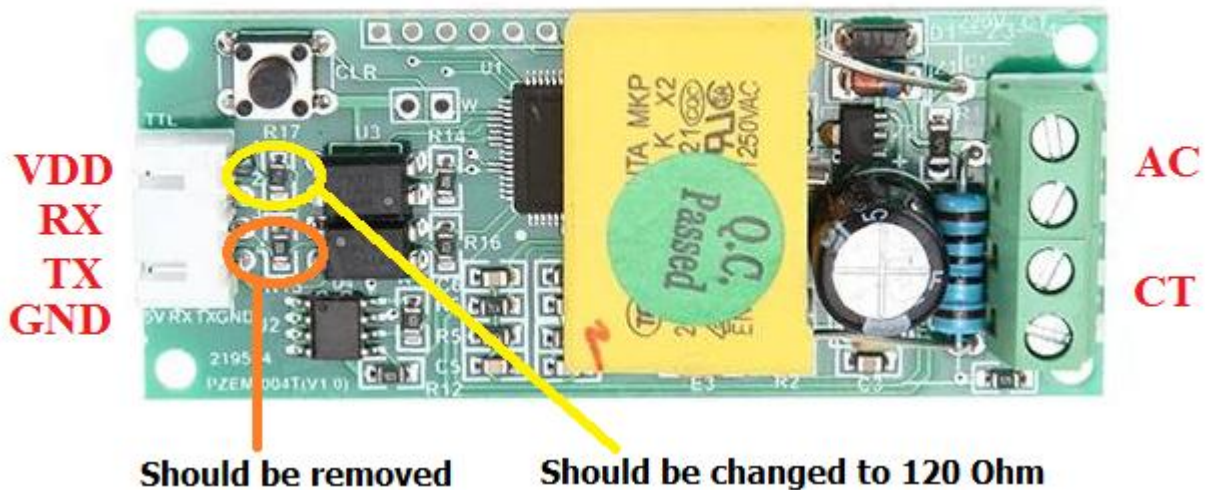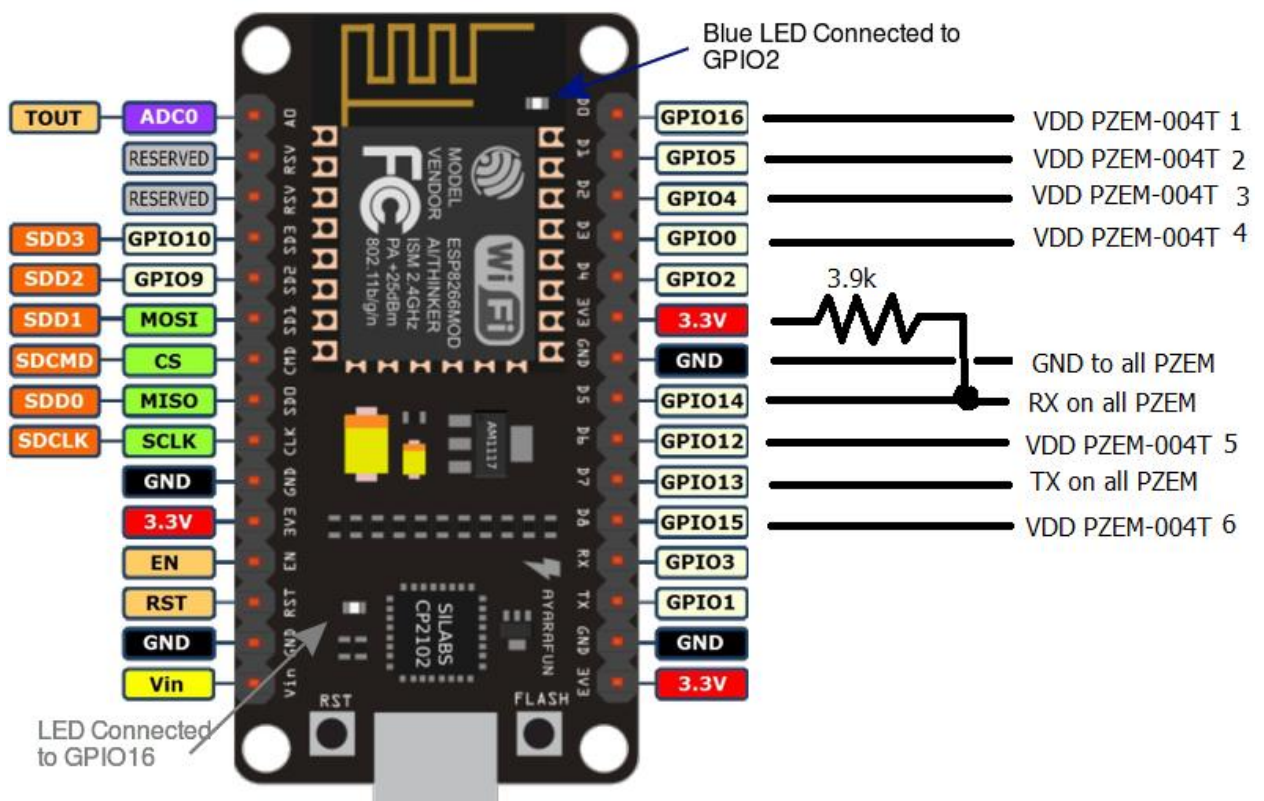# There is a brief introduction how to connect several PZEM-004T to ESP Node MCU.

