Adding "Libraries" to the Arduino IDE

How to Install Additional Libraries in Arduino IDE 1

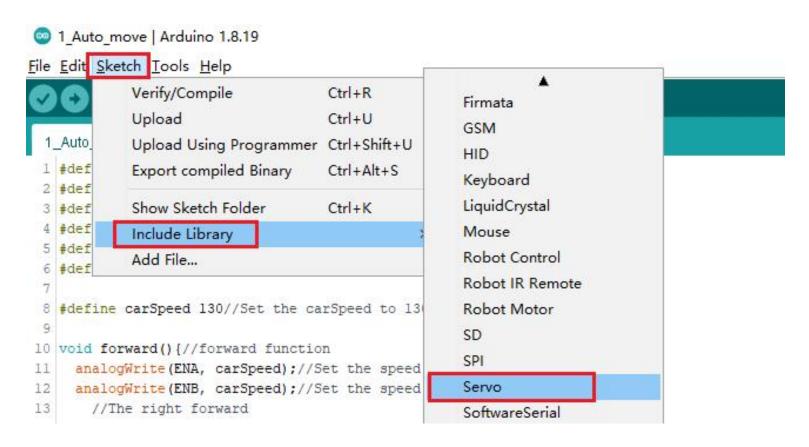
Once you are familiar with the Arduino software and use the built-in functions, you may wish to extend the functionality of the Arduino with other libraries.

What are Libraries?

A library is a set of code that allows you to easily connect to sensors, displays, modules, and more. For example, the LiquidCrystal library allows you to easily talk to character LCD displays.

There are thousands of libraries available for download directly through the Arduino IDE, all of which you can find in the Arduino Library Reference .

The library used in this tutorial is the servo motor: servo. The newer version of the Arduino IDE has integrated this library. You can open the Arduino IDE and find it in Include Library">Sketch>Include Library. If the library is not available, follow the steps below to install the library That's it.

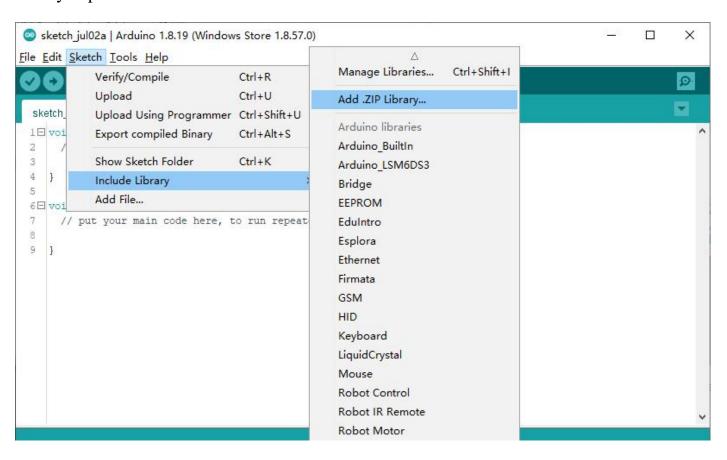


Method 1: Import the .zip library

Libraries are usually distributed as ZIP files or folders. The name of the folder is the name of the library. This folder will contain a .cpp file, a .h file, and usually a keywords.txt file, examples folders, and other files needed by the library.

Starting with version 1.0.5, you can install 3rd party libraries in the IDE.

In the Arduino IDE, navigate to <u>Sketch > Include Library > Add .ZIP Library</u>, and at the top of the drop-down list, select the "Add .ZIP Library" option.



The system will prompt you to select the library you want to add, navigate to the saved library on your computer as shown below The path location of the servo .zip file (<u>2 Libraries/servo.zip</u>) and open it .



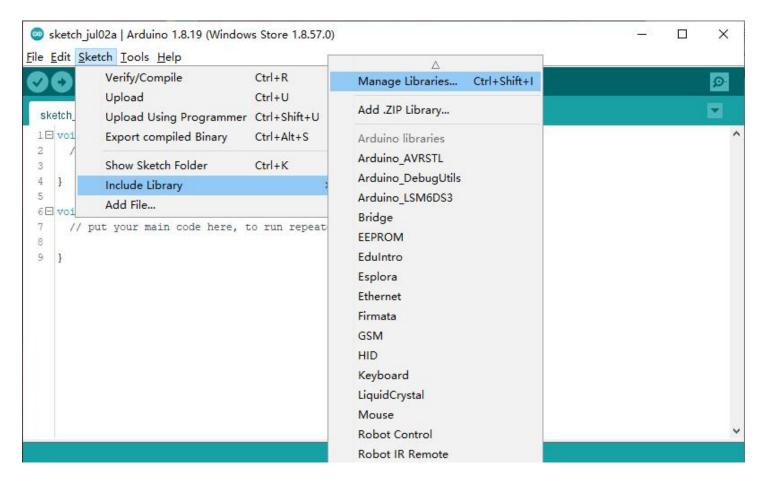
Return to the <u>Sketch > Include Library</u> menu. You should now see the library at the bottom of the drop-down menu, ready to use in your sketches.

Note: This library will be available for sketches, but with older IDE versions, the library's examples will not be exposed in <u>File > Examples</u> until the IDE is restarted.

Method 2: (This method requires networking) In addition to adding the library that has been prepared, you can also use the library manager to search and download the desired library

To install new libraries into your Arduino IDE, you can use the library manager (available from IDE 1.6.2 and above).

Open the IDE and click the Sketch menu, then click <u>Include Library > Manage Libraries</u>.



The library manager will open and you will see a list of libraries that are installed or ready to be installed. Here, we take the installation of the servo library as an example, and the same is true for installing other libraries. Scroll the list to find it,

then select the version of the library to install, sometimes only one version of the library is available, click Install to install it.



The download may take some time, depending on your connection speed, and you can close the library manager when finished.

Likewise, you can now find new libraries available in the <u>Sketch > Include Library</u> menu.