

# PLC Analog Application Training System | Hands-On Allen-Bradley ControlLogix Skills



Learning System: 89-AS-AB5500

The PLC Analog Application Learning System - ControlLogix (89-AS-AB5500) adds to the Programmable Controller Troubleshooting Workstation (890-PECB) and the PLC Troubleshooting Learning System-AB ControlLogix (890-AB5500) to teach PLC control of analog input and output devices. Analog I/O capability enables PLCs to more precisely control processes by providing variable output signals and receiving variable input feedback from sensors. Popular applications include temperature control, liquid level control, and variable speed conveyors.

The analog training system includes an analog application station, cable assembly, Allen-Bradley ControlLogix combination analog module, student learning materials for both theory and lab, and a teacher's assessment guide. Students will learn industry relevant skills including how to operate, interface, program and troubleshoot PLC systems using analog I/O.

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## Teach Hands-On Skills

## Interchangeable Application Station

Amatrol's analog training system includes an interchangeable analog application station that enables students to quickly set up the 890-PECB and 890-AB5500 systems for analog study with live components. As with other 890 application stations, the analog station attaches to the application console with quick release connectors. The station stores conveniently under the workstation when not in use.

The analog training system adds to the 890-PECB and 890-AB5500 systems to provide a self-contained learning platform for study of analog control. The analog application station includes a 10-turn potentiometer with 0 - 10 VDC signal and digital readout to provide an analog input to the PLC analog module, while the analog output from the PLC is displayed on a second digital readout. Power for the station is supplied from the 890-PECB.

## External Analog I/O Control

The analog training system also provides a convenient, compatible interface to external analog devices, enabling students to extend their study of real world applications, such as process control. The analog application station supports connections of four analog inputs and two analog outputs. The station is compatible with both voltage and current signals with a selector switch setting. It also includes 16 discrete I/O connections and indicators to support control of processes that require a combination of discrete and analog I/O.

## In-Depth Curriculum

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### In-Depth PLC Analog Application Curriculum

Amatrol's PLC analog application training system features comprehensive curriculum that teaches PLC analog application topics, including: analog input and output modules and input and output module configuration and troubleshooting. Within these topics, learners will study objectives like configuring the input configuration screen parameters for a ControlLogix analog input module; troubleshooting a PLC routine that performs on/off control using an analog input; and designing a PLC routine that controls the speed of a conveyor with an analog output module.

### Optional eBook Curriculum Available

Amatrol's [eBooks](#) look like a real book and allow users to flip between pages with ease. Enhanced with features such as keyword searches and zoom controls that enable a user to quickly locate and view information, these eBooks are a fantastic learning tool. Amatrol's eBooks are available online and can be used by anyone with access to Amatrol's Learning Management System (LMS). Optionally, if you choose to use your own LMS, these eBooks are SCORM compatible to allow smooth integration into your current training system. Combined with our already extensive library of interactive multimedia titles, which are also SCORM compatible, users can now complete their entire course work online!

## Additional Info

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### Requires:

- Programmable Controller Troubleshooting Workstation (890-PECB)
- PLC Troubleshooting Learning System - AB ControlLogix (890-AB5500)
- Computer (see [Computer Requirements](#))

### Utilities:

- See base systems for utility requirements.

### Options:

- PLC Analog Applications eBook Courseware for AB ControlLogix PLCs (E40661)
- PLC Analog Application Learning System - ControlLogix Module Addition (89-AS-AB5500-I)

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### Contacts

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