



SparkFun Inventor's Kit - v4.1

KIT-15267 ★

★★★★☆ 4

DESCRIPTION

INCLUDES

DOCUMENTS

EXAMPLES

The SparkFun Inventor's Kit (SIK) 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 full-color, spiral-bound SIK guidebook (included) 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!

The SIK V4.1 includes the **Redboard Qwiic** which allows you to expand into the SparkFun Qwiic ecosystem after you have become proficient with the SIK circuits. The SparkFun Qwiic Connect System is an ecosystem of I²C sensors, actuators, shields and cables that make prototyping faster and less prone to error. All Qwiic-enabled boards use a common 1mm pitch, 4-pin JST connector. This reduces the amount of required PCB space, and polarized connections mean you can't hook it up wrong. With the addition of the SparkFun RedBoard Qwiic, you *will need* to download a **new driver install** that is different from the original SparkFun RedBoard.

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

Tags

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

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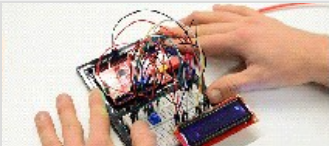
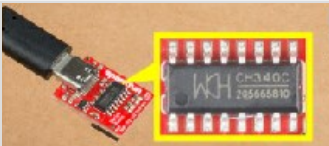
Previous Versions ▾

SparkFun Inventor's Kit - 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.

How to Install CH340 Drivers

AUGUST 6, 2019

How to install CH340 drivers (if you need them) on Windows, Mac OS X, and Linux.

Endless Runner Game

NOVEMBER 28, 2017

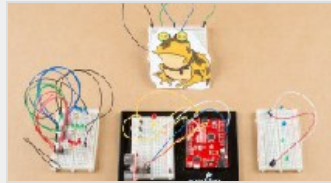
We make a simple side-scrolling endless runner game using parts from the SparkFun Inventor's Kit v4.0.



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.



Basic LED Animations for Beginners (Arduino)

DECEMBER 3, 2019

Let's have some fun with LEDs! We'll explore LEDs once again with the SparkFun RedBoard Qwiic, making cool effects, and putting those effects to work using a sensor.



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.

COMMENTS 0

REVIEWS ★★★★★ 4

Customer Reviews

★★★★★ 4.3 out of 5

Based on 4 ratings:

5 star		1
4 star		3
3 star		0
2 star		0
1 star		0

Currently viewing all customer reviews.

1 of 1 found this helpful:

★★★★★ Pretty good!

about 6 months ago by **Member #1539985** ✓ verified purchaser

Easy to use. All you can ever need in a kit. Got it delivered the next day.

★★★★★ Great starter kit!

about 4 months ago by **Member #1552638** ✓ verified purchaser

Great "sampler" of so many types of sensors and controls. Instructions are clear and repeatable. I have some background skills in electronics, radios, computers and programming, but this kit assumes nothing. I am learning a lot, even though some of it may be familiar. This is my platform for launching many future projects with my kids as their interest grows. Thank you!

★★★★☆ Good project kit for a beginner

about 2 months ago by **Member #1565828** 

The LED projects are cool. Ready to start project 2. It can be very confusing dealing with the wires, but it's fun to see what comes out in the end. Tryg. 9 yrs old

★★★★☆ Great starter kit

about 2 weeks ago by **Member #1571616** 

Great beginner kit. Easy to follow online guide as well as a book included in the box yet still challenging enough to entertain my 11 year old for several hours. The kit is well packaged though it would be great to have dividers/compartments in the box for storing the parts after removing the packaging.



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