

Technical Books

Electronics Demystified

If you have enjoyed the Short Circuits or Fun Way Project books and want to know more, this is your next book. It places all that project experience on a sound technical grounding. It avoids heavy mathematical formulae, but, be warned there are equations in this book. They are not seriously hard though!

The book starts at simple D.C. circuits, goes through A.C. circuits, impedance, reactance, Power Supply concepts, semiconductor basics, amplifiers, oscillators, RF, telecommunications and finishes on antennas. At the end of each chapter is a straightforward quiz (multiple choice) to make sure you are on top of concepts.

This is the best-written technical book on novice to moderately advanced electronics we have seen. Read this book and understand it. 480+ pages soft cover

▲ MH0180

Electricity Demystified

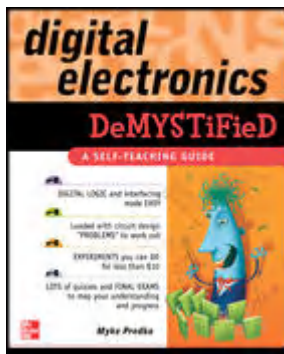
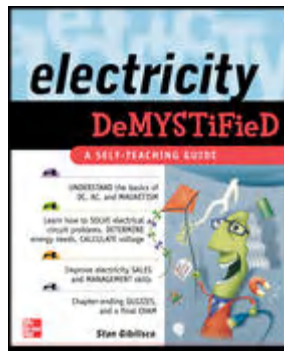
- Solve electrical circuit problems
- Make power and energy determinations
- Calculate voltage, current and resistance issues
- Prepare for advanced courses in electricity
- Improve sales and management skills in the area of electricity
- Enhance knowledge of how electrical devices work
- Each section ends with a 50-question, multiple-choice test. The book concludes with a 100-question final exam

▲ MH0100

Digital Electronics Demystified

Written by renowned digital guru Myke Predko, the primary focus of this self-teaching guide is on digital electronics and logic, demonstrating how functions are designed and interfaced to other devices. Readers can perform experiments with the technologies discussed in the book for under \$10. The author includes two circuit design problems per chapter.

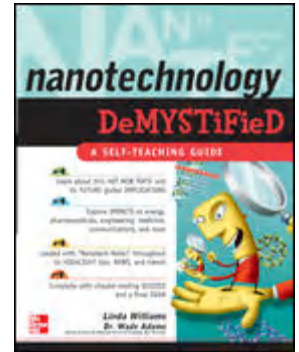
▲ MH0120



Nanotechnology Demystified

Get up to speed on nanotechnology and the many biological, chemical, physical, environmental, and political aspects of this developing science

▲ MH0140

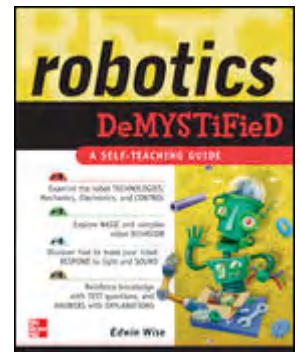


Robotics Demystified

There's no easier, faster, or more practical way to learn the really tough subjects

McGraw-Hill's Demystified titles are the most efficient, interestingly written, brush-ups you can find. Organized as self-teaching guides, they come complete with key points, background information, questions at the end of each chapter, and even final exams.

▲ MH0160



You'll be able to learn more in less time, evaluate your strengths and weaknesses, and reinforce your knowledge and confidence. This complete self-teaching guide takes an introductory approach to robotics, guiding readers through the essential electronics, mechanics, and programming skills necessary to build their own robot.

23 Robotics Experiments For The Evil Genius

Frankly, the "Evil Genius" series of books started a few years ago and the publisher realised that it grabbed the attention of many. We reviewed one early title and were horrified at the VERY DANGEROUS projects described therein.

