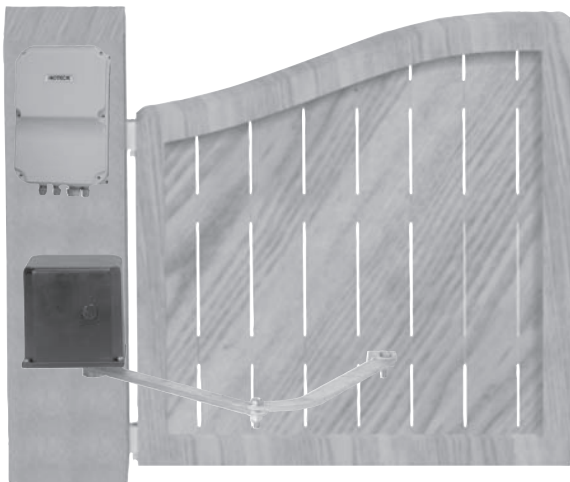


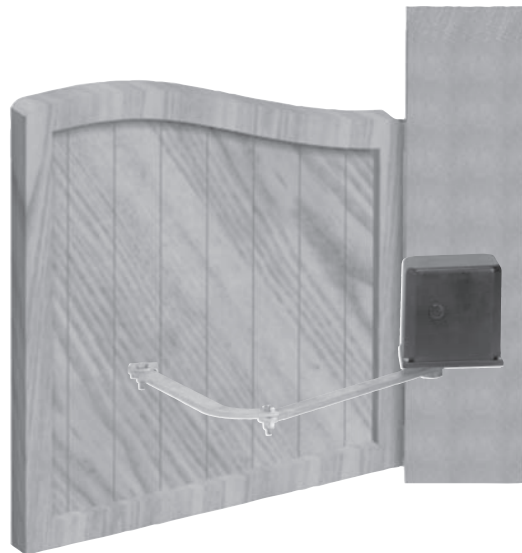
# USER'S MANUAL



## SWING GATE OPENER



**2.50m max.**  
**250kg max.**

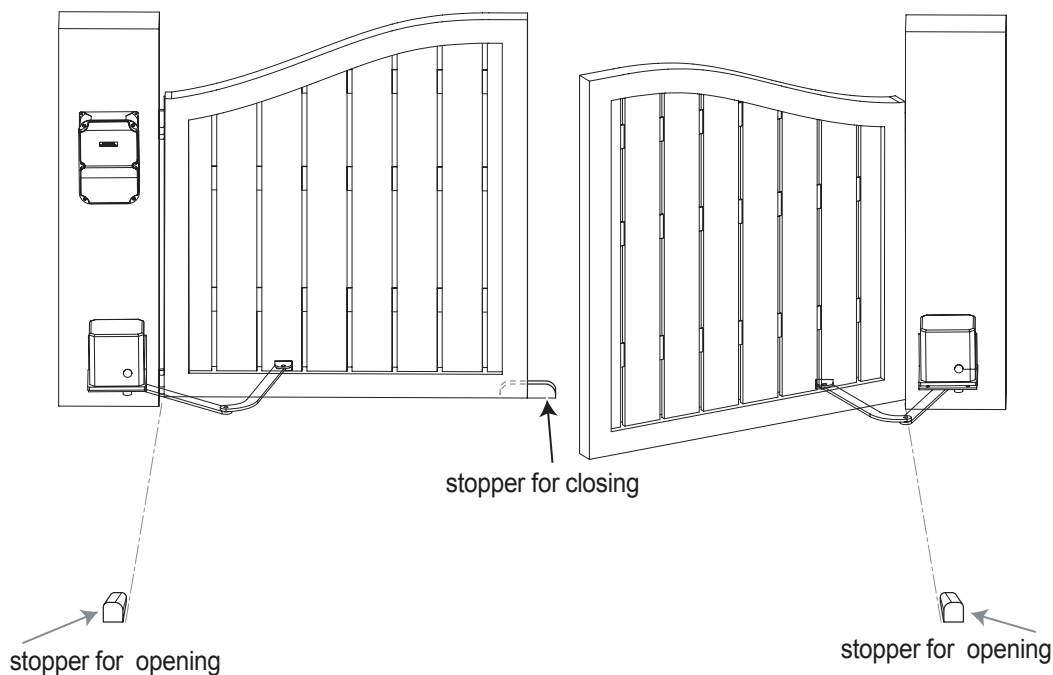
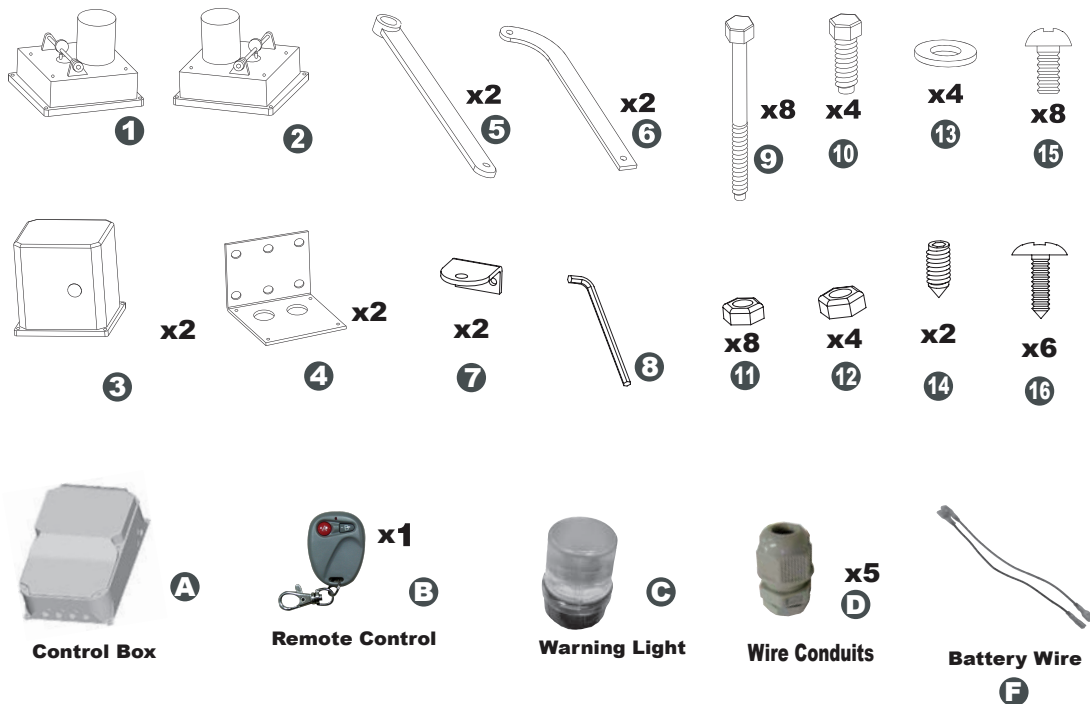


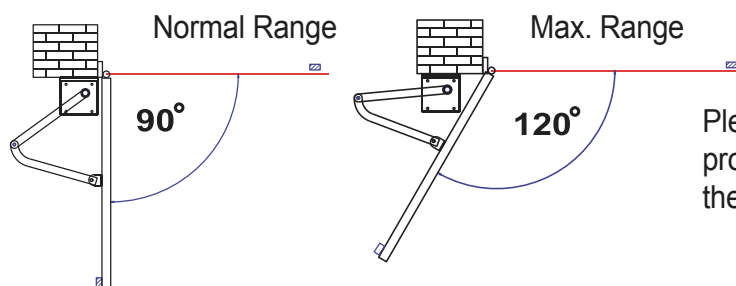
**2.50m max.**  
**250kg max.**

## Important Safety Advice:

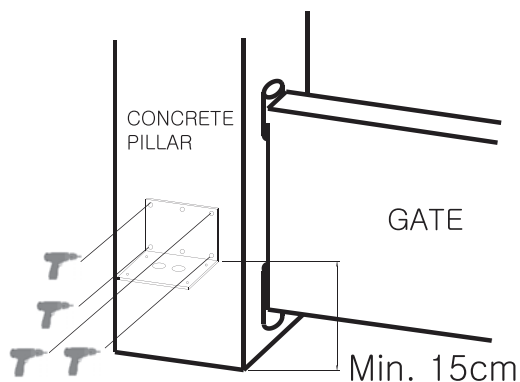
1. Knowledge of the relevant electro-technical regulations is required.
2. Training in use and maintenance of safety equipments is necessary.
3. Always put mains and control cables separately.
4. Test each individual item before initial operation.
5. Make familiar with the use of the system before initial operation.

