



TOPENS CF800 Fast Sliding Gate Opener Chain Drive Automatic Gate Motor User Manual

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TOPENS CF800 Fast Sliding Gate Opener Chain Drive Automatic Gate Motor



Specifications

• **Power input: A**C 110V/60Hz or 220V/50Hz

Motor voltage: DC 24VRated power: 300W

• Gate moving speed: 43 ft/min (13 m/min)

• Max gate weight: 800 lbs (363 kg)

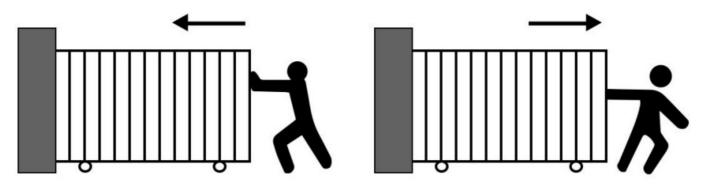
Thank you for purchasing our sliding gate opener. We are sure that the products will be greatly satisfying as soon as you start to use it.

The product is supplied with a user's manual which encloses installation and safety precautions. These should be read carefully before installation and operation as they provide important information about safety, installation, operation, and maintenance. This product complies with the recognized technical standards and safety regulations.

Check Your Gate before Installation

CHECK YOUR GATE

Before installation, please make sure that the gate itself can be opened and closed smoothly & freely BY HAND WITHOUT THE GATE OPENER.

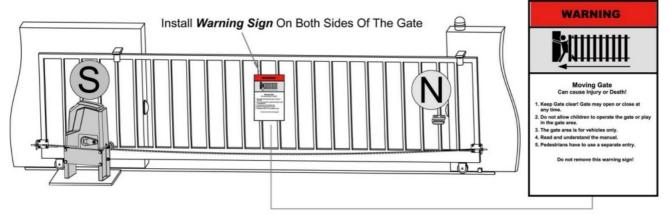


General Safety

WARNING! An incorrect installation or improper use of the product can cause damage to persons, animals, or properties.

- Scrap packing materials (plastic, cardboard, polystyrene, etc ..) according to the provisions set out by current standards. Keep nylon or polystyrene bags out of children's reach.
- This product was exclusively designed and manufactured for the use specified in the present documentation.

 Any other use not specified in this documentation could damage the product and be dangerous.
- The factory declines all responsibility for any consequences resulting from improper use of the product, or use which is different from that expected and specified in the present documentation.
- Do not install the product in an explosive atmosphere.
- The factory declines all responsibility for any consequences resulting from failure to observe Good Technical Practice when constructing closing structures (door, gates, etc.), as well as from any deformation that might occur during use.
- Disconnect the electrical power supply before carrying out any work on the installation. Also disconnect any buffer batteries, if fitted.
- Fit an omnipolar or magnetothermal switch on the mains power supply, having a contact opening distance equal to or greater than 3,5 mm
- Make sure a residual current circuit breaker with a 30mA threshold is fitted before the power supply mains.
- Check that earthing is carried out correctly: connect all metal parts for closure (doors, gates, etc.) and all system components provided with an earth terminal.
- Fit all the safety devices (photocells, electric edges, etc.) that are needed to protect the area from any danger caused by squashing, conveying, and shearing.
- Position at least one visible indication device, and fix a Warning sign to the structure.



- The factory declines all responsibility concerning the automation safety and correct operation when other suppliers' components are used.
- Only use original parts for any maintenance or repair operation.
- Do not modify the automation components, unless explicitly authorized by the factory.
- Instruct the product user about the control systems provided and the manual opening operation in case of emergency.
- Do not allow persons or children to remain in the automation operation area.
- Keep radio control or other control devices out of children's reach, to avoid unintentional automation activation.
- The user must avoid any attempt to carry out work or repair the automation system and always request the assistance of qualified personnel.
- Anything which is not expressly provided for in the present instructions is not allowed.
- Before installing the gate opener, check that all moving parts as well as the sliding gate is in good mechanical condition, correctly balanced, and open and close properly.
- Save these instruction instructions for future use.

