

CONFIGURATION

The factory preset input is 4-20mA and the output is -10 to 10V, as shown in Figure 1. The supply power is configured for 120 VAC operation. For other I/O ranges, remove the four base screws and case to access the I/O card.

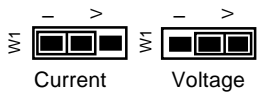
Refer to Figure 1 for configuration and program the I/O channel as desired.

Replace the cover before applying power.

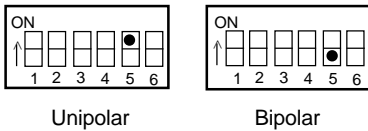
WARNING: Do not attempt to change any switch settings with power applied. Severe damage will result!

INPUT

1. Position input jumper “W1” for Current (I) or Voltage (V) input.

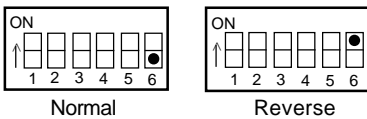


2. Set position 5 of the Input Range Selector for Unipolar (e.g. 0 to 5V) or Bipolar (e.g. -5 to 5V) operation.



Note: A bipolar range selection will double any input range from Table 1 (e.g. 10V span = -10 to 10V bipolar span)

3. Set position 6 of the Input Range Selector for Normal or Reverse operation. Reverse acting produces a decreasing output with an increasing input.

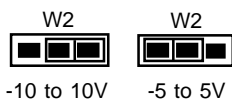


4. Using Table 1, configure positions 1 through 4 of the Input Range Selector for the desired maximum input. Round the desired maximum input value to the next highest range (e.g., 0-70V = 100V range).

WARNING: Do not configure the output ranges with the power on. Damage to unit will result.

OUTPUT

1. Position output jumper “W2” for -5 to 5V or -10 to 10 V



POWER

1. Configure the AC jumpers for either 120 or 240 VAC operation. See Figure 2.

CALIBRATION

1. Connect the input to a calibrated DC voltage or current source and apply power. Wait 1 hour for thermal stability before monitoring the voltage/current output. Refer to PIN CONNECTIONS.

2. Set the calibrator to the desired minimum input and adjust the Zero, 20-turn, potentiometer for desired minimum output.

3. Set the calibrator to the desired maximum input and adjust the Span, 20-turn, potentiometer for desired maximum output.

4. Repeat steps 2 and 3 for best accuracy.

PRODUCT ASSISTANCE

For additional information on calibration, operation and installation please contact our Technical Services Group. Call toll-free:

800-783-6664

Table 1: AP4382 Input Ranges

Voltage*	Current*	Input Range Selector (SW1)
20mV	2mA	
50mV	5mA	
100mV	10mA	
200mV	20mA	
500mV	50mA	
1V	100mA	
2V		
5V		
10V		
25V		
50V		
100V		

**Note: Use jumper (W1) to configure either voltage or current input. For split range current inputs (e.g. 4-12mA, 12-20mA) or high voltage inputs >100V consult factory.*

SPECIFICATIONS

Input	Voltage Input (field configurable) Full Scale Range: 10mV to 100V Impedance: >100K Ω Overvoltage: 400 Vrms, max (Intermittent): 264 Vrms, max (Continuous) Current Input (field configurable) Full Scale Range: 1mA to 100mA Impedance: 20 Ω , typical Overcurrent: 170mArms, max Overvoltage: 60VDC Common Mode (Input to Ground): 1500VDC, max	Accuracy (Including Linearity, Hysteresis) <20mV/2mA: $\pm 0.35\%$ of full scale, typical, 0.5%, max >20mV/2mA: $\pm 0.1\%$ of full scale, typical, 0.2%, max
Zero and Span Range	Zero Turn-Up: 0 to 50% of full scale range Span Turn-Down: 100 to 50% of full scale range	Response Time (10-90%) 200 mSec., typical Stability (Temperature) $\pm 0.025\%$ of full scale/ $^{\circ}\text{C}$, typical, $\pm 0.05\%$ / $^{\circ}\text{C}$, max
Output	Voltage Output Output: -10 to 10V, -5 to 5V Impedance: <10 Ω Drive: 10mA, max (1K Ω min. @ 10V)	Common Mode Rejection DC to 60Hz: 120dB Isolation (Input to Output) 1500 VDC between input, output and power ESD Susceptibility Meets IEC 801-2, Level 2 (4KV) Humidity (Non-Condensing) Operating: 15 to 95% (@ 45 $^{\circ}\text{C}$) Soak: 90% for 24 hours (@ 65 $^{\circ}\text{C}$)
LED Indication (green)	Input Range >110% input: 8Hz flash <0% input: 4Hz flash	Temperature Range Operating: -15 to 60 $^{\circ}\text{C}$ (5 to 140 $^{\circ}\text{F}$) Storage: -25 to 70 $^{\circ}\text{C}$ (-13 to 158 $^{\circ}\text{F}$) Power Consumption: 3W typical, 5W max Standard: selectable 120/240VAC, $\pm 10\%$, 50-60Hz Optional: 9 to 30VDC, inverter isolated 0.60lbs
		Weight 0.60lbs Agency Approvals CSA certified per standard C22.2, No. M1982 (File No. LR42272-54). UL recognized per standard UL508 (File No. E150323).

