



## Johnny-Five Inventor's Kit

KIT-14604 ROHS

The Johnny-Five Inventor's Kit (J5IK) is your go-to source for developing projects using the Tessel 2 and the Johnny-Five programming framework. With the J5IK you will be able to build JavaScript-powered hardware by marrying common software language with powerful hardware. This kit includes everything you need to complete 14 circuits that will teach you how to control and read external sensors and displays, control motors, learn JavaScript, and much more. With the J5IK, you won't need any previous programming or electronics experience to use this kit though if you do possess such skills they will certainly aid you. After using this kit you'll have the know-how to start creating your own IoT projects and experiments, all thanks to Johnny-Five!

Johnny-Five is an Open Source Robotics and IoT platform based on the IO-Plugin protocol. Released by Bocoup in 2012, Johnny-Five is maintained by a community of passionate software developers and hardware engineers. Over 75 developers have made contributions towards building a robust, extensible and composable ecosystem.

The on-line Experiment Guide for the J5IK (that will be released when the kit starts shipping) 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 anyone comfortable learning new programming languages or if you are looking for an alternative to the original SparkFun Inventor's Kit.

## INCLUDES

- Tessel 2
- White Breadboard
- Carrying Case
- SparkFun Motor Driver
- SparkFun Soil Moisture Sensor (With Screw Terminals)
- SparkFun BME280 Breakout (With Headers)
- 16x2 Character LCD White on Black (With Headers)
- 7 Segment Display
- Hobby Gearmotor (Pair)
- Shift Register
- Magnetic Door Switch Set
- Mini Photocell
- Switch (SPDT)
- Red, Blue, Yellow, and Green Tactile Buttons
- Red, Blue, Yellow, and Green LEDs
- RGB LED
- Trimpot 10K
- Jumper Wires M/M 6"
- USB microB Cable 6 Foot
- Wall Charger 5V USB (1A)
- 10K Ohm Resistors
- 100 Ohm Resistors

## EXAMPLES

- Experiment 1: Blink
- Experiment 2: Multiple LEDs
- Experiment 3: Reading a Sensor Potentiometer
- Experiment 4: Reading a Button
- Experiment 5: Reading a Switch
- Experiment 6: Reading a Light Sensor
- Experiment 7: Fading an LED
- Experiment 8: Controlling an RGB LED
- Experiment 9: Using an H-Bridge Motor Control
- Experiment 10: I<sup>2</sup>C Sensor with BMP180
- Experiment 11: Moisture Sensor
- Experiment 12: LCD Screen
- Experiment 13: Shift Register + LEDs
- Experiment 14: Shift Register + Seven Segment



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