VIJAYANTA
VIJAI ELECTRONICS
28/147, CIVIL LINES
ROORKEE - 247667

WSC
ISO – 9001-2008
Certificate No. WSC-215028-A

STEPPER MOTOR CONTROL TRAINER,

MODEL – CMS – 101.

DESCRIPTION OF EQUIPMENT :

- The Stepper Motor Control Unit houses all the necessary electronic circuits required to operate and control of the Stepper Motor. A control circuit using TTL ICs provides the necessary pulse sequence for continuous rotation in clockwise and anticlockwise directions. In single stepping mode 4 inputs are provided to select 0 and 1 signal through switches. A variable frequency square wave generator with a varying frequency of 10-800 Hz. (approximate) is provided for varying the speed of the motor.
- All necessary power supply are provided in the same unit. Only 230V± 10%, 50Hz mains power is required to operate the unit.
- The motor is, also, housed in the separate cabinet. A 360^0 calibrated dial is fixed on the shaft of the motor to provide a visual indication of the shaft position.
- A servo potentiometer is also mounted on the motor shaft, for sensing the shaft position.
- A microprocessor interface has been incorporated to provide the user with a facility to study the microprocessor control of stepper motor. By using on 8085 microprocessor based kit, the movement of the stepper motor can be programmed to generate any desired profile.

Features :

** This unit is inside a metallic cabinet with front panel block diagram.
** All the necessary switches, potentiometer and test points are on the front panel.
** The features include Single Stepping and free running mode of operation and variable speed and direction reversal – internal TTL circuit.
** 360 degree motion servo-potentiometer position pick – up for motor dynamics.
** Operation through Microprocessor kit with sample control programs.
** Stepper Motor Specifications are :
  ** 2.8 Kg-cm Torque.
  ** 1.8 degree step angle.
  ** Power : 12 Volt at 1 Amp. per phase.
** Builtin Regulated Power Supply : 220 Volt, ± 10%, 50 Hz mains operated.
** Detailed literature and patch cords.

OBJECT :

To study the operation of a Stepper Motor.

Trainer complete with Microprocessor.