Preparation for Installation

Before proceeding to your opener installation, check if your gate structure is by the current standards, especially as follows:

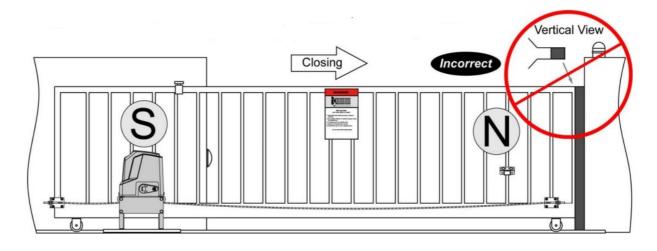
The gate sliding track is linear and horizontal, and the wheels are suitable the gate should be mounted and moving freely. Check that the structure is sufficiently strong and rigid, Make sure that the gate is plumb and level. The fence posts must be mounted in concrete. The gate does not bind or drag on the ground.

• The opening and closing gate stops are positioned.

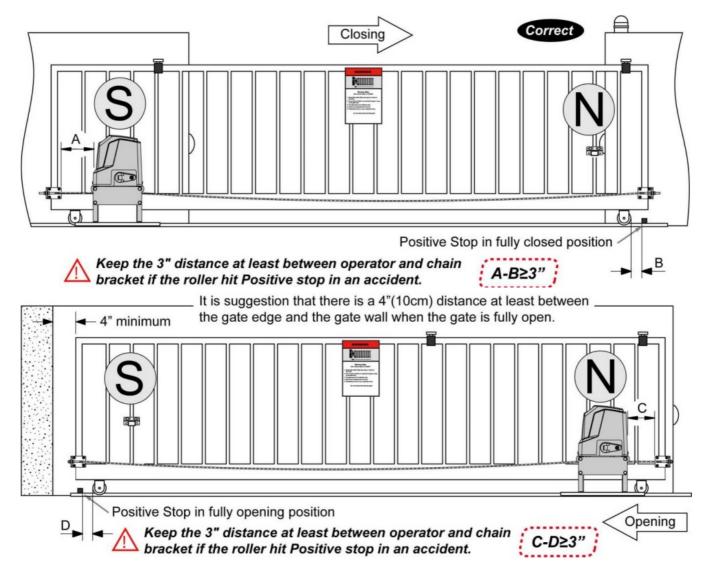
WARNING: Remember that control devices are intended to facilitate gate operation, but can not solve problems due to any defects or deficiency resulting from failure to carry out correct installation or maintenance. Take the product out of its packing and inspect it for damage. Should it be damaged, contact your dealer. Remember to dispose of its components (cardboard, polystyrene, nylon, etc.) according to the current prescriptions.

Refer to the following Figures for gate installation.

Using the post or wall as a stop, either directly or indirectly, is not recommended to protect the post or wall against damaging shock from the sliding gate.



For the sake of safety, a positive stop must be mounted on the two ends of the ground track.



Parts List



Accessories Parts (Included in some models, refers to the actual package)



Optional Accessories Parts List (Available at TOPENS Store)



Replacement Parts



WARNING: Changes or modifications not expressly specified by this user manual, TOPENS could void the warranty of this equipment.

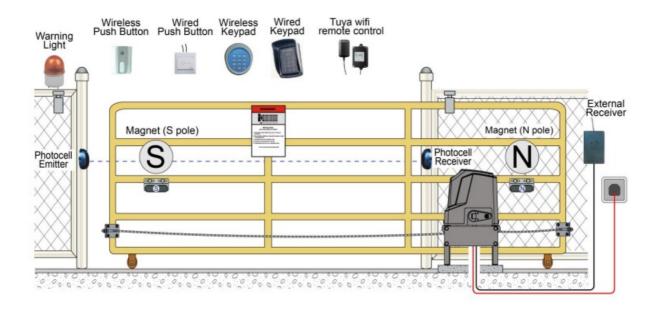
Technical Specifications & Features

Specifications				
	CF8	300		
Power input:	110~120V/60Hz or 220~240V/50Hz			
Motor voltage:	120VAC or 230VAC			
Rated power:	450W			
Gate moving speed:	40cm/s (16 in/s) for 120V	35cm/s (14 in/s) for 230V		
Max gate weight:	800kg (1800lbs)			
Environmental conditions:	-20°C~ +50°C (0°F to 120°F)			
Protection class:	IP44			

