AUTOGLIDE
INNOVATIONS UNLIMITED

Automatic Gate Opening System

USER MANUAL

› SWING GATE OPENER › SLIDING GATE OPENER

› UNDERGROUND GATE OPENER




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INDEX

1. Warning.

2. Installation.

2.1 Standard Installation Demonstration.
2.2 Description of Device.
2.3 Dimension of Device.
2.4 Installation of Motor Gear and Gear Rack.
2.5 Checking for Installation.
2.6 Emergency Release.

3. Setup and Function Setting.

3.1 Wire Connection.
3.2 Transmitter Memorization and Erasing Process.
3.3 System Learning, Reset Process and LED Display.
3.4 Programmable Function Setting.
3.5 Testing and Checking.
3.6 Recognition of LED.

4. Technical Characteristics.

4.1 Technical Data Sheet of Series.
4.2 Photocell Data Sheet.
4.3 Transmitter Data Sheet.
4.4 Flashing Light Data Sheet.
4.5 External Receiver Box Data Sheet.

5. Additional Information

5.1 Wire Connection of Photocell (Safety Beam).

Warnings

Please read this instruction manual carefully before the installation of gate-automated system.

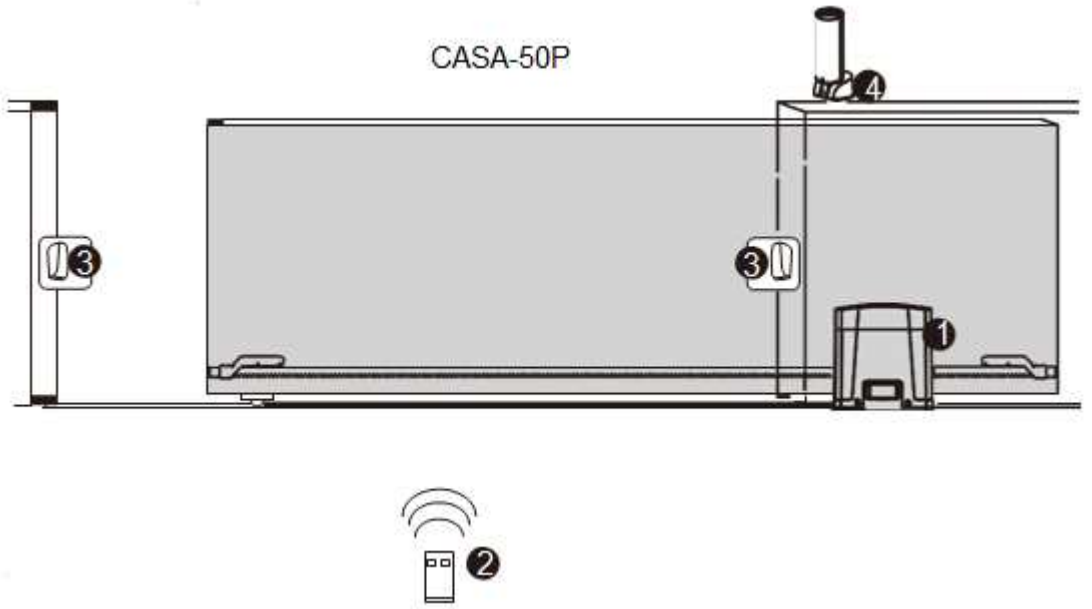
This manual is exclusively for qualified installation personnel. **Autoglide** is not responsible for improper installation and failure to comply with local electrical and building regulations.

Keep all the components of **CASA-50P** system and this manual for further consultation

- Be aware of the hazards that may exist in the procedures of installation and operation of the gate-automated system. Besides, the installation must be carried out in conformity with local standards and regulations
- If the system is correctly installed and used following all the standards and regulations, it will ensure a high degree of safety
- Make sure that the gates works properly before installing the gate-automated system and confirm the gates are appropriate for the application.
- Do not let children operate or play with the gate-automated system.
- Do not cross the path of the gate-automated system when operating.
- Please keep all the control devices and any other pulse generator away from children to avoid the gate-automated system being activated accidentally.
- Do not make any modifications to any components except that it is mentioned in this manual.
- Do not try to manually open or close the gates before you release the gear motor.
- If there is a failure that cannot be solved and is not mentioned in this manual, please contact qualified installation personnel.
- Do not use the gate-automated system before all the procedures and instructions have been carried out and thoroughly read.
- Test the gate-automated system weekly and have qualified installation personnel to check and maintain the system at least every 6-month.
- Install warning signs (if necessary) on the both sides of the gate to warn the people in the area of potential hazards.

