



Order Code- 52060 is one of the most comprehensive motor control trainers. This system is designed for learning the working Principal of different types of motors. Students will learn not only the foundation of motors but also controlling the motors with Descriptive Components, Microcontroller 8051 and Computer Interface via RS232. Experiments are specially designed for this system right from the basic stepper motor forward/ reverse, speed controls to all Actuators control. HALF, FULL and WAVE modes

On Board Technical Specification

Actuators:

01. Unipolar Stepper Motor
02. Bipolar Stepper Motor
03. Servo Motor
04. DC Motor

Displays:

01. 16x2 LCD Display(Mode indication , Direction and Step Rate Measurement)
02. 3mm RED LEDs for (Motor phase Indication, Direction and Modes).

Switches:

01. Matrix Keypad : For Selecting Mode : Microcontroller Mode or RS232 mode and also for selecting Direction and Input Stepping).
02. SPDT Switch: This for Stand Alone Mode without Microcontroller. Mode selection (HALF, FULL and WAVE), Speed Controlling, STEP Mode and RUN Mode Selection.

Microcontroller Based:

01. Onboard AT89C51RC microcontroller with 32K bytes of Flash programmable ROM & 512 bytes of RAM.

Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.

305, Taru Chhaya Nagar, Tonk Road, Jaipur-302029, India
Tel: +91-141-2724326, Mob: +91-9413330765
Email: info@tesca.in, tesca.technologies@gmail.com
Website: www.tesca.in

Serial Communication:

01. PC Interface-RS 232 communication port.

Training Contents:

01. Setup a stepper motor's driver
02. Utilize a stepper motor for positioning control
03. Stepper motor's speed control
04. Encoder's application in stepper motor control
05. Utilize a potentiometer module for stepper motor's positioning control
06. Utilize an encoder to design a closed loop control

Experiments:

01. Stepper motor's forward/ reverse control
02. Stepper motor's positioning control
03. Stepper motor's speed and position control in the self-starting zone
04. Stepper motor's speed and position control in the accelerating/ decelerating zone
05. Encoder in the stepper motor closed-loop control
06. Potentiometer in stepper motor's control
07. Step Counting on Particular Modes
08. Manual Stepping and Auto Stepping Modes.
09. Angle Measurement on Particular modes
10. Modes Selection (HALF, FULL and WAVE)
11. DC Motor Speed Control
12. DC Motor Direction Control
13. Servo Motor Angle Selection (+90, +45, 0,-45,-90 degrees)

Clock:

01. Auto Clock
02. Manual Clock

Power Supply:

01. On Board 5v adapter Jack.