Features:

- · Midway mode.
- · Quick selection for the gate open/close direction
- Reliable rolling code technology for remote control
- Emergency release key in case of power failure
- · Stop in case of obstruction during gate opening
- · Reverse in case of obstruction during gate closing
- Built in adjustable auto-close (1-99 seconds)
- Built in max. Motor Running Time (MRT) for multiple safety protection (90 seconds)
- Reliable electromagnetism limit for easy adjustment ·Can be equipped with a wide range accessories
- Easy to install, and minimum maintenance requirement
- Get the desired chain tension by adjusting the chain bolts

Installation Overview



Installation of the Opener

Caution:

- Be sure that the opener is installed in a level and paralleled position. Improper installation could result in property damage, severe injury, and/or death.
- Before starting installation, ensure that there is no point of friction during the entire movement of the gate and there is no danger of derailment.
- Ensure that the safety side rollers are present. Necessary Tools: The following tools may be necessary to install the Gate opener. You will need screwdrivers, an electric drill, wire cutters and a wire stripper, a socket set, and possibly access to a welder.
- When installing the opener, you should build a concrete pad to support the base plate of the opener to maintain proper stability.

The installation proceeds are as follows:

- 1. Assemble the Base Plate and fix the Opener to the Base Plate.
- 2. Dig a hole for a concrete pad which should be approximately 60 x 32 x 35cm (24 x 13 x 14). It may protrude 10 cm (4") above ground and 25 cm (10") in depth underground. Increase the pad height if necessary to protect the system from flooding, heavy snow, etc.
- 3. Prepare one or more conduits for the electrical cables before pouring concrete. Remember that cable conduits have to pass through the hole in the base.
- 4. Pour concrete and before it starts to harden, check that it is parallel to the gate leaf and perfectly level.
- 5. Mark the position of four expansion anchors according to the position of the mounting hole on the base plate. Double-check your marking, move the base plate, and drill the 4 holes using a 14mm (9/16") masonry bit. Put the 4 expansion anchors (provided) into the holes and firmly tighten.
- 6. Mount the base plate to the concrete Pad and firmly tighten it, enabling the opener to be firmly secured on the concrete pad during the whole gate travel.

Manual Operation

- You can open the gate manual when power fails. The opener should be put in the manual (emergency release) position before fitting the chain and installing the opener and limit switch. The process is as follows:
- Insert the Release Key and turn it in clockwise 90°, then pull the release handle in clockwise 90° to disengage the clutch between the gear shaft and motor. Now the opener is in manual operation.

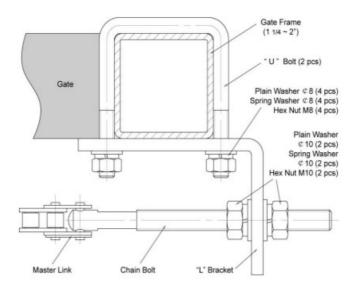


Installation of chain and chain brackets

1. Chain Brackets

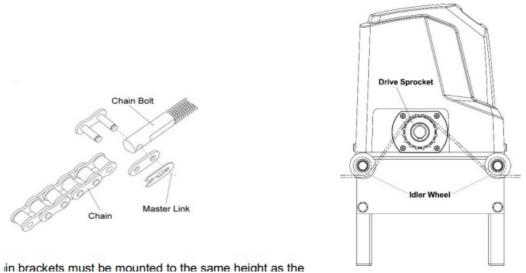
• Please refer to below chain brackets figure below, which shows "U" bolt, "L" bracket, and chain bolt. Use the "U" bolts (square or round) to attach the chain brackets to the gate frame.

• If Both the square bolts and round bolts are not fit for the gate frame, use the appropriate bolts to attach the chain brackets to gate frame.

