



## **ACR10R Meter**

# **Wiring and Configuration**

**V02**

## Version Information

Version	Date	Content
V01	Apr. 10 2018	New
V02	Sept.14 2018	Direction of arrow instruction added

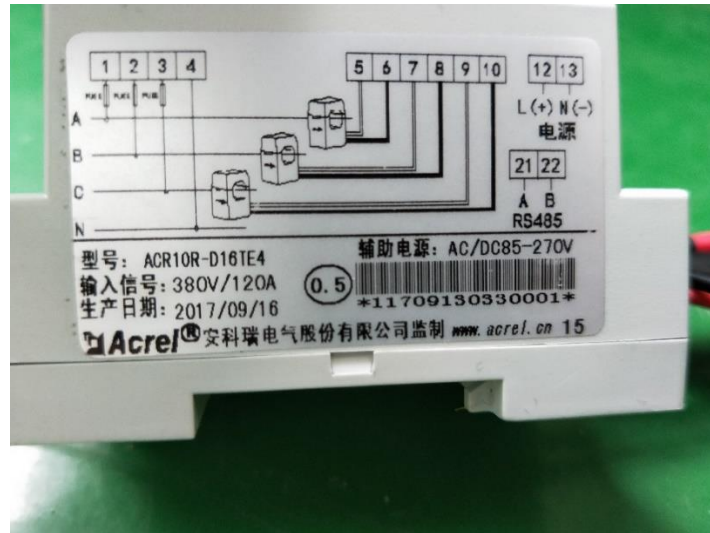
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## 1. Wiring

### 1.1 Power Cables Wiring

Please connect the wires according the diagram of the meter side.



Port 1, 2, 3, 4 should be connected to A, B, C and N line of the three-phase grid for supplying the grid voltage to the meter.

Port 12 and 13 should be connected to L (+) and N (-) of one phase grid for supplying power to the LCD screen of the meter.

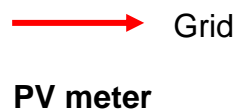


Port 5, 6, 7, 8, 9, 10 should be connected to the wires of CT secondary side.

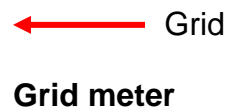
NOTE: pay attention to the relationship of the phase voltage and current according to the wiring diagram. The secondary side of the CT that the connecting to Port 1 Line passes through should be connected to Port 5 and 6. Analogously the other two CTs should be connected in the right way.

## 1.2 Arrow Direction of CT

If the ACR10 meter is used as a PV meter in hybrid system, the direction of arrow in CT should point to the grid.



If the ACR10 meter is used as a grid meter, the direction of arrow in CT should point away from the grid side as the figure shows.

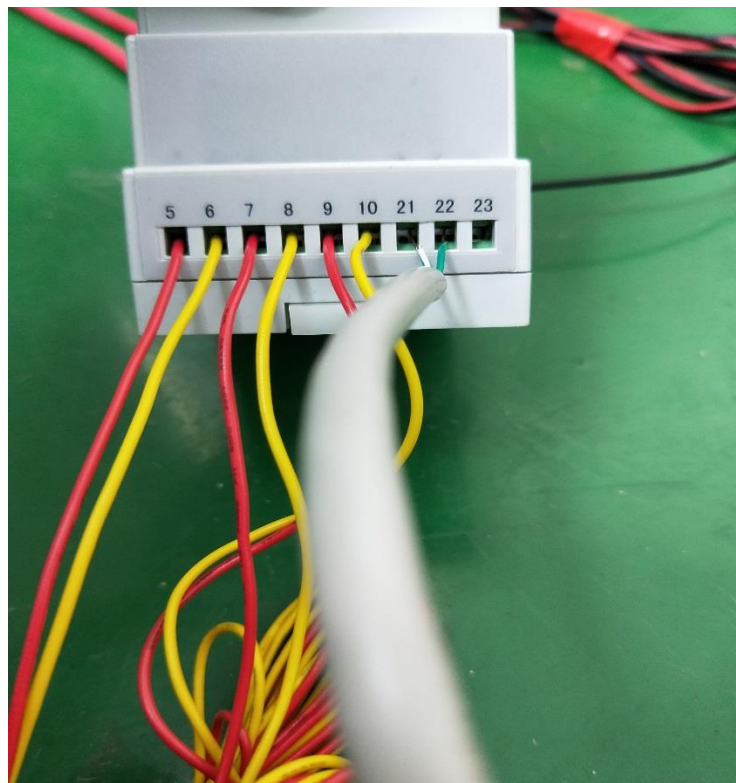


### 1.3 Communication Cables

Port 21 and 22 are used for the RS485 communication connecting.

