

# Servo debugging

## SG90 Servo

180 angle steering  
gear

Rotation angle is  
from 0 to 180

Brown line —GND


Red line —SV

Orange line —signal(PWM)



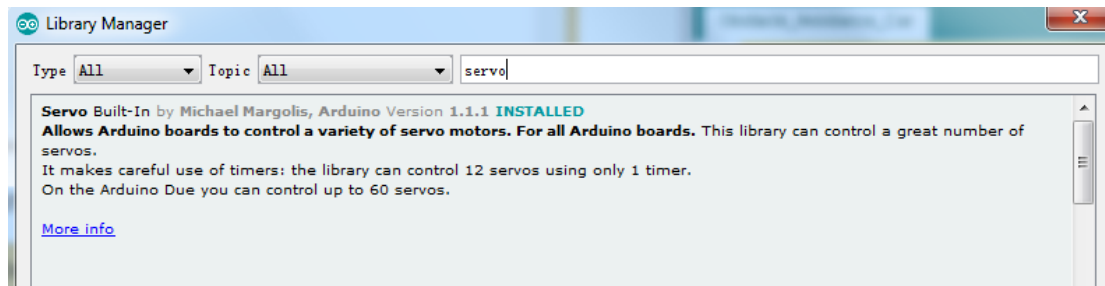
*When assemble the fastening board, the servo should also be debugged to ensure it can bypass obstacles normally.*

*Connect the vehicle with the computer using the usb cable, and open the Arduino IDE interface. Chose the right type of plate (Arduino/Genuino uno) and the serial port, and burn the code of Servo\_debug in the appendix.*

 Servo\_debug

Because the program uses the library <servo.h>, so we need to install the library at first.

Open the Sketch---Include Library---Manage Libraries



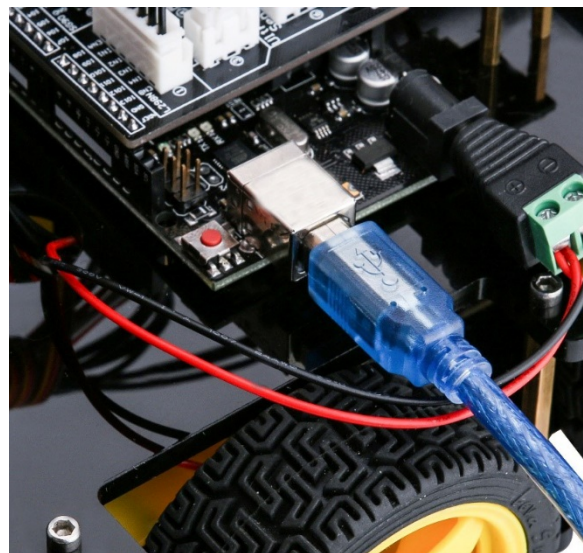
Search servo and then install the newest version.

**Servo\_debug** code review:

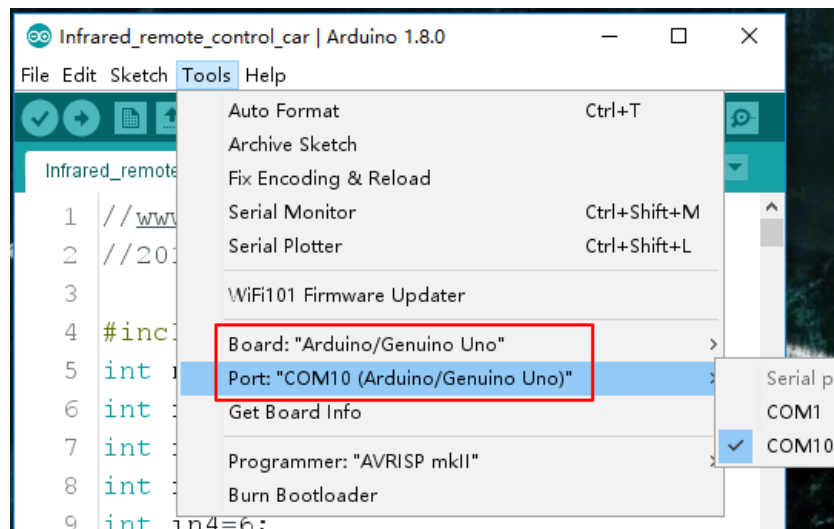
```
#include <Servo.h>  
Servo myservo;  
void setup(){  
    myservo.attach(3);  
    myservo.write(90); // move servos to center position -> 90°  
}  
void loop(){  
}
```

*After the code is burned, the servo will adjust itself to the position at 90°. If the steering plate is not at this location, please take off the plate and install it onto the servo again. Implement trial and error to ensure the servo is at the 90° location.*

