

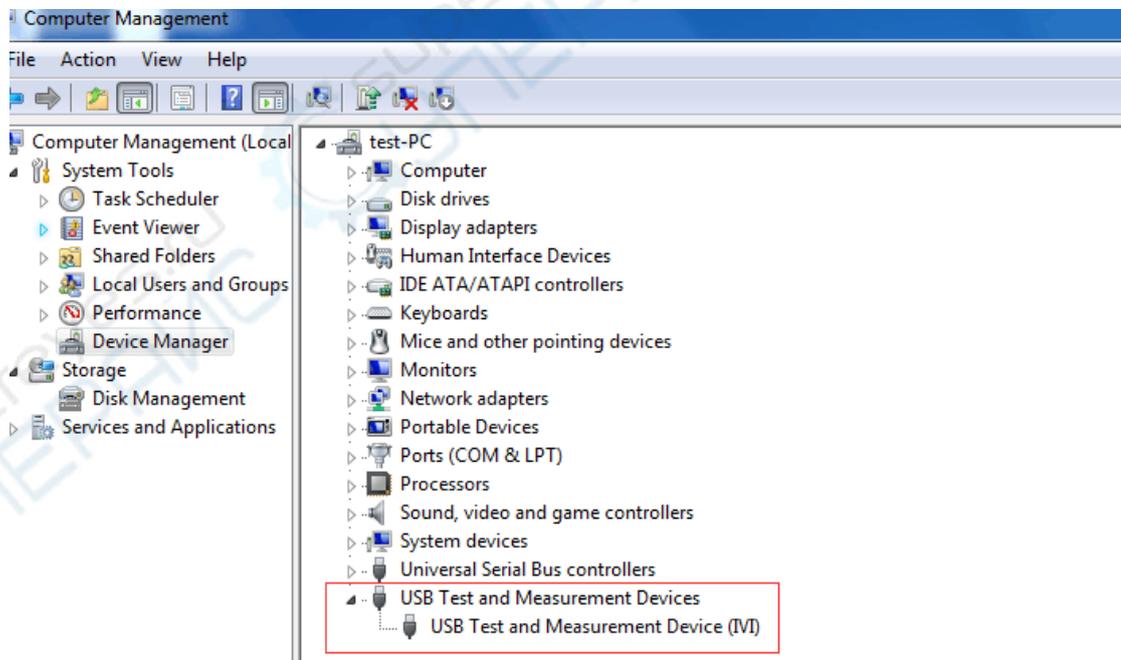
ODPEasyControl Software Instruction

Install Driver

1. Before start ODPEasyControl, 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.



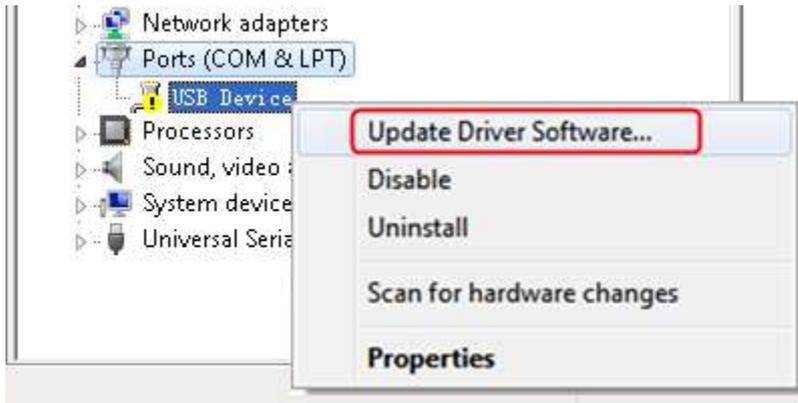
Click on "**Device Manager**" on the left hand side. On the right hand side, double click on "**USB Test and Measurement Devices**".



