# DMMEasyControl Software Guide

Install Driver

1. Before start DMMEasyControl, please download and install the driver from NIVISA:
   Open http://www.ni.com, search "**NI-VISA**", click the link of NI-VISA Download. In the download page, select the supported OS and version (the recommended version is **15.0.1**), and then download the driver.
   A warning information will pop out if you didn't install this driver before start.

2. Right click [**Computer**], you can find it on the desktop, or in [**Start**] menu. In the drop-down menu, click on [**Manage**], the "Computer Management" window opens.
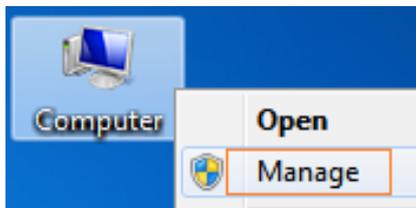

Click on "**Device Manager**" on the left hand side. On the right hand side, double click on "**USB Test and Measurement Devices**".
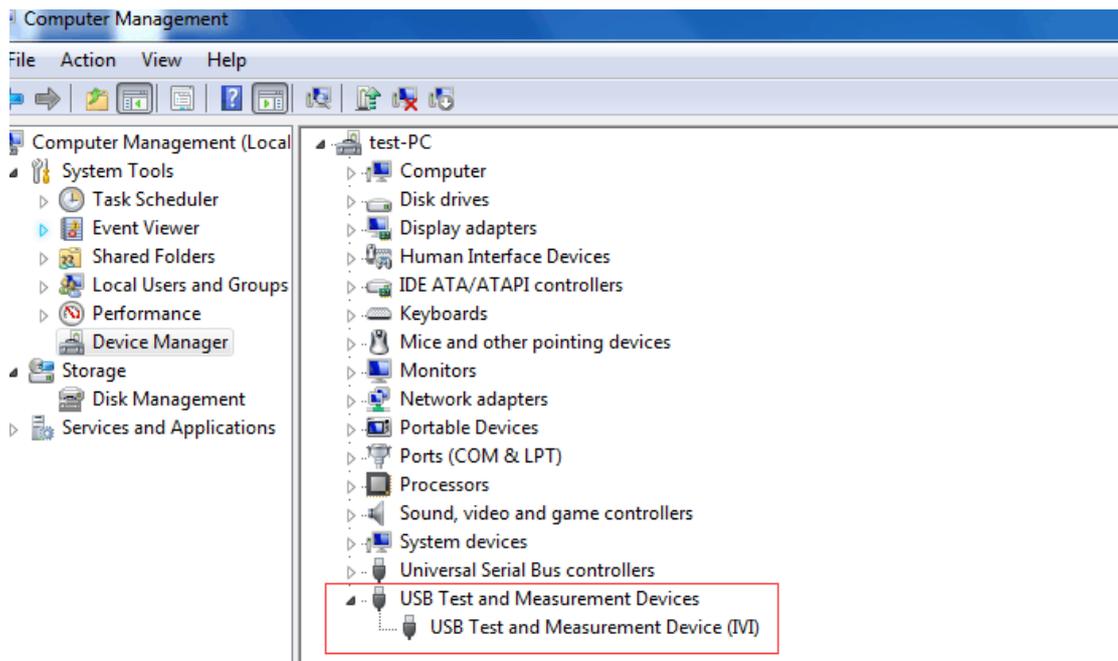

If "**USB Test and Measurement Devices (IVI)**" is displayed, that means the driver is installed successfully.

3. If "**USB Test and Measurement Devices (IVI)**" is not displayed, follow the steps below to install the driver manually.

