# DMMVIEW_A Software Users Manual

## Version: 2.0

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# 1. Initial Use

Before the initial use, install the DMMVIEW_A software and USB transmitter driver correctly. Put the enclosed disk into the PC disk driver, open the folder named as "Driver Installation", read the "Driver Installation Instruction" file, and then install step by step (the default path is recommended to avoid unnecessary problem); Open "DMMVIEW_A" folder, click on "setup.exe" twice, and install the software following the instruction. When finishing, you can make communication between a PC and the meter via the software.

# 2. Instruction

This terminal procedure is a meter monitoring and data recording software developed on WINDOWS (Windows2000/XP) platform, employing USB interface cable connection to realize communication function between the meter and a PC, which helps the meter store and analyze the real-time data more precisely and strengths the measuring efficiency and recording accuracy vie taking advantage of the great data processing capacity of the PC.

Under this software environment, you can execute the real-time monitoring function, real-time recording function and COMP function; read and store data records in LOG part, COMP part and manual part of the DMMVIEW_A meter; Meantime, you can save files in .xls and .txt formats, and execute auto-record function, which can record the data in the PC without monitoring for a long-time.

Before using the DMMVIEW_A software, make sure the USB interface cable between the meter and the PC is connected correctly and the set communication port of the software is complied with the corresponding port of RS232 – USB.

# 3. Menu

Open the software. In the menu window, we could found eight choices (See Figure 1), which are:

**File:**

    **Open:** Open files in the PC saved in ".xls" and ".txt" formats;

    **Close:** Close all the already-opened recording windows;

    **Save:** Save data into the data recording list, in .xls(default) and .txt formats(see Figure 2); (Note: input .txt after the filename in order to save the file as a *.txt file )
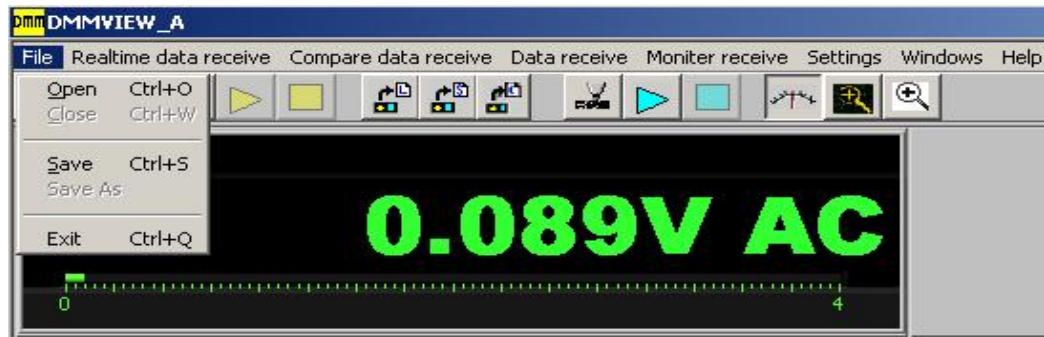
**Figure 1**

**Save as:** Save the saved file again, and the path and the format could be changed (.xls or .txt);

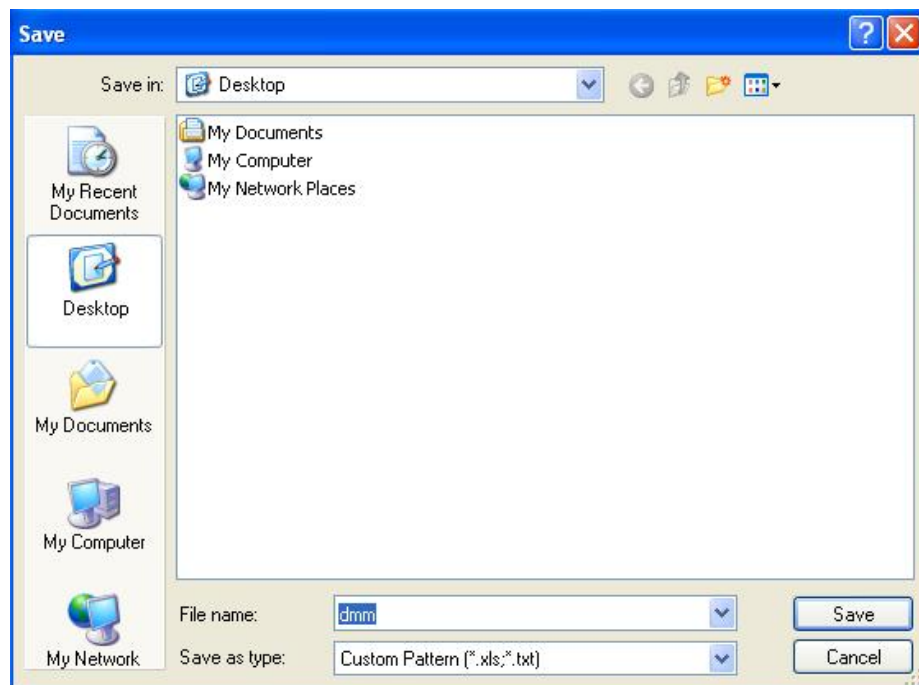**Exit:** Exit the upper-end software procedure;