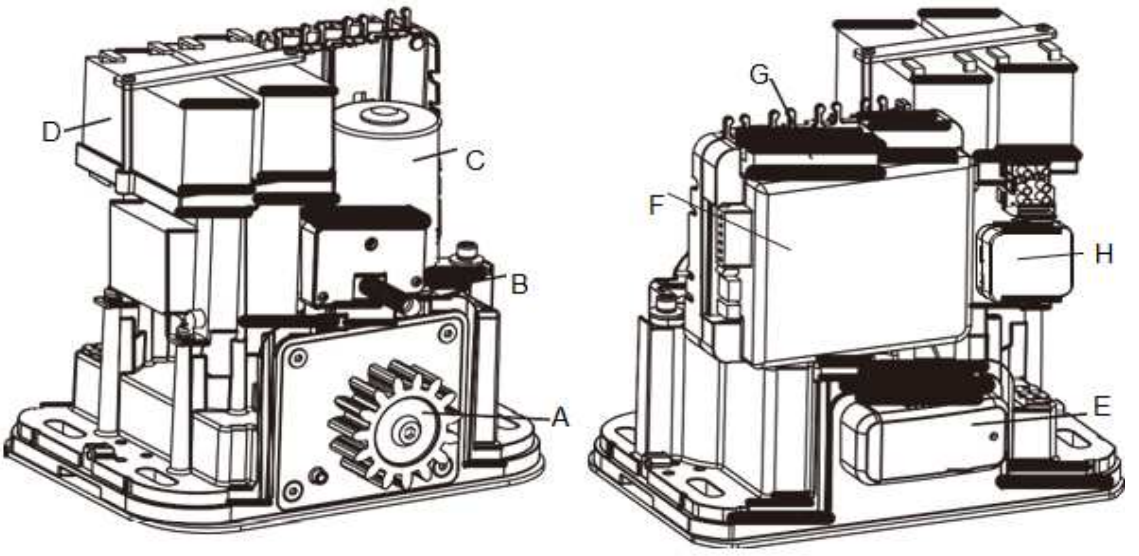
2. Installation

2.1 Standard Installation Demonstration



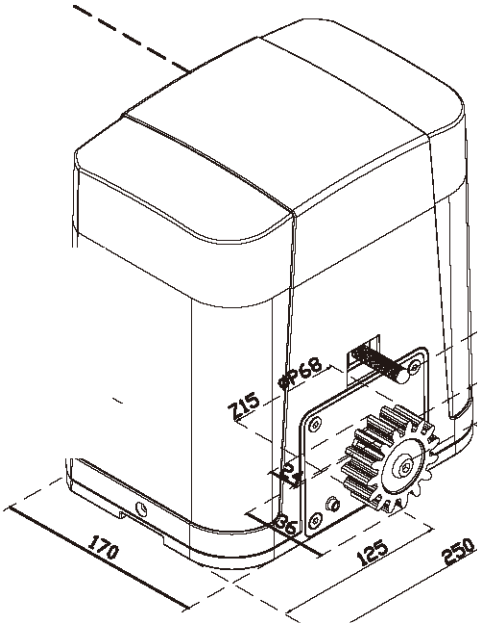
1. 24V DC sliding motor, **2**.Transmitter, **3**. Safety photo sensor, **4**. Flashing light

