
Sliding Gate Operator User's Manual

FAS-SLIDECH300BBUP

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1. Products introduction

please read the instructions carefully before proceeding.

The operator contains Extra battery, transformer, control board and radio control.

In case of power of failure, the operator is powered by a 24Vdc, 1.3Ah, extra battery.

Intelligent charging system supplied.

MCU is supplied to control the gate operator.

Keypad / single button interface.

Photo beam safety beam interface.

User can select Auto-close feature

Soft start & soft stop.

Manual key release design for emergency purposes.

Gate operator has auto-reverse function, and the reverse power can change by user.

2. Important safety information

Carefully read and follow all safety precaution and warnings before attempting to install and use this automatic gate operator.

Make sure the Power supply(AC110V) of operator is suitable for the power supply in your area.

3. Main technical parameters

<i>Unit Model</i>	<i>FAS-SLIDECH300BBUP</i>
<i>Power Supply</i>	<i>110VAC</i>
<i>Maximum gate weight</i>	<i>300Kg</i>
<i>Maximum gate width</i>	<i>8m</i>
<i>Motor</i>	<i>24VDC 100W</i>
<i>Output torque</i>	<i>Max. 8N·m</i>
<i>Work duty</i>	<i>S₂ 30min</i>
<i>Limit switch</i>	<i>Electronic Limit</i>
<i>Gate Move speed</i>	<i>12m/min</i>
<i>Remote control range</i>	<i>≥30 meters</i>
<i>extra remote control</i>	<i>20</i>
<i>Frequency</i>	<i>433.92 MHz</i>
<i>Noise</i>	<i>≤60 dB</i>
<i>Working temperature</i>	<i>-20°C ~ +50°C</i>
<i>Extra Battery</i>	<i>24V 1.3 Ah</i>

4. Mechanical Installation

The FAS-SLIDECH300BBUP will handle gate weighting up to 300kg and up to 8m if the proper installation procedures have been followed.

The FAS-SLIDECH300BBUP gate operator operates by forcing a drive chain by a drive chain wheel. The entire configuration is shown in the diagram below. The gate operator must be installed on the inside of the gate.

