



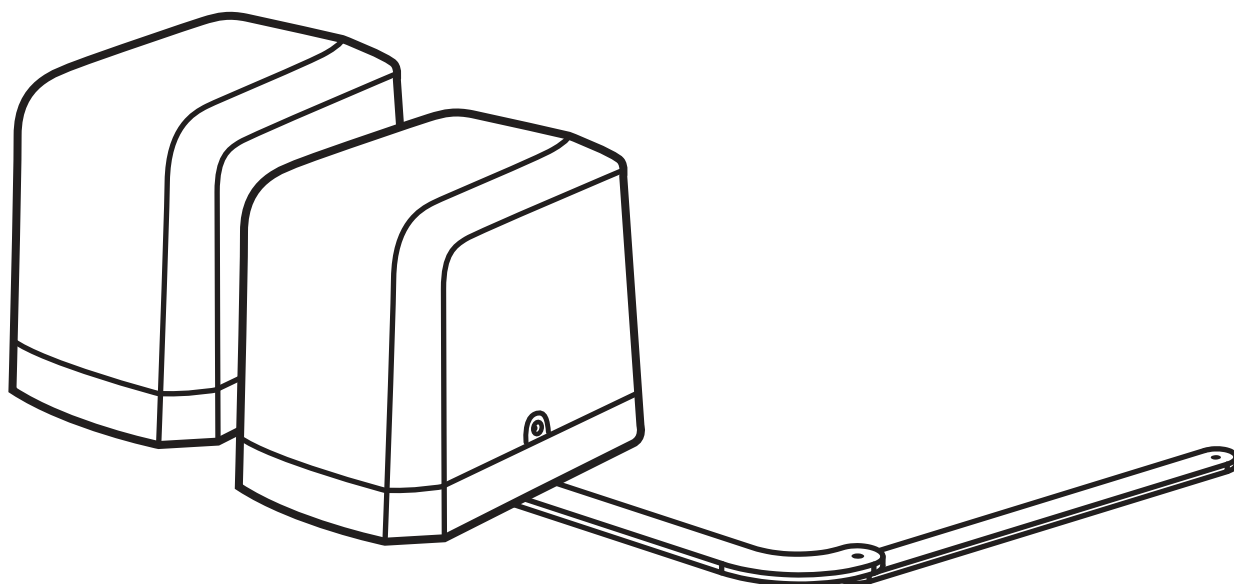
PYRENE

ARTICULATED ARM OPENER

24V DC GEAR MOTOR

RESIDENTIAL USE

INSTALLATION MANUAL



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1. Warnings

WARNINGS :

This manual is intended exclusively for trained installation personnel.

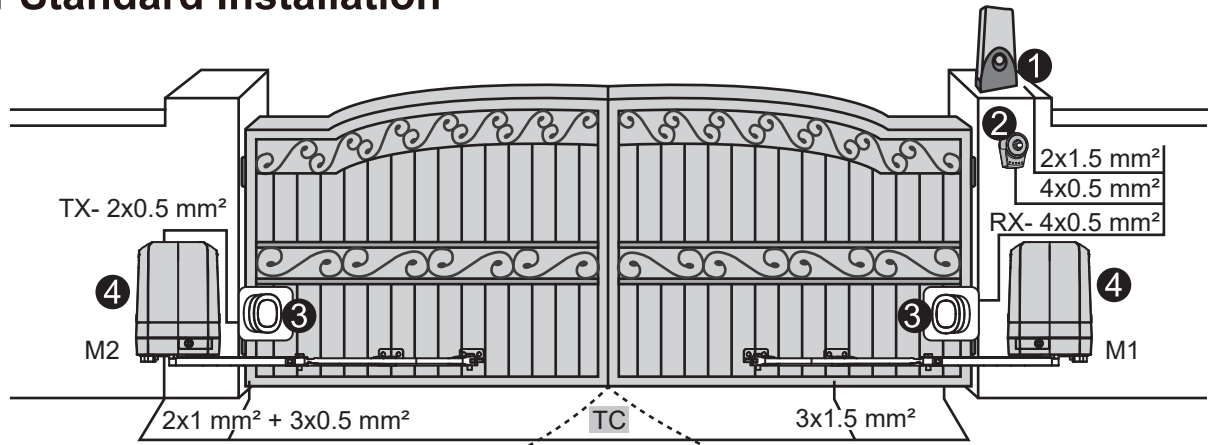
- (1) All installations, electrical connections, adjustments and tests must be carried out only after carefully reading and understanding all instructions.
- (2) Before performing any installation or maintenance operations, disconnect the electrical power by turning off the circuit breaker connected upstream and apply the hazard area notification per applicable regulations.
- (3) Make sure that the existing structure has the necessary requirements in terms of strength and stability
- (4) When necessary, connect the motorized gate to the grounding system, during the electrical connection phase.
- (5) Installation requires qualified personnel with mechanical and electrical knowledge.
- (6) Please keep all control devices (transmitter, pushbutton, key selector...etc) to prevent children from accidentally activating the door automation.
- (7) To replace and repair the motorized system, original components must be applied. Any damage caused by improper parts and methods will not be claimed from the engine manufacturer.
- (8) Never operate the unit if you have any suspicion of what might be defective or damage to the system.
- (9) The motors are designed exclusively for opening and closing the door, any other use is considered inappropriate. Manufacturer should not be held responsible for any damage resulting from improper use. The warranty will be cancelled for improper use, and the user must accept sole responsibility for the risks.
- (10) The system can only work in good working condition. Always follow standard procedures following the instructions in this installation and operation manual.

ERREKA will not be responsible for any injury, damage, or any claim to any person or property that may result from the improper use or installation of this system.

Please keep this manual for future reference.

1.2 Installation

1.2.1 Standard Installation



1. 24V DC flashing lamp(LUMI)
2. Push Button
3. Photocells(FT06)
4. 24V DC articulated arm opener
5. Transmitter

IMPORTANT: Gate TC stop on closing and TA stops on opening must be installed.

*Using an electrolock for full panel leaves or leaves with lengths of over 1,8 m is highly recommended

1.2.2 Dimension Chart

Please comply with the measures shown on the chart for proper installation. If necessary, please adjust the gate structure to the best operation.

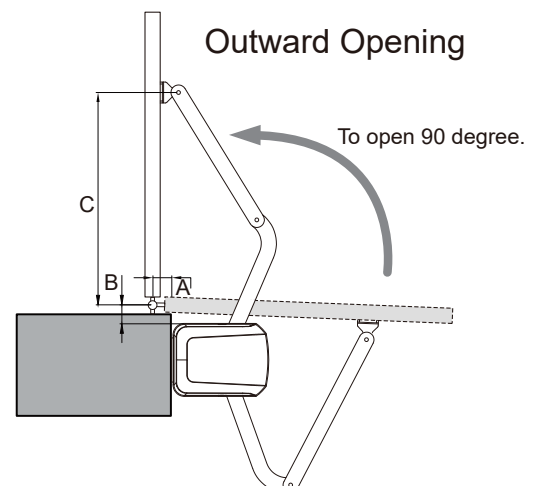
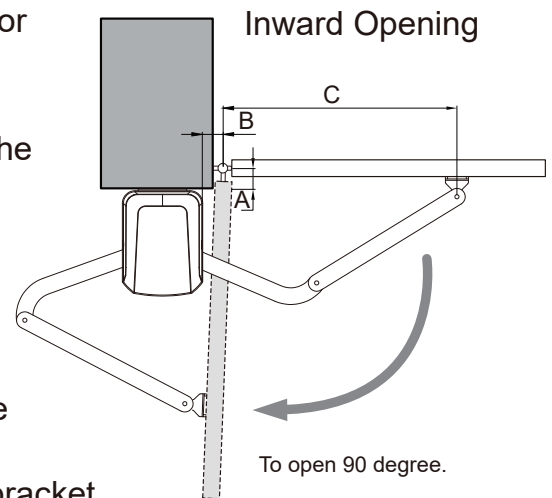
Before starting the installation, please make sure that the gate moves smoothly and that :

