



# **Chain Sliding Gate Operator User's Manual**

**Model: SCG-24**

**[www.WholesaleGateOpener.com](http://www.WholesaleGateOpener.com)**

# CAUTION

## . PLEASE START WITH READING THESE IMPORTANT SAFETY RULES

1. Installation and wiring must be in compliance with your local building and electrical installation codes.
2. Make sure the system is power off before beginning any connections.
3. It is important to make sure that the gate always runs smoothly. Gate which stick or jam must be repaired immediately. Employ a qualified technician to repair the gate, never attempt to repair it yourself.
4. Keep additional accessories away from children. Do NOT allow children to play with pushbutton or remote controls. A gate can cause serious injuries as it closes.
5. Disconnect electric power to the system before making repairs or removing covers. A disconnecting device must be provided in the permanently- wired installation to guarantee all-pole disconnection by means of a switch ( at least 3mm contact gap) or by a separate fuse.
6. Make sure that people who install, maintain or operate the gate operator follow these instructions. Keep these instructions in a safe place so that you can refer to them quickly when you need.
7. After the installation a final test of the full function of the system and the full function of the safety devices must be done.

## . Main specifications and technical parameters

Power: 24V DC Speed: 220 RPM

Output : 20NM

Gate Speed: 16M/Min

Max gate weight: 300/500 kgs

Weight temperature: -45° + 65°C

Noise: ≤ 56 DB

Certificate: CE

# Mechanical Part

## . Mechanical Installation

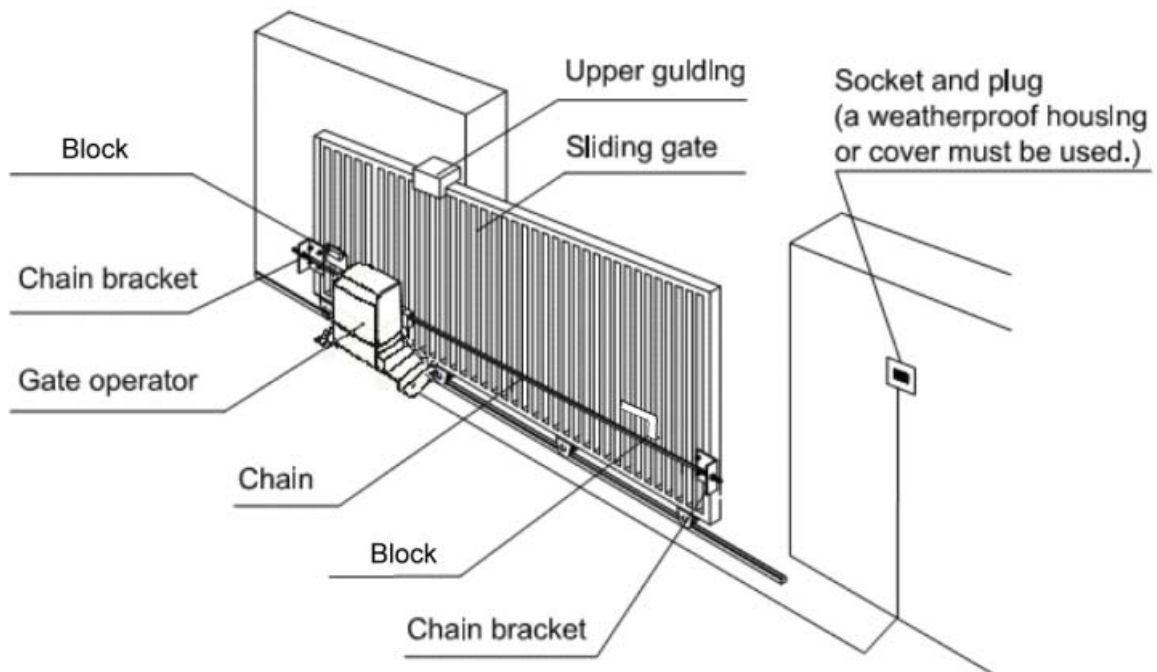


Fig.1

### Installation and Adjustment

The 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 diagram above.

### Concrete Pad

The base unit of the gate operator requires a concrete pad in order to maintain proper stability. 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. These anchors must be set into the concrete when it is poured, or you can use wedge anchors.

