AUTOGLIDE
INNOVATIONS UNLIMITED

Automatic Gate Opening System

USER MANUAL

› SWING GATE OPENER › SLIDING GATE OPENER

› UNDERGROUND GATE OPENER




www.autoglideglobal.com

INDEX

1. Features

1. Manufacturer has patent for manual release mechanism. Use this feature in case of Power failure, during installation or maintenance
2. Easy Self-learning feature (Page 9)
3. Commercial power & solar energy power source can be connected at the same time
4. Over current immediate stop function (A0~ A1/B0~B1)
5. Adjustable time of fast speed & slow speed (A2~A5/B2~B5)
6. Adjustment of force during fast speed & slow speed (A6~A7/B6~B7)
7. Auto close function with adjustable closing time delay
8. Optional electric lock connection facility
9. Single or dual swing
10. Use Max up to 50 sets of remote controllers
11. Dc 24v backup battery (optional)
12. Flashing Light AC 220V/110V & DC 24V (optional)
13. Optional Device: DC 24V gate lock, photocell, extensional receiver box

2. Technical Specifications

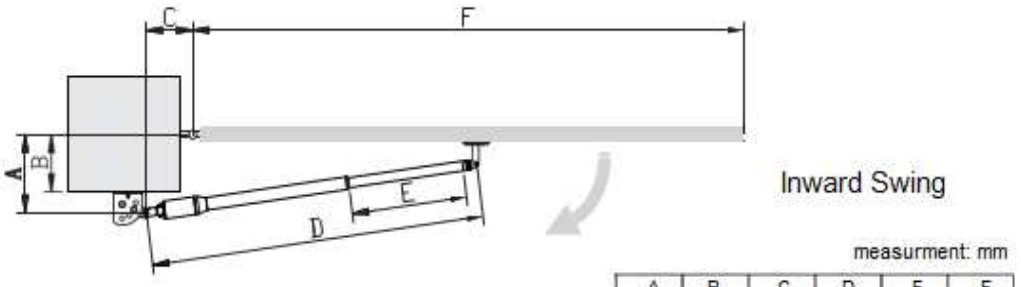
Electrical

Operating voltage	DC 24V
Electronic Controller	Microcontroller Based
Safety Detection	Over current detection
Safety Barrier	Infrared Beam Sensor(Optional)
IP Rating	IP66

Mechanical

Swing Type	Magro-35A
Max. piston stroke	450mm
Max.length of motor	1255 mm
Max.leaf's weight	350kg/leaf
Suitable Leaf's Length	2 to 3.5 meter/leaf
Frame Housing	stainless steel/aluminum alloy
Driving Method	Screw driven piston type
Opening degree	0 to 110 degree
90 degree rotation time	8 to 12 seconds
Temperature	-25 degree C to + 55 degree C

