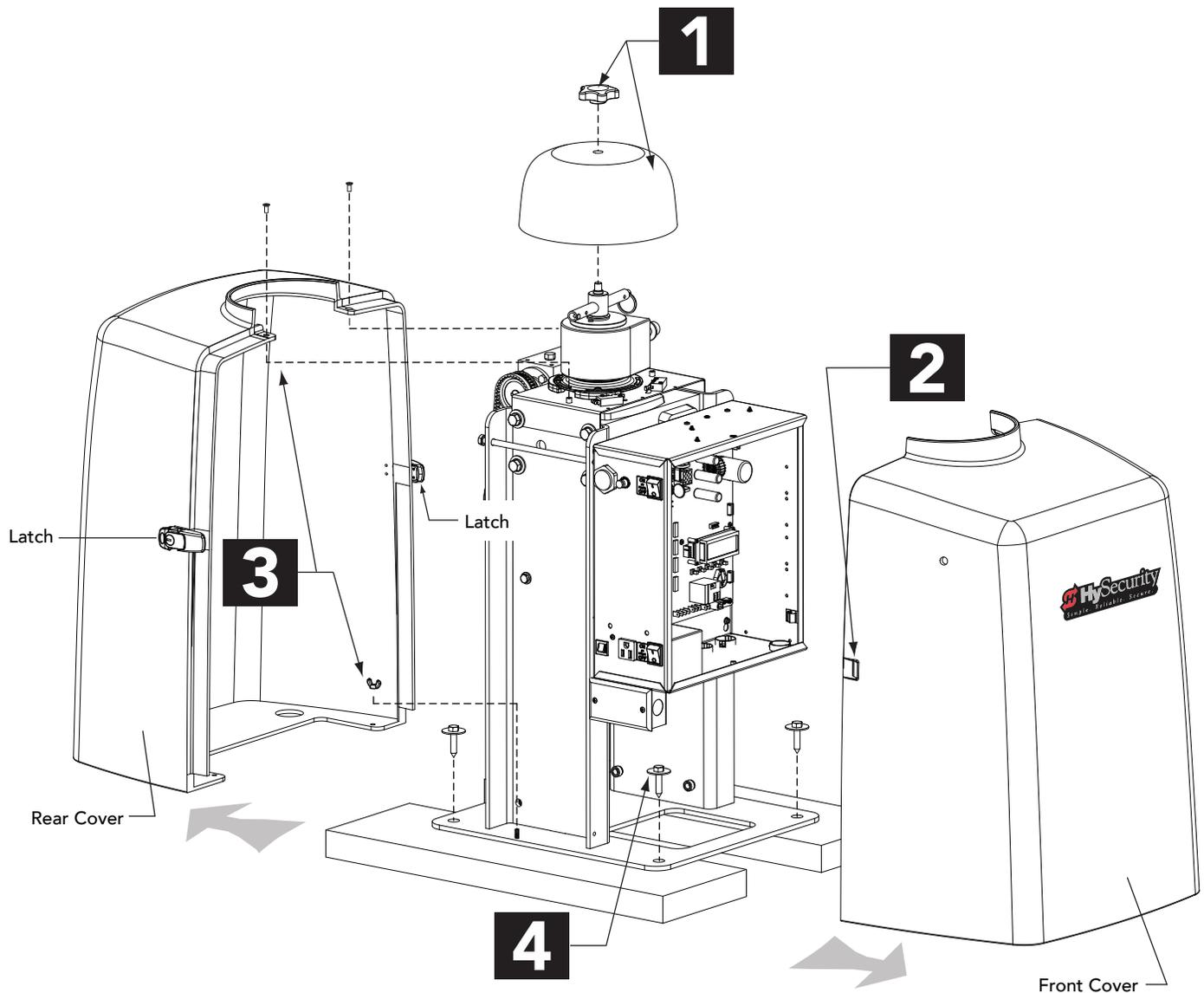


SwingSmart ™

QUICK START STEPS



**UNPACK
THE OPERATOR**

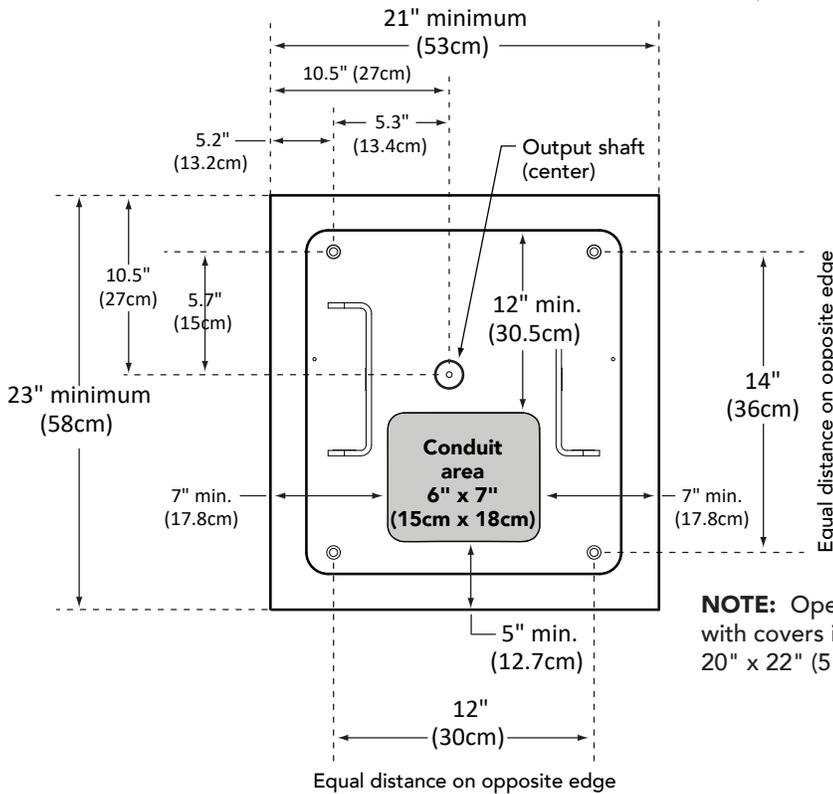
5 SITE PLANNING AND OPERATOR INSTALLATION

