mBot & mBlock

Introduction

Teaching, Learning and Having Fun
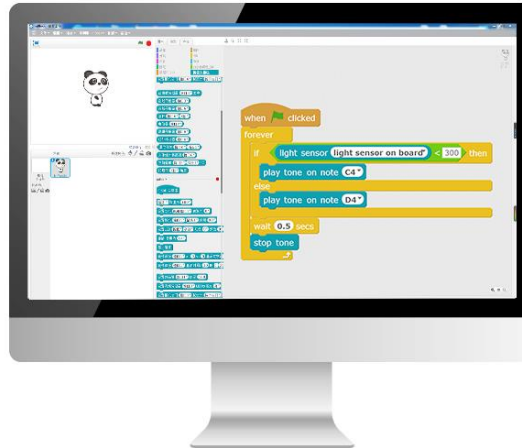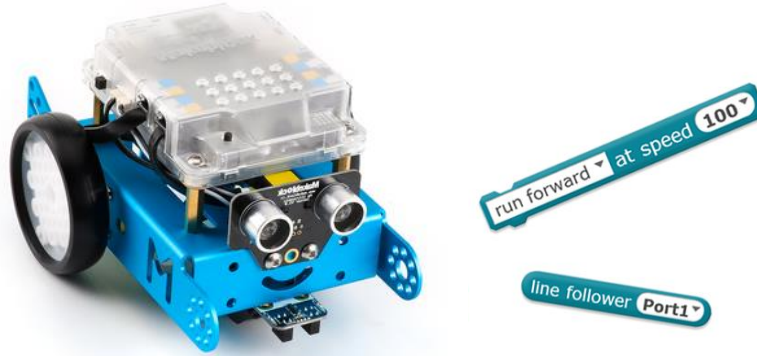
What is mBot?

Graphical programming & C language

APP for Control and Coding

Infinite Extensibility

run forward at speed 100

line follower Port1
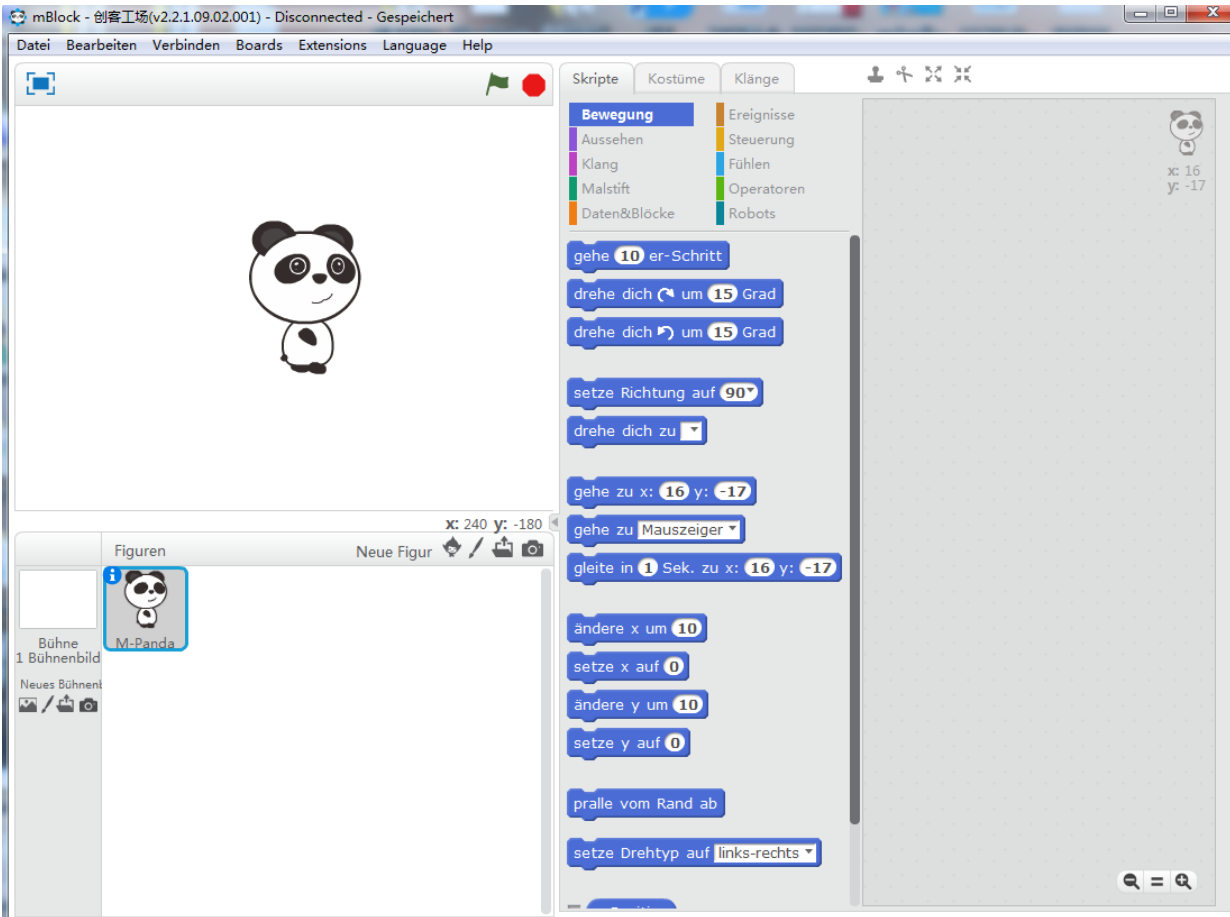
mBot

mBot is an all-in-one solution for kids and beginners to get hands-on experience with robotics, programming, and electronics.

