

CIRCUIT-TEST

Power Supply Control Software

PSC-4xxx Series
PSC-6xxx Series

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

PSC-4XXX Series models as follows:

PSC-4120, PSC-4136, PSC-4160

PSC-6XXX Series models as follows:

PSC-6118, PSC-6136, PSC-6160, PSC-6318, PSC-6336, PSC-6360, PSC-6616, PSC-6632, PSC-6660, PSC-6916, PSC-6932, PSC-6960

Supported OS System

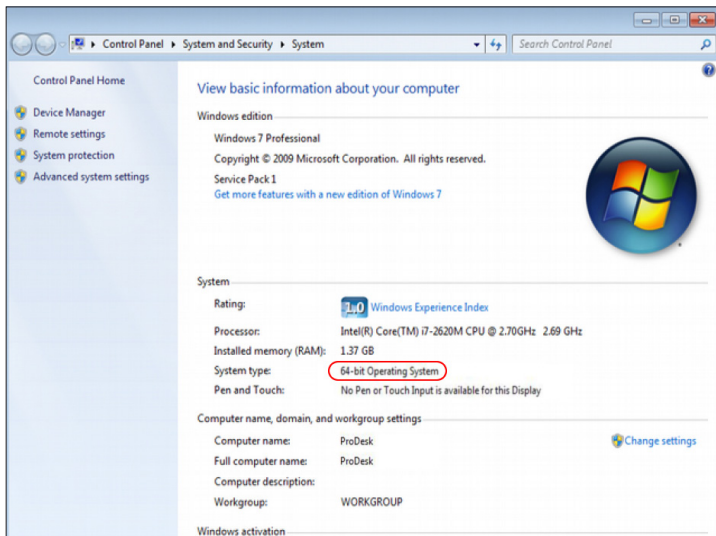
Windows 7 (32-bit and 64-bit), Windows 10 (32-bit and 64-bit)

USB driver installation

The correct USB driver should be installed before connecting the power supply to the PC. The USB driver file is located in folder name with "USB CP210xDrivers" in the CDROM or it can be downloaded from the website www.circuittest.com (look for the respective model number)

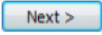
For 32-bit Windows
run "CP210xVCPInstaller_x86.exe"

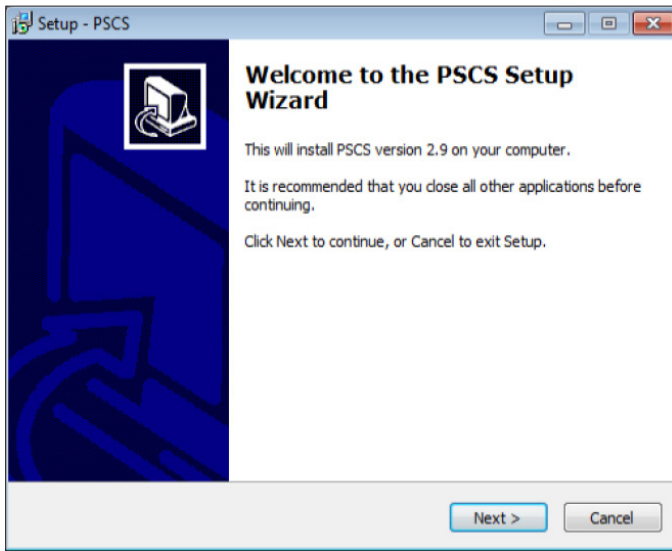
For 64-bit Windows
run "CP210xVCPInstaller_64.exe"



