



**INTEGRATED CIRCUITS**  
ELECTROINC INDUSTRIES

# Electrical Installation Trainer

## IC-EL-SG-I06

**2024**

### 1. Overview

The IC-EL-SG-I06 is designed to provide a good foundation for students who study electrical installation, both for house hold and industries. Experiment, such as electrical measurement, basic electrical control, electrical installation and power factor correction as well as three phase AC motor brake system and speed control with inverter can be done by this trainer.

### 2. Specification

- Operated on mains power 230V, 50Hz+10%.
- Single phase energy meter.
- Circuit breaker 30mA, 10A (2) and 16A.
- Inner twilight circuit using LDR.
- Digital Timer.
- Remote control switch.
- Digital clock.
- Push button.
- Two way switches (2).
- Port lights with lamp (3).
- Ignition switches (2).
- Shutter Control (2).
- Terminal block (2).
- Modular contractor (2).
- Convactor 500W.
- Simulation module of shutter control (2).
- Light dimmer.
- Presence detector.
- Emergency stop



Fig: Electrical Installation.

### 3. Experiment Will be Done

- Electrical Circuits.
- Series and Parallel Lamp.
- Two-Way Switching Circuit for a Single Lamp.
- Residential House Wiring Using MCB, Switch, Power Socket, Lamp, and Energy Meter.
- Switch Operation: NO and NC Positions with Lamp Load.
- Operating a Lamp Load with a Single-Phase Contactor.
- Time Delay Operation of a Lamp Load Using a Timer.
- Lamp Dimmer and Fan Speed Control.
- Miniature Circuit Breakers (MCB).
- Motion Sensor
  - PIR Sensor.
  - Inter-Twilight Operation: Lamp Control with a Photo Cell