**Figure 2**

**Real time data receive:** Save the measured real-time data according to the set time (see Figure 3);

**New:** Start new recording task; set the interval time and recording time reference value (see Figure 4);

**Start:** Start a task, the measured real-time data is displayed in the head part, and the data-recording list undertakes data storage function according to the newly set reference value;

**Stop:** Stop recording and refreshing the real-time data display;

**Note**

1. When recording time arrives at the set time, the system stops recording and refreshing data display automatically.

2. During the recording process, the operation of storage function will take recording time.

3. In the real time mode, record all the data in the real time mode when the interval setting time is 0 seconds; record is no time limit when record time is setting for 0S.
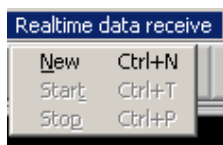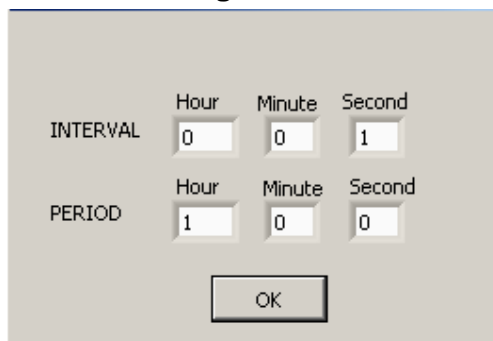


**Figure 3**



**Figure 4**

**COMP data receive:** (see Figure 5) record the measured present value according to the set limits;

**COMP Set:** set the upper and the lower limits, choose data within recording range or out of recording range;

**COMP Start:** start a task, the measured real-time data is displayed in the head part, and the data recording list undertakes data storage according to the newly-set reference value;

**COMP Stop:** stop recording and refreshing the real-time data display;

**Note**

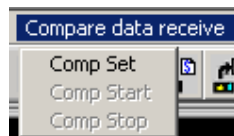The software cancels COMP function automatically if the range is changed.



**Figure 5**

**Data receive:** Read data in the LOG, COMP and Manual SAVE parts of the meter (see figure 6);

**LOG mode:** Read all data in the LOG part;

**COMP mode:** Read all data in the COMP part;

**SAVE mode:** read all data in the SAVE part.

**Note**

1、Press Cancel to stop reading data in the closed part; the reading will make a refresh start when read again, which is unrelated to the previous reading data.

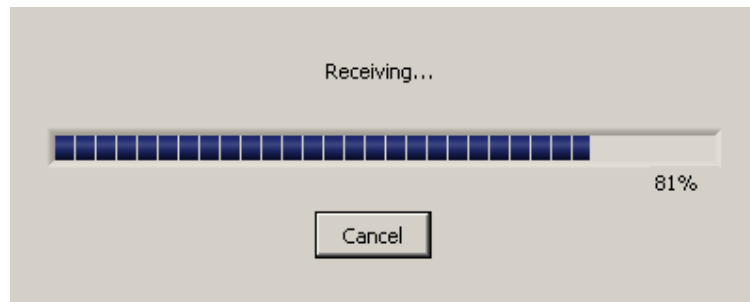2、Rotary Switch must be set in MEM position when reading data in the LOG, COMP and SAVE parts of

the meter



**Figure 6**

## Monitor receive: Display real-time data (See Figure 7)

**Start:** Start monitoring, and value display;

**Stop:** Stop monitoring, and display;



**Figure 7**

## Settings:

**COM port:** Choose a COM port to communicate with the meter (see figure 8);

Method: install the diver, connect the USB Interface cable with a PC, and click on in the follow sequence: Desk → My Computer → Right Key → choose a property → Hardware → Control Panel → Connection, find CP210xUSB to UART Bridge Controller (an abbreviation for the reflected COM) in the list and choose it.

