

BitGadget Kit - Grove Creator Kit for Micro:bit



SKU

114991970

BitGadget Kit includes a BitMaker and up to 9 different Grove modules. The most suitable kit for micro:bit intermediate learners to dive deep into the world of micro:bit. One project you could create is your own customized mood lighting with the RGB LED strip which automatically senses when it needs to come on through a light sensor or adjust it manually with a sliding potentiometer and pushbutton.

PRODUCT DETAILS

Description

BitGadget Kit is a must-have for micro:bit intermediate learners.

The included micro:bit expansion board, BitMaker incorporates six Grove connectors, one RGB LED strip and one buzzer to make it possible for some beginners to still use the micro:bit without purchasing extra modules.

If you want to buy BitMaker separately on its own, click [here](#).

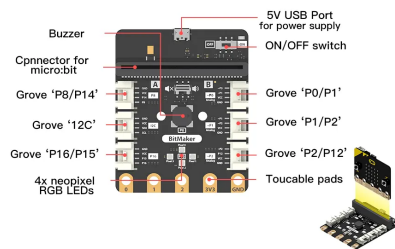
The complete BitGadget Kit also includes 1 sliding potentiometer, 1 light sensor, 1 sound sensor, 1 button module, 1 ultrasonic distance sensor, 1 mini fan, 1 motor, 1 servo, 1 RGB

LED strip (9 modules in total). You can let your imagination take flight by creating projects with the endless combinations of these components. Scroll down to see project examples.

If you are already an experienced micro:bit user, you can experiment with adding other Grove modules such as a gesture sensor or 4 digit display to enhance your projects. If you haven't heard of Grove before, Grove is a Seeed Studio series which you can read more about [here](#).

Feature

BitMaker



BitMaker is a micro:bit expansion board for the micro:bit which also includes one RGB LED and one buzzer onboard to make it possible for some beginners to extend the micro:bit's functionality.



9 Classic Modules

Besides a buzzer and an RGB LED carried by the BitMaker, the kit also includes 9 Grove modules that Makers often use in their projects. You can let your imagination take flight with those components. Scroll down for project ideas & examples.

Microsoft MakeCode Compatible - A Powerful Programming Platform



MakeCode is a widely-used graphical programming software which allows you to program the micro:bit. You can easily use it through a web browser.



Educational Course Materials

We provide free BitGadget Kit-related courses for schools and families. You can get started with BitGadget Kit no matter whether you are at class or home.

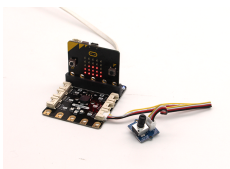
Educational Focus

With the BitGadget Kit, students will develop open source electronics understanding as well as programming skills. Students must exercise creative thinking and use their hands as they design their own projects, customising functions through graphical programming. Not only can kids build knowledge of the modules and graphical programming, but they can also learn how to create their own DIY projects.

This product is suitable for:

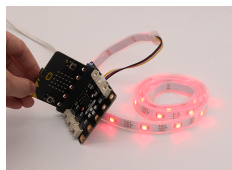
Maker teachers / DIY hobbyists / high school students / micro:bit intermediate learners / Homeschoolers

Project Examples



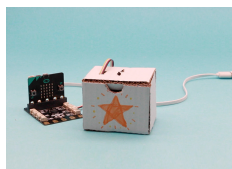
Project 1 LED Controller

The LEDs change its light display regularly as you rotate the rotary angle sensor, just like filling a glass.



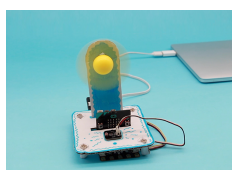
Project 2 Rainbow LED Strip

When tilting the micro:bit left and right, you can see a rainbow-like RGB LED strip!



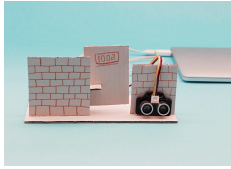
Project 3 The Secret Box

Keep your secrets in a fantastic box! If someone opens it, it'll alert you!



Project 4 The Light-Sensing Fan

This fan can sense the light. If the light is bright, the fan turns on; if the light is dim, the fan turns off.

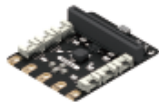


Project 5 Automatic Door

This is an automatic door made with a servo and an ultrasonic distance sensor. If something approaches, it'll open automatically.

Part List

- 1 BitMaker
- 1 Rotary Angle Sensor
- 1 Light sensor
- 1 Sound sensor
- 1 Button
- 1 Ultrasonic sensor
- 1 Mini fan
- 1 Vibration motor
- 1 Servo
- 1 RGB LED strip
- 7 Grove cables



1x BitMaker



1x Rotary Angle Sensor



1x Light Sensor



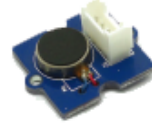
1x Sound Sensor



1x Button



1x Ultrasonic Sensor



1x Vibration Motor



1x Analog Servo (180°)



1x Mini Fan (with motor)



1x RGB LED Strip



7x Grove Cable

ECCN/HTS

HSCODE 9023009000

USHSCODE 9023000000

UPC