




Lesson 9 Servo 90° debugging

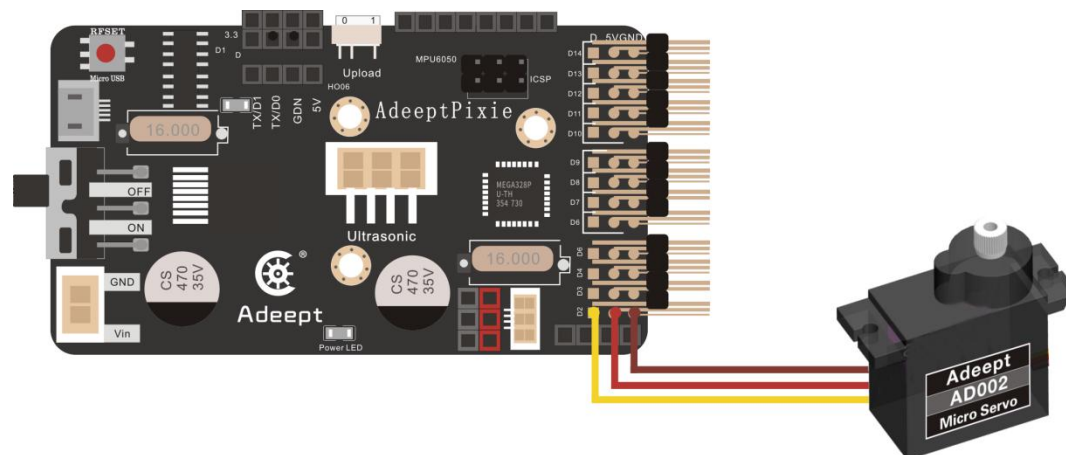
Since the initial angle of the factory-built servo will be different, we need to adjust the angle of the servo before assembling the robot, and all adjust them to an initial angle of 90°.

9.1 Components used in this course

Components	Quantity	Picture
AdeptPixie Drive Board	1	
Micro USB Cable	1	
Servo	13	

9.2 Wiring diagram (circuit diagram)

In this lesson, you need to prepare 13 servos in the robot kit. Only one servo is connected for debugging at a time. We use AD002 servos to connect to the AdeptPixie driver board. You only need to connect the AD002 servo to the AdeptPixie driver board. The Servo interface is shown below:



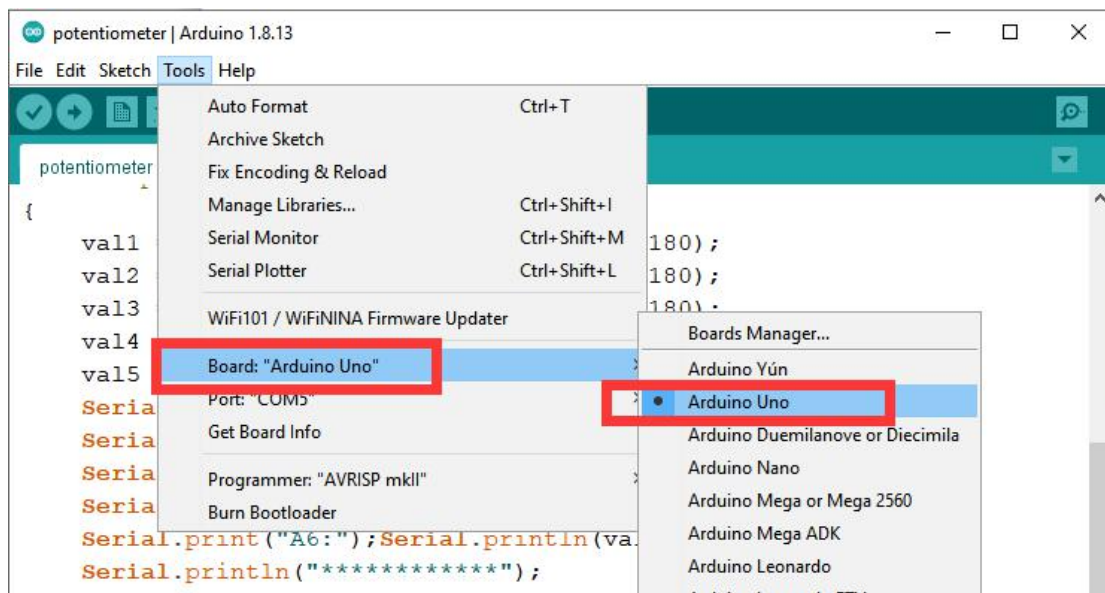
9.4 Servo 90° debugging

You need to prepare all the servos in the robot kit. First, brush a debug program into the servos to turn all the servos to the 90° position.

