ESP8266 ESP-12E (NodeMCU) with Motor Shield - Robot code and information.

Motor Shield Documentation:

<https://www.gitbook.com/book/smartarduino/user-mannual-for-esp-12e-motor-shield/details>

Most of the programs I have found for this project are done in LUA, here is some information, and a link a to the smart car Android app.

<http://www.instructables.com/id/A-very-cheap-ESP8266-WiFi-smart-car-controlled-by-/?ALLSTEPS>

App:

<https://play.google.com/store/apps/details?id=com.remote.yingwen.carsochet>

Lua code

<https://smartarduino.gitbooks.io/user-manual-for-wifi-car-by-nodemcu-doitcar-/content/31_code_for_ap_case_on_doitcar.html>

NodeMCU (and LUA) information can be found here:

<http://nodemcu.com/index_en.html#fr_54745c8bd775ef4b99000011>

I found this code that will work with the Arduino IDE (as long as you have the ESP8266/NodeMCU boards installed)

<https://github.com/vittayasak/NodeMCU_Robot>

This code works a lot like how my code for the WIFI on the Bitty Bot works.

it’s waiting for numbers to be passed to it via a HTML request.

IE: <http://192.168.4.1/?cmd=1>

Unlike my code, the creator of this code also has a UDP version of the code.

It looks like the UDP version needs to be used in station mode (?)

Unfortunately it is not all that well documented as to what it’s is doing or how it works.

(At first look at his code, it might need a little tweaking for the motor shield, it appears from his video, he is just using a nodemcu (esp8266 ESP12) and a L298 motor driver)

The creator also has an Android app:

<https://play.google.com/store/apps/details?id=com.br3.udpctl>

His video:

<https://www.youtube.com/watch?v=E85RfNlRmHU>

# **June 28, 2017**

# **Introduction**

ESP-12E Motor Shield is designed and developed by Shenzhen Doctors of Intelligence & Technology (SZDOIT). This large current motor driven module can compatible with ESP12E Dev Kit and NodeMCU.By using the overlap-plug design, the motor shield can be directly plugged by ESP-12E Dev Kit and NodeMCU Lua module.

This shield board is driven by the special excent large power full-bridge chip L293DD from the famous Stmicroelectronics company, which can directly drive 2-channels DC motors or one-channel stepper motor. The driven current can be arrived at 1.2A. This board is generated with national layout, SMT ensuption, and convenient installation.

In this motor shield board, the IO port of ESP-12E Dev Kit is used as the control port. The logic chip configured inside can finish IC driven. Thus, the shield board has four ports: D1, D2, D3, and D3, which are used as PWMA(motor A), PWMB (motor B), DA (direction of motor A), and DB (direction of motor B), respectively.

In addition, this shield board has many pins, such as VIN, 3.3V, DIO, AIO, SDIO, UART, SPI, RST, and EN, thus can conveniently connect all kinds of sensors (e.g., temperature and humidy, buzzer, light, relay sensor, etc.).

The board is developed by the humanized design with a power switch, and thus user can control the on-off of power conveniently.

This motor shield board can be used to control directly the smart car. More details, please visit [http://www.doit.am](http://www.doit.am/); [http://www.smartarduino.com](http://www.smartarduino.com/).