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Previous Versions -

# SparkFun Inventor's Kit for Arduino Uno - v4.1

DESCRIPTION

INCLUDES

DOCUMENTS

**EXAMPLES** 

The SparkFun Inventor's Kit (SIK) for Arduino Uno is a great way to get started with programming and hardware interaction with the Arduino programming language. The SIK includes everything you need to complete five overarching projects consisting of 16 interconnected circuits that teach everything from blinking an LED to reading sensors. The culminating project is your very own autonomous robot! No previous programming or electronics experience is required to use this kit.

The online guide contains step-by-step instructions with circuit diagrams and hookup tables for building each project and circuit with the included parts. Full example code is provided, new concepts and components are explained at point of use, and troubleshooting tips offer assistance if something goes wrong.

The kit does not require any soldering and is recommended for beginners ages 10 and up who are looking for an Arduino starter kit. For SIK version 4.1 we took an entirely different approach to teaching embedded electronics. In previous versions of the SIK, each circuit focused on introducing a new piece of technology. With SIK v4.1, components are introduced in the context of the circuit you are building, and each circuit builds upon the last, leading up to a project that incorporates all of the components and concepts introduced throughout the guide. With new parts and a completely new strategy, even if you've used the SIK before, you're in for a brand-new experience!

This version of the SIK replaces the SparkFun RedBoard Qwiic with the Arduino Uno (SMD version) and comes without the SIK guidebook and carrying case. With these components being swapped and removed, we were able to reduce the overall size and weight of the kit, making shipping cheaper and easier for anyone ordering internationally.

Note: As stated above, this SIK does NOT include a carrying case or print guidebook.

> GET STARTED WITH THE SPARKFUN INVENTOR'S KIT V4.1 **EXPERIMENT GUIDE**

#### Tags

ARDUINO BEGINNER EDUCATION INVENTION KIT KIT ROBOTICS SIK SMD SPARKFUN ORIGINAL START A PROJECT V4.1

# SparkFun Inventor's Kit for Arduino Uno - v4.1 Product Help and Resources

**TUTORIALS** 

**VIDEOS** 

SKILLS NEEDED









#### **Light-Seeking Robot**

NOVEMBER 28, 2017

We use parts from the SparkFun Inventor's Kit v4.0 to create a light-seeking robot that mimics the behavior of single-celled organisms.

### Clap On Lamp

NOVEMBER 28, 2017

Modify a simple desk lamp to respond to a double clap (or other sharp noise) using parts from the SparkFun Inventor's Kit v4.0.

### **Endless Runner Game**

NOVEMBER 28, 2017

We make a simple side-scrolling endless runner game using parts from the SparkFun Inventor's Kit v4.0.

#### **Basic Character LCD Hookup Guide**

MAY 28, 2019

Liquid crystal displays (LCDs) are a great way to output a string of words or sensor data to a display for visual feedback. In this tutorial, we'll learn about LCDs, how to print a strings of words to a 16x2 basic character LCD, create custom characters.



**Measuring Internal Resistance of Batteries** 

MAY 5, 2016

Classroom STEM activity that has students build a battery from a lemon, measure the open and closed circuit voltages, and determine the battery's internal resistance.



SparkFun Inventor's Kit Experiment Guide - v4.1

AUGUST 8, 2019

The SparkFun Inventor's Kit (SIK) Experiment Guide contains all of the information needed to build all five projects, encompassing 16 circuits, in the latest version of the kit, v4.1.



REVIEWS 0



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