EETARP
BENDER Group

ELECTRICAL SAFETY
POWER QUALITY
ENERGY MANAGEMENT

Eetarp E810 iBCPM Training Slide | Feb 2021

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01 - PRODUCT INFORMATION

E810 iBCPM

01 - PRODUCT INFORMATION

E810 iBCPM

- Measurement accuracy according to IEC62053-22 Cl 0.5S
- Measure up to 2 main circuits up to 31st harmonics measurements
- Measure up to 24 single phase circuits or measure up to 8 three phase sub-circuit metering
- Able to combine either three phase or single phase according to your need
- 4 relays output
- Optional with 2nd Modbus output
- Designed to suit with split core current transformer with 333mV CT input (CT range from 100A to 3000A)

02 – DEVICE CONNECTION

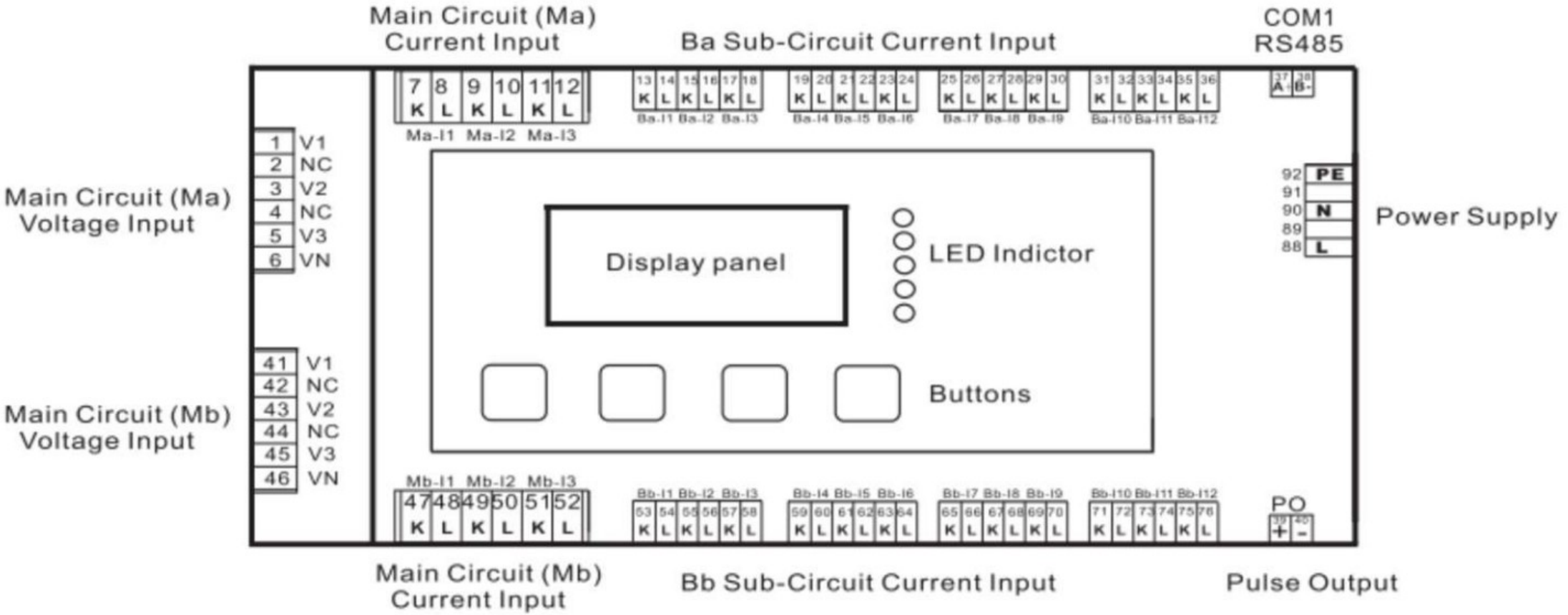
E810 iBCPM

02 – DEVICE CONNECTION

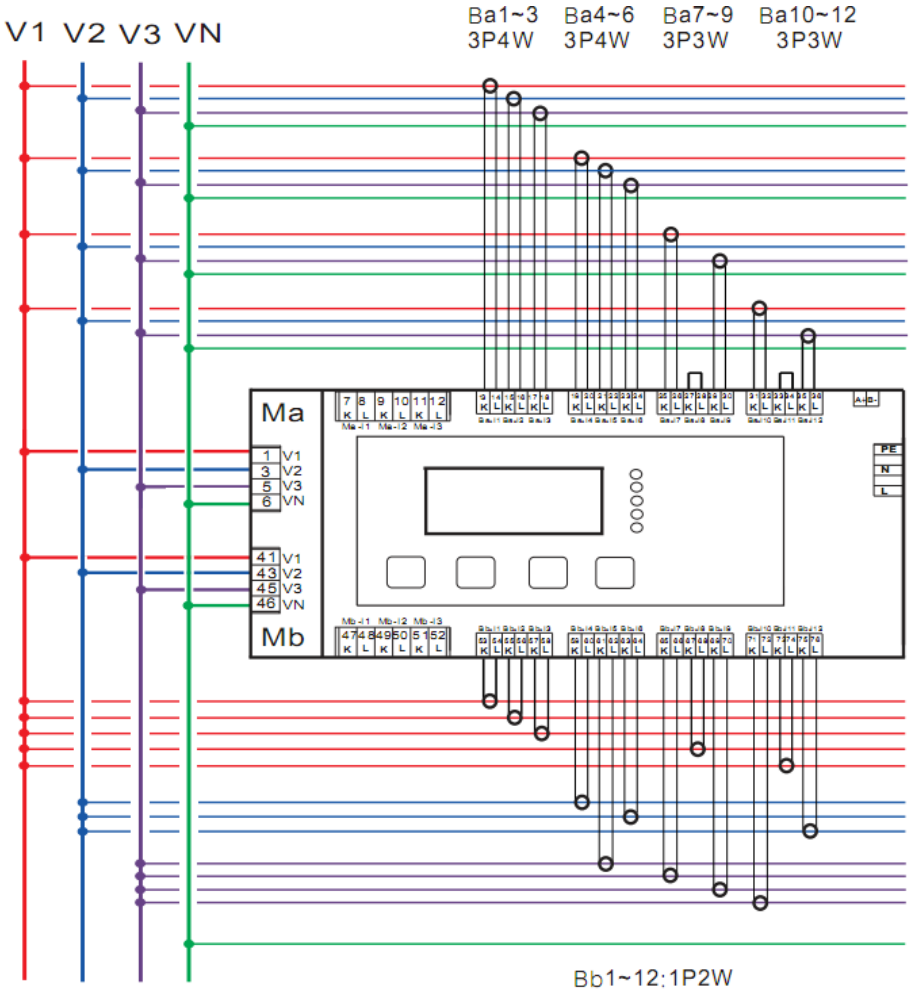
Side view

Side view

02 – DEVICE CONNECTION (3P4W)



02 – DEVICE CONNECTION (3P4W)

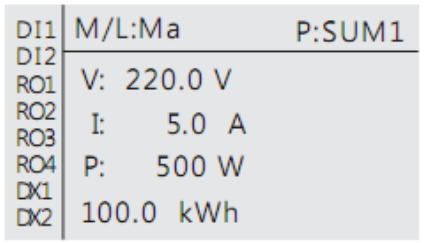


- Please take note to put a jumper wire on non-using channel in order to prevent noise occur.

03 – DEVICE SETUP

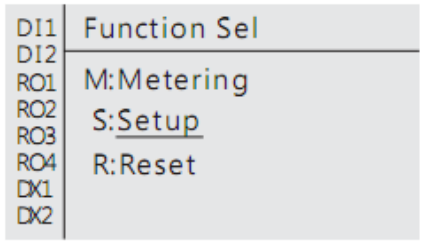
E810 iBCPM

03 – DEVICE SETUP (SYSTEM TYPE SETTING)



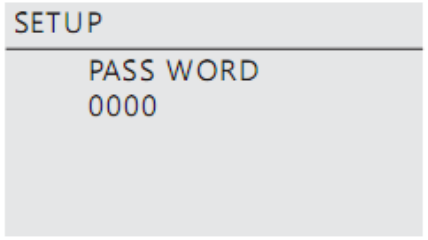
Main display

ENT FUN



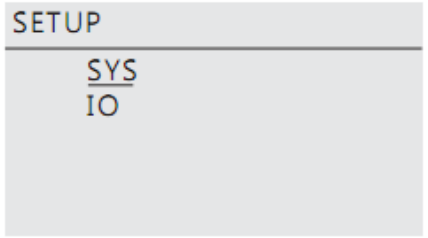
Select setup

ENT FUN



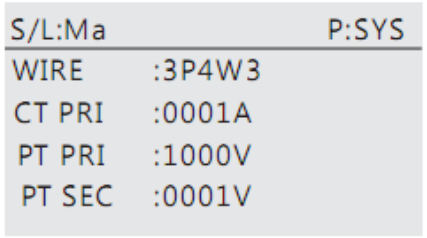
Input PASS WORD 1000

ENT FUN

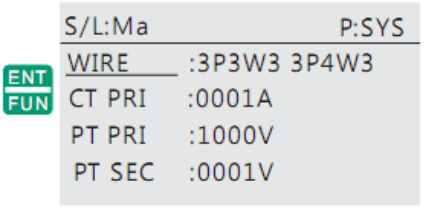


Select system setting

ENT FUN

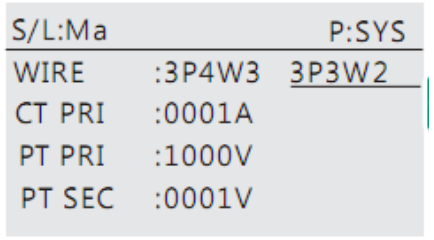


ENT FUN



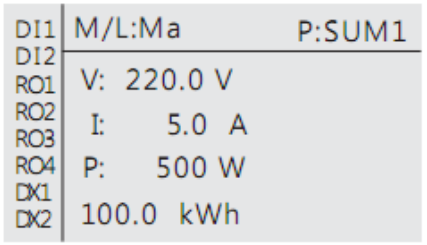
Select wire to setup system type

ENT FUN



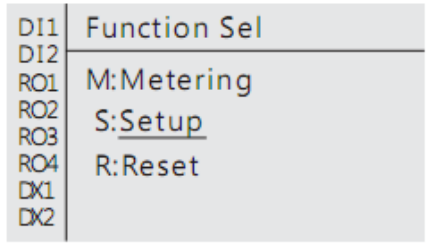
Use ▲▼ to select:1P3W/ 3P3W2/3P3W3/3P4W3

03 – DEVICE SETUP (CT & PT SETTING)



