

D.C Motor Speed Controller



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

Product Page: <https://www.labappara.com/product/d-c-motor-speed-controller/>

Product Description

D.C Motor Speed Controller

D.C motor Speed control trainer built around a small permanent magnet D.C. motor is designed to bring out the salient features of such a system. Facilities are available to directly measure the principal performance features of the speed control system, viz, steady state error and load disturbance rejection, as a function of the forward path gain. In addition, the experimental work involves the determination of the motor transfer function and the characteristics of the tachogenerator. An important feature of the unit is the built-in absolute speed measurement through photo diode pick-up from a slotted disk followed by a frequency counter. Variable loading of the motor is achieved by a built-in eddy current brake.

Features:

Closed loop motor speed control with eddy current brake

Compact system-no mechanical hassles

Photo diode speed sensor

Digital speed display

Specifications:

- 01 Speed control of a 12V,4W permanent magnet D.C. motor
- 02 Speed range : 0 to 2500 rpm (typical)
- 03 Photo diode based speed sensing
- 04 4-digit speed display in rpm
- 05 Electronic tachometer generator for feedback
- 06 Separate unit for motor in a see through cabinet
- 07 Smooth, non-contact eddy current brake for loading
- 08 Built-in 3½ digit DVM for signal measurements
- 09 Built-in IC regulated internal power supply
- 10 The unit is operative on 230V $\pm 10\%$ at 50Hz A.C. Mains
- 11 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm.