CIRCUIT-TEST

Power Supply Control Software

PSB-4332
PSB-4618

USER MANUAL

1. Introduction

The PC software feature allows remote access of the Circuit-Test power supplies with USB or Ethernet connectivity.

Following Circuit-test power supply models are compatible with this PC software.

Supported Power Supply Models

PSB-4332

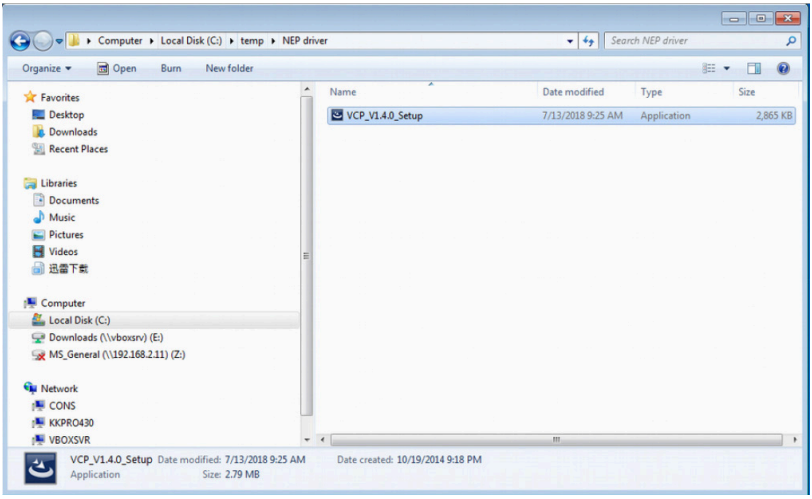
PSB-4618

Supported OS System

Windows 7 (32-bit and 64-bit), Windows 10 (32-bit and 64-bit)

USB driver installation

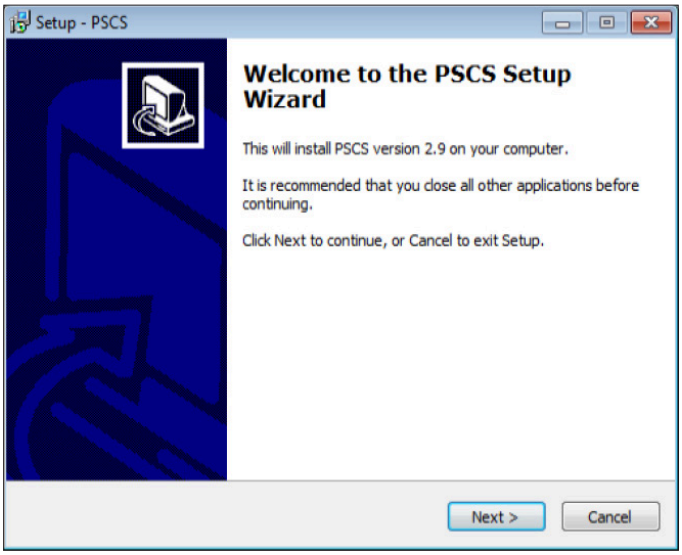
Unzip the downloaded file and run "VCP_V1.4.0_Setup.exe" to install USB driver.



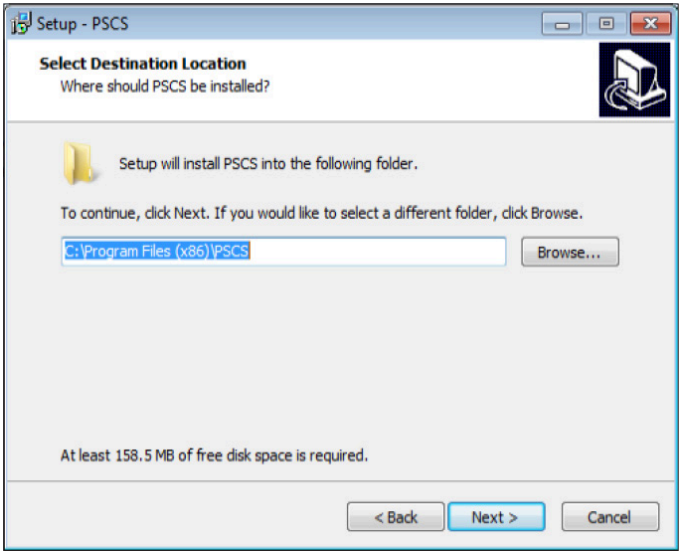
PC Software Installation

Please download the PC control software for the respective power supply model from the website www.circuittest.com

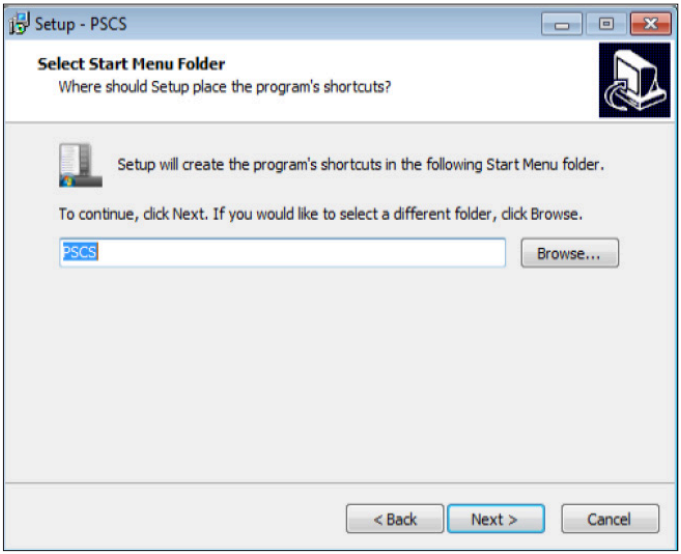
a) Run file "PC Control software.exe" and click Next > to continue.



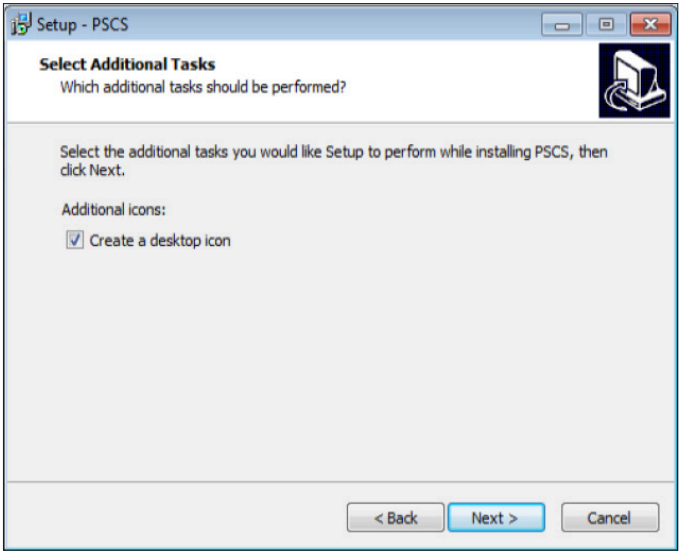
b) Select the destination location for software installation and click Next > to continue.



c) Select Start Menu Folder and click Next > to continue.



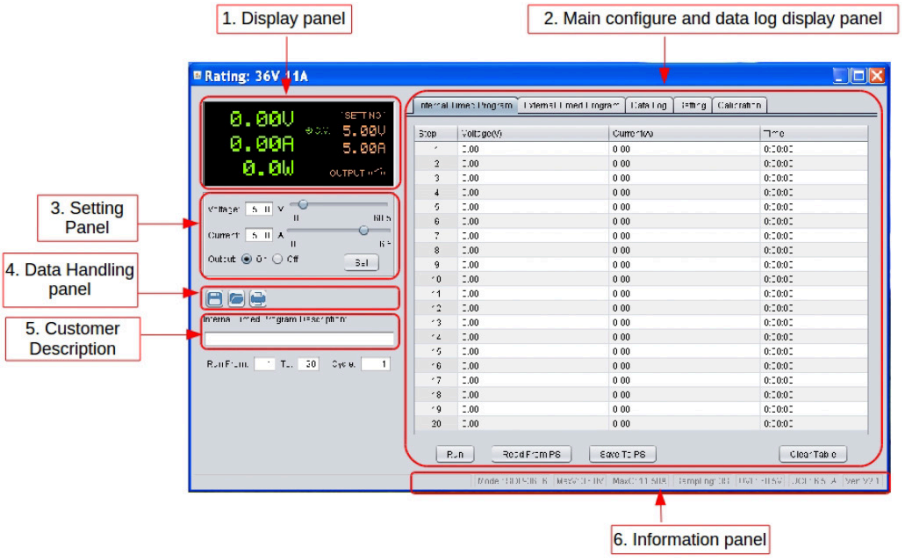
d) Click the check box if you would like to create a desktop icon. Then click Next > to continue.



