

DSP Arm Controller Control Box

SETTINGS

Overview



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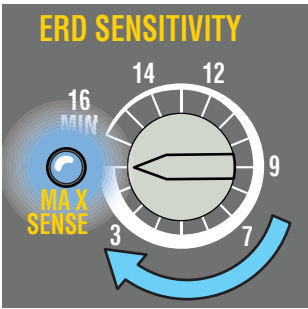
DIP-Switches

MODE B Switches	1	Open Relay Pulsed	OFF	Open Relay ON when gate open
			ON	Open Relay Pulsed when gate open
	2	Secondary Opposite Direction	OFF	Secondary moves same as primary
			ON	Secondary moves opposite of primary
	3	Lock on Close	OFF	Stop at close limit switch (see page 33)
			ON	Stop on overload condition after seeing close limit switch
MODE A Switches	4 & 5	Select Gate Length	5-OFF 4-OFF	Gate < 7 FT
			5-OFF 4-ON	7 FT < Gate < 10 ft
			5-ON 4-OFF	10 FT < Gate < 13 ft
			5-ON 4-ON	Gate > 13 FT
				Short Gate < 7 FT - shorter ramp down
				Long Gate > 10 FT - longer ramp down
	6	Choose Actuator Type	OFF	MAX Super arm
			ON	MAX Arm
				REQUIRED SETTING
	1	Battery Beep Mode	OFF	No beeping when ONLY battery power and gate is in motion.
			ON	Beeping when ONLY battery power and gate is in motion.
	2	Gate in Motion Alert	OFF	No alarm while gate in motion
			ON	Alarm while gate in motion
	3	Strobe Light Relay Control	ON	Tamper Relay NO/C Triggered while gate in motion for strobe light control.
	4	Quick-Close	OFF	No quick-close
			ON	Quick-close ON
	5	Close Tamper Detect	OFF	No Close Tamper Detect
			ON	Trigger Tamper Relay (alarm for slider only)
	6	Stop Input Polarity	OFF	Stop Input NO-connect to GND to activate
			ON	Stop Input NC-disconnect from GND to activate
	7	Open Relay Polarity	OFF	Open Relay CLOSED when gate is open
			ON	Open relay OPEN when gate is open
	8	Solenoid Control Relay	OFF	For Maglock: Mag lock relay will trigger BEFORE closed limit is reached
			ON	For Solenoid: Mag lock relay will trigger AFTER closed limit is reached
	9	UL Closing Photo ON PHOTO CLS NC Anti-tailgate	OFF	UL Closing Photo anti-tailgate OFF
			ON	UL Closing Photo anti-tailgate ON
	10	Reserved	OFF	MUST be OFF
			ON	DO NOT turn ON

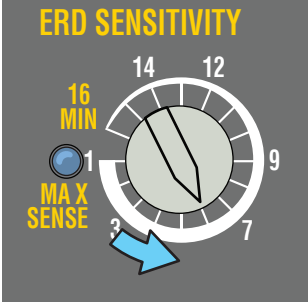
ERD Sensitivity Setting

IMPORTANT: Adjust the ERD to avoid injury as well as to minimize vehicle damage.

- 16 sensitivity setting positions for EACH direction.
- NO mechanical hard stops for knobs.