### Operator Base

Mount the gate operator base to the concrete pad. Verify that the operator is leveled properly.

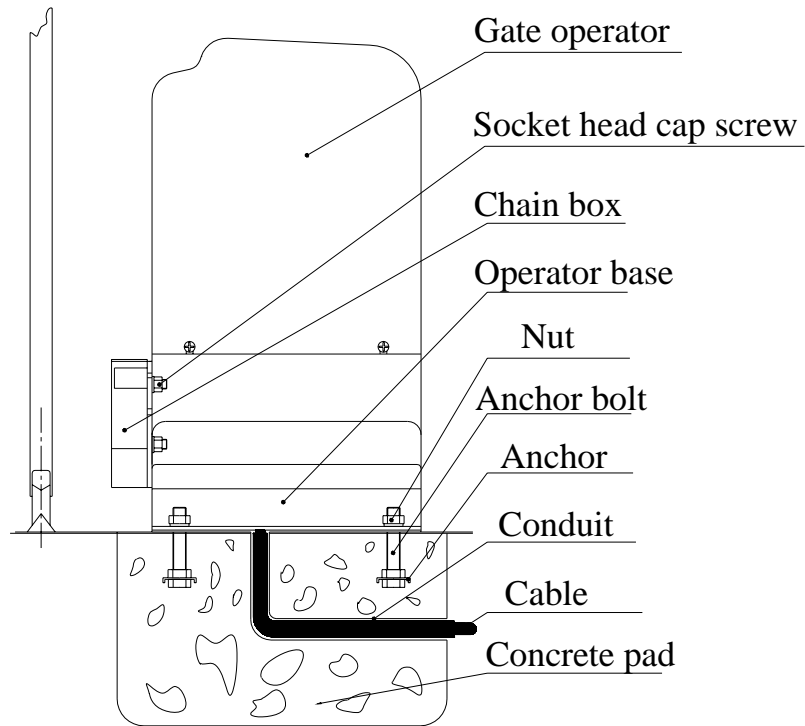


Fig.2

### 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 socket head cap screws to mount the chain box in to the base.

### Operator

Mount the gate operator to the base using bolts and washers. Check the operator and make sure it is lined up with the gate.

