



REMOTE CONTROL

Swing Gate Opener

Intelligent Remote-control

Swing Gate Opener Product Manual

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I . General description

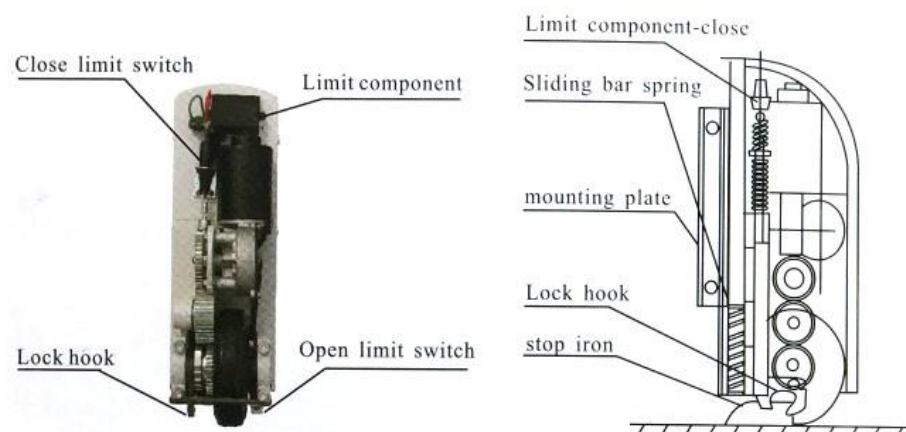
Thank you for selecting our intelligent remote-control swing gate opener !Please carefully read this manual before installation and use,Please also check our logo and brand carefully to beep away any fake product. If you have any problem that you can't settle during Please contact your local distributor of our products.

Our Roller Style swing gate opener is a patented product this gate opener is furnished with an automatic locking mechanism and hence the safe and reliable driving and locking of gates can be realized. With a compact structure and a high starting torque, this gate opener is installed on the far end of the gate away from the hinge and operates in a highly efficient.safe and energy -efficient manner. The characteristic sliding bar, a shock-absorbing device, can automatically rises and lowers to accommodate slightly wavy ground surfaces and there is no need to have any rail. With our products, the gate can be opened to any angle without limitations from the opener. It is suitable for all gates, regardless new or old , gates without causing any damage to the original structure of the gate body and gate posts.

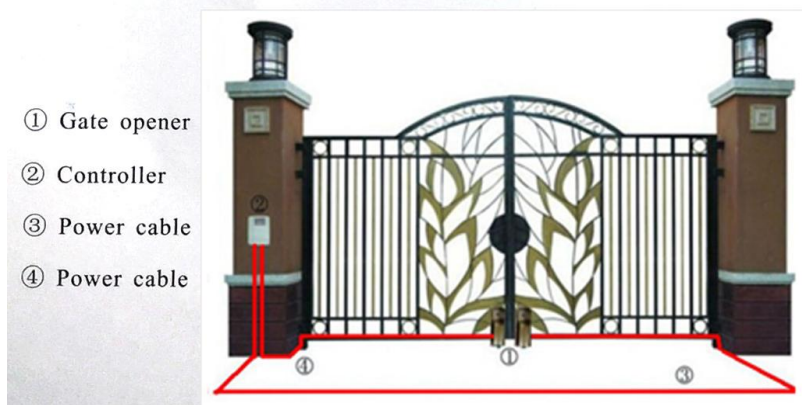
The intelligent remote controller (AC or DC mode) of our dual-circuit two-line gate opener is an electromechanical product designed and developed independently by ourselves based on ergonomic principles. It has gained extensive popularity since it was launched into the market.

II. Gate opener structure and classification

1. Opener structure, as shown in Figure 1



2. Control and power distribution structure, as shown in Figure 2



4. Control system classification: dual-circuit five-line control system and dual-circuit two-line control system.

III . Main technical data

Item	Specification
mains voltage	AC220V or DC24V
Pushing force for opening	600n
Remote control distance	30m
Tolerance to ground unevenness	0 - 80mm
Operating speed	10 to 15m/min
Ambient temperatur	- 40 to + 50 degrees Celsius
Motor power	80W X 2
Dimension of gate opener	370mm(H) X 125mm(W) X 170mm (D)
Dimension of control box	220mm(H) X 170mm(w) X 90mm (D)
Gross weight	23kg / box

IV. Features

1. Single-leaf or double - leaf opening : The function can be activated by pressing button.
2. Controller locking: To avoid unauthorized opening , the function can be activated with remote controller.
3. Automatic detection and protection : the gate opener will stop automatically if any obstacle is detected during opening; it will automatically return to the original position if any obstacle is detected during closing.
4. Infrared detection and protection: the gate will be automatically re-opened if any passing vehicle or person is detected during closing.
5. Automatic detection and access control : it can be vonnected to a card reader, finger scanner , antitheft alarm, camera or any other device for automatic access control .
6. Operating alarm: acoustic and light alarms are given out during gate operation.
7. Backup power interface : it will be automatically switched to storage battery or solar cell mode upon external power failure.

