



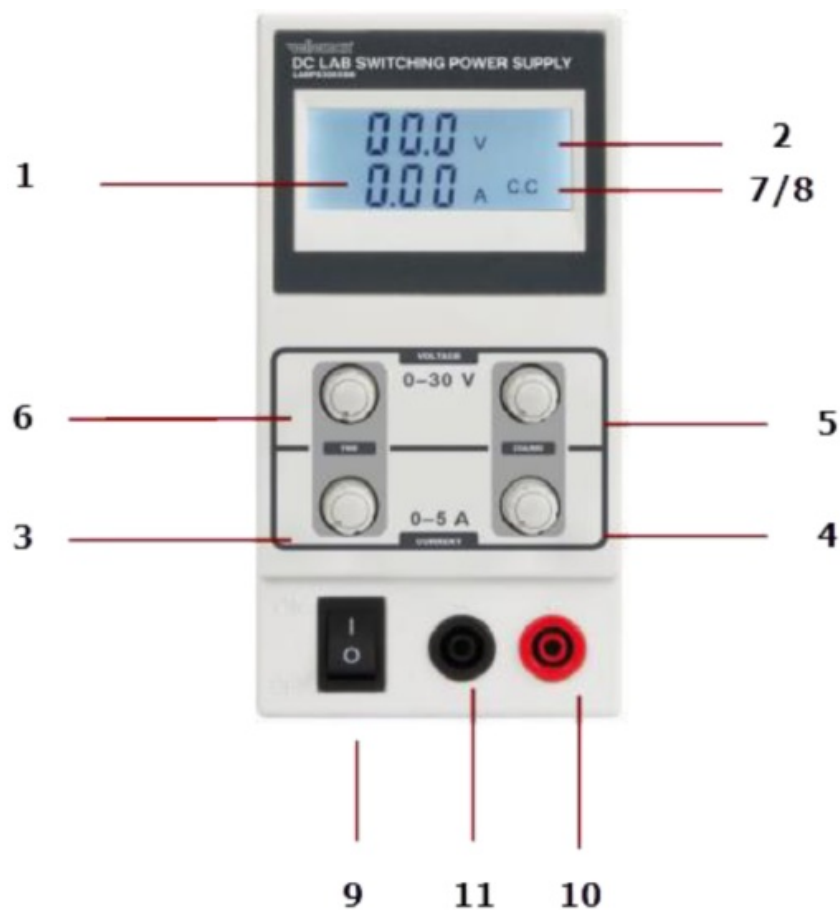
velleman LABPS3005SM Bench PSU User Manual

[Home](#) » [Velleman](#) » velleman LABPS3005SM Bench PSU User Manual 

velleman[®]
LABPS3005SM Bench PSU

User Manual





Contents

- [1 Introduction](#)
- [2 Safety Instructions](#)
- [3 General Guidelines](#)
- [4 Overview](#)
- [5 Operation](#)
- [6 Cleaning and Maintenance](#)
- [7 Technical Specifications](#)
- [8 Documents / Resources](#)
 - [8.1 References](#)
- [9 Related Posts](#)

Introduction

To all residents of the European Union

Important environmental information about this product











This symbol on the device or the package indicates that disposal of the device after its lifecycle could harm the environment. Do not dispose of the unit (or batteries) as unsorted municipal waste; it should be taken to a specialized company for recycling. This device should be returned to your distributor or to a local recycling service. Respect the local environmental rules.

If in doubt, contact your local waste disposal authorities.

Thank you for choosing Velleman! Please read the manual thoroughly before bringing this device into service. If the device was damaged in transit, don't install or use it and contact your dealer.

Safety Instructions

	Keep this device away from children and unauthorized users.
	Indoor use only. Keep this device away from rain, moisture, splashing, and dripping liquids. Never put objects filled with liquids on top of or close to the device.
	DO NOT disassemble or open the cover under any circumstances. Touching live wires can cause life-threatening electroshocks. There are no user-serviceable parts inside the device. Refer to an authorized dealer for service and/or spare parts. Always connect the device to an earthed power socket.
	Caution: device heats up during use. Make sure the ventilation openings are clear at all times. For sufficient air circulation, leave at least 1" (\pm 2.5 cm) in front of the openings. Place the device on a flat, heat-resistant surface, do not place the device on carpets, fabric surfaces...
	Always disconnect mains power when the device is not in use or when servicing or maintenance activities are performed. Handle the power cord by the plug only.
	Keep this device away from dust and extreme temperatures.
	Protect this device from shocks and abuse. Avoid brute force when operating the device.
	Do not use the device when damage to housing or cables is noticed. Do not attempt to service the device yourself but contact an authorized dealer.

General Guidelines

Refer to the Velleman® Service and Quality Warranty on the last pages of this manual.

- Familiarise yourself with the functions of the device before actually using it.
- All modifications of the device are forbidden for safety reasons. Damage caused by user modifications to the device is not covered by the warranty.
- Only use the device for its intended purpose. Using the device in an unauthorized way will void the warranty.
- Damage caused by disregard of certain guidelines in this manual is not covered by the warranty and the dealer will not accept responsibility for any ensuing defects or problems.
- Keep this manual for future reference.

Overview

Refer to the illustrations on page 2 of this manual.

Amp-display (LED): indicates the output current.	6	C.V. fine-tuning: rotary switch for the fine-tuning of the output voltage.
Volt-display (LED): indicates the output voltage.	7/8	C.C. indicator / C.V. indicator
C.C. fine-tuning: rotary switch for the fine-tuning of the current-limiting point.	9	power switch
C.C. adjustment: rotary switch for the adjustment of the current-limiting point.	10	the output terminal (+): is used for the connection of the load's positive terminal.
C.V. adjustment: rotary switch for the adjustment of the output voltage.	11	the output terminal (-): used for the connection of the load's negative terminal.

Operation

Introduction

The device is a highly accurate, DC-regulated power supply with an adjustable output. This output can be used for constant voltage (C.V.) and constant current (C.C.).

The output voltage can be adjusted between 0V and 30V when the device is in the constant voltage mode or C.V.-mode. The current-limiting point (max. ± 12 A) can also be set arbitrarily in this mode.

The output current can be adjusted continuously between 0 and 10 A in the constant current mode.

The output current and voltage are indicated through LED displays.

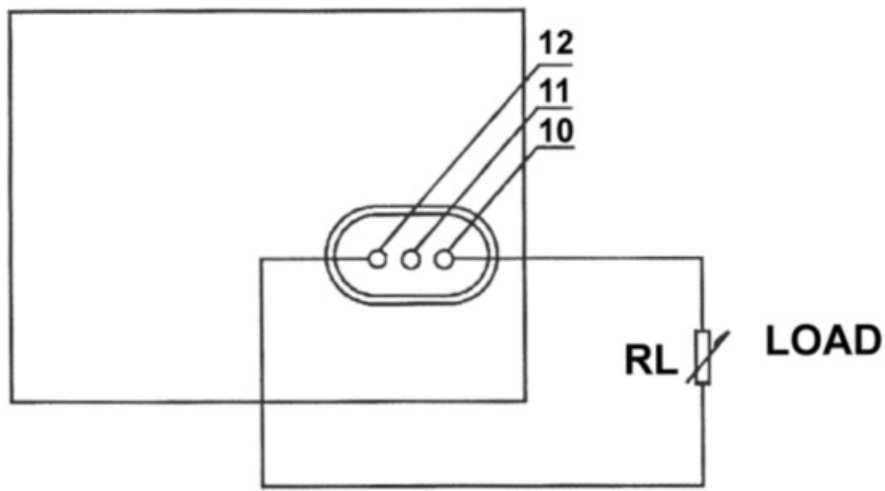
Using the device as a C.V. source

1. Turn the knobs [3] and [4] completely to the right before activating the device.
2. Activate the device.
3. Use knob [5] to obtain a voltage that is close to the desired value.
4. Consequently, you should use fine-tuning knob [6] to set the exact value.

The C.V. indicator comes on.

Connecting the Load

- The load is connected as shown in the figure below.
- You can read the output current [1] and the output voltage [2] from the display as soon as the device has been switched on.
- The C.V. indicator [8] is lit if the device is in the C.V.-mode.
- The C.V. LED is off and the C.C. LED will light if the Amp display indicates a value that exceeds the installed value. When this happens, the device will automatically go into current-limiting mode. Install a load that will allow the device to function normally.



Using the device as a C.C. source

1. Use the power switch [9] to activate the device.
2. Turn knobs [5] and [6] completely to the right and turn knobs [3] and [4] completely to the left.
3. Connect the load.
4. Adjust [3] and [4] until the desired current is obtained.

The C.C. indicator is now lit while the C.V. indicator is off.


Use of the current-limiting adjustment in the C.V.-mode

1. Set both current knobs [3] and [4] to the maximum position.
2. You can now set the current-limiting point arbitrarily (max. $\pm 12A$).
3. Proceed as follows: activate the device, connect a variable load and adjust the load so that the current matches the desired current-limiting point.
4. Meanwhile, you should also manipulate current knobs [3] and [4] until the C.C. LED lights.
5. The value on the Amp display is identical to the current-limiting point.

Cleaning and Maintenance

- Disconnect the device from the mains prior to maintenance activities.
- The power supply cables must not show any damage. Have a qualified technician maintain the device.
- Wipe the device regularly with a moist, lint-free cloth. Do not use alcohol or solvents.
- There are no user-serviceable parts, apart from the fuse. Contact your dealer for spare parts if necessary.
- Store the device in a dry, well-ventilated, dust-free room.

Technical Specifications

input voltage	220-240 V~, 50/60 Hz
output voltage	0-30 V  adjustable max.
output current	0-5 A adjustable max.
ripple voltage	200 MVP-p
dimensions	85 × 160 × 205 mm
weight	1.62 kg
fuse	T5A, 250 V~

Use this device with original accessories only. Velleman nv cannot be held responsible in the event of damage or injury resulting from (incorrect) use of this device. For more info concerning this product and the latest version of this manual, please visit our website www.velleman.eu. The information in this manual is subject to change without prior notice.

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Velleman® Service and Quality Warranty

Since its foundation in 1972, Velleman® acquired extensive experience in the electronics world and currently distributes its products in over 85 countries.

All our products fulfill strict quality requirements and legal stipulations in the EU.

In order to ensure the quality, our products regularly go through an extra quality check, both by an internal quality department and by specialized external organizations. If, all precautionary measures notwithstanding, problems should occur, please make an appeal to our warranty (see guarantee conditions).

General Warranty Conditions Concerning Consumer Products (for EU):

- All consumer products are subject to a 24-month warranty on production flaws and defective material from the original date of purchase.
- Velleman® can decide to replace an article with an equivalent article or to refund the retail value totally or partially when the complaint is valid and a free repair or replacement of the article is impossible, or if the expenses are out of proportion.

You will be delivered a replacing article or a refund at the value of 100% of the purchase price in case of a flaw occurred in the first year after the date of purchase and delivery, or a replacing article at 50% of the purchase price or a refund at the value of 50% of the retail value in case of a flaw occurred in the second year after the date of purchase and delivery.

• **Not covered by warranty:**

- all direct or indirect damage caused after delivery to the article (e.g. by oxidation, shocks, falls, dust, dirt, humidity...), and by the article, as well as its contents (e.g. data loss), compensation for loss of profits;
- consumable goods, parts, or accessories that are subject to an aging process during normal use, such as batteries (rechargeable, non-rechargeable, built-in or replaceable), lamps, rubber parts, drive belts... (unlimited list);
- flaws resulting from fire, water damage, lightning, accident, natural disaster, etc....;
- flaws caused deliberately, negligently, or resulting from improper handling, negligent maintenance, abusive use, or use contrary to the manufacturer's instructions;
- damage caused by a commercial, professional or collective use of the article (the warranty validity will be

reduced to six (6) months when the article is used professionally);

– damage resulting from an inappropriate packing and shipping of the article;

– all damage caused by modification, repair, or alteration performed by a third party without written permission by Velleman®.

- Articles to be repaired must be delivered to your Velleman® dealer, solidly packed (preferably in the original packaging), and be completed with the original receipt of purchase and a clear flaw description.

- Hint: In order to save on cost and time, please re-read the manual and check if the flaw is caused by obvious causes prior to presenting the article for repair.

Note that returning a non-defective article can also involve handling costs.

- Repairs occurring after warranty expiration are subject to shipping costs.
- The above conditions are without prejudice to all commercial warranties.

The above enumeration is subject to modification according to the article (see article's manual).

velleman®


Made in PRC

Imported by Velleman nv

Legen Heirweg 33, 9890 Gavere, Belgium

www.velleman.eu

Documents / Resources

 <p>LABPS3005SM</p> <p>100W 5V 2A 100W 5V 2A 100W 5V 2A 100W 5V 2A 100W 5V 2A</p> <p>CE</p>	<p>velleman LABPS3005SM Bench PSU [pdf] User Manual LABPS3005SM Bench PSU, LABPS3005SM, Bench PSU</p>
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References

-  [Velleman – Wholesaler and developer of electronics](#)