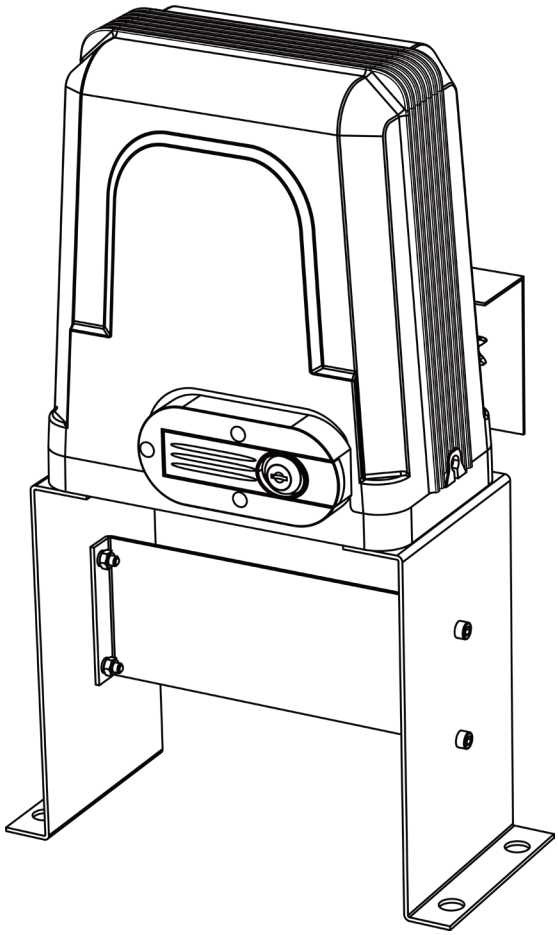
V20230323

# PY600ACL Premium SLIDING GATE OPENER USER MANUAL



Read Carefully Before Use
Keep for Future Reference

# Safety Information

## ⚠ Warning!

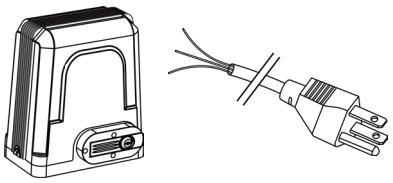
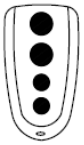
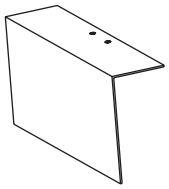
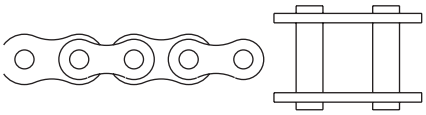
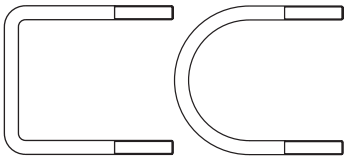
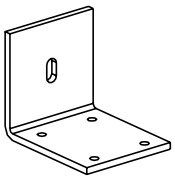
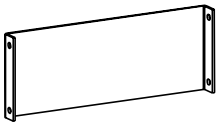
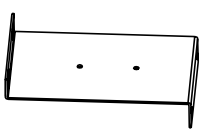
- Read these instructions **CAREFULLY** before installation and use. Provide them to any technician used to install, maintain, or repair this device and provide them with the device if it is ever given or sold to a third party.
- Install and use this gate opener **ONLY** in accordance with these instructions and all applicable local and national laws and regulations. Adding clearly visible warning signs is a requirement for UL 325 compliance and may be necessary in your area. Only use the device for its intended purpose, opening and closing a single sliding gate for Class I residential vehicular traffic. Always aim to minimize public exposure to potential hazards such as pinch points. Failure to do so may result in serious property damage and severe personal injury.
- Install and use this gate opener only on firm level ground. Install and use this device so that its motor and other hazardous components are not in public areas and are protected as much as possible from unauthorized access and use. There should be adequate clearance between your gate and any nearby structures to prevent any possibility of a pinching or crushing hazard during use. If this is impossible, the area should be guarded as well as possible and warnings clearly placed nearby.
- **ONLY** allow trained technicians to install and repair this device and its electrical connections. Disconnect all power from electronic components during installation and maintenance except as instructed for safely testing functionality.
- Confirm **BEFORE** any digging that there are no nearby gas, power, or other utility lines or that all such lines have been fully disabled and cleared to allow safe work.
- **ONLY** use this device for a single sliding gate intended for vehicular traffic. Pedestrians should be provided with a separate access point far enough away to ensure they never come into contact with the moving vehicular gate.
- **DO NOT** install this device in any area prone to flooding or in locations exposed to flammable or explosive fumes.
- **ONLY** use this device with gates of compatible weight and size and stable, compatible, and well-grounded power sources. Do not use with ungrounded power strips, 3-to-2 prong adapters, DC batteries, or DC solar power systems.
- **ONLY** use well-connected and maintained ANSI #41 chains with this device. Never use this device for gates wider than 40 feet (12 m) and never allow the sprockets to carry the weight of the gate. Keep the chain correctly positioned so all weight is distributed to the gate's own wheels during operation.
- **ONLY** install fixed controls for the gate where they cannot be reached over, under, around, or through the gate. They should also be far enough away that operators cannot contact the moving gate during use. For full UL 325 compliance, there should be a clear line of sight between the controls and the gate but it should be located at least 6 feet (2 m) away from any of the gate's moving parts.
- **NEVER** allow children to play on or around this device or its attached gate. Keep controls away from children and out of their reach at all times and warn them of the gate's danger.
- **NEVER** pair a remote control for this device with any other control board. Never attempt to operate this device with two or more remotes or control devices at the same time.

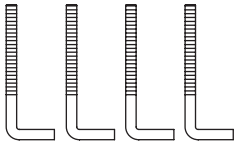
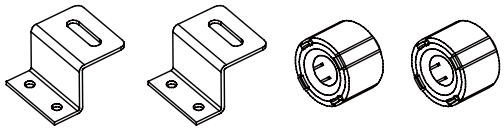
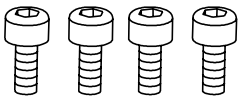
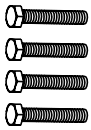
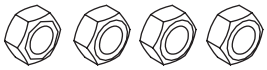
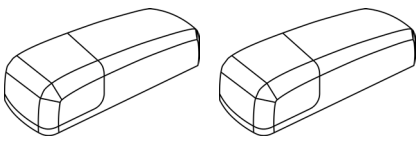
- All provided components of this device are weatherproofed to withstand normal rain. Ensure adequate insulation and protection of all electrical connections and never direct pressurized water against any part of this device.
- Keep your gate well maintained and its track free of grime and debris. Periodically confirm that it runs smoothly under manual operation.
- **DO NOT** use if any component is missing, loose, worn, or damaged. Tighten, repair, or replace problematic parts before further use. Only replace components with identical parts and always fully replace damaged electrical cords.

# Specifications

| **Model** | PY600ACL | |
|---|---|---|
| **Input Power** | 110–120 V~ 60Hz | |
| **Rated Power** | 0.37 hp | 280 W |
| **Torque** | 11.8 lb.-ft. | 16 N·m |
| **Duty Cycle** | S2 20 min. | |
| **Max. Gate Weight** | 1400 lb.<br>0.7 T | 600 kg<br>0.6 MT |
| **Max. Gate Speed** | 42.5 fpm | 13 m/min. |
| **Chain Type** | ANSI #41 | |
| **Prov. Chain Length** | 20 ft. | 6 m |
| **Max. Gate Length** | 40 ft. | 12 m |
| **Max. Noise** | 56 dB | |
| **Temp. Range** | −4°F to 158°F | −20°C to 70°C |
| **Weatherproofing** | IP44 | |
| **IR Signal Frequency** | 940 nm | 1.9 kHz |
| **IR Sensor Range** | 6.6–40 ft. | 2–12 m |
| **Max. Remotes** | 40 | |
| **Remote Range** | 98.4 ft. | 30 m |
| **Remote Frequency** | 433.92 MHz | |
| **Power Cord Length** | 4 ft. 11 in. | 1.5 m |