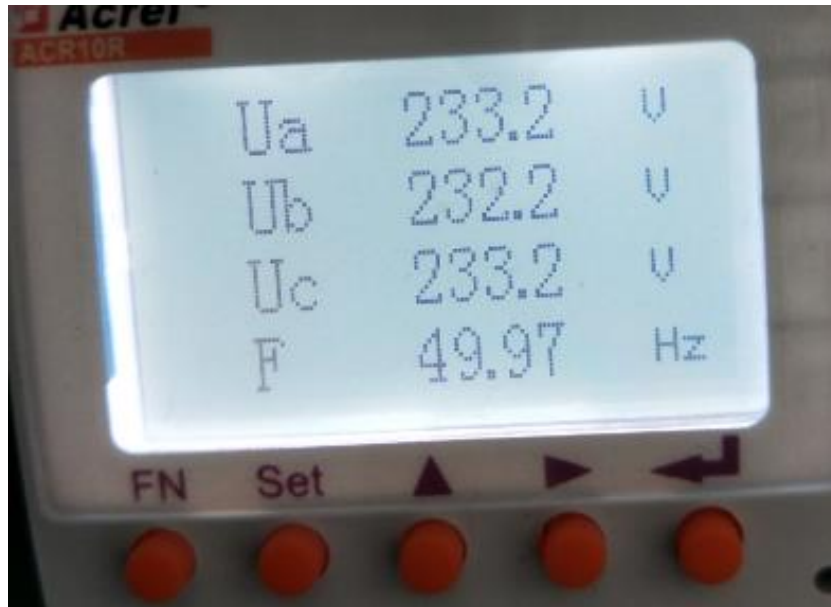
NOTE: please use normal Type B patch cable. Line 3 (G/W) of one side should be connected to Port 21 of the meter. Line 6 (G) should be connected to Port 22 of the meter. The RJ45 connector on the other side should be plugged in the Meter Port of SMILE5-INV.

If two meters are used, Port 21 and 22 on the meter should be connected at first, then the Line 3 and 6 should be connected to the relevant ports on the meter.



## 2. Configuration

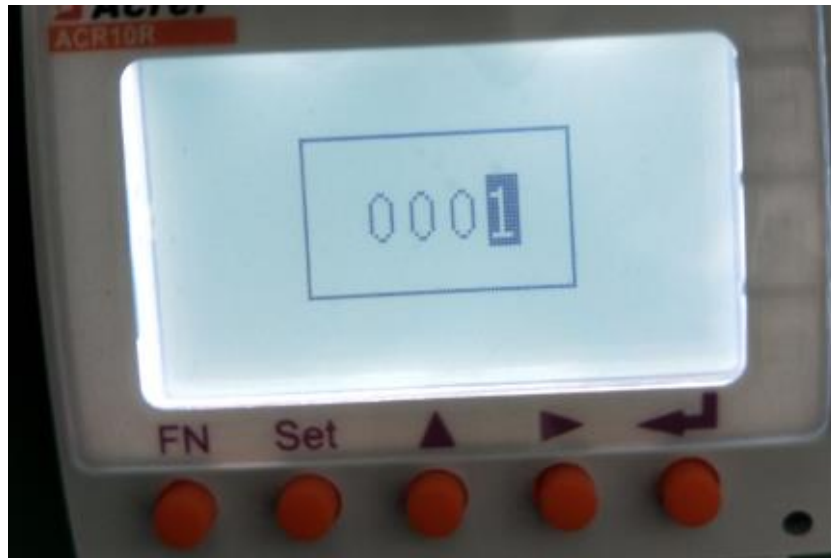
1. The initial interface of the meter is about voltage as the following figure.  
Click “Set” button on the meter.



2. Choose “SETUP” and click the enter button.



3. Input "0001" in the password interface to enter the setup interface.



4. Choose "Comm" in the setup interface to enter the communication setting interface.



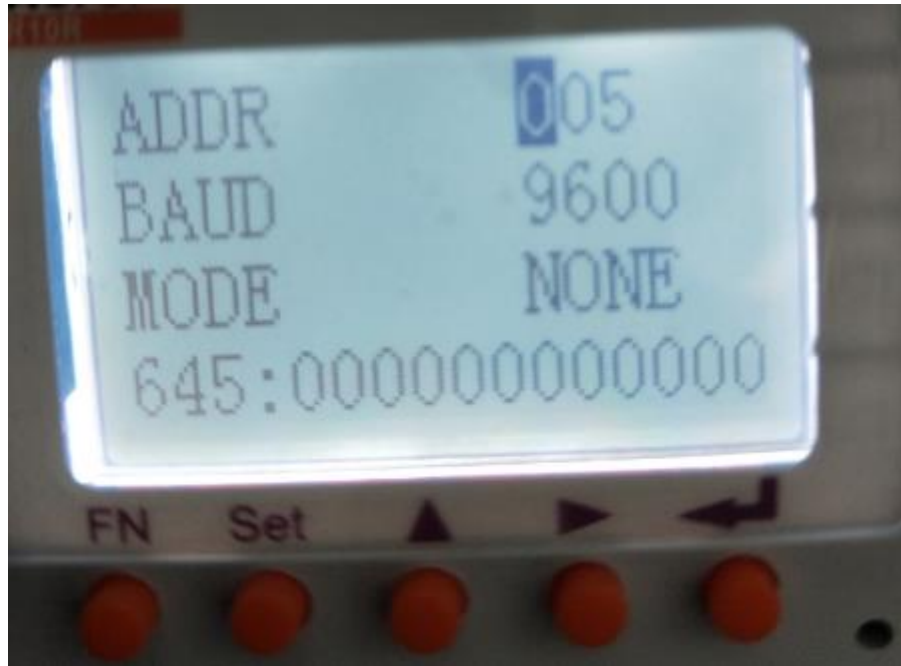


## 5. Set the communication address and baud.

When the meter is used as a grid meter, set the communication address as “005”.

When the meter is used as a grid-tie inverter meter, set the communication address as “006”.

Set baud as “9600”.



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## 6. Set the CT ratio of meter in the SMILE5 interface.

Click “setting” - “function” – “CT Meter” and set “Enable” as On/

This meter is 120A, set the ratio as 120.

If the meter is 200A, set the ratio as 200.