QUICKSTART "BASIC" GUIDELINES FOR MODEL 9500 "FULL OPEN"

Concrete Pad

56"

36"

Operator MUST be PARALLEL to gate!

Manual Crank: refer to manual for manual gate operation.

Chain Bracket

Chain Bracket

4"

4" minimum from operator chassis to gate.

Top MUST Be Level!

Above Ground

3/4" Conduit

Re-Bar: 4 per 12" x 12" concrete post.
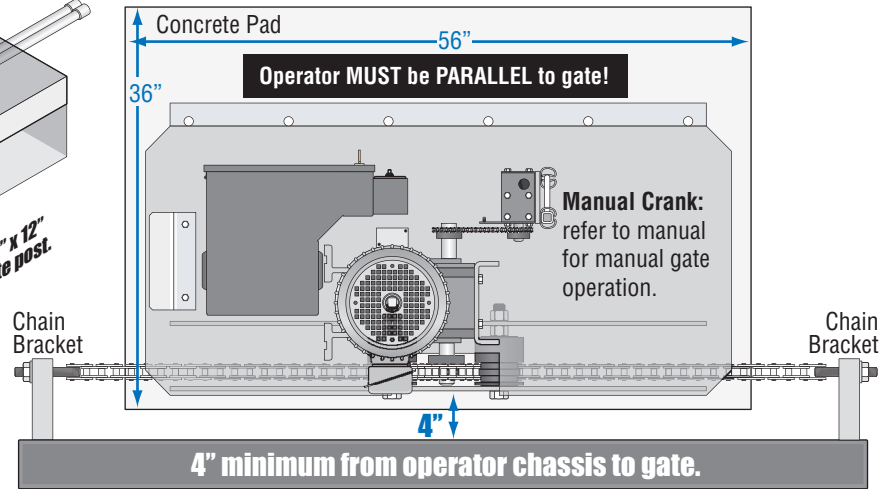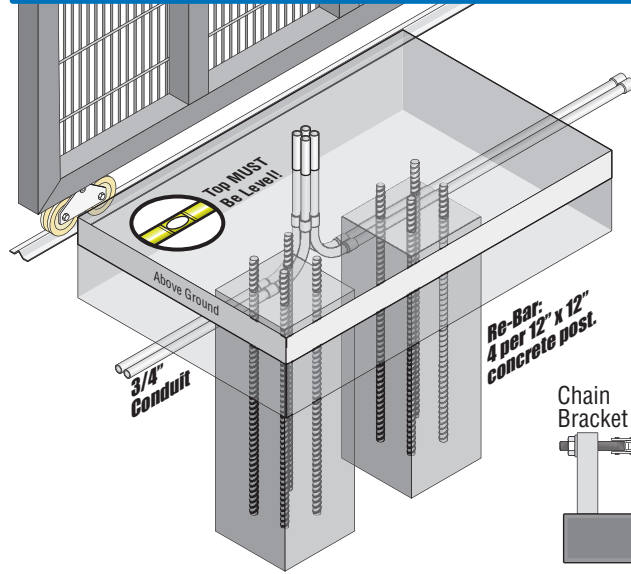
Manual Crank Note:
Model 9555/9575/9595 can be back-driven after power has been shut off and does **NOT** need to be manually cranked (See manual).
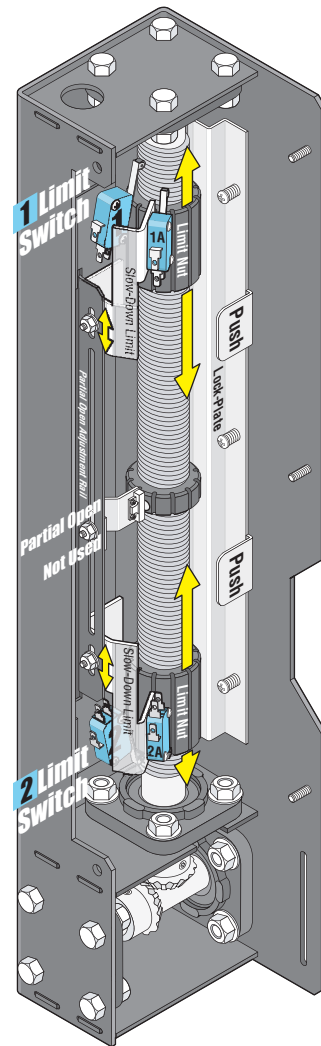
Chain Tray Note: Recommended for longer gates to support the weight of the chain. DoorKing offers a chain tray and supporting brackets in sections to fit any length gate. (DoorKing P/N 2601-270 10 Ft. section)

Manual Crank Stored

4"

11"

3/4" Conduit

Chain Tray

Chain Bracket

Idler Wheels

Chain Bracket

15"

15"

15"

15"

Sleeve Anchors

4" Min.