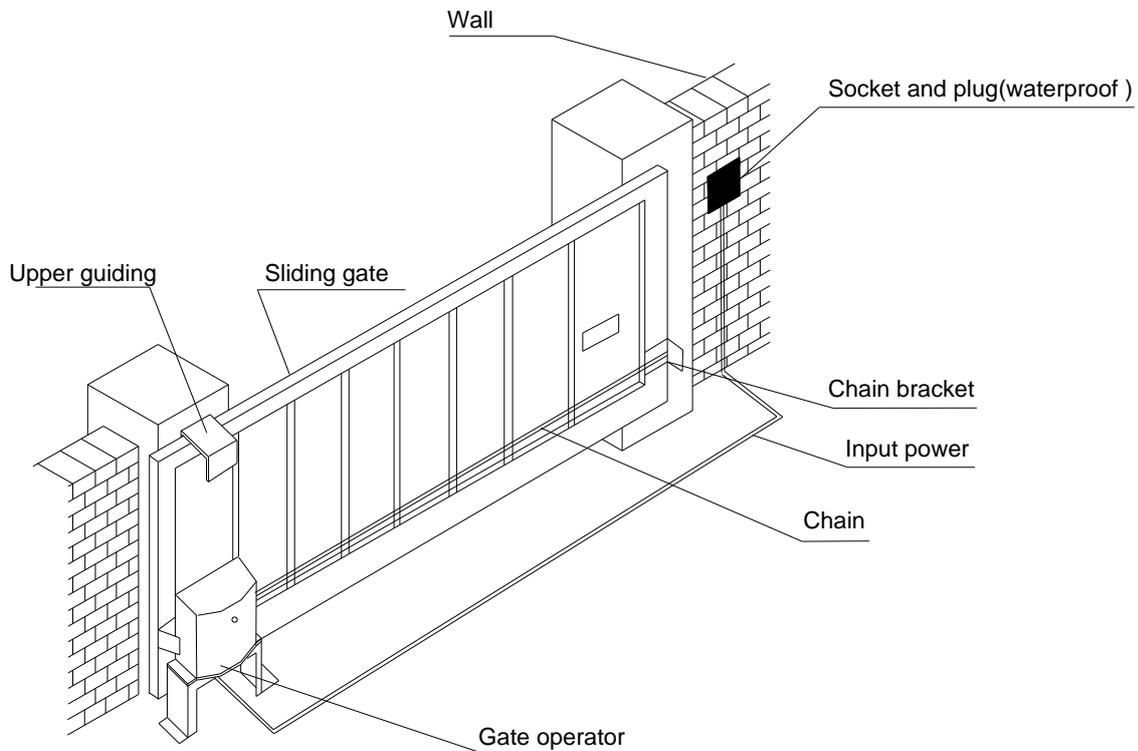


Fig.1

Installation and Adjustment

The FAS-SLIDECH300BBUP Chain-driven Gate Operator operates by forcing a straight piece of chain through its chain box. This length of chain is extended between two chain brackets located at opposite ends of the gate. The entire configuration is shown in the pack list.

Concrete Pad

The base unit of the gate operator requires a concrete pad in order to maintain proper stability. The concrete pad should be approximately 24" (600mm) x 12" (300mm) x 18" (460mm) deep in order to provide for adequate operation.

Once the gate is mounted adequately, electrical power is available, and the concrete pad is poured, you are ready to proceed.

Anchors

You can use the anchors that are provided with the operator, 3 3/4 anchor bolts (4), anchors, washers, and nuts. These anchors must be set into the concrete when it is poured, or you can use wedge anchors (1/4" x 4").

Operator Base

Mount the gate operator base to the concrete pad. The distance between the gate and the base should be no more than 2 1/2" (64mm). Verify that the operator is leveled properly.

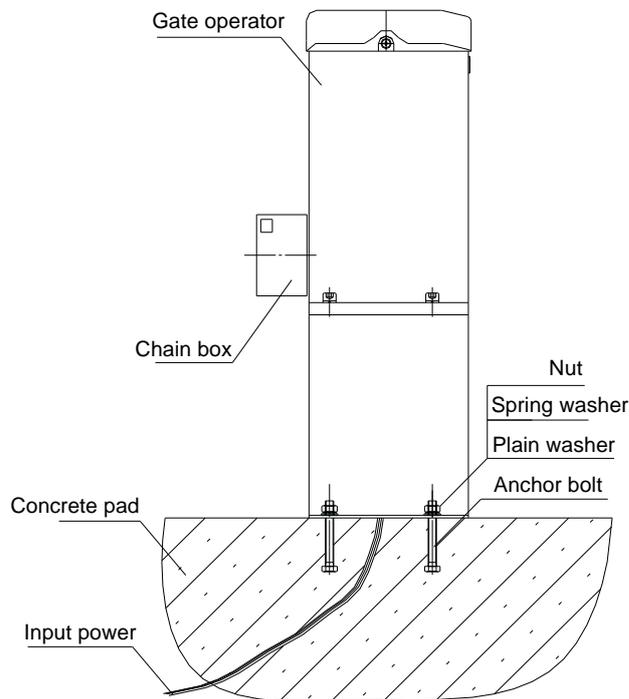


Fig.2

Chain Box

Make sure the ends of the guide chain are out of the chain holes on both sides of the chain box. Remove the cover and insert the manual release key and turn counter-clockwise to disengage the clutch. Remove the elastic band from the shaft and line up the key on the shaft with the sprocket at the chain box. Insert the sprocket from the chain box into the operator shaft. Place the operator on top of the base and use (4) 5/8" (M8x15mm) socket head cap screws to mount the chain box in to the base.

Operator

Mount the gate operator to the base using (4) 2 3/4" (M8x70mm) #48 bolts and washers. Make sure there is no more than 1/8" (2mm) of space between the cover and the chain box. Check the operator and make sure it is lined up with the gate.

