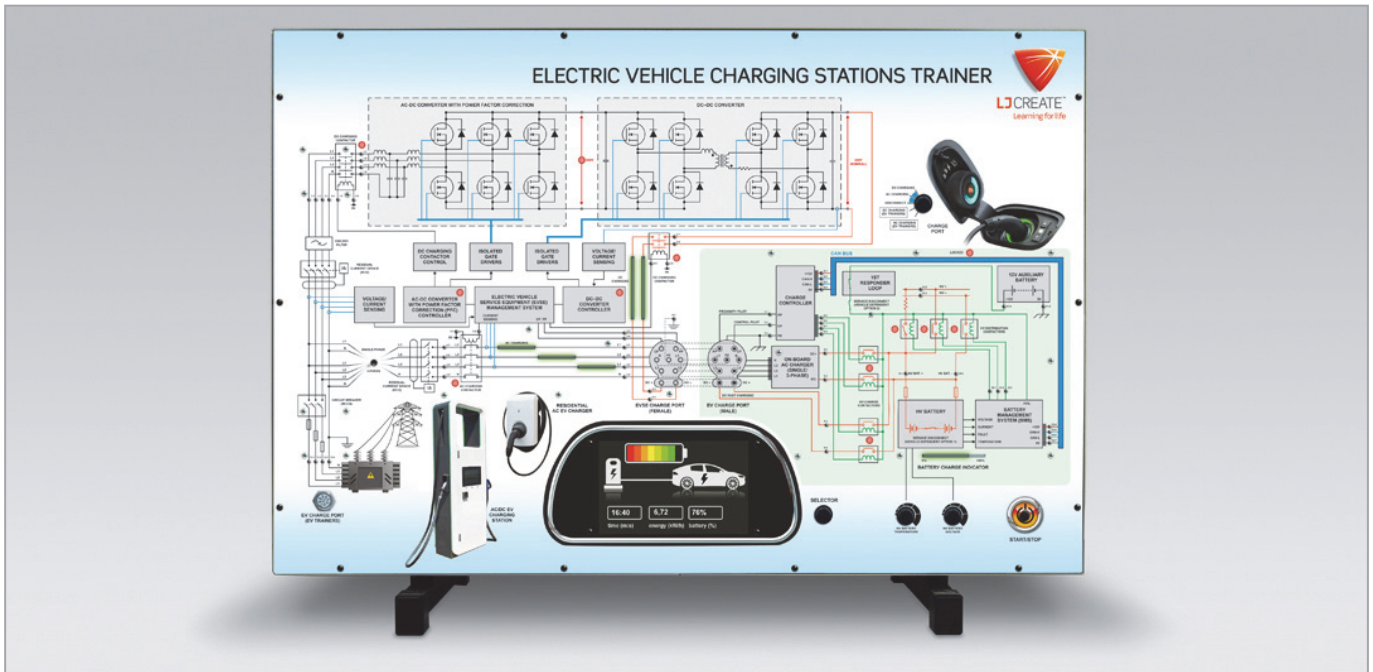


# Product Information Sheet

## Electric Vehicle Charging Stations Panel Trainer



The Electric Vehicle Charging Stations Panel Trainer provides students and instructors with the opportunity to demonstrate, investigate and fault-find a simulation of different levels of electric vehicle charging station.

The trainer is designed to illustrate the operation of residential, commercial and on-board charging systems as well as provide a mimic of the electrical power flow. The trainer also includes test points at a safe voltage level to allow for investigation of electrical circuits. To facilitate the development of techniques in diagnostics and fault-finding skills, the panel includes a range of fault-insertion options to simulate typical real-world system malfunctions.

This trainer includes access to digital curriculum materials including theory and practical learning tasks. The trainer can also be used in conjunction with our optional cloud-based software, which offers online practical electronics tasks as well as interactive theory presentations, investigations, and assessments, which link directly to the practical activities carried out using this resource.

### The Panel Trainer Provides the Following Features:

- Simulation of electrical power flow
- LCD panel with charging station and on-board visualization
- Simulation and visualisation of electrical power flow
- Charge level type selector
- Port to connect to other LJ Create EV Panel Trainers
- Start/Stop Button
- Service Disconnect Switch
- Controls to adjust HV battery voltage and temperature
- Battery stack and on-board charger circuit simulation
- Terminals to make DC and AC circuit measurements
- Manual or automatic fault insertion (16 Faults)

### Typical Practical Tasks Include:

- AC Charging Station - Single Phase
- On-Board Vehicle Charging Circuit
- AC Charging Station - Three Phase
- AC Inverter Circuit
- DC Fast Charging Station Operation
- DC/DC Converter Circuit
- Voltage and Current Sensing
- Charging Station Safety - RCD
- Charging Station and Vehicle Communications
- Electric Vehicle Service Equipment Management (EVSE)
- Charging Station Software
- Introduction to Troubleshooting the Charging Station Panel
- Troubleshooting Connector and Cable Failures
- Troubleshooting Isolation Faults
- Troubleshooting Grid Phase Imbalance
- Identifying Central and Proximity Pilot Errors
- Troubleshooting EVSE Faults
- Troubleshooting the Effects of Over-Temperature
- Interconnecting the LJ Create EV Panels

### Items Included:

- Trainer
- Curriculum in digital format
- Wall mounting brackets and bench stands

### Other Items Required:

- Lab scope

### General Information:

Trainer Dimensions: 900 x 170 x 600 mm (W, D, H)  
Packed Volume: Approx. 0.316 m<sup>3</sup>  
Packed Weight: Approx. 26 kg

**Order Code: 743-01**

P9615-A

For more information visit [www.ljcreate.com](http://www.ljcreate.com)



**REPRESENTED BY:**  
Allegheny Educational Systems, Inc.  
320 East 3rd Avenue  
Tarentum, PA 15084  
Phone: 800-232-7600  
[www.alleghenyedusys.com](http://www.alleghenyedusys.com)