

## MC102L / MC102H ACTUATOR MOTOR CONTROLLER



The MC102 electric actuator controller is used with most of our 12VDC electric rod-type and rack & pinion linear actuators to simplify direction control and provide current (force) limiting. It is also used as a control for other 12V motor applications requiring maximum torque settings. Set-up, adjustment, and user configuration are simple. The MC102 saves time and money over expensive controls for simple DC actuator/motor applications.

- Single or two-button selectable- Allows user to select a momentary SPST input, two separate switches, or a SPDT/DPDT switch input. Inputs are switch closure only. Do not apply power to switch inputs.
- User selectable maintained (toggle) or momentary modes- Allows a short momentary input for continuous travel, or choose to hold the input on for motion- selectable by jumper.
- Independent current settings via sensitive 12-turn potentiometers for adjustment of maximum force in each direction. When a preset current limit is reached, the actuator will stop and await the next signal.
- Automatic motor reversing- Once a current limit is reached or another input is received (button pressed again), the motor will stop. The next input will reverse the actuator or motor direction.
- Dynamic braking- With no power applied or direction selected, motor outputs are grounded together to assist in load holding.
- Control board is potted in an open-frame plastic box with mounting tabs.
- 5.13"L x 2.85"W x 1.24"H (width includes mounting tabs).
- All connections are standard 1/4" male spade terminals.
- May be used to eliminate the need for external limit switches in applications with physical stops.

Model #	Voltage	Current Adjustment Range (amps)	Maximum Current Rating (amps)
MC102L	8.5-14.3 VDC	1-6 A	25A
MC102H	8.5-14.3 VDC	4-25A	25A

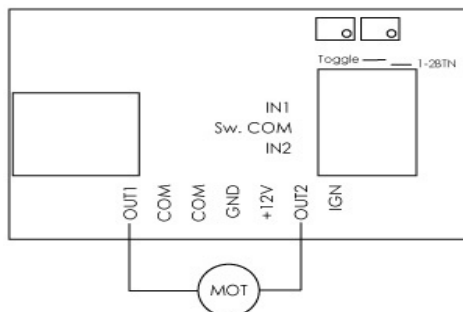
The MC102 motor control may be used in either single-button or two-button modes. Single button mode is standard, and two-button mode is selected by cutting the jumper wire located at 1-2BTN on the circuit board. Both modes can be used with or without the toggle function. Cutting the jumper wire at Toggle on the board disables the toggle function, thus requiring a maintained signal to run the actuator to the desired position. A small flat blade screwdriver is used to adjust the current limit settings in each direction, controlled by the two 12-turn potentiometers on the board (blue).

Single-Button Operation: Controlled by a switch connection between input 'SW.Com' and either 'IN1' or 'IN2'. The motor direction reverses with each press of the switch. +12V on 'IGN' defaults operation to a single motor direction (interlock).

Two-Button Operation: Connecting 'SW.Com' to 'IN2' causes +12V on 'OUT1' and ground remains on terminal 'OUT2'. With terminal 'SW.Com' connected to 'IN1', polarity is reversed. +12V on 'IGN' disables switch input terminal 'IN2' and prevents motor operation in 1 direction (interlock).

Toggle Operation (standard): Toggle mode works with either single or two-button mode. Toggle mode will latch a momentary button press or other input until another button is pressed or a current limit is reached.

- IN1, IN2, SW.Com= switch inputs (no power)
- OUT1, OUT2= motor connections
- GND= ground
- +12V= 12V supply +
- IGN= interlock input
- COM= not used



**Warning:** The MC102 may be used to effectively limit current and control direction in many circuits. It is the responsibility of the user to plan and design for actuator, controller, and/or peripheral equipment failure, and to take necessary precautions to ensure that persons and equipment are not subject to harm in normal operation, as well as in the event of a failure, malfunction, or loss of power.