# Large digit displays - 38, 45, 57 or 58mm digit height models
# LD-232, 485, CL for serial input

The LD-232, LD-485 and LD-CL with the 38mm, 45mm, 57mm & 58mm displays will be ideal for applications where a display must be seen from a distance. The displays offers the capability of displaying numeric characters and a range of alpha characters and special characters limited by the flexibility of a 7 segment display. High contrast versions, viewable even in bright sunlight are available in 38mm and 58mm digit hight in red, green, amber or white.

## Displays



6 digit 38mm high red LED (visibility to 18m)



5 digit 45mm high red LED (visibility to 20m)
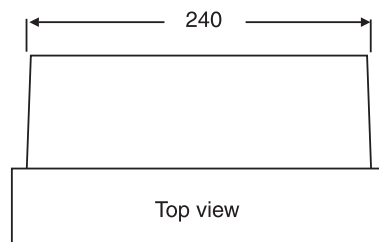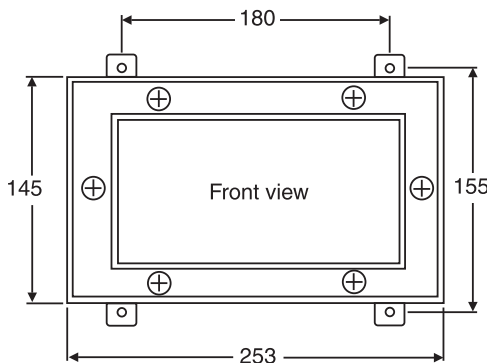


4 digit 57mm high red LED (visibility to 25m)



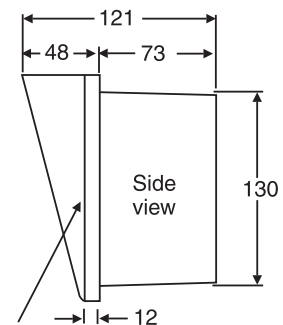4 digit high contrast 58mm high green LED
(visibility to 25m)



## Features

- Models for RS232, RS485 or 20mA serial current loop (ASCII or Modbus RTU)
- Arithmetic mode - allows arithmetic operation from up to 8 sources of same manufacture as the LD display
- Scanning mode, allows input from up to 8 sources of same manufacture as the LD display
- 6 x 38mm LED - visibility rating to 18m
- 5 x 45mm LED - visibility rating to 20m
- 4 x 57mm or 58mm LED - visibility rating to 25m
- High contrast, daylight viewable 38 or 58mm versions in green, red, amber or white
- Flexible setup, allows display from a wide range of sources
- IP65 rated wall mount enclosure
- One, two or three address characters, allows selection of which display receives the message when multiple displays are connected using RS485
- Automatic or user selectable decimal point position
- 2 configurable setpoint relays standard rated at 240VAC, 5A into a resistive load, form A
- Panel mount kit available
- Pushbutton setup
- Remote input can be configured to one of a wide range of functions including zero, peak hold, etc.
- The auto-brightness feature for LED displays varies the display brightness to suit the ambient light
- 2 year guarantee
- See separate brochures for 39mm flip digit, 100mm LED and flip digit and 200mm display models



Front view
180
145
155
253

Top view
240
All dimensions in mm

Side view
121
48
73
130
12
Can be ordered with or without hood

LDSERL384557-3.8-0

## Specifications

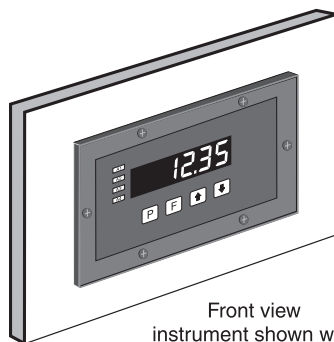| | |
|---|---|
| Input: | RS232, RS485 or 20mA serial current loop models available |
| | (input type is factory configured) |
| Baud rate | 300, 600, 1200, 2400, 4800, 9600, 19200 or 38400 baud (programmable) |
| Microprocessor: | MC68HC11 CMOS |
| Ambient temp: | LED models -10°C to 60°C |
| Humidity: | 5% to 95% non condensing |
| Display types: | 38mm 6 digit red, green, amber or white LED with alarm annunciators and 4 way keypad |
| | 45mm 5 digit red LED with alarm annunciators and 4 way keypad |
| | 57mm red or 58mm 4 digit red, green, amber or white LED |
| | See separate brochures for other display sizes |
| Power supply: | See order code table (type is factory configured) |
| Power usage: | AC supply 15VA max, |
| | DC supply typically 100mA at 24VDC for 38 & 45mm standard brightness, |
| | 250mA at 24VDC for 57mm or 38 & 58mm high contrast |
| Outputs (standard): | 2 x relays, form A, rated at 240VAC, 5A resistive |
| Outputs (optional): | See order code table (type is factory configured) |
| Relay action: | Programmable N.O. or N.C. |
| Environmental rating: | IP65 |
| Weight: | 1.3 kg |
| Dimensions: | See front page |

## Compatibility

The LD serial input displays are designed to be flexible in operation and will accept inputs from most serial strings where there is a consistent format. Setup functions allow matching of baud rate, parity, and number of data bits. Other setup functions allow the display to ignore characters before or after the required display value in suitable input strings in order to extract the required display value from the input string.
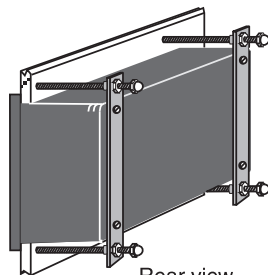
## Panel mounting

The instrument is provided with removable surface (e.g.wall) mounting tabs mounting. A panel mount kit is optionally available which allows the instrument to be mounted via a panel cut out. If required the instrument can be optionally supplied with the front hood removed to allow a more flush panel mount fitting.

