

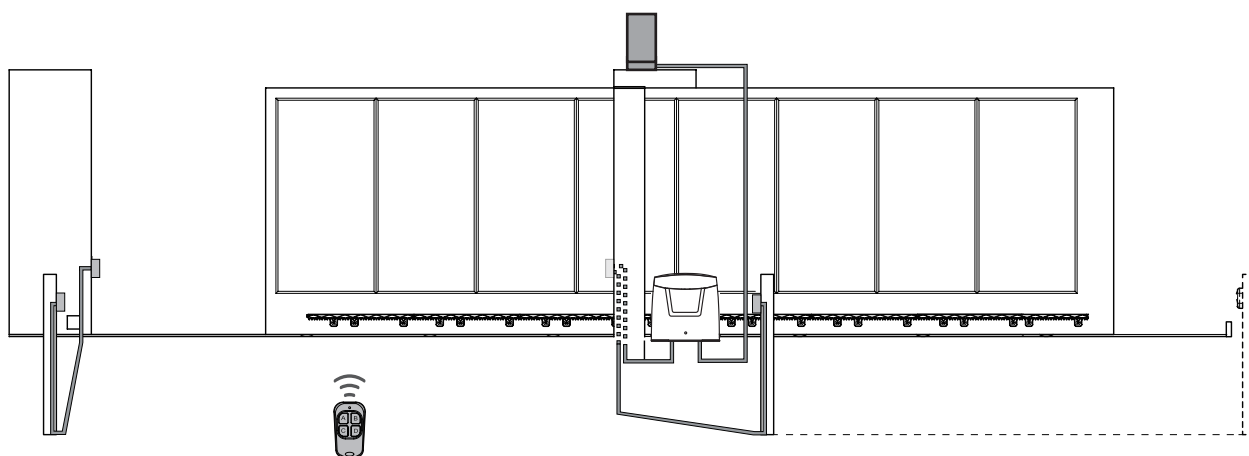


A3

FOR RESIDENTIAL

SLIDING GATE OPENERS 24V DC MOTOR

USER MANUAL



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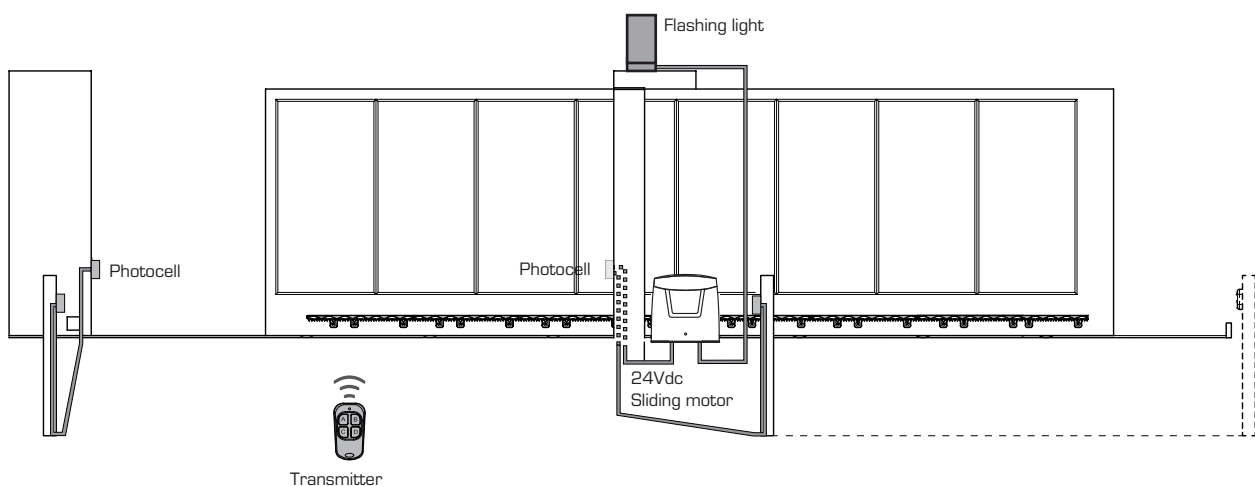
Warnings

- i. All procedures of the installations, electrical connections, adjustments and testing must be followed after understanding the instruction and operation.
- ii. Disconnect the power supply via switching off the magneto thermic with upstream connected, and the hazard area required by relevant regulations.
- iii. The existing structure must be up to standard in terms of strength and stability.
- iv. Connect the motorized gate to reliable systems in electricity connection phase if it is necessary.
- v. Installers require the qualifications in mechanical and electrical skills.
- vi. Automatic controls (remotes, push bottoms, key selector, etc.) must be placed appropriately, and away from children.
- vii. Only original parts can be applied for the replacement or repair of the motorized system.
Any damages caused by inadequate parts and usages cannot be claimed to the motor manufacturer.
- viii. Do not operate the drives if it might cause any faults or damages to the systems.
- ix. The motors are only designed for the gate opening and closing application, and the manufacturer is not liable for any damage caused from other improper usage.
- x. The system is only operated in proper working order with the standard procedures according to this manual.
- xi. Only command the remote when the gate is in a full view.