Right click the unknown device icon, in the drop down menu, click "**Update Driver Software...**".
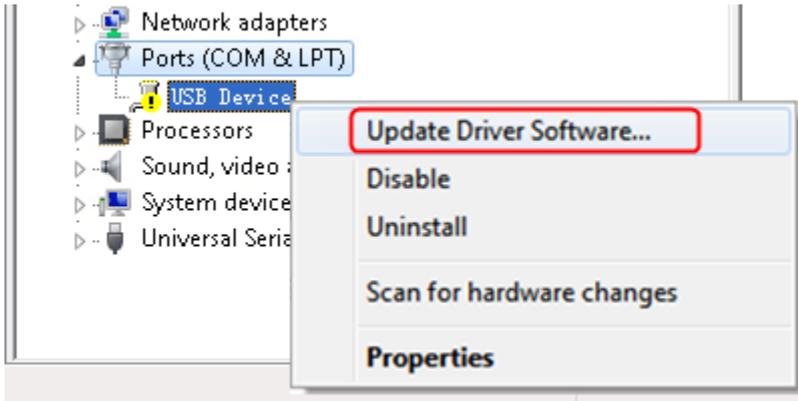

Select "**Browse my computer for driver software**".
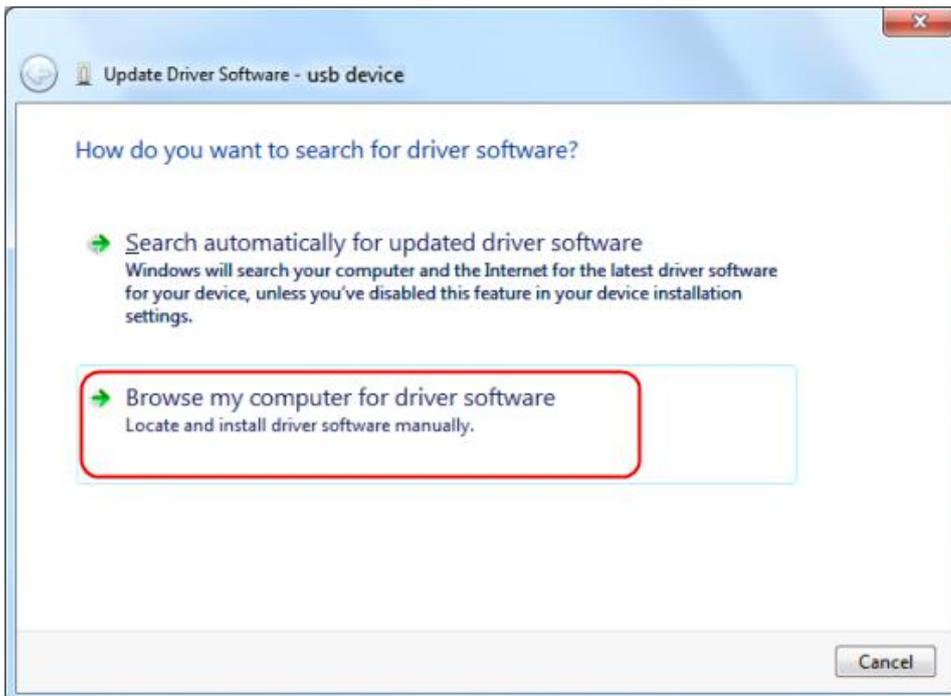
Select a directory path for the driver, and click "**Next**".
