

ACTUONIX - LAC DRIVE BOARD

LAC
Control board

- Designed for Actuatorix '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 Actuatorix 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 P012 actuator connector

5 pin, 1 mm Pitch JPC connector

X2 L12-P/L16-P/P16-P/T16-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 in one end then stops, swap pins 3 and 4 to change the motor direction.

X5 Universal Serial Bus (Male Mini-B)

- Pin Function
- 1 NC
 - 2 Data
 - 3 Data
 - 4 NC
 - 5 Ground

X6 Control interface

- Pin Function
- 1 Ground
 - 2 0-24 VDC Power
 - 3 RC / Hobby Servo Input signal
 - 4 Current Input signal (0-20 mA)
 - 5 Voltage Input signal (0-3.3 V) or 1 kHz PWM

P1 Speed Control

Set maximum actuator speed

SW Potentiometer

SDW Onboard

P2 Limit Controls

Left Potentiometer controls Retract Limit

SW Maximum Stroke

Right Potentiometer controls Extend Limit

SW Maximum Stroke

P3 Sensitivity adjustment

SW Smaller dead band

SDW Larger dead band



Connector Pin numbers (from Top to Bottom or Left to Right)