Chain Brackets

Use the appropriate bolts to attach the chain bracket to the frame of the gate. If the gate is of square frame style, use the square bolts shown.

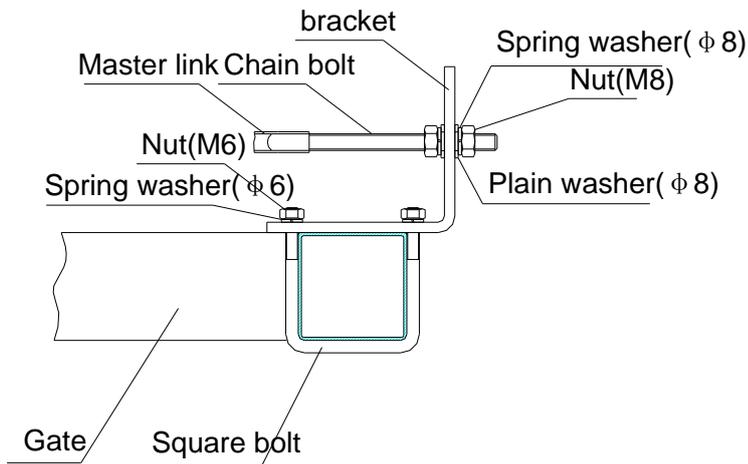


Fig.3

If the gate is of round frame style, use the round bolts shown.

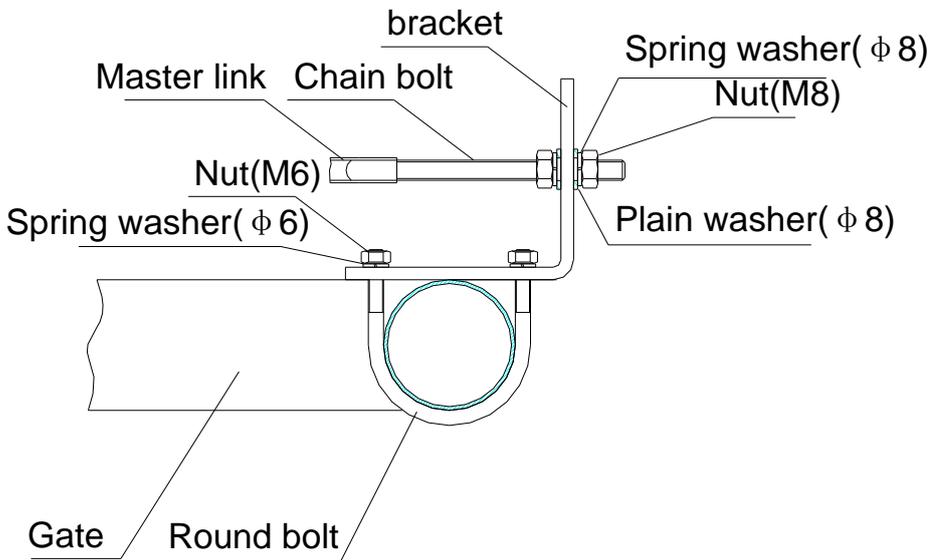


Fig.4

Chain

Close the gate and attach a chain bolt to the piece of chain that comes with the chain box using enclosure master links. Tighten the chain bolt to the bracket with washers and nuts. Pull the chain through the chain wheel box to the other chain bracket at the opposite end of the gate. Connect the other end of the chain and the chain bolt, and then tighten the chain bolt to the chain bracket. Thread up the chain by adjusting the chain bolt. Cut the chain to length if necessary. Make sure that the chain is perfectly aligned with the chain holes on the chain box. Tighten the chain by tightening the chain bolts at either end. See illustration below.

