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› [Kungber](#) /

› [Kungber 60V 5A DC Power Supply User Manual](#)

## Kungber SPS605

# Kungber 60V 5A DC Power Supply User Manual

Brand: Kungber | Model: SPS605

## 1. INTRODUCTION

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This user manual provides detailed instructions for the Kungber 60V 5A Adjustable Switching Regulated DC Bench Power Supply. It covers product features, safety guidelines, setup procedures, operating instructions, maintenance tips, troubleshooting, and technical specifications to help you effectively and safely use your device.



Figure 1: Kungber 60V 5A DC Power Supply Front View

## 2. SAFETY INFORMATION

To ensure safe operation and prevent damage, please observe the following safety precautions:

- Always ensure proper grounding of the device.
- The unit incorporates leakage protection to prevent electrical hazards.
- Thermal protection is integrated; the intelligent cooling fan activates when the operating temperature exceeds 122°F/50°C.
- Voltage overload protection prevents damage from excessive input voltage.
- Power overload protection safeguards against drawing too much power.
- Short-circuit protection automatically halts output in case of a short circuit.
- Do not operate the device in wet or damp conditions.
- Ensure adequate ventilation around the power supply.



Figure 2: Intelligent Cooling System

### 3. PRODUCT FEATURES

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- **Intelligent Charging and Safety Detection:** Features intelligent charging mode with real-time display of charging power (Ah). Automatically stops charging when the battery is full and includes built-in detection for incorrect connections.
- **Overcurrent Detection Alarm (OCP):** Easily activated with the 'OCP' button. Detects short circuits and overcurrents, triggering an alarm and stopping output to protect connected devices.
- **Compact and Versatile Application:** Lightweight (less than 2.3 lb) and compact (7.59 x 3.35 x 6.1 inches), suitable for laboratory, school, repair, electrolyzation, electroplate, brush plating, lamp test, aging testing, battery charge, and home DIY.
- **18W USB Ports:** Includes high-speed 18W USB-A and USB-C ports for efficient device charging.
- **High Precision 4-Digits LED Display:** Offers high accuracy with a resolution of 0.01V and 0.01A, ensuring precise voltage and current readings.
- **Precision Encoder Adjustment Knobs:** Provides accurate control with coarse and fine adjustment knobs for setting voltage and current values.



Figure 3: Front Panel and Display

## 4. SETUP

### 4.1 Unpacking and Inspection

Carefully remove the DC Power Supply from its packaging. Verify that all components are present and undamaged:

- 1 x Kungber Variable DC Power Supply
- 1 set of Output Power Cords (with alligator clips)
- 1 x Input Power Cord
- 1 x User Manual (this document)

### 4.2 Power Connection

1. Ensure the power switch on the rear panel is in the OFF position.

2. Connect the provided input power cord to the AC inlet on the rear of the power supply.
3. Plug the other end of the input power cord into a grounded AC power outlet (115 Volts).
4. Verify the fuse is correctly seated in its holder on the rear panel.



Figure 4: Rear Panel with Fuse Holder

### 4.3 Output Connection

Connect the output power cords to the binding posts on the front panel:

- Connect the red lead to the red (+) positive terminal.
- Connect the black lead to the black (-) negative terminal.
- Connect the green lead to the green (GND) ground terminal if required for your application.
- Connect the alligator clips to your load device, ensuring correct polarity.

## 5. OPERATING INSTRUCTIONS

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### 5.1 Powering On/Off

Flip the power switch on the rear panel to the ON position. The LED display will illuminate.

### 5.2 Adjusting Voltage and Current

The power supply features coarse and fine adjustment knobs for precise control:

- **V-COARSE / V-FINE:** Adjusts the output voltage. Use V-COARSE for large changes and V-FINE for precise adjustments (setting the last two decimal places).
- **A-COARSE / A-FINE:** Adjusts the output current limit. Use A-COARSE for large changes and A-FINE for precise adjustments.
- **Encoder Knob Function:** Press the voltage or current knob to switch the number of digits being adjusted. Rotate the knob to set the value.

# Precision Encoder Adjustment Knob



Accurate Control



Better User Experience



Enhanced Durability



Press the knob to switch the number of digits



Rotate the knob to set the value



Notice:

Coarse adjustment knob for setting the first two values.  
Fine adjustment knob for setting the last two values.

Figure 5: Voltage and Current Adjustment

## 5.3 Overcurrent Protection (OCP)

To activate OCP, press the 'OCP' button on the front panel. When activated, the power supply will detect short circuits or overcurrents, trigger an alarm, and halt output to protect your connected device.

# OverCurrent Detection Alarm

Instantly detects short circuits or overcurrent, halting output for load device protection and triggers an alarm



Figure 6: OCP Activation and Function

## 5.4 Intelligent Charging Mode

For battery charging, connect the battery to the output terminals. The power supply will display real-time charging power (Ah). It automatically stops charging when the battery is full and detects incorrect connections.

# Intelligent Charging Mode For Battery



Figure 7: Battery Charging Interface

## 5.5 Using USB Charging Ports

The unit includes USB-A and USB-C ports for quick charging devices. Simply connect your device to the appropriate USB port on the front panel.

# Fast Charging Ports

Quickly charge your devices with high-speed 18W output for efficient charging



Figure 8: USB Charging Ports

## 5.6 Common Applications

This power supply is suitable for a wide range of applications, including but not limited to:

- Circuit board testing and development.
- Automotive troubleshooting and diagnostics.
- LiFePO4 cell charging and balancing.
- Titanium anodizing.
- General laboratory and DIY electronics projects.

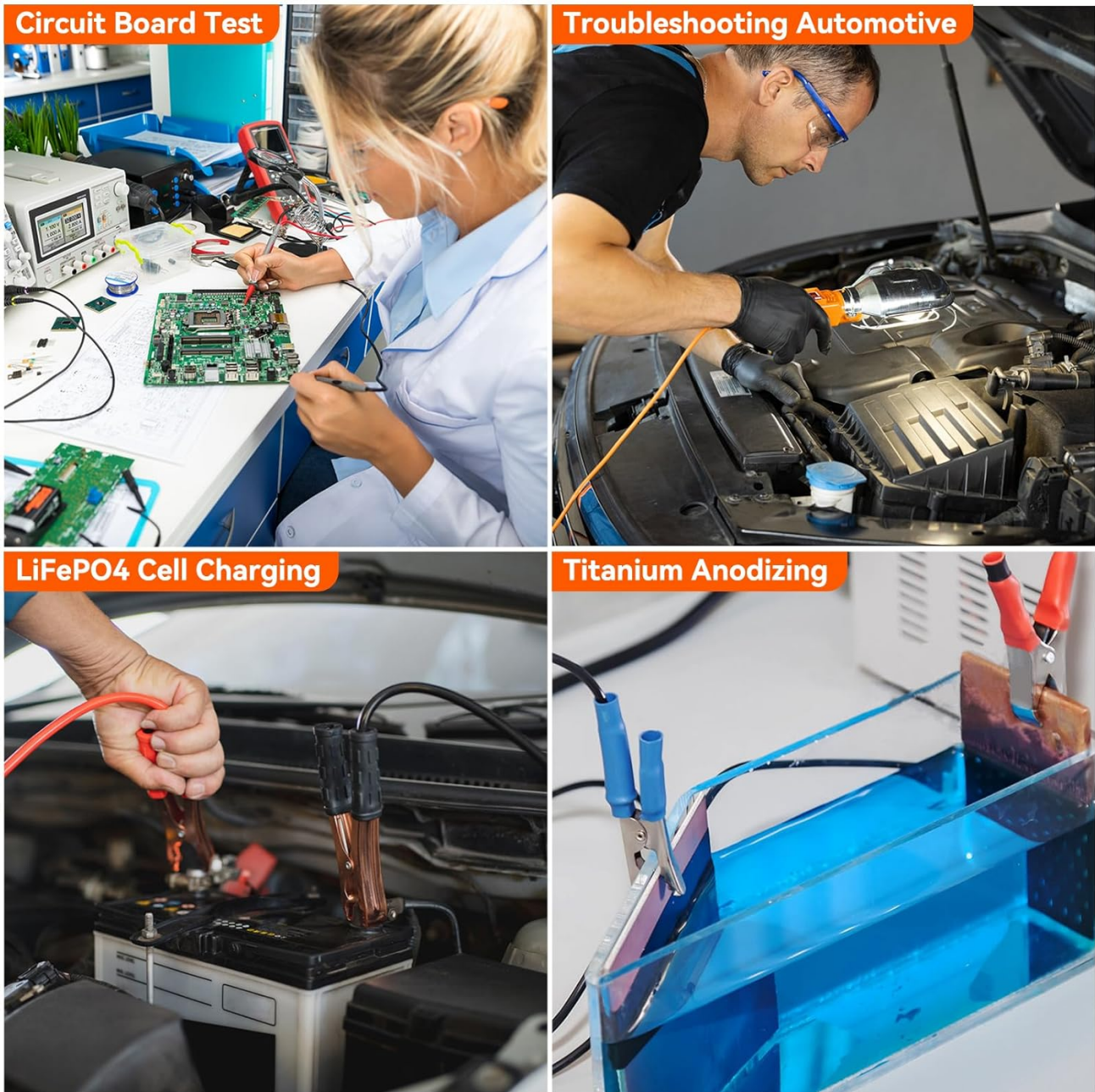


Figure 9: Example Applications

## 6. MAINTENANCE

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To ensure the longevity and optimal performance of your power supply:

- Keep the unit clean and free from dust. Use a soft, dry cloth for cleaning. Do not use liquid cleaners.
- Ensure the ventilation openings on the sides and rear of the unit are not obstructed to allow proper airflow for the intelligent cooling fan.
- Store the power supply in a dry, cool environment when not in use.
- Regularly inspect the input and output power cords for any signs of damage.

## 7. TROUBLESHOOTING

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If you encounter issues with your DC Power Supply, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power/display off	Power cord disconnected, power switch off, blown fuse.	Check power cord connection, ensure power switch is ON, inspect and replace fuse if necessary.
No output voltage/current	Output terminals not connected, OCP activated, current limit set too low.	Ensure output cords are securely connected. Check if OCP is triggered (alarm/display). Increase current limit using A-COARSE/A-FINE knobs.
Inaccurate readings	Loose connections, external interference.	Ensure all connections are secure. Minimize external electromagnetic interference. For precise measurements, use a calibrated multimeter.
Unit overheating	Obstructed ventilation, prolonged high load.	Ensure ventilation openings are clear. Reduce load or allow unit to cool down. The intelligent cooling fan should activate.

If the problem persists, please contact Kungber Technical Support.

## 8. SPECIFICATIONS

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Attribute	Value
Product Dimensions	8.67 x 3.35 x 5.9 inches
Item Model Number	SPS605
Date First Available	July 23, 2020
Manufacturer	Kungber
Brand	Kungber
Color	White
Item Weight	2.3 Pounds
Connector Type	USB Type A
Input Voltage	115 Volts

## 9. WARRANTY AND SUPPORT

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Kungber offers a lifetime warranty for this product, ensuring long-term reliability and customer satisfaction.

For technical assistance, troubleshooting, or warranty claims, please contact Kungber Technical Support. Refer to the contact information provided with your purchase or visit the official Kungber website.