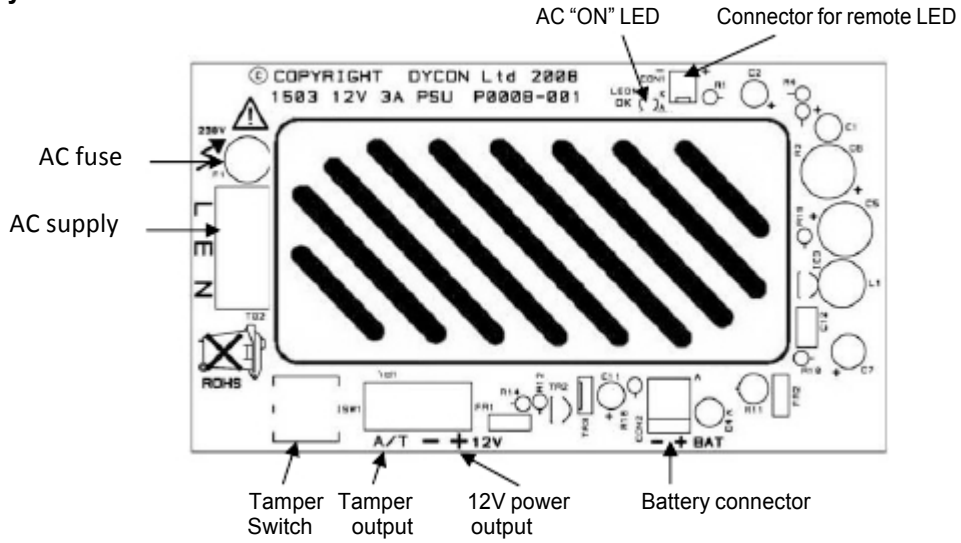
Layout – D1501



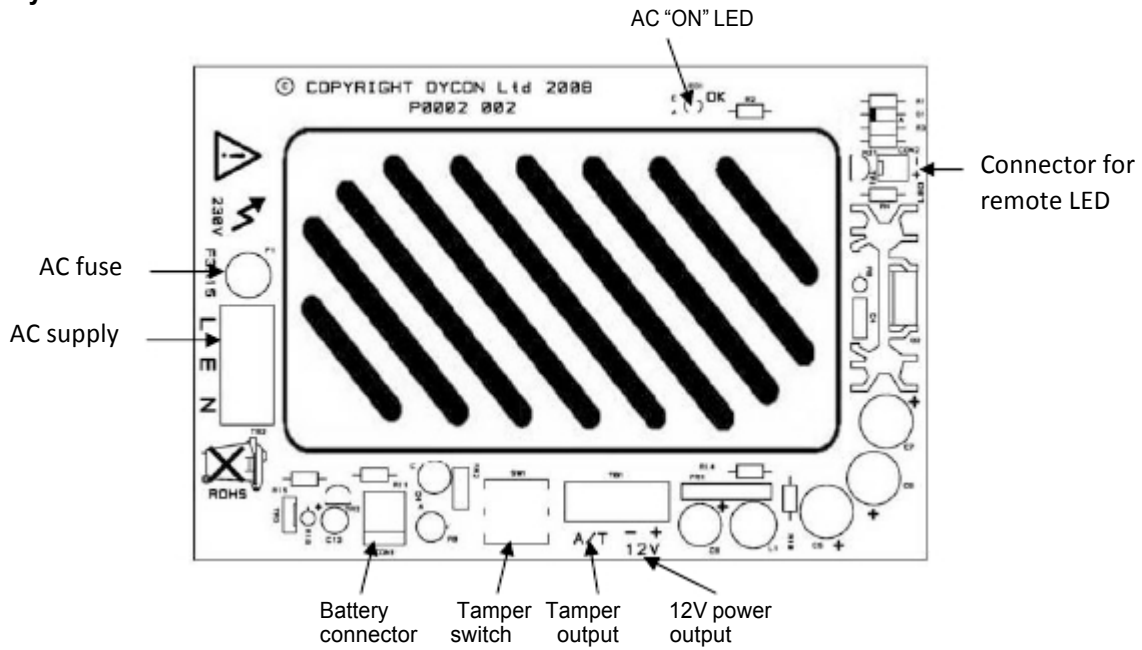
Layout – D1502



Layout – D1503



Layout – D1505



In case of problems, telephone Dycon Technical Support on +44 (0)1443 471 900,
or email technical@dyconpower.com.