INSTRUCTION MANUAL

Power Supply Control Kit

(Cat. No. BP-PCSV01)

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Vers. 0611

1. Power Supply Control Kit

1.1. General information

The Power Supply Control Kit (Cat. No. BP-PCSV01) provides the communication between a SERVA Blue Line Power Supply and an IBM compatible personal computer via a USB-serial converter; it is also a documentation software.

The software has basically two functions:

1. Monitoring of voltage, current, and power during the time course of an electrophoresis run.

2. Loading, storage, and documentation of multistep power supply settings

The Power Supply Control Kit can be used with the following SERVA power supplies: BluePower™ 200x4, BluePower™ 500x4, BluePower™ 1500x4, BluePower™ 3000x4, and HPE Power Supply 1500.

The documentation software package is only compatible with the *Windows* platform (all versions from Windows 98 to Windows 7). When installed, it is not entered into the Registry.

1.2. Kit components

The Power Supply Control Kit consists of the following items:

High-speed USB-serial converter	1 piece
Gender Changer for serial port	1 piece
1 USB stick containing: driver for USB-serial converter, documentation software package, power supply programs for various applications; Licence number, Short Instruction Manual „PS Control Kit“	1 piece

2. Software installation

a. Insert the USB stick into the computer

b. Click on the folder: **FTDI** and click on :
(**32_64bit)Win7_XP_Vista_2008_2008R2_2003_2000**

c. Double click on: **CDM20600.**
Now the driver for the USB-serial converter will be installed on the computer

d. Copy and paste the folder Blue PS Control to disk C on your computer

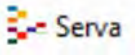
e. Copy and paste the folder Blue PS Data to disk C on your computer

f. Click on Blue PS Control and edit the Serva.ini file, e.g by double click: 

g. Enter the last three digits of the serial number of your power supply. Up to three instruments can be registered. Note: the program will only communicate with the power supply when the last three digits of the serial number are entered in the „ini“file.

h. Connect computer and power supply with the USB-serial converter.

i. Switch the power supply on.

j. Double click on the Serva program: 

k. Click on „Help“ and then on „Registration“

l. Enter here the Licence number by copy and paste, which is provided in the file „Licence“.

m. Click on „Edit“, select „Edit Programs“. Now you can download a program with multiple steps to the Power Supply. The tables on the next pages show some examples.

n. You can change the power supply settings in the computer program and coopy them to the power supply with „write to device“. You can also transfer programs, which have been modified in the power supply, to the computer program with the function “read from device“

Examples for multiple step programs:

Tab.1: Programs for HPE 2D Flatbed Large Electrophoresis day run: **HP2D**

1	FBL1	One 2DGel Flatbed Large	Full program
2	FBL2	Two 2DGels Flatbed Large	Full program
3	FBL3	Three 2DGels Flatbed Large	Full program
4	FBL4	Four 2DGels Flatbed Large	Full program
5	Pre4	Four 2DGels Flatbed Large	Steps 1 to 3
6	Sep4	Four 2DGels Flatbed Large	Steps 4 and 5
7	Pre2	Two 2DGels Flatbed Large	Steps 1 to 3
8	Pre2	Two 2DGels Flatbed Large	Steps 4 and 5
9		open	

Tab. 2: Programs for HPE 2D Flatbed Large Electrophoresis over night run: **ON2D**

1	FBL1	One 2DGel Flatbed Large	Full program
2	FBL2	Two 2DGels Flatbed Large	Full program
3	FBL3	Three 2DGels Flatbed Large	Full program
4	FBL4	Four 2DGels Flatbed Large	Full program
5	Pre4	Four 2DGels Flatbed Large	Steps 1 to 3
6	Sep4	Four 2DGels Flatbed Large	Steps 4 and 5
7	Pre2	Two 2DGels Flatbed Large	Steps 1 to 3
8	Pre2	Two 2DGels Flatbed Large	Steps 4 and 5
9		open	

Tab. 3: Programs for HPE 2D Flatbed Double and Triple (Standard size) Electrophoresis: **SG2D**

1	FBS1	One 2DGel Flatbed Standard	Full program
2	FBS2	Two 2DGels Flatbed Standard	Full program
3	FBS3	Three 2DGels Flatbed Standard	Full program
4	FBS4	Four 2DGels Flatbed Standard	Full program
5	PrS4	Four 2DGels Flatbed Standard	Steps 1 to 3
6	SeS4	Four 2DGels Flatbed Standard	Steps 4 and 5
7	PrS2	Two 2DGels Flatbed Standard	Steps 1 to 3
8	PrS2	Two 2DGels Flatbed Standard	Steps 4 and 5
9		open	

o. Important hint: Switch off the save energy mode in your computer, in order to avoid interruption in the recording.

p. Start the electrophoresis on the power supply (device) by pressing „Run“.
Note: Due to safety reasons you cannot start the electrophoresis from the computer. You can only start from the device.

