



**CHAIN DRIVEN
COMPACT NEW
SLIDING GATE OPERATOR
USER'S MANUAL**

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1. Important safety information

- Carefully read and follow all safety precaution and warnings before attempting to install and use this operator, incorrect installation can lead to severe injury.
- The gate operator should be installed by a qualified technician; otherwise, serious personal injury or property damage may occur.
- Before installation, the clutch should be unlocked.
- When opening or closing the gate, do not attempt to walk or drive through the gate.
- Children should not be allowed to play near to or operate automatic gates.
- The automatic gate operator, and the doors itself must be electrically grounded.
- Install the gate operator on the inside of the property; DO NOT install it on the outside of the property where the public has access to it.
- Be careful when in close proximity to moving parts where hands or fingers or clothes could be trapped.
- In the event of power failure, an emergency release key allows you to operate the gate manually.
- The operator should be switched off before repairing it or opening its cover.
- As this is electric equipment, check with your Electric Authority the standards to install this class of equipment.
- After installing the device, paint the floor the security area where the people must stand-out during the door operation.
- Attach a warning over the door announcing that this is an automatic device.
- Every time you operate the door, keep it in line of sight.
- Remove the packing of this product and dispose of it. Do not leave the packing material within reach of children.
- Save this manual for possible maintenance during the operational life of the operator.
- This product was designed for automation of sliding gates; other uses can cause injury to people.
- Company shall not be held responsible in case of injury or other health impairment caused by unintended use of the operator.
- Do not install the equipment in premises with quick-inflammables materials or in other dangerous environments, because it can cause explosion or fire.
- Mechanical units of the gate shall be constructed and installed in accordance with the standards EN12604 and EN 12605.
- Manufacturer or the resellers are not responsible in case of incorrect installation of the product and if it is damaged during operation.
- The installation must be performed in accordance with the standards EN12453 and EN 12445. For countries, which are not EC members,

- these requirements are to be met.
- The automatic system shall be connected to the mains supply through an automatic switch. At that the distance between the contacts shall not be less than 3 mm. It is recommended to use the automat 6A.
 - The safety devices of the operator protect against hazard of pinch through the gate while opening.
 - Company is not responsible for unstable work of the automatic system, if the safety devices and accessories, which were produced by other manufacturers and without agreement with company, are used.
 - Use the accessories of the company, as the accessories of other manufactures can cause failure of the system.
 - For maintenance, use only company original parts.
 - Do not make modification in the components of the automatic system.
 - Be sure, that the installer has instructed you how to release the gate in case of emergency and on the proper operation and maintenance of the automatic system.
 - Do not let any people to be in the operation area of the automatic system when it is working.
 - Never let children play and be in the operation area of the automatic system, under the gate and near the gate, when the gate is moving and the operator is running.
 - Passage is allowed only after the gate has been stopped and the operator is switched off.
 - Check good working condition of the safety sensors monthly.
 - Maintenance: make diagnostics of the system sliding at least once a half-year, pay special attention to the gate travel smoothness in the released state and to good working condition of the release.
 - It is forbidden to perform operations, which are not permitted by this manual.

2. Main technical parameters

Type	Compact New 220V	Compact New 110V
Power supply	AC 220 X (1±10%)VCA 50Hz	AC110 X (1±10%)Vac 60Hz
Motor speed	1400 r/min	1680 r/min
Gate moving speed	14m/min (24 teeth)	17 m/min (24 teeth)
Output torque	14N·m	
Limit switch	Magnetic limit switch	
Noise	≤62dB;	
Environmental temperature	-20°C~+50°C	