**Note**

Only after the cable is connected with a PC will the corresponding connection be on the Control Panel window.

### Auto save:

**Start:** Start auto-save function，available for any of the monitoring recording function;

**Close:** Stop auto-save function；

**Auto Set:** Default Path: My Documents \DMMDATA

　　　　　　Default saved format: .xls
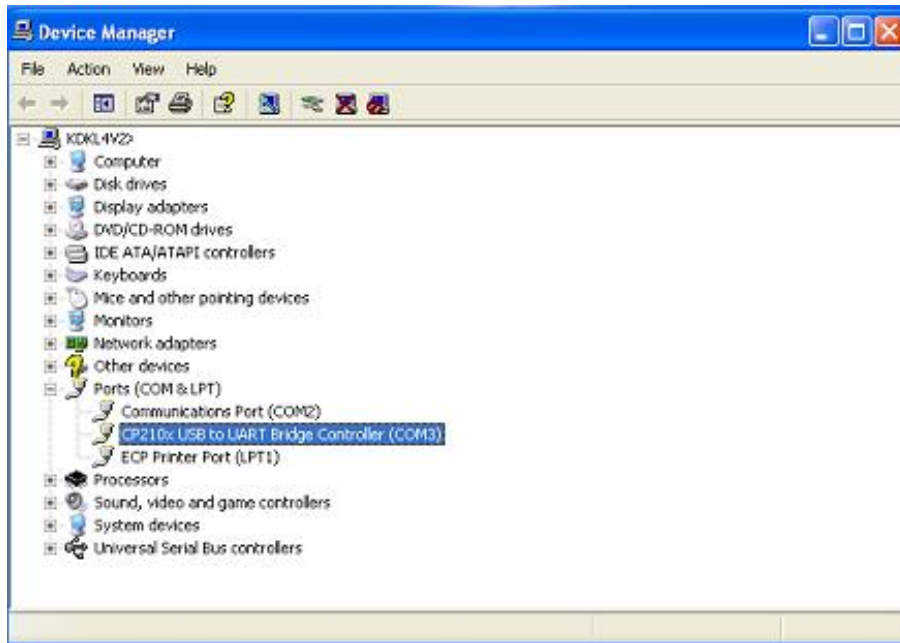
　　　　　　Default saved number: 100

**Figure 8**

**Note**

1. The number of the auto-storage recording is allowed to set from 10 to 50000(10 and 50000 are included);

2. Close the auto-save function when receiving the recorded data from the meter ;( See the following figure for related operations):
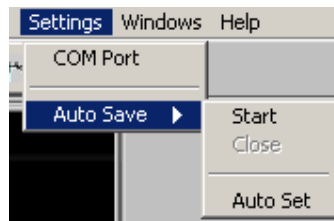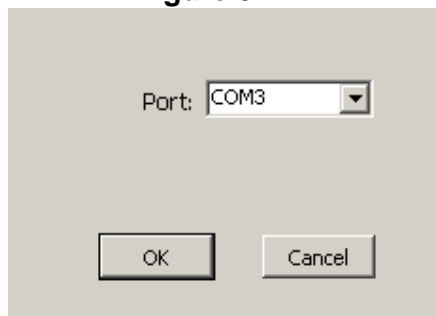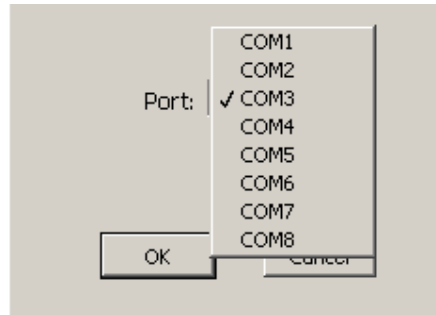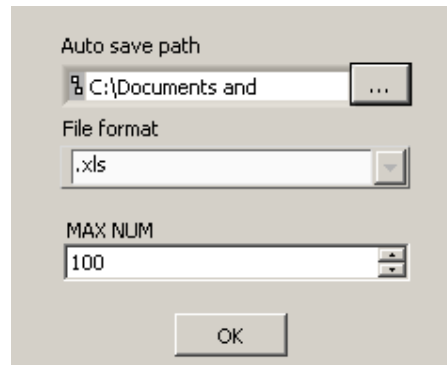