This book, however, is an absolute delight. Written by the brilliant Myke Predko, the book starts with the basic concepts of robotics. In many ways it starts at "Too Simple". We mean this because Myke describes a couple of silly projects to start, i.e. a "doll" made out of the cardboard tubes from toilet paper rolls. He gets into gear quickly, however. (Start reading from p. 15 and have an inches -> metric conversion table handy!)

The projects & concept explanations come at a fast pace. You will learn about all the concepts needed for basic robotics technology & have all of the components described to you as well. You will get the basics at a bit of a rush - so that you can get to real robotic control - through the BASIC Stamp microcontroller. Before you know it, you will have serious knowledge of robotics. Indeed this book even includes a double-sided plated-through P.C.B that you will need for many projects. A board such as this could cost almost as much as the book itself if sold separately. So let's be tough & call the book 121 Robotics Projects. Either way it is THE book for someone who wants to get into this fascinating technology

▲ EBM7104

Technical Books

555 Timer & its Applications

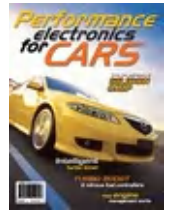
The 555 Timer IC is probably the most used IC in the world. It will give an accurate timing range of micro seconds to hours. This book describes the functions and operation of the 555, then explains 21 projects to build using the IC. Some of these include photo timer, touch plate controller, car wiper control, car lights turn off, flashers, generators, delays auto power on and off, NiCad charger, frequency divider, light operated relay, etc. An ideal book for the electronic hobbyist and experimenter. 43 pages 138 x 208mm



Performance Electronics for Cars

- Silicon Chip Publications

This book contains all of the projects described on these pages. It shows, in full colour, the constructed modules, has colour overlay diagrams, detailed build guides and fitting instructions. It also includes chapters on: how engine management works, advanced engine management, electronic car systems like ABS and traction control, the different approaches to modifying car electronics, DIY electronic modification, and how to build electronic kits. It is a definite must-have if you are building and fitting any of these kits. Over 150 pages



▲ EBM2466

Electronic Test Bench Magazine - Silicon Chip

This book contains plans and instructions regarding a selection of the best test equipment kits from the pages of Silicon Chip magazine. Includes details explaining 18 kits, from a low-cost dual tracking power supply, to a compact pink noise generator. Soft-cover, 205 x 275mm. 128 pages



▲ EBS5070

Build your own Valve amps book

Whilst solid state technology has seemingly surpassed the tradition of valve amplifiers, there is still some reluctance from many to give up the old tubes. This book will give a broad cross section in the details of valve state amplifiers. From construction projects for pre-amps and power amps, to the basic operation of the tube and power supplies. It also covers a basic history on the origin and development of the tube. 250 pages Soft Cover, Size: 150 x 225mm



▲ EBM2483

A Beginner's Guide to Robotics Projects using PIC micro

This book enables you to master the specialised taste of programming the most popular robotic microcontroller, the PIC series. If you are serious about robotics, you will need to tackle this at some stage as robotics is all about machine intelligence. Luckily, no Assembly Language programming is required to complete the subject matter of the book. There are 14 chapters in all, including: Robot Intelligence, Testing PIC Performance, Speech Recognition, Colour Robotic Vision and 3 on specific robot controller construction projects



▲ EBT1367

AVR An Introductory Course

If you're looking for a kick-start in using and understanding this popular device, whether you're a student using the AVR microcontroller for project work or an embedded system designer using an AVR for the first time, then this is the book for you



▲ EBT1372

▲ EBS5080

The Practical Guide to Satellite TV - Fourth Edition

This book explains the practical aspects of satellite television in a concise but easy to understand format. Chapters include History of Satellite Television, Principles of Operation, Earth Station Components, Dish Accessories, Encryption & Compression Systems, Setting Up a Satellite TV Receiving System, Installation - Fixed Dish C Band, Motorised Systems, Inclined Orbit Satellites, Multiple Satellite Systems, International Video Standards, Wiring the System, Maintenance, Solar Outages and Glossary of Terms. It also has 67 pages of satellite orbital data, transponder load and footprints for every satellite covering Australia and neighbouring countries. To top it off, there is also three pages of satellite related Internet sites.

