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2 decade BCD remote display with 1" high digits

Model BCD2

Connection details and general information

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VERY IMPORTANT WARNINGS

You should carefully read all warnings and commence installation ONLY when you are satisfied that all warnings are adequately covered.

! Connections to this equipment shall be carried out in accordance with current IEE regulations, and all wiring shall be separated in accordance with IEC1010

Notes:

! Power supply to this equipment is derived from the constant current input signal. This should be fused at 250mA

Notes:

! Before installation, check that model number and signal type suit your application

Notes:

! Lethal voltages may be unexpectedly present on the circuit board, in the event of external wiring faults. Do not touch any circuitry when power is applied to the system.

Notes:

! This product is designed for Installation class II service

Notes:

! This product is designed for use in Pollution-Degree 2 environments

Notes:

! Use an insulated screwdriver when adjusting terminations and do not touch any circuitry

Notes:

! Replace front cover when meter is unattended

Notes:

! All adjustments to jumper settings or terminations must be made with power removed

Notes:

! Ensure all screw terminals are tight before applying power.

Notes:

Safety First .....Don't make assumptions..... Always double check. If in doubt, ask someone who is QUALIFIED to assist you in the subject.

IMPORTANT INTRODUCTORY NOTES

Thank you for choosing to use a London Electronics Ltd. product. We hope that you will be entirely satisfied with your purchase, and welcome any comments you may have which will help us to improve the ease of use, clarity of this manual, etc. for future shipments.

We invite you to write to us, free of charge, if posted in the United Kingdom, to:-

London Electronics Ltd.
Thorncote Road
Near Sandy
Bedfordshire SG19 1PU

Alternatively you may send us a fax on **01767 626444** (international code +44)
Or, telephone us on **01767 626446** (international code +44)

Or, send us an E-Mail to **help@london-electronics.com**

To enable us to provide a swift and accurate service, please be sure to provide the following information :-

1) Full Model Number , including all options fitted.
2) Serial Number
3) DETAILED description of your difficulties, suggestions etc.
4) Input Range and Display range

This product is covered by a 2 year warranty, during which period we will put right or replace any meter found to be faulty through bad workmanship or materials. This warranty does not cover damage caused by misuse or accident.

IMPORTANT If the meter is a vital component in your process, you may wish to consider the purchase of a spare to cover the possible eventuality of a failure or accident, as we cannot guarantee instant repair or replacement.

We are constantly striving to improve our products and services, and as a result, changes to instruments do occur. Please ensure that this manual is kept safely for future reference, as future manuals, covering revised designs may no longer describe your product accurately.

We believe these instructions to be accurate, and the product to be competently designed and manufactured. We do not make any claims as to the suitability of this product for any particular application. The choice of product and responsibility for the choice lies with the User.

EQUIPMENT SPECIFICATIONS

Input Signal	2 decade BCD, logic level as supply voltage
Logic	Selectable positive logic (high input = 1) or negative logic (low input = 1)
Data format	4 line BCD per decade (1,2,4,8 10,20,40,80)
Resolution	1 in 99 max.
Input Resistance	10 Kilohms to 0V or + supply line (selectable pull-down or pull-up)
Speed of Response	Immediate - DC coupled decoder
Decimal Point Selection	No decimal point available
Display Type	Red LED
Digit Height	25 mm
Power Supply	11 to 26VDC
AC Supply	none
Current Consumption	280mA maximum
Mechanical	1/8 DIN bezel
Bezel Size	48 mm high x 96 mm wide
Cutout Size	45 mm high x 92 mm wide
Depth behind Panel	93 mm
Weight	100 g
Case Material	Polycarbonate UL rating 94V-0
Environmental	
Operating Temperature	-10 to +50 degrees Centigrade
Storage Tempaerature	-20 to +70 degrees Centigrade
Humidity	90 % at 50 degrees C, non condensing
Case sealing	IP54

PANEL REQUIREMENTS

Separation of all power carrying cables, and the signal cables applied to this meter must be ensured in accordance with IEC 1010

