

CM-712

Column Mount Unit

INSTALLATION INSTRUCTION & OWNER'S MANUAL



PLATINUM ACCESS SYSTEMS™



CM-712

Vehicular Gate Operator

Class I, Class II, Class III, and Class IV

TABLE OF CONTENTS

Important Safety Instructions.....	2
Protection Against Entrapment.....	3
Safety Information.....	4-5
Gate Operator Class Categories and Examples.....	6
Maintenance Instructions.....	7
Product Dimensions.....	8
Mounting Instructions.....	9
Plan of Installation - Open Inside.....	10
Installation: Primary Unit.....	11-12
Contact Safety Sensor and Non-Contact Safety Sensor Installation.....	13
Installation: Photoeye Sensor Alignment instructions.....	14
Installation: Entrapment Protection.....	15
Installation: Inductive Loops.....	16
Installation: Electronic Control Unit Mounting.....	17
Installation: Electrical.....	18
Installation: Primary Unit.....	19
Installation: Limit Switch Set-Up.....	20-21
Installation: Positive STOP & Dimensions.....	22
Installation: Primary/Secondary Connections.....	23
Installation: Loop Rack.....	24
Installation: Reset Switch.....	25
Installation: Selectable Features.....	26-28
Installation: Selectable Features & Solar Installation.....	29
Installation: Safety & Accessory Connections.....	30
Installation: Accessory Connections.....	31-35
Platinum ETL Approved Non-Contact External Sensors.....	36
Standard Installation Reference for Safety Devices and Ground Rod.....	37
PL-JS-181 Receiver Installation & Program Procedure.....	38-39
Trooble Shooting, Parts Diagram, and Field Wiring.....	40-42



WARNING: to reduce the risk of injury or death:

1. READ AND FOLLOW ALL INSTRUCTIONS MANUAL BEFORE ATTEMPTING ANY INSTALLATION.
2. Should never let children play with gate controls. Keep the remote control away from children.
3. Always keep people and objects away from the gate. "NO ONE SHOULD CROSS THE PATH OF THE MOVING GATE".
4. Check and test the gate operator monthly. The gate MUST reverse on contact with a rigid object or when an object activates the non-contract 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. The gate system MUST be maintained properly. Have a qualified service person inspect, repair or adjust your system if any unusual behavior is observed or suspected.
6. Some companies offer a scheduled preventive maintenance service.
7. DO NOT EXCEED the equipment specifications.
8. Insure a safe and proper installation.
9. Install this equipment in accordance with the UL 325 specifications.
10. All installation MUST have secondary protection devices against entrapment, such as edge sensors and photo beams especially in places where the risk of entrapment is more likely to occur.
11. Gate is for vehicles only, a separate entrance for pedestrians is required.
12. Install only on properly balanced and operating door. A door that is operating improperly could cause severe injury. Have qualified service personnel make repairs to cables and other hardware before installing the operator.

SAFETY DEVICES:

1. Remove the Power Harness for the control board.
2. Check that all mounting hardware of the gate operator is properly tightened.
3. Ensure that the gate moves freely.
4. Check the battery for the following:
 - Battery connections must be free of corrosion.
 - Battery voltage must be 26.5 VDC minimum (fully charged battery).
5. Reconnect the Power Harness for the control board.
6. Make sure every installation has a minimum of one safety device (such as photo beams or loop detector).
7. Check for Reverse Sensitivity.
8. Make sure that all areas around the gate are safe and secure.

SPECIFICATIONS

Maximum Gate Weight:	700 lbs.
Maximum Gate Length:	12 feet
Opening Time:	90° opening in 16-21 seconds
Maximum Opening Angle:	110°
Power Requirements:	120 VAC Single Phase at 2 Amps or 220 VAC Single Phase at 1 Amp
Main Power:	Power Input: 100-240 VAC Select 115 /230 VAC Single Phase Built-in 24VDC battery backup (7AmpHr 12VDC x 2)
Operating Temperature:	-20°C (-4°F) to 70°C (158°F)

Usage Class	Gate Operator Category			
	Horizontal Slide, Vertical Lift, and Vertical Pivot		Swing and Vertical Barrier (Arm)	
	Primary type*	Secondary Type*	Primary Type*	Secondary Type*
Vehicular I and II Vehicular III Vehicular IV	A A, B1, or B2 A, B1, B2, or D	B1, B2, or D A, B1, B2, D, or E A, B1, B2, D, or E	A, or C A, B1, B2, or C A, B1, B2, C, or D	B1, B2, C, or D A, B1, B2, C, D, or E A, B1, B2, C, D, or D

Note - The same type of device shall not be utilized for both the primary and the secondary entrapment protection means. Use of a single device to cover both the opening and closing directions is in accordance with the requirement; however, a single device is not required to cover both directions. A combination of one Type B1 for one direction and one Type B2 for the other direction is the equivalent of one device for the purpose of complying with the requirements of either the primary or secondary entrapment protection areas.

Entrapment Protection Types:

Type A: Inherent entrapment protection system.

Type B1: Provision for connection of, supplied with, a non-contact sensor (photoelectric sensor or the equivalent).

Type B2: Provision for connection of, or supplied with, a contact sensor (edge device or the equivalent)

Type C: Inherent adjustable clutch or pressure relief device.

Type D: Provision for connection of, or supplied with, an actuating device requiring continuous pressure to maintain opening or closing motion of the gate.

Type E: An audio alarm.



WARNING: To reduce the risk of severe injury or death to person, please to follow these instructions:

IMPORTANT INSTALLATION INSTRUCTIONS BY UL STANDARDS:

a) Install the gate operator only when:

1. The operator is appropriate for the construction of the gate 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 1.83 m (6 ft) above the ground to prevent a 57.2mm (2-1/4 inch) 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 areas of the moving vertical pivot gate panel from the bottom of the gate to the top of the gate or a minimum of 1.83 m (72 in) above grade, whichever is less, that pass by a fixed stationary object, and in the area of the adjacent fence that the gate covers during the travel of the gate, shall be designed, guarded or screened to prevent a 57mm (2-1/4 in) diameter sphere from passing through such areas.
4. All exposed pinch points are eliminated or guarded, and
5. Guarding is supplied for exposed rollers.
6. The operator instructions shall list the maximum number of open and close entrapment protection devices capable of being connected to the operator.

b) The operator is intended for installation only on gates used for vehicles. Pedestrians must be supplied with a separate access opening. The pedestrian access opening shall be designed to promote pedestrian usage. Locate the gate such that persons will not come in contact with the vehicular gate during the entire path of travel of the vehicular gate.

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, Do not over-tighten the operator clutch or pressure relief valve to compensate for an improperly installed, improperly functioning, or damaged gate.

e) For gate operators utilizing Type D protection:

1. The gate operator controls must be placed so that the user has full view of the gate area when the gate is moving,
2. The placard as required by 62.1.6 shall be placed adjacent to the controls,
3. An automatic closing device (such as a timer, loop sensor, or similar device) shall not be employed, and
4. No other activation device shall be connected.

f) Permanently mounted controls intended for user activation must be located at least 1.83 m (6ft) away from any moving part of the gate and where the user is prevented from reaching over, under, around or through the gate to operate the controls. Exception: Emergency access controls only accessible by authorized personnel (e.g. fire, police, EMS) may be placed at any location in the line-of-sight of the gate.

g) The Stop and/or Reset button must be located in the line-of-sight of the gate. Activation of the reset control shall not cause the operator to start.

Safety Information



WARNING: To reduce the risk of severe injury or death to person, please to follow these instructions:

g) The stop and/or reset button must be located in the line-of-sight of the gate. Activation of the reset control shall not cause the operator to start

h) A minimum of two (2) WARNING SIGNS shall be installed, in the area of the gate. Each placard is to be visible by persons located on the side of the gate on which the placard is installed. Also see 62.1.1.

i) For gate operators utilizing a non-contact sensor in accordance with 32.1.1:

1. See instructions on the placement of non-contact sensors 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 is still moving, and

3. 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.

j) For a gate operator utilizing a contact sensor in accordance with 32.1.1:

1. One or more contact sensors shall be located where the risk of entrapment or obstruction exists, such as 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 device such as one that transmits radio frequency (RE) 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 device shall function under the intended end-use conditions.

6. One or more contact sensors shall be located on the inside and outside leading edge of a swing gate. Additionally, if the bottom edge of a swing gate is greater than 152 mm (6 in) but less than 406 mm (16 in) above the ground at any point in its arc of travel, one or more contact sensors shall be located on the bottom edge.

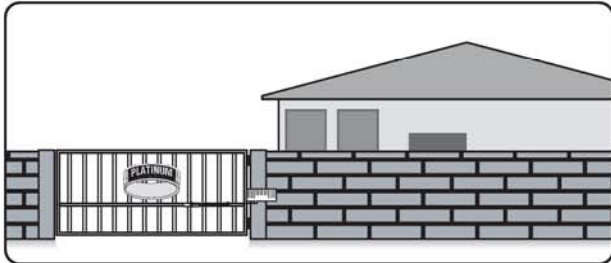
7. One or more contact sensors shall be located at the bottom edge of a vertical barrier (arm).

If the operator must be installed less than 8ft (2.44M) above the floor, then exposed moving parts must be protected by covers or guarding provided by the operator manufacturer. Locate the control station: (a) within sight of the door, and (b) at a minimum height of 5ft so small children cannot reach it, Controls intended for user activation must be located at least six feet (6') away from any moving part of the gate and where the user is prevented from reaching over, under, around or through the gate to operate the controls.

READ AND FOLLOW ALL INSTRUCTIONS MANUAL BEFORE ATTEMPTING ANY INSTALLATION

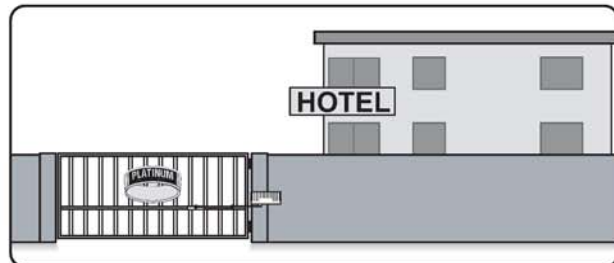
RESIDENTIAL VEHICULAR GATE OPERATOR CLASS I

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.



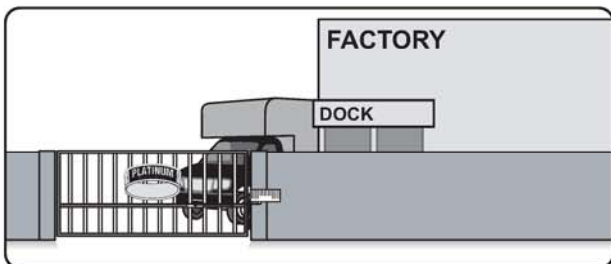
COMMERCIAL/GENERAL ACCESS VEHICULAR GATE OPERATOR CLASS II

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



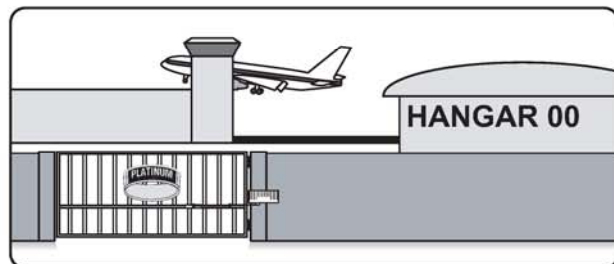
INDUSTRIAL/LIMITED ACCESS VEHICULAR GATE OPERATOR CLASS III

A vehicular gate operator (or system) intended for use in an 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.



MAINTENANCE INSTRUCTIONS OF CM-712 PERFORMED BY A QUALIFIED GATE OPERATOR TECHNICIAN

INSTALLATION, ALL CONNECTIONS, PROGRAMMING, REPAIR AND MODIFICATIONS MUST BE DONE BY A QUALIFIED PROFESSIONAL GATE OPERATOR INSTALLER.

The following services need to be periodically performed:

- Check and adjust the gate operator for force, speed, and sensitivity.
- Make sure all power (AC/DC) connections are corrosion free.
- Check all batteries for proper voltage of the intended use. A fully charged battery must be 26 VDC minimum.
- Check the incoming line voltage and confirm it is within 10% of its rating (115 or 230 volts).
- Verify battery backup functionally by turning off the power source (115 VAC and 230 VAC). Don't forget to restore power after testing.
- Check gate hinges and operator/arm mounting brackets and lubricate them with heavy-duty, high-performance lubricant and avoid spillage.
- Test (use caution) all contact and non-contact sensors, all vehicle detectors, keypad, telephone entry system or other control devices applicable.
- Test the manual release feature on the operator/arm.

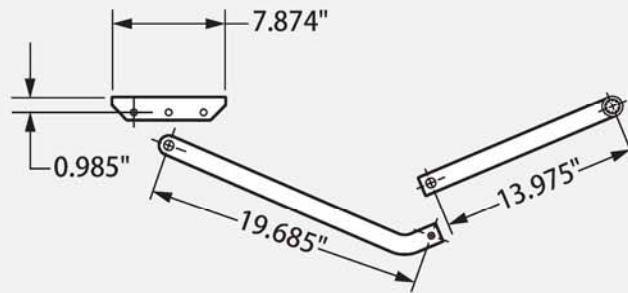
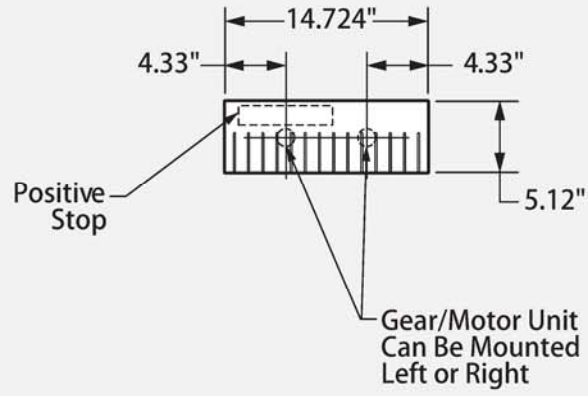
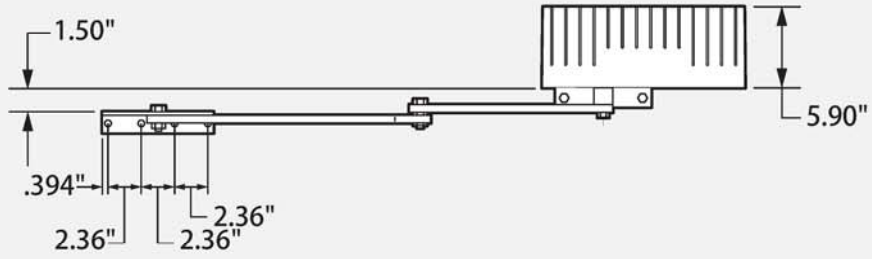
MAINTENANCE INSTRUCTIONS OF CM-712 PERFORMED BY THE END USER/HOME OWNER

Installation, all connections, programming, repair and modifications must be done by a qualified professional gate operator installer. End users/home owners must call a qualified professional gate operator installer for programming changes, repairs and modifications.

Although all Platinum Access Systems' gate operators are virtually maintenance free to an end user/home owner, minimal maintenance is recommended to ensure a smooth operation of this unit.

End users/home owners:

- Perform maintenance every six months, or when strenuous noise from gate hinges and/or operator/arm mounting brackets is detected. Lubricate them with heavy-duty, high-performance lubricant and avoid spillage.
- DO NOT take the cover off the operator/arm and/or the electrical control box to perform maintenance.
- Make sure there are no cars in the path of the gate while performing maintenance.
- Make sure the person performing maintenance is the only person in control of all control devices in order to avoid possible involuntary activation of the gate operator.
- Keep spraying water hoses and sprinkler systems away from the gate, gate operator/arm and the electrical control box at all times. Keep that general area as clean as humanly possible.
- Test (use caution) all non-contact sensors, all vehicle detectors, keypad, telephone entry system or other control devices applicable.



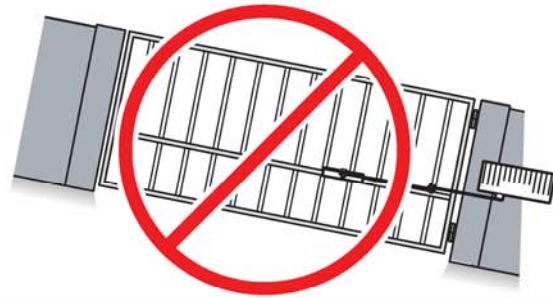
The operator is intended for installation on a vehicular swing gate only.



