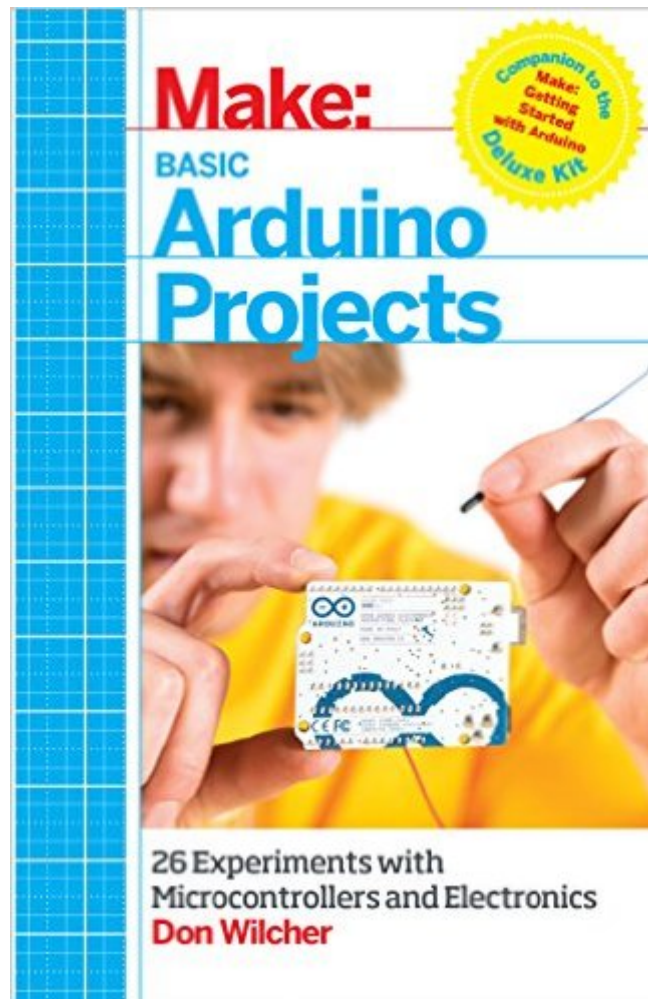# Basic Arduino Projects: 26 Experiments With Microcontrollers And Electronics

Synopsis

This companion book to MakerShed's Ultimate Arduino Microcontroller Pack provides 26 clearly explained projects that you can build with this top-selling kit right away--including multicolor flashing lights, timers, tools for testing circuits, sound effects, motor control, and sensor devices.With the Ultimate Arduino Microcontroller Pack, you'll find everything from common components such as resistors and capacitors to specialized sensors and actuators like force-sensing resistors and motors. The kit also features the Arduino Uno Microcontroller and a MakerShield, the definitive prototyping shield for Arduino.Build 26 cool mini Arduino projects and gadgetsWork on projects that are both instructive and have practical applicationGet circuit diagrams and detailed instructions for building each projectUnderstand circuit design and simulation with easy-to-use tools

Book Information

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Customer Reviews

Most of the projects are trivial, and teach little of electronics or the Arduino's programming capabilities. For example several projects use sensors, and include a bridge resistor (a pullup) to offset the sensor range, but there was no explanation of what an analog sensor actually is, or how to tune the range of a sensor by changing the values in the bridge circuit, or how to calibrate a sensor, or how an analog value is 'sensed' by the Arduino.Blindly following the detailed instructions might result in something that 'worked' but would leave the 'experimenter' with little understanding of why or how it worked, how to correct it if it didn't work, or how to extend the sample to a useful

device. The chapters on "Processing" (A java app that facilitates comm between a pc and the Arduino, emulating an 80s era terminal) are almost pointless, since having an Arduino use a pc to display (awful) graphics defeats most purposes of the Arduino, forcing it to be tethered via USB to the pc.The book seems to have been written as an guide to a parts kit, but based on the projects in the book, the parts kit must be too sparse to do anything very interesting with an Arduino.There are far better books for beginning electronics, including "Make Electronics" (I believe from the same publisher.) You can't do much sensing or control with an Arduino until you have that basic understanding, and this book doesn't provide that.Nor is it very useful as a tutorial on the Arduino's hardware, programming language, or libraries. The code for the examples (most obviously copied from public sources and the samples that come in the free IDE) is simply delivered as black boxes, with little explanation.

