

MAGIC LIGHTING OVERVIEW

Magic Lighting (ML) is a weekly programmable timer. The timers are WiFi-controlled from anywhere. It contains 8 timers. 4 timers are switches (relays contacts), other 4 timers will drive 12-volt dimmable LED lights. ML is controlled through a Web APP on your cell phone or PC. The power output of each channel is 12 volts and 28 Watts max. It can drive 4, 12-volt 7 Watts LED on each channel (Output)

The 12 volt DC outputs are over current protected. Once an overcurrent/short circuit is detected, the shorted output will be turned off for 8 seconds. If over current persists the output will remain off until the overcurrent is rectified.

Since LED lights are 12 Volts DC rated they can be mounted inside the pool. Make sure you feed your power supply through a GFCI receptacle. This controller only supports 2.4Ghz Wi-Fi

WARNINGS

ML LIGHTING IS MADE TO BE INSTALLED INDOORS. EXCESSIVE HUMIDITY AND WATER WILL DAMAGE THE DEVICE. ONE MAY INSTALL IT OUTDOORS WITH A PROTECTIVE WOODEN COVER WITH THEIR OWN RISK. ONE WOULD NEED TO KEEP WATER FROM GETTING IN TO THE BOX BEHIND THE ML BOX

How to set up Magic Lighting, (ML)

1. Insert 3.0 Volt cell battery CR2032 not supplied, in the black socket next to the CPU. Do this if you intend to power up your ML. Otherwise, the CPU will drain your battery.
2. The CPU board is located at the top right of the PCB and below the black battery socket. Please observe the battery polarity. Please do not touch the small square plate on top of the CPU board. ML requires a 12-volt DC, 200-watt power supply (Not supplied) to drive your ML to the maximum capacity. Adjust your power supply voltage to 12.5 volts. Using a power supply larger than 200 watts is not recommended.

3. Connect the 12-volt DC power supply to your ML 12V+ and 12V- Your device CPU board is in hard listening mode. The RGB LED located on the CPU board is blinking blue.
4. **Ensure that your phone is close to your ML hardware, and that you have a strong WIFI connection where this device is being set up.**
5. **Open the Wi-Fi settings on your Cell phone and connect it to the network called photon-xxxx. ML does not give you an internet connection so, waite for the full page message then choose the “connect only this time “ option**
6. **Open a web browser on your phone (Google) and in the address bar, enter the following URL: <http://192.168.0.1> , click search, You will be connected to the soft app on your device**
7. **Click Scan, select your home Wi-Fi and enter your Wi-Fi password, then click go**
8. **The RGB LED on your CPU will blink different colors and once it is connected to your Wi-Fi it will breathe Cyan. This is telling you that your ML is connected to your Wi-Fi. If your password or Wi-Fi name is incorrect, the LED will blink indefinitely. Make sure your phone is still connected to the Photon-XXXXX. Then Please go back to steps 4 to 9. Once ML is connected to the internet, then go to step 10.**
9. At this point, your phone will be disconnected automatically from Photon-XXXXX. Please reconnect your phone to your home WIFI
10. Once on the internet, visit <http://partouiot.com/Access/login> and enter your username and password that is provided to you. A web app page will open where you can control your ML with it.
11. Before you take your ML to a different location with different Wi-Fi, you need to put your ML in hard listening mode.
12. Press gently and hold on to the Setup button on the CPU board until the RGB light blinks blue slowly then fast. Release the button after it starts blinking fast. If you turn the power on and off, the RGB light will blink blue, indicating it is in hard listing mode.
11. Repeat steps 4 to 9 to connect it to your new home Wi-Fi.
13. If you want to change your home Wi-Fi credentials. Go to the set-up Wi-Fi on your web app and click save. You may do this while you are still connected to the internet. (Make sure you are close to your router) This will put your ML in soft listening mode. The LED on the CPU will blink blue. If you shut off your ML it will come out of soft listening mode.