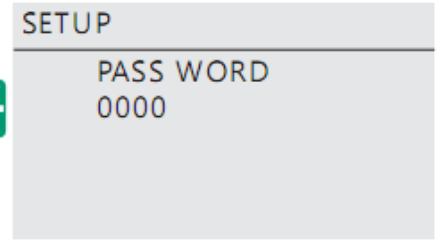
Main display

ENT FUN



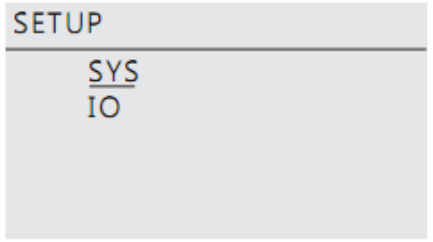
Select setup

ENT FUN



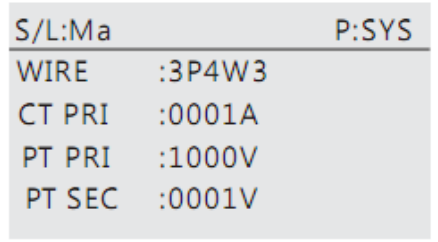
Input PASS WORD 1000

ENT FUN

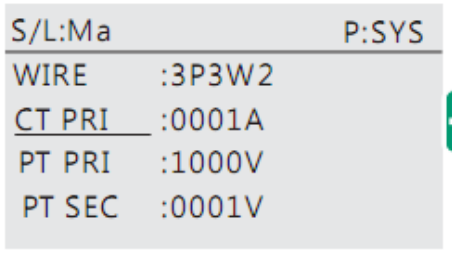


Select system setting

ENT FUN

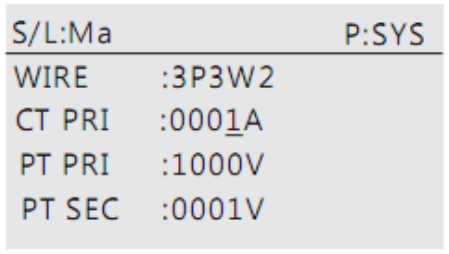


ENT FUN



Select CT primary side setting

ENT FUN



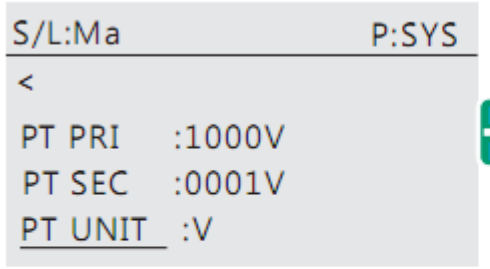
Input ratio
Use ◀ ▲ ▼ to input value

...

CT PRI :5~9999

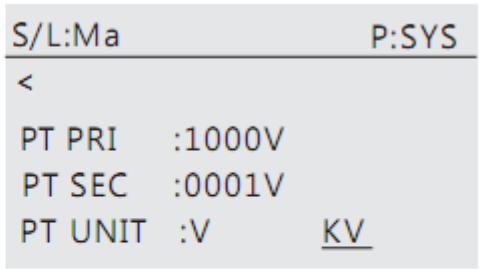
PT PRI :1~9999

PT SEC :100~600



Setup PT primary side voltage unit

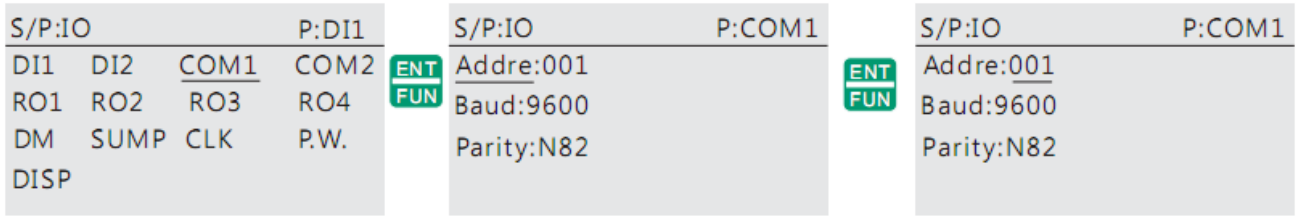
ENT FUN



Use ▲ ▼ to select V or KV

*if set to KV, PT PRI unit will change to KV

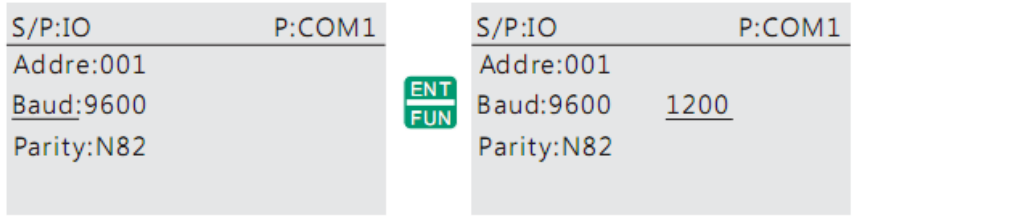
04 – COMMUNICATION SETUP



Select Com1 to setup

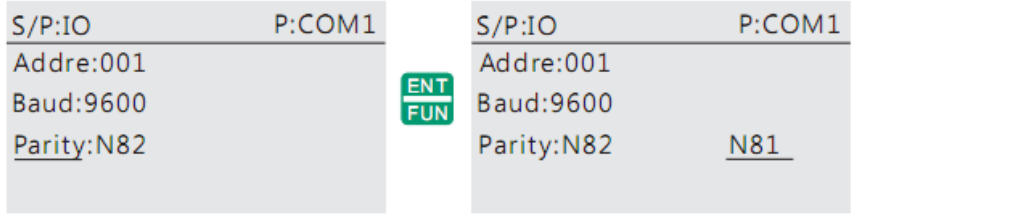
Device address setting

Use ◀ ▲ ▼ to input value
Press ENT FUN to confirm



Baud rate setting

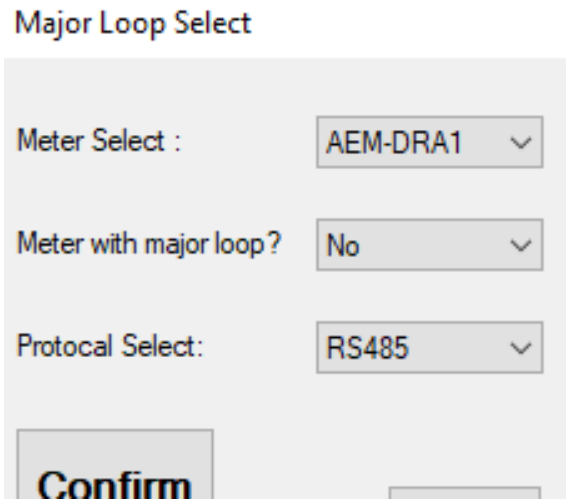
Use ▲ ▼ to select 1200/2400/4800/
9600/19200/38400
Press ENT FUN to confirm



Parity check seting

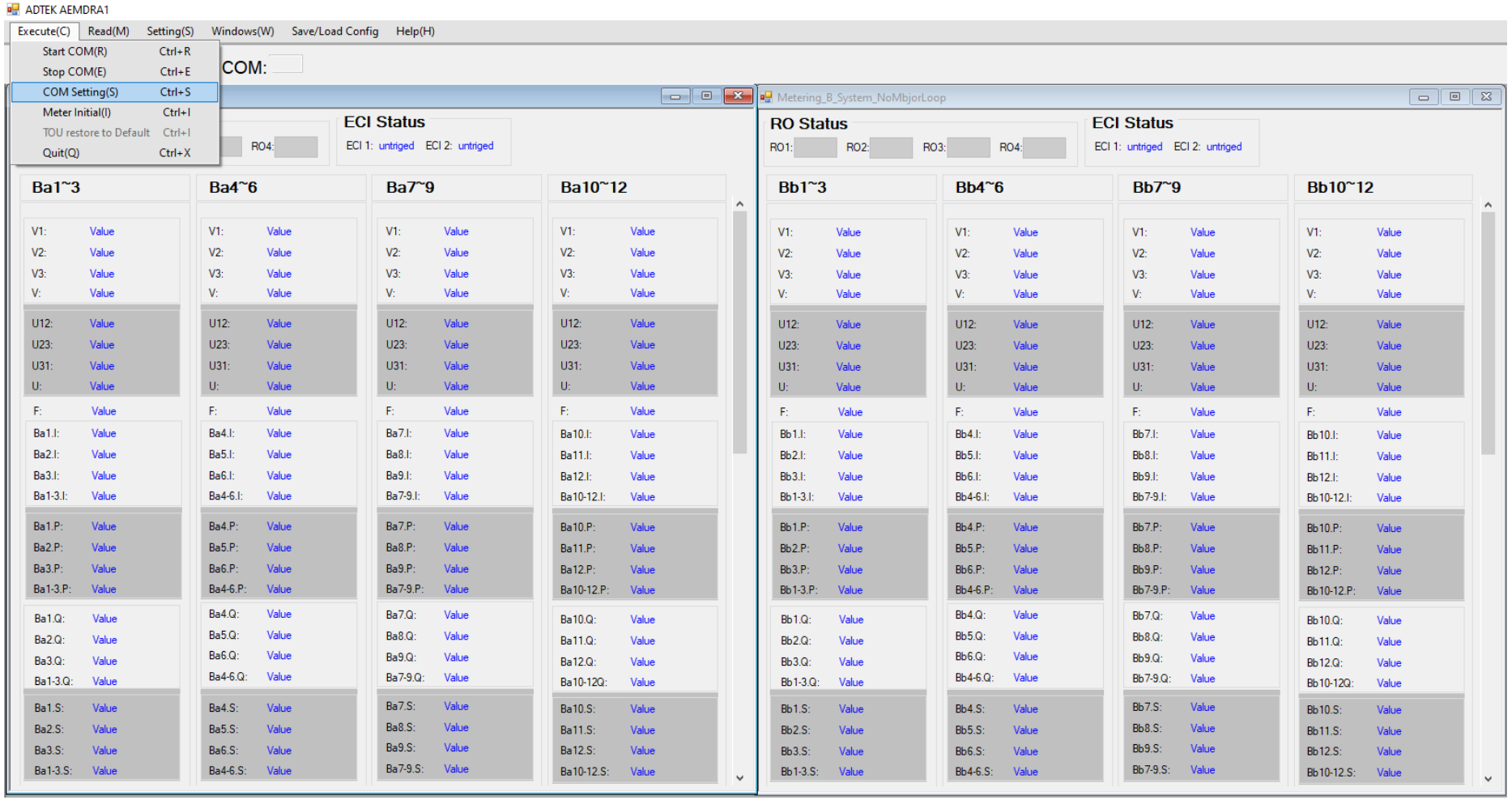
Use ▲ ▼ to select N81/N82/O81/E81
Press ENT FUN to confirm

04 – COMMUNICATION SETUP (SOFTWARE)