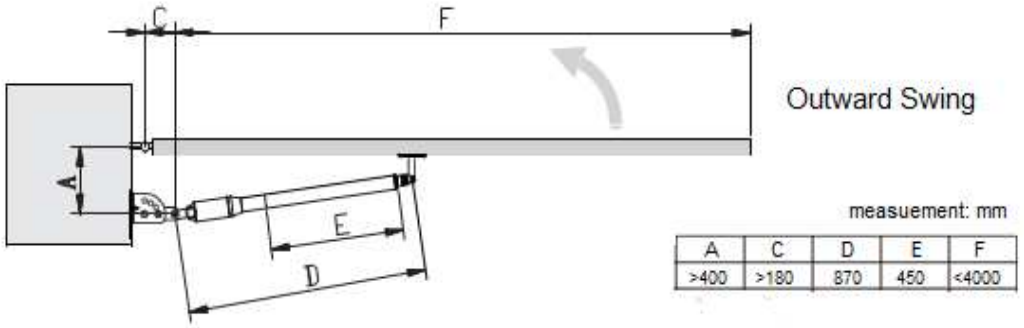
3. Mechanical Installation



Inward Swing

measurment: mm

A	B	C	D	E	F
< 275	<200	<180	1320	450	<4000

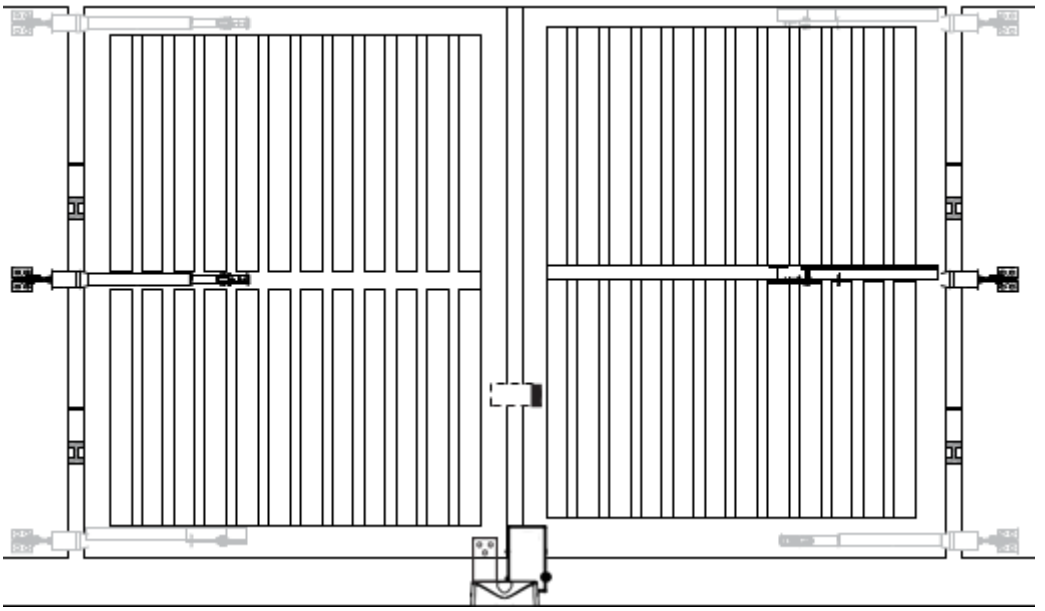


Outward Swing

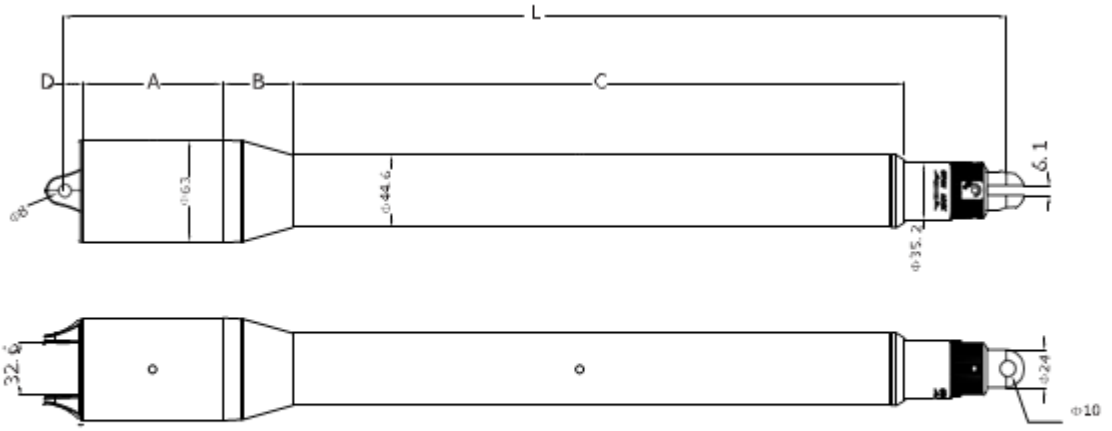
measuement: mm

A	C	D	E	F
>400	>180	870	450	<4000

Diagram Installation



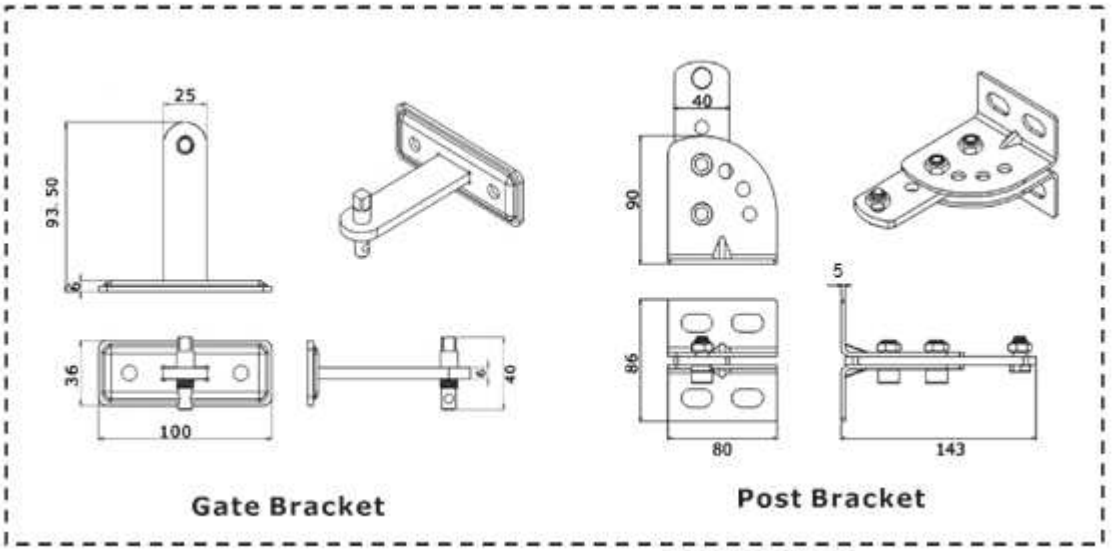
Opener Dimension



Measurement: mm

Piston Stroke	A	B	C	D	L
200	135	45	275	12.5	530/730
350	135	45	425	12.5	680/1030
450	135	45	550	12.5	805/1255

