JT-DPH5005
Programmable power supply

1. GENERAL INFORMATION

Dear customer,

thank you for purchasing our product. In the following, we will show you how to use your product.
Should you encounter any unexpected problems during use, please do not hesitate to contact us.

With the DPH5005, voltages can be converted both up and down.
This power supply combines analog and digital technologies in an advanced design with outstanding precision and accuracy. The adjustable output reaches up to 50V or 5A and can be precisely configured in 10mV or 1mA steps.
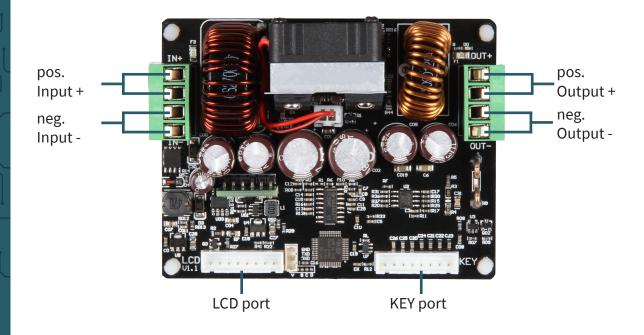
The power supply unit is additionally equipped with a switch-off parameter memory and ten programmable data memories. The operation of the unit has been optimized for particularly easy operation and the colour display offers particularly detailed and comprehensive information. Among other things, the current voltage and current values, presettings and output powers can be displayed here. Dynamic notification symbols also facilitate clarity.

The additional settings menu offers maximum control of overcurrent and overvoltage values as well as other parameters. The DPH5005 offers modern design and advanced technology in a compact package, making it the ideal power supply.

2. TECHNICAL DETAILS

input voltage	6 - 50 V
output voltage	0 - 50 V
output current	0 - 5 A
output power	0 - 250 W
display size	1.5"
display module size	43 x 79 x 38 mm
power module size	93 x 35 x 72 mm
voltage resolution	0.01 V
current resolution	0.001 A

3. CONNECTION DETAILS

pos.
Input +

neg.
Input -

pos.
Output +

neg.
Output -

LCD port   KEY port

Attention! Ensure at all times a sufficient ventilation of the device for the heat dissipation.

The permitted output voltage range is between 6 to 50 V (DC). Watch at the sufficient safety distance and do not ever exceed the maximal output voltage range. Non-observance can cause substantial and irrparable damage of your device.
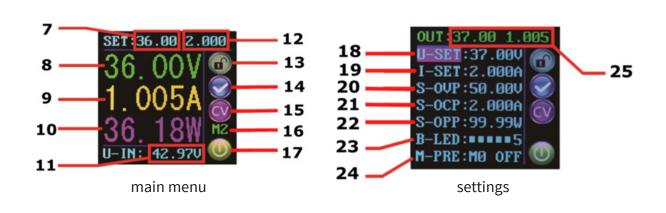
Operate the device only with direct current! The operating of the device with alternating current can cause deadly electric shocks and irreparable damages to the device.

4. PANEL & DISPLAY

After the first start, the welcome screen followed by the main screen are shown. On the main screen, the selected voltage and current values are displayed. If the outputs are activated, the actual values are additionally shown. On the right side of the display are symbols and prompts which represent the status of the system. A detailed description of the screen is in the following:

1	voltage settings / arrow up / M1 data group
2	data input / extract data from data group / save data in data group
3	current settings / arrow down / M2 data group
4	1.5" LCD display
5	rotary switch / key lock
6	activate / deactivate output

main menu

settings

7	output volatge (default)
8	output voltage (current value)
9	output current (current value)
10	output power (current value)
11	input voltage
12	limit of ouput current
13	lock / unlock keys
14	normal/ abnormal status
15	constant voltage / constant current
16	number of data group
17	ouput active / inavctive
18	default ouput voltage
19	default limit of ouput current
20	default overvoltage range
21	default overcurrent limit
22	default overload limit
23	default screen brightness
24	default number of data group
25	actual value of output voltage and current

Output voltage and current limit

Press V/↑ to open the voltage setting mode. Press the rotary switch to set the cursor on the numerical value which should be changed. Rotate the rotary switch clockwise to increase the value and counter clockwise to decrease the value. Press again V/↑ to end. Alternatively, after 30 seconds of being inactive the setting mode ends automatically. Press A/↓ to set the output current limit the same ways as before.

Configuration of data and conservation values

Press SET in the main screen to open the data settings menu.

Setting the voltage and current limit values

Navigate through the menu to option **U-SET** (voltage limit) or **I-SET** (current limit). Adjust here the output voltage and / or the output current limit after your preferences. With SET can you go back to the menu options. Press SET again to return to the main screen and to leave the menu.

Setting the conservation value

Navigate through the menu to limit value options **S-OVP** (overvoltage protection), **S-OCP** (overcurrent protection) or **S-OPP** (overpower protection). Adjust now with the rotary switch the desired value. Press SET to return to the menu options and again to leave the menu. If the limit values are reached, the output will be deactivated automatically.

Attention! These are global limit values and should not be confused with the default voltages and currents.

Adjustment of screen brightness

Navigate to the option **B-LED** to configure the screen brightness. Rotate the rotary switch to adjust the brightness from level 0 to 5. 0 defines the darkest level and 5 the brightest. Press SET to return to the menu and press it again to leave the menu.

Configuration of the data groups

Data group M0
The data group M0 is a special case. It is the standard data group. Every time an alternative data group is chosen or changes at the current settings are made, the M0 is immediately overwritten by the new data. M0 is therefore a realtime duplicate of the current chosen data group and the values. It is also the set of data which is saved by switching off and will be invoked by starting the device again. This happens automatically and transparently without any input of the user.

Selection of the processing data group
Navigate to option **M-PRE** to edit a data group. Rotate the rotary switch to choose the number of the data group which should be edited. After finishing the settings hold down SET until the number of the data group is shown on the right side of the screen. By pressing again SET, you leave the data group settings.

Activation / deactivation
Navigate to option **M-PRE** and press the rotary switch. After that rotate that switch to choose the data group by its number which should be edited. Press it again to change the option **M-PRE**.
By activating this option, the output stays the same by invoking a data group.
By deactivating this option, the output is automatically switched off by invoking a data group.
Hold down SET until the number of the data group is shown on the right side of the screen. The data value will be saved under the number of the data group. Press again SET to return to the menu. To leave this menu press SET.

Datagroup quick selection

Key combination by choosing M1 / M2
Hold down V/↑ or A/↓ for longer than 3 seconds to select the data group M1 or M2 quickly. The number in accordance with the data group is shown on the right side of the screen. The data group M1 and M2 are perfect for frequently used settings because of their quick selection function.

Selection of an arbitrary data group
Hold down SET for more than 3 seconds to show M0 on the right side of the screen. Through rotating the rotary switch is it possible to choose the desired data group (M0 - M9). To activate the chosen data group, press SET.

<u>Editing the chosen data group</u>
To edit the chosen data group press V/↑ or A/↓ to navigate upwards or downwards through the menu options. Press the rotary switch and the according numerical value will be highlighted with the cursor. Further operation of the knob scrolls through the available characters. After the desired value is set, hold down SET until the data group number is shown on the right side of the screen. The value of the data will now be saved in the selected data group. Press the Set button again to return to the previous menu. Repeat the above procedure to change one of the other numerical values for the selected data group. To exit the menu, press the Set button again.

<u>Condition of selected data group at the start</u>
You can configure the device that the output activates automatically as soon as the device is started. Navigate in the menu to option **S-INI** and set the value to **ON** to activate this option. After you set the desired settings, hold down SET until the number of the data group is shown on the right side of the screen. The data value is now saved. By pressing SET you return to the menu and you leave the menu by pressing it again.

<u>Activation and deactivation of the output</u>
You can press the ON/OFF button at any time to activate or deactivate the output.

<u>Key lock</u>
The keys can be deactivated to avoid unintentional changes. Hold the rotary switch longer than 3 seconds to block the keys or to unlock them again. The status of the key lock is shown with the lock symbol on the right side of the screen.

6. OTHER INFORMATION

Our information and take-back obligations according to the Electrical and Electronic Equipment Act (ElektroG) Symbol on electrical and electronic equipment:

Symbol of electrical and electronic devices:

This crossed-out dustbin means that electrical and electronic appliances do not belong in the household waste. You must return the old appliances to a collec-tion point. Before handing over waste batteries and accumulators that are not enclosed by waste equipment must be separated from it.

Return options:

As an end user, you can return your old device (which essentially performs the same function as the new device purchased from us) for disposal free of charge when you purchase a new device. Small appliances with no exter-nal dimensions greater than 25 cm can be disposed of in normal household quantities independently of the purchase of a new appliance.

Possibility of return at our company location during opening hours:

Simac GmbH, Pascalstr. 8, D-47506 Neukirchen-Vluyn

Possibility of return in your area:

We will send you a parcel stamp with which you can return the device to us free of charge. Please contact us by e-mail at Service@joy-it.net or by telephone.

Informationen on packaging:

Please pack your old appliance safely for transport, if you do not have suitable packaging material or do not wish to use your own, please contact us and we will send you suitable packaging.

7. SUPPORT

If any questions remain open or problems arise after your purchase, we are available by e-mail, telephone and ticket support system to answer these.

E-Mail: service@joy-it.net
Ticket-System: http://support.joy-it.net
Telephone: +49 (0)2845 98469 – 66 (10 - 17 o'clock)

For further information visit our website:
www.joy-it.net