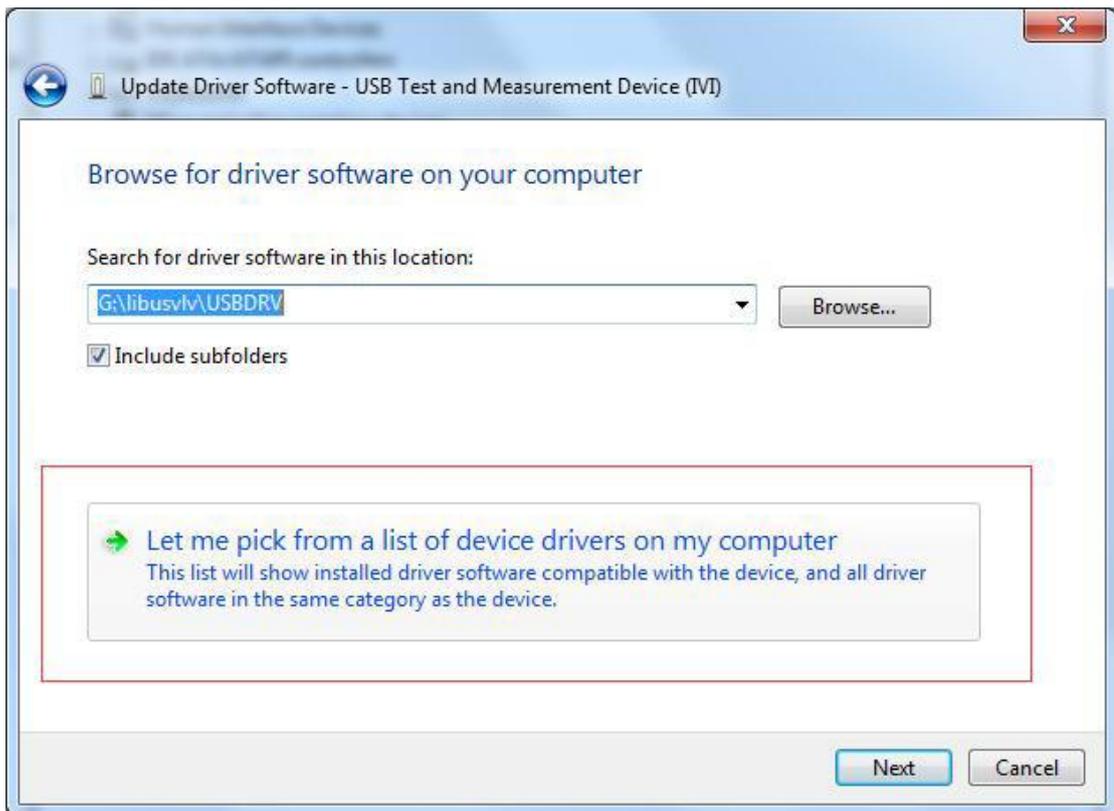
Click "**Next**".
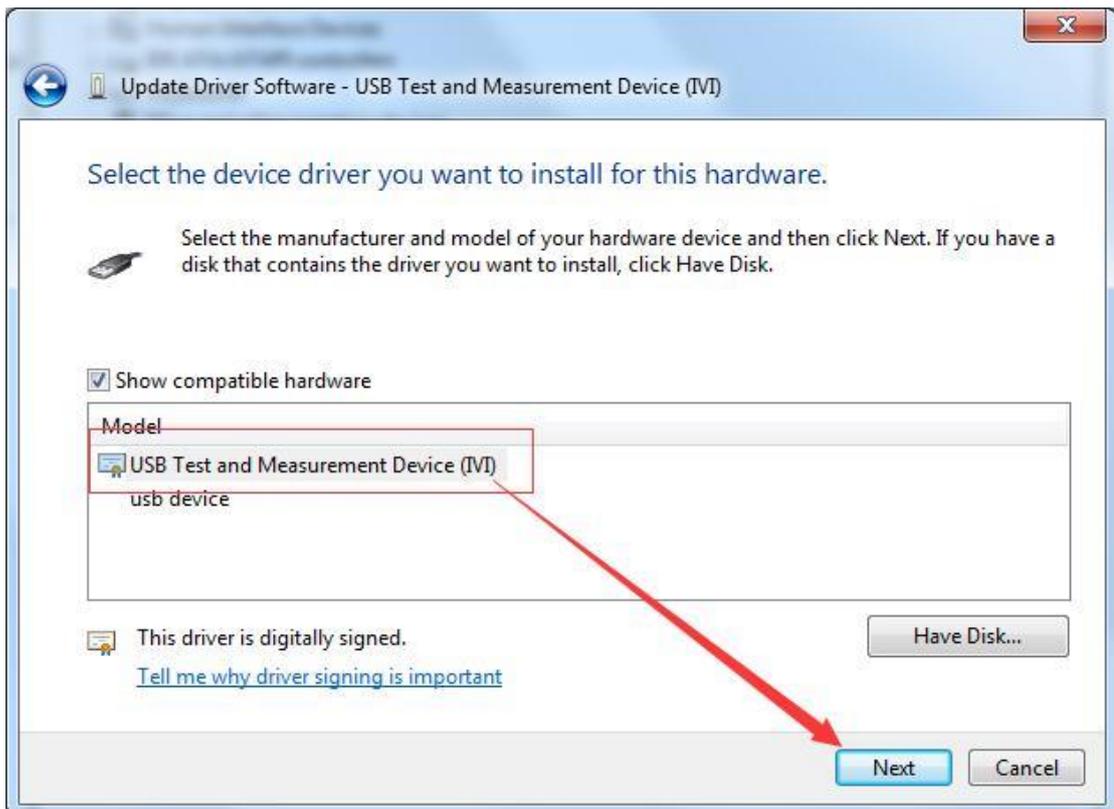
After installing successfully, click "**Close**".
In Device Manager, check if "**USB Test and Measurement Devices (IVI)**" is displayed under USB Test and Measurement Devices.

Install Software

Install DMMEasyControl.

How to Connect

The desktop multimeter can communicate with the computer through its own interface, which is USB, LAN or COM interface .

The minimum computer configuration is as follows:

Item	Configuration
Operating system	XP SP2 /Windows7/Windows10
CPU	Dual-core 2 GHz
RAM	2 GB @ 2.20Hz
Storage space occupied by files	300MB
Drive	NI-VISA 15.0.1
GPU	Intel®G41 Express Chipset(Microsoft Corporation_WDDM1.1)
Sound card	DirectX® compatible
USB to RS232 Serial	H:\Z-TEK USB RS232 （third-party software, for reference only）

Connect by USB (Only for 5½,4½)

1. Start DMMEasyControl.
2. **Connection**：Use USB cable to connect the bench multimeter USB port with PC USB port.
3. **Connection Setting**： Click **Control** on left-top side of software menu bar, select **Connect** on list.
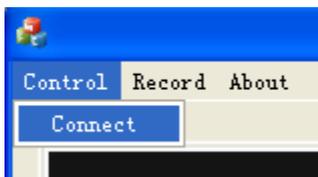
4. Select Via USB and choose the corresponding serial number on list(Select the port with the suffix DMM, as shown in the red box in the figure below). Click OK.
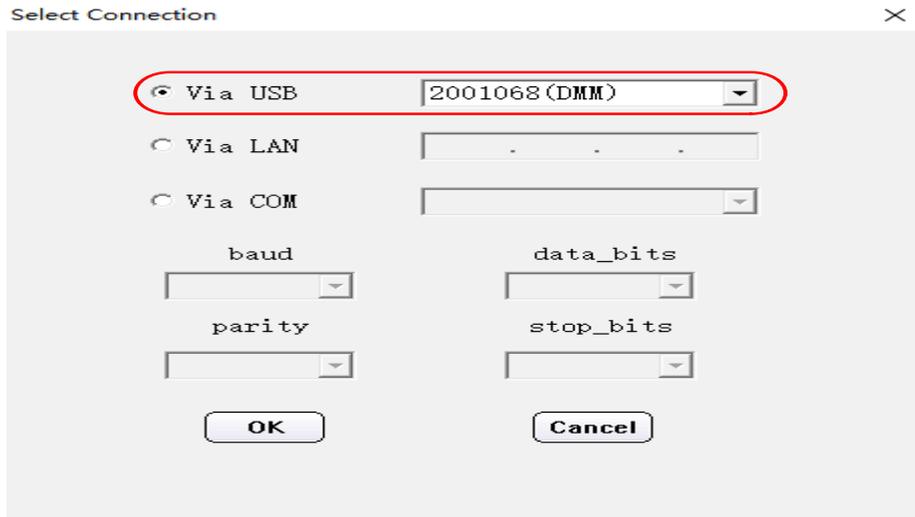
How to check serial number in bench multimeter：Press [Utility] on multimeter front panel, select Next, select System Info, the serial number (Sernum) will display on screen.

Connect by LAN (Only for 5½,4½)

1. **Connection**：Use LAN cable to connect the bench multimeter LAN port with PC LAN port.

2. **View the network parameters of the computer**.