e) Click Install to start installing the software.

2. PC Software Usage

2.1 Main Display

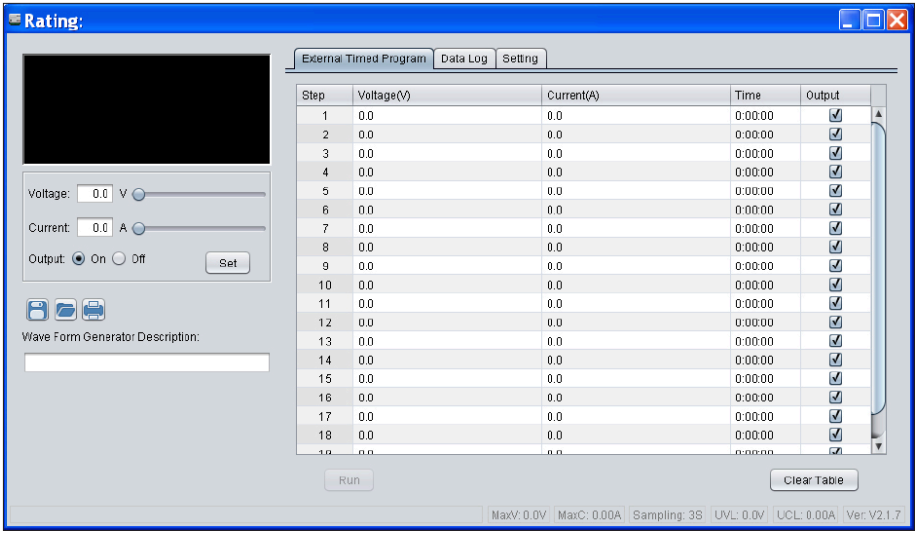


The Main interface is divided into 6 panels.

1. Display panel – use to display real-time information of power supply.
2. Main configuration and data log display panel – use to change general setting of program and display data log.
3. Setting panel – use to set incident voltage value, current value and output On/Off.
4. Data handling panel – use to save, load and print data.
5. Description input panel – use to enter description for wave form
6. Information panel – use to display Maximum voltage/current, sampling time, upper voltage/current limit and software version.

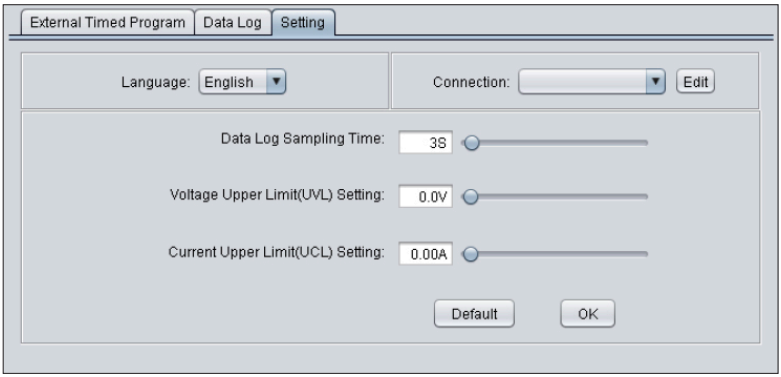
2.2 Connect to Power Supply

Before edit any connection setting, the software will not connect to power supply. It just show following display. The first thing you need to do is to edit correct connection for your system. If there are saved connection setting in software. The software will search power supply and connect automatically.

