

## M211

# Harmony Control Unit - S800 I/O with Composer



Learn to configure and troubleshoot Harmony with S800 I/O.

### Course type and methods

This is an instructor led workshop with short presentations and demonstrations, extended exercises, and hands-on sessions and discussion.

### Student Profile

This training is targeted to anyone responsible for installation, start-up, and maintenance of Harmony with S800 I/O systems.

### Prerequisites

Students should have taken either course M101, Process Control Unit – Rack I/O with WinTools, or M111, Harmony Control Unit – Rack I/O with Composer, or have equivalent knowledge with basic Harmony hardware. Basic knowledge and usage of applications running on the Windows® operating system is also recommended.

### Course objectives

Upon completion of this course the participants will be able to:

- Know what information is in the Harmony S800 and S800 I/O documentation, and where to find it
- Know the basic hardware layout including redundancy at all levels
- Describe the various components, supported I/O, communications, specifications, and constraints
- Explain the BRC100/BRC300 and IOR firmware compatibility

- Use proper procedures for flashing firmware
- Install and set up a complete system including MRC and S800
- Configure the appropriate function blocks for S800 I/O, including labeling operations to associate the module with the function block
- Analyze hardware status and troubleshoot using LEDS, Composer, and other tools

### Main topics

- Documentation
- S800 I/O architecture
- Hardware, firmware, software set-up
- Controller configuration
- Operation
- Troubleshooting

### Duration

The duration is 5 days

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**Course Outline**

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Day 1	Day 2	Day 3	Day 4	Day 5
<ul style="list-style-type: none"><li>• Introductions</li><li>• Documentation</li><li>• System components and architecture</li><li>• Firmware/software requirements</li></ul>	<ul style="list-style-type: none"><li>• Review: questions and answers</li><li>• Harmony hardware</li><li>• S800 introduction</li><li>• S800 communications</li></ul>	<ul style="list-style-type: none"><li>• Review: questions and answers</li><li>• S800 modules and termination units</li><li>• S800 harmony configuration</li></ul>	<ul style="list-style-type: none"><li>• Review: questions and answers</li><li>• S800 harmony operation</li><li>• S800 harmony troubleshooting</li></ul>	<ul style="list-style-type: none"><li>• Review: questions/answers</li><li>• Hardware update BRC300/BRC400, NIS21, ICT13</li></ul>

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