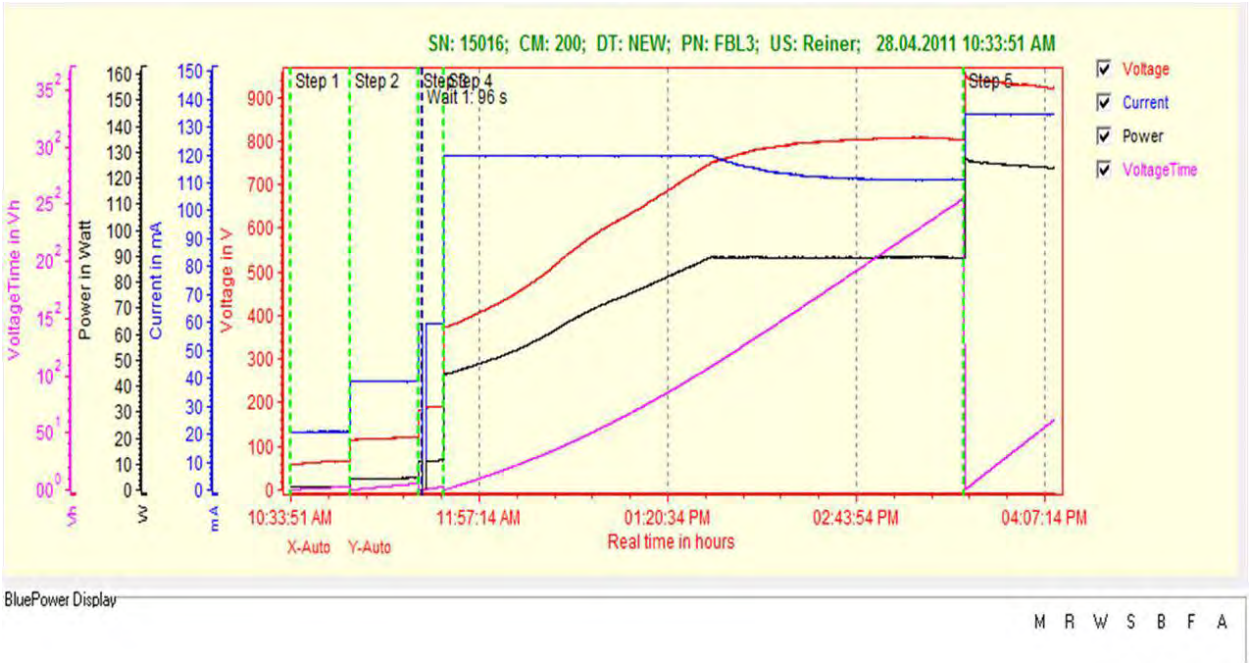
q. The program is constantly in contact with the power supply. Status and measuring values will be read every 1 s and transferred to the chart (see fig. 1). The program automatically recognizes start and end of the electrophoresis run.

r. At the end of the run the file will be automatically saved to the subfolder „Data“ in the folder „Serva“ on drive C. The respective pattern title contains several informations:

SN: Serial number of power supply
CM: Current Mode (maximum current)
DT: Device Type (New)
PN: Program name
US: User (Name of the computer Login)
Date and time of the start of the electrophoresis.

s. You will be asked, whether the file should be saved or not. You have to generate a file name. You have time to carry this out until you start a new electrophoresis run.

Fig. 1: Example of a chart of an electrophoresis run: 3 HPE 2D Gels Large.



3. Ordering information

Product	**Cat. No.**
BluePower™ 200x4	BP-200x4
BluePower™ 500x4	BP-500x4
BluePower™ 1500x4	BP-1500x4
BluePower™ 3000x4	BP-3000x4
HPE Power Supply 1500	HPE-PS1