



Instruction Manual CSW-200-UL SERIES HIGH TRAFFIC COMMERCIAL GATE OPERATOR

UL325 UL991 compliant compliant



installation instructions and manual book for architects, general contractors and dealers

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UL LISTINGS AND INSTRUCTIONS

Installation Instructions Regarding the Gate Operator

A) Install the gate operator only when:

1) The operator is appropriate for the construction and the usage Class of the gate.

2) All openings of a horizontal slide gate are guarded or screened from the bottom of the gate to a minimum of 4 feet (1.2 m) above the ground to prevent a 2 1/4inch (57.15 mm) diameter sphere from passing through the openings anywhere in the gate, and in that portion of the adjacent fence that the gate covers in the open position.

3) All exposed pinch points are eliminated or guarded, and

4) Guarding is supplied for exposed rollers.

B) The operator is intended for installation only on gates used for vehicles. Pedestrians must be supplied with a separate access opening.

C) The gate must be installed in a location so that enough clearance is supplied between the gate and adjacent structures when opening and closing to reduce the risk of entrapment. Swinging gates shall not open into public access areas.

D) The gate must be properly installed and work freely in both directions prior to the installation of the gate operator.

E) -

F) Controls must be far enough from the gate so that the user is prevented from coming in contact with the gate while operating the controls. Controls intended to be used to reset an operator after 2 sequential activations of the entrapment protection device or devices must be located in the line of slight of the gate outdoor or easily accessible controls shall have a security feature to prevent unauthorized use.

G) All warning signs and placards must be installed where visible in the area of the gate.

H) For a gate operator utilizing a non-contact sensor such as a photo beam:

1) See instructions on the placement of non-contact sensor for each Type of application,

2) Care shall be exercised to reduce the risk of nuisance tripping, such as when a vehicle trips the sensor while the gate still moving, and

 One or more non-contact sensors shall be located where the risk of entrapment or obstruction exists, such as the perimeter reachable by a moving gate or barrier.

I) For a gate operator utilizing a contact sensor such as an edge sensor:

 One or more contact sensors shall be located at the leading edge, trailing edge and postmounted both inside and outside of a vehicular horizontal slide gate.

2) One or more contact sensors shall be located at the bottom edge of a vehicular vertical lift gate.

3) One or more contact sensors shall be located at the pinch point of a vehicular vertical pivot gate.

4) A hardwired contact sensor shall be located and its wiring arranged so that the communication between the sensor and the gate operator is not subjected to mechanical damage.

5) A wireless contact sensor such as the one that transmits radio frequency (RF) signals to the gate operator for entrapment protection functions shall be located where the transmission of the signals are not obstructed or impeded by building structures, natural landscaping or similar obstruction. A wireless contact sensor shall function under the intended end-use conditions.

Important Safety Instructions

WARNING - To Reduce the Risk of Injury or Death:

1. READ AND FOLLOW ALL INSTRUCTIONS!

2. Never let children operate or play with gate controls. Keep the remote control away from children.

3. Always keep people and objects away from the gate while the gate is in operation. NO ONE SHOULD CROSS THE PATH OF A MOVING GATE.

4. Test the gate operator monthly. The gate MUST reverse on contact with a rigid object or stop when an object activates the non-contact sensors. After adjusting the force or the limit of travel, retest the gate operator, Failure to adjust and retest the gate operator properly can increase the risk of injury or death.

5. Use the emergency release only when the gate is not moving. Make sure the power for the gate operator is off.

6. KEEP GATES PROPERLY MAINTAINED. Read the manual. Have a qualified service person make repairs to the gate or gate hardware.

7. The entrance is for vehicles only. Pedestrians must use separate entrance.

8. SAVE THESE INSTRUCTIONS.

UL LISTINGS AND INSTRUCTIONS

Gate – A moving barrier such as a swinging, sliding, raising lowering, rolling, or like, barrier, that is a stand-alone passage barrier or is that portion of a wall or fence system that controls entrance and/or egress by persons or vehicles and completes the perimeter of a defined area.

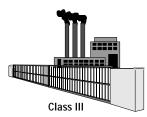
Vehicular horizontal slide-gate operator (or system) – A vehicular gate operator (or system) that controls a gate which slides in a horizontal direction that is intended for use for vehicular entrance or exit to a drive, parking lot, or the like.



Residential vehicular gate operator – Class I – A vehicular gate operator (or system) intended for use in a home of one-to four single family dwelling, or a garage or parking area associated therewith.

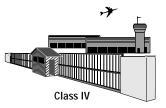
Commercial/General access vehicular gate operator – Class II – A vehicular gate operator (or system) intended for use in a commercial location or building such as a multi-family housing unit (five or more single family units) hotel, garages, retail store or other building servicing the general public.