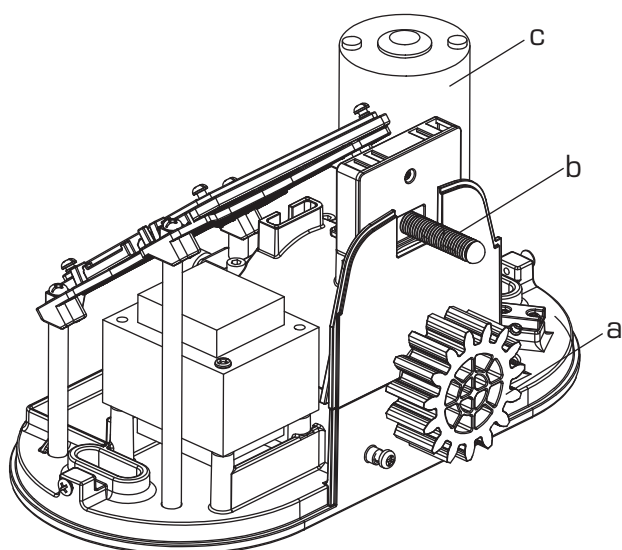
Manufacturer is not liable for any damage causes which are made from the improper use and installation of the system.

Please keep the user manual for the future reference.

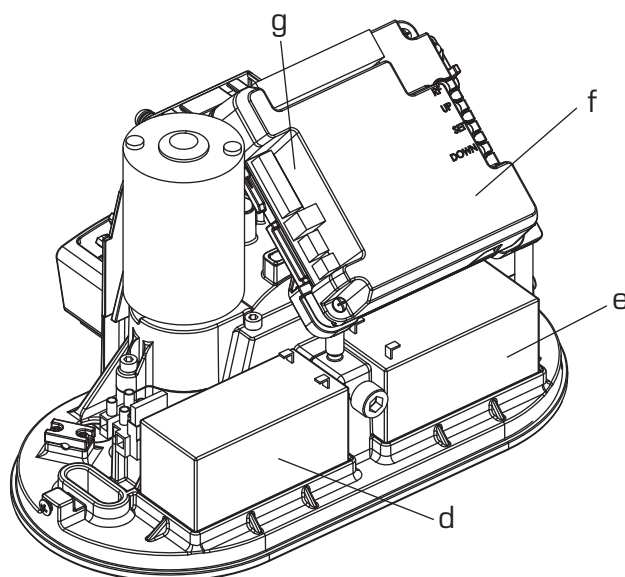
Standard installation



Description of device

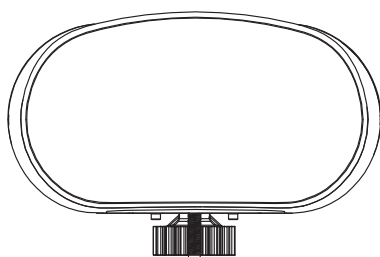
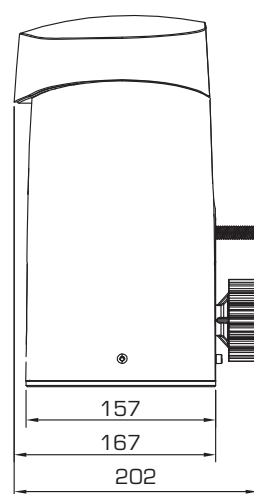
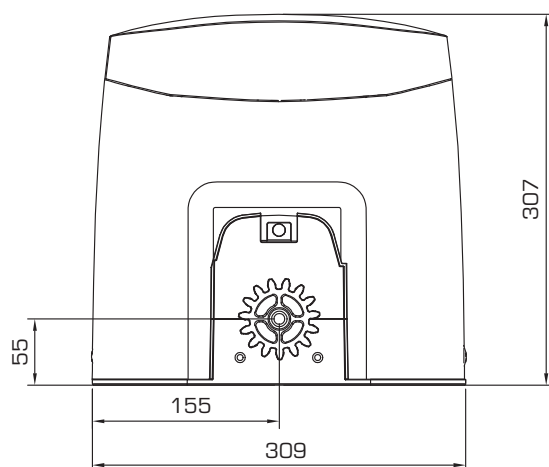


- a. Operation gear
- b. Limit switch device
- c. 24Vdc motor
- d. Back-up batteries [Optional]

