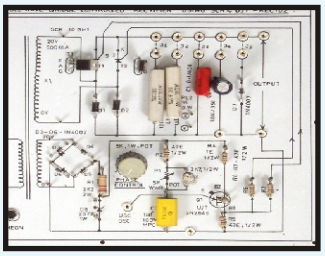
STEPPER MOTOR, SCR MOTOR, SERVO MOTOR TRAINER

MODEL - MOTOR100

This trainer has been designed with a view to provide practical and experimental knowledge of stepper motor, SCR motor, serve motor, UJT trigger, circuit breaker, timer and alarm.

Stepper Motor Unit



SCR Motor Unit

Servo Motor Unit

SPECIFICATIONS

1. STEPPER MOTOR UNIT

MOTOR	:	Bidirectional with permanent magnet rotor & bifilar wound stator.
MOTOR CHARACTERISTICS	:	Self starting, low moment of inertia, instantaneous start, stop and reversal of rotation.
ROTATION	:	200 Steps / Revolution.
TORQUE	:	3.5 kg-cm 2
STEPPING ANGLE	:	1.8 deg.
PROTECTION	:	Against forcible stalling.
OPERATING VOLTAGE	:	12V DC.
CONNECTOR	:	Special connector with wires to connect motor unit to translator unit.

2. SCR MOTOR UNIT

Input	:	230V, 50Hz, AC Single Phase
Power Circuit	:	Using 1 SCR (1200V, 25A) Half Bridge
Based on SCR	:	BT151

Uses UJT for Speed control

On board 20V DC Supply

12V DC Motor provided

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Dealer:-

3. SCR MOTOR UNIT

PRINCIPLE	:	DC Position Servo System
DISPLACEMENT	:	Angular (0 to 270 deg).
INPUT TRANSDUCER	:	Command or master potentiometer with calibrated dial (0 to 270 deg)
Motor	:	Specially designed bi-directional, geared, permanent magnet armature control led DC motor.
COUPLING	:	Suitable coupling of motor to output rebalance potentiometer.
AMPLIFIERS	:	Summing amplifier of adjustable gain preamplifier and power amplifier for driving DC on basis of error signal.
AMPLIFIER GAIN	:	Controlled by the Voltage signal derived by the conversion of the output position of rebalance potentiometer into voltage signal.
OUTPUT	:	Slave dial coupled to the servo mechanism and mounted with calibrated dial.
CONTROLS	:	1. Master or command potentiometer. 2. Potentiometric for zero adjustment. 3. Potentiometric for span adjustment to adjust the minimum and maximum limit 4. Potentiometric for gain adjustment. 5. Servo Motor ON/OFF control.
4. Standard Accessories	:	1. A Manual having practical 2. Patch Cords.