SPA-8330 Fixed Voltage
Switching Mode Power Supply

USER'S MANUAL

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 10 ~ 15V.

Constant current circuitry is used for overload, short circuit and over temperature protection. Output voltage and current would drop to a safety value when any of the faults occur and the red indicator will turn ON. 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.
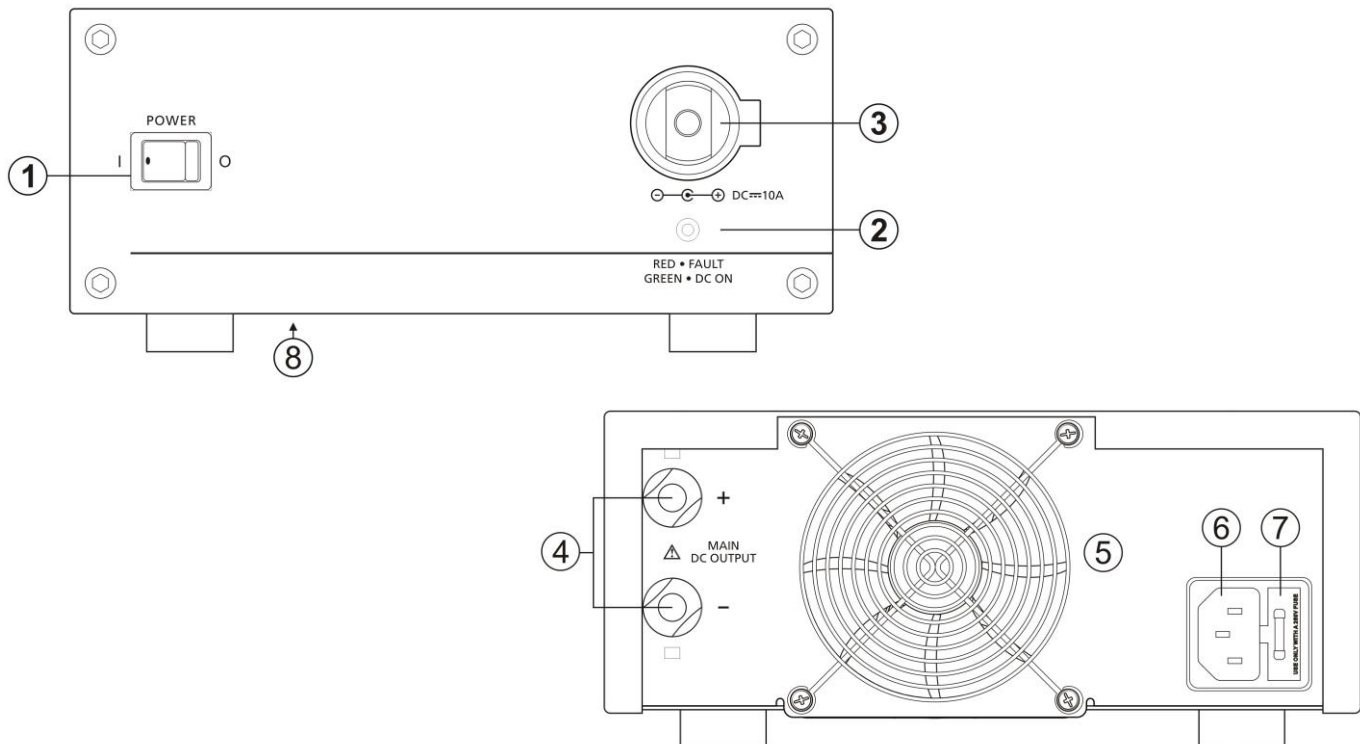
SAFETY PRECAUTIONS

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 object to get inside.
Must use a mains AC 3pin socket with effective grounding.

PANEL DESCRIPTION

1. On/Off Switch
2. Indicator: DC ON (Green)/ Fault (Red)
3. Cigar Socket with center positive (10A Max.)
4. Main DC Output Binding Post
5. Cooling Fan (Variable speed)
6. AC Power Input Connector
7. Cover Fuse Holder
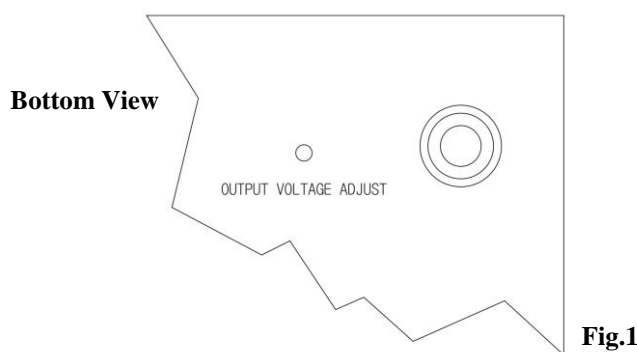8. Fine tune access port at the base plate. **(Range: 10-15V)**

INSTALLATION

1. This power supply is designed for indoor use only, put the unit in a well ventilated place and allow at least 50mm (2 in.) space on two 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

   Make sure your mains plug is of 3 pin version and the ground pin is effective as the grounding of the power supply will prevent electrical shock caused by leakage.

3. Turn ON the power supply for a few minutes, 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 (10-15V)

This regulated power supply has been factory preset at a stable DC output.

Rarely you need to do any fine tuning under normal operation .

However, should the need for specific precise output voltage other than the preset voltage is required , refer to the following procedure.

Bottom View

OUTPUT VOLTAGE ADJUST

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 - 8330
OUTPUT VOLTAGE:	Fixed 13.8Vdc +/-0.5V
OUTPUT CURRENT:	
Main Output Post	33A Continuous, 36A Max. (30sec ON/ 30sec OFF)
Main Output Post + Cigar Socket	33A Continuous, 36A Max. (30sec ON/ 30sec OFF)
RIPPLE AND NOISE:	$\leq$50mVp-p, 5mV$_{r.m.s,}$
LINE REGULATION:	$\leq$20mV ($\pm$10% Variation)
LOAD REGULATION:	$\leq$50mV (10~100% Load)
POWER SOURCE:	110-240Vac/50-60Hz~
COOLING SYSTEM	Forced air cooling by variable speed cooling fan
DIMENSION (W×H×D):	200 × 80 × 213 (mm) / 7.9 x 3.2 x 8.4 inch
WEIGHT:	Approx. 2.7Kg / Approx. 6Lbs.