18. Case16: The Dazzling Lights
18.1. Purpose

- Simulate the lights of the police car.

18.2. Material

1 x TPBot

18.3. Hardware connection
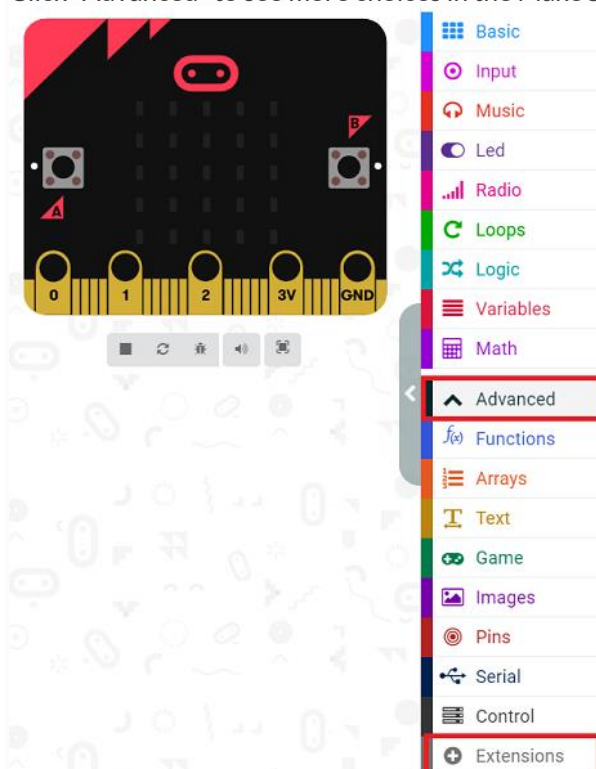
Connect rainbow led to port 1 on TPBot.

18.4. Software

MicroSoftmakecode
18.5. Programming

Click "Advanced" to see more choices in the MakeCode drawer.

- We need to add a package for programming. Click "Extensions" in the bottom of the drawer and search with "tpbot" in the dialogue box to download it.
- We need to add a package for programming. Click "Extensions" in the bottom of the drawer and seach with "PlanetX" in the dialogue box to download it.
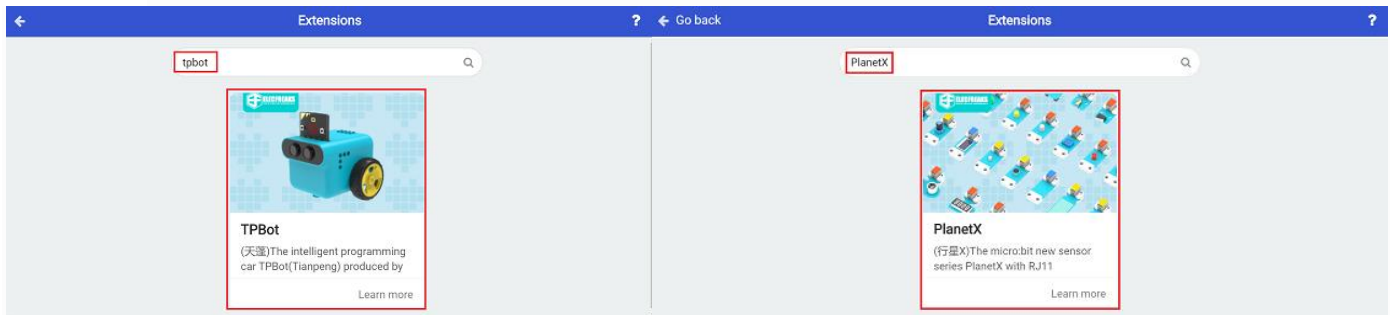
18.6. Sample

- In on start brick, initialize the led strip and has it connected to J1 port, set TPBot move forward at the speed of 50%.
- Save the variable "i" as 1 while pressing button A and set it as 0 while pressing button B.
- In forever brick, judge if the variable "i" is 1, if yes, set the led in red and pasue for 500ms, after in blue and pause another 500ms; or set it in black.

