

# Economical Large Digit Display

## LD4-IV for analog input

4 x 57mm high LED digits



### Features

- 57mm high digits (visible to 25m)
- Displays in engineering units (scaleable)
- High brightness LED display
- User selectable decimal point position
- Pushbutton calibration and setup
- Two point calibration. A single point calibration offset can also be entered.
- Special display scaling mode for 4-20mA input allows entry of scaling values without live input.
- Digital filter improves stability. Uses weighted average method to reduce effects of short term interference.
- 2 alarm/control relay outputs. The relays can be configured with high and/or low trip points and for normally open or normally closed operation. Relay trip time and reset delay times can also be set if required.
- Remote input to perform special functions e.g. brightness level switching, high/low memory, peak hold, display hold, setpoint only access, security lockout, tare, zero or calibration scaling switching.
- High and low limits can be set for visual alarm - can be set to cause display to flash the value on the display or to display error message **-or-**
- 18VDC unregulated transmitter supply available on AC powered models
- Rugged, weatherproof, IP65 rated housing
- 2 year guarantee
- Optional serial communications, analog retransmission, extra relays, panel mounting kit and hood removal.

### Description

Model LD4-IV accepts  $\pm 20\text{mA}$ , 4-20mA,  $\pm 100\text{mV}$ ,  $\pm 1\text{V}$ ,  $\pm 10\text{V}$  or  $\pm 100\text{V}$  inputs. From these inputs the display can be scaled to read in engineering units. A choice of linear or square root law display can be selected. The instruments feature flexible pushbutton scaling and programming with "on display" messages being used to assist in setting up. Two sets of calibration scaling values may be stored, an external input allows switching between scales. An 18VDC unregulated transmitter supply is provided as standard on AC supply models.

Each instrument is supplied with a two control/alarm setpoint relays. Optional outputs include isolated analog retransmission (4-20mA, 0-1V or 0-10V, selectable) or isolated serial retransmission (RS232 or RS485, factory configured, with choice of ASCII or Modbus RTU protocols) and isolated  $\pm 12\text{V}$  (24V) transmitter supply.

An external input is configurable to perform one of various functions e.g. zero, tare, scaling, switching, brightness level switching, high/low memory, peak hold, display hold setpoint only access or security lockout. This input can also be used to allow fast and easy access to the alarm setpoints.

The 57mm LED display is housed in a rugged, IP65 rated, UV stabilised ASA enclosure.



LD4IV-2.2-0

**AMALGAMATED INSTRUMENT CO PTY LTD**

ACN: 001 589 439

Unit 5, 28 Leighton Place Hornsby  
NSW 2077 Australia

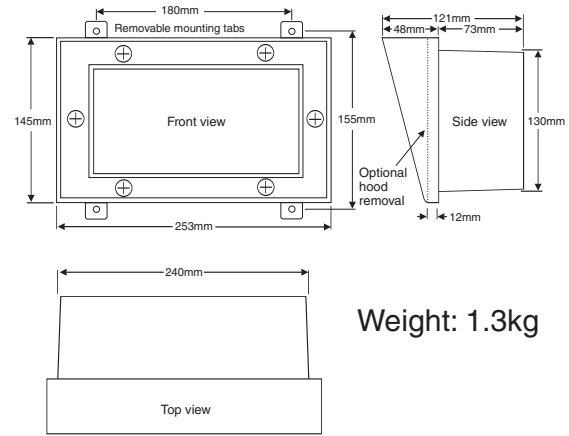
Telephone: +61 2 9476 2244  
Facsimile: +61 2 9476 2902

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

## Technical Specifications

Input Types:	$\pm 20\text{mA}$ , 4-20mA, $\pm 100\text{mV}$ , $\pm 1\text{V}$ , $\pm 10\text{V}$ or $\pm 100\text{VDC}$ , link selectable
Accuracy:	0.1% of full scale when calibrated
Input impedance:	$80\Omega$ nominal (4-20mA or $\pm 20\text{mA}$ input) $1\text{M}\Omega$ (DC Volts input)
Sample rate:	4 per second
ADC resolution:	1 in 20,000
Microprocessor:	MC68HC11 CMOS
Ambient Temp:	$-10^\circ\text{C}$ to $60^\circ\text{C}$
Humidity:	5% to 95% non condensing
Outputs:	2 x setpoint relays, form A, rated 5A at 240VAC (resistive load)
Power Supply:	See order code table (type is factory configured)
Power consumption:	AC supply, 15VA max. DC supply, depends on supply voltage, typically 500mA (2Apeak) for 24V using non isolated power supply

