

Universal

TRAFFIC CONTROLS

Barrier Operator UTC-3306



Installation Manual



This barrier operator is not for pedestrians!

Automatic gate openers are designed for vehicular traffic. They are powerful and can cause serious bodily injury or death. Accordingly direct all pedestrian traffic to a separate walk-through gate.

- Cut off the power supply before starting installation, operation or maintenance.
- The barrier operator must be secured to the ground.
- As for the electric cable type and section, we suggest to use the cable type of with a minimum section of 2.0mm²
- Do not change the original inside wiring.
- If there is power failure, please switch off the power supply first, then open the door and rotate the handle on the motor to manually open the boom completely.
- Keep the automatic control (push-button, remote control, etc.) out of the reach of children. The control system must be installed a minimum height of 1.5m from the ground surface.
- Use transmitters or button only where you can see the gate clearly.
- Never open the door or the cover of the cabinet when the machine is running.
- Do not permit children to play on or around the gate.

Technical Specifications

DC Series - UTC-3306

Power Supply: 120V 60Hz

Motor's Power: 80W / 24V DC

Motor's Rotation: 1400r/min

Time for up/down:

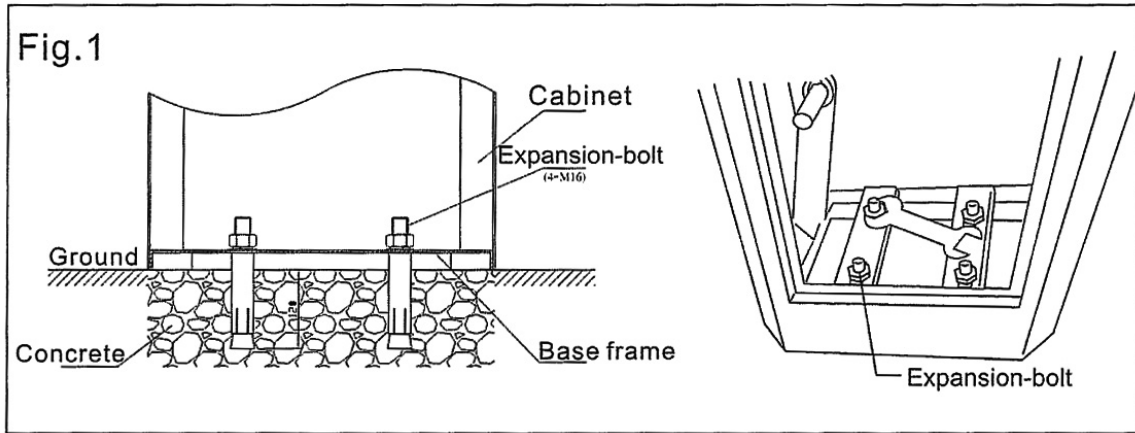
2 seconds (for 1-3M)

6 seconds (for 4-6M)

Max boom's length: 20 feet

Installation and Adjustments

1) Installing the barrier on the ground:



2) Installing the boom (Fig. 2)