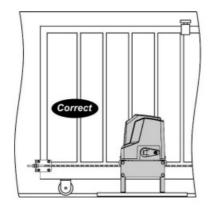


2. How to install the chain

- Place the chain around the top of the idler wheels and under the drive sprocket in the chain box.
- Connect a chain bolt to one end of the chain from the chain box by using the master link. Then insert the chain bolt to the L bracket and fix them each other by washers and nuts temporarily. (Nuts will be further adjusted for proper chain tension later)
- Connect the second chain bolt with another end of the chain from the chain box, then attach the bolt to the L bracket on the opposite end of the gate using the washers and nuts.
- Make sure that the chain is lined up exactly with the position where the chain is on the chain idler wheel.
- Remove the unwanted length of the chain. Set appropriated chain tension by adjusting two chain bolts on both ends.

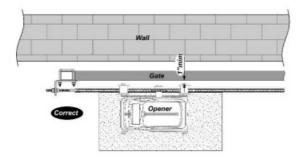


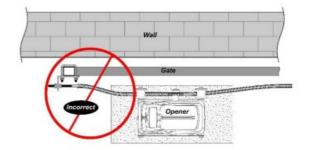
• The chain brackets must be mounted to the same height as the chain on the idler wheels.



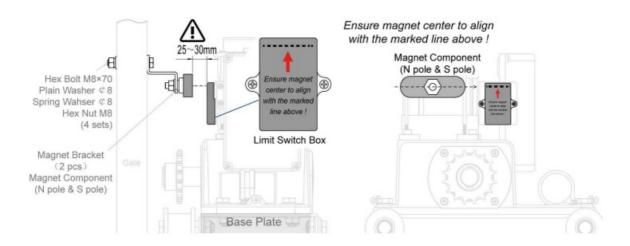


 Make sure there is 1" distance at least between the wheel cover and the gate after you position the base plate.





Installation of the Magnets



Before installing the limit switch, make sure the gate opener is put in manual operation. (the clutch connected with the gear shaft is disengaged) and the mains power supply is disconnected. Position the two Magnet Components approximately on the gate and move the gate by hand to fix them in place.

Fit magnets bracket

- Push the gate fully closed by hand. Locate and install the magnet bracket so that the opener will stop at the desired close position when the close limit switch approaches it.
- Push the gate fully open by hand. Locate and install the magnet bracket so that the opener will stop at the desired open position when the open limit switch approaches it.

The magnet component with an S pole must be installed on the left side and the magnet component with an N pole must be installed on the right side from the view inside of the property. Ensure magnet center aligns with the marked line above!

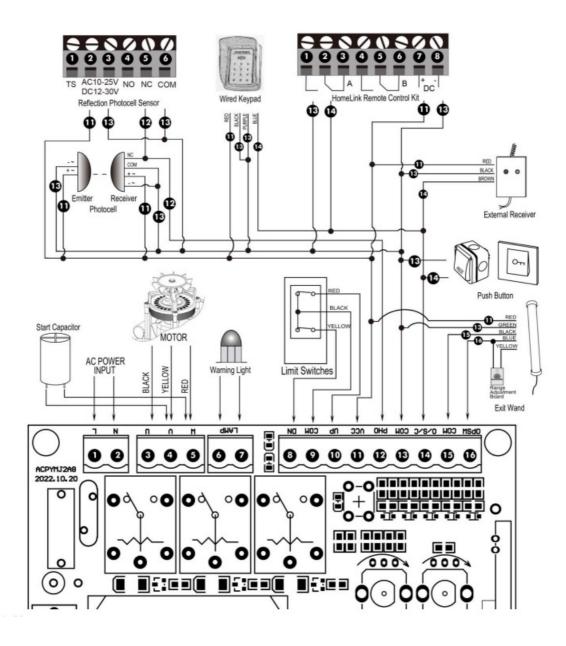
The magnets should be 25~30mm (1-1.2") away from the Limit Switch Box. If it is too near or too far, the switches will fail to work. Adjust the position of the magnets until the positions of the opening and closing meet the requirements.

Warning: Improper magnet installation may cause the gate to crash into the end barrier, which is very dangerous!

