

- Do not store the meter in a place of explosive, inflammable substances
- Do not modify the equipment in any way
- Opening the equipment and service- and repair work must only be performed by qualified service personnel
- The instrument must be set so that the power plug can be removed from the socket easily.
- **Measuring instruments don't belong to children hands**

## 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 for PeakTech 6100.

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 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.

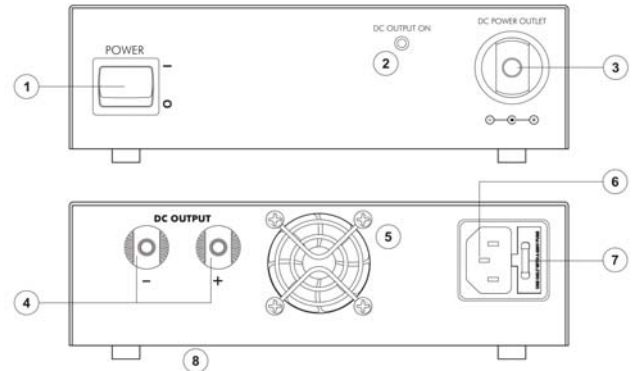
Keep this manual in an easy to find place for future reference.

## 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.

## PANEL DESCRIPTION



1. On/Off Switch with Light
2. DC Output ON Indicator
3. DC POWER OUTPUT
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 : 13.3-14.5V for PeakTech 6100)

## **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
2. Check for the correct input AC voltage with the rating label on the power supply cooling.

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 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 for PeakTech 6100**

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

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

way of the ventilation slots

- Do not place water-filled containers on the equipment (danger of short-circuit in case of know-over the container)
- To avoid electrical shock, do nit operate this product in wet or damp conditions. Conduct measuring works only in dry clothing and rubber shoes, i. e. on isolating mats
- Never touch the tips of the test leads or probe
- Comply with warning labels and other info on the equipment
- Do not subject the equipment to direct sunlight or extreme temperatures, humidity or dampness
- Do not subject the equipment to shocks or strong vibrations
- Do not operate the equipment near strong magnetic fields (motors, transformers etc.)
- Keep hot soldering irons or guns away from the equipment
- Allow the equipment to stabilise at room temperature before taking up measurement (important for exact measurements)
- Periodically wipe the cabinet with a damp cloth and mid detergent. Do not use abrasives or solvents
- The meter is for indoor use only.
- Do not operate the meter before the cabinet has been closed and screwed safely as terminal can carry voltage.

## Safety Precautions

This product complies with the requirements of the following European Community Directives: 89/336/EC (Electromagnetic Compatibility) and 73/23/EEC (Low Voltage) as amended by 93/68/EC (CE-marking).

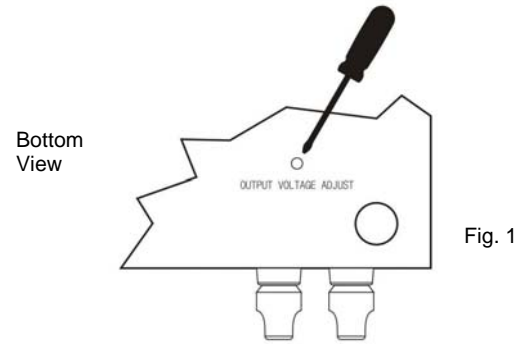
To ensure safe operation of the equipment and eliminate the danger of serious injury due to short-circuits (arcing), the following safety precautions must be observed.

Damages resulting from failure to observe the safety precautions are exempt from any legal claims whatever.

- Prior to connection of the equipment to the main outlet, check that the available mains voltage corresponds to the voltage setting of the equipment.
- Connect the main plugs of the equipment only to a mains outlet with earth connection.
- Do not exceed the maximum permissible input rating
- Replace a defective fuse only with a fuse of the original rating. **Never** short-circuit fuse or fuse holding
- Disconnect test leads or probe from the measuring circuit before switching models or functions.
- Check the test leads and probes for faulty insulation or bare wires before connection to the equipment
- Do not cover the ventilation slots of the cabinet to ensure that the air is able to circulate freely inside
- Do not insert metal objects into the equipment by

- 2 -

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



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.

- 7 -

## SPECIFICATIONS

|                                     |   |
|-------------------------------------|---|
| OUTPUT VOLTAGE:                     | Fixed 13.8V DC +/-0.5V                              |
| OUTPUT CURRENT:<br>Main Output Post | 23A Continuous , 25A Max<br>(1 min. 50% duty cycle) |
| RIPPLE AND NOISE:                   | ≤50mVp-p, 5mVr.m.s,                                 |
| LINE REGULATION:                    | ≤50mV (±10% Variation)                              |
| LOAD REGULATION:                    | ≤100mV (0~100% Load)                                |
| POWER SOURCE:                       | 115/230V AC, 50/60Hz<br>selectable internal         |
| COOLING SYSTEM                      | Forced air cooling by variable<br>speed cooling fan |
| Dimensions (WxHxD):                 | 181 x 63 x 190 mm                                   |
| WEIGHT:                             | Approx. 1.7Kg / Approx. 3.7Lbs.                     |

All rights, also for translation, reprinting and copy of this manual or parts are reserved.

Reproduction of all kinds (photocopy, microfilm or other) only by written permission of the publisher.

This manual considers the latest technical knowing. Technical changings which are in the interest of progress reserved.

We herewith confirm, that the units are calibrated by the factory according to the specifications as per the technical specifications. We recommend to calibrate the unit again, after one year.

© PeakTech® 07/2009 /St



## Fixed Voltage Switching Mode Power Supply with Cigar Socket

### Operation Manual



**PEWA**  
Messtechnik GmbH  
  
Weidenweg 21  
58239 Schwerte  
  
Tel.: 02304-96109-0  
Fax: 02304-96109-88  
E-Mail: info@pewa.de  
Homepage : www.pewa .de