2.2 Description of Device

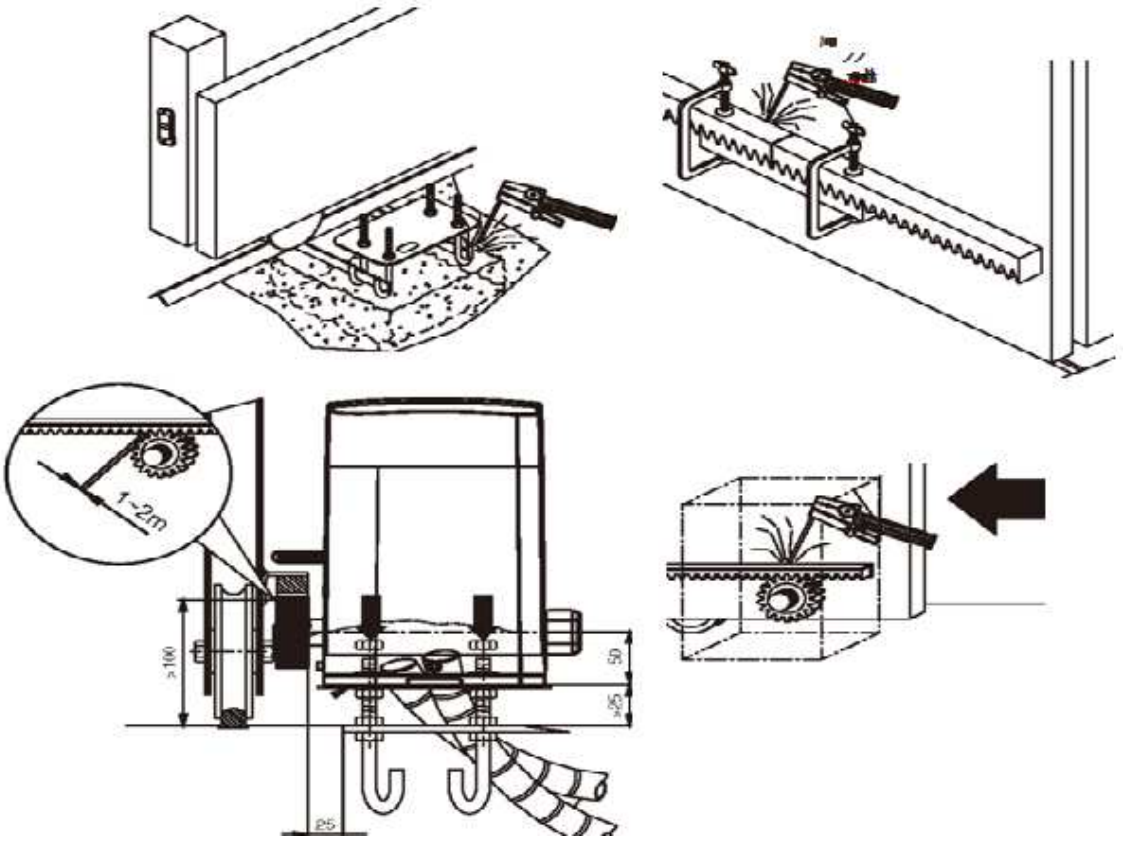


a. Operation gear, **b**. Limit switch device, **c**. 24Vdc motor, **d**. Back-up batteries (Optional)
e. Release device, **f**. Control panel, **g**. Terminals of devices, **h**. Green Box (Optional)

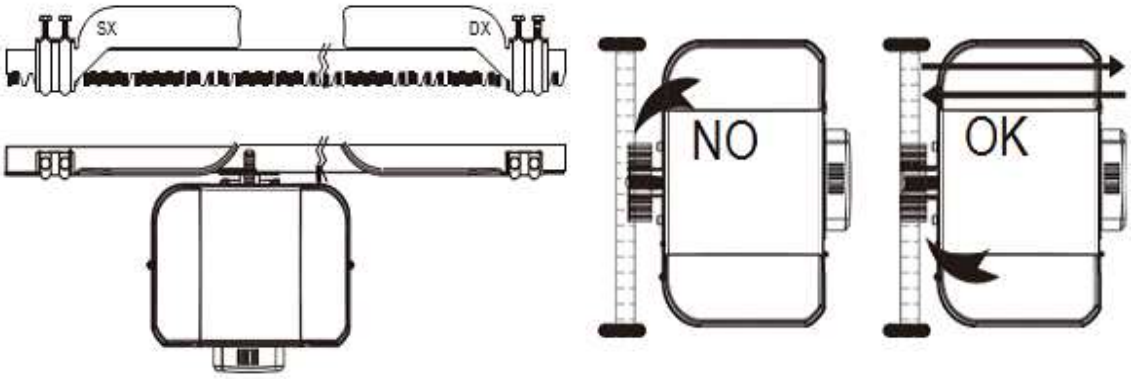
2.3 Dimension of Device.