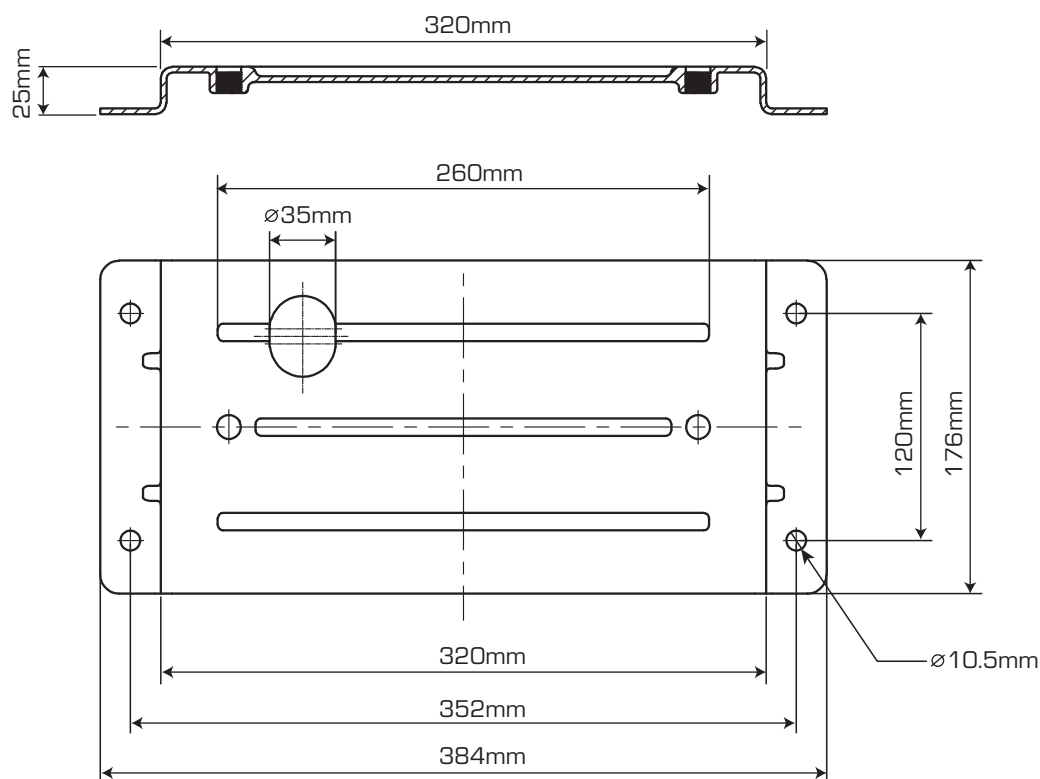


- e. Release device
- f. Control panel
- g. Terminals of devices

Dimension of device



Mounting plate



Installation of motor gear and gear rack

This pose is privileged because it protected the operator from any standing water.

- (A) Install the 2 nut covers on the plate. (Figure 1)
- (B) Position the plate without fixing at its precise location. It must be perfectly parallel to the date (Figure 2)
- (C) Mark the 4 fixing points on the ground.
- (D) Remove the plate.
- (E) Pierce your concrete substrate and install 4 metal anchors in 4 chemical sealing with threaded rods 8mm. Leave out the thread rods for 20mm.
- (F) Wait for complete setting and drying.
- (G) Pass all cables (Power supply + accessories) in the base. (Figure 2)
- (H) Position the base.
- (I) Fix the base and the bolt
- (J) Pass the cables in the operator.
- (K) Fix the operator with the screws in the nut cover.

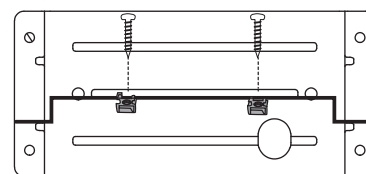


Figure 1

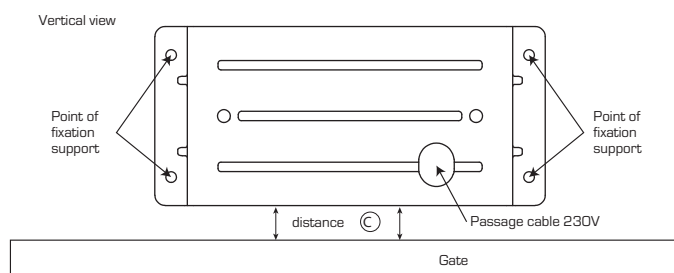
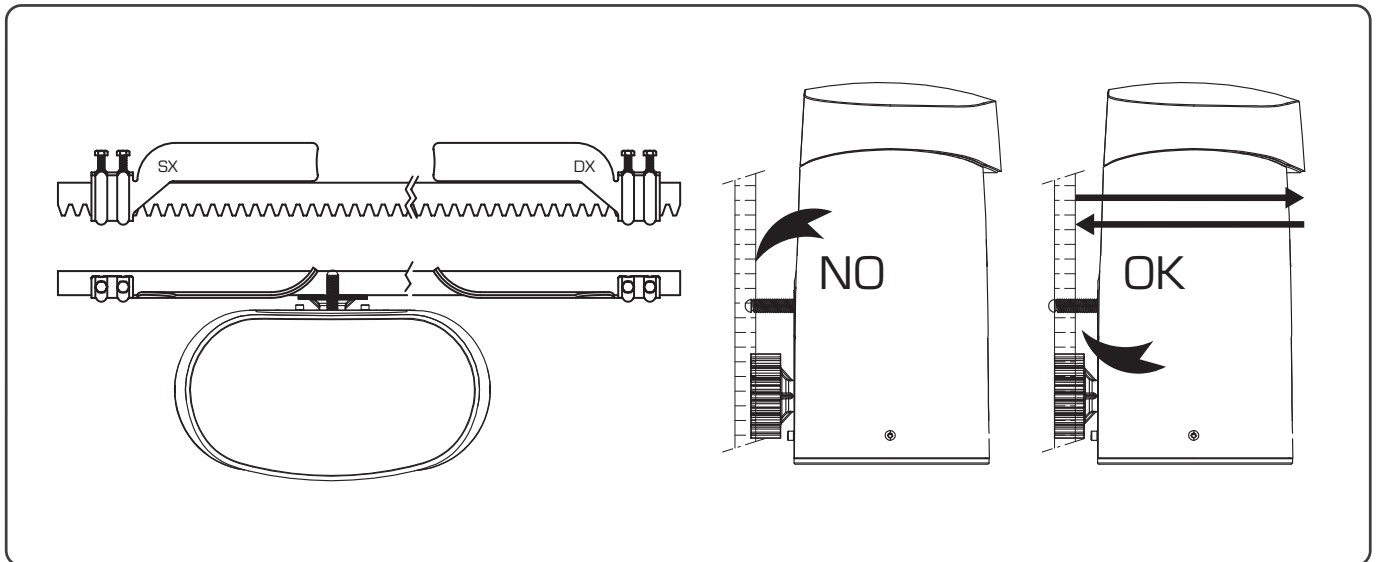


Figure 2

Checking for installation

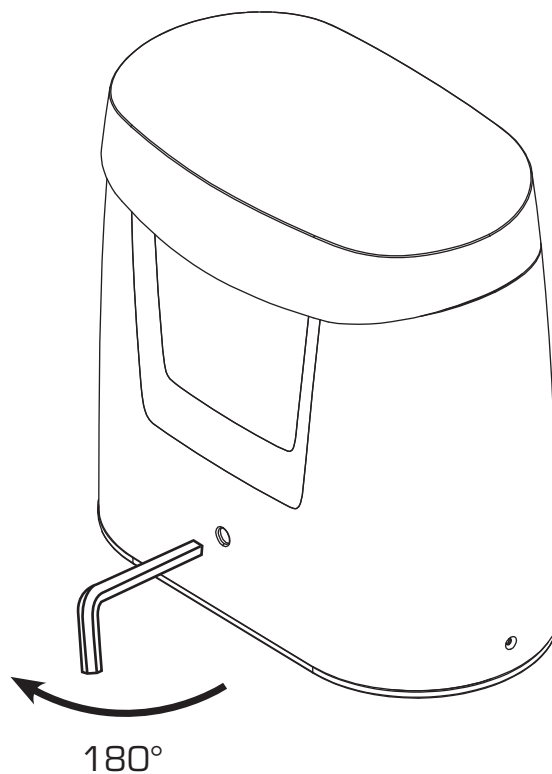


Manual release

In case of power failure or to schedule your automatic gate, you can manually unlock the operators:

Stand in the inner side of the portal. Insert the hex wrench used to unlock, and then turn 180° clockwise. You can now open the gate by hand.

To lock again the engine, insert the hex wrench used to unlock, and then turn 180° in the other direction.



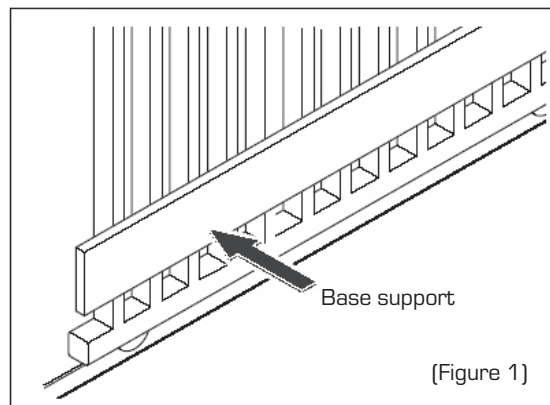
Fixing by screwing the motor on concrete pads

The installation is recommended in areas with heavy snowfall and where there is a risk of flooding. The principle is the same as above, but this time the motor is raised from the ground. The height of concrete pads is decided with your judgement. Please note that in all cases, the height of the rack is directly related to the final height of the operator.

The racks provided, thermoplastic material with steel insert, are suitable for gates with a maximum weight 500 kg. They are easily mounted on the gate by simply screwing. We provide with self-tapping screws. If the construction of your gate doesn't allow direct mounting racks, you will have to create a new base of support. (Figure 1)

The height of the rack should be adjusted so that the weight of the gate won't be placed on the driving pinion. There must always be a gap from 1.5cm to 2cm between the driving motor and the rack during the stroke of the operator.

Any difference of gap above or below taking premature wear is not covered by the product warranty.