# Package List

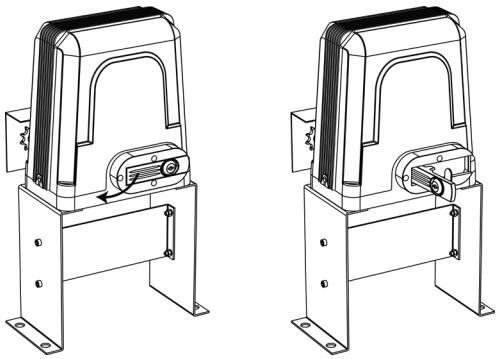
| No. | Picture | Name | Quantity |
|---|---|---|---|
| A |  | Motor with Power Cord | 1 |
| B |  | Manual Release Keys | 2 |
| C |  | Remote Controls | 2 |
| D |  | Sprocket Cover | 1 |
| E |  | #41 Chains | 2 |
| F |  | Tie Rods | 2 |
| G |  | Square & Round Bolts | 8 |
| H |  | Gate Brackets | 2 |
| I |  | Horizontal Mounting Plate | 1 |
| J |  | Vertical Mounting Plates | 2 |

| No. | Picture | Name | Quantity |
|---|---|---|---|
| K |  | M8 Foundation Bolts | 4 |
| L |  | Magnet & Bracket Sets | 2 |
| M |  | M4×10 Bolts | 4 |
| N | | M6×20 Bolts | 4 |
| O |  | M6×65 Hex Bolts | 4 |
| P | | M8×40 Hex Bolts | 4 |
| Q |  | M6 Hex Nuts | 16 |
| R | | M8 Hex Nuts | 20 |
| S |  | M6 Flat Washers | 16 |
| T | | M8 Flat Washers | 18 |
| U |  | M6 Spring Washers | 16 |
| V | | M8 Spring Washers | 14 |
| W |  | IR Sensor Set | 1 |

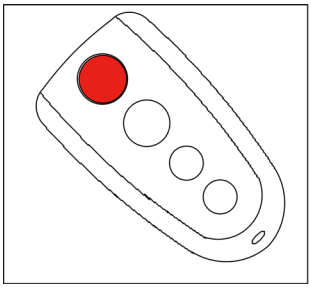
# Installation

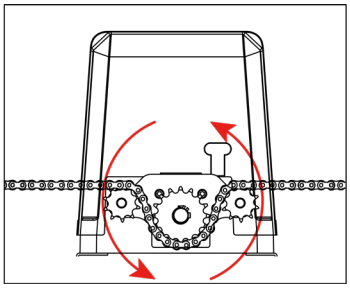
## Initial Testing and Setup

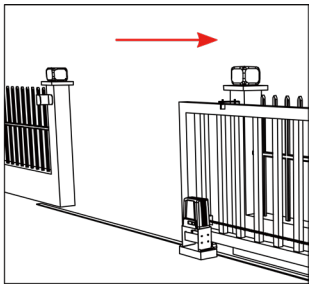
1. When you first receive your motor (A), use one of the manual release keys (B) to open the motor's release bar 90°. This releases the main gear's normal locking mechanism for manual testing. Confirm that the gears rotate freely and smoothly by hand. Close the release bar and lock the gear back into its normal configuration.



2. Plug the motor into any stable, compatible, and well-grounded power source. Use one of the provided remote controls (C) to confirm its operation. The top button on both remotes should already come paired to your motor's circuit board. If they are not, see the instructions for Remote Pairing below.

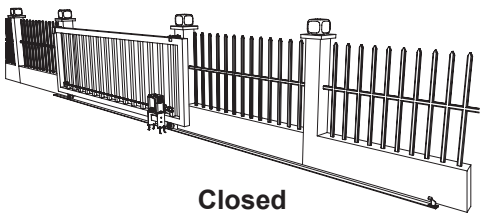




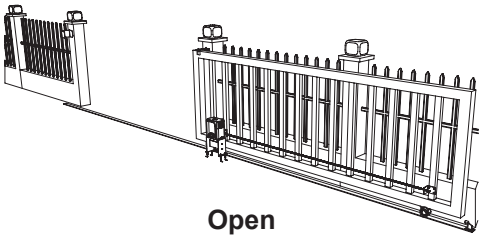


The default setting for this gate opener is single-button control, which helps prevent accidents and malfunctions from contradictory inputs. Press the top button once to start the motor. This should cause the main gear to begin turning counterclockwise, which opens gates towards the right. If you will need to install your opener on the left side of your gate, see the instructions for Reversing Direction below.

**Standard Right Side Installation**

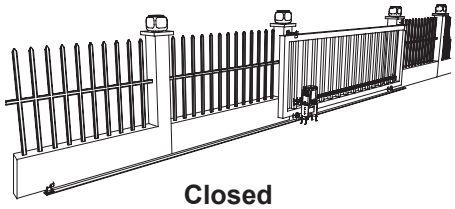


**Closed**

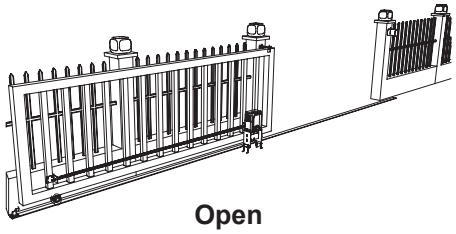


**Open**

**Optional Left Side Installation**



**Closed**



**Open**

Press the button again to stop the gears. Press the button a third time to start the motor again in reverse. This should cause the main gear to begin turning clockwise, which closes gates from the right. Press the button a fourth time to stop it again.

3. Test the magnetic limit switches (L) by starting the motor turning in either direction and bringing one of the magnets close. The detector is located inside the case above and to the right of the gears. Move the magnet around to find the exact location, marking it if needed. Confirm that each magnet stops the wheels turning in each direction when brought near the detector. If there is any problem or issue with the magnetic limit switches, contact Customer Service before continuing with installation.

   ⚠ Keep the motor and other devices **FULLY** disconnected from power for the rest of installation, except as instructed for testing operation.

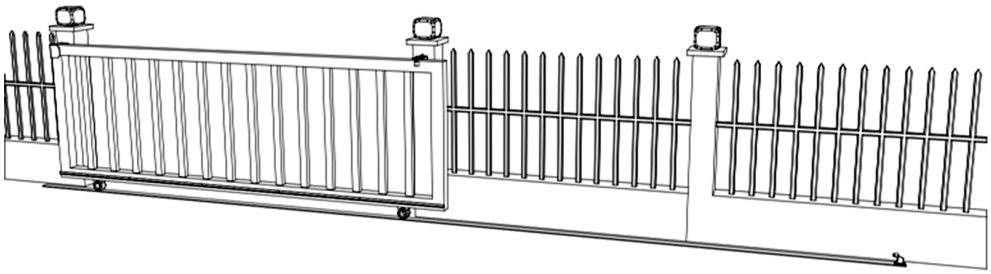
4. Double check your gate's weight and size. Confirm that your gate opener will be able to provide the necessary torque for safe and consistent operation. Confirm that your gate does not exceed 40 feet (12 m) in length. Check how far your gate will need to move to open and close as needed. If your gate will need to move more than 20 feet (6 m), you will need to purchase additional ANSI #41 chain and connect it with the chain already provided with your device. Be sure any additional chain is completely identical and flush with the rest.

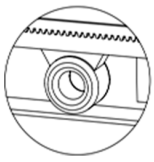
   ⚠ **NEVER** use incompatible chain sizes with this device and **ALWAYS** ensure the gate chain is securely fastened before use.

5. Double check your gate's condition. Confirm that it is properly installed on firm and level ground entirely within your own property. Confirm that it moves smoothly and remains completely plumb and level both vertically and horizontally along its entire path. Its wheels and guides should rotate easily and be free of any corrosion, dirt, or grime. Any track should be cleaned and firmly mounted along its entire length. There should be adequate space at both ends to avoid any pinching or crushing hazard once movement is automated.

   ⚠ If it is impossible to eliminate hazardous areas around your gate, each one should be blocked off and clear warnings posted.

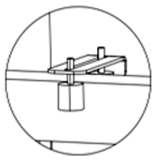
   Confirm that your gate includes all of the following features or their equivalent. In particular, be sure end catches and stops on both sides are prepared so your gate can never roll off its designated path.



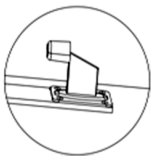


**Track and Wheels**

**End Catch**



**Guide Rollers**



**End Stop**

For full UL 325 compliance, place one or more warning signs so that they are clearly visible to anyone near the gate on either side. Such signs should warn of the possibility of serious injury or death from the moving gate, warn against allowing children nearby, and guide pedestrians to keep clear and use a separate entrance. As potential pinch points, access to exposed wheels must also be restricted using roller guards. Similarly, the gate and nearby fence or wall must be constructed so that they do not provide **ANY** openings below a height of 4 feet (1.2 m) above the ground where a 2¼″ (5.8 cm) diameter sphere would be able to pass through.