I/O CARD CONFIGURATION

WARNING: Applying voltage to the input with W1 in current (I) position will result in damage to the unit.

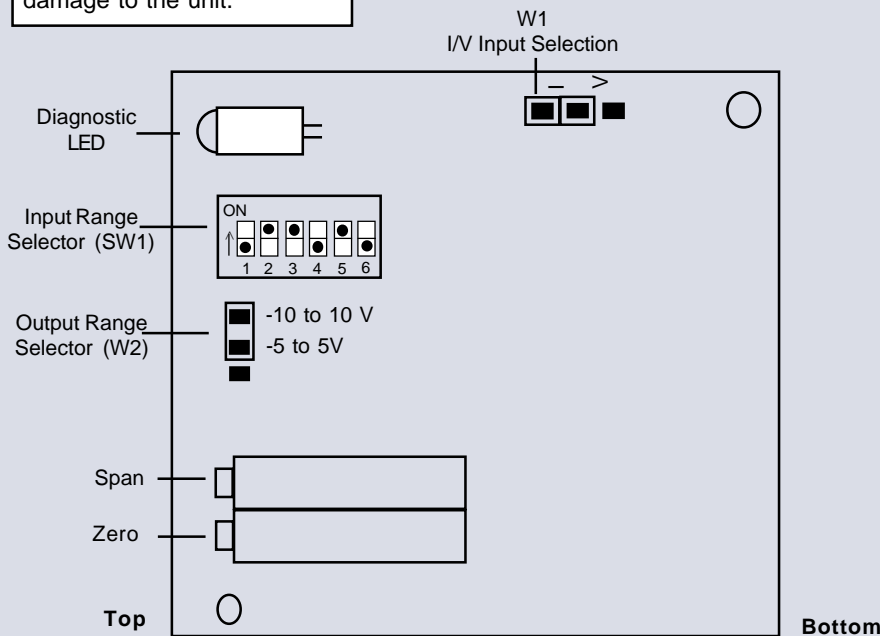


Figure 1: AP4382 I/O card
factory calibration: 4-20mA input, -10 to 10V output
(shown sideways to view switches)

WARNING: Do not configure I/O switch ranges with power on. Damage will result!