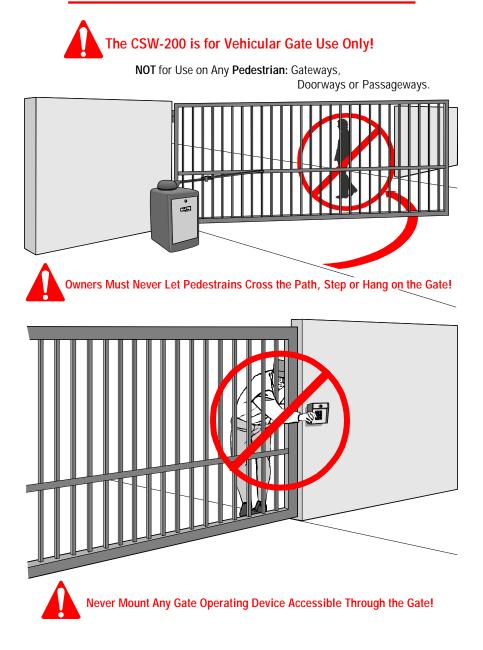


Commercial/General access vehicular gate operator – Class III – A vehicular gate operator (or system) intended for use in a industrial location or building such as a factory or loading dock area or other locations not intended to service the general public.

Restricted access vehicular gate operator – Class IV – A vehicular gate operator (or system) intended for use in a guarded industrial location or building such as an airport security area or other restricted access locations not servicing the general public, in which unauthorized access is prevented via supervision by security personnel.



WARNINGS AND PRECAUTIONS



ELITE RECOMMENDED SETUP



Pedestrians Must have a Separate Walkway!

CSW-200-UL

1/2 hp Motor, 120 VAC, 4 amp. Maximum Gate Length – 18 ft. Maximum Gate Weight– 600 lbs.

CSW-200-UL-ST

1/2 hp Motor, 120 VAC, 4 amp. Maximum Gate Length – 18 ft. Maximum Gate Weight– 600 lbs.

CSW-200-UL-DM

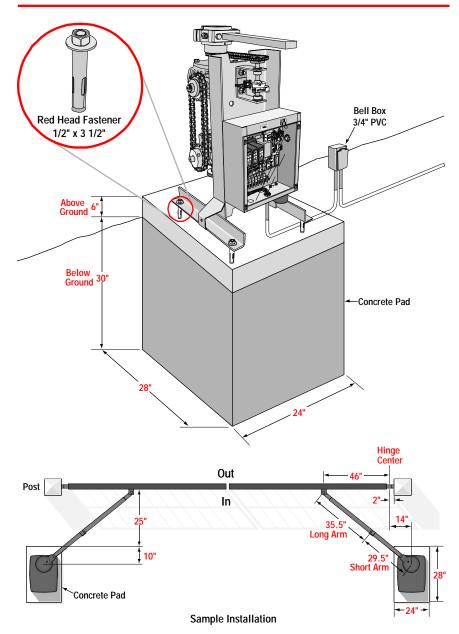
Two-1/2 hp Motors, 120 VAC, 4 amp. Maximum Gate Length – 18 ft. Maximum Gate Weight – 600 lbs.

CSW-200-UL-1HP

Two-1/2 hp Motors, 120 VAC, 7.9 amps. Maximum Gate Length – 20 ft. Maximum Gate Weight– 1000 lbs.

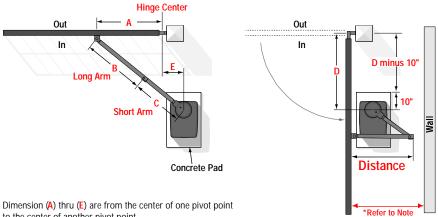


Be sure to read and follow all Elite and UL instructions before installating and operating any Elite products. Elite Access Systems, Inc. is not responsible for improper installations or failure to comply with local building codes.



INSTALLATION LAYOUTS

Sample Installation is Shown on Previous Page.



to the center of another pivot point.

Caution: If the gate is longer than 18 feet, follow Chart A : A-2.

Suggestion: The dimension between the gate and the concrete pad is always 10 inches less than the dimension D. Example: D = 42", if the dimension between the gate and the concrete pad is 32".

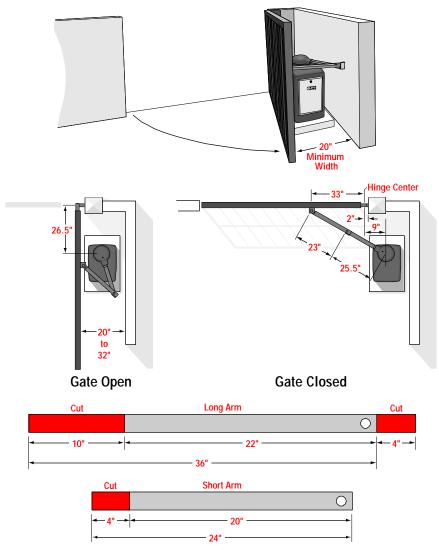
			Cha	rt A						Cha	rt B		
	Α	В	С	D	ΕD	istanc	е	Α	В	С	D	ΕD	istance
1	46"	35.5"	29.5"	35"	11"	45"	1	34.5"	34.75"	29.5"	35"	14"	43"
2	46.75"	35.5"	33.5"	42"	11"	37"	2	44"	36.5"	32.5"	42"	14"	32"
3	46.75"	37"	31.5"	40"	11"	41"	3	44"	37"	30.5"	40"	14"	40"
4	47.25"	37.25"	30"	37"	11"	45"	4	45"	37"	30.5"	37"	14"	43"
5	47"	35"	29.5"	32"	11"	45"	5	44.75"	35.75"	29.5"	32"	14"	44"
6	42.5"	33"	26.5"	28.5"	11"	41"	6	41"	39"	27.5"	28.5"	14"	41"