   Click on your **Start** button, and then hitting **Run**, and type in **CMD** in the box and hit Enter to bring up your command prompt.
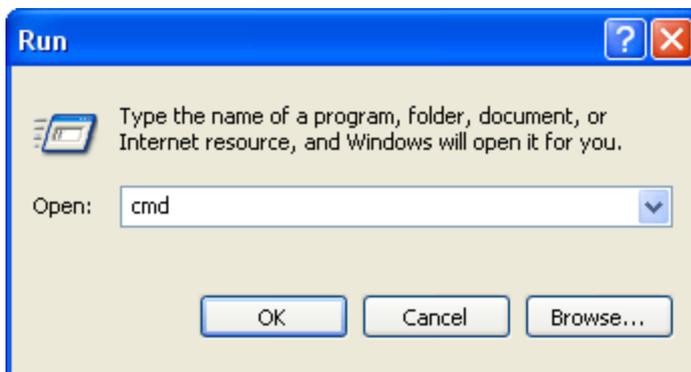
Type in **IPCONFIG** after the new prompt that is opened in the Dos window. This will bring up the network information on your system.

IP Address
Subnet Mask
Gateway
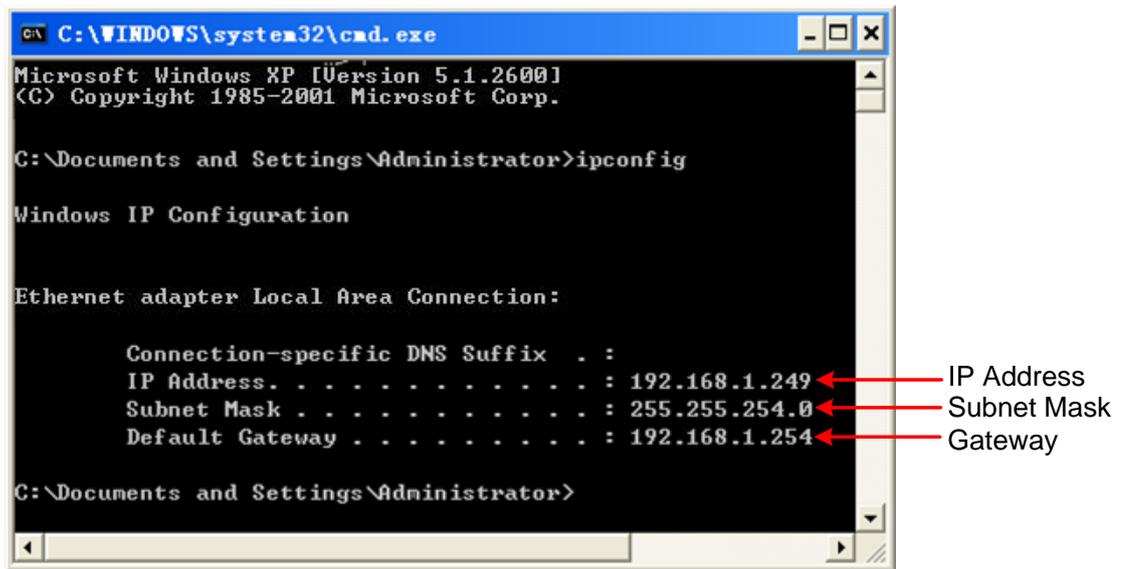
3. **Set the network parameters of the multimeter.**

   Press the front panel `Port` key, press the NET Type softkey to select LAN.

   Press the LAN Setting softkey, set the IP address, subnet mask, gateway, port.

   IP address: The first three bytes is same as the IP of computer, the last byte should be different. Here, we set it to 192.168.1.99.

   Subnet mask and **gateway** should be the same as the computer.

   Set **port** as "3000".

   Restart the multimeter for the parameter changes to take effect.

