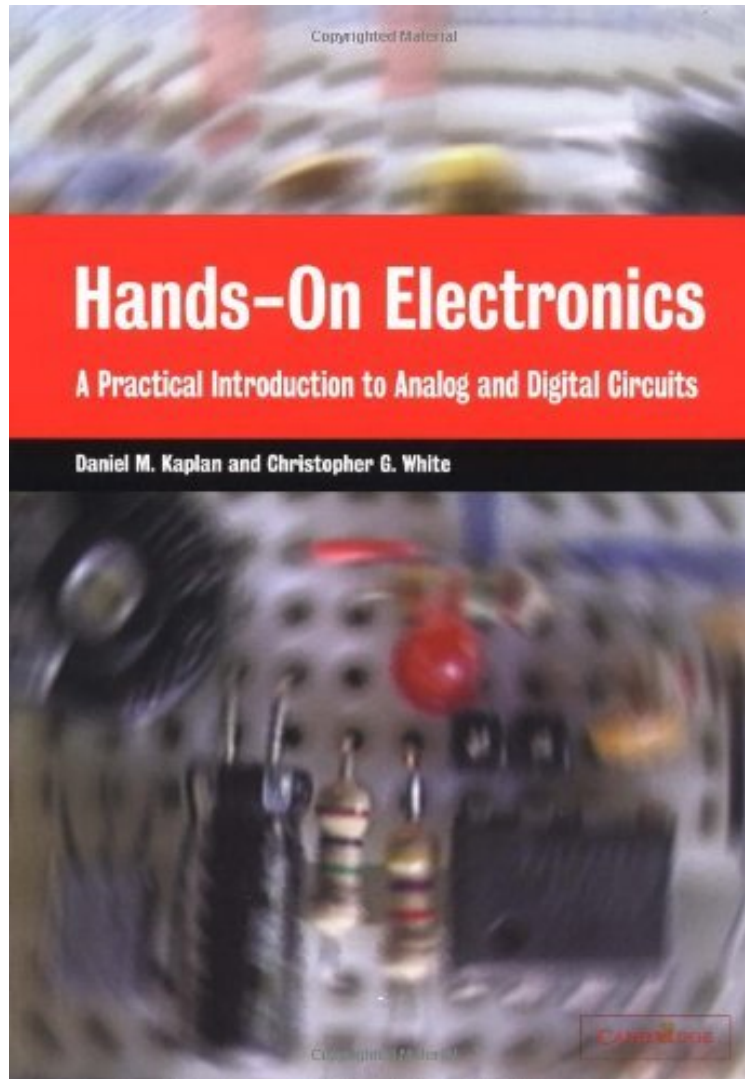


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# Hands-On Electronics: A Practical Introduction to Analog and Digital Circuits

*Daniel M. Kaplan, Christopher G. White*

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**Daniel M. Kaplan, Christopher G. White : Hands-On Electronics: A Practical Introduction to Analog and Digital Circuits** before purchasing it in order to gage whether or not it would be worth my time, and all praised Hands-On Electronics: A Practical Introduction to Analog and Digital Circuits:

2 of 2 people found the following review helpful. Good idea, not great execution  
By Joseph J. Thiebes  
This is a great approach to learning the basics of electronics. Love the hands-on perspective. But the details get confusing and a bit chaotic. The book would benefit from an editor with good attention to detail.  
1 of 2 people found the following review helpful. Exercises Your Understanding of Theory  
By Timothy R. Darrough  
An awesome book for the serious amateur

or student. The book guides you through setting up and studying a variety of circuits. For me, this makes it significantly easier to understand electronics and is fun to do. Note that this is not a stand alone introduction to electronics. You will still need an introductory text. Also, you will need equipment, including an oscilloscope. However, you are going to need that equipment anyway. So I do not see this as a drawback. There are some economical options, such as PC and USB scopes. Or you could simulate everything using software. 17 of 20 people found the following review helpful. Impractical for the hobbyist  
By Brian Lamure  
This book is well thought out, organized, and thorough. It provides excellent hands-on exercises that help you to really understand in a functional way how electronics work. The mathematical explanations and exercises may be challenging to folks who haven't used their college calculus/algebra/trig skills in a while (me included) - though they will serve those seeking to understand the underlying fundamental calculations. With all those positives, why a 3 star rating? Well, the book assumes that you have ready access to a ~\$1,000 oscilloscope and a ~\$500 proto-typing bread board. On top of that, you need all of the bits and pieces to actually do the experiments - those are relatively cheap, but not always readily available (at a local store). All of the required equipment and supplies can be obtained on-line, but it will take a concerted effort, a chunk of cash, and some lead time to get all of this stuff. There are alternatives to the expensive oscilloscope and proto-board, but this path requires some assumed additional knowledge and may prove challenging as it deviates from the proscribed curriculum. My final thought on this book is that it is quite excellent in a classroom / lab setting, but is not very "practical" for the hobbyist.

Packed full of real circuits to build and test, Hands-On Electronics is a unique introduction to analog and digital electronics theory and practice. Ideal both as a college textbook and for self-study, the friendly style, clear illustrations and construction details included in the book encourage rapid and effective learning of analog and digital circuit design theory. All the major topics for a typical one semester course are covered including RC circuits, diodes, transistors, op-amps, oscillators, TTL logic, counters, D/A converters and more. There are also chapters explaining how to use the equipment needed for the examples (oscilloscope, multimeter and breadboard) together with pin-out diagrams and manufacturers' specifications for all the key components referred to in the book.

About the Author  
Daniel M. Kaplan received his Ph.D. in Physics in 1979 from the State University of New York at Stony Brook. He has taught electronics laboratory courses for non-electrical-engineering majors over a fifteen-year period at Northern Illinois University and at the Illinois Institute of Technology, where he is currently Professor of Physics and Director of the Center for Accelerator and Particle Physics.  
Christopher G. White graduated with a degree in Engineering Physics from the University of Illinois in Urbana-Champaign in 1986. He received his Ph.D. in Physics from the University of Minnesota in 1990 and is currently an Assistant Professor of Physics at the Illinois Institute of Technology. He is an enthusiastic and dedicated teacher who consistently receives high marks from his students.