## Dimensions



Weight: 1.3kg

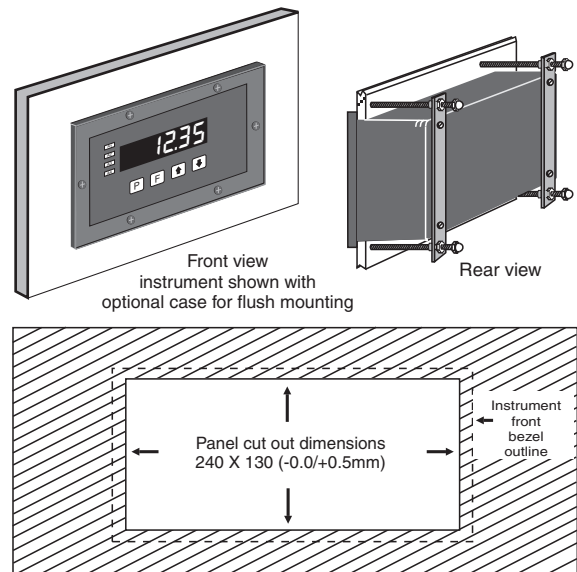
## Order Codes

Order Code	Display	Supply Voltage
LD4-IV-240-574	4 x 57mm red LED	240VAC
LD4-IV-110-574	4 x 57mm red LED	110VAC
LD4-IV-DCN-574	4 x 57mm red LED	15-24VDC non isolated
LD4-IV-DC-574	4 x 57mm red LED	12-48VDC isolated

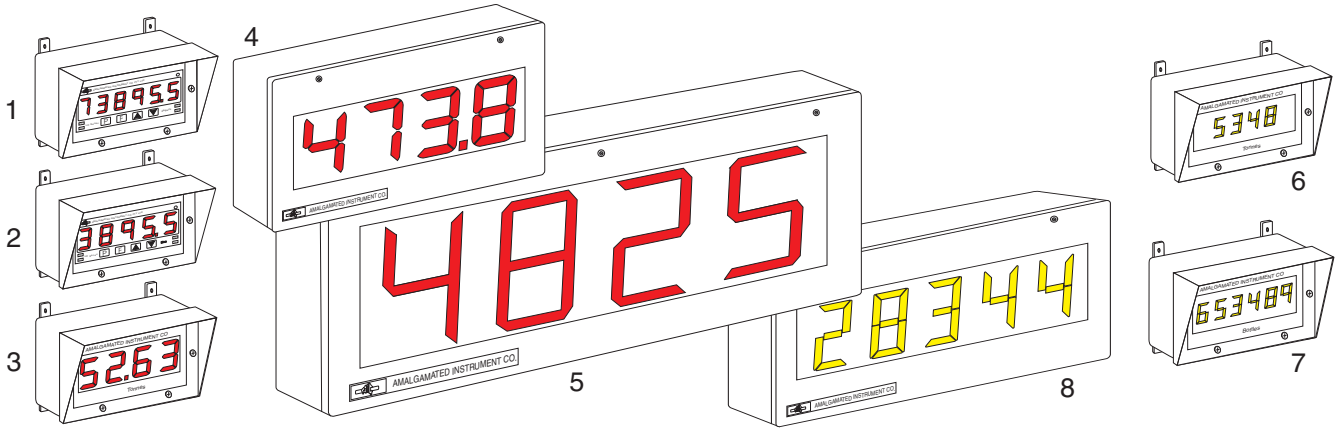
## Options

Option Code	Description
LD4-OPT-12	24VDC transmitter supply ( $\pm 12\text{VDC}$ )
LD4-OPT-C2	RS232 serial comms, non-isolated
LD4-OPT-C4	RS485 serial comms, non-isolated
LD4-OPT-A	Isolated analog retransmission 4-20mA, 0-1VDC or 0-10VDC selectable
LD4-OPT-RR	2 extra setpoint relays
LD-MTG-PM-KIT	Panel mount kit incl brackets & screws
LD-HOOD-REMOVAL	Front hood removal

## Panel Mounting Options



## Displays available in Large Digit Series



No.	LED digit size	No of digits	No.	"FLIP" digit size	No of digits
1	38mm (1.5")	6	6	39mm (1.5") - selected models	4
2	45mm (1.8")	5	7	39mm (1.5") - selected models	6
3	57mm (2.3")	4	8	100mm (4")	4, 5 and 6
4	100mm (4")	4 and 6	Other sizes and styles of display are under development		
5	200mm (8")	4			

## Other applications available with large digit displays

- Analog input, process transmitters etc.  
4-20mA, 0-1VDC, 0-10VDC, slidewire
- Rate, total, count, grand total from pulse input
- Temperature - RTD, thermocouple, 4-20mA
- Weighing - mV/V ratiometric loadcells
- Pressure measurement - mV/V ratiometric or analog transducers
- Liquid level measurement - mV/V ratiometric or analog transducers
- Serial input - RS232, RS485, Current loop
- Synchronous Serial Interface (SSI)
- Binary, BCD or Gray Code input
- Real Time clock with alarms
- Multifunction timer - elapsed time, stopwatch, etc.
- Time and Temperature