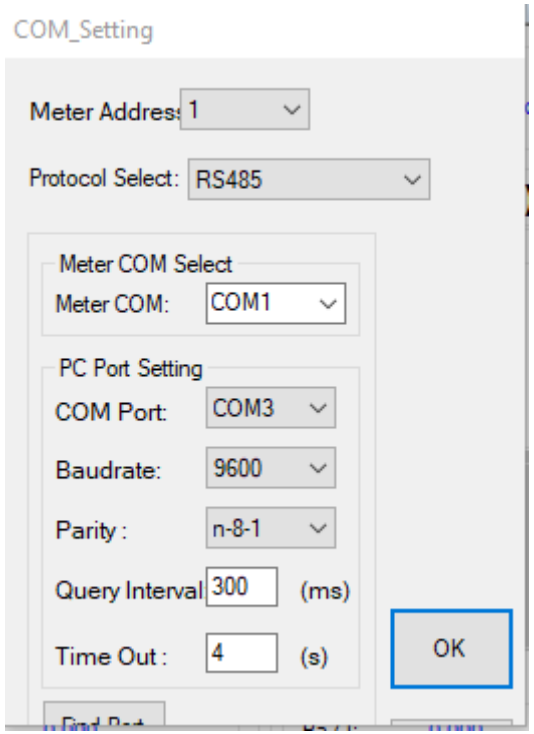
- First, set the selection as shown and press Confirm

04 – COMMUNICATION SETUP (SOFTWARE)



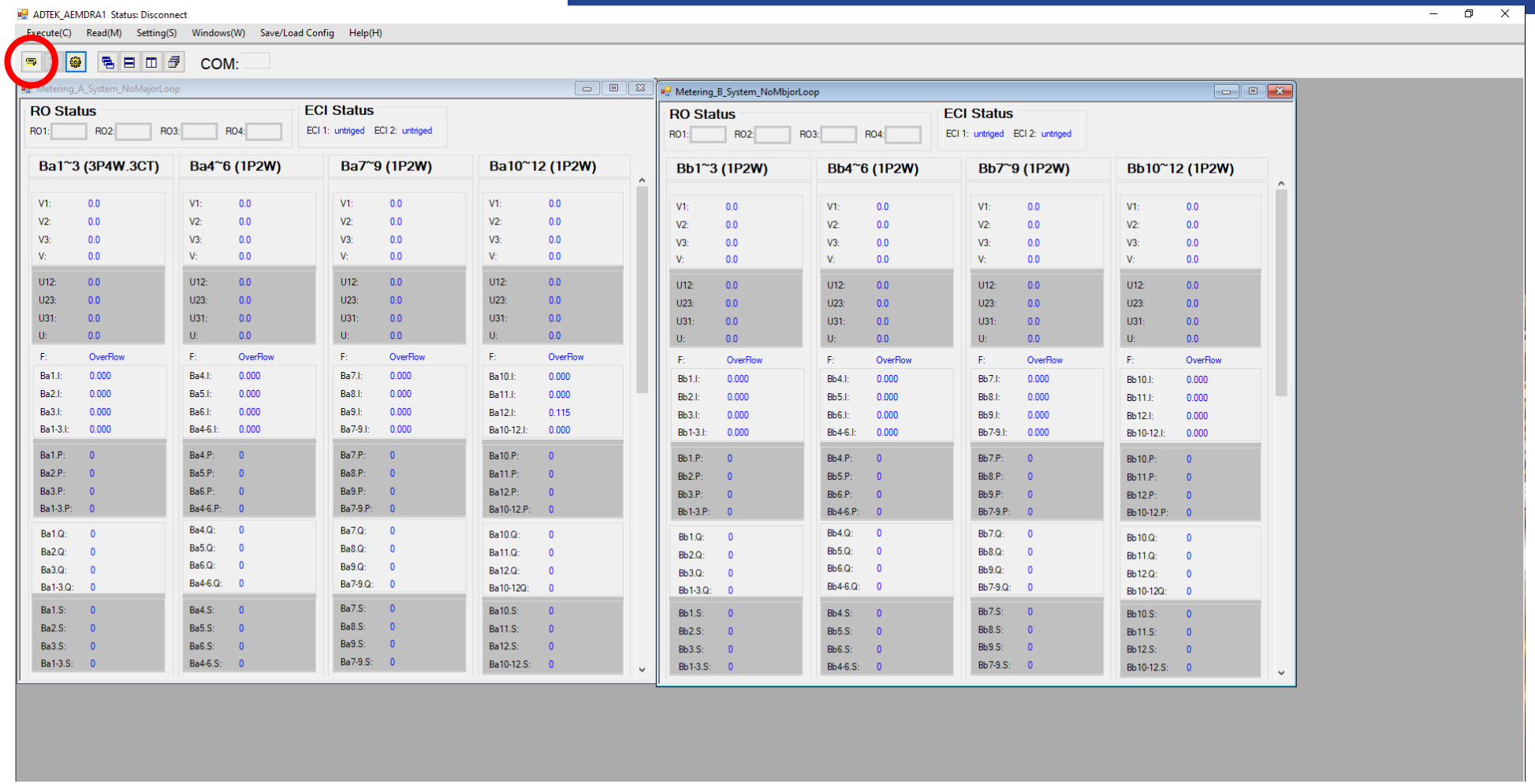
- Under Execute select COM Setting

04 – COMMUNICATION SETUP (SOFTWARE)



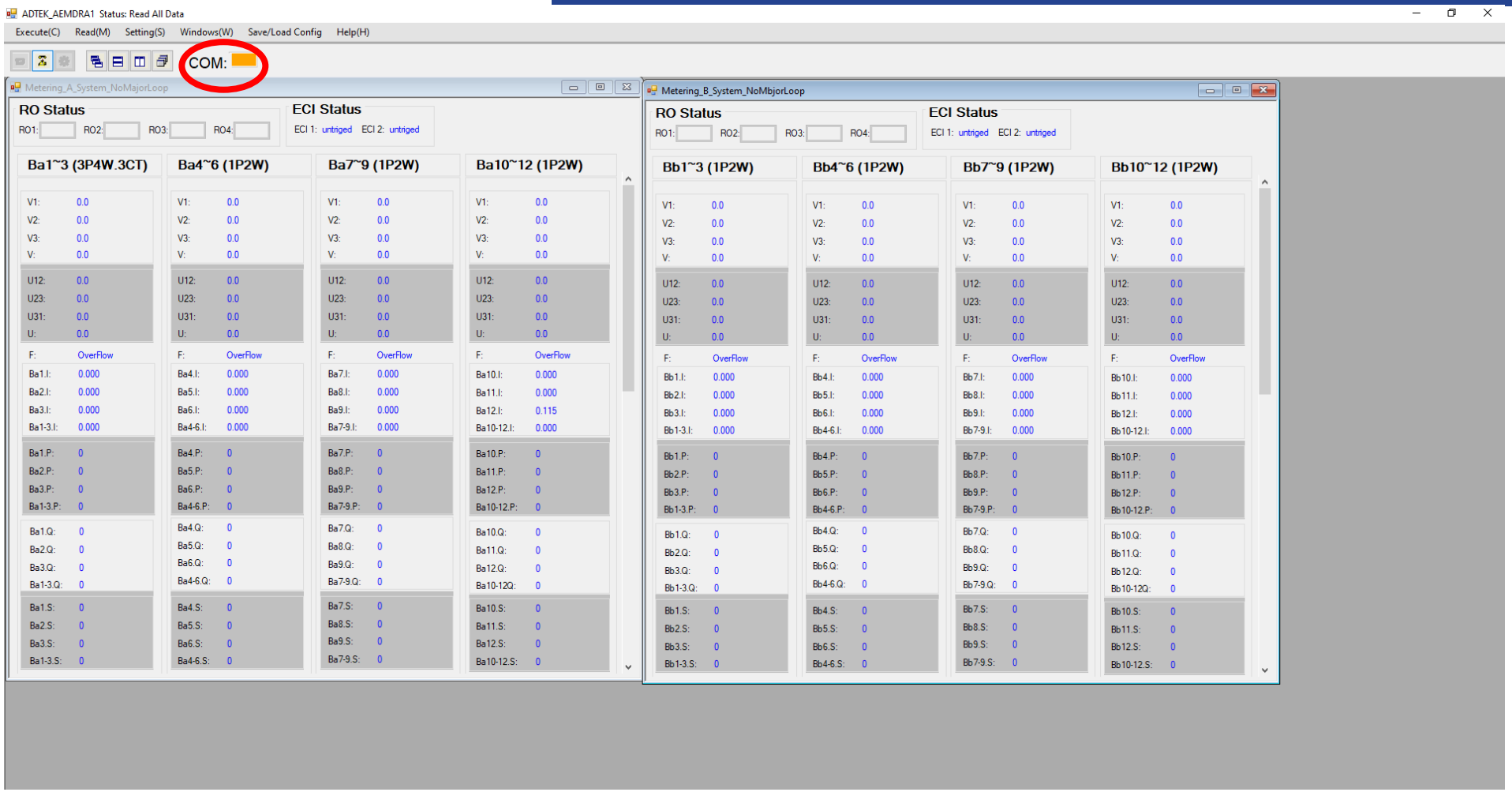
- Make sure all the setting are same as the E810 iBCPM and press OK

04 – COMMUNICATION SETUP (SOFTWARE)