*Note - If this dimension is between 20 and 32 inches, Refer to Compact Installation Page

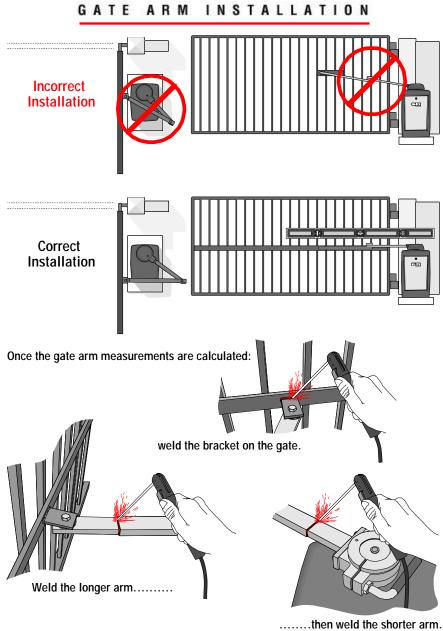
COMPACT INSTALLATION

Compact Installation Only!

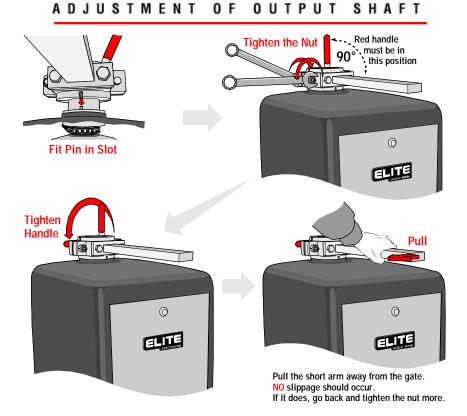
"DO NOT" Use These Measurements for a Standard Installation.



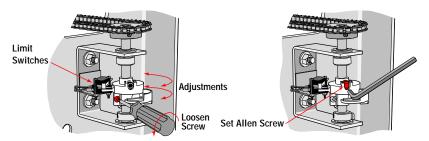
Follow the exact measurements, then cut the standard arm to meet the shorter measurements.



Weld Completely Around the Rectangular Tubes



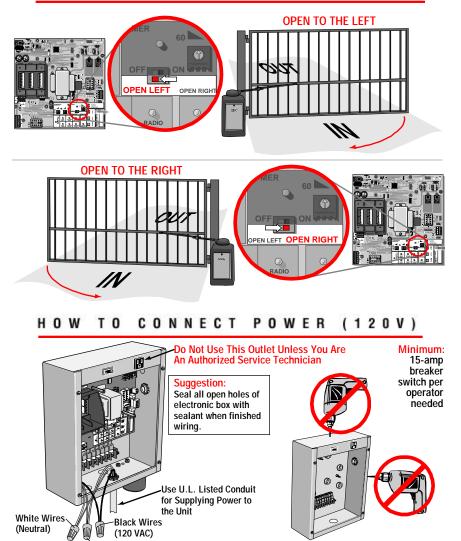
ADJUSTING GATE TRAVELING DISTANCE



Release the red handle and open the gate to a distance desired. Loosen the screw. Turn plastic part until the half moon shape hits the limit switch. For closing cycle, do the same with the other plastic part.

For a more precise adjustment, you may use the set allen screw.

CHOOSING MOVEMENT DIRECTION



Green Wires (Ground)

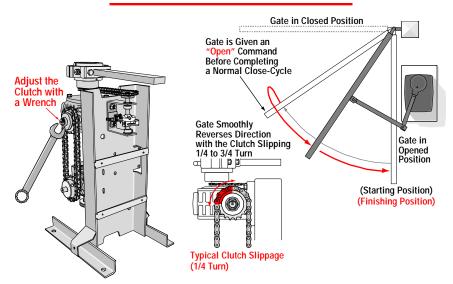
Gate Operator MUST be Properly Grounded

WIRE GUAGE REQUIREMENT FOR 120 VAC POWER SUPPLY: 1/2 HP AND DUAL MOTOR ONLY

16 Gauge	14 Gauge	12 Gauge	10 Gauge	8 Gauge	4 Gauge
150 Feet	250 Feet	400 Feet	650 Feet	1000 Feet	2200 Feet

Caution: ELITE ACCESS SYSTEMS, INC. is not responsible for conflicts between the information listed in the above chart and the requirements of your local building codes. The information is for suggested use only. Check your local codes before installation.

CLUTCH ADJUSTMENT



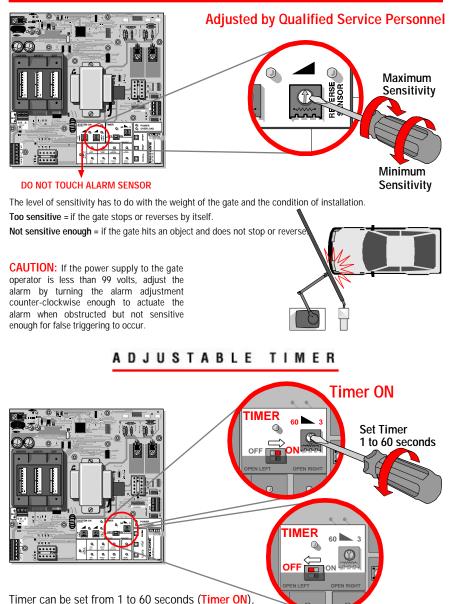
The adjustment is for a gate that is over 300 pounds and 12 feet long or longer. While the gate is closing, instantly an "open" command is given as shown above; the clutch may slip a bit, max. of 1/4 to 3/4 of a turn (slippage depends on the weight of the gate). If it does not slip, then readjust the clutch.