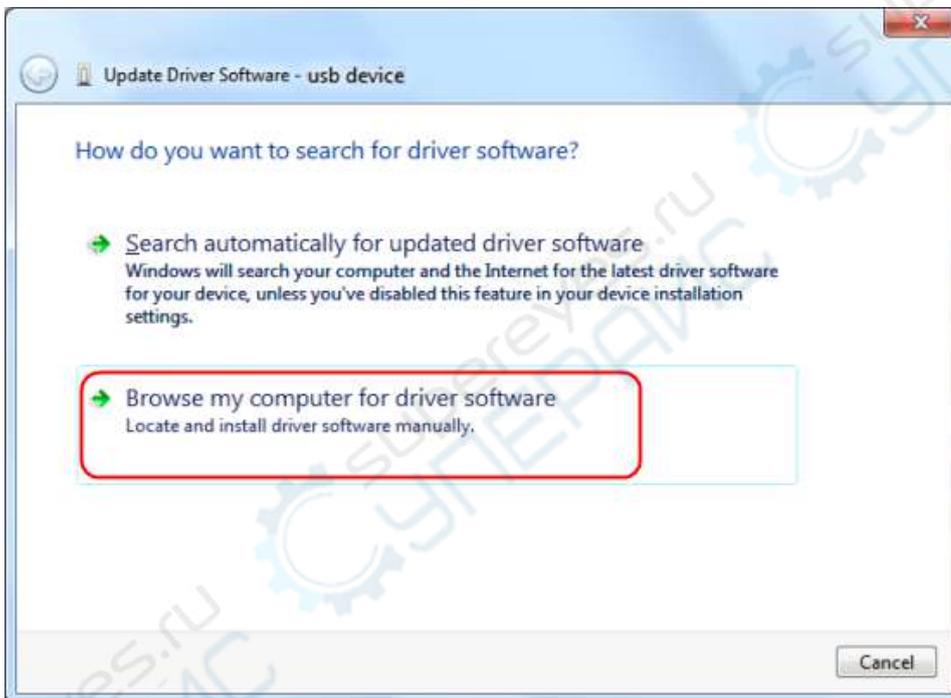
If "**USB Test and Measurement Devices (IVI)**" is displayed, that means the driver is installed successfully.

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

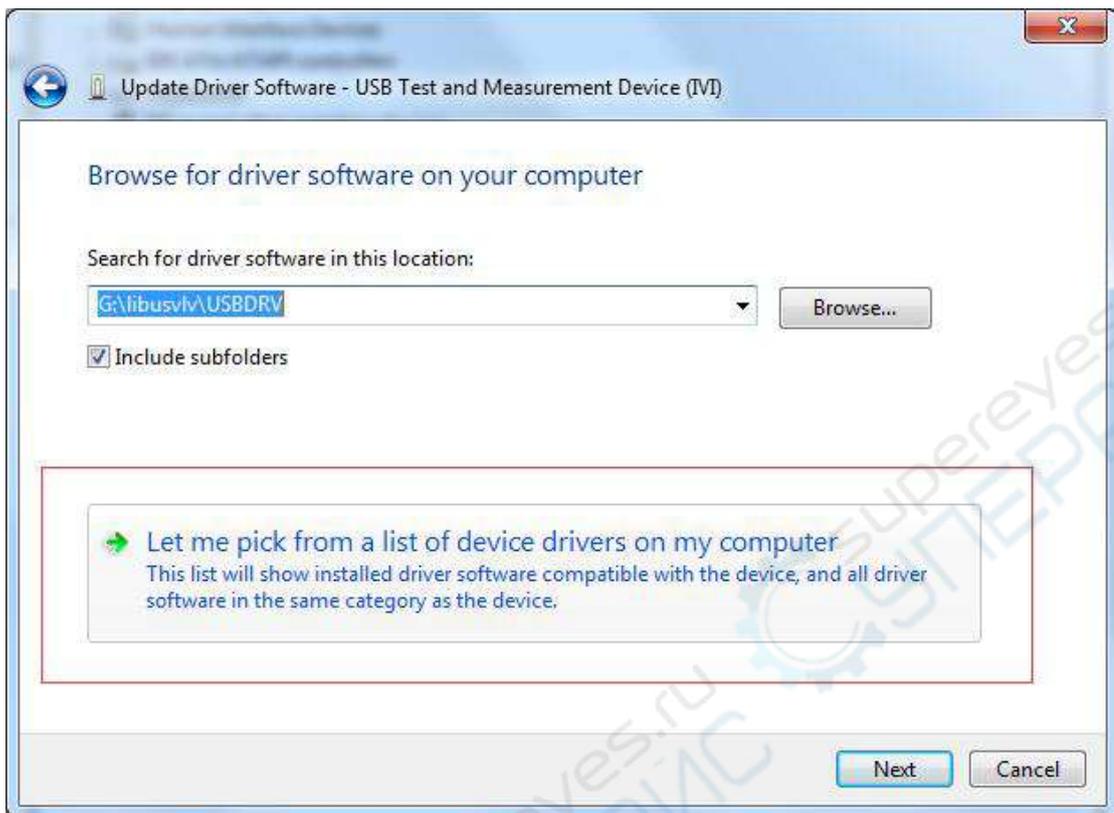
Right click the unknown device icon, in the drop down menu, click "**Update Driver Software...**".



