

3.4 Add additional library files

Q: When we compile the program of the Omniduino car, it may report an error due to the lack of some library files.

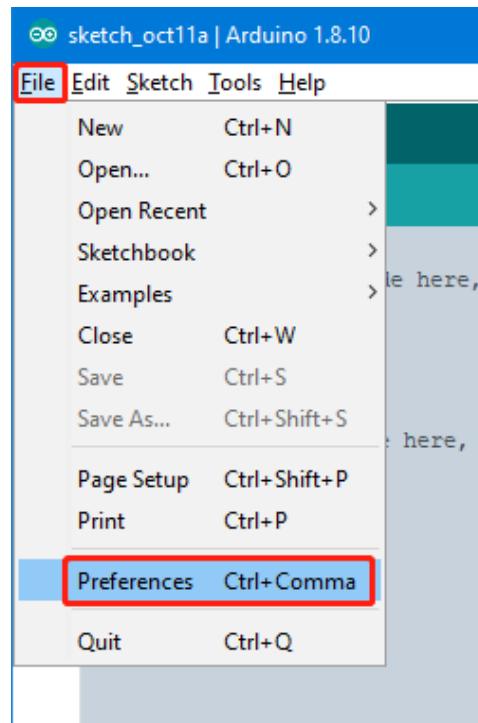
A: The solution is as follows:

Method 1:

It is recommended to use version arduino IDE 1.8.10.

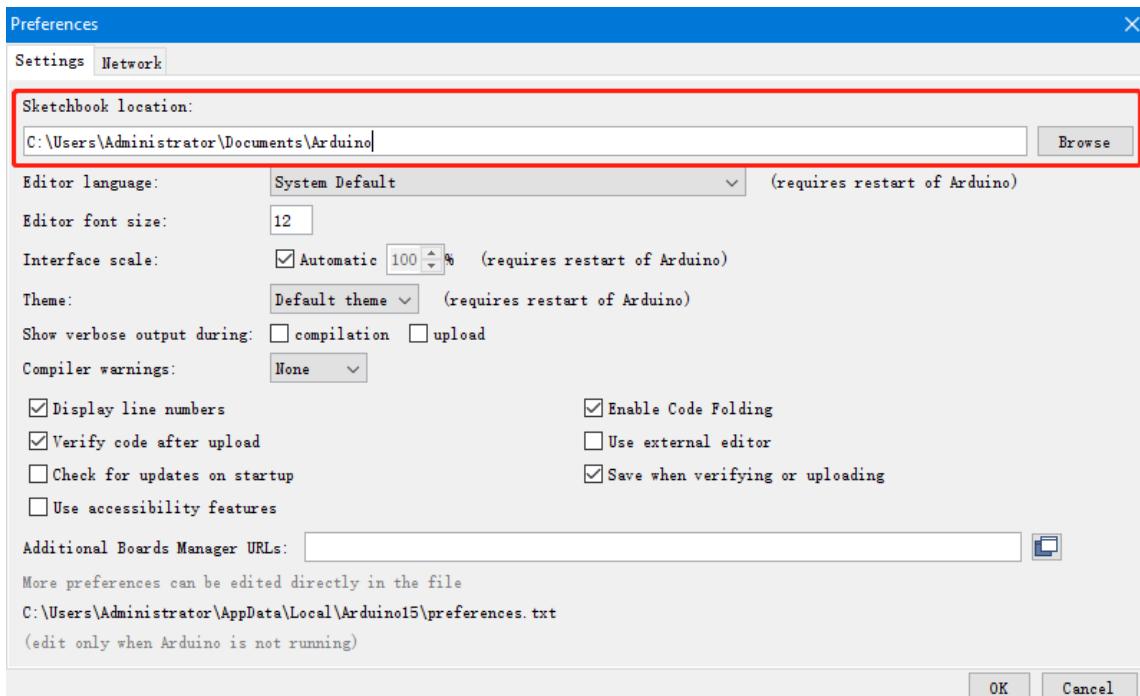
1. Import additional library files

1.1 click 【File】-->【Preferences】



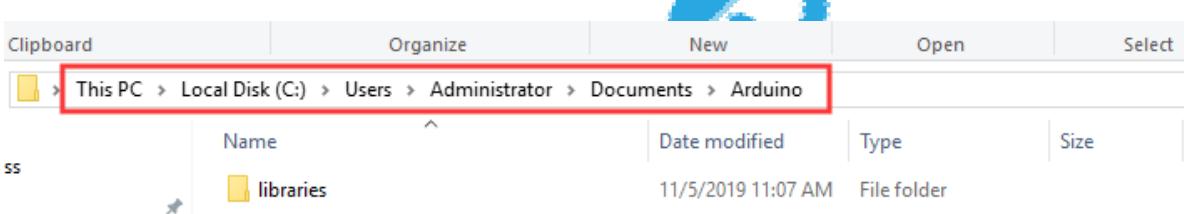
1.2 The **【Sketchbook location】** path is used to save other files such as additional libraries downloaded by arduino IDE. Our own libraries can also be placed in this path. When compiled by arduinolIDE, the library files will be searched in this directory.