A. Turn knob until blue LED lights up. Maximum sensitivity reached, Position 1 - Too sensitive for most gates.



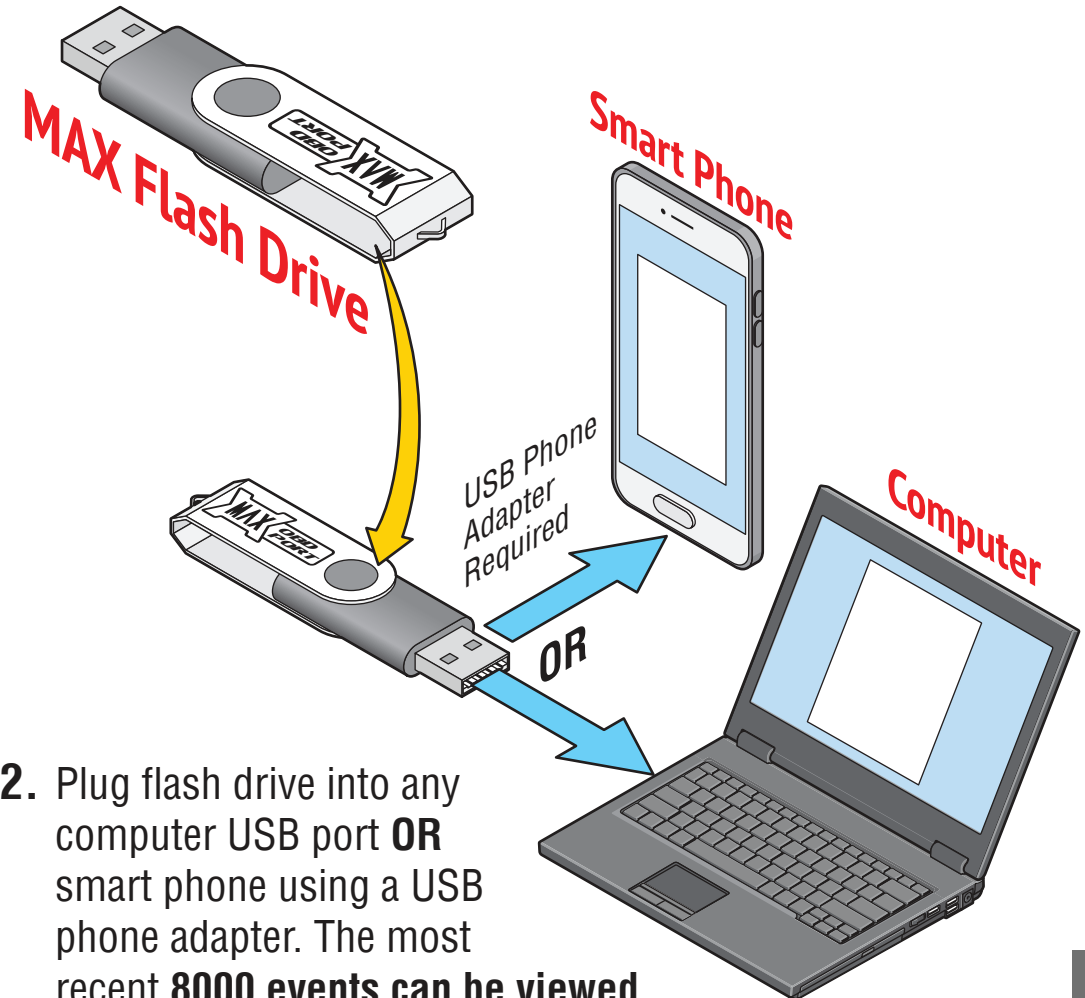
B. Turn knob counter-clockwise to reduce gate sensitivity while testing ERD until desired results is attained. (LED remains OFF for all but position 1)

If alarm sounds while adjusting ERD, press STOP BUTTON to shut-off alarm.

NOTE: Cycle the gate 3 or 4 times to make sure that the ERD sensor does not falsely trigger.

ODB Port Black Box

- Plug MAX USB flash drive into OBD port on circuit board. OBD LED will flash while file is downloading. Remove flash drive after LED stops flashing (up to 5 minutes to download).



- Plug flash drive into any computer USB port OR smart phone using a USB phone adapter. The most recent 8000 events can be viewed. No special software required.

Anti-Tailgate

Turned OFF - Close timer will close the gate at its selected time.

Turned ON - (In-ground loops required) Gate will close after all the in-ground loops have been cleared no matter how long the close timer is set for. When an in-ground safety loop gets activated during the close cycle, gate will PAUSE and NOT reopen. When loop is cleared, gate will continue to close preventing UNAUTHORIZED entry.

Solar Mode

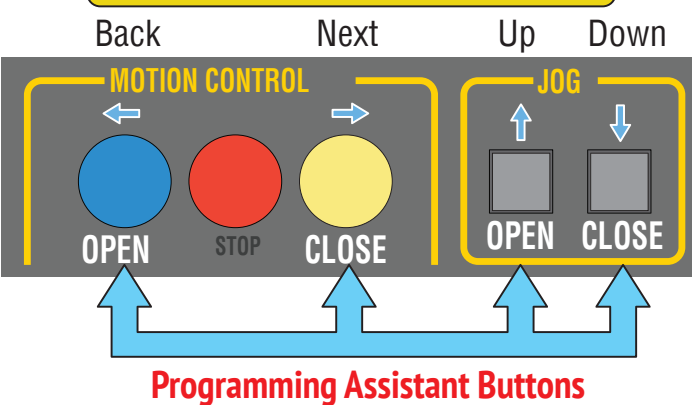
Turned OFF - AC input Power ONLY.

Turned ON - Solar panels installed. Unit draws min power to extend battery life.