## Content of the Kit:



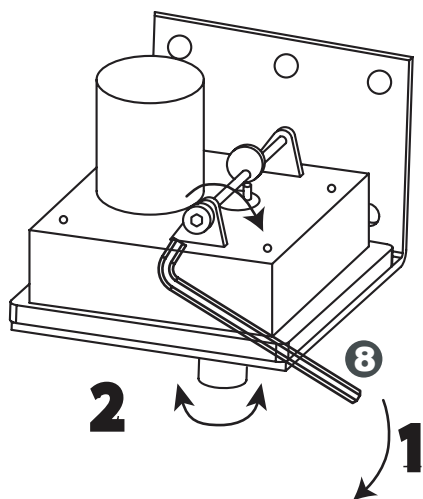
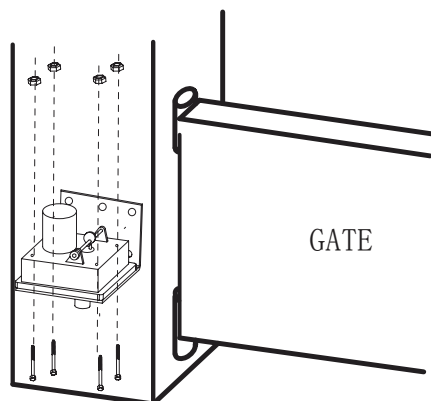


Please install the openers and stoppers properly according to the operating range of the gate.



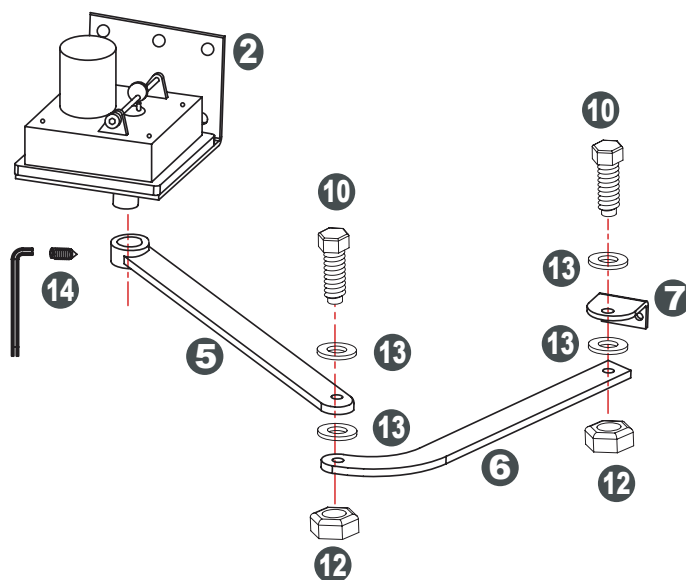
Fix the motor support **4** on the pillar.  
Be sure there is at least 15cm between the bottom of the motor support and the ground.

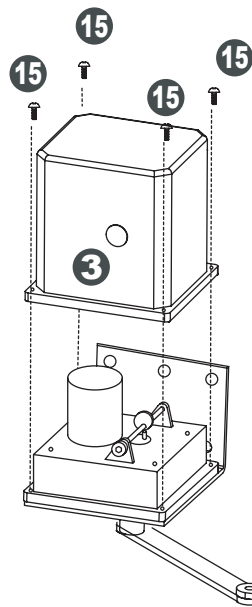
Fix the motors **1** **2** on the motor supports **4** on the pillars by tightening the 4 pairs of screws and nuts as the figure on the right side.



1. Please turn the hexagonal screw on the front side of the motor by the clutch release key in CW direction to release the clutch.
2. Turn the output axis for- and backward to make sure that the clutch is well released.

