

Portable PLC Troubleshooting Learning System - Allen Bradley CompactLogix

990-PAB53F



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Includes FaultPro software and interactive eLearning



Portable Workstation

Learning Topics:

- PLC Troubleshooting
- PLC Systems Troubleshooting
- Analog I/O Troubleshooting
- Analog Application Troubleshooting
- Basic Panelview Plus Terminal Operation
- Panelview Plus Application Editing
- PLC Program Operations
- PLC Programming
- PLC Motor Control
- PLC Timer and Counter Instructions
- Event Sequencing
- Program Control Instructions
- Math and Data Instructions
- Analog Inputs & Outputs
- Variable Output Applications

The 990-PAB53F Portable PLC Troubleshooting Learning System provides comprehensive curriculum and a cutting-edge workstation to teach PLC (Programmable Logic Controller) programming, operation, and applications used in industry. The 990-PAB53F uses FaultPro, Amatrol's unique electronic fault insertion, to teach PLC troubleshooting skills, such as PLC input and output testing, software testing, and application troubleshooting. Learners study both basic and advanced applications using Allen-Bradley's CompactLogix 5300 PLC, PanelView Plus, and networking throughout the curriculum.

The 990-PAB53F comes with a mobile carrying case, workstation mounting panel, master control relay circuit, Allen-Bradley CompactLogix 5300 Programmable Controller, RS Linx and RS Logix 5000 software, a PanelView Plus terminal, an Ethernet Switch, I/O Simulator, five application circuits, student curriculum, instructor's assessment guide, and installation guide. Learners will study industry-relevant application and troubleshooting skills so needed in today's workplace.



Technical Data

Complete technical specifications available upon request.

Portable Case

Suitcase: 28.8" L x 20.1" W x 14.8" D
Durable ABS Plastic

Workstation on Mounted Panel

Circuit Breaker

Master Control Relay Circuit

Allen Bradley Compact Logix 5300

24 VDC Power Supply

12 VDC Power Supply

I/O Simulator

- 1 Green Normally-Open Pushbutton
- 1 Red Normally-Closed Pushbutton
- 2 Black Normally-Open Pushbuttons
- 4 Two-position Selector Switches
- 6 Red Indicators
- 1 Yellow Indicator
- 1 Green Indicator
- 1 Potentiometer for Analog Input Adjustment

Thermostatic Temperature Application

Analog Temperature Application

Reversing Motor Starter Application

Variable Speed Motor Control Application

Stepper Motor Control Application

Power Cord

Student Curriculum (M11136, M11143)

Instructor Guide (C11136)

Install Guide (D11136)

Additional Requirements:

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

Utilities Required:

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

PLC Fault Troubleshooting

The 990-PAB53F uses Fault Pro, an electronic fault insertion system that is only available from Amatrol, to insert 35+ faults into the system for troubleshooting. Learners will troubleshoot these faults as they progress through 25 different troubleshooting skills.

Learners engage in practicing skills directly related to industry needs including using a six-step sequence to troubleshoot a PLC system, troubleshooting a PLC routine that performs on/off control using an analog input, and testing a PLC-controlled Pulse-Width Modulation (PWM) output device.

Rich Applications: Basic through Advanced

In addition to troubleshooting skills, the 990-PAB53F includes application circuits and components for thermostatic temperature control, analog temperature control, reversing constant-speed motor control, variable speed motor control with feedback, and stepper motor homing and commissioning. These circuits include basic and advanced applications starting with discrete I/O projects and extending to projects involving analog I/O. These applications enhance a learner's experience because they can actually see how a program controls real systems.

Modern Curriculum with PanelView Plus Terminal and Networking



The extensive Amatrol curriculum offered with the 990-PAB53F features a wide range of analog, discrete, data, and networking commands. The curriculum has been designed to teach modern PLCs as they are used today, with the PanelView Plus terminal and networking introduced in the basic lessons and applied throughout the curriculum. Learners cover a wide variety of program commands, ranging from timers and contacts, stepper motor control, PWM control, and analog control that will quickly develop relevant and critical skills to be job ready in modern industry environments.

Portable Workstation

The 990-PAB53F is a mobile training platform that can be used to deliver training at multiple facilities or for convenient storage. It features a sturdy, portable case with wheels and a handle for easy transport. The cover can be quickly removed to enable the case to sit firmly upright on a table surface for student use. The cover also locks so that the workstation can be safely stored when not in use.