The operator IS NOT intended to be used for any pedestrian gate.



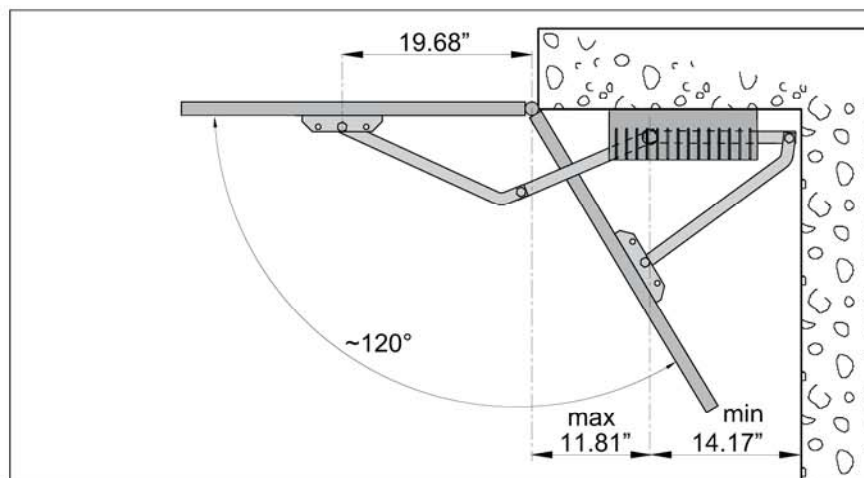
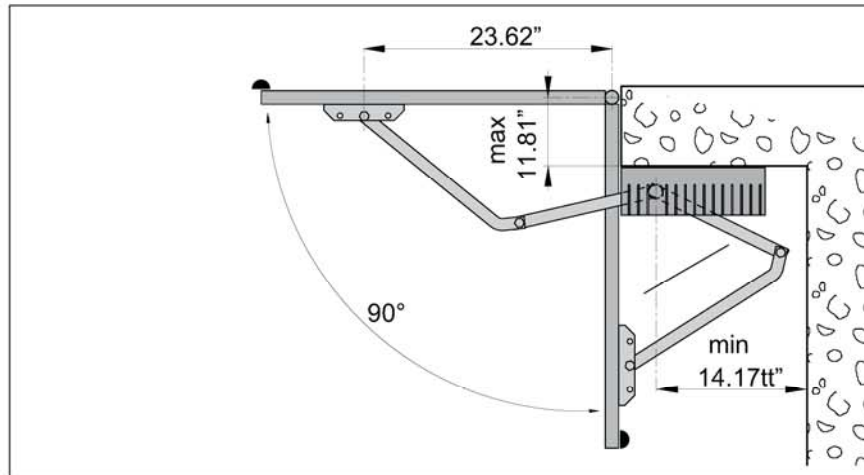
The operator IS NOT intended to be used for any uphill gate.



Do not attach/weld the front bracket plate to pickets directly.



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.

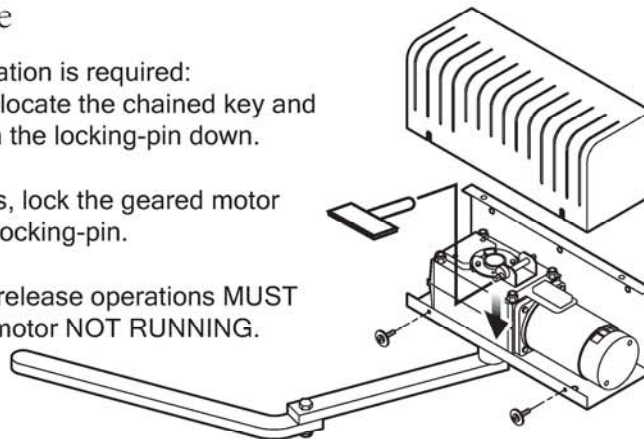


Manual Release

When manual operation is required:
Remove the cover, locate the chained key and turn the key to push the locking-pin down.

At end of operations, lock the geared motor again by releasing locking-pin.

Attention: lock and release operations **MUST** be performed with motor **NOT RUNNING**.

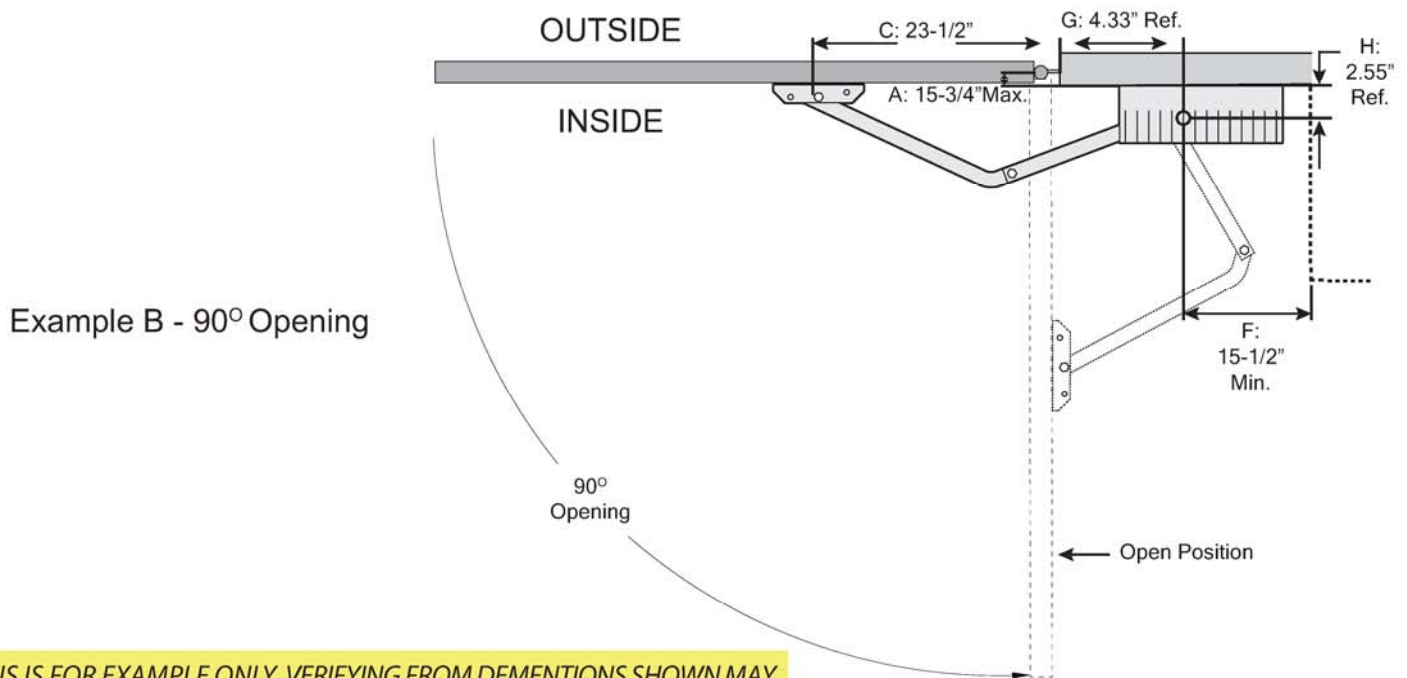
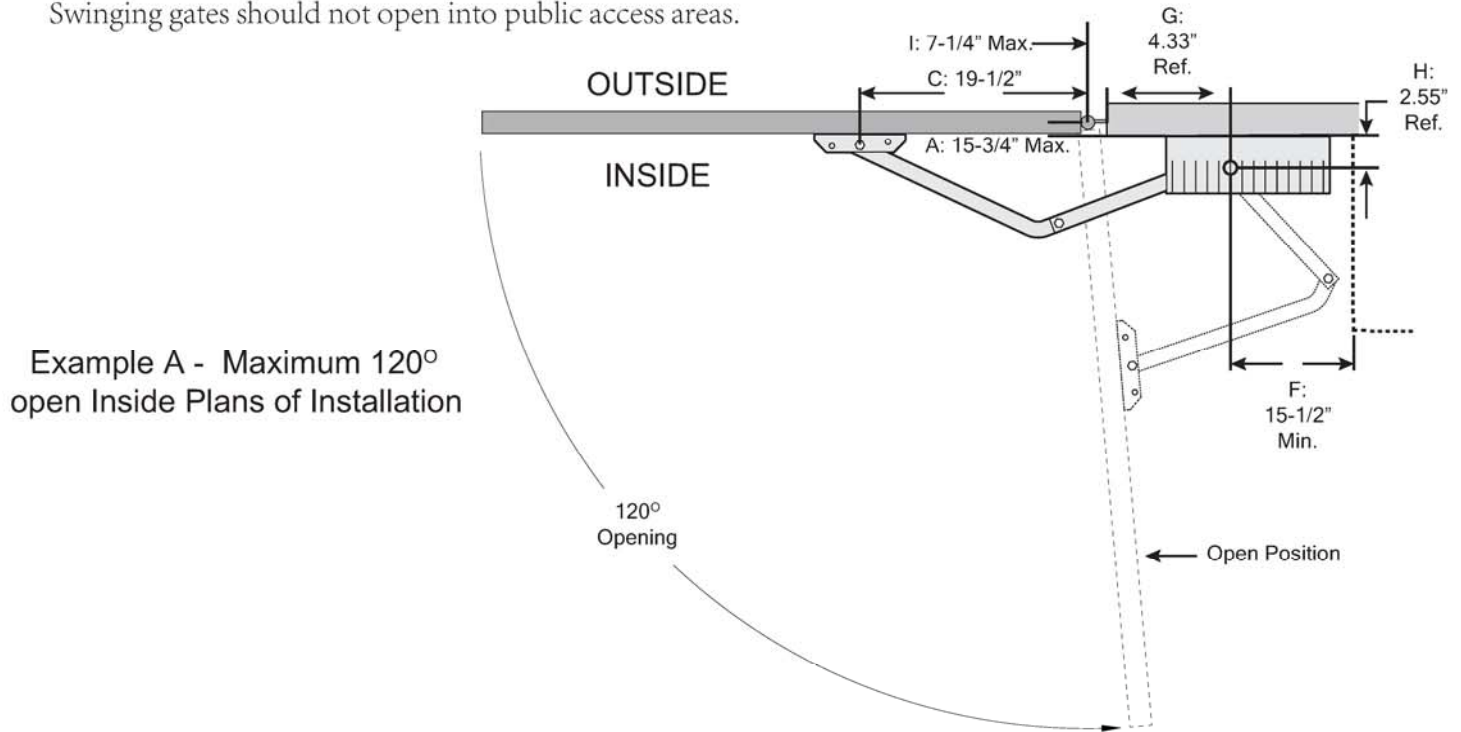


NOTE: Varying from the dimensions shown may severely affect the speed and performance of the gate operator.

SINGLE UNIT CONNECTION:

Gate must be installed in a location so that enough space is supplied between the gate and adjacent structures when in open and closed position to reduce the risk of entrapment.

Swinging gates should not open into public access areas.

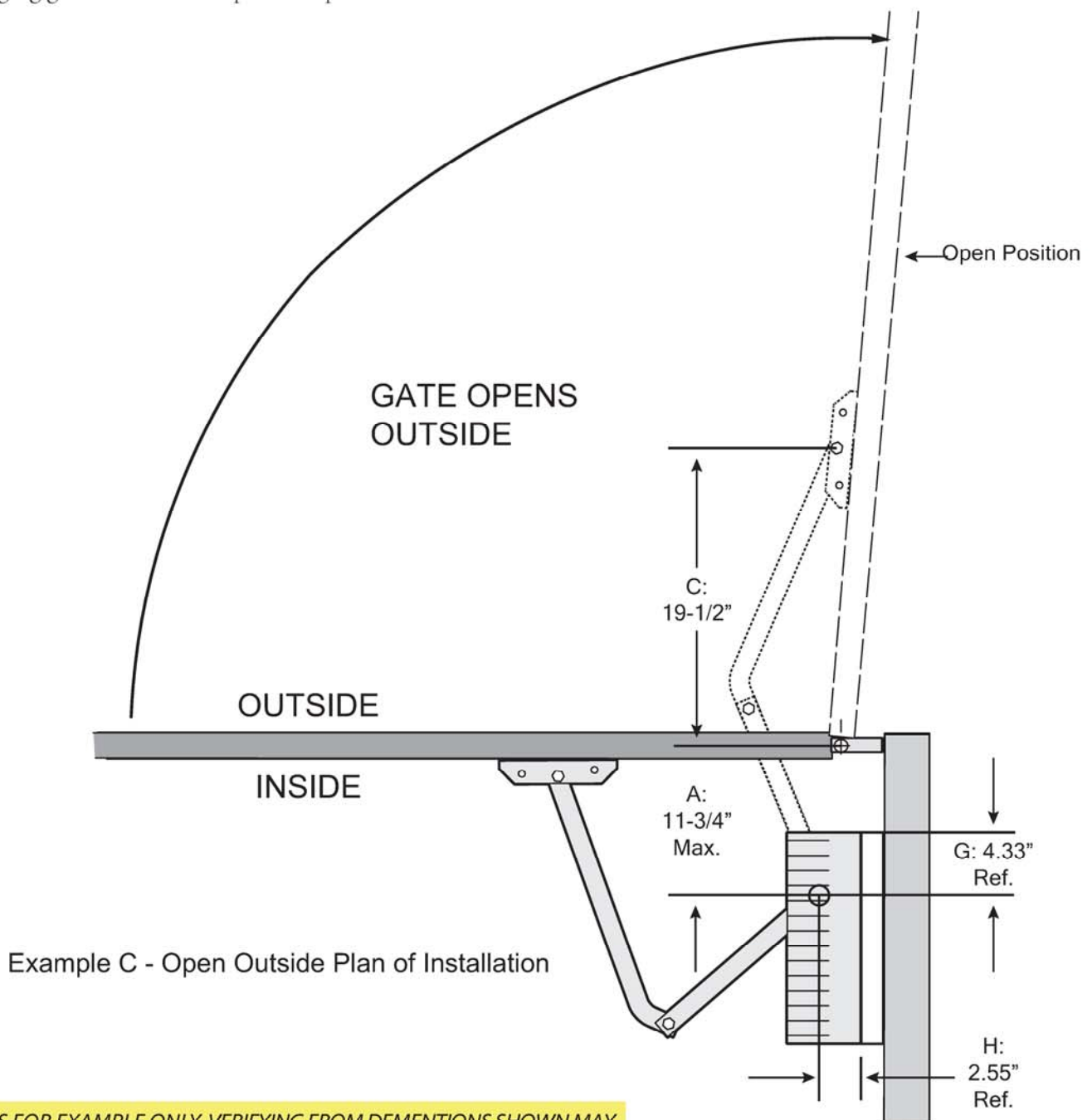


THIS IS FOR EXAMPLE ONLY. VERIFYING FROM DEMENTIONS SHOWN MAY SEVERLY AFFECT THE SPEED AND PERFORMANCE OF THE GATE OPERATOR.

SINGLE UNIT CONNECTION:

Gate must be installed in a location so that enough space is supplied between the gate and adjacent structures when in open and closed position to reduce the risk of entrapment.

Swinging gates should not open into public access areas.



Example C - Open Outside Plan of Installation

THIS IS FOR EXAMPLE ONLY. VERIFYING FROM DIMENSIONS SHOWN MAY SEVERELY AFFECT THE SPEED AND PERFORMANCE OF THE GATE OPERATOR.