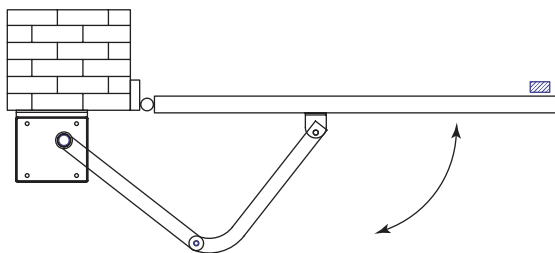
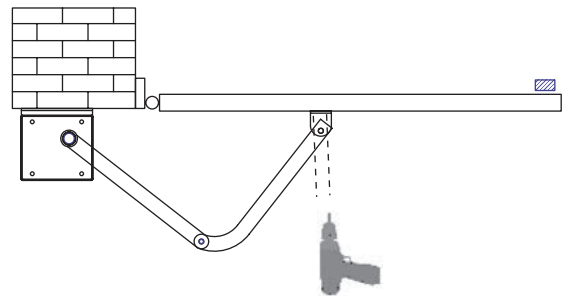
Assemble the links between the gate and the axes of the motors as the figure on the right side.





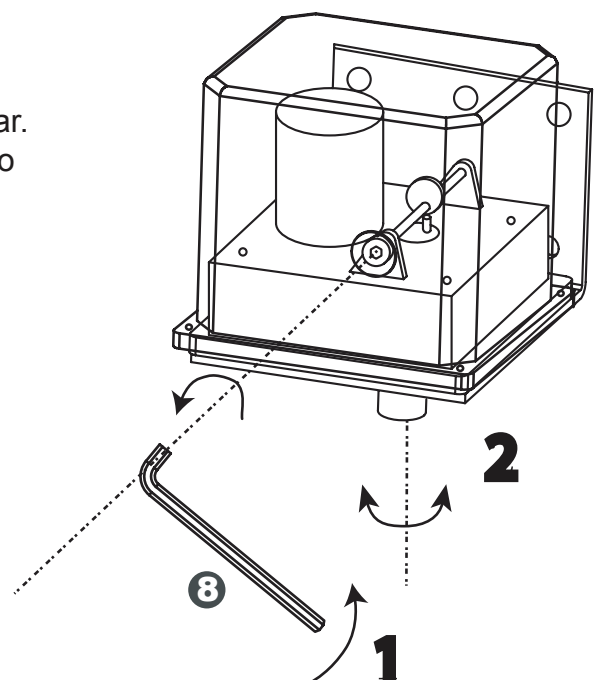
Put the plastic covers **3** onto the motors and tighten the screws **15** on the cover.

Tighten the gate holder **7** onto the gate



Swing the gate for- and backwards to check if there's any interference

Recover the position of clutch by turning the clutch release key in CCW direction. Swing the gate again to check if it's now limited by the gear. If the gate can still be swung freely, please try to turn the hex screw a little more to the CCW direction. (A click should be heard)





# **Connection Diagram:**

Optional  
Backup battery



To transformer  
(12V AC)

To Backup Battery  
(12V DC)

Dip Switches

AUTO

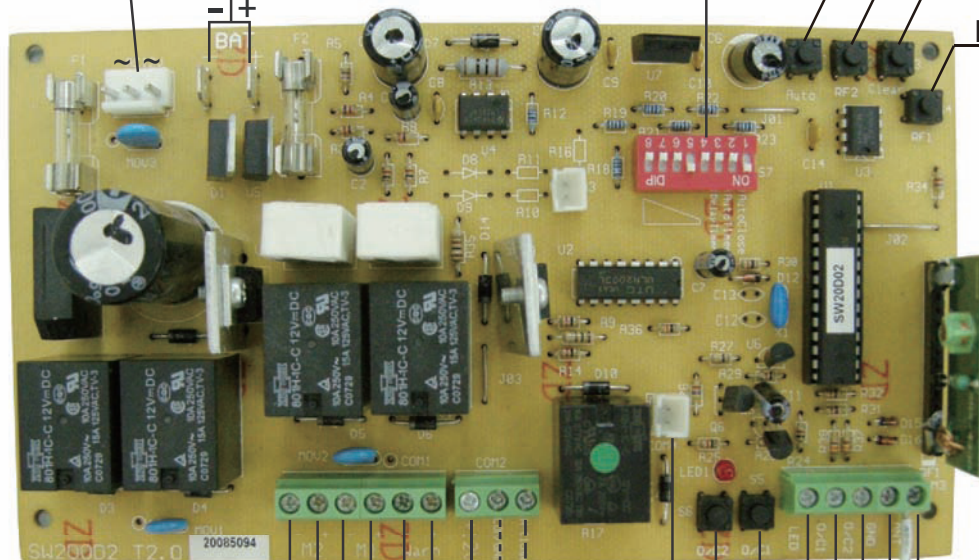
RF 2

Clear

RF 1

**Color indication for  
motor wire:**

**Black wire for -  
Red wire for +  
12V DC**



Motor 2  
Motor 1  
Warning Light

+12V  
Ground  
Sensor

Antenna  
Ground

To external dual-gate operation  
To external single-gate operation  
For external LED display

Single-gate operation manual button  
Dual-gate operation manual button  
12V DC output to small PCB

**PHOTOCELL  
SENDER**

GND DC DC  
+12V +24V

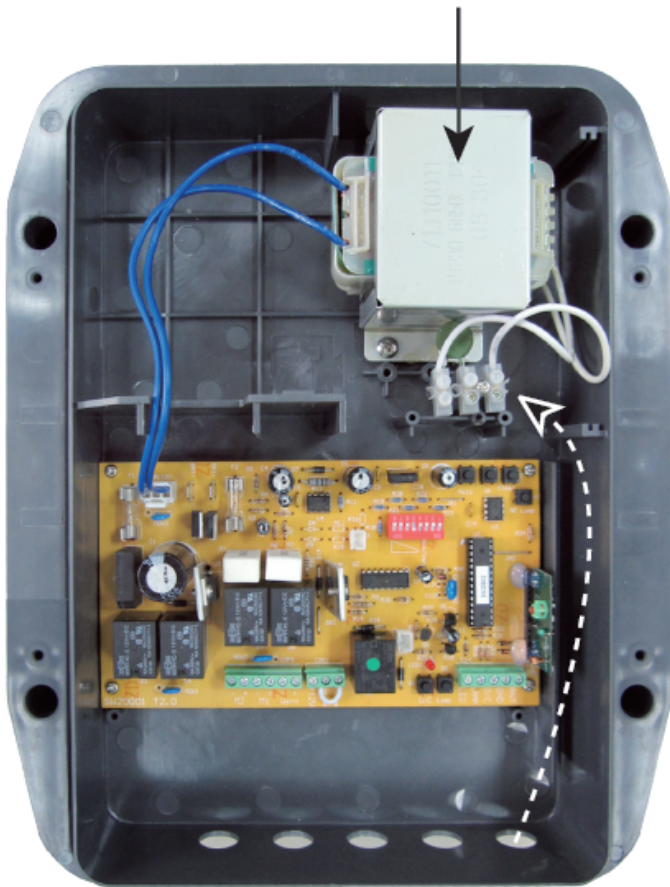
**PHOTOCELL  
RECEIVER**

DC DC GND NC COM NO  
+12V +24V

GND  
+12V  
+24V

+12V  
+24V  
GND  
NC  
COM

## Transformer



## AC Wiring:

Inside the control box, the wiring should be like the photo on the left.

AC 110V / 230V

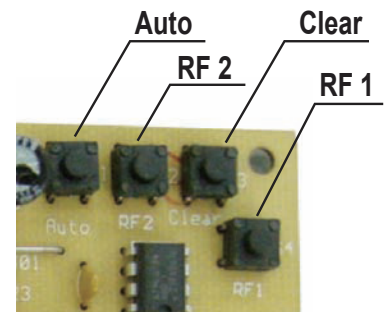
## Auto-learning:

Please proceed with this function before you start to use the kit, or otherwise the system might drive the gate improperly. E.g. : the gate will not close completely, or it can't open to the intended position with some stroke left unused.

Before this process, please be sure that there's not any obstacle within the opening or closing route of the gate.