Use these illustrations to help clarify the installation process.

For more detailed steps, refer to the *SwingSmart DC Installation and Reference Manual*.

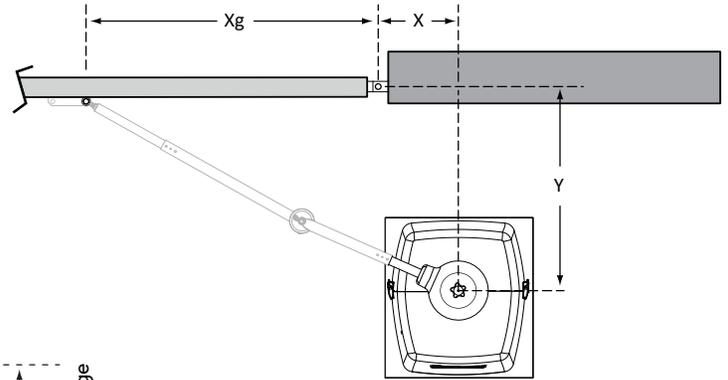
IMPORTANT: When installing the operator, be sure to read the *Important Safety Instructions* and comply with all local government regulations and codes.

CONCRETE PAD DIMENSIONS



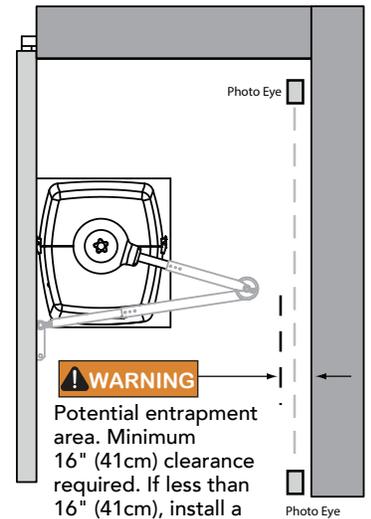
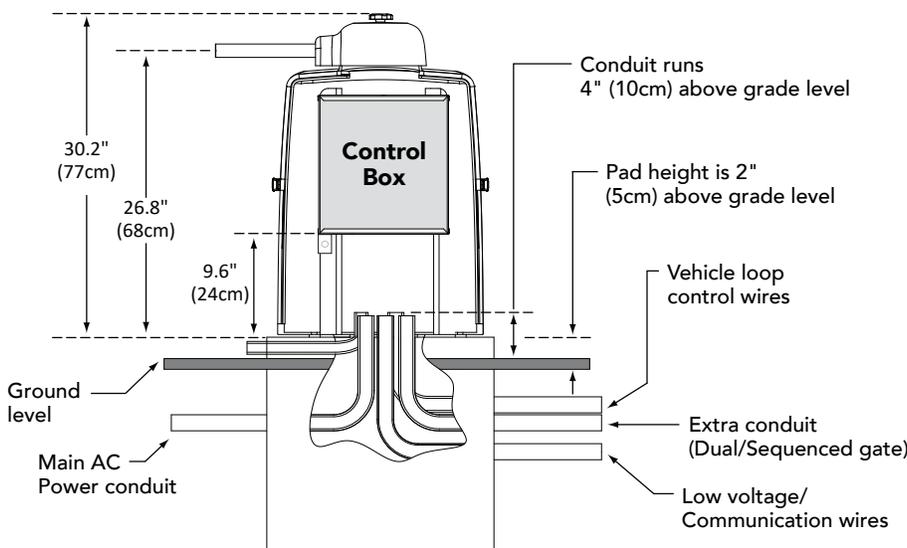
NOTE: Operator footprint with covers is approximately 20" x 22" (51cm x 56cm)

OPERATOR PLACEMENT



Install the gate bracket and set linkage arm geometry based on the dimensions shown in the chart on page 3.