2.4 Installation of Gear Motor and Gear Rack.



2.5 Checking for Installation



2.6 Emergency Release

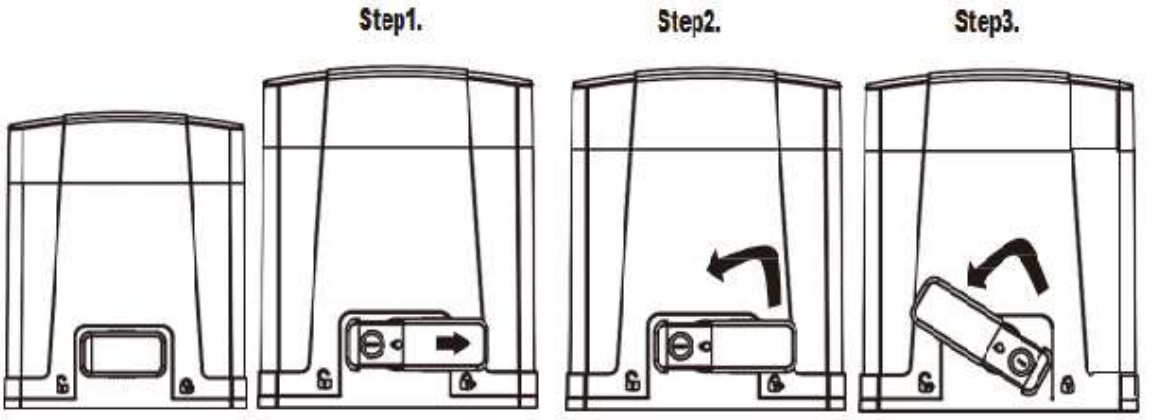
In the case of power failure for emergency release of the motor, please follow the procedure as below:

Step1. Push the lid of release chamber and move rightward

Step2. Insert the key and turn counterclockwise to unlock the device.

Step3. Turn counter-clockwise of the bar to release the motor.

To restore the automation, simply reverse the above procedure.