To start the auto-learning, keep pressing "Auto" button on the PCB until the actuators start to move. The learning process is as follow :

1. Actuator 2 will close first, followed by Actuator 1.
2. After 3 seconds, Actuator 1 will open fully, and 3 seconds later, Actuator 2 will open fully.
3. 3 seconds later, Actuator 2 will close fully, and 3 seconds later, Actuator 1 will close fully.
4. The system will repeat Point 2~3 once.
5. 3 seconds later, both actuators will open and close together.
6. After the auto-learning process, the system is ready for use.



Note : If the warning light is blinking after the learning process, it means the learning process has failed. Please make sure that there's not any obstacle on the way for opening and closing, and try to launch the auto-learning process again.

## Remote Control Pairing (Dual-gate and Single-gate operation):

To use the remote control, please follow the below steps :

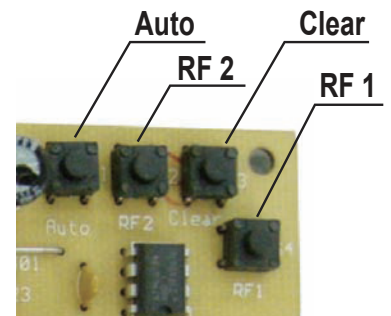
RF2 : Assign a button for dual-gate operation.

1. Keep pressing "RF2" on the PCB until the red LED turns OFF.
2. Press a desired button on your remote, and you will see the red LED on the PCB starts to blink 3 times, and it will stay ON, which means the pairing process is done.
3. Repeat the above two steps for any other button that you want to have dual-gate operation.

RF1 : Assign a button for single-gate operation.

The same steps as the above, but press "RF1".

Note : Each channel (RF1 & RF2) can accommodate up to 8 memory positions.



## Operation with a Remote Control:



The operation with a remote control is very simple :  
One press on the key will open the gate, the next press to stop, the next press to close the gate, the next press to stop the gate, and so on.

Opening:

1. Warning light will blink 2 seconds. Then Actuator 1 opens, and 3 seconds later, Actuator 2 opens.
2. If the gate hits an obstacle, both actuators will reverse 3 seconds, with the warning light blinking slowly until the next command is received.

Closing :

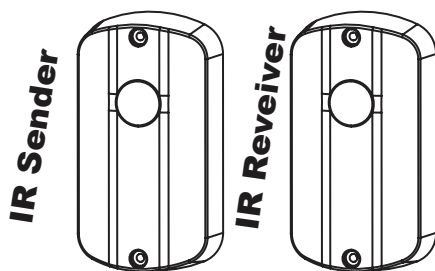
1. Warning light will blink 2 seconds. Then Actuator 2 closes, and 3 seconds later, Actuator 1 closes.
2. If the gate hits an obstacle, both actuators will reverse 3 seconds, with the warning light blinking slowly until the next command is received.

## Garden Lamp Function:

The garden lamp, if installed, will be turned on during the operation, and will be turned off two minutes after the operation is finished.

Remarks : Gate operation will be correct only when a successful auto-learning process is carried out.

## Photocells (Optional):



**1 Set of Photocell**

During Opening :

When the photocells beam is cut, the system will :

- (1) Ignore and keep opening, if Actuator 1 has already started opening, or
- (2) Stop, if Actuator 1 hasn't started opening.

During Closing :

When the photocells beam is cut, the system will stop closing, and reverse immediately the both actuators until they reach their fully-opened positions.

Auto-close Function :

When this function is activated (with dip switch 1 set to ON position), both actuators will start closing 30 or 60 seconds (depending on dip switch 2 setting) after they reach the fully-opened positions.

Manual Buttons on the PCB :

1. O/C2 is the manual button for Dual-gate operation, while O/C1 is for Single-gate operation.
2. Optional handsets or external wall buttons are also available (connected to O/C1 or O/C2 & GND connectors).

Erase the Registered Remote Controls :

Press "Clear" button on the PCB for over 5 seconds, and release it.