IMPORTANT!

Installers are required to adhere to this procedure: The UL required Warning Signs must be installed in plain view and on both sides of each commercial gate installed. Each sign is made with fastening holes in each corner and should be permanently secured in a suitable manner. Also the warning sticker should be placed on the operator so it is clearly visible.

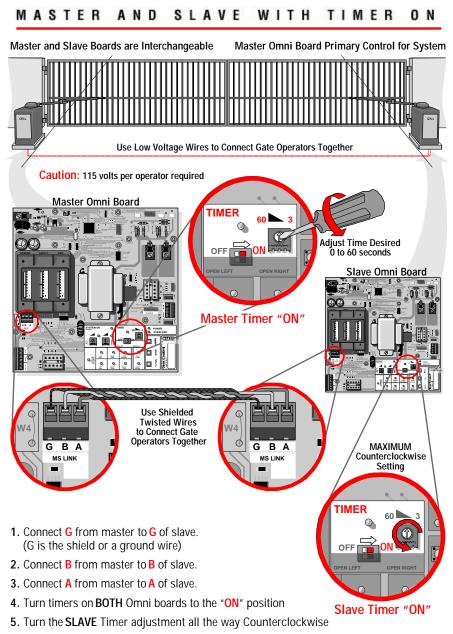


TWO-WAY ADJUSTABLE REVERSING SENSOR

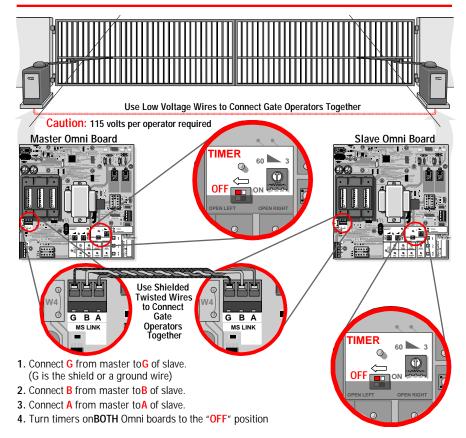


or for push open/push close type operation (Timer OFF).

Timer OFF



6. Use MASTER timer ONLY to select the desired time



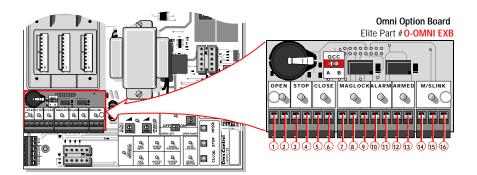
PARTIAL MASTER/INDIVIDUAL CONTROL

IN ORDER FOR THE FOLLOWING OPERATION TO OCCUR, FOLLOW THE INSTRUCTIONS.

EXAMPLE: There is a double gate, the entry gate is to be opened with a radio transmitter and the exit gate with a free exit loop. Only one safety loop system is to open both gates, and a fire department switch should open both gates at the same time.

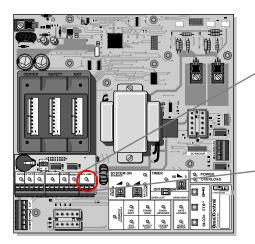
- 1. Connect the radio receiver to entry gate only.
- 2. Connect the exit loop to exit gate only.
- 3. Connect the safety loop to both entry and exit gates.
- 4. Connect the fire department switch to both entry and exit gates.

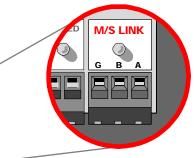
INSTRUCTIONS FOR OPTIONAL SYSTEMS



- 1 & 2 Open Command
- 3 & 4 Stop Command
- 5 & 6 Close Command
 - 7 Common
 - 8 Normally Closed
 - 9 Normally Open
- __Maglock or Solenoid
- 10 & 11 Burglar Alarm Output
- 12 & 13 Burglar Alarm Input
 - 14 Ground 15 – B 16 – A

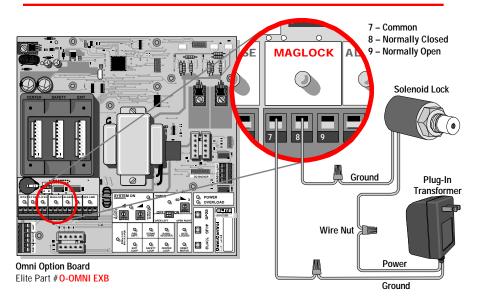
MASTER/SLAVE WITH OPTIONAL BOARD

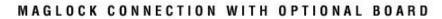


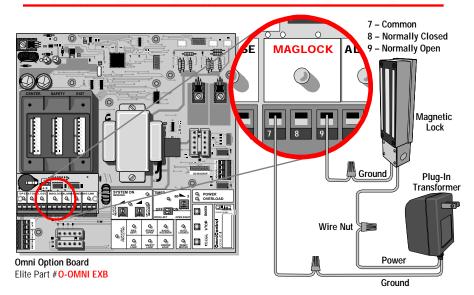


Use this socket (M/S LINK) if the Omni option board is being used, and Master/Slave option is needed.

