Kitronik micro:bit Inventors Kit - Python version - German

Stock code: 5669-DE

Description

Kitronik micro:bit Inventors Kit - Python version - English. The Kitronik Inventor's Kit - Python Version for the BBC micro:bit is a great way to get started programming and hardware interacting with the BBC micro:bit. This inventor's kit contains everything you need for 10 experiments, including LEDs, motors, photoresistors and capacitors. To get you started straight away we've included an easy to follow instruction booklet to walk you through everything you need to know about programming the BBC micro:bit. You don't need any programming experience as the textbook will guide you through every step. You'll be programming and creating circuits in no time! This is a German language version of the booklet,

The instruction booklet provides step-by-step instructions for all 10 experiments. Experiments 1 - 6 are coded with MakeCode blocks and experiments 7 - 10 with the MakeCode Python editor. The Python version tutorial booklet is written specifically for this version and guides the user through creating the code and circuits. In the original Inventor's Kit, experiments 7 - 10 were coded with JavaScript.

The Kitronik Inventor's Kit - Python Version for the BBC micro:bit provides a fantastic way to learn how to build and control electronic circuits. The BBC micro:bit has a selection of pins located on the bottom edge of its circuit board. By using our specially designed edge connector board for the BBC micro:bit in conjunction with the breadboard it is easy to use these pins to connect additional components to the BBC micro:bit. This set is available as a single pack or as a pack of 20 for the classroom.

Inventor Set Extension Packs:

On its own, the Kitronik Inventors Kit offers a great introduction to the world of physical computing. The experiments show how code and electronics can be combined to create real, everyday practical solutions to situations and problems. Harnessing the power of the elements, using sensory input to make things happen, and using variable amounts of input to cause gradual change are just a few of the things you can learn as you progress through the experiments. But why stop there?

In our homes, schools, and offices, we are surrounded by consumer electronics that are, at their core, physical computing devices. Coded electronic devices are everywhere. Many of these devices are coded to tell us things, both visually and audibly. The three add-on packages for the Inventor's Kit have been specially designed to introduce you to these aspects of practical physical computing.

- o The ZIP LEDs add-on package for Kitronik Inventors Kit for micro:bit - Most consumer electronics rely heavily on LEDs as they are a great way to provide instant visual feedback to the user. This add-on pack will teach you how to write code to take control of ZIP LEDs. You will also learn how to make ZIP LEDs respond to input from components such as potentiometers and sensors.
- o The Noise Pack for Kitronik Inventor's Kit for the BBC micro:bit - Learn how to manipulate sounds, build instruments, amplify and shape your sounds with filtering and EQ.
- o The Digital Logic Package for Kitronik Inventor's Kit for the BBC micro:bit - Learn how logic gates work and how they can be used in conjunction with the micro:bit.

Notice:

- This kit requires assembly.
- The kit comes with a booklet with detailed instructions and diagrams for all 10 experiments.
- No soldering is required and you can build your first circuit in minutes!
- Complete the experiments with the MakeCode editor.
  - o Experiments 1 - 6 with MakeCode blocks.
  - o Experiments 7 - 10 with MakeCode Python.
  - o This kit does not include a BBC microbit .
  - o If you purchase a microbit separately, you may also need to purchase a battery cage and USB cable , depending on which microbit option you purchase.
  - o This set is available as a single set or as a pack of 20.

Features:

- No soldering required - build your first circuit in minutes!
- Perform 10 experiments included in the included step-by-step instructions.
- As your skills grow, you can move from Blocks to Python, all within the MakeCode environment.
  - o Experiments 1 - 6 are block-oriented.
  - o Experiments 7 - 10 are now complete with Python.

- All parts are included to complete the 10 experiments (listed below).
- Breaks 21 accessible pins of the BBC micro:bit with the BBC micro:bit edge connector board (included).
- Small prototype breadboard included for quick prototyping.

Contents:

Each individual pack contains;

- 1 x mounting plate.
- 1 x Potentiometer - Vertical Type (Finger Adjustment) 100K .
- 1 x Fingerverstellspindel.
- 1 x adhesive fixer for battery pack.
- 1 x Small Prototype Breadboard .
- 1 x end plug .
- 4 x pressure switches .
- 1 x Motor.
- 1 x Transistor.
- 2 x Rote 5mm LED.
- 2 x Orange 5mm LED.
- 2 x Gelbe 5mm LED.
- 2 x Grüne 5mm LED.
- 1 x RGB 5mm LED.
- 1 x fan blade .
- 5 x 2KΩ resistors .
- 5 x 10KΩ resistor .
- 5 x 47Ω resistor .
- 1 x edge connector breakout board for BBC micro:bit .
- 10 x Male to Male Jumper Wires .
- 10 x Male to Female Jumper Wires .
- 1 x 470uF electrolytic capacitor .
- 1 x Piezo-Element-Summer.
- 2 x pan head M3 machine screw .
- 1 x Phototransistor .

Kitronik micro:bit inventors kit - Python Version Pack Size Options:

- Single pack: 5669-DE.
- 20er Pack: 5669-DE20