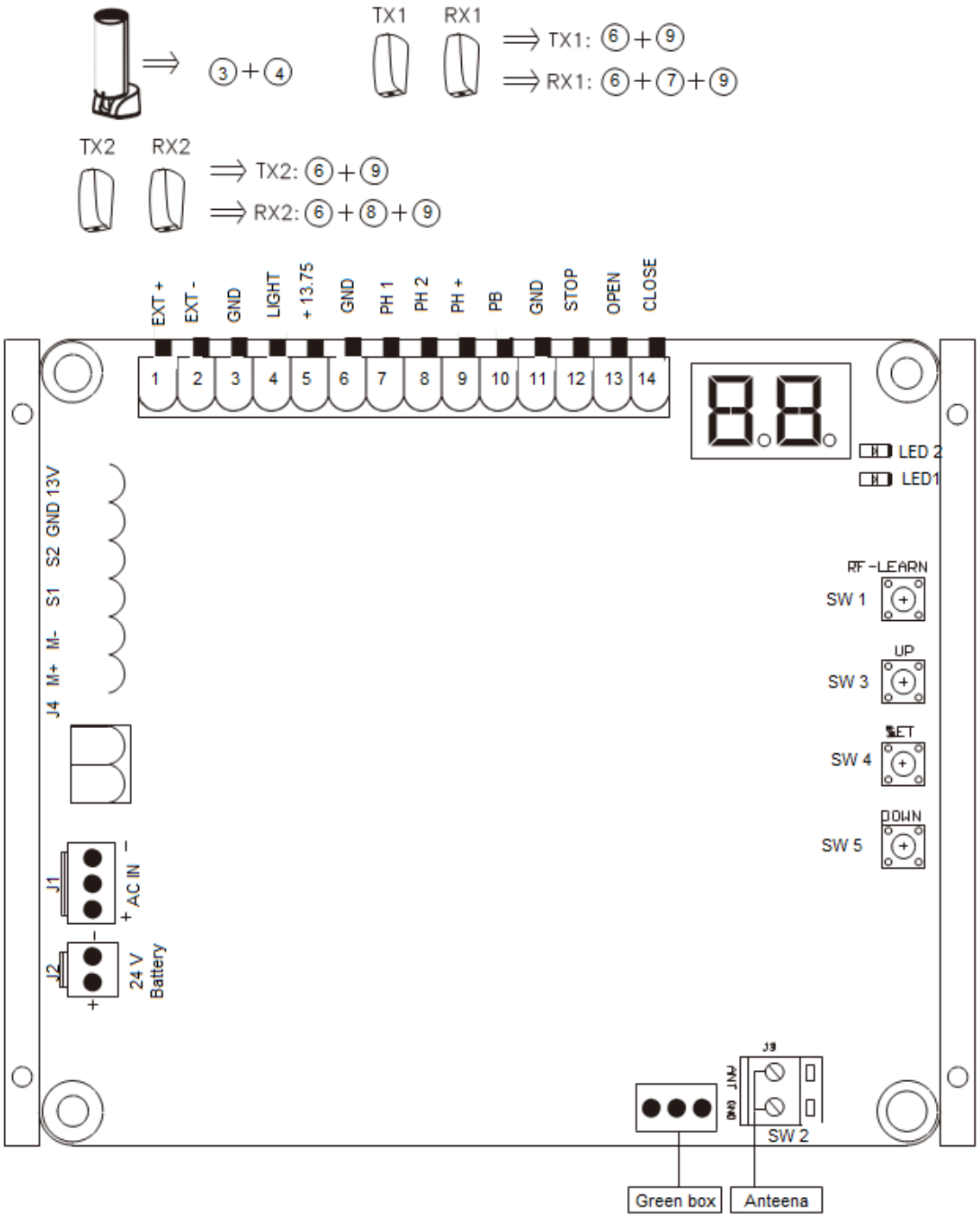


3. Setup and Function Setting.

3.1. 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

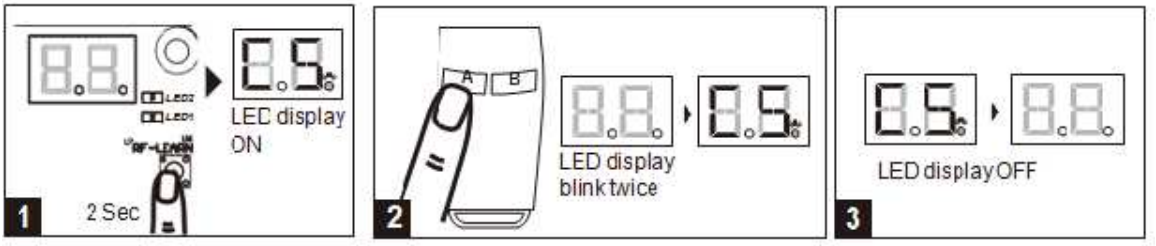


Push Button: 10-11

3.2 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.



3.3 System Learning, Reset Process, and LED Display.

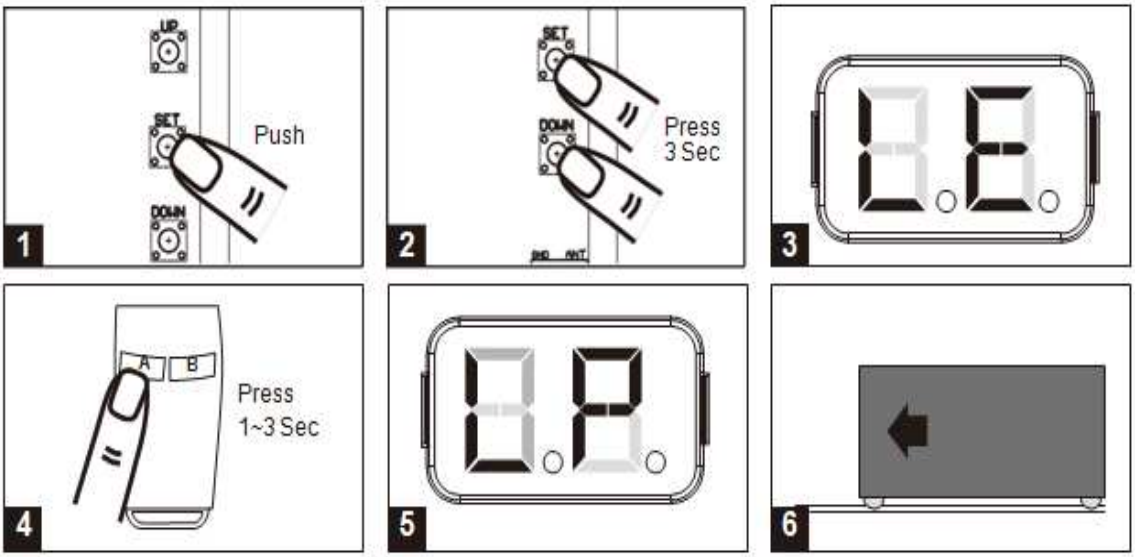
! CAUTION: Before proceeding to system learning, the transmitter memorizing process has to be completed.

(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**

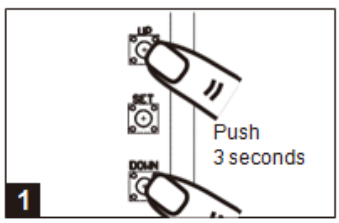
Step2: Press left button (A) on time, the LED display should show “LP” **4 , 5**

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”



LED Display	Programmable Functions	LED Display	Programmable Functions
-L	“-L”: The system learning is not done.	LE	“LE”: Enter learning mode and then wait for learning instructions.
OP	“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.	LP	“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	“CL”: Reset Factory Setting.

3.4 Programmable Function Settings

LED DISPLAY	DEFINITION	FUNCTION	VALUE	DESCRIPTION
1	Options of Gate Opening direction	1-0	Clockwise Opening	**1**.The function can adjust the direction of gate opening **2.**The factory setting is1-1
		1-1	Counter clockwise Opening	
2	Automatic closing	2-0	No automatic closing	**1**. This function can cause the gate to close automatically after the paused time **2.** The factory setting is 2-2. 15 seconds as the pause time
		2-1	5 seconds	
		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	Pleas the function setting after 8	**1**. Please do the function setting after H & J **2**. The factory setting is 3-1
		3-2		
		3-3		

LED DISPLAY	DEFINITION	FUNCTION	VALUE	DESCRIPTION
4	Motor speed(% full speed)	4-1	50% learning speed	**1**. The function can adjust the running speed of motor **2**. The factory setting is (4-4)
		4-2	70% learning speed	
		4-3	85% learning speed	
		4-4	100% learning speed	
5	The deceleration setting for gate moving	5-1	75% of full distance	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	The factory setting is (6-4)
		6-2	60	
		6-3	40	
		6-4	25	
		6-5	10	
7	Over current settings	7-1	2A	**1**. The function can adjust the running force of motor to be compatible with the gate weight **2**. The factory setting is (7-5)
		7-2	3A	
		7-3	4A	
		7-4	5A	
		7-5	6A	
		7-6	7A	
		7-7	8A	
		7-8	10A	
8	Open partially (pedestrian mode)	8-1	3 seconds	1. The function can adjust the time of opening partially. 2. The factory settings is (8-2)
		8-2	6 seconds	
		8-3	9 seconds	
		8-4	12 seconds	
		8-5	15 seconds	
		8-6	18 seconds	
9	Pre-flashing	9-0	The flashing light blinks when the gate starts to move	The factory setting is (9-1)
		9-1	The flashing light blinks 3 seconds before the gate starts to move	

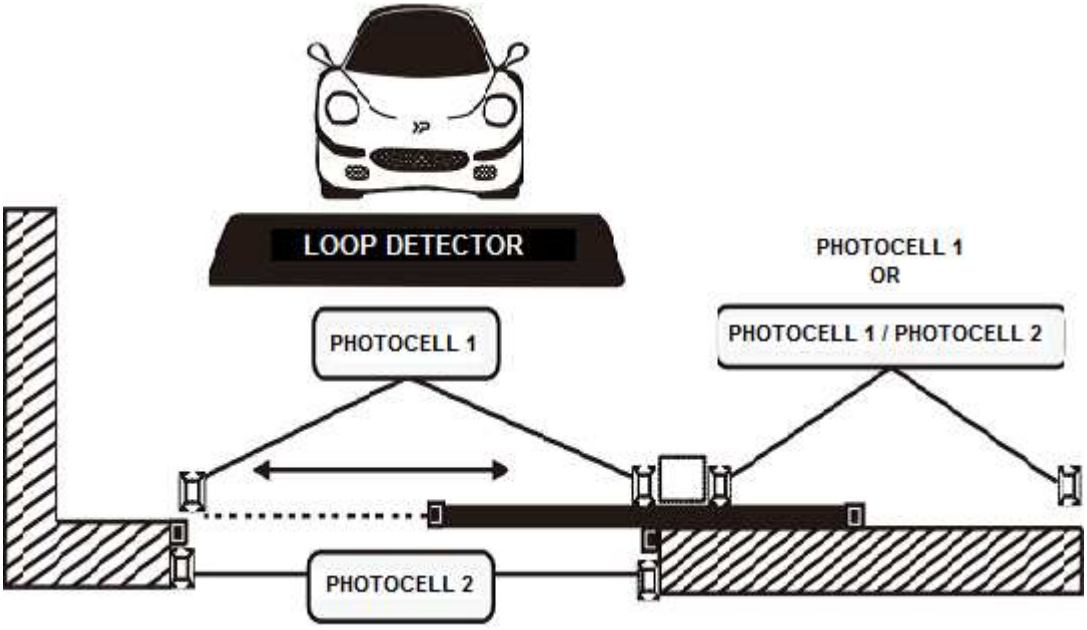
LED DISPLAY	DEFINITION	FUNCTION	VALUE	DESCRIPTION
A	Over current reverse setting	A-0	Stop	**1.**The factory setting is (A-3) **2**.The reverse function only operate 3 times and then stop **3**. If the gate reverses, the auto close function will be cancelled.
		A-1	Reverse 1 second	
		A-2	Reverse 3 second	
		A-3	Reverse to the end	
C	Open-stop-close-stop function key	C-1	A key	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	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	The factory setting is (F-2)
		F-1	A key	
		F-2	B key	
		F-3	C key	
		F-4	D key	
H	Photocell 1 function	H-0	Close	The factory setting is (H-0)
		H-1	Open	
J	Photocell 2 function	J-0	Close	The factory setting is (J-0)
		J-1	Open	
L	Photocell test function	L-0	Close	**1**.The factory setting is (L-0) **2**.if the function open
		L-1	Open	
P	Stop connector function	P-1	Close	**1.**The factory setting is (P-1) **2.** St
		P-2	Open	

