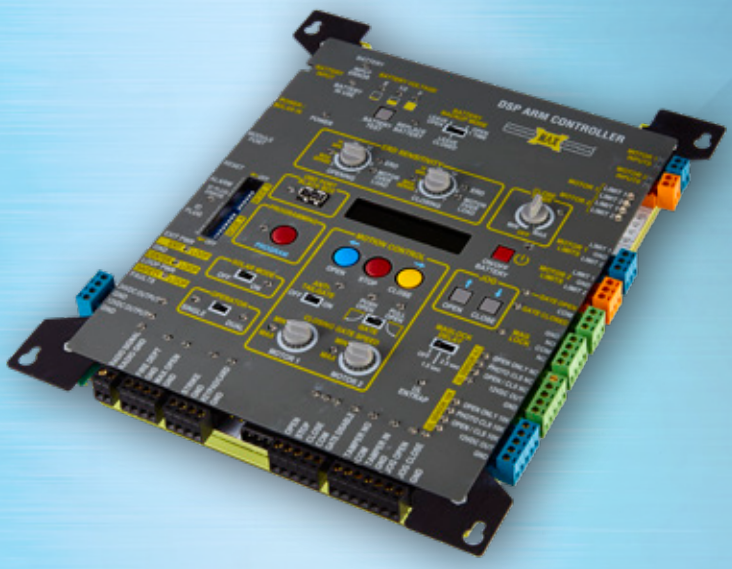
MAXIMUM MAX CONTROLS

MAX SUPER ARM 2300

Heavy Duty Commercial Linear Gate Operator

Moves heavy gates up to 20′
High traffic high wind
Self-locking, Mag Lock unnecessary
Overload clutch release on 3 ton impact



MAX AC CONTROL BOX

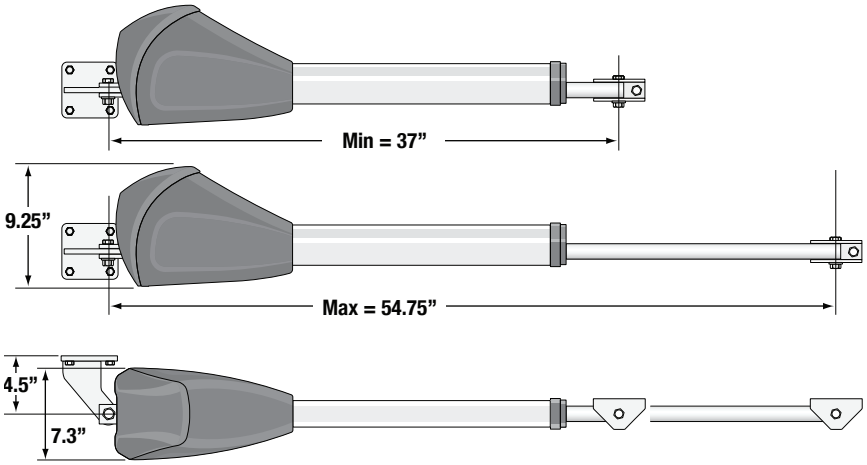
DSP Control

2 Years Warranty
or 100,000 Cycles
whichever comes first

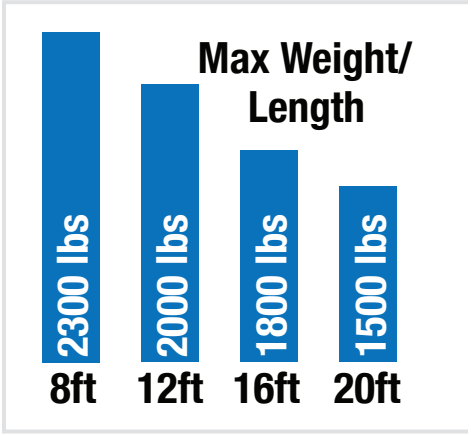
ETL LISTED
C US
UL 325/991 Compliant
UL 2018 THE NEW STANDARD

MAX SUPER ARM 2300 FEATURE LIST:

MECHANICAL SPECIFICATIONS



Gate Capacity



- Shipping weight of Actuator: Super Arm (35 lbs)
- Shipping weight of AC Control Box (38 lbs)
- ✔ The patented brake system allows the operator to retract with extreme force. When the force exceeds 3 tons, the clutch releases upon impact then automatically resets. Causes for clutch release include a vehicle strike while the gate is in motion.
- Stainless steel output shaft
- Direct gear drive (no internal chains, belts, or pulleys)
- Mechanical and electrical gate release functions
- Corrosion protection: gold zinc and 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
- ✔ 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 Super Arm 2300**