Program Button

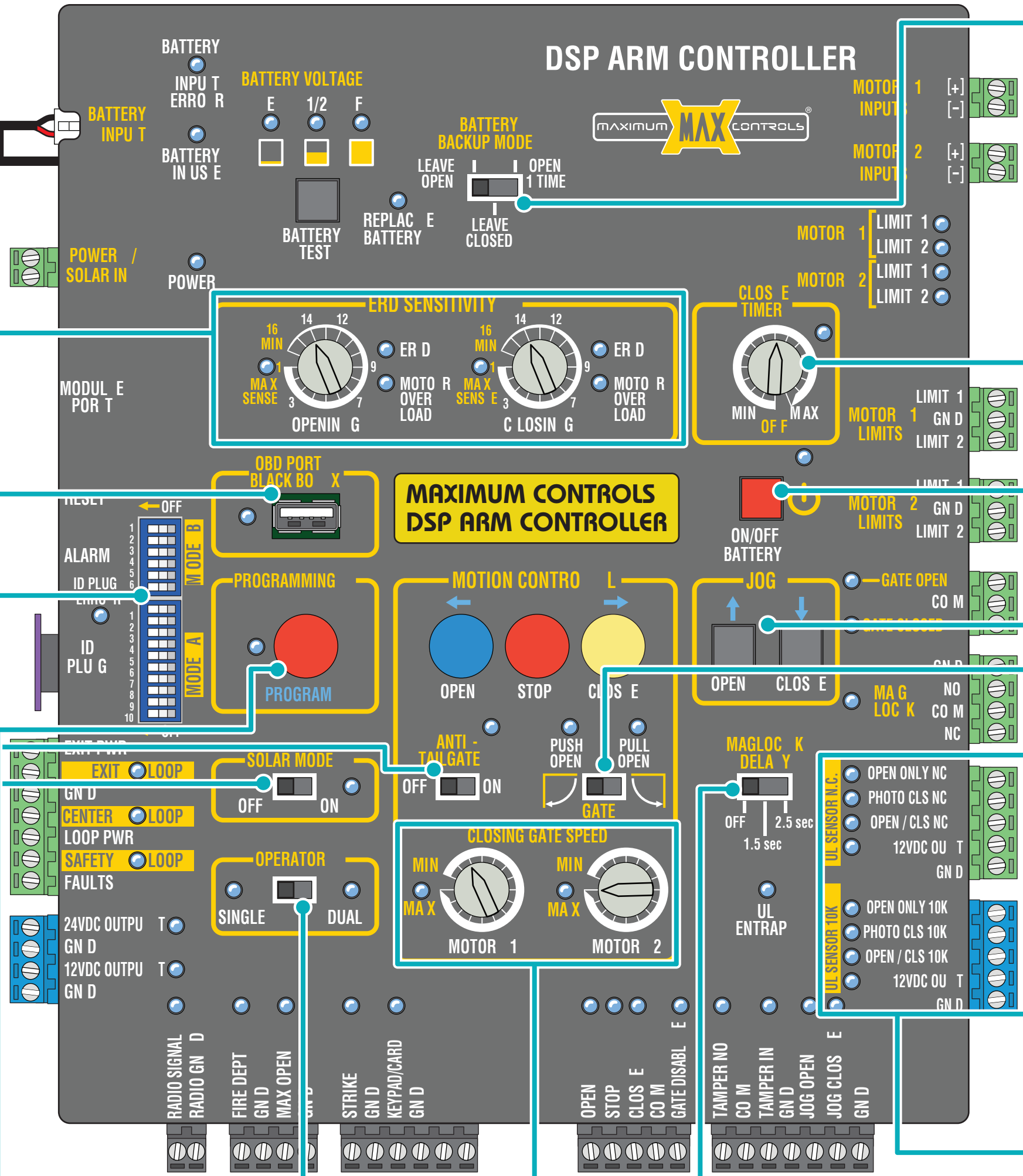
To enter PROGRAM mode, press and hold PROGRAM button for 5 seconds. Follow instructions on-screen using the 4 buttons shown at left to program with. Press ONLY PROGRAM button again to end programming when finished.

PROGRAM INSTRUCTIONS ARE ON SCREEN



In PROGRAM mode, you can do the following:

- Scroll through most recent errors.
- View input voltage (DC voltage).
- View average current gate consumption.
- View cycle count.
- Program date and time.
- Turn on/off other advanced features.



Battery Back-Up Mode

LEAVE OPEN - After a power failure, gate will continue to operate until battery power is drained. At this point, the next open command, gate will remain OPEN. Gate will automatically close after AC power is restored if close timer is ON.