Contact Safety Sensor and Non-Contact Safety Sensor Installation

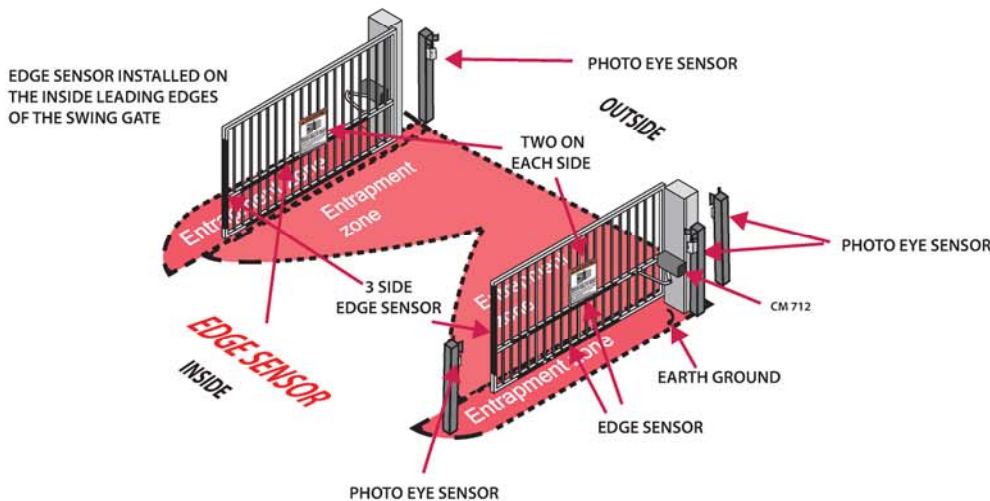


WARNING: To reduce the risk of severe injury or death to person, please to follow these instructions:

NOTE: Edge Sensor installation DOES NOT reverse the gate all the way back to its limits when the edge sensor is contacted. This installation is only to protect against entrapment and to comply with UL325.

NOTE: If the bottom edge of a swing gate is more than 6" (152mm) above the ground at any point in its travel on or more sensors shall be located to protect from the bottom edge.

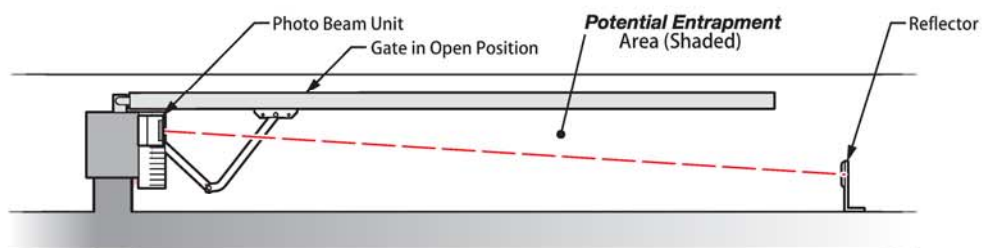
- A wireless contact sensor such as one that transmits radio frequency signals to the gate operator for entrapment protection functions shall be located where the transmission of the signals are not obstructed or impeded by building structures, natural landscaping or similar obstruction. A wireless contact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



Note: One or more Contact Sensors and Non-Contact Sensors Shall be located on the inside and outside leading edges of a swing gate, or where the risk of entrapment, or obstruction exists' such as the perimeter reachable by a moving gate, or barrier.

Install photo beam sensors and edge sensors to protect against any entrapment or safety conditions encountered in your gate installation.

We recommend to install photo beam sensors for protection at the potential entrapment area like the one shown at the bottom picture.



The new 2018 UL 325 standard requires minimum two external safety devices for an operator. One monitors the close cycle, and the other one monitors the open cycle. Most typical installation is to connect one photo eye sensor to CL-EYE terminal and connect an Edge sensor MGL-RX20 to terminal J6 @ UL-OP.

Photoeye Sensor Alignment Installation Instruction



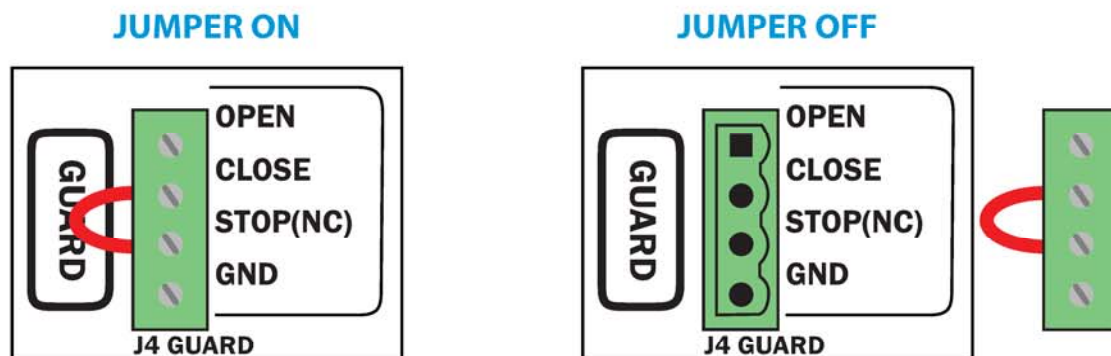
WARNING: to reduce the risk of injury or death:

Photoeye Sensor Alignment Installation Instruction For Revision-36, Or Later Firmware For GOC-4200 Main Board

1. Turn off AC and Battery power.
2. Take out the 4-pin terminal jumper from the GUARD terminal.
3. Connect the first photo eye sensor to the MON CLEYE terminal on the GOC-4200LDR Loop board.
4. Look for a good location to secure the photoeye sensor receiver.
5. Turn battery power ON.
6. Now you hear one alarm sound every 5 seconds.
7. Next try to align the lens to the photo eye sensor receiver. If the lens is aligned to the receiver, then you hear the alarm sound rapidly (6 alarm sounds per second).
8. Once you approximately have located the area to put the lens. Next you need to move the lens left and right, up and down to center the lens.
9. Once you have centered the lens. You can secure the lens.
10. Disconnect the photo eye sensor receiver from MON CL EYE terminal. Use the same method start from step 1 to align the photo eye sensor lens for MON OP for the PRIMARY UL terminals.
11. If you only install two photo eye sensors (One monitors the gate close cycle, and the other one monitors the gate open cycle). Then you can go to step 14. Otherwise go to step 12.
12. Use the same method to align the other photo eye sensors for MON CL for the PRIMARY UL terminals.
13. Use the same method to align the other photo eye sensors for MON OP, and MON CL for the SECONDARY UL terminals if need.
14. Once you have completely aligned all the photo eye sensors. Put the 4-Pin terminal jumper back to Guard terminal. And plus in all the photo eye sensors receivers (One must connect to the MON CL EYE, terminal, and other one connect to one of the MON OP terminal at the PRIMARY UL terminals). Then reset the operator.

Note: To check the lens to see if lens is at the center position to the receiver, or not, you can make a 1.5" in diameter circle from a piece of cardboard. And use this cardboard to cover the lens with the center of the circle aligns to the center of the lens. Then use a transmitter to open/close the gate to see if the gate still work. If gate is still working, that mean the lens is at the center position to the receiver, if not, go back to step 1 to align the lens correctly.

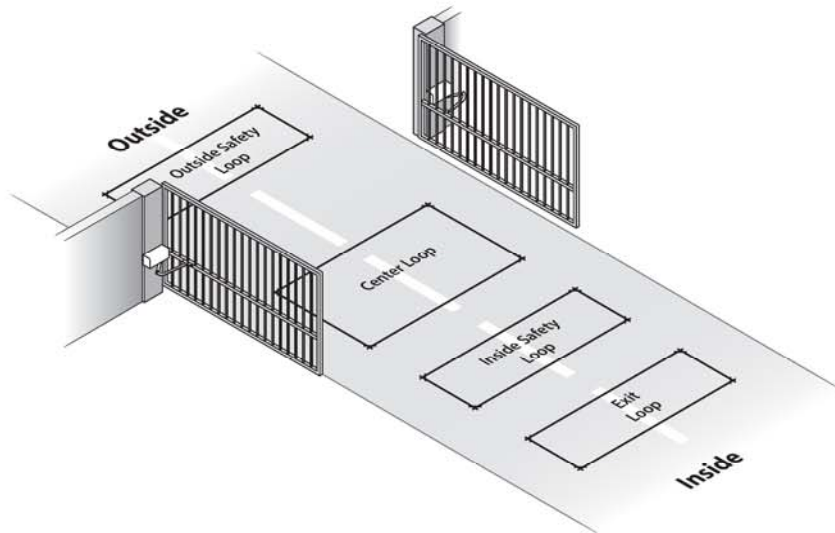
FIGURE 2



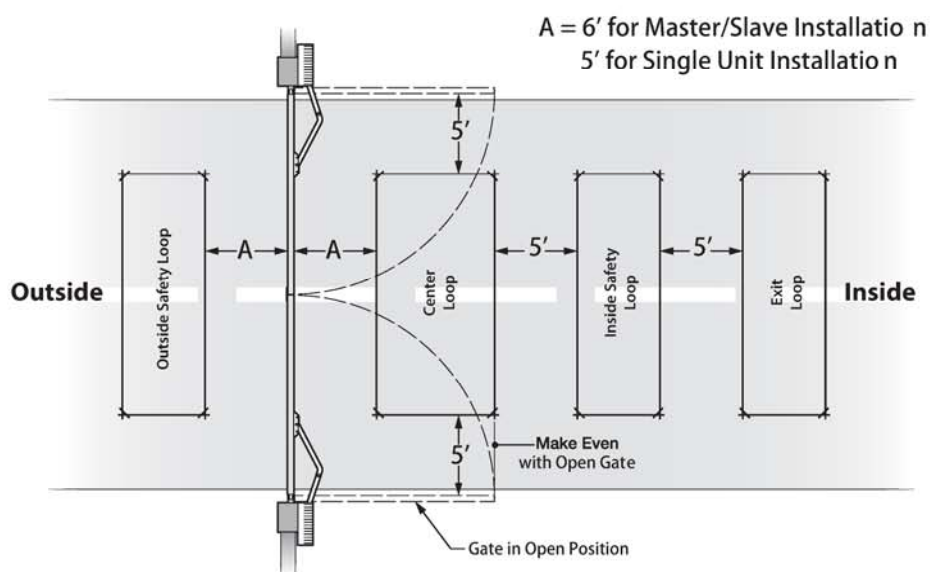


WARNING: Consult the installation instructions from the loop detector manufacturer. The following statements are provided as a guide but different requirements may be required by the vehicular loop detector manufacturer.

Safety loops allow the gate to stay open when vehicles are on the gate path. If the gate is longer than the vehicles that pass through it a center loop is recommended and should be installed. A center loop prevents the gate from closing when a vehicle is between the safety loops. Safety loops are required when using a center loop. See Loop Wiring.



Check with local regulations and accepted best practice requirements for every installation.

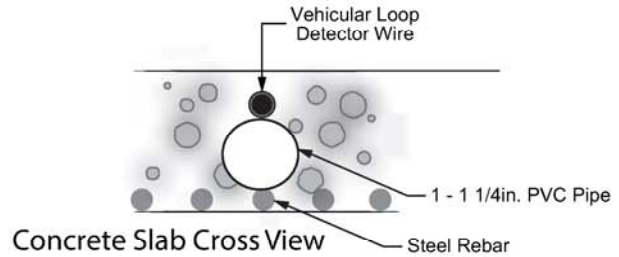




WARNING: Always read and follow the manufacturer's instructions for the products used before connecting them. Comply with all applicable codes and safety regulations. Failure to do so may result in damage, injury or death.

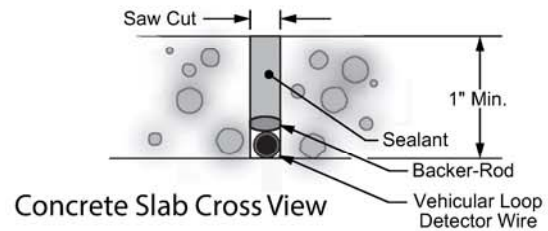
NEW SLAB POUR

Ty-wrap 1 1/4" PVC Pipe to the top of the rebar in the size and configuration of the loop (i.e. 4ft x 8ft). Then ty-wrap the loop to the top of the PVC frame. This stabilizes the loop during the pour and separates it from the rebar.



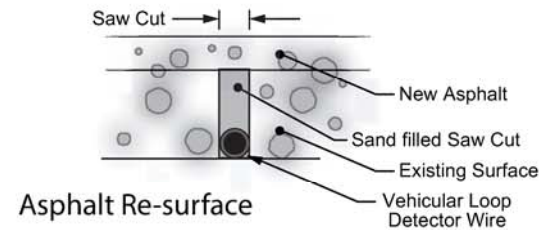
SAW CUT EXISTING SURFACE

Cut 1" deep into the existing surface, place a 45° cut at the corners to prevent sharp edges from damaging the loop wire. Notch out for the "T" connection where the lead wire connects to the loop. Remove all debris from the finished cut with compressed air. Place the loop into the saw cut. Place backer material into the saw cut over the loop wire and pack tightly. Place a high quality sealer over the saw cut to seal the surface.



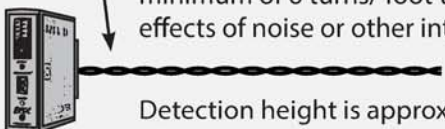
RESURFACE ASPHALT

Saw cut the existing surface 3/4" deep and place a 45° cut at the corners to prevent sharp edges from damaging the loop wire. Remove all debris from the finished cut with compressed air. Place sand over the loop wire to the surface and pack tightly. Lay new asphalt.



GENERAL INSTALLATION GUIDELINES

Lead-in wire (wire from loop to detector) must be twisted a minimum of 6 turns/ foot to avoid the effects of noise or other interference.

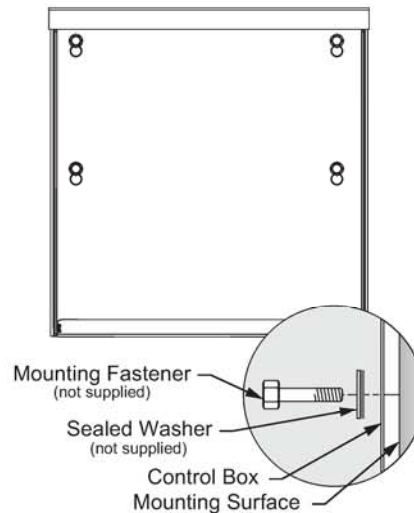
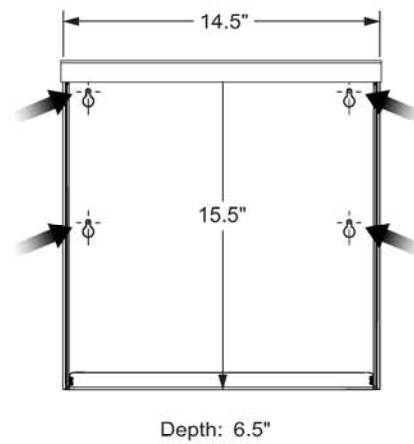
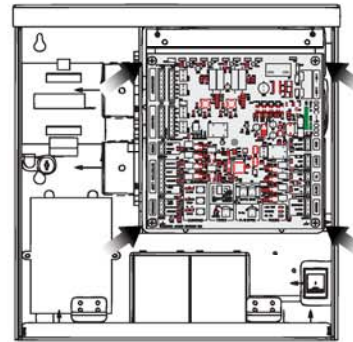


Detection height is approximately 70% of the shortest side of the loop.

Recommended # of Turns	
Perimeter in Feet	# of Turns
10	5
20	4
30-40	3
50-100	2

The control box MUST be mounted within 5 feet of the gate operator. Mount the control box as high as possible for best radio reception. Make sure the control box is level. The control unit weight is approximately 28 lbs. with supplied batteries.

- 1** Remove the screws and open the control box.
- 2** Disconnect the connector from the Main Board.
- 3** Position the control box into the desired place and mark the mounting holes.
- 4** Select the mounting holes and remove the knockouts using a screwdriver and hammer.
- 5** Secure the control box to mounting surface.



