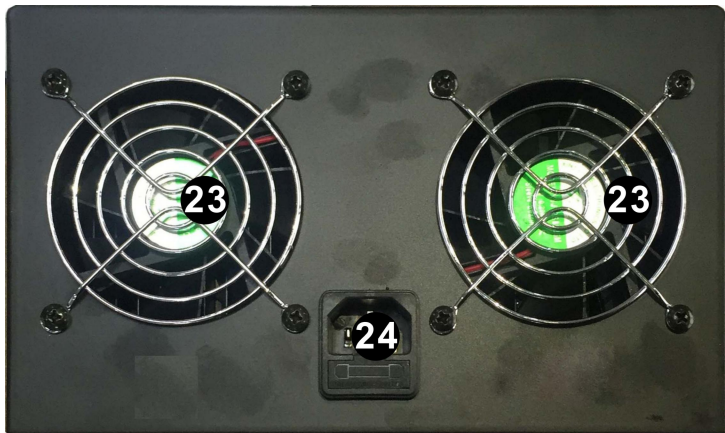
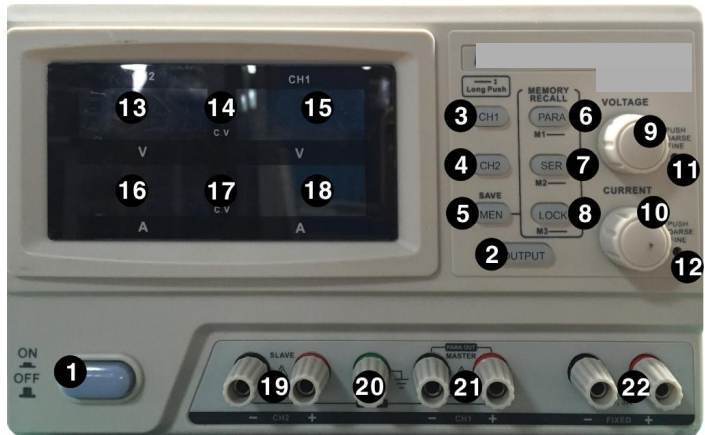




QJ3003GIII QJ3005GIII

Programmable DC laboratory DC Power Supply 0-30V with USB 2.0 Interface





USER MANUAL

1. 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.

2. 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" (±2.5 cm) in front of the openings. Place the device on a flat, heat resistant surface, do not place the device on carpets, fabrics...
	Always disconnect mains power when device 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 authorised dealer.

3. General Guidelines

- 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 unauthorised 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.

4. Features:

- Voltage and Current dual LED display
- Voltage and Current Coarse/Fine adjustment
- Protection mode: limited current output
- Parallel or serial connection detection to automatically switch outputs
- Stylish plexi-glass display panel
- Memory: 3 programmable memories

5. Description

The QJ3003GIII/QJ3005GIII is a high-precision, variable DC power supply. It can operate on either Constant Voltage (C.V.) or Constant Current (C.C.) mode. While on C.C. mode, the voltage is adjustable between 0 and 30 volts. Whereas the current is adjustable between 0 and 5 amps when on C.V. mode. Dual channels output for convenient serial or parallel setup, the 3rd output is fixed output at 5 volts.

1	Power Switch: On/Off Switch	13	Channel 2 Voltage Display
2	Switch: Output On/Off	14	Channel 1 Status Indicator
3	CH1 Channel 1	15	Channel 1 Voltage Display
4	CH2 Channel 2	16	Channel 2 Current Display
5	Data Storage	17	Channel 2 Status Indicator
6	Parallel Connection Button	18	Channel 1 Current Display
7	Serial Connection Button	19	Channel 2 Output
8	Key Lock	20	Ground
9	Voltage Adjustment Knob	21	Channel 1 Output
10	Current Adjustment Knob	22	Fixed Output 5V @ 3A
11	Voltage Coarse/Fine Adjustment Indicator	23	Ventilation Fan
12	Current Coarse/Fine Adjustment Indicator	24	Power cord connector and fuse box

6. Operation

Turn on or off power source

1. Connect the included power cord to the backside **【15】** of the power supply, plug the other end into a properly grounded power outlet.



Always connect the equipment to a grounded power outlet.

2. Press the power button **【1】** to turn on the power supply, at this point there's no output voltage or current at the output terminals.
3. Press the power button **【1】** to turn off the power supply,

7. Operating on C.V. or C.C. mode

Adjust channel 1's voltage or current, press CH1 button 1st, the CH1 button will light up, and CH2 indicator light will be off.

Adjust channel 2's voltage or current, press CH2 button 1st, the CH2 indicator light will turn on, and CH1 indicator light will be off.

On constant voltage mode, a voltage can be set anywhere between 0 and 32 volts.

If the output current is over limit, then the power supply will automatically switch to C.C. mode.

On constant current mode, a current can be set anywhere between 0 and 3 amps.

By default, channel 1 will be automatically selected as the output when the power supply is switched on.