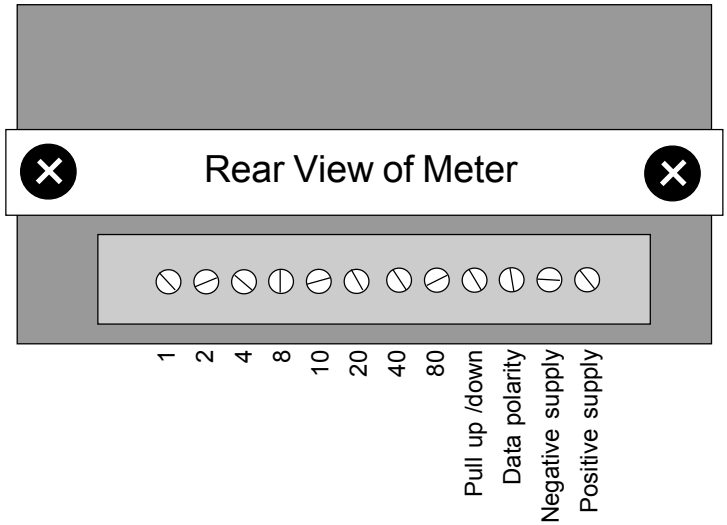
Installation Class II
Pollution degree 2

This meter is to be installed within a secure enclosure, to prevent accidental access by persons to the connections present on the meter's rear terminals, which may, under plant fault conditions, be at an elevated level above ground potential.

CUTOUT DIMENSIONS A hole 45 mm high and 92 mm wide, with minimal radius is required

Connections

Connector Specifications :- [VDE Rated Voltage, group B insulation VAC = 380]-[VDE Rated Current = 8 Amperes.] [Vibration Immunity per VDE0611 <10g]-[Rated Number of mating cycles <100]-[Screw Clamp material/plating Steel/ZnCc] [Contact Spring material/plating CuSN/gal SnPb]-[Plug-in force, per pole is from 3 to 6 Newtons]-[Disconnect force per pole is from 4 to 7 Newtons]-[Screw clamp tightening torque recommended 0.5Nm]-[Solid wire csa between 0.13 to 1.5mm^2] [Multistrand wire csa from 0.5 to 1.5mm^2]- [AWG conductor range from 22 to 16]-[Gauge to DIN/EN50027 Size A1]



Pullup/pulldown: Connect this terminal to Negative supply to pull down the input signal if using PNP input devices, or to positive supply to pull up the signal if using NPN input devices

Data polarity: Connect this terminal to Negative Supply for positive logic (HI=1) or to Positive supply for negative logic (LO=1)

IMPORTANT: Do not run signal wires near any power-carrying cables. Power-carrying cables will almost certainly radiate appreciable amounts of electro-magnetic energy, which could interfere with the small signals you are trying to measure. Use screened cable , in its own separate conduit or tray. Connect the screen to a clean earth point as near to the meter as possible.

Notes

Declaration of Conformity

Declaration Number : BCD2
Issue Date : 21 April 1997
Products Covered : BCD2
Title : 2 digit BCD display

This is to confirm that the Products covered by this declaration have been designed and manufactured to meet the following specifications :

EN55022:1987 Conducted Emissions: Class B
EN55022:1987 Radiated Emissions : Class B
IEC801-2:1984 Electro-Static Discharge Immunity: 8kV Air
IEC801-3:1984 Radiated ElectroMagnetic field Immunity: 3V/m

and comply with the requirements of Council Directive 89/336/EEC relating to Electro-Magnetic Compatibility, & are designed to meet 72/23/EEC safety directive, as applies to meters of less than 30VDC supply voltage.

Conditions

The meters covered by this certificate must be installed in adherence to the following conditions :-

Signal cabling shall be routed separately to power carrying cabling (includes relay output wiring)
All signal cabling shall be screened. The screen shall only be terminated to the power earth terminal

Declared as true and correct, for and on behalf of London Electronics Ltd. J.R.Lees Director