4. **Set the network parameters of the Software.**

   Start DMMEasyControl. Click **Control** on left-top side of software menu bar, select **Connect**.
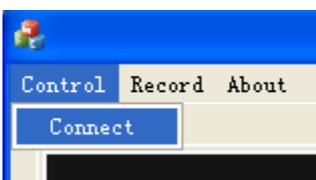
   Select **Via LAN**, then set the IP to the same as multimeter. Click OK. (The software port is 3000 by default, can not be edited.)
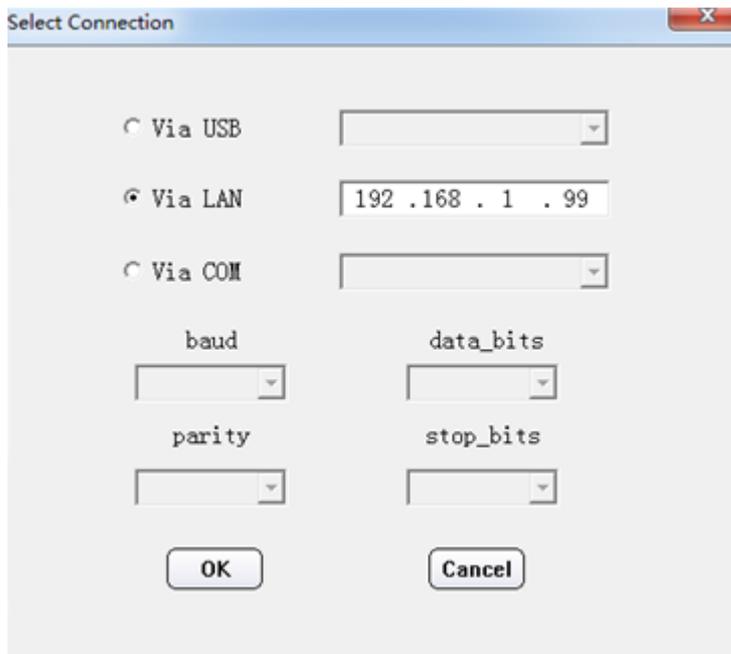
Connect by COM (Only for 55000 count)

1. Start DMMEasyControl.

2. **Connection**：Use RS232 cable to connect the bench multimeter COM port with PC USB or RS232 port.

   3. **Connection Setting**：Click **Control** on left-top side of software menu bar, select **Connect** on list.
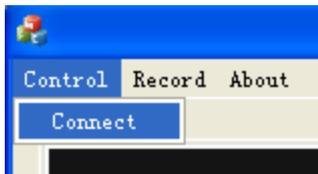
4. Select Via COM, and choose the corresponding serial number on the list(Select the port with the suffix DMM, as shown in the red box in the figure below). Click OK.

Default
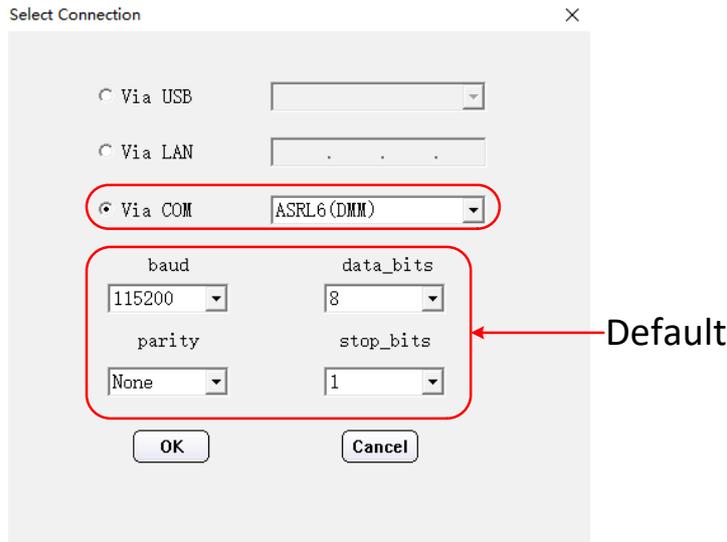
Select and Configure Measurement

Click measure button in function area to start measure, they are: DC voltage, AC voltage, DC current, AC current, Frequency, Period, Resistance, Continuity, Diode, Capacitance and Temperature.
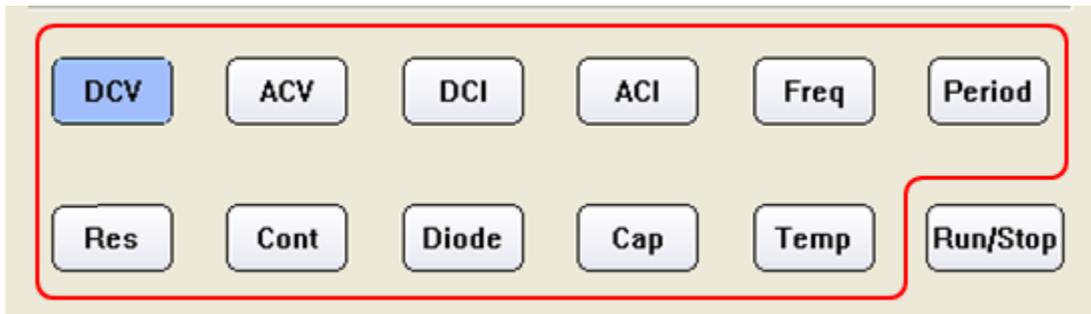
Configure the parameter in parameter setting area.

