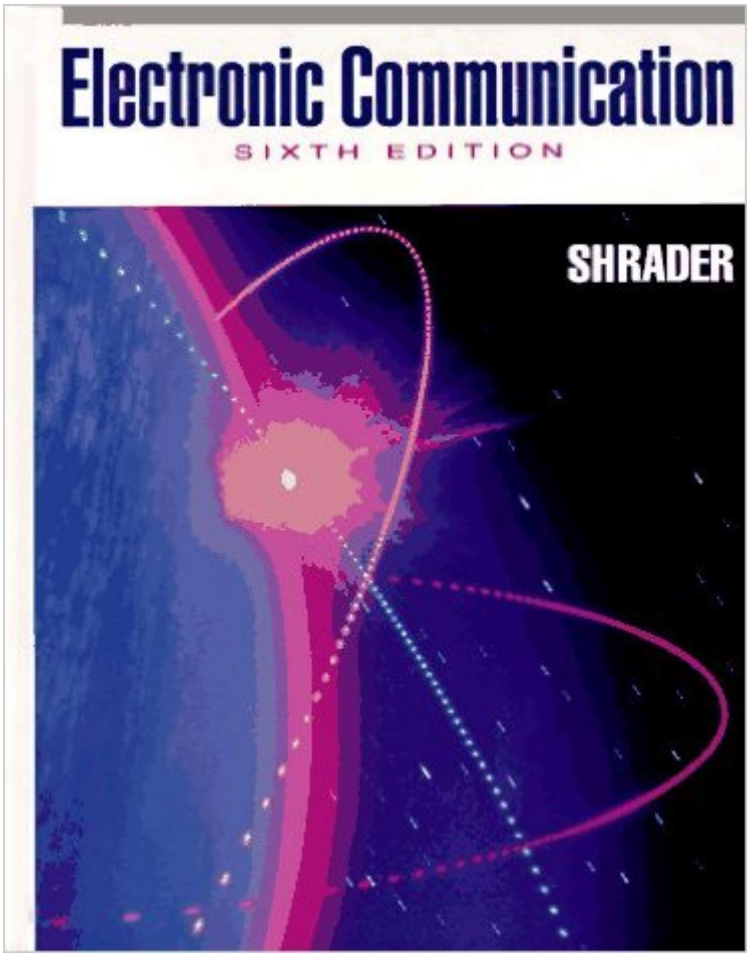
Electronic Communication



Synopsis

Electronic Communication has been one of the most popular textbooks in its field for many years. This expanded. Sixth Edition utilizes the same user friendly format to prepare students for the operation, installation, and. maintenance of most modern electronic and radio communication systems. Performance objectives have been. added to each chapter to guide student focus. Electronic. Communication provides information on the interrelationship. of voltage, current, resistance, inductance, and capacitance as well as discussions of various active devices currently in use. While the text emphasizes semiconductor devices and circuitry, it still retains an adequate amount of vacuum tube theory. In addition, this edition features up-to-date coverage of digital communications and fiber optics, topics that are critical to the skills development of todayï¿ s communication student. To reinforce understanding of subjects just covered, check-up quizzes are inserted every few pages in most chapters, with answers on the next turned page. End-of-chapter questions, which include number references to the section or figure where the answer can. be found, check comprehension of the entire chapterï¿ s material. Bold letters prefixing many end-of-chapter questions indicate that a similar question may appear in one of the specific certification license tests.. . The Lab Manual has been expanded to include much more experiments that correlate and correspond with the revisions made to the text. As always, the manualï¿ s experiments reinforce text content and are an integrated part of the total package.. . .

Book Information

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Customer Reviews

I first encountred the first edition of this book in 1971 when attending College in Southern California. I started using the 4th edition in 1981 when I began instructing a college class on radio Communications. I have used Shrader ever since. The reason I use Shrader's book is because the book is accurate. Other books I have attempted to use have had errors in formulas and some information was not quite clear for the students. Shrader covers many subjects with a good basic explaination of circuits and systems. Shrader not only has a good understanding of the subject material he is able to relate the information without confusion.

Since you can't "search inside this book" on , I wanted to make people aware that this book is written at the community college/vocational school/electronics technician level. In other words, after the basics on components & resonant circuits, the text describes various communication systems at a qualitative level and attempts to educate people on, e.g., how tweaking component values in a transmitter will influence the end results. This is quite valuable (and something that someone who learns "a bunch of formulas" from a more advanced book may not have a good grasp on), but you will need some of those more advanced books (and a corresponding mathematical background) if you find yourself in a traditional college or university engineering program. E.g., you won't find a derivation of how a sine wave input to a frequency modulator produces a sum of Bessel functions in the output spectrum, derivation of the large scale gain of a transistor amplifier based on its non-linear behavior, there's no usage of phasors, convolution, LaPlace transforms, etc.Looking at it the other way around -- people from traditional four year programs will find themselves gaining value from exposure to different communication system devices & architectures that time usually doesn't permit mention of in their formal education, as well as an emphasis on knowing what to expect from and how to troubleshoot existing system. For instance, Shrader has plenty to say about tubes -- enough that you could build an OK amplifier out of them --, whereas many 4 year undergraduate programs only mention them in passing since their usage is so uncommon today. Similarly, Shrader will tell you how to align the various sections of a superheterodyne radio, whereas the traditional 4 year program will just teach you how to calculate the exact (unobtainable in practice) component values needed to achieve perfect alignment.