TOP VIEW DIAGRAM

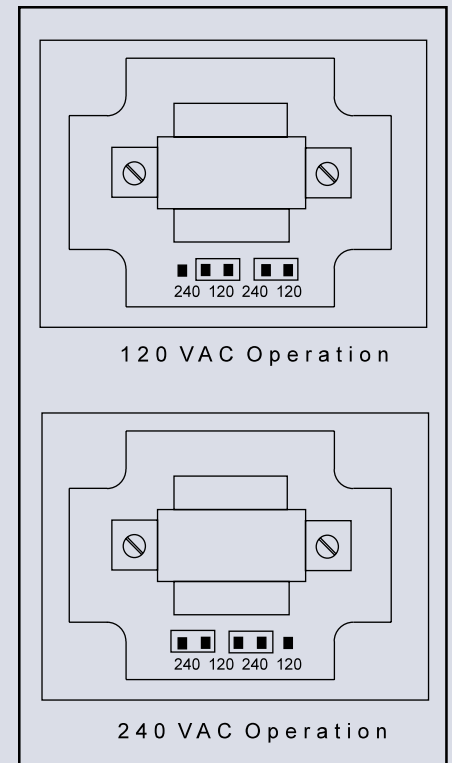
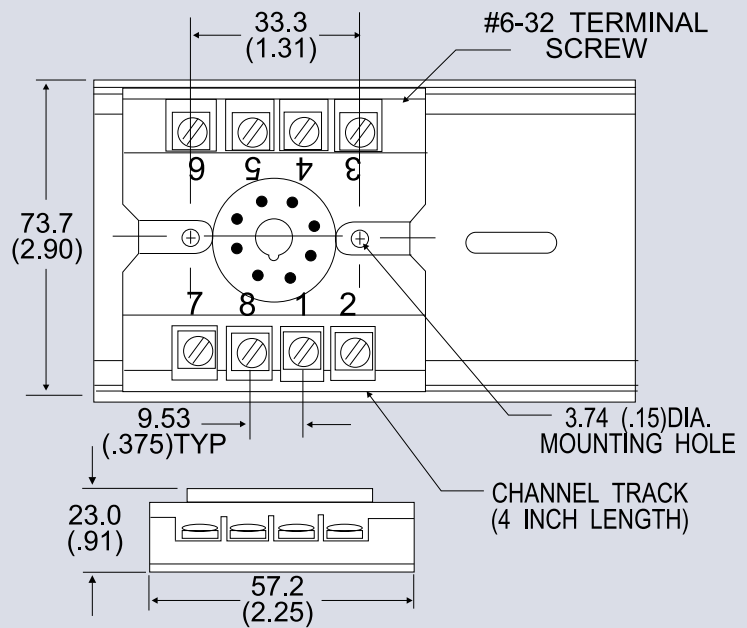
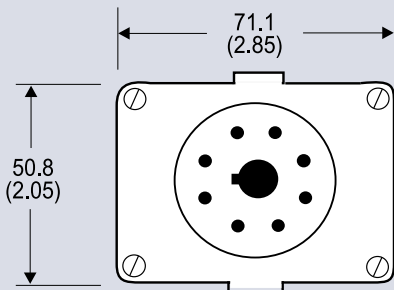
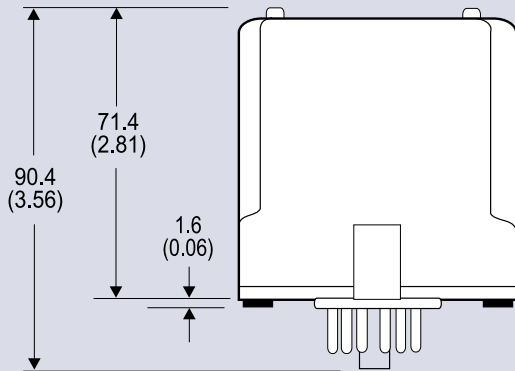


Figure 2: 120/240 VAC Selection

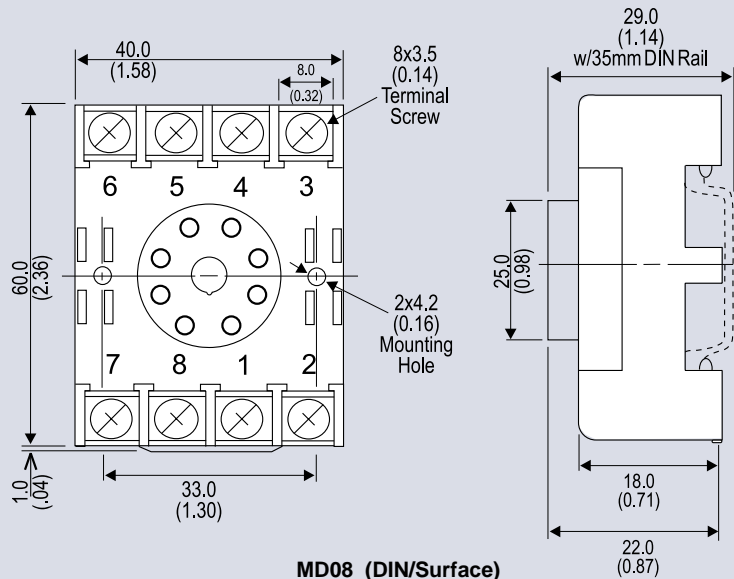
WARNING: Do not change with power connected!

DIMENSIONS

Dimensions are in mm (inches)



M008 (Track/Surface)



MD08 (DIN/Surface)

MODELS & ACCESSORIES

Mounting

All Action Paks feature plug-in installation. Model AP4382 uses an 8-pin base and either molded socket M008 or DIN socket MD08.

Ordering Information

Specify:

1. Model: **AP4382**
 2. Option: U, see text
 3. Line Power: 120/240 VAC or 9 to 30 VDC
 4. Factory calibration (C620): Specify input range, output range and power.
- (All power supplies are transformer-isolated from the internal circuitry.)

Pin Connections

- 1 Power (Hot)
- 2 Shield (Gnd)
- 3 Power (Neu)
- 4 Spare Termination
- 5 Input (+)
- 6 Input (-)
- 7 Output (+)
- 8 Output (-)

DC Power: PIN 1 = (+); PIN 3 = (-)