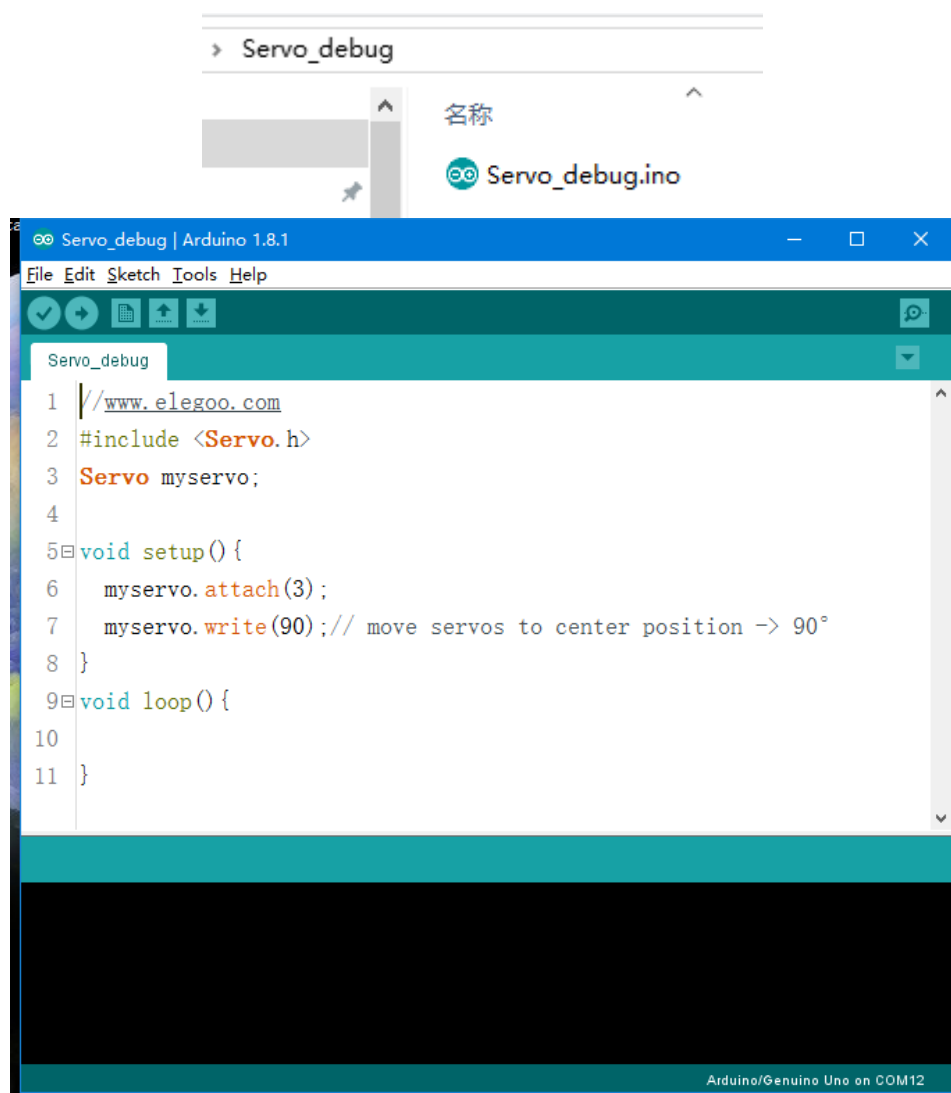
**STEP1:** Connect the UNO to the computer.