- 1) Hinges are properly positioned and greased
- 2) There is no any obstacle in the moving area
- 3) No frictions between two leaf gates and on the ground while moving.
- 4) Installation reference: to open the gate with 90 degree please refer the data table below:

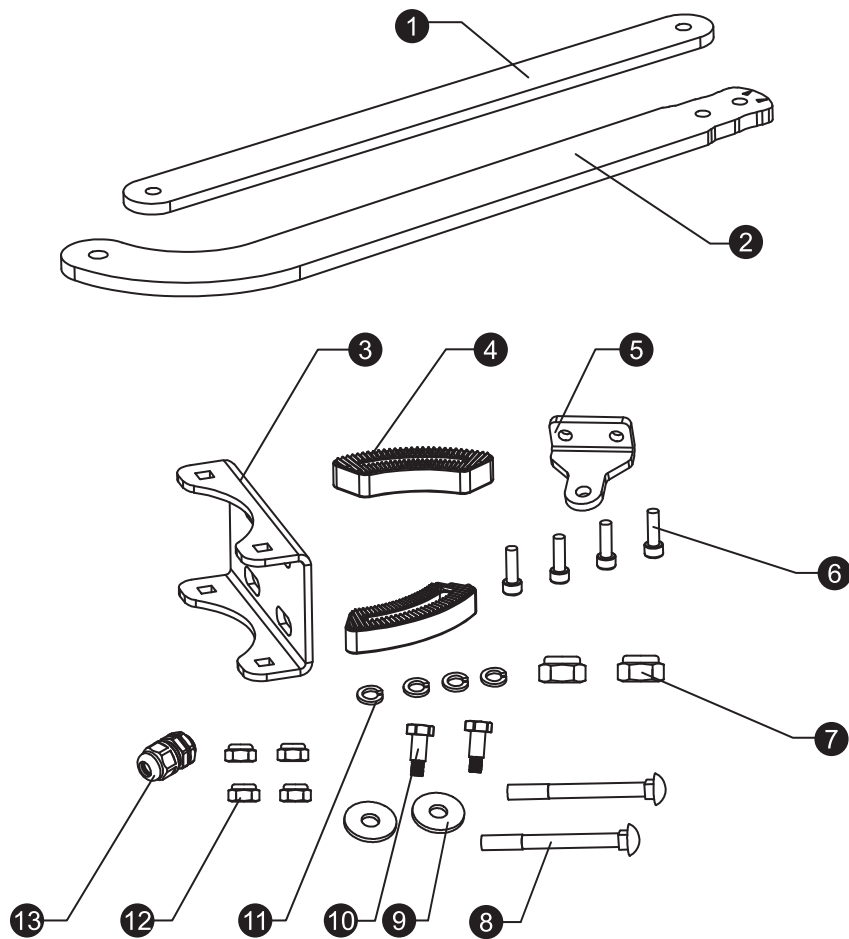
- A: Distance between the gate hinge and the wall bracket.
 B: Distance between the gate hinge and the motor side.
 C: Distance between the gate hinge and the fixing point of the arm.

		B		
		50	100	150
A	C ↙	50	100	150
	50	625	575	545
	100	615	565	540
	150	600	550	/
	200	585	535	/
	250	565	515	/
300	540	/	/	

unit: mm



1.2.3 Components of Installation



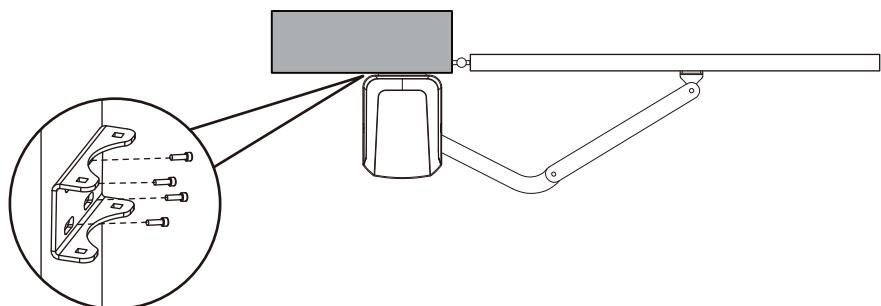
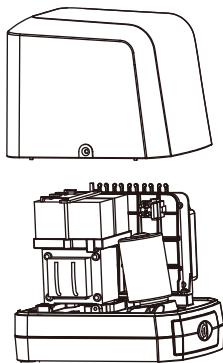
1	Straight arm	1 pce
2	Curved arm	1 pce
3	U-shaped fixing plate	1 pce
4	Mechanical stopper	2 pcs
5	Front-end fixing bracket	1 pce
6	Screw	4 pcs
7	Nut Ø10	2 pcs
8	Screw	2 pcs
9	Gasket	2 pcs
10	Screw	2 pcs
11	Spring washer	4 pcs
12	Nut Ø8	4 pcs
13	Cable gland	1 pce

1.2.4 Installation of Articulated Arm Opener

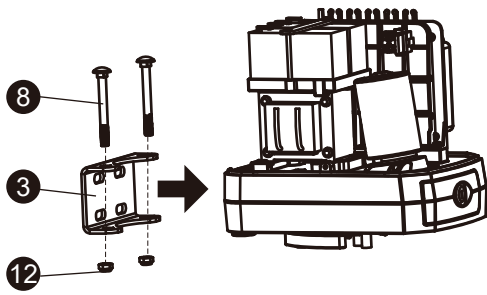
1. Refer to the Dimension Chart to choose the correct dimensions of the motors and position to be installed.
2. Check if the mounting surface of the brackets to be installed is smooth, vertical and rigid.
3. Arrange the cables for power supply cable of the motors, make sure power supply cable is connected to motor.
4. Motor installation and setting for mechanical stopper in opened and closed position.

1) Remove the upper cover and mechanical stoppers on the bottom of motor.

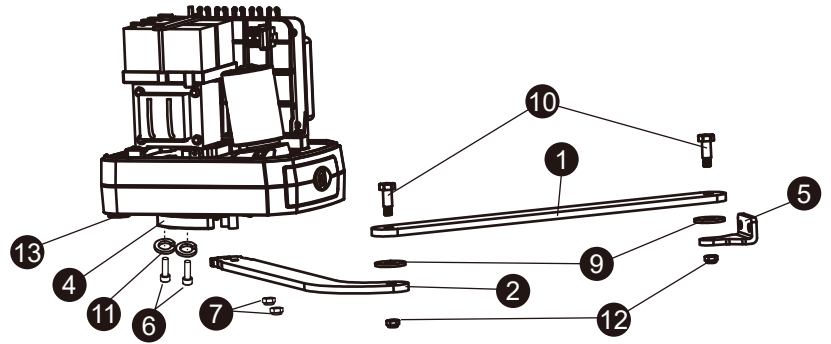
2) Place the gate in the full closed position and fix the U-shaped fixing plate on the wall.



3) Install the motor on the U-shaped fixing plate with corresponding screws and nuts.