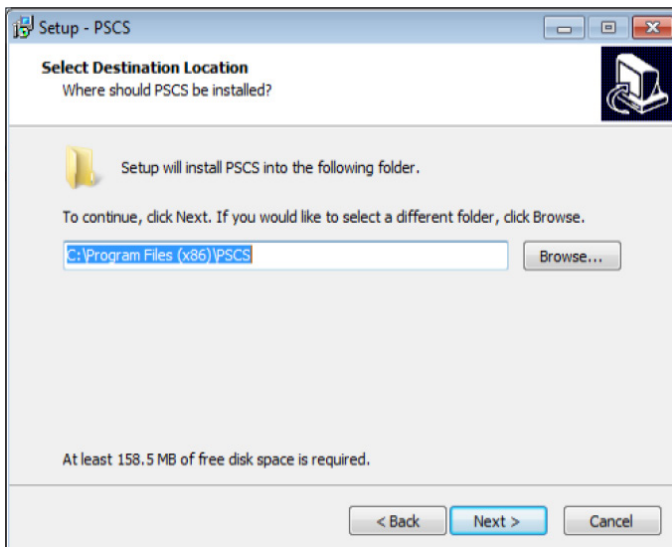
PC Software Installation

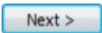
The file start with “pscs_setup” is the installation program for PC software.

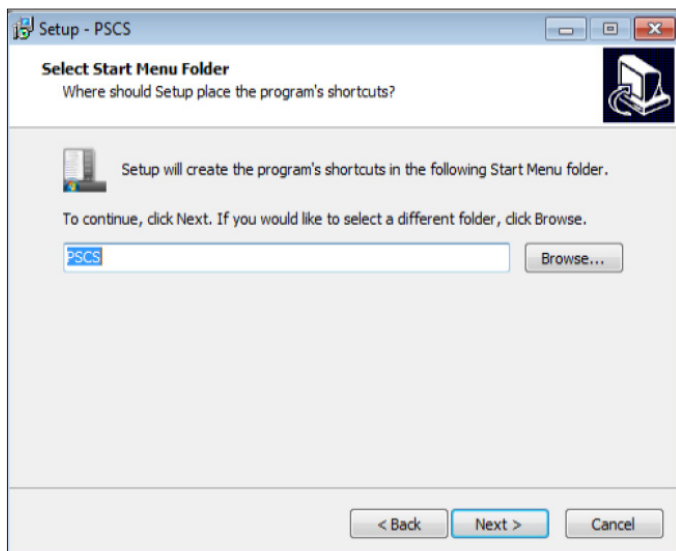
- a) Run file “pscs_setup.exe” and click  to continue.

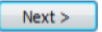


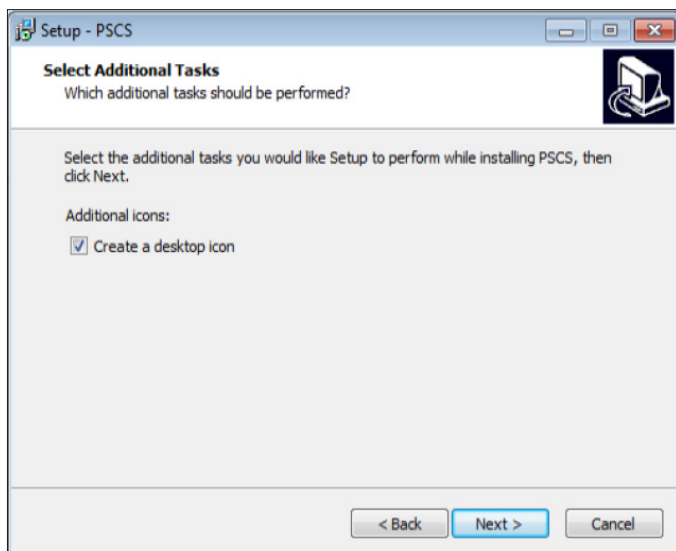
- b) Select the destination location for software installation and click  to continue.

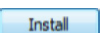


c) Select Start Menu Folder and click  to continue.



