

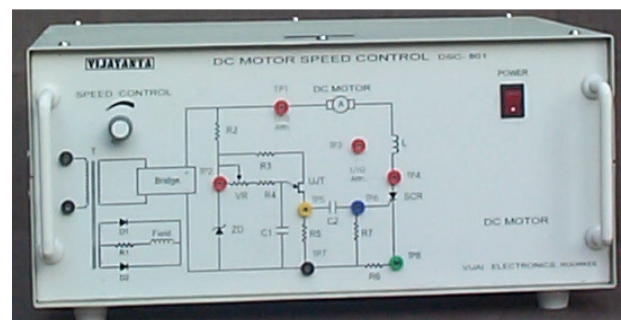
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STUDY OF D.C. MOTOR SPEED CONTROL TRAINER, MODEL – DSC – 801.

D.C. Motor Speed Control Trainer, Model – DSC – 801 has been designed to explain the operation of D.C. Motor speed control by silicon control rectifier. The single phase AC is converted into dc by a controlled AC – DC Converter and the DC is fed to the motor. By varying the firing angle the voltage applied to the motor can be varied and thus speed control can be achieved. Here, dc separately excited motor driver from single phase AC supply through half wave AC – DC converter. Separate converters are used for the armature and field circuits. All care has been taken to make this unit convenient and simple in working. This unit is fully self content only a C.R.O., Multimeter, Tachometer is required to perform experiments.



All components are mounted on a glass epoxy PCB. Basic block diagram is printed and brought out to the banana sockets mounted on front panel for observations.

The Set – Up consists of :

- ** Fully isolated AC supply for control and motor.
- ** 1/16 H.P. shunt wound motor (separately excited).
- ** Firing Circuit.
- ** Half Wave phase controlled rectifier.
- ** Operating manual.

Experiments :

1. To Study of D.C. Motor Speed Control by SCR.

Other Apparatus Required :

1. Power Scope / General purpose dual trace C.R.O.
2. Digital Multimeter.
3. Tachometer (If required).