I was introduced to this book by a fellow satellite communications tech in the Army about 12 years ago. Although I had received extensive training, before and after joining the Army, I found that this book was able to fill in many of my knowledge gaps; particularly in the area of transmitter design and modulation techniques. The author starts with the very basics of AC / DC then progresses

chapter by chapter into advanced communications techniques. Almost all of the circuits are solved or modeled algebraically instead of using more advanced integration / differentiation formulas. Therefore, the text can be followed by anyone with at least a high school math background. The book that I had was an older edition with a lot of vacuum tube theory (most of us will never see a vacuum tube outside of a CRT). If there had been less tube and more solid state text, I would have given this book 5 instead of 4 stars. Overall, highly recommended. A good buy!

I have kept an edition of this book around for 12 years. I have used this book to brush up for electronic exams when I changed jobs (some companies give pre-employment exams). I also used this book as a reference to learn new equipment I was not familiar with before. I find this to be a better reference than people.This book contains almost all electronic information you may need: basic electronics, antennas, opamps, microwave and radar, transmitters and receivers. All material is written in a condensed form and is to the point. Sometimes half a page tells you all you need - you are not wading through pages and pages of vague information.This one book is packed with the best electronic reference available. A must for electronic technicians and engineers who encounter a wide array of equipment.

For a good technical school level introduction to the field this is still the best book I've seen. I used a much earlier edition, now 30 years old, but which is still a treasured part of my technical library. The book uses only basic math and basic physics so it's not necessary to have an engineering level background to use the book, and anyone who's interested in the field could benefit from reading this book. It's especially strong on semiconductor theory and devices, but still has enough of the old tube electronics to be useful. Maybe I'm old fashioned, but I always thought the old tubes were more interesting than semiconductors. :-) Devices like electronic beam tubes and pentode based amplifiers were just too cool, and fun to learn about. After reading this book, you'll have a pretty good grasp of the field, and unless you really want to step up the gain and tackle engineering level texts, you won't need to go any further. If you knew everything in this book, you could probably get a technician job somewhere--I've known people who did, just as I knew people who got jobs because they knew Grob's basic electronics book way back when (which includes me :-)). Overall, still a great classic in the field that dispenses a huge amount of useful, easily understood information on an important area.

Waste Electrical and Electronic Equipment (WEEE) Handbook (Woodhead Publishing Series in

Electronic and Optical Materials) Modern Electronic Communication (9th Edition) Electronic Communication Management of Electronic and Digital Media (Cengage Series in Communication Arts) Building Automation: Communication systems with EIB/KNX, LON and BACnet (Signals and Communication Technology) Intelligent Communication Systems: Toward Constructing Human Friendly Communication Environment Communication in Crisis and Hostage Negotiations: Practical Communication Techniques, Stratagems, and Strategies for Law Enforcement, Corrections and Emergency Service Personnel in Managing Critical I Communication at the End of Life (Lifespan Communication) Body Language: Discover and Understand the Psychological Secrets Behind Reading and Benefitting From Body Language (Read People On Sight - Body Communication - Nonverbal Communication) Technical Communication 11e & LaunchPad for Technical Communication 11e (Six Month Access) Conflict Communication (ConCom): A New Paradigm in Conscious Communication Marriage: How To Save And Rebuild Your Connection, Trust, Communication And Intimacy (FREE Bonus Included) (Marriage Help, Save Your Marriage, Communication Skills, Marrige Advice) Conversation Skills: Tactics to Improve Your Conversation and Small Talk Skills for Better Social, Business and Relationship Communication (Communication Skill Training) Kinesics and Context: Essays on Body Motion Communication (University of Pennsylvania Publications in Conduct and Communication) Nonviolent Communication: A Language of Life, 3rd Edition: Life-Changing Tools for Healthy Relationships (Nonviolent Communication Guides) Communication Research Measures: A Sourcebook (Routledge Communication Series) Encyclopedia of Electronic Components Volume 3: Sensors for Location, Presence, Proximity, Orientation, Oscillation, Force, Load, Human Input, Liquid ... Light, Heat, Sound, and Electricity Encyclopedia of Electronic Components Volume 1: Resistors, Capacitors, Inductors, Switches, Encoders, Relays, Transistors Encyclopedia of Electronic Components Volume 2: LEDs, LCDs, Audio, Thyristors, Digital Logic, and Amplification Introduction to Electronic Commerce (3rd Edition) (Pearson Custom Business Resources)