# Review: The LEGO® MINDSTORMS EV3 Laboratory

By Jetro

Pictures by Daniele Benedettelli

The LEGO® MINDSTORMS EV3 Laboratory By Daniele Benedettelli Editorial: No Starch Press

So you have an EV3 set and want to do more with it... well you have several options. The five models that come with the Retail set software are a good starting point to let your imagination fly. There is a lot you can learn from having a closer look at the models and peering into the programs. After that there are the 12 bonus models that you can download from the official LEGO MINDSTORMS website. Do you really need anything else?

Technically, you might think "no", but I can already hear some of you think: "some more building instructions would be nice". Also, there are areas both in building technique and in programming knowledge where you may welcome some help. The LEGO MINDSTORMS EV3 Laboratory is the perfect companion to your EV3 set.

What can you expect to find in the book? Basically you can divide the information into 4 categories:

## 1- Building instructions

The book contains complete and detailed building instructions for 5 different models, ROV3R, which is used in the initial chapters of the book, WATCHGOOZ3, a walking biped, SUP3R CAR, SENTIN3L (any Star Wars fans out there?) and T-R3X, another walker (featured on the cover).

# 2 - Programming guides

Building is only a small part of robotics and the programming guides go way beyond providing instructions to make the builds move. The programming guides go into every aspect of the programming language that LEGO provides with the EV3, from every single option in the on-brick programming to detailed practical examples of how to use everything that is available in EV3-G. From simple control structures to the advanced use of the math and array blocks, each element is explained and used in the different programs that accompany the models, teaching you how to use them in your own creations.

# 3 - Building Ideas

The building instructions contain many helpful explanations on why certain solutions were used, but the book goes a step further by dedication an entire chapter to explaining how to make the most of all the elements in the set including ideas for bracing, cross-blocks, gears and motor assemblies.

### 4 - Comics

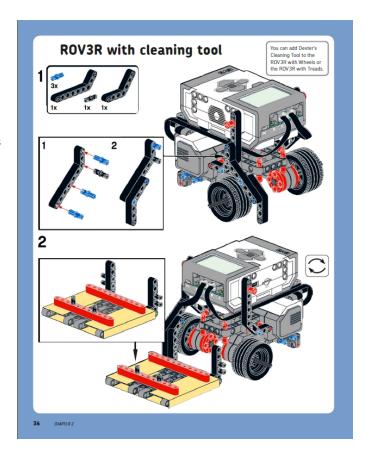
In addition to a technical building and programming guide, the

book is a fun read as it includes a comic "The EV3L Scientist's Apprentice", featuring Dexter as the apprentice and Danny as his tutor in robotics. The comic is woven through the book and provides the uniting element between the chapters and challenges.

Not convinced yet? The companion website http://EV3L.com provides the code for all the projects (in case you want to use the shortcut – but you are much better off following the step-by-step instructions in the book anyway) as well as some additional models (the codes to unlock the content are all contained in the book). Daniele (the author of the book) is even in the process of providing alternative build options for those who instead of the Retail set have the Education set which comes with a different inventory

The book is available in paper format (black and white) and as a full colour eBook and it provides a very complete addition to make to most of your MINDSTORMS EV3.

Acknowledgements: No Starch Press #





# THE LEGO® MINDSTORMS® EV3 LABORATORY

build, program, and experiment with five wicked cool robots!

daniele benedettelli