**Figure 9**



**Figure 10**

**Figure 11**
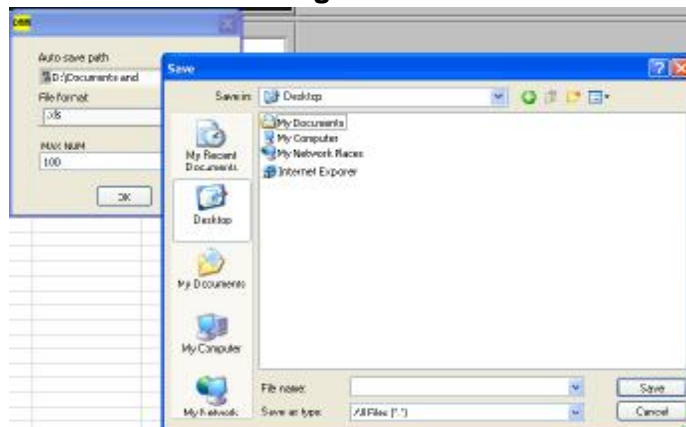


**Figure 12**
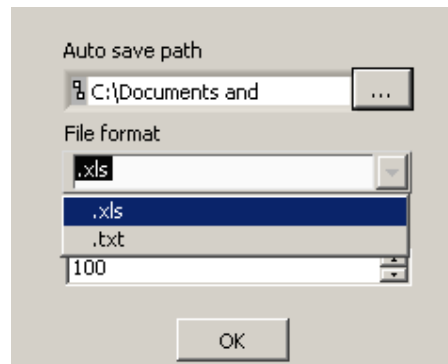


**Figure 13**



**Figure 14**

## Windows:

**Meter Panel:** Display the analogous meter panel;

Close the analogous meter panel;



**Figure 15**

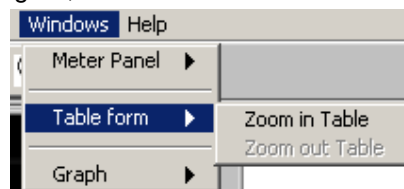**Table form:**    Enlarged recording list;

Original recording list;



**Figure 16**

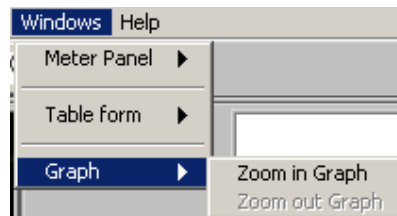**Graph:** Enlarged graph;

Original graph;



**Figure    17**

## Help:

**About DMMVIEW…:** simple explanation of the software;

# 4. Tool Bar

The tool bar button includes**:** Open, Save ; New, Start, Stop(real-time recording); LOG mode, SAVE mode, COMP mode; COM port; Start monitoring, Stop monitoring; Meter panel, Graph enlargement, Table enlargement.
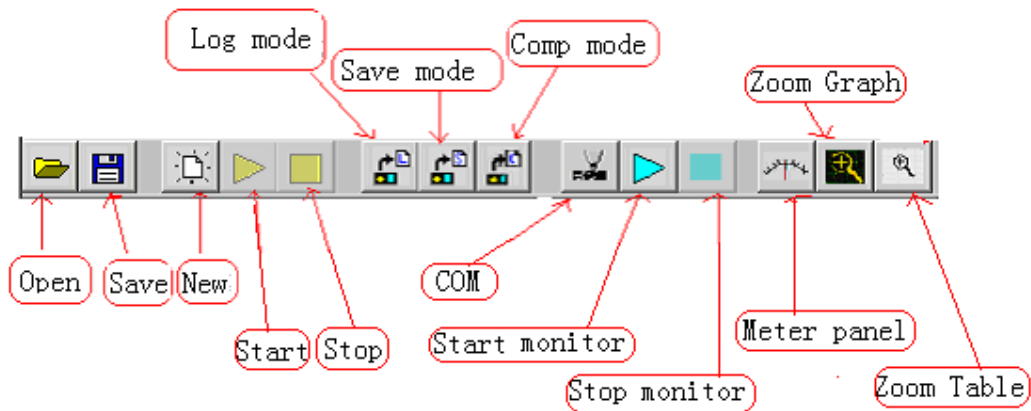
**Figure 18**