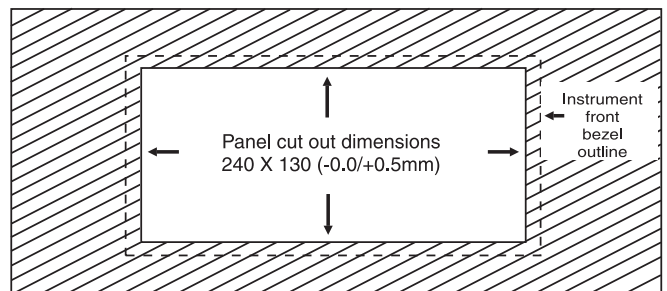Part number for panel mount kit: LD-MTG-PM-KIT
Part number for hood removal: LD-HOOD-REMOVAL



Front view
instrument shown with
optional case hood removed
case for flush mounting

Rear view
showing optional
panel mount brackets
and screws

Panel cut out dimensions
240 X 130 (-0.0/+0.5mm)

Instrument
front
bezel
outline

# Order codes for serial input 38, 45 or 57mm displays

**RS232 input**

LD-232-[    ]-[    ]

**Power supply**
| | |
|---|---|
| 240 | 240VAC |
| 110 | 110VAC |
| ACD | 24-48VAC |
| DC | 12-48VDC isolated |

**Display type**
| | |
|---|---|
| 38R6 | 6 digit 38mm red LED - with front pushbuttons and alarm anunciators |
| 38D6 | 6 digit 38mm red LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable |
| 38G6 | 6 digit 38mm green LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable |
| 38A6 | 6 digit 38mm amber LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable |
| 38W6 | 6 digit 38mm white LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable |
| 45R5 | 5 digit 45mm red LED - with front pushbuttons and alarm anunciators |
| 57R4 | 4 digit 57mm red LED |
| 58R4 | 4 digit 58mm red LED - high contrast daylight viewable |
| 58G4 | 4 digit 58mm green LED - high contrast daylight viewable |
| 58A4 | 4 digit 58mm amber LED - high contrast daylight viewable |
| 58W4 | 4 digit 58mm white LED - high contrast daylight viewable |

**RS485 input**

LD-485-[    ]-[    ]

**Power supply**
| | |
|---|---|
| 240 | 240VAC |
| 110 | 110VAC |
| ACD | 24-48VAC |
| DC | 12-48VDC isolated |

**Display type**
| | |
|---|---|
| 38R6 | 6 digit 38mm red LED - with front pushbuttons and alarm anunciators |
| 38D6 | 6 digit 38mm red LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable |
| 38G6 | 6 digit 38mm green LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable |
| 38A6 | 6 digit 38mm amber LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable |
| 38W6 | 6 digit 38mm white LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable |
| 45R5 | 5 digit 45mm red LED - with front pushbuttons and alarm anunciators |
| 57R4 | 4 digit 57mm red LED |
| 58R4 | 4 digit 58mm red LED - high contrast daylight viewable |
| 58G4 | 4 digit 58mm green LED - high contrast daylight viewable |
| 58A4 | 4 digit 58mm amber LED - high contrast daylight viewable |
| 58W4 | 4 digit 58mm white LED - high contrast daylight viewable |

**Serial current loop input**

LD-CL-[    ]-[    ]

**Power supply**
| | |
|---|---|
| 240 | 240VAC |
| 110 | 110VAC |
| ACD | 24-48VAC |
| DC | 12-48VDC isolated |

**Display type**
| | |
|---|---|
| 38R6 | 6 digit 38mm red LED - with front pushbuttons and alarm anunciators |
| 38D6 | 6 digit 38mm red LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable |
| 38G6 | 6 digit 38mm green LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable |
| 38A6 | 6 digit 38mm amber LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable |
| 38W6 | 6 digit 38mm white LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable |
| 45R5 | 5 digit 45mm red LED - with front pushbuttons and alarm anunciators |
| 57R4 | 4 digit 57mm red LED |
| 58R4 | 4 digit 58mm red LED - high contrast daylight viewable |
| 58G4 | 4 digit 58mm green LED - high contrast daylight viewable |
| 58A4 | 4 digit 58mm amber LED - high contrast daylight viewable |
| 58W4 | 4 digit 58mm white LED - high contrast daylight viewable |

## Applications/input types available with large digit display models

- Analog input, process transmitters etc. $\pm20$mA, 4-20mA or $\pm2.5$VDC or $\pm25$VDC
- Pulse input, rate, total, count, grand total (encoders, switches, proximity sensors etc.)
- Temperature - RTD, thermocouple, 4-20mA
- Weighing - 4 or 6 wire mV/V output loadcells
- Pressure measurement - 4 or 6 wire mV/V pressure sensors or 4-20mA analog transducers
- Liquid level measurement - 4 or 6 wire mV/V pressure sensors or 4-20mA analog transducers
- Serial input - RS232, RS485, Serial current loop for slave displays etc.
- Synchronous Serial Interface (SSI) for high accuracy position etc. measurement
- Binary, BCD or Gray Code input
- Real Time clock with alarms
- Multifunction timer - elapsed time, stopwatch, run time etc.

LDSERL384557-3.8-0