Bracket Dimension



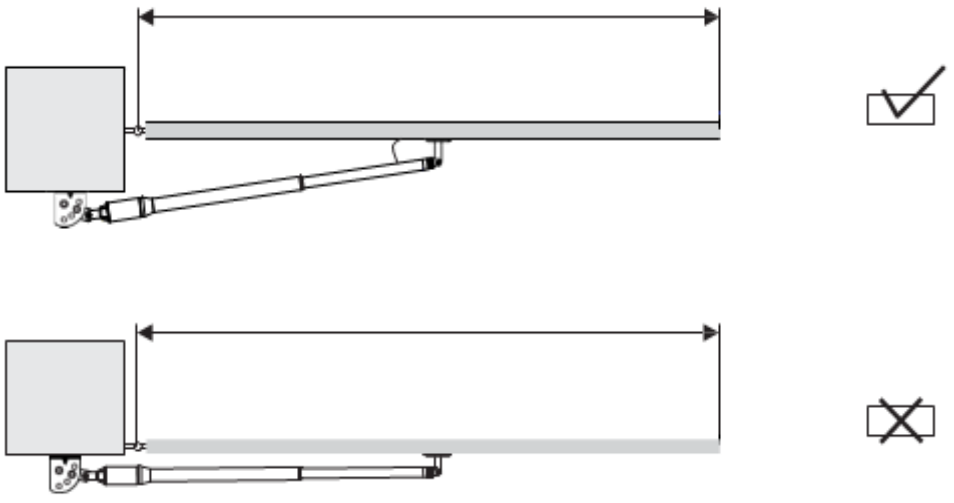
Measurement: mm

Installation Precautions

1. Please make sure there is some angle between the position of the gate bracket and the post bracket and these two brackets should not be in parallel position.

2. Make sure the position extend have at least 5 mm allowance when the gate in Opened / Closed position.

3. There are two small holes in the swing arm motor,please make sure this side face down when do installation for water proof purpose.