Please refer to the Instructions Manual of the controller for the foregoing functions , interfaces and detailed operating and setting methods.

V. Operating methods

This gate opener can be controlled electrically or manually . Please remove any obstacle within the working scope of the gate body and no passing vehicle or person is allowed during operation.

(I) Electric control

1. Press the controller button for automatic gate opening, closing or stop;
2. Press the remote controller button for automatic gate opening, closing or stop;
3. The gate access control system can identify and control access automatically

(II) Manual control

1. Manual opening:insert the key into the lock hole and rotate it clockwise to disengage the clutch (the gate opener is in manual mode). Then push the gate open with hands.
2. Manual closing : push the gate to near the close position when it is in manual mode. Then insert the key into the lock hole and rotate it counterclockwise to engage the clutch (the gate opener now in electric mode). Then push the gate to the lock position and manual closing is completed.



Figure 3 Switching between Manual and Electric modes

VI. Installing methods and commissioning

(I) Preparations

- 1 . Check the flexibility of the gate during opening and closing ; make sure that the gate does not bounce back when the gate reaches the open or close limit position.

When the gate is at the close position , the bottom edge of the gate frame shall be at least 25mm above the ground (slightly higher than the stop iron, as shown i Figure 4). Make special adjustments if the gap is less than 25mm.

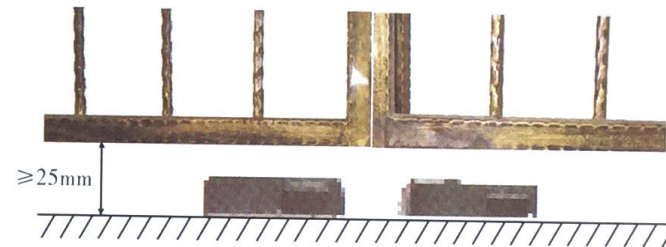


Figure 4 Heights of Gate Frame and Retainer Irons

2 . The unevenness of the ground within the working scope of the gate opener

Fall h = height of the highest point of the ground - height of the lowest point of the ground

- a) When $0 < h \leq 80\text{mm}$, the fall is normal and the standard configuration shall be adopted ;
- b) When $80\text{mm} < h \leq 140\text{mm}$, the fall is large and the long configuration shall be adopted ;
- c) When $140\text{mm} < h \leq 300\text{mm}$, the fall is too large and the special configuration shall be adopted (dual sliding boards)

3 . Determination of gate opener power

Measure the width , height and weight of the gate leaf and determine if ordinary or high - duty motor shall be adopted according to the sealing conditions and external environments (e . g. ground conditions, wind force, etc) of the gate.

4. Choose the model and configuration of the gate opener according to the user type and functional requirements.
5. Bury the wire pipes with reference to the wiring diagram of the power distribution system of the gate opener (Figure 2 on Page 3) and determine the diameter and number of cores of multi-strand flexible wires (power cables).
Determine the connection method of the gate opener and the controller. Two system configurations are available:

- a) Dual - circuit two - line gate opener and controller-the gate opener and the controller are connected via two circuits of two - core power cables ;
- b) Dual - circuit five line gate opener and controller - the gate opener and the controller are connected via circuits of five - core power cables ;

If any electric lock is installed , please adopt two-core power cables to connect the electric lock to the controller.

If any opposite-type infrared sensor is installed, please adopt three-core power cables to connect the infrared sensor to the controller and use two-core power cables to connect the infrared sensor's transmitting terminal with receiving terminal.

If any card reader is installed , please adopt four-core power cables to connect the card reader to the controller.

Precautions:

- a) The wire pipes buried right below the projection of the gate at the close position shall not conflict with the stop iron to be installed.
 - b) In order to minimize circuit losses, the connecting wires (or power cables) of the gate opener shall have a sectional area above 1 sqmm while other signal wires shall have a sectional area of about 0.5sqmm.
6. Ensure that an inward gate opener is adopted for an inwardly- opening gate , while an outward gate opener shall be adopted for an outwardly-opening gate.

