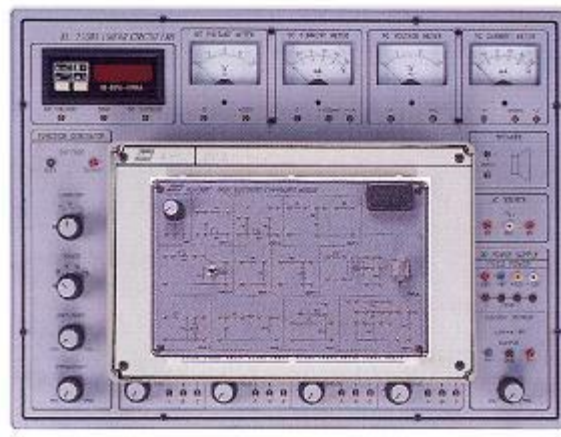


Basic Electricity Trainer

BET-1000



The BET-1000 Basic Electricity Trainer is an comprehensive and self-contained system specially design for Electricity Circuit experiments training, the system consist of **Main Module Unit** and **Experiment Modules** covers a wide variety of essential topics in the field of Electricity Circuit. It is a time and cost saving device for both students and researchers interested in developing and testing circuit prototypes in institution and universities.

List Of Experiments & Detail

1. Experiments for Basic Electricity

- 1.1 DC Voltage Measurement
- 1.2 Using an Ohmmeter
- 1.3 Resistor Characteristics
- 1.4 DC Current Measurement
- 1.5 Ohm's Law
- 1.6 Power in DC Circuit
- 1.7 Series-Parallel Network and Kirchhoff's Law
- 1.8 Superposition, Thevenin's and Norton's Theorems
- 1.9 Maximum Power Transfer Theorem
- 1.10 DC RC Circuit and Transient Phenomena
- 1.11 AC Voltage Measurement
- 1.12 AC Current Measurement
- 1.13 AC RC Circuit
- 1.14 AC RL Circuit
- 1.15 AC RLC Circuit
- 1.16 Power in AC Circuit
- 1.17 Transformer Characteristics
- 1.18 Series-Resonant Circuit
- 1.19 Parallel-Resonant Circuit
- 1.20 LC Filter.

Specification

Main Unit	
Fixed DC Power Supply	Voltage range: +5V, -5V, +12V and -12V Maximum current output: 300mA Output overload protection
Variable DC Power Supply	Voltage range: +3V ~ +18V, -3V ~ -18V Maximum current output: 1A

	Output overload protection
AC Power Supply	Voltage range: 9V~15V~0V~15V~9V Maximum current output: 500mA Output overload protection
Function Generator	Four frequency ranges: 10Hz to 100Hz 100Hz to 1KHz 1KHz to 10KHz 10KHz to 100KHz Waveforms: Sine, Square, Triangle Accuracy: $\pm 5\%$ of full scale value Output impedance: 50W Output voltage: $\geq 18V_{p-p}$ (open-loop); $\geq 9V_{p-p}$ (with 50W load)
3½ Digit Digital Meter	DC Voltage range: 2V, 200V DC Voltage accuracy: $\pm 0.3\%$ of reading + 1 digit DC current range: 200 μ A, 2000mA DC current accuracy: $\pm 0.5\%$ of reading + 1 digit
Analogue Meters	AC current: 0 ~ 100mA ~ 1A AC Voltage: 0 ~ 15V DC current: 0 ~ 100mA ~ 1A DC Voltage: 0 ~ 20V
Computer Interface	Serial Interface Parallel Interface USB Interface
Speaker	8W, 0.25W speaker with driver circuit
Potentiometer	1kW, 0.25W Potentiometer 10kW, 0.25W Potentiometer 100kW, 0.25W Potentiometer 1MW, 0.25W Potentiometer
Removable Solderless Breadboard	1680 interconnected tie points, accepting all DIP devices, components with leads and solid wires of AWG #22-30 (0.3mm to 0.8mm)
Accessories	Power lead, connecting leads, fuse, dust cover, and user manual
Power Supply	240V AC 50Hz
Physical Characteristics	Dimensions: 400mm (width), 300mm (depth), 130mm (height) Weight: 6.5kg

Accessories

- A. Connect Leads : 2mm ~ 2mm, 300mmL
- B. Connect Plugs : $\varnothing 2mm$, 10mmL
- C. Experiment manual and Instructor's manual