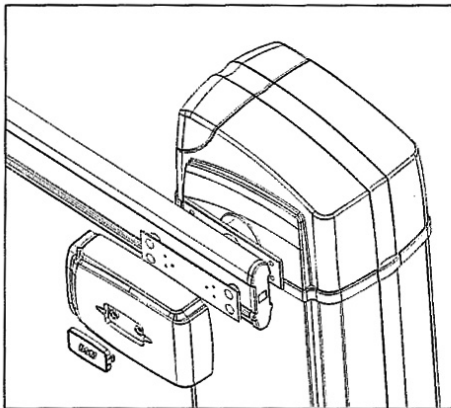
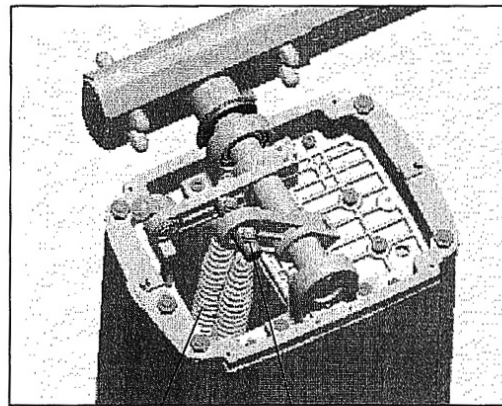
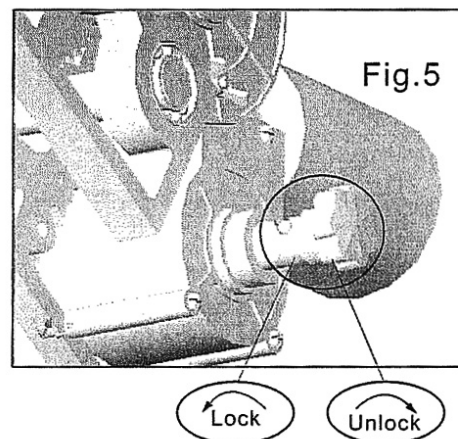
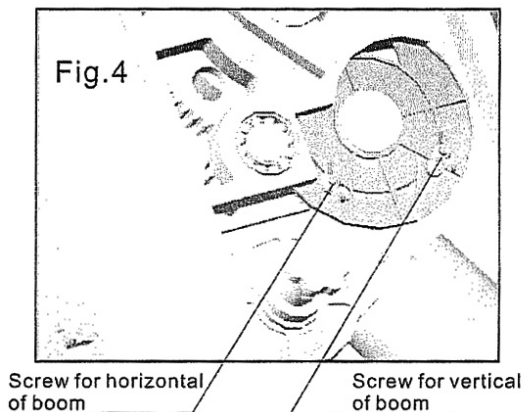