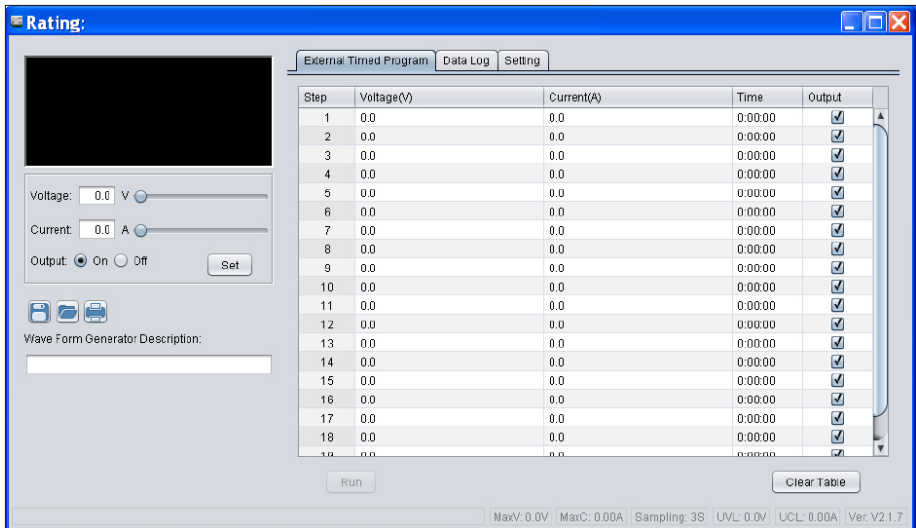
d) Click the check box if you would like to create a desktop icon. Then click  to continue.



e) Click  to start installing the software.

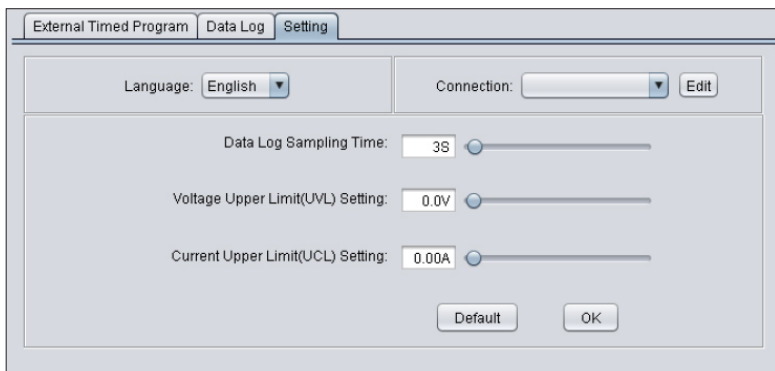
2.2 Connect to Power Supply

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.

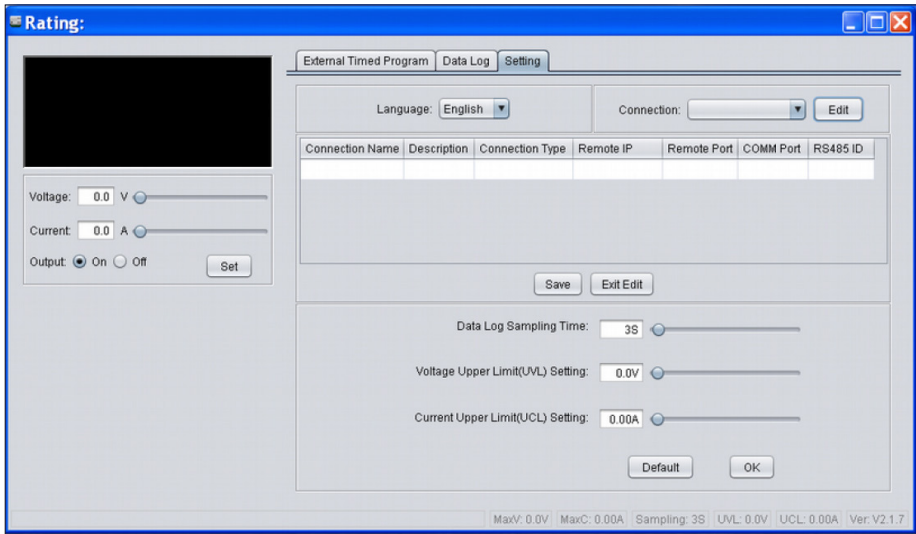


Connection editing steps

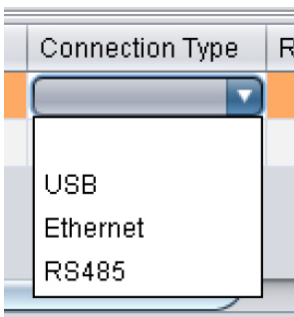
- i. Select Setting Tab.