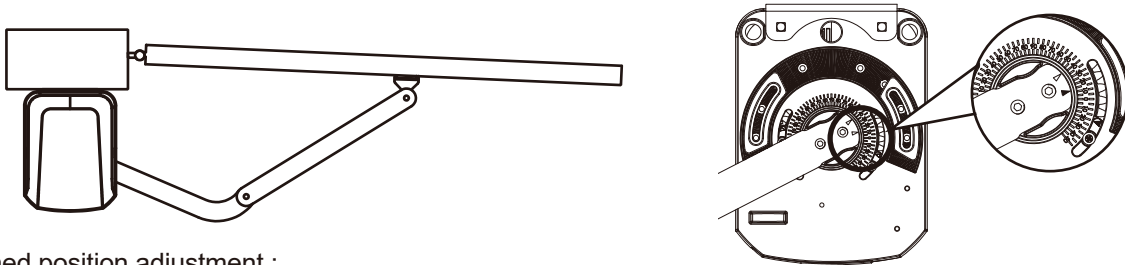
4) After positioning the front of curved arm on the bottom of motor, release the motor and position the straight arm on the end of curved arm and mounting bracket with corresponding screws and nuts.



5) Closed position adjustment :

5.1 After the full closed position decided, fix the corresponding mechanical stopper at the position.

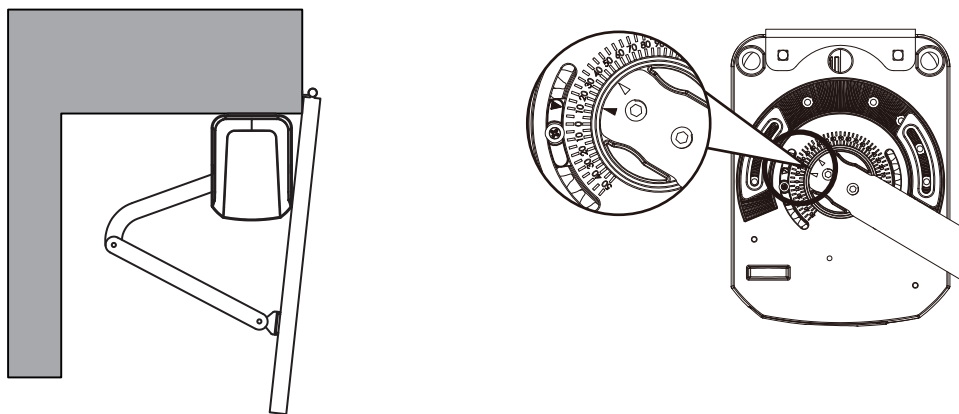
5.2 After the full closed position decided, make the pointer on limit switch aligned with the pointer on the curved arm. (Red points shown on the figure below indicate the pointers)



6) Opened position adjustment :

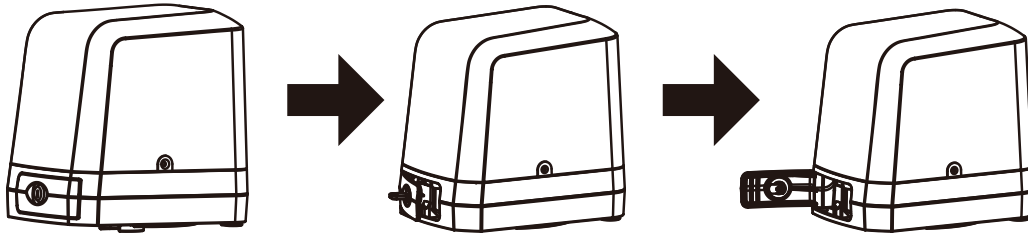
6.1 Adjust the gate to full opened position and after the position decided, fixe with corresponding mechanical stopper.

6.2 Adjust the gate to full opened position and after the position decided, make the pointer on the limit switch aligned with the pointer on the curved arm. (Red points shown on the figure below indicate the pointers)



1.2.5 Emergency Release

- 1) Insert the release key to the release slot
- 2) Turn the release key anti-clockwise
- 3) Pull out the release bar
- 4) Turn the release key clockwise to fix the release bar, the release bar has to be in pulled out position when turning the release key clockwise

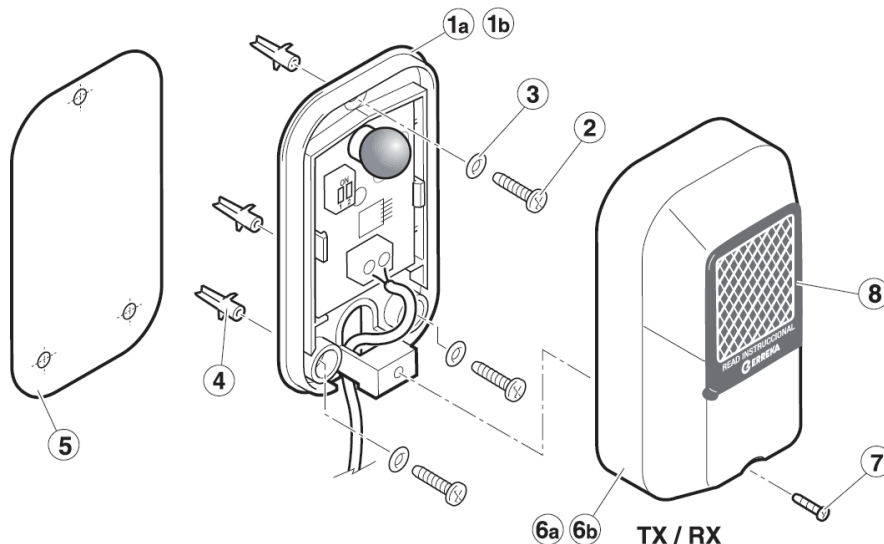


1.2.7 Photocells

The safety photocells are security devices for control automatic gates. Consist of one transmitter and one receiver based in waterproof covers; it is triggered while breaking the path of the beams.

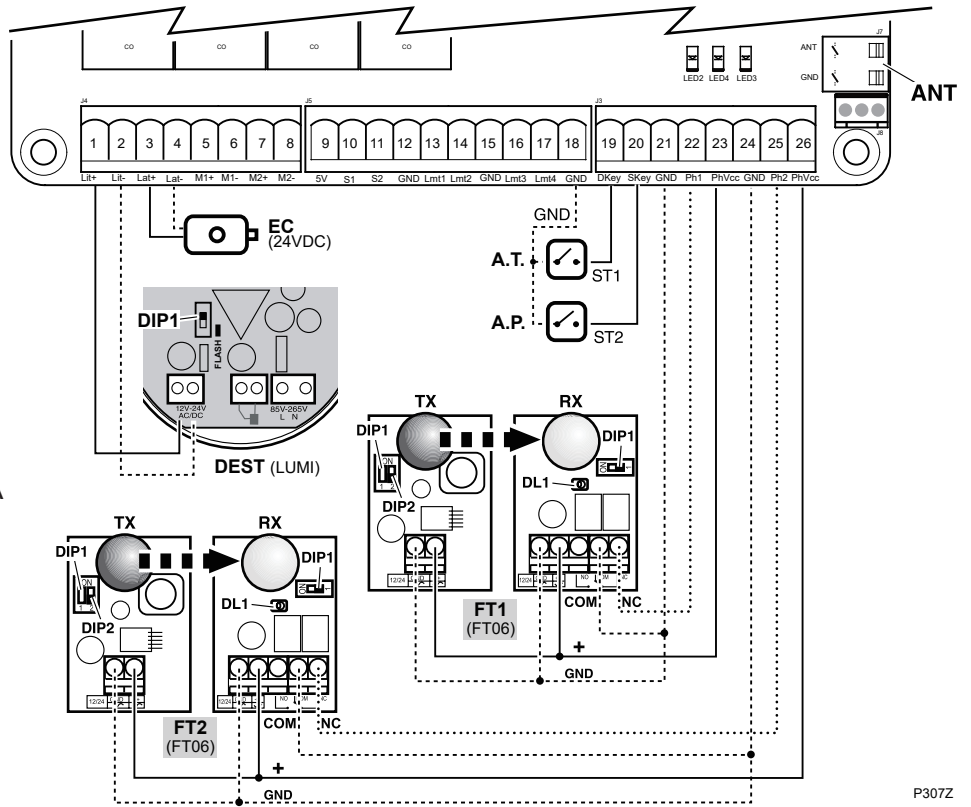
SPECIFICATION:

Detection Mode	Through Infrared
Sensitivity Distance	30M
Voltage Input	AC12~24V DC12~36V
Response Time	110MS
Emitter Element	IR LED
Operation Indicator	DL1 Red LED (RX): OFF In case of ray breaking, Red LED DL1(RX):ON
Dimensions	88*50*30mm
Output Mode	Relay Outputs
Current Consumption maximum	RX <25mA\ TX <20mA
Impermeability	IP44



Peripheral cabling (valid for all cases)

- ANT Cable connectors for antenna
- EC Electrolock 24 VDC
- A.T. Double-leaf opening pushbutton
- A.P. Single-leaf opening pushbutton
- DEST Flashing light (ERREKA LUMI)
Configure DIP1 as shown in figure
- FT1 Exterior safety device (ERREKA FT06 photocell)
- FT2 Interior safety device (ERREKA FT06 photocell)



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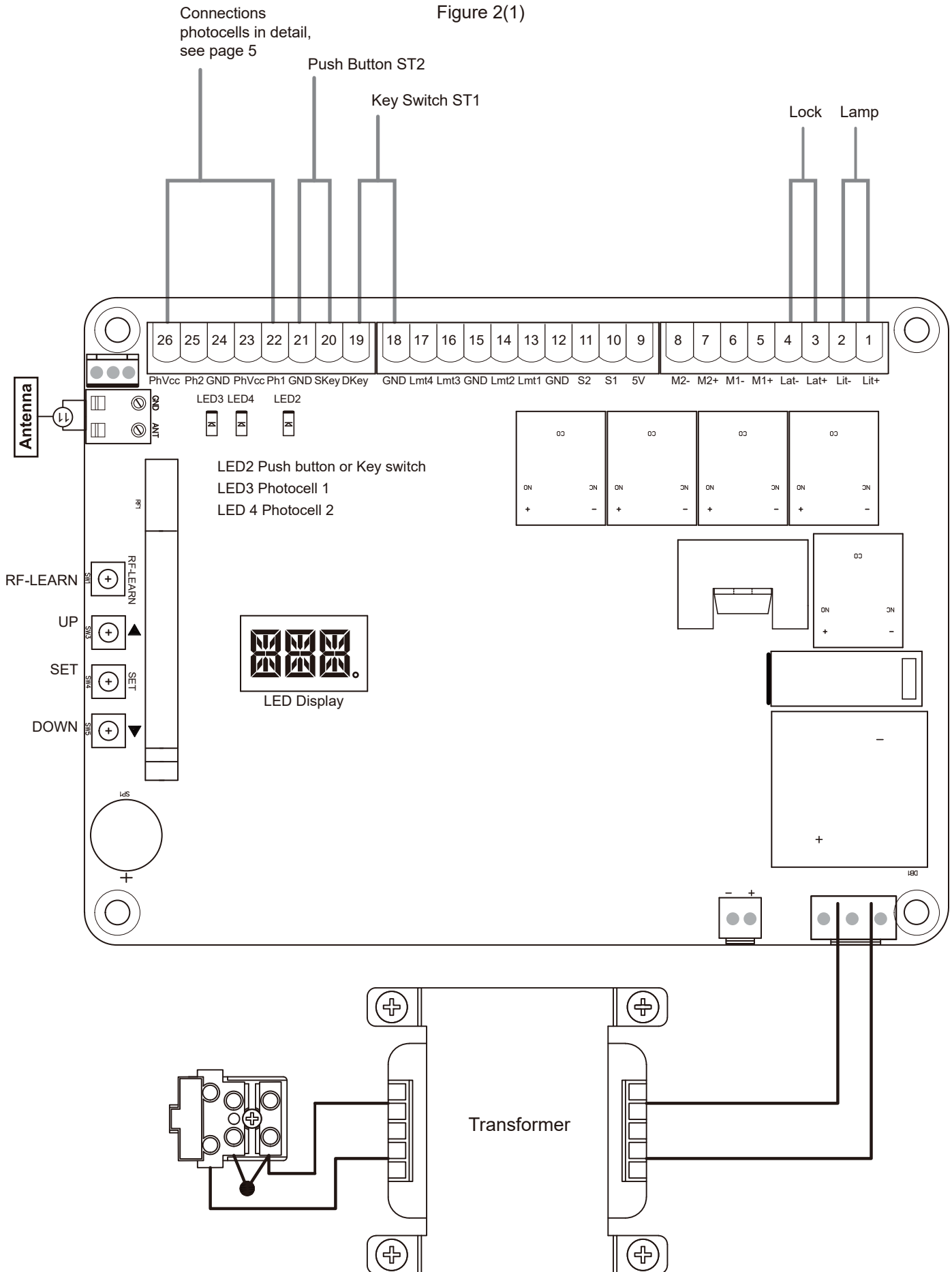
1.2.8 Power Supply Connections

Please kindly notice that the operation of power connection should be carried out by a qualified electrician with following steps:

- 1). Make sure the motor did not connect with power supply before finishing installation.
- 2). Make sure all the wires are firmly connected.
- 3). Then, connect the power with motor.

2.1 Wiring Connection

Figure 2(1)