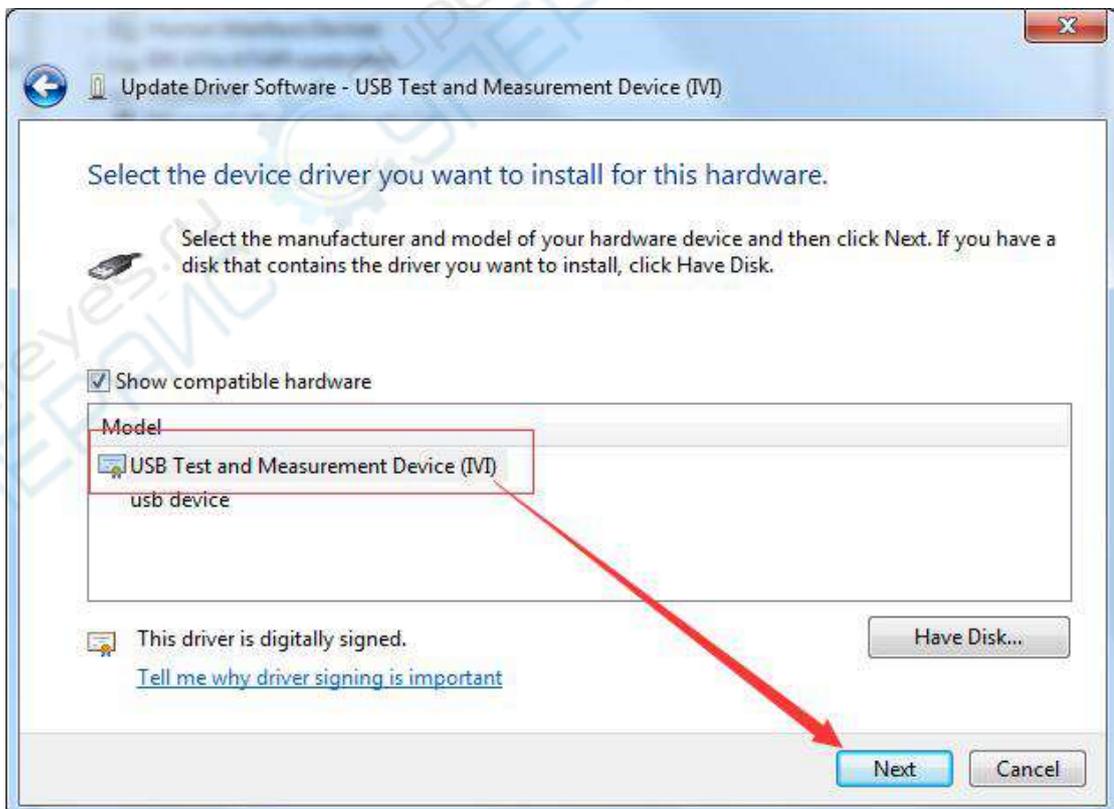
Select "**Browse my computer for driver software**".



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

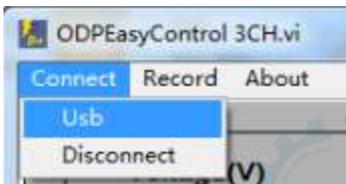
Install ODPEasyControl.

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**.