CONDUIT PLACEMENT



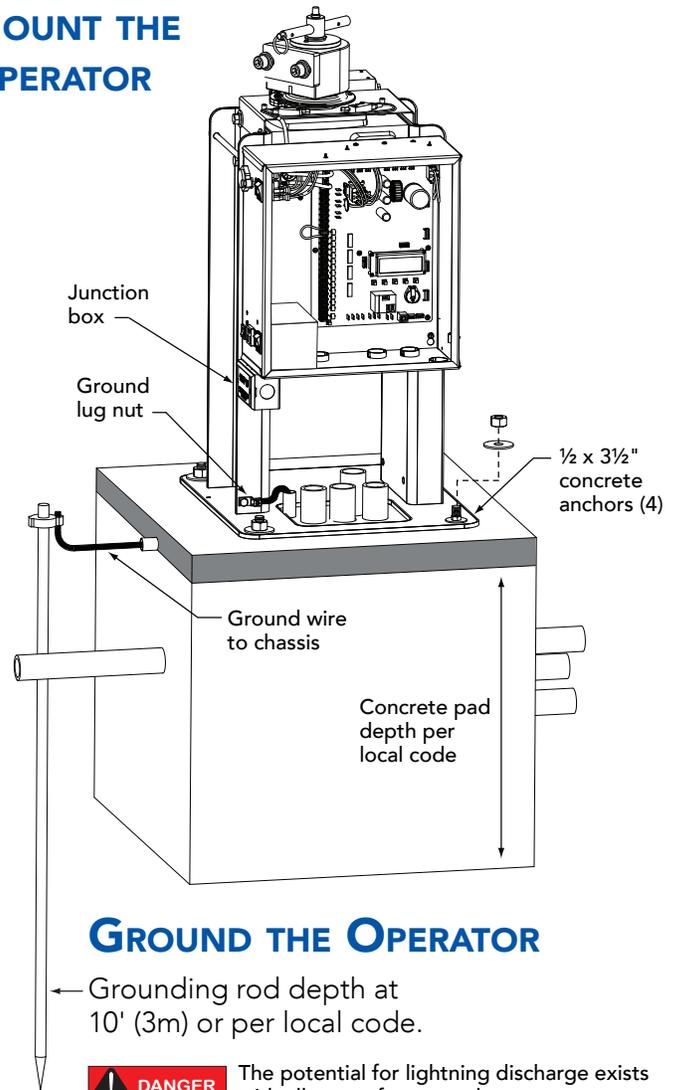
6 MOUNT OPERATOR – ASSEMBLE GATE ARM

MEASUREMENT CHARTS FOR GATE ARM GEOMETRY

Operator Placement & Gate Arm Geometry for 90° Gate Opening									
<i>Short Gate Installation:</i> For gates up to 10 feet (3 meters)					<i>Long Gate Installation:</i> For gates up to 20 feet (6 meters)				
X	Y	Xg	A	B	X	Y	Xg	A	B
10.5" 27cm	14" 36cm	23.5" 60cm	15.5" 39cm	21.5" 55cm	15" 38cm	30" 76cm	44" 112cm	28" 71cm	38.5" 98cm
	18" 46cm	27.5" 70cm	17.5" 44cm	24.5" 62cm		35" 89cm	49" 124cm	30.5" 78cm	42.5" 108cm
	20" 51cm	29.5" 75cm	19" 48cm	26" 66cm		40" 102cm	54" 137cm	33.5" 85cm	48.5" 118cm
<i>Medium Gate Installation:</i> For gates up to 13 feet (4 meters)					<i>Custom Gate Installation:</i>				
X	Y	Xg	A	B	X	Y	Xg	A	B
12" 31cm	22" 56cm	33" 84cm	21" 53cm	29" 74cm	—	—	X + Y - 1	0.63 * Xg	0.87 * Xg
	24" 61cm	35" 89cm	22" 56cm	30.5" 78cm	Space for custom calculations				
	28" 71cm	39" 99cm	24" 61cm	33.5" 85cm					

Operator Placement & Gate Arm Geometry for 100° through 130° opening					
Degree of swing	X	Y	Xg	A	B
100	20" 51cm	24" 61cm	36" 91cm	24" 61cm	36" 91cm
110	26" 66cm	24" 61cm	39" 99cm	28" 71cm	40.5" 103cm
120	32" 81cm	20" 51cm	41" 104cm	31.5" 80cm	44" 112cm
130	38" 97cm	18" 48cm	44" 112cm	36" 91cm	47.4" 121cm
Maximum A = 38" (97cm) Maximum B = 47" (121cm)					