Dual Display

After selecting measure subject, click **Dual**, right side drop down list will show the supported sub-display subject. Select the sub-display subject and begin dual display mode.

Note: If **Dual** is in grey, it means the measure subject doesn't support dual display.

Dual Display   List
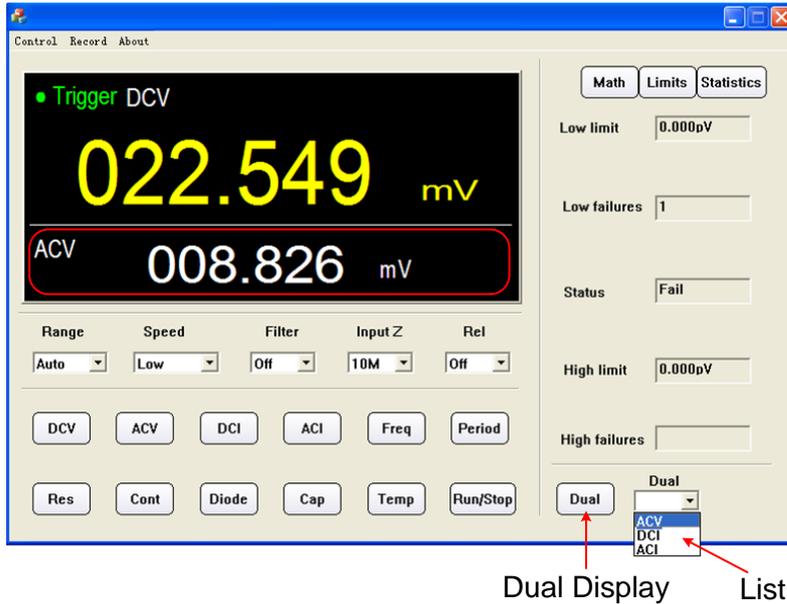
Statistics

Click **Statistics** to start the function, the result display under the button line, they are：
Sample amount, Maximum value, Minimum Value, Average value.
Note: If **Statistics** is in grey, it means the measure subject doesn't support statistics mode.
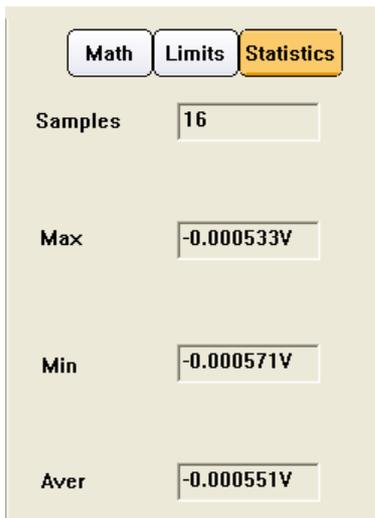
Limit Value Mathematics

Click **Limit** to start this function. Set the high and low limit value in parameter area.
Limit result displays under the button line, they are: Low limit, low limit break times, limit mathematics status (Pass means the readings don't exceed the limit, Fail means exceeding), High limit, High limit break times.
Note: If **Limit** is in grey, it means the measure subject doesn't support limit value