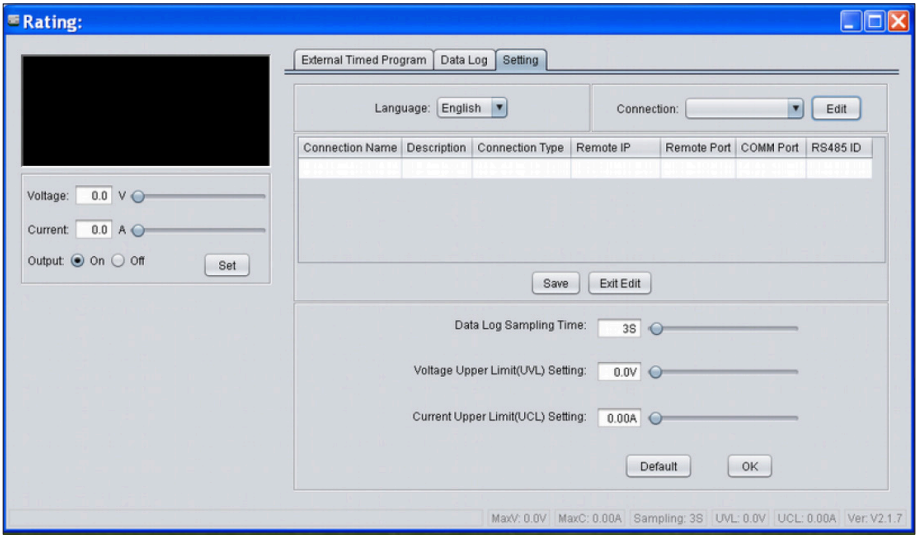


Connection editing steps

i. Select Setting Tab.

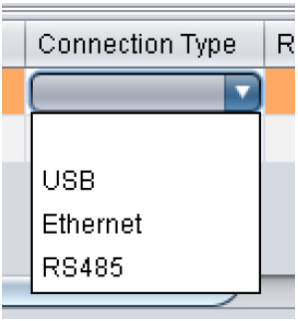


ii. Click on Edit to start edit connection. The connection edit panel come up.



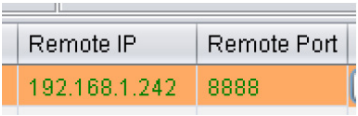
iii. Enter connection name for this connection setting and description. e.g. PS-1

iv. Select connection type for your system. It allow configure for USB, Ethernet and RS485.



v. Enter addition connection parameters.

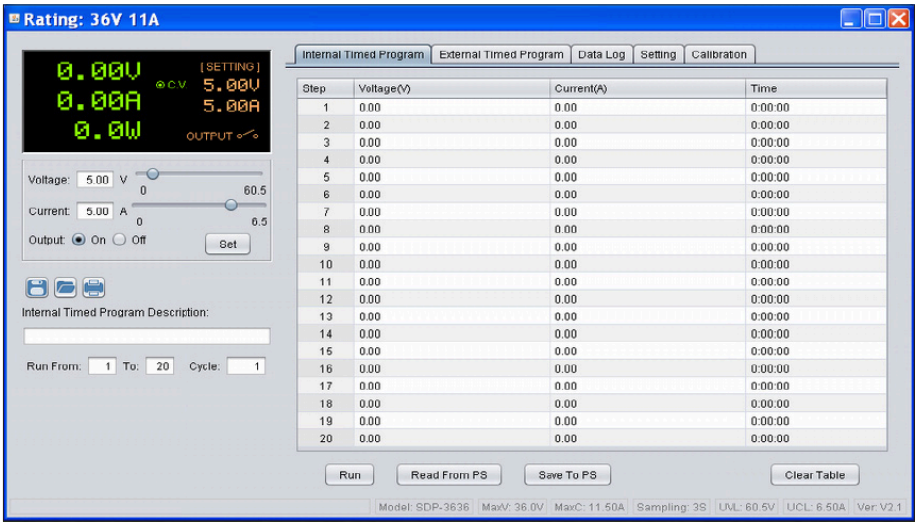
For Ethernet, enter IP address and remote port number.
(It can be check in menu → Display Information → LAN Information.
Please refer to hardware manual).