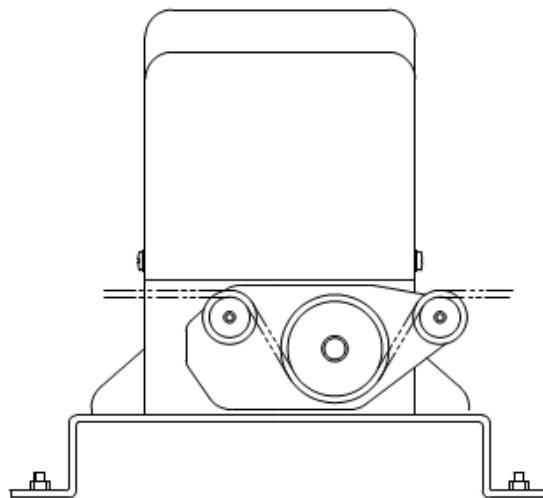


Fig.3

## 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.

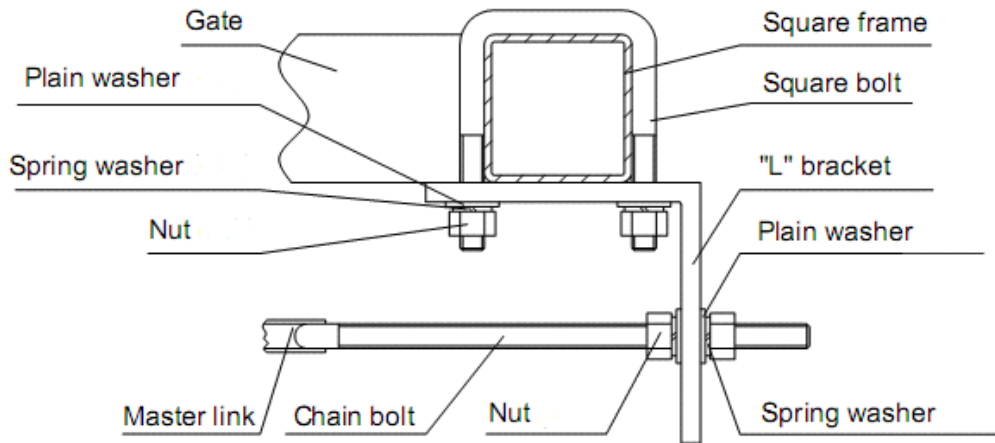


Fig.4

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

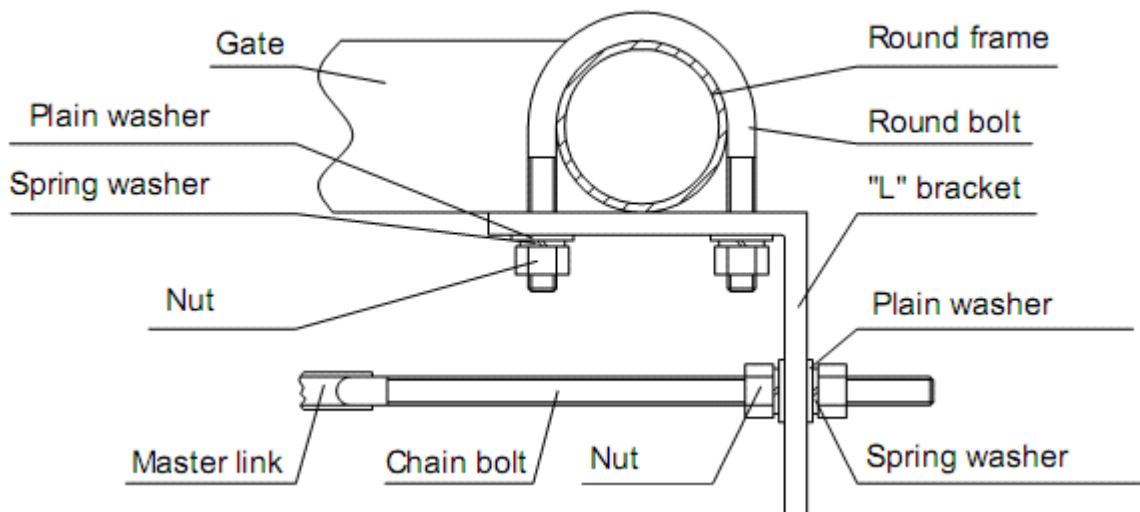


Fig.5

## 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.

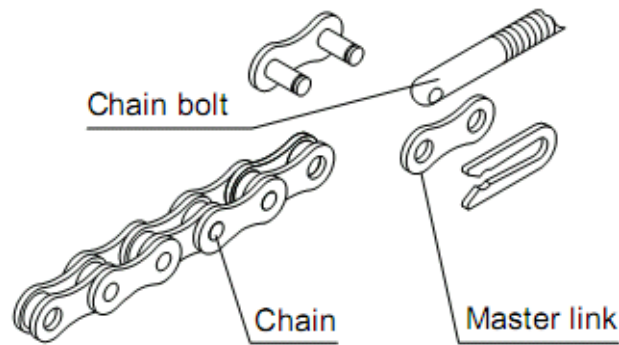


Fig.6

### Blocks for Limit Switch

Install the block as shown in Fig.7. The block and limit switch are used to control the position of the gate. When the block is installed, please release the gear clutch and push the sliding gate manually to pre-determine the position. Fit the block with the bolts to the gate and then tighten the gear clutch. Finally test the open and close positions by moving the gate with the motor. Adjust the position of the blocks to meet the requirement.