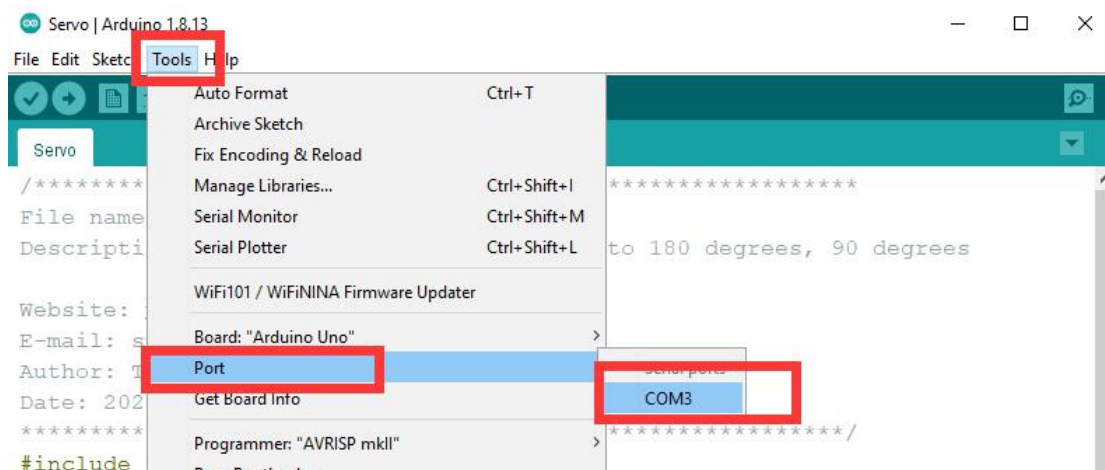
1. First, open the Arduino IDE software, as shown below:



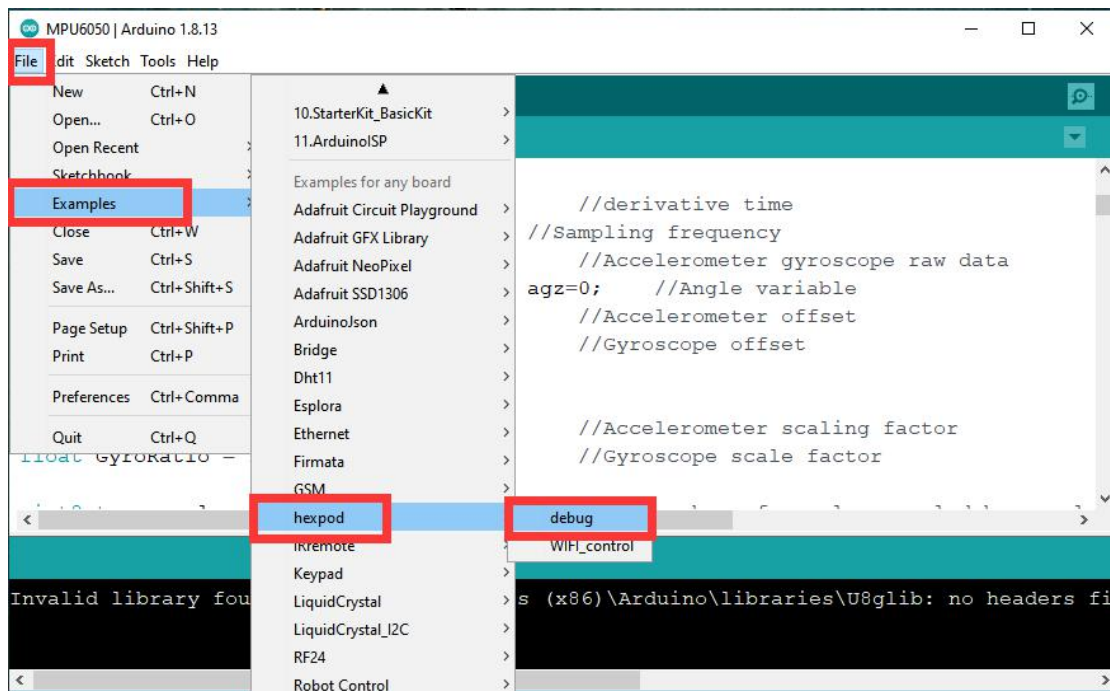
2. In the Tools toolbar, find Board and select Arduino Uno, as shown below:




