Technical Guide for Meter installation

General overview

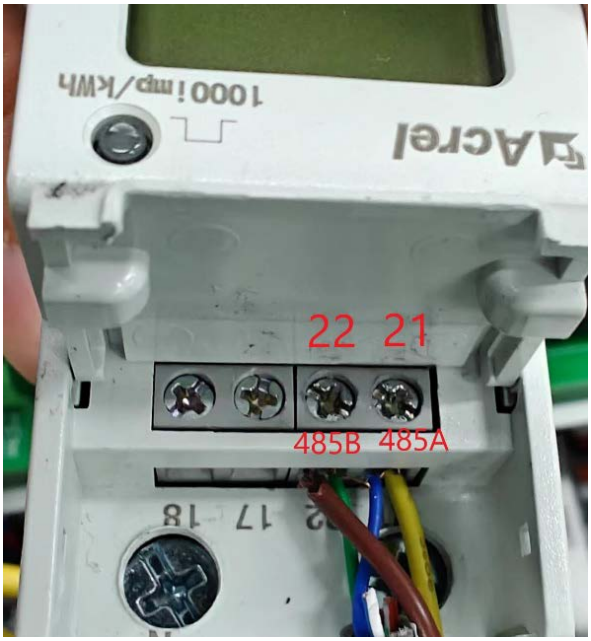
ADL200 is a single-phase electric meter, designed for single phase active energy measurement on low voltage system, at the same time, can measure the electrical parameters like **voltage, current, power** and so on.

There is also RS485 can be chosen. This electricity meter has advantages of smaller volume, high precision.

This meter meets the related technical requirements of electricity meter in the IEC62053-21、IEC62053-22 standards.

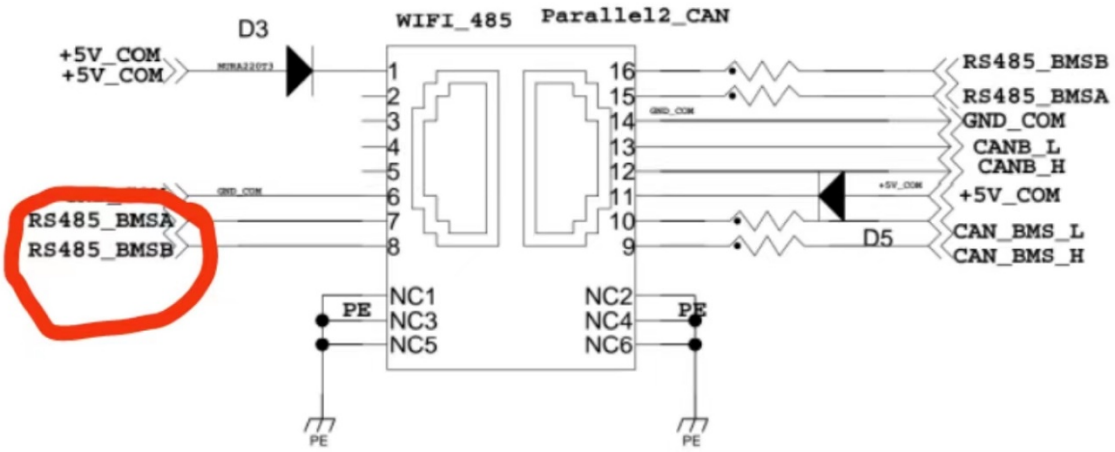
The above photo illustrates the AC wiring, the GRID labelled connects the input mains (ESKOM) and the Inverter labelled needs to be connected on the input grid of the inverter.

These are the parameters that should be seen on the screen of the meter as you scroll by.