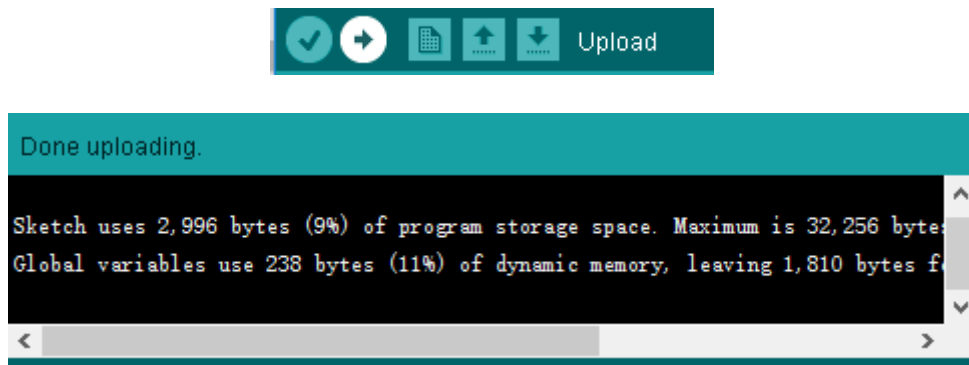


**STEP2:** Open the arduino IDE and select "Tool"-->"Port", "Board". As shown below.



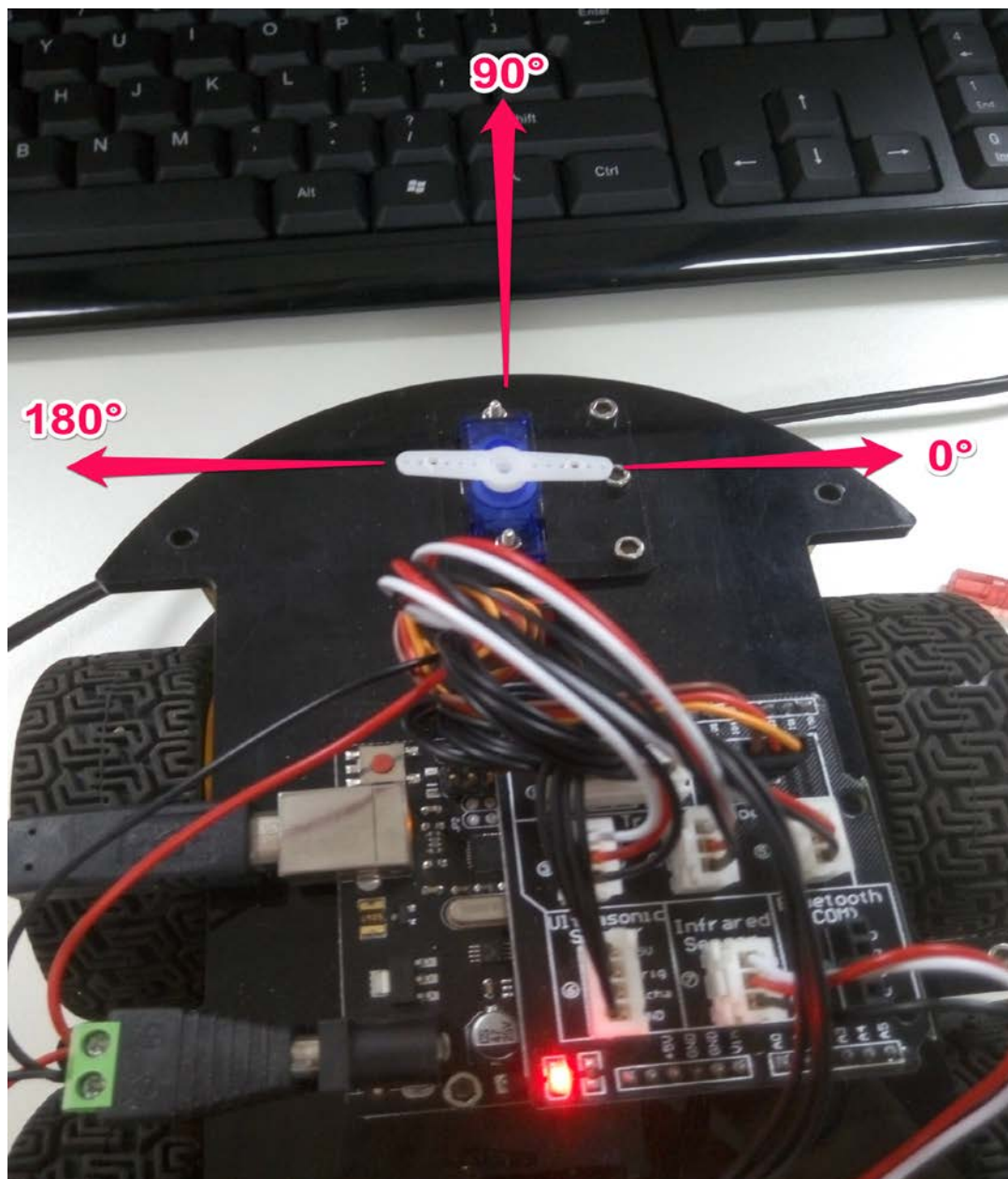
**STEP3:** Open the file Servo\_debug \ Servo\_debug.ino and upload to the UNO controller board.





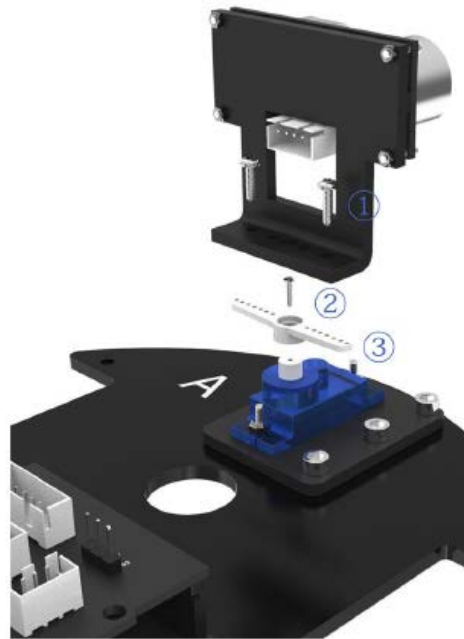
The picture above shows that it is uploaded successfully.

**STEP4:** Assemble the fastening board



## STEP5:

ELEGOO



- ① Self-tapping screw
- ② Mini self-tapping screw
- ③ Fastening board