



## THE ELECTRIC VEHICLE FOR EDUCATION

# The Switch Lab EV - DC/72v

A high-impact project that challenges students to build, test and drive an electric vehicle as an educational project.

The Switch Lab EV is the perfect workforce development tool for educators to teach hands-on EV fundamentals. Designed using a component-agnostic approach, it prepares students for careers in electric vehicle technologies.

The Switch Lab EV is a fully functional electric vehicle that empowers students to build, wire, and troubleshoot an EV while practicing low and high voltage safety procedures.

### **Educational Benefits**

- Reusable & rebuildable design for use semester after semester
- Learn the purpose & functions of EV components
- Grow professional skills - teamwork, time management, attention to detail
- Demonstrate & practice high voltage safety procedures (OSHA/ASE)
- Teach fundamentals of electricity and how to use wiring diagrams
- Test students knowledge through troubleshooting challenges
- Gain understanding of cycle analyst sensor information
- Exam preparation for ASE xEV level 1 & 2 certifications
- Use across multiple subjects - physics, autoshop, chemistry, engineering, CAD
- Teach up to 15 students at a time
- Street Legal (*most states*)

### **Features**

- Open Chassis with easy access to components
- Electrical components and batteries behind clear removable plastic for safety
- 72v Lead acid batteries for safety & durability
- DC motor
- Cycle analyst with digital display
- Charges via standard 110v extension cord
- Wiring looms for ease of troubleshooting lessons
- Professionally labeled and terminated wiring

- In person Instructor training included
- Access to Switch Vehicles community forum for educators
- Includes all major components user manuals for reference

### **Add-Ons**

- High voltage safety equipment available (insulated tools, gloves, hook)
- Multi-meter
- Relay Lab kit w/ wiring crimper set
- Component Lighting Kit (LEDs)
- Switch Lab Organizer

### **Technical Information**

- Fully Assembled
  - 144.3in L x 79in W x 52.4in H
  - 1,350 lbs
- 7.5 kw/h battery - up to 25 miles of range

### **Warranty**

- Honor all major component manufacturer warranties
- 1 year warranty on hardware