



ESDW325 System Control Protocol

The purpose of this course is to provide designers with an advanced knowledge of using communication protocols to control systems. Participants will study the differences in handling communication protocols depending upon physical connectivity, packet structure, and supported command set. This course will explore the mysteries of protocol documents, checksums and CRCs, and the ways they can be used to perform real-world actions. Participants will learn to identify and solve problems encountered when controlling sub-systems. The course also identifies the command sets each typical residential sub-system should support for useful integration. It is expected that participants already have a requisite knowledge of the basic use and function of common residential systems and are comfortable with the hexadecimal and binary numbering systems and programming concepts.

Upon completion of this course, participants should be able to:

- Identify and address communication issues arising from connectivity and protocol use
- Comprehend communication protocol documentation and recognize the pertinent portions
- Apply various solutions to real-world system control problems
- Recognize shortcomings in system control protocols

Recommended prerequisites: ESD123, ESD124