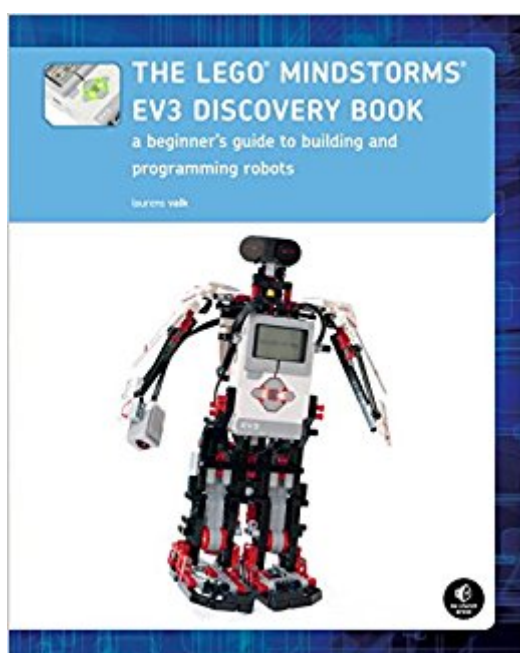The book was found

The LEGO MINDSTORMS EV3 Discovery Book: A Beginner's Guide To Building And Programming Robots

Synopsis

LEGO MINDSTORMS has changed the way we think about robotics by making it possible for anyone to build real, working robots. The latest MINDSTORMS set, EV3, is more powerful than ever, and The LEGO MINDSTORMS EV3 Discovery Book is the complete, beginner-friendly guide you need to get started.Begin with the basics as you build and program a simple robot to experiment with motors, sensors, and EV3 programming. Then you'll move on to a series of increasingly sophisticated robots that will show you how to work with advanced programming techniques like data wires, variables, and custom-made programming blocks. You'll also learn essential building techniques like how to use beams, gears, and connector blocks effectively in your own designs.Master the possibilities of the EV3 set as you build and program:The EXPLOR3R, a wheeled vehicle that uses sensors to navigate around a room and follow linesThe FORMULA EV3 RACE CAR, a streamlined remote-controlled race carANTY, a six-legged walking creature that adapts its behavior to its surroundingsSK3TCHBOT, a robot that lets you play games on the EV3 screenThe SNATCH3R, a robotic arm that can autonomously find, grab, lift, and move the infrared beaconLAVA R3X, a humanoid robot that walks and talksMore than 150 building and programming challenges throughout encourage you to think creatively and apply what you've learned to invent your own robots. With The LEGO MINDSTORMS EV3 Discovery Book as your guide, you'll be building your own out-of-this-world creations in no time!Requirements: One LEGO MINDSTORMS EV3 set (LEGO SET #31313)

Book Information

Paperback: 396 pages

Publisher: No Starch Press; 1 edition (June 14, 2014)

Language: English

ISBN-10: 1593275323

ISBN-13: 978-1593275327

Product Dimensions: 8 x 0.9 x 9.9 inches

Shipping Weight: 2.4 pounds (View shipping rates and policies)

Average Customer Review: 4.7 out of 5 stars   141 customer reviews

Best Sellers Rank: #10,456 in Books (See Top 100 in Books)   #1 inÃ Â Books > Children's Books > Computers & Technology > Hardware & Robotics   #2 inÃ Â Books > Crafts, Hobbies & Home > Crafts & Hobbies > Toys & Models > Models   #4 inÃ Â Books > Children's Books > Computers & Technology > Programming

Age Range: 10 and up

Grade Level: 5 and up

Customer Reviews

Gr 6 UpÃ¢â ¬â •A tome for fans of robotics and LEGO Mindstorms EV3 Kits. Hyper-detailed instructionsÃ¢â ¬â •with full color, easy-to-read and understand illustrationsÃ¢â ¬â •help budding enthusiasts navigate EV3 Kits with clear language and step-by-step directions. Readers learn the basics of assembling a simple robot before being introduced to various programming tricks to be used on the EV3 Brick, the colloquial term for the Mindstorms mini-computer. Be forewarned that in order to take full advantage of the programming functionality of the kit, including the ablity to create and edit programs, users must have a computer to connected to their EV3 Brick (though basic programming on the EV3 Brick can be done without one). Each chapter contains several short challenges, dubbed "discoveries," which are cleverly accompanied by a legend: whimsical gear wheels represent the estimated amount of building time; tiny Microsoft Windows-esque blocks show the expected level of programming expertise; and a small clock estimates the length of time it should take to solve the challenge. Later chapters describe building intricate robots with fun objectives: a racing robot, ANTY (a robotic ant), and the SNATCH3R (complete with a robotic arm that grabs). Readers who are intimidated by the discoveries can skip these and instead focus on the building projects and the programming tricks that do not involve the use of a computer. The size, advanced vocabulary, and organization of the book evokes a science or physics textbook, which is warranted due to the amount of complex and detailed programming information contained within. However, colorful images keep it from feeling too academic. VERDICT This book will find a home in libraries with makerspaces and/or those that offer robotics or science clubs, LEGO teams, or other STEM-oriented groups.Ã¢â ¬â •Amy M. Laughlin, Darien Library, CT