- 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

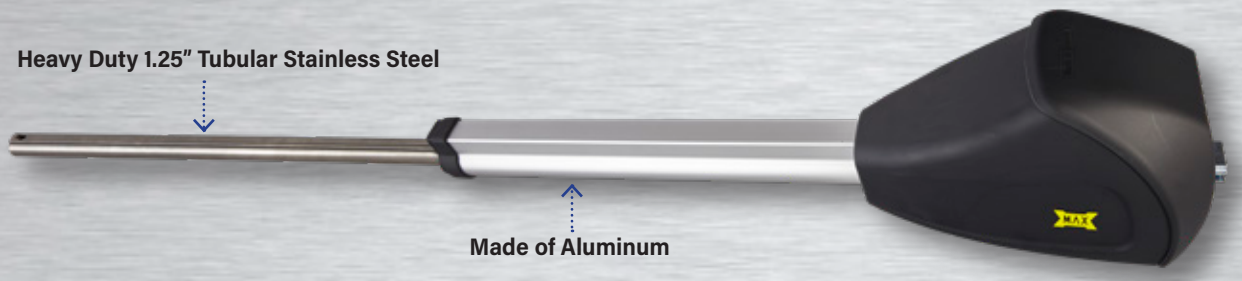
SECURITY SPECIFICATIONS

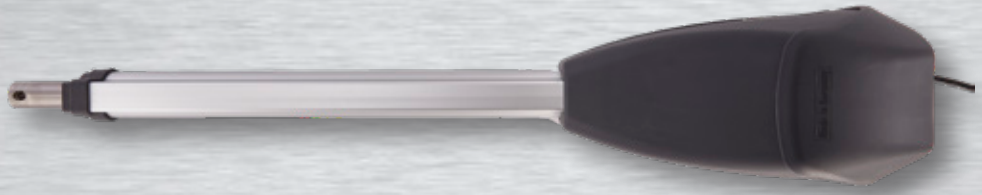
- High traffic intuitive loop management system for exceptional security
- Advanced security features with built-in audible and remote alarms
- Magnetic lock control relay outputs with selectable delay times
- Tamper alert relay output triggers “on” if gate is forced open
- Audible alarm if gate is tampered 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
- Vehicle hit protection technology protects the gate operator from collision damage caused by automobile impact, avoiding costly repairs
- Built in advanced entrapment protection and alarm output
- Built in gate-in-motion alarm for industrial applications

= Unique to Max Super Arm 2300





The Max Super Arm 2300 has a solid stainless steel output shaft and key lock for mechanical release. For emergency release unlock the key and lift up the hood. To engage the actuator, push down the hood and lock to resume automatic operation.

