Adding support of ESP8266 board to Arduino IDE

- Start Arduino and open Preferences window.
- Enter http://arduino.esp8266.com/stable/package_esp8266com_index.json in to *Additional Board Manager URLs* field. You can add multiple URLs, separating them with commas.
- Open Boards Manager from Tools > Board menu and find *esp8266* platform.
- Select the version you need from a drop-down box.
- Click *install* button.

Sketch uploading

- Connect USB to UART converter to ESP13 UART connector as show below.
- Don't forget swith it to 3.3 voltage level
- Connect pin D0 of ESP13 side connector to Ground as show below.
- Connect USB to UART converter to PC.
- Select ESPDuino (ESP-13 Module) form Tools > Board menu.
- Select USB port from Tools > Port menu.
- Click *upload* button or select Upload from Sketch menu.

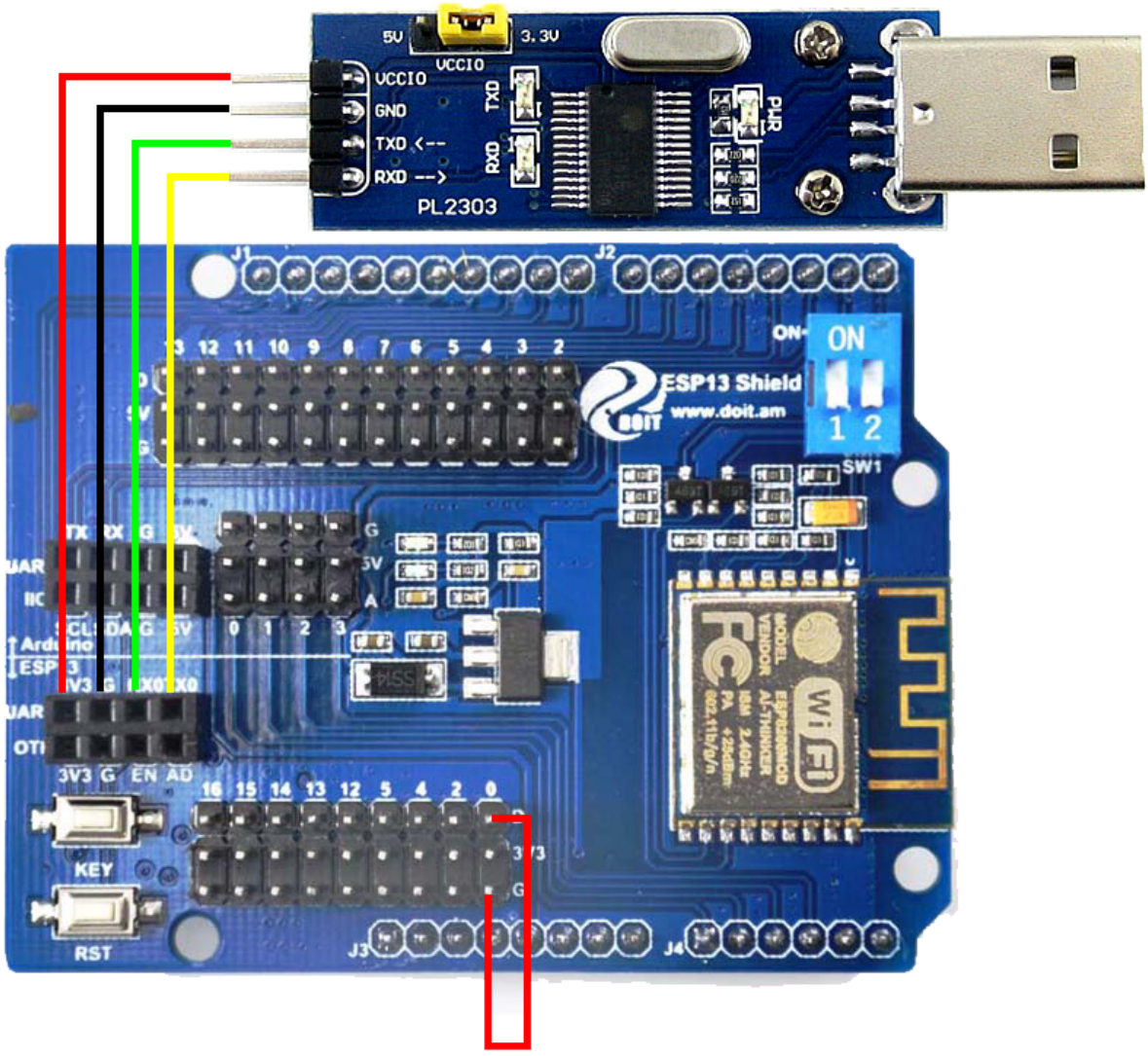
Board installation

- Disconnect USB to UART converter from ESP board.
- Remove jumper wire between D0 and Ground pins.
- Switch SW1 to ON.
- Remove jumper wires from Motor Shield board.
- Install ESP board atop of Motor Shield board.
- Connect jumper wires to Arduino side connector as shown below.