Concrete Pad

Wire Mesh

12"

3/4" Conduit (Sweeps)

12"

10.5"

10.5"

12"

Re-bar

Re-bar

Re-bar

Chain brackets MUST align with idler wheels so chain stays PARALLEL to gate!

Chain brackets MUST be mounted so the chain remains the same height as it is on the idler wheels!
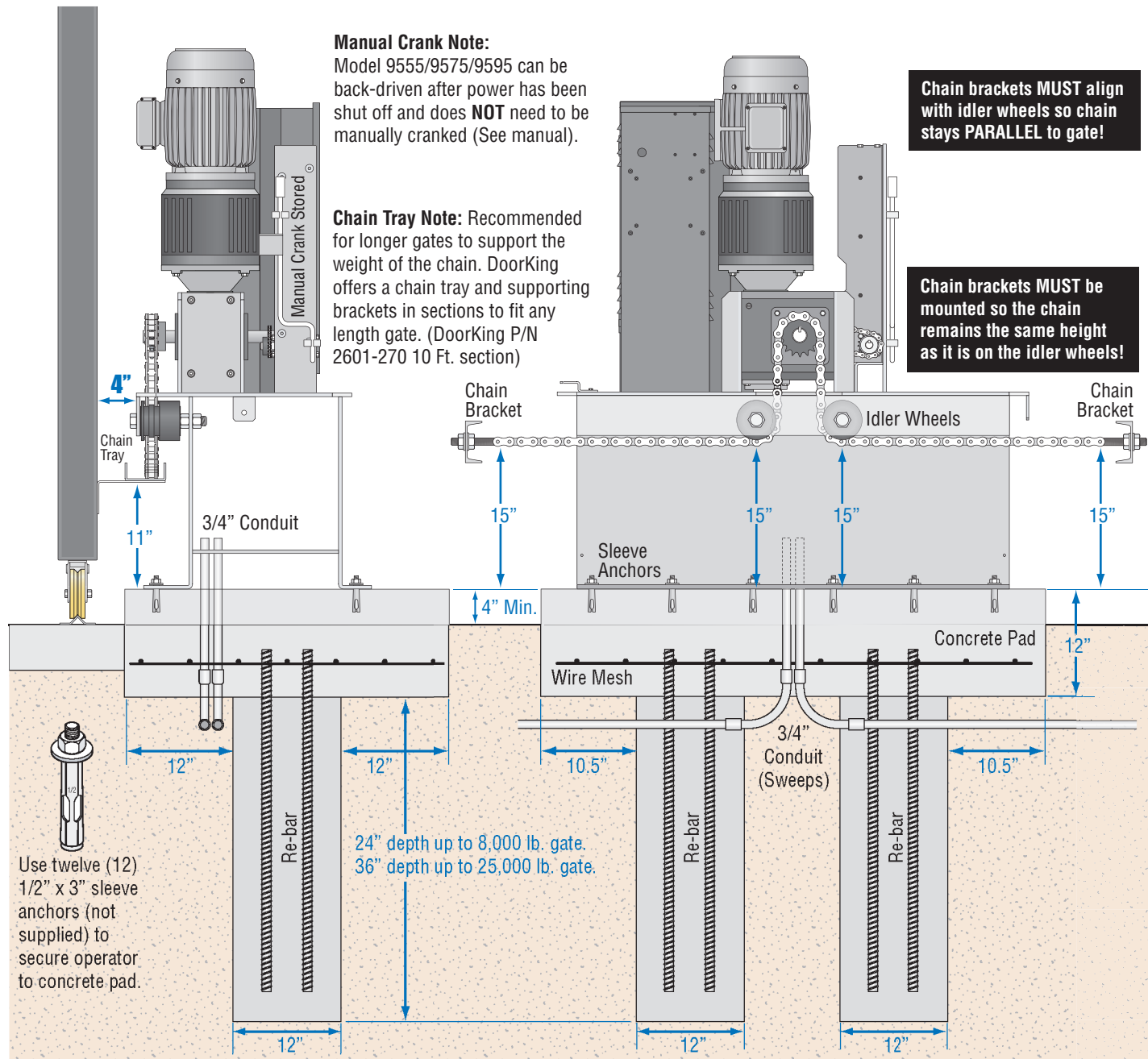
Use twelve (12) 1/2" x 3" sleeve anchors (not supplied) to secure operator to concrete pad.

