# **ODPEasyControl Software Instruction**

## **Install Driver**

 Before start ODPEasyControl, please download and install the driver from NIVISA: Open <u>http://www.ni.com</u>, 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".

Ho	w do you want to search for driver software?
•	Search automatically for updated driver software Windows will search your computer and the Internet for the latest driver software for your device, unless you've disabled this feature in your device installation settings.
•	Browse my computer for driver software Locate and install driver software manually.

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

Browse for driver	software on your cor	mputer		
Search for driver softw	are in this location:			
G:\libusvlv\USBDRV		-	Browse	do.
Include subfolders				10K
				E D
				401
	Parafala da d			
This list will show software in the s	rom a list of device d v installed driver software co ame category as the device,	mpatible with the devi	outer ce, and all driver	





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 ODPEasyControl.

## How to connect

This instruction takes triple output for example, You can communicate with your computer via a USB or LAN interface.

### **Connect by USB**

- 1. Start ODPEasyControl.
- 2. Connect the ODP USB Device interface with PC USB interface by USB cable.
- 3. Click **Connect** from left-top Menu bar, select **Usb** from menu list. Then the SN input box will pop out.



4. Input the serial number of connected power supply, click **OK**.

The way to check device serial number: Press **Utility** button on front panel, rotate Knob to select [system information] main menu. After selected, the screen will display the serial number (Sernum).

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Device SN	,			
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### **Connect by LAN**

- 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.

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 for the power supply.

Press the POWER key on the front panel of the power supply, press the Utility soft key, turn the knob to the right to select Port set, and press the down key of the up and down arrow keys to select Lan set. Set the IP address, subnet mask, gateway, and port respectively.

**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 device for the parameter changes to take effect.

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

Start ODPEasyControl. Click **Connect** on left-top side of software menu bar, select **Lan**.



In the dialog box, set the IP address of the power supply and the port value of the software. The IP address is consistent with the setting value of the software. Click OK.

Type in y	our device IP and port		×		
Please 192.168	type in your device IP a .1.99,port:3000	and port!as follow:IP:			
TP Ad	Idress				
Pout			9:00		
Tort		10			
			AN .		
		-041			
	OK	Cancel			
		Y/			
Interface	Guide				
Menu Bar	Conset Record About	1.1.1	And a state of the	keik som	
	Voltage(V)	Cel II 333	V Selfch 17 510	V	
	33-	0.001	A 30.000 V 1.000	- <u>A</u>	
	11-				
Voltage/Current	and status status second second trained	Tirre(s) 0.000	V Link 0.010	v	Channel Status Area
Wave Area	Current(A) OH OH	oo #21	A 5.000 × 1.000	A	
	0.001	Cris	Set		
	5.002- 5.005-	2.751	V Lust 2.750	v	
	3	144747 16473E 0.004	A 3.100 × 1.000	A	
	Quick Set				
	12/12/12/12/12/12/12/12 DA 1 100/	1 00A,1 00VIT 00A,1 00VIT.00A	CH2 CH5		
Quick Set Area –	1014/1014 1014 1.000	INTACIDITACIONI COA	0.01 6.000	Running	—Voltage Sweep Area
	TUTACIVIA OFIA TUTACIVIA OFIA	TWIA WIA WIA	5	Stop	

## **Channel Status Area**

Take CH1 for example:



## Voltage/Current Wave Area

Check the voltage/current waveform trends from waveform area when channel is opened.



icon: to move waveform from wave area.

icon: waveform zooming, to zoom in/out the waveform.

Waveform zooming icon introduction:

Icon	Note
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**A 90**-

Enlarge the selected waveform area



Enlarge the selected waveform area under horizontal direction

	Enlarge the selected waveform area under vertical direction
4.11	Return to normal display
<b>4</b> ►	When this selected, the waveform will enlarge aiming at mouse cursor as center
-++++	When this selected, the waveform will enlarge aiming at mouse cursor as center.

### Input X and Y axis scale manually

Right click the waveform area, uncheck the "AutoScale X" and "AutoScale Y".



Click beginning time value on X axis to enter edit mode, input the required time to check.



By same way, click top value at Y axis scale to enter edit mode and input the required value.



## **Quick Set Area**

### Set the hotkey parameter

Hold the mouse scroll wheel and point to a certain hotkey, a dialogue box will pop out for channel voltage/current value configuring. The format is "CH1 voltage/CH1 current; CH2 voltage/CH2 current; CH3 voltage/CH3 current". For example, set CH1/CH2/CH3 for 1.00V, 1.00A. The format should be

"1.00V/1.00A;1.00V/1.00A;1.00V/1.00A". Click OK to complete configuring.

Info		20		
Input as follows:1.00V/	1.00A;1	1.00V/1.00	A;1.00V/1.0	00A
		6		
ОК		Ca	incel	

### Use hotkey to configure channel output parameter

When left button click a certain hotkey, channel parameter configuration can be set as this hotkey's parameter.

Hotkey	ĥ	
	12V/2A;12V/2A;3.3V/0.5A	1.00V/1.00A;1.00V/1.00A;1.00V/1.00A
	1V/1A;1V/1A;1V/1A	1.00V/1.00A;1.00V/1.00A;1.00V/1.00A
	1V/1A;1V/1A;1V/1A	1V/1A;1V/1A;1V/1A
	1V/1A;1V/1A;1V/1A	1V/1A;1V/1A;1V/1A
	1V/1A;1V/1A;1V/1A	1V/1A;1V/1A;1V/1A

## **Voltage Sweep Area**

weep			
CH1	CH2	CH3	
0.01	30.000	1.000	
30.000	0.01	6.000	Running
0.500	1.000	0.050	
	10	201	Stop
	CH1 0.01 30.000 0.500	CH1 CH2   0.01 30.000   30.000 0.01   0.500 1.000   10 10	CH1 CH2 CH3   0.01 30.000 1.000   30.000 0.01 6.000   0.500 1.000 0.050   10 10 10

After setting the start voltage, stop voltage, voltage step and delay, click Run, the button will show Running. The channel will firstly output the scheduled start voltage, then increase or decrease the value by voltage step. When reaching the stop voltage, the output voltage will remain this value. If press Stop button while voltage is stepping, the voltage will stop stepping and keep on outputting current value.

For example, set CH1 as following parameter,

Voltage sweep							
	CH1	CH2	СНЗ				
Start Volt	1.000	0.01	0.01				
Stop Volt	7.000	0.01	0.01				
Step Volt	2.000	0.000	0.000				
Delay	1						

Then voltage will be output by the time as follow:

Time	0 sec	1 sec	2 secs	3 secs	4 secs	5 secs	

CH1	1)//(C+o.r+)/ol+)	214	<b>E</b> 14	7)//(Ctore)/(alt)	7)/	7)/	
Voltage	IV (Start Volt)	30	50	7V (Stop Voit)	7.	7.	

Note: if the Step Volt of one channel is set as 0.000V, this channel will not be swept.

## **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.

One XLS file can keep one hour record at maximum. If the sum time of multiple records do not exceeds one hour, the multiple records will be saved into one file. If the record exceeds one hour, the software will build a new XLS file to continue recording and saving.

ODPEa	syControl	3CH.vi
Connect	Record	About
	Save	

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