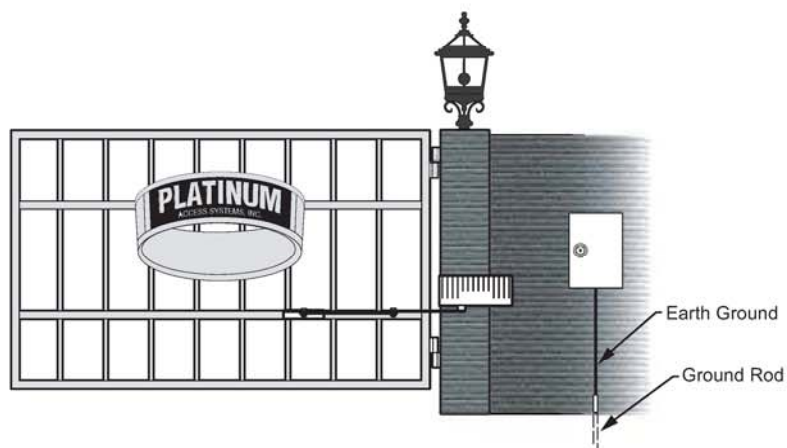
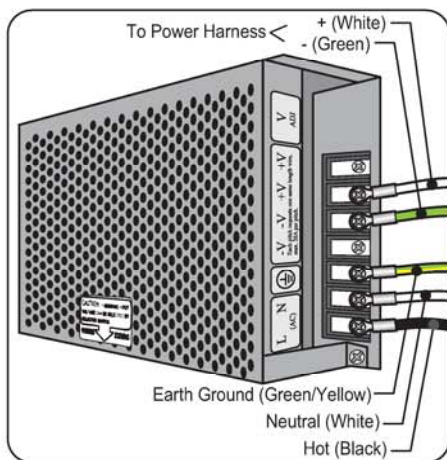
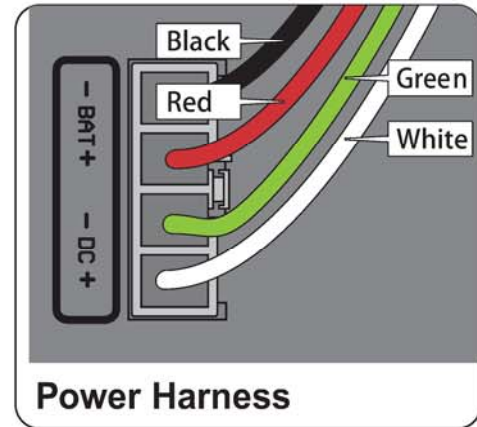


WARNING: Verify the installation first to make sure everything is correct before connection the power cable to the board. USE MIN. 14 AWG WIRE. FOLLOW ALL LOCAL ELECTRICAL CODES.

To help protect the equipment from lightning and power surges and to protect persons from shock hazard the Operator must be grounded. The earth ground rod must be located within 3 feet from the gate operator. Use the proper type earth ground rod for your local area. The ground wire must be a single, whole piece of wire. Never splice two wires for the ground wire. If you cut the ground wire too short, break it, or destroy its integrity, replace it with a single wire length. Prevent unnecessary turns or loops in ground wires.

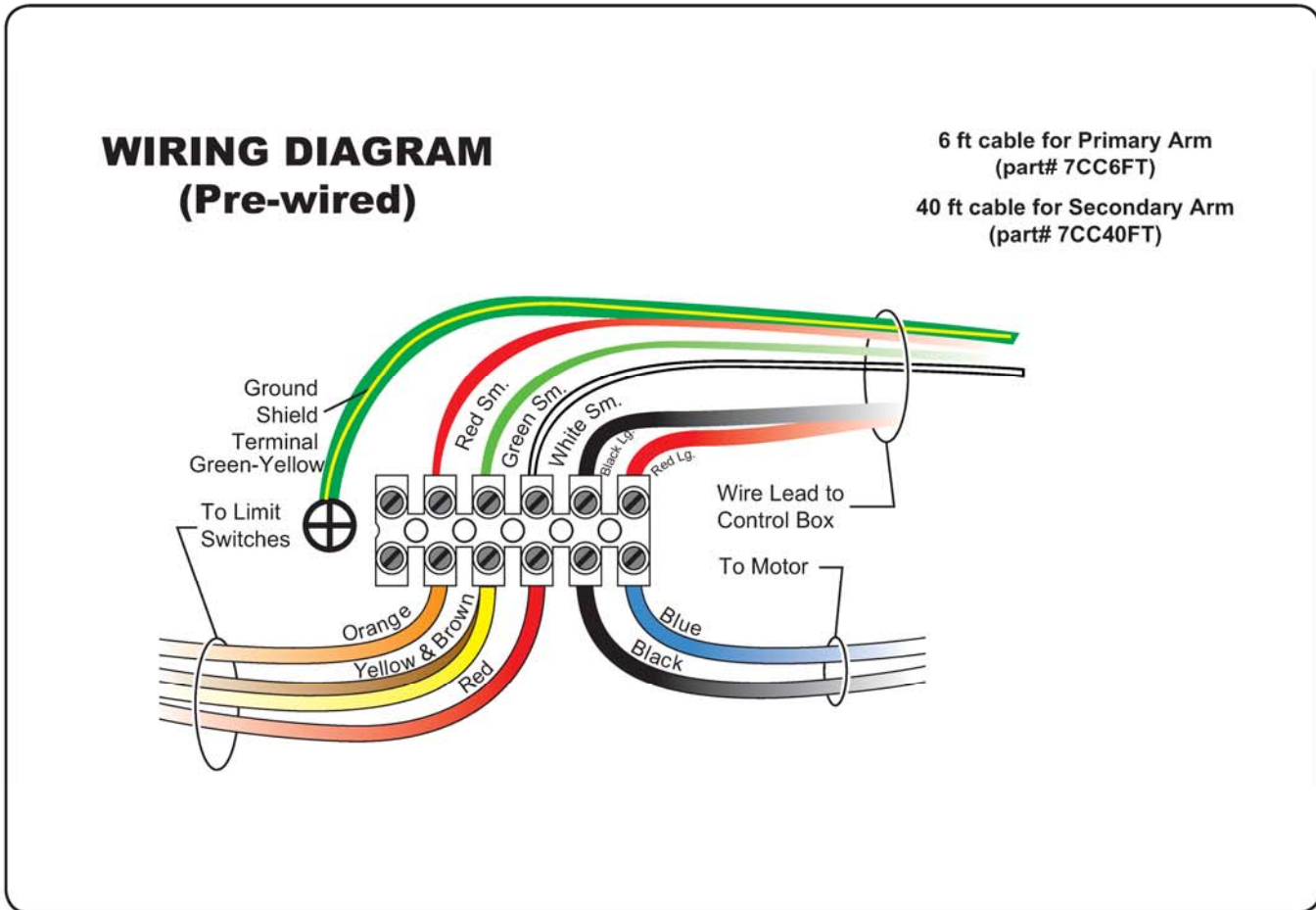
The gate operator and the battery charger require a single phase AC line to operate.

1. Turn off the breaker for the circuit you are using.
2. Select the proper voltage on the power board.
3. Connect the incoming power wires to the proper terminals.
4. Turn on the breaker and check that AC ON and CHARGE LED are lit.



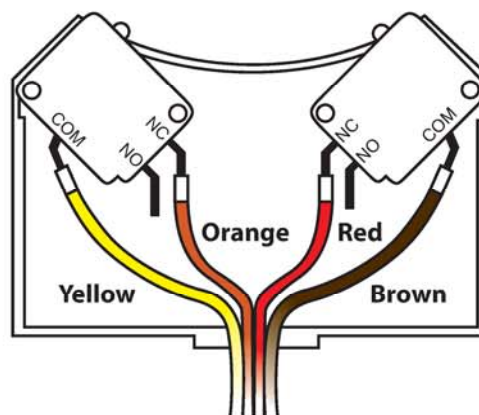
The power receptacle has been left unconnected till the installer decides what voltage to use. Connect to 120VAC only

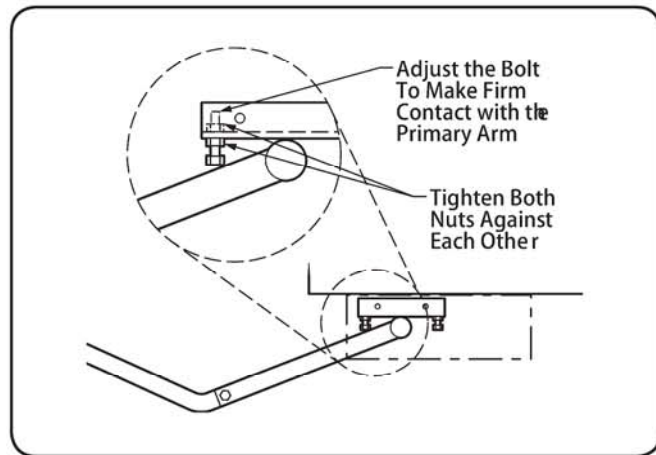
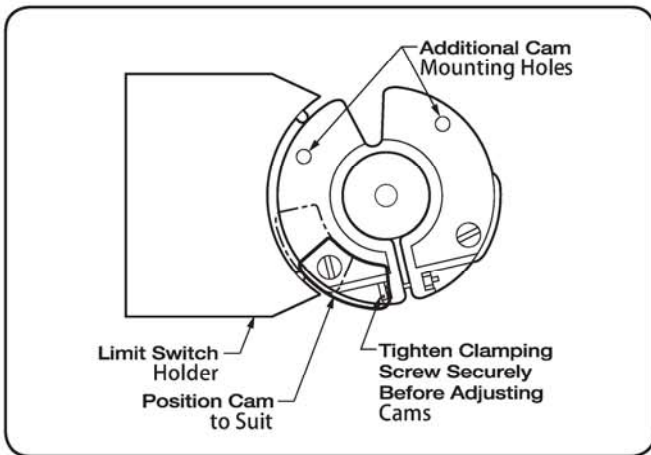
LIMIT SWITCH SET-UP (Continued):



LIMIT SWITCH CONNECTIONS

The Limit Switches are wired as shown



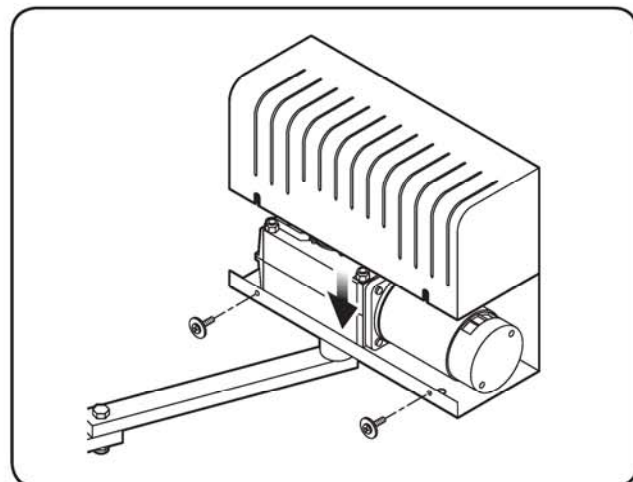


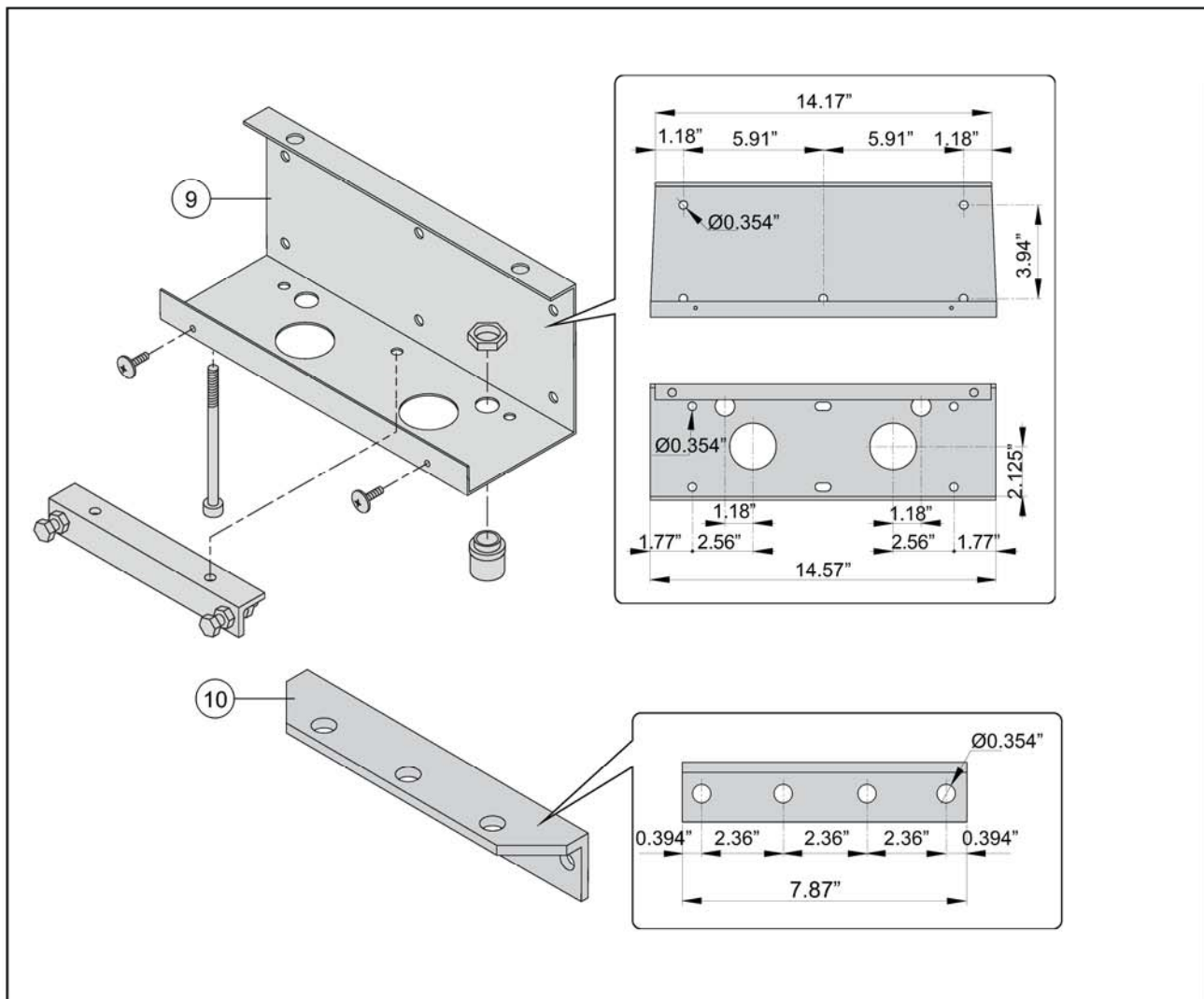
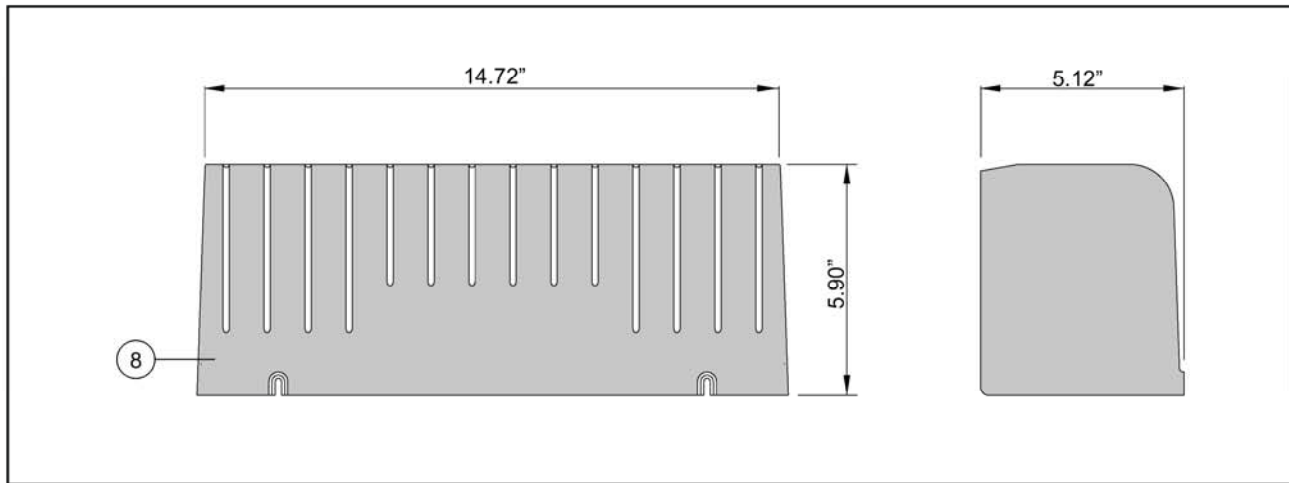
WARNING: Be aware that the Positive Stop Extension DOES NOT trip the Obstruction Sensor, it is only designed to eliminate freeplay in the arms when the gate is full closed.

- A. Loosen the screws on the limit switch cams and position the cams to the desired locations. There are additional holes provided in case of a wide or tight angle of opening or closing.
- B. Move the gate manually and ensure that the limit switch gets actuated at the desired open and closed position. The limit switch will click when engaged by the limit cam.
- C. Retighten the screws on the limit switch holders once the proper position has been determined. CAUTION – DO NOT OVERTIGHTEN SCREWS!
- D. Run the unit 2 full cycles without interruption (from limit to limit) to execute a “Learn Cycle.”
- E. Fine-tune the adjustment of the Limit Switch Cams.
- F. With gate in the fully closed position, adjust the Positive Stop by moving the bolt to make firm contact with the Primary Arm.
- G. Lock the bolt’s position by tightening the nuts on each side of the bracket against each other.