14. Go to steps 4 to 9 to enter your new Wi-Fi credentials. Once you update your home Wi-Fi, ML will connect to it

How to Use Your Web App

Search for partouiot.com/access/login on Google. A page will come up then enter your login and password given to you. You may have to login several times to get connected

After logging in you will see 3 Icons, Light Control, Device Management, and Profile

Click on the Light Control. Then click Select located on the far right of your screen.

You Will see 4 boxes, Light1 to 4, and 4 other boxes, Switches 1 to 4. There are some blue writings in each box which you can change to whatever you like. Just double-click it. You may have to enter your username and password again

There are 2 boxes at the bottom, Wi-Fi Configurations, and Time zone

Configurations. The Toronto Time zone is -4 or -5 depending on the season. You need to find the time zone of your town. Using Google. Please note after daylight savings time the time zone will change.

Wi-Fi Config is for when you need to change your home Wi-Fi name, password, or both in the future. Click Save on the Wi-Fi Config. This will put your ML in soft listening mode with the blue light slowly blinking. You need to be close to your ML for this job. Please note that by turning the power to your ML off and then on, your CPU will come out of soft listening mode and try to connect to your old Wi-Fi.

Please follow steps 4,5,6,7 and 8 to enter your new Wi-Fi info into your ML.

ML is now waiting for you to update your home Wi-Fi

After changing your home Wi-Fi, your ML will connect to it. Remember to update your ML Wi-Fi before changing your home Wi-Fi

4 relay switches are corresponding to Switch 1 to 4. There are green LEDs behind each blue relay close to the K1 to K4 terminals.

When the relay is activated the green light behind it will glow.

How to Change Your WebApp Password

After logging in to your web app, click on the Profile. It will allow you to change your WebApp password. Do not attempt to change your ID. If you do it

How to Connect Switches and 12V DC Outputs

The following is a simple guideline for wiring Magic Lighting. Partouiot will not take any responsibility for any miswiring. One would need to get the help of a qualified electrician for ML installation. Please check the ratings of your contactor

1. Use a 24 Volts AC transformer 30 to 40VA to power up high voltage contactors with the switches K1 to K4. Contractors must have a 24-volt AC coil. The contact ratings will depend on your AC load requirements
2. One terminal of the 24-volt AC transformer will be connected to the top or the bottom terminal of all the K1 to K4. The other terminal of K1 to K4 will go to the coil of the contactors 1 to 4 respectively and another terminal of the contactor will go to the other terminal of the 24V transformer. Please refer to the Relay connection diagram.

How to Connect 12 Volt LEDs to the ML

Use a 12-Volts, 200 watts DC power supply (PSU) not supplied.

Run a pair of AWG 16 wires to each LED. One wire will connect to 12V+ and the other to the desired output (1 to 4). Do not share 12V+ of PSU with other LEDs

To connect more than one LED to any output, the connection can be shared at each LED that might be on the front or back yard

Please keep the wire from your DC PSU (Power supply) to the 12V- terminal as short as possible and use a higher gauge wire if needed because the total current of all 4 channels passes through the negative PSU terminal to the ML board.

Mode1 only starts from channel 1 and in Auto mode. It applies to all 4 channels. Mode1 will blink each light to the left 10 times and then to the right 10 times until the end of the time you have programmed it.

Other modes have not been programmed yet; they are for future use.

The time zone must be set before any auto-mode setup. The memory backup battery will store the time zone and time program settings.

If you intend to keep your ML off for a long time you should remove your battery to keep it from draining

Installations Instructions.

There are 4 holes in the bottom of the box for mounting on the wall. Do not mount it on a conductive surface (Metallic) This device is intended for inside installation. It may be installed on the inside wall of your garage. Installation location needs to be close to the Wi-Fi router of your house. If you are mounting it outside of your house, choose the box with no holes on it. Please cover it with a wooden box(non conductive) to protect it against direct rain and snow. Make sure you feed your power supply through a GFCI receptacle. The device must be mounted with the 2 cable glands facing downward.

Install your power supply close to the ML box. If your power supply is not outdoor rated. Install it on the wall behind your ML if possible. Use a 12 gauge wire to connect the 12 volt DC power to your ML.