4. Manual Release

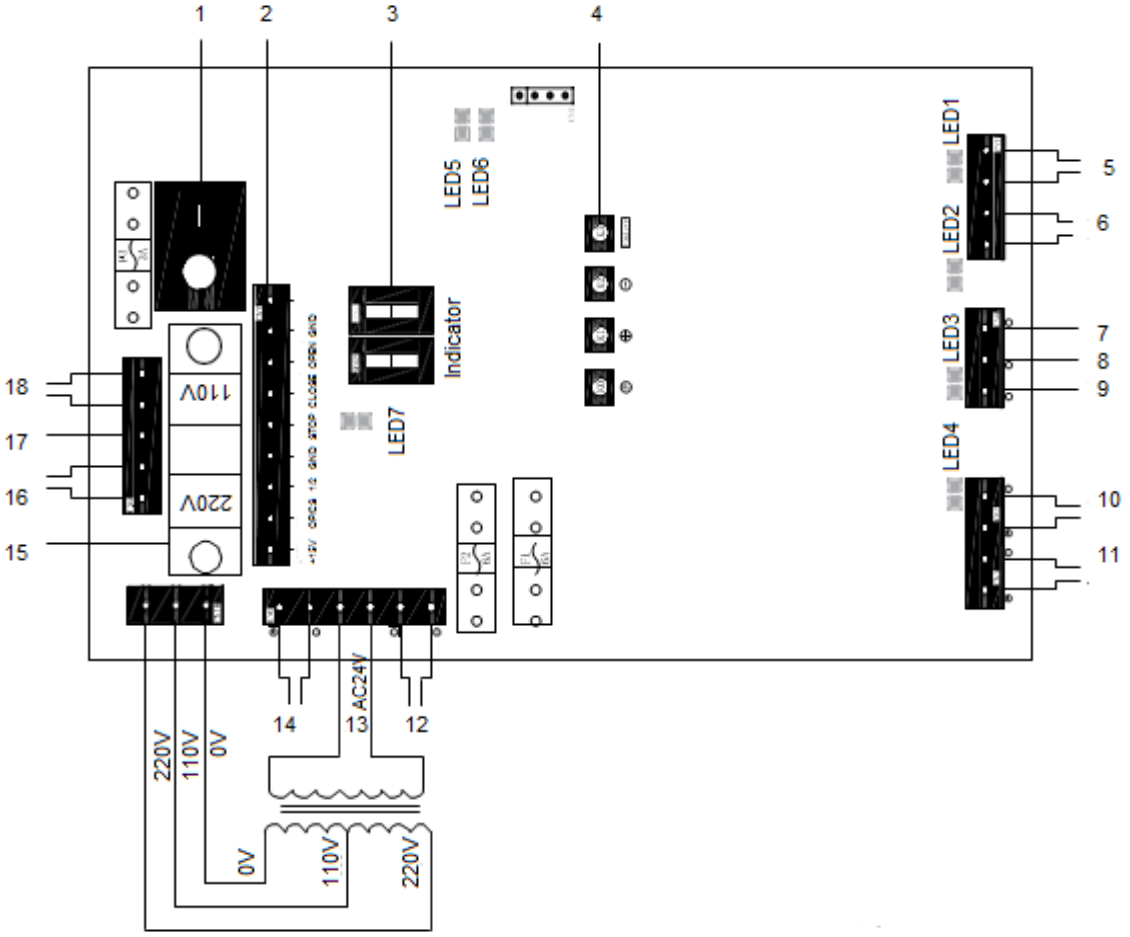
In case of power failure, the operator can be dis engage from the gate, follow the directions below to release and rotate the operator to enable the manual release function.

1. Using Allen Key (Special Key) to unlock the manual release function.
2. Toward te “open” direction to rotate 90 degree or ¼ turn.
3. Now the manual release function is enabled when maintaining or no power.
4. After maintaining, rotate 90 degree back to the locked position, then use special key to lock the moving part.