NOTE: Leave cover off until after the installation of the control box and the electrical installation. Verify that the operator opens and closes to the desired position under power. Make any adjustments as necessary.

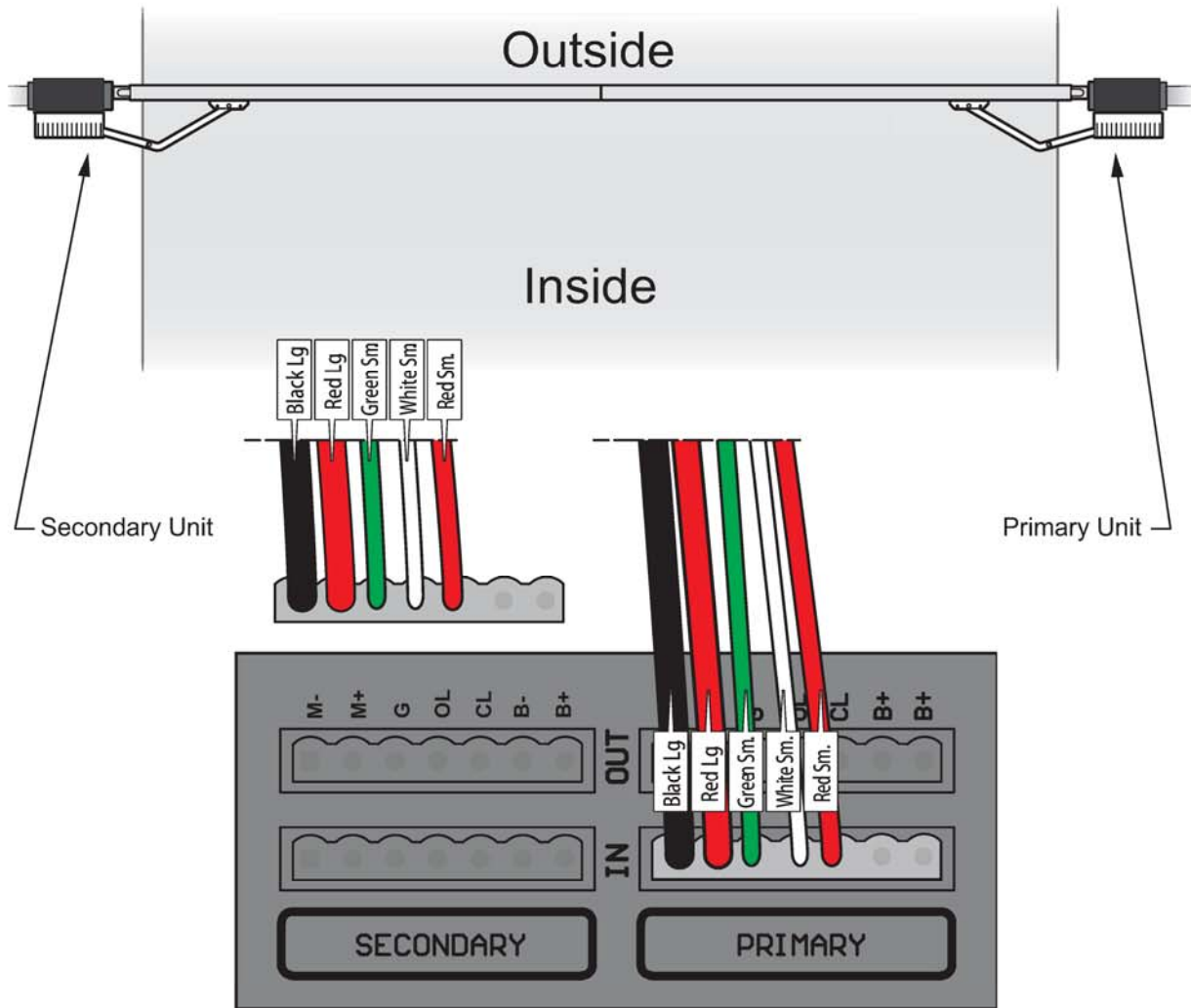
Replace the cover and secure it with screws provided after finishing final adjustments.





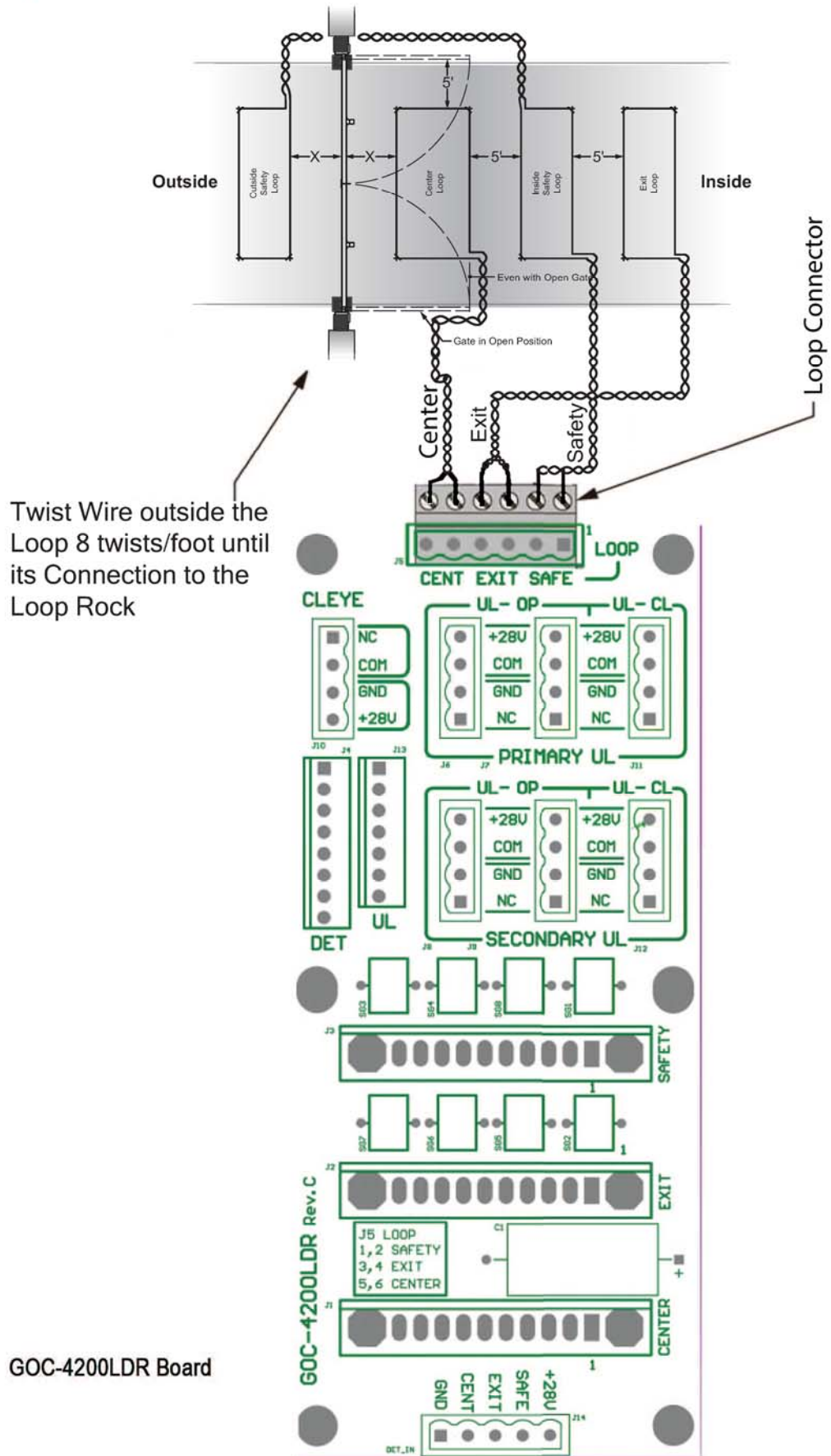
Ref.	Description
8	Housing
9	Fastening plate
10	Gate attachment bracket

The control board provides a connector for the secondary actuator unit and automatically synchronizes the secondary unit with the primary unit.



Simply connect the Secondary arm to its applicable position, IN for open inside or OUT for open outside.

Loop Rack Installation





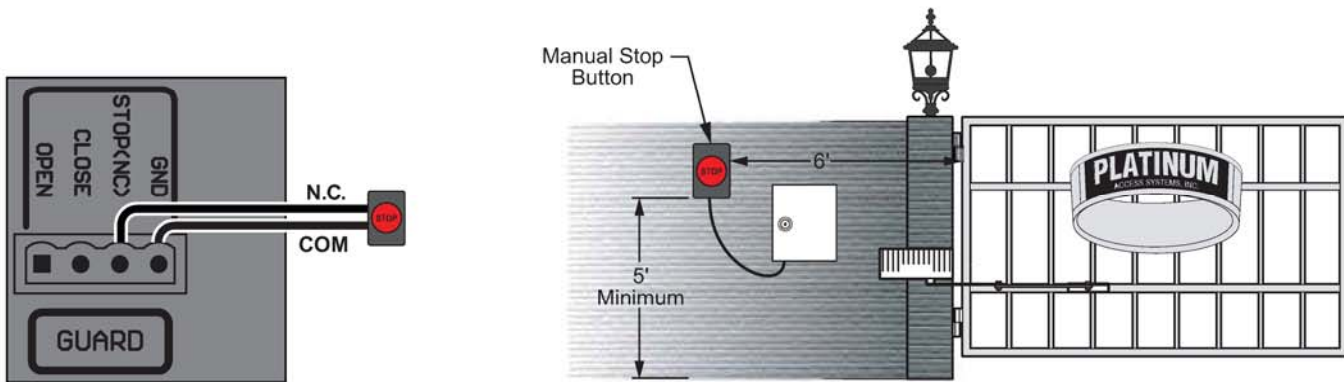
WARNING: To reduce the risk of severe injury or death to person, please follow these instructions:

ALARM RESET SWITCH INSTALLATION: (UL 325 standard requirement)

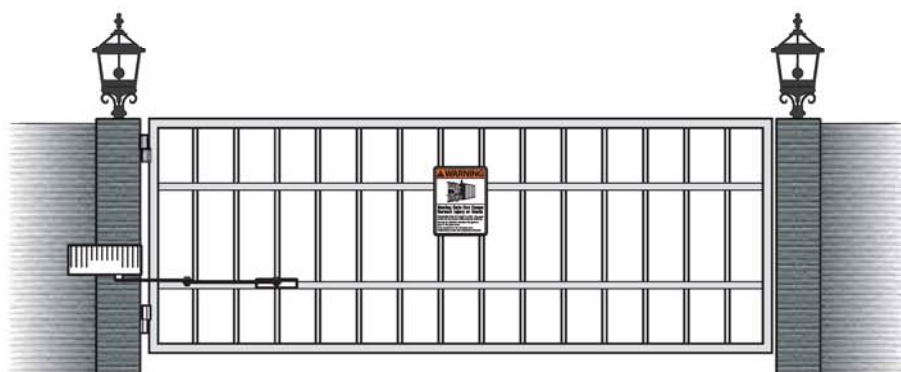
An alarm shall signal upon two sequential activations of an entrapment protection device, where the first activation is either a Type A or B2 device and the second activation is a Type A device. The alarm shall signal for a minimum of 5 min or until a renewed manual input from an integral control or a permanently mounted control (such as a Stop button) located in the line-of-sight of the gate has been entered. An audio alarm is not required for Classes III and IV.

To reset the alarm the Stop command can be given in two different ways.

1. The Built in Stop switch on the control board.
2. The External Stop button in the line-of-sight of the gate, away from moving parts of the gate and out of reach of children.



WARNING PLACARDS INSTALLATION:



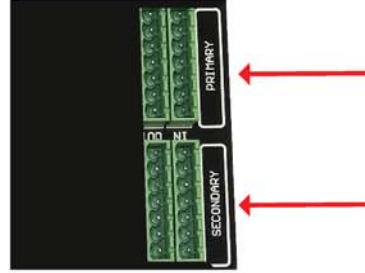
All Warning Signs and Placards must be mounted where visible in the area of the gate. A minimum of two (2) Warning Placards shall be mounted. (One on each side of the gate).

PRIMARY/SECONDARY OPERATOR SELECT:

Primary/Secondary

To set the Operator to Secondary: Select the Secondary Terminal on the 4200 Board. Reset power to make the new setting Effective

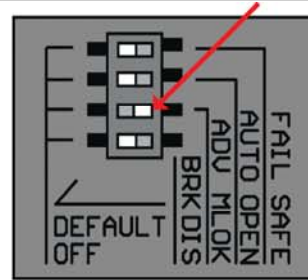
To set the Operator to Primary: Select the Primary Terminal on the 4200 Board. Reset power to make the new setting Effective



ADVANCING LOCK SELECT:

ADV MLOK

To set the maglock to be engaged before the gate reaches the close or open position: Select the DIP switch to ADV MLOK position.



OPEN ON POWER FAIL:

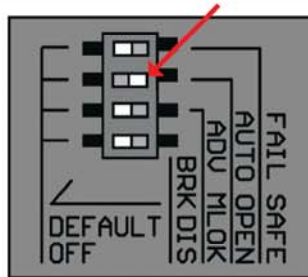
The Auto-Open feature in Platinum Access Systems Gate Operators enables the following functionality in the event of power failure:

- Open the gate in case of power failure (120 or 220 VAC).
- Keep the gate at the open position as long as there is no power.
- Resume to normal operation when the power has been restored.

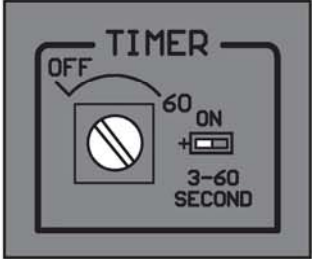
All accessories and safety devices are functional. The only function disabled is the close command.

Auto-Open

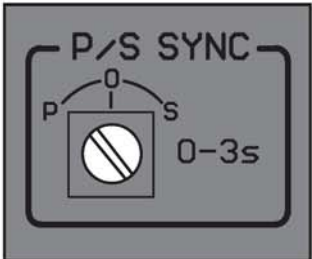
To enable the Auto-Open feature: Select the DIP switch to AUTO OP position.