- 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).

Remote IP	Remote Port
192.168.1.242	8888

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.

Rating: 36V 11A

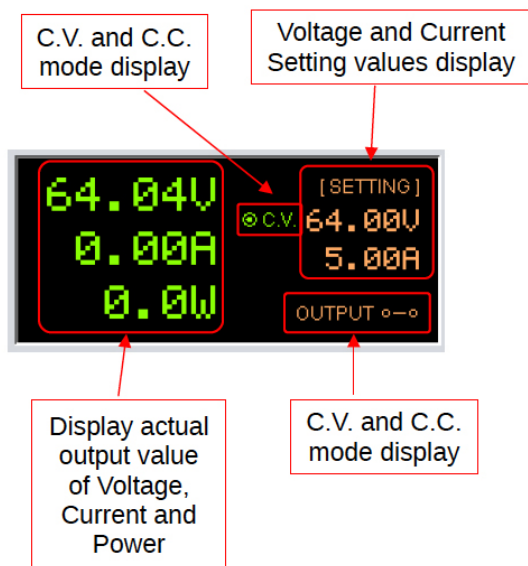
Internal Timed Program | External Timed Program | Data Log | Setting | Calibration

Step	Voltage(V)	Current(A)	Time
1	0.00	0.00	0:00:00
2	0.00	0.00	0:00:00
3	0.00	0.00	0:00:00
4	0.00	0.00	0:00:00
5	0.00	0.00	0:00:00
6	0.00	0.00	0:00:00
7	0.00	0.00	0:00:00
8	0.00	0.00	0:00:00
9	0.00	0.00	0:00:00
10	0.00	0.00	0:00:00
11	0.00	0.00	0:00:00
12	0.00	0.00	0:00:00
13	0.00	0.00	0:00:00
14	0.00	0.00	0:00:00
15	0.00	0.00	0:00:00
16	0.00	0.00	0:00:00
17	0.00	0.00	0:00:00
18	0.00	0.00	0:00:00
19	0.00	0.00	0:00:00
20	0.00	0.00	0:00:00

Run | Read From PS | Save To PS | Clear Table

Model: SDP-3636 | MaxV: 36.0V | MaxC: 11.50A | Sampling: 3S | LVL: 60.5V | UCL: 6.50A | Ver: V2.1