(II) Controller installation

1. Please install the controller (indoors or outdoors) according to relevant codes on electric safety.
2. Install the controller as close to the gate as possible in order to shorten the wires, reduce circuit losses and save electricity.
3. An independent external power switch , leakage protector or over-current circuit breaker shall be installed.
4. If any external packing box is to be installed, the shielding effects of metal products to remote signals shall be considered and the antenna shall be stretched out of the packing box.
5. The controller shall be installed at an appropriate position and height and the environment shall be well ventilated.

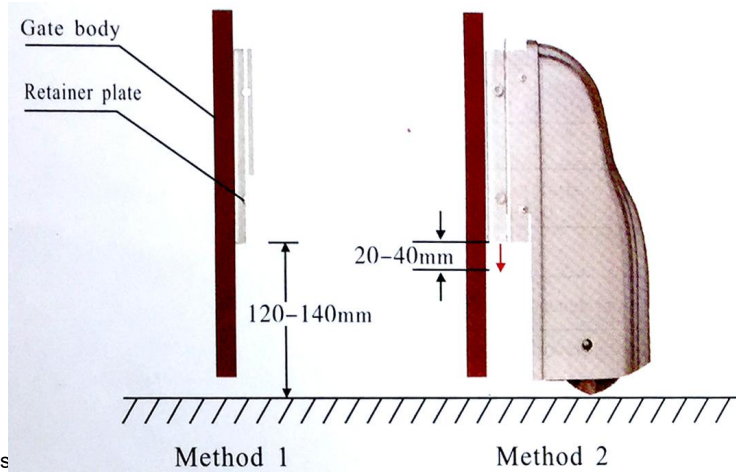
Measures shall be taken to avoid rainfalls , sunshine or child access.
6. Wiring method : please refer to the Instructions Manual of the controller.

(III) Gate opener installation (the pair of gate openers shall be of the same specifications)

1. Determine the installing position of the gate opener : mark the installing positions of the two gate openers on the gate body when the two gate leaves are closed .

NOTE: the distance of the inner edges (outer covers)of both gate openers shall not be less than 70mm for the purpose of convenient manual operation.
2. There are two methods to determine the installing heights
 - a) Method 1 : move the mounting plate up and down until bottom edge of the mounting plate is 120 to 140mm above the lowest point of the ground. Mark the installing height of the mounting plate.
 - b) Method 2 : keep the gate opener in natural state (the spring is neither compressed nor extended) and against the gate body vertically.
Mark the position of the mounting plate on the gate body .Move the mounting plate further downward by 20 to 40mm from this mark and this is the actual installing height of the mounting plate.

In either method, the installing height of the mounting plate shall be appropriately adjusted to the ground smoothness , gate size and weight , hinge flexibility and other factors.



Note : please
onto the gate body.

- 3 . Make one hole on either of the inner sides of the gate on the bottom frame (for entry and exit of wires) for wires.
One flexible sleeve over the wires shall be used where they to through the holes.



- 4 . Properly fix the gate opener and connect the wires (whose color shall be the same as the color of the label of terminal block within the controller or the color for the plug wire)

Check : use the key to switch the gate opener to manual mode and push the gate body forward and backward.

6. Installation of limit magnet for opening

Open the gate to the maximum or designated position and retreat it by 200mm. Find the ground projection of the magnetic switch at the bottom of the gate opener, drill a hole there (dia. 22mm) and bury a magnet leveled with the surface.

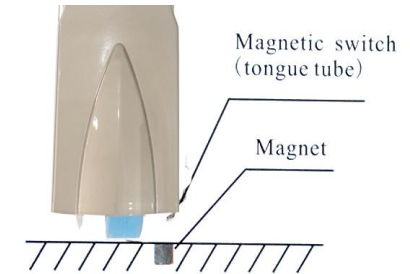


Figure 8 Magnet Position

- (IV) Operation and commissioning of the electric control gate , Check if the wiring is properly done and if the voltage meet the requirements before operation is started. Use the key to disengage or engage the clutch and check if the gate can be properly manually opened and closed . Push the gate to the mid-position and engage the clutch of the gate opener (in electric state). Switch on the mains power and the indicators are in normal condition.
 1. Press the button on the remote controller or the controller to open. stop and close the gate . Observe if the gate opener works in a stable and consistent manner and if it automatically stops in an accurate manner when the required position is reached . Otherwise , check if relevant parts are properly installed.
 2. Check if the gate moves in the right as displayed by the control key pressed . Otherwise , please correct the wiring of the gate opener or motor.
 3. Please see the controller's Instructions Manual for the locking method of keys.

