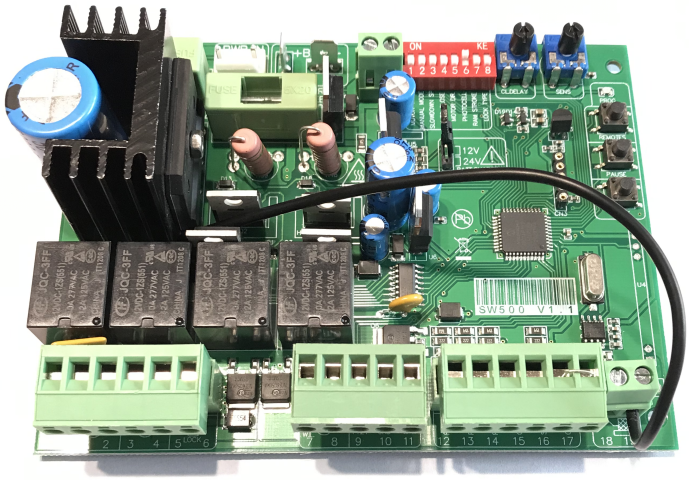
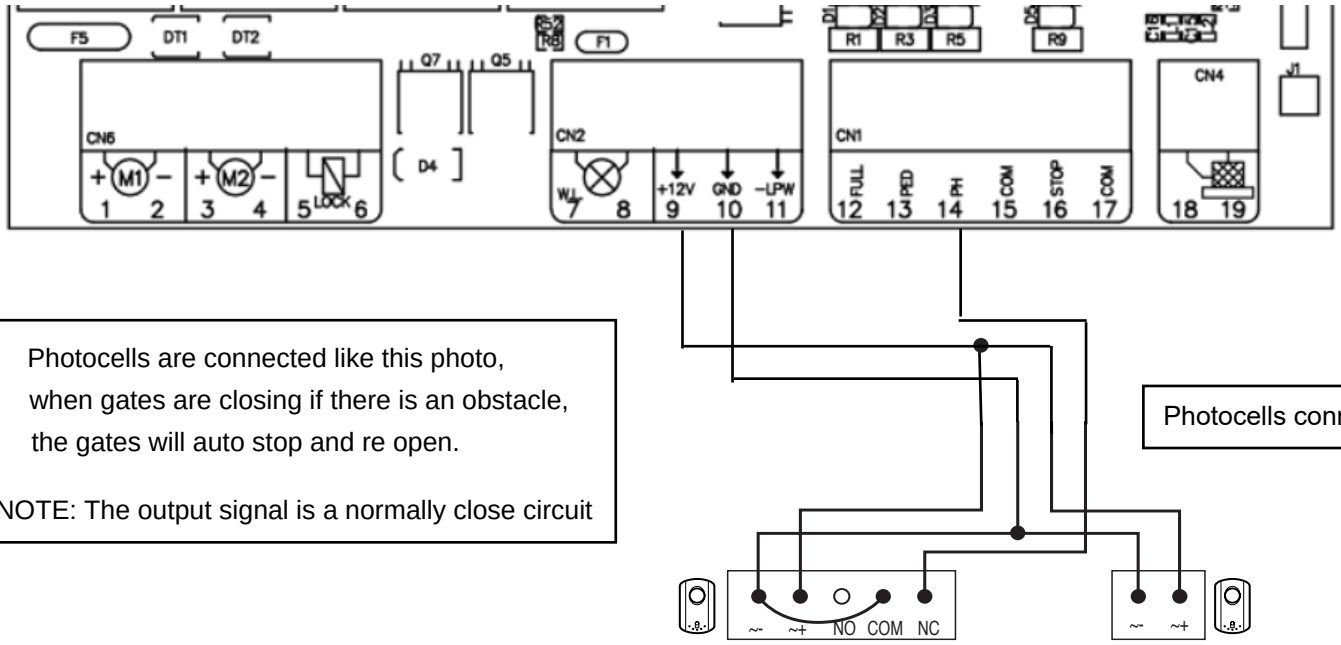


## Technical characteristics

| | |
|---|---|
| Power Supply | 12-24Vac +/- 10% |
| Power consumption | 1W (stand-by) |
| Supply out (12V and LPW), each | 12Vdc, 250mA (@25°C) |
| Aux contact | NO, 3A 30Vdc, 3A 250Vac |
| Motors outputs | 8A (with 200VA Transformer) |
| Flashing light output | 12-24Vdc, 1A, 25W |
| Operating temperature range | -5 +60°C |




Photocells are connected like this photo, when gates are closing if there is an obstacle, the gates will auto stop and re open.