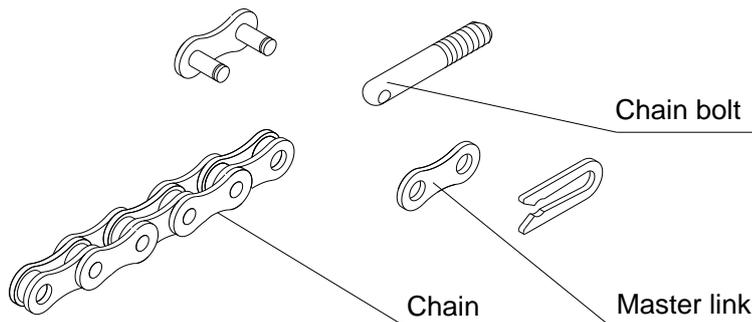


Fig.5

Gate preparation

Be sure the gate is properly installed and slides smoothly before installing the FAS-SLIDECH300BBUP sliding gate operator. The gate must be plumb, level, and move freely.

Conduit

In order to protect the wires, use PVC conduit for low voltage power cable and control wires. Conduit must be preset into the concrete when it is poured. Wires within the conduit shall be located or protected so that no damage can result from contact with any rough or sharp part.

Concrete pad

The base unit of the gate operator requires a concrete pad in order to maintain proper stability. The concrete pad should be approximately 400mm x 250mm x 200mm deep in order to provide for adequate weight and structure to insure proper stable installation.

Anchors (see Fig.2)

You can use anchor bolts, anchors, washers and nuts. These anchors must be set into the concrete when it is poured or you can use wedge anchors to fasten the operator.

5. Adjustment

Manual operation

In case of power failure use manual release key to open or close gate manually, use the release key as follow:

- Fit the supplied key in the hole.
- Turn the key **clockwise** to release the clutch.
- Open and close the gate manually.

- After power-restored use the manual release key to tight the clutch by turning the key **counterclockwise** and resume normal operation.

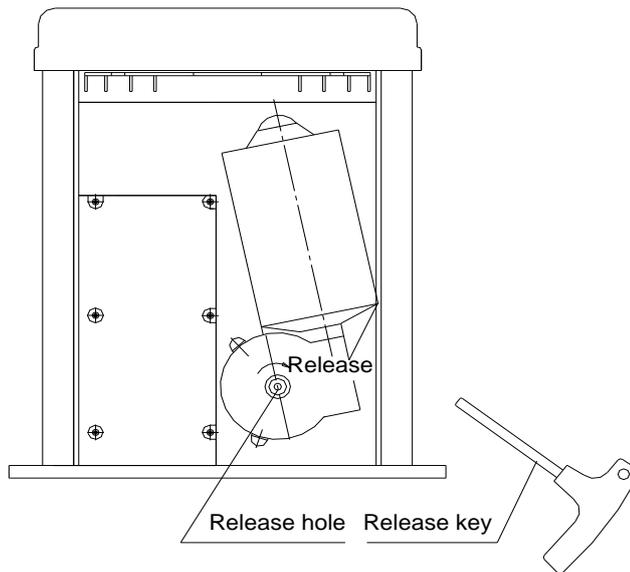


Fig.6

NOTE: The gate operator needed reset limit after re-tight the clutch by turning the key counterclockwise if the power failure and released by hand.

6. Wire Connecting

Connecting the battery

Plug the terminal of Extra battery in the control board.

NOTE:If you not use gate operator and power failure, please pull out the extra battery terminal.

