

Model LD-COM
Large Digit LED Slave Display for
Compac C3000 or C4000
Operation and Instruction Manual

AMALGAMATED INSTRUMENT CO

*Unit 5, 28 Leighton Place Hornsby
NSW 2077 Australia*

*Telephone: +61 2 9476 2244
Facsimile: +61 2 9476 2902*

ABN: 80 619 963 692

*e-mail: sales@aicpl.com.au
Internet: www.aicpl.com.au*

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1 Introduction

This instruction booklet covers the setup and operation of the LD-COM slave display with input from either a C3000 or C4000 Compac unit. The Compac unit sends clock pulses, strobe pulses and data pulse patterns to the LD-COM slave display. This slave display will follow the output from the Compac unit and display in total litres. The only setup required for this display is via DIP switches, see below.

No output other than the display digits are fitted to this unit.

A message of - - - - or a blank display indicates that no communication is being received. Choice of no signal message to be displayed is via the DIP switches.

2 DIP switch operation

The DIP switch package is located on the LD-COM input board.

DIP1 OFF - display blanks if communications fails

DIP1 ON - display shows - - - - if communications fails

DIP2 OFF - display rounding disabled, see note below

DIP2 ON - display rounding enabled, see note below

DIP3 OFF - display set for 4 digit operation (C4000)

DIP3 ON - display set for 3 digit operation (C4000 or C3000, see note below)

DIP4 - not used

Notes:

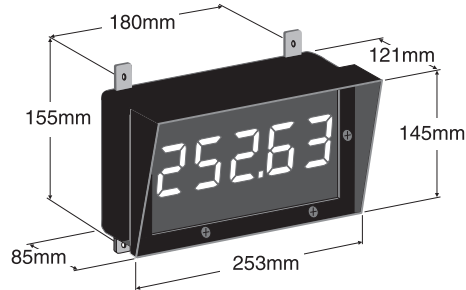
Display rounding - when display rounding is enabled the number displayed will be rounded up or down e.g. Compac unit display shows 123.6, LD-COM slave display shows 124 i.e. rounded up. When display rounding is disabled the same Compac display of 123.6 would show as 123 on the LD-COM slave display.

3 digit mode - when set for 3 digit mode the LD-COM slave display will show the three most significant digits received.

3 Mechanical installation

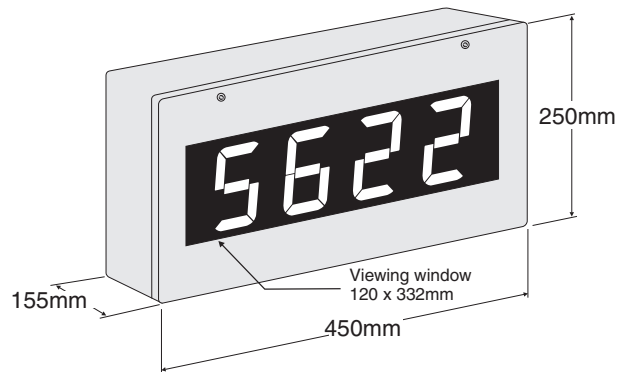
3.1 20mm, 38mm, 45mm, 57mm and 58mm LED

An optional panel mount kit is available for these size displays. Panel cut out size is 240 x 130mm (-0.0mm / +0.5mm). Weight: All types 1.6kg approx.