LEAVE CLOSED - After a power failure, gate will continue to operate until battery power is drained. At this point, gate will remain CLOSED.

OPEN 1 TIME - After a power failure, gate automatically OPENS and REMAINS OPEN. When power is restored, gate will automatically close.

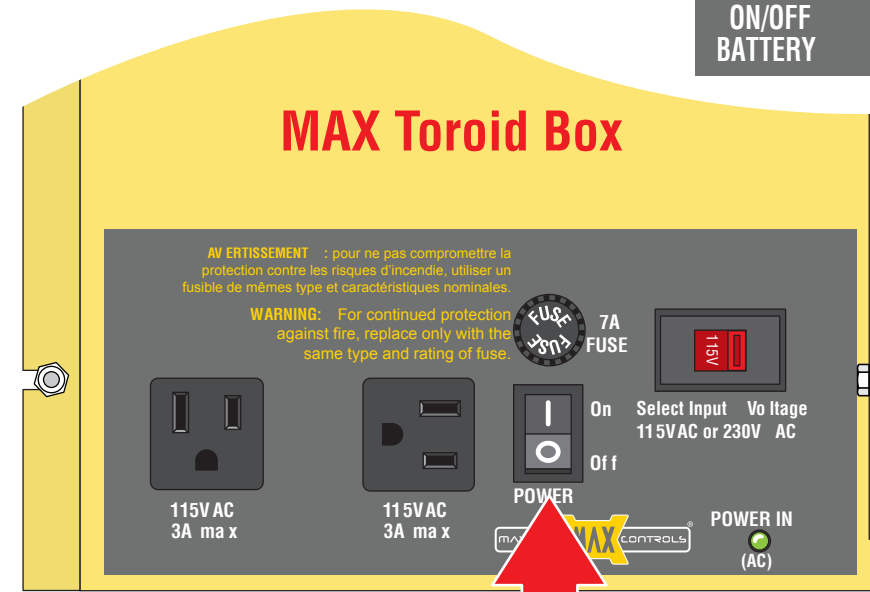
Close Timer

1st click clockwise - Knob at MIN: 1/2 sec...
2nd click clockwise: 1 sec...
3rd click: 4 sec...
4th click: 8 sec... etc up to 60 sec. MAX. LED turns ON for MAX setting ONLY

Turn off ALL Power

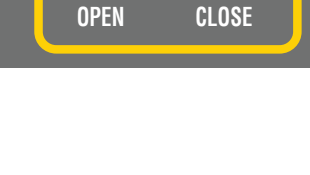
IMPORTANT: This procedure must be followed whenever ALL power must be turned OFF on operator.

- Turn OFF POWER Switch on MAX Toroid Box. Battery power will remain ON.
- Press and HOLD the RED ON/OFF BATTERY button until beep is heard, then release button.

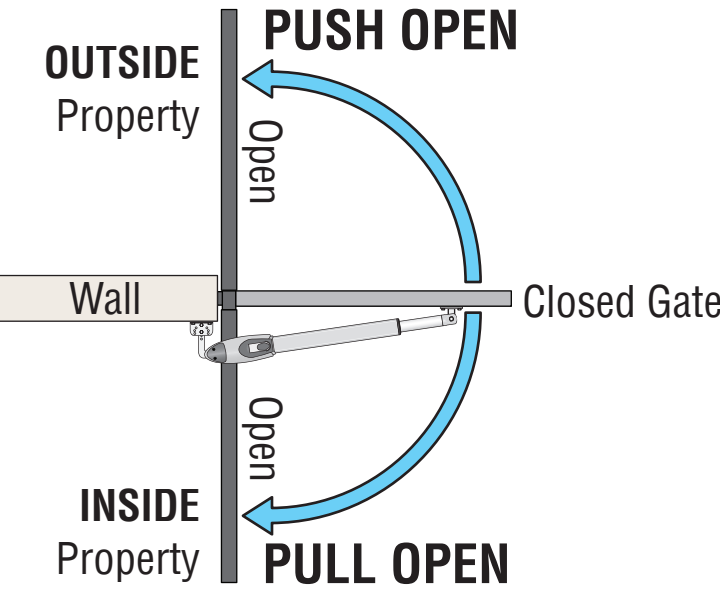


Jog Buttons

Push and HOLD to Open or Close (release button to stop gate). Helps when "Fine tuning" gate limit positions.



Gate Opening Direction



Maglock Delay

Turned OFF - NO Maglock installed.

Set to 1.5 sec or 2.5 sec - You MUST select a time delay when using a maglock. Maglock power disengages 1.5 sec or 2.5 sec before gate starts opening.

Dual Gate Operators using Maglock: Primary gate opens FIRST. Install maglock accordingly to account for this.

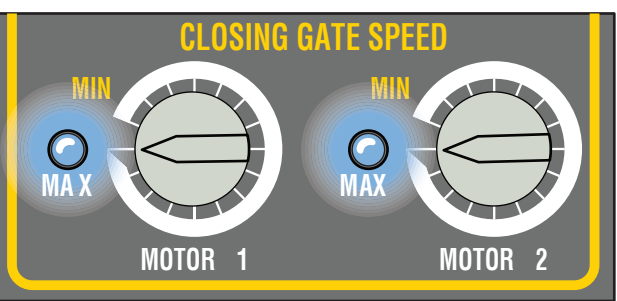
MAGLOCK LED (Monitors Maglock):
ON - Locked
OFF - Unlocked
Flashing - Problem with Maglock Power.

Operator Switch

SINGLE - Single operator installed (Motor 1).
DUAL - Dual operators installed (Motor 1 & Motor 2).

Closing Gate Speed

After gate positions have been "Learned", the gate will cycle at the speed set on "CLOSING GATE SPEED" settings.



Typically set to MAX, LEDs ON.

UL 325 2018 Standard

Minimum of ONE Entrapment protection sensor MUST be installed or operator will NOT function.
It MUST be MONITORED and NORMALLY CLOSED (N.C.)/10K.
All entrapment zones should be protected by MONITORED sensors.

MONITORED UL sensors Input

A sensor wired to the PHOTO CLS NC will "AUTOMATICALLY be MONITORED" (Factory default). All other inputs MUST be learned before they will be monitored.

Sensor Learn Mode:

- Press and HOLD the STOP button & then the OPEN button together until beeping is heard, learn mode begins. DO NOT press the OPEN button before the STOP button or learn mode will NOT begin (no beeping).

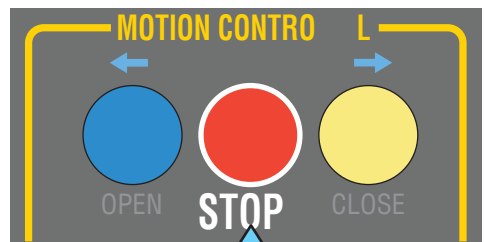
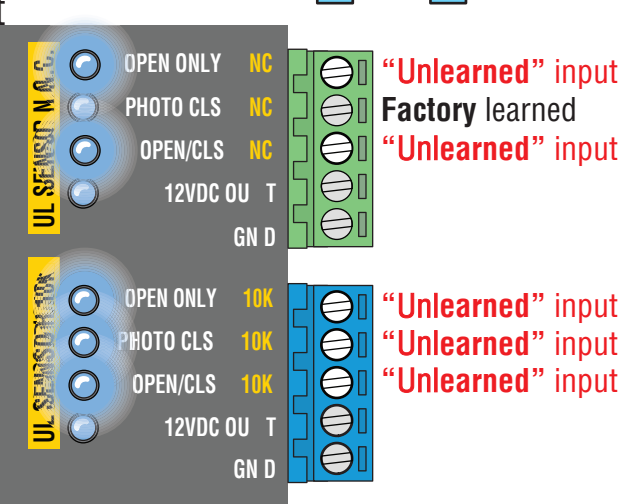
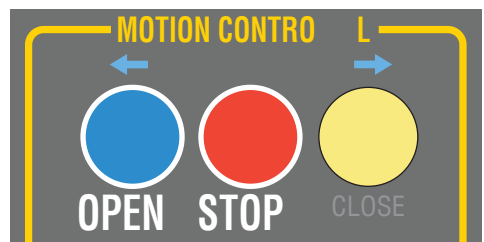
- LEDs WILL turn ON for each detected "UNLEARNED" sensor that has been wired to the inputs. If a sensor's LED is NOT on, that sensor has a problem and it MUST be corrected before continuing.

- Possible problems:
 - Photocells are out of alignment
 - Photocells are wired wrong - N.C. or N.O. depending on which photocells are used.
 - Sensor is bad

When all LEDs are ON that should be ON, proceed to next step.

- Press STOP button again within 5 min. to learn sensors and end learn mode, beeping stops. Wired "Unlearned" Inputs will now be MONITORED.

NOTE: If STOP button is not pressed within 5 min., learn mode terminates. If no "UNLEARNED" sensors are detected then factory default setting is restored (Inputs will NOT be Monitored).



DSP Arm Controller Control Box **WIRING** Overview

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