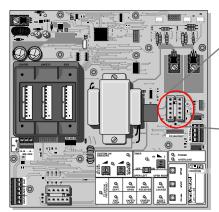


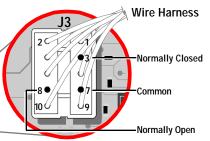






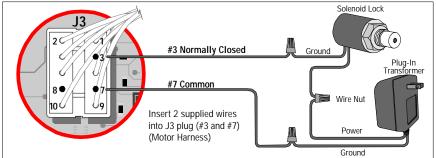
SOLENOID/MAGLOCK J3 CONNECTION



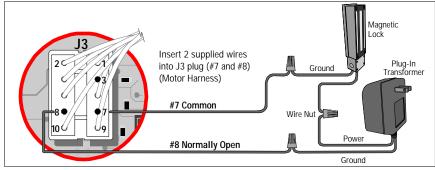


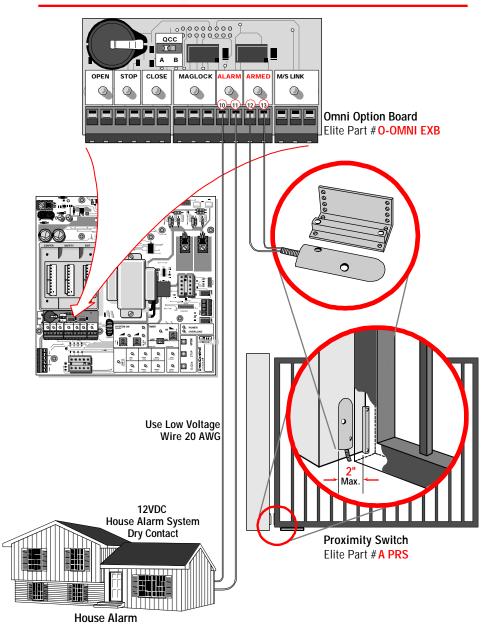
Connection of a Solenoid or Magnetic Lock can be made using the J3 plug and three wires supplied with the unit.

Solenoid Lock

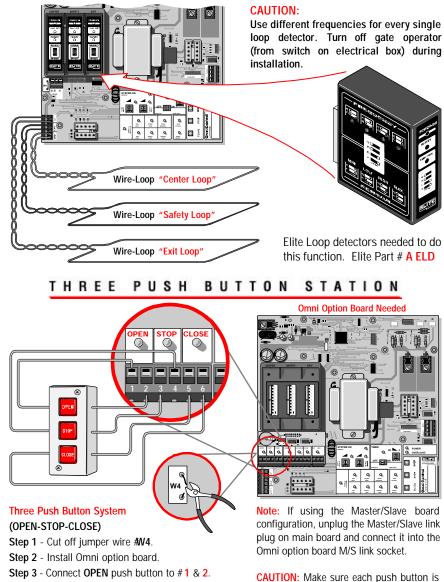


Magnetic Lock





HOUSE ALARM/PROXIMITY CONNECTIONS

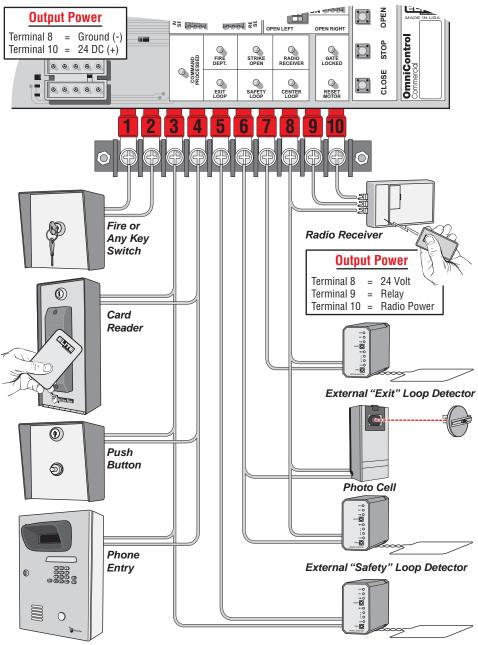


Step 4 - Connect STOP push button to #3 & 4.

Step 5 - Connect CLOSE push button to #5 & 6.

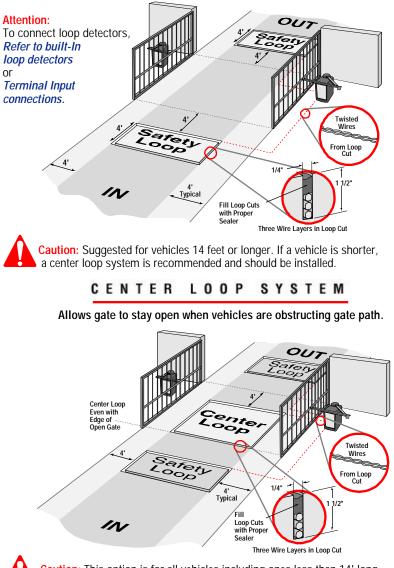
dry contact and there are no jumper wires between them.