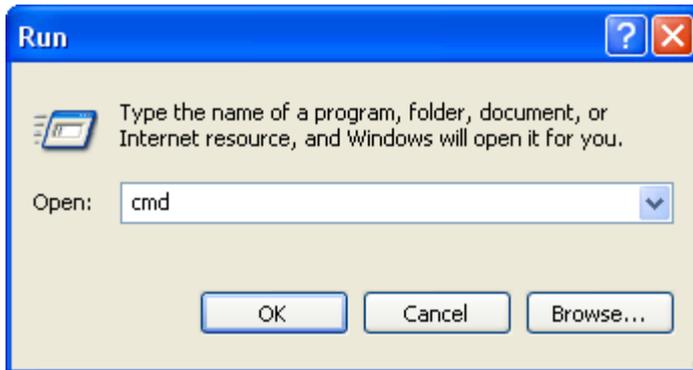
The way to check device serial number: Press **Utility** button on front panel, rotate Knob to select [system information] main menu. After selected, the screen will display the serial number (Sernum).



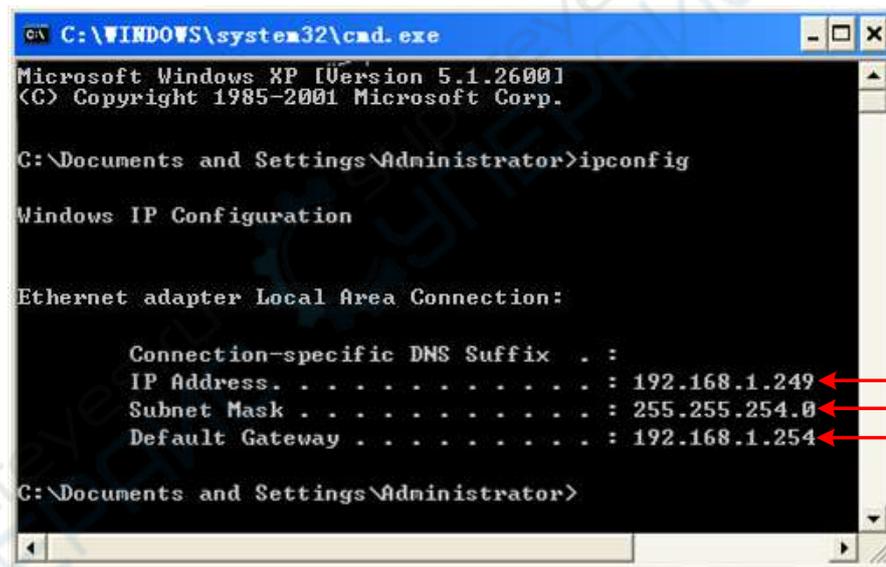
Connect by LAN

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.



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".

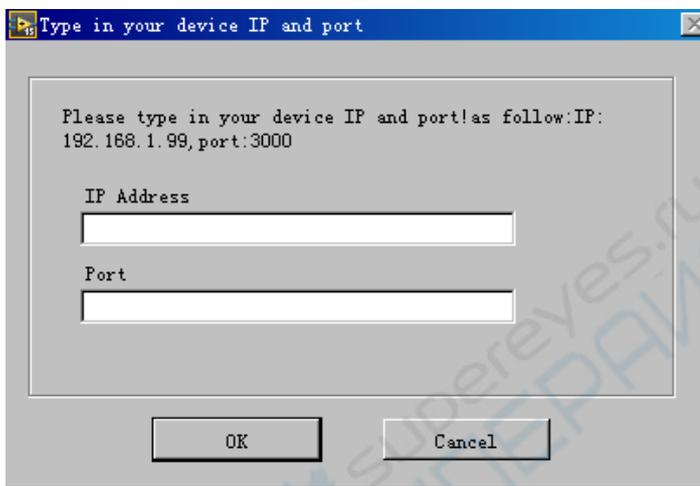
Restart the device for the parameter changes to take effect.

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.

