

Voltage Commutated Chopper



Product Categories: [Electronics](#), [Engineering Equipment](#), [Power Electronics Lab](#), [Power Electronics Lab](#)

Product Page: <https://www.labappara.com/product/voltage-commutated-chopper/>

Product Description

Voltage Commutated Chopper

Experiments :

Study of SCR Trigger Circuit for a Jones Chopper.

Observe the output voltage with Motor Load.

Observe the effect of ON Time Control on Output.

FEATURES :

Jones Chopper is a self-contained stand unit useful in the study and demonstration of the principle and working of a Voltage Commutated Chopper. It consists of a D.C. Source, UJT Triggering Circuit of variable frequency, Class "D" Commutation and D.C. Output the D.C. Output drives a D.C. Motor. The unit is housed in an elegant metal cabinet, with a well spread intelligently designed circuit layout on the front panel. Multicolored Test Points are provided at various stages in the circuit to observe the waveforms and voltages. It is strongly supported by a comprehensive Instruction Manual complete with theory and operating details.

TECHNICAL SPECIFICATIONS

Principle	:	Conversion of a Fixed DC to Variable DC Voltage.
Type of Chopper	:	Jones Chopper.
D.C. Source	:	24V DC (Unregulated).
Trigger Circuit	:	1. UJT Trigger Circuit with variable trigger frequency to trigger the Main SCR. 2. UJT Trigger Circuit with variable trigger frequency to trigger the Auxiliary SCR.
Commutation	:	Class "D" Type.
Output Voltage	:	5V to 20V approximately (variable).
Output Frequency	:	30V to 100Hz approximately.
Duty Cycle	:	20 to 70% at 50Hz approximately.
Controls	:	1] Mains ON / OFF. 2] Frequency Control. 3] ON Time Control.
Test Points	:	Multicoloured Test Points are provided at various stages in the circuit to observe the waveforms and voltages.
Indicator	:	Mains ON / OFF.