3. Installation and adjustment

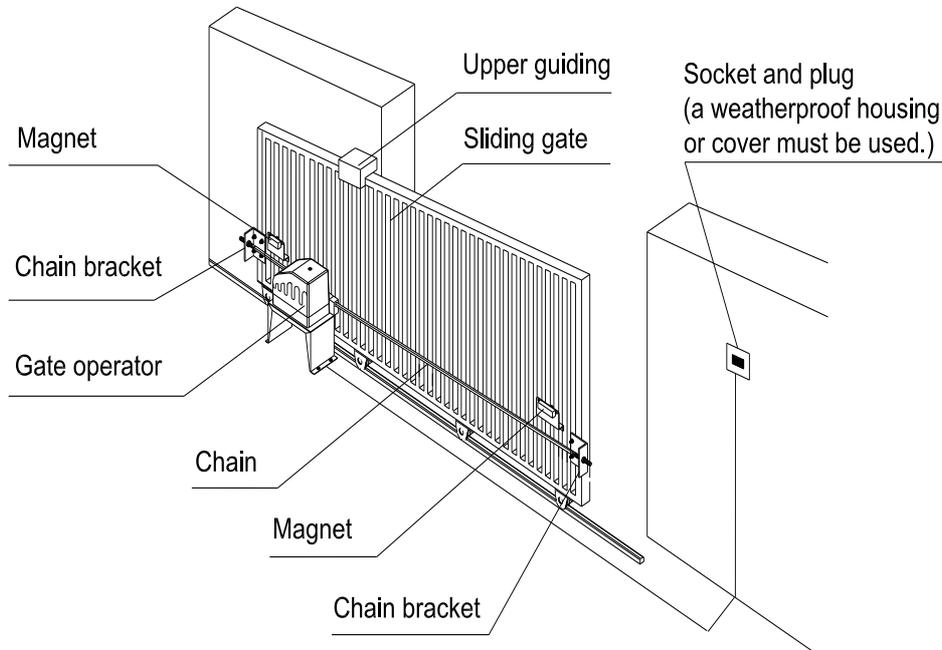


Fig.1

The Compact New Chain-driven Gate Operator operates by forcing a straight piece of chain through its chain box. This length of chain is extended between two chain brackets located at opposite ends of the gate. The entire configuration is shown in the diagram above

Conduit

In order to protect the wires, use PVC conduit for wires, conduit must be set into the concrete when it is poured. Wires within the conduit shall be located or protected so that no damage can result from contact with any rough or sharp part.

Concrete pad

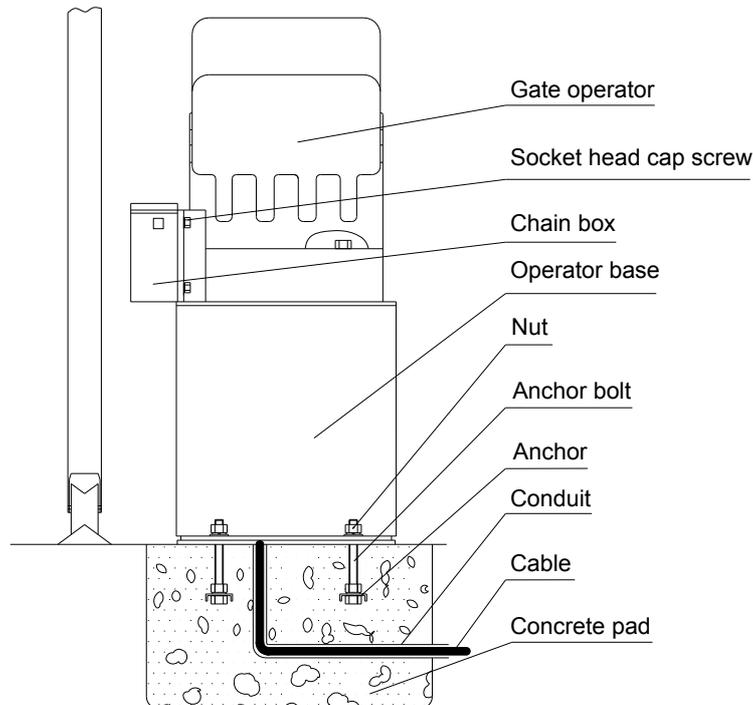
The base unit of the gate operator requires a concrete pad in order to maintain proper stability. The concrete pad should be approximately 300mm x 200mm x 200mm deep in order to provide a good stand for adequate operation.

Anchors

You can use the anchors, bolts, washers and nuts that are provided with the operator. These anchors must be set into the concrete when it is poured, or you can use wedge anchors.

Operator Base

Mount the gate operator base to the concrete pad. The distance between the gate and the base should be no more than 2 ½ " (64mm). Verify that the operator is leveled

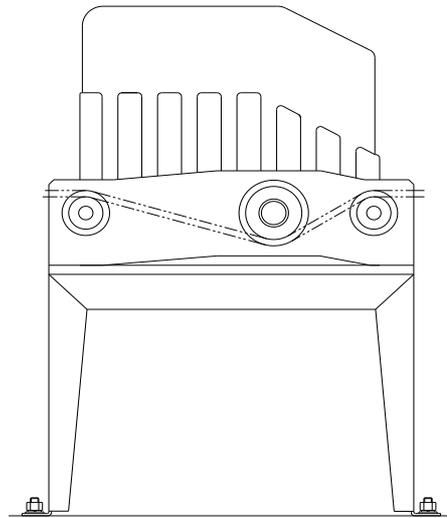


Chain Box

Make sure the ends of the guide chain are out of the chain holes on both sides of the chain box. Remove the cover and insert the manual release key and turn counter-clockwise to disengage the clutch. Remove the elastic band from the shaft and line up the key on the shaft with the sprocket at the chain box. Insert the sprocket from the chain box into the operator shaft. Place the operator on top of the base and use (4) 5/8 " (M8x15mm) socket head cap screws to mount the chain box in to the base.