Fig. 2

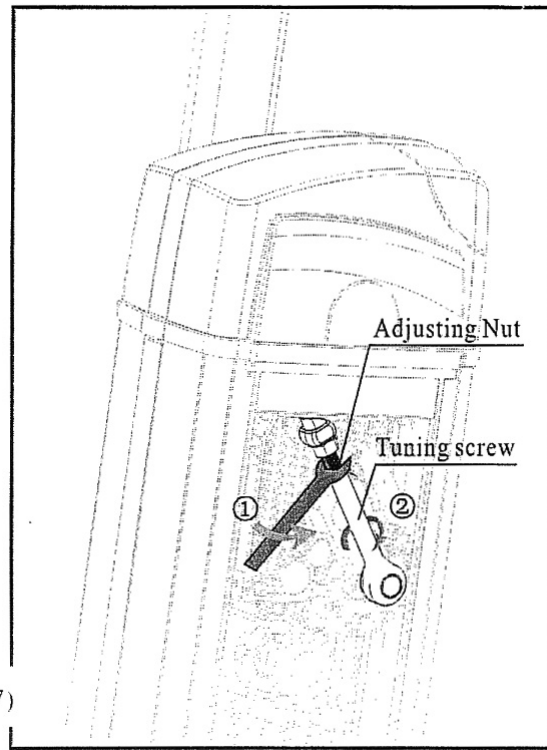
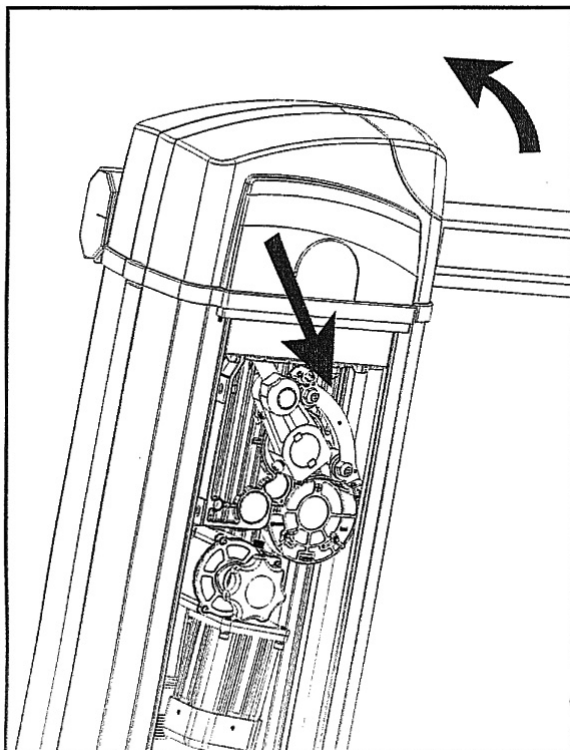
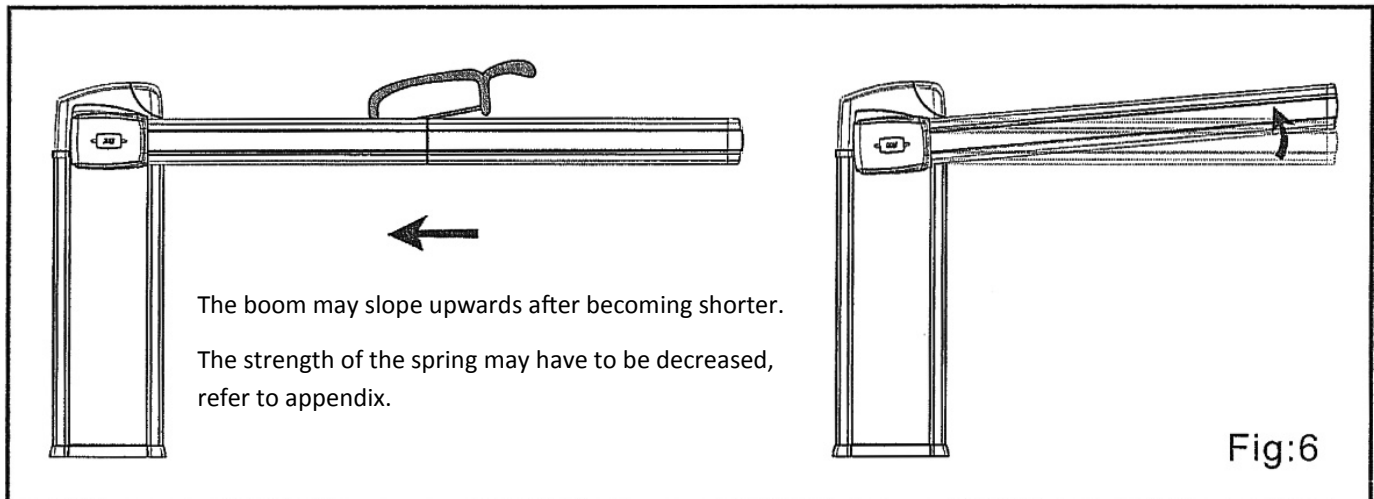


3) Adjust the limit position. The barrier is supplied with the magnet limit switch and the mechanical limit switch for optimum boom movement. **Do not chance the limit position.**



Boom Length

1) Adjust the vertical and horizontal line of the boom. If the boom needs to be shorter.



(Fig.7)

Manually put up the boom perpendicularly.

- 1) Loosen the adjusting nuts.
- 2) Adjust the tuning screw and check the boom. If the boom is perpendicular to the ground when it is open,

Boom Length (Continued)

2) If the boom needs to be longer.