While the power supply is not on "MEN" or "LOCK" mode, press SER button, the serial connection is enable, the SER light will turn on, and parallel model is disabled. Connect the load to the power supply by following the indication "SER OUT" on the output terminals, adjust the voltage adjustment knob and current adjustment knob to their respective desired levels, now the output voltage "SER OUT" can be adjusted in a range from 0 to 60 volts, and the current is from 0 to 5 amps.

While the power supply is not on "MEN" or "LOCK" mode, press PARA button, the parallel connection is enabled, the PARA light will turn on, and the serial connection model is disabled. Connect the load to the power supply by following the indication "PARA OUT" on the output terminals, adjust the voltage adjustment knob and current adjustment knob to their respective desired levels, now the output voltage "PARA OUT" can be adjusted in a range from 0 to 32 volts, and the current is from 0 to 10 amps.

8. Set up pre-set voltage and current

Up to 3 pairs of voltage and current values can be preset by using M1-M3 memory buttons.

1. **Press Voltage/Current selection button**
2. **While all "PAPA", "SER", "LOCK", "OUTPUT" are disabled, press the "MEN" button to turn it on, now the "MEN" button will light up. To turn it off, press the "MEN" button again.**
3. **Press one of the memory buttons M1-M3 to save the preset voltage and current value, the unit will beep twice to confirm a successful save.**

9. Recall Pre-set Memory

While all "PAPA", "SER", "LOCK", "OUTPUT" are disabled, press and hold one of the memory buttons M1-M3 to recall the preset voltage and current value, release the button after 2 beeps, the recall is a success. Now the screen will display stored voltage and current value.

Load Connection

1. Connect the positive end of the load to the power supply's red (+) terminal [14]
2. Connect the negative end of the load to the power supply's black (-) terminal [12]
3. You may connect the positive terminal "+" or negative terminal "-" to the green ground terminal with a conductive wire to realize 0 potential at the ground, or the output will be floating between 0 potential and ground.

Quick Operation

Press ON/OFF button [1] to turn on the power supply, then press OUTPUT button [2] , the power supply is ready to work on C.V. mode. The screen will display the actual voltage and current value. If the output current is over the preset limit, the power supply will enter C.C. mode. Now the C.V. indicator light will turn off, and C.C. indicator light will turn on.

After operation, please ON/OFF button [1] to turn off the power supply.

MainForm

Mainform Main Functions

1. Voltage/Current output indication, it displays real-time output voltage and current value.
2. Voltage/Current setup, setup window displays the setup value of the voltage and current, the setup value can be adjusted by press
3. Voltage waveform displays voltage fluctuation over time.
4. Current waveform displays current fluctuation over time.



5. Cleaning and Maintenance

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

Replacing the Fuse

- 1 Only replace the fuse by a fuse of the same type and rating.
- 1 Before replacing the fuse, unplug the mains lead.
- 2 Wedge the fuse holder out of its housing with a flat-head screwdriver.
- 3 Remove the damaged fuse from its holder and replace with the exact same type of fuse.
- 4 Insert the fuse holder back in its place and reconnect power.

1. Technical Specifications:

Model Number	QJ3003GIII	QJ3005GIII
Output Voltage	220 V/ 50 Hz	
Fuse	T4A /250 V	T5A /250 V
Output Voltage	0-30 V 	0-30 V 
Output Current	0-3A	0-5 A
Power effect	C.V. $\leq 0.01\% + 3\text{ mV}$	C.V. $\leq 0.01\% + 3\text{ mV}$
	C.C. $\leq 0.1\% + 3\text{ mA}$	C.C. $\leq 0.1\% + 3\text{ mA}$
Load Effect	C.V. $\leq 0.01\% + 3\text{ mV}$	C.V. $\leq 0.01\% + 5\text{ mV}$
	C.C. $\leq 0.1\% + 5\text{ mA}$	C.C. $\leq 0.1\% + 10\text{ mA}$
Resolution	10 mV	10 mV
	1 mA	1 mA
Accuracy (25 ° C \pm 5 ° C)	$\leq 0.1\% + 20\text{ mV}$	$\leq 0.1\% + 20\text{ mV}$
	$\leq 0.1\% + 5\text{ mA}$	$\leq 0.1\% + 5\text{ mA}$
Ripple & Noise (20Hz-20MHz)	$\leq 1\text{ mV rms}$	$\leq 1\text{ mV rms}$
	$\leq 3\text{ mA rms}$	$\leq 3\text{ mA rms}$
Temperature Coefficient	$\leq 150\text{ ppm}$	$\leq 150\text{ ppm}$
	$\leq 150\text{ ppm}$	$\leq 150\text{ ppm}$
Readout Resolution	10 mV	10 mV
	1 mA	1 mA
Readout Temperature Coefficient	$\leq 100\text{ mms}$	$\leq 100\text{ mms}$
	$\leq 100\text{mms}$	$\leq 100\text{mms}$
Parallel Load Regulation	$\leq 0.1\%+0.1\text{V}$	$\leq 0.1\%+0.1\text{V}$
Serial Load Regulation	$\leq 0.1\%+0.1\text{V}$	$\leq 0.1\%+0.1\text{V}$
Dimensions	220(W) x 145(H) x 310(D) mm	220(W) x 145(H) x 310(D) mm
Weight	6.5Kg	7Kg
Fixed Output	5V/3A	