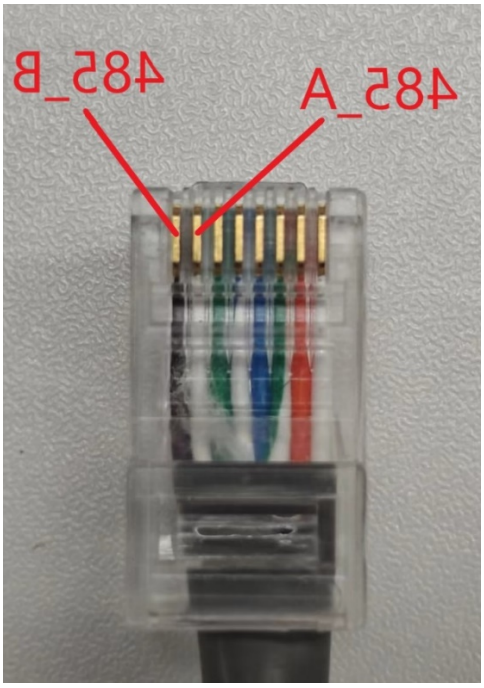


At the Meter's output (Inverter) side, there are 4 ports which are labelled 17-18 and 21-22.

Note: DO NOT USE pin 17 and 18, not part of the procedure!

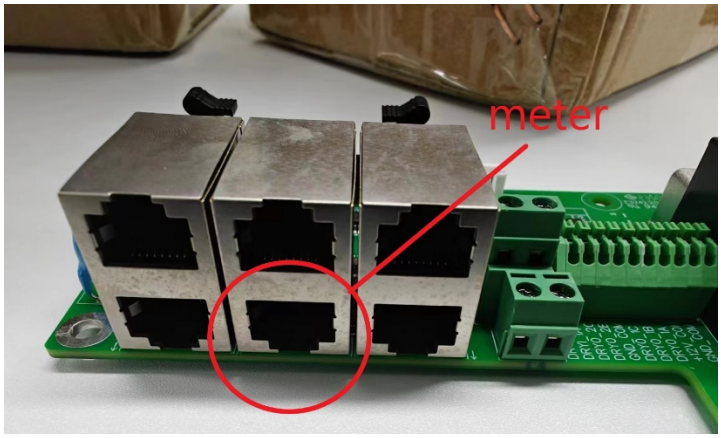


The illustration above shows the internal network wiring of the pins that needs to be connected to the meter using the RS485 protocol.

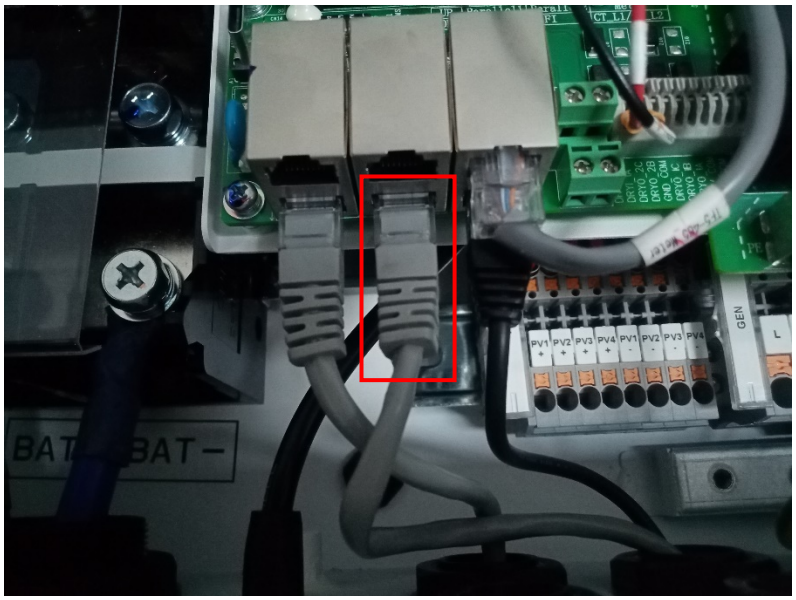


This is the head of the network cable, RJ45 pin, indicated above are the pins needs to be connected to the meter.

Pin 7 and 8 from the network cable nees to be connected to pin 21 and pin 22 of the meter



The circled RJ45 pin is underlined as WIFI on the new REVO inverter, this is where the meter must be plugged in.



plugged in to the inverter

Configuring/Programming the meter

Steps are as follow:

- Press and hold the Enter button
- It will display **0000**, use the UP and DOWN buttons to change the password to **0001**
- If you have selected the correct password, it will go through and require an address, communication speed.
- The default will be **025**, use the UP and DOWN buttons to select and changed to **001**
- **Baud rate is 9.6, which is correct, no need to be changed**
- **You will need to go through all the settings and set them as per the flow diagram**