SUPER ARM 2300 MECHANICAL RELEASE AND MOUNTING BRACKETS

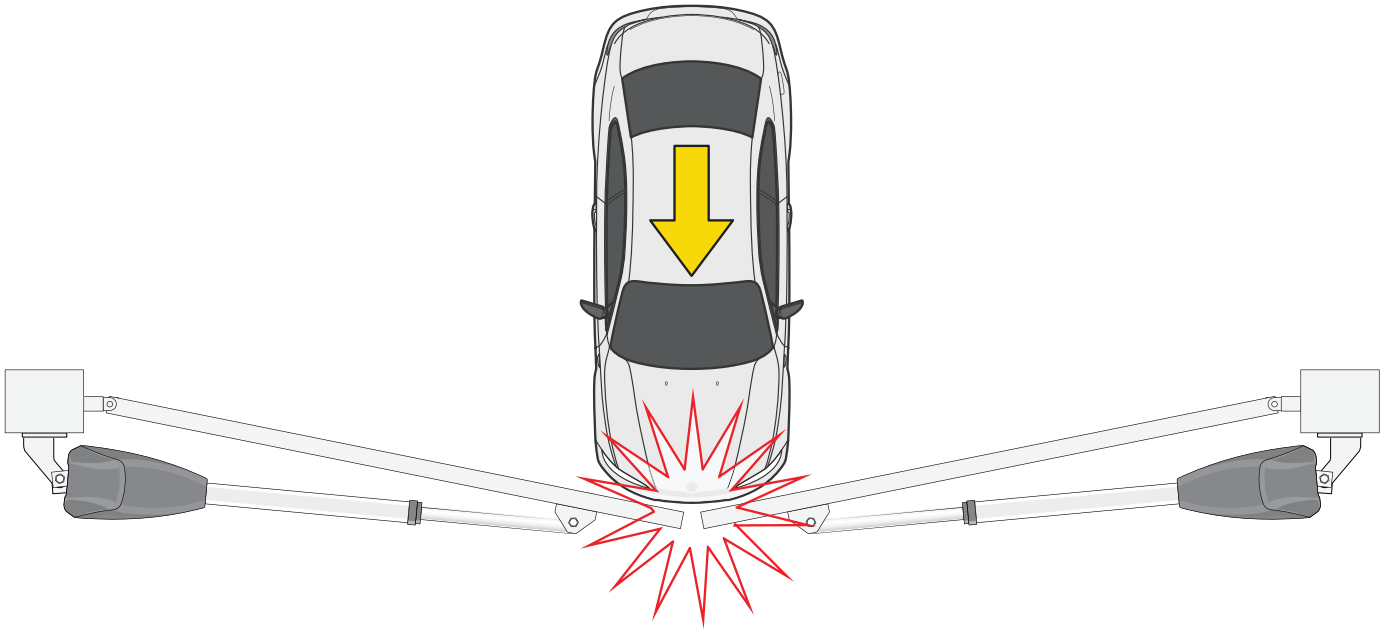
Front Bracket

Rear Bracket

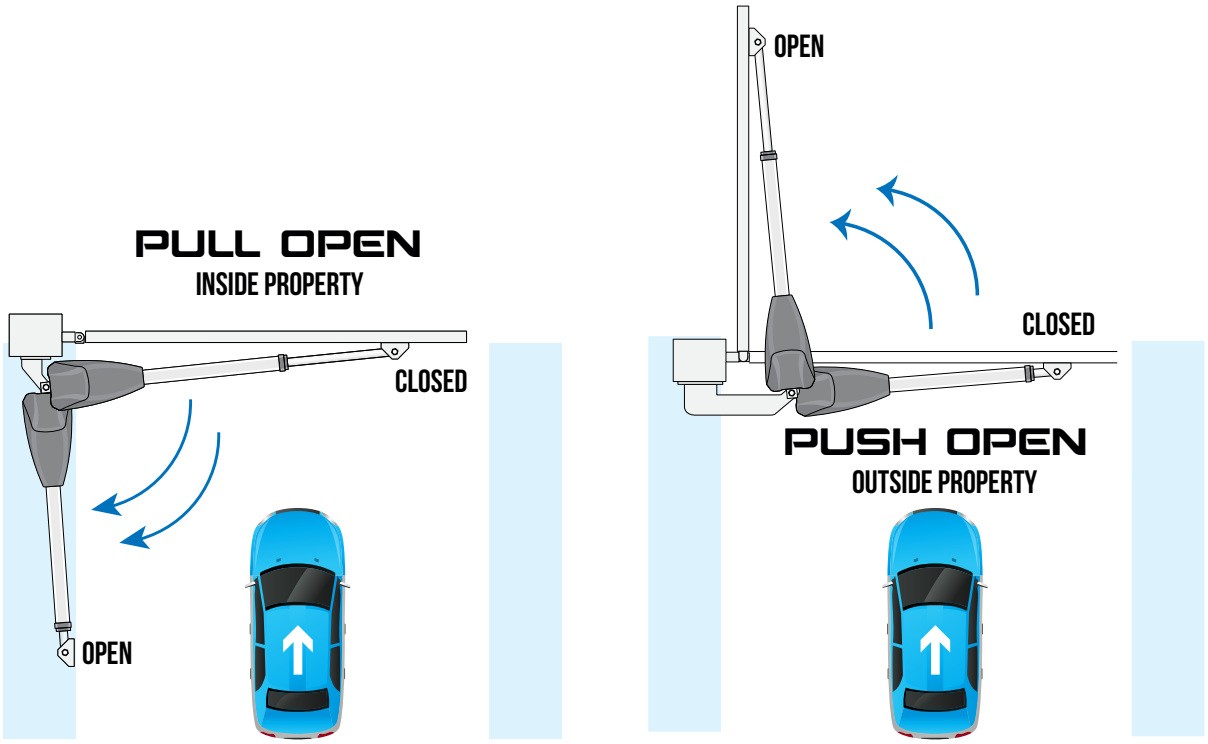
The **Max Super Arm 2300** ships with a heavy duty half inch stock rear bracket that is broached and welded. Both brackets front and rear, are silver zinc plated.

