

SPS-8041 SWITCHED MODE POWER SUPPLY

USER'S MANUAL

INTRODUCTION

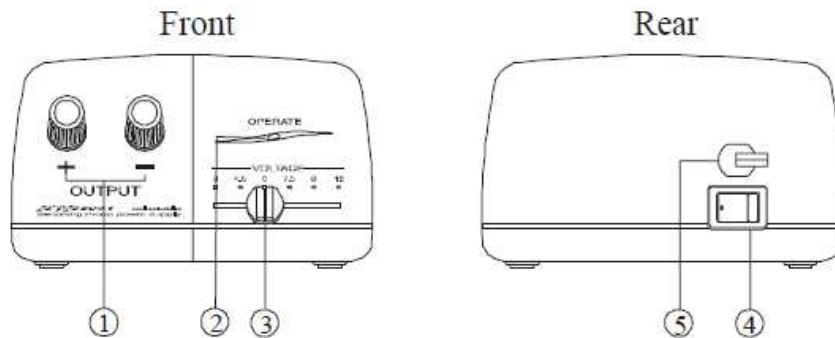
The SPS-8041 Switched Mode DC Power Supply provides high power output for its small size and weight. It is suitable for a variety of applications as it provides 3V, 4.5V, 6V, 7.5V, 9V and 12V selectable DC output. The SPS-8041V provides a continuously variable output (pot adjustable) between 6 and 12 Volts.

Please read these instructions carefully and follow them to prevent abuse or misuse of the power supply. These instructions must be kept for future reference.

FEATURES

1. Lightweight and small in size: This switch mode power supply has the advantage of small size and weight in comparison to linear mode power supplies.
2. High Efficiency: This unit operates with efficiency greater than 80% under normal conditions.
3. Overload Protection: Current control circuitry (hic-cup mode) is used to prevent overloading of the power supply. The power indicator will dim when overload conditions occur.
4. Output voltage is adjustable 3V, 4.5V, 6V, 7.5V, 9V, 12V DC.

PANEL DESCRIPTION



1. Output Terminals
2. Power On Indicator
3. Output Voltage Selector with lock
4. On/Off Switch
5. Power Cord

INSTALLATION

1. **DO NOT** place the unit in dusty or highly humid locations. **DO NOT** place the unit in direct sun-light or locations subjected to high temperatures.
2. Place the unit in a location which provides unobstructed air circulation.
3. **DO NOT** place the unit close to TV sets or CRT monitors.
4. The unit is for **Indoor Use only**.

CAUTION

1. **DO NOT** use the unit for powering devices that require higher current than the maximum - otherwise damage may occur to the unit.
2. **DO NOT** use the unit for lamps or motorized equipment which requires higher current than the maximum at startup. Damage to the unit may occur.
3. **DO NOT** replace the fuse and operate the unit before rectifying the problem that caused it to fail. Always replace the fuse with the same rated type.
4. If the external cable or cord of this unit is damaged, it must be replaced by the same or equivalent unit from the manufacturer or service agent.

SAFETY PRECAUTIONS

1. **NEVER** remove the cover of the power supply with the AC power connected. Allow the unit to cool before opening the cover. Some components may burn your hand in the event of a component failure. Only qualified personal should open the cover.
2. **NEVER** touch the unit with wet hands or allow it to become wet.
3. **NEVER** operate the unit if foreign materials such as metallic objects, liquids or other debris have fallen inside. Return to the manufacturer or dealer for checking and repair.
4. **NEVER** operate the unit if it has been damaged. The voltage regulation circuitry may have been disabled, resulting in high voltage and damage to your equipment.
5. **NEVER** allow foreign objects to come into contact with the DC output terminals.
6. **NEVER** block the cooling vents on the sides and top of the power supply.
7. **NEVER** adjust the output voltage whilst connected to your equipment. Switch off first!
8. **ONLY** connect to the AC mains outlet when in use, at all other times disconnect the power supply from the AC mains outlet.

CONNECTION AND OPERATION

1. Make sure the input AC power source is as per the label before plugging in the unit.
2. Adjust the output voltage to match that of your equipment by pressing the lock button and moving the lever left or right. Warning, high voltages may appear on the output when switching voltages. Always turn off the power supply whilst selecting the voltage. With voltage sensitive equipment, always check the output using a DMM or Voltmeter.
3. Connect your equipment to the unit. Positive polarity to red (+) and negative polarity to black (-).
4. When ready, turn ON the power supply and then turn ON your equipment.
5. When finished, turn OFF your equipment and then turn OFF the power supply.

Note: When using a DC output plug, check that the input to your device is centre positive or centre negative. If centre positive align 'TIP' with '+' on the plug, if negative align the '-' with 'TIP'. Always connect the red lead to the '+' terminal and the black lead to the '-' terminal on the power supply.

SPECIFICATIONS*

OUTPUT VOLTAGE:	3V, 4.5V, 6V, 7.5V, 9V, 12V DC (selectable)
OUTPUT CURRENT:	0-3A (5A peak)
RIPPLE AND NOISE:	60mV p-p
LINE REGULATION:	60mV ($\pm 5\%$ variation)
LOAD REGULATION:	300mV (0~100% load)
POWER SOURCE:	200-240VAC/50Hz~
COOLING SYSTEM:	Natural convection
PROTECTION:	Output over-load and short-circuit protection
DIMENSIONS (W x H x D):	90 x 55 x 135 mm
CE APPROVALS:	EN60950, EN55022
ACCESSORIES:	Terminal leads, 7 x DC output plugs, crocodile clips
WEIGHT:	Approx. 450g

NOTE:

The SPS-8041V version provides a variable voltage between 6V and 12V using a slide potentiometer.

*Specifications subject to change without notice.