

Switch status and mode selection:

	1	2	3	4	5	6	7	8
CH340 connect to ESP8266 (upload sketch)	OFF	OFF	OFF	OFF	ON	ON	ON	NoUSE
CH340 connect to ESP8266 (connect)	OFF	OFF	OFF	OFF	ON	ON	OFF	NoUSE
CH340 connect to ATmega2560 (upload sketch)	OFF	OFF	ON	ON	OFF	OFF	OFF	NoUSE
CH340 connect to Mega2560 COM3 connect to ESP8266	ON	ON	ON	ON	OFF	OFF	OFF	NoUSE
Mega2560+ESP8266	ON	ON	OFF	OFF	OFF	OFF	OFF	NoUSE
All modules work independent	OFF	NoUSE						

Also, have switch for change of connecting port between ATmega2560 and ESP8266



After choosing the mode of the board can proceed to set up the IDE

It is important that when the ESP8266 module is programming, it is necessary to press the button "Mode"



To begin open the Arduino IDE programming environment and go to settings



Then in the window that appears in the row, Additional Boards Manager URLs (marked in red) insert http://arduino.esp8266.com/stable/package_esp8266com_index.json link for installation in Arduino IDE additional scripts that would work with the modules ESP8266 and click OK

Preferences				X
Sketchbook locat	ion:			
C:\Users\admin\	Documents (Arduino			Browse
Editor language:	English (English)	•	(requires restart of Arduino)	
Editor font size:	12			
Show verbose ou	tput during: 🗹 compilation 📝 upload			
Compiler warning	is: None 👻			
Display line n	numbers			
Enable Code	Folding			
Verify code a	after upload			
Use external	editor			
Check for up	dates on startup			
Update skete	ch files to new extension on save (.pde -> .ino)			
Save when v	verifying or uploading			
Additional Boards	: Manager URLs:			
More preferences	s can be edited directly in the file			
C:\Users\admin\/	AppData\Roaming\Arduino15\preferences.txt			
(edit only when A	Arduino is not running)			
				OK Cancel

Then go to the Tools> Board> Boards Manager

💿 sketch_mar09a A	rduino 1.6.5		
File Edit Sketch To	ols Help		
sketch_mar09	Auto Format Ctrl+T Archive Sketch Fix Encoding & Reload Serial Monitor Ctrl+Shift+M		
. (Board: "Arduino Yún"	Boards Manager	
<pre>} void loop() { // put your } </pre>	Port Programmer: "USBasp" Burn Bootloader	Arduino AVR Boards Arduino Yún Arduino Yún Arduino Juemilanove or Diecimila Arduino Duemilanove or Diecimila Arduino Nano Arduino/Genuino Mega or Mega 2 Arduino Mega ADK Arduino Mega ADK Arduino Leonardo Arduino JGenuino Micro Arduino Esplora Arduino Esplora Arduino Esplora Arduino Ethernet Arduino Fio Arduino BT LilyPad Arduino USB LilyPad Arduino Arduino Pro or Pro Mini Arduino NG or older Arduino Robot Control	a 2560
		Arduino Robot Motor Arduino Gemma	

In the window that appears, scroll through the list down to the script esp8266 by ESP8266 Community and click.

Boards Manager		×
Type All	Filter your search	
Boards included in Arduino 101. More info	s by anter n this package:	*
AMEL-Tech Board Boards included in SmartEverything F <u>Online help</u> <u>More info</u>	is by AMEL Technology n this package: Fox.	
esp8266 by ESP8 Boards included in Generic ESP8266 Adafruit HUZZAH D1 mini, ESPino (<u>Online help</u> <u>More info</u>	266 Community n this package: Module, Olimex MOD-WIFI-ESP8266(-DEV), NodeMCU ESP8266 (ESP-12), ESPresso Lite 1.0, ESPresso Lite 2. ESP-12 Module), ESPino (WROOM-02 Module), WifInf	0.9 (ESP-12 Module), NodeMCU 1.0 (ESP-12E Module), 0, SparkFun Thing, SweetPea ESP-210, WeMos D1, WeMos 0, ESPDuino.
		Close

In the lower right corner will be able to select the version of the software, select the version 2.1.0 (the newest) and click the