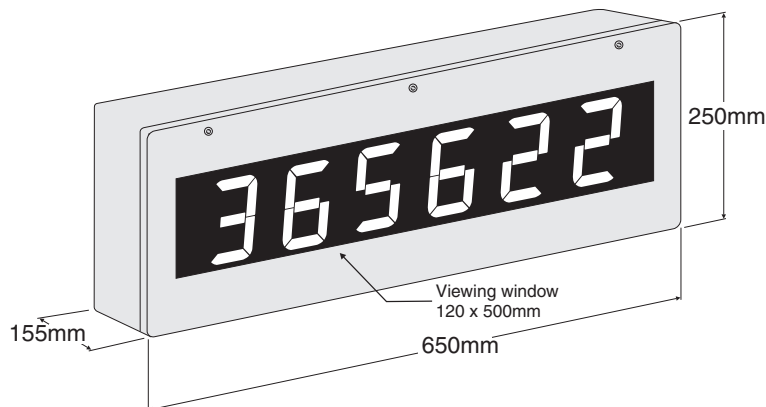
3.2 100mm 4 digit LED

Weight 10kg (LED)



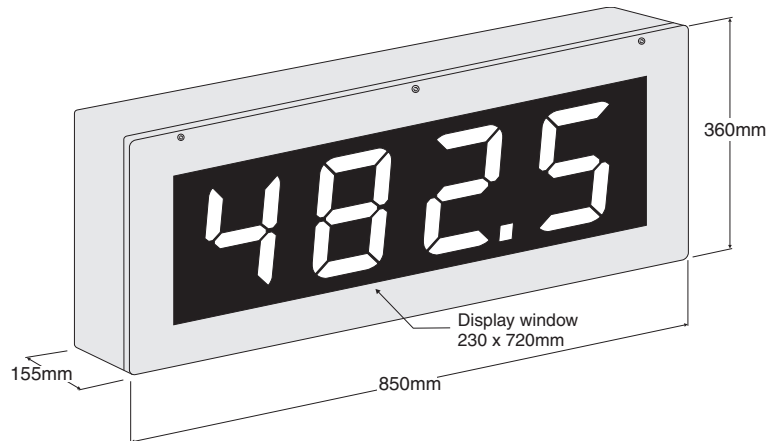
3.3 100mm 6 digit LED

Weight 14kg (LED)



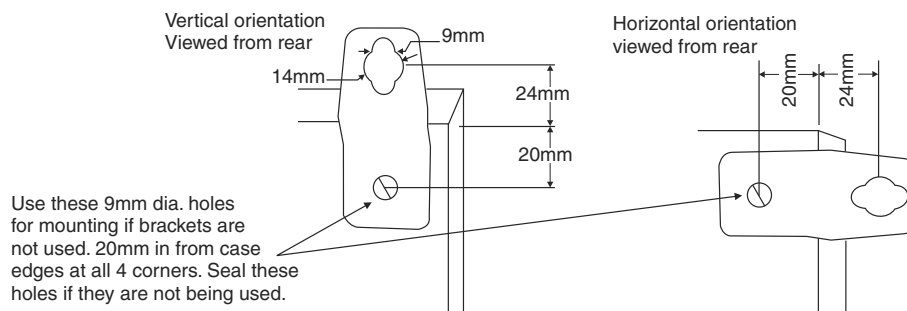
3.4 200mm 4 digit LED

Weight 14kg.



3.5 Cable entry and Mounting brackets

For 20 to 58mm displays no holes are pre drilled. For all 100mm and 200mm displays 3 off 20mm holes are drilled at the bottom of the case, these are fitted with 2 x IP65 grommets and 1 x air vent which allows moisture to exit the case but not enter. Four mounting brackets and four blind grommets are supplied for use with all metal case large digit displays. Diagrams below illustrate vertical and horizontal installation for mounting brackets. If mounting without the brackets is preferred then the 9mm dia. case holes provided for the brackets can be used as alternative mounting holes. Any rear holes not used for mounting should be sealed.