Make sure you get a kit that has everything in the book and don't expect any foreword explanations of the Arduino or how things work. This is a straight up project book. Color photos would have been nice too since B&W is hard to understand when it's of a circuit board.

Sorry, I don't like to be negative. Unfortunately this book is a complete flop, so much so that I'm willing to write this review so you don't have to feel cheated. Technically weak, poorly explained. I'm going to recycle my copy instead of trying to find someone who might want it.Caveat emptor.

I was very disappointed when I started to read through the activities and saw that the images describing how to build each project were of poor quality. White wires were used against a light colored breadboard and printed in greyscale. This makes it incredibly difficult to follow the diagrams. Actual schematics aren't shown until the end of the chapter. The circuit theory sections don't teach any theory. They just give a high level description of what a sensor does.The book has a little bit of encouragement for someone to explore related concepts in a chapter, but without much explanation.

This has to be the absolute worst book for Arduino. Very little explanations. The pictures use 6 inch wires which makes it very difficult to see what is happening. Also, I found the way some circuits were laid out to be way more confusing than necessary. I had to modify some projects just to make them work.Don't waste your money on this! There are many better books to spend your money on.I can't believe that the Make: brand actually let this piece of crap get published with their name on it.

Each project is given with clear instructions, as well as a parts list. These would be wonderful projects for those interested in electronic circuits (maybe even for fun father/son time).

Basic Arduino Projects: 26 Experiments with Microcontrollers and Electronics Arduino: Complete Beginners Guide For Arduino - Everything You Need To Know To Get Started (Arduino 101, Arduino Mastery) Arduino for Musicians: A Complete Guide to Arduino and Teensy Microcontrollers Arduino: The Ultimate QuickStart Guide - From Beginner to Expert (Arduino, Arduino for Beginners) DIY Woodworking Projects: 20 Easy Woodworking Projects For Beginners: (Woodworking Projects to Make with Your Family, Making Fun and Creative Projects, ... projects, wooden toy plans, wooden ships) Arduino + Android Projects for the Evil Genius: Control Arduino with Your Smartphone or Tablet Building Arduino Projects for the Internet of Things: Experiments with Real-World Applications Fundamentals of Microcontrollers and Applications in Embedded Systems with PIC Microcontrollers Hacking: How to Hack Computers, Basic Security and Penetration Testing (Hacking, How to Hack, Hacking for Dummies, Computer Hacking, penetration testing, basic security, arduino, python) Hacking: Basic Security, Penetration Testing and How to Hack (hacking, how to hack, penetration testing, basic security, arduino, python, engineering) Dad's Book of Awesome Science Experiments: From Boiling Ice and Exploding Soap to Erupting Volcanoes and Launching Rockets, 30 Inventive Experiments to Excite the Whole Family! Arduino: 2016 Arduino Beginner User Guide Arduino práctico / Practical Arduino (Manual Imprescindible / Essential Manual) (Spanish Edition) Model Railroad Electronics: Basic Concepts to Advanced Projects (Model Railroad Handbook) Getting Started with Sensors: Measure the World with Electronics, Arduino, and Raspberry Pi Getting Started with Arduino: The Open Source Electronics Prototyping Platform (Make) Arduino Electronics Blueprints Mosfet Modeling for VLSI Simulation: Theory And Practice (International Series on Advances in Solid State Electronics) (International Series on Advances in Solid State Electronics and Technology) The Physics And Modeling of Mosfets (International Series on Advances in Solid State Electronics) (International Series on Advances in Solid State Electronics and Technology (Unnumbered)) Digital Electronics: A Primer : Introductory Logic Circuit Design (Icp Primers in Electronics and Computer Science)