Connecting of Power Supply

WARNING: NEVER connect the gate opener to the power outlet before all the installations have been done. The power supply cord should be at least 3×0.75mm2 (3C×18AWG). Connect the live wire and neutral wire to the "L" (1) and "N" (2) terminal of the control board respectively; and connect the earth wire to "PE".

Connecting of the Control Board



Motor

- The BLACK wire of the motor should be connected to the "3" terminal.
- The YELLOW wire of the motor should be connected to the "4" terminal.
- The RED wire of the motor should be connected to the "5" terminal.

Limit Switches

- The YELLOW wire of the limit switches should be connected to the "8" terminal.
- The BLACK wire of the limit switches should be connected to the "9" terminal.

• The RED wire of the limit switches should be connected to the "10" terminal.

Warning Light (Included in some models, refers to the actual package)

• One wire of the warning light should be connected to the "6" terminal, another should be connected to the "7" terminal.

Start Capacitor

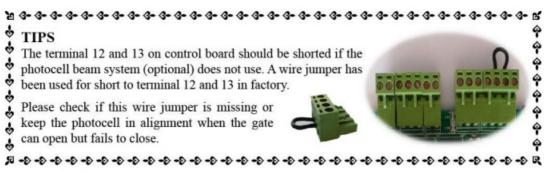
The two wires of the start capacitor should be connected to the "4" terminal and "5" terminal.

• Photocell Beam System (PBS) (Included in some models, refers to the actual package)

- Use a 2-core cable to connect the "+ ~" terminal of the photocell's emitter to the "11" terminal, and the "- ~" terminal to the "13" terminal. Also the "+ ~" and "- ~" terminals of the photocell's receiver should be connected to the "11" and "13" terminals in parallel.
- Use another 2-core cable to connect the "COM" terminal of the receiver to the "13" terminal, and the "NC" terminal to the "12" terminal.

Reflection Photocell Sensor (optional)

- The "AC10-25V/DC12-30V" terminals of the reflection photocell sensor should be connected to the "11" and "13" terminals, no matter the polarity.
- The "NC" terminal should be connected to the "12" terminal.
- The "COM" terminal should be connected to the "13" terminal.



Wired Keypad (12VDC) (Optional)

- The RED wire of the wired keypad should be connected to the "11" terminal.
- The BLACK wire of the wired keypad should be connected to the "13" terminal.
- The PURPLE wire of the wired keypad should be connected to the "13" terminal.
- The BLUE wire of the wired keypad should be connected to the "14" terminal.

Push Button (Optional)

• The push button should be wired to the "13" and "14" terminals. The gate operator works alternately by pushing the button (open-stop-close-stop-open).

• External receiver (optional)

- The RED wire of the external receiver should be connected to the "11" terminal.
- The BLACK wire of the external receiver should be connected to the "13" terminal.
- The BROWN wire of the external receiver should be connected to the "14" terminal.

HomeLink Remote Control Kit (optional)

- The "1" terminal should be connected to the "13" terminal.
- The "2" terminal should be connected to the "14" terminal.
- The "DC+" terminal should be connected to the "11" terminal.
- The "DC-" terminal should be connected to the "13" terminal.

• Exit Wand (optional)

- The BLACK wire of the exit wand should be connected into the "15" terminal.
- The BLUE wire of the exit wand should be connected into the "16" terminal.

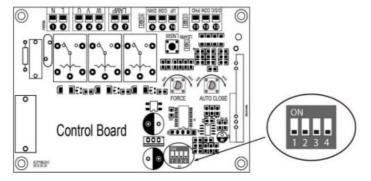
- The RED wire of the exit wand should be connected into the "11" terminal.
- The GREEN wire of the exit wand should be connected into the "13" terminal.
- The sensitivity adjustment board should be wired to the GREEN wire and the YELLOW wire of the wand. No matter the polarity.

Setting of the Control Board

• WARNING: Ensure the gate opener is powered off when you make any adjustments of the gate opener. Keep away from the gate while you set the gate opener system in case of an unexpected gate moving. Carefully adjust the DIP switches to avoid the risk of machine damage and injury or death. Always ask the help of a professional technician /electrician if you have any questions.