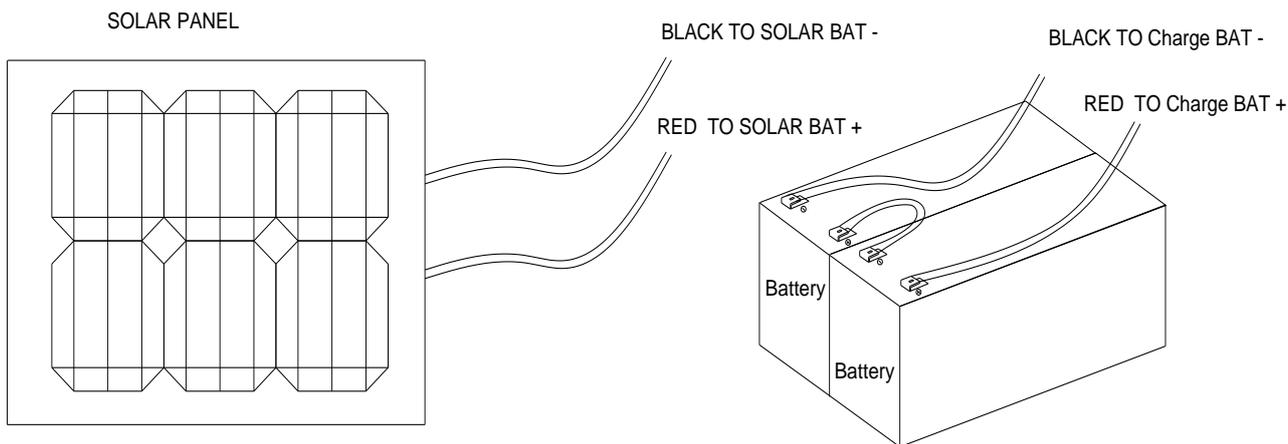


Fig.7

Connecting the motor

Connect motor wires to 'M-' and 'M+' of terminal block T1 (BLACK)and T2(RED).

Connecting power wire

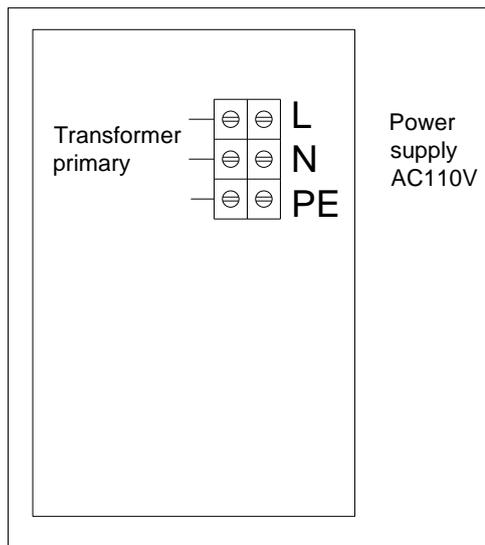


Fig.8

7. Electrical and control board

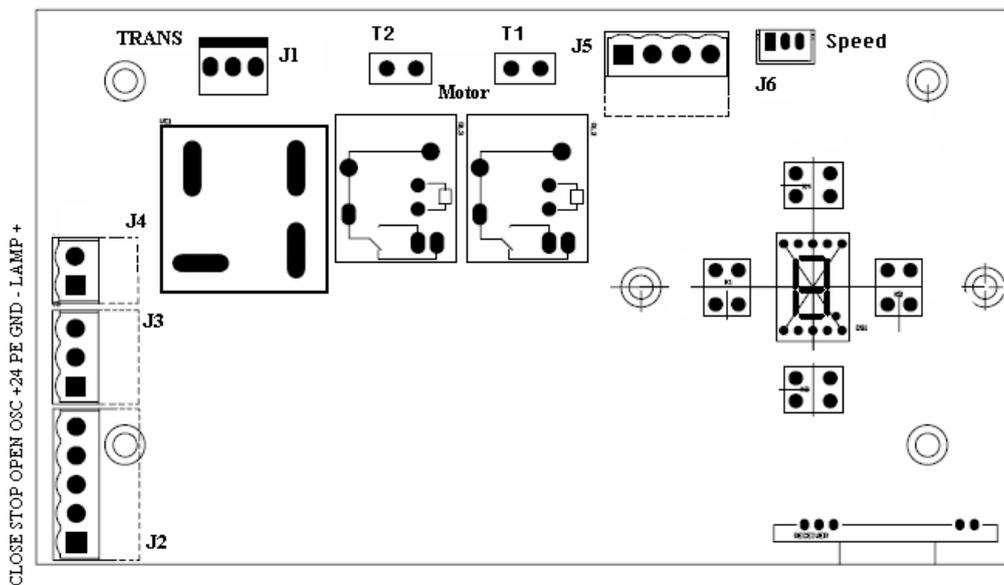


Fig.9

Motor: black wire to T1 and red wire to T2.

