DIAMOND

GZV4000

Switching Mode DC Power Supply • 120VAC Version

INTRODUCTION

The GZV4000 Switching Mode DC Power Supply provides high power output with its small size and light weight. It is suitable for a variety of uses, especially for DC operated radio equipment source from an AC outlet and providing variable voltages of 5V to 15V and up to 40A continuous operation.

Please read through these operation instructions carefully and follow the instructions to prevent abuse or misuse.

Voltage Type:	120VAC
Output Voltage:	5-15V
Output Current:	40A Max.
Ripple and Noise:	8mV _{r.m.s}
Line Regulation:	180mV (±5% Variation)
Load Regulation:	180mV (0-100% Load)
Headphone Jack:	3.5mm
Meter Type:	Precision Analog Meter
Input Fuse:	12A
Dimensions (inches):	8.25W x 4.25H x 11.75D
Weight:	6.5 lbs. (approx.)

SPECIFICATIONS

SAFETY PRECAUTIONS

MUST read through the following precautions carefully to prevent from electric shock.

- 1. NEVER remove the metal cover of the power supply while AC power is connected.
- 2. NEVER touch the unit when your hands are wet.
- 3. NEVER operate the unit if foreign materials such as metallic objects, water, or other debris have fallen inside. Contact your dealer for assessment and repair.
- 4. NEVER operate the unit that has been damaged, as the voltage regulation circuitry may have been disabled. The resulting high voltage could damage your equipment.
- 5. NEVER allow foreign objects to touch the DC Power Output Terminals.
- 6. If you have the need to inspect the interior of the unit, first let it cool down completely.

FEATURES

1. Lightweight and Small Size

Switching mode power supply has the advantages of being lightweight and small in size. Comparing with linear mode power that has the same power output, it is much lighter and smaller.

2. High Efficiency

The unit is operated with efficiency over 80%.

3. Overload Protection

The current foldback circuitry is designed to prevent from overload. The overload indicator will be lit up when the unit is overloaded.

4. Overheating Protection

The overheating circuitry is functioned when the unit reaches a certain high temperature to prevent the unit from damage. When the circuitry is functioned, the output voltage and current will drop down to a safe value and the overload indicator will light.

- 5. Insitivity to RFI
- 6. Variable Voltage Output

The variable range of output voltages are from 5V to 15V.

7. Multiple DC Output Connections

The unit has a pair of 6A easy snap on output terminals, a pair of full power screw-on output terminals and a cigar-lighter type output jack.

CAUTION

- 1. DO NOT use the unit for any equipment requiring higher current input than the designed value.
- 2. DO NOT use the unit for the lamps or motorized equipment, which have high inrush currents.

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INSTALLATION

- 1. Ground the unit to prevent electric shock caused by leakage or lightning.
- 2. DO NOT place the unit in high humidity, dusty and/or high temperature location.
- 3. Place the unit to allow free air cirulation.
- 4. DO NOT place the unit close to a TV set or CRT monitor.
- 5. Put the unit horizontally for accurate meter readings.

CONNECTION AND OPERATION

- 1. Turn ON the unit and adjust the output voltage to match with the input voltage of the equipment. Turn off the GZV4000.
- 2. Connect the equipment to the unit. Red (+) is connected to the positive polarity input of the equipment and Black (-) is connected to the negative polarity input of the equipment.
- 3. First turn ON the unit and then turn the equipment ON.
- 4. When an operation is finished, turn off the equipment first and then turn OFF the GZV4000.

PANEL DESCRIPTION

- 1. POWER SWITCH: Turn ON/OFF the unit.
- 2. OUTPUT METER: Indicate the voltage or current output.
- 3. METER SELECTOR: Select the meter to indicate the voltage or current.
- 4. POWER INDICATOR: Lights up when the unit is turned on.
- 5. OVERLOAD INDICATOR: Lights up under the condition of overload or overheating.
- 6. VOLTAGE CONTROL KNOB: Controls the output voltage.
- 7. 6A SNAP-ON OUTPUT TERMINAL
- 8. CIGAR-LIGHTER OUTPUT JACK
- 9. SPEAKER

10. SCREW-ON OUTPUT TERMINAL

11. FUSE

12. GROUNDING

13. COOLING FAN AIR INLET

- 14. POWER CORD
- **15. HEADPHONE JACK**



