

# London Electronics Limited

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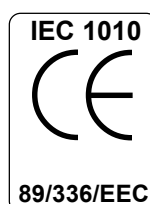
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## Operating Instructions

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### *Model PSC1*

Parallel BCD to Serial Data Convertor  
The ideal solution for transmitting BCD-derived data over long distances



# ***TABLE OF CONTENTS***

- 1) Introduction
- 2) Warnings
- 3) Specifications
- 4) Panel Requirements + Connections
- 5) Installation Dimensions
- 6) Declaration of Conformity

# ***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.  
Customer Services Department  
Thorncote Road  
Near Sandy SG19 1PU  
Bedfordshire, England**

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 [help4u@london-electronics.com](mailto:help4u@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.

# 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 supplies to this equipment must be anti-surge fused at 125mA for 230V supply, 250mA for 110V supply or 630mA for DC supplies in the range 12-30VDC

Notes:

! Before installation, check that model number and supply voltage suit your application

Notes:

! Lethal voltages may be present on the circuit board. Do not touch any circuitry when power is applied.

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 potentiometers 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.**



# PANEL REQUIREMENTS



All wiring to this device must be carried out in accordance with current IEC regulations  
Separation of all power carrying cables must be ensured in accordance with IEC 1010

Installation Class II  
Pollution degree 2



This device is to be installed within a secure enclosure, to prevent accidental access by persons to the powered connections present on the meter's rear terminals if potentials are capable of exceeding 38V.

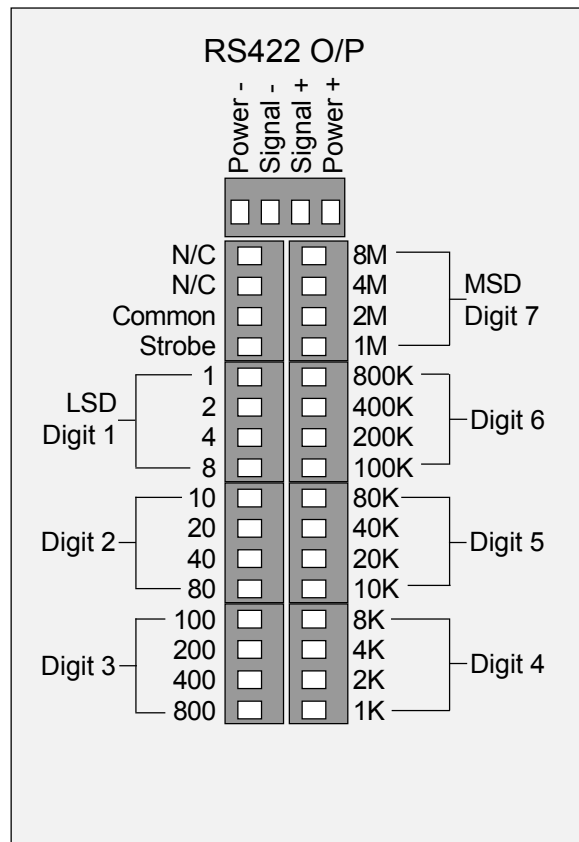
# Connections

**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<sup>2</sup>] [Multistrand wire csa from 0.5 to 1.5mm<sup>2</sup>]-[AWG conductor range from 22 to 16]-[Gauge to DIN/EN50027 Size A1]

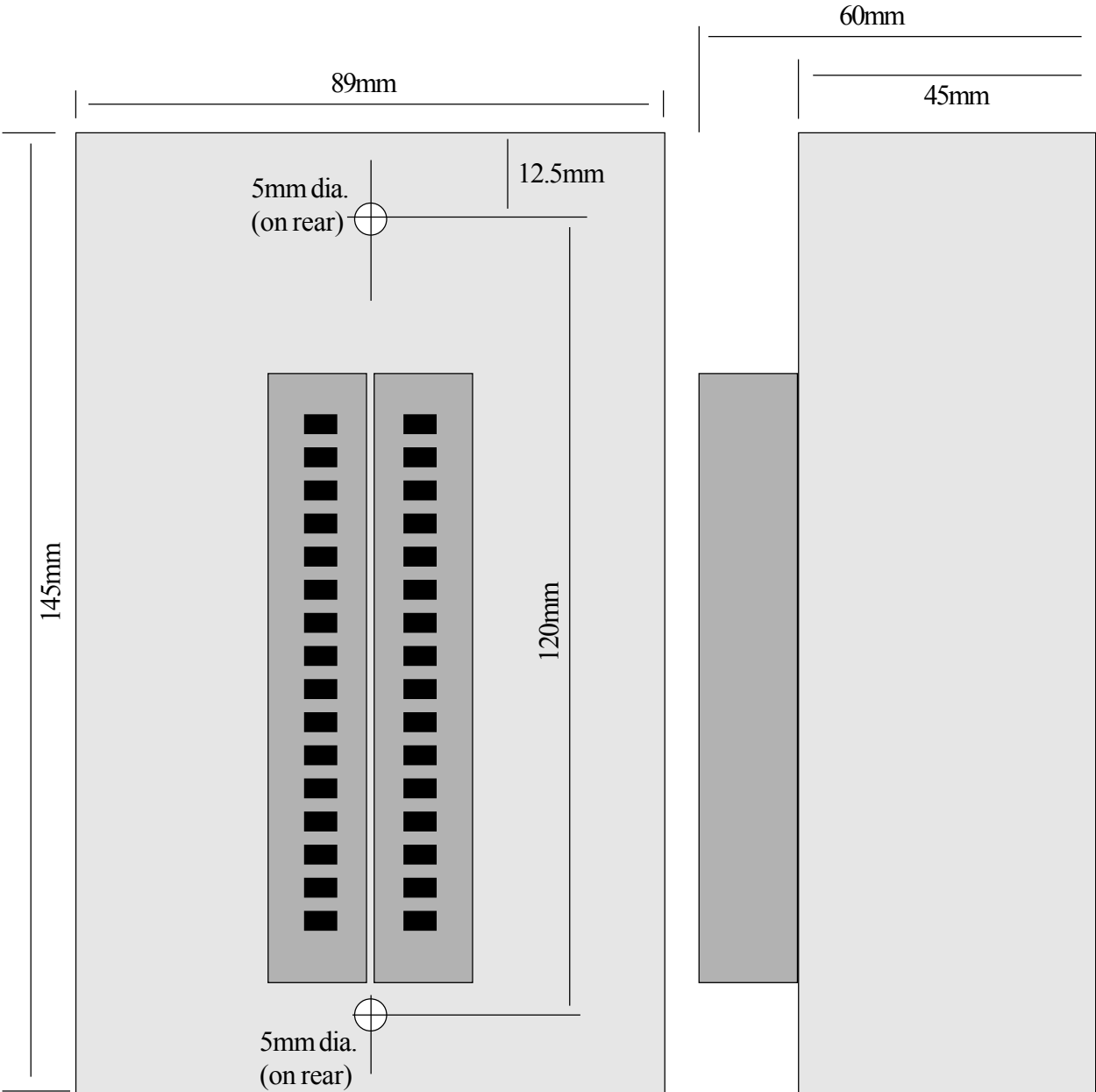
**AVOID DISAPPOINTMENT!** Route **all** signals via individually screened cables. Do **not** mix input and output signals in the same screened cable. Earth the screens at a point as near to the converter as possible and do not earth the screen at the other end. Route all signal cables well away from power cables, relay switching cables and other sources of electrical noise.

If wiring to a London electronics S17XX series large display, the RS422 O/P is connected as follows:-

Display Serial I/P Cable	PSC1 RS422 O/P
Red	Power +
Blue	Signal +
Green	Signal -
Yellow	Power -



# INSTALLATION DIMENSIONS



Mounting holes on rear surface of case

# Declaration of Conformity

Declaration Number : PSC1 Iss. 1  
Issue Date : 2 July 1998  
Products Covered : PSC1  
Title : BCD/ASCII converter

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

IEC 1010  
EN50081-1:1992 (normative)  
EN50082-1:1992 (normative)

and comply with the requirements of Council Directive 89/336/EEC relating to Electro-Magnetic Compatibility and 72/23/EEC relating to safety.

## Conditions

The devices must recover automatically when disturbance ceases without the need for human intervention, such as resetting, power-down etc.

The devices 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 a clean power earth terminal as close to the device as possible.

This certificate applies only to devices carrying Serial Numbers 801001 or higher.

Signed as true and correct, for and on behalf of London Electronics Ltd.

J.R. Lees  
Director