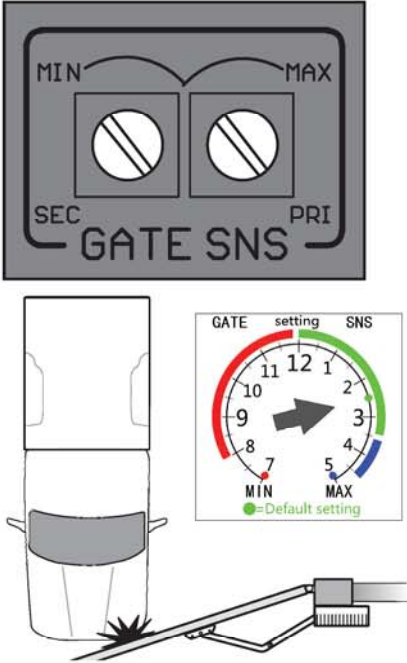
CLOSE TIMER:

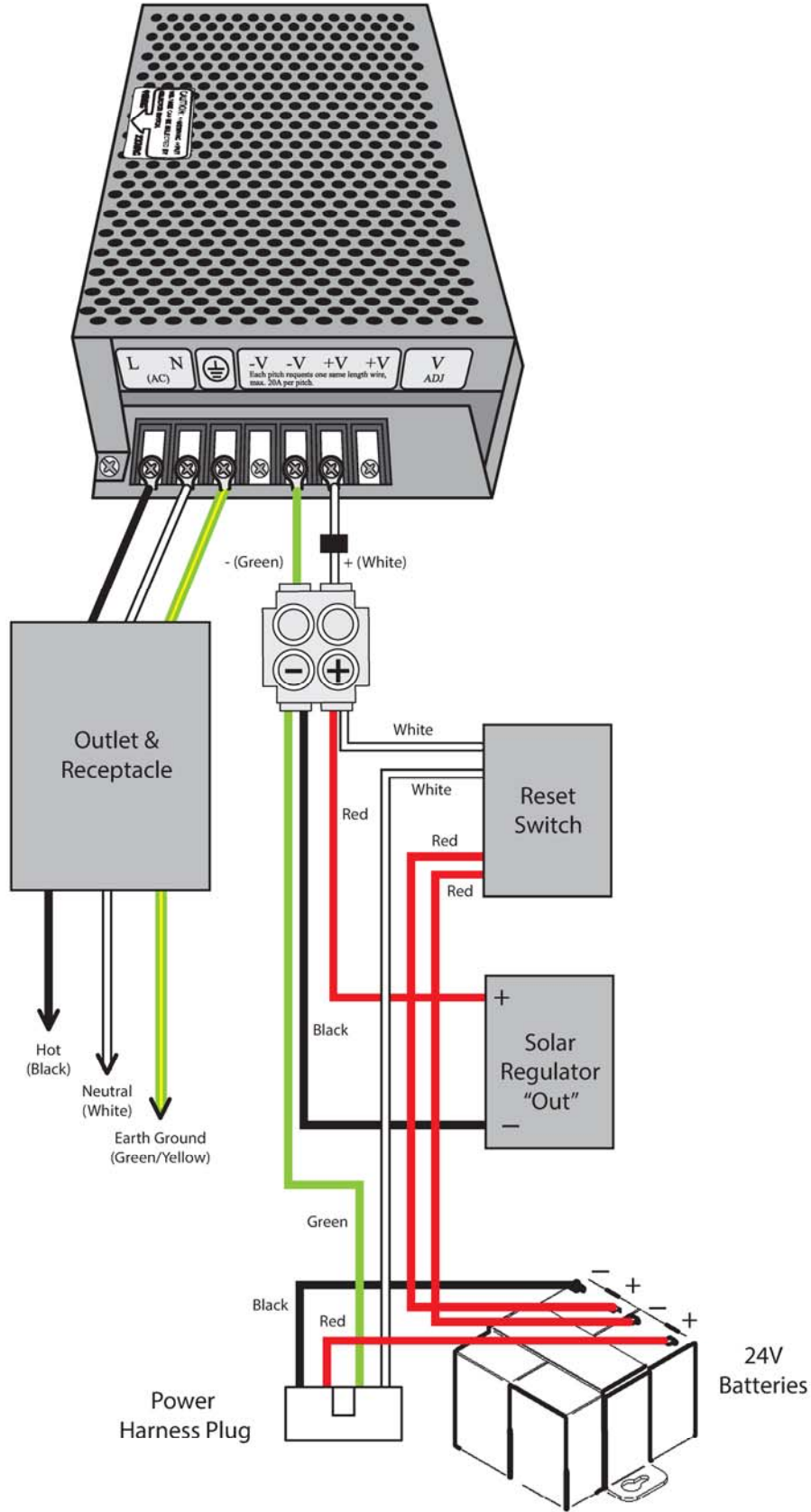
<p>Close Timer</p> <p>Timer Feature when activated will close the gate automatically of a set number of seconds. This is adjustable from 3 to 60 seconds.</p>	 <p>The diagram shows a control panel with a rotary switch labeled 'TIMER'. The switch has 'OFF' and 'ON' positions. To the right of the switch, there is a battery symbol and the text '3-60 SECOND'. A '60' is also indicated near the top of the switch.</p>
--	--

LEAF DELAY:

<p>Leaf Delay</p> <p>An Overlap Delay has been provided for biparting gates that have an emblem or maglock for example. It will provide up to a 3 second delay on primary or secondary operator.</p>	 <p>The diagram shows a control panel with a rotary switch labeled 'P/S SYNC'. The switch has 'P' and 'S' positions. To the right of the switch, there is the text '0-3s'.</p>
---	---

INSTANT REVERSING SENSOR:

<p>Instant Reversing Sensor</p> <p>The Obstruction Sensor needs to be adjusted to compensate for the installation and gate weight. The overload adjustment is provided to set the gate sensitivity.</p> <ol style="list-style-type: none"> If the gate reverses by itself or stops in midcycle, it is too sensitive. If the gate hits an object and does not reverse or stop, it is not sensitive enough. Clockwise increases sensitivity, counterclockwise decreases sensitivity. <p>Test and adjust for proper reversing pressure</p> <p><i>(Note: When unit alarms, push "STOP" or "RESET" button will clear the alarm)</i></p>	 <p>The diagram shows a control panel with two rotary switches labeled 'MIN' and 'MAX'. Below them are 'SEC' and 'PRI' labels. The text 'GATE SNS' is at the bottom. Below the panel is a diagram of a gate with a sensor arm and a pressure gauge. The gauge is labeled 'GATE setting SNS' and has a scale from 1 to 12. A green dot at the 5 mark is labeled 'Default setting'. A red arrow points to the 12 mark, and a blue arrow points to the 1 mark.</p>
---	--



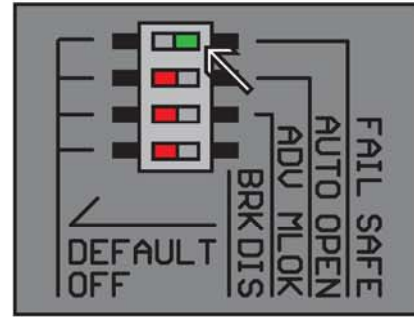
FAIL SAFE/SECURE:

Fail Safe/Secure

On = Fail Safe Off = Fail Secure

Fail/Safety	Battery Detection	AC Detection	Output
ON	Normal	Normal	Secure
ON	Normal	OFF	Fail Safe
ON	Low/OFF	Normal	Fail Safe
ON	Low/OFF	OFF	Fail Safe
OFF	Normal	Normal	Secure
OFF	Normal	OFF	Fail Secure
OFF	Low/OFF	Normal	Fail Secure
OFF	Low/OFF	OFF	Fail Secure

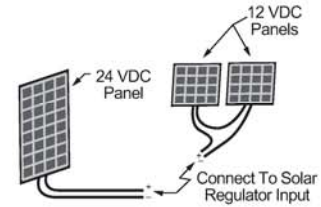
Note: When the output is "Fail Safe", there is less resistance to push the gate open manually.



SOLAR INSTALLATION:

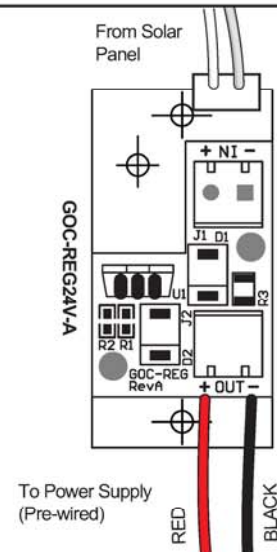
Step 1

A 24V solar panel or two 12V solar panels with minimum 80 watts capacity, Maximum Power Voltage (VPM) > 31V and Open Circuit Voltage (VOC) >38V is required.



Step 2

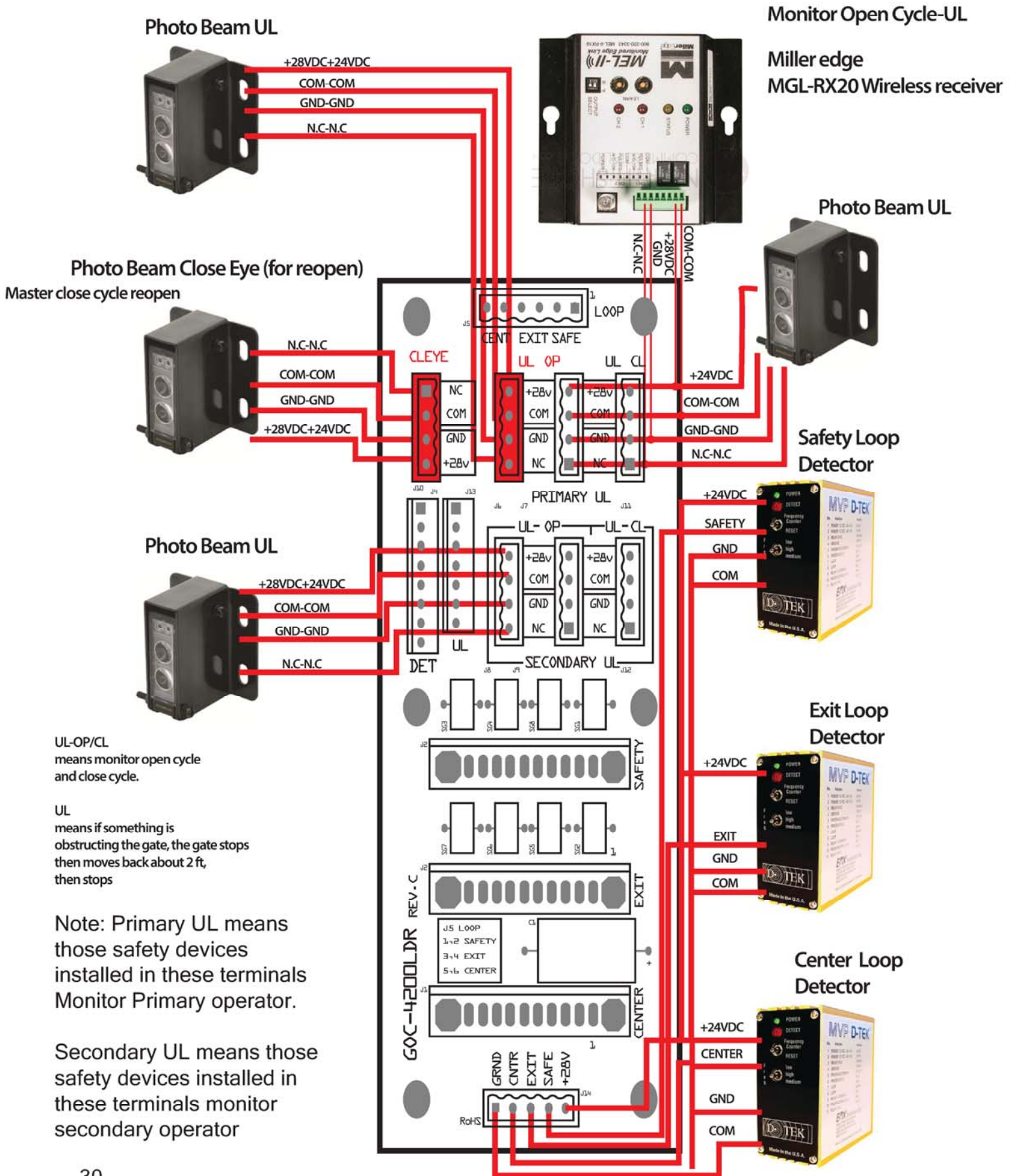
Connect the solar panel cables to the Solar Regulator as shown.



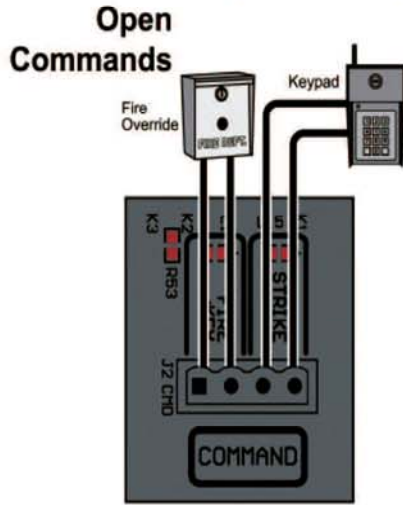
Optional Solar Installation: For Solar Panel controller installation, please call Technical Support.

Installation: Safety & Accessory Connections

ACCESSORY CONNECTIONS



ACCESSORY CONNECTIONS (continued):



Fire Box & Keypad Installation

Radio Receiver

Need to verify the proper connections before connecting the Radio Receiver. The maximum voltage that the control board / battery can provide is about 28V for external accessories. If there is an electrical shot in the power to the accessories, the control board will protect itself by shutting down and will remain shut down until the short is fixed.

Two modes of operation that a radio receiver can control the gate:

Open-Close

By having the radio receiver connected as illustrated and with the Timer OFF:

Every command of the radio transmitter will control the gate as follow:

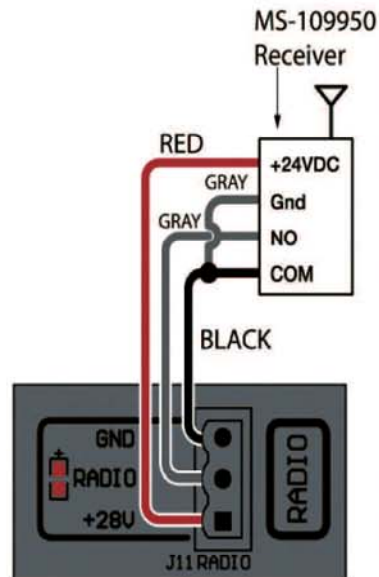
- A. First command opens the gate
- B. Second command CLOSE the gate if at open position
- C. Third command OPEN the gate
- D. Any subsequent commands will continue in the same order to control the gate.

This type of configuration is not recommended for a commercial installations.

Open Only

By having the radio receiver connected as illustrated and with the Timer ON:

Each command of the radio transmitter is ALWAYS AN OPEN COMMAND to the gate.

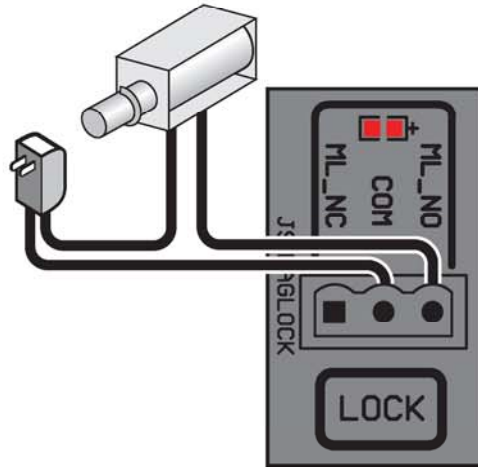


Linear MS-109950
Installation Diagram

ACCESSORY CONNECTIONS (Continued):

Solenoid Connection

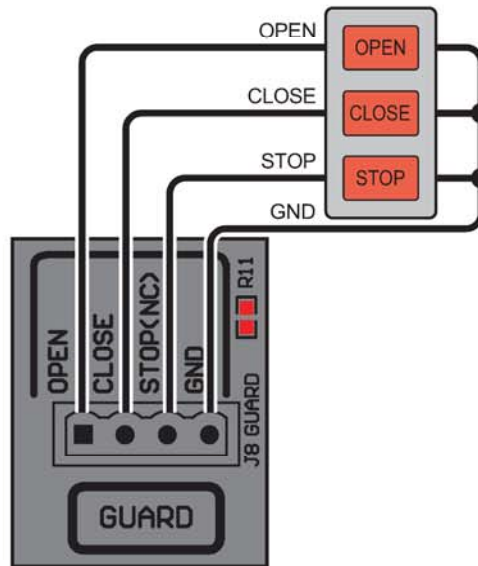
The solenoid power connection must be provided an external power source. This will prevent damage to the battery in the event of a line power failure.



