

# eLINE LPD Operating Instructions

## Operation

### General

The eLINE LPD is a panel mount, 3+1/2 Digit, LCD Indicator for 4-20mA signals.

### Loop powered operation

The eLINE LPD draws its power from the 4-20mA signal current, resulting in a voltage drop across the unit. The voltage drop (2.5V @20mA) is equivalent to an increase in loop load of 125Ω. The maximum input current is 100mA.

### Cleaning

The case can be wiped with a damp cloth. De-energise the unit before cleaning.

## Installation

**Caution:** In order to meet product safety requirements, these units must only be installed, by qualified staff, in accordance with the information given in this manual, using the mounting clips and terminal blocks supplied, and all relevant national electrical wiring and safety rules must be followed.

### Location

Locate the instrument in an area that is free from dust, moisture and corrosive gases. Do not cover the ventilation holes at the side of the case.

### Connections

Strip wires to 7mm from the ends. Use a suitable ferrule for multistranded wires (do not solder).

Use 12-28AWG Cu Wire rated for temperatures above 70°C Only, tighten to 4.5lb-in.

For effective protection from electromagnetic noise, all signal cables must be shielded, or located on conductive trays or in conduits.

### eLINE LPD Connections

Terminal	Signal	
1	Signal -	Input 4-20mA signal
2	Signal +	

## Set-up

### General

The eLINE LPD default display range is 0.0-100.0%. If you want to set the display to show in units other than percentage you will need to change switch settings on the main board.

You can also change the display action from direct to reversed by changing the position of push fit jumpers on the main board.

### Access to switches and jumper settings

1. Remove the plug in connector from the back of the unit.
2. Remove the backplate. There are four lugs that can be gently prised apart to release the backplate.
3. Slide the electronics from the housing.

### Display range selection

1. Set the display action jumper position.
2. Choose the Zero adjustment switch to suit the range:
  - **Fine** for zero values in the ±200 count display range
  - **Coarse** for larger offsets (±1999 counts)
3. Select the display span adjustment range switches (see below).
4. Select the display decimal point selection
5. Adjust the Zero and Span controls to give the desired display range.

## Calibration

All instruments are fully calibrated before leaving the factory and should not need adjustment until the next scheduled calibration.

### Equipment requirements

- A suitable mA current source.
- Flat bladed screwdriver (blade width less than 2.54mm/0.1inch)

### ZERO and SPAN adjustment

The ZERO and SPAN controls are marked Z and S respectively. Turn the control clockwise to increase the output level.

1. Connect the current source up to the inputs.
2. Set the input source 4.00mA.
3. Turn the ZERO adjustment until the display shows .
4. Set the input source to highest temperature in the range required.
5. Adjust the SPAN control until the output is at 20.00mA.
6. Recheck the ZERO adjustment.

This completes the calibration procedure.