Install button

😳 Boards Manager	x	
Type All + Filter your search		
Inter Curle Boards by Inter Boards included in this package: Arduino/Genuino 101. More info	-	
AMEL-Tech Boards by AMEL Technology Boards included in this package: SmartEverything Fox. Online help More info		
esp8266 by ESP8266 Community Boards included in this package: Generic ESP8266 Module, Olimex MOD-WIFI-ESP8266(-DEV), NodeMCU 0.9 (ESP-12 Module), NodeMCU 1.0 (ESP-12E N Adafruit HUZZAH ESP8266 (ESP-12), ESPresso Lite 1.0, ESPresso Lite 2.0, SparkFun Thing, SweetPea ESP-210, WeMos D1 mini, ESPino (ESP-12 Module), ESPino (WROOM-02 Module), WifInfo, ESPDuino. Online help More info	todule), D1, WeMos ≣	
	Installing	-
Installing tools (2/3)	Cancel]

After installation, close the window and go to Tools> Board and see the list of available devices on the chip programming

ESP8266

00	sketc	h_mar23	a Ard	uino 1.8.1			
File	Edit	Sketch	Tools	Help			
S	ketch,	mar23 setup		Auto Format Archive Sketch Fix Encoding & Reload Serial Monitor	Ctrl+T Ctrl+Shift+M		
2	11	put y	-	Serial Plotter	Ctrl+Shift+L	-	
4 5 6	} void	loop(1	ESP8266 Sketch Data Upload WiFi101 Firmware Updater			Arduino Fio Arduino BT LilvPad Arduino USB
7	//	put y	- 1	Board: "Generic ESP8266 Module"	3		LilyPad Arduino
8 9	}			Flash Mode: "DIO" Flash Frequency: "40MHz" CPU Frequency: "80 MHz" Flash Size: "512K (64K SPIFFS)" Debug port: "Disabled" Debug Level: "None" Reset Method: "ck" Upload Speed: "115200" Port Get Board Info			Arduino Pro or Pro Mini Arduino NG or older Arduino Robot Control Arduino Robot Motor Arduino Gemma Adafruit Circuit Playground Arduino Yún Mini Arduino Industrial 101 Linino One Arduino Uno WiFi
			1	Programmer: "AVRISP mkli" Burn Bootloader	2	•	ESP8266 Modules Generic ESP8266 Module
							Generic ESP8285 Module ESPDuino (ESP-13 Module) Adafruit HUZZAH ESP8266 ESPresso Lite 1.0 ESPresso Lite 2.0

Next, you need to select the card as shown in the picture (Generic ESP8266 module)

De	bug Level: "None"	>	
Re	set Method: "ck"	>	
Up	load Speed: "115200"		115200
Po	rt	>	9600
Ge	t Board Info		57600
Programmer: "AVRI	AVRISE mkll"	,	256000
	rn Rootloader	1	512000
bu	in bootioadel		921600

Select the upload speed - 115200

```
Tools Help
```

Auto Format	Ctrl+1	
Archive Sketch		
Fix Encoding & Reload		
Serial Monitor	Ctrl+Shift+M	
Serial Plotter	Ctrl+Shift+L	
ESP8266 Sketch Data Upload	N	
WiFi101 Firmware Updater	h	डे
Board: "Generic ESP8266 Module"	>	
Flash Mode: "DIO"	>	
Flash Frequency: "40MHz"	>	
CPU Frequency: "80 MHz"	>	
Flash Size: "512K (64K SPIFFS)"	>	
Debug port: "Disabled"	>	
Debug Level: "None"	>	
Reset Method: "ck"	>	
Upload Speed: "115200"	>	
Port	>	
Get Board Info		

```
void setup()
```

```
{
```

Serial3.begin(115200);

pinMode(13,OUTPUT);

delay(500);

```
Serial3.println("AT+CIPMUX=1");
```

delay(2000);

Serial3.println("AT+CIPSERVER=1,5000");

delay(2000);

Serial3.println("AT+CIPSTO=3600");

delay(2000);

}

```
{
```

```
while(Serial3.available())
{
```

```
char Rdata;
```

```
Rdata=Serial3.read();
```

```
if(Rdata=='A'|Rdata=='a')
```

{

```
digitalWrite(13,HIGH);
```

delay(50);

```
}
```

```
else if(Rdata=='B'|Rdata=='b')
```

```
{
```

```
digitalWrite(13,LOW);
```

```
delay(10);
```

```
digitalWrite(13,HIGH);
```

delay(10);

```
digitalWrite(13,LOW);
```

```
}
```

```
else
```

{

```
digitalWrite(13,LOW);
```

```
}
```

```
}
```

```
}
```