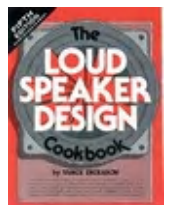


Written by Gary Cratt and printed in Australia
Soft-cover - 179 pages - 292 x 207mm

▲ EBV1800

Loudspeaker Design Cookbook Sixth Edition

This fantastic book will teach you all you need to know to design, construct and test loudspeakers for your home stereo, home theatre, and car. Includes a tutorial on woofer design, curvilinear vents, a chapter on transmission line enclosures, CAD software, in car sound and 2 fully documented speaker designs.



▲ EBA1400

Getting The Most From Your Multimeter

This book is primarily aimed at beginners, and those with a limited knowledge of electronics. Chapter 1 covers the basics of analogue and digital multimeters. In chapter 2 various methods of component checking are described, including tests for transistors, thyristors, resistors, capacitors and diodes.

Circuit testing is covered in chapter 3, where subjects such as voltage, current and continuity checks are discussed. Soft-cover, 102 pages, 110x178mm

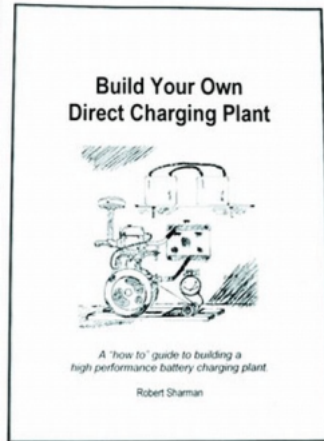
▲ EBB7034

Technical Books

Build Your Own Direct Charging Plant Book

If you use a Deep Cycle battery to power a remote or mobile home you need an efficient charging plant.

This book takes you through all the elements pertaining to building your own Direct Charging Plant including, basic to advanced battery charging, alternators, horsepower vs alternator output calculations, power input, efficient regulation and more with full colour pictures and easy to read text. 57 Pages, soft-cover. Full colour pictures, Size: 254 x 183mm

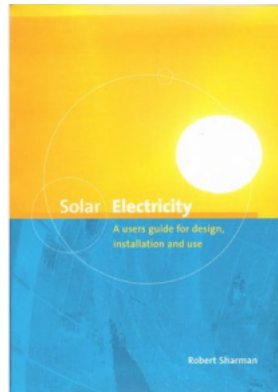


▲ EBE1530

Solar Electricity Book

This is a great book to find out all you need to know about Solar Energy if you are looking to use it in your home, caravan, or anywhere.

You will learn about Solar Panels and how they work, how electricity can work for you, Solar regulators, Deep Cycle Batteries, Inverters, Panel Mounting and Wiring, and Maintenance and Use. All delivered in a comprehensive and up to date easy-reading manual. 57 Pages, soft-cover



▲ EBE1532

Short Circuits Book - Volume 1

This full colour 96 page book, which measures 205mm x 275mm is lavishly illustrated with over 100 drawings and diagrams.

Each project features components which are state of the art. The projects are fun to build but, perhaps more importantly, are relevant to the electronics scene in the 90s.

It is a great read in itself and far superior to cheap alternatives. Some of the exciting projects that you can build from this book include: Short circuit tester Magic Eye light alarm Police siren Electronic organ Sound effects unit Light chaser Solar powered radio 3 types of transistor amplifiers Computer type circuits and many many more



▲ EBJ8502

Short Circuits Book - Volume 2

Once you have the basic skills and knowledge either from a School Design and Technology course, or tackling Short Circuits Vol 1, you can now have some real fun!

This book shows you can make such things as; a mini strobe light, police siren, mini organ, a couple of powerful radio transmitters, an FM radio - even a 'Knight Rider' scanner!!

All components are fully described and explained, along with tutorials on soldering iron and multimeter use. All projects are safe and battery powered.