# 5. Windows Explanation

## Meter Panel:

**Digital Meter Panel:**



**Figure 19**

1.  State display, synchronous display with the lower-end meter;

2.  Measuring data display;

3.  Bar graph;

### Note

The digital meter Panel will not display bar graph when measuring capacity, frequency, percentage, dBm, TC, RTD.

**Analogous Meter Panel:**

1.  **Analogous meter panel** data display;
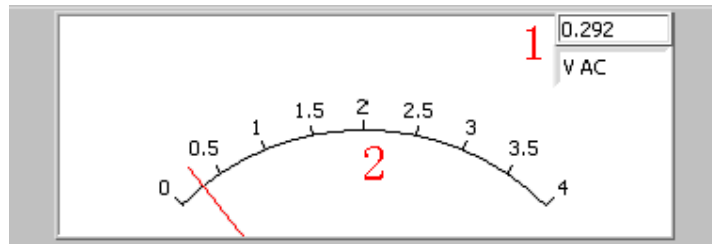
2.  **Analogous meter panel** display;

**Figure 20**

## Recording part:

1. Window to display the set value for the real-time data, including interval time and recording time;

2. Display part of present save path;

3. Real-time display of the recorded MAX,MIN and AVG of the table;

4. Table from: record number (NUM), time (TIME), data (DATA) and function (MODE) are in each record;

| INTERVAL | 00:00:01 | | MAX | 27.400mV DC |
|---|---|---|---|---|
| PERIOD | 01:00:00 | | MIN | -35.270mV DC |
| PATH | | | AVG | -5.838mV DC |

TABLE    0    0

| NUM | TIME | DATA | MODE |
|---|---|---|---|
| 1 | 9:14:47 | -10.03 | mV DC |
| 2 | 9:14:48 | -10.02 | mV DC |
| 3 | 9:14:49 | -8.05 | mV DC |
| 4 | 9:14:50 | -2.54 | mV DC |
| 5 | 9:14:51 | -1.63 | mV DC |
| 6 | 9:14:52 | -0.91 | mV DC |
| 7 | 9:14:53 | 0.46 | mV DC |
| 8 | 9:14:54 | 1.81 | mV DC |
| 9 | 9:14:55 | -35.27 | mV DC |
| 10 | 9:14:56 | -11.96 | mV DC |
| 11 | 9:14:57 | -1.43 | mV DC |
| 12 | 9:14:58 | 0.38 | mV DC |
| 13 | 9:14:59 | 10.23 | mV DC |
| 14 | 9:15:00 | 9.24 | mV DC |
| 15 | 9:15:01 | 9.17 | mV DC |
| 16 | 9:15:02 | 9.16 | mV DC |
| 17 | 9:15:03 | 8.98 | mV DC |
| 18 | 9:15:04 | -4.23 | mV DC |
| 19 | 9:15:05 | -4.48 | mV DC |
| 20 | 9:15:06 | -4.93 | mV DC |
| 21 | 9:15:07 | 5.46 | mV DC |