"Hyper-detailed instructionsÃ¢â ¬â •with full color, easy-to-read and understand illustrationsÃ¢â ¬â •help budding enthusiasts navigate EV3 Kits with clear language and step-by-step directions."Ã¢â ¬â •School Library Journal"Directions are mostly in the form of vivid and distinct images and diagrams...will definitely appeal to readers who like to learn by handling and tinkering with parts."Ã¢â ¬â •VOYA Magazine"Whether youÃ¢â ¬â„¢re new to the EV3, a FLL coach, on a FLL team, or maybe your robot has been sitting for a while and youÃ¢â ¬â„¢re looking to breath new life into it, The LEGO Mindstorms EV3 Discovery Book is for you!"Ã¢â ¬â •GeekMom

I got the EV3 for my 7 year old son as soon as it came out. By accident, we ended up with the educational version. The instructions provided were not clear enough to get us easily up and running. I started buying other EV3 books. They generally assumed that one had done Mindstorms previously. I just did not have time to help my son figure the thing out, and it sat in a box for months.Then this book arrived. We are up and running, and my son is engrossed and so am I. The author gives terrific detail, and has small projects scattered through each chapter to help develop understanding of each of the features. We work through a few pages each evening, and do one or two projects (e.g., program the EV3 to do a figure 8). These projects are perfect.As to the educational version vs the home version..... I splurged and got the expansion set. It turns out that this just has a lot of Technics-type structural pieces. It does not have new motors or sensors. The educational packs has all of the motors and sensors of the home version with two exceptions: the remote control sensor and related beacon. I got those thru the lego site. There may be a few add'l pieces that we'll need in the future to build all of the projects in this book, but we are 1/4 the way thru and haven't found them.I'd also refer you to the book's website, which has a lot of useful information. The author has also kindly responded to specific questions (relating to education vs home versions), and has been quite helpful. So...can't recommend this more enough. I recommend it to all home users as well as school clubs.

For those of you who want to know about Mindstorms and can understand some programming helps. This is truly written for your Lego Teen fanatic. It is super for those who want to understand this Lego Robot machine and programming better.Love it.It did help the tag along Mom understand this robot but it is very detailed and some of it needs more attention then I could give it at that time.It would be the perfect handbook for any gifted and talented parent and student as well as teacher. It is worth the read. It is worth the purchase.

Outstanding book I love the paper edition but also bought the Kindle edition too!The author is amazing and replied to a question, highly recommended.

This is an excellent book.As a long-time professor, this is the book I'd like my name on. The diagrams are very clear and the writing is helpful and informative. I bought the book (and the Mindstorms kit) for my grandsons, but first I wanted to build one of the robots in the book and to do some programming for it in case I needed to help my grandsons with the versions they build. I can see it will be very easy to turn over this book and the Mindstorms components to my grandsons.

great book. You gotta have this if you buy the Mindstorms EV3 which comes with no documentation at all. I can't believe Legos can sell their product for $350 with no support or documentation. This book saved us!

If you're buying Lego Mindstorms, you really should get this book, too. It contains lots of great projects with easy-to-follow instructions. My grandson has built just about every project in the book and he loves it.

This is a great book. We have only begun, but it is already fantastic. It is not only information, but it is also a tutorial. The book includes 132 practice modules spread throughout the chapters which allow for an iterative process of learning. Additionally, the book contains 30 design modules that allow you to learn building techniques. My two sons and I (ages 9 and 11) are separately going through the book and practice/design modules with each of us tracking our progress on a tracking sheet. We do the modules individually and then collaborate to see how each of us is accomplishing the task. It's great, but it does still require you to think ahead and be organized. Just by completing a module, you don't necessarily become an expert on that topic. You will find that you will still need to play around with the features to better understand how they work. The first module that will test your understanding of previously introduced capability is Discovery Module #8 which tells you to have your EV3 make a figure 8. I was able to do it with four blocks (in the downloaded EV3 programming software from Lego).Great book for learning how to use your EV3 and for learning how to program.

Our one frustration with this book is that is goes with the retail version of the Mindstorm and we have the educational version. So the pieces don't line up exactly correctly. My kids have still had a great time building things from this book though - they just have to get a bit creative when it calls for a piece they don't have in their set.

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