Note: Change one setting at a time, once you are done, press and hold the ENTER button to save the setting

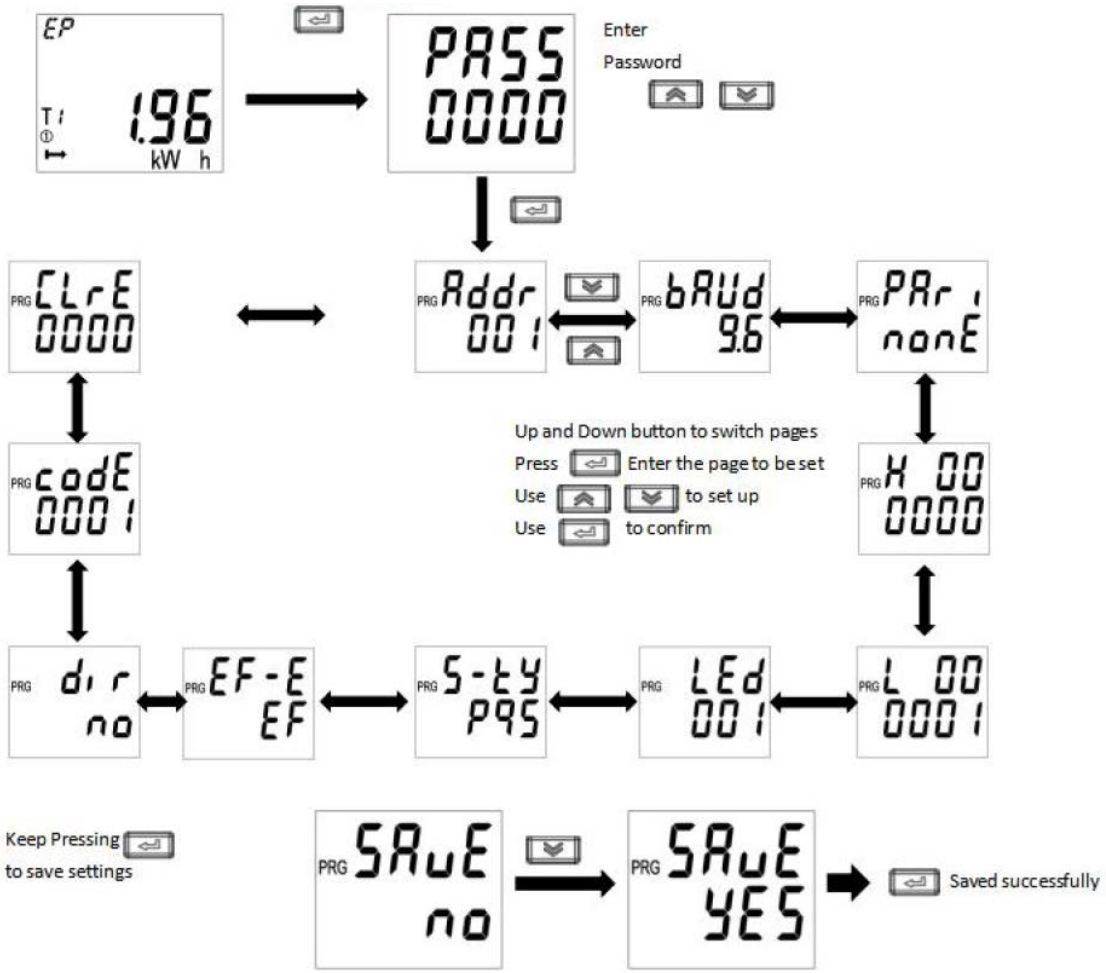


Illustration above shows all the required parameters to be set as shown.

