

# PLC & MICROCONTROLLER BASED ELEVATOR TRAINING SYSTEM

**MOD :AS-PM001**

## INTRODUCTION

- ♦ The PLC & Microcontroller-based Elevator Training System is a sophisticated educational platform designed to provide hands-on learning in modern elevator automation. Combining the power of Programmable Logic Controllers (PLC) with microcontroller technology, it simulates real-world elevator operations, enabling detailed control over motor speed, position sensing, and cabin lighting. This dual-system approach mirrors industry practices, offering learners valuable insights into hybrid control strategies. With practical experiments in PLC, microcontroller, and PC-based control, the trainer bridges theoretical knowledge with real-world application. Compactly designed with dimensions of 450 x 400 x 870 mm and operating on a single-phase AC 220V±10% 50Hz/60Hz input, it prepares students and professionals for advanced troubleshooting and optimization in diverse industrial elevator systems.



## TECHNICAL SPECIFICATION :

- ♦ The elevator trainer represents a cutting-edge educational tool designed to simulate and teach elevator control systems. It leverages the combined power of PLC (Programmable Logic Controller) and microcontroller technology to offer a comprehensive learning experience.
- ♦ Complementing the PLC, the microcontroller enhances the trainer's versatility by handling real-time tasks and interfacing with various elevator components.
- ♦ It allows for detailed monitoring and control of motor speed, position sensing, and cabin lighting, among other functionalities.
- ♦ This dual-system setup not only mirrors industry standards but also equips learners with in-depth knowledge of hybrid control strategies increasingly prevalent in modern elevator systems.
- ♦ Through hands-on exercises and simulations, The trainer enables students and professionals to grasp fundamental concepts in elevator automation, from basic operational principles to advanced troubleshooting techniques.
- ♦ By bridging theoretical understanding with practical application, it prepares individuals for the complexities and demands of managing and optimizing elevator systems in diverse industrial settings.
- ♦ **EXPERIMENT:**
  - ♦ PLC control Experiment, Microcontroller control Experiment,
  - ♦ PC control Experiment
  - ♦ Technical Parameter:
  - ♦ Total Dimension :L x W x H (mm):450 x 400 x 870 ,
  - ♦ Input power: single-phase, three-wire AC 220V±10%50Hz/60Hz, □
- ♦ Outputpower: DC 24V safety terminal output,Capacity:200VA, Lift
- ♦ Driven by Stepper Motor
- ♦ Driven Belt Size: Length-550mm,Width-18mm, PLC module,
- ♦ Microcontroller Control Card,PC software
- ♦ Items Included:
- ♦ 1 x PLC and 1 x LOGO!12/24 RC Software,
- ♦ 1 x Microcontroller Control Card,
- ♦ Microcontroller Programming Software,
- ♦ Power Supply, USB Lead, Curriculum CD,
- ♦ Operating Manual, Dust Cover with water Proof.
- ♦ Original packing: Each equipment delivered in original pack in a single box and end user open the box first time at delivery point. □
- ♦ **ACCESSORIES**
  - ♦ Connecting Wire: 1 set
  - ♦ User Manual: 1
  - ♦ Standard Accessoriec
- ♦ **OTHERS :**
  - ♦ Origin(Parts) : China,Taiwan, Japan
  - ♦ Manufacturing: Assemble in Bangladesh
  - ♦ Inatallation, Training
  - ♦ Warranty: 01 year