



Heavy Duty Linear Actuator for Residential / Commercial use

Super quiet - Solar ready Large diameter stainless steel output shaft







2 Years Warranty or 100,000 Cycles whichever comes first

# MAX ARM FEATURE LIST:

# MECHANICAL SPECIFICATIONS



- Shipping weight of Actuator: Max Arm (27 lbs)
- Shipping weight of AC Control Box (38 lbs)
- Stainless steel output shaft
- Direct gear drive (no internal chains, belts, or pulleys)
- Mechanical and electrical gate release functions
- Corrosion protection: powder coated aluminum housing
- High cycles at extreme temperature ranges. No overheating
- Intelligent ramp-up and ramp-down for smooth gate operation

### ELECTRICAL SPECIFICATIONS

- 24 Volt DC motor
- Two independently adjustable closing speed controls with 16 positions each
- Switchable 115/230 voltage selection
- S Adaptive DSP motor control for advanced motion control
- Real time performance analyzer and event log (OBD PORT and Black Box)
- Magic Box enables low voltage wiring capabilities for remote power up to 1000 ft
- On-board switch for solar mode enables 18 milliamp idle in sleep mode
- Gold contact input connections and automobile grade connectors
- -4F to 165F (-20C to +74C) operational range including battery backup without a heater

🛇 Unique to Max Arm

- Robust lightning protection, up to 20KVolts and 10KAmps on all inputs and outputs (35 channels) including loop detector input connections
- Two selectable 16 position safety obstruction sensors, auto adaptable to gate weight and size, for independent control of open and close cycles
- 🤣 Independent closing speeds for primary and secondary
- Dual motor overcurrent safety shut off for additional protection
- Two 7amp hour batteries provides 500 cycles in case of power failure with three modes of battery backup, open once, leave open or leave closed
- On-board three button station
- On-board UL reset button

### SECURITY SPECIFICATIONS

- High traffic intuitive loop management system for exceptional security
- Advanced security features with built-in audible and remote alarms
- Magnetic lock control relay outputs with selectable delay times
- Tamper alert relay output triggers "on" if gate is forced open
- Audible alarm if gate is tampered with or ERD is triggered for heightened security
- Steel cover with lock protects against intruders and vandalism
- Gate disable feature disables all inputs with exception of the fire department and Max Open input for increased security
- Built in transaction buffer
- Gate status outputs for gate monitoring
- Key activated jog fuction for emergency OPEN/CLOSE function
- Advanced anti-tailgate feature prevents unwanted intrusion

## SAFETY SPECIFICATIONS

- UL 325/991 compliant Class I, II, III, and IV. CSA approved
- Built in advanced entrapment protection and alarm output
- Built in gate-in-motion alarm for industrial applications



### ASYMMETRIC SPEED CONTROL



For asymmetric installations the two independent closing speeds can be adjusted to achieve a smooth closing sync. Whichever gate closes first, slow it down. This enables the installer to visually sync the closing cycle. This feature is unique to Maximum Control's actuators.







The AC Control Box features rugged metal construction that is gold zinc plated and powder coated. Each AC Control Box comes with an exterior UL reset button, a convenient jog key switch for emergency access or egress, a 10 amp power supply with two 115 VAC accessory outlets, two 7 amp hour batteries conveniently located behind the control panel, a loop rack and much more. A lockable steel cover finishes off this handsome design.

A convenient LCD display keeps you informed. Functional data and error messages are visible when an accessory failure or function is present. This makes troubleshooting and fuction monitoring a breeze.

These many features can be explored in our downloadable installation manual available on **max.us.com** 

### CONTROL FEATURES AND CONNECTIONS



- 1. Battery backup mode switch
- 2. Battery test switch
- 3. ERD Sensitivity
- 4. OBD Port
- 5. DIP Switches
- 6. Program Button
- 7. Loop Status

- 8. Solar Mode Application
- 9. Motion Control Buttons
- 10. Maglock Delay
- 11. LCD Display
- 12. Close Timer Switch
- 13. Jog Open/Close
- 14. Closing gate speed



- 1. Battery Input
- 2. Power/Solar Input
- 3. Module Port
- 4. Reset

- 5. UL Alarm
- 6. ID Plug
- 7. Loop Rack Input
- 8. 12vdc & 24vdc limited current power output

### MAX SOLAR CONTROL BOX



### Select proper solar panel

SWING, ACTUATOR										
ACT	UATOR	GATE SOLAR CYCLES PER DAY								
		(6 Hr	<b>ZONE 1</b> (6 Hrs Sunlight/Day)		ZONE 2 (4 Hrs Sunlight/Day)		<b>ZONE 3</b> (2 Hrs Sunlight/Day)			
PANEL SIZE	Total System Current Draw (mA)		18Ah batteries			18Ah batteries			18Ah batteries	
60 W	26		442.74			438.58			338.38	
	50		408.16			400.16			296.12	
	100		336.13			320.13			208.08	
	200		192.08			160.06			32.01	
	250		120.05			80.03			-56.02	
85 W	26		442.74			438.58			434.41	
	50		408.16			400.16			392.16	
	100		336.13			320.13			304.12	
	200		192.08			160.06			128.05	
	250		120.05			80.03			40.02	
120 W	26		442.74			438.58			434.41	
	50		408.16			400.16			392.16	
	100		336.13			320.13			304.12	
	200		192.08			160.06			128.05	
	250		120.05			80.03			40.02	
200 W	26		442.74			438.58			434.41	
	50		408.16			400.16			392.16	
	100		336.13			320.13			304.12	
	200		192.08			160.06			128.05	
	250		120.05			80.03			40.02	



The map and daily cycle rate shown are approximations based upon the average solar radiation and the temperature effects on batteries in the given regions. Local geography and weather conditions may require additional solar panels.

USE LOW POWER accessories in order to minimize power draw. Each additional accessory draws power affecting the daily cycle rate.



The Max Arm offers the most robust lightning protection available in the industry. The Max Arm protects all peripheral inputs, loop inputs, power inputs, relay outputs, and all communication lines (over 35 channels of protection) in 1/1,000,000,000 of a second. With special emphasis on power supply protection, the Max Arm is guaranteed to withstand any lightning hit more than 50 feet away. Truly protected like no other operator in the world.



# Maximum Controls LLC Warranty and Return Policy

#### Section I Coverage

- a. 2 years or 100,000 cycles whichever comes first on components
- b. 1 Year on batteries

#### Section II Not Covered

- a. Damages due to flooding
- b. Damages due to fire
- c. Damages due to negligence i.e. leaving the cover off in the rain, improper wiring of AC or peripheral systems
- d. Damages due to product misuse i.e. gate and operator combination mismatch
- e. Damages due to vandalism

#### Section III RMA Shipping Policy

- a. Maximum Controls LLC will pay for return shipping via standard ground UPS or USPS FOB CA on all RMA's within one year of Distributor's purchase
- b. Any form of "Expedited Shipping" on any RMA will be paid by Distributor

#### Section IV Product Returns

- a. Products must be in original, resalable condition with all warranty information, manuals, and original packaging.
- b. A re-stock fee of 10% will be charged on all returned products.
- c. All returned products must reference a Maximum Controls RMA number or it will be refused.
- d. Maximum Controls is not responsible for freight charges associated with returned merchandise.



#### www.Max.US.com



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#### Maximum Controls LLC 949.699.0220

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