(!Note: Just for example, please check your own actual path.)



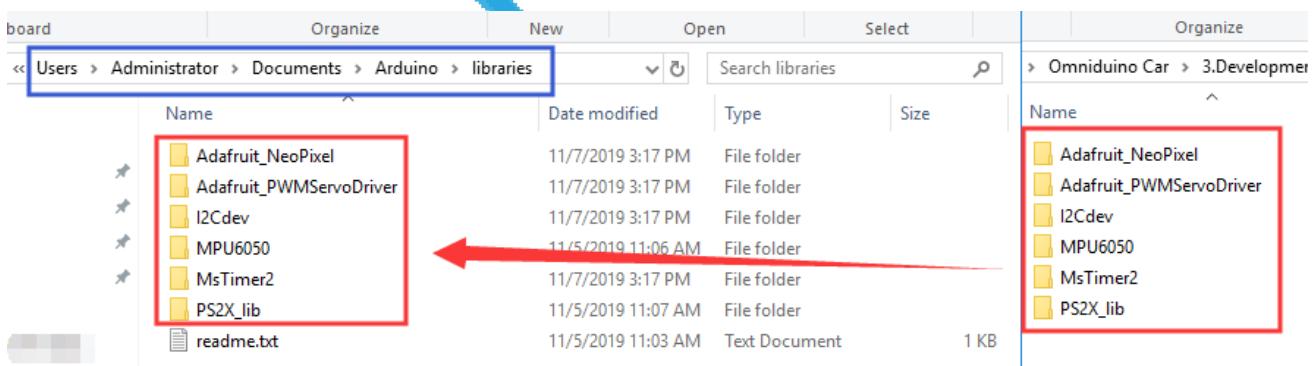
1.3 Open this path, **C:\Users\Administrator\Documents\Arduino**

We can see a libraries folder, and we need to add library files into this folder.

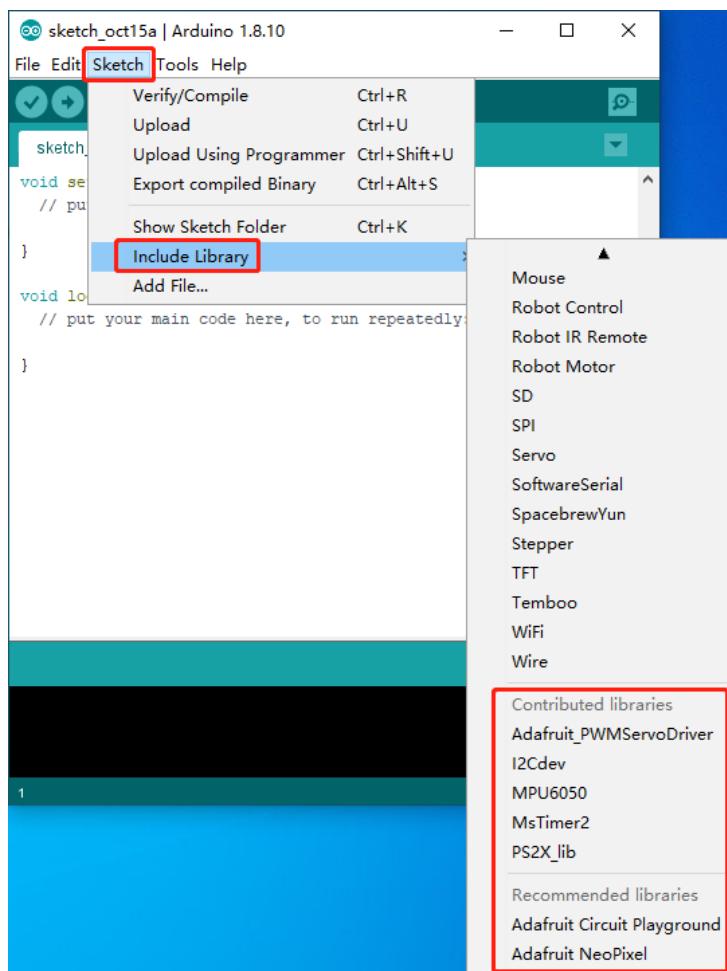


1.4 Copy all the files inside into the

C:\Users\Administrator\Documents\Arduino\libraries.



