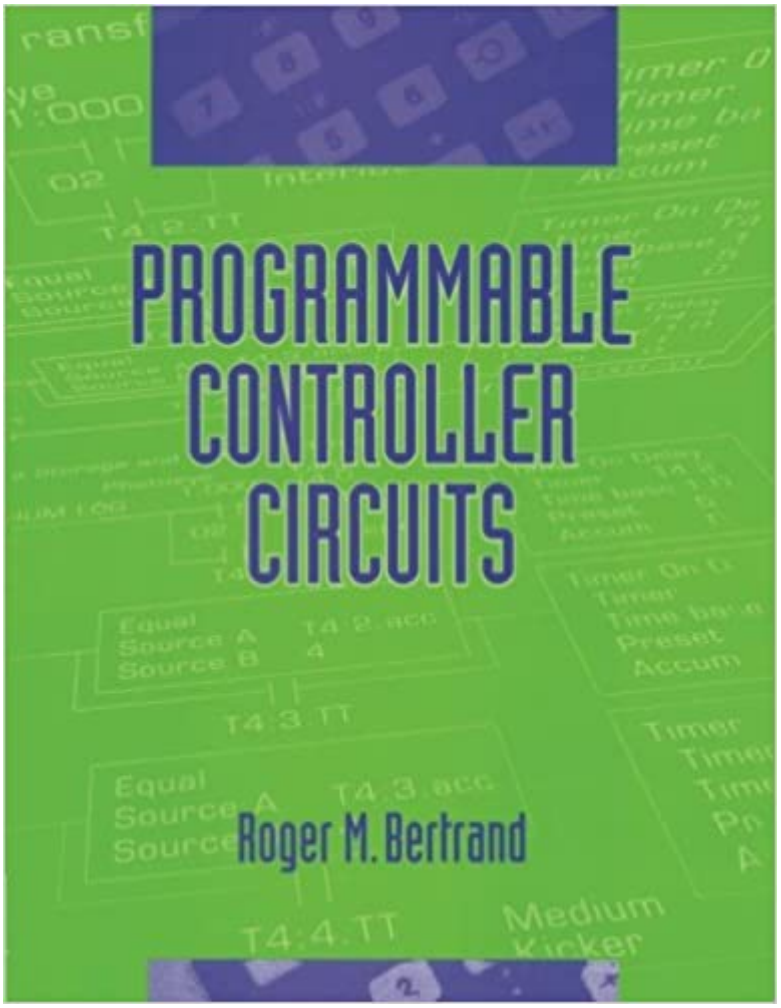
Programmable Controller Circuits (Electrical Trades (W/O Electro))



Synopsis

This book is a project manual designed to provide practical laboratory experience for the student of Industrial controls: Its purpose is two fold (1) to provide structured laboratory experiences based on motor control applications. (2) to provide a background on programming control circuits and concepts that are used in industry. Throughout the manual the student will construct and program their own circuits focusing on "real-world" purposes. The projects and experiments will lead them in a step-by-step development process, designed to progress through various stages of programming instructions. The student’s abilities to analyze and program circuits will progress as they complete each project. The simulator can be used to complete all the programming projects and experiments in the book. With the supervision of the instructor the simulator can be assembled and connected by students to provide valuable training.

Book Information

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Customer Reviews

Part I: Electromechanical/ Project 1. Stop-Start Circuits 1.1Two Motor Starters 1.2 Two Stop-Start 1.3 Sequence Start 1.4 Single Pushbutton Sequence 1.5 Non-Sequential Lights /Project 2. Run-jog Circuits 2.1 Jog-Off Auto 2.2 Relay Jog #1 2.3 Relay Jog #2 2.4 Jog1-Jog 2-Run 1&2 /Project 3. Forward Reverse Circuits 3.1 Standard Forward-Reverse 3.2 Reverse Jog1-Forward 1&2 Reverse Jog2 3.3 Forward Run-4 Starters /Project 4 Timing Circuits 4.1 Timed Sequence 1 4.2 Timed Sequence 2 4.3 timed Press Circuit 4.4 Timed Switch Circuit 4.5 Two Speed Compelling / Project 5