J1: transformer secondary(AC24V/3.3A)

external Push Button(J2,J3,J4): Single Button(OSC and COM)
 Three Button(K,G,T,and COM),
 Photo beam(PE and COM)
 Output DC power: 24 and GND

J5: solar panel(10W 27V) and charge Battery.

NOTE: Please put through the “J5”(Battrey) terminal if you need use the sliding operator.

8. Programming Process

SET button: Mode set and Confirm function

CODE button: Transmitter set and clear function

OPEN button: open door

CLOSE button: close door

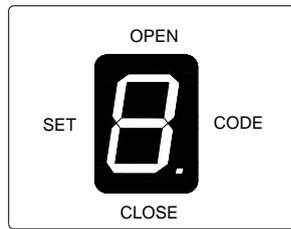


Fig.10

Adding extra transmitter (learn)

1. Press **CODE**, a dot is indicated on the LED display.
 2. Press the transmitter button which you want to use (button 1, 2, 3, 4), then press the same button again.
 3. The dot on the LED display will flash then turn off.
 4. '| |' is indicated on the LED display, then the learning process is finished.
- Up to 20 transmitters may be used.

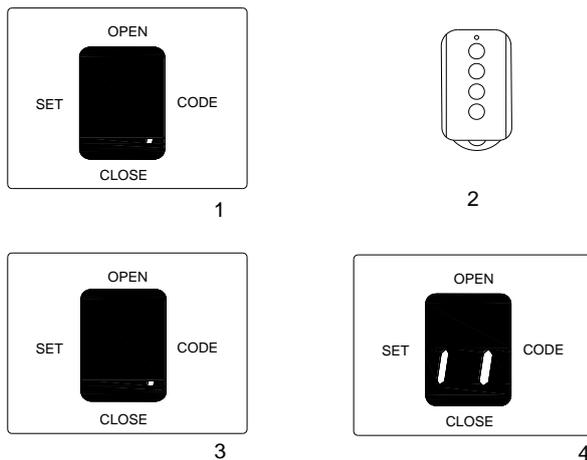


Fig.11

Erase transmitter

Press and hold **CODE** until 'C' flashes on the LED display. This indicates that all the transmitters have been erased completely.

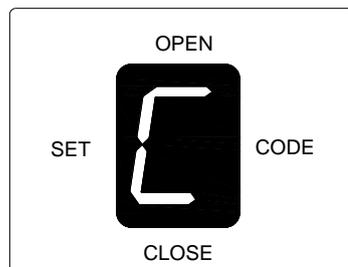


Fig.12

Set open and close positions

1. Press and hold **SET** until number '1' is indicated on the LED display.
2. Press and hold **OPEN** to set open position(*now the door must be OPEN,, if not,please change the motor wire red and black*), release the button until the door has reached the desired position. (You also can press **CLOSE** to move the door close, **OPEN** and **CLOSE** can be used to fine adjust the door position.)
3. Press the **SET** to confirm the open position, now number '2' is indicated on the LED display.
4. Press and hold **CLOSE** to set close position, release the button until the door has reached the desired position. (You also can press **OPEN** to move the door open, **OPEN** and **CLOSE** can be used to fine adjust the door position.)
5. Press the **SET** to confirm the close position.
6. The door will do a complete open and close cycle.