**Important Note:** Verify and if necessary exchange the limit switch wires (close and open).

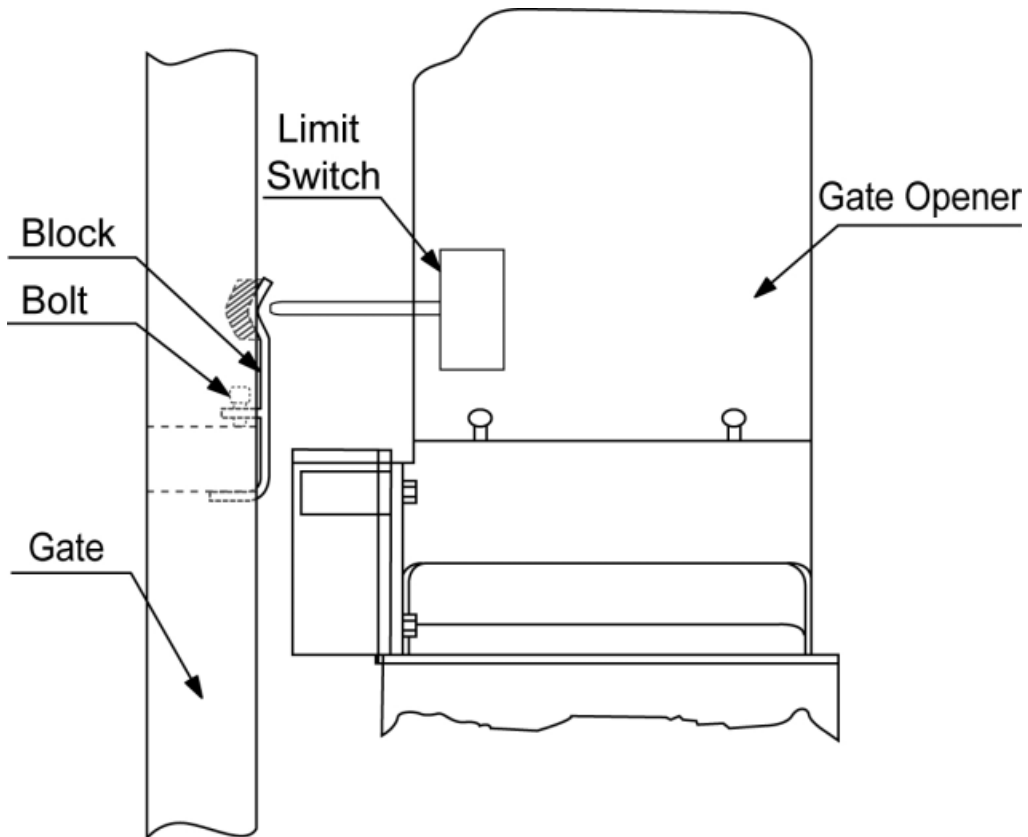


Fig.7

# Electrical Part

## . Connections of the Power Board

### Transformer

Transformer output ( 24VAC ) is connected to “AC24V” terminals in power board. (refer to Fig.8)

### Battery

Battery ( 24VDC ) is connected to “+DC24V-” terminals in power board. (refer to Fig.8)

### Other

Use two wires to connect the X1 terminals in power board with the X1”19””20” terminals in control board. (refer to Fig.8)

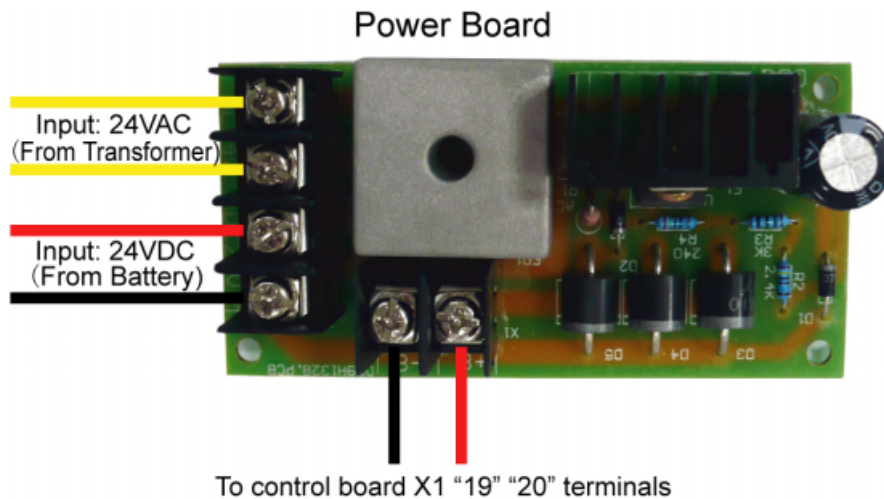


Fig.8

## . Connections of the Control Board

### External Receiver

The external receiver is connected to X2 ”1””2””3””4” terminals in control board. (refer to Fig.9)