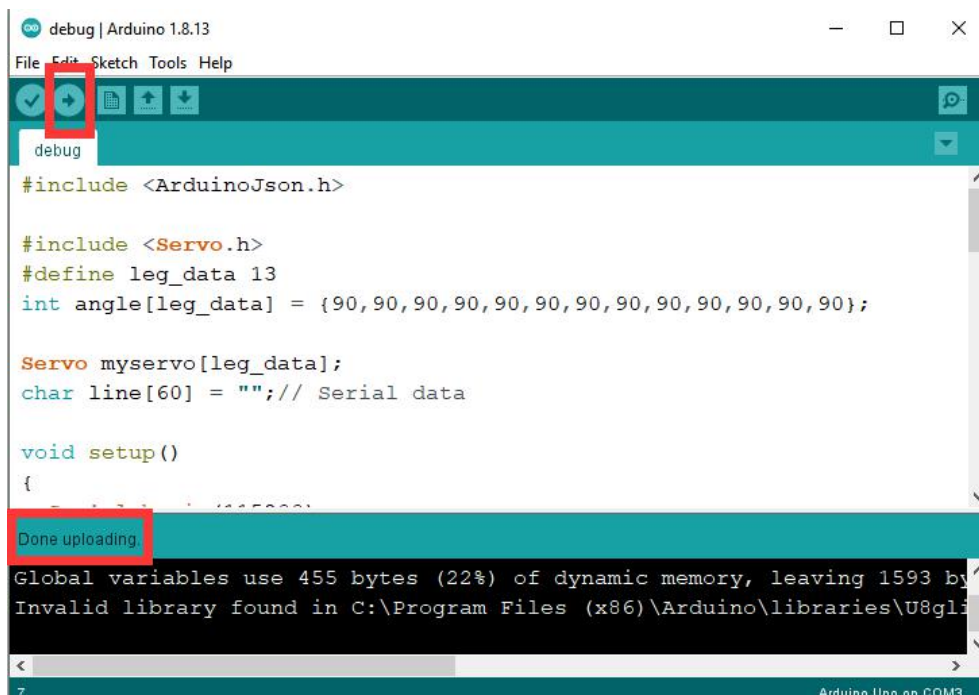
3. Click "Tools" and select the port number of the connected AdeptPixie Drive Board in "Port", as shown in the figure below:



4. Click Examples->hexpod->debug under the File drop-down menu:

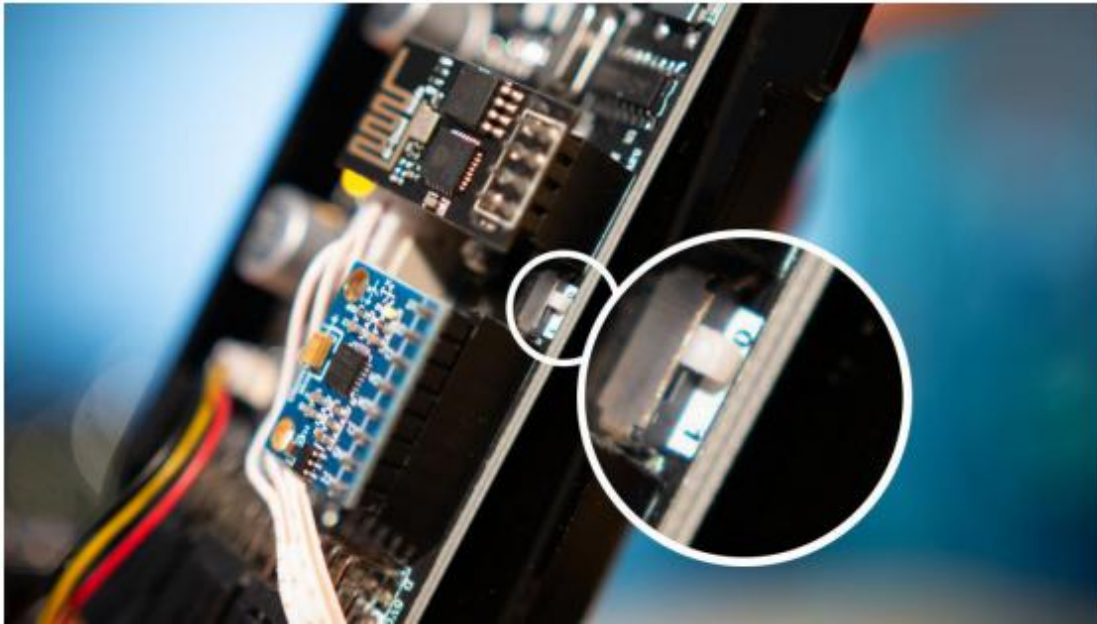


5. Then a debug program will be opened. Your AdeptPixie driver board has already installed the ESP8266 module, then you need to turn the "Upload 0 RUN 1" switch on the AdeptPixie driver board to the 0 position. You need to click  to upload the code program to the driver board. After the upload is successful, a text prompt appears in the lower left corner: Done uploading.



【Pay attention】

If you have already installed the ESP8266 module on your AdeptPixie driver board when you proceed to step 5, then you need to flip the "Upload 0 RUN 1" switch on the AdeptPixie driver board to the 0 position, as shown in the figure below. When you upload the program successfully, you must turn the switch to the 1 position.



6. Observe whether the servo rotates. Rotation indicates successful debugging. Then you need to replace other un-tuned servos, continue to repeat the above steps to debug until the 13 servos are debugged.