4. Commissioning of automatic stop upon obstacle and motor's loading capacity : it is necessary to appropriately adjust the potentiometer (pressure of resistance) of the controller according to the gate size. hinge flexibility and ground evenness in order to increase or decrease the motor's capacity against resistances.
5. Test methods of automatic stop upon obstacle during opening and re open upon obstacle during closing :
 - a)Apply a counterforce (push or pull with hands) on one leaf during opening and the gate shall stop opening:
 - b)Apply a counterforce on one leaf during closing and both leaves shall retreat in the opening direction. If the motor's capacity against resistance is set to be too small, the motor may easily stop operation. If it is set to be too big,the protective effects may be reduced.
6. Please read the controller's Instruments Manual for the protection time of the gate during operation. If the protection time setting is too small , the gate will stop automatically before it reaches the desired position.
7. Please read the controller's Instruments Manual for setting and time adjustment for automatic gate closing.
8. The time difference for delayed closing of the gate leaves shall be adjustment according to the different degrees of opening of both leaves
9. Please see the Instruments Manual for details about the card reader, infrared protector and wiring.

VII. Maintenance and services

1. The turning parts of the gate opener shall be kept clean and free of any attachments.
2. Frequently clean away the foreign matters in the grooves of the retainer irons.
3. Properly lubricate various mechanical moving parts every quarter.
4. Check the mains protector and the performance conditions of the backup storage battery once a month.

VIII.Troubleshooting

Trouble	cause	Solution
The gate can't operate	1. Check if the clutch is in state of electric operation	Resume
	2. (Mains indicator off) tripping and out of power	Resume power supply
	3. Fuse blowout	Replace
	4. Remote controller fails or becomes disabled	Check and replace
	5. Short circuit	Repair
	6. Controller or gate opener fault	Repair
Short distance of remote control or failure of remote controller	1. Battery is out of power or damaged	Replace the battery
	2. Controller is locked or damaged , incorrect code	Unlock or replace
	3. Same frequency interference	Wait for the source of interference to disappear
	4. Controller receiving module is damaged	Replace the receiving board of the remote controller
The gate can't be stopped at the desired position	1. Magnet in the ground is missing	Resume
	2. Open limit switch or limit component fails	Inspect, repair and replace
The gate does not stop or reopens at the desired close position3. Erroneous sequence	1. Close limit switch fails or tension spring is damaged	Replace
	2. Retainer iron is loosened or there is any obstacle	Inspection and repair
	3. Erroneous sequence of gate closing	Operate again
	4. Circuit fault	Inspect and repair

The gate doesn't operate after the open or close key is pressed	1. Motor resistance protection (setting is too small)	Inspect and repair the hinge or the gate opener's rising and lowering conditions and lubricate if necessary.
	2. Limit component , limit switch controller circuit fault	Inspect, repair and replace
Indicator is truned on then off after the open or close key is pressed. The gate opener remains out of operation There are abnormal noises from the motor	1. Open circuit , short cir cuit or bad wiring of the system	Inspect and repair
	2. Fixtures are loosened or structural members are damaged	Inspect, repair and replace
	3. Motor is damaged	Inspect, repair and replace

In case of any problem that can't be settled, please contact your local distributor and we will offer aftersales services according to our relevant service policies. We are not going to notify our users otherwise if our product is upgraded or if our product functionality and technical data are changed. For more details and information about our new products, please log onto our website, All rights reserved.

IX . Pack list of swing - gate opener in standard configurations

Item	Specifications	Quantity	Unit
Motor	Five-line system	2	Set
Controller	OR two line system	1	Set
Remote controller		2	Set
Clutch key		2	Piece
Lockng retainer iron		2	Piece
Limit magnet	Dia. 22mm	2	Piece
Expansion bolt	Dia.8 x12mm	6	Unit
Product manual		1	Copy
Warranty certificate		1	Copy
Conformity certificate		1	Copy

X. Some optional parts of out swing-gate opener

Item	Specifications	Quantity	Unit
UPS	DC24V / 4Ah	1	Set
Card reader	DC212V	1	Set
Infrared detector	0 -140mm	1	Pair
Elongated vertical	0- 300mm	1	Set
Video gate bell	Color, 4 or 7	1	Set
Encoded remote	Battery driven	1	Set
Encoded remote	AC220V	1	Set