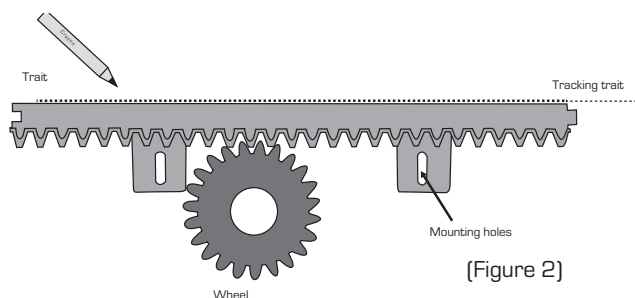
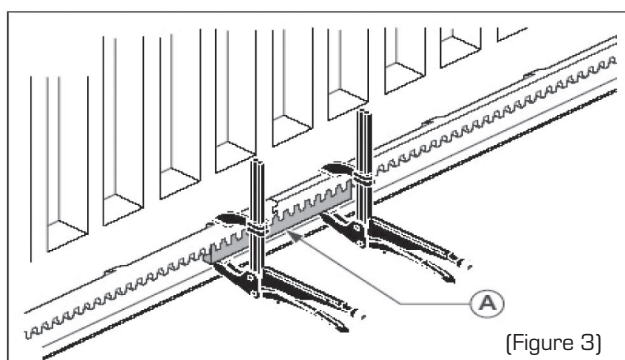
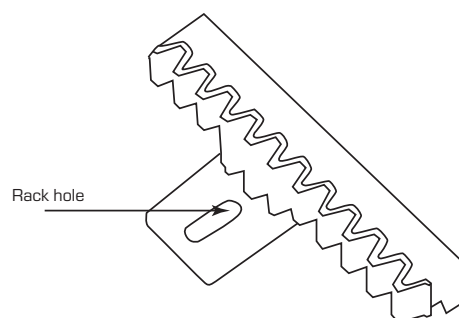


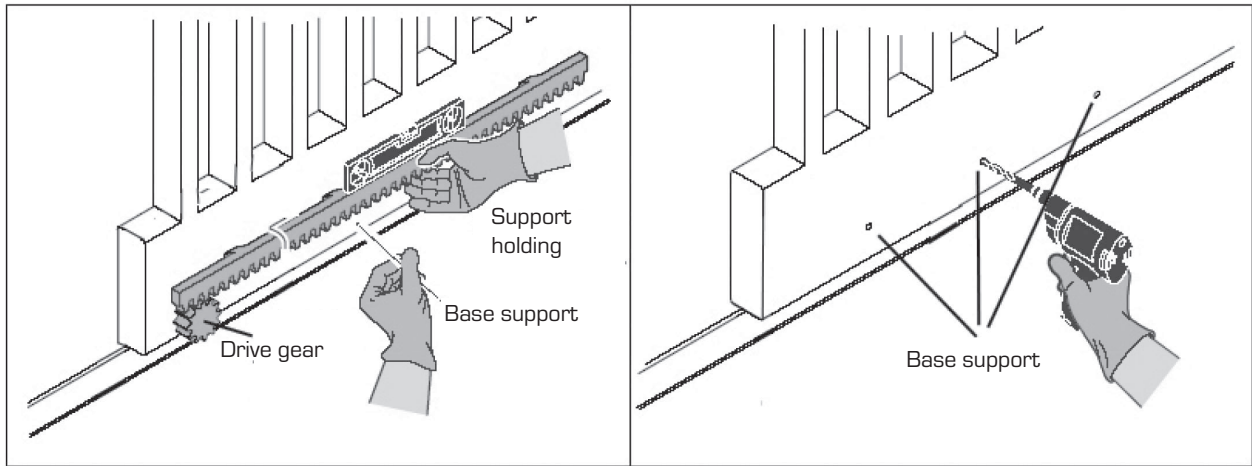
It is imperative to never lubricate the racks.

Base of support

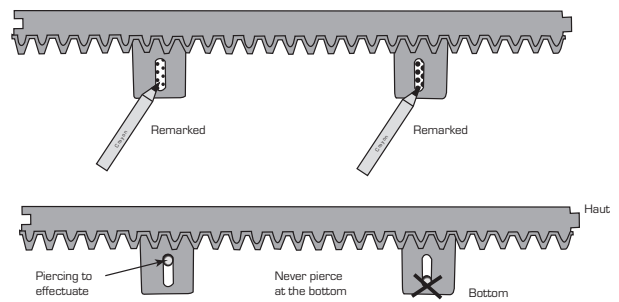
A. Place the first rack on the driving pinion and trace the drilling locations completely. The rack must be perfectly horizontal. Mark a trait on the top of rack. Proceed in this way over the entire length of the gate. (Figure 2)

Note: Help yourself to use one piece of rack to stabilize 2 pieces of racks. (Figure 3)

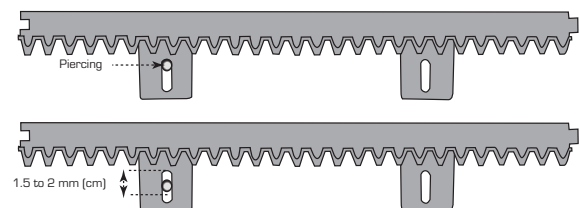




- B. Remove the rack.
- C. Pierce your fate on the top of all remarks of tracking. (Figure 4)
- D. Fix your rack. To obtain the necessary gap between the wheel and the rack, raise the rack slightly in its fixation. You can thus obtain the desired gap between the star wheel of operator and the rack. (Figure 5)



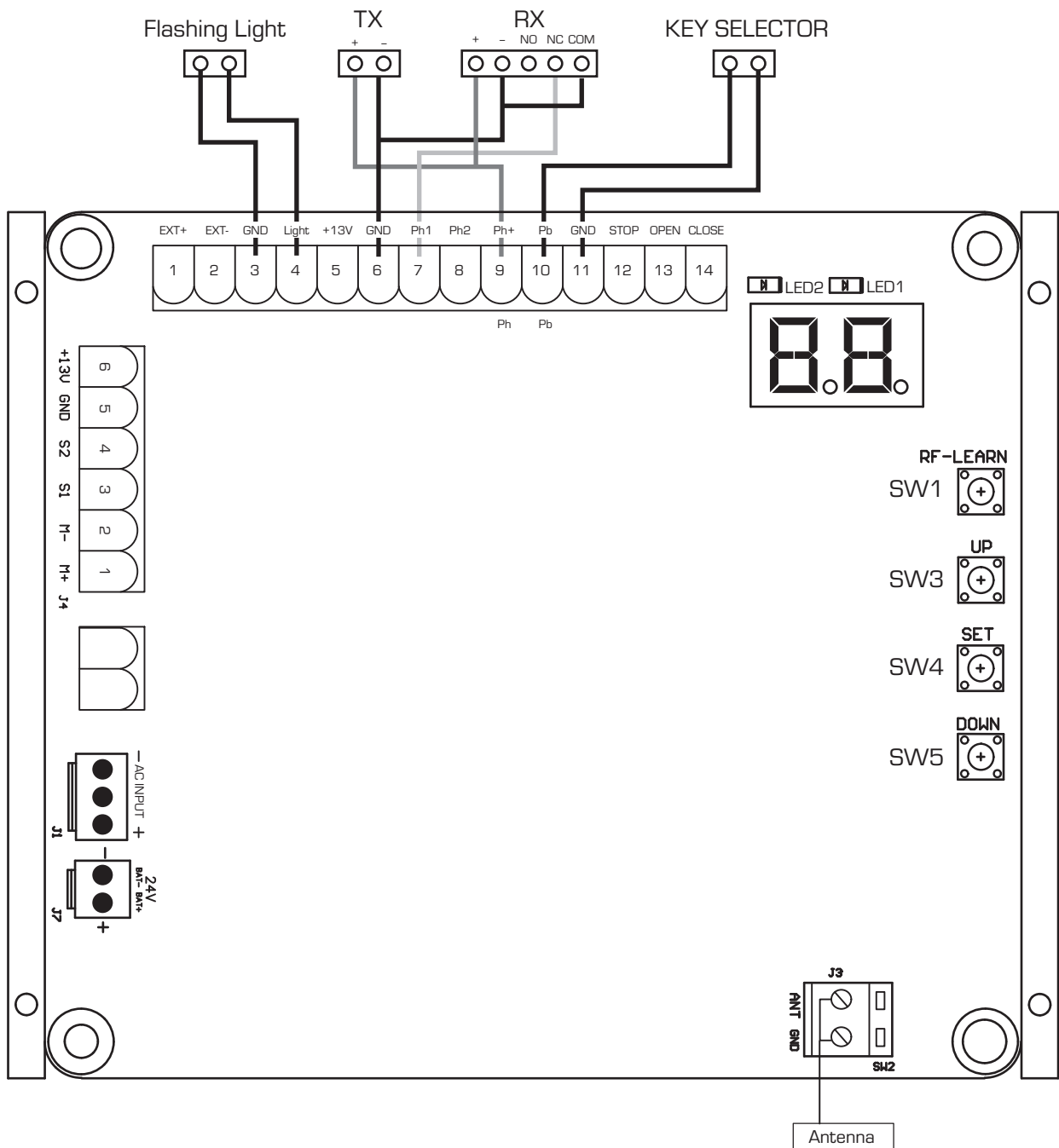
(Figure 4)



(Figure 5)

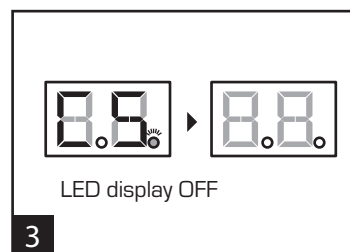
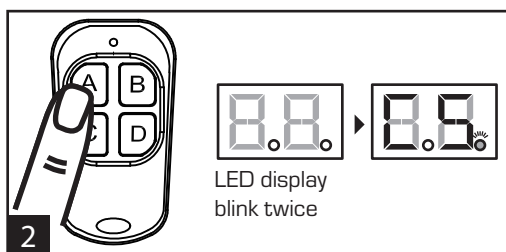
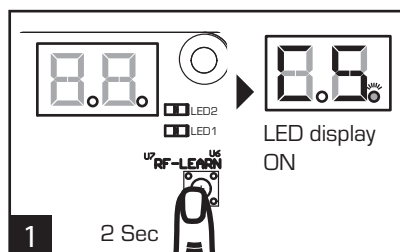
Wire connection

If the LED display is in normal performing refer to “4.2.1”, you can control the gate by either transmitters or the button on the board: “UP”-clockwise moving, “SET”- stop and “DOWN”- Counterclockwise moving.



Transmitter memorizing and erasing process

- (1) Transmitter Memorizing: Press "RF Learn" button for 2 seconds, and the LED display shows "CS"; then press the transmitter left button (A); the LED display will blink twice and then be off. The transmitter learning is completed.
- (2) Erasing Memory: Press "RF Learn" button for 5~6 seconds as right LED display is on, then wait for LED display off.