6. Provide a separate gate for pedestrians if needed. Once automated, the main gate should **ONLY** be used for vehicular traffic. Be sure the pedestrian access is clearly visible or clearly marked from the area of the gate, but it should be located safely away from the main gate's range of motion.

7. Provide a stable, compatible, and well-grounded power connection for the gate opener. The motor's outlet should be within sight of the gate, protected from the elements, and equipped with a GFCI, RCD, or circuit breaker. It should be at least 3 feet (1 m) high to minimize damage from weather. If possible, place the outlet higher than 5 feet (1.5 m) to limit access by children and animals.

   It is recommended that any wiring near the gate run underground inside PVC pipe or conduit to minimize any possibility of tripping or accidental damage. If you will be using additional wire to extend the length of the provided power cord, be sure to keep all connections clean and well insulated. Any additional wiring for the outlet or power connection should be a 3-core cable at least 16 AWG (1.5 mm²) thick. If your gate's position is further than 300 feet (90 m) from the nearest power source, the wire should be at least 14 AWG (2.5 mm²) thick. At distances beyond 1000 feet or 300 m, a professional electrician should be consulted to safely deal with the expected voltage drop.

   **ONLY** make and adjust electrical connections while all lines are fully disconnected from power.

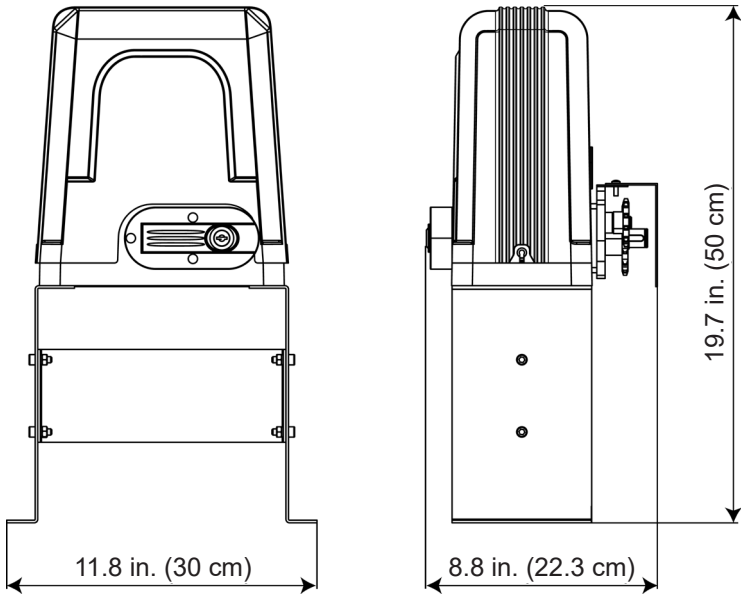
   **ALWAYS** confirm **BEFORE** digging that each area is free of underground utility lines or that any such lines have been deactivated and cleared to allow safe work.

8. When properly configured and activated, the gate opener's collision reaction system functions as a Type A entrapment protection and an attentive user and the device remote function together as a Type B1 non-contact sensor. Users should also install the provided infrared sensors (W), especially if any additional access method is added.

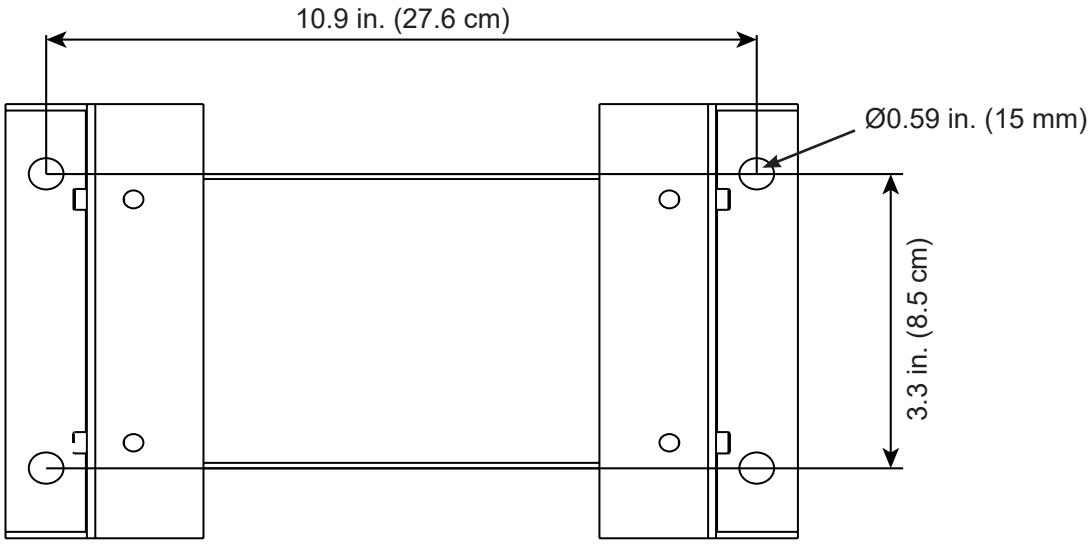
   To use the infrared sensors, prepare locations for them on opposite sides of your gate. They should be directly across from one another at least 1′8″ (50 cm) apart but no further apart than 40 feet (12 m). If possible, they should be placed where they will be shielded from direct sunlight. Remove the sensors' housing to mark position where pilot holes will need to be drilled for their support bolts (not included).

   Each sensor needs a circuit board connection. The receiver can use two AAA batteries or 12–24V AC/DC power, while the emitter requires a 12–24V AC/DC power source. This can be provided from the motor circuit board's +15V pin (7) or separately. The signal line from the receiver—the sensor with the three 2-pin terminals—and any power lines should be prepared ahead of time. Additional wires should be at least 22 AWG (0.5 mm²) thick. If possible, these lines and those from any other control or access system should also be placed underground inside a PVC pipe or conduit separate from the one used for the motor's own power cord. Again, all wiring connections should be insulated and protected to withstand rain and inclement weather.

## Gate Opener Dimensions



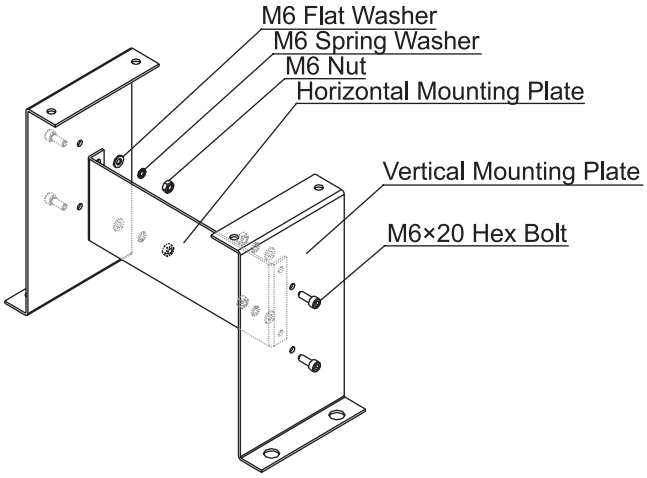

## Mounting Plate Dimensions



## Base Installation

⚠ Your motor **MUST** be firmly secured for safe use. Do not attempt to use it loose or only secured to thin pavement.

1. Use the horizontal mounting plate (I) to brace the two vertical mounting plates (J) as shown. Use the M6×20 bolts (N), spring (U) and flat washers (S), and nuts (Q) to connect the plates so that both vertical plates face inwards on top and the large holes for the foundation bolts face out.

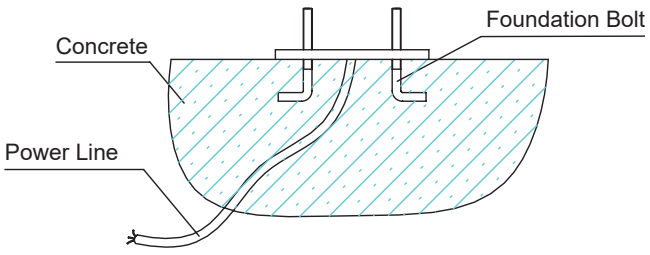



2. If the area beside your gate already has concrete 10 inches (25 cm) or deeper, you can attempt to secure this base into it with your drill and suitable fasteners.

