### MBIT108-EN-L

# MICRO:BIT MAQUEEN LITE ROBOT STEM EDUCATION MONATGE EN 60S



# INTRODUCTION

**Note:** The product includes <u>micro: Maqueen Lite-micro:bit Educational Programming</u> Robot Platform with Red skin (Installed). ROB0148-EN-L

micro:bit board and batteries are not included.

The pretty skin not only makes it **more popular with children** but also effectively **protects the core circuit** from damage. If you only need the skin, <u>please</u> click here.

Maqueen Lite is a STEAM educational programming robot. Despite a mini-body, it comes with an exquisite appearance and inherits the playability and simple operation of micro:bit. Besides, there are housings with four lively colors red, green, blue and gray designed for Maqueen Lite, which makes it more popular with kids.

Maqueen Lite works well with both micro:bit V1 and V2, and integrates rich peripherals like ultrasonic ranging sensor, IR receiver, IR line-tracking sensor, LED car lights, RGB ambient lights, etc.

Suggest Age: 8 +

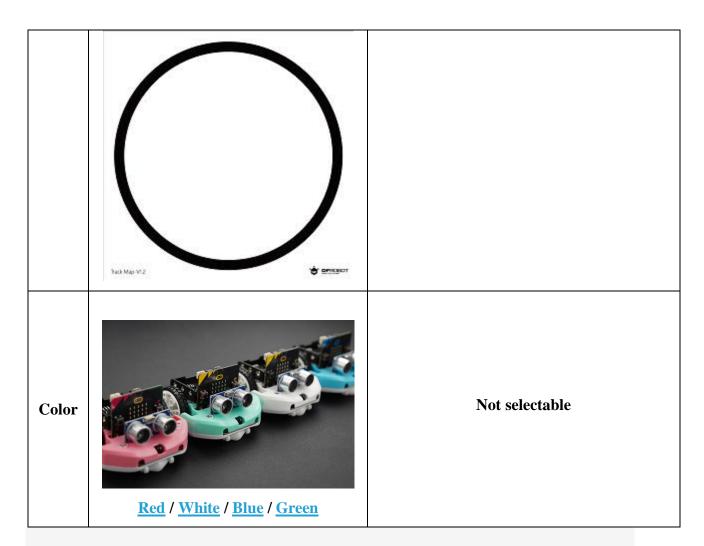
Maqueen is accessible to <u>Mind+ Programming platform</u> now. Mind+ is a graphical programming platform from DFRobot, supporting Python, Arduino, and other programming platforms. At present, Mind+ has been applied to all kinds of sensors, modules, and related educational products.

We recommend that students choose micro: Maqueen Lite with skin, easier to operate. Motors, vehicle wheels, support wheel, skin, and battery holder has been installed before delivery.

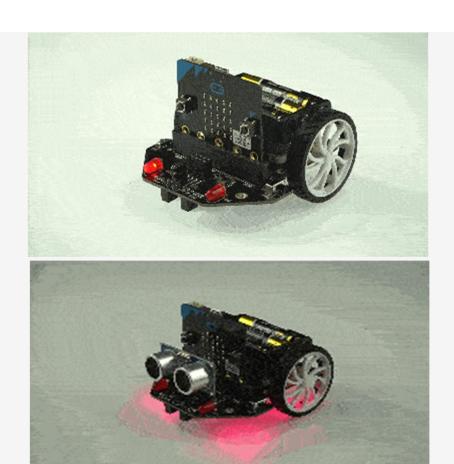
This kit includes a track map, more suitable for teaching.

The Differences between micro: Maqueen Lite with skin & micro: Maqueen Lite

Product	micro: Maqueen Lite with skin	micro: Maqueen
Installed	√ (Parts and skin has been installed before delivery)	× (Spare Parts)
		Magazine Guita Sara Sara
Map	V	×



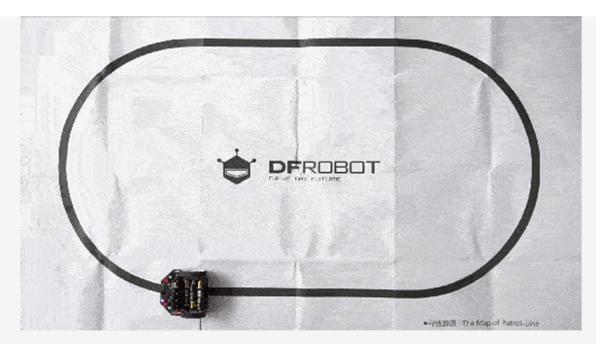
**LED Light Flash and RGB Breathing Ambient Light:** 



**Light-operated Sprite:** 



Line Tracking:



# **FEATURES**

- Exquisite appearance and lively colors, popular with kids
- No need to install, get started in minutes
- Latest Maqueen 4.2 core, stable and steady performance
- Support micro:bit V1 and V2 and Maqueen Mechanic Kit

# **APPLICATIONS**

STEM Education

# **SPECIFICATION**

#### Maqueen Lite:

- Supply Voltage: 3.5V~5V DC (Three AAA batteries)
- Infrared Line-tracking Sensor (High/low level) x 2
- Buzzer x 1
- Infrared Receiver (NEC encode) x 1
- LED Car Lights (High/low level control) x 2
- RGB Ambient Light (Full 16 million colors) x 4
- SR04 Ultrasonic Interface (5V) x 1
- I2C (3.3V) x 1
- Servo Port (S1 S2) x 2
- Gravity Expansion Port (P0, P1, P2) x 3
- N20 Metal Gear Motor x 2
- Motor Reduction Ratio: 1:150
- Maximum Rotate Speed: 133 rpm
- Motor Drive Mode: PWM
- Support Wheel Material: POM
- Vehicle Wheel Material: ABS

- Tyre Material: eco-friendly rubber
- Programming Method: MakeCode, Mind+
- Dimension: 81x 85 x 44mm/3.19 x 3.35 x 1.73" (micro:bit not included)
- Weight: 75.55g (Battery, micro:bit, and peripheral accessories not included)

## Skin (Installed):

Skin Material: eco-friendly ABS

• Weight: 60g

• Color: Red-blue-green-white

## **DOCUMENTS**

• <a href="https://wiki.dfrobot.com/micro\_Maqueen\_Lite\_for\_micro\_bit\_SKU\_ROB0148-EN-L">https://wiki.dfrobot.com/micro\_Maqueen\_Lite\_for\_micro\_bit\_SKU\_ROB0148-EN-L</a>

# **SHIPPING LIST**

- Maqueen Lite Vehicle Body x1
   (Note: Motors, vehicle wheels, support wheel, skin, and battery holder have been installed before delivery)
- H-SR04 Ultrasonic Sensor x1
- Line-tracking Map x1