

Microcomputer Technology

Chapter 4: PLC Programming Methods

by

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PLC Programming Methods

- **Aims**
 - Apply the fundamental technique in PLC programming to control a basic automation system.
- **Expected Outcomes**
 - Develop ladder programs for the logic functions AND, OR, NOR, NAND, NOT and XOR.
 - Develop ladder programs involving internal relays, timers, counters, shift registers, sequencers and data handling.
 - Develop functional block diagram, instruction list, structured text and sequential function chart programs.
- **References**
 - W. Bolton, Programmable Logic Control, 4th Ed.



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Content Chapter 4

- Ladder and Functional Block Diagram
 - Ladder diagrams
 - Logic functions
 - Latching
 - Multiple outputs
 - Entering programs
 - Function blocks
 - Programming example
- IL, SFC & ST Programming Methods
 - Instruction lists
 - Sequential function charts
 - Structured text



Ladder Diagram



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Logic Functions



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Latching



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Multiple Outputs



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Entering Programs



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Function Blocks



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Program Examples



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Instruction Lists



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Sequential Function Charts



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Structured Text



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Conclusion of The Chapter

- Conclusion #1

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- Conclusion #2

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- Conclusio #x

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