   If not, dig a hole about 20 inches across, 14 inches wide, and 8 in. deep (50×35×20 cm) in the location you have selected for your gate opener. This hole should be located so the motor will be at least one foot (30 cm) inside where the nearest chain bracket will be attached to the gate.

3. Prepare a form box with the same dimensions and fit it into the hole. Nonstick spray can be used to minimize moisture absorption and ease its future removal.
4. Fill the form with concrete. You will need a minimum of 1.25 cubic feet (35 L) of concrete, equivalent to about three standard 60 lb. bags or a little more than two standard 80 lb. bags.

   A metal wire or cage frame can be added near the sides to further reinforce your concrete foundation.
5. If you will be feeding your power and signal cables through PVC pipe, adjust them as needed while the concrete is still wet.
6. Insert the four M8 foundation bolts (K) as shown. Remember to allow for the additional 2 inches (5 cm) or so that the chain gears will need between the nearest foundation bolts and the gate. It is recommended to coat the bolts with a protective solution to minimize corrosion during their time in the wet concrete and afterward.



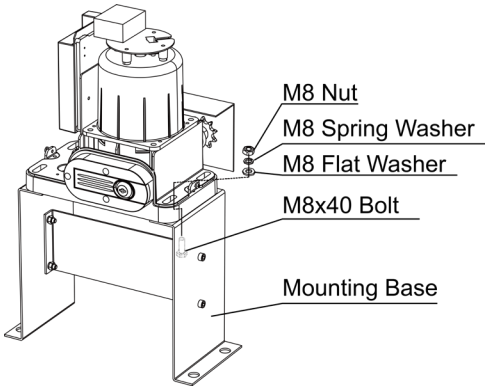

7. Level the upper surface of the concrete.
8. Wait at least 24 hours for the concrete to set, protecting the area from any rain or other weather as needed.
9. Remove the form box from around the concrete and pack the soil tightly back into place. Adjust the concrete and surrounding dirt as needed to ensure it is snuggly fit, firmly positioned, and completely level.

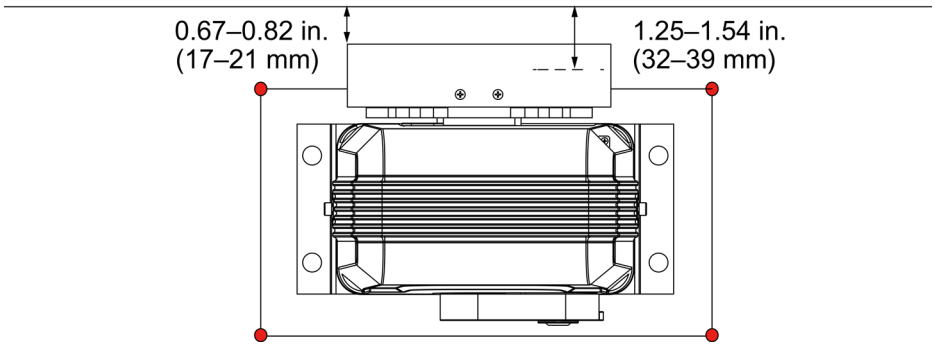
   ⚠ If you ever subsequently notice the gate opener rocking with the concrete during use, add additional concrete or further secure the base as needed.
10. Fix the base onto the foundation bolts using the M8 spring (V) and flat washers (T) and nuts (R). Use additional washers as needed to keep the base completely level.

## Motor Installation

1. Remove the plastic casing from the motor (A).
2. Connect the motor to the base using the M8 bolts (P) with their spring (V) and flat washers (T) and nuts (R).

   Adjust the placement of the bolts in their slots to match the expected path of the chain as shown. Normally, the path of the chain will be 1¼ to 1½ inches (32–39 mm) from the inner edge of the gate.

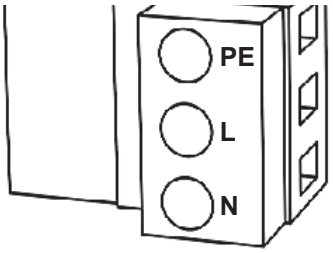


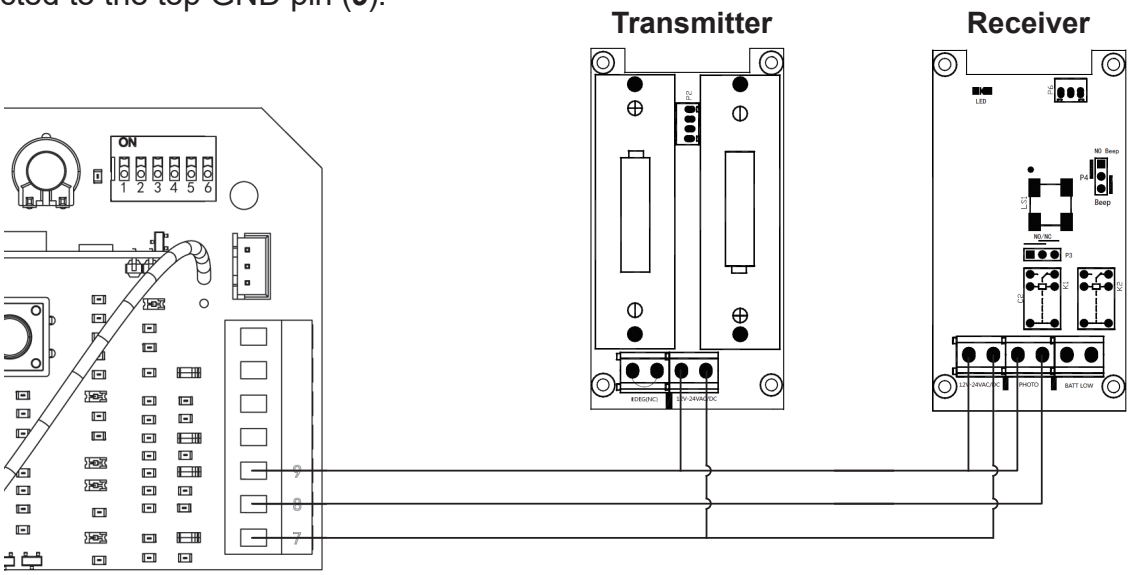

3. Remove the protective cover from the motor circuit board. Keep its fasteners nearby.

   ⚠ **NEVER** make electrical connections while the motor's power supply is active. Disconnect the GFCI or circuit breaker before any wiring adjustment.

4. You will need to directly wire your power source into the motor's circuit board. Connect the provided cord or your extension to the main power terminal, the only one with three pin positions. Use a small flathead screwdriver to loosen and tighten the terminal screws as needed. Connect the ground wire to the top **PE** pin, the live wire to the central **L** pin, and the return or neutral wire to the bottom **N** pin. Be sure no wiring is left bare and exposed.




5. If you will be using the provided infrared sensors, find the long terminal next to the circuit board's DIP switches. Remove the wire shorting pins **8** and **9** together. Connect the wiring from your infrared sensors as shown. The sensors' power input pins should be connected to the bottom +15V pin (**7**); the receiver's photocell signal pin should be connected to the central NC pin (**8**); and the sensors' power return pins and the receiver's photocell return pin should all be connected to the top GND pin (**9**).

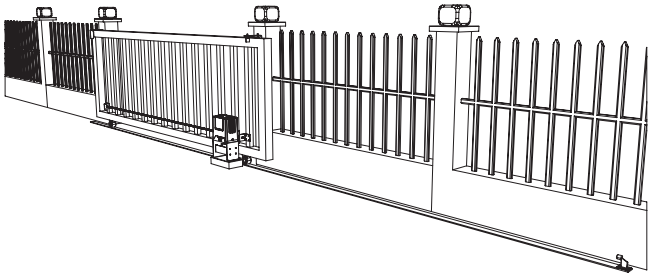


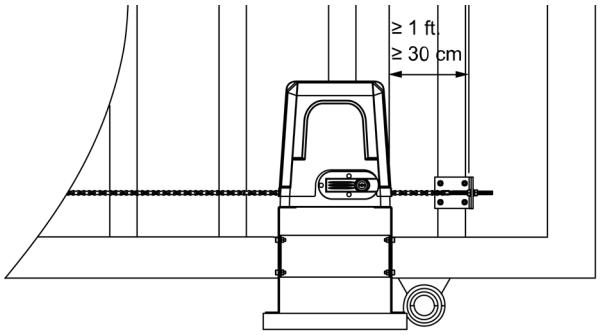
Replace the sensors' covers and mount them near your gate at the positions prepared for them. If possible, cover or otherwise protect them from direct sunlight.

6. Arrange the wiring for your motor as needed, being sure it will be protected from the moving gate. Use conduit, silicone, or other sealant to minimize exposure to the elements and limit access by insects.

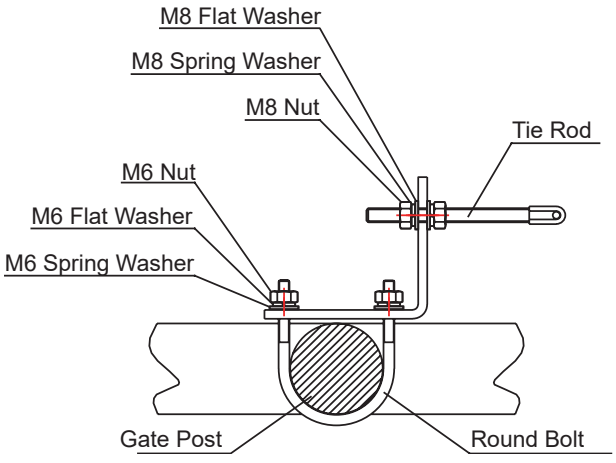
## Chain Installation

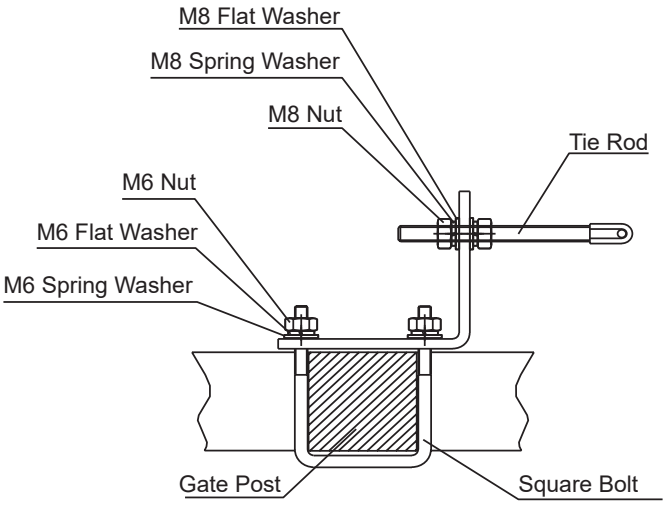
1. Close the gate.
2. Install the gate brackets (H) at or near each end of your gate. They should face in towards your property and be located at the same height as the two smaller sprockets on the motor. The nearest bracket should be at least one foot (30 cm) away from the motor.



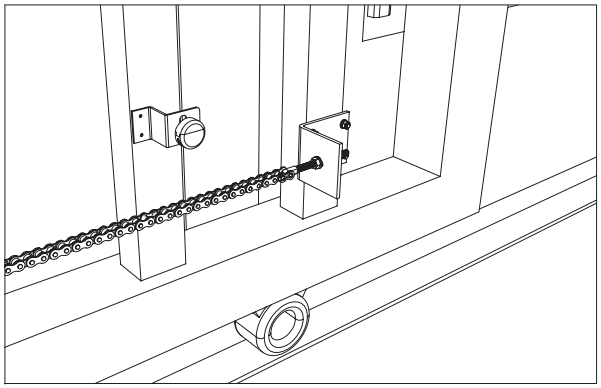


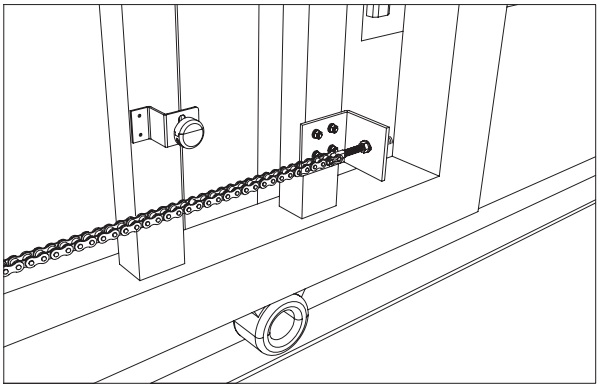

Use the square bolts (G) for gates with square posts and the round bolts (G) for gates with round posts.



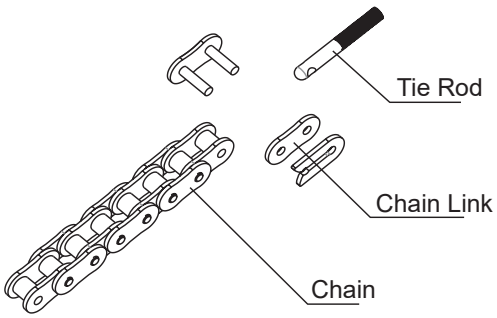

It is recommended to position the brace for the tie rod (F) on the side of the post nearer to the motor, but it can be used in either position if necessary.





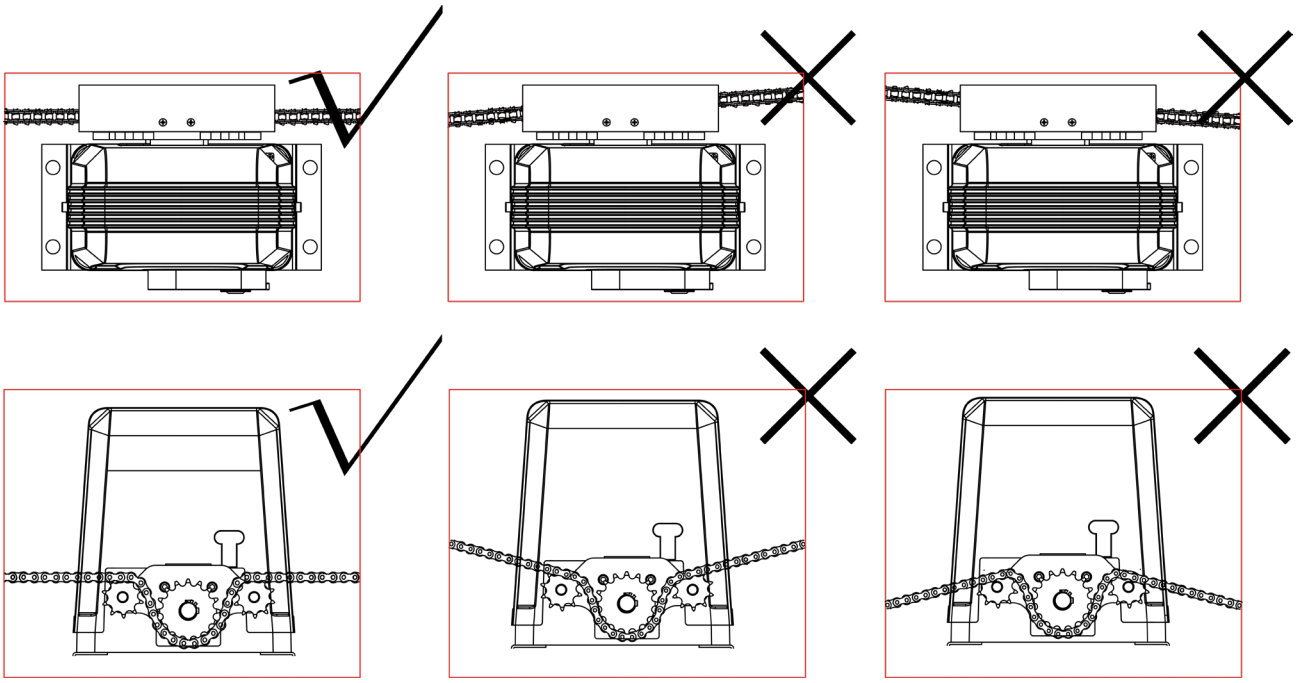
3. Fasten one of the chains (E) to the tie rod of the bracket farther from the motor by opening, positioning, and resealing its final chain link.

   If necessary, repeat the process to connect the two chains to one another or even to add additional lengths of chain.