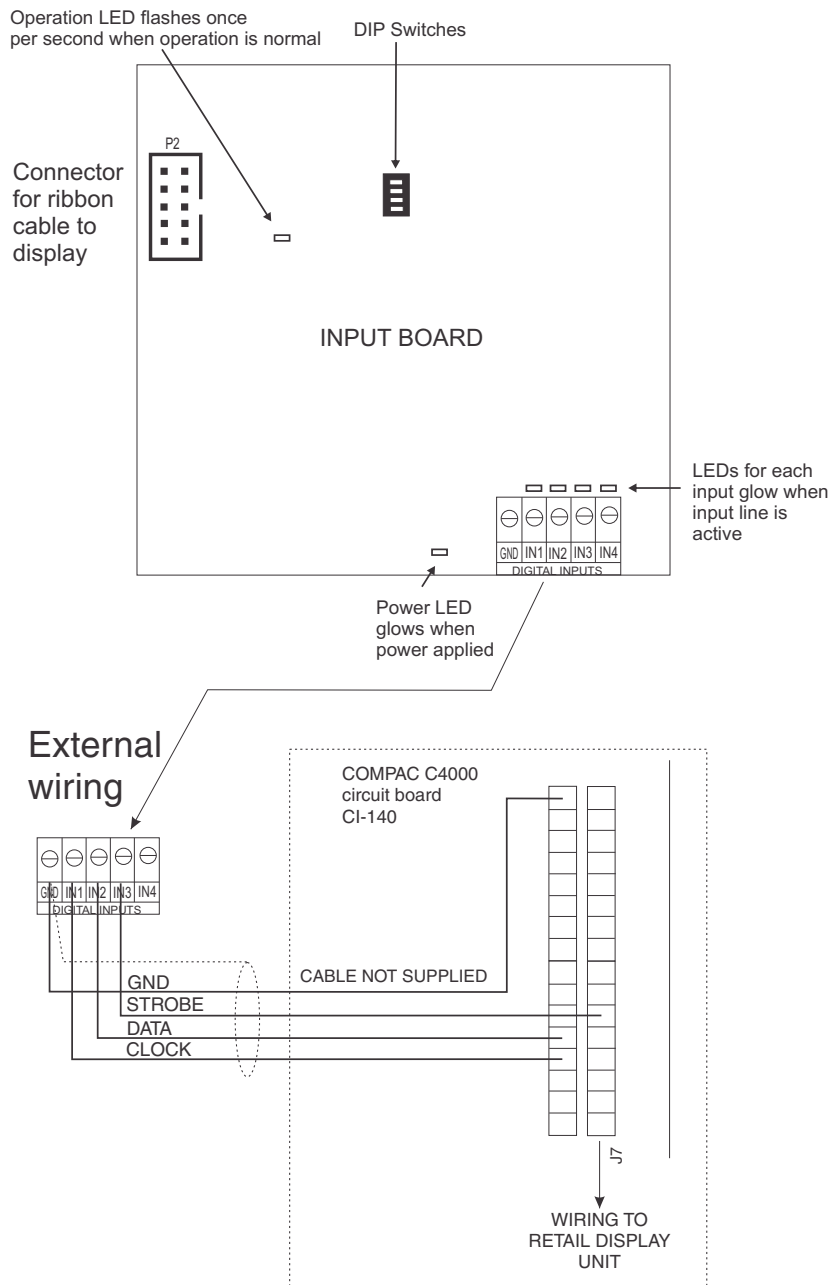


4 Electrical installation

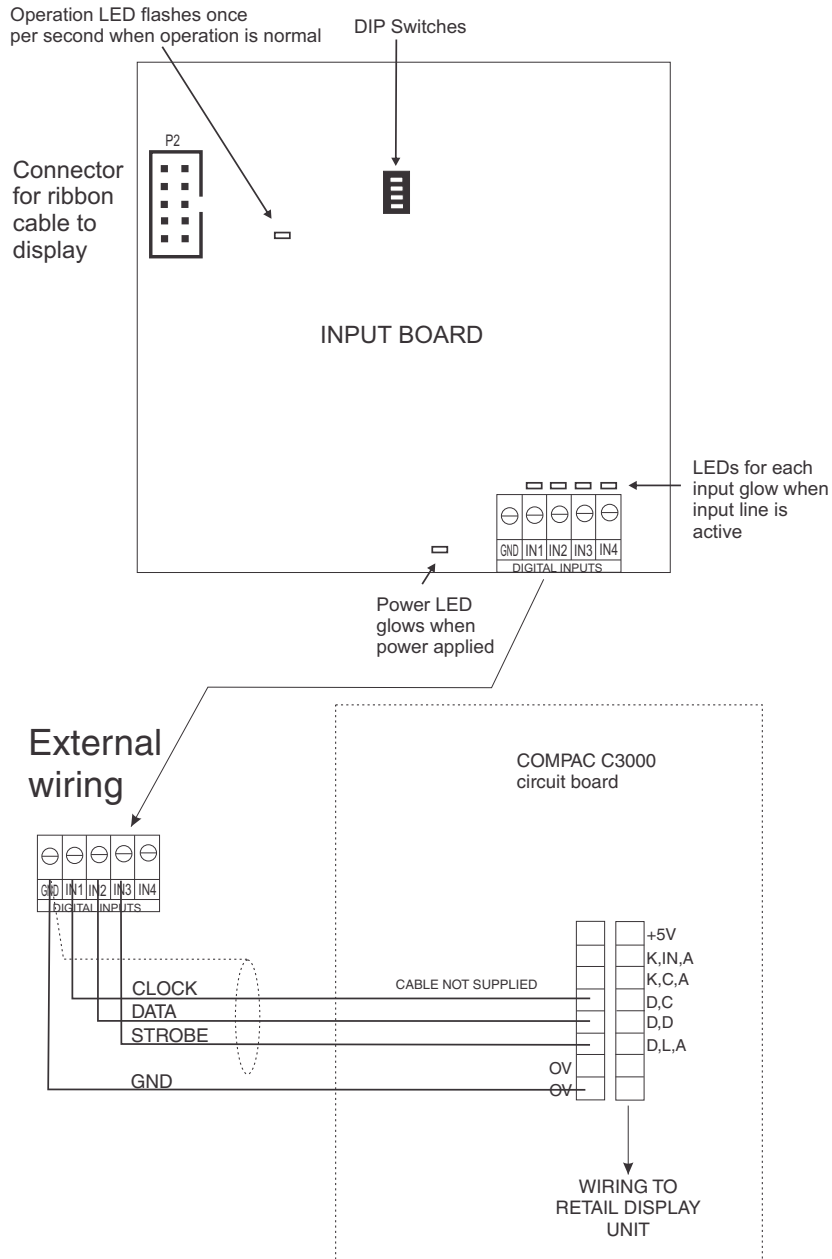
4.1 Electrical installation

The LD instrument is designed for continuous operation and no power switch is fitted to the unit. It is recommended that an external switch and fuse be provided to allow the unit to be removed for servicing. The terminal blocks are plug in screw type for ease of installation and allow for wires of up to 1.5mm² (2.5mm² for AC or isolated DC supply connections) to be fitted. Connect the wires to the appropriate terminals as indicated below. Refer to other details provided in this manual to confirm proper selection of voltage, polarity and input type before applying power to the instrument. When power is applied the instrument will cycle through a display sequence, indicating the software version and other status information.