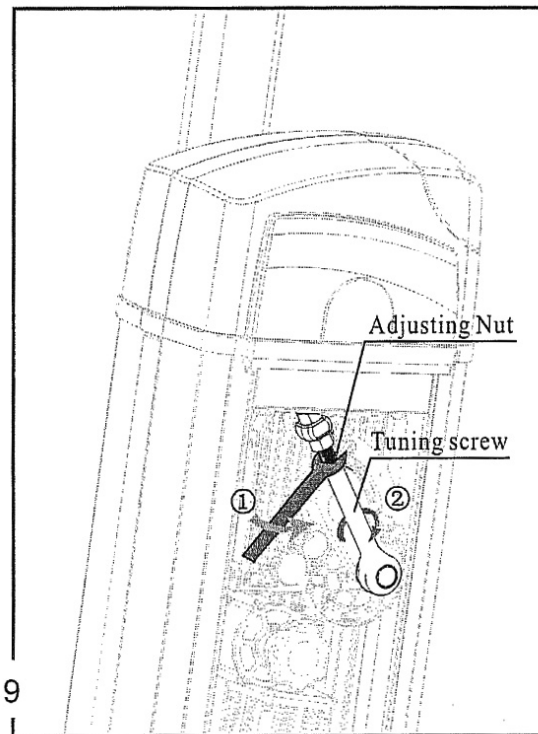
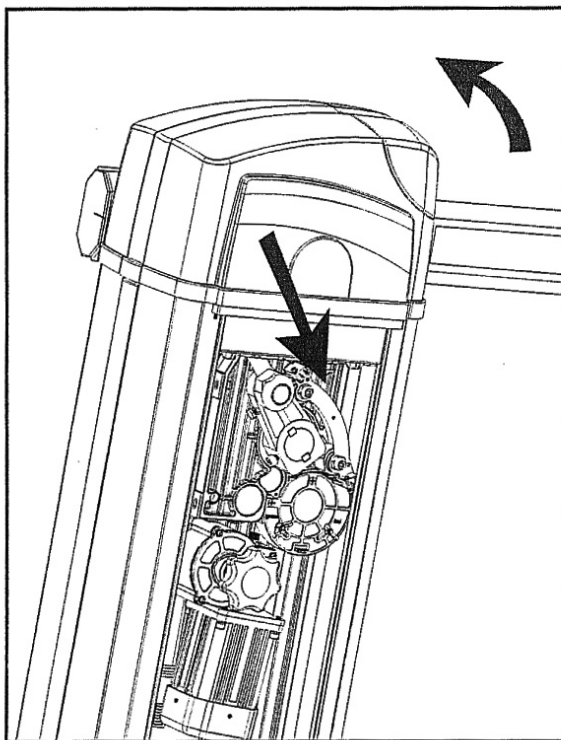
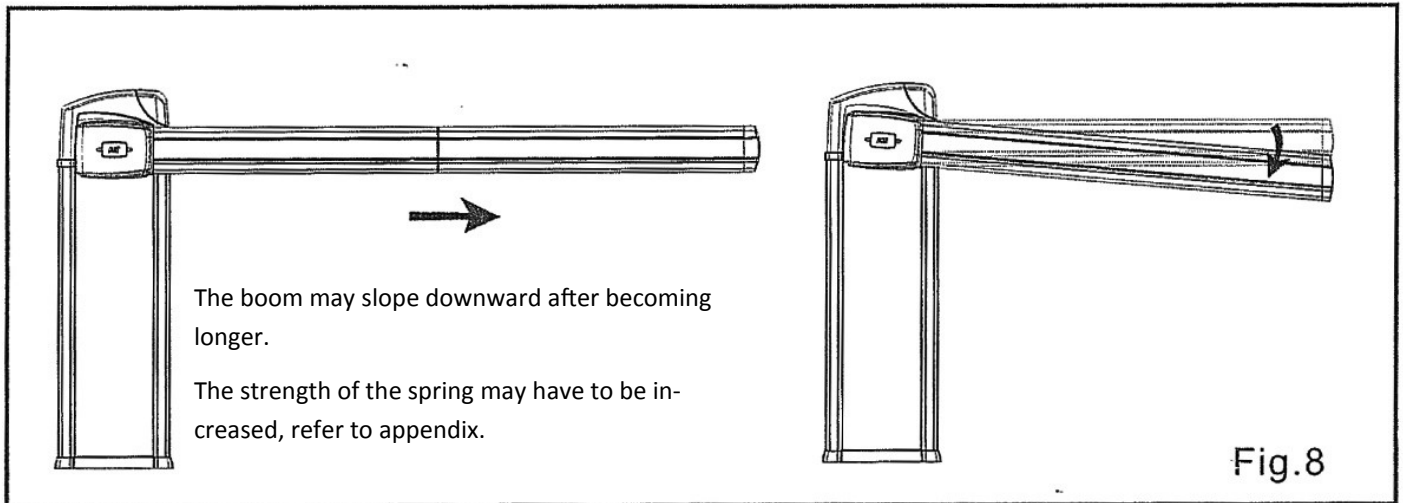


Fig.9

Manually put up the boom perpendicularly.