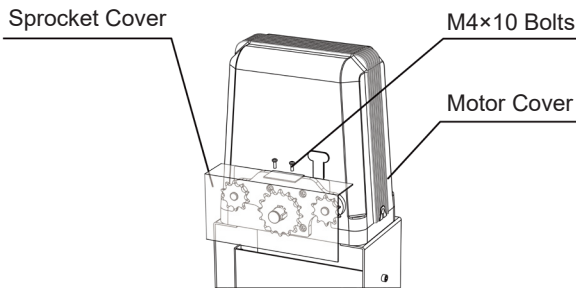

   ⚠ **ONLY** use ANSI #41 chain with this device and do not use any chain longer than 40 feet (12 m).

4. Adjust the length of your chain so that it will be roughly taut—neither loose nor tight—once threaded through the motor and attached to the other bracket. Confirm that the chain will run straight from one bracket to the other without requiring the sprockets to support any of the gate's weight.



   Adjust the positions of the brackets as necessary but do not position either bracket closer than one foot (30 cm) to the motor.

5. Activate your motor's main power connection. Press the **TEST** button on its circuit board or press any button on either remote control (C). The sprockets should begin to turn. Confirm that they will pull your chain in the correct direction. Press **TEST** or your remote's button again to stop the sprockets and disconnect the motor from power. (If the wheels spin in the wrong direction for their location, see how to reverse their direction below.)
6. Thread the chain through the motor's sprockets as shown. Adjust the position of the motor on its base if needed by loosening, moving, and retightening its M8 bolts.
7. Connect the chain to the tie rod on the second bracket.
8. After finishing adjustment and testing (see below), attach the motor's cover and the sprocket cover (D) using their M4 bolts as shown.



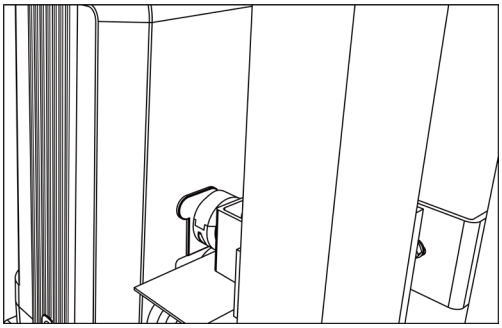
## Magnetic Limit Switch Installation

⚠ Using this gate opener without its magnets in the correct position risks damage to the motor and to the gate, including possible derailment.

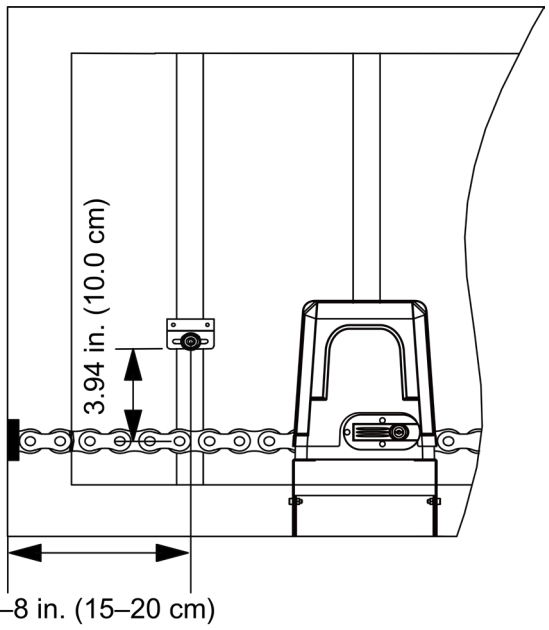
1. Place the motor in manual mode. Move the gate to the position you want it to go to when fully open.
2. Find the post on the open gate about 6–8 inches (15–20 cm) farther away from your driveway than the middle of the motor.
3. Find the position on that post exactly 3.82 inches (9.7 cm) above the middle of the taut chain.
4. Place one of the magnets (L) there using its bracket and M6×65 bolts (O), spring (U) and flat washers (S), and nuts (Q) or using any similarly secure equipment. The magnet should be held facing the opener with at least 0.4 inches (1 cm) between it and the motor casing.

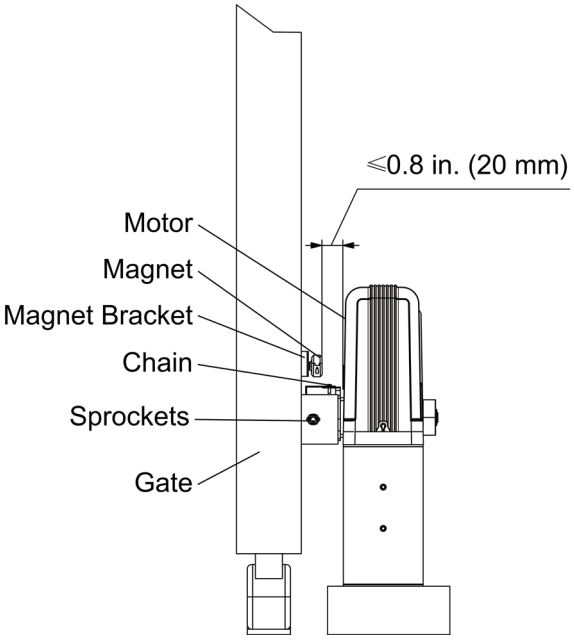
   ⚠ The magnets and brackets are interchangeable but the functions of their positions are not.

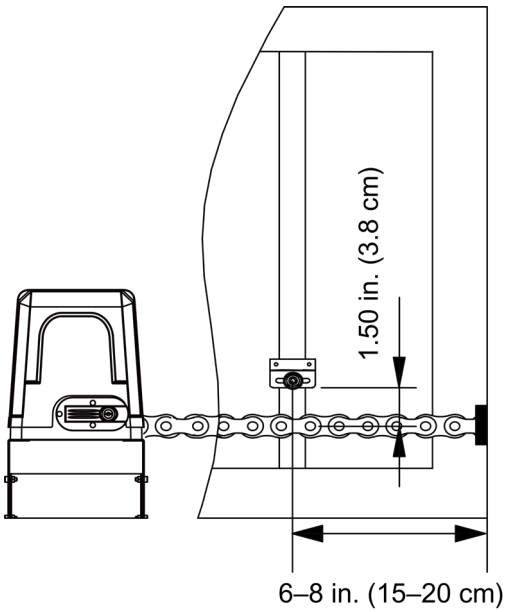
   This higher magnet will function as the **OPEN** limit switch because of the position of the sensors in the motor housing. Reverse the diagrams shown in Figures 18 and 20 for left side installation.



5. Move the gate to the position you want it to lock at when fully closed.
6. Find the post on the closed gate about 6–8 inches (15–20 cm) towards the driveway from the center of your motor.
7. Find the position on that post exactly 1.38 inches (3.5 cm) above the middle of the taut chain.
8. Place the other magnet there using its bracket and fasteners or other similarly secure equipment as before.
9. Fine tune the positions of the magnets during initial testing (see below) so the system gently stops your gate at the best location.

