DMMEasyControl Software Guide

Install Driver

1. Before start DMMEasyControl, please download and install the driver from NIVISA:

http://download.ni.com/support/softlib/visa/NI-VISA/14.0/Windows/NIVISA140 0full.exe

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 a directory path for the driver, and click "Next".

	a soltware on your comp	uter	
Search for driver softv	vare in this location:		
G:\libusvlv\USBDRV		•	Browse
Include subfolders			
A Let me nick	from a list of device drive	ars on my comp	uter
	installed driver software comp	atible with the device	and all driver
This list will she	same category as the device.		
This list will sho software in the	same category as the device.		-



beleet the device drive	er you want to install fo	or this hardware.	
Select the manuface of the select	cturer and model of your hard the driver you want to install,	ware device and then clic click Have Disk.	ck Next. If you have
Show compatible hardwa	re		
Model			
USB Test and Measurem	ent Device (IVI)		
usb device			
			· · · · · · ·
This driver is digitally si	aned.		Have Disk

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

Bench multimeter support USB or LAN communication with PC.

Connect by USB

- 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. Click OK.

Select Connection				
• Via USB	1710302		•	
_	1710302			
○ Via LAN	.			
ОК		Cancel	ו	
		Connect)	

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

- 1. **Connection**: Use USB 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.

Run	? 🛛
-	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	cmd 💌
	OK Cancel Browse

Type in **IPCONFIG** after the new prompt that is opened in the Dos window. This will bring up the network information on your system.



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.)

Select Connection		×
○ Via USB	•	
- fii - i - i - i - i - i - i - i - i -	100 100 1 00	
• Via LAN	192.168.1.99	
ОК	Cancel	

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.

DCV	ACV	DCI	ACI Fr	eq Perio	bd			
Res	Cont	Diode	Cap Te	mp Run/S	top			
configure the parameter in parameter setting area.								
Range	Speed	Filter	Input Z	Rel				
Auto 💌	Low	▼ Off ▼	10M -	Off 💌				

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.

A	
Control Record About	
Trigger DCV	Math Limits Statistics
	Low limit 0.000pV
022.549 mV	Low failures 1
008.826 mv	Ctatua
	Status
Range Speed Filter Input Z Rel Auto ✓ Low ✓ Off ✓ 10M ✓	High limit 0.000pV
DCV ACV DCI ACI Freq Period	High failures
Res Cont Diode Cap Temp Run/Stop	Dual ACV DCI
Du	iai 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.

Math	Limits Statistics
Samples	16
Мах	-0.000533V
Min	-0.000571¥
Aver	-0.000551V

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 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.

	Click
£	
	Math Limits Statistics
-52.08 ^{db}	Low failures 1 Status Fail
dB/dBm Speed Filter Input Z Rel dB × × × × × dBm × × ×	High limit 0.000pV
Res Cont Diode Cap Temp Run/Stop	High failures Dual Dual ACV Y

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:

1	Date/Time	DCM (M)	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	-	_	_	-	-	_	-

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