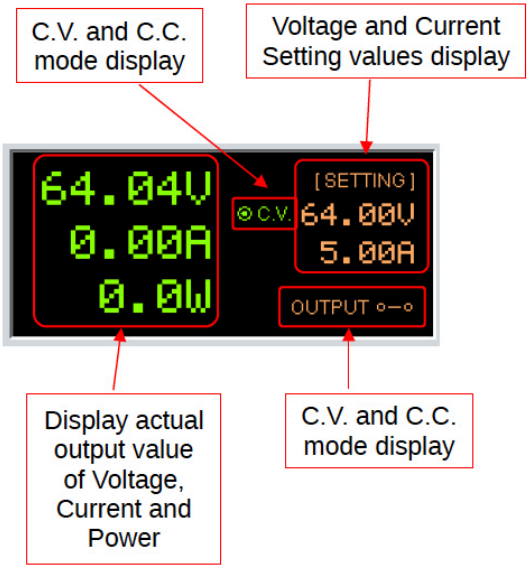
For USB, enter COM port. The COM port can be find in device manager of Windows system after driver installed. For RS485, additional to COM port. Input RS485 ID for your system as well

vi. Then click Save to save setting then click Exit Edit to exit the edit page.

After save configuration, the power supply connect automatically. You will find different tabs will be shown for different models of power supply connected.



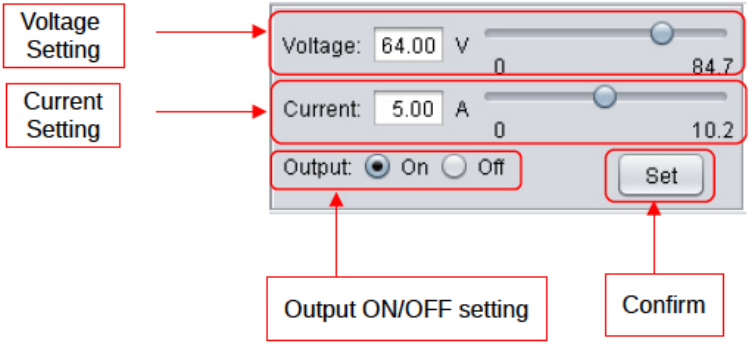
2.3 Display Panel



The display shows following information

- Output Voltage value
- Output Current value
- Output Power value
- Output On/Off status
- C.V./ C.C. Model
- Setting values

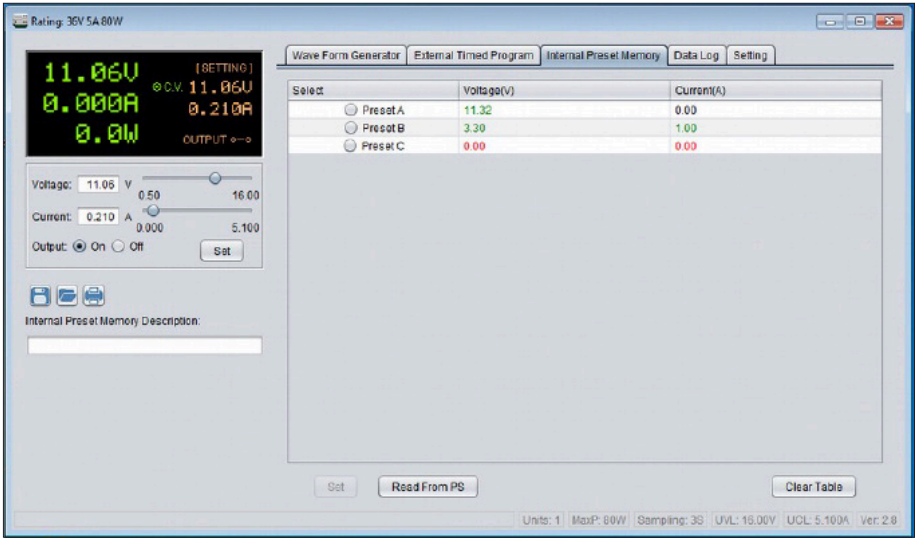
2.4 Set output voltage value, current value and ON/OFF status



It allow direct input voltage value and current value in setting area or use slide bar to adjust value. After adjust the value, then click Set button to confirm setting.