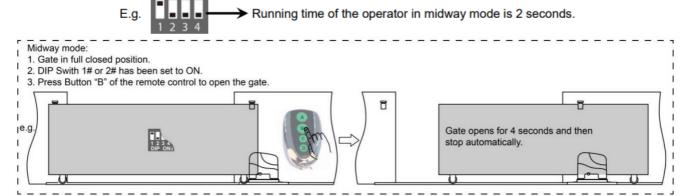
DIP Switches

The DIP switches are used to set the running time of the motor in pedestrian mode, enable/disable the auto close function of the gate operator, and fast change the open/close direction which is determined by the position of the gate operator installed.



- DIP Switch #1-#2: Running time of the motor in Midway Mode
- DIP Switch #1: ON 2 Seconds OFF 0
- DIP Switch #2: ON 4 Seconds OFF 0

NOTE: The midway mode function will be disabled if both DIP switches are turned off. Factory default setting is disabled. The midway mode could be activated by pressing button B of the remote control when the gate is in the fully closed position.

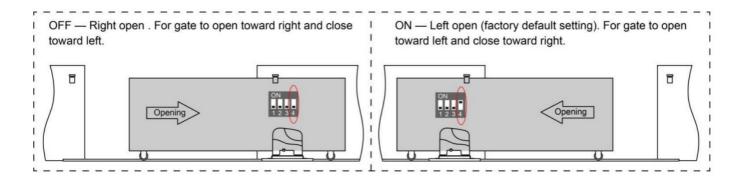


- DIP Switch #3: Auto close function enabled/disabled
- DIP Switch #3: ON auto close function enabled
 OFF –auto close function disabled.

E.g. Auto close function of the opener has been enabled. Factory default setting is disabled.

WARNING: Important Note: When the auto close function is enabled, the photocell sensor is highly recommended to be installed with the gate opener for safety.

DIP Switch #4: Left/Right open

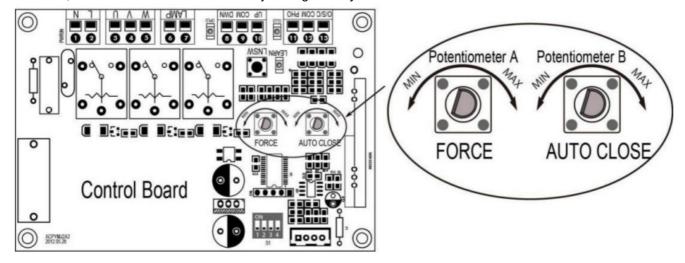


Potentiometers

Potentiometers A and B are used to adjust the stall force and auto close time of the gate operator separately. Turn potentiometer A clockwise to increase the stall force, and turn it counter-clockwise to decrease the stall force.

WARNING: Photocell is highly recommended to be installed with the gate opener as entrapment protection for safety when you set stall force to maximum.

Turn potentiometer B clockwise to increase the auto close time, and turn it counter-clockwise to decrease the auto close time, the auto close time could be adjusted gradually from 1 to 99 seconds.



Test the Reversing Sensitivity

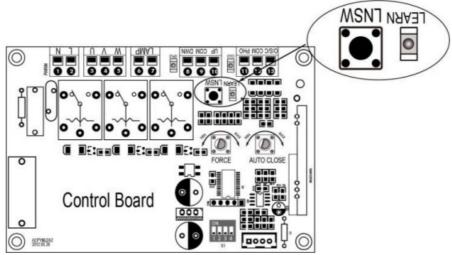
- For the sake of safety, it is very important to test the reversing sensitivity as soon as the control board set is finished.
- The reversing sensitivity adjustment is an inverse correlation with stall force adjustment in potentiometer A. In other words, the stall force level is higher; the reversing sensitivity level is lower.
- Put an immobile object along the gate path, and then operate the gate to strike it during the close cycles. The gate must reverse as soon as the object is struck with it. If the gate doesn't reverse, please increase the reversing sensitivity by turning the potentiometer A in a counter-clockwise direction. (Turning the stall force potentiometer toward to MIN position to increase the reversing sensitivity)
 - **Note 1:** If the sensitivity setting is too high, the gate will stop or reverse very easily by itself while there is little obstruction or resistance such as strong wind or heavy snow sometimes.
 - **Note 2:** Always check the gate reversing function every time of control board is set or restarted after the power is off.