www.autoglideglobal.com

Control Box Setting

1. Wiring

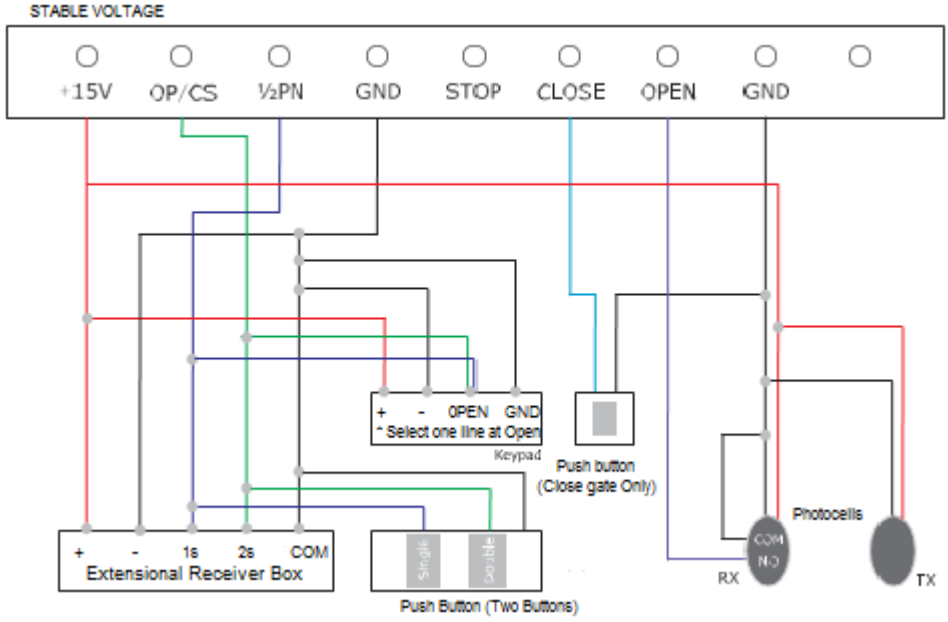


1. Power Switch. **2.** Accessories and command device's terminals. **3.** Indicator. **4.** Function Adjustment Button. **5.** Motor A (With Electronic Lock). **6.** Motor B **7.** Output DC 24V (Unstable Voltage). **8.** OV "-" output **9.** Output DC 15V stable voltage (load current can't be over 500 MA) **10.** DC 24V Electric Lock. **11.** DC 24V Flashing Light * * photocell (see page 1 6).. **12.** Back up Battery (12 v 9 ah x 2 in series) **13.** Connector for adaptor. **14.** Solar Panel **15.** Switch (AC 220V & 110V). **16.** Power Supply (AC220/110V). **17.** Earthed. **18.** AC Flashing Light

LED DIAGRAM

Power on LED 5 will blink. LED 1 Motor A Open LED. LED 2 Motor A close LED. LED 3 Motor B open LED. LED 4 Motor B close LED. LED 5 Power LED. LED 6 Received signall for remote control LED. LED 7 Pushbutton LED

2. Wiring for Optional Accessories



Item	+15V	OP/CS	1/2PN	GND	STOP	CLOSE	OPEN	GND	Remarks
Description	**Stable voltage output**	**Dual Open**	**Single Open**	**"-" & "Concentration line"**	**Stop**	**Close**	**Normally opening signal**	**"-" & "Concentration line"**	
Extensional Receiver Box (single gate)	●		●	●●					
Extensional Receiver Box (dual gate)	●	●	●	●●					
Keypad (single open)	●		●	●●					
Keypad (dual open)	●	●		●●					
Push button (two buttons)		●	●	●					
Push button (one button)						●		●	close gate only
			●					●	single open
		●						●	dual open
Photocell (sender)	●							●	
Photocell (receiver)	●						●	●●	

How to Connect the Motors

Motor A:

Connect the two wires from the motor to the " Motor A" terminals marked on the control board. If you find the motor is operating in the wrong direction, reverse the motor wires on the circuit board.

Motor B:

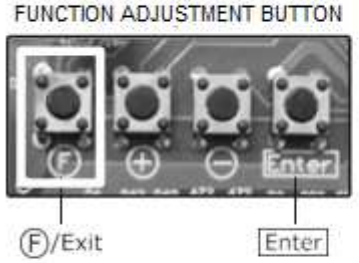
Repeat the above steps except connect to Motor B.

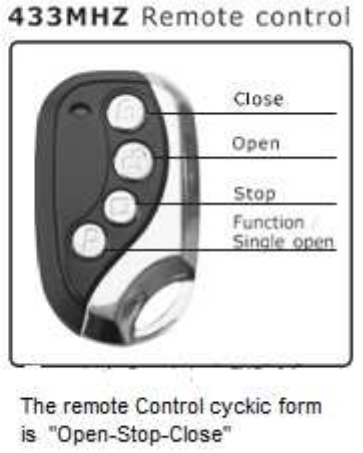
3. Remote Control Setting

3.1 Activating the Remote Control

Press and hold the "F" button for approximately one seconds (With out pressing the button on the remote control) or until the indicator displays "FF" and keeps flashing, then release the "F" button.

Press any button on the remote control, if the display stops flashing "FF", it means the remote control is programmed to the PCB and is valid (50 remote controls can be set at most)





*Verify the remote control is operating by pressing a button on the remote. When press any button on the remote control, the LED 6(on the PCB) will be on.

