<u>USB e-Meter 8870 Manuel</u>

Non-Contact Current Meter Recorder

Introduction

USB e-Meter 88700 is a very convenient and economical "Non-Contact USB Current Meter".
Just open the meter and put the L or N cable then you can get and record the current value in
PC. Support USB CDC Emulation model   for wild   supplication .

*   Without having to make physical contact of power line , simply place around an electrical conductor.

* Safety measure the power current in " Distribution Box" .

* **Auto record the current value and save in PC for evaluation and application** .

Measure the current range of electricity device at 0A~ 10A,   User do not need to search the metal
part and can quick and safely get detect the value of current.

Features:

● Small size , light weight , convenient and safe.

● Fit for long time display record in PC

   Support USB CDC emulation mode (RS232 control). Read the current in Hyper terminal. .

   Support SDK for system integrator or hobbyist to make development
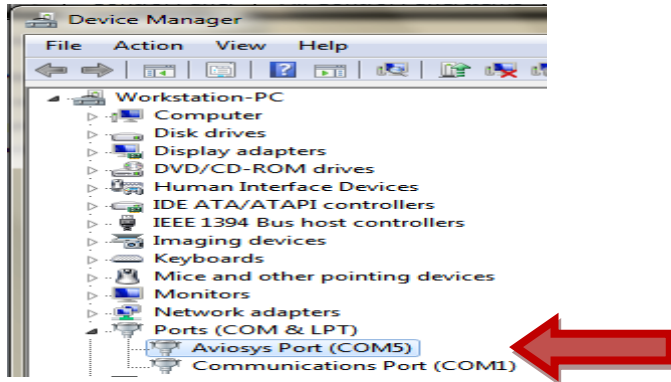
How to use the 8870 Current clamp ?

Open the clamp and put the L or N line of power line pass through .
Do not put more than ONE line .

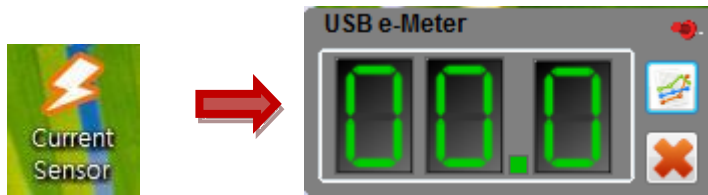| SPEC:	
Interface	One side : USB jack (male) to connect to PC and get USB power in
	Another side : Current meter Ouch
For	L / N line of power line
Measure Current Range	40~66Hz, 0~10A (Accuracy: : ±0.2A).
Power Input	Standard　USB 5V
Sampling Rate	Max. Software read : 2 times per second. 8870 output the value :　3 second. Response Time :　0.1 sec.
Power In	USB 5V standard
Operation Temperature	0 ~50° C
PC System inquire	● 　Windows OS :　WIN 7 (32 bit) , Vista or　XP ● 　USB 2.0 / 1.1　　　* Microsoft .NET Framework Version 3.5 or above
Package	8870 device　,　CD- Include driver , driver , manual　and　SDK.
Length & Weight	111cm & 90g

Installation Procedure

1.) Turn on your PC , put the CD in your CD ROM .

2.) Plug in the 8870 device to your PC , then PC would show out "Detect New Hardware" and then select the driver in CD suggest to save into your desktop to install the USB driver of 8870.

3.) After install the driver, you can get "Aviosys Port (COM X)　in Ports (COM& LPT) device manager as following .

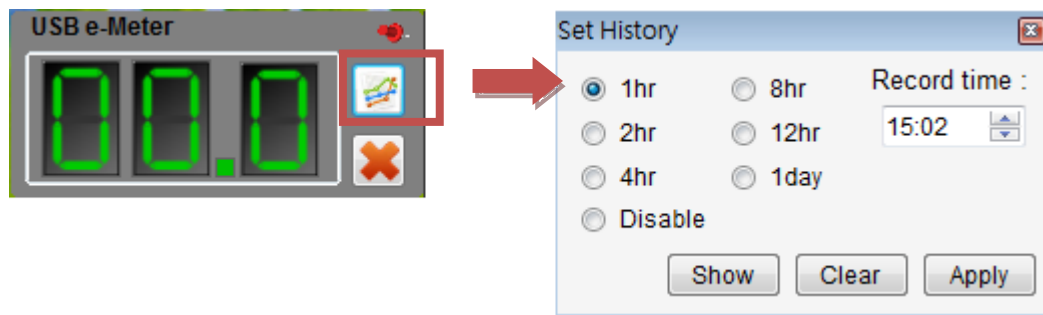Control Panel → System → Device manager → Ports(COM& LPT) → Aviosys Port (COM X)

4.) After install the software "Current Sensor " , please execute it and you will get the software as following :

5.) User can record the current value (from 1 hour to 1day) into PC:

If need long time record please do keep PC awake and turn off the sleep function) .

- Record Time : the time start recording
- 1hr : record every hour .   1day : record every day
- Disable: disable record function (Default)
- Apply : Confirm setting
- Clear: remove all record
- Show: display all record

Example of Show record :

```xml
<?xml version="1.0" encoding="UTF-8" ?>
- <History>
    <Record Time="2013/5/30 11:19:30" Current="0.1" />
  </History>
```

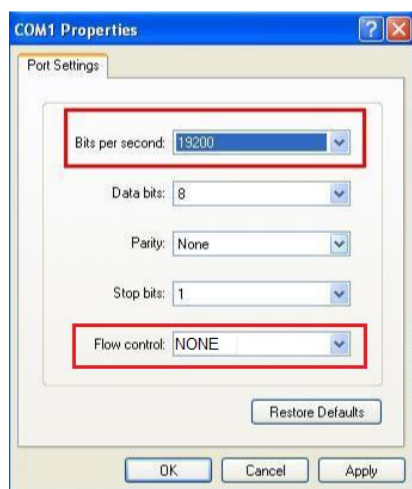**SDK**

For user to arrange own development :

● Developing environment: :

VB.NET 2008 ,   Microsoft NET. Framework Version 3.5 , Microsoft office access 2007

USB CDC series emulation model .

USB e-Meter 8870   support USB CDC emulation model , Please refer the following :

1. First , make sure that the 8870 is connect with your PC.   Please go to

   Control Panel → System → Device manager → Ports(COM& LPT) → Aviosys Port (COM X)

2. Then open Hyper terminal to connect with 8870.

Start → All programs→ Accessories → Communication → Hyper terminal

* There is no Hyper terminal program in WIN 7.   Please use other serial software like Putty .

Select the COM   port 8870 use .

3. Setup " Bits per second" as 19200 and " Flow control" as NONE. Then press OK to log in .

RS232:

● Read Device model :   Command   is   ~

● Read current :   Command   is   @

Thank you for support Aviosys .

If any question please email to our Service Dep. :   Service@Aviosys.com.