2.5 Internal Preset Memory

If the power supply models has internal preset memory, this tab will be shown. You can adjust value of memory. Then click Set button to save the value back to power supply.

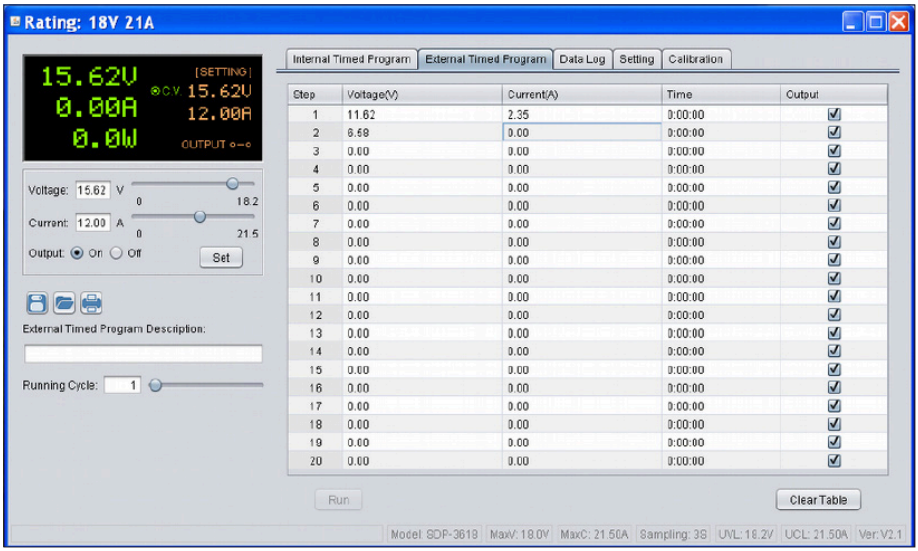


You can click Read From PS to read internal preset memory from power supply.

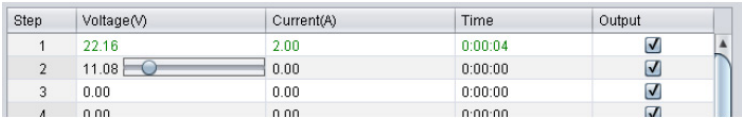
2.6 External Timed Program

Select External Timed Program tab to operate with 20 user define steps program. It can define Voltage, Current, running time and Output ON/OFF for each step. User can setting running cycle for the Timed Program. External Timed Program is completely controlled by PC, PC counts the time and changes voltage and current of power supply.

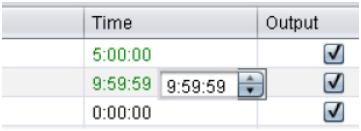
It has an External Timed Program Description space for user to enter description for the setting. The description will be saved when user select to save setting into CSV file.



- Double click on the cell that you would like to set value.
  For example Step 2 voltage.
- Slide the bar to configure the value.



- Set time for this step to be running. The time range is between 0 to 9hours 59 minutes 59 seconds. You can click up/down button to change value or directly input value. If the time value is set to 0, this step will be skipped.



- Select running cycle between 0-999. You can use slide bar to select or directly input value in text box. Input 0 means run the program forever.

- Click  button to start running cycle.

- In between program running cycle, click  button to stop program.

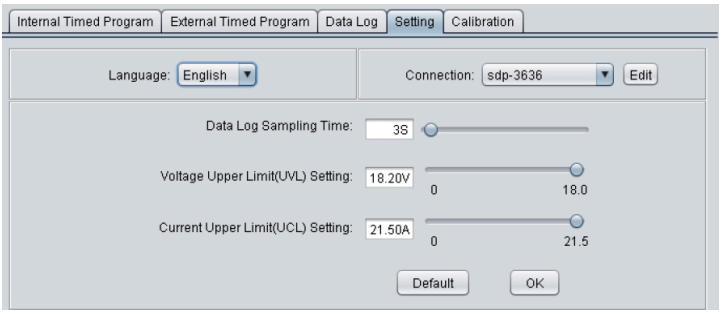
- Click  to clear the setting.

2.7 Set Upper limited of Voltage and Current

Select Setting tab to configure Voltage Upper Limit (UVL) and Current Upper Limit (UCL). If you set the UVL and UCL, all setting in General Output setting, Internal Timed Program and External Timed Program cannot higher than this limit. You will find the setting become red to alert you it is over the UVL or UCL.

In the setting tab,

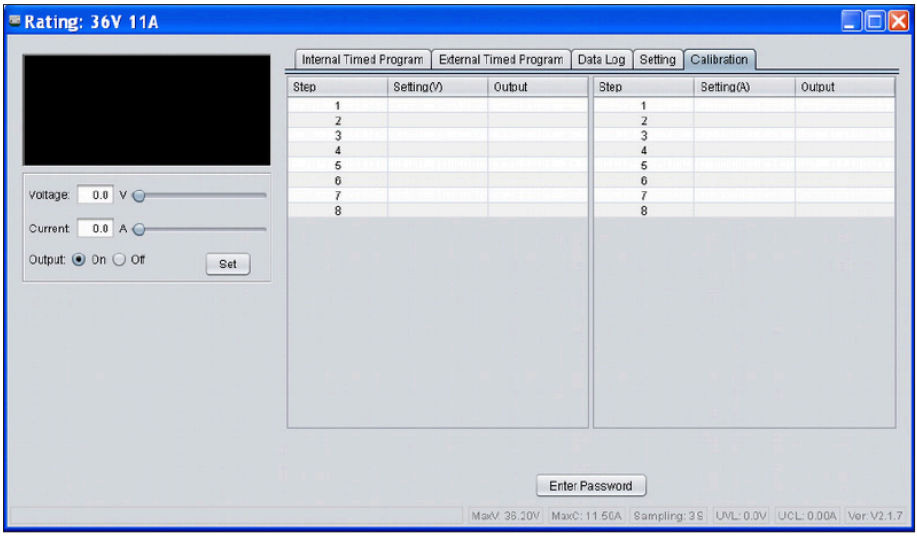
- Direct input your setting value or using slide bar to configure for the UVL an UCL.



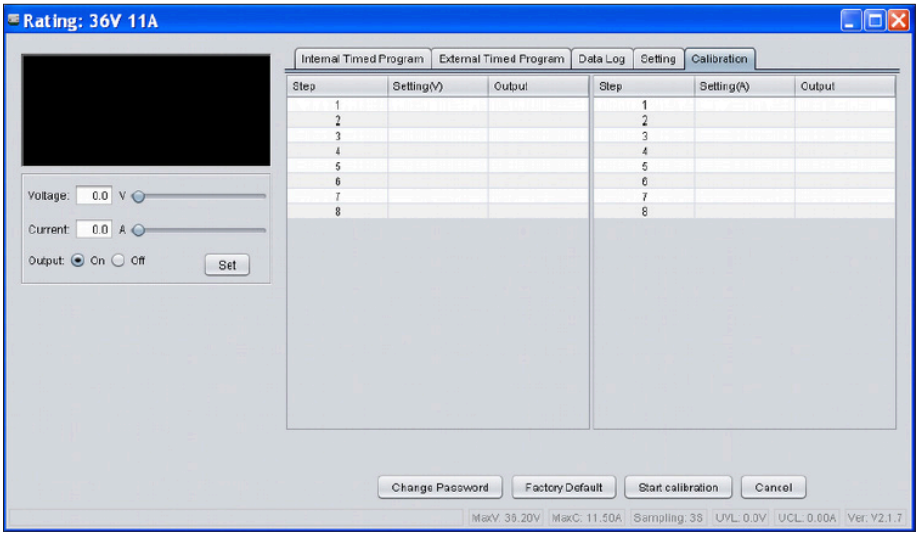
- Click  button to save the setting to power supply.

2.8 Calibration

If the power supply support calibration, you will find the Calibration tab is shown.



- Enter password. The default password is "password"



Click "Start calibration" to start calibrate power supply. The system will show setting value for voltage and you input actual output value which measured by multi-meter. After calibrate voltage, it start calibrate the current. It show output current setting and you input actual output value measured by multi-meter.

Notes:

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