

# **Position Indicator**



The Actuonix Position Indicator provides remote visual feedback for all of our feedback type actuators. This is a simple way to add a visual display to your actuator system without modification of your design, or the addition of a custom controller or software.

Simply connect power, ground, and the feedback line to the Position Indicator and the indicator will begin to operate. This indicator is compatible with all -I and -P actuators, as well as the -P/LAC combination. NOTE: The black and red wires, and the yellow and orange wires must be reversed on the "P" actuator/LAC combination or display will also be reversed.

The LED bar graph lights proportionally to the actuators position. At full retraction, no LEDs are lit, and at full extension all of the LED's are lit. A trim potentiometer makes this display compatible with a wide range of feedback voltages. For power sensitive applications, remove the jumper and only a single LED will be used to indicate position.

## **Benefits**

- → Compact miniature size
- → Simple control
- ightarrow Wide Input range
- → Easy mounting

## **Applications**

- → Robotics
- → Hobby
- **Automotive**

Connection Reference:			
LAC	Indicator		
X4 Pin 2 (P)	$\rightarrow$	1 – Red	
X6 Pin 2 (+)	$\rightarrow$	2– White	
X6 Pin 1 (-)	$\rightarrow$	3 – Black	
L12-I		Indicator	
Pin 3 (Purple)	$\rightarrow$	1 – Red	
Pin 5 (Red)	$\rightarrow$	2 – White	
Pin 6 (Black)	$\rightarrow$	3 – Black	
L12-P/L16-P		Indicator	
Pin 2 (Purple)	$\rightarrow$	1 – Red	
Pin 1 (Orange)	$\rightarrow$	3 – Black	
PQ12-P		Indicator	
Pin 5	$\rightarrow$	1 – Red	
Pin 1	$\rightarrow$	3 – Black	
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<sup>\*</sup> For -P, the Indicator also requires connection to Power and Ground (Unswitched side of Motor Supply)

# **Position Indicator Specifications**

	<u>1 LED Mode</u>	<u>10 LED Mode</u>	
Supply Voltage	3-24VDC*	3-15VDC	
Maximum Current Required	11mA	75mA	
Input Voltage Range	0-30VDC **		
Storage Temperature	-40°C to 150°C		
Operating Temperature	0°C to +70°C		
Input Impedance	5 Mega Ohm		

<sup>\*</sup> Supply noise over 35V may damage the display.

- 1 Fahrenheit[F] =1.8Celsius[C] +32
- 2 Inches["]=Millimeters[mm]/25.4

### Pin Out:

WIRING: (see last page for pin numbering)

1 - Red - Position Input Signal

2 - White - Power (DC)

3 - Black - Ground Colour coding may differ on pre-2015 units

### **Operation:**

Calibrate the indicator by first positioning the actuator for maximum feedback signal (For -P this is extended, for -I this is retracted). Adjust the potentiometer so that all 10 LEDs are lit.

Remove the jumper for 1 LED operation, or leave the jumper connected for 10 LED operation. For the lowest power usage, install a switch between the red wire and the power supply.

Most applications require removal of the connector and baring of the wires.

Note: Reversing the polarity of pins 2 and 3 may permanently damage the Indicator.

All information provided on this datasheet is in accordance with our terms and conditions as posted here: http://actuonix.com/terms.asp

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<sup>\*\*</sup>For Input voltages over 30V, ensure the potentiometer is fully counter-clockwise before you calibrate. Input damage can occur if the potentiometer is adjusted too low.