Password

- Change the default address to 001
- After each setting change, save by long press  then select YES to save, this saves time and less frustrating in case you miss or forget a setting

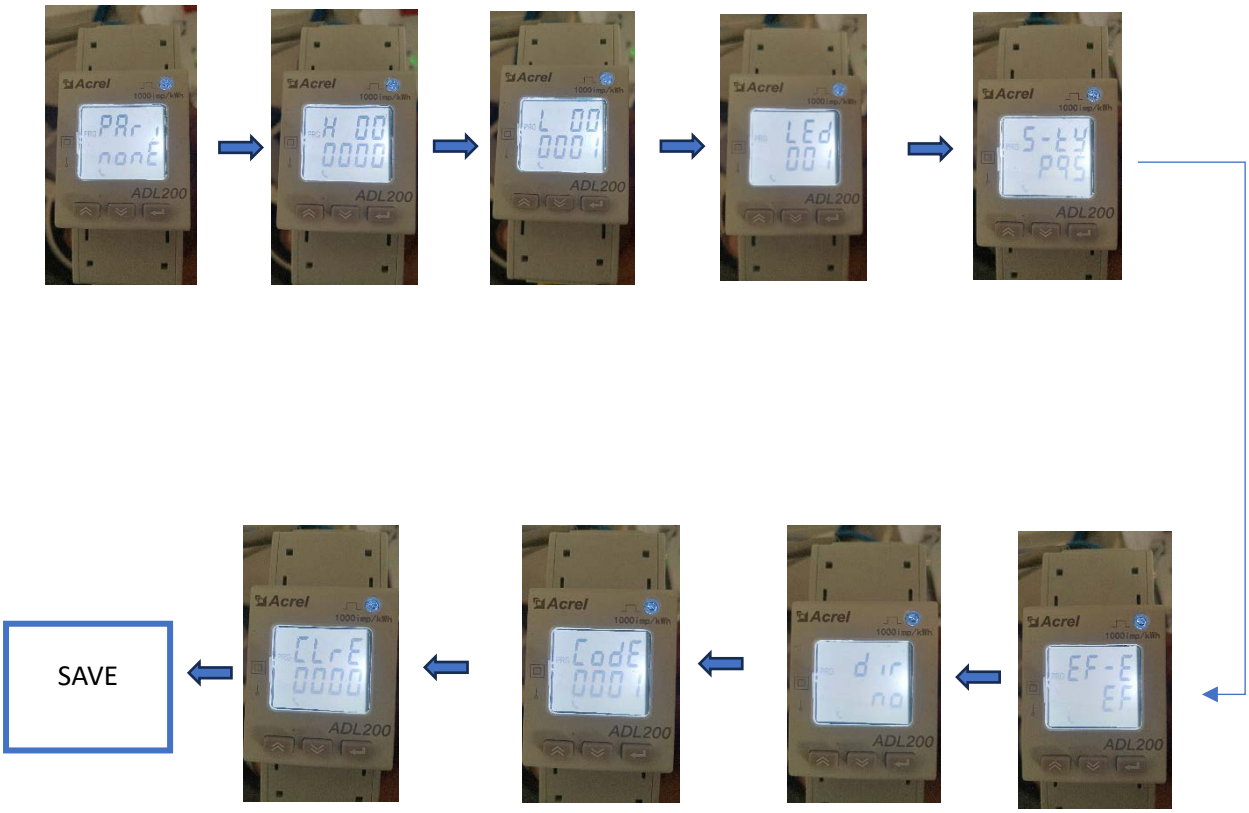
Address

Default will be set to 025, change it to 001

Baud rate

Long press the ENTER button to Save all settings.

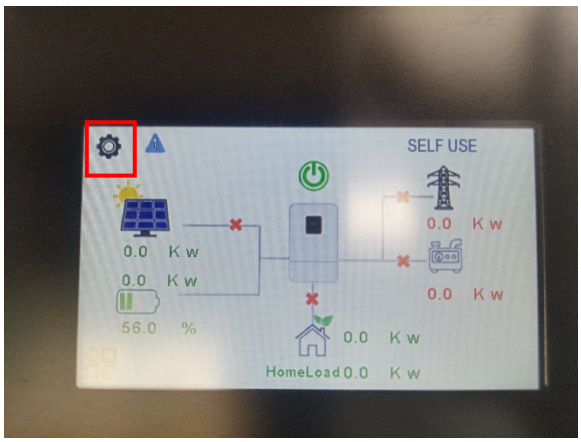
The meter must have these parameters set to it as per the flow chart/diagram shown on the previous page



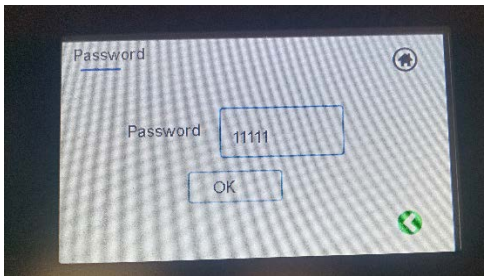
Inverter programming

Settings to be changed:

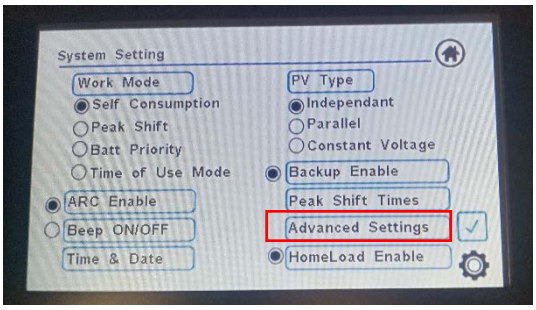
- Press the Settings icon



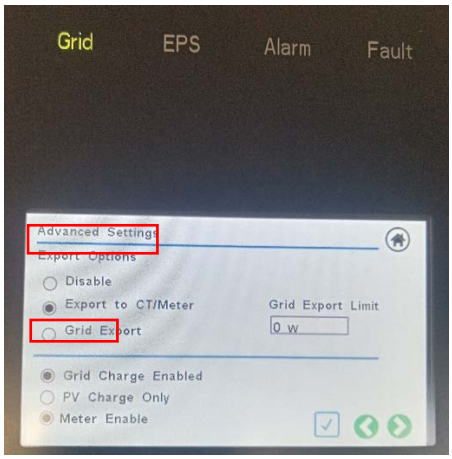
- Insert the password – 11111, click OK



- System settings

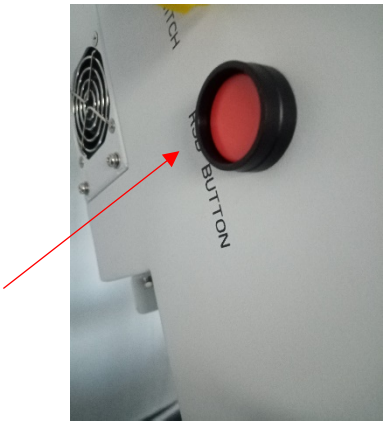


- Advanced settings, click on export to CT/Meter then Meter Enable function

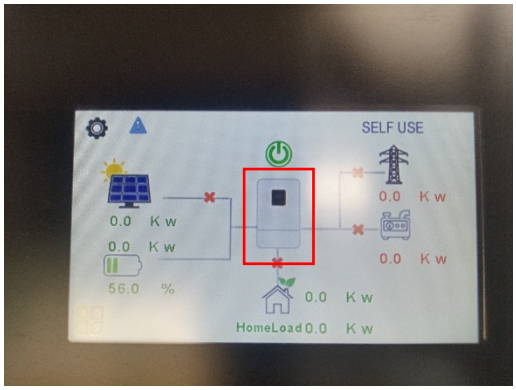


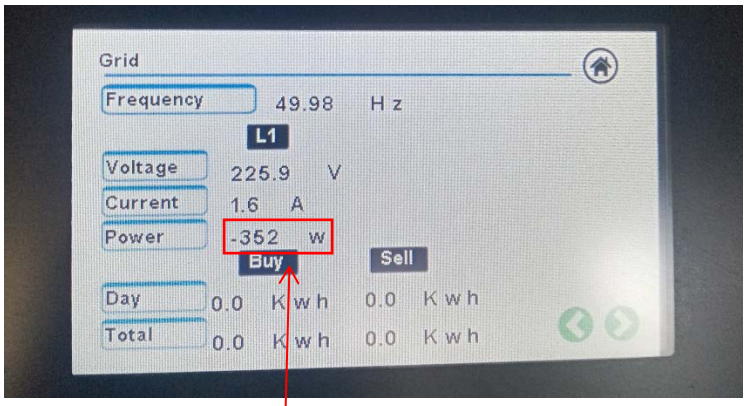
As the inverter/system was on Standby,

click in the RSD button



click the inverter icon,





and the readings observed on the inverter must almost be as the readings from the meter

The neon lamp should be flashing every 2-5 seconds depending on the current flowing through the meter.