Thank you very much for purchasing our products, if there are any questions, please feel free to contact us via Amazon or Email, Email: help@aokin.vip, we will do our best for you.

From this link: https://github.com/aokindiy/document can get this ESP8266 D1 Mini help instructions electronic document.

Pin

Pin	Function	ESP-8266 Pin
TX	TXD	TXD
RX	RXD	RXD
A0	Analog input, max 3.3V input	A0
D0	IO	GPIO16
D1	IO, SCL	GPIO5
D2	IO, SDA	GPIO4
D3	IO, 10k Pull-up	GPIO0
D4	IO, 10k Pull-up, BUILTIN_LED	GPIO2
D5	IO, SCK	GPIO14
D6	IO, MISO	GPIO12
D7	IO, MOSI	GPIO13
D8	IO, 10k Pull-down, SS	GPIO15
G	Ground	GND
5V	5V	-
3V3	3.3V	3.3V
RST	Reset	RST

All IO have interrupt/pwm/I2C/one-wire supported(except D0)

Programming

The D1 mini has a micro USB for auto programming.
Also you can programming it using OTA.

Warnings

All IO is work at 3.3V.

A mini wifi board with 4MB flash based on ESP-8266EX.

This is an excellent review/tutorial from Amazon user Bobby Page, hope it can help you, thanks.

For those having issues with not detecting the device when plugged in.. **MAKE SURE YOUR USB CABLE IS FOR DATA, NOT ONLY CHARGING!** I wasted several hours messing with Windows and trying to install drivers for CH340G, didn't even dawn on me that the cable could be the problem. After trying about 6 different cables in the house I finally found one that worked, and everything worked fine after that. I'll post instructions for anyone having trouble -- these really should be part of the description (not just "install drivers" and "install board to Arduino IDE").

Installation for drivers only:

0. Ensure you have a DATA micro USB cable (typically one that came with a phone should work -- mine came with vapes and so only supported charging).

1. Try plugging in the board without installing drivers -- if you hear the connection sound for an external device you are good to go (skip to 3).

2. If you need drivers, SparkFun has them hosted (official wemos site seems to be down) -- I can't link to them but search google for "sparkfun CH340 drivers," and the first result should be "How to Install CH340 Drivers"

3. Verify you can see the device: open Device Manager --> Ports (COM & LPT) --> USB Serial CH340 (COMXYZ)

Getting setup in Arduino IDE:

0. You will need a link to copy and paste, but I can't link it here. Search Google for "arduino ide esp8266 board manager" -- the first result should be for a "readthedocs" website, and that should have all the instructions you need. However, for clarity I will list them here as well.

1. Ensure you have Python installed (this might be optional -- I haven't installed Python directly, but I installed the Arduino IDE and had no issues).

2. Open the Arduino IDE and go to File --> Preferences

3. Under "Additional Board Manager URLs" at the bottom, paste the link (it's to a JSON file) you copied from the other page into that box and hit "OK"

4. Go to Tools --> Board --> and select Board Manager (near the top)

5. Search for "ESP8266" and install the result (should be from "ESP8266 Community")

Selecting the board for your sketch:

1. Go to Tools --> Board and select either "LOLIN(WEMOS) D1 R2 & mini" or "NodeMCU 1.0 (12-E Module)" — either of these worked for me

2. Be sure to select which COM port the board from Tools -> Port

3. Check that the upload rate is 115200 (it should already be)

Test the board with "Blink":

1. Go to File --> Examples --> ESP8266 and select "Blink" at the top

2. You shouldn't need to change anything, so click Upload

3. Once it's finished, check that your blue led light is blinking

Test the board's WiFi with "ArduinoOTA":

0. This isn't necessary, but to be sure your WiFi module actually works you need to try connecting

1. Go to File --> Examples --> ArduinoOTA and select "BasicOTA"

2. Only changes you have to make are on lines 7 and 8 for your WiFi SSID and password

3. (Optional) Save the sketch

4. Go to Tools --> Port: If all was successful, you should be able to see the ESP8266 board here (COM whatever) -- select it

5. Hit upload and open the serial monitor

6. Once the program is finished uploading, make sure to change the baud rate to 115200 on the serial monitor

7. Check to make sure you get the "Ready" message, followed by an IP address