

PLC Controlled Transparent Four-layer Elevator Trainer



Machine room part



Liftway Part



Lift Car Part



Landing Door Part



Electrical Control Part



Accessory Part



Frequency Converter



Wiring Board



Programmable Logic
Controller



Electrical Control Part

Note :

Due to keeping innovation,
the specification and
Machine pictures or color
are subject to alteration
without notice!



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Equipment Overview

- This trainer is designed according to construction of lift type elevator, which is widely used in our daily life.
- The electrical control system adopts programmable logic controller and frequency converter to achieve logic intelligent control and AC variable frequency speed regulating and driving. The hardware part of this trainer is same as real elevator in composition and function, coming with automatic door opening/closing, automatic leveling, inner/external calling signal response in same direction, straight moving, elevator safe running protection, elevator emergency stop, slow up/down, lighting, air fan function and so on.
- Organic glass material is adopted for most of the components so as to make the inner structure and working principle of real elevator easy for students to understand.
- It is reliable in performance, steady in running, easy in operation and low in energy consumption. Both the hardware and software part of this trainer adopt open structure, which makes it easy to be extended for secondary development, such as multiple control elevator, parallel control elevator, signal control elevator, autoselected elevator and so on.

Training Content

- Lift car starting, stopping, inching control
- Lift car speed up/down control
- Lift car leveling control
- Lift car landing door opening/closing control
- Floor calling system training
- Terminal limit protection device training
- Speed limit protection device training
- Signal indicating system training
- Lift car lighting control
- Elevator control system training
- Elevator control system programming
- Elevator control system running and debugging

Technical Parameters

1. Power supply: 220V, 2A
2. Installed capacity: $\leq 0.75\text{KW}$
3. Dimension: 950mm $\times$ 660mm $\times$ 2400mm
4. Net weight: 160kg (approx.)
5. Load capacity: 5kg
6. Control mode: PLC control
7. Speed regulating mode: AC variable frequency speed regulating
8. Floor pattern: Four-layer
9. Traction machine: Speed ratio (15:1), worm speed reducer module (1.5)
10. Driving motor: AC220V, 50Hz, 0.12KW, 1400rpm
11. Safety protection: Leakage protection function, safety meets related national standard