MOUNT THE OPERATOR



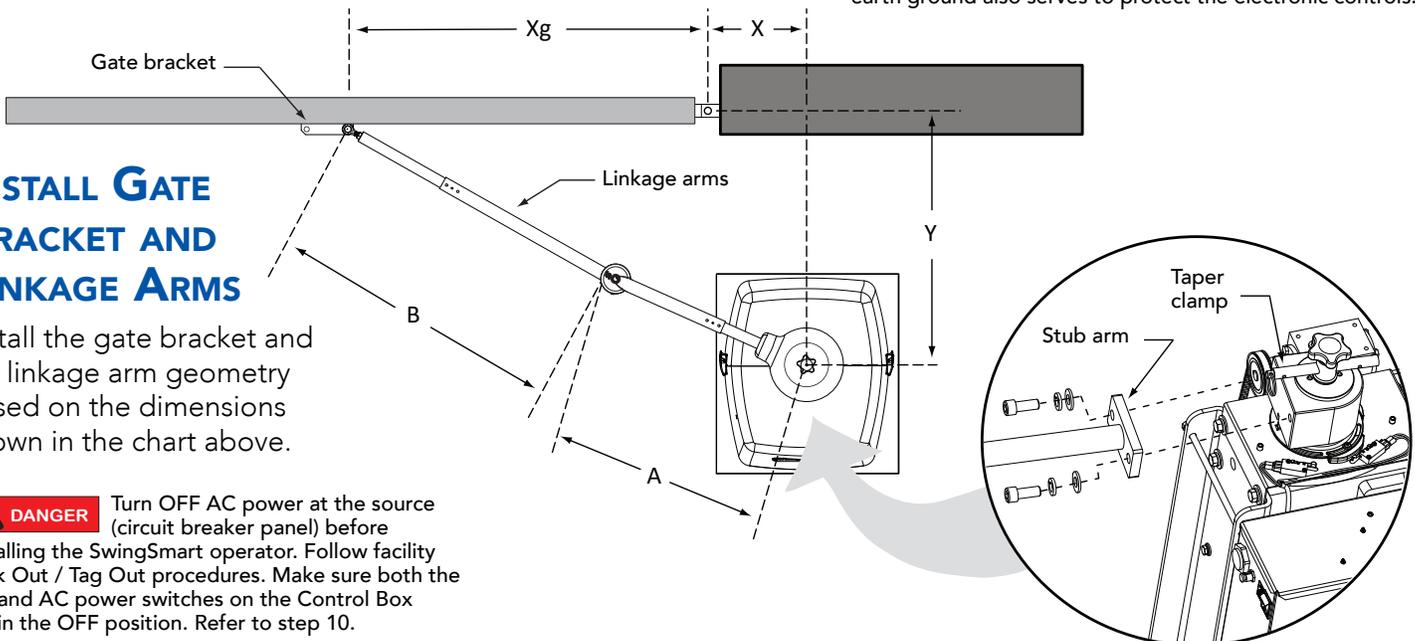
GROUND THE OPERATOR

⚠ DANGER The potential for lightning discharge exists with all gates, fences and gate operators. National Electric Code (NEC) requires a separate earth ground in addition to the required equipment ground. A local earth ground also serves to protect the electronic controls.

INSTALL GATE BRACKET AND LINKAGE ARMS

Install the gate bracket and set linkage arm geometry based on the dimensions shown in the chart above.

⚠ DANGER Turn OFF AC power at the source (circuit breaker panel) before installing the SwingSmart operator. Follow facility Lock Out / Tag Out procedures. Make sure both the DC and AC power switches on the Control Box are in the OFF position. Refer to step 10.



7 INSTALL THE GATE ARM

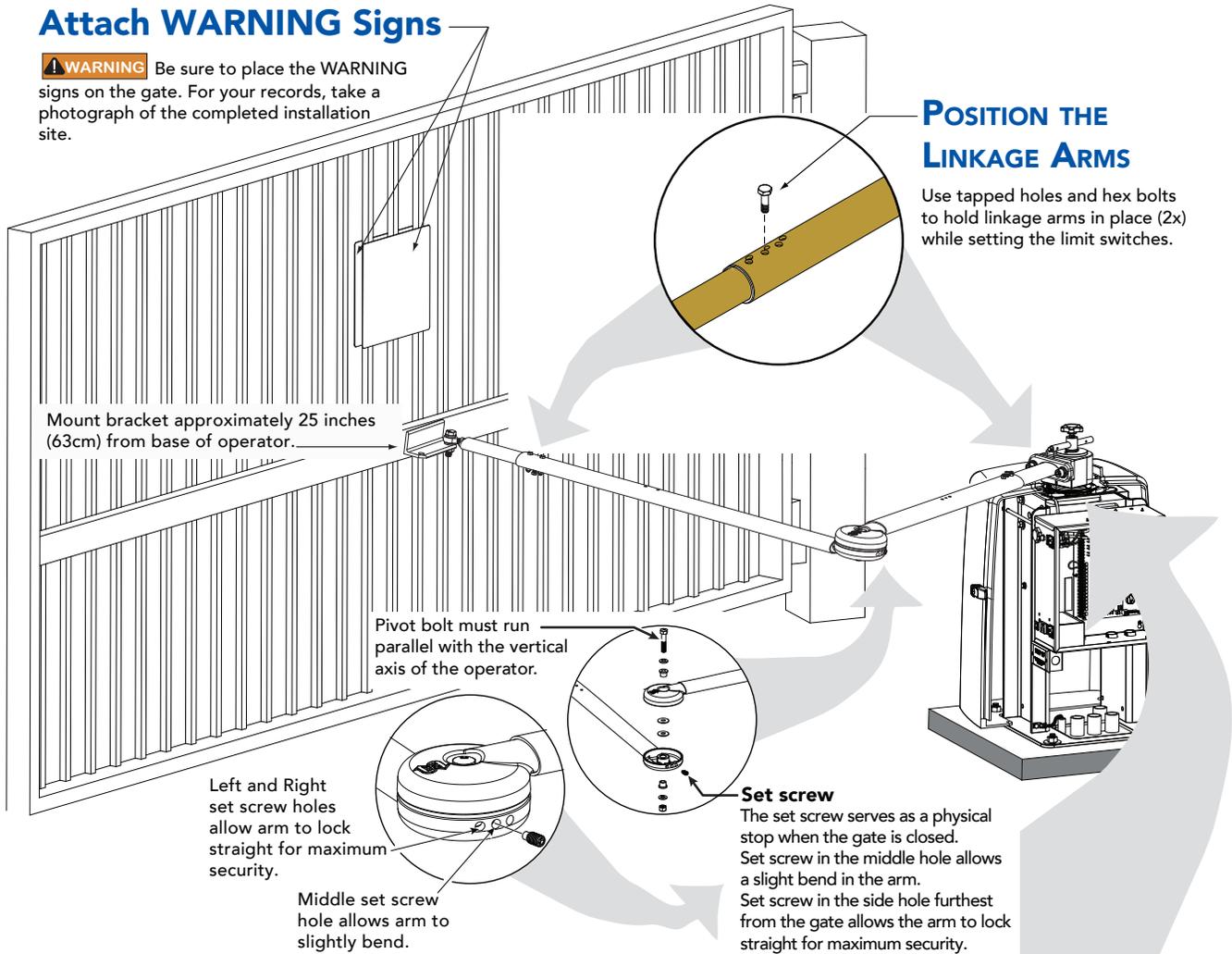
The universal elbow on the swing arm lets you easily change the handing from a left-arm configuration to a right swing arm configuration. The illustration present below show a right hand configuration. For more detailed steps, refer to the *SwingSmart DC Installation and Reference Manual*.