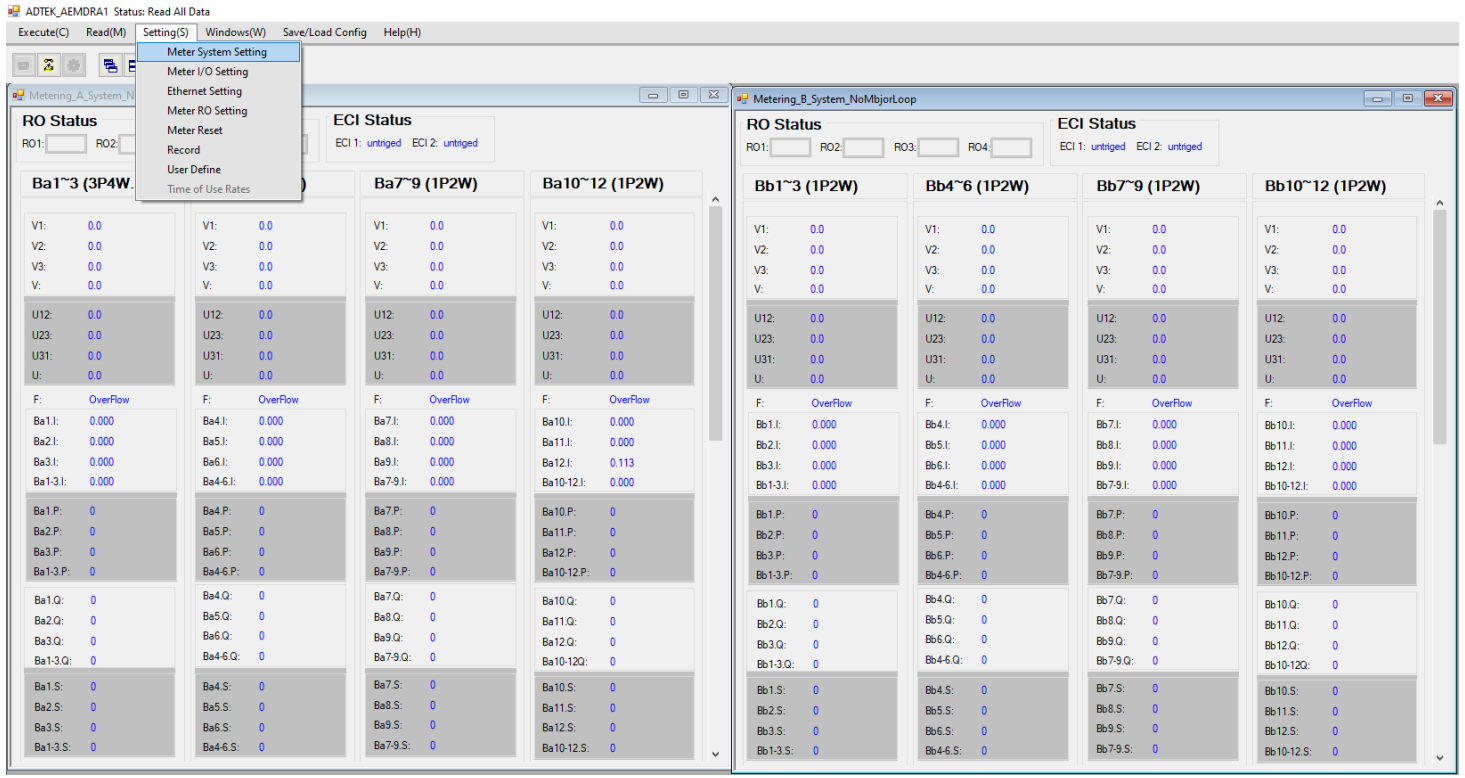
- Click the first icon on the top left

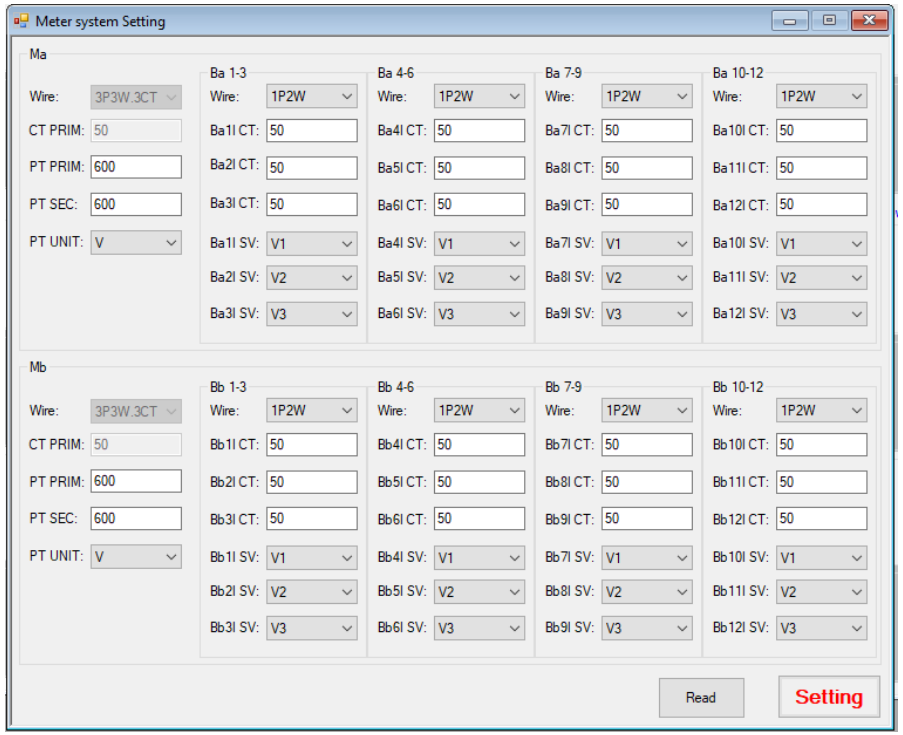
04 – COMMUNICATION SETUP (SOFTWARE)