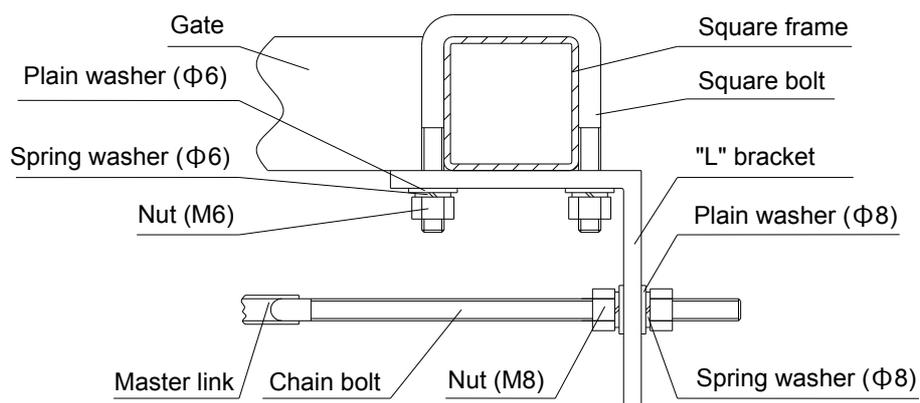
Operator

Mount the gate operator to the base using (4) 2 ¾ " (M8x70mm) #48 bolts and washers. Make sure there is no more than 1/8" (2mm) of space between the cover and the chain box. Check the operator and make sure it is lined up with the gate.

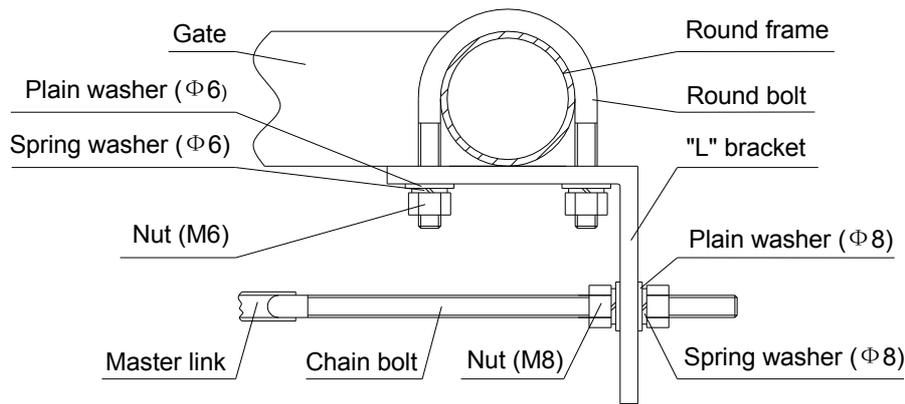


Chain Brackets

Use the appropriate bolts to attach the chain bracket to the frame of the gate. If the gate is of square frame style, use the square bolts shown.

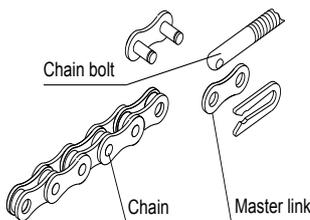


If the gate is of round frame style, use the round bolts shown.



Chain

Close the gate and attach a chain bolt to the piece of chain that comes with the chain box using enclosure master links. Tighten the chain bolt to the bracket with washers and nuts. Pull the chain through the chain wheel box to the other chain bracket at the opposite end of the gate. Connect the other end of the chain and the chain bolt, and then tighten the chain bolt to the chain bracket. Thread up the chain by adjusting the chain bolt. Cut the chain to length if necessary.



Make sure that the chain is perfectly aligned with the chain holes on the chain box. Tighten the chain by tightening the chain bolts at either end. See illustration below.