4.2 Input board wiring for CL4000

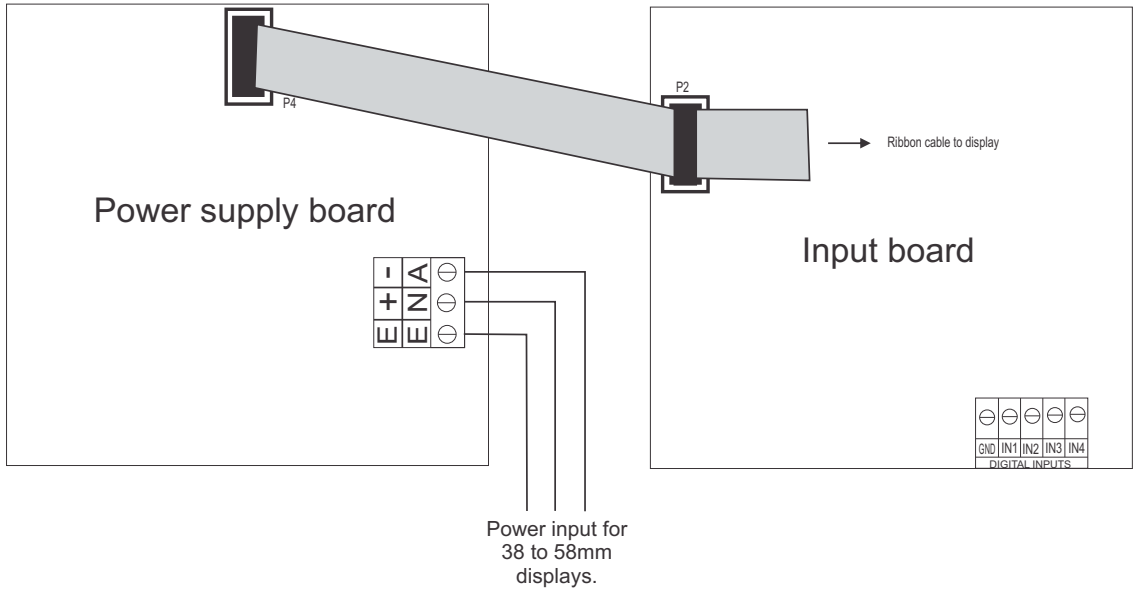


4.3 Input board wiring for CL3000



4.4 38mm LED, 45mm LED, 57mm LED or 58mm LED display power supplies

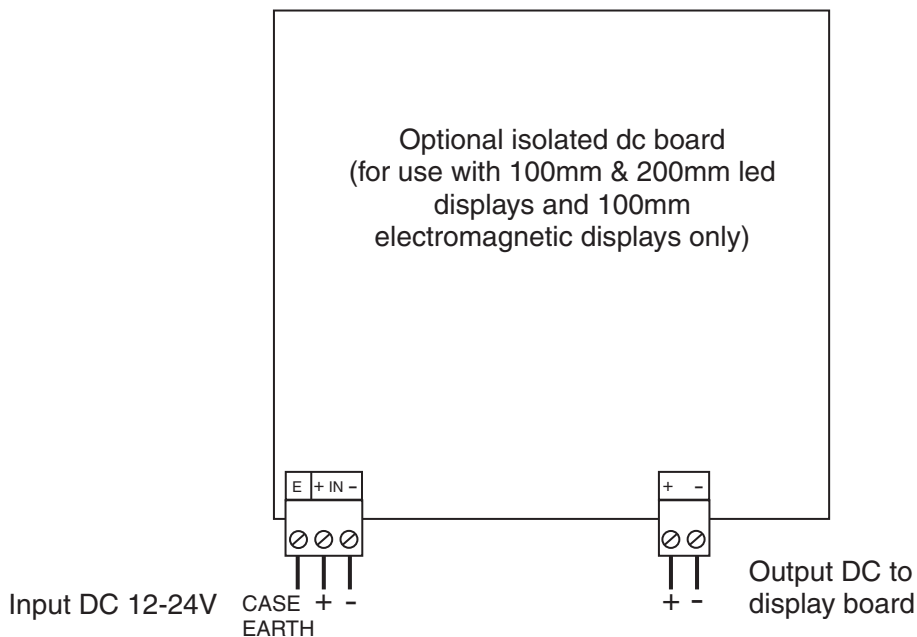
AC power connections use a plug in connector with screw terminals at P1 (2.5mm² max. wire). Isolated DC supplies (12-48VDC) use the same terminals. Note supply type is factory configured.