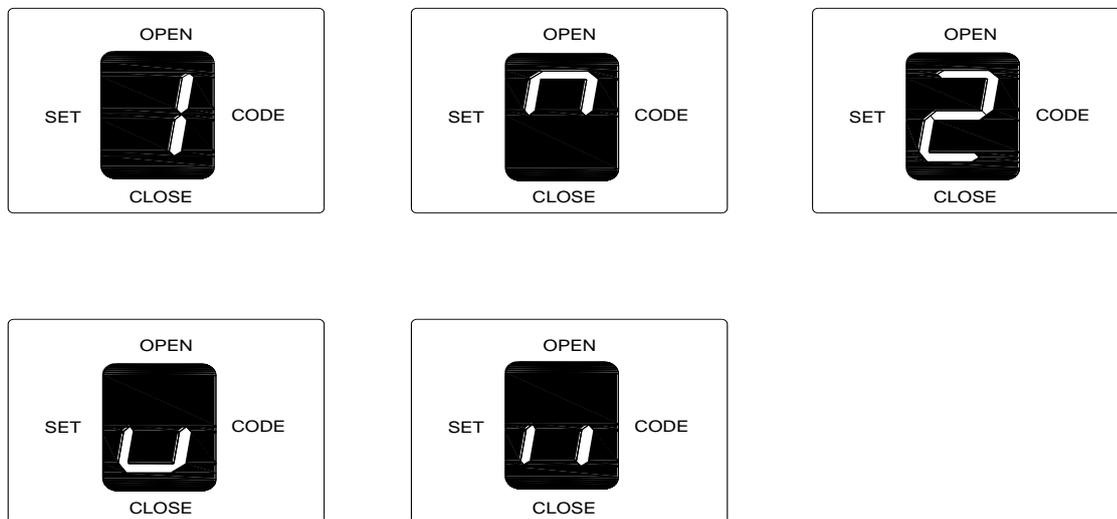
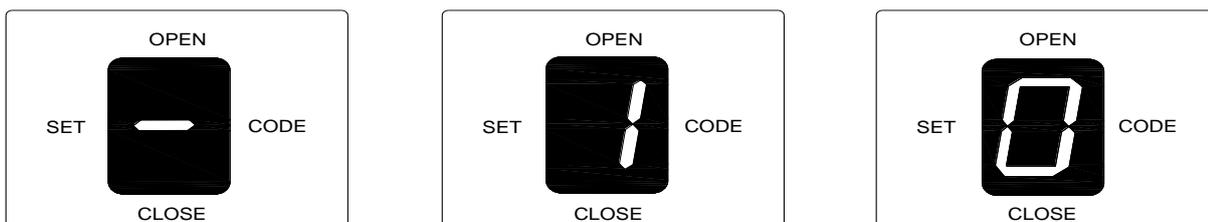


Fig.13

Automatic close (0-90 seconds adjustable)

1. Press and hold **OPEN** until '-' is indicated on the LED display.
2. Press **OPEN** to increase the auto close time, press **CLOSE** to decrease time.
3. Set timer to '0', the automatic close function will disable.
4. Press **SET** to confirm the setting.
5. Add 10 second per number

NOTE: Automatic close function is available only when the door is in fully opened position.



Setting obstruction force

If the door meet an obstruction during closing, it will stop and reverse about 15cm~20cm.

1. Press and hold **SET**. The LED will display number from '1' to '4', when the number '3' appears on the LED display, release the **SET**.
2. Press **OPEN** to increase the obstruction force, the maximum force is level 9. Press **CLOSE** to decrease force, the minimum force is level 1.
3. Press **SET** to confirm.

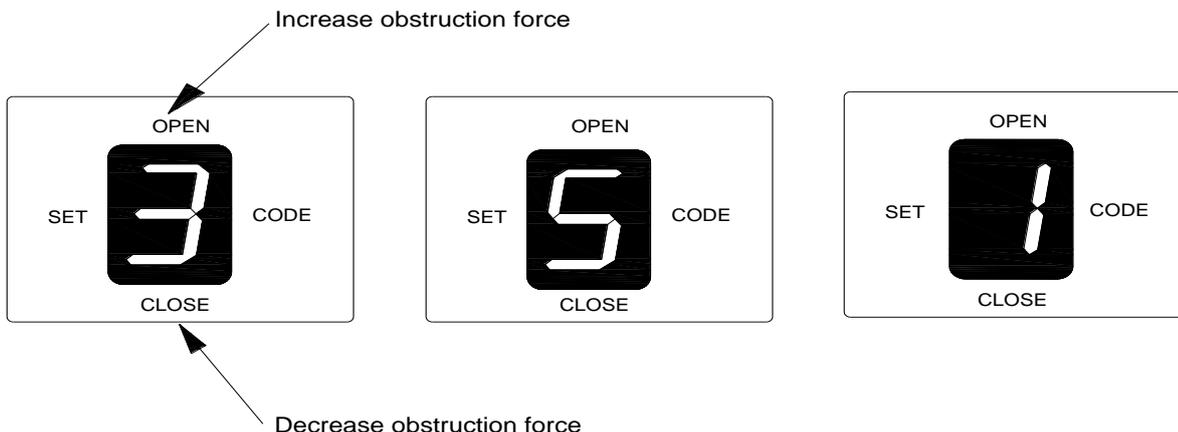


Fig.14

Photo beam:

Connect the photo beam follow Figure. The photo beam output signal must be N.C. signal.

