

# Adjust LED searchlight brightness

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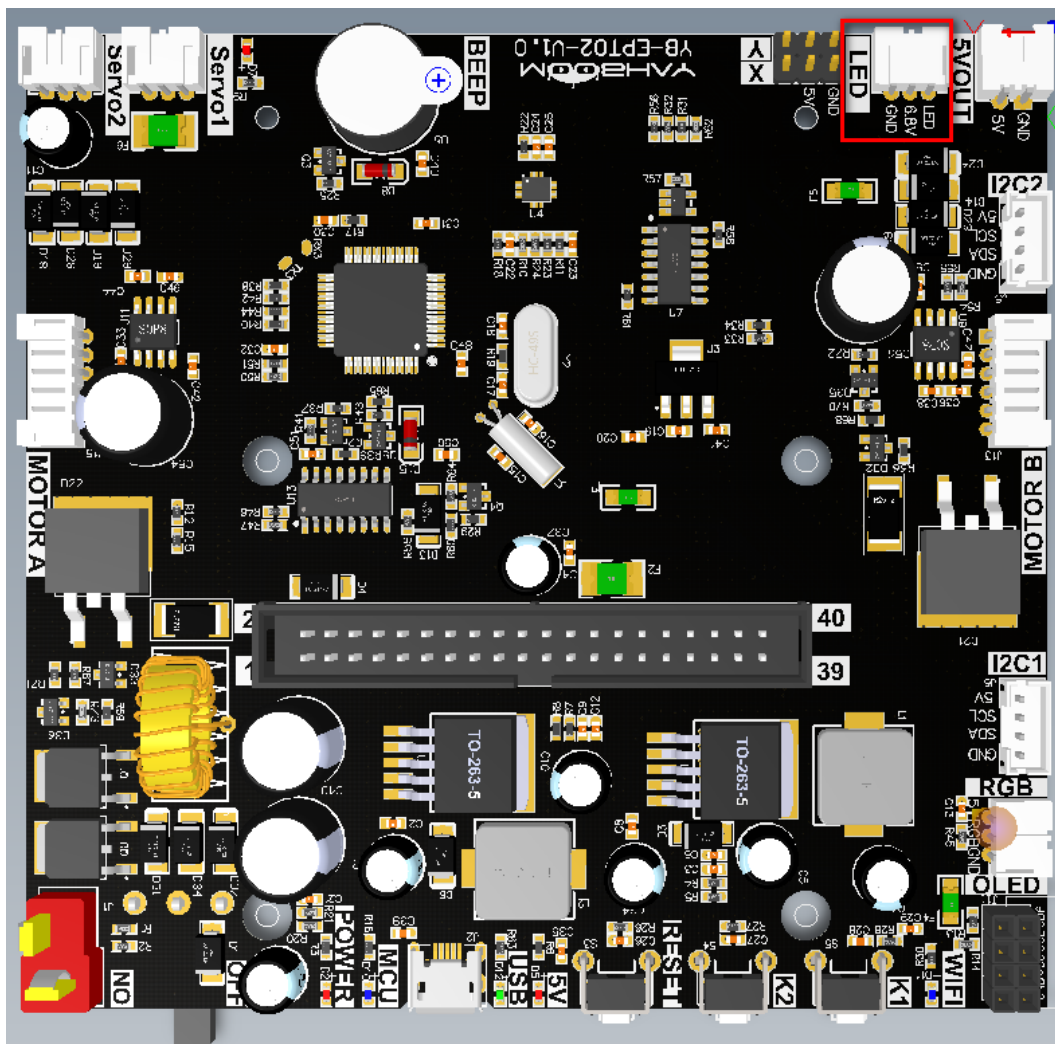
- 1、Experiment goal
- 2、Experiment preparation
- 3、Experimental operation and phenomenon
- 4、Code

## 1、Experiment goal

Control the LED searchlight on Transbot to switch different brightness to achieve a similar breathing light effect.

## 2、Experiment preparation

Buzzer and button as shown below.



The picture below shows the LED searchlight module. The white socket on the bottom of the back is the cable interface, which can be directly inserted into the LED light interface on the expansion board.



The brightness of the LED searchlight is adjusted by the PWM signal output by the MCU. We only need to pass in the duty cycle of the brightness to adjust the brightness of the light.

Transbot\_Lib library functions needed for LED searchlights:

```
set_floodlight(light)
```

Parameter explanation: light controls the brightness, light = [0, 100], 0 is off, and 100 is the brightest.

Return value: None.

### 3、 Experimental operation and phenomenon

Please the video.

Note: Due to the high brightness and concentrated light of the LED searchlight, it is forbidden to irradiate the eyes to avoid damage to the eyes.

### 4、 Code

Code path: Transbot/Samples/4.led\_light.ipynb