Attach WARNING Signs

⚠ WARNING Be sure to place the WARNING signs on the gate. For your records, take a photograph of the completed installation site.

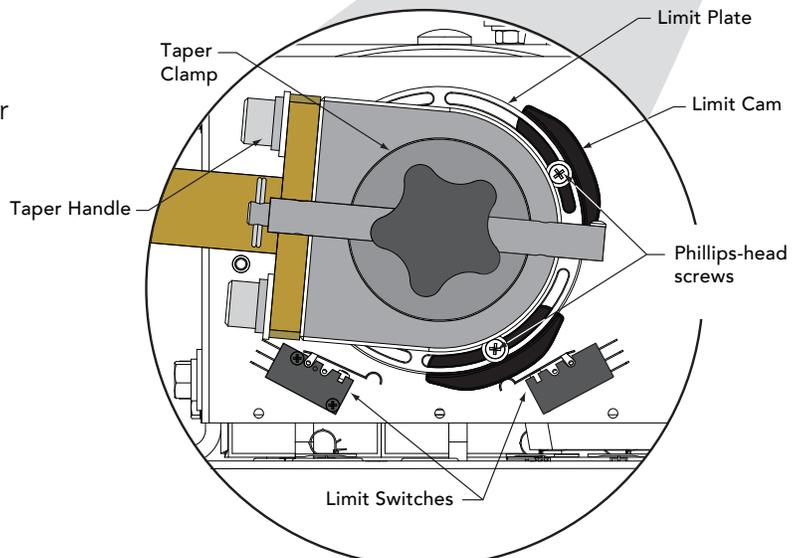
POSITION THE LINKAGE ARMS

Use tapped holes and hex bolts to hold linkage arms in place (2x) while setting the limit switches.

