Order Code - 10912
Power Supply Trainer

The Power Supply Trainer is a comprehensive training system for the laboratories. It is useful in understanding the various concepts of a DC Power Supply. As we know that power supply is a very basic element of any electronic circuit or appliance. Starting from a mobile charger to a huge Computer system, each needs an efficient Power Supply. It is essential for an engineer to know basic concepts of Electronic Power Supplies. This trainer describes the Transformer, Rectifiers, Filters, Regulators, Role of Bleeder resistor, Load and Line regulation etc. While performing any experiment students have to connect the links by patch cords so it is very helpful for students to learn the inputs and outputs of different sections of any Power Supply circuit. It also consists of a demonstration bridge which is made up of LEDs for visualization of each part of an AC cycle.

Technical Specifications

Input	:	230 V ±10%, 50 Hz
Outputs		
Zener diode outputs	:	10 V, 5.6 V regulated
Regulators outputs	:	+12 V regulated -12 V regulated 1.8 to 17 V adjustable
Load	:	5 K variable with 1 K fixed resistance.
Bleeder Resistor	:	5 K variable with 1 K fixed resistance.
Astable Multivibrator	:	1 Hz, 14 Vpp
Transformer	:	Primary 0 to 220 V Secondary 18-0-18, 6-0-6 (500 mA)
Fuse	:	500 mA (slow blow, spare fuse is given in mains socket)

- ❒ Real time appearance of components
- ❒ Test points are provided in different sections of Power Supply
- ❒ Demonstration bridge
- ❒ Designed by considering all the safety standards
- ❒ Provided with a detailed Operating manual
- ❒ Low cost yet including many experiments

Experiments that can be performed

- ■ Study of Transformers and its working
- ■ Study of Two diode Full Wave Rectifier
- ■ Study of Full Wave Bridge Rectifier
- ■ Study of Demonstration Bridge
- ■ Study of Ripple Factor and to calculate Ripple Factor of Half Wave, Full Wave and Bridge Rectifier
- ■ Study of LC and ð filter
- ■ Study of Bleeder Resistor and its effect on load current
- ■ Study of Zener Diode as Regulator
- ■ Study of Positive Regulated Supply
- ■ Study of Negative Regulated Supply
- ■ Study of Adjustable Regulated Supply
- ■ Study of Line Regulation
- ■ Study of Load Regulation

Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.
IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,
Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,
Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com
Website: www.tesca.in