3.2 Erasing the code

Press and hold "F" button for approximately one seconds (with out pressing the button on the remote control) or until the indicator displays "FF" and keeps flashing, then release the "F" button.

Press and hold the "Enter" button until the display stops flashing "FF" this indicates all remotes have been erased and are invalid.

**pedestrian opening push "p" button to perform single swing opening
(Note: only valid for double swing systems)

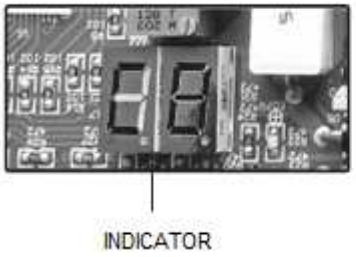
4. Self Learning (Easy and Smart)

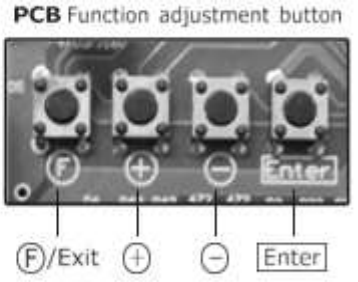
Checking before self-learning

1. Check the wiring of the motors
2. Check the manual release is in the locked position
3. Make sure the gates are at the fully open position.
4. There should be hard stoppers at both fully opened positions and fully closed position.

Self –Learning Setting (motor setting)

1. Press the “F” button on the PCB. If C8 is not on the display, Tap the “+” or “-“ button until it is shown.
2. Hold down the “ Enter” button on the PCB for 3 seconds until the display starts to blink and release the button. This enters self learning mode.
3. Self- learning is finished when C8 is steady on the display. You can now use the remote control.





* do not operate the remote control during the above self-learning process. Press the “F” button to exit the learning mode if you require an emergency stop. To restart the self learning process, start from step 1

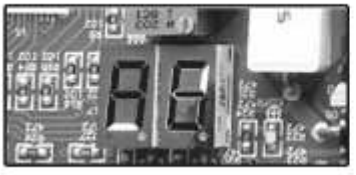
If you find problems with the gate operation in heavy winds or with other obstacles, adjust “MOTOR SETTING” and total timer adjustment manually.

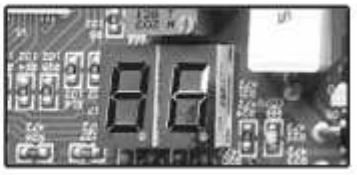
PCB Manual Adjustment

After self-learning process if manual adjustment is required to get optimum parameters, please following below:

If opening or closing does not reach the required positions, you can increase the force during slow speed (A6, B6) by 10 and then repeat the self- learning process.

If the speed is not slowing down at the ends of the cycle, decrease A6 and B6 by about 5 and then repeat the self learning process.





Note:

1. After the above adjustment the opening or closing is still not reaching the designated position, is slower than normal, or does not function, the following reason may be caused:

a. The motor will not wok if the supply voltage is outside operating parameters. Please confirm the input voltage is within + 10% of 24 volts
b. Advise to choose above 2.5 square mm with copper wire. It will be better to increase the wire diameter if long distance wiring.
c. Adjust the motor installed position.

2. In case if you have changed the parameters, make sure to restore factory default settings before proceed with self-learning procedure.(set D2)

3. Function Adjustment

(Follow the steps below)

Step 1 : press “f” button ,the indicator will show “c8”
Step 2 : press “+” button, it’ll show in turn

“C9,D0,D1,D2,A1,A2,A3,A4,A5,A6,A7,C0,C1,C2,C3,C4,C5”, PRESS “-“ Button, it’ll show reversely

Step 3 : press “F” button after choose the item, the indicator will show numbers
Step 4 : press “+” or “_” button to select levels
Step 5 : press “Enter” button to confirm
Step 6 : press “F” button for return to previous configuration menu.