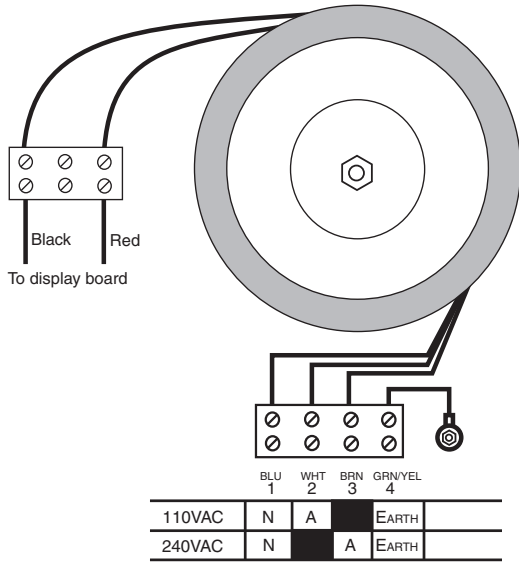
4.5 100mm, 200mm LED and 100mm electromagnetic display power supplies

Isolated DC supplies (12 to 24VDC) connect to the isolated supply pcb on the base board. AC supplies connect to the transformer primary on the base board. The base board is located under the input circuit board, see wiring diagram for AC supplies on the next page.

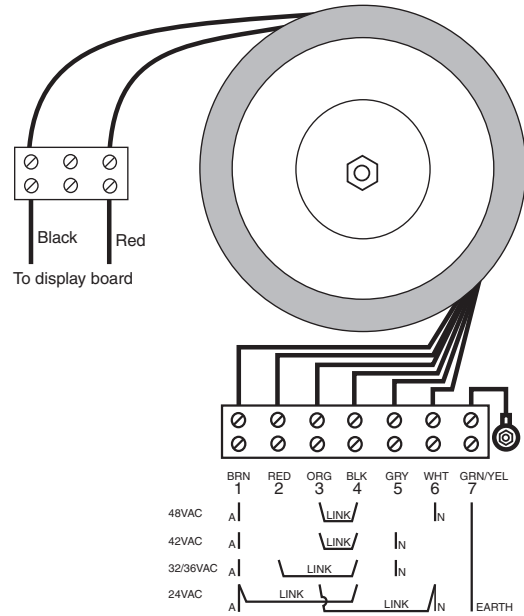
Optional isolated DC supply



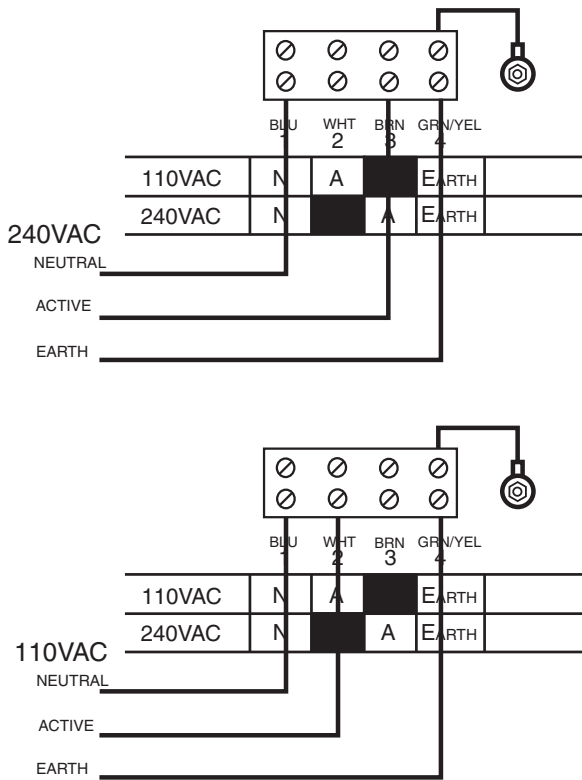
240 & 110VAC supplies.
For 100mm/200mm LED or 100mm
electromagnetic display types only.



