

# **ELECTRIC ACTUATOR FIRMWARE UPDATED TO V1.02**

This product notice is to inform you about a series of significant improvements to our electric actuator, designed to enhance performance, precision, and usability across all operations.

#### IMPROVED CALIBRATION PROCEDURES

You can now manually calibrate the valve, giving you greater control and flexibility during setup and maintenance.

### **ENHANCED MOVEMENT OPTIONS**

Several new features have been created to enhance actuator movement, precision, and safety.

- Both the "Open" and "Close" functions can be set to operate by force or position (default).
- A new auto acceleration feature has been added. When set to Auto acceleration in the menu, the actuator synthesizes
  and optimizes force based on speed.
- Maximum speed is now automatically limited to 100 RPM when operating at 12V, ensuring safe and efficient performance. In the event of a stall during battery operation, the system temporarily reduces speed to a minimum to maximize force during fail-safe movements.

#### REFINED CALIBRATION PARAMETERS

Several refinements have been made to the calibration procedures in order to improve calibration performance.

- Default current has been standardized to 10A even after a factory reset.
- To better mimic normal operational movement, high current startup has been enabled, and acceleration has been refined for the calibration process.
- During calibration, maximum speed during calibration is now limited based on input voltage and capped at 300 RPM regardless of voltage.

#### **DATALOGGING ENHANCEMENTS**

- The datalog header has been corrected to ensure accuracy and consistency.
- More accurate temperature readings in the datalog

#### **UPGRADED DEMO/TEST MODE**

- Users can now toggle the valve for a specified number of cycles, making demonstration and testing easier.
- The cycle count can now be reset directly through the user interface.

## IMPROVED MODBUS COMMUNICATION

Remote calibration has been improved, ensuring smoother timing and more reliable communication.

These updates reflect our ongoing commitment to delivering reliable, intelligent solutions that meet the demands of today's valve control applications. The most recent firmware will be on production units made after 11/04/2025 (SN's after 2253090000). This firmware version can also be downloaded at <a href="https://www.kimray.com/firmware">kimray.com/firmware</a>. Please contact me with any questions.

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