Item	Name / Explanation	Setting	Default	REM
A0/B0	Intermediate Stop Function with slow speed. This refers to the sensitivity of gates when meeting obstacles during slow speed operation.	0~99	20	Lower setting means the gates will be more sensitive to stopping.
A1/B1	Intermediate Stop Function with high speed. This refers to the sensitivity of gates when meeting obstacles during high speed operation.	0~99	50	Higher setting means the gates are not as sensitive to stopping on hitting an obstacle.
A2/B2	Time of opening - slow speed. Low speed operating time during gate opening.	0~9.9s	9s	This is the time it takes to Open/Close the gate for the Slow Speed part of the sequence.
A4/B4	Time of closing - slow speed. Low speed operating time during gate closing.	0~9.9s	9s	

A3/B3	Time of opening - high speed. High speed operating time during gate opening.	0~99s	10s	This is the time it takes to Open/Close the gate for the Fast Speed part of the sequence.
A5/B5	Time of closing - high speed. High speed operating time during gate closing.	0~99s	10s	
A6/B6	Force of opening and closing - slow speed. Force adjustment for low speed operating during open and close.	0~99	56	This is the force the motor applies on the gates. If the gates are heavy, you will need more force to speed up the opening and closing of the gates. (Note: if the gates can open/close into position, you do not need to adjust the default settings.)
A7/B7	Force of opening and closing - high speed. Force adjustment for high speed operating during open and close.	0~99	99	
	Reverse swing of motor A.			
C0	If you choose "0", the gate system will not have gate lock function or reverse swing operation. If you choose "1", the gate system will have gate lock function but no reverse swing operation. If you choose "2", the gate system will have gate lock function and reverse swing operation.	0~2	2	No need to adjust this if the gate installed has end stoppers.
C1	Electric lock. If you choose "0", the gate system will not have gate lock operation after gate is closed. If you choose "1", the gate system will have gate lock operation after gate is closed.	0~1	1	When activated (Option "1"), the gates can't be pushed open.
C2 C3	Motor delay setting. If you choose "0", only motor A working, motor B do not working If you choose "1", motor B will delay open during opening. If you choose "2", motor B will delay open during opening, motor A will delay start during closing. If you choose "3", motor B and motor A will start working at the same time.	0~3	2	

C3	Time of auto close. if you choose "0", the gate system will not have auto closing function. If you choose "10", it means the gates will automatically close 10 seconds after completing its opening.	0-99s	0	
C4	Time delay for opening, and delay for closing. During opening, motor B will open a little later than motor A During closing, motor A will close a little later than motor B	0.1~99s	2	
C5	Delay activating time for remote control button (for avoiding mis operation) If choose " 0 ", normal operation If choose " 1 ", delay 2 seconds then start the operation If choose "2", first press stop button for 2 seconds, then close /open button to activate the operation	0~2	0	
C8	Battery capacity display Below 30 = battery soon will be run out 99 = fully charged	0~99		
C9	Reversed terminal for maintenance and testing			
D0	PCB Model Number			Display PCB Model & Software version Number
D1	PCB Software Version			
D2	Restore default setting “09” = restore factory settings		0	
C8	Self-learning feature			Press & hold “Enter” button to turn to self-learning mode

*Use this guide to help trouble shoot gates that are not operating properly. You can also set some of the auto open functions and delay functions using this guide.

1. For most of these functions, it’s only necessary to adjust them if the system is not opening or closing as desired.
2. Default settings can be reset directly from the power control box.
3. Please note that the gates open and close in the following manner: slow start, fast swing and slow finish . To adjust each of these speeds, refer to the chart above.

Battery Wiring Instructions

1. Using the wire, connect the connector to the positive(+) terminal of one of the batteries. Connect the other end of the wire to the negative (_) terminal of the OTHER BATTERY.
2. Using the other wire, connect the connector to the positive (+) terminal of the battery. After the batteries are installed, the other end will be connected to the control board.
3. Using another wire, connect it to the negative (-) terminal of the battery. After the batteries are installed, the other end will be connected to the Control board.

Note: make sure the bare ends of the wires do not touch together or do not touch the same metal surface at the same time.

4. Connect the other end of the wire that is already connected to the positive terminal(+) of the battery to the positive (+) terminal in the control board for the battery.
5. Connect the other end of the wire that is already connected to the negative (-) terminal of the battery to the negative (-) terminal in the control board for the battery (terminal-12).

Battery Maintenance

Before use the batteries, please make sure that they are fully charged, it will lead to wrong operation if it is not fully charged, and need to check or replace the batteries by qualified person on a regular time basis.

***Recommend to use 2pcs of 12v 9Ah battery connection in series**

Flashing light installation