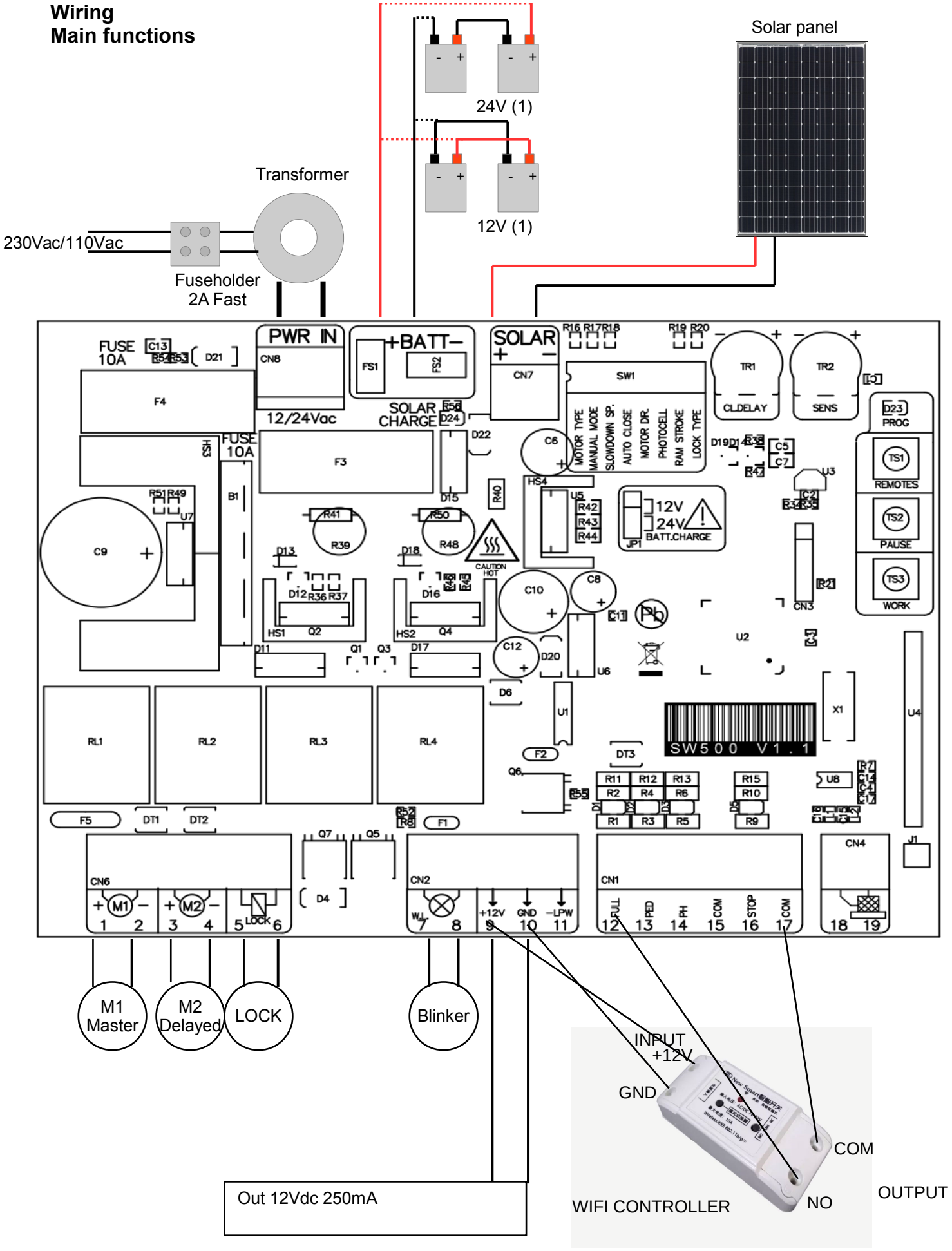
NOTE: The output signal is a normally close circuit

Photocells connection

**ATTENTION:** Safety inputs photocell, Stop, have to be shunted to common or disabled , otherwise board programming can't be done correctly.

(1)Just a battery voltage can be connected, or 12 or 24V, according to Battery charger selector.

