IR control fan

Note: The program provided in this course is only applicable to Yahboom exclusive IR controller.

1. Purpose

In this course, we mainly learn to use micro:bit boards, infrared receiver module, motor drive module, building block servo, DC motor, and realize IR control fan.

2. Programming method

Mode 1 online programming:

First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: http://microbit.org/ to enter the programming interface. Add the Yahboom package: https://github.com/lzty634158/yahboom_mbit_ir and https://github.com/lzty634158/Croco-Kit to start programming.

Mode 2 offline programming:

We need to open the offline programming software. After the installation is complete, enter the programming interface, click[New Project]. Add Yahboom package: https://github.com/lzty634158/yahboom_mbit_ir and https://github.com/lzty634158/Croco-Kit you can start programming.

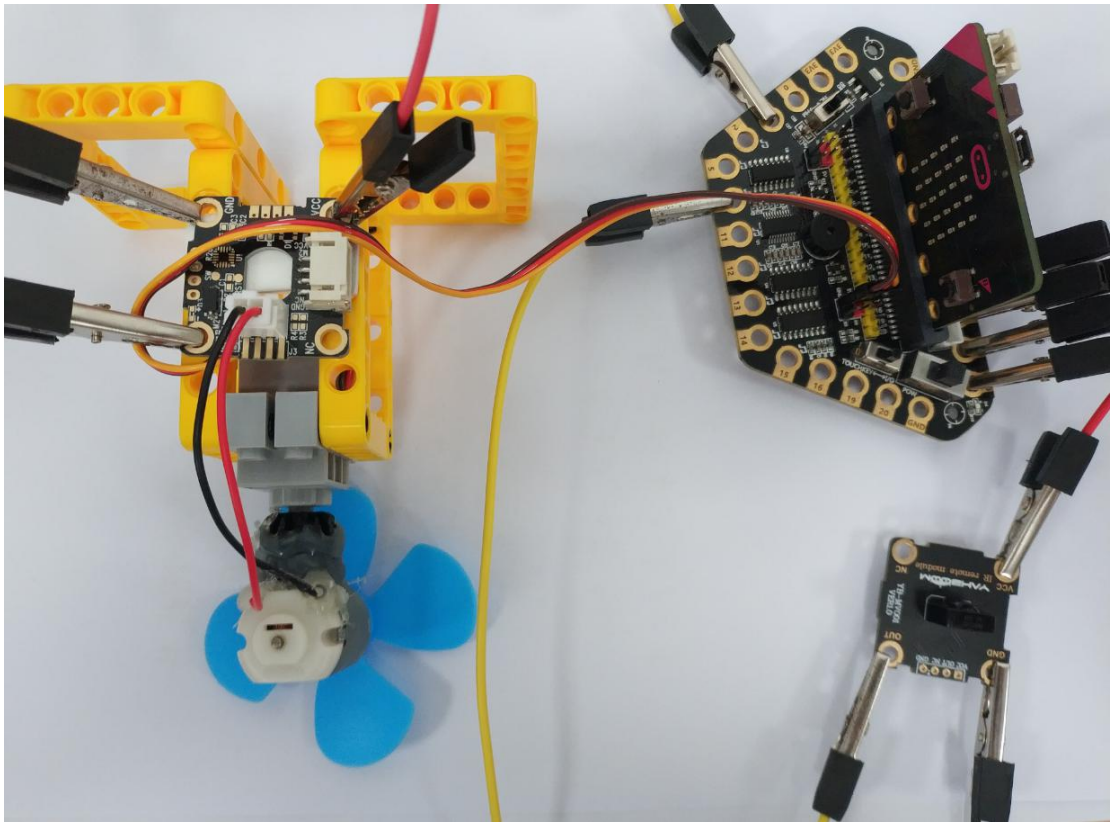
3. About wiring

Infrared receiver module	Micro:bit
OUT	P8
VCC	5V
GND	GND

Motor drive module	Micro:bit
OUT	P1
VCC	5V
GND	GND

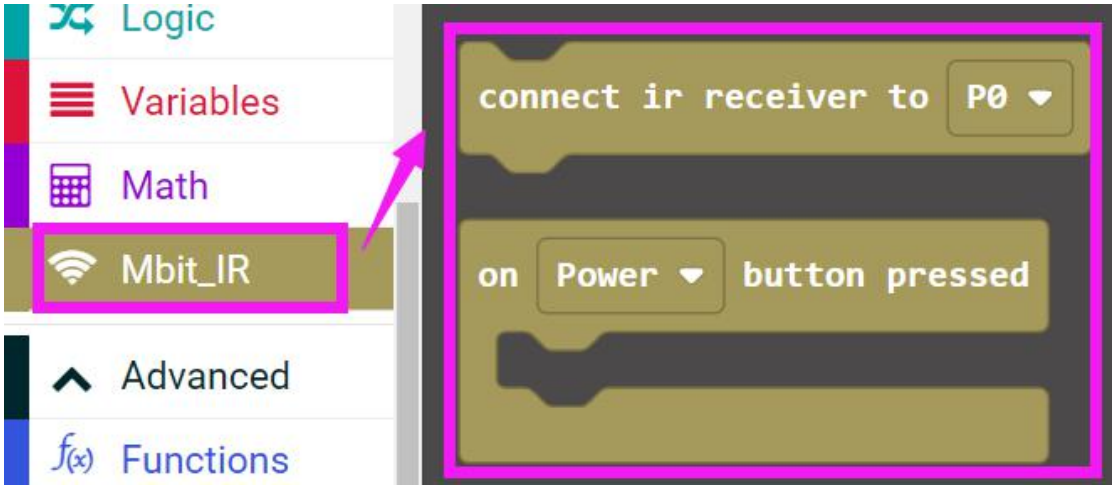
Building block servo	Micro:bit
Yellow line	P15
Red line	5V
Brown line	GND

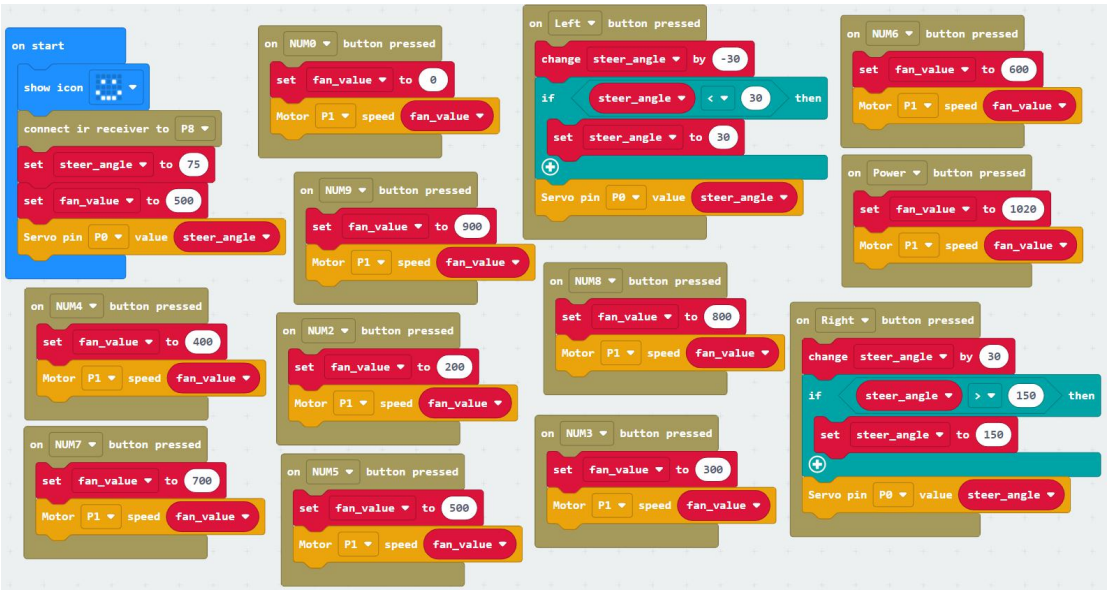
Note: Because the micro:bit cannot be directly connected to the module, we use the micro:bit alligator clip expansion board. As shown in the figure below.



4. Combine building blocks

We need to use the following programming building blocks.





5. Experimental phenomenon

After the program is downloaded successfully, micro:bit dot matrix displays a smile face.

0-9 buttons represents different fan speed. The higher the value, the wind speed is faster.

Left and right buttons control the servo to rotate left and right.