System learning, reset process, and led display

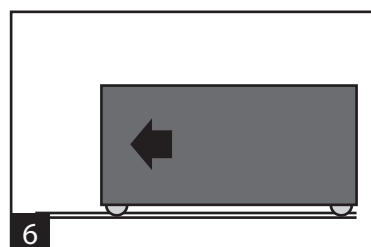
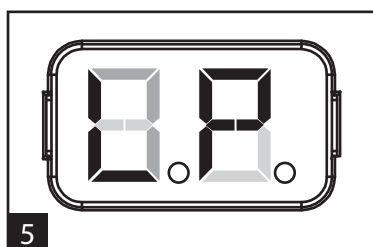
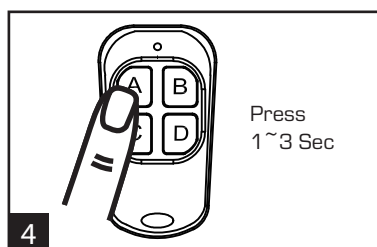
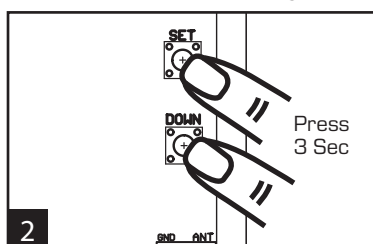
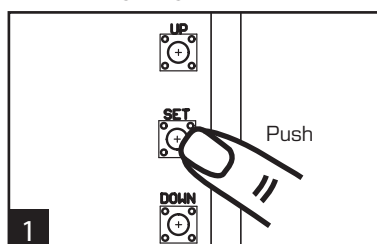
! CAUTION: Before proceeding to system learning, the transmitter memorizing process has to be completed.

- (1) To Complete the System Learning:

Step1: Press "SET"; then press "SET" + "DOWN" for 3 seconds, and the LED display shows "LE" 1 2 3

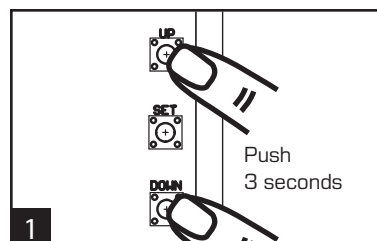
Step2: Press left button (A) on time, the LED display should show "LP" 4 5

Step3: The gate goes to Auto-learning, please wait for the learning process to be completed 6



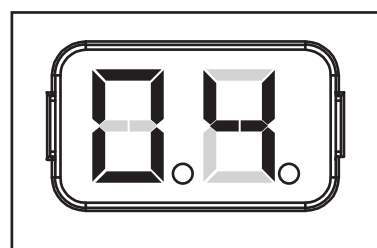
- (2) To Reset Factory Setting:

Press UP and DOWN for 3 seconds, and the LED display shows "CL"



- (3) Motor current auto-detection

The LED display shows the current consumption of the motor



"0.4" : During the system learning procedure, the control panel will automatically detect the current consumption from each motor, indicate the resistance level of the gate whiling the motor operation. If this reading increase instantly or stay in high reading, please check if any object in between of the gate moving area, and contact your installer for inspection.

Warnings

LED Display	Programmable Functions
	"L": The system learning is not done.
	"OP": The system is in normal operation To program, press SET button for 3 seconds, when the LED display change from OP to 1, press UP or DOWN to change function settings (1 to P). Then press SET to enter the sub function within each group, press UP or Down to select sub functions and press SET for confirmation.

LED Display	Programmable Functions
	"LE": Enter learning mode and then wait for learning instructions.
	"LP": The system learning is in progress. The Auto-learning process of gate moving: "Gate open to the end- stop close to the end- stop."
	"CL": Reset Factory Setting.

Programmable function settings

LED Display	Definition	Function	Value	Description
1	Options ofGate Opening direction	1-1	Clockwise Opening	1. The function can adjust the direction of gate opening.
		1-2	Counterclockwise Opening	2. The factory setting is "1-1".
2	Automatic Closing	2-0	No automatic closing	1. This function can cause the gate to close automatically after the paused time.
		2-1	5 seconds	2. The factory setting is "2-2".
		2-2	15 seconds	
		2-3	30 seconds	
		2-4	45 seconds	
		2-5	60 seconds	
		2-6	80 seconds	
		2-7	120 seconds	
		2-8	180 seconds	
3	There actions of the photocells / safety edge / loop detector when they detecting obstacles	3-1	Refer to Page12 for F3 function	1. Please do the function setting after H & J
		3-2	settings description and check	2. The factory setting is "3-1".
		3-3	the settings on FH and FJ	
4	Motor Speed (% full speed)	4-1	50% Learning Speed	1.The function can adjust the running speed of motor.
		4-2	70% Learning Speed	2.The factory setting is "4-4".
		4-3	85% Learning Speed	
		4-4	100% Learning Speed	
5	The deceleration point (% full distance)	5-1	75% of full distance	1. The factory setting is "5-1".
		5-2	80%	
		5-3	85%	
		5-4	90%	
		5-5	95%	
6	Deceleration Speed (% full speed)	6-1	80%	1. The factory setting is "6-4"
		6-2	60%	
		6-3	40%	
		6-4	25% of full speed	
7	Over current setting	7-1	2A	1. The function can adjust the running force of motor to be compatible with the gate weight.
		7-2	3A	2. The factory setting is "7-5".
		7-3	4A	
		7-4	5A	
		7-5	6A	
		7-6	7A	