## Wiring
## Main functions



## Terminals:

| | | | |
|---|---|---|---|
| 1-2 | Master Motor, motor 1 (used in single wing mode) | 13 | single gate open by wired push button |
| 3-4 | Slave Delayed Motor 2 | 14 | Photocell(NC) |
| 5-6 | LOCK output | 15,17 | COM/GND |
| 7-8 | Blinker | 16 | STOP(NC) |
| 9-10 | 12Vdc output 250mA | 18-19 | External antenna input. As minimum antenna connect a 17mm 1.5sqm wire in connection 19. |
| 9-11 | Low power output, suggested to supply photocells when control unit is powerd with solar panel. This out is on just during opening of closing cycle. 12Vdc 250mA | BATT | Battery input, 12-24VDC according to charger selector. ATTENTION: Wrong battery charging voltage may damage battery or board. |
| 12 | dual gate open by wired push button | PWR IN | Transformer input, max 24Vac, 200VA |

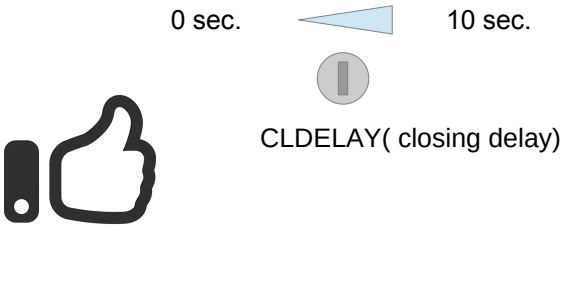
## Dip switches setting:

| **Function off** | **Dip** | **Function on** |
|---|---|---|
| Motor with Ground stop block limit | 1 | Motor with internal Micro limit switch |
| Normal work mode | 2 | Manual mode |
| Slowdown speed slow | 3 | Slowdown speed high |
| Auto close is off,step by step mode | 4 | Auto close is on. Closing time is set with Pause button. |
| Gate open inside (Pull to open) | 5 | Gate open outside(Push to open) |
| Photocell input is active, NC. | 6 | Photocell input is disabled. |
| Ram stroke is off | 7 | Ram stroke is on, at the end of closing the gate pushes for 1 seconds to firmly closing the gate. |
| Impusive lock (power on open lock) | 8 | Magnetive lock (power off open lock) |

## Potentiometer Setting:

**Closing Delay potentiometer:**adjust the delay between 2 wings in closing phase,from 0 to 10 seconds.Opening delay is 2 seconds by default,but if closing delay is set to 0,opening delay is 0 second too (2 wings start opening and closing simultaneously).

**Obstruction Sensitivity Potentiometer(Motor Stall Force):** adjust the sensibility of obstacle detection.turn it clockwise to max position to disable the obstacle detection.if gate can not move fully please turn it clockwise to increase force.
if gate can not auto stop when it meets obstacle or ground stop block,please turn it countclockwise to decrease force.





## Do working time learning for gate opener with limit of ground stop block:

Don't mind gates'positions,press WORK button for 2 seconds then release on control board until gates start opening in slowdown speed.when gates reach fully open positions, please press and release WORK button shortly again,the gates will start to close in quick speed.when gates reach fully closed positions and contact ground stop block,it will auto

If the gate operates in single wing mode, just connect Master motor M1. The control unit feels that M2 isn't connected and set itself in single wing mode.

**Please proceed this function before using this product, otherwise the system will drive the gates improperly. E.g.: The gate can't close and open completely.**

**IMPORTANT:** The gate openers use ground stop blocks as limits.when gates move to the end and contact ground stop blocks, they will stop working automatically.

## Remotes learning:

**Learning a remote by pressing REMOTES button on control board:**

Press shortly (1 second) REMOTES button then release on control board then press remote control to set dual gates open.
Press shortly (1 second) REMOTES button twice on control board then press remote control to set a single gate open.

On each pressing on REMOTES button on control board,PROG led flashes once. A couple of seconds after the PROG led is on,transmit in this time with remote to be learned.
After 10 seconds without any action the PROG led goes off and the procedure exits (timeout).

**Learning a remote using another remote (without any action on board):**

It's possible to learn a new remote quickly without acting on board.to learn a new remote:press new remote for 3 times. ( at least 1 second pause between each press).then press already programmed remote for 3 time.press new remote 1 time to confirm.programming is done.*STS* led flashes 1 time.

**Remove all codes:**

To remove all codes in memory,press and hold REMOTES button on control board till the PROG led goes off (about 5 seconds). When the led goes on you can release the REMOTES button, the memory is deleted.

## Pause time learning(auto close time):

Press shortly(1second)PAUSE button then release,the PROG led starts flashing with 1 second period.Count the led flashing up to the desired pause time then press PAUSE button again.the PROG led goes off and the pause time is updated into the memory.

## Manual mode :

DIP switch 2 is on ,board is in manual mode . User can use this function to adjust gate position and to know motor polarity .
TS1 button is to change motor ,between motor1 and motor 2.
Press TS2 button is to open motor,release motor stop.
Press TS3 button is to close motor ,release motor stop.