2.1.1 Master Motor is installed at right side

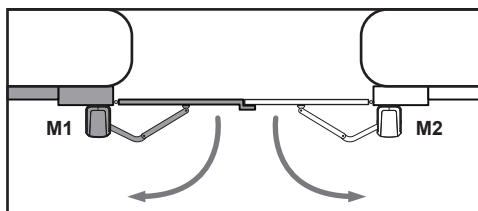
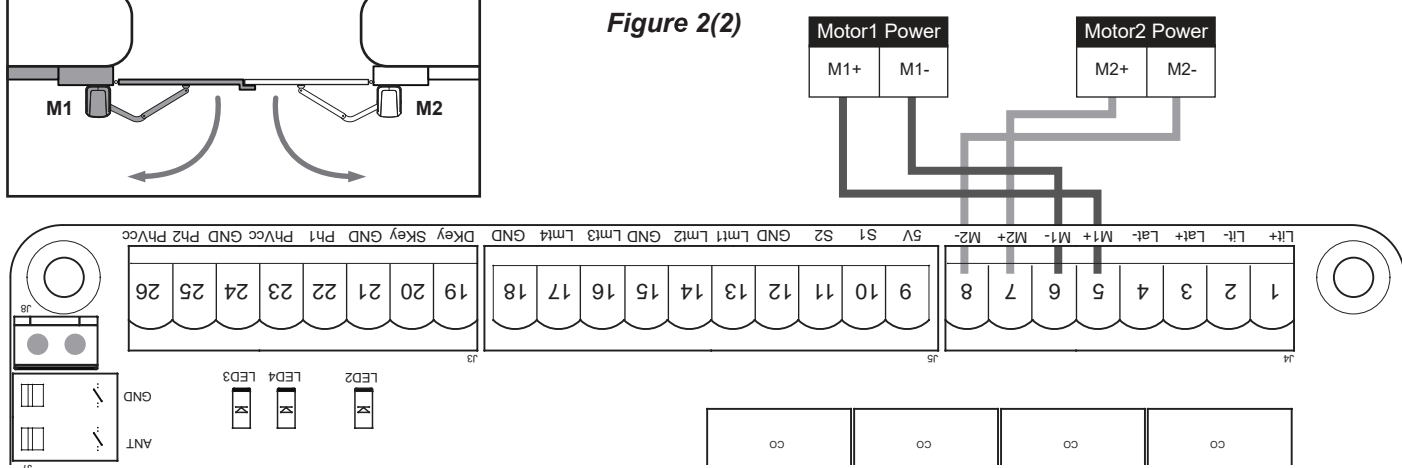
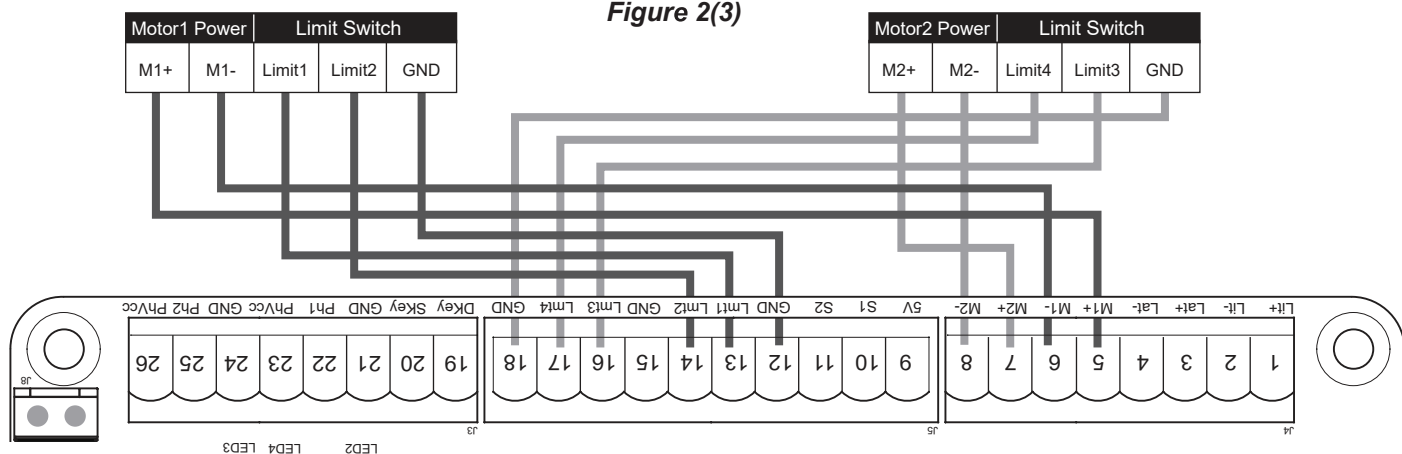


Figure 2(2)



Motor with Limit Switch (standard)

Figure 2(3)



Remark:
Limit1,
Limit2,

2.1.2 Master Motor is installed at left side

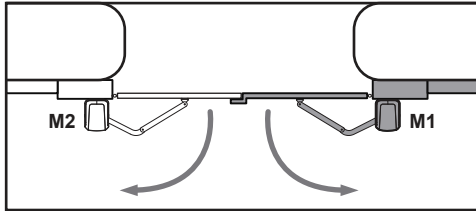
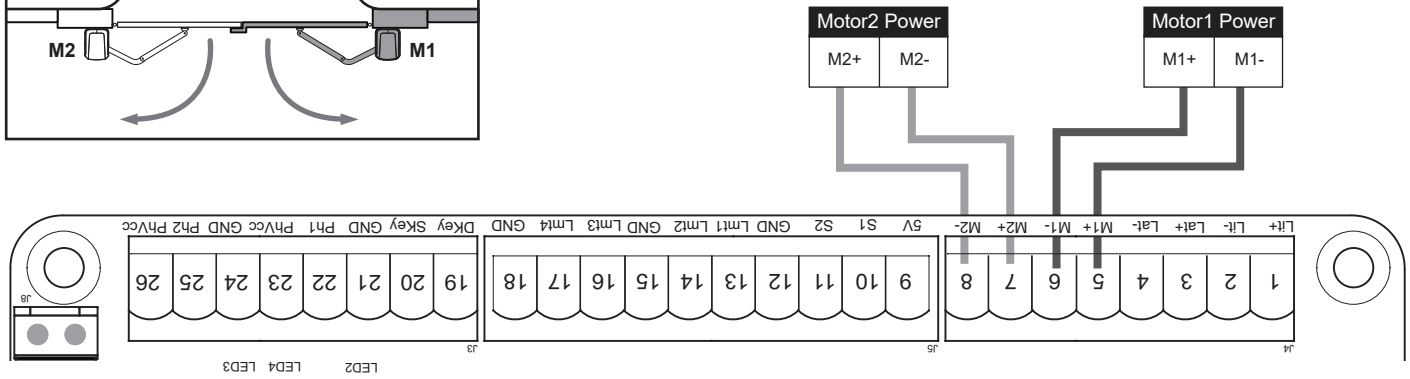
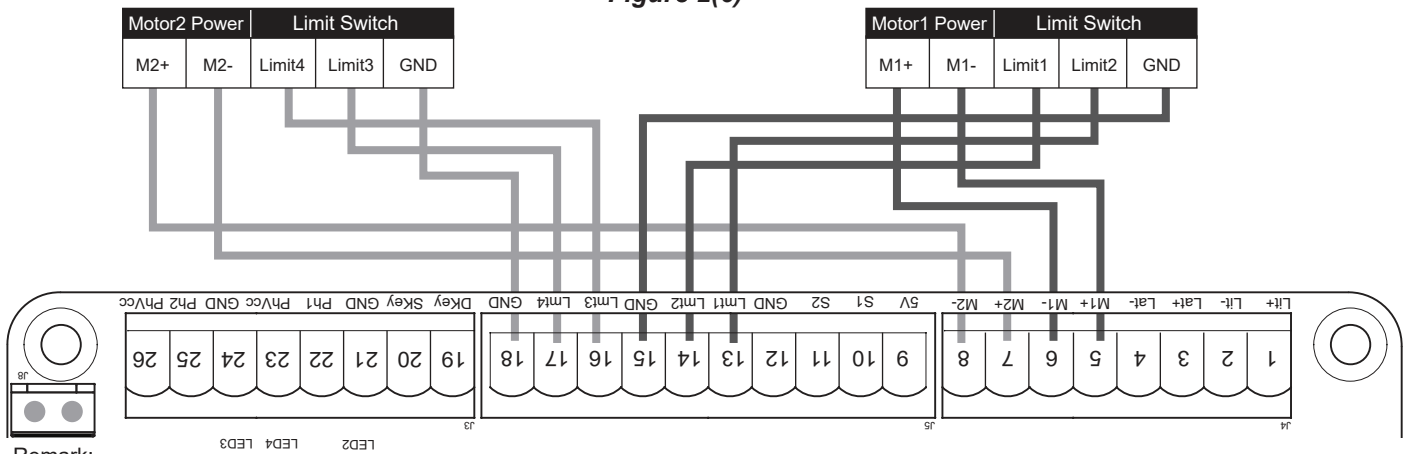


Figure 2(5)



Motor with Limit Switch (standard)

Figure 2(6)



Remark:
Limit1, Limit3
Limit2, Limit4 limit)