LED Display	Definition	Function	Value	Description
8	Open Partially (Pedestrian mode)	8-1	3seconds	1. The function can adjust the time of opening partially.
		8-2	6seconds	2. The factory setting is "8-2".
		8-3	9seconds	
		8-4	12seconds	
		8-5	15seconds	
		8-6	18seconds	
9	Pre-flashing	9-0	The flashing light blinks when the gate starts to move.	1. The factory setting is "9-0"
		9-1	The flashing light blinks 3 seconds before the gate starts to move.	
A	Over current reverse setting	A-0	Stop	1. The factory setting is "A-3".
		A-1	Reverse 1 second	2. The reverse function only operate 3 times and then stop.
		A-2	Reverse 3 second	3. If gate reverses, the auto close function will be cancelled.
		A-3	Reverse to the end	
C	Open-stop-close-stop function key	C-1	A key	1. The factory setting is "C-1".
		C-2	B key	
		C-3	C key	
		C-4	D key	
E	Open Partially function key	E-0	No function in transmitter	1. The factory setting is "E-2".
		E-1	A key	
		E-2	B key	
		E-3	C key	
		E-4	D key	
F	External device control function key	F-0	No function in transmitter	1. The factory setting is "F-3".
		F-1	A key	
		F-2	B key	
		F-3	C key	
		F-4	D key	
H	Photocell 1 function	H-0	OFF	1. The factory setting is "H-0".
		H-1	ON	
J	Photocell 2 function	J-0	OFF	1. The factory setting is "J-0".
		J-1	ON	
L	Stop terminal function	L-0	OFF	1. The factory setting is "L-0".
		L-1	ON	2. If the function open
P	Gate operation	P-1	OPEN/STOP/CLOSE/STOP	1. The factory setting is "P-1".
		P-2	OPEN/STOP/CLOSE	

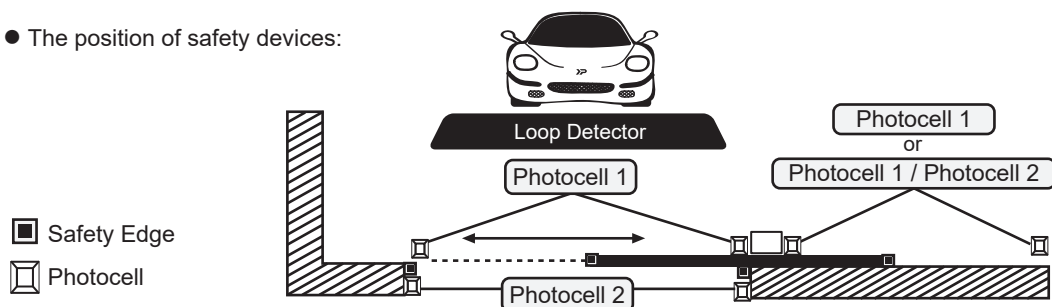
● F3 function settings:

Logic F3-1 The reactions when safety devices got activated		
Gate Status	Photocell 2	Photocell 1
Closed	Stop opening	No Effect
Open	No Effect	Reloads automatic closing time
Stop during moving	Stop opening	Reloads automatic closing time
Closing	No Effect	Open
Opening	Close	No Effect

Logic F3-2 The reactions when safety devices got activated		
Gate Status	Safety Device 2	Safety Device 1
Closed	Stop opening	No Effect
Open	Reload automatic closing time	
Stop during moving	Stop opening/closing	Reload automatic closing time
Closing	Stop after opening for 2 Secs	Open
Opening	Stop after closing for 2 Secs	No Effect

Logic F3-3 The reactions when safety devices got activated		
Gate Status	Safety Device 2	Safety Device 1
Closed	Open	No Effect
Open	Reload automatic closing time	
Stop during moving	Open	Reload automatic closing time
Closing	Open	Open
Opening	No Effect	No Effect

● The position of safety devices:



Testing and checking

Make sure the notices included in Warnings has been carefully observed.

- Release the gearmotor with the proper release key.
- Make sure the gate can be moved manually during opening and closing phases with a force of max. 390N (40 kg approx.)
- Lock the gearmotor:
- Using the Key selector switch, push button device or the radio transmitter; test the opening, closing and stopping of the gate and make sure that the gate is in the intended direction.
- Check the devices one by one (photocells, flashing light, key selector; etc.) and confirm the control unit recognizes each device.

Recognition of LED

LED Indication	Descriptions
LED1 Photocells	LED1 will be on when the first pair of the photocells are activated.
LED2 Photocells	LED2 will be on when the second pair of the photocells are activated.

Technical feature

Gear type	Worm Gear
Nominal thrust	5000N
Engine RPM	2600 RPM
Power supply	24 Vdc
Maximum gate weight	Up to 500 KG
Maximum gate length	6M
Maximum operating current	5.5A for Maximum 10 secs
Operating Temperature	-20°C ~ +50°C
Dimension LxWxH mm.	309*157*308mm
Speed	23.10 cm/s