How to Program or Erase the Remote

- The remote MUST be programed to the opener BEFORE OPERATING. Please follow the steps to program the remote.
- Activate the opener only when the gate is in full view, free of obstruction, and properly adjusted. No one should
 enter or leave the gate area while the gate is in motion. DO NOT ALLOW CHILDREN to operate the push
 button or remote. DO NOT ALLOW CHILDREN TO PLAY NEAR THE GATE.
- If you purchase additional remote controls, the gate opener must be programmed to accept the new remote code
- If you lose one of any remote controls, please erase and reprogram all other remote controls to have a new code for safety.

Program the remote

Press and release the LNSW button, the LEARN LED light will be on, then press the key A or B on the remote two times in 2 seconds, between the two times HOLD ON FOR A MOMENT, the LEARN LED light will flash for 4 seconds. Now the remote has been programmed successfully.



Erase all the remote codes

Press and hold the learn button until the LEARN light is off. Now all remote codes have been erased.

- Max. 8 remotes can be programmed for the opener. An External Receiver (optional) allows up to 250pcs remotes to be programmed for the opener. TOPENS ERM12 Universal External Receiver is available at the TOPENS Store.
- TOPENS ERM12 Universal External Receiver is also compatible with other brands of swing gate openers, sliding gate openers, and garage door openers.

How to Use the Remote to Operate Your Gate Opener

Each remote has four buttons, from top to bottom are separately A, B, C, and D. You may use this remote to operate as many as 4 sets of TOPENS swing gate openers or 1 set of TOPENS sliding gate openers and 2 sets of TOPENS swing gate openers.

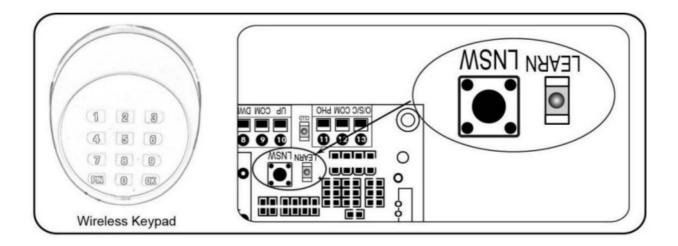
- 1. Use this remote to only operate TOPENS swing gate openers A, B, C, and D four buttons share the same function once they are programmed with
 - TOPENS swing gate opener. You may choose any button to program it with our swing gate opener. Every press of the button can activate the gate opener to work alternately (open-stop-close-stop-open).

2. Use one remote to operate the TOPENS swing gate opener & sliding gate opener at the same time All of TOPENS sliding gate openers have midway mode. Button B is designed to realize the midway function (refer to more details in our TOPENS sliding gate opener manual). So it is must program button A with the sliding gate opener, while you may program either the C button or the D button with the TOPENS swing gate opener.

Wireless Keypad Programming

You can follow the below steps to program the wireless keypad to the opener. Press the LNSW button until the LEARN LED is ON, and then release the button. Then press the "OK" button on the keypad and LEARN LED will flash for 3 seconds and then be OFF which indicates the keypad has been programmed successfully. You can use the default password "888888" to operate the opener after programming. You can press "PIN" "8 8 8 8 8 8" and then press "OK" to confirm to operate the opener.

Also, you can change the password of the keypad by following the below steps. Press "PIN" and then input the six digits old password and then press "PIN" again, the LEARN LED will be ON. Input the six digits new password and then press the "PIN" to confirm the new setting, The LEARN LED will flash for 3 seconds and then be OFF which indicates the password has been changed successfully. You can press "PIN" "6 digits new password" and then press "OK" to confirm to operate the opener.



NOTE: Every step for pressing the button during the program must be finished within 1 second to ensure successful programming.

Troubleshooting



Need help or have questions? DO NOT RETURN to the store.

Visit www.topens.com to CONTACT US.

Have a multimeter to check voltage and continuity. Use caution when checking high-voltage terminals.