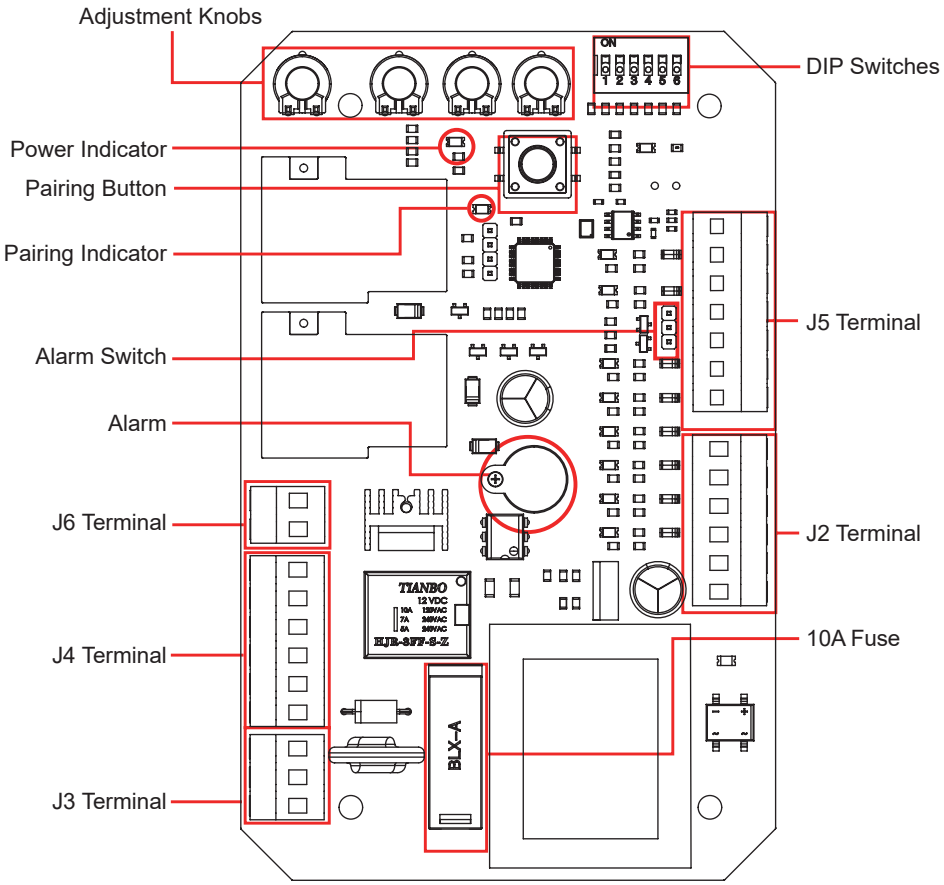


# Adjustment

## Circuit Board Diagram




| Adjustment Knobs | |
|---|---|
| **VR1** | Obstruction Sensitivity |
| **VR2** | Braking Force |
| **VR3** | Slow Stop Distance |
| **VR4** | Starting Force |

| DIP Switches | |
|---|---|
| **1** | Deactivate Slow Start |
| **2** | Reverse Direction |
| **3** | Autoclose Time |
| **4** | |
| **5** | Deactivate Collision Close |
| **6** | Remote Operation Mode |

| J4 Terminal | |
|---|---|
| **MOT1** | Live Motor Pin |
| **MOT2** | Neutral Motor Pin |
| **MCOM** | Common Motor Pin |
| **LAMPL** | Live Alarm Light Pin |
| **LAMPN** | Neutral Light Pin |
| **PE** | Ground Pin |

| J5 Terminal | |
|---|---|
| **13** | Open Limit Pin |
| **12** | Common Limit Pin |
| **11** | Close Limit Pin |
| **10** | Sensor Signal Pin |
| **9** | IR Ground Pin |
| **8** | IR NC Signal Pin |
| **7** | IR 15V Supply Pin |

| J3 Terminal | |
|---|---|
| **PE** | Mains Ground Pin |
| **L** | Mains Live Pin |
| **N** | Mains Neutral Pin |

| J2 Terminal | |
|---|---|
| **6** | Pedestrian Signal Pin |
| **5** | Cyclical Signal Pin |
| **4** | Common Signal Pin |
| **3** | Stop Signal Pin |
| **2** | Open Signal Pin |
| **1** | Close Signal Pin |

⚠ **NEVER** adjust any wiring or board setting while the gate is connected to power unless specifically directed otherwise. Disconnect the circuit from power, make your adjustment, and then restore power to test the effect.

## Reversing Direction

The default placement for this system is on the right side of sliding gates when looking out from the property. This is controlled by the up position of DIP Switch **2**. If you are installing your system on the left side of your gate, make sure that this switch is flipped down away from the word **ON** before connecting the gate to power.

| DIP2 | Effect |
|---|---|
| UP | Right Side Operation |
| DOWN | Left Side Operation |

## Changing Command Modes

The default command mode for this system is single-button operation. Pressing a single button on the remote will cycle through the commands OPEN→STOP→CLOSE→STOP. This is controlled by the down position of DIP Switch **6**. If you prefer to use four separate buttons for the different commands, make sure that this switch is flipped up towards the word **ON** before connecting the gate to power. Be aware that this setting makes accidents and excessive wear from contradictory commands more likely and is not recommended.

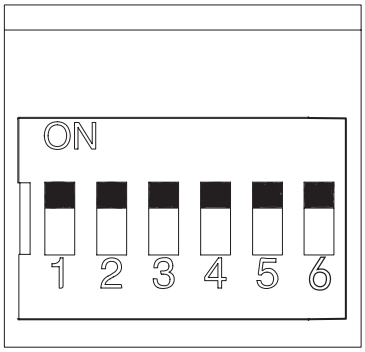
## Toggling the Movement Alarm

By default, the circuit board produces an alarm or buzzing noise when the motor is active. This is controlled by the position of the small wire connecting Pins **1** and **2** on the Alarm Switch terminal. If you prefer to deactivate this safety feature, move the wire to connect Pins **2** and **3** on the Alarm Switch terminal instead. Be aware that this can make accidents more likely and is not recommended.

## Activating Autoclose

By default, the gate remains open indefinitely until it receives a command to close. This is controlled by the joint down position of DIP Switches **3** and **4**. To set the gate to close 12 seconds after reaching its maximum open position, flip switch **4** up towards the word **ON**. To set the gate to close 24 seconds after reaching its maximum open position, flip switch **3** up but leave switch **4** down. To set the gate to autoclose after 36 seconds, flip both switches up. Because of the additional risk involved in the gate moving without direct instruction and supervision, be sure that the gate's obstruction sensitivity, stop speed, and similar setting are working as intended. Using the movement alarm, infrared sensor, and other safety equipment is also highly recommended while autoclose is active. (DIP Switch **5** can be flipped up to disable the automatic closure that occurs when a collision is detected, but this is not recommended for most users.)

| DIP3 | DIP4 | Effect |
|---|---|---|
| UP | UP | 36 Second Delay |
| UP | DOWN | 24 Second Delay |
| DOWN | UP | 12 Second Delay |
| DOWN | DOWN | Manual Closure |



## Adjusting the Gate's Sensitivity

The leftmost adjustment knob **VR1** controls obstruction sensitivity. The far left position is the most sensitive to any obstruction but may cause overreaction, e.g., to strong winds or leaves along the gate's track. Moderate settings are fine for most users, but careful trial and error can find the ideal settings for your situation.

## Adjusting the Gate's Forcefulness

Various settings control the forcefulness of the gate. The gate normally minimizes wear by speeding up gradually as it begins moving. DIP Switch **1** can be flipped up to deactivate this soft start. (This can damage the system and is not usually recommended.) Similarly, the rightmost adjustment knob **VR4** controls the gate's initial force. The far left position minimizes wear on the motor and gate but may cause it to react too sluggishly. The 2nd knob **VR2** controls the braking force of the motor. Again, the far left position minimizes wear on the motor and gate but may react too slowly to obstructions and limit switches, causing a forceful collision with the end stops and brackets. The 3rd knob **VR3** controls the sensitivity to the limit switches. The far left position responds immediately and disables any soft stop, but this can cause unnecessary wear and even cause your gate to stop before reaching its end bracket.

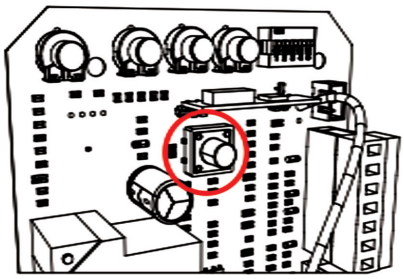
## Remote Pairing

The top button of both included remotes (C) should come already paired with your gate opener. Up to 38 additional remotes or wireless control buttons can be paired to the gate's circuit board. Be sure that they use the 433.92 MHz (LPD433 Channel 35) radio band or can be configured to do so.

⚠ **NEVER** pair the same button to 2 different gates or devices at the same time.

1. Remote pairing must be done with the circuit board exposed and connected to power. Be careful and only touch the pairing button while the circuit is live. Disconnect the motor's power while its casing is being removed and replaced or making any other adjustment besides remote pairing.
2. Press the remote pairing button long enough for the nearby indicator light to come on.

   ⚠ **DO NOT** hold the button down, as this has a different effect.
3. Press the remote button to be paired or enter a passcode and press the open button on your wireless control.
4. Press the same button on the remote again or reenter the passcode and press the open button again on the wireless control. The remote indicator light should flash and then go out.



5. The button or keypad is now paired and can be used to open or close the gate. This pairing should remain stored in memory even when power to the gate opener is cut accidentally or at its circuit breaker.
6. Test that your gate responds correctly to commands from the new remote or keypad. When you are finished pairing and testing, disconnect the gate from power, replace the motor's covers and fasteners, and restore power.