- 1) Loosen the adjusting nuts.
- 2) Adjust the tuning screw and check the boom. If the boom is perpendicular to the ground when it is open,

Adjust the balance of the spring with boom.



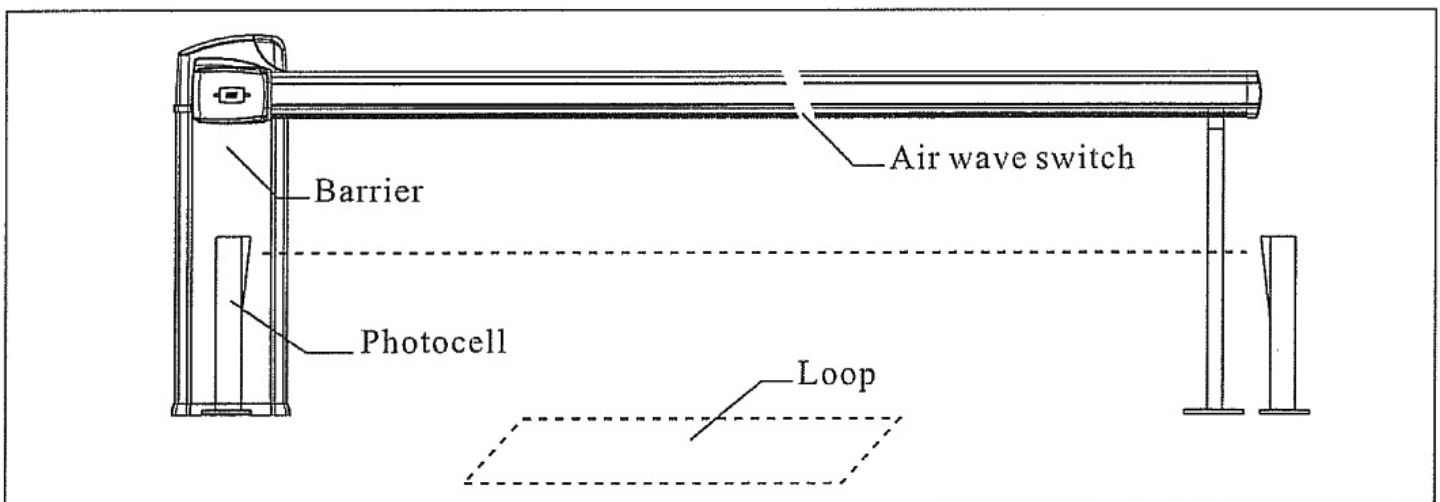
The springs have been already adjusted to balance with the 16' boom. If the length of boom needs to be changed, the springs should be re-adjusted.