Logic F3-1	The reactions of the photocells when detecting obstacles		
Gate Status	Photocell 2	Photocell 1	Photocell 1/ Photocell 2
Closed	Stop opening	No effect	Stop opening
Open	No effect	Reloads automatic closing time	
Stop during moving	Stop opening	Reloads automatic closing time	
Closing	No effect	Open	Locks and, on release, reverses to open
Opening	Closes the leaf	No effect	Locks and, on release, continues opening

Logic F3-2	The reactions of the safety edge/ photocell when detecting obstacles	
Gate Status	**Safety Edge**	**Photocell 1**
Closed	Stop opening	No effect
Open	Reloads automatic closing time	
Stop during moving	Stop opening/ closing	Reloads automatic closing time
Closing	Reverses to open for 2 seconds	Open
Opening	Reverses to close for 2 seconds	No effect

Logic F3-3	The reactions of the loop detector/ photocell when detecting obstacles	
Gate Status	**Loop Detector**	**Photocell 1**
Closed	Open	No effect
Open	Reloads automatic closing time	
Stop during moving	Open	Reloads automatic closing time
Closing	Open	Open
Opening	Open	No effect

The position of safety devices:



3.5 Testing and checking

Make sure the notices included in 1.1 General safety precaution "WARNINGS" has been carefully observed.

1. Release the gear motor with the proper release key.
2. Make sure the gate can be moved manually during opening and closing phases with a force of max 390N (40 kg approx.)
3. Lock the gear motor.
4. 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.
5. Check the devices one by one (photocells, flashing light, key selector, etc.) and confirm the control unit recognizes each device.

3.6 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.

4. Technical Characteristics

MOTOR	PL500E
Gear type	Worm Gear
Peak thrust	5500N
Nominal thrust	5000N
Engine RPM	3800RPM
Absorbed Power	144W
Power supply	24 Vdc
Nominal input power	6A
Maximum gate weight	Up to 500 KG
Maximum gate length	6M
Maximum operating current	5.5A for Maximum 10 secs
Operating Temperature	-20oC~+50oC
Dimension L x W x H mm.	250*170*275mm
Weight	8kg
Speed	27.10 cm/s

4.1 Photocell Data Sheet

Detection type	Through beam
Operating distance	25 meters
Response time	100ms
Input voltage	AC/DC 12~24V
Operating Temperature	-20℃~+60℃
Protection class	IP54
Dimension	96mm * 45mm * 43mm

4.2 Transmitter Data Sheet

Application	Radio transmitter
Frequency	433.92Mhz
Coding	Rolling code
Buttons	2, for single-gate or dual-gate operation
Power Supply	3V with one CR2032 button type lithium battery
Operating Temperature	-20□~+50□
Dimension	71.5mm * 33mm * 14mm

4.3 Flashing Light Data Sheet

Application	For outdoor use
Installation	Wall mounted vertically
Operating Temperature	-20□~+50□
Dimension	85mm * 60.5mm * 40.5mm

5. Photocell installation guide

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.