Press and hold **close** until '—' is indicated on the LED display. release the **close**, '11' will indicated on the LED display. Press **open**, 'H' will indicated on the LED display. Press **SET** to confirm. **Then Connect the photo beam follow the Figure.** (Note: When not using photo beam, please click the above action and set to "11" status)

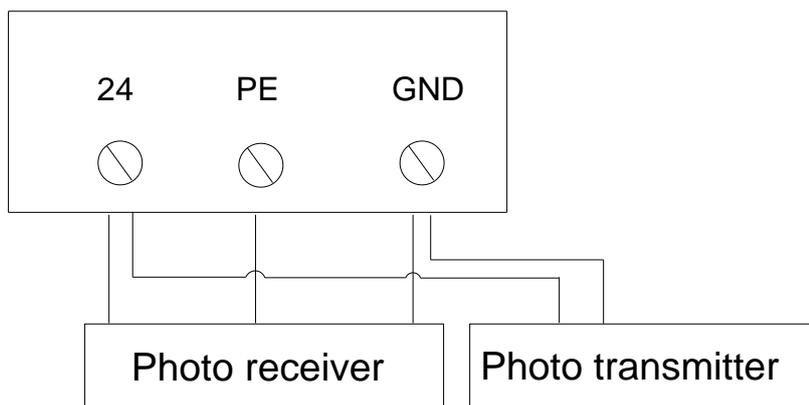


Fig.15

9. Maintenance

- Check the door once a month. The door should be carefully checked for balance. The door must be in good working order.
- The auto-reverse function should be regularly inspected, and adjusted if necessary. For service, call an experienced serviceman.

- We suggest for safety reasons, photocells be used on all gates.
- Disconnect from mains supply before replacing bulb.
- Be sure to read the entire manual before attempting to perform any installation or service to the door operator.
- Our company reserves the right to change the design and specification without prior notification.

10. Troubleshooting

Trouble	Possible causes	Solutions
The door fails to open and close. LED display does not light.	1. Power is OFF 2. Fuse burn	1. Make sure that power is ON. 2. Replace fuse.
The door can open, fails to close.	1. Infrared beam is obstructed. 2. Infrared photocell function is enable, but the photocell has not been installed.	1. Remove obstructions. 2. Make sure the infrared photocell function is disable.
Remote control does not work.	1. Battery level may be low, 2. Transmitter	1. Replace the battery inside the transmitter. 2. Re-program the transmitter.
The transmitter operating distance is too short.	Battery level may be low.	Replace battery.

11. Packing list

After receiving the gate operator, you should make an unpack-inspection, in which you should check whether the product was damaged. If you have any problem please contact our dealer. You should find the following items in our standard packing:

Pack list

No.	Item	Quantity
1	FAS-SLIDECH300BBUP sliding gate operator	1
2	Operator Base	1
3	FAS-J-4CH TX transmitter	2
4	Master Links	2
5	Chain	1
6	Chain Bolts	2
7	Chain Brackets	2
8	“U” Bolts for square & round gate frame	4
9	2 ¾_ (M8x 70mm) Bolts for mounting operator to the base and washers	4
10	2 ½_ (M8x65mm) Bolts for mounting Magnet brackets and washers	4
11	3 ¾_ Anchor bolts, Anchors, Washers and Nuts (In the same bag	4

	with manual release key)	
12	5/8_ (M8x15mm) Socket Head Cap screws for mounting chain box	4
13	Manual release key	1
14	User's manual	1