Spring Ratio Per Boom Length

UTC-3306	3-4m	1	5x440mm
	4.5m	1	6x440mm
	5m	2	5x440mm
	6m	3	5x440mm

Electrical Safety Devices

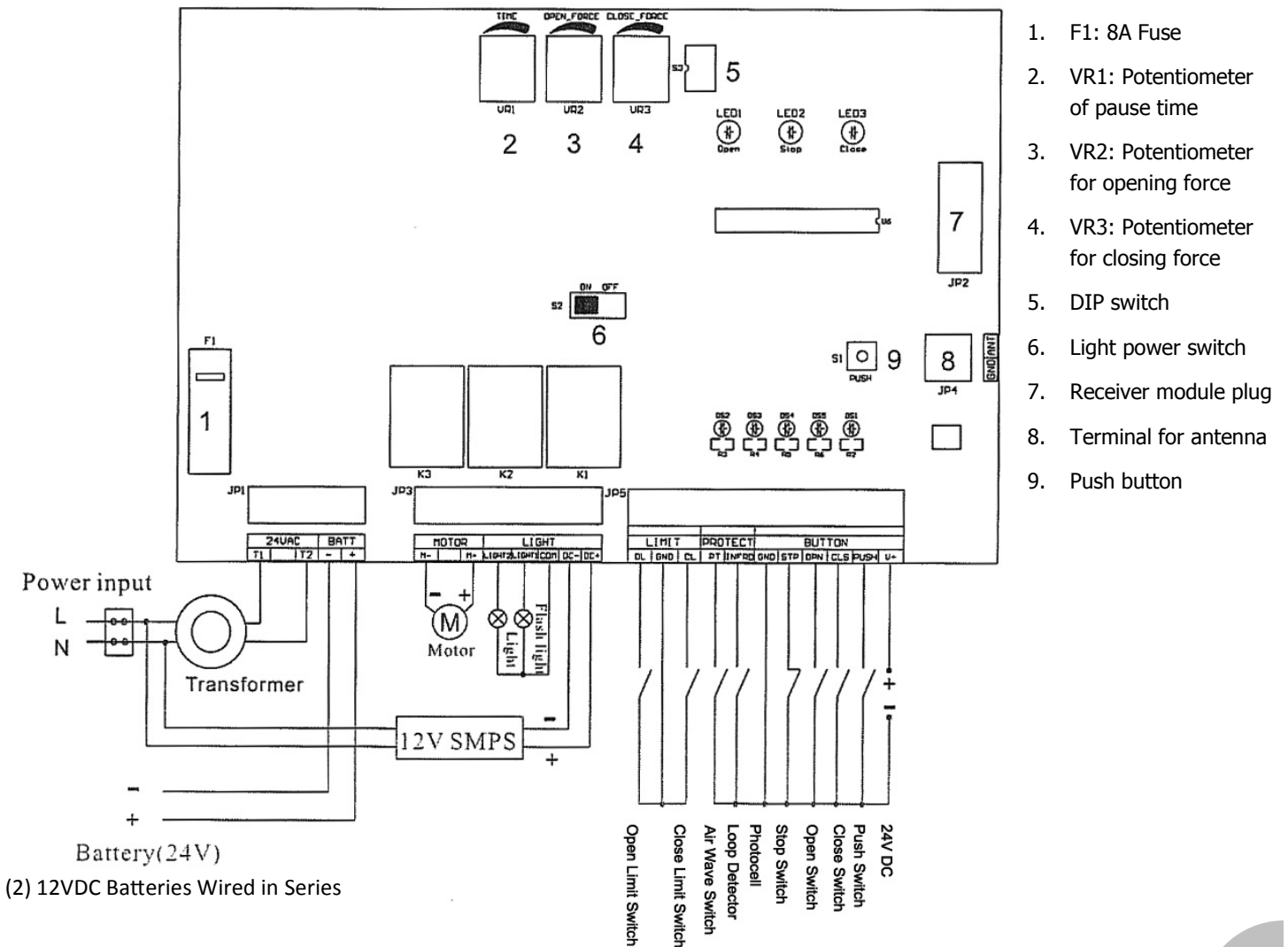
- 1) The barrier's limit switches, motor, and control unit are already connected.
- 2) One the photo cells, loop detector, and the supply voltage have not been connected.



Control Box (DC Motor) Technical Data

Power Supply	AC 120V 60Hz
Max. Consumption	120W
Accessories Power Supply	24V DC 10W Max
Environment Temperature	-20C ~ +5-C
Frequency of Remote Control	433.92 MHz
Auto-close Delay Time	1-120 seconds

Wiring Diagram (DC Motor)



Dip Switch Setup

Dip1:

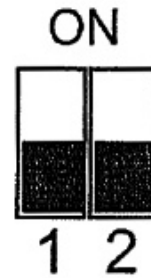
ON: Enable auto close. The pausing time is adjustable when rotating the VR2

OFF: Disable auto-close

Dip2:

ON: The light flashes off when the boom stops.

OFF: The light flashes on when the boom stops.



LED Definitions

NO	Name	Definitions
1	DS2	Opening limit switch LED. Light up when the boom has completely opened
2	DS3	Closing limit switch LED. Light up when the boom has completely closed
3	DS4	Air wave switch LED. Light up when the car is in range of the loop
4	DS5	Loop detector LED. Light up when the car is in range of the loop
5	DS1	Power LED. Lights. Lights up when the power is on.

Transmitter's Code Setting:

Press "Learn button" until the Learn LED light turns on, then press button of your choice on the transmitter until the Learn LED light flashes and goes out. The transmitter is now coded. Other transmitters can be coded in this manner.