Vehicle Hit Protection

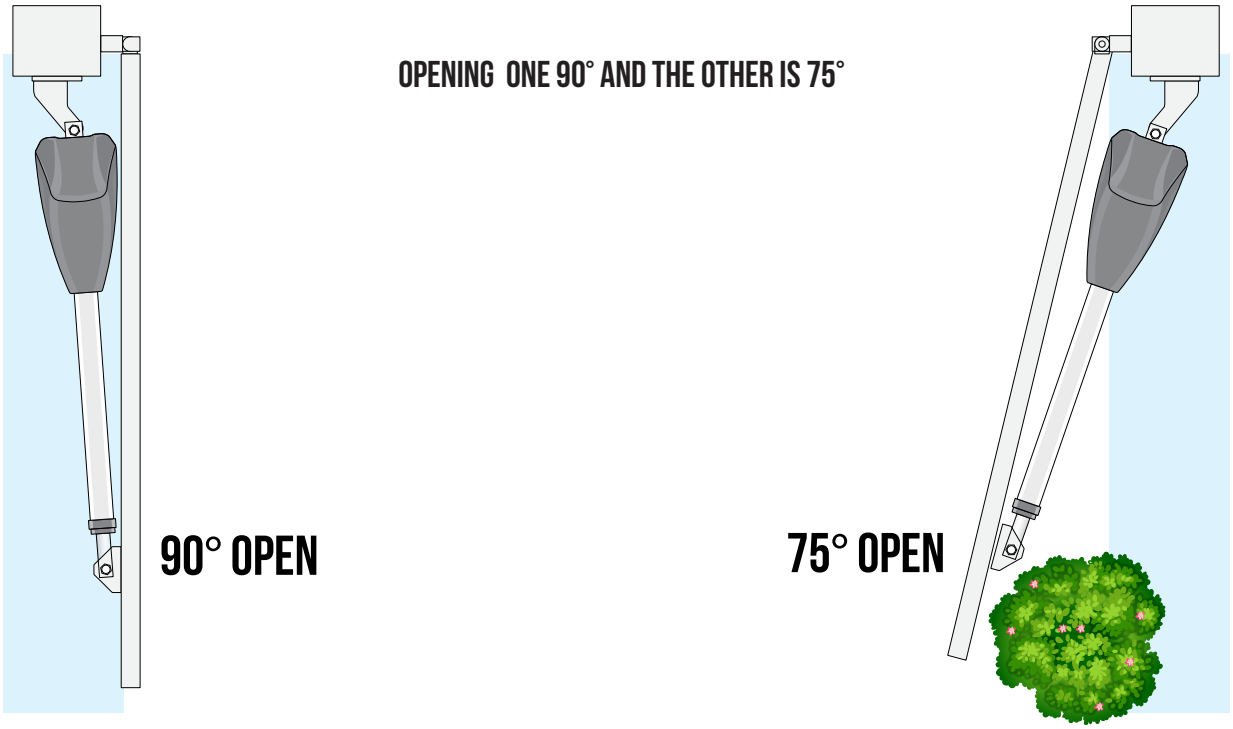
Maximum Controls recognizes swing gates are more prone to vehicular collisions. For this reason the Max Super Arm 2300 will collapse on impact when struck by vehicular traffic. When a vehicle hits a moving gate, to avoid damage to the actuators, the clutch releases, then they reset automatically.



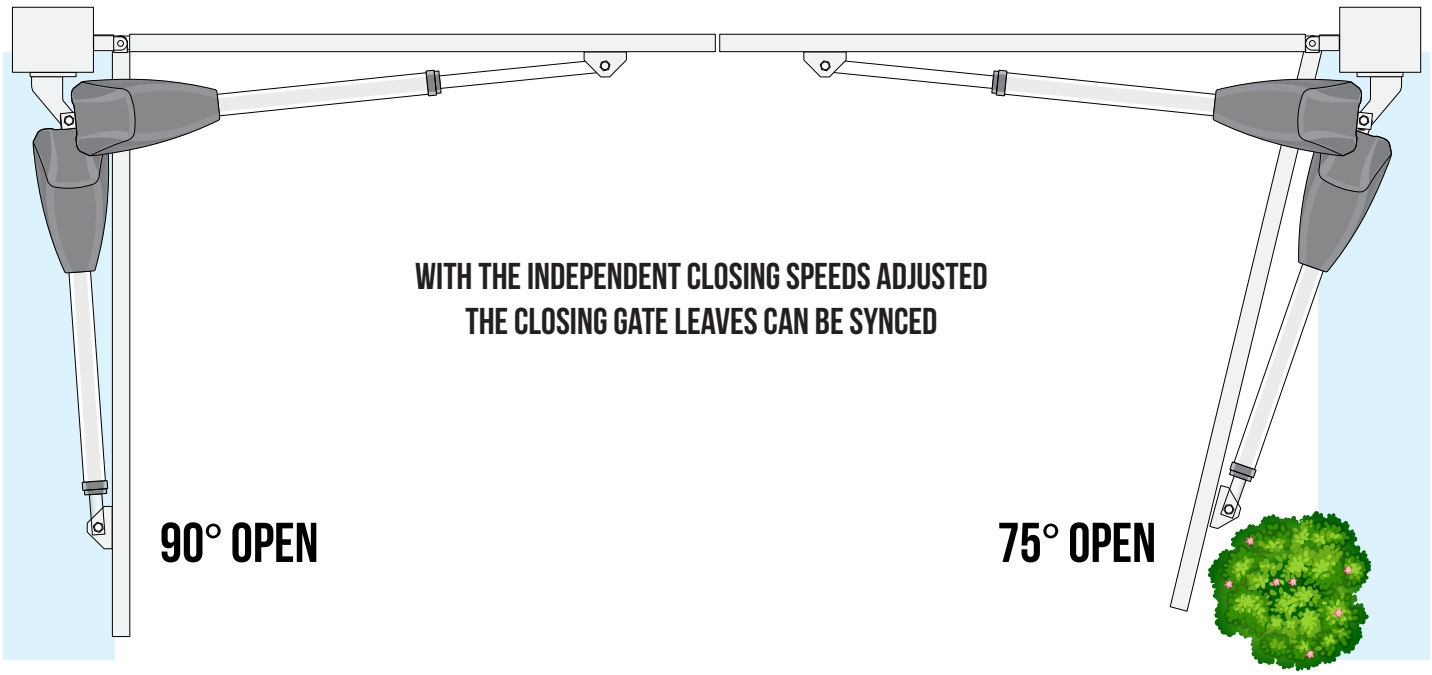
Two Installation Options



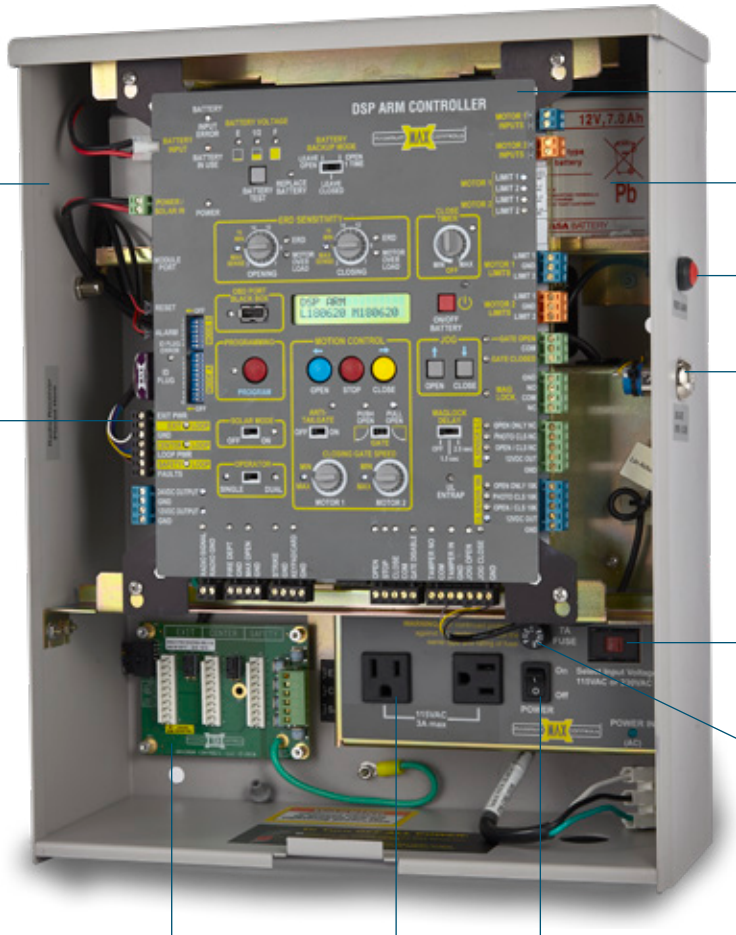
ASYMMETRIC SPEED CONTROL



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.