24" depth up to 8,000 lb. gate.
36" depth up to 25,000 lb. gate.

12"

12"

12"

Limit Switches

1 Limit Switch

Limit Nut

Slow-Down Limit

Push

Lock-Plate

Push

Partial Open Not Used

Slow-Down Limit

Limit Nut

1A

2A

2 Limit Switch

With power **OFF**, push and hold the lock plate down where shown to adjust the Open and Close limit nuts.

After adjusting the limit-nuts, be sure that the lock-plate is engaged in the slots on the limit-nuts to prevent them from rotating. The slow-down limits will move up or down 3/4 inch. **DO NOT** remove the slow-down limit assembly from the 3/4 inch slot and re-attach it in the longer slot on the partial open adjustment rail to gain further adjustment. **This will cause mechanical damage to the switch assembly when the operator is activated.**

Turn power **ON** and activate the gate operator.

Re-adjust the limit nuts as necessary for full-open and full-close gate travel. After you are satisfied with the gate limit settings, the speed control knob can then be adjusted to personal preference.
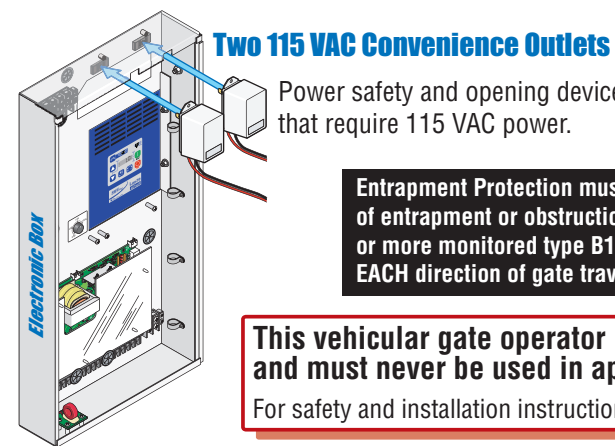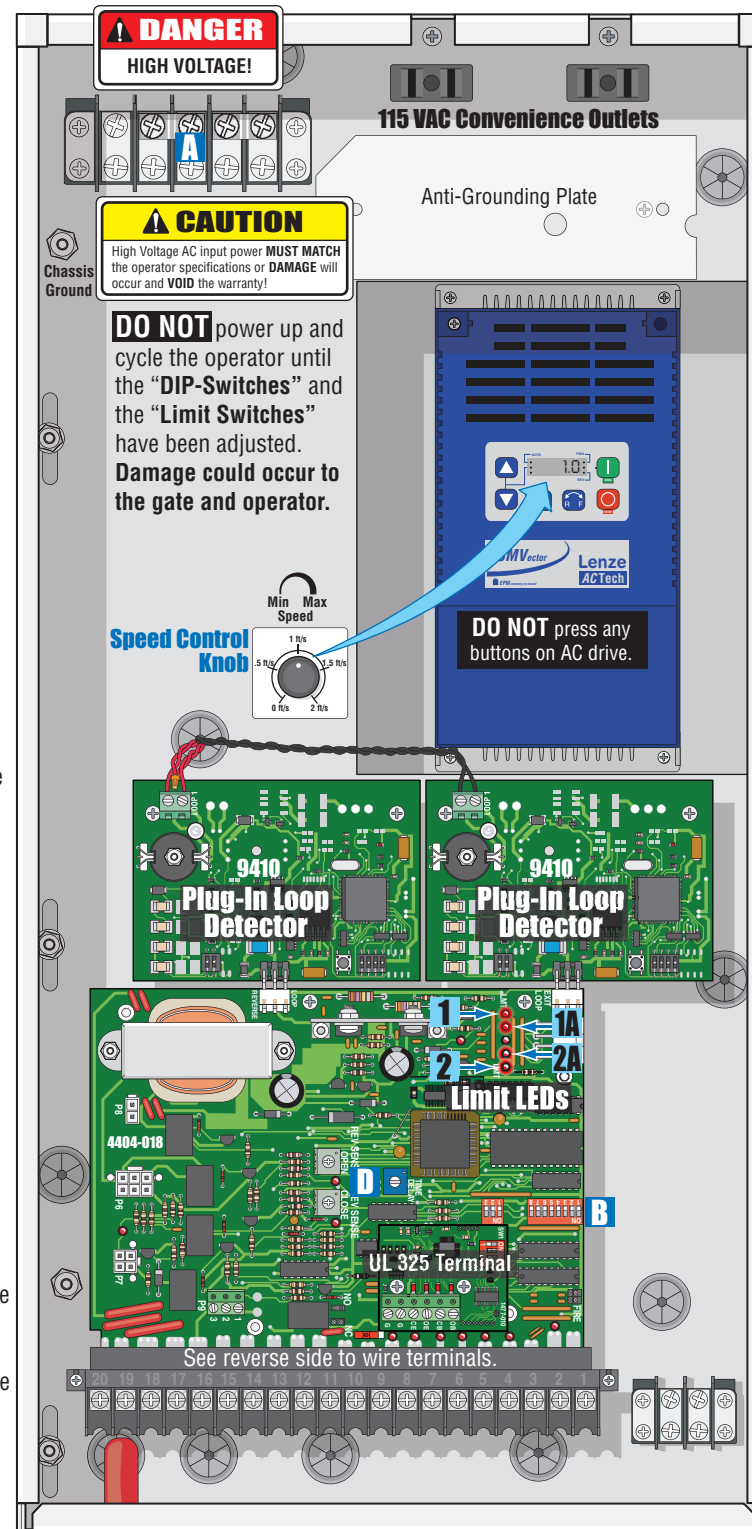
Two 115 VAC Convenience Outlets
Power safety and opening devices that require 115 VAC power.

Electronic Box

Entrapment Protection must be provided for the gate system where the risk of entrapment or obstruction exists. The operator will NOT run without ONE or more monitored type B1 or B2 external entrapment protection devices in EACH direction of gate travel (minimum of 2 external devices required).

This vehicular gate operator is designed for Class III and Class IV applications ONLY and must never be used in applications serving the general public.
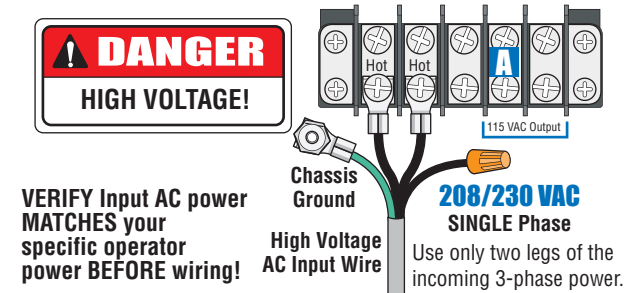For safety and installation instructions, please refer to the Installation/Owner's manual.

⚠ DANGER
HIGH VOLTAGE!

115 VAC Convenience Outlets

Anti-Grounding Plate

Chassis Ground

⚠ CAUTION
High Voltage AC input power **MUST MATCH** the operator specifications or **DAMAGE** will occur and **VOID** the warranty!

DO NOT power up and cycle the operator until the "**DIP-Switches**" and the "**Limit Switches**" have been adjusted. **Damage could occur to the gate and operator.**

DO NOT press any buttons on AC drive.

SMVector Lenze ACTech

Speed Control Knob
Min Max Speed

9410 **Plug-In Loop Detector**

9410 **Plug-In Loop Detector**

1

2

1A

2A

Limit LEDs

D

B

4404-018

UL 325 Terminal

See reverse side to wire terminals.

High Voltage Connection
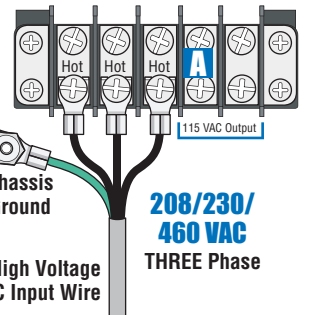
GATE OPERATOR MUST BE PROPERLY GROUNDED!!
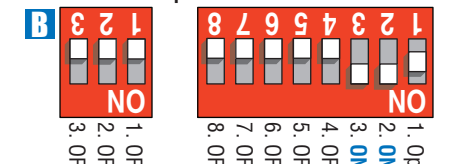**Tip:** It is recommended that a surge suppressor be installed on the high voltage power line.