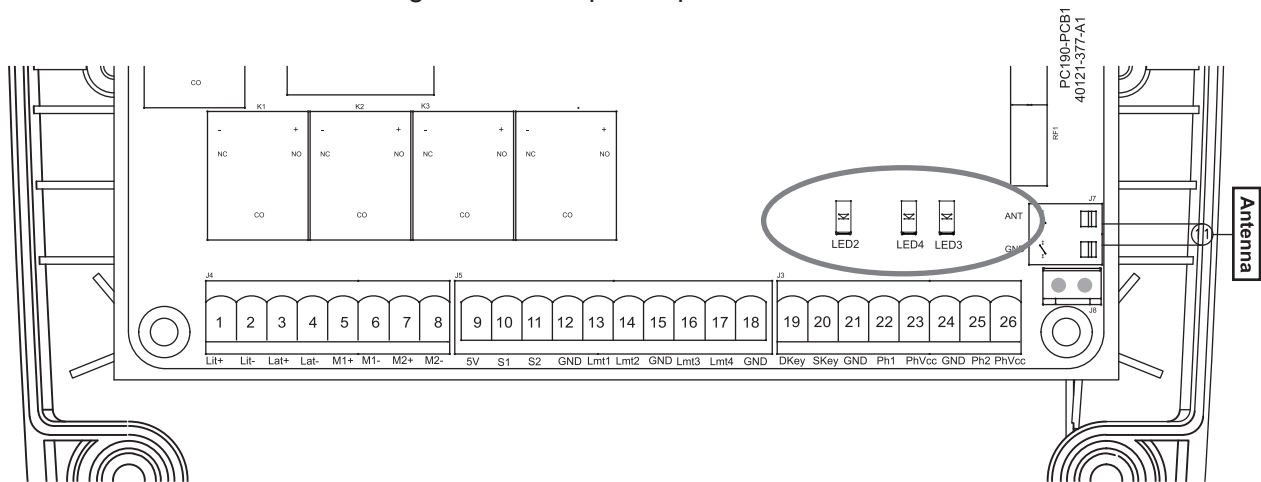
2.2 LED Indication

LED Blue on receiver: Flashes 3 times when transmitter memory has completely expired.

LED2 External device: When key switch or push button is activated, LED2 will light.

LED3 Photocells Ph2: LED3 will light when first pair of photocells FT2 were activated.

LED4 Photocells Ph1: LED4 will light when first pair of photocells FT1 were activated.



2.3 Programming and erasing transmitters

(A) Programming transmitters: Press and hold the “RF-LEARN” button on PCB for 1 second. The blue LED on the receiver will light. Press button A on the double leaf transmitter and press button B on the single leaf transmitter for 5 seconds. Transmitter learning is complete.

(B) Erase transmitters: Press and hold the “RF-LEARN” button on the card for 10 seconds, until the blue LED on the receiver is off.

(C) A receiver can memorize up to 200 units of transmitters.

2.4 System learning

Step1: Connect the wires to the M1 and M2 terminals correctly. If you only install one door, connect the wires to terminal 1.

Step2: Set parameter F2-1 for double gate learning and F2-2 for single gate.

Step 3: To start learning the double leaf system

To start learning the double leaf system.

Press and hold "UP+SET+DOWN" buttons on PCB for 3 seconds. LED will display "LEA" and "D-G".

Press button (A) on the transmitter for 10 seconds to activate system learning automatically.

LED will show "ARN", do not interrupt the process through pressing transmitters or stopping the door.

In system learning mode, the doors will proceed with the following procedures figure 2(8). LED will show "RUN" when system learning is finished.

To start learning the single leaf system.

Press and hold "UP+SET+DOWN" on PCB for 3 seconds. LED will show "LEA" and "S-G". Press the button

on the transmitter for 10 seconds to activate system learning automatically. LED will show "ARN",

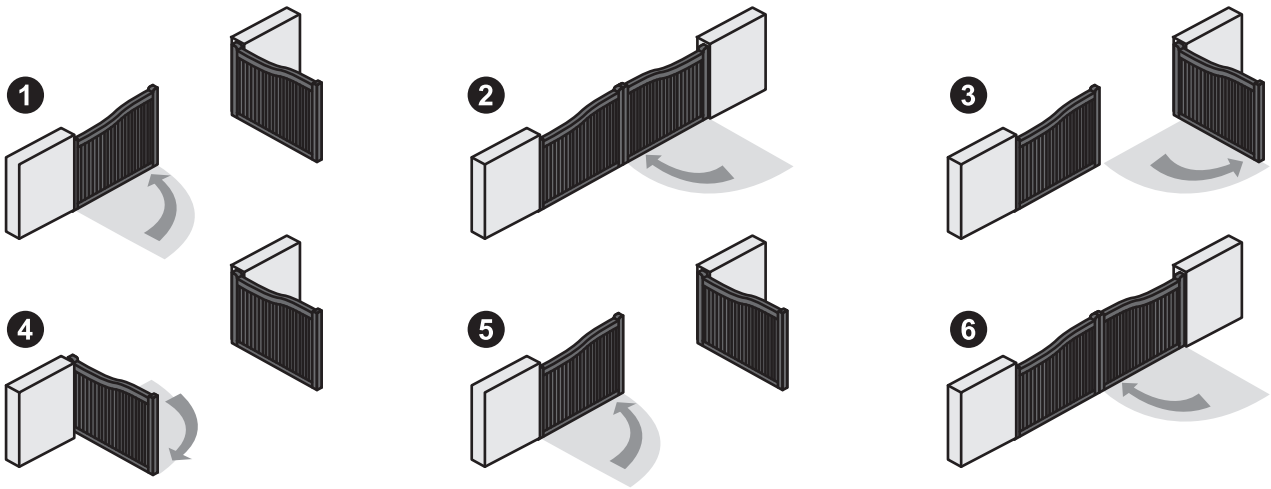
do not interrupt the process through pressing transmitters or stopping the door. In system learning mode,

the doors will proceed with the following procedures figure 2(8). LED will show "RUN" when system learning is finished.

Figure 2(8)

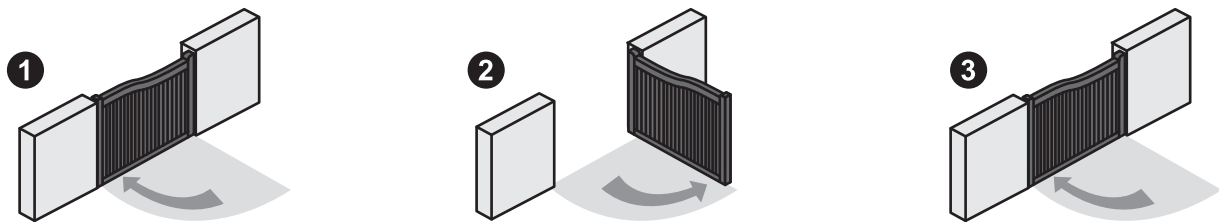
A. Double leaf

- (1) Slave Gate (M2) Close → (2) Master Gate (M1) Close → (3) Master Gate (M1) Open →
(4) Slave Gate (M2) Open → (5) Slave Gate (M2) Close → (6) Master Gate (M1) Close



B. Single leaf

- (1) Master Gate (M1) Close → (2) Master Gate (M1) Open → (3) Master Gate (M1) Close



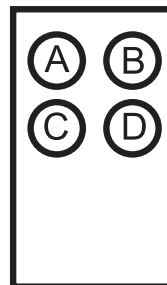
Notes:

- (A) When an unforeseen interruption occurs and causes the system learning to fail, you need to do the programming again.
- (B) Once system learning is finished, there is no need to proceed with the procedures again if power failure occurs.
- (C) M2 opens after M1 has opened for 3 seconds and M1 closes after M2 has closed for 3 seconds.
- (D) In use of limit switch, make sure the motor touches the limit switch during speed deceleration.