### Push Button

The push button is connected to X2 “5””6” terminals in control board. (refer to Fig.9)

### Limit Switches

The limit switches are connected to X3 “7””8””9” terminals in control board. (refer to Fig.9)

## Photocell

The photocell is connected to X3 “11””12” terminals in control board. (refer to Fig.9)

## Solar Panel

The solar Panel ( 24VDC charger ) is connected to X4 “15””16” terminals in control board. (refer to Fig.9 and Fig.10)

**NOTE: Maximal power of the solar panel should not exceed 30W.**

## Motor

The motor is connected to X1 “17””18” terminals in control board. (refer to Fig.9)

## Other

X3”13””14” terminals in control board has been provided for an Aux output (24VDC). (refer to Fig.9)

SW1 is used to adjust the motor rotate time and place mode and auto-close time. (refer to Fig.9)

SW2 is used to select the remote button. (refer to Fig.9)

The potentiometer is used to adjust the open force. (refer to Fig.9)

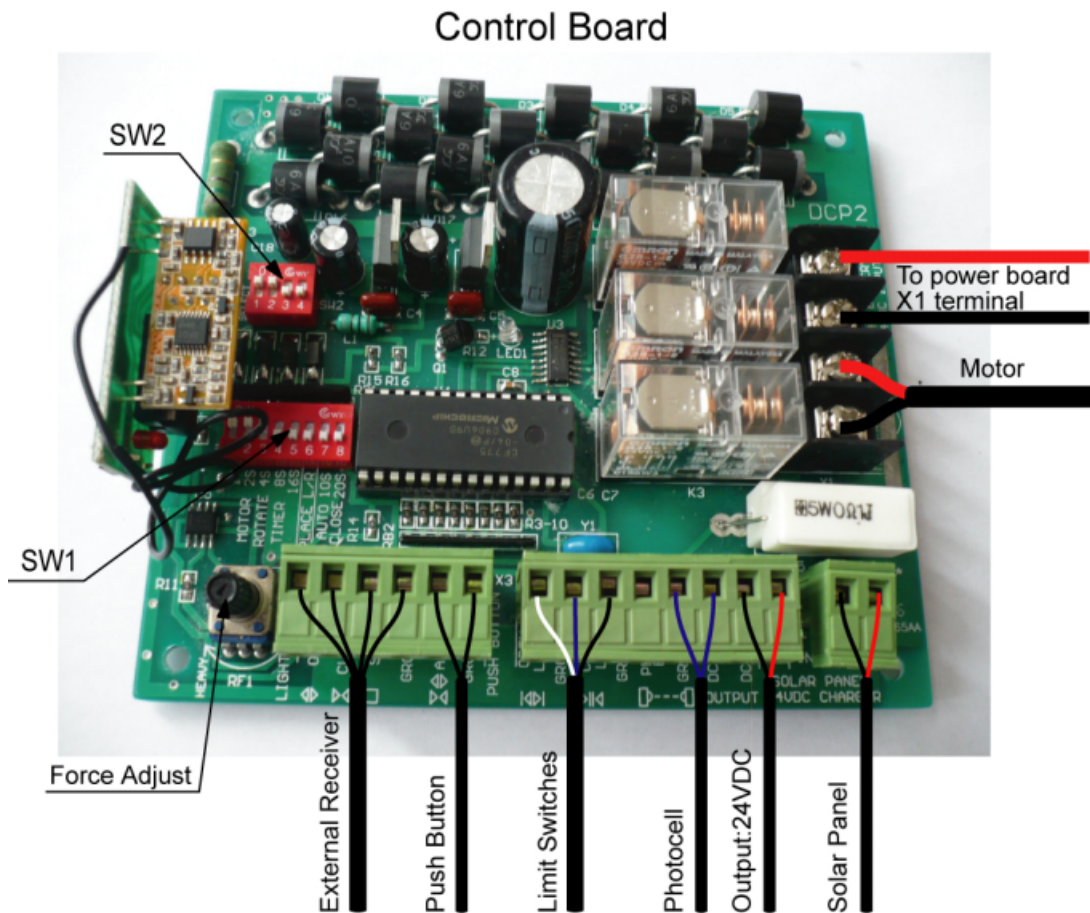


Fig.9

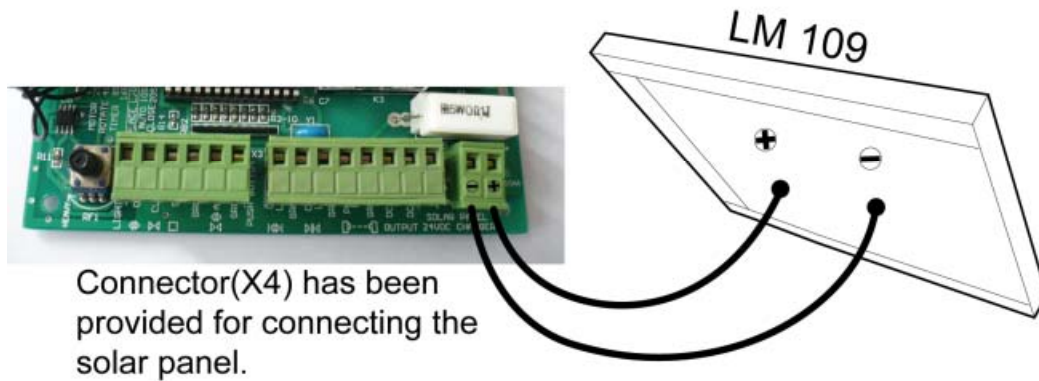


Fig.10

## . How to program and erase remote

### Program Remote

Press and release the Learn Button in receiver board, the LED light blinks once, then press the key in the Remote once. The LED light blinks once. Now the code has been learned. (refer to Fig.11)

### Erase all Remote Codes

Press and release the Learn Button until the LED light is OFF. Now all Remote codes have been erased. (refer to Fig.11)

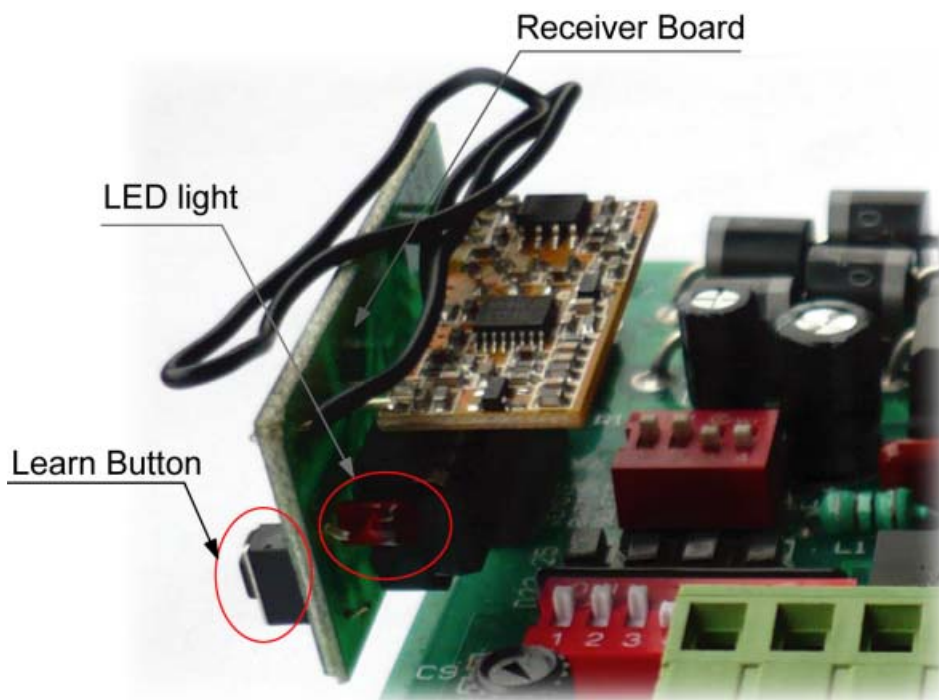


Fig.11



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