TERMINAL INPUT CONNECTIONS



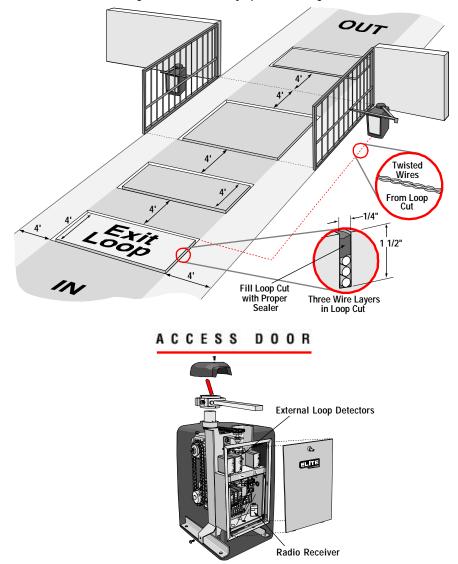
External "Center" Loop Detector

SAFETY LOOP SYSTEM



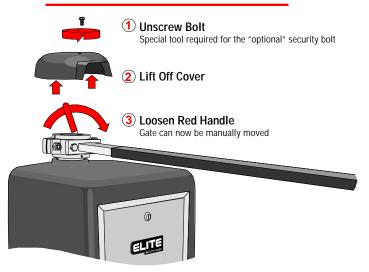
Allows gate to stay open when vehicles are obstructing gate path.

Caution: This option is for all vehicles including ones less than 14' long. Center loop system requires two safety loops. Allows gate to automatically open for exiting vehicles.

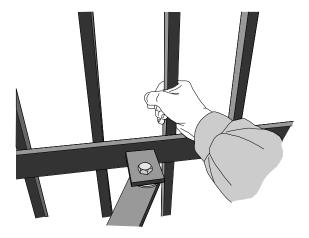


Access Door - A generous allotment of space is allowed for external loop detectors and radio receiver. For a secure attachment, velcro external loop detectors in place.

EMERGENCY RELEASE

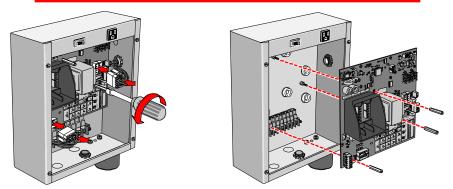


Grab the Gate to Make Adjustments



Tighten the Red Handle, Replace the Cover and Bolt when Finished When the power is turned on again, the gate will readjust itself automatically.

REPLACING THE CONTROL BOARD



Disconnect 2 harnesses from OmniControl board. Unscrew 3 nuts to remove board.

AUDIO ALARM

When one of the following events happensTwice Consecutively,

an Alarm will Sound!



① The gate is too heavy or the arm is installed wrong, Refer to Gate Arm Installation





A foreign object is on the gate frame while the gate is moving.





The gate hits the driveway, curb or other, and gets stuck or bent in an awkward position.





) Gate hinges are too tight or broken and the gate is not moving freely.

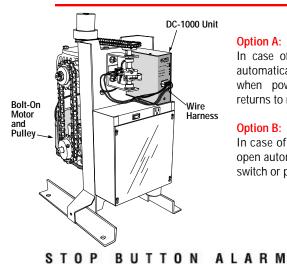




The gate is moving and an object pushes the gate.

Refer to the Troubleshooting Table

OPTIONAL DC-1000U BACK-UP



Option A:

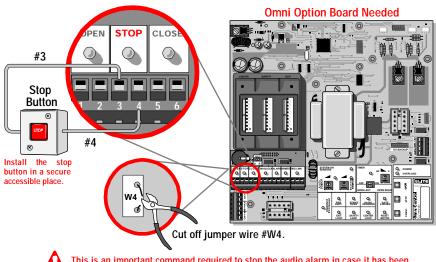
In case of power failure the gate opens automatically one time and stays open. when power is restored the operator returns to normal condition.

Option B:

In case of power failure the gate will not open automatically until activated by a key switch or push button.

> for More Details Contact your Local Dealer

SHUT-OFF



This is an important command required to stop the audio alarm in case it has been triggered. Otherwise the alarm will sound for 5 minutes and reset itself.

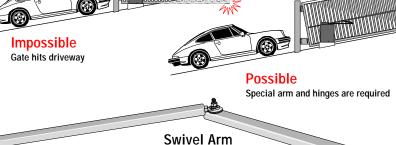
Use STOP Button:

•To stop the movement of the gate in case of potential entrapment.

- •To reset the audio alarm, (check for obstructions).
- •To stop the gate operator while traveling.

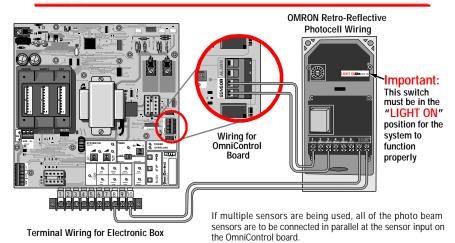
When using the Omni option board, use the"STOP" input to connect the stop button.