⚠ DANGER
HIGH VOLTAGE!

VERIFY Input AC power MATCHES your specific operator power BEFORE wiring!

Hot Hot

A

115 VAC Output

Chassis Ground

High Voltage AC Input Wire

208/230 VAC SINGLE Phase
Use only two legs of the incoming 3-phase power.

Check polarity of Three Phase: Position the gate half way open. Give open command and while gate is opening, activate the appropriate limit switch with your finger. Gate should **STOP**. If it does not, activate the other limit switch. If this **STOPS** the gate, AC power wires must be changed (Reverse the connection of any 2 wires and re-check limits).

Hot Hot Hot

A

115 VAC Output

Chassis Ground

High Voltage AC Input Wire

208/230/ 460 VAC THREE Phase

DIP-Switches

SW 1 and 2 are Upside-Down on Circuit Board.

B

NO
ON
1, 2, 3
1. OFF
2. OFF
3. OFF

NO
ON
1 2 3 4 5 6 7 8
1. OFF
2. OFF
3. OFF
4. OFF
5. OFF
6. OFF
7. OFF
8. OFF

1 2 3
1. Opening Direction
2. **ON**
3. OFF

See reverse side

D

Auto-Close Timer
TIME DELAY
1 23
Adjust 1 to 23 sec.

Plug-In Loop Detectors

Not included - Refer to the Installation/Owner's manual AND Loop Information Manual (available from **www.doorking.com**) for more information on loops and plug-in loop detectors.

Important Note: DoorKing highly recommends that loops and loop detectors are installed with this slide gate operator. A loop detection system will preventing the gate from automatically opening or closing on a vehicle when it is in the gate's path.

QUICKSTART "BASIC" GUIDELINES FOR MODEL 9500 - DIP-SWITCH AND WIRING REFERENCE

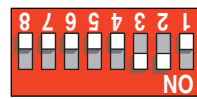**UL 325 August 2018 Standard**

DKS DOORKING®

This vehicular gate operator is designed for Class III and Class IV applications only and must never be used in applications serving the general public.

For safety and installation instructions, please refer to the Installation/Owner's manual.

Important: Controls intended for user activation must be located at least six (6) feet 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. 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.

120 S. Glasgow Avenue
Inglewood, California 90301
U.S.A.

SW 1 DIP-Switches (Right Hand Side)

Switch	Function	Setting	Description
1			Changes the direction the operator will open/close the gate. Opening direction using **ON** setting. Opening direction using **OFF** setting.
2	Auto-Close Timer	OFF	Auto-close timer is OFF. Manual input required to close gate.
		ON	Auto-close timer is ON. Adjustable from 1-23 seconds to close gate.
3	Exit Loop Port Output	OFF	The output wired to terminal #4 becomes the output from the exit loop detector plugged into the EXIT Loop port. Used for dual operator application.
	Full Open Input	ON	**Normal Setting.** Terminal #4 is a normal full open input.
4 and 5	Relay Activation and LED Indicator Light Activation	4-OFF 5-OFF	Relay activates and LED is ON when the gate is fully open.
		4-OFF 5-ON	Relay activates and LED is ON when the gate is not closed.
		4-ON 5-OFF	Relay activates and LED is ON when the gate is opening and open.
		4-ON 5-ON	Relay activates and LED is ON when the gate is opening and closing.
6	Warn Before Operate	OFF	Internal alarm will **NOT** sound.
		ON	Internal alarm will sound before gate starts and throughout gate's cycle.
7	Reverses Gate	OFF	**Normal Setting.** Input to terminal #6 and/or reverse loops will REVERSE gate during CLOSE cycle.
	Stops Gate	ON	Input to terminal #6 and/or reverse loops will STOP gate during CLOSE cycle.
8	Quick-Close Timer Override	OFF	**Normal Setting.** Timer will function normally.
		ON	Opening gate will stop and begin to close as soon as all reversing inputs (Reverse loops, photo sensors) are cleared regardless of the distance the gate has opened.