Magnets for limit switch

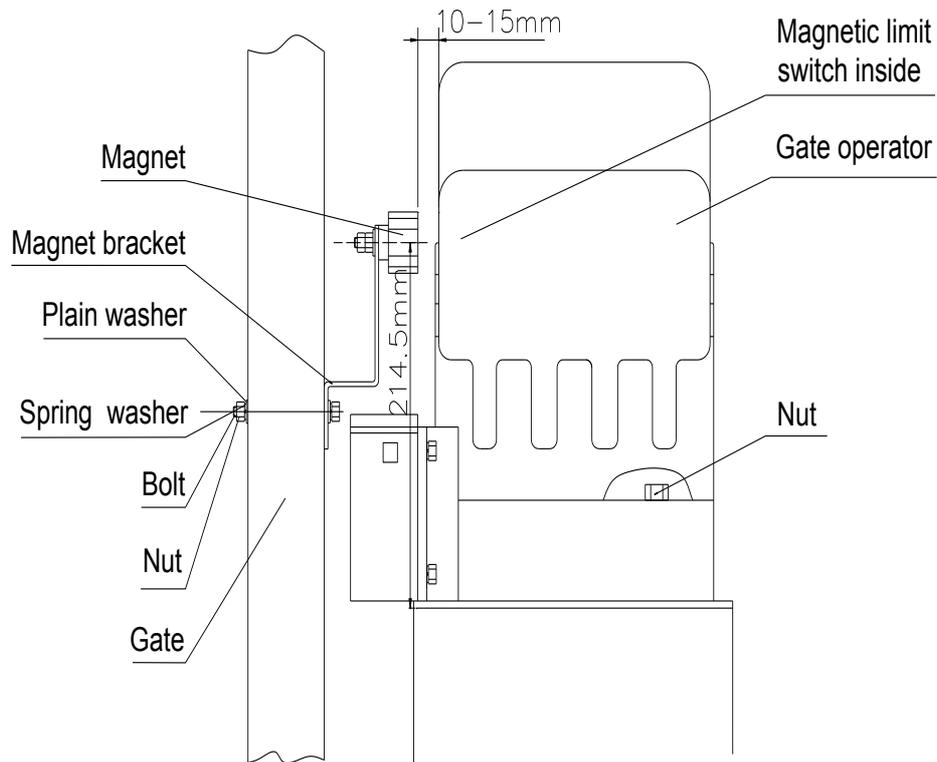
Install the magnet and magnetic limit switch as shown below. The magnet and limit switch are used to control the position of the gate. When the magnet is installed, release the gear clutch and push the sliding gate manually to pre-determine the position. Fit the magnet bracket to the gate and then tighten the gear clutch.

The lower bracket is for open position and higher bracket is for close position. Finally adjust the magnet to the proper position by moving the gate with the motor. The magnet should be .39 - .59 "away from the magnetic limit switch. If it is too far away, the switch will fail to work.

The distance between the magnet and the operator should be @ ½" (12mm) with the operator cover on. Adjust the position of the magnetic limit switch until the positions of the opening and closing meet the requirement.

Important Note: Please note the two magnet brackets (fixed plate) are different: one is higher and another is lower. Verify and if necessary

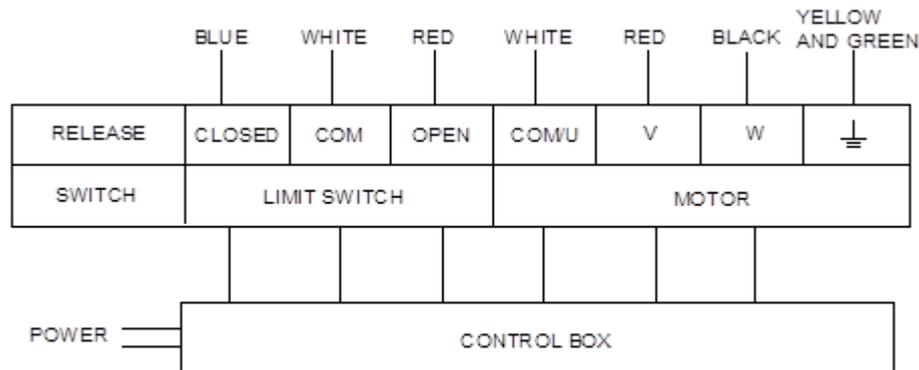
exchange the two brackets position. Also if necessary exchange the limit switch wires CL (close) and OP (open). Another common problem is there are four reed switches inside the magnetic limit switch: two are upper and two are lower. The magnet position can be installed in the middle so it inducts both reed switches. Solution: adjust the magnet upper or lower.



Electrical

The control box should be equipped with a single-phase breaker (10A). Make sure that the power is OFF before making any electrical connections. Remove the cover of the control box, perform the wiring and replace the cover again. (See control board scheme and wiring notes for control board)

Wiring Information



110VAC Compact New Version

4. Check

- Release the gear clutch with the release key to determine whether or not the gate can be moved manually. If everything is in good working order, tighten the clutch with the key.
- Switch on the power and run the device to ensure that the gate is sliding smoothly.
- Adjust the magnet position until the gate opened and closed properly at the limited positions.
- The device is installed with a thermal protector, the thermal protector will switch off the motor automatically in case of the temperature of motor is higher than 120°C and switch on the motor automatically when the temperature of motor is lower than 85°C±5°C.
- The motor is only designed to work for occasionally use, the use frequency is 30 percent. If it runs continually for an extended period of time, a thermal protector will stop it because of the high temperature.

5. Maintenance

- We recommend you put some grease in the keyhole to avoid rusting, also regularly grease the wheels and axles if the gate was jammed or cannot be moved smoothly.
- The operator must be well grounded.
- Keep operator clean at all times.
- Please power off before removing the cover.