Soft cover - full colour 205 x 275mm



▲ EBJ8504

Short Circuits Book - Volume 3

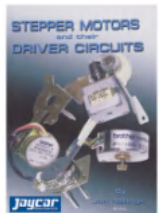
Over 5 years in the making, Short Circuits Volume 3 is the definitive electronics training manual. This book is far, far more than the weekend fun-type superficial approach to electronics. In the process of constructing any, or most - even all of the over 30 projects you will end up accumulating knowledge & skill that will elevate you to a fully fledged constructor. After this book nothing could reasonably stop you from tackling any of the full scale projects in electronics magazines.

No other book on learning electronics achieves this. At the same time we have still adopted a light-hearted approach. We describe projects that take from 20 minutes to make, such as project 2, the Ding Dong Doorbell to a fully fledged Guitar Sustain which may take several hours to construct, but will give you a useful music accessory that could last a lifetime. Also included are FULL technical descriptions of all circuits, how to experiment to safely change circuit performances and a massive technical dictionary which explains all phenomena and technical terms used. Attention D & T teachers: This book is a totally up-to-date D & T electronics manual suitable for year 11 & 12 High School students. It contains, for example, a working project that safely connects to a PC. This is absolutely unique & strongly establishes the link between electronics & computer technology. Generous quantity discounts are available for both the book & the kits. Soft-cover - 205 x 275mm.

▲ EBJ8505

Stepper Motors and their Driver Circuits

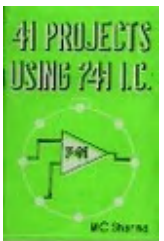
Make stepper motors work for you. This book is filled with comprehensive information on the motors, the circuits that power them and the programs that can control them using a PC. Written for the hobbyist and experimenter you'll be able to understand motors, driver board kits, bit patterns, components, testing debugging and even torque measurement



▲ EBM1510

41 Projects Using 741 IC

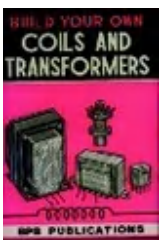
BY M C Sharma. The 741 OP amp IC is very inexpensive yet is comparable to the best in respect of versatility and superb performance. We can't list every one of the 41 kits but here are a few examples: inverting and non-inverting AC and DC amps, X'tal, magnetic, guitar, telephone and mic preamps, 3W and 12W amps, intercom, AC and DC motor control, schmitt trigger, square wave generator, flasher, timer light op relay, DC voltmeter, AC millivoltmeter, RPM counter, A to D converter, etc. 37 Pages 140 x 210mm



▲ EBM2430

Build Your Own Coils and Transformers Book

This book is a wealth of information, ideal for hobbyist or anybody interested in winding their own transformers. After the introduction the book covers attributes of coils/transformers, mutual inductance, reactance, resonance, impedance, coil selectivity. It then goes on to the design aspects - discussing coils in tuning circuits, types of formers and cores, types of winding, self capacity, equations, coil design, design of IF transformers then output and power transformers. 55 pages 137 x 212mm



▲ EBM2440

Technical Books

Electronic Musical Projects

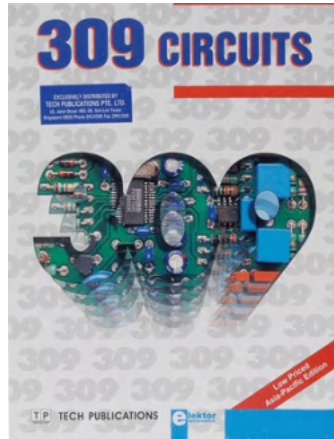
This book has 30 projects to build based around musical instruments. Projects include - metronome x4, guitar practice, accompaniment drummer, guitar bass booster, treble boost preamp, presence boost, connecting guitar pickups, guitar preamps, practice amp, envelope control, distortion box, waa waa, echo and reverb, tremolo, sustain, phasers, bonger, percussion box, sound generators, organ, etc. 52 pages 135 x 210mm