Makeblock

What is mBlock?

mBlock is a graphical programming environment based on Scratch 2.0. Open Source Code that makes it easy to program Arduino projects and create interactive applications.

Key Features

- Quick entry. 10-20 minutes assembly.

- 4 mode APP control: manual mode; gravity control mode; line following mode; automatic driving mode.

- Convenient wiring electronic system with color-labeled RJ25 ports.

- Graphical programming PC software – mBlock.

- PC programming software - Arduino IDE**.**

- Graphical programming APP – Makeblock & mBlockly

- Optional 2.4G wireless connection available.

- Extensible with add-on packs and accessories.

Arduino
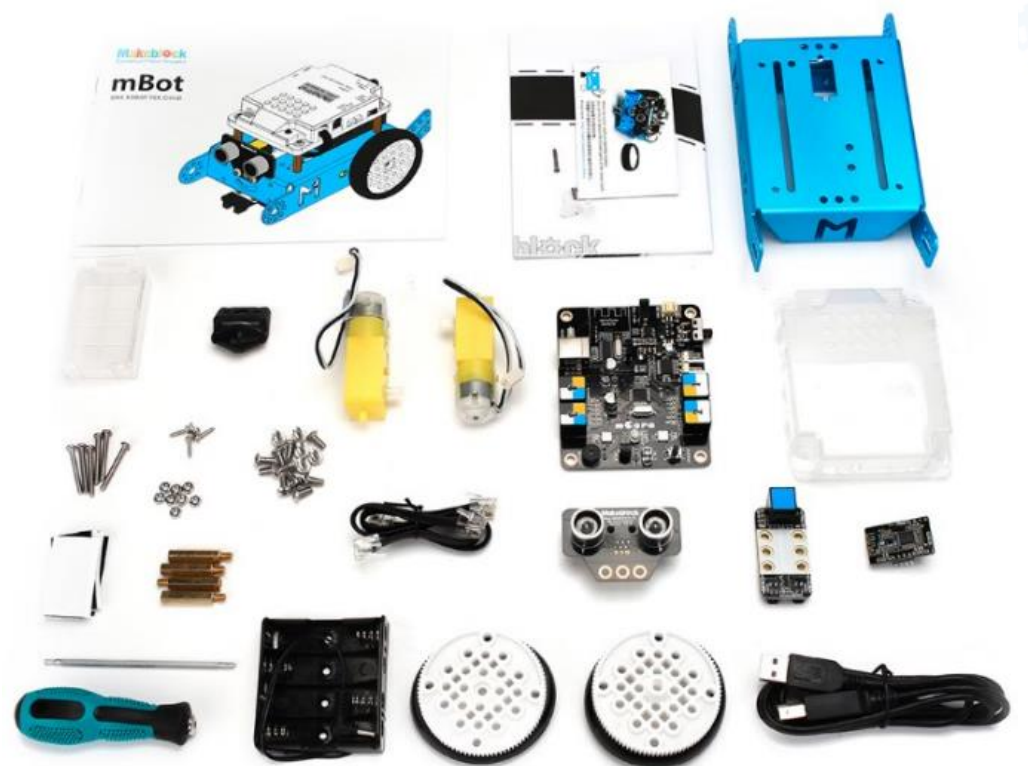
mBot

Scratch 2.0

Robotics

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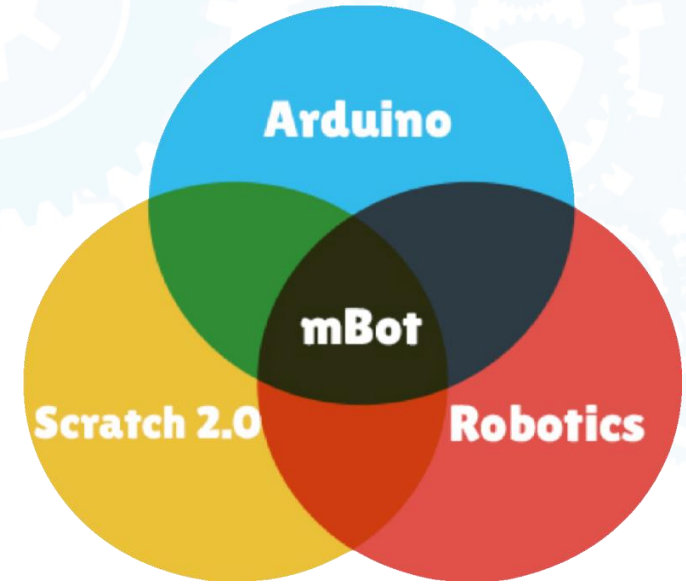
Parts List

90058 2.4G Version
For classroom, no paring confusion