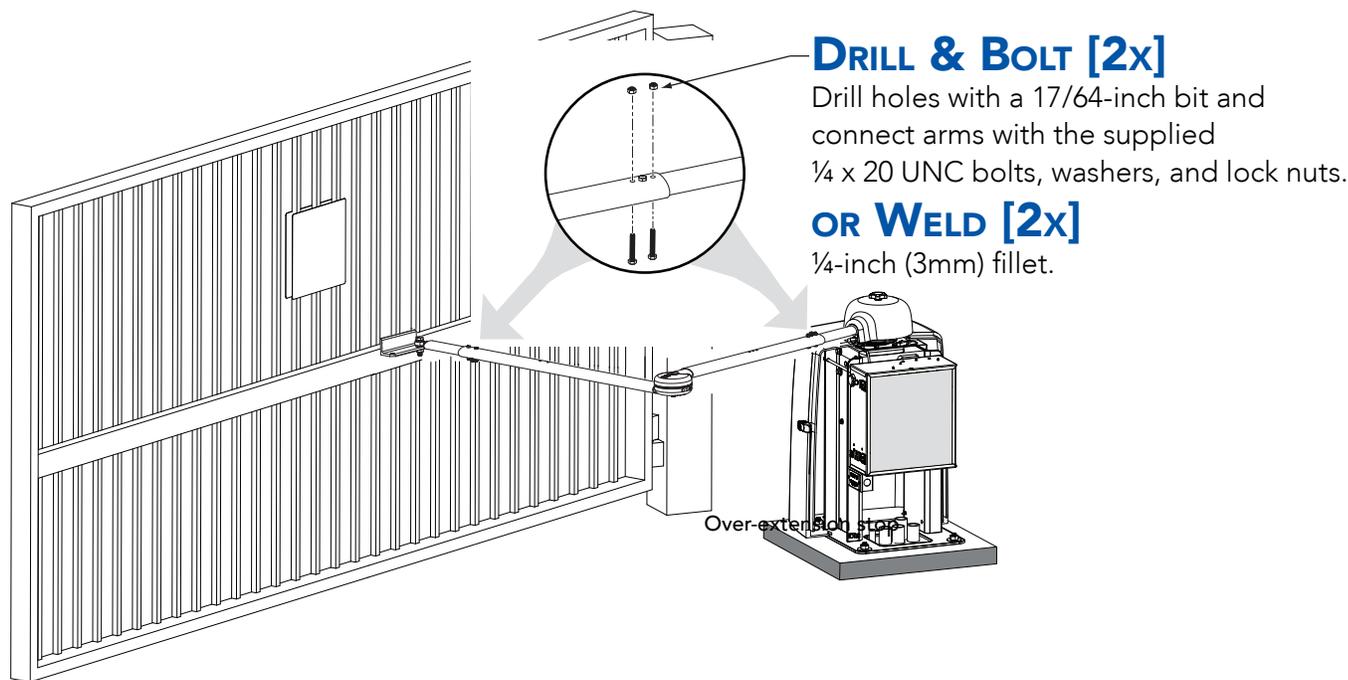


ADJUST THE LIMIT SWITCHES

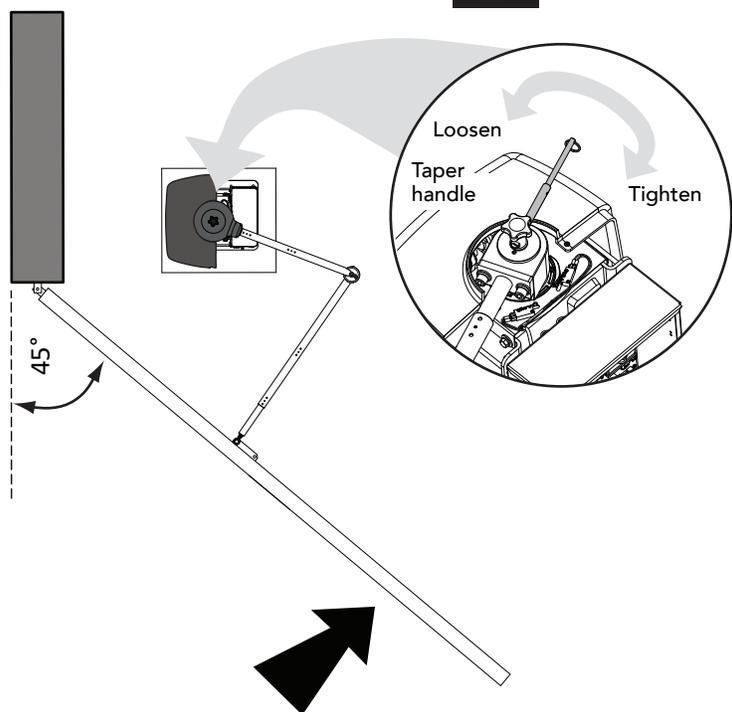
- ◆ Extend the taper handle and loosen the taper clamp.
- ◆ Manually swing the gate to full OPEN and CLOSE positions.
- ◆ Loosen the two Phillips-head screws.
- ◆ Move the limit cams so they trip the appropriate limit switch at the full OPEN and CLOSE positions.
- ◆ Retighten the two screws.



8 COMPLETE GATE ARM INSTALLATION



9 ADJUST AND TEST GATE OPERATION



SET THE TAPER CLAMP

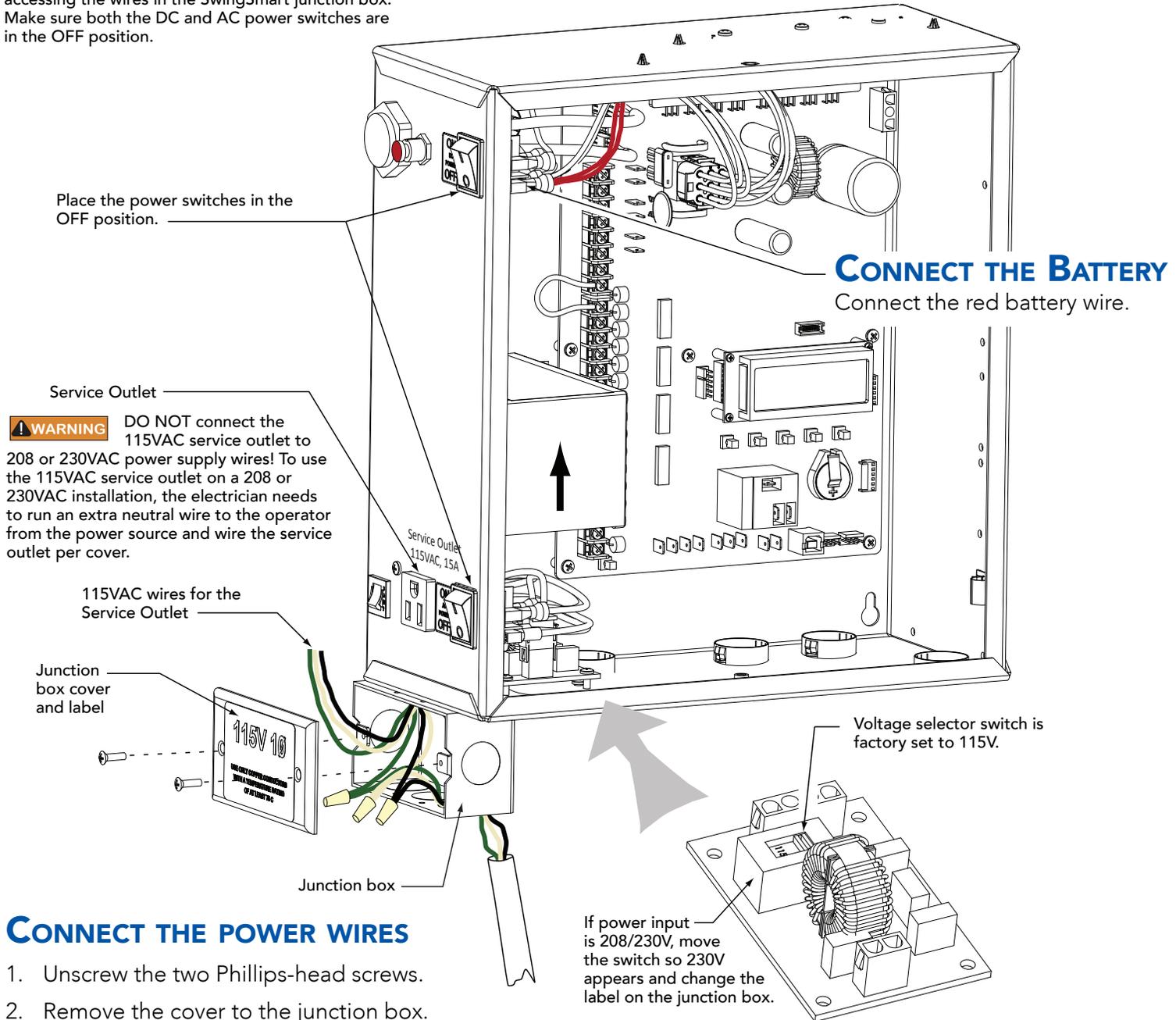
The taper clamp is designed to break free when a gate strike occurs, but not slip during normal operations. Set it properly, by taking the following steps:

- ◆ Loosen the taper clamp so you can manually swing the gate half way between the open and close position (above a 45° angle).
- ◆ Continue to incrementally turn the taper handle until the clamp is set so that it only breaks free with a strong push that simulates a gate strike.
- ◆ **NOTE:** A large amount of torque is not required to obtain a tight clamp setting. At highly secure facilities, use the outermost set screw position to straighten the arm. A straightened the arm is preferable to over-tightening the taper clamp.

10 VERIFY THE POWER IS OFF, AND THEN CONNECT THE WIRES

TURN POWER OFF

! DANGER Turn OFF AC power at the source (circuit breaker panel) before accessing the wires in the SwingSmart junction box. Make sure both the DC and AC power switches are in the OFF position.



CONNECT THE POWER WIRES

1. Unscrew the two Phillips-head screws.
2. Remove the cover to the junction box.
3. Connect the AC power and ground wires with wire nuts.

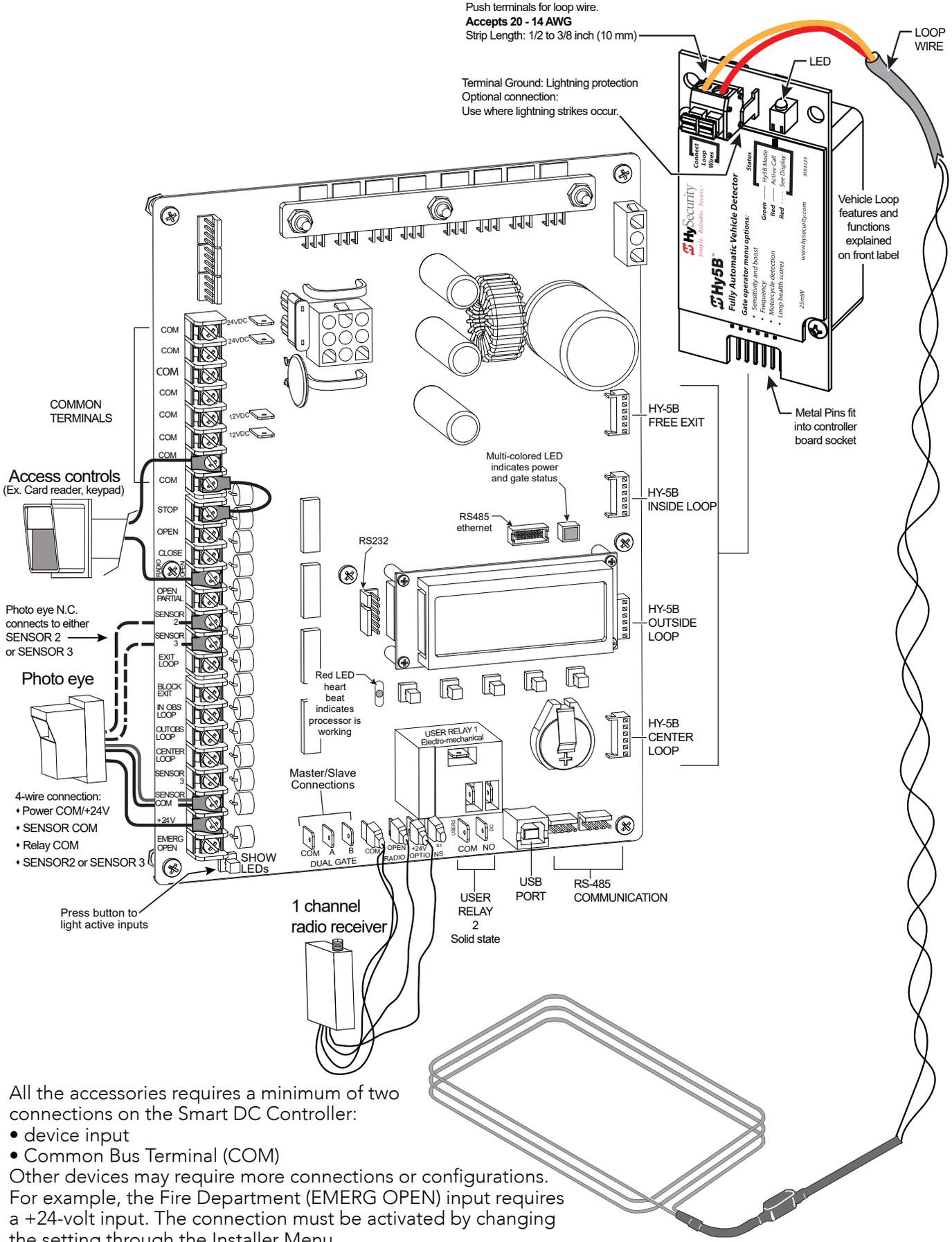
! CAUTION Wiring of gate operators must conform to NEC standards and comply with all local codes.

