

ACTUONIX - LAC DRIVE BOARD

LAC
 Control board

- Designed for Actuonix 'P' actuators
- PC software via USB connection
- RC servo compatible
- 6 to 24V dc actuators



PRODUCT DESCRIPTION

The Linear Actuator Control Board is a stand-alone, closed-loop control board specifically designed for Actuonix P-series micro linear actuators. The LAC simplifies designs by saving the development time, cost and processor overhead associated with direct motor control. As little as 1 digital or analog output is required for position control. Supported input signals include USB, voltage, current, RC servo and PWM. On-board adjustment of speed, sensitivity and stroke limits are available.

This linear actuator controller can be operated as both an interface board or as a stand alone controller with the addition of an external potentiometer and power supply. Each LAC board controls 1 linear actuator and will require an external power supply rated for the actuator.

The LAC is compatible with all P-series micro linear actuator on this site. A 6 volt or 12 volt power supply is required for operation.

TECHNICAL DATA

Duty cycle	20 %
IP class	IP00
Temperature operational max	50 °C
Temperature operational min	-10 °C

External Connections Detail

X1 PG12 actuator connector

5-pin, 2mm-Pitch DPC connector

X2 L12-P/L16-P/P16-P/P16-P actuator connector

Pin Function

- 1 Potentiometer Reference Negative (yellow)
- 2 Motor Terminal (black)
- 3 Motor Terminal (red)
- 4 Potentiometer Feedback (purple)
- 5 Potentiometer Reference Positive (orange)

X3 Radio control receiver connector

Pin Function

- 1 Ground (black)
- 2 Power (red)
- 3 Control (white)

X4 Large actuator connector

Pin Function

- 1 Potentiometer Reference Positive (white)
- 2 Potentiometer Feedback (purple)
- 3 Motor Terminal (red)
- 4 Motor Terminal (black)
- 5 Potentiometer Reference Negative (blue)

NOTE: If the actuator moves to one end then stops, swap pins 3 and 4 to change the motor direction.

X5 Universal Serial Bus (Male Mini-B)

Pin Function

- 1 AVE
- 2 Data
- 3 Data
- 4 AVE
- 5 Ground

X6 Control interface

Pin Function

- 1 Ground
- 2 0-24 VDC Power
- 3 RC / Potentiometer input signal
- 4 Current input signal (0-20 mA)
- 5 Voltage input signal (0-1.1 V) or 1 kHz PWM

P1 Speed Control

Set maximum actuator speed

Pin Function

- 1 CW
- 2 CCW

P2 Limits Controls

Left Potentiometer controls Retract Limit

Pin Function

- 1 CW
- 2 Maximum Stroke

Right Potentiometer controls Extend Limit

Pin Function

- 1 CW
- 2 Maximum Stroke

P3 Sensitivity adjustment

Smaller dead-band

Pin Function

- 1 CCW
- 2 Larger dead-band



Connector Pins numbered from Top to Bottom or Left to Right