ELECTRONIC SYSTEMS: THE ROBOT & THE APPS

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PREFACE

In writing this book, we lay down our passion for invention and experience with electronics, robotics, microcontrollers and app developments.

We hope you have as much pleasure building and enhancing your robot as we did in developing the techniques contained in this book.

Building a robot and enabling it to sense and reacts to its environment is a wonderful way to take one's programming knowledge to the next level.

This book introduces a wide range of programming tips, apps development techniques, internet of things and robotics concepts including movement, obstacle detection, handling sensors, remote control, and all kinds of real-world physical computing challenges.

It is for people who want to understand how these concepts can be used to build, expand and customize the robot.

CONTENTS

Part A
Programming

1.1 Installation Guide

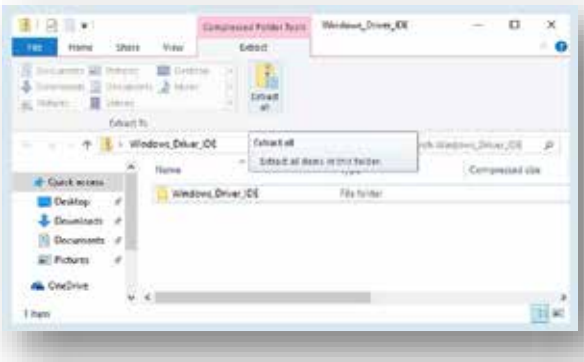
Installation Guide

This guide will walk you through installing the Windows driver and Integrated Development Environment (IDE) so that your computer can communicate with your microcontroller.

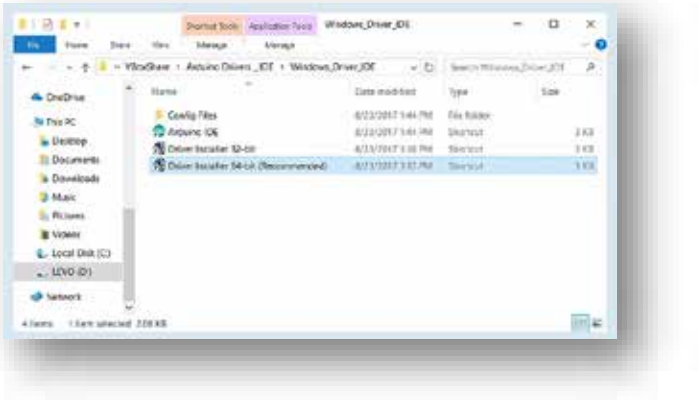
TIPS: The software can be downloaded from:-
https://www.arduino.cc/en/Main/Software

1. If you have never used the Arduino IDE before, select the "Arduino IDE and Driver" below. If you already have a working version of the IDE, simply download the Driver.

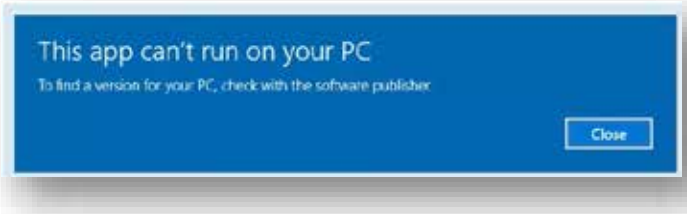
Unzip ("Extract all") the entire folder. This may take a few minutes.



2. The installer you'll want depends on whether you have a 32-bit or 64-bit version of Windows. If you're not sure just chose the "Driver Installer 64-bit (Recommended)".



* If you see the following message after running "Driver Installer 64-bit (Recommended)" then you'll need to use "Driver Installer 32-bit".



3. You'll be asked if you want to allow the app to make changes to your device. Select 'Yes' to continue.