1.5 Restsrt arduino IDE software and refresh, then, open 【Sketch】 ---> 【Include Library】 , Swipe down, we can see that we have added the library file , and you can click on it to add it.



1.6 When we compile the program again, we can successfully compile it.

The screenshot shows the Arduino IDE with the sketch named "Omniduino_APP_control_code". The code defines various pins and constants:

```

25
26 #define ENABLE_DEBUG1
27
28 #define BUZZER 10 //Define buzzer pins
29 #define KEY_PIN 8 //Define button pins
30 #define INTERRUPT_PIN 2 //Define MPU6050 pins
31 #define LED_PIN 5 //Define status indicator pins
32 #define RGB_PIN 9 //Define RGB pins
33 #define MAX_LED 4 //Car with 4 RGB lights
34
35 #define IR_SENSOR_L1 A3
36 #define IR_SENSOR_L2 A0
37 #define IR_SENSOR_R1 A2
38 #define IR_SENSOR_R2 A1
39 #define IR_SENSOR_MID A7
40

```

The status bar at the bottom of the IDE window displays the message "Done compiling." Below the code editor, the terminal window shows the compilation results:

```

Sketch uses 26222 bytes (81%) of program storage space. Maximum is 32256 by
Global variables use 729 bytes (35%) of dynamic memory, leaving 1319 bytes

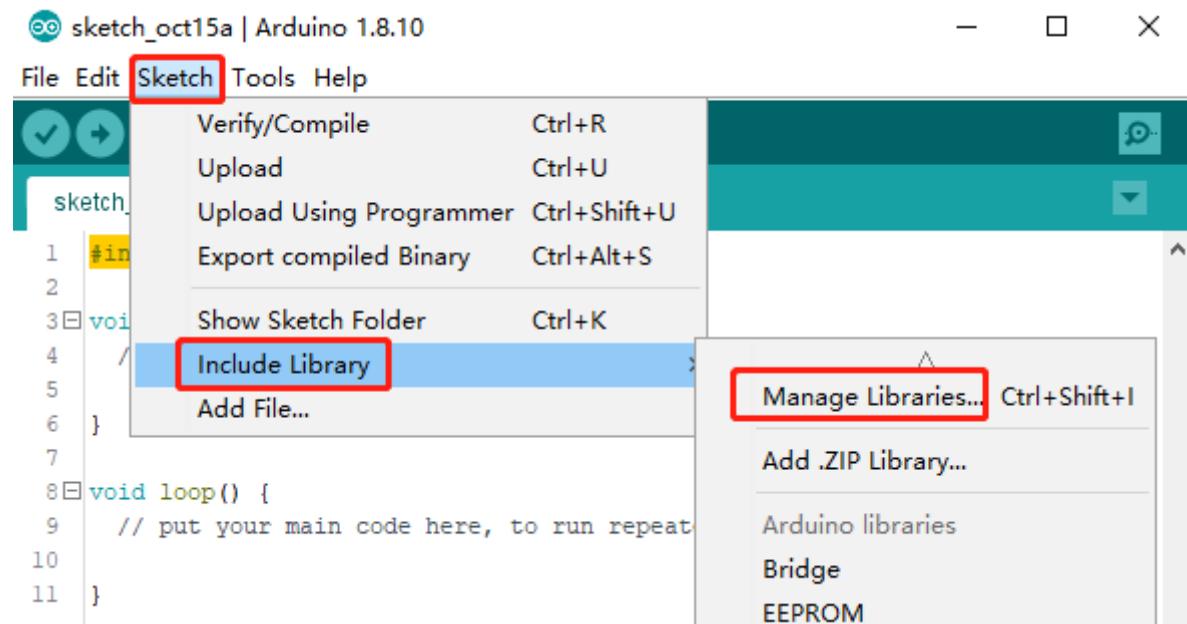
```

Method 2:

arduino IDE has integrated a third-party library downloader for us to search and download.

2.1 Open 【Sketch】 --> 【Include Library】 --> 【Manage Libraries】

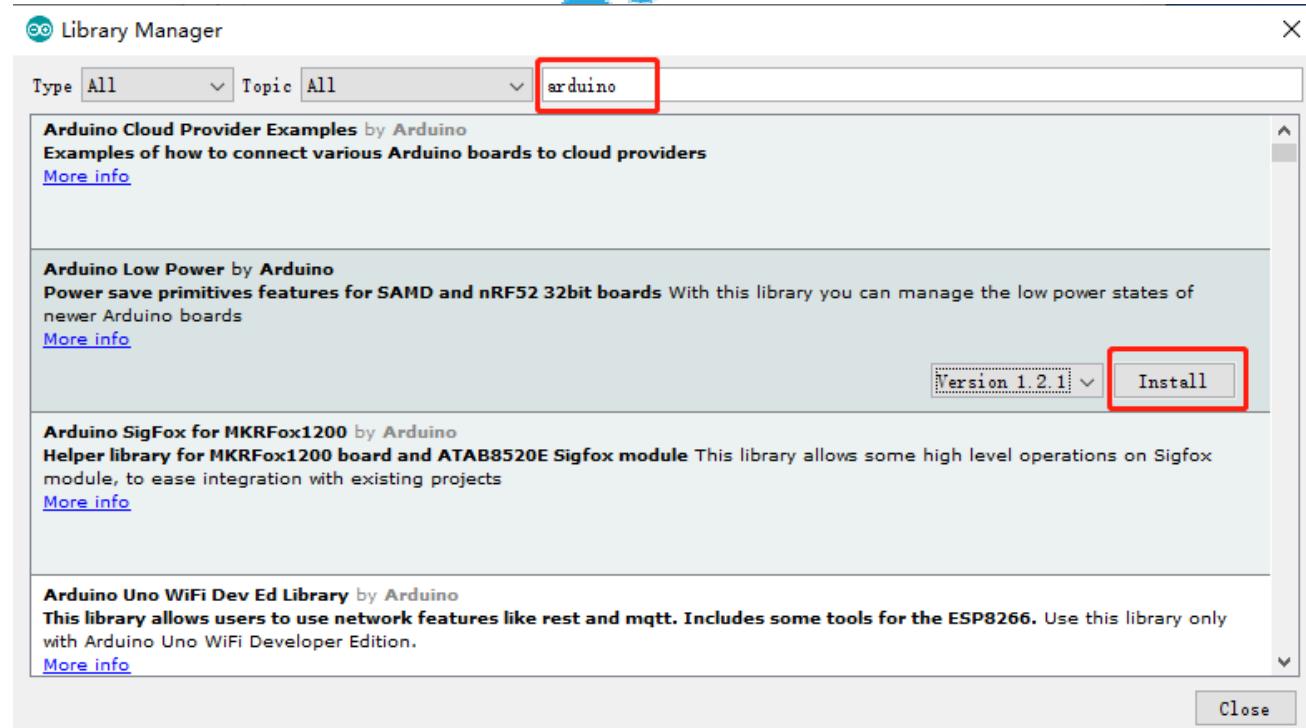
The shortcut is: **Ctrl+Shift+I**



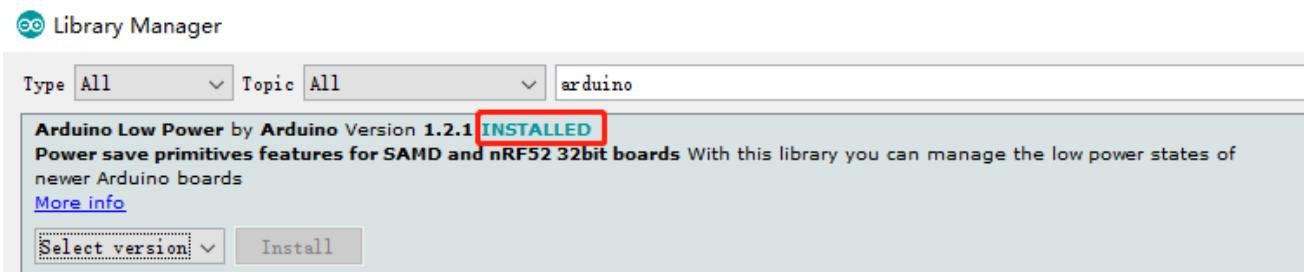
2.2 We can see the Library Manager interface, input the name of the library you want to find in the search box, it will automatically search and display the results.

(Eg: [download the Arduino Low Power library](#))

Input the “arduino” in the input box, move the mouse to the Arduino Low Power line, select the version number need downloaded, and click the “Install” button to start the download.



2.3 An “**INSTALLED**” logo will appear when the download is complete.



2.4 We can see “**Arduino Low Power**” by opening Sketch->Include Library.

