Portable PLC Troubleshooting Learning System - Mitsubishi FX5U

990-PM5UF





Learning Topics:

- Programmable Logic
 Controllers
- PLC Systems Troubleshooting
- Analog I/O & Application Troubleshooting
- HMI Operation & Application Editing
- PLC Programming
- PLC Motor Contro
- PLC Timer and Counter Instructions
- Event Sequencing
- Program Control Instructions
- Math and Data Move Instructions
- Analog Inputs & Outputs

Amatrol's Portable PLC Troubleshooting Learning System - Mitsubishi FX5U (990-PM5UF) teaches Programmable Logic Controller (PLC) programming operation and applications used throughout industry. The system also utilizes FaultPro, the industry's premier computer-based fault insertion system. FaultPro enables learners to develop key PLC troubleshooting skills, such as PLC input and output testing, software testing ansd application troubleshooting.

Interactive Multimedia Curriculum

This portable system provides hands-on experience with real-world components, including the powerful Mitsubishi FX5UJ-24MT/DSS Processor, HMI, Ethernet Switch, an I/O Simulator, five applications, and a master control relay circuit. Learners will study industry-relevant applications and troubleshooting skills that will build a strong foundation for a successful career in a variety of industries.



Technical Data

Complete technical specifications available upon request

- Mitsubishi FX5UJ-24MT/DSS Processor
- Digital Inputs, 24 VDC
- Digital Outputs 24 VDC
- HMI Panel
- 24 VDC Built-In Power Supply
- I/O Simulator
- Workstation Application Panel
- Mobile Workstation Case
- USB Cable
- Fault Controller
- Amatrol FaultPro Software
- Student Curriculum Interactive PC-Based Multimedia
- Instructor's Guide
- Installation Guide
- Student Reference Guide
- Additional Requirements:
 - o GX-Works3 (PLC), GT-Works3 (HMI) Programming Software
- o Computer: See requirements: http://www. amatrol.com/support/computer-requirements
- Optional Requirements:
- o Mobile Technology Workstation (82-610)

 Utilities Required:
- o Electrical (100-240V / 50-60Hz / 1ph)
- o Clean, filtered air (50psi)
- o Air Pressure Regulator

Practice Hands-On PLC Troubleshooting and Programming

The Portable PLC Troubleshooting learning system includes a Mitsubishi FX5UJ-24MT/DSS Processor & HMI Screen, two double-acting pneumatic cylinders, two control valves, a potentiometer, variable speed drive, external I/O interface, temperature control and an emergency stop button all within a portable learning system. Learners will use these components to perform troubleshooting skills on a variety of topics, such as thermostatic temperature control, variable speed motor control with feedback and electro-pneumatic controls. Learners will also practice the programming and operation of industrial PLCs.



Portable PLC Troubleshooting

Highly Engaging Interactive Multimedia for PLC Skill-Building

Portable PLC Troubleshooting's extensive multimedia curriculum begins with PLC operation and programming, and then builds onto this knowledge by advancing to topics such as analog input / output troubleshooting. By combining theoretical knowledge and hands-on skills, the learner's comprehension and retention of troubleshooting systems is greatly enhanced.



PLC Troubleshooting Multimedia

Amatrol's peerless interactive multimedia curriculum utilizes text with voiceovers, pictures, videos, stunning

> 3D animations, and interactive guizzes 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.

I/O Link Interface with Optional Smart Factory Capabilities

The 990-PM5UF can be used with the Industry 4.0 Fundamentals course to serve as a PLC training device and Table Top "Smart Factory" Cell Controller. Amatrol's Smart Factory is a fully connected and flexible manufacturing system that connects its physical systems, operational information and human assets to control manufacturing, maintenance, inventory, and supply chain operations.

Fault-Pro: A World-Class Troubleshooting Teaching Tool

The 990-PM5UF Portable PLC Troubleshooting Learning System uses Fault-Pro, the industry's premier software utilizing an electronic fault insertion system that is only available from Amatrol, to

implant 30+ faults into the system for troubleshooting. During the learning process, Fault-Pro allows learners to insert faults in the system as they progress through the step-by-step procedures learning industrial troubleshooting methods. Then, Fault-Pro can be set to randomly select and insert a fault to test a learner's troubleshooting abilities and prepare them to solve real-world technical problems once they're in the field.





Complimentary Student Reference Guide

A sample copy of the Portable PLC Troubleshooting - Mitsubishi Student Reference Guide is included with the learning system. Sourced from the curriculum, the Student Reference Guide supplements 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.

