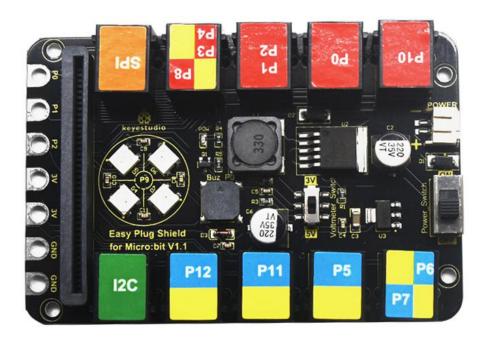


EASY Plug Shield for Micro bit V1.1 (Black and Eco-friendly)



Description

Micro:bit is a basic development board designed by BBC for teenagers programming education. However, the micro:bit is hard to wire up.

Therefore, we design the EASY Plug Shield to tackle with the micro:bit's inconvenience wiring. You only need to insert the micro:bit board into it.

The silver plated parts and 10 sockets on the expansion board(RJ11 6P6C)can connect other sensors, modules with the micro:bit.

We connect it to sensors and modules with via one special telephone line (RJ11 crystal head), which is convenient and easy.

Meanwhile, it comes with four WS2812 LEDs (controlled by P9), a buzzer (controlled by P0), two DIP switches.



Power switch is used for power control and Voltmeter_Switch is used for the voltage (3.3V, 5V) of Easy Plug.

Although the sensors and modules purchased from other companies comes with RJ11 6P6C port , they may not compatible with ours.

Parameter:

Power: DC 6-10V

Output current: 1.5A

Interface: RJ11 6P6C interface and golden finger interface

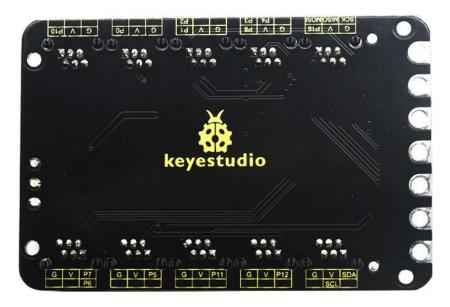
Size: 98 * 65 * 17mm

EASY plug Description

EASY plug and RJ11 6P6C interface are practically the 6pin ports , according to the IO port led out by the silk screen on the back.

As shown below:





Interfaces

G: GND

V: controlled by Voltmeter_Switch; dial to 5V end, V is 5V, dial to 3V end, V is 3.3V.

I2C Communication Interface

G	٧	SDA
	SCL	

SDA: P20

SCL: P19



SPI Communication Interface

G	V	P16
SCK	MISO	MOSI

MOSI: P15

MISO: P14

SCK: P13

Experiment

The 4 WS2812 LEDs on the shield display various colors by external power

Test Code

```
on start

led enable false ▼

set strip ▼ to NeoPixel at pin P9 ▼ with 4 leds as RGB (GRB format) ▼

strip ▼ clear

forever

strip ▼ show color red ▼

pause (ms) 500 ▼

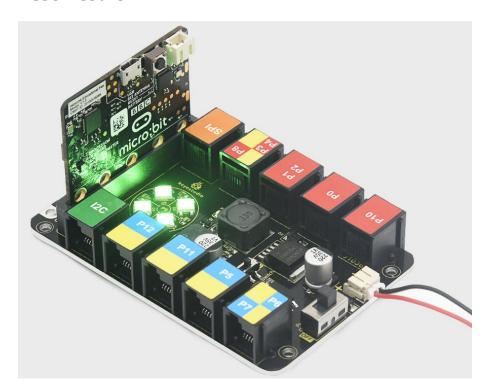
strip ▼ show color green ▼

pause (ms) 500 ▼

strip ▼ show color blue ▼
```



Test Result

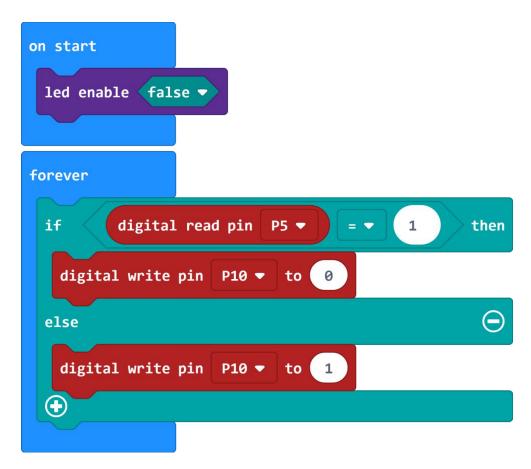


When the code is uploaded and plug it in power, the 4 WS2812 LEDs will flash three colors: red, green, and blue.

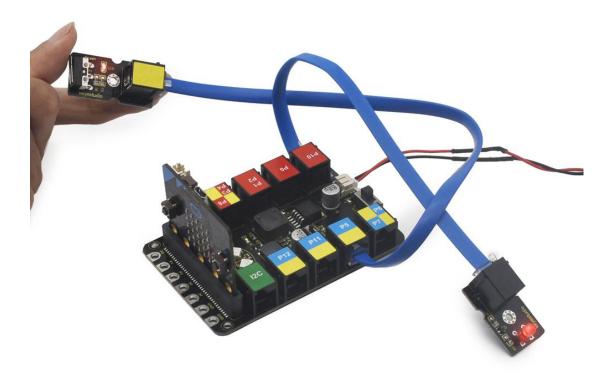
Attached to a collision module through Easy plug, LED can be restrained by a collision module.

Test Code





Test Result



When the shrapnel on the collision module is pressed, the LED will be on.



Otherwise, the LED will be off.

Resource:

https://fs.keyestudio.com/KS0496