# Get started in Arduino

# Setup driver

Before you use miniD1 boards, you need setup ch340g driver.

# Python

On Windows you need install Python 2.7.10. On Linux & MAC OSX, you don't need install it, comes preinstalled with OS.

# Installing Hardware package

There is two ways to install hardware package, Boards Manager and git.

### Installing with Boards Manager

Starting with 1.6.4, Arduino allows installation of third-party platform packages using Boards Manager. We have packages available for Windows, Mac OS, and Linux (32 and 64 bit).

```
1. Install Arduino 1.6.7 from the Arduino website.
```

1

2. Start Arduino and open Preferences window.

3. Enter http://arduino.esp8266.com/stable/package\_esp8266com\_index.json into Additional Boards Manager URLs field. You can add multiple URLs, separating them with commas.

1

4. Open **Tools**→**Board:xxx**→**Boards Manager** and install **esp8266 by ESP8266 Community** (and don't forget to select your ESP8266 board from Tools > Board menu after installation).

#### -

### Installing use git (Recommend)

We recommend using git to install Hardware package, you can always get the latest version of it.

#### 1.

Install Arduino 1.6.7 from the Arduino website.

2. 3.

> Clone repository into <Sketchbook\_directory>/hardware/esp8266com/esp8266 directory (or clone it elsewhere and create a symlink), you may need to create the hardware directory if it does not exist.

4.

cd hardwaremkdir esp8266comcd esp8266comgit clone
https://github.com/esp8266/Arduino.git esp8266

5.

6.

You should end up with the following directory structure:

7.



```
--- LICENSE
```

8.

9.

Download binary tools (you need Python 2.7)

10.

cd esp8266/tools

python get.py

11.

1.

Restart the Arduino IDE

2.

3.

To get the latest version anytime,

in <Sketchbook\_directory>/hardware/esp8266com/esp8266 simply run 4.

4.

git pull

5.
 6.
 Restart the Arduino IDE
 7.

### **Configure Board**

After install hardware package, you will see mini D1 boards in the **Tools** $\rightarrow$ **Board:xxx** 



**Upload Using** 

Serial – Use USB port on board to upload flash

```
OTA – Use OTA to upload flash
÷
CPU Frequency
н.
80MHz
÷.
160MHz
÷
Flash Size
÷.
4M (3M SPIFFS) - 3M File system size
н.
4M (1M SPIFFS) - 1M File system size
÷
÷.
Upload Speed
н.
÷
921600 bps - recommend
.
Installing Examples
```

### Simple Way

```
    Download Examples files form here.
    .
    Rename the uncompressed directory to D1_mini_Examples
    .
    .
    Move directory to <Sketchbook_directory>
    .
    .
    The path will look like <Sketchbook_directory>/D1_mini_Examples
    .
    .
    Restart the Arduino IDE
```

10.

11.

All examples are under File  $\rightarrow$  Sketchbook  $\rightarrow$  D1\_mini\_Examples

12.

### Git Way (Recommend)

We recommend using git to install Examples, you can always get the latest version of it.

1.

Clone repository into <Sketchbook\_directory> directory (or clone it elsewhere and create a symlink).

2.

cd <Sketchbook\_directory>git clone
https://github.com/wemos/D1 mini Examples.git

3.

4.

To get latest version anytime, in <Sketchbook\_directory>/D1\_mini\_Examples simply run

5.

git pull

6.
7.
Restart the Arduino IDE
8.
9.
All examples are under File→Sketchbook→D1\_mini\_Examples
10.

### Hello world!

Open File→Sketchbook→D1\_mini\_Examples→01.Basics→HelloWorld
 3.
 Click Upload
 4.
 5.
 After upload, open Tools→Serial Monitor, set baudrate to 9600 baud.
 6.
 7.
 Have fun!

# Get started in nodemcu

## Setup driver

Before you use mini D1 boards, you need setup ch340g driver.

## Reference

D1 mini compatible with nodemcu. However, we recommend that you use arduino with them.

There is some website help you use WeMos Boards with nodemcu.

http://www.nodemcu.com https://github.com/nodemcu/nodemcu-firmware API:https://github.com/nodemcu/nodemcu-firmware/wiki/nodemcu\_api\_en