

14. Case 12: micro:bit Remote Control

14.1. Purpose

- Programme to use the micro:bit to control the TPBot.

14.2. Material

- 1 x [TPBot](#)

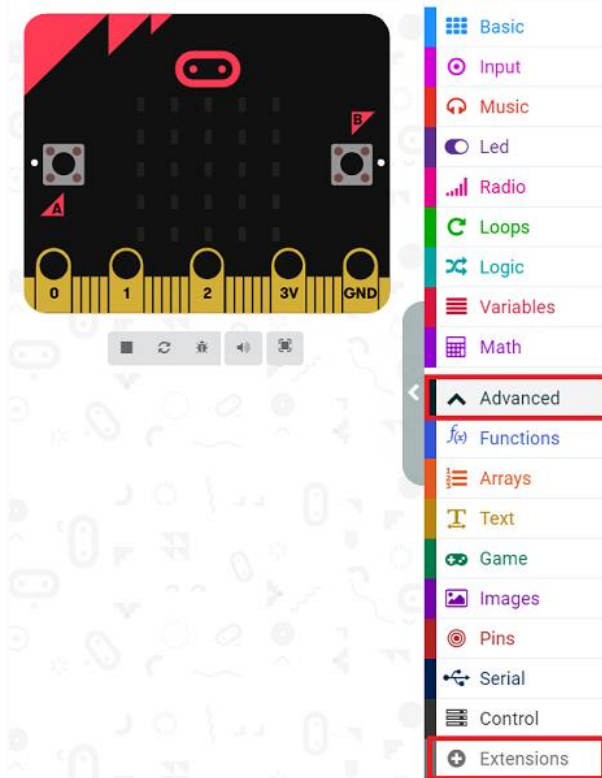


14.3. Software

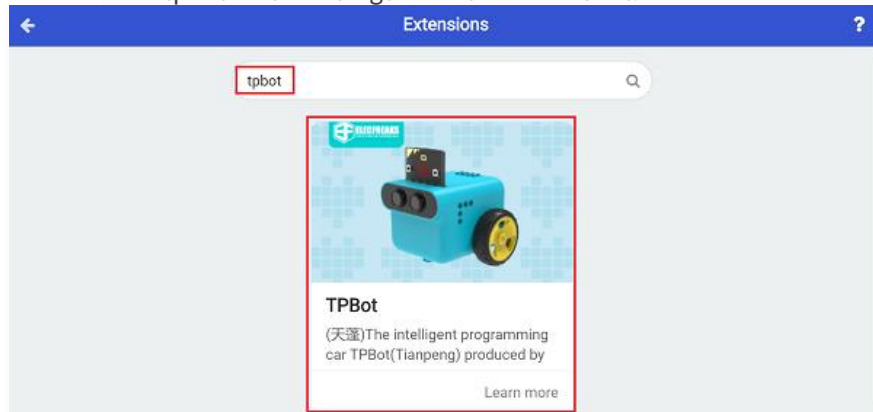
[MicroSoftmakecode](#)

14.4. Programming

- Click “Advanced” to see more choices in the MakeCode drawer.



