



# SparkFun Inventor's Kit (for Arduino Uno) - V3.3

KIT-13970 RoHS



**Description:** 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 16 circuits that will teach you how to read sensors, display information on an LCD, drive motors, and more. You don't need any previous programming or electronics experience to use this kit.

The on-line SIK Digital Guide (in the *Documents* section below) contains step by step instructions of how to connect each circuit with the included parts. Full example code is provided and explained and even includes troubleshooting tips if something goes wrong.

The kit does not require any soldering and is recommended for beginners ages 10 and up. This version of the SIK replaces the SparkFun RedBoard for the tried and true Arduino Uno and removes the SIK Guidebook and carrying case. With these parts 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 it internationally.

**Note:** As stated above, this SIK does NOT include a carrying case.

### **Circuit Examples:**

- Circuit 1: Blinking an LED
- Circuit 2: Reading a Potentiometer
- Circuit 3: Driving and RGB LED
- Circuit 4: Driving Multiple LEDs
- Circuit 5: Push Buttons
- Circuit 6: Reading a Photo Resistor
- Circuit 7: Reading a Temperature Sensor
- Circuit 8: Driving a Servo Motor
- Circuit 9: Using a Flex Sensor
- Circuit 10: Reading a Soft Potentiometer
- Circuit 11: Using a Buzzer
- Circuit 12: Driving a Motor
- Circuit 13: Using Relays
- Circuit 14: Using a Shift Register
- Circuit 15: Using an LCD
- Circuit 16: Simon Says

### **Kit Includes:**

- Arduino Uno - R3 SMD
- Arduino and Breadboard Holder
- White Solderless Breadboard
- SparkFun Mini Screwdriver
- 16x2 White on Black LCD (with headers)
- 74HC595 Shift Register
- BC337 Transistor
- 1N4148 Diodes
- DC Motor with Gear
- Small Servo
- SPDT 5V Relay
- TMP36 Temp Sensor
- Flex sensor
- Softpot
- 6' SparkFun USB Cable
- Jumper Wires
- Photocell
- Tri-color LED
- Red, Blue, Yellow, and Green LEDs
- Red, Blue, Yellow, and Green Tactile Buttons
- 10K Trimpot
- Piezo Speaker
- 330 and 10K Resistors