**Figure 21**

**Note**

This data list saves 50,000 records at most, when the user has not started the automatic save function (Auto Save) and recording reaches 50,000, a dialog box will spring out to instruct the user to preserve the current record and rewrite the recording after save.
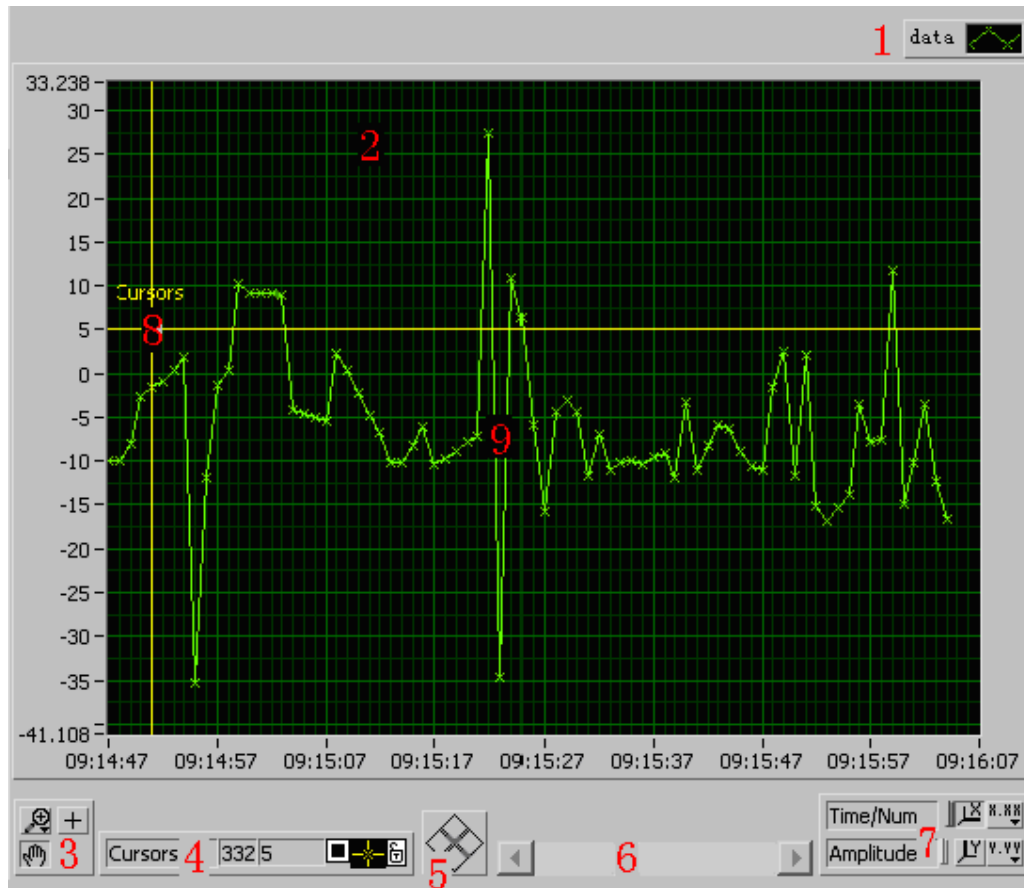
## Graph:



**Figure 22**

1. Plot legend, click on the left key in the Plot legend of symbols to spring a menu, the user can set the attributes of the plot, including: color, line style, etc. ;

2. Plot display part;

3. Graph palette: to enlarge, or move the displayed plot; (See Figure 23)

4. Cursor legend; (See Figure 24)

5. Cursor move;

6. X scroll bar;

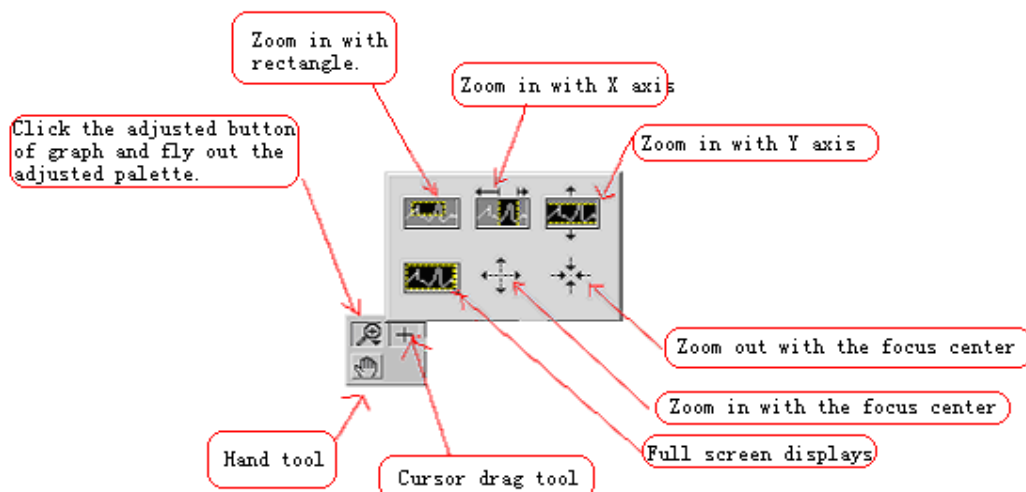7. X , Y scale legend;(See Figure 25)
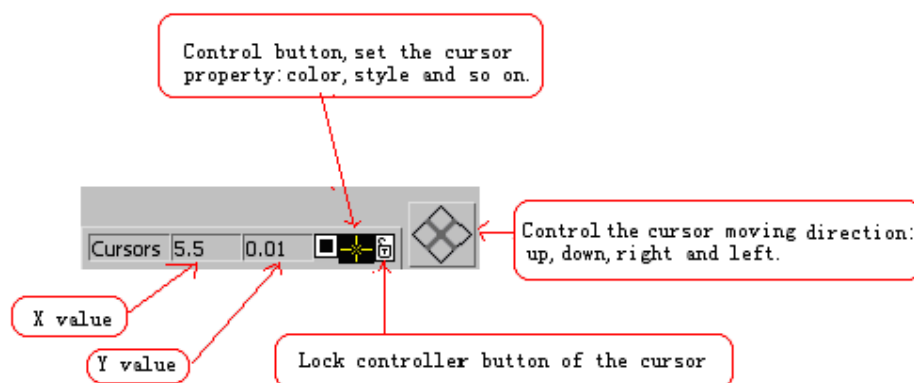
8. Cursor;