Symptom	Possible Solution(s)
	Check the input voltage of the control board. It should be local AC electricity.
	2. Check the fuse in the control board. Replace the fuse if it is burnt out.
	3. Ensure the remote control has been programmed to the control board before oper ating.
	4. The thermal protector is working because of the high temperature after a long working time. Please wait for 20 minutes to let the motor become cold.
	5. Check the installing position of the limit magnets. The opener would not run if both of the limit switches were activated by one magnet.
The opener does not run	6. Check the limit switch. Remove the wire connection of the limit switch which is connected to the 8#, 9#, and 10# terminals of the control board, and then use a jumper wire to short the 3 terminals together to try it again. Replace the limit switch if the mot or can run in both directions.
	7. Check the control board. Replace the control board as necessary.
	The indicator light of the remote control is not on. Check the battery in your remot e control. Replace the battery as necessary.
Remote control does not work.	2. The distance you use the remote is too far away from the opener. Try it again clos er.
	3. Remote control is not suitable for the receiver. After making sure the codes are cor rect, erase remote controls and then re-program the codes in the device.

. Check the control board. Replace the control board as necessary.
. Check the wire connection of the hall sensor board with the main control board.
The opening force or closing force is adjusted too small. Turn the Potentiometer to increase the force.
2. Disconnect the gate from the gate opener and check that the gate slides freely wit tout any binding.
. Check the control board. Replace the control board as necessary.
. Check the installing position of the magnets. The opener would not run if both of t le limit switches were activated by one magnet.
Check the limit switch. Remove the wire connection of the limit switch which is connected to the 8#, 9#, and 10# terminals of the control board, and then use a jumpe wire to short the 3 terminals together to try it again. Replace the limit switch if the motor can run in both directions.
. Check the control board. Replace the control board as necessary.
. Photocell is obstructed. Remove obstruction.
2. Check the limit switch. Remove the wire connection of the limit switch which is connected to the 8#, 9#, and 10# terminals of the control board, and then use a jumper vire to short the 3 terminals together to try it again. Replace the limit switch if the motor can run in both directions.
. Check the control board. Replace the control board if necessary.
Ensure the DIP 4# has been set correctly according to the installation for "Left Open" or "Right Open"
Ensure the clutch for emergency release is adjusted properly and is not slipping.

Maintenance

Every six months check the following items for proper operation of the unit.

- · Lubricate shafts and sprockets.
- Keep the operator clean at all times.
- · Check and tighten anchor bolts.
- · Check for loose or corroded wire
- Ensure the operator is well earthed, and correctly terminated.
- Always check the Stop/Reverse in case of obstruction function when performing any maintenance. If this
 function can't be made operable, remove this operator from service until the cause of the malfunction is
 identified and corrected.

According to the Waste of Electrical and Electronic Equipment (WEEE) directive, WEEE should be separately collected and treated. If at any time in the future, you need to dispose of this product please do NOT dispose of

this product with household waste. Please send this product to WEEE collecting points where available.

Feedback & Review

Your comments and suggestions are important to us as they help us provide the best possible service. Should you have any need to contact us, the info below will help you get in touch:



TOPENS Website

www.topens.com

Contact Us:

- E-mail: support@topens.com
- Kindly include your Product Model, Purchasing Date & Site, Order #, and your contact information. All your concerns will be replied within 24 hours.
- Tel: +1 (888) 750 9899 (Toll Free USA & Canada)

Documents / Resources



TOPENS CF800 Fast Sliding Gate Opener Chain Drive Automatic Gate Motor [pdf] User Manual

CF800, CF800 Fast Sliding Gate Opener Chain Drive Automatic Gate Motor, Fast Sliding Gate Opener Chain Drive Automatic Gate Motor, Chain Drive Automatic Gate Motor, Automatic Gate Motor, Gate Motor, CK1100

References

- a Amazon.ca
- <u>a Low Prices in Electronics, Books, Sports Equipment & more</u>
- a . Spend less. Smile more.
- <u>a Amazon.de: Low Prices in Electronics, Books, Sports Equipment & more</u>
- TOPENS Gate Opener Automatic Gate System
- User Manual

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