#### **Control PWM servo**

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### 1. Experiment goal

Control the PWM servo on Transbot SE to rotate up and down, left and right.

## 2. Experiment preparation

The servo interface is shown below. There are a total of two servo interfaces on the expansion board.

Among them, the black interface is GND, the red interface is the positive terminal of the 5V power supply, and the yellow interface is the signal, marked X and Y respectively, indicating two servo interfaces .

Control the left and right servos into the X interface, and control the up and down servos into the Y interface. As shown below, the servo must be correctly connected to the expansion board, otherwise the servo will be damaged.

The normal camera version only needs to insert the servo X and the servo Y. The depth camera version only needs to insert the servo X, no need use the servo Y.



Transbot\_Lib library functions needed for PWM servo pan/tilt:

Parameter explanation: servo control, servo\_id: corresponding ID number: X = 1, Y = 2, angle: corresponding servo angle value

servo\_id=[1, 2], angle=[0, 180]

Return value: None.

# 3. Experimental effect

Please check video

## 4、Code

Code path: Transbot/Samples/5.pwm\_servo.ipynb