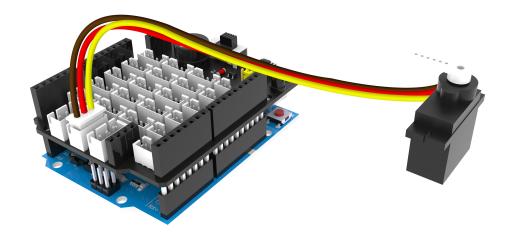
Experimental content: Servo wiper swing simulator

Experiment preparation: UNO board *1, Plugkit sensor expansion board *1, USB data cable *1, 9G Metal digital servo *1

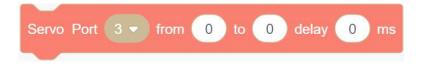
Experimental wiring:



The interface of the servo connected to the sensor expansion board is silk screen (~ 5, 5V, GND).

Experimental steps:

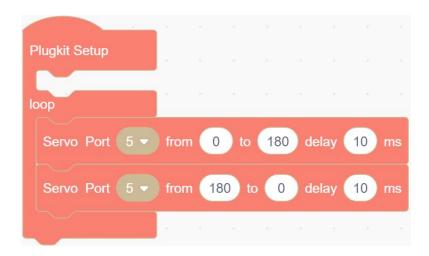
1. Select the following building blocks in the [Plugkit].



2. Set the servo port to 5 and modify it to from 0 $^{\circ}$ to 180 $^{\circ}$ with a delay of 10ms. This experiment requires two servos to turn the blocks to achieve the servo from 0 $^{\circ}$ to 180 $^{\circ}$, then, from 180 $^{\circ}$ to 0 $^{\circ}$. After testing, we find when the USB cable is powered, the minimum speed of the servo is 10ms. If it is less than 10ms, it will cause UNO board to restart.



3. Add the two blocks from the previous two steps together and put them in the loop block.



4. Compiling and uploading programs.

Note: If the USB data cable is used for power supply, the UNO board may restart due to unstable voltage. It is recommended to use a battery box for power supply.

Experimental phenomena: Servo wiper from 0° to 180°, then, from 180° back to 0°, every turn 1° time interval 10ms.