- COM status will turn orange (blinking) when connected

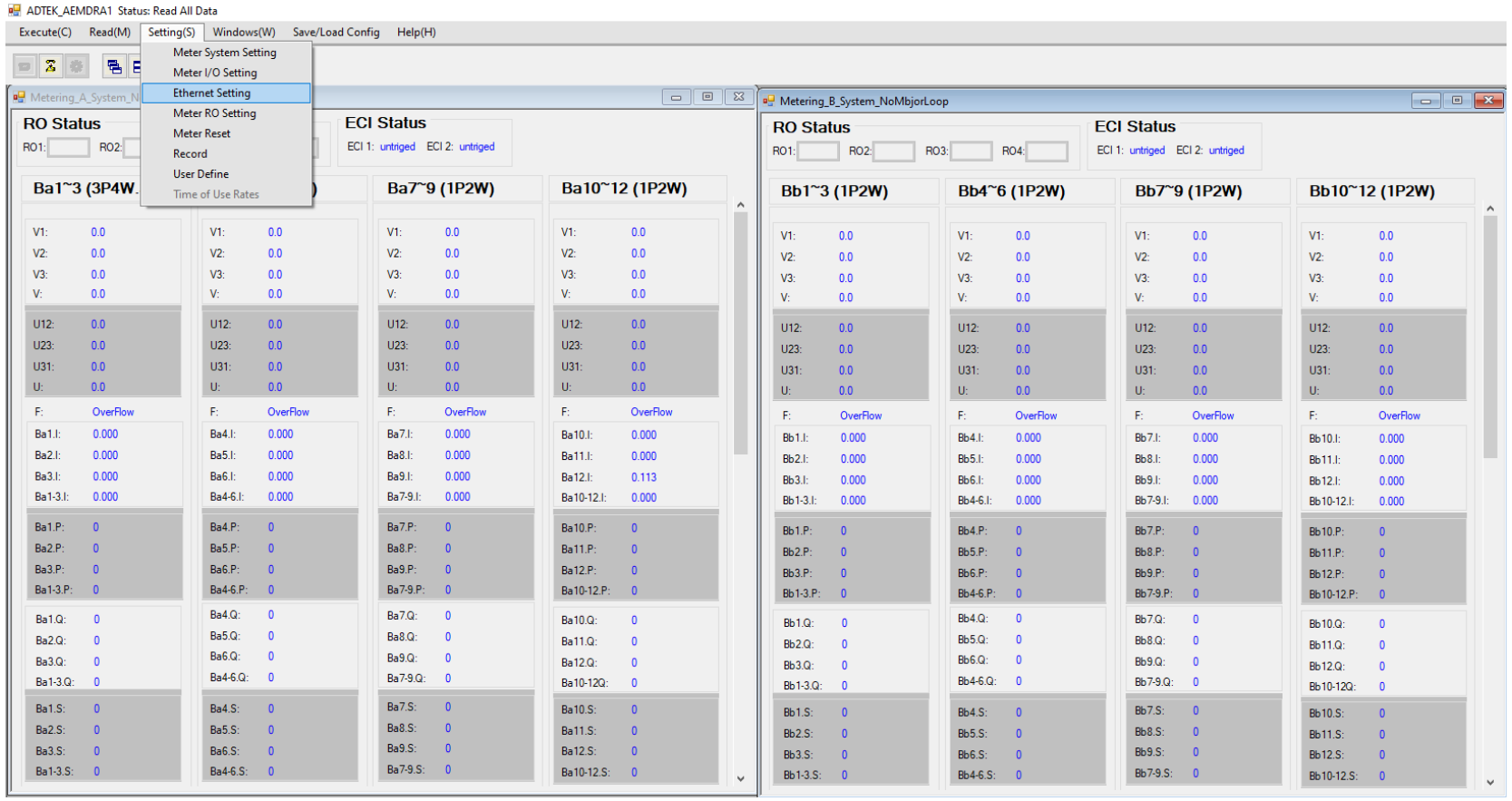
04 – COMMUNICATION SETUP (SOFTWARE)

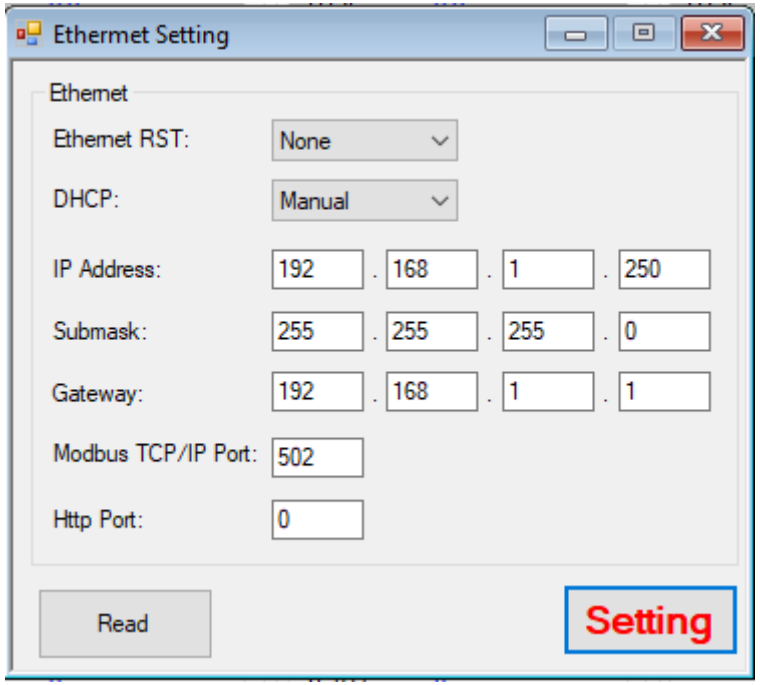




- Under Setting, select Meter System Setting to set PT ratio

04 – COMMUNICATION SETUP (SOFTWARE)





- Under Setting, select Ethernet Setting to set IP Address, Submask and Gateway

05 – FREQUENCY ASK QUESTIONS

E810 iBCPM

05 – FREQUENCY ASK QUESTIONS

1) Does E810 BCPM required external power supply ?

Yes, it needs a 240VAC power supply.

2) What is the maximum CT length?

Theoretically is 10 meters.

3) Do we have variation model that use 5A secondary CT instead of current 333mV secondary CT ?

E810 BCPM only support 333mV CT input

4) What is the sampling rate of E810 BCPM?

The sampling rate of E810 BCPM is 128 sample/cycle which equivalent to 6.4kHz

5) Can randomly connect CT instead of connect in sequence ?

Yes, but make sure the software interface is set accordingly.

6) Can we have 3 phase and single phase circuits connected into the E810 module?

Yes.

05 – FREQUENCY ASK QUESTIONS

7) What is the maximum length RS485 communication cables for E810?

Theoretically is 1200 meters.

8) Why BMS / PMS cannot read power meter reading?

Recommend to use Modscan software to connect to the power meter and read the data directly to confirm the connection and meter functionality

https://www.youtube.com/watch?v=STBX1Nc2I0s

9) Can I replace the power meter without shutdown the load?

It is possible but please do take note that voltage signal's fuses need to be pull out . Whenever possible, we still recommend to replace the meter with system shutdown.

10) Do 333mV CT secondary required to short link if it removed from terminals?

333mV CT secondary do not required any short link terminal since it is small voltage signals compare to 1 or 5A CT type.

THANK YOU

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