2.5 Door Operation

Press the “A” button on the transmitter for double leaf operation.

Press the “B” button on the transmitter for single leaf operation in either single or double leaf installations.



2.6 Gate motion logic

(A) During door opening: the doors stop if the transmitter/pushbutton/key selector button is activated, and close when it is pressed again.

(B) In the door closing phase: the doors stop if the transmitter/pushbutton/key selector button is activated, and open when it is pressed again.

(C) When opening or closing the door: for safety reasons, the leaves will stop if they encounter obstacles.

2.7 Check door movement

1). Unlock the motor with the unlock key and move the door in the middle, if it is easy to unlock in opening and closing, lock the motor.

2). Open and close the door several times and make sure the doors reach the limit switch at least 2~3 centimeters before the mechanical stop.

3. Function setting

3.1 LED function

LED Display	Status of programmable functions
	“N-L”: No travel learnt
	“RUN”: The gate is already programmed.
	“LEA”: in the learning mode and wait for the programming instruction. (1). Press “SET” + “DOWN” + “UP” for 3 seconds, and “LEA” + “DG” will be displayed; and press button A on the transmitter 1 time. After 1~3 seconds, it will display the current value during system learning, it will display 10 for 1A.
	“CLN” the system memory is cleared. Press and hold “UP+DOWN” for 5 seconds.
	“ME”: Door operation error.
	“STP”: the motor stops in the middle of the door operation.

3.2 Photocell adjustment

The actions of safety devices when they detect obstacles.

FA-1 Photocell OPEN/CLOSE (Standard set up)

Position of Gate		When safety devices are activated	
Type of Safety Device	Safety Device1 Photocell FT1-CLOSE	Safety Device2 Photocell FT2-OPEN	
CLOSED	No effect	Open not allowed	
OPENED	Reload automatic closing time	No effect	
STOP DURING MOVING	Reload automatic closing time	Open not allowed	
CLOSING	Open	No effect	
OPENING	No effect	Close	

FA-2 Safety Edge

Position of Gate		When safety devices are activated	
Type of Safety Device	Safety Device1 Photocell FT1-CLOSE	Safety Device2 Safety Edge	
CLOSED	No effect	Open not allowed	
OPENED	Reload automatic closing time		
STOP DURING MOVING	Reload automatic closing time	OPEN/CLOSE not allowed	
CLOSING	Open	Reverse to open for 2 seconds	
OPENING	No effect	Reverse to close for 2 seconds	

FA-3 Open Only Device (Vehicle detector)


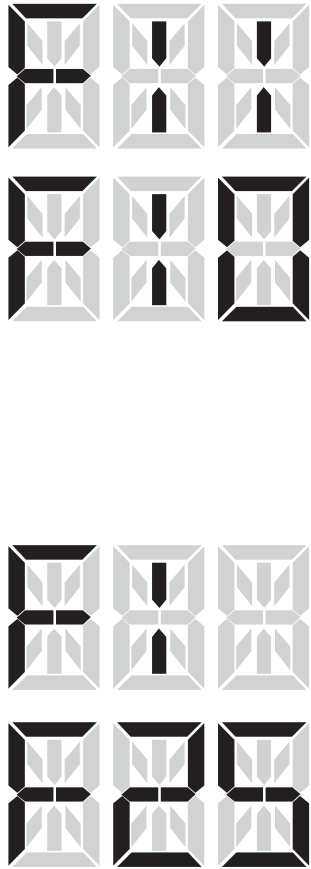

Position of Gate		When safety devices are activated	
Type of Safety Device	Safety Device1 Photocell FT1-CLOSE	Safety Device2 Opening Device	
CLOSED	No effect	Open	
OPENED	Reload automatic closing time		
STOP DURING MOVING	Reload automatic closing time	Open	
CLOSING	Open	Open	
OPENING	No effect	No effect	

FA-4 Double photocell set up

Position of Gate		When safety devices are activated	
Type of Safety Device	Safety Device1 Photocell FT1-CLOSE	Safety Device2 Photocell FT2-OPEN/CLOSE	
CLOSED	No effect	Open not allowed	
OPENED	Open for 2 seconds, when auto closing is ON	No effect	
STOP DURING MOVING	Close not allowed	Open not allowed	
CLOSING	Open	No effect	
OPENING	No effect	Stop	

3.3 Function setting operation

An example: How to adjust the function "F1-0"; follow the steps as below:

Step	Operations	Digital display status
1.	<p>(1) Press "SET" 3 seconds, and the screen will show F1. (*) To enter "F2" function or other function, press "UP" button to 1. select parameters between F2 and F1.</p>	
2.	<p>(2) After completing step (1) press "SET" button again, the second option will appear. (3) Then press "DOWN" until you find the desired function. "0" (**) of F1 as the right hand photo. "F1-0" is set.</p> <p>(**) You can set "0 ~ 8" as the second option, please press "UP" or "DOWN" to set it.</p> <p>(4) To program other functions, press "SET" to return to the first option, such as F1, F2, F3.....ect.</p> <p>Another example, after completing the setting of F1-0, to continue setting F2-5, press "SET" to return to the first option. F1 will appear on the screen and follow the steps mentioned (*) (2) and (3) to complete the programming.</p>	
3.	<p>After setting all the functions, wait for 10 seconds, the display will show "RUN", and you can use the transmitter to control the door operation.</p>	

3.4 Function setting

LED	Description	Options	Default option	Options or values
F1	Encoder / Limit switches	F11	F12	F11 : not installed
		F12		F12 : with limit switches(standard)
		F13		F13 : with simple encoder
F2	Number of actuators	F21	F21	F21 : two actuators
		F22		F22 : an actuator
F3	Maximum intensity of entrapment.	F31	F31	F31 : 2A
		F32		F32 : 3A
		F33		F33 : 4A
		F34		F34 : 5A
F4	Door speed	F41	F41	F41 : 100% of maximum speed
		F42		F42 : 80% of maximum speed
F5	Soft stop	F51	F51	F51 : soft stop in opening and closing
		F52		F52 : no soft stop
F6	Velocidad de desaceleración	F61	F62	F61 : 70% of maximum speed
		F62		F62 : 50% of maximum speed
		F63		F63 : 35% of maximum speed
		F64		F64 : 25% of maximum speed
F7	Offset between opening and closing leaves	F71	F71	F71 : 2 s
		F72		F72 : 3 s
		F73		F73 : 4 s
		F74		F74 : 5 s
		F75		F75 : 6 s
		F76		F76 : 7 s
		F77		F77 : 8 s
		F78		F78 : 9 s
		F79		F79 : 10 s
F8	Semi-automatic or automatic operating mode and waiting time (in seconds) in automatic mode	F80	F80	F80 : semi-automatic mode
		F81		F81 : Automatic mode and standby time 3s
		F82		F82 : Automatic mode and standby time 10s
		F83		F83 : Automatic mode and waiting time 20s
		F84		F84 : Automatic mode and standby time 40s
		F85		F85 : Automatic mode and standby time 60s
		F86		F86 : Automatic mode and standby time 120s
		F87		F87 : Automatic mode and standby time 180s
		F88		F88 : Automatic mode and standby time 300s
F9	FT1-FT2 Functions	F91	F91	F91 : FT1 external photocell, FT2 internal photocell
		F92		F92 : FT1 external photocell, FT2 safety edge
		F93		F93 : FT1 external photocell, FT2 opening device
		F94		F94 : FT1 gate close photocell, FT2 internal photocell

LED	Description	Options	Default option	Options or values
FR	Selection of pedestrian opening	FRO	FRO	FRO : does not carry out pedestrian opening
		FR I		FR I : open the single leaf with the B button on the emitter
FB	Warning flashing lamp	FBO	FBO	FBO : without pre-warning; the lamp lights up and the door starts to move simultaneously
		FB I		FB I : with 3 second pre-warning; the lamp lights up and the door does not start to move until 3 seconds have passed
FC	FT1 photocells (external)	FCO	FCO	FCO : OFF (disabled)
		FC I		FC I : ON (activated)
FD	FT2 photocells (internal)	FDO	FDO	FDO : OFF (disabled)
		FD I		FD I : ON (activated)
FE	Buzzer	FEO	FEO	FEO : OFF (disabled)
		FE I		FE I : ON (activated)
FF	Reverse impulse for electric lock	FFO	FF I	FFO : OFF (disabled)
		FF I		FF I : ON (activated); the door moves back slightly to help unlock the electric lock
FG	Transmitter button for total opening (opening - stop -closing - stop)	FG I	FG I	FG I : transmitter button A
		FG2		FG2 : transmitter button B
		FG3		FG3 : transmitter button C
		FG4		FG4 : transmitter button D
FH	Transmitter button for pedestrian opening	FHO	FH2	FHO : OFF (does not perform pedestrian opening)
		FH I		FH I : transmitter button A
		FH2		FH2 : transmitter button B
		FH3		FH3 : transmitter button C
FI	Transmitter button to activate/deactivate the automatic closing mode When the flashing lamp and buzzer are active, the button on the transmitter to activate/deactivate automatic closing does not work until the flashing lamp or buzzer stop working.	FI0	FI0	FI0 : ningún botón
		FI I		FI I : transmitter button A
		FI2		FI2 : transmitter button B
		FI3		FI3 : transmitter button C
		FI4		FI4 : transmitter button D

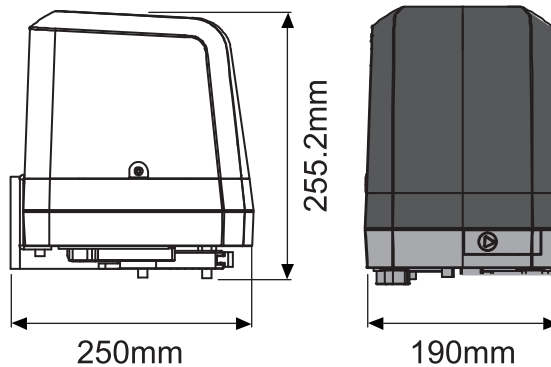
ATTENTION ! The 24Vdc flashing lamp output is not a fixed output, but flashing. Connect a fixed lamp or in fixed operation mode for the correct operation of the flashing lamp.

4. Troubleshooting

Overheating of backup batteries	Check the battery wiring connection.
The door does not move when the button on the transmitter is pressed.	<ol style="list-style-type: none"> 1. Check if LED3 and LED4 are in ON position. 2. Check that the voltage of the batteries is not lower than 3. Check if LED1 is in ON position. 4. Make sure all wire connections are firmly connected to the terminals on the PCB 5. Make sure the fuse is good.
The door moves a little only when the button on the transmitter is pressed	Make sure all encoder connections are firmly connected.
Transmitter control distance is short	Make sure all antenna connections are firmly connected.
Motors run very slow	Check speed setting
The flashing light does not work.	Check whether the wiring connection of the light is correct.
The leaves close instead of open.	Change the connection of the polarity of the positive(+) and negative(-) terminals of the motors.
Leaves stop suddenly during operation	<ol style="list-style-type: none"> 1. Check if "RESET" socket is active 2. Make sure all motor connections are firmly connected. 3. The GND terminal of the photocells on the board must be short-circuited if there are no photocells installed. 4. Make sure the fuse is good. 5. Make sure all encoder connections are firmly connected
The leaves do not move or only move in one direction	<ol style="list-style-type: none"> 1. Check if "RESET" socket is active 2. Make sure all motor connections are firmly connected. 3. The GND terminal of the photocells on the board must be short-circuited if there are no photocells installed. 4. Make sure the fuse is good.
M1 gate closes and M2 stops, the flashing light flashes rapidly for five seconds.	Cut off AC input power and battery output. Release gate M1 and M2 manually, then open gate M1 all the way and close gate M2 all the way by hand. Next, restore power to the unit by connecting the AC and battery terminals.
The motors don't move	Check if the fuse is blown.

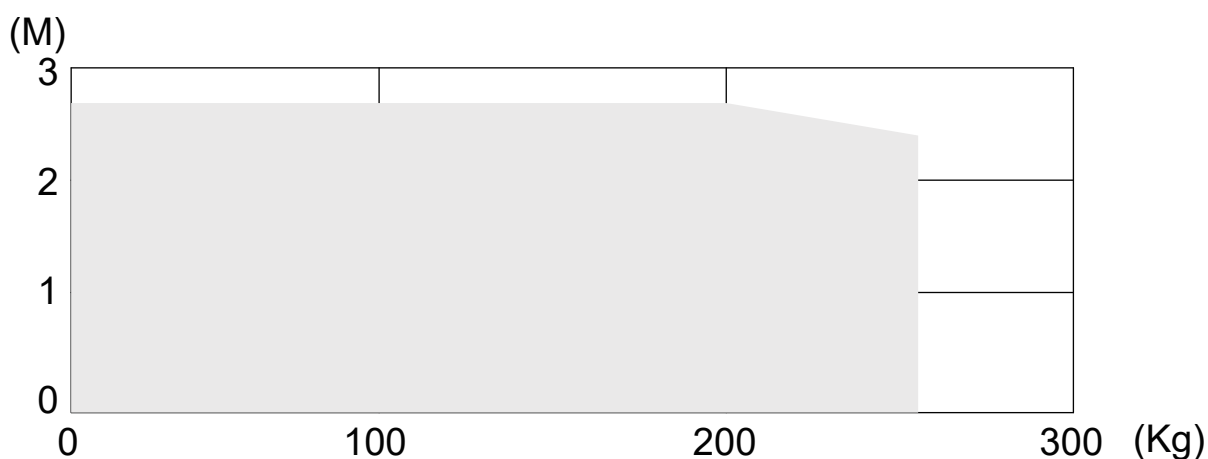
5. Technical characteristics

5.1 Dimension



5.2 Technical Characteristics

Model	PY2524EC (with control)+ PY2524C (without control)
Motor	24Vdc motor
Gear type	Electromechanical worm gear
Nominal thrust	2500N
Maximum Gate Weight	250 kg per leaf
Maximum Gate Length	2.5 meters per leaf
Operating Temperature	-20°C~+50°C
Dimension	256 x 187 x 267mm
Weight	6 kg



Model	SPY01
Main power supply	230Vac (PY2524EC) / 110Vac (PY2524ECM), 50Hz/60Hz
Back-up battery (Opt.)	2pcs of batteries for emergency operation, 1.3A.h. each
Receiver board	433.92MHz; 200 transmitters memory
Installation	Built-in PCBA
Operating Temperature	-20°C~+50°C
Dimension	275mm x 195mm x 102mm

6. Maintenance

Conduct the following operations at least every 6 months. If you are a high intensity user, please shorten the period in between.

Disconnect the power supply:

- (1) Clean and lubricate the screws, the pins, and the hinge with grease.
- (2) Check the fastening points are properly tightened.
- (3) Maintain the wire connection are in good condition.

Connect the power supply:

- (1) Check the power adjustment.
- (2) Check the function of the manual release.
- (3) Check the function of photocells or other safety devices.

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ARTICULATED ARM OPENERS - INSTALLATION MANUAL

34100P-124-22-A