



An ISO 9001:2015 Co.

Voltage Multiplier Trainer (Doubler, Tripler, Quadrupler)

Model : SB-124

SINCOM SB-124 Voltage Multiplier is **All-In-One** remarkable very useful simply designed trainer to study the operation and output voltages of Voltage Multipliers circuit as a Double, Triple and Quadruple outputs in a simple experimental way. The Trainer is without meters and has the facility to connect the external analog or digital Voltmeter and Ammeter in the circuit.

Features

- ❖ Diode and Capacitor based single circuit
- ❖ Voltage Doubler circuit uses two Diodes and two Capacitors
- ❖ Voltage Tripler circuit uses three Diodes and three Capacitors
- ❖ Voltage Quadrupler circuit uses four Diodes and four Capacitors
- ❖ Double, Triple and Quadruple DC Output voltage
- ❖ Step Down Transformer as an AC Input source
- ❖ In-Built AC Input Power Supply
- ❖ User friendly Design
- ❖ Very Easy for Operation
- ❖ Multi color Circuit Diagram is screen printed on the front of the white color acrylic board
- ❖ Enclosed in an attractive, light weight, High Quality, Poly Coated Australian Pine Wooden cabinet
- ❖ Facility to connect external Digital/Analog Voltmeter and Ammeter
- ❖ Interconnections by 2mm high quality banana sockets and pins
- ❖ Maximum Test points to explore all the corners of experiment
- ❖ 1 Year Warranty

Technical Specifications

▪ AC Mains Power Supply	: 230V \pm 10%, 50Hz
▪ AC Input Supply V_i	: 12V AC, 50Hz
▪ DC Output Voltage V_o	: +24V DC Double, +36V DC Triple & +48VDC Quadruple, \pm 20%
▪ Circuit Types	: Cascaded Half Wave
▪ AC Input Source	: Step Down Transformer 12V-0V/500mA/50Hz
▪ Diodes Used	: Four Silicon PN Junction Diodes 1N4007
▪ Capacitors Used	: Four Electrolytic Capacitors 100 μ F -1000 μ F/100V
▪ Weight	: 2.0 kg (approx)
▪ Dimensions (mm)	: L 220 x W 270 x H 110
▪ Interconnections	: 2mm Banana sockets
▪ Operating Temperature	: 0-50 $^{\circ}$ C, 80% RH

Learning Scope

- To Study the Operation of Voltage Doubler Circuit. To Observe & Note Double DC O/P Voltage w.r.t. AC I/P Voltage V_m .



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- To Study the Operation of Voltage Tripler circuit. To Observe & Note Triple DC O/P Voltage w.r.t. AC I/P Voltage V_m .
- To Study the Operation of Voltage Quadrupler circuit. To Observe & Note Quadruple DC O/P Voltage w.r.t. AC I/P Voltage V_m .

Other Instruments Required

SINCOM Digital V V meter (DVV) : Model DVV-01 Range V_1 -20V, V_2 -20V DC, Digital Multimeter

Accessories Included : Set of Patch Cord and Details Instruction Manual