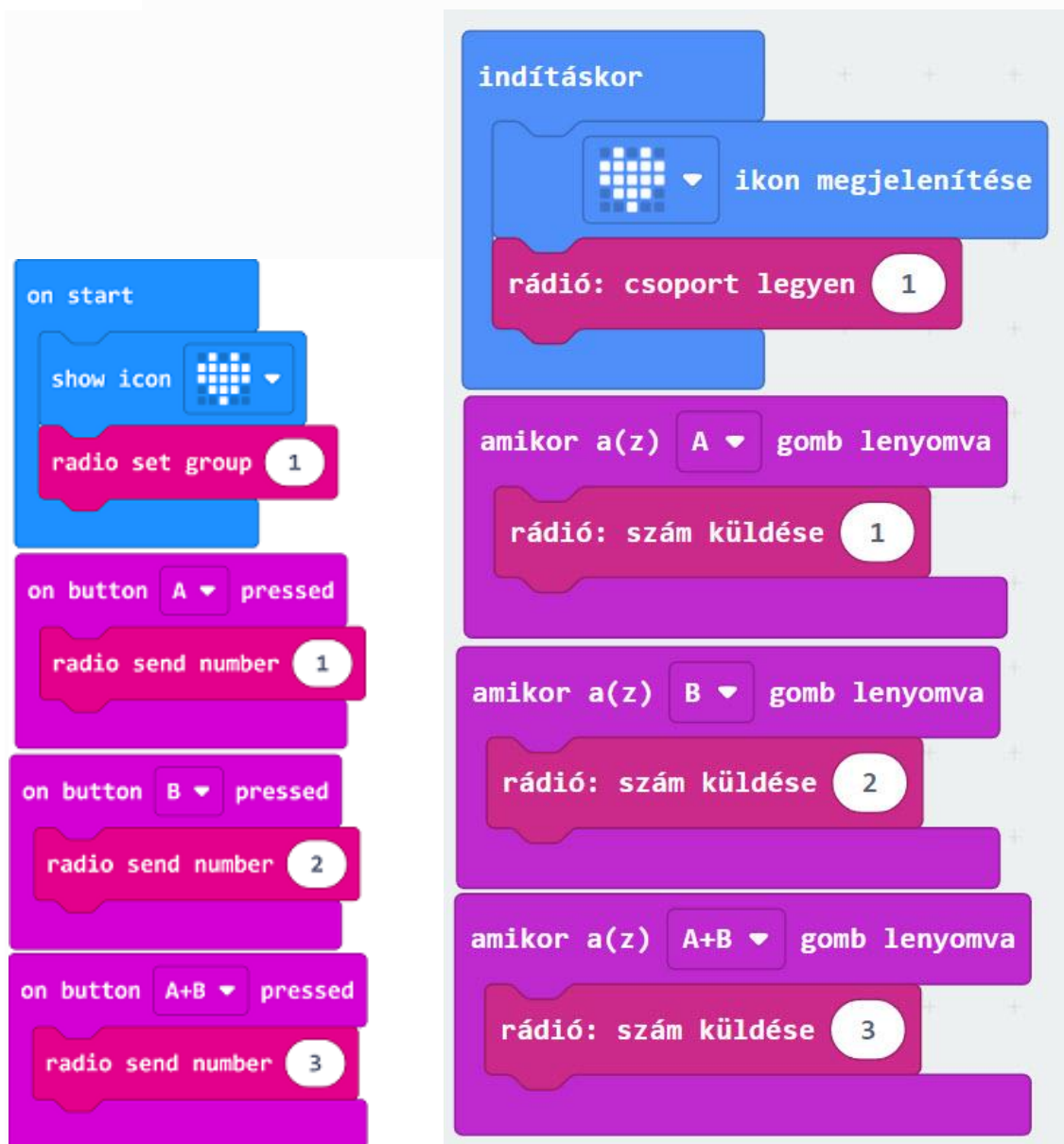
- We need to add a package for programming. Click “Extensions” in the bottom of the drawer and search with “tpbot” in the dialogue box to download it.



##Sample

Remote Control Part

- Set the micro:bit showing a set icon and the radio group as 1.
- After pressing button A, radio send number 1; after pressing button B, radio send number 2; after pressing button A+B, radio send number 3.



Link

- Link: <https://makecode.microbit.org/ DYDT9ibh9V1E>
- You may also download it directly below:

--- ### Receiving Part - Set the micro:bit showing a set icon and the radio group as 1. - Save the received number as the variable. - Judge if the variable is 1, if yes, set the TPBot turning left at the speed of 30%; if the variable is 2, set the TPBot turning right at the speed of 30%; if the variable is 3, set the TPBot moving forward at the speed of 30%.

```

on start
  radio set group 1
  show icon [ikon megjelenítése]

on radio received receivedNumber
  set i to receivedNumber

forever
  if i = 1 then
    Go Left at speed 30 %
  else if i = 2 then
    Go Right at speed 30 %
  else if i = 3 then
    Go Forward at speed 30 %

indításkor
  rádió: csoport legyen 1
  ikon megjelenítése

rádiós adat vételekor receivedNumber
  i legyen receivedNumber

állandóan
  ha i = 1 akkor
    Go Left at speed 30 %
  különben ha i = 2 akkor
    Go Right at speed 30 %
  különben ha i = 3 akkor
    Go Forward at speed 30 %

```

Link

- Link: <https://makecode.microbit.org/CAMF0t8rYT0j>

- You may also download it directly below:

--- ## Conclusion ---

- Power up to show a set icon on the micro:bit, after pressing button A, it turns left; after pressing button B, it turns right; after pressing button A+B, it moves forward.

14.5. Exploration

14.6. FAQ

Q: The car does not work with the code in the wiki.

A: It should be the batteries that are lack of power, please try to fix it by adding the value of the speed in the code.