1. Remove one resistor and change another one. Please see the picture.

VDD
RX
TX
GND

AC

CT

Should be removed   Should be changed to 120 Ohm

2. Add resistor 3.9 kOhm between 3.3v and your RX pin. My version on connection is below:

Blue LED Connected to GPIO2

TOUT	ADC0			A0		D0	GPIO16	VDD PZEM-004T 1

GPIO16 —— VDD PZEM-004T 1
GPIO5 —— VDD PZEM-004T 2
GPIO4 —— VDD PZEM-004T 3
GPIO0 —— VDD PZEM-004T 4
GPIO2   3.9k
3.3V
GND —— GND to all PZEM
GPIO14 —— RX on all PZEM
GPIO12 —— VDD PZEM-004T 5
GPIO13 —— TX on all PZEM
GPIO15 —— VDD PZEM-004T 6
GPIO3
GPIO1
GND
3.3V

TOUT — ADC0
RESERVED
RESERVED
SDD3 — GPIO10
SDD2 — GPIO9
SDD1 — MOSI
SDCMD — CS
SDD0 — MISO
SDCLK — SCLK
GND
3.3V
EN
RST
GND
Vin

LED Connected to GPIO16

3. **Add PZEM-004T device in easy esp. and setup RX pin TX pin and select pin.**

Main	Config	Controllers	Hardware	Devices	Notifications

Task Settings

Device:	Voltage & Current (AC) - PZEM-004T ❓
Name:	PZEM_1
Enabled:	✔
SoftSerial RX-Pin:	GPIO-14 (D5) ▾
SoftSerial TX-Pin:	GPIO-13 (D7) ▾
SoftSerial Dir-Pin:	GPIO-12 (D6) ▾

Data Acquisition

Send to Controller ❶	✔

Interval:	60 [sec]

4. **For others PZEM-004T when you add dwvice there will be only option for select pin which should be connect to appropriate PZEM.**

⌂Main	⚙Config	💬Controllers	✈Hardware	🔌Devices	✉Notifications

Task Settings

Device: Voltage & Current (AC) - PZEM-004T ❓

Name: PZEM_2

Enabled: ☑

SoftSerial Dir-Pin: GPIO-16 (D0) ▾

Data Acquisition

Send to Controller ❶   ☑

Interval: 60   [sec]

Do not forget to use only 4Mbytes flash on ESP NODEMCU.

Or I could compile for any other.

Be careful with High Voltage!!!!!!