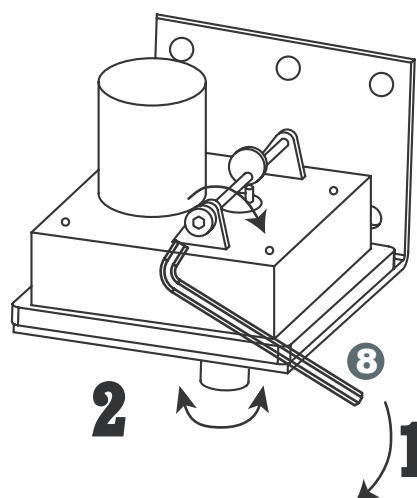
You'll see the red LED blink 5 times, and all registered remote control memories will be erased.

Reset :

Press and hold "Clear" key on the PCB, and connect the AC power. Release "Clear" key, and you'll see the red LED blink 5 times, indicating all stored data (RF memories & auto-learning process) is removed.

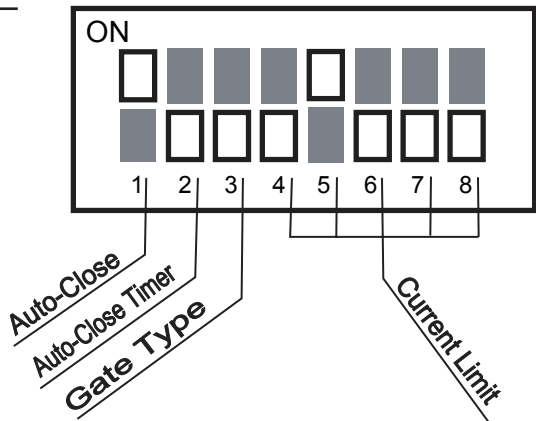
Quick release :

1. Please turn the hexagonal screw on the front side of the motor by the clutch release key in CW direction to release the clutch.
2. Turn the output axis for- and backward to make sure that the clutch is well released.



# Setting of the Dip Switches:

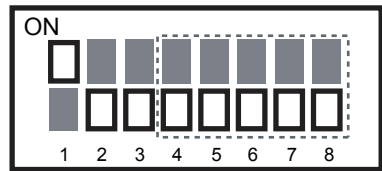
The default setting of dip switches.



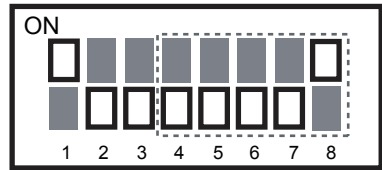
Key No.	Function	ON	OFF
1	Auto-Close	Yes	No
2	Auto-Close Timer	60 Sec	30 Sec
3	Gate Type	Heavy Gate	Light Gate
4~8	Current Limit	selected	unselected

The below table shows the approximate current limit values for various dip switch settings :

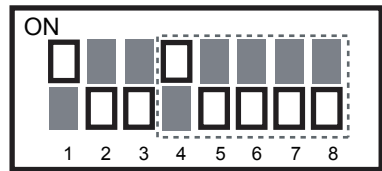
switch 4	switch 5	switch 6	switch 7	switch 8	All off
1.0A	2.0A	3.0A	3.7A	4.5A	5.2A



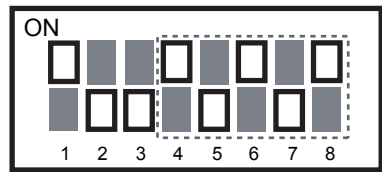
The maximum current limit, also the worst sensibility, could shorten the life span of the actuator. Try lower current limits before choosing this one.



The second highest current limit.



The minimum current limit.



If the user selects several switches ON, for the safety reason, the system will choose automatically the lower limit value (switch 4 instead of switch 6 or 8).

## **Specifications :**

### Motor:

Model	SuperJack Elbow type
Power Input	12V DC
Power Consumption	0.8 ~ 3.0A
Maximum Gate Weight	250KGS (550Lbs) x 2 Max.
Maximum Gate Width	2.5M (8 Feet) x 2
Speed	9°/sec
Duty Cycle	20%
Overload Protection	Current Detection
Release Function	Clutch
Protection	IP44

### Control:

Model	SuperJack controlbox
Input	110 / 230V AC ; 60/50Hz
Output	12V DC / 72W Max.
RF Remote	303.175 / 433.92 MHz w/ Rolling Codes
Recharging Function	Built-in (12V DC Battery not included)
Approx. Weight	2.6Kgs
Demensions (mm)	299(L) x 200(W) x 120(H)