

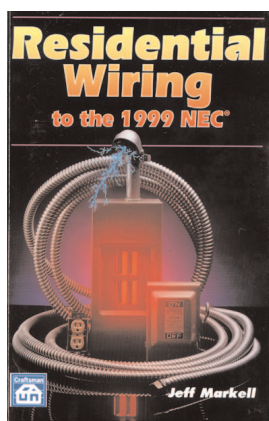
Electrical Wiring References

by Dave Holbrook

Just as learning a few simple phrases can improve your experience of a foreign country, gaining some familiarity with basic wiring concepts will aid you in evaluating a prospective job, and help get you on the same page with your electrician. I checked out the following books to see what they offer the informed builder or wire-puller wannabe.

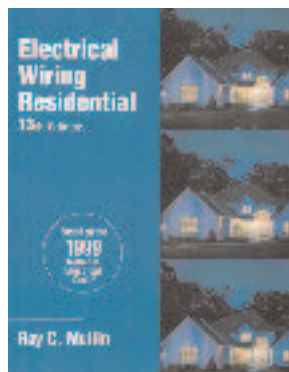
Wiring 101

If you really want to get grounded in practical principles and basic technology, author Jeff Markel's *Residential Wiring to the 1999 NEC* (5th edition 1999, \$27 from Craftsman Book Company, P.O. Box 6500, Carlsbad, CA 92018; 800/829-8123; www.craftsman-book.com) promises to tell you just about everything a book can to get you going as a novice electrician.



Of course, your best option is to be tutored on the job, but certainly if you can read and follow instructions, the logical progression and plain language (graphics are black and white, not to mention few and far between) of this book ought to make a knowledgeable and code-compliant apprentice out of you. Builders can get a handle on circuit sizing, amperage capacity, and the rudiments of Ohm's and

Watt's Laws. All are useful for understanding a building's wiring requirements and the amazing mind of your electrician. As a troubleshooting reference, this is not a casual, (or exhaustive) find-it-quick resource, but dedicated readers will walk away with some real versatility under their belts, or maybe even start a new career.



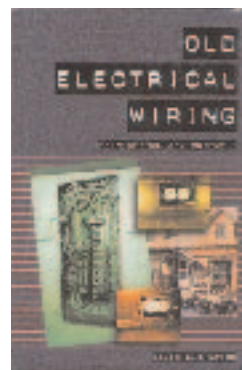
Wiring Room by Room

I know better than to judge a book by the cover, but the paperback binding didn't want to hold the pages of my review copy of *Electrical Wiring Residential — Thirteenth Edition*, by Ray C. Mullin (\$43.50, Delmar Publishers, P.O. Box 15015, Albany, NY 12212; 800/347-7707; www.delmar.com). This

book is revised to meet the 1999 NEC, and links every topic to the relevant section of the code. It's intended for student instruction, with a Q&A review at the end of each unit, and an Instructor's Guide available for classroom application. Don't let the format (or the higher price) dissuade you from checking this book out, though. Loaded with photos, illustrations, charts and tables (including a binder-busting fold-out five-sheet residential blueprint inside the back cover), it takes a thorough, room-by-room wiring tour of a typical contemporary residence, and addresses up-to-date issues such as home automation and structured wiring systems, whole-house surge-suppression, and CATV. The index led me to clear, basic explanations of every residential application I could think of. This book isn't exactly a field manual, but it's well worth having for home or office reference should you want to broaden your scope and understanding of household wiring.

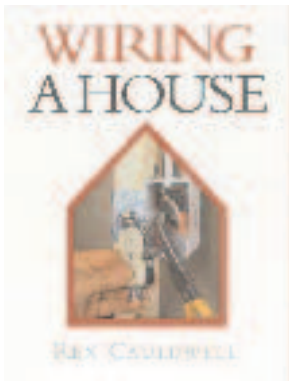
Troubleshooting History

Far from being a dry, technical manual, *Old Electrical Wiring Maintenance and Retrofit* (\$39.95 from McGraw-Hill, 11 West 19th Street, New York, NY 10011; 800/722-4726; www.mcgraw-hill.com) by David E. Shapiro, is an enjoyably readable guide to the many peculiar installations that may be encountered in older buildings. The book addresses time-worn and idiosyncratic work, and helps with the decision to repair or replace. The target audience is the practicing electrician, but non-electricians will garner lots of useful information about old systems and methods. Examples alert readers to possible problems and offer sound, experienced advice. There are plenty of case histories and troubleshooting tips here to aid in tracking down isolated glitches, such as dead outlets, mystery shorts, or tired fixture locations. The well-organized chapters include just enough black & white photos and schematics for clarity, while the glossary of terms at the back of the book is an education all by itself. If your first look at that old service panel elicited a "yikes," take note: This excellent book is for you.



Voltage in His Veins

Rex Cauldwell's approachable insider book, *Wiring a House* (\$34.95; Taunton Press, P.O. Box 5506, Newton, CT 06470; 800/477-8727; www.taunton.com), draws on three generations of wiring know-how, presenting the wiring story in a



hands-on manner. Cauldwell's qualified to throw in a little wiring history (and he does), mostly to let you know that electricity doesn't come from outlets any more than eggs come from the supermarket. This is a well-illustrated DIY manual that will take you through most situations you're likely to encounter in conventional house wiring. From utility pole or pedestal to the service entrance and panel, on to outlets and three- and four-way switch wiring, lighting and appliance hookups, this book puts the emphasis where it should be — on good wiring technique and safe practices.

Post-Modern Puzzler

If I'm counting correctly, *Modern Residential Wiring Based on the 1999 NEC*, by Harvey N. Holzman (\$37.28 from Goodheart-Willcox, 18604 West Creek Drive, Tinley Park, IL 60477; 800/323-0440;



www.goodheartwillcox.com) is a fifth edition update, first published in 1986, with the look of a 1950s classroom textbook. It's jam-packed with illustrations, though, and does a workman-like job of covering all of the essentials; in this respect, it's comparable to the other books. But, I'm a bit puzzled by a complete chapter on electric motor

arcana, which suggests that you may encounter residential motors operating on up to 600 volts (yes, 600), and even higher in commercial/industrial work; this doesn't seem to be news you can use. Also, it seems to me that a book updated to the 1999 NEC would make at least passing reference to some of today's automated and Category 5 installations. This is certainly a useful book, but maybe a sandwich short of a full picnic.

Portable Reference

Pocket-sized *Ugly's Electrical References — Revised 1999 Edition* is a handy reference, packed with electrical formulas, calculations, wiring symbols and diagrams, trigonometry for conduit bending, and much more. A miscellaneous section at the end includes useful knots, crane hand signals, calendars, and a bookshop list of further electrical reading



(\$12.95 from Burleson Distributing Corp., 3501 Oak Forest Drive, Houston, TX 77018; 800/531-1660).

Since there are only two ways to wire a receptacle — right and wrong — I'm hard-pressed to say which of these books offers the best guidance. For my bookshelf, however, the team of Mullin and Shapiro is hard to beat.