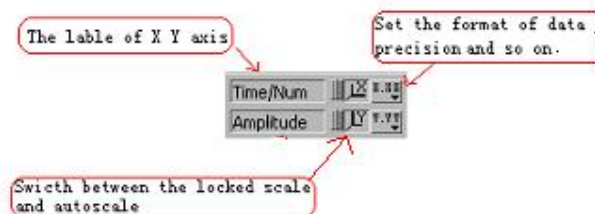9. Data plot;

**Figure 23**



**Figure 24**



**Figure 25**

**Note**

1. The graph data plot renovates along with the measuring function change;

2. When the data is +OL, the graph data point demonstrates as 5, 000, while the data is -OL, graph data point demonstrates as -5000;

3. When operating Graph palette, the Auto Scale X and Auto Scale Y should be cancelled;
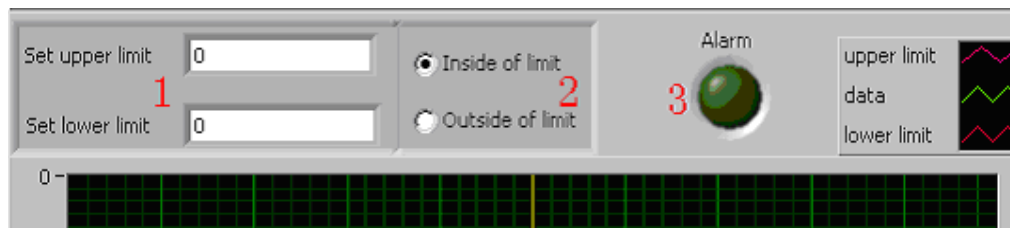
## COMP Set Windows:



**Figure 26**

1. Set the upper and lower limit values, which are both defaulted as 0;

2. Choose within-range or out-of-range, which is defaulted as within-range;

3. Alarm and record when the measured value satisfies the set conditions;(Alarm LED light turns red)

**Note**

After setting the limits, make sure to start the COMP function after the cursor is out of depart 1, otherwise system bulletins set mistake.

# 6. F & Q

1. Q: Why can't I make communication after installing the entire upper-end meter and the driver procedure correctly?

   A: Please check whether the set COM connection is complied with the driver's defaulted COM connection and whether the driver has been installed correctly or not.

2. Q: Why the installed communication connection is so unstable that it will display in the PC machine equipment resource management window sometimes?

   A: This kind of situation appears when the driver software is installed incompletely; remove the entire old CP210x range driver and reinstall under the instruction manual.

3. Q: In the communication, what should I do if the communication can't be realized when I reconnect the cable correctly after disconnecting them without exiting from the upper-end software procedure?

   A: Exit this software procedure, restart the software and undergo the communication.

**Note**

1. Make sure the PC has been connected ground before starting the communication function

2. Do exit from the upper-end software procedure before disconnecting the cable, otherwise the communication will not be realized.