

# Calibration Guide

## AMC16-DETT

### I communication connection

1. As shown in Figure 1, first select the correct port, then select the correct baud rate (default 9600) and address according to the wiring diagram identification printed on the meter side, at last click "open the serial port".

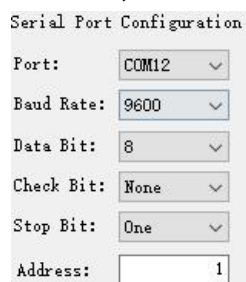


Figure 1

If Figure 2 pop-up, you need to check whether the selected port exists or is occupied.

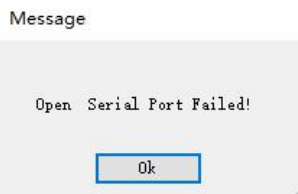


Figure 2

2. Click communication, observe until the times of sending and receiving are equal (like Figure 3), which indicating that the communication between PC and meter is normal. Other parameters can be modified at this time.



Figure 3

### II Modify address

As shown in Figure 4, when the meter communicates normally, input the address to be set in the text box on the right side of "set address", then click "set address" to set the parameters.

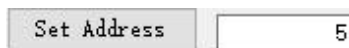


Figure 4

When the dialog box as shown in Figure 5 pops up, the setting is successful.

Message

Set Address Successfully!

Ok

Figure 5

If the setted general addresses get lost, it can be read through universal address 255 (when networking communication, must use general address).

### III Modify baud rate

As shown in Figure 6, when the meter communicates normally, select the required baud rate in the drop-down box on the right side of "set baud rate", and click "set baud rate" button to save the baud rate after selection.

Set Baud Rate 9600 ▼

Figure 6

When the dialog box shown in Figure 7 pops up, the setting is successful.

Message

Set Baud Rate Successfully!

Ok

Figure 7

IV It is not recommended to click the data and power reset button if there is no special need.

### V Ratio setting and reading

Multi Channels DC Power Meter Debugging

Serial Port Configuration

Port: COM1

Baud Rate: 9600

Data Bit: 8

Check Bit: None

Stop Bit: One

Address: 1

Debugging

Close Serial Port

Stop Send: 27 Receive: 27

Set Address 1

Set Baud Rate 9600

Data And Power Reset

Zero Calibration

CT1: 40

CT2: 10

CT3: 10

CT4: 10

CT5: 10

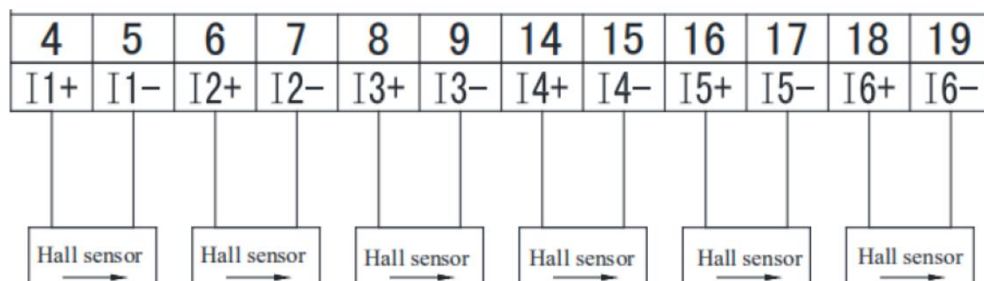
CT6: 20

Set Ratio

Data Display

	I	U	P	EP	Read Ratio
Channel 1	0.00	0.00	0.00	200031.00	CT1: 40
Channel 2	0.00	0.00	0.00	200031.00	CT2: 10
Channel 3	0.00	0.00	0.00	200031.00	CT3: 10
Channel 4	0.00	0.00	0.00	200031.00	CT4: 10
Channel 5	0.00	0.00	0.00	200031.00	CT5: 10
Channel 6	0.00	0.00	0.00	200031.00	CT6: 20
DC Input	4.78				

The transformation ratio is corresponding from top to bottom:



CT1— Hall sensor No.4 No.5  
 CT2— Hall sensor No.6 No.7  
 CT3— Hall sensor No.8 No.9  
 CT4— Hall sensor No.14 No.15  
 CT5— Hall sensor No.16 No.17  
 CT6— Hall sensor No.18 No.19

The value of the transformation ratio is determined by the hall sensor accessed into the channel. Fox example, if port 4 and 5 connect 200A/5V hall sensor, the ratio is 40. Port 6 and 7 connect 100A/5V, the ratio is 20.

After the change ratio of the corresponding channel is correctly filled, click the "set change ratio" button to modify the parameters. After modification, click read ratio to check whether modification is completed.

## VI Zero Calibration

### 1.Preparation

Before performing the hall sensor zero calibration, the hall sensor must be removed from the power line to ensure the hall sensor is in an unload state. Then tighten the screws, ensuring that the hall sensor corresponding to the channel to be calibrated is in a normal working state.



### 2.Hall Sensor zero calibration

As shown in Figure 1, select the correct channel number according to the corresponding channel of the Hall to be calibrated; for example, the hall sensor corresponding to the terminal number 4 and 5 needs to be calibrated, select "Channel 1", and then click "Zero Calibration" to enter the channel 1 zero point calibration mode (as shown in Figure 3). If all channels need to be zeroed, select "Channel All", and then click "Zero Calibration" to enter the zero point calibration mode for all channels (as shown in Figure 3). When the pop-up "Zero Calibration Failed" means the Hall zero calibration failed, when the pop-up "Zero Calibration Successfully" means the Hall zero calibration was successful;

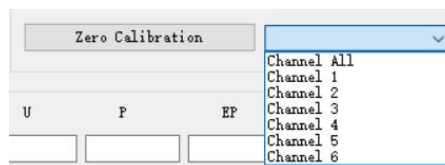


Figure 1



Figure 2



Figure 3

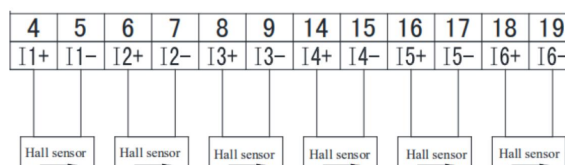


Figure 4