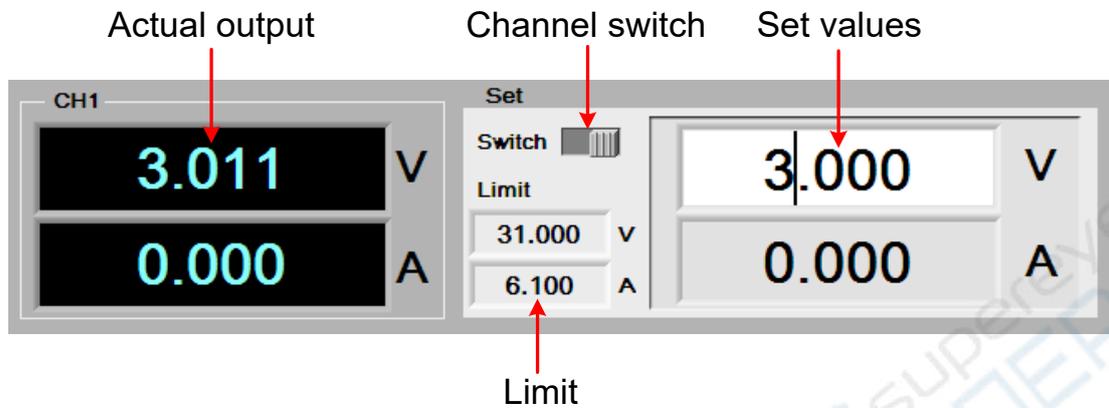


Interface Guide



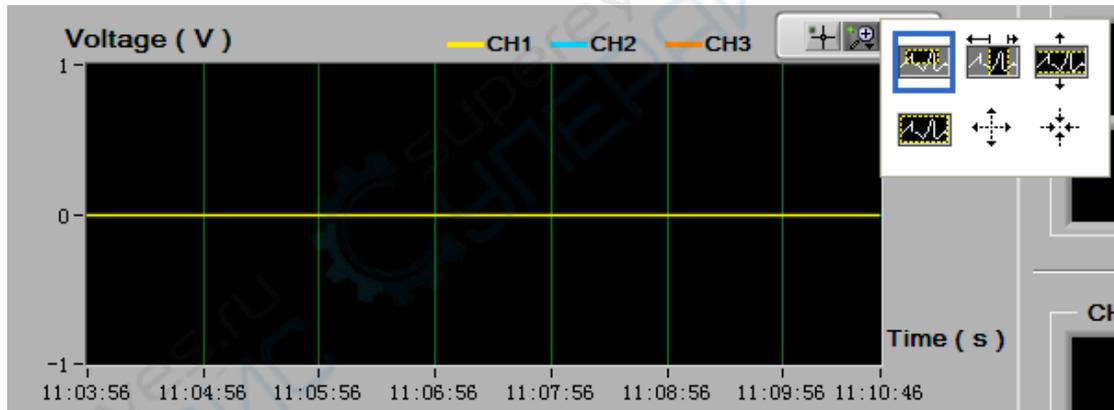
Channel Status Area

Take CH1 for example:



Voltage/Current Wave Area

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



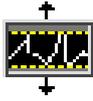
icon: to move waveform from wave area.



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

Waveform zooming icon introduction:

| Icon | Note |
|---|---|
|  | Enlarge the selected waveform area |
|  | Enlarge the selected waveform area under horizontal direction |



Enlarge the selected waveform area under vertical direction



Return to normal display



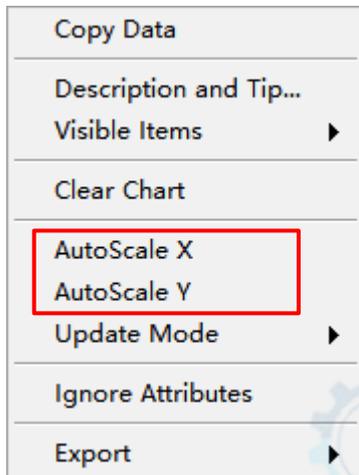
When this selected, the waveform will enlarge aiming at mouse cursor as center