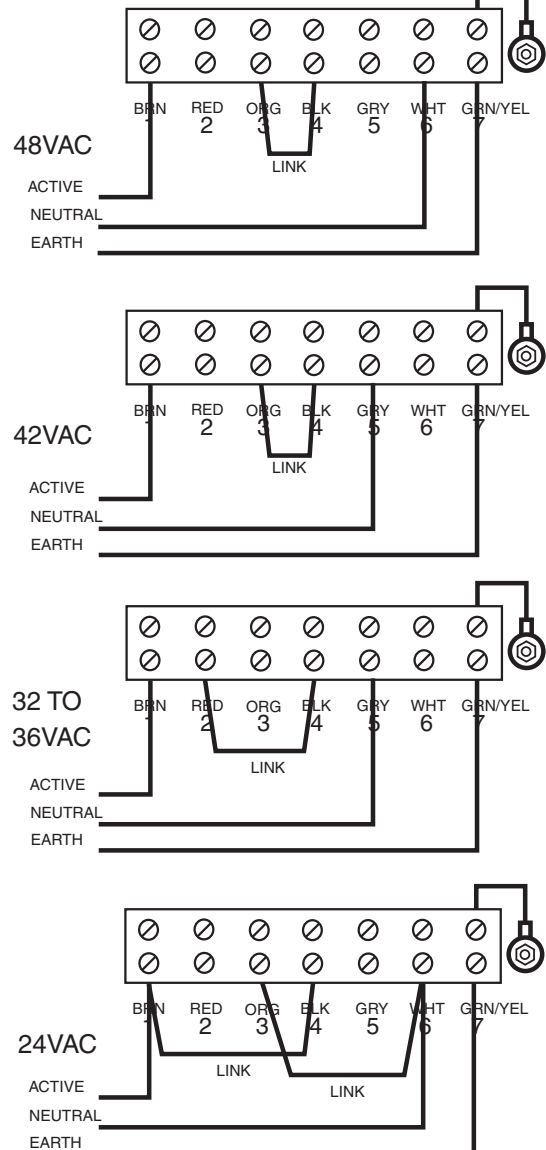
Low voltage AC supplies.
For 100mm/200mm LED or 100mm
electromagnetic display types only.



Wiring examples 240VAC & 110VAC



Wiring examples low voltage AC



Important note: the 240V & 110V supplies use the same transformer, low voltage instruments use a different transformer. Do not use a low voltage transformer for 240V or 110V or vice versa.

5 Specifications

5.1 Technical specifications

Input types: Compac C3000 or C4000 (DIP switch selectable)
Ambient temperature: LED -10 to 60° C
Humidity: 5 to 95% non condensing
Power supply: 100 and 200mm LED:
AC 240 or 110V selectable, 50/60Hz or
AC 48/42/32/24 selectable, 50/60Hz or
DC isolated wide range 12 to 24V.
38mm,57mm or 58mm LED:
AC 240 or 110V 50/60Hz or
AC 24 to 48V 50/60Hz or
DC 12 to 48V isolated
Supply type is factory configured

6 Guarantee and service

The product supplied with this manual is guaranteed against faulty workmanship for a period of 2 years from the date of dispatch.

Our obligation assumed under this guarantee is limited to the replacement of parts which, by our examination, are proved to be defective and have not been misused, carelessly handled, defaced or damaged due to incorrect installation. This guarantee is VOID where the unit has been opened, tampered with or if repairs have been made or attempted by anyone except an au authorised representative of the manufacturing company.

Products for attention under guarantee (unless otherwise agreed) must be returned to the manufacturer freight paid and, if accepted for free repair, will be returned to the customers address in Australia free of charge.

When returning the product for service or repair a full description of the fault and the mode of operation used when the product failed must be given. In any event the manufacturer has no other obligation or liability beyond replacement or repair of this product.

Modifications may be made to any existing or future models of the unit as it may deem necessary without incurring any obligation to incorporate such modifications in units previously sold or to which this guarantee may relate.

This document is the property of the instrument manufacturer and may not be reproduced in whole or part without the written consent of the manufacturer.

This product is designed and manufactured in Australia.