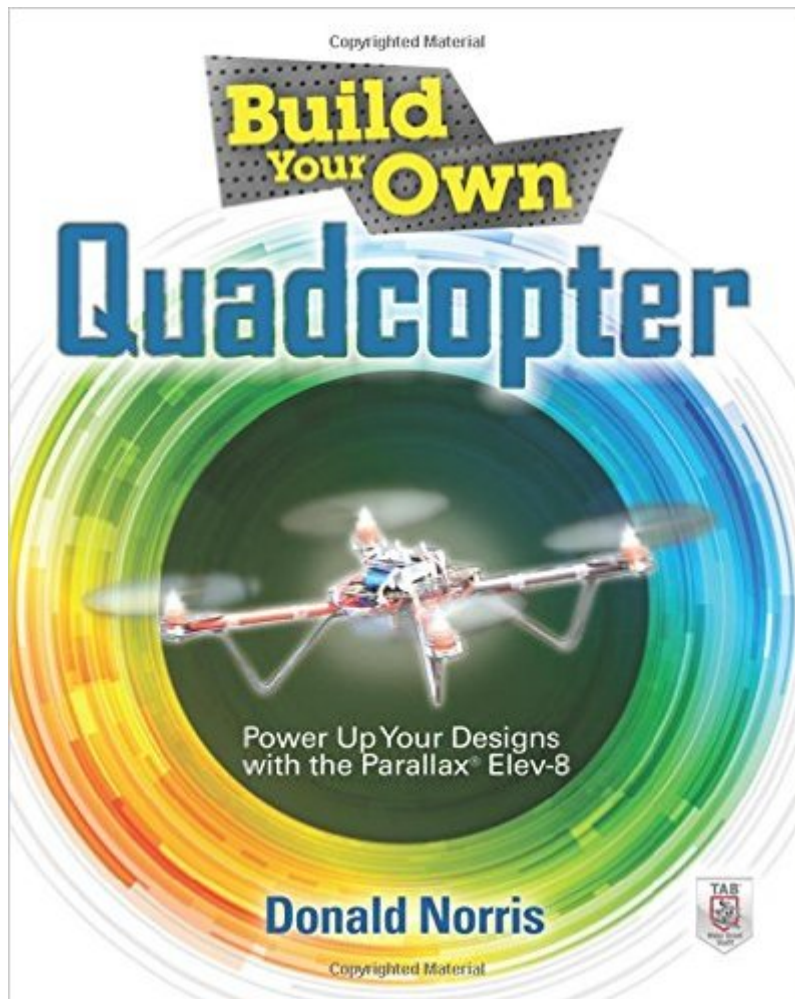# Build Your Own Quadcopter: Power Up Your Designs With The Parallax Elev-8

Synopsis

Build a custom multirotor aircraft! Build and customize radio-controlled quadcopters that take off, land, hover, and soar. Build Your Own Quadcopter: Power Up Your Designs with the Parallax Elev-8 features step-by-step assembly plans and experiments that will have you launching fully functioning quadcopters in no time. Discover how to connect Elev-8 components, program the microcontroller, use GPS, and safely fly your quadcopter. This fun, do-it-yourself guide fuels your creativity with ideas for radical enhancements, including return-to-home functionality, formation flying, and even artificial intelligence! Understand the principles that govern how quadcopters fly Explore the parts included in your Parallax Elev-8 kit Follow illustrated instructions and assemble a basic 'copter Connect the Parallax chip to a PC and write Spin and C programs Build radio-controlled systems that minimize interference Add GPS and track your aircraft through Google Earth Beam flight information to smartphones with WiFi and XBee technology Mount cameras and stream real-time video back to the ground Train to safely operate a quadcopter using flight simulation software

Book Information

Series: Build Your Own (Book 1)

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Product Dimensions: 7.4 x 0.8 x 9.2 inches

Shipping Weight: 1.4 pounds (View shipping rates and policies)

Average Customer Review: 4.1 out of 5 starsÂ Â See all reviewsÂ (14 customer reviews)

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Customer Reviews

I was surprised to see the two star review here, but I guess it is all about expectations. This book is the only one I've found that breaks down a VTOL UAV into its core components and drills down to bedrock on each one. This is currently my bible as I try to better understand how to manipulate and

optimize my machine for my intended purpose - capturing high quality cinematic footage.You can buy ARTF kits (almost ready to fly) and with a little soldering, a little programming to get the radio set up properly, and a lot of reading on countless discussion forums (to translate vague instructions not well translated into English) you can take to the air with reasonable competence. That seems to be all the two-star reviewer would like to accomplish at this point and that's fine, but you are going to need this book soon enough! These things fly great until they don't. Your idea of what you'd like to use your quadcopter for will change, and when it does, you can hunt for an overpriced RTF that's "close" to what you need, or you can tweak your craft on your own and get it exactly right. If the latter sounds more appealing to you, this book is for you.I'm not even building an Elev-8 quadcopter - but the topics and the clear language in this book are universal. It's rare to find someone with this level of passion and knowledge about a technical subject who can also make it this accessible.If nothing else, this book will expose you to questions you didn't even know to ask. I bought this elsewhere because of a gift card I was given, but I bought the tablet version. I think I will order a print edition here on as I expect to spend a lot of time in this book.

This book is a comprehensive and in depth look at every system and circuit needed to make a Elev-8 copter. I will admit it is not for people that are not somewhat familiar with engineering or technically inclined. I admit that I have a degree in engineering, but I knew nothing about RC planes and quadcopters. After reading this one book, I am comfortable talking about them with people that have built them and fly them. I will be ordering my Parallax copter next month...it looks like a new design is in the works :)

This is an outstanding book for what it is. As someone with a background in computer science, some basic electronic engineering knowledge, and a ham radio license I found the material to be very approachable and a useful introduction to the underlying function of modern RC technology. I do not have nor expect to have the parallax product referenced in the book, so I was able to move quickly through sections which were specific to that hardware. The book would have been just as good if it left the parallax portions out, and even better if it replaced them with some more hardware agnostic material addressing i2c, sbus, and other common technologies in use today.All in all, this book is the most technical book I have found on the topic and written in a way that someone new to RC but versed in adjacent field of knowledge could make great use of it. Well done to the author.

I completely misunderstood the purpose of this book. I thought it was how to physically BUILD a

quad not program it from scratch. I'm not saying it is not a good book to read if you are an aeronautical engineer with advanced programming skills, but it is not for ME. I have done programming my whole life but not this advanced. I will see if I can return it or wait until I advance my programming skills. I give it generously two stars because it was not adequately described.

The book is an excellent reference book for one looking for details at a grass roots level when building a unique quadcopter. There are numerous examples to help with understanding what the issues are for designing firmware, sizing motors, flight control considerations, etc. Very helpful for a newbie just getting into quad building. What it lacked was the latest standardized flight control PCB's like the Naze32, etc. It is oriented toward the DJI products that were current about 18 months an earlier ago.I recommend the book to any newbie and it would be helpful to sit down with a very experienced quad builder to help with some of the details if details are important. Somewhat like a new aspiring pilot would do with a CFI.

Great book! It is written by an Engineer so it probably goes a little deeper than most people want but the author explores some really cool options if the desire is there to mount a camera for FPV flying, GPS auto piloting, etc.

Very helpful book, loaded with good design information that will help building any quad-copter. I am using it as a design guide to build my own quad-copter.

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