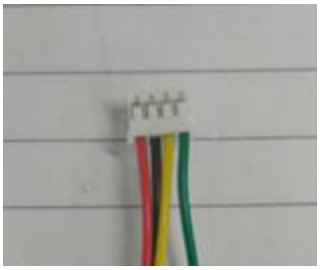
1.Hardware connection

Camera connector



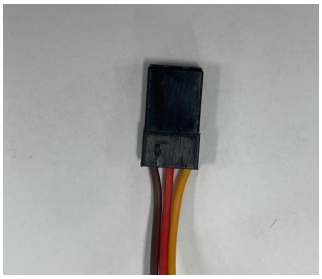
Red: VCC(5V)

Black: GND

Yellow: TXD

Green(white):RXD

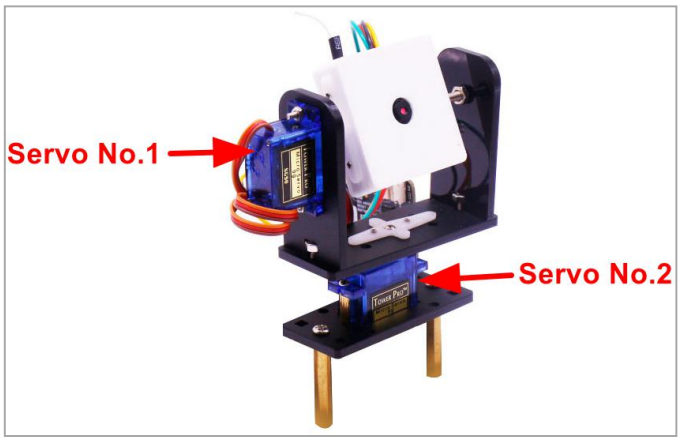
Servo connector



Black: GND

Red: VCC(5V)

Yellow: Signal line S



Wiring table:

Camera platform		UNO	4WD expansion board
No.1 servo	Signal line S	A1	J2
	VCC	VCC	VCC
	GND	GND	GND
No.2 servo	Signal line S	3	J1
	VCC	VCC	VCC
	GND	GND	GND
	Red VCC	VCC	VCC

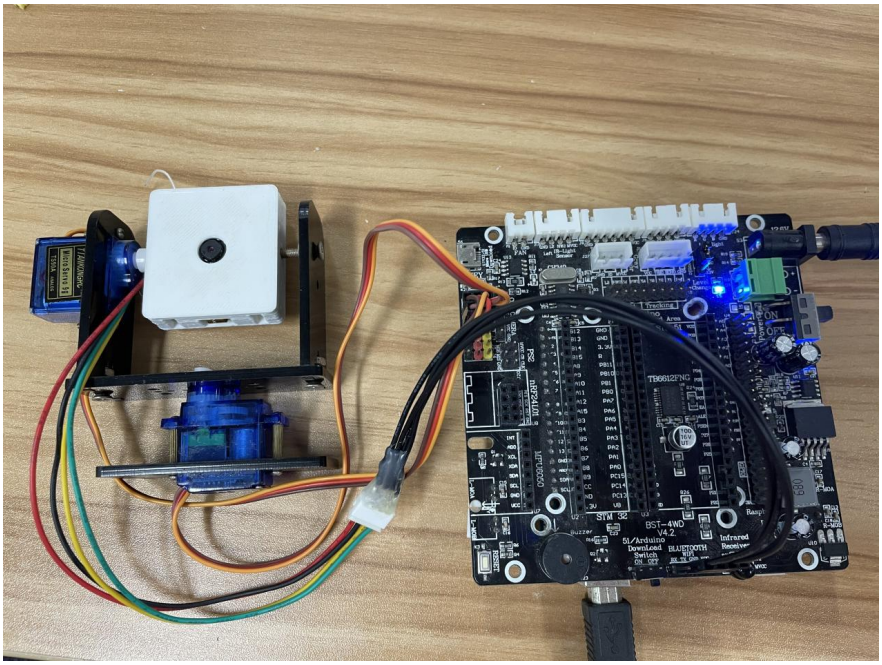
WiFi camera	Black GND	GND	GND
	Yellow TXD	0	TX
	Green(white) RXD	1	RX

Notice:

1) Due to the power of the camera is too high, the Arduino board alone may not be able to directly drive the camera and the servo. It needs to be equipped with an additional expansion board and an adapter cable, and it is powered by a battery.

2) When using the 4WD expansion board, you need to turn the programming switch to 【ON】when uploading the code, and unplug the WiFi camera module. When the APP is controlled, it needs to connect the WiFi camera module, and turn the programming switch to【OFF】.

3) The camera interface is PH2.0 interface, cannot connect to XH2.54 interface and use XH2.54 DuPont cable.



2. Steps

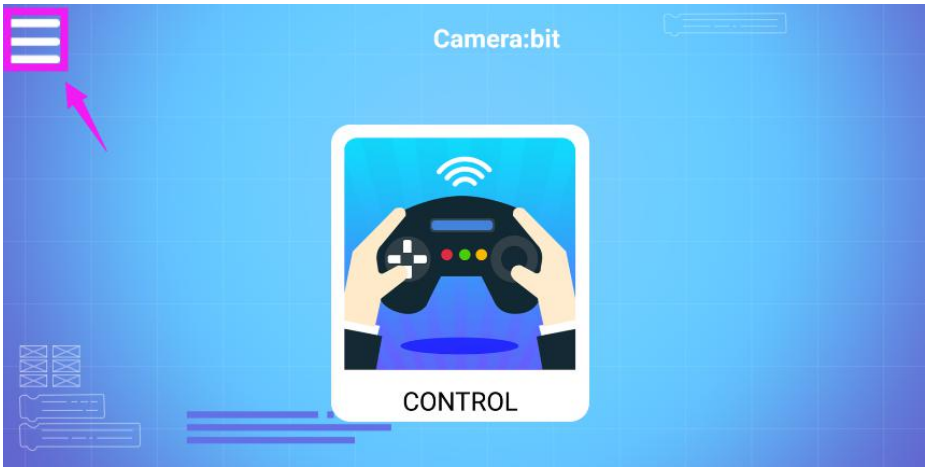
2.1 Download and install APP

Android users search "YahboomRobot" inPlay Store to download APP.

iOs users search "YahboomRobot”in AppStore to download APP.

2.2 We need to use the mobile phone to search for WIFI signal**(Yahboom_XXXXX, no need password)** and connect.

2.3 After the WIFI connection is successful, open the APP. If you will see the screen shown below. You can click left upper corner to select service -- [Micro:bit camera platform].



2.4 Click to enter the screen shown below, after seeing the video screen, you can start to control the camera platform.

"RUN, BACK, LEFT, RIGHT": You can send data to the serial port. After the MCU receives the data, it can control the up and down, left and right movements of the camera platform.

"CL, CR": You can send data to the MCU to control the left and right rotation of the camera platform.

"Slider": You can slide to send data from 0-180° to control the servo to control the angle of the camera.

"Rotation": Rotate the screen by 90° each time.

"Photo": Take a photo, the path to store the photo will be prompted in the APP interface, we can also go to the root directory--->[MediaStream]--->[Image] of the mobile phone to get the photos.

"Video": After the camera sees the screen, you can press to start recording, then start recording, the interface prompts to start recording, after the recording is over, click this button again. We can also go to the root directory--->[MediaStream]--->[Movie] of the mobile phone to get the videos.