Link
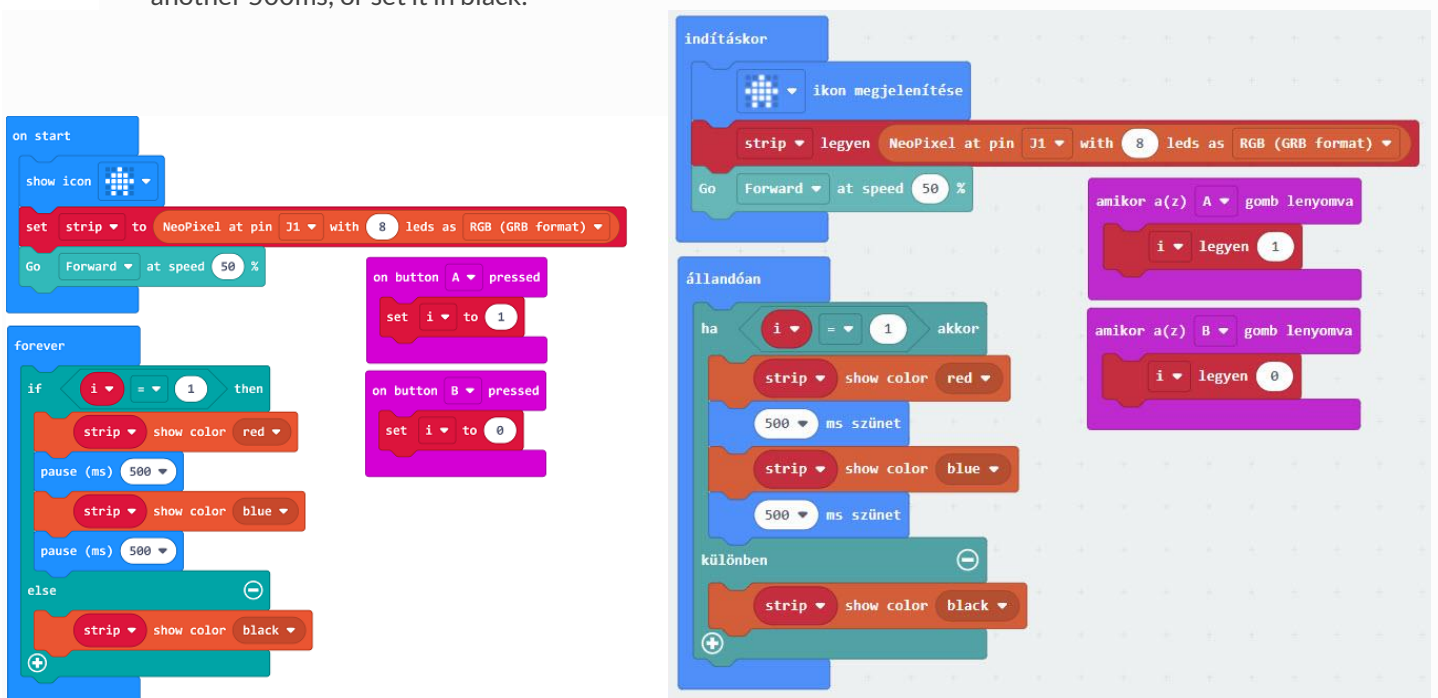
- Link：https://makecode.microbit.org/_TvrRaMJLKPWr
- You may also download it directly below:

18.7. Conclusion

- The TPBot moves forward after powering on, press button A on the micro:bit to turn on the LED cycling with red and blue, press button B to turn it off.

18.9. FAQ

Q: While operating this case, why the car might not work properly?

A: It might be the low power of the batteries, please try adding the value of TPBot's speed and test again.