INTERFACE SERIES

Installation & Operation Instructions

ATL

Phone: 1-888-967-5224
Website: workaci.com

GENERAL INFORMATION

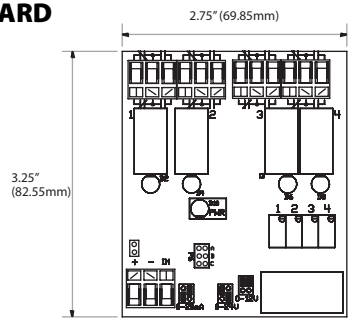
The ATL accepts an analog (voltage or current) input signal and controls four relays. Each relay has an adjustable trip point which is set by a multi-turn potentiometer. Each relay is activated when the input signal is equal to, or greater than, the trip point setting. Relays deactivate at trip point less the deadband (3% standard, 1% & 10% optional). Common (C), Normally Open (NO), and Normally Closed (NC) terminals are available at each relay. The ATL is field calibratable, however, factory calibration is available upon request for an additional charge. This will speed up installation time for the end user.

MOUNTING INSTRUCTIONS

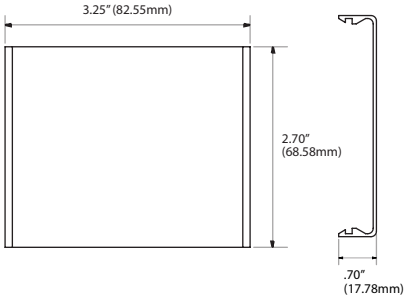
Circuit board may be mounted in any position. If circuit board slides out of snap track, a non-conductive "stop" may be required. Use only fingers to remove board from snap track. Slide out of snap track or push against side of snap track and lift that side of the circuit board to remove. **Do not flex board or use tools.**

FIGURE 1: DIMENSIONS

BOARD



SNAP TRACK



WIRING INSTRUCTIONS

PRECAUTIONS

- **Remove power before wiring. Never connect or disconnect wiring with power applied.**
- **When using a shielded cable, ground the shield only at the controller end. Grounding both ends can cause a ground loop.**
- **It is recommended you use an isolated UL-listed class 2 transformer when powering the unit with 24 VAC. Failure to wire the devices with the correct polarity when sharing transformers may result in damage to any device powered by the shared transformer.**
- **If the 24 VDC or 24VAC power is shared with devices that have coils such as relays, solenoids, or other inductors, each coil must have an MOV, DC/AC Transorb, Transient Voltage Suppressor (ACI Part: 142583), or diode placed across the coil or inductor. The cathode, or banded side of the DC Transorb or diode, connects to the positive side of the power supply. Without these snubbers, coils produce very large voltage spikes when de-energizing that can cause malfunction or destruction of electronic circuits.**
- **All wiring must comply with all local and National Electric Codes.**

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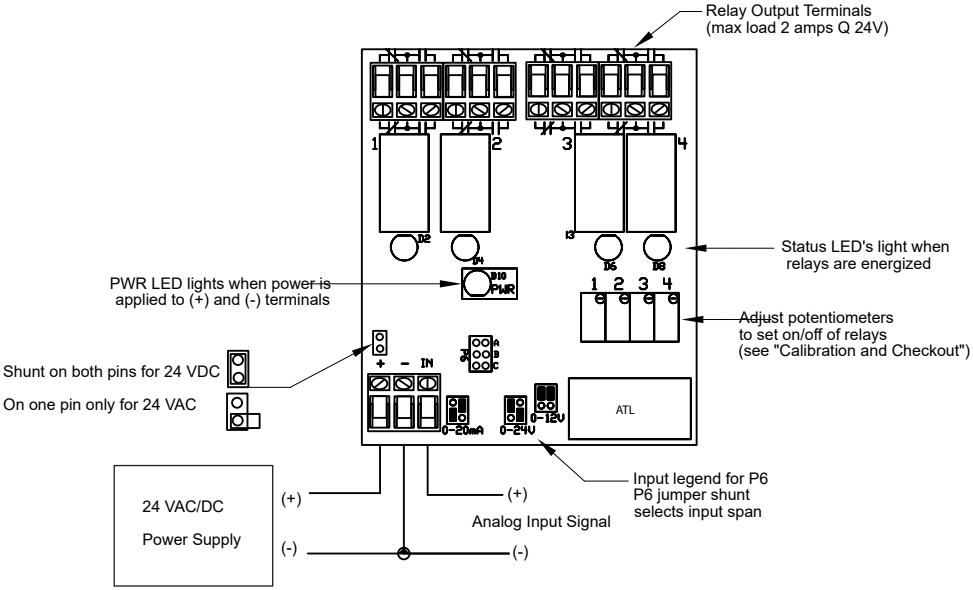
FIGURE 2: WIRING



CALIBRATION

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.

Turn all trim pots clockwise (minimum value) for making relay. You may 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.

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PRODUCT SPECIFICATIONS

NON-SPECIFIC INFORMATION	
Supply Voltage:	24 VAC (+/- 10%), 50/60 Hz or 22-28 VDC
Supply Current:	180 mA maximum
Input Voltage Signal Range (@ Impedance):	0 to 12 VDC @ 10MΩ, 0 to 24 VDC @ 20,000Ω
Input Current Signal Range (@ Impedance):	0-20 mA @ 500Ω
Deadband (0-12 VDC Signal):	3% Version (Standard): 0.33 VDC | 10% Version: 1.0 VDC | 1% Version: 0.1 VDC
Deadband (0-24 VDC Signal):	3% Version (Standard): 0.66 VDC | 10% Version: 2.0 VDC | 1% Version: 0.2 VDC
Deadband (0-20 mA Signal):	3% Version (Standard): 0.66 mA | 10% Version: 2.0 mA | 1% Version: 0.2 mA
Digital Output Type:	Four SPDT Form "C" Relays
Relay Contact Rating:	2A @ 24 VDC, 0.5A @ 240 VAC
Relay Electrical Life:	100,000 operation @ 1A
Relay Mechanical Life:	10,000,000 operations
Connections:	45° Captive screw Terminal Blocks
Wire Size:	12 (3.31 mm²) to 22 AWG (0.33 mm²)
Terminal Block Torque Rating:	0.5 Nm (Minimum); 0.6 Nm (Maximum)
Operating Temperature Range:	35 to 120°F (1.7 to 48.9°C)
Operating Humidity Range:	10 to 95% non-condensing
Storage Temperature:	-20 to 150°F (-28.9 to 65.5°C)
Snaptrack Material:	Polyvinyl Chloride (PVC)
Snaptrack Flammability Rating:	UL94 V-0
Product Dimensions:	(L) 2.75" (W) 3.25" (H) 1.00" (69.85 x 82.55 x 25.4 mm)
Product Weight:	0.25 lbs. (0.113 Kg)
Agency Approvals:	RoHS2, WEEE

WARRANTY

The ATL Series is covered by ACI's Two (2) Year Limited Warranty, which is located in the front of ACI'S SENSORS & TRANSMITTERS CATALOG or can be found on ACI's website: www.workaci.com.

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NOTES

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