! CAUTION When connecting to 208/230VAC on the AC power, the voltage selector switch on the AC power board must be moved to the 230V position or damage to the operator will occur and void the Limited Warranty.

11 CONNECT ACCESSORIES

Push terminals for loop wire.
Accepts 20 - 14 AWG
 Strip Length: 1/2 to 3/8 inch (10 mm)

Terminal Ground: Lightning protection
 Optional connection:
 Use where lightning strikes occur.

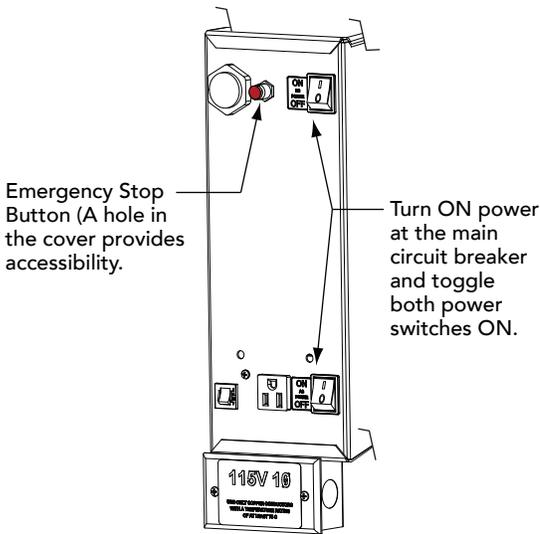


All the accessories requires a minimum of two connections on the Smart DC Controller:

- device input
- Common Bus Terminal (COM)

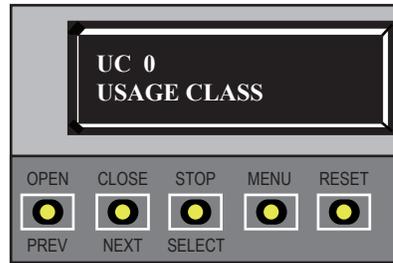
Other devices may require more connections or configurations. For example, the Fire Department (EMERG OPEN) input requires a +24-volt input. The connection must be activated by changing the setting through the Installer Menu.

12 TURN ON POWER & COMPLETE THE SET UP



The USAGE CLASS menu display appears the first time power is applied. Four sequential displays present information which must be configured before *SwingSmart* will function.

To edit the MENU	To navigate through SELECTIONS	To choose what is on the display	To navigate between menus
Press SELECT. <i>Two top characters blink.</i>	Press NEXT. <i>Continue pressing NEXT to view all selections.</i>	Press SELECT. <i>Blinking characters become static.</i>	Press NEXT or PREV. <i>Advance – press NEXT Previous – press PREV</i>



SELECTIONS

- 0 – No Usage Class set.
- 1 – Single Family residential up to four units.
- 2 – Multi-family, hotel, etc.
- 3 – Industrial use, not for general public.
- 4 – Guarded and monitored facility not for general public.



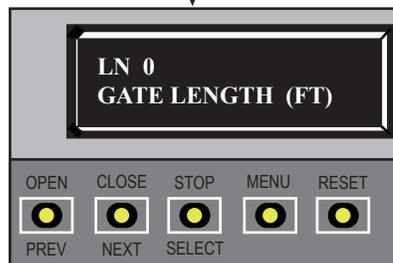
SELECTIONS

- 0 – No handing set. Gate will not move until handing is set.
- Looking at the gate from the secure, operator side, choose:
- R – If the operator is on your right.
 - L – If the operator is on your left.



SELECTIONS

- 0 – Not set.
- 1 – Gate weight: 0 to 300lbs (0 to 136kg)
- 2 – Gate weight: 301 to 600lbs (136 to 272kg)
- 3 – Gate weight: 601 to 800lbs (272 to 363kg)
- 4 – Gate weight: 801 to 1300lbs (363 to 590kg)



SELECTIONS

- 0 – Not set.
 - 1 – Gate length: 0 to 8ft (0 to 3m)
 - 2 – Gate length: 8 to 12ft (3 to 4m)
 - 3 – Gate length: 12 to 16ft (4 to 5m)
 - 4 – Gate length: 16 to 20ft (5 to 6m)
- An audible beep occurs when the initial setup is complete



Note: One of three gate status displays will appear depending on the gate's position.
GATE OPEN
GATE CLOSED
GATE STOP

COMPLETE THE INSTALL

Refer to the installation manual to configure User and Installer Menu options such as gate speed, IES sensitivity, Close Timer, relay functionality, etc.

TEST THE GATE

- ◆ Test cycle the gate operator by pressing the OPEN and CLOSE buttons. Make sure the gate travels to full open and close positions.
- ◆ Readjust the limit cams as required.
- ◆ When the gate and operator are functioning properly, replace the operator's covers and secure the latches.
- ◆ Review the *Important Safety Instructions* with the end use/property owner on the proper use of the gate system.