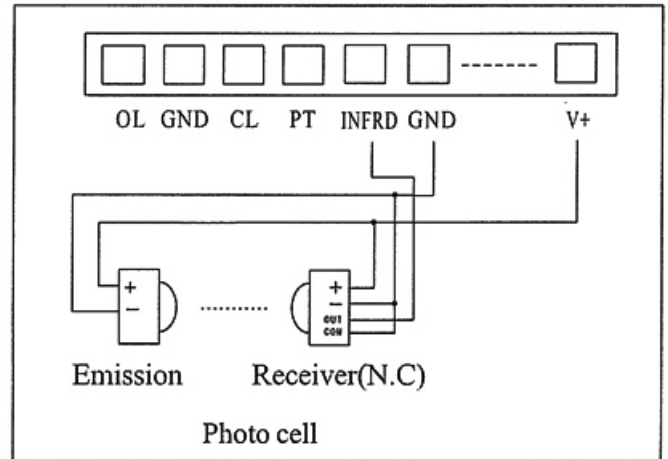
Erase Transmitter's Code:

Press the "Lean Button" and hold to make the "Lean LED" light go off. Now all the codes on the transmitter have been cleared.

Safety Device Wiring (Sold Separately)

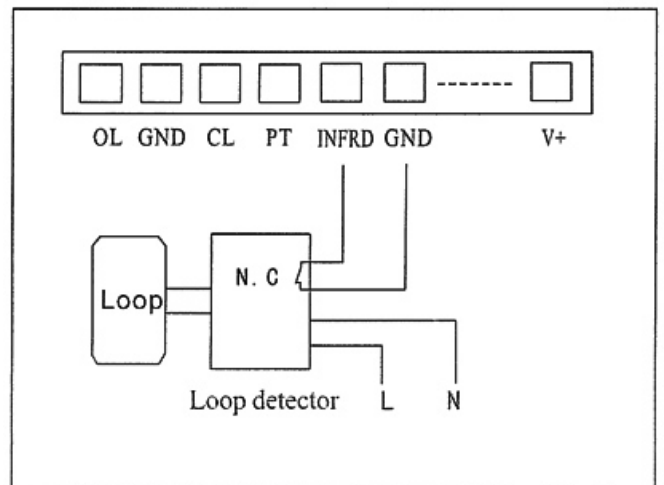
Photocell (N.C.)

- If the infrared ray is shut off when the gate is closing, the gate opens instantly.
- If the infrared ray is shut off when the gate is opening, the gate remains open.



Loop Detector (N.C.)

- If a car is in range of loop while gate is closing, the gate will open.
- If a car is in the range of loop when the gate is open, the gate remains open.

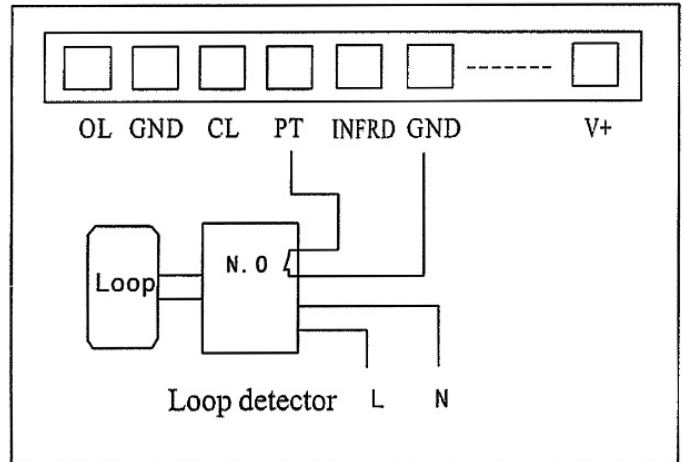


NOTE: If auto-closing function is valid, when an obstacle passes through the sensor range, the gate will close automatically after a set delayed time. The delay time can be adjusted from 1-120 seconds.

Wiring (Continued)

Loop Detector (N.O.) *Dip1 should be Off*

- If a car is in range of the sensor, the gate remains open.
- When a car passes through the range of the sensor, the gate closes.



External Terminal

- When a IC card reader is used, it must be connected with OPN and GND

