



## INSTALLATION

**READ THESE INSTRUCTIONS BEFORE YOU BEGIN INSTALLATION.**

Ground yourself before touching board. Some components are static sensitive.

### MOUNTING:

Circuit board may be mounted in any position. If circuit board slides out of snap track, a non-conductive "stop" may be required.

Use only fingers to remove board from snap track. Slide out of snap track or push against side of snap track and lift that side of the circuit board to remove. Do not flex board. Use no tools.

**POWER CONNECTIONS - THIS PRODUCT ACCEPTS 24 VAC OR 24 VDC POWER. SEE JUMPER SHUNT ABOVE TERMINAL BLOCK CONNECTIONS TO SELECT THE POWER TYPE YOU ARE USING.**

Be sure to follow all local and electrical codes. Refer to wiring diagram for connection information.

- 1) The secondary supply voltage to the interface should be isolated from earth ground, chassis ground, and neutral leg of the primary winding. Any field device connected to this transformer must use the same common. If you are not sure of other field device configuration, use separate transformers.
- 2) If the 24 VAC power is shared with devices that have coils such as relays, solenoids, or other inductors, each coil must have an MOV, AC Transorb, or other spike snubbing device across each of the shared coils. Without these snubbers, coils produce very large voltage spikes when de-energizing that can cause malfunction or destruction of electronic circuits.

- 3) If the 24 VDC power is shared with devices that have coils such as relays, solenoids, or other inductors, each coil must have an MOV, DC Transorb, or a diode placed across the coil or inductor. The cathode or banded side of the diode (or DC Transorb) connects to the positive side of the power supply.
- 4) The secondary voltage should be between 22 and 28 volts measured at the interface terminals and isolated from earth ground, chassis ground, and neutral leg of the primary winding. Grounding should be to the system common only. Failure to follow these procedures can result in improper operation.
- 5) You should measure the actual voltage output of the secondary. If the output is not fully loaded you may read a higher voltage than the circuit board can handle.

## CALIBRATION AND CHECKOUT

---

Place the jumper shunts as shown in diagrams printed on ATL (between input power/signal terminals and label space) for the input signal span selected. Connect input signal to IN and (-). Also place jumper shunt above power terminal block for 24 VAC or 24 VDC power (see drawing, page 1).

Turn all trim pots clockwise (minimum value) for making relay. You will hear a slight “clicking” when you reach the end of the adjustment, before calibrating.

Apply power to terminals “+” and “-”. The “POWER” LED should light. If you are working in the 0-12 VDC signal input range and no signal is connected, all relays will go high (or energize).

Adjust each trim pot as follows: Input the desired signal level and adjust the respective pot counterclockwise until the corresponding relay turns on. LED 1, 2, 3 or 4 will turn on when the respective relay is energized. **Turning the potentiometer counterclockwise increases the voltage or current level at which the relay energizes.**

Pot 1 sets the point at which relay 1 turns on

Pot 2 sets the point at which relay 2 turns on

Pot 3 sets the point at which relay 3 turns on

Pot 4 sets the point at which relay 4 turns on

Note: To cascade several ATL's together, connect power, signal and common in parallel. If using current input, select current on one board only and set other ATL(s) to the 0-12 VDC span.

Power Consumption:	180 mA maximum	Contact Ratings: 2 Amps @ 24V
Input Impedance:	0-12 VDC/10, 000,000 ohms	Standard Dead Band 3%:
	0-24 VDC/20 K ohm	0-12 VDC - .3 volts
	0-20 mA/500 ohm	0-24 VDC - .6 volts
		0-24 mA - .6mA
		(10% and 1% deadbands also available)