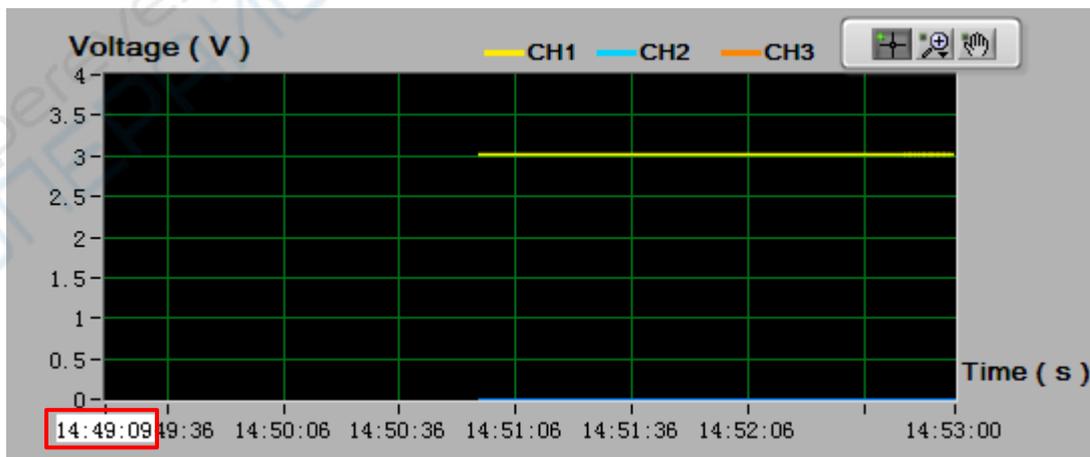
When this selected, the waveform will enlarge aiming at mouse cursor as center.

Input X and Y axis scale manually

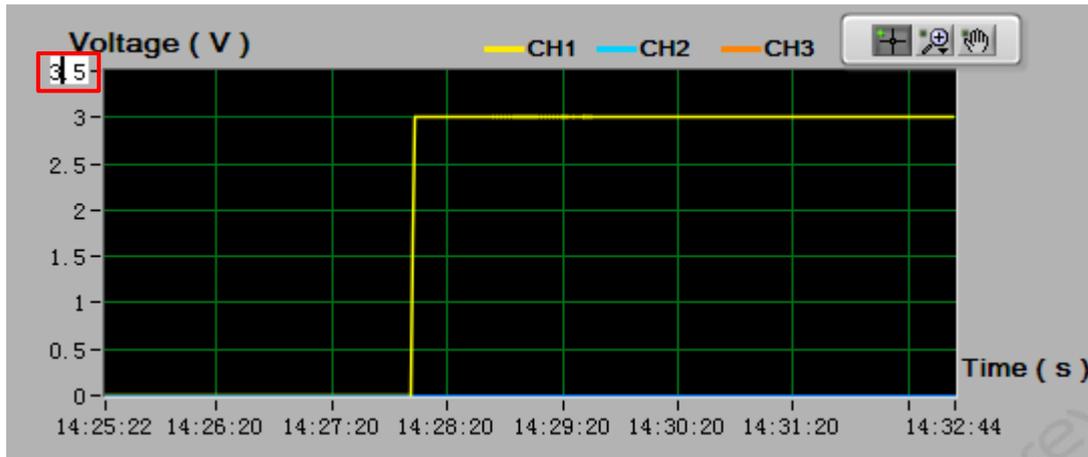
Right click the waveform area, uncheck the “AutoScale X” and “AutoScale Y”.



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.



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.

| Quick Set | |
|-------------------------|-------------------------------------|
| Hotkey | |
| 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

| Voltage sweep | | | |
|---------------|--------|--------|-------|
| | CH1 | CH2 | CH3 |
| Start Volt | 0.01 | 30.000 | 1.000 |
| Stop Volt | 30.000 | 0.01 | 6.000 |
| Step Volt | 0.500 | 1.000 | 0.050 |
| Delay | 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 | CH3 |
| 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 Voltage | 1V (Start Volt) | 3V | 5V | 7V (Stop Volt) | 7V | 7V | ... |
|------------------------|-----------------|----|----|----------------|----|----|-----|

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

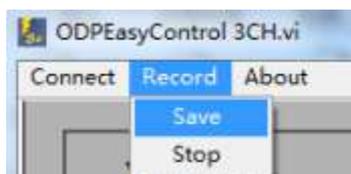
Data Record Function

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.



V1.4