



mga research corporation

mga

Pneumatic & Power

Life Cycle Controllers

The Only Solution for Durability Testing

Mechanical component Life Cycle testing can be automated with an MGA pneumatic controller. The controller has the ability to monitor force, position, and continuity of any electrical components that may be affected by the continued evaluation of a component.

Pneumatic Life Cycle Controller



- Manual seat adjusters
- IP and center console closure testing
- Door, hood, and lift gate slam
- Open loop repetitive loading such as knee load
- Single load strength or deflection measurements

MGA power controller to monitor the current, position, and continuity of test articles. The system also has the ability to send pulse modulated signals to interface to heater and vent controls to simulate different vehicle power level settings.

Power Life Cycle Controller



- Power seat adjuster durability
- Power seat adjuster speed of operation
- Seat heaters and vents
- Power lift gates
- Window regulators
- DC powered actuators for single load strength or deflection measurements

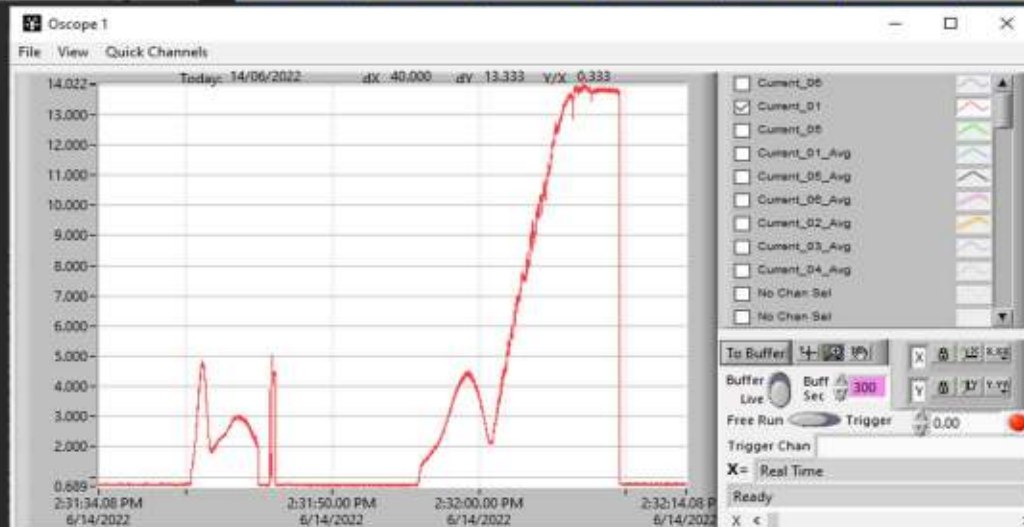
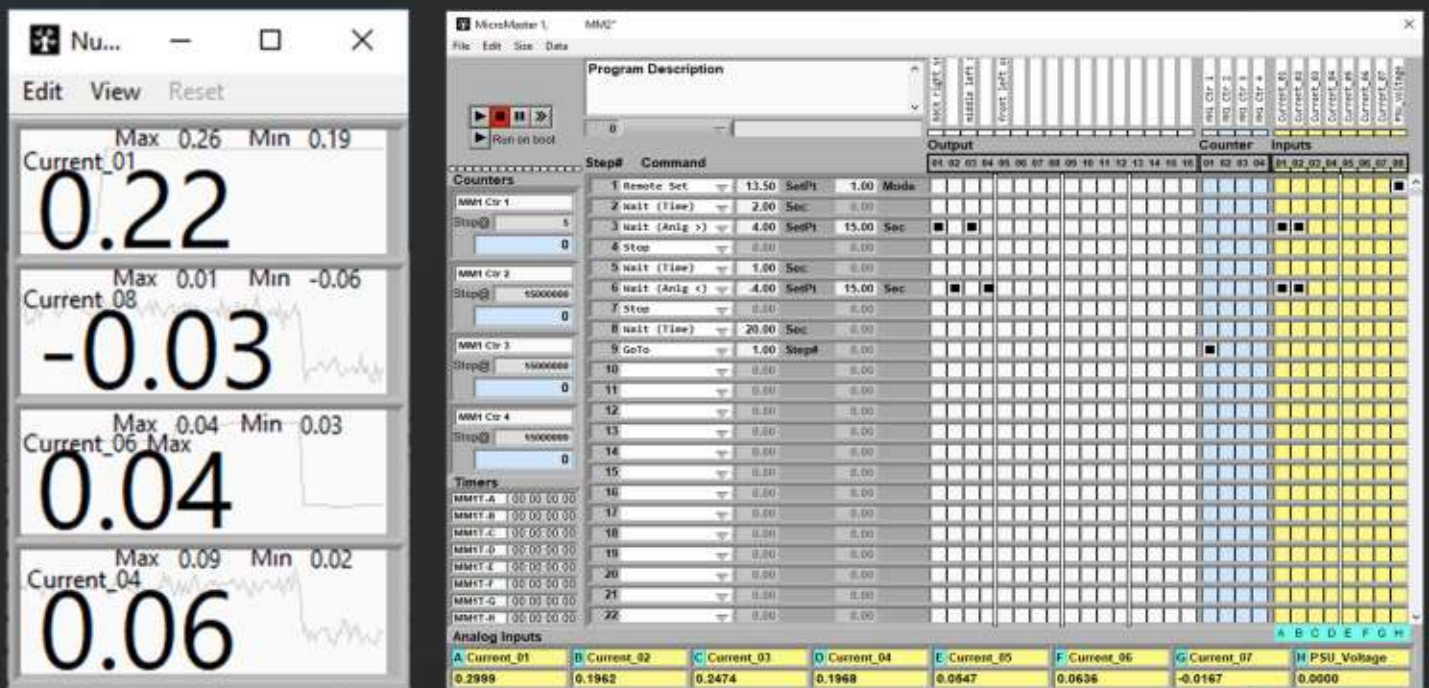
Our Controllers

MGA Research Corporation has been the industry leader in automotive safety test services and equipment for over 45 years. Our controllers are used throughout the MGA network of tests facilities for a variety of components including doors, windows, seats, and interior cockpit assemblies. Our robust designs used extensively throughout our lab network allows for an easy to use, all-inclusive solution capable of controlling continuous automatic operation over multiple days.

Features	Pneumatic	Power
Data acquisition inputs for limits set by current or a displacement read from LVDT, string pot, or laser.	✓	✓
8 outputs allow forward/reverse control of motors.		✓
24 inputs to be used for limit switches or proximity sensors.	✓	✓
8 load cell inputs	✓	
8 inputs for automated continuity checking	✓	✓
4 AUX inputs that will accept any -10 to 10-volt sensor	✓	✓
BNC outputs allow easy measurement of voltage and current		✓
Controllable line resistance on 4 outputs		✓
1 non-switched DC output 20 amps max		✓
8 double sided pneumatic outputs for 16 total outputs	✓	
E-stop to cease test operation	✓	✓
Battery Back up	✓	✓

MGA's Power and Pneumatic Life Cycle controllers use Micromaster software provided by inkeeper LLC. Each controller has specific options based on desired controls and data acquisition, as necessary. Micromaster allows up to four independently programmable test setups, each with its own live readouts and data acquisition for a variety of sensors.

Micromaster



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