Guard Station

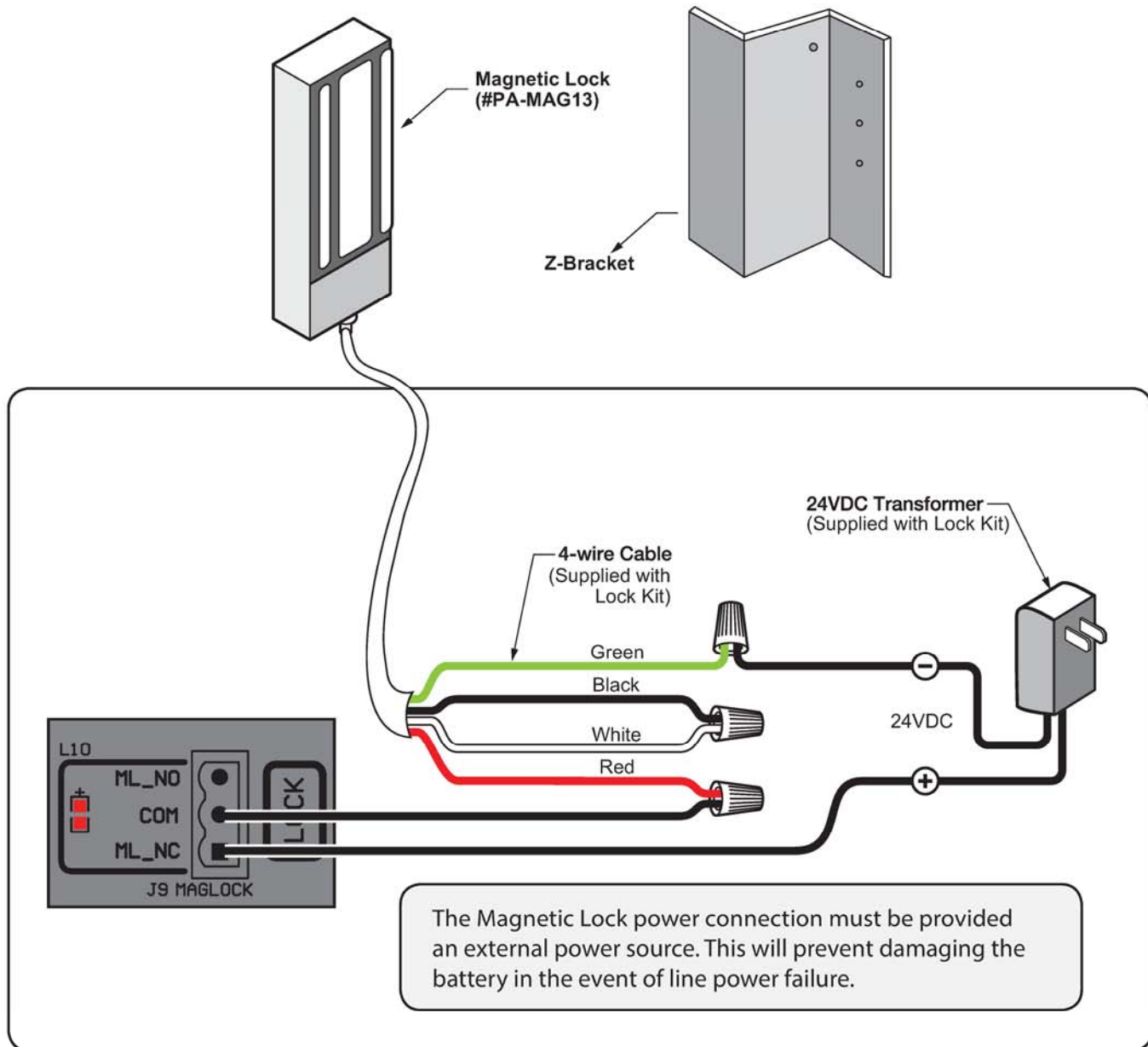
This will control the gate operator to Open, Stop, and Close the gate. The switches for Open and Close must be normally open type. The switch for Stop must be normally close type. They all can be using the same common ground. The control switch box should be within sight of the gate, out of reach of children, and away from moving parts of the gate.

If no guard station or STOP switch is installed, a jumper must be inserted between "STOP(NC)" and "GND" pins.



ACCESSORY CONNECTIONS (Continued):

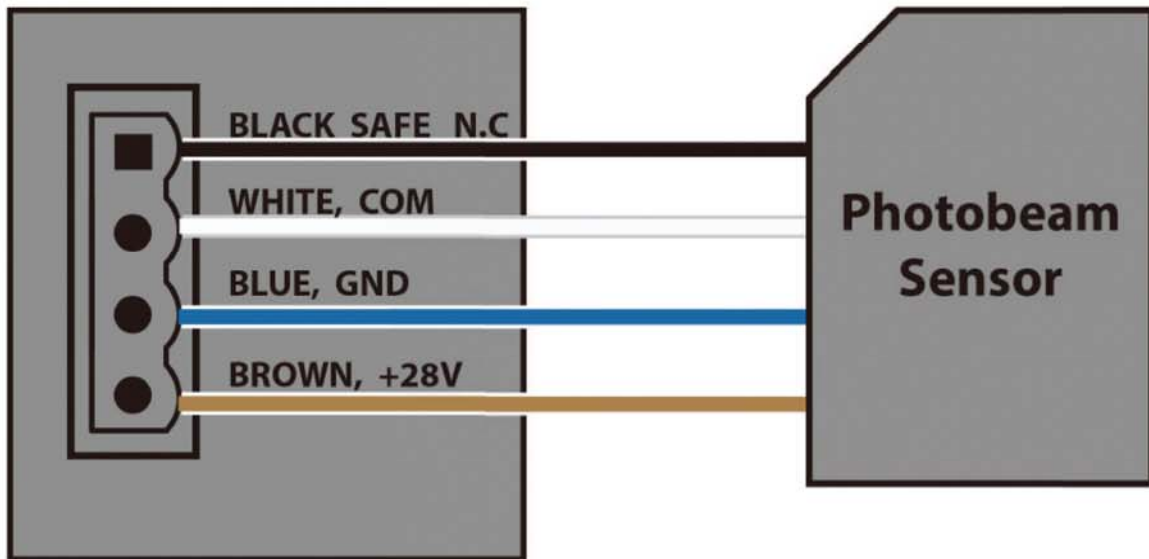
Locks



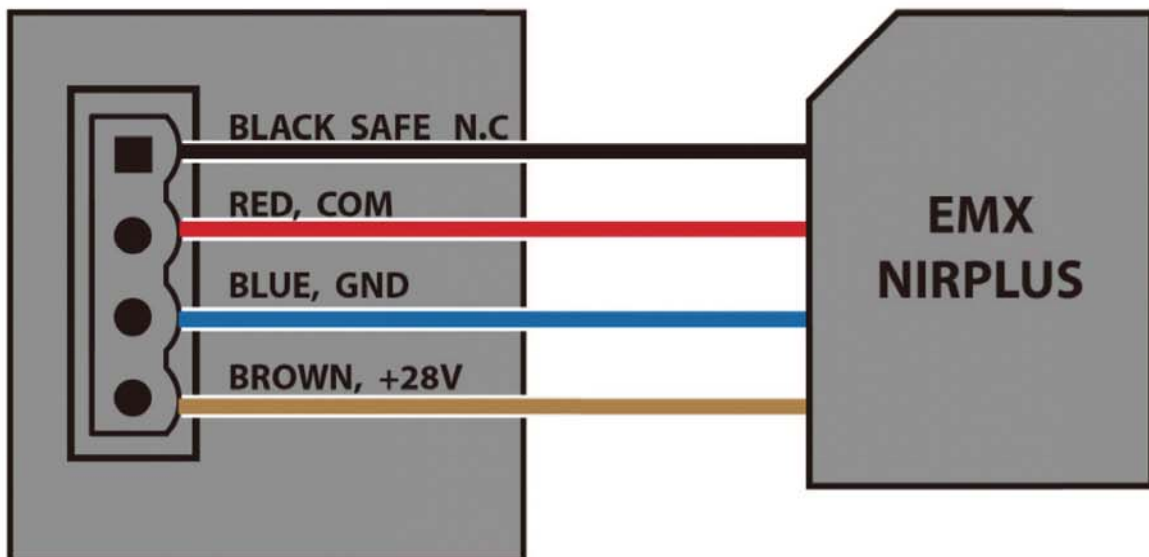
OPTIONAL ACCESSORY- part # (PA-MAG13).

GOC-4200LDR SAFETY PHOTOEYE CONNECTION

MON CLEYE



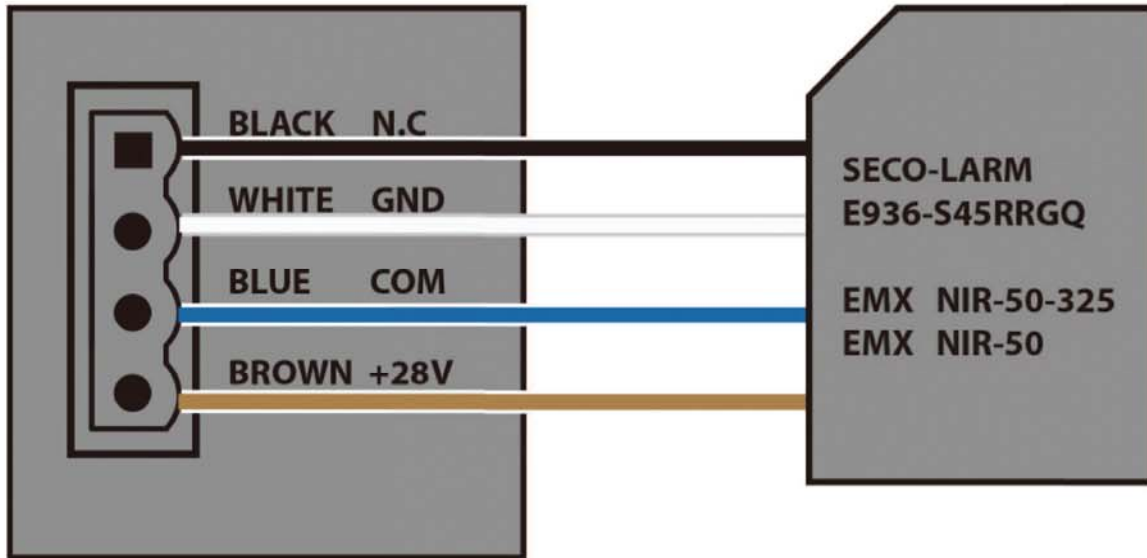
SECO-LARM	E936-S45RRGQ
EMX	NIR-50-325
EMX	NIR-50



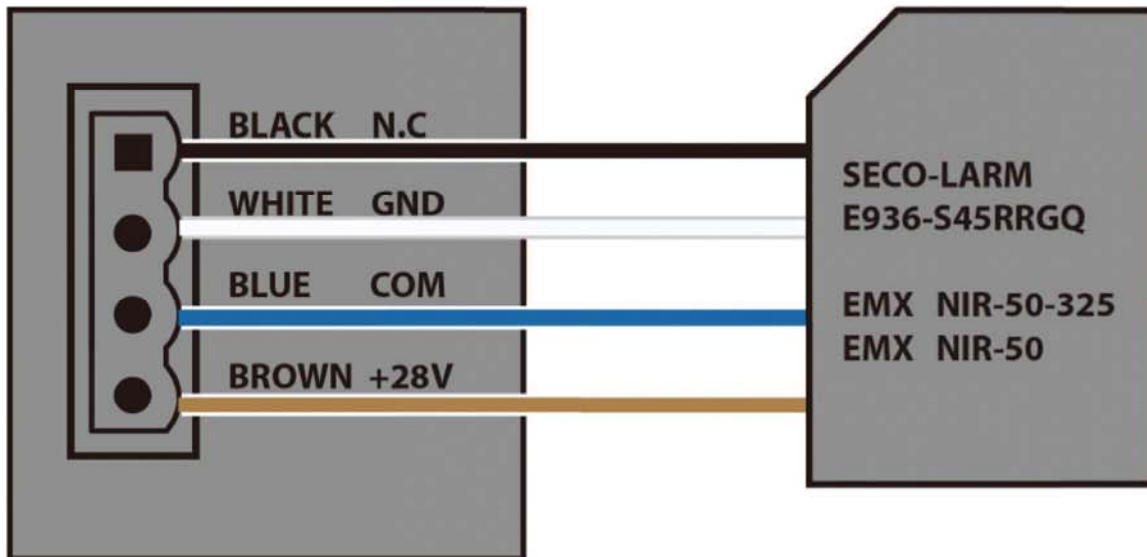
TECHNICAL SUPPORT: (909)259-6001

GOC-4200LDR UL PHOTOEYE CONNECTION FOR PRIMARY AND SECONDARY GATES

MONITOR OPEN



MONITOR CLOSE



TECHNICAL SUPPORT: (909)259-6001

Platinum ETL Approved Non-Contact External Sensors:

Device Type	Mfg. Part#	Mfg. Name	Max Effective Range	Reconnized	Note
Reflector Photo Eye	NIR-50-325	EMX	MAX RANGE 50FT	Yes	
Reflector Photo Eye	NIR-50	EMX	MAX RANGE 50FT	yes	
Reflector Photo Eye	IRB-RET	EMX	MAX RANGE 60FT	Yes	
Reflector Photo Eye	E-931-S50RRGQ	Seco Larm	MAX RANGE 50FT	Yes	
Reflector Photo Eye	E-936-S45RRGQ	Seco Larm	MAX RANGE 45FT	Yes	
Thru-Beam Photo Eye Kit	E-960-D90GQ	Seco Larm	MAX RANGE 90FT	Yes	
Thru-Beam Photo Eye Kit	IRB-MON	EMX	MAX RANGE 100FT	Yes	
Thru-Beam Photo Eye Kit	IRB-325	EMX	MAX RANGE 65FT	Yes	
Thru-Beam Photo Eye Kit	IR55	Albano Elettronica	MAX RANGE 55FT	Yes	
Thru-Beam Photo Eye Kit	42GRU-9001	Allen Bradley	MAX RANGE 30FT	Yes	

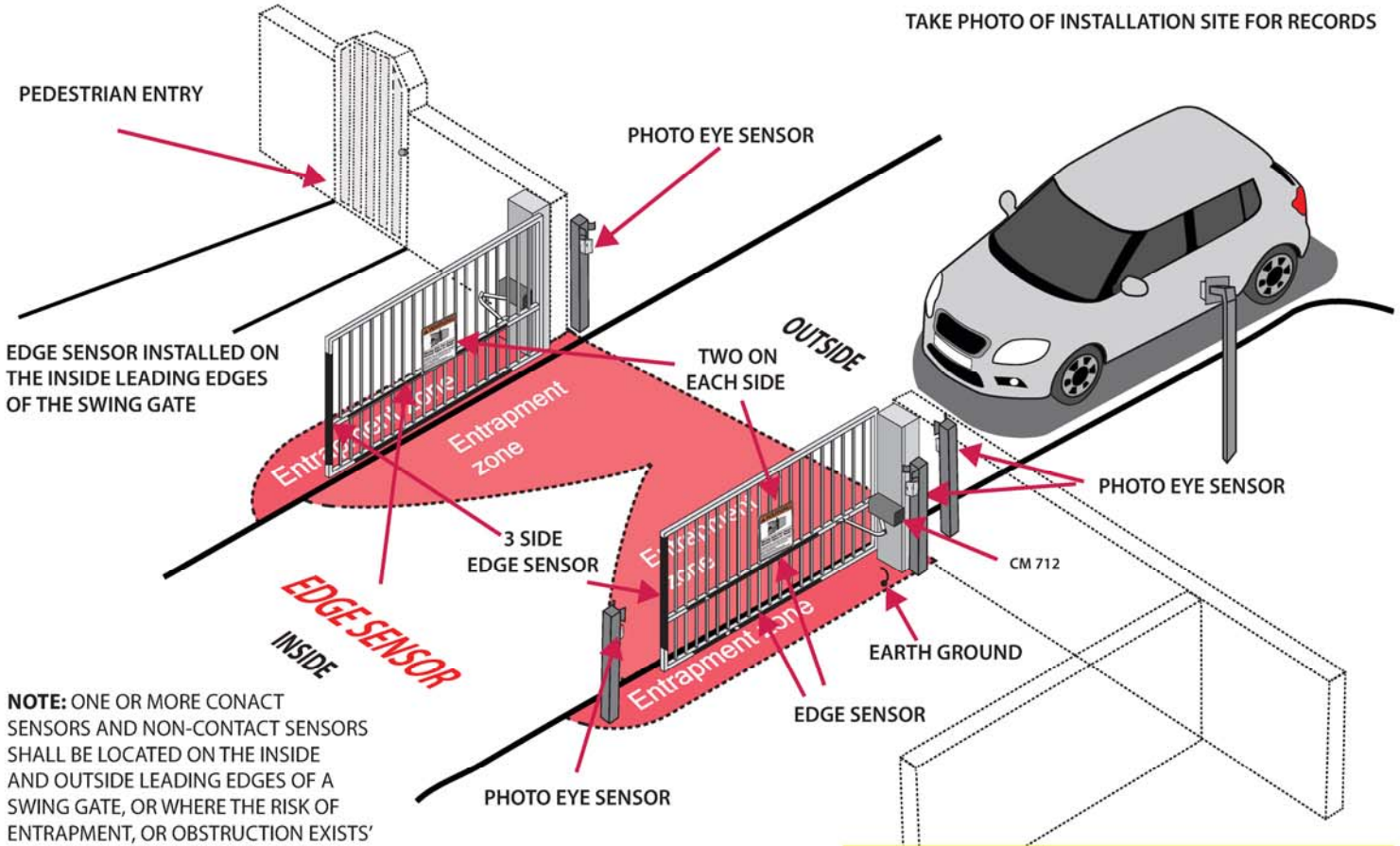
Platinum ETL Approved Contact External Sensors:

Device Type	Mfg. Part#	Mfg. Name	Description	ETL/UL325 Reconnized
Wireless Edge Link	MGL-K20	Miller Edge	Come with Transmitter & Receiver	Yes
Wireless Edge Link	MGL-RX20	Miller Edge	Receiver	Yes
Wireless Edge Link	MGL-TX20	Miller Edge	Transmitter	Yes

N.O means N.C For
Platinum Boards

Standard installation Reference for Safety Devices and Ground Rod

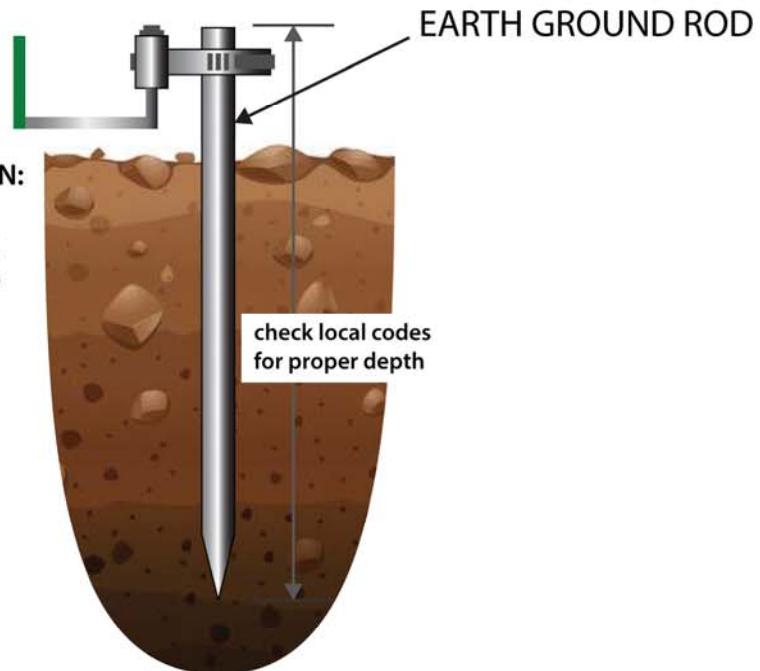
TAKE PHOTO OF INSTALLATION SITE FOR RECORDS



NOTE: ONE OR MORE CONTACT SENSORS AND NON-CONTACT SENSORS SHALL BE LOCATED ON THE INSIDE AND OUTSIDE LEADING EDGES OF A SWING GATE, OR WHERE THE RISK OF ENTRAPMENT, OR OBSTRUCTION EXISTS, SUCH AS THE PERIMETER REACHABLE BY A MOVING GATE, OR BARRIER

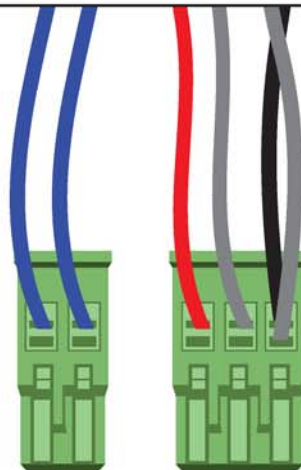
THIS IS FOR EXAMPLE ONLY. YOUR SITE MAY NEED TO INSTALL MORE SAFETY DEVICES TO PROTECT EVERY ENTRAPMENT ZONE

EARTH GROUND ROD INSTALLATION: INSTALL THE EARTH GROUND ROD WITHIN 3FT OF THE OPENER, MAKE SURE USE PROPER EARTH GROUND ROD IN YOUR AREA.



PLATINUM RECEIVER PL-JS-181 INSTALLATION:

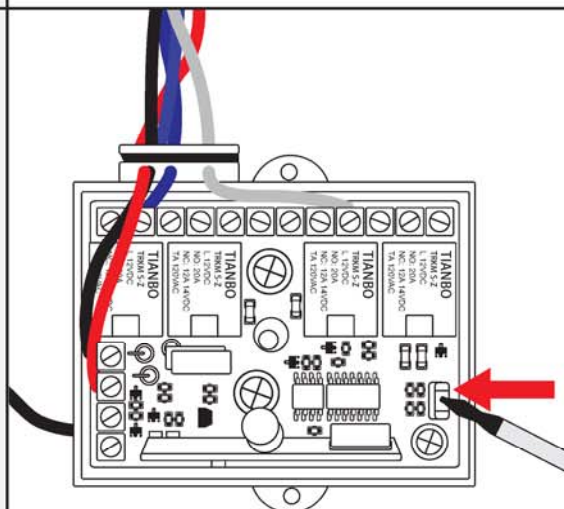
1. Connect two blue wires to the RESET, J15, 2-Pin green connector on the board if apply.
2. Connect Red , Black, and two Grey wires to RADIO J11 in the following way:
 - Connect Red wire to +28V
 - Connect one Grey wire to RAD
 - Connect Black wire and the other Grey wire to GND.



Receiver Wire Connection Picture 1

PROGRAMMING THE PL-JS-181 RECEIVER TO WORK WITH THE PL-RC-C1 TRANSMITTER:

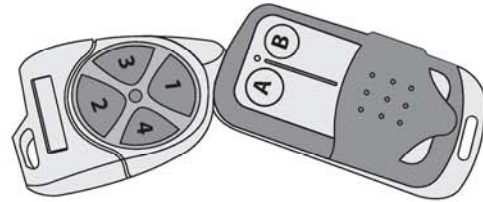
1. Open the Receiver by taking off the screw on the bottom side of the receiver.
2. Press down and then release the K1 tactile switch which located at the corner that near the silver crystal in the receiver. The LED will turn in green. Then press down and hold button #1 on the Platinum Transmitter PL-RC-C1 for 3 seconds.
3. The Receiver LED will be flashing once it has learned the Transmitter code successfully.
4. Wait for about 5 seconds. Then press button #1 on the Transmitter to confirm the transmitter works with the receiver. If not, then repeat step 2 to step 4 to make it works.
5. Repeat step 2 to step 3 to program the other three transmitter buttons if need.



Location of the Tactile Switch in the PL-JS-181 Receiver

PROCEDURE TO MAKE THE TRANSMITTER PL-CRC-I11 TO COPY THE TRANSMITTER PL-RC-C1 CODE:

1. Press down both buttons in the same time on the PL-CRC-I11 transmitter and hold it till the blue LED flashing for 3 seconds (It takes about 13 seconds totally).
2. Next bring both transmitters PL-RC-C1 and PL-CRC-I11 close to each other. Make sure the transmitter PL-RC-C1 antenna is touching the transmitter PL-CRC-I11 top surface.
3. Press down PL-CRC-I11 transmitter "A" button and hold it. Then press down the PL-RC-C1 #1 button. The PL-CRC-I11 blue LED will flash a few times once it has learned the code successfully.
4. Repeat step 2 to Step 3 to make the PL-CRC-I11 button "B" to learn the #2,#3, or #4 button code from the PL-RC-C1 transmitter.



PL-RC-C1
Transmitter

PL-CRC-I11
Transmitter

Picture shown the position of the transmitters when using transmitter PL-CRC-I11 to copy the code from transmitter PL-RC-C1

PROCEDURE TO ERASE THE TRANSMITTER PL-CRC-I11 CODE :

1. Press and hold both button A & button B down until the blue LED flashing for 3 seconds. Normally it takes about 10 seconds.

Gate does not open or close

Check all motor connections to be fully engaged.

Check that the stop command is not active.

Check that the UL command (photo beam and/or edge sensor) is not active.

Check that the vehicular loop detectors are working properly.

Check that the radio command is not active.

Ensure that you external accessories are working properly

Automatic close does not function

Check that the trim pot of the hold open timer is set to the proper time delay.

Note: Hold open timer closes the gate automatically once the gate reaches the limit open. The time delay to close is set by the trim pot. To turn this system off turn the trim pot all the way clockwise

Gate opens in the opposite desired direction

Verify your motor cable is connected to the proper connector.

Check that all motor cable connections, junctions and extensions are properly connected and color-coded.

Gate does not open but after few seconds

Set the overlap delay trim pot to 0.

Note: Overlap trim pot is normally recommended to use in overlapping gates.

Gate opens. Closes or stops on its own

Check that your external devices are working properly

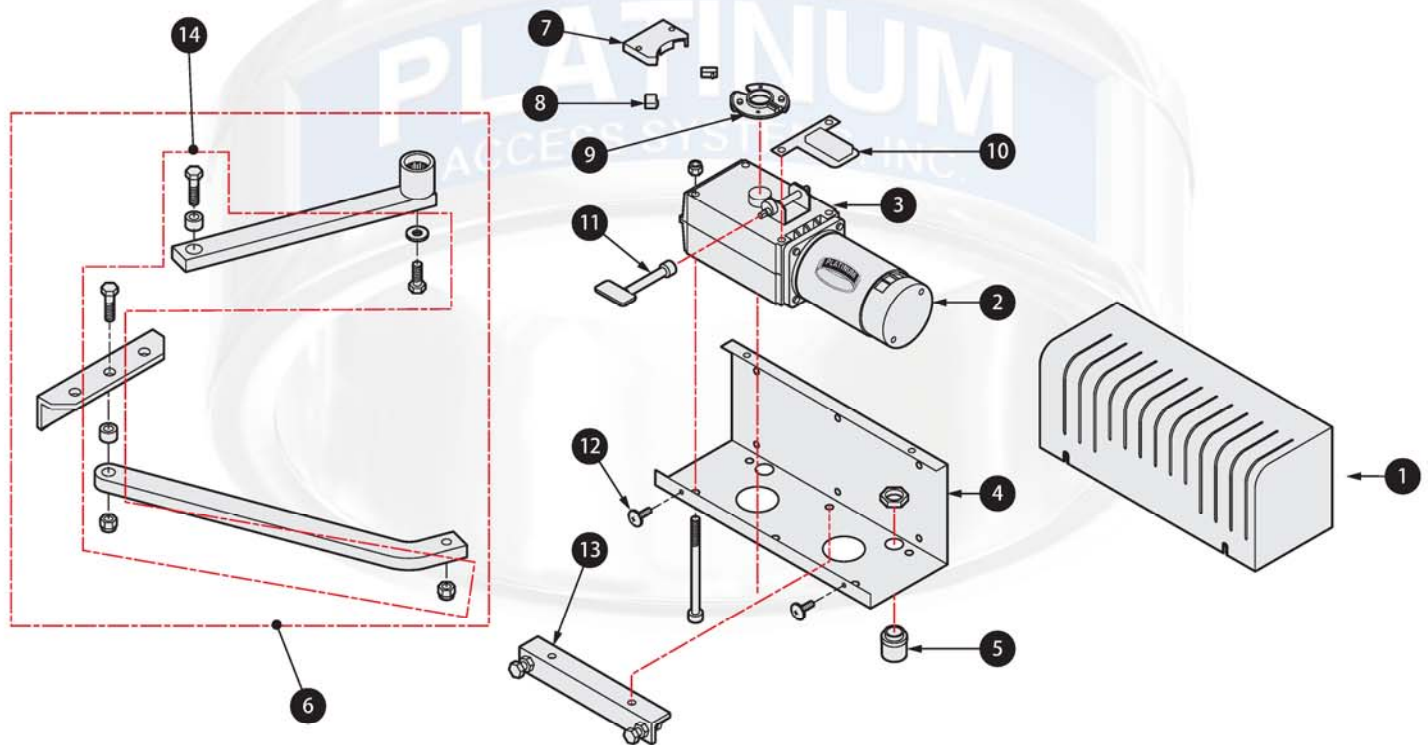
Check that your wires from your accessories are:
 a) Not shorting together
 b) Not shorting a power line
 c) Not shorting to metal or earth ground.

Green 'Charger' LED not illuminated

Check power supply

Check that there is AC power.
 Check Fuse on EMI board.
 Check for proper power selection (120/220 VAC) on EMI board.
 Check power harness plug on control board.

Column Mount Operator



- 1 Cover, Plastic

- 2 Motor

- 3 Gearbox

- 4 Chassis

- 5 Strain Relief

- 6 Arm Assembly, Articulated with Hardware

- 7 Limit Holder

- 8 Limit Switch (2)

- 9 Limit Cam

- 10 Terminal Block and Holder

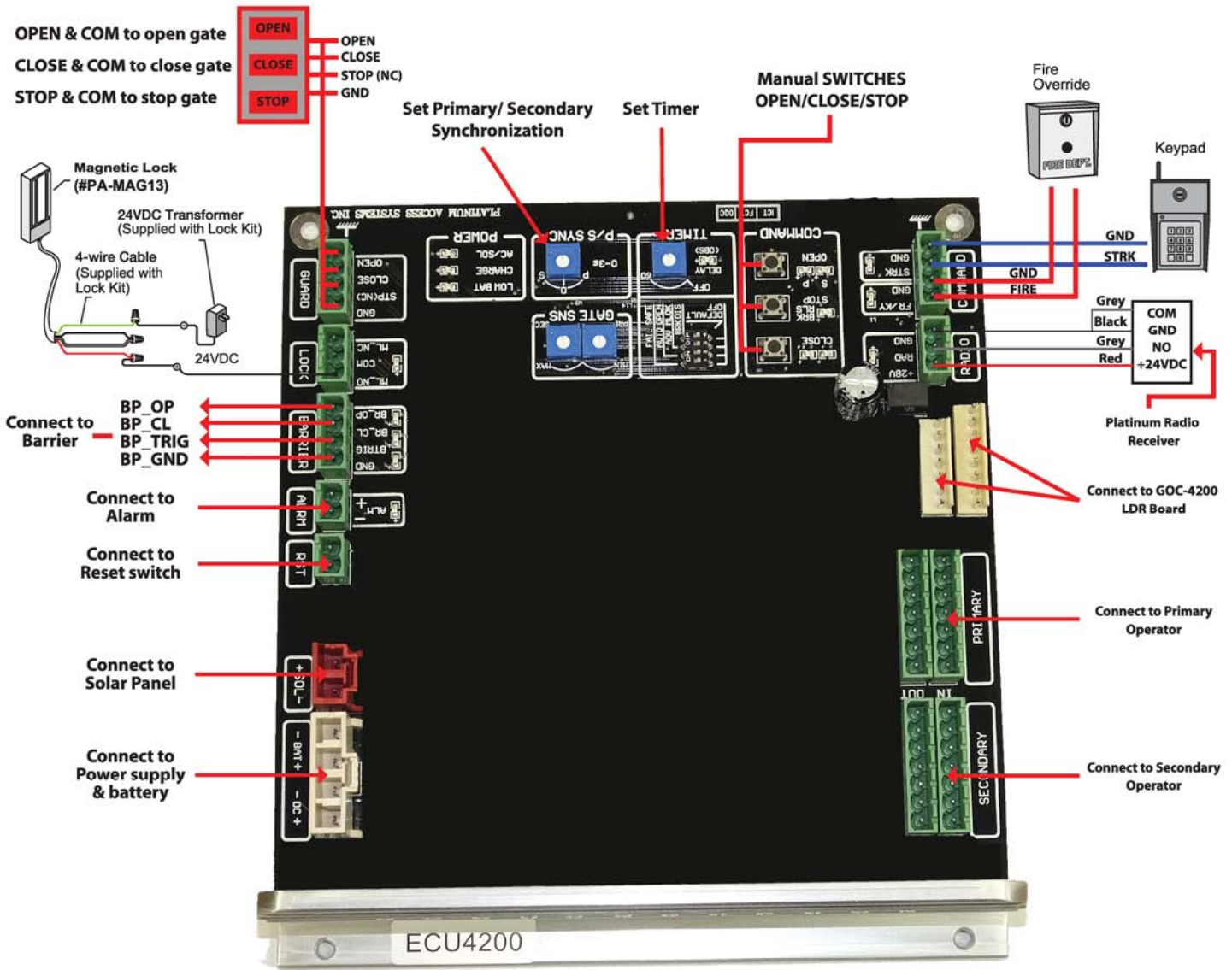
- 11 Key Release

- 12 Cover Screw

- 13 Positive Stop Extension

- 14 Hardware Only

Field Wiring







PLATINUM ACCESS SYSTEMS™

1725 E. Grevillea Court, Ontario, CA 91761
Phone: (909) 259-6000 | Fax: (909) 923-7890

www.PlatinumASI.com

© 2014 Platinum Access Systems, Inc. All Rights Reserved.

Technical Support: (909) 259-6001