▲ EBM2450

309 Circuits Book

Companion to the popular 308 circuits with many useful designs in audio, video, car, computer, hobby, home, test, power supplies, chargers and more. The book is divided into categories to help find circuits easier. Each circuit has a diagram and a photo of the finished project. Softcover, 428 pages, 240 x 184mm



▲ EBM2470

Robot Builder's Sourcebook

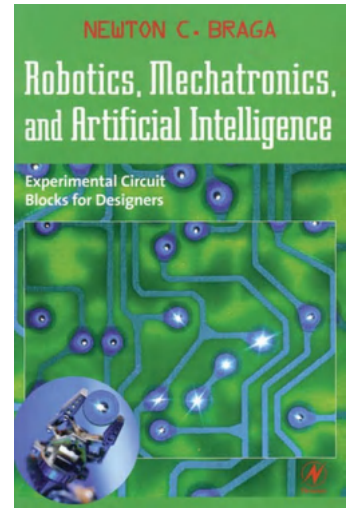
If you are going to really get serious about robot construction, you must have this massive book! Written by Gordon McComb, author of the classic (but slightly outdated) Robot Builders Bonanza, Robot Builders Sourcebook is totally new and up-to-date. It is so good, Jaycar is even listed in it!! It lists suppliers of all the bits-in-pieces, you are even likely to need to pursue the construction of your dream machine, over 150 separate categories. It also includes lists of relevant books, societies, help groups, services, you name it. You not only get component sources, you get materials sources, as well as manufacturing facilities. In all, over 2,500 sources for robot parts. Apart from this, there are dozens of helpful primers on likely sources of useful parts, such as old VCR's etc



▲ EBT1365

Robotics, Mechatronics, and Artificial Intelligence

If you are starting Robotics from ground zero, or near it, this is your book. We have never seen a book before that encapsulates a subject from beginner to serious constructor in one volume. This book encompasses all of the basic control systems - along with the philosophy behind them - to enable the interested reader to get a serious grip on how to make a robot move, sense, lift, control and otherwise relate to an external environment. The format is extremely practical in that the author provides - literally - hundreds of useful circuits, which are invaluable to practical design. Indeed the components specified are mostly available from Jaycar. Also included are review questions at the end of each chapter to sharpen understanding

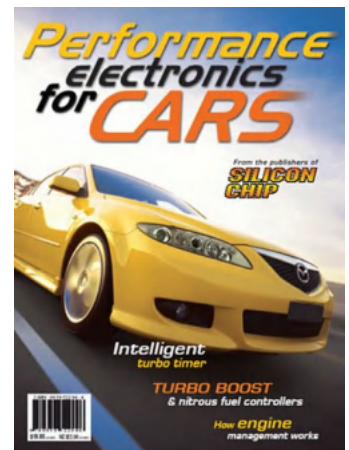


▲ EBT1370

Performance Electronics for Cars

- Silicon Chip Publications

This book contains all of the projects described on these pages. It shows, in full colour, the constructed modules, has colour overlay diagrams, detailed build guides and fitting instructions. It also includes chapters on: how engine management works, advanced engine management, electronic car systems like ABS and traction control, the different approaches to modifying car electronics, DIY electronic modification, and how to build electronic kits. It is a definite must-have if you are building and fitting any of these kits. Over 150 pages!



▲ EBT1370

Programming & Customising the PIC Microcontroller

Tap into the latest advances in PIC technology with the fully revamped third edition of this brilliant book. Certainly the definitive text on the subject, this indispensable volume comes with more than 600 illustrations and provides comprehensive, easy-to-understand coverage of the PIC microcontroller's hardware and software schemes. With 100 experiments, projects and libraries, you get a firm grasp of PICs, how they work and the ins-and-outs of their most dynamic applications. This updated edition features a streamlined, more accessible format and concentrates on the three major PIC families, to help you fully understand Assembly, BASIC, and C programming languages. It also covers the latest program development tools and includes a refresher in electronics and programming as well as reference material. Softcover, 1263 pages

▲ EBT1347