

AC/DC Electrical Learning Systems

96-ADE1

96-ADE2



AC/DC Electrical 1 Learning Systems

Student Reference Guide



Interactive Multimedia Curriculum

Learning Topics:

- Basic Electrical Circuits
- Fundamentals of Electricity
- Electrical Measurements
- Series and Parallel Circuits
- Circuit Analysis
- Circuit Protection Devices
- Inductance
- Capacitance
- Combination Circuits
- Combination Circuit Troubleshooting
- Transformers
- Transformer Types

Amatrol's AC/DC Electrical Learning Systems 1 and 2 (96-ADE1 and 96-ADE2) cover the fundamentals of electricity, such as electric measurement training and basic electrical circuit training, as well as inductance, capacitance, and transformers. Electricity is the most widely used utility and the demand will continue to increase as technology continues to grow. This means that more engineers and technicians will be needed to install, develop, and maintain electrical devices. These learning systems include a large array of industrial electrical power and control components, typical of what learners will find in real world applications. This hands-on experience is invaluable in today's workplace.

The industrial components included with these learning systems are used with the heavy-duty welded steel workstation included with the Basic Electrical Training System (96-ADE1). This workstation features instrumentation, component mounting surface, component storage panel, and a built-in analog voltmeter. Each component's leads are attached to quick-turn terminal posts, allowing learners to quickly connect components for a variety of circuit applications. Each learning system also includes an in-depth online electrical training course.



Technical Data

Complete technical specifications available upon request.

96-ADE1

AC/DC Electrical Trainer

- Lamp Module Assembly (3)
- Knife Switch Assembly
- Solenoid Module Assembly
- Fuse Module Assembly
- 25 Ohm Resistor Module Assembly (2)
- 10 Ohm Resistor Module Assembly
- Pushbutton Switch Module Assembly
- Selector Switch Module Assembly
- Circuit Breaker Module Assembly
- Buzzer Module Assembly
- Fan Module Assembly
- Patch Cords, Spade Lug to Spade Lug (10)
- Patch Cords, Spade Lug to Banana (4)
- Neon Circuit Tester
- Handheld Digital Meter
- Fuses, 3A, Fast-Acting (1 pkg. of 12)

Electrical Power Cord

Student Curriculum – Interactive PC-Based Multimedia (NB707)

Instructor's Guide (CB707)

Installation Guide (DB707)

Student Reference Guide (HB707)

Additional Requirements:

Computer, see requirements: <http://www.amatrol.com/support/computer-requirements/>

Utilities Required:

Electrical: 120 VAC / 60 Hz / 1 Phase

Recommended:

Mobile Technology Workstation (82-610) or equivalent

Optional:

Virtual AC/DC Electrical 1 Learning System (VT96-ADE1)

96-ADE2

AC/DC Electrical, Level 2

- Capacitor Module Assembly (2)
- Relay Module Assembly
- Rheostat Module Assembly
- Step Down Transformer Module Assembly
- Compass Module Assembly
- Transformer Load Module Assembly

Student Curriculum – Interactive PC-Based Multimedia (NB708)

Instructor's Guide (CB708)

Student Reference Guide (HB708)

Additional Requirements:

96-ADE1 AC/DC Electrical 1 Learning System
Computer, see requirements: <http://www.amatrol.com/support/computer-requirements/>

Utilities Required:

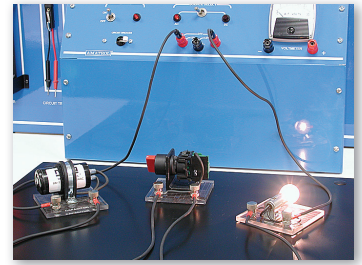
Electricity supplied by 96-ADE1

Optional:

Virtual AC/DC Electrical 1 Learning System (VT96-ADE2)

Build Basic Electrical Skills with the 96-ADE1

The 96-ADE1 covers the basic concepts of electricity, electrical measurements, and circuit analysis. This system includes various industrial quality components including a lamp module assembly, knife switch assembly, solenoid module assembly, fuse module assembly, circuit breaker module assembly, and much more! This system also includes a heavy-duty workstation with built-in power supply that allows learners to easily connect components and build hands-on skills.



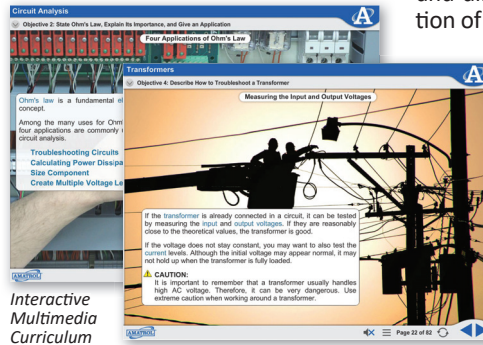
Electrical Component Applications

Learn About the Vital Electrical Topics of Inductance and Capacitance

The 96-ADE2 adds onto the 96-ADE1 to expand a learner's basic electrical skills including topics like inductance, capacitance, combination circuits, and transformers. This system includes a capacitor module assembly, relay module assembly, rheostat module assembly, and other industrial components. Learners will practice skills like testing a capacitor with a DMM, tracing the current path in a combination circuit, and calculating the current load on a transformer.

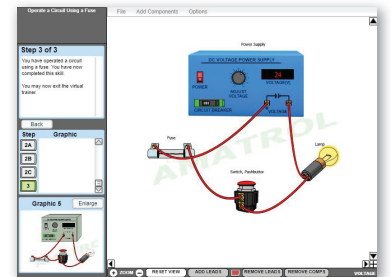
World-Class Interactive Multimedia Curriculum

These electrical learning systems feature an expansive offering of electrical knowledge. Learners begin by studying very basic electrical topics such as defining electricity, describing alternating and direct electrical currents, and describing the operation of manual switches. Learners then move on to more advanced topics like voltage/current measurement, circuit protection devices, inductor and capacitor applications, voltage dividers, and transformer types. The online training courses are presented as interactive multimedia which includes audio, cutting-edge 3D animations and illustrations, and video.

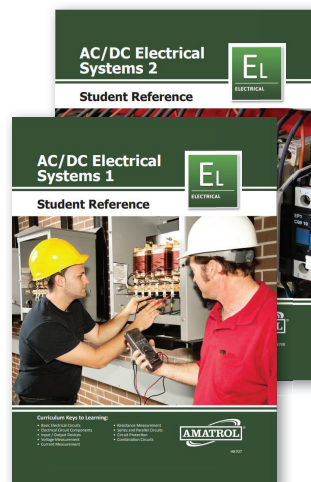


Electrical Virtual Trainer

Virtual simulations of electrical applications engage learners on a higher level by providing additional circuits and conditions under which learners can study. Learners can use the software to create and simulate circuits of their own design in addition to the circuits described by the exercises in the student learning materials.



Virtual Electrical Trainer



Complimentary Student Reference Guide

A sample copy of the AC/DC Electrical 1 and AC/DC Electrical 2 Student Reference Guides are included with the learning system for your evaluation. Sourced from the curriculum, the Student Reference Guides take the entire series' technical content contained in the learning objectives and combines them into one perfectly-bound book. Student Reference Guides supplement this course by providing a condensed, inexpensive reference tool that learners will find invaluable once they finish their training making it the perfect course takeaway. If you would like to inquire about purchasing additional Student Reference Guides for your program, contact your local Amatrol Representative for more information.