Detection Method	Through Beam
Sensing Range	25M
Input Voltage	AC/DC 12~24V
Response Time	100MS
Emitting Element	IR LED
Operation Indicator	Red LED (RX): ON (When Beam is Broken)Green(TX):ON
Dimensions	96*45*43mm
Output Method	Relay Output
Current Consumption Max	TX: 35MA/Rx: 38MA (When beam aligned properly); TX: 35MA/ Rx: 20MA (When beam is broken)
Water Proof	IP54

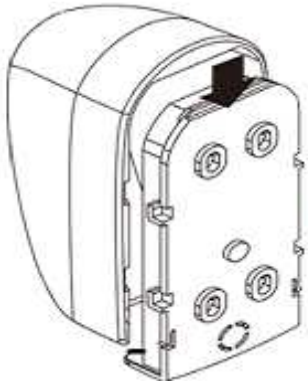


Figure 4(1)

Installation

Wire Connection of PH-2 Photocells See **figure 4(2)**

TX: Connect terminals 1 and 2 on the transmitter with the terminals Ph+ and GND on the P600B PCB.

RX: Connect terminals 1, 2 and 4 on the receiver with the terminals Ph+, GND and Ph1 on the P600B PCB. And use an extra wire to connect terminals 2 and 5 on the receiver as a bridge.

Figure 4(2)

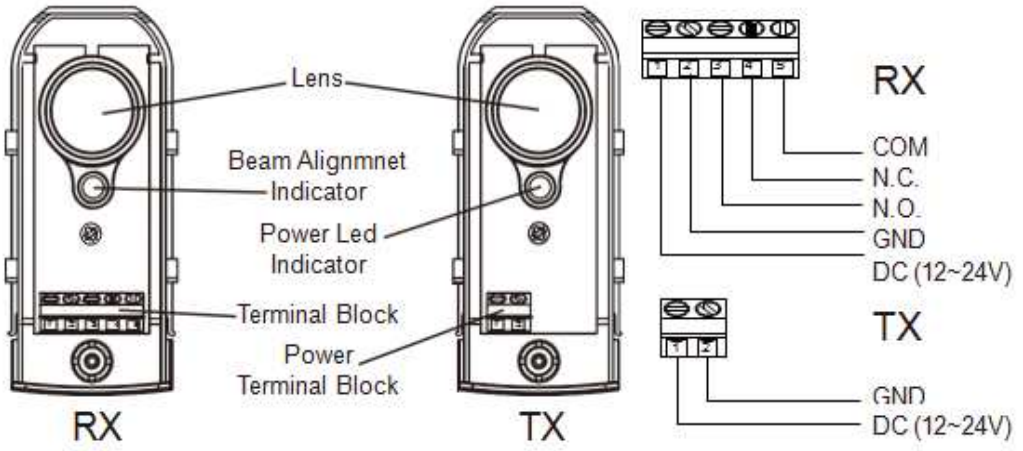
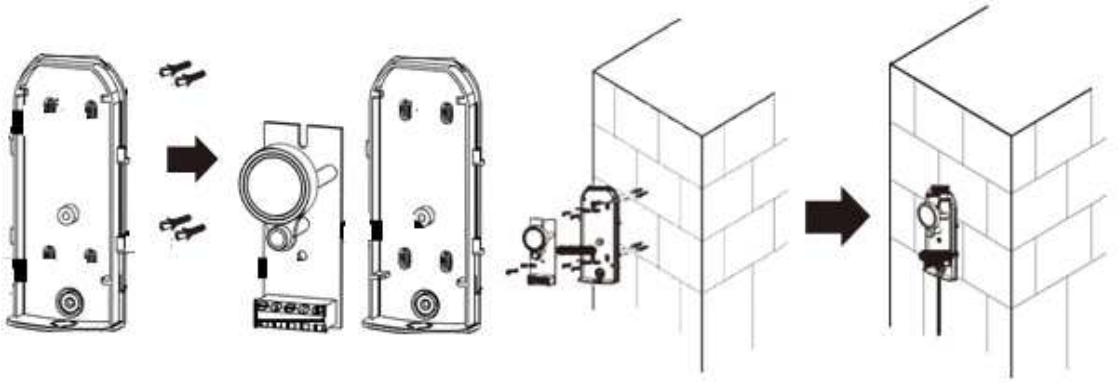


Figure 4(3)



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