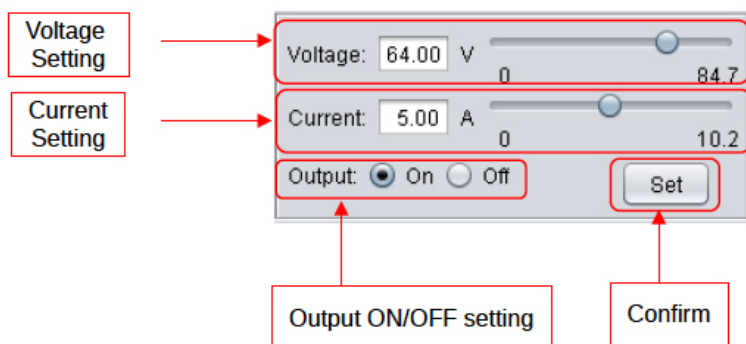
2.3 Display Panel



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

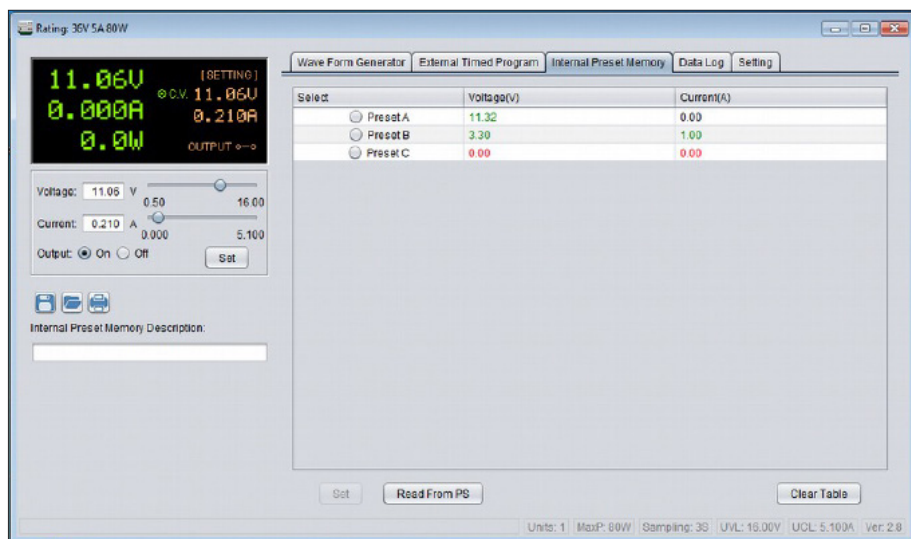
2.4 Set output voltage value, current value and ON/OFF status



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.

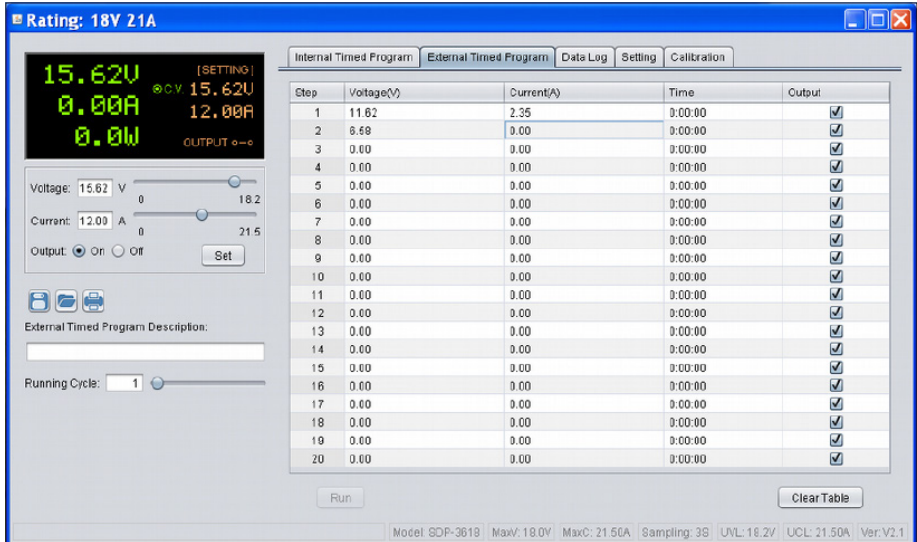


You can click **Read From PS** to read internal preset memory from power supply.

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.

Step	Voltage(V)	Current(A)	Time	Output
1	22.16	2.00	0:00:04	☒
2	11.08	0.00	0:00:00	☒
3	0.00	0.00	0:00:00	☒
4	0.00	0.00	0:00:00	☒

- 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.

Time	Output
5:00:00	☒
9:59:59	☒
0:00:00	☒

- 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.



Running Cycle:

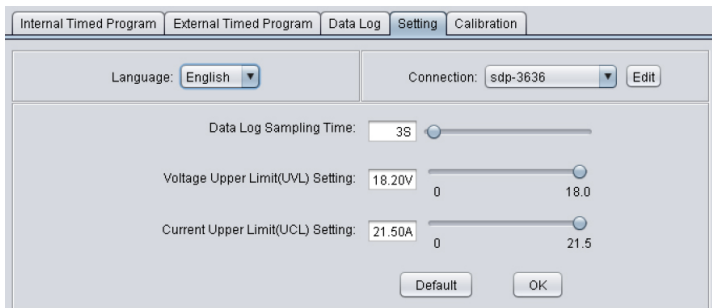
- Click button to start running cycle.
- In between program running cycle, click button to stop program.
- Click to clear the setting.

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.

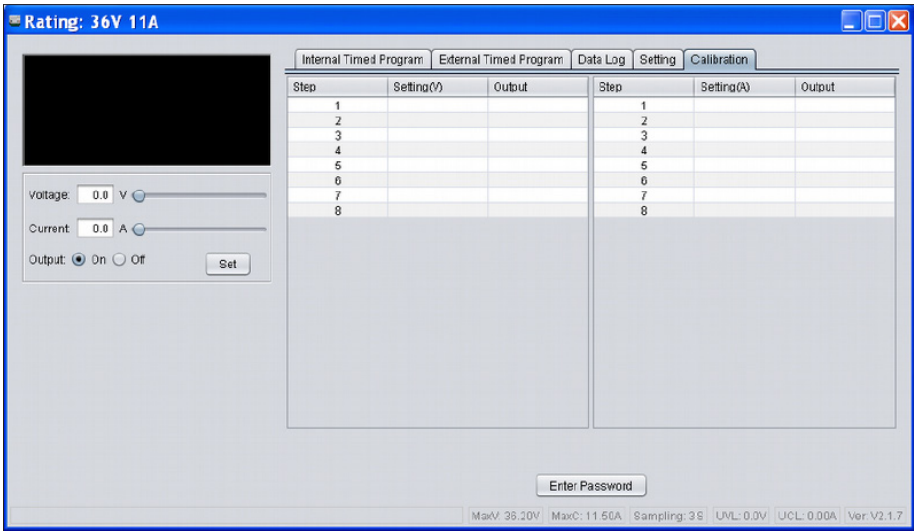


The image shows a software window with tabs: Internal Timed Program, External Timed Program, Data Log, Setting (selected), and Calibration. Below the tabs, there is a Language dropdown set to 'English' and a Connection dropdown set to 'sdp-3636' with an 'Edit' button. The main area contains three settings: 'Data Log Sampling Time' set to '3S', 'Voltage Upper Limit(UVL) Setting' set to '18.20V' (with a range from 0 to 18.0), and 'Current Upper Limit(UCL) Setting' set to '21.50A' (with a range from 0 to 21.5). At the bottom are 'Default' and 'OK' buttons.

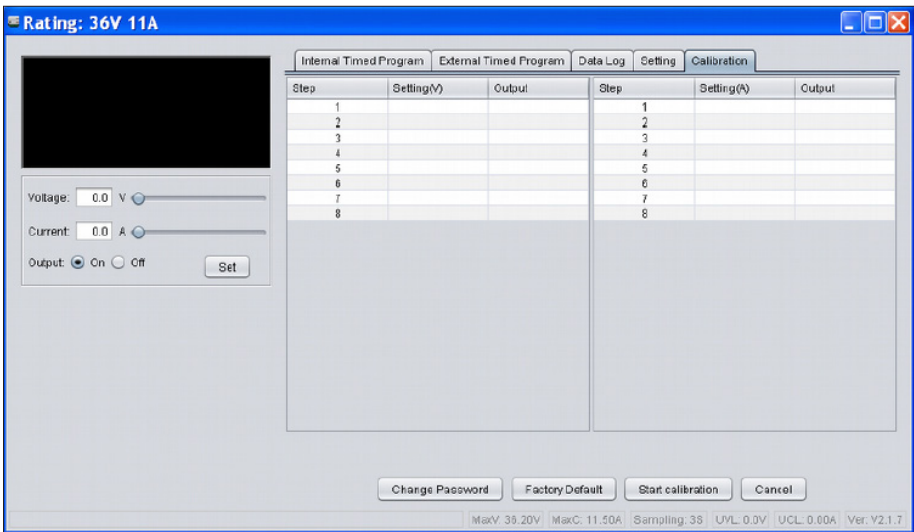
- Click button to save the setting to power supply.

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:

CIRCUIT-TEST
ELECTRONICS

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