## Unpairing Remotes

This board cannot unpair an individual remote. If you need to remove lost remotes from the system's memory, you will need to delete **ALL** stored remotes at once. Open the motor and circuit board casing as before, press and **HOLD** the pairing button, and wait for the indicator light to come on and then turn off. Use any remote to test that all stored remotes have been purged.

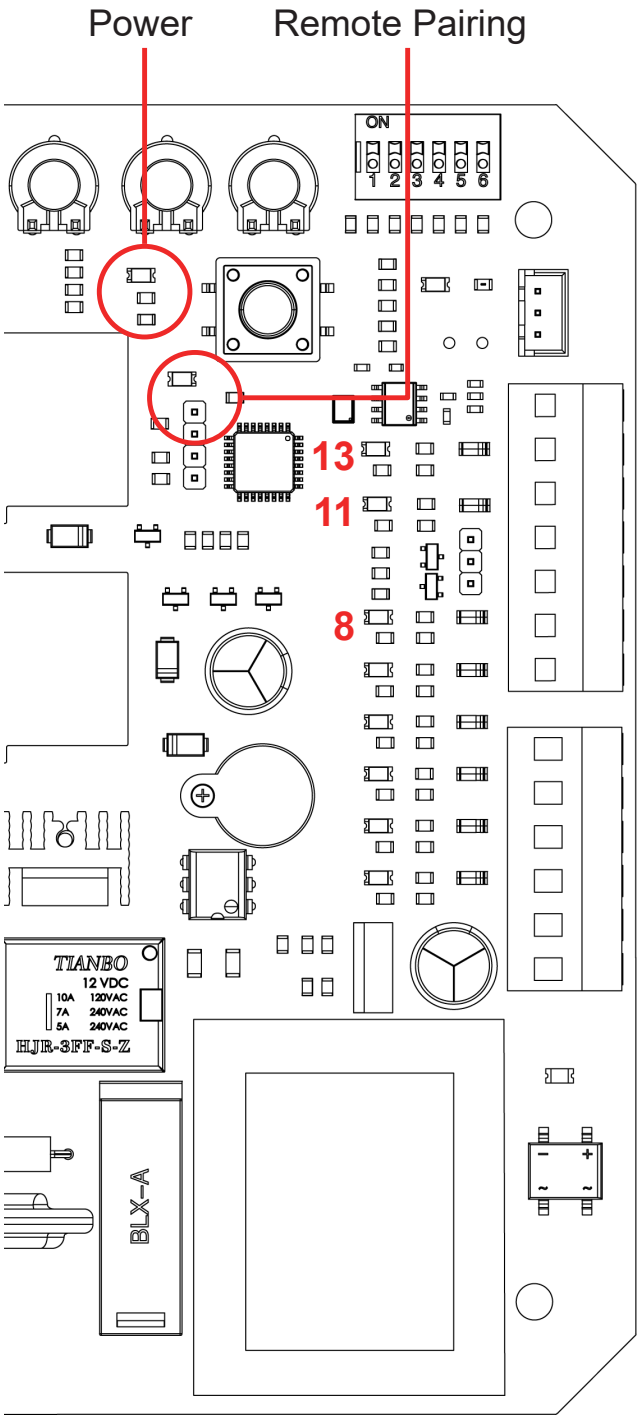
Once this process is successful, pair the remotes that you want to continue using in the same way as before.

# Initial Testing

1. If the motor is located on the right side of your gate, confirm that DIP Switch **2** is toggled up. If the motor is located on the left side, make sure that DIP Switch **2** is toggled down.
2. Clear any obstacles from the gate's path and keep all bystanders away.
3. Activate the power to your motor. The power and infrared (**8**) indicator lights should come on.
4. Test the infrared sensors by blocking the path between the two sensors with any obstacle. The infrared indicator light (**8**) should turn off. Remove the obstacle. The indicator light should come back on.
5. The top button on both of your remote controls should already be paired with your motor. They use a single control mode at a distance of up to 98 feet (30 m). Pressing either button should cycle through the commands OPEN→STOP→CLOSE→STOP. The remote pairing indicator light should come on each time a signal is received.
6. When the gate reaches the open limit switch, the open limit indicator light (**13**) should come on and the gate should come to a stop.

   Be ready to manually stop the gate using the remote if the limit switch does not activate correctly.

   If the limit switch is so close that it contacts the motor housing or is so distant that it fails to activate the motor's sensor, adjust its support bracket as needed to correct the problem. If the limit switch stops the gate too early or too late, adjust the location of the support bracket so that the gate will gently stop in the correct place.
7. If you have activated the automatic close function, test that it works correctly. Wait the set amount of time, and see if the gate begins closing automatically. Confirm that the remote can still stop the gate when it is closing automatically.




**Indicator Lights**

8. When the gate reaches the close limit switch, the close limit indicator light (**11**) should come on and the gate should come to a stop. Again, be ready to quickly stop the gate with the remote if needed and adjust the support bracket as needed.
9. Test both remotes through the full cycle of commands.
10. Deactivate the power to your motor using its circuit breaker. If any abnormalities have been detected during testing, make the necessary adjustments—e.g. by repositioning the infrared sensors, realigning the limit switches, or adjusting the control panel's sensitivity settings—or contact Customer Service. Once everything is functioning, replace the circuit board and motor covers and their fasteners, reconnect power, and enjoy!

# Troubleshooting

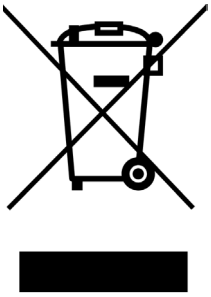
| Possible Problems | Typical Solution(s) |
|---|---|
| The gate does not open or close normally and no indicator lights activate on the circuit board. | Verify that the power supply is functioning properly. |
| | Check that the fuse is not blown. If necessary, replace it with an identical 10A 250V fuse. |
| | Have a certified electrician rewire your system. |
| The gate opens but does not close. | Remove any obstacles that might be in the gate's path. |
| | Check the placement of the limit switches. |
| | Check the gate direction switch on the circuit board. |
| | If it has been removed, replace the short wire between the NC and GND pins (Pins **8** and **9**) on the circuit board's infrared sensor terminal or correct the wiring for your infrared sensors. |
| A remote control does not activate the gate. | Change the remote control's battery. |
| | Pair the remote control button to the board again. |
| | Remove any obstruction between the motor and the remote. |
| The motor makes noise but the gate does not move. | Remove any obstruction from the motor, main gear, track, or gate path. |
| | Have a certified electrician check the gate opener's capacitor. Replace or rewire it if necessary. |
| The circuit breaker trips repeatedly. | Remove any other devices from the circuit providing the motor's power and confirm it is not unstable or experiencing surges. |
| | Have a certified electrician check the power supply line and motor line for short circuits. Repair if necessary. |
| The gate suddenly stops or reverses when moving. | Remove any obstacles that might be in the gate's path. |
| | Check the infrared sensors, their wiring, and the circuit board indicator lights, adjusting as necessary. |
| | Check the limit switches, their placement, and the circuit board indicator lights, adjusting as necessary. |
| An obstruction to the infrared sensors stops the gate from opening but doesn't stop it from closing. | Correct the direction settings on the circuit board to match your motor's placement. |

# Maintenance

- Always supervise children and pets near the gate, the motor, and their controls to prevent accidents.
- Always fully disconnect your motor from its power supply before removing its cover or making any adjustments to its wiring. Use trained and licensed electricians for rewiring or electrical repair work.
- Keep your gear and guide tracks clean and free of any corrosion, grime, or obstructions.
- Lubricate wheels and rollers as needed.
- If your gate is not in regular use, test your gate opener's operation at least once a month. If any problems are noticed during testing or normal use, disconnect the motor from power, unlock the gate, and test manually that the gate still moves smoothly on its own. Tighten, repair, or replace problematic parts as needed. Only use identical components and always fully replace damaged or malfunctioning electrical cables.

# Disposal

Electrical products should not be disposed of with household products. In the EU and UK, according to the European Directive 2012/19/EU for the disposal of electrical and electronic equipment and its implementation in national laws, used electrical products must be collected separately and disposed of at the collection points provided for this purpose. Locations in Australia, Canada, and the United States may have similar regulations. Contact your local authorities or dealer for disposal and recycling advice.



# Contact Us

Thank you for choosing our products! If you have any questions or comments, contact us at **contact@b2csupportpro.com** and we'll resolve your issue ASAP!

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