



## SPA-8230 (13.8V) Switch Mode Power Supply

### USER'S MANUAL / SPECIFICATONS

#### INTRODUCTION

This fixed voltage switching mode power supply is designed with high RFI stability especially for DC operated radio equipment. It is also suitable for a variety of applications that need a clean DC source.

The concealed trimmer allows fine tuning of output voltage range of 13.3 ~ 14.5V.

Constant current circuitry is used for overload, short circuit and over temperature protection. Output voltage will reduce to a safety value when any of the faults occur and the DC output ON indicator will turn off. This power supply also has Over Voltage Protection to prevent your connected equipment from damage by abnormal high output voltage.

Please read through this manual and pay special attention to the caution and safety precautions. Keep this manual in an easy to find place for future reference.

#### CAUTIONS

DO NOT use this power supply for high inductive load such as solenoid or motorized equipment because of the inductive kick back from the output may damage the power supply.

DO NOT operate power supply immediately with a newly replaced fuse before the fault has been found and rectified. Make sure to use the same rating and type as the original fuse.

#### SAFETY PRECAUTIONS

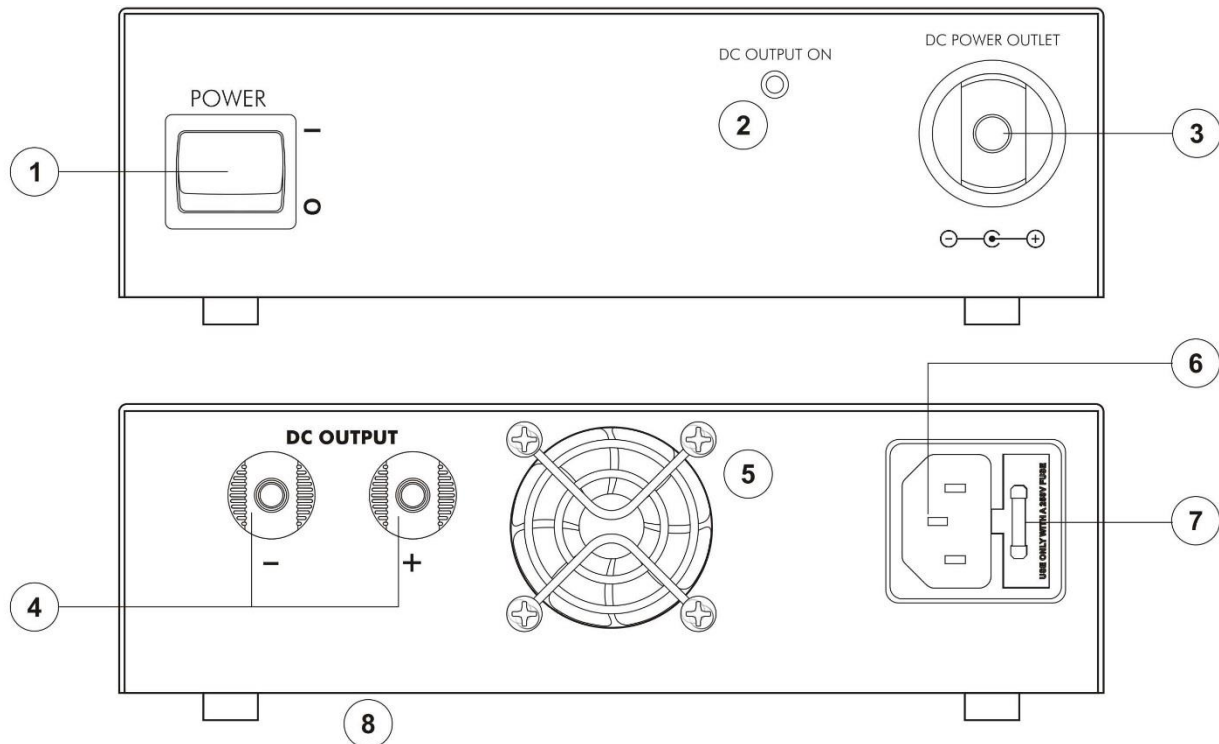
Never remove the casing when the power supply is connected to AC or load.

Never touch the unit when your hands are wet.

Never block any of the grille openings or allow foreign objects inside.

Must adhere to all local electrical authority rules & use a mains AC 3- pin socket with effective grounding.

#### PANEL DESCRIPTION



1. On/Off Switch with Light
3. Cigar Style Socket (10A Max.)
5. Cooling Fan (Variable speed)
7. AC Fuse Holder (Slide out Receptacle)

2. DC Output ON Indicator
4. Main DC Output Binding Post
6. AC Power Input Connector
8. Voltage Adj port, underside.

(Range: 13.3-14.5V)

## INSTALLATION

The unit is fitted with Rubber feet for benchtop mounting, Or you can fit the supplied side brackets for Under bench applications.

1. This power supply is designed for indoor use only. Place or mount the unit in a well ventilated location and allow at least 50mm (2 in.) space on both sides and the back to allow sufficient fan cooling.
2. Check for the correct input AC voltage with the rating label on the power supply
3. Turn on the power supply for a few minutes, the power switch (1) should be lit and the indicator (2) should be in green.
4. Turn off the power supply and connect the equipment with correct polarity.
5. Turn on the power supply first, then turn on the equipment.
6. When the operation is finished, turn off the equipment first, then turn off the power supply.

## FINE TUNING THE OUTPUT VOLTAGE (13.3 ~14.5V)

This regulated power supply has been factory preset at 13.8VDC output. However, If you need to alter the Preset Voltage, Please refer to the following procedure.

Bottom View

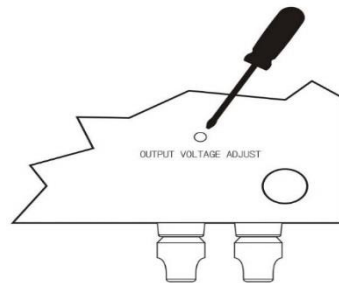


Fig.1

1. Let the power supply warm up for about 15 min.
2. Turn the power supply over with the bottom up and connect a digital multi-meter (DMM) with at least 2 decimal read out to the main output terminal (4).
3. Locate the fine tune access hole (8) on the bottom as shown in Fig.1.
4. Insert a slim flat head screw driver to get to the trimmer as shown in Fig.1.
5. Carefully and slowly turn the screw driver clockwise or anti-clockwise while keeping an eye on the DMM for your desired voltage setting.
6. Measure again the output voltage to re-confirm your new setting after returning the power supply to its normal operation position.

## SPECIFICATIONS

	SPA-8230
OUTPUT CURRENT Total:	25A(max) 23A (cont)
OUTPUT VOLTAGE:	Preset (Fixed) 13.8Vdc +/-0.5V
Main Output Posts (rear):	23A Continuous, 25A Max. (1 min. 50% duty cycle)
Front Socket:	10A Continuous, 10A Max.
FUSE RATINGS; Ac Input Fuse:	T4AL (4amp 250V)
Dc Output:	n/a
RIPPLE AND NOISE:	≤50mVp-p, 5mV
LINE REGULATION:	≤50mV (±10% Variation)
LOAD REGULATION:	≤100mV (0~100% Load)
POWER SOURCE:	240Vac/50Hz
COOLING SYSTEM	Forced air cooling by variable speed cooling fan
DIMENSION (W×H×D):	180 × 65 × 220 (mm)
WEIGHT:	Approx. 1.7Kg