

Robotics 1 Learning System

96-ROB1A



Interactive Multimedia Curriculum and Student Reference Guide

Learning Topics:

- Basic Robot Operation
- Power Up and Shutdown
- Homing
- End Effector Operation
- Basic Robot Programming
- Teaching Points
- Movement and End Effector Commands
- Looping and Speed Commands
- I/O Interfacing
- Material Handling

Amatrol's Robotics 1 Learning System (96-ROB1A) teaches articulated arm servo robotics and how it's applied in industrial tasks like assembly, material handling, and inspection. This introductory robotics training system includes a 5-axis articulated servo robot arm with a 360-degree work envelope, mobile workstation, industrial controller, and state-of-the-art teach pendant. Using these real-world components, learners will be able to practice over 140 executable commands using the powerful MCL II programming language.

The system also includes in-depth multimedia curriculum covering the major topic areas of basic robot operation, programming, interfacing, and material handling. For example, learners will study: homing procedures for a servo robot; commands like grasp, release, and Pmove; and applications of robots in material handling. Amatrol's combination of theoretical knowledge and hands-on practice allows learners to gain both conceptual and practical knowledge, broadening competency in robotic applications.



Technical Data

Complete technical specifications available upon request.

Pegasus II Servo Robot

5-Axis Servo Robot Arm with Electric Servo Gripper
Servo Controller
Pegasus Control Software
Teach Pendant

Flexible Workstation

Rectangular Parts Set

Parts Feeder

Parts Bins (3)

Manual Pushbutton

Indicator Light

Multimedia Curriculum (MB761)

Instructor's Guide (CB761)

Installation Guide (DB761)

Student Reference Guide (HB761)

Additional Requirements:

Computer (Visit www.amatrol.com/support/ for computer requirements for details.)

Utilities Required:

Electric (100-240 VAC/50-60 Hz/1 phase)
Compressed Air Supply (5 CFM @ 100 PSIG/
0.142 cmm @ 690 kPa)

Options:

Robotics 2 Learning System (96-ROB2A)

Study Robot Programming and Practice with an Industrial-Quality Pegasus II Robot

The 96-ROB1A features a powerful, 5-axis Pegasus II articulated servo robot arm with a gripper. This robot features a double-jointed arm with a 360-degree work envelope, increasing work cell efficiency. Industrial-quality repeatability, high-resolution encoders, infrared homing sensors, and multiple microprocessors allow this robot to also perform precise industrial tasks, such as assembly. The system also features a state-of-the-art teach pendant with a two-line display, emergency stop button, jog capability, and four soft keys. This powerful unit serves as a handheld programming terminal, enabling users to enter and edit teach points as they learn basic robot programming.



Pegasus II Robot with Computer Controller and Teach Pendant

Engaging, Highly-Interactive Multimedia

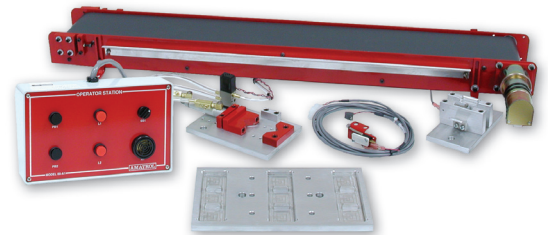
Amatrol's curriculum features a highly-interactive, multimedia format that includes stunning 3D graphics and videos, voiceovers of all text, and interactive quizzes and exercises designed to appeal to learners with different learning styles. The 96-ROB1A curriculum teaches learners about the basics of robot operation and programming. For example, learners will study interfacing and material handling topics, such as looping and speed commands. The combination of theoretical knowledge and hands-on skills solidifies understanding and creates a strong basis for pursuing more advanced skills.



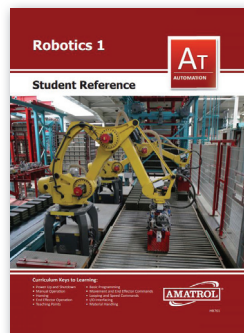
Interactive Multimedia Curriculum

Extend Your Robotics Learning

For those who want to extend their robotics training, Amatrol offers the optional Robotics 2 Learning System (96-ROB2A). Moving beyond basic robot operation and programming, the Robotics 2 Learning System teaches advanced robotics concepts, such as application development, flexible manufacturing cells, quality control, and production control. For example, users will learn how to connect and control a conveyor in conjunction with the Pegasus II robot.



Optional Robotics 2 Learning System



Student Reference Guide

A sample copy of the Robotics 1 Student Reference Guide is also included with the system for your evaluation. Sourced from the system's curriculum, the Student Reference Guide takes 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.