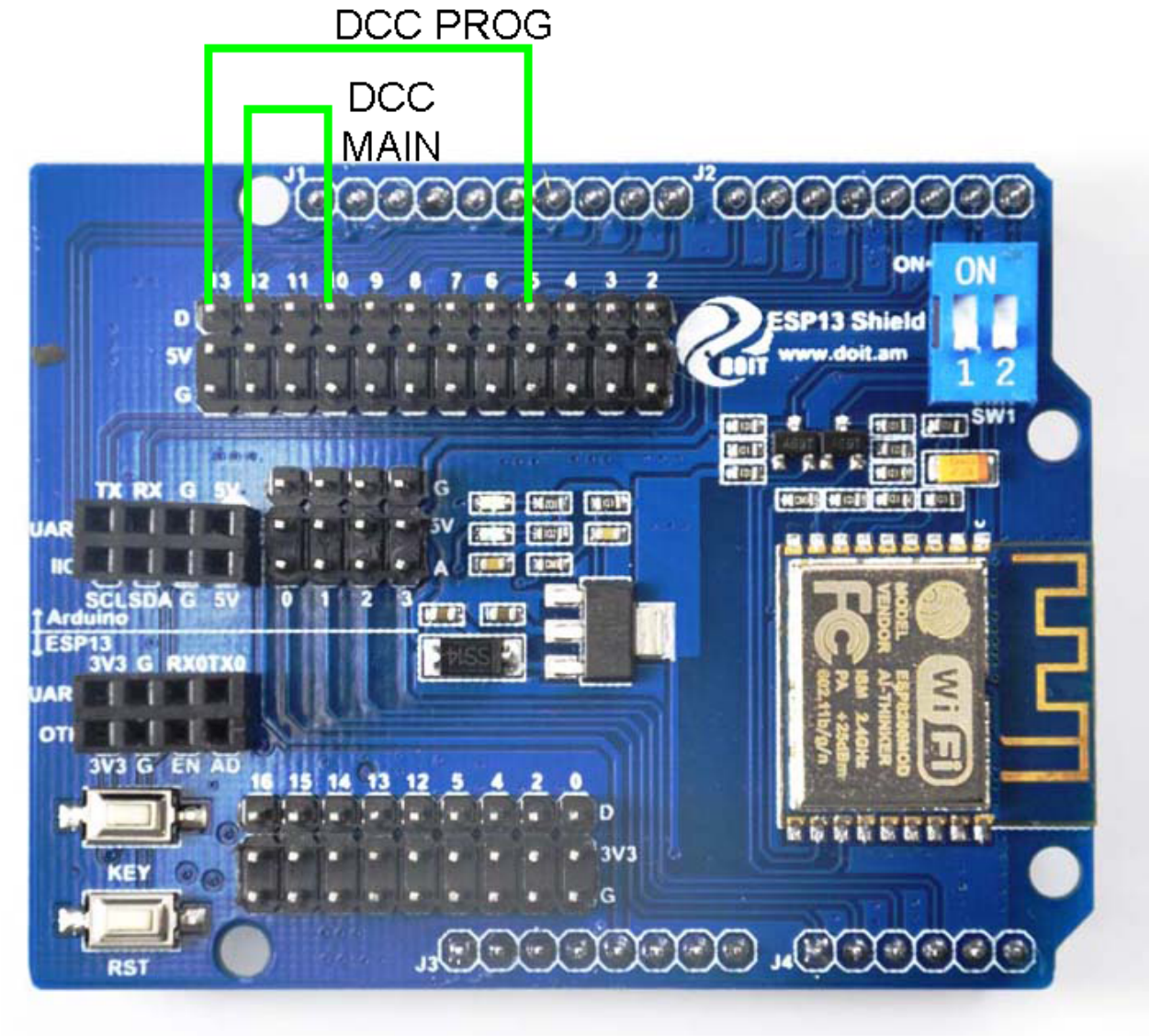
How to use

- Turn power ON on DCC++.
- Open WiFi settings on mobile device.
- Find and connect to «withrottle» network.
- Start Engine Driver or WiThrottle app on mobile device
- On Engine Driver select ESPWTServer on Discovered Servers
- On WiThrottle app go to Settings page, select «Server Configuration», and turn on «Use automatic network configuration». Restart WiThrottle app.
- Enjoy!

USB to UART wiring



Arduino UNO jumper wires



Arduino MEGA jumer wires