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mode.
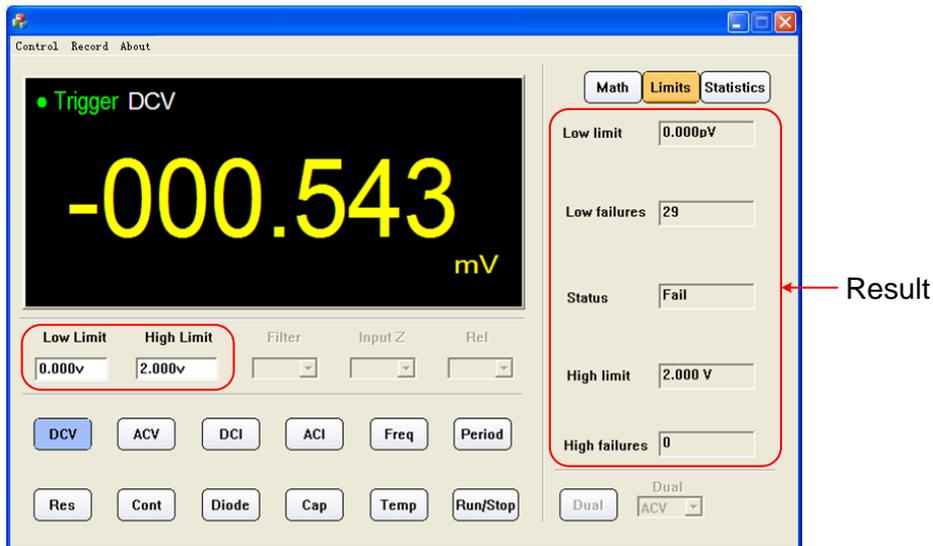
dB/dBm Mathematics

Click **Math**, select dB or dBm in parameter area to begin mathematics.
Note: If **Math** is in grey, it means the measure subject doesn't support dB or dBm mathematic.

Data Record Function

Data could be saved as XLS format after record.
Click left-top menu and select **Record,** select **Save** from pull-down menu. Choose the save path, input the folder name and click save. Data will be saved in this way. Click the **Record** and select **Stop** can stop saving data.

XLS file format:

	Date/Time	DCV (V)	ACV (V	DCI (A)	ACI (A)	Freq(Hz)	Period(S)	Res (Ω)	Cap (F)	Temp (℃)
2	2017/5/26->14:14:42	0.286	–	–	–	–	–	–	–	–
3	2017/5/26->14:14:59	0.286	–	–	–	–	–	–	–	–
4	2017/5/26->14:15:00	0.286	–	–	–	–	–	–	–	–
5	2017/5/26->14:15:00	0.286	–	–	–	–	–	–	–	–
6	2017/5/26->14:15:01	0.286	–	–	–	–	–	–	–	–
7	2017/5/26->14:15:01	0.286	–	–	–	–	–	–	–	–
8	2017/5/26->14:15:01	0.286	–	–	–	–	–	–	–	–
9	2017/5/26->14:15:02	0.286	–	–	–	–	–	–	–	–
10	2017/5/26->14:15:02	0.286	–	–	–	–	–	–	–	–
11	2017/5/26->14:15:03	0.286	–	–	–	–	–	–	–	–
12	2017/5/26->14:15:03	0.286	–	–	–	–	–	–	–	–
13	2017/5/26->14:15:03	0.286	–	–	–	–	–	–	–	–
14	2017/5/26->14:15:04	0.286	–	–	–	–	–	–	–	–
15	2017/5/26->14:15:04	–	3.099	–	–	–	–	–	–	–
16	2017/5/26->14:15:05	–	3.099	–	–	–	–	–	–	–
17	2017/5/26->14:15:05	–	3.099	–	–	–	–	–	–	–
18	2017/5/26->14:15:05	–	3.1	–	–	–	–	–	–	–
19	2017/5/26->14:15:06	–	3.1	–	–	–	–	–	–	–
20	2017/5/26->14:15:06	–	3.1	–	–	–	–	–	–	–
21	2017/5/26->14:15:07	–	3.1	–	–	–	–	–	–	–
22	2017/5/26->14:15:07	–	3.099	–	–	–	–	–	–	–
23	2017/5/26->14:15:07	–	3.099	–	–	–	–	–	–	–
24	2017/5/26->14:15:08	–	3.099	–	–	–	–	–	–	–
25	2017/5/26->14:15:08	–	3.1	–	–	–	–	–	–	–
26	2017/5/26->14:15:09	–	3.1	–	–	–	–	–	–	–

V1.4.1