



ETHERNET I/O SYSTEM OVERVIEW COURSE

Online Training Course

Course ID: SP156

ITW EAE Learning

Our eLearning courses are specifically designed to provide engaging and interactive learning opportunities for operators, technicians, engineers and/or managers to be introduced to or build upon the knowledge and skills needed to successfully operate, maintain, program, or troubleshoot their Electrovert Electra Vectra wave soldering system. Online courses are designed to cover beginning and intermediate competencies and should be mastered before considering more advanced, in person training. Courses require a reliable internet connection and can be viewed at your own pace on your phone, tablet, or pc laptop.

Course Overview:

In this course, you will review the Electrovert Ethernet I/O System. It is split into 6 chapters which cover: the main module, digital module, solid state relays, analog module, counter/timer module, and blower control card.

Who Should Take this Course: Anyone who will interact with or troubleshoot the ethernet I/O system of an Electrovert machine.

Prerequisites: None

Time Requirements: 1 – 1.5 hours **Assessments:** Knowledge Checks

Languages: English, Spanish

Learning Objectives:

Chapter 1: Main Module

- Understand the power and interlock configuration.
- Identify the communication connections on the main module.
- Use the diagnostic LEDs for troubleshooting and problem-solving purposes.
- Be able to hook up an outside PC for diagnostic purposes.
- Utilize serial communications through the COM ports on the main module.



Chapter 2: Digital Module

- Understand the configuration of the I/O points.
- Use the diagnostic LEDs for troubleshooting and problem-solving purposes.
- Configure the board addressing.
- Utilize the interlock jumpers.
- Interpret software terminology and indicators.

Chapter 3: Solid State Relays

- Understand the communication of the SSRs.
- Use the diagnostic LEDs for troubleshooting and problem-solving purposes.
- Utilize the port connectors.
- Address the different SSRs within the machine.
- Interpret software terminology and indicators.

Chapter 4: Analog Module

- Understand the inputs and outputs of the analog module.
- Use the diagnostic LEDs for troubleshooting and problem-solving purposes.
- Utilize the input and output connectors and jumpers.
- Interpret software terminology and indicators.

Chapter 5: Counter/Timer Module

- Understand the inputs of the counter/timer module.
- Identify what each LED indicator means and how it relates to the functionality of the module.
- Utilize input connections to properly address the counter/timer module.

Chapter 6: Blower Control Card

- Use the diagnostic LEDs for troubleshooting and problem-solving purposes.
- Locate the connectors and be able to utilize each connection for its intended purpose.
- Address the card using the dip switches located on the blower control card.

For more information and pricing, please contact ITW EAE at training@itweae.com.