Elite Part # Q103

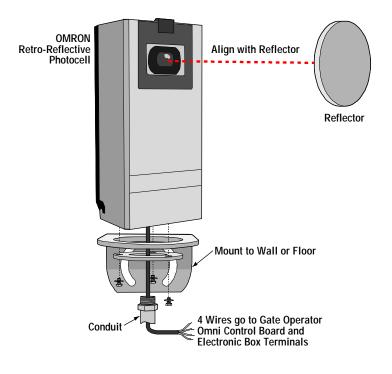
SECONDARY ENTRAPMENT WIRING

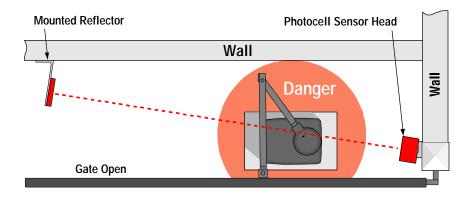


If you are going to use a non-contact sensor as a secondary entrapment protection you should use a recognized component to component to comply with the revised UL 325 intended to be use in class I or class II gate operator, like the following: OMRON Retro-Reflective Photocell, Model: E3K-R10K4-NR

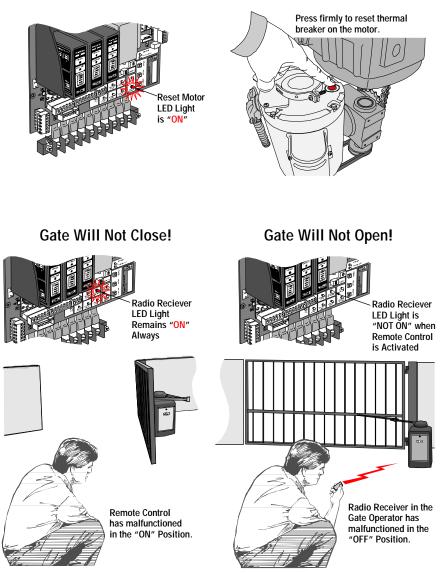
ELITE Part # A OMRON

Elite Part # A OMRON





Resetting Motor

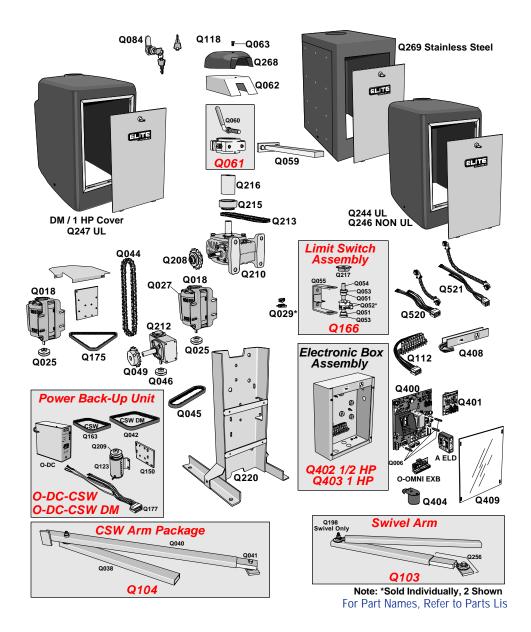


Consult your Authorized Technician for more help.

TROUBLESHOOTING TABLE

CONDITION	POSSIBLE CAUSES	SOLUTIONS
OVERLOAD LED ON And POWER LED OFF	1.Short circuit at terminals 8 and 10 2.Short circuit at any of the loop detectors in the board 3.Short circuit in the control board	 Remove the short circuit condition at the terminals Remove the defective loop detector Send the board to repair
OVERLOAD LED ON And POWER LED ON	1.Excessive current draw at terminal 10 2.Over-voltage at the 120 VAC line input	1.Reduce the accessories load from terminal 10 2.Verify your electrical power
SYSTEM ON LED Flashing	1.One limit switch is faulty 2.Motor thermal fuse has poped-out	1.Test the limit switches and wire connections, fix the fault 2.Reset the motor
REVERSE SENSOR LED ON	 Cate has encountered and obstruction during traveling Reverse sensor is extra sensitive 	1.Remove the obstruction 2.Turn the reverse sensor switch counter clockwise a little more and try again
ALARM SENSOR LED ON	 Gate encountered an obstruction during traveling Alarm sensor is extra sensitive 	1.Remove the obstruction 2.Turn the alarm sensor switch counter clockwise a little more and try again
ALARM SENSOR LED ON	 Gate encountered and obstruction during traveling Alarm sensor is extra sensitive 	1.Remove the obstruction 2.Turn the alarm sensor switch counter clockwise a little more and try again
COMMAND PROCESSED LED ON	1. There is a command hold active	 This is a normal response of the gate operator. It does not represent necessarily that there is a problem.
TIMER LED BLINKING And Command Processed Led Blinking	1.There is a command holding the gate open	 This is a normal response of the gate operator It does not represent necessarily that there is a problem. Check inputs for command.
TIMER LED BLINKING, COMMAND PROCESSED LED BLINKING And REVERSE SENSOR LED ON	1.Gate has reopened because it encountered an obstruction while closing.	1.Any re-new command will resume normal operation. Check for obstructions.
AUDIO ALARM ON	1.Gate has encountered two consecutive obstructions while trying to close or open	 Any re-new command will resume normal operation but not a radio command. Check for obstructions. You can stop the alarm by using the stop button.
ANY "LOOP LED" ON And NO VEHICLE ON THE SENSING AREA	 The loop detector needs to be reset. The wire loop has been disrupted The loop detector needs to work in a different frequency The loop detector is too sensitive 	 Reset the loop detector (If you use Elite Plug-in Loop detectors, change the setting for sensitivity and come back to your original setting). Verify and correct connections Set a different working frequency Decrease the sensitivity of the loop detector

