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# **Discovery Kit Plus for the BBC micro:bit**

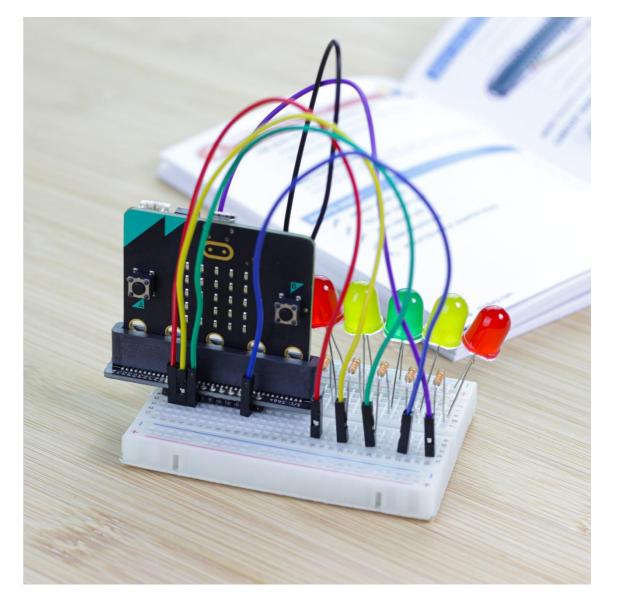
By working together DigiKey and Kitronik have been able to bring this unique micro:bit kit to a much wider audience. The kit is tailored to provide a simple and enjoyable way to learn block based and Python coding using the incredibly friendly micro:bit platform.

At the same time the user gets to also gain experience of building their own circuits using components. To make things super simple everything the user needs is included including the micro:bit and micro USB cable.

The Discovery Kit Plus for BBC micro:bit contains a total of 10 experiments which introduce students to coding the micro:bit using both Block based coding and Python.

The included booklet assumes no prior knowledge and contains detailed information about everything the new user will need to know. It covers everything from using a prototyping board to how to use the Microsoft MakeCode Editor, and everything in between.

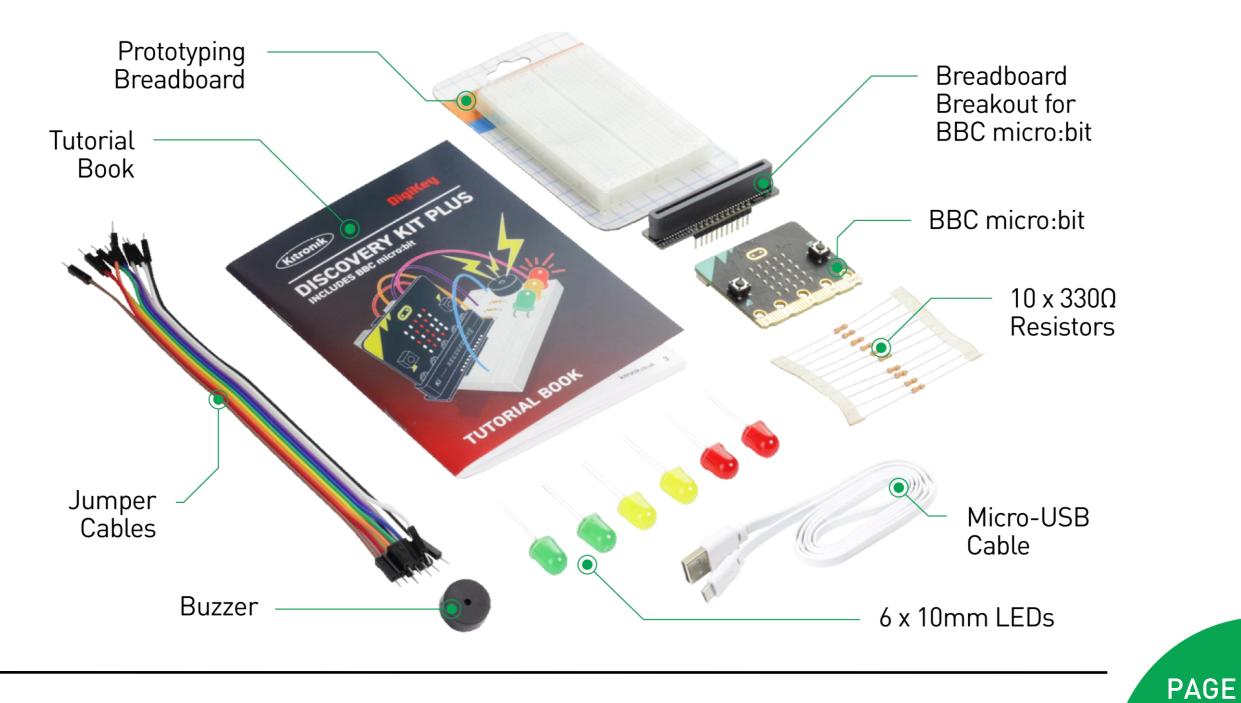
The kit contains all of the components required to complete the experiments. Each experiment has a complete code walkthrough, a circuit diagram and a top-down breadboard view, full explanations of what is happening, and how the electronics work



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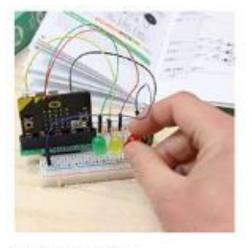


Kitronik.co.uk



### Features

- This kit offers a great introduction to both coding and electronics.
- No soldering required build your first circuit in minutes!
- Make the 10 experiments in the step-by-step tutorial book and learn as you go.
- All parts are included to conduct the 10 experiments.
- Once you have completed all of the included experiments, you have the perfect prototyping system for further adventures with the micro:bit.
- The code can be created in Microsoft's easy to use MakeCode editor and micro:bit Python editor.



### Simple Build

No soldering here! Simply slot the components into the breadboard...and pull them right out again.

### CHALLENGE - USE JUST O

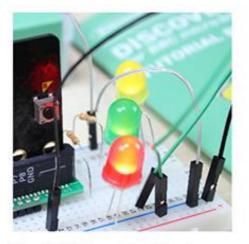
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#### Hint: A variable will be needed to c

VARIABLES and is using. They a button. Once a '

### **Further Learning**

Think you've got it all solved? Push yourself with extension challenges after every experiment.



**Build New Projects** 

Unleash your imagination and make your own circuits on the resuseable prototyping system.

## **Tutorials**

- Show an Image on the LED Display
- Scroll a Message Across the LED Display
- Play a Sound When a Button is Pressed
- LED Control Circuit
- Buzzer Jukebox
- Lights in sequence
- Digital LED Thermometer
- Traffic Light With Pedestrian Crossing
- Python Getting Started
- Making a Spirit Level



**Electronics Explained** 

Clear circuit diagrams and explanations make getting to grips with electronics easy.

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