UNIVERSAL PROGRAMMABLE PROCESS INDICATOR

Features

- Microprocessor based controller, linearised for PT100 sensor & 3 thermocouples (J,K,R) and 4-20mA with Auto cold junction compensation
- Input for 4-20mA programmable from Tx for Pressure, Humidity, pH, Temperature etc.
- Span, Zero and resolution user programmable for 4-20mA input
- Large 4" height bright Red LED Displays for long distance viewing
- Offset digitally programmable from front
- Configuration lockable by jumper on terminals
- Non-volatile memory to save settings
- Aesthetically designed front panel

Specifications

- Display : 4 digit 4" 7 segment Red LED display for Process Values
- Sensor : J,K,R T/C, 3 wire PT100 and 4-20mA
- Range : J T/C : 0 to 750˚C K T/C : 0 to 1250˚C
  R T/C : 0 to 1700˚C PT100: -100.0 to +600.0˚C
- Accuracy : ±0.1% of Full Scale ± 1 digit
- Resolution : Settable 0.000 to 0000 for 4-20mA input
  1˚C for thermocouples, 0.1˚C for PT100
- Offset Band : Settable from -25.0˚C to +25.0˚C
- Exciter Voltage : 24V @ 30mA for loop Tx
- Memory : Non-volatile EEPROM to save settings
- Configuration Lock : Open lock terminals to lock the Sensor type
- Supply : 220V AC ± 15% @ 50/60Hz
- Dimensions : 395mm x 119mm x 158mm
- Mounting : Wall Mounting

Manufactured By: **COUNTRONICS, New Delhi**

Terminal Connections

- Connect the sensor to the terminal strip as per the markings on the strip.
- For thermocouples, connect the Positive and Negative of the sensor the '+' and '-' on left and right of 'T/C'
- For 2 wire PT100 sensors, short the two terminals (+T/C and 3rd Wire of PT100) as shown on the label and then connect the 2 wires to the 'TC+' and 'TC-' terminals.
- For 3 wire PT100 sensors, connect the same colored wires to the terminals(+T/C and 3rd Wire of PT100) shown short and then connect the third wire to the terminal marked '-'.
- For 4-20mA input, short the inputs as shown on the label ("Short for 4-20mA" and +TC) and connect the 4-20mA input to the +TC and –TC terminals.

Directions for Usage

- Short the terminals marked as 'Lock'. This will allow changes in the sensor selection.

Setting the Offset (Zero)

- Press the Mode Switch.
- The display shows "Zero". Press the Enter ↵ switch.
- The display now shows the value of Offset. This represents the offset adjustment in the displayed value.
- Use the Increment △ and Decrement ▽ switches to make changes. The range is from -250 to 250.
- After changes have been made, press the Enter ↵ switch to save changes and return to the display of "Zero". Now press Increment Switch. If 4-20mA input has been selected, the Display shows "Hi" else is shows "Sens".

Setting the Full Scale (20mA)

- If 4-20mA input has been selected, the display shows "HI". Press the Enter ↵ switch.
- The display now shows the value of Hi. This represents the value to be displayed when an input of 20mA is given.
- Use the Increment △ and Decrement ▽ switches to make changes. The range is from -1999 to 9999.
- After changes have been made, press the Enter ↵ switch to save changes and return to the display of "HI". Now press the Increment switch. The display shows "Lo".

Setting the Starting Scale (4mA)

- The display shows "Lo". Press the Enter ↵ switch.
- The display now shows the value of Lo. This represents the value to be displayed when an input of 4mA is given.
- Use the Increment △ and Decrement ▽ switches to make changes. The range is from -1999 to 9999.
- After changes have been made, press the Enter ↵ switch to save changes and return to the display of "Lo". Now press the Increment switch. The display shows "dec".

Setting the resolution (decimal)

- The display shows “dec”. Press the Enter ↵ switch.
- The display now shows 0000 with the decimal point as per previous setting. This represents the resolution or decimal placement in the displayed value.
- Use the Increment △ and Decrement ▽ switches to make changes. The options are 0000, 000.0, 00.00 or 0.000
- After changes have been made, press the Enter ↵ switch to save changes and return to the display of “dec”. Now press the Increment switch. The display shows “Sens”.

Sensor Selection (Sens)

- To change the sensor input, the lock terminals must be shorted.
- Press the Enter switch
- The current selected sensor is displayed.
- TH-J (J Thermocouple), TH-K (K Thermcouple), TH-r (R Thermocouple) or PT10 (PT100 RTD sensor) or 4-20 (4-20mA)
- Use the Increment and Decrement switches to make changes.
- After changes have been made, press the ENTER key to return to the ‘SENS’ display.
- Press Mode switch to return to normal display