CSW-200 PARTS



CSW-200 PARTS LIST

Kludge Assembly					
г Q060 -	ARM RELEASE HANDLE				
0061 L 0061 -	OUTPUT SHAFT CLUDGE (T)				
4001					
Swivel Arm					
Q103 - Q198 -	SWIVEL ONLY				
0103 - 0256	SOLID ARM, SWIVEL, AND				
0250 -	GATE CONNECTOR				
	GATE CONNECTOR				
CSW Arm Package					
	SHORT ARM				
	LONG ARM				
	ADJUSTABLE SOLID METAL				
- 0041 -	ADJUSTABLE SULID METAL				
Limit Switch Assembly					
r Q051 -	COLLAR 1/2 In.				
0052 -	GATE ADJUSTMENT				
2002	(PLASTIC PART)				
0166 - 0053					
2000	BALL BEARING				
	GATE ADJUSTMENT SHAFT				
Q055 -	LIMIT SWITCH HOLDER				
L 0217 -	SPROCKET GATE ADJUSTMENT				
Flexible Assembly for 1/2 Horse Motor					
Q520 WIRE	HARNESS AND CONDUIT				
Flexible Assembly for	or Dual Motor				
Q521 WIRE HARNESS AND CONDUIT					
Power Back-Up Unit					
rower back-op onit					
	Q042 - DRIVE BELT (DM)				
0.00.000	Q123 - BACK-UP MOTOR DC 12V				
0-DC-CSW	Q150 - CHASSIS DC BACK-UP				

Electronic Box Assembly Q402 1/2 HP Q403 1 HP Q006 - PC BOARD NUTS (SET) Q018 - 1/2 HP ELECTRIC MOTOR Q019 - CONTROL BOARD NON UL (NOT SHOWN) Q025 - MOTOR PULLEY (ID5/8) Q027 - MOTOR CAPACITOR Q029 - LIMIT SWITCH Q044 - CHAIN #50 Q045 - DRIVE BELT 1/2 HP 4L190 Q046 - GEAR REDUCER PULLEY Q049 - SPROCKET (B50-16) Q059 - OUTPUT ARM SOLID Q062 - STAINLESS STEEL COVER Q063 - SECURITY BOLT Q084 - EMERGENCY KEY RELEASE Q112 - WIRE HARNESS-B TERMINAL BLOCK Q118 - KEY FOR ACCESS DOOR Q175 - BELT UL DM/1 HP Q208 - CLUTCH SET (POST 10/95) 0210 - GEAR BOX - SIZE 70 Q212 - GEAR REDUCER 40-30:1 Q213 - ENDLESS CHAIN #35 X 72P Q215 - OUTPUT SHAFT SPROCKET - 35B18 Q216 - OUTPUT SHAFT FOR 70 REDUCER Q220 - CSW-200 CHASSIS FOR 70 REDUCER Q244 - UL COVER - DM HD POLYETHYLENE Q246 - NON UL COVER - DM HD POLYETHYLENE Q247 - UL COVER - DM HD POLYETHYLENE Q268 - KLUDGE COVER - PLASTIC Q269 - STAINLESS STEEL COVER Q400 - OMNI MAIN PCB Q401 - OMNI 1 HORSEPOWER BOARD# Q404 - OMNI ALARM Q408 - ELECTRONIC POWER STRIP Q409 - ELECTRONIC ACCESS PANEL A ELD - LOOP DETECTOR# O-OMNI EXB - OPTIONAL BOARD#

Note:

Muliple Parts "Q" Numbers

O-DC-CSW DM

OmniControl Board Accessories

* Operator Serial No. and Model No. Required When Ordering

MAINTENANCE

- 1. THE GATE AREA SHOULD BE KEPT CLEAN TO INSURE PROPER OPERATION.
- 2. MAKE SURE HINGES ARE WORKING SMOOTHLY AND LUBRICATED PROPERLY.
- 3. MAKE SURE GATE ARM IS GREASED PROPERLY.

0163 - DRIVE BELT 4I 240

Q177 - WIRE HARNESS DC-1000

Q209 - PULLEY DC-1000 1/2 ID

- 4. KEEP THE COVER CLEAN.
- 5. CHECK BELT FOR CRACKING, LOOSENESS, WEAR.
- 6. CHECK GATE REVERSING SENSOR.
- 7. CHECK FOR PROPER CLUTCH ADJUSTMENT.
- 8. CHECK FOR PROPER SYNTHETIC OIL LEVEL IN UPPER GEAR BOX
- 9. FOR PARTS, REFER TO CSW-200 PARTS PAGEAND THIS PAGE.

IF YOU NEED FURTHER ASSISTANCE, PLEASE CALL YOUR LOCAL SERVICE COMPANY.

AVAILABLE PRODUCTS