AC Drive System...Part 2: Programming Introduction /Project 6. Stop- Start 6.1 Sequence Start 6.2 Latch/Unlatch 6.3 Masher Control Reset 6.4 Hand -Auto 6.5 Non-Sequential Lights 6.6 Logic Circuit Lab / Project 7. Run & Jog 7.1 Selector Jog 7.2 Bit Moving / Project 8 Bag Conveyor 8.1 Timed Motor Sequence 8.2 Timed Press Circuit 8.4 Cycle Timer /Project 9 Forward-Reverse (off delay) 9.1 For-Rev Low-High /Project 10 Up-Down counter 10.1 Bottle Count 1 10.2 Bottle Count /Project 11. Forward & Reverse (sequence) 11.1 Electric Brake 11.2 Reset to Park /Project 12. Press Cycle 12.1 Temperature Conversion 1. 12.2 Barbecue Sauce /Project 13. Thumbwheel 13.1 False Starts 13.2 Temperature Conversion 2. /Project 14 Multi-Speed Motor 14.1 Sequence Lights / Project 15 Storage Process 15.1 Storage Process 2. 15.2 Hungarian Roll Recipe Project 16 Conveyor system 16.1 Box Conveyor Project 17 Paint Shift 17.1 Ring Shift 17.2 right/Left Shift 17.3 Parallel In/Serial Out/ Project 18. Log Kicker 18.1 Log Scanner 19. Sequencer 19.1 Car Wash / Project 20 Sequential Function Chart 20.1 SFC#2 /Project 21 Digital to Analog Conversion /Project 22. Analog to Digital Conversion 22.1 AD/DA / Project 23. PID 23.1 PID#2 24 Structured Text Program 24.1 STX #2 Appendix A: Instruction References Appendix B. Roto-Push Switches

Roger Bertrand has over 30 years experience as a master electrician. He received both his BS and MS from the University of Maine. He is currently the an Instructor and Department Chair of Electromechanical Technology at Central Maine Technical College in Auburn, Maine.

The title of this book, as well as the description, strongly suggest that it covers circuits. Unfortunately, it appears that in this case, the meaning of "circuit" has been hijacked by PLC industry practitioners and assigned a jargon definition that most closely approximates the existing words "Program", "Algorithm", "Procedure", or "Sequence".As you can see, none of these words has much to do with describing:a: the complete path of an electric current including, usually, the source of electric energy.b : an assemblage of electronic elements.which are both meanings of the word "circuit" that can actually be found in a dictionary.If you are a USER of certain families of PLCs, perhaps this book will be of some use. However, at $50, I would strongly suggest just reading the PLC manual.If you intend to DESIGN a PLC, this book will be of absolutely NO USE, whatsoever.

Here, we can find a lot of examples of Programmable Logic controller circuits. Not only for the teacher who teach in PLC. subject but for everyone who are interesting in this field.

Programmable Controller Circuits (Electrical Trades (W/O Electro)) How to Prepare for the Air Traffic Controller Exam (Barron's How to Prepare for the Air Traffic Controller) Introduction to the ControlLogix Programmable Automation Controller with Labs Programmable Logic Controller (PLC) Tutorial, Siemens Simatic S7-200 Programmable Logic Controller (PLC) Tutorial Programmable Logic Controller (Plc) Tutorial, Siemens Simatic S7-1200 Programmable Logic Controller (PLC) Tutorial, GE Fanuc Industrial Electrical Troubleshooting (Electrical Trades S) IEC 61508-7 Ed. 1.0 b:2000, Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 7: Overview of techniques and measures Electrical Studies for Trades Audel Guide to the 2011 National Electrical Code: All New Edition (Audel Technical Trades Series) CMOS Digital Integrated Circuits: A First Course (Materials, Circuits and Devices) Selected Topics in RF, Analog and Mixed Signal Circuits and Systems (Tutorials in Circuits and Systems) What Are Electrical Circuits? (Understanding Electricity) Everything Electrical: How To Test Circuits Like A Pro: Part 1 (Revised Edition 8/29/2017) Microelectronic Circuits (The Oxford Series in Electrical and Computer Engineering) 7th edition Everything Electrical: How To Test Relays And Involved Circuits (Revised Edition 5/10/2017) Everything Electrical: How To Test Circuits Like A Pro: Part 2 (Revised Edition 4/12/2017) Microelectronic Circuits (Oxford Series in Electrical & Computer Engineering) Logic Circuits and Microcomputer Systems (McGraw-Hill series in electrical engineering)