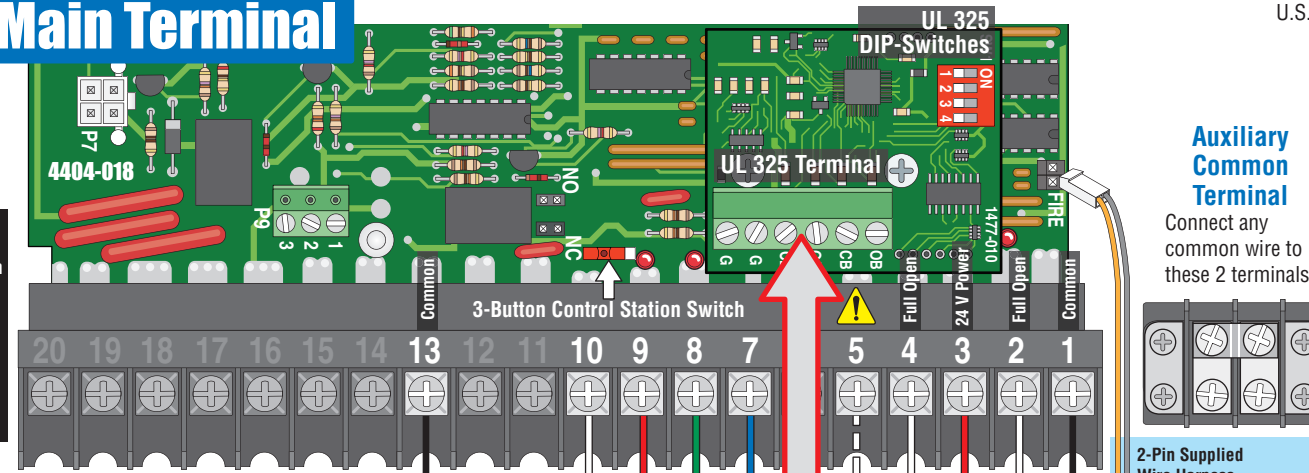**SW 1** Upside-Down on Circuit Board.

Note: After a DIP-switch setting is changed, power must be turned OFF and then turned back on for the new setting to take affect.

SW 2 DIP-Switches (Left Hand Side)

Switch	Function	Setting	Description
1	Self-Test	OFF	**Normal Setting.** Normal gate operation.
		ON	Self-test mode. Operator **MUST** be disconnected from gate to run self-test.
2	Gate Opens Uphill	OFF	**Normal Setting.** Level gate operation or gate opens DOWNHILL.
		ON	**MUST** be ON if gate opens UPHILL.
3	Gate Opens Downhill	OFF	**Normal Setting.** Level gate operation or gate opens UPHILL.
		ON	**MUST** be ON if gate opens DOWNHILL.

SW 2 Upside-Down on Circuit Board.

Main Terminal

UL 325 DIP-Switches
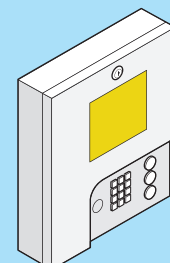
4404-018

UL 325 Terminal

Entrapment Protection must be provided for the gate system where the risk of entrapment or obstruction exists.
The operator will NOT run without ONE or more monitored type B1 or B2 external entrapment protection devices in EACH direction of gate travel (minumum of 2 external devices required).
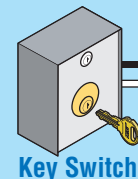
Common — 3-Button Control Station Switch

| 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | | 5 | 4 | 3 | 2 | 1 |

Full Open — #5 - Partial Open (See manual) — #4 - Full Open — Full Open — Common

Auxiliary Common Terminal Connect any common wire to these 2 terminals.

2-Pin Supplied Wire Harness

Com

Fire Dept Open

Note: All stand-alone and telephone entry devices must use a separate power source.

SW 1 is Upside-Down on Board

3-Button Control Station Switch Switch in **RIGHT** position **ONLY** when using a **4-wire** 3-button control station with a normally closed **STOP** circuit.

Com / Open / Close / Stop (NC)

3-Button Control Station

SW 1, Switch 3 MUST be **ON** except for dual operators or exit loop partial open applications.
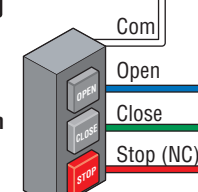
External Entrapment Protection Devices
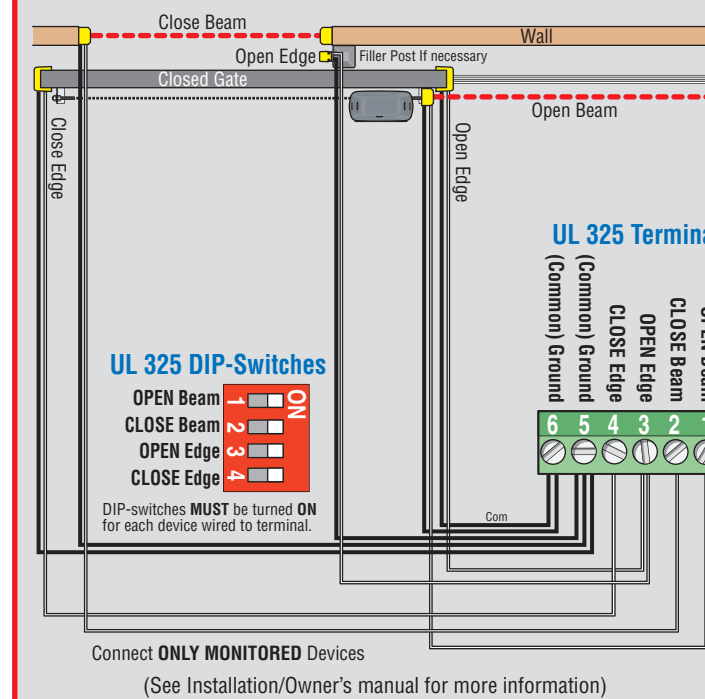
IMPORTANT: Only 1 **monitored** Device can be connected to each input. An **OPTIONAL** Expansion Kit (sold separately) will allow connection for additional devices.
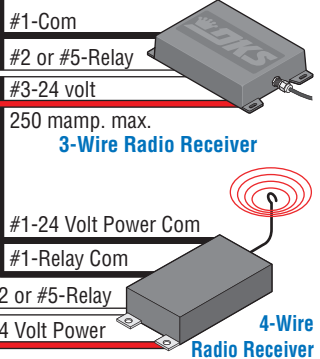
IMPORTANT: Monitored Photo and Edge sensors must be end-of-line resistive types. See specific manufacturer's wiring manual for more information.

Gate will **ONLY OPEN** when this device is activated by authorized personnel ONLY (fire, police, EMS) and operator has power. Alarm will sound during entire open cycle. Operator will then go into a hard shutdown once fully opened. Operator **MUST** be reset to function normally again. This device **MUST** be mounted in the line-of-site of gate so authorized personnel can monitor gate movement.
Activation Note: Activation of this device will **OPEN** gate regardless of the status of the open direction monitored external entrapment protection device(s). If gate is opening, and the operator's **inherent** entrapment protection system detects an obstruction, the operator will reverse approx. 2 inches and go into a hard shutdown. Operator reset button **MUST** be pushed to function again **OR** cycle operator's power.

Main Terminal #3 Note: Exceeding 250 mA of power from this terminal may cause the circuit board transformer to overheat, causing intermittent problems.

Telephone Entry

Key Switch

Stand-Alone Keypad

Stand-Alone Card Reader

Close Beam / Open Edge / Filler Post If necessary / Wall / Open Beam / Closed Gate / Close Edge / Open Edge

UL 325 Terminal

(Common) Ground / (Common) Ground / OPEN Beam / CLOSE Beam / OPEN Edge / CLOSE Edge

| 6 | 5 | 4 | 3 | 2 | 1 |

UL 325 DIP-Switches

OPEN Beam
CLOSE Beam
OPEN Edge
CLOSE Edge

DIP-switches **MUST** be turned **ON** for each device wired to terminal.

Com

Connect **ONLY MONITORED** Devices
(See Installation/Owner's manual for more information)

To #4 or #5

#1-Com
#2 or #5-Relay
#3-24 volt
250 mamp. max.
3-Wire Radio Receiver

#1-24 Volt Power Com
#1-Relay Com
#2 or #5-Relay
#3-24 Volt Power
4-Wire Radio Receiver

#5 Terminal Note: Any opening device connected to terminal #5 will open the gate to the partial open setting. External entrapment protection devices will also open the gate to the partial open setting. If the **Inherent Reverse Sensor** gets activated during the close cycle, it will always **fully** open the gate.