POWER SUPPLY for e/m Apparatus

N99-B10-7350-06
The power supply ESR-DS 1337 Discharge Tube Power Supply is a very useful & unique Power Supply which provides the High Voltage (10 to 500V & 0 to 80V) & Low Voltage (0 to 20V DC, 5 Amps.) along with the DIGITAL DISPLAY for Voltage & Current. It also provides the AC Voltage selectable from 1 to 6V AC, 2 Amps. All the outputs provided are independent of each other and can be used simultaneously.

The DC voltage 10 to 500V (adjustable) & 0 to 80V (adjustable) are displayed on the DIGITAL DISPLAY by selecting with the help of Voltage Monitor Selector Switch.

The Low Voltage 0 to 20V, 5 Amps. DC output voltage is displayed on the DIGITAL DISPLAY. The Voltage or Current Display is selected with the help of A/V selector switch.

The 6V AC, 2Amp. is also provided on four different Sockets, The A/C Voltage can be selected from 1 to 6V in the step of 1V, out of these four sockets.

The 2 Amps. AC Overload Cut-Off Resettable Switch is provided in series with the AC O/P for the overload protection. Once the AC Current exceeds the 2 Amps. The switch will be cut off & O/P will be reduced to Zero. This switch has to be reset to reactivate the AC Output voltage.

Operation:

1. Select the mains input with the help of slide switch provided on the rear panel 120V(50/60Hz) or 240V(50/60Hz).
2. Connect the power chord to the mains outlet after selecting the desired input.
3. Flip the ON/OFF (I & O) switch to the (I) ON position. The ON position of the Power Supply is indicated by the Neon light.

WARM-UP PERIOD :-
For accurate, outputs & Digital Displays of voltage & current the warm up period about the 15 minutes is required.
4. Over all the supply has four outputs, out of which three are the DC outputs & one is the Low Voltage AC 6.0V, 2 Amps.

**Technical Data:**

- **Fuse Rating:** F 3.15A/250V
- **Mains Input:** Selectable 120(50/60Hz) or 240(50/60Hz)
- **Max. Output Wattage:** 140 watt. max.

**DC:**

- **Voltage:** 0-20V (Regulated), 5 Amps. Max. adjustable from 0 to +20V the output voltage is displayed on the DPM, keeping A/V selector switch in the V (Voltage Position). To know the current, set the selector switch to A (Amps) position.
- **10 - 500V, 0.01 Amp. Max. adjustable from 10 to +500V.** The output voltage is displayed on the DPM keeping the selector switch towards 500V markings.
- **0-80V, 0.01 Amp. Max. adjustable from 0 to +80V.** The output voltages is displayed on the DPM keeping the selector switch towards the 80V markings.

**IMPORTANT NOTE:-**

While using H-Voltages 10-500V & 0-80V, please note down the following instruction very carefully.

1. Always turn the voltage controls knobs (Grey for 10-500V & Yellow for 0-80V) fully anti-clockwise to make the O/P voltages 000V.
2. Connect the required Load / Under Test apparatus at the appropriate O/P sockets.
3. Then slowly turn the voltage control knobs in the clockwise direction to set the desired O/P voltage which is also displayed on the Digital Voltmeter.
4. Before removing the load / apparatus from the O/P sockets first of all always make the O/P Voltage 000, only then remove the connections from O/P sockets, for the safe guard of DPM / equipment to avoid any electric shock due to HV DC available at the O/P Sockets.

**AC**

- **Voltages** 6V (Max.) selectable from 1 to 6V as per the markings.
- **Current** 2 Amps. Max.

**Caution:**

1. Replace the fuse as per the specified rating & type.
2. Do not over-load more than 5 Amps.
3. In case of DC (0 to + 20V) O/P voltage, GREEN LED indicates that the supply is in the normal condition & when the GREEN LED changes to the RED, it means that
supply is overloaded. In that case reduce the load Connected at the DC Output Sockets, so that the LED changes from RED to GREEN.

Cleaning Instruction:
For cleaning the unit / Power Supply outwardly only use the damped moist cloth soaked with clear water.

Intended Use of Equipment:
Mostly this equipment will be used in Educational Institutions, Schools for carrying out the experiments.

Environmental Conditions:
1. Pollution Degree: 2
2. Installation Category: 2
4. Maximum recommended humidity: 75% RH.
5. Electrical Supply: 120V/240V, ± 10%, 50/60Hz
6. Equipment is meant for Indoor use only.
7. Ambient Temperature: 30°C Max.

Equipment Installation:
Equipment to be installed by qualified trained personnel only.

Explanation of Symbols:

⚠️ Caution, Refer Instruction Manual.

⚡️ Danger High Voltage Present.

Ground Protective Earth.

Important:
Protection impairment if used in a manner not specified as per this manual.
No operator serviceable parts inside. Refer to qualified personnel for servicing repairs only.

MUST "DISCONNECT THE SUPPLY BEFORE SERVICING".