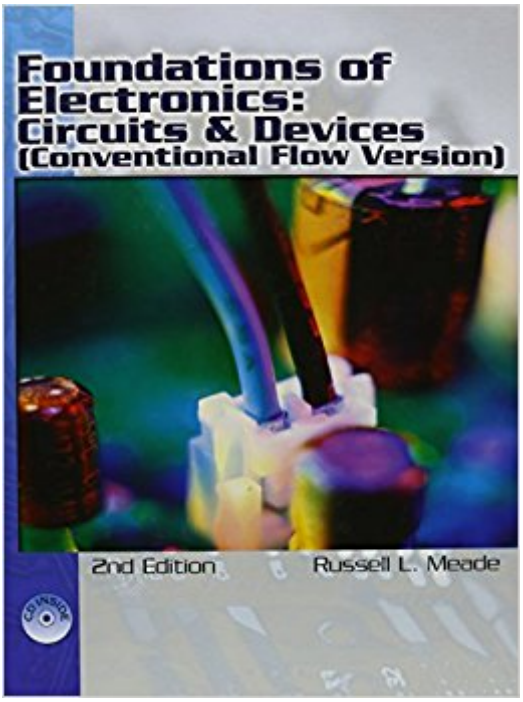
Foundations Of Electronics: Circuits & Devices Conventional Flow



Synopsis

The conventional flow version of Foundations of Electronics: Circuits and Devices comprehensively teaches electronics fundamentals for both DC and AC circuits, from Ohm's Law through series and parallel circuits, and features strong coverage of solid-state devices theory and important practical circuits in which diodes, BJT's, FET's, MOSFET's and optoelectronic devices are used. The Second Edition has been updated to better provide a foundation in power supplies, amplifiers, oscillators, op-amps, and optoelectronic systems that readers need to launch a career or pursue more advanced study. Real-world color codes and strategic highlighting combine with color charts, photos, schematics, and diagrams to build an understanding of circuits and devices that bridges the gap between must-know theory and hands-on circuit work. Other enhancements include totally new, automated calculations for the formulas in the book on the accompanying CD, and all-new information on admittance and susceptance.

Book Information

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Customer Reviews

PART I FOUNDATIONAL CONCEPTS: Basic Concepts of Electricity, Electrical Quantities and Components PART II BASIC CIRCUIT ANALYSIS: Ohm's Law Series Circuits Parallel Circuits Series-Parallel Circuits Basic Network Theorems Network Analysis Techniques PART III PRODUCING and MEASURING ELECTRICAL QUANTITIES: Magnetism and Electromagnetism Measuring Instruments Basic AC Quantities The Oscilloscope PART IV REACTIVE COMPONENTS: Inductance Inductive Reactance in AC RL Circuits in AC Basic Transformer

Characteristics Capacitance Capacitive Reactance in AC RC Circuits in AC RLC Circuit Analysis Series and Parallel Resonance. PART V: Semiconductor Materials and P-N Junctions Diodes and Diode Circuits Power Supply Circuits Bipolar Junction Transistors BJT Amplifier Circuits, Field-Effect Transistors and Circuits Operational Amplifiers Oscillators and Multivibrators Thyristors Optoelectronics

Russell L. Meade obtained his Bachelor of Science degree from Mercer University in Georgia. He possesses more than 11 years of teaching experience in electronics and more than 10 years of business experience in such high-tech industries as Scientific-Atlanta, Electromagnetic Sciences, Inc., and Training Technology, Inc. Russell also has more than 16 years of State Agency Technical Education experience in the field of electronics, and has authored numerous books for electronics education and training.Robert Diffenderfer received a Bachelor of Science in Electrical Engineering (BSEE) from John Brown University and a Master of Science in Electrical Engineering (MSEE) from the University of Illinois. With over 28 years of professional experience, he is currently a Senior Professor with DeVry University teaching in the Bachelor of Science in Electronic Engineering Technology program at the Kansas City, Missouri campus.

The text book is constructed well and easy to navigate for "self-teaching". The text book arrived in less than 2 days.

Since this was a required textbook for school, I am making good use of it. The lessons and material is well organized, making it easier to study out of.

This is just what I needed for school. even had the cd that came with it.

This textbook is far and away the best I’ve ever seen on the subject. I wholeheartedly agree with the previous review, and would like to add a few comments of my own. This book, as a stand-alone text, is outstanding. If you combine this book, the lab project manual(sold separately-around $70), and invest around $50 in a Multisim software program(10.1 is the newest version right now), you’ve just given yourself the basis of an electronics education that will serve you well for the rest of your life. Multisim is basically a circuit prototyping and analysis software package. It has a 3-d breadboard where you can hook up circuits(with around 16,000 different components to choose from) and see how/if they work, analyze and troubleshoot them, etc. Pretty much anything you could do on a

breadboard, you can do on Multisim. This book comes with a disk that gives you ready made circuits to open with Multisim to experiment on, and it walks you through doing so. It's unbelievable. The lab manual gives you a ton of actual circuit building experiments to do on an real breadboard...again walking you through. The book itself starts assuming no previous knowledge of electronics, and takes you up through transistors, oscillators, op amps, etc. It has a plethora of examples that are worked out step by step, with practice problems coming every couple of pages, and then chapter review problem at the end of every chapter...all with the answers at the back of the book so that you can check your progress. I've never taken the time to review ANYTHING my whole life, but this book has been such a blessing for me, I just had to. I'm teaching myself electronics, in preparation of starting an Electronics Engineering program at Devry this spring. I just wish I would've bought this book earlier, instead of some others I bought. HIGHLY recommended!

Of the 3 electronic books I ordered, this one is definitely the best. Easy to understand and laid out well. For an introduction, it's better than "Practical Electronics for Inventors" and vastly superior to the kindergarten style of "Getting Started i Electronics". I ordered a cheap edition from 2003. I figured that electronics at my level hadn't changed that much in the last decade.

Circuits and Systems) Electronic Devices (Electron Flow Version) (5th Edition) Photodetectors: Devices, Circuits and Applications Sensors, Actuators, and Their Interfaces: A Multidisciplinary Introduction (Materials, Circuits and Devices)