AC CONTROL BOX



Steel housing
Two layers of protection
Gold zinc
Electrostatic powder coating

Gold plated automobile connectors throughout the system

Control Panel

Two 12V 7 Agm Batteries

UL Reset Button

Jog Open/Close
Key Switch for emergency access to property

Selectable Switch
115V or 230V AC

7 A
Fuse

Loop Rack
safety loop
center loop
exit loop

Two plugin power outlets

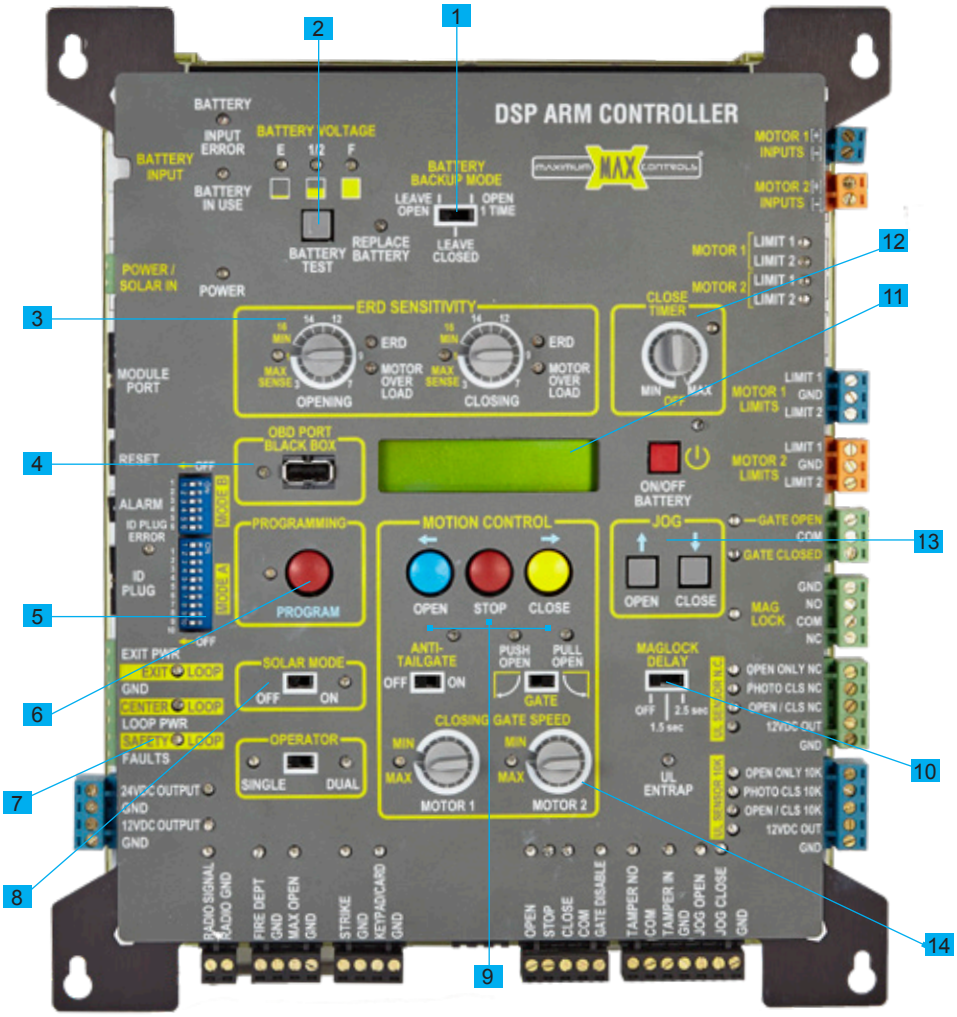
ON and OFF
Power Supply
Switch

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.

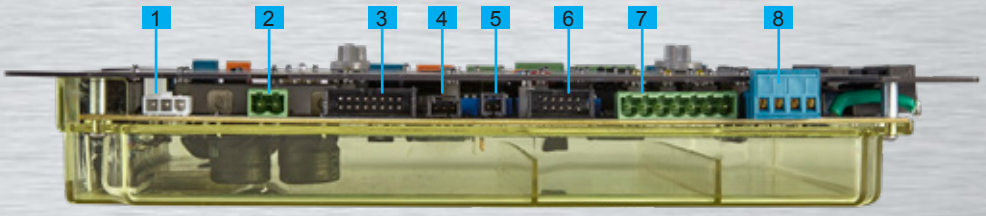
A convenient LCD display keeps you informed. Functional data and error messages are visible when an accessory failure or function is present. This makes troubleshooting and fuction monitoring a breeze.

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

CONTROL FEATURES AND CONNECTIONS

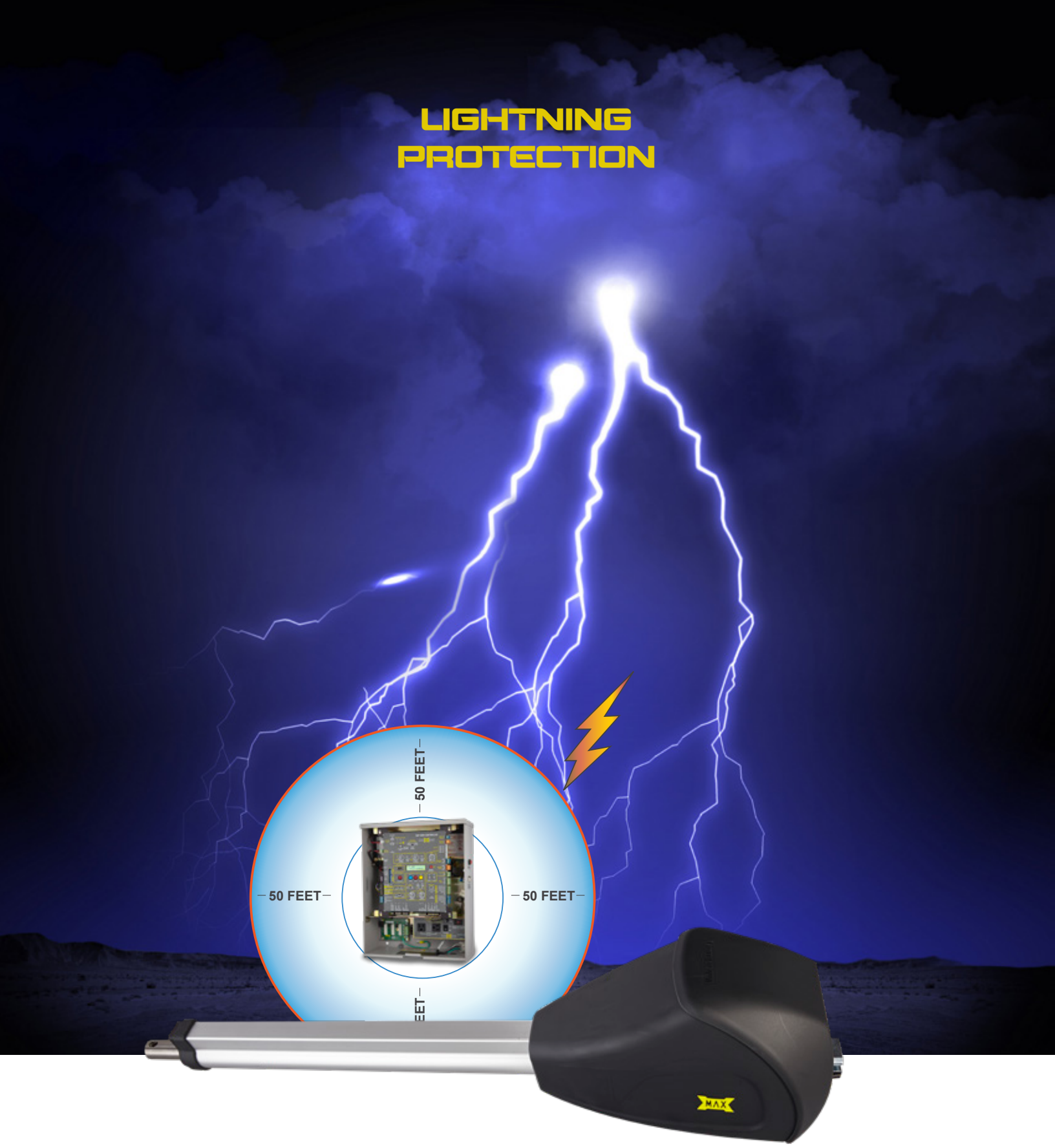


1. Battery backup mode switch
2. Battery test switch
3. ERD Sensitivity
4. OBD Port
5. DIP Switches
6. Program Button
7. Loop Status
8. Solar Mode Application
9. Motion Control Buttons
10. Maglock Delay
11. LCD Display
12. Close Timer Switch
13. Jog Open/Close
14. Closing gate speed



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**

LIGHTNING PROTECTION



The Max Super Arm 2300 offers the most robust lightning protection available in the industry. The Super 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 Super arm 2300 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

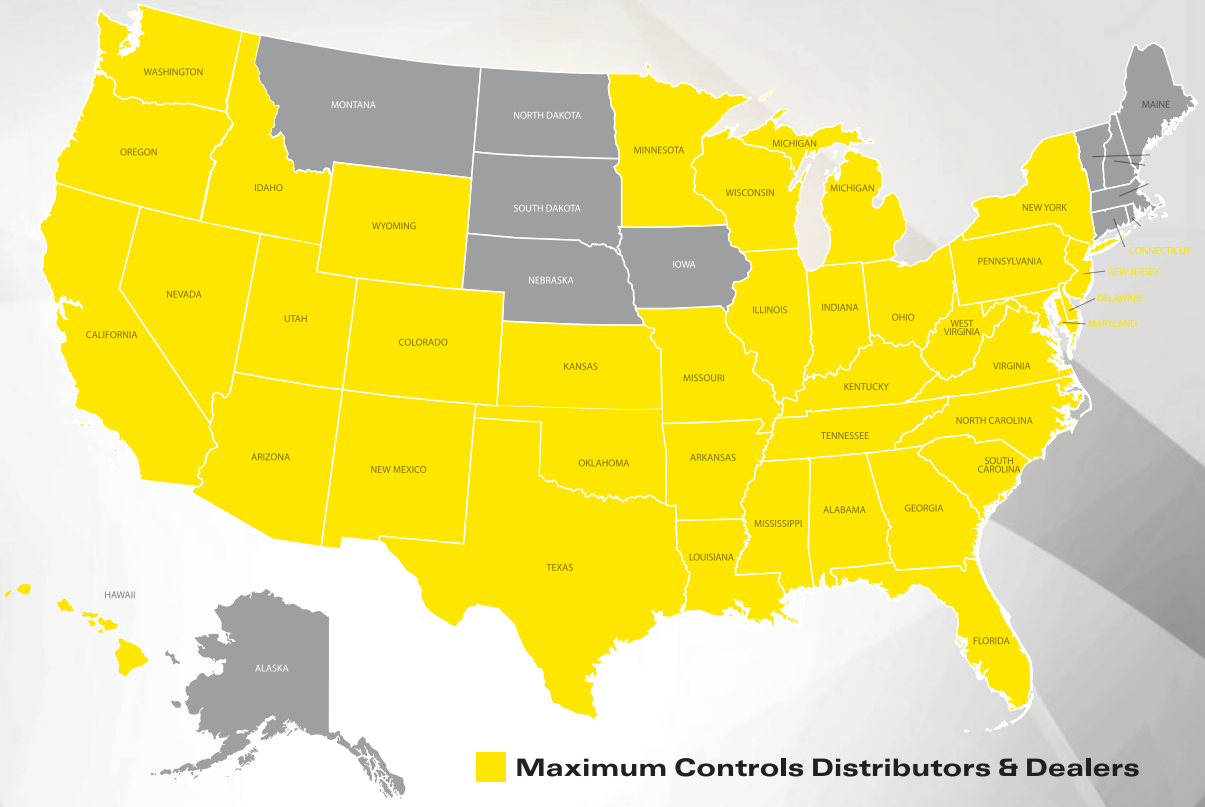
Section III RMA Shipping Policy

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



AC CONTROL BOX

DSP Control

MADE IN USA

MAX SUPER ARM 2300

MADE IN GERMANY

October 5th, 2018

Maximum Controls LLC
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10530 Lawson River Ave.
Fountain Valley CA 92708
USA

Independent Dealer or Distributor