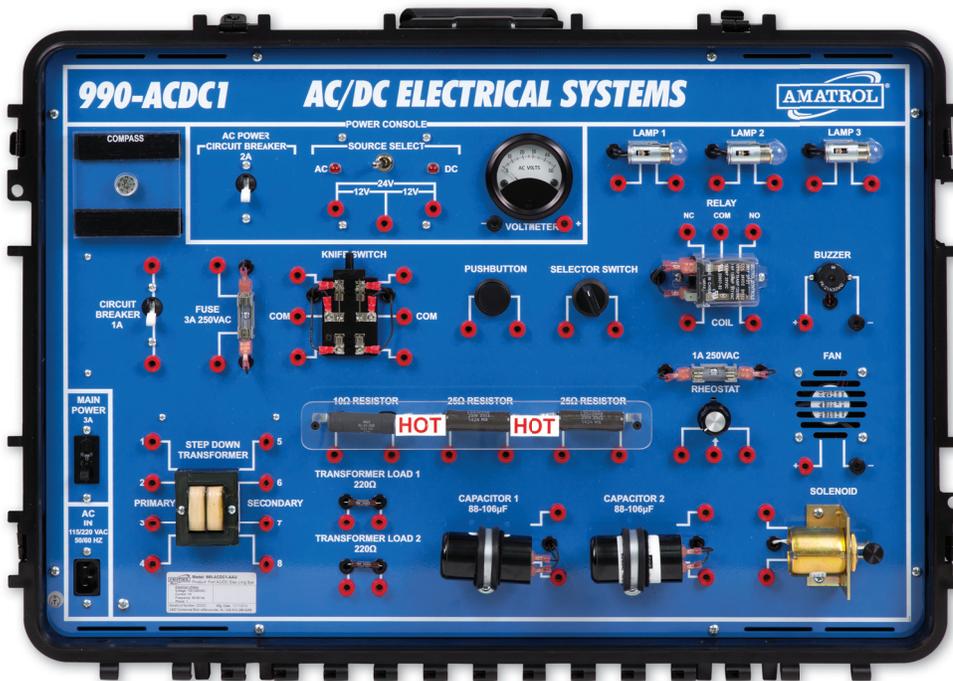
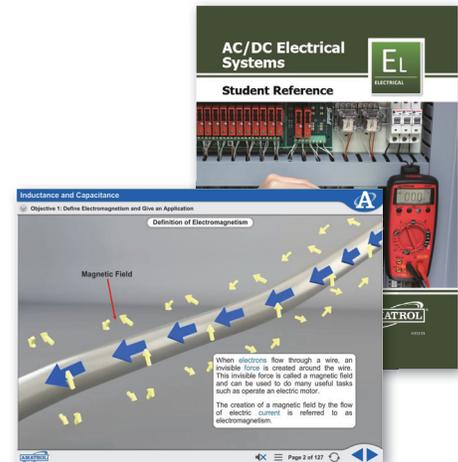


# Portable AC/DC Electrical Learning System

990-ACDC1



990-ACDC1



Interactive Multimedia Curriculum and Student Reference Guide



Portable Workstation

## Learning Topics:

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

Amatrol's AC/DC Electrical Learning System (990-ACDC1) is a portable solution when training space is limited, but comprehensive knowledge and skill-building cannot be sacrificed! Thanks to its small footprint, this portable system can be placed on a conference room table, shop floor desk or practically anywhere. Its compact size and durable case provide for safe storage when available training space must be used to teach other topics.

The 990-ACDC1 workstation, combined with a highly-engaging interactive multimedia, teaches the fundamentals of AC and DC electrical systems used for power and control in industrial, commercial, agricultural and residential applications. Using a variety of input, output and other electrical components, the 990-ACDC1 offers industry-relevant skills, including how to operate, install, design and troubleshoot basic AC and DC electrical circuits.

This system provides the knowledge and skills needed with unmatched flexibility!



## Technical Data

Complete technical specifications available upon request.

### Portable Console

Durable ABS Plastic  
Power Cord, 14/3, 15A  
990-ACDC1 Mounted Panel

Magnetic Compass  
Circuit Breaker, 1A & 2A  
AC/DC Source Select  
AC/DC Power Supply  
Voltmeter  
Lamp (3)  
Fuse, 3A 250VAC  
Knife Switch  
Pushbutton  
Selector Switch  
Coil  
Main Power Switch  
AC Input  
Buzzer  
Step Down Transformer  
10 Ohm Resistor  
25 Ohm Resistor (2)  
Rheostat, 1A 250VAC  
Fan  
220 Ohm Transformer Load (2)  
Capacitor, 88-106F (2)  
Solenoid

### 24" Stackable Banana Leads (14)

Neon Circuit tester

Digital Multimeter with Test Leads

Spare Fuse 10A

Fuses, 3A, Fast-Acting (12)

Fuse Puller, 250V

Student Curriculum – Interactive PC-Based

Multimedia (M11133)

Instructor's Guide (C11133)

Installation Guide (D11133)

Student Reference Guide (H11133)

Additional Requirements:

See <http://www.amatrol.com/support/computer-requirements>

Utilities Required:

120/220 VAC, 60/50 HZ, Power Outlet

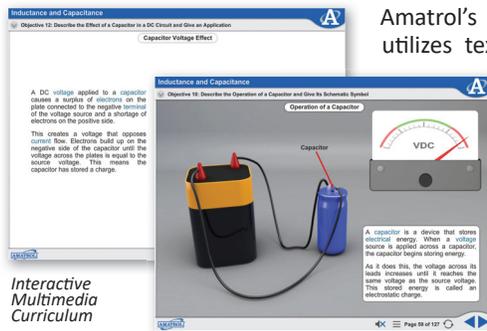
## Learn about Electricity Nearly Anywhere

By simply using the 990-ACDC1 and a computer, anyone can attain a wide array of AC/DC electrical training at a desk, in a conference room, or practically anywhere – this compact system opens up untapped training areas in your facility that you have never been able to consider prior. The learning system provides knowledge and skill-building by covering topics such as Ohm's Law and Kichhoff's Voltage Law. This allows users to apply their knowledge using real-world components, such as digital multimeters, solenoids and switches. Learners build on this knowledge, adding skills such as testing wire continuity, connecting and operating electrical circuits, and designing a voltage divider network.



## Highly Engaging Interactive Multimedia

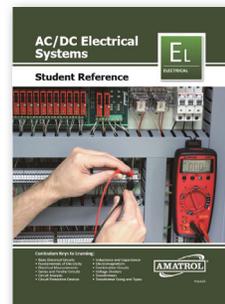
The 990-ACDC1's extensive multimedia curriculum begins with the basic electrical circuits by defining the fundamentals of electricity, and then builds onto this knowledge by advancing to topics such as electromagnetism and transformers. As learners complete new topics, they'll use this theoretical knowledge to complete hands-on skills, like connecting and operating a basic lighting circuit, measuring resistance in series and parallel circuits, and troubleshooting a transformer. By combining theoretical knowledge and hands-on skills, the learner's comprehension and retention of electrical systems is greatly enhanced.



Amatrol's peerless interactive multimedia curriculum utilizes text with voiceovers, pictures, videos, stunning 3D animations, and interactive quizzes and reviews that engage learners in theoretical knowledge and concepts. This thorough, detailed curriculum begins with the basics and advances to complex concepts. Through partnerships with key industry leaders and leading educators, Amatrol developed the right balance of knowledge to train learners to work in their chosen field.

## The 990-ACDC1: Mobile, Durable, Efficient

Set within a durable ABS plastic case, the 990-ACDC1 features wheels and a handle to create a completely mobile learning experience. This highly-efficient learning system also includes a lock for safety and a storage pouch on the inside cover for loose components, such as banana leads used to connect various circuits. Additionally, the system's front cover is easily removable, enabling the case to sit upright on a flat surface for more convenient use. It will be a breeze to both transport the learning system and store it.



Student Reference Guide

## Complimentary Student Reference Guide

A sample copy of the AC/DC Electrical Student Reference Guide is included with the learning system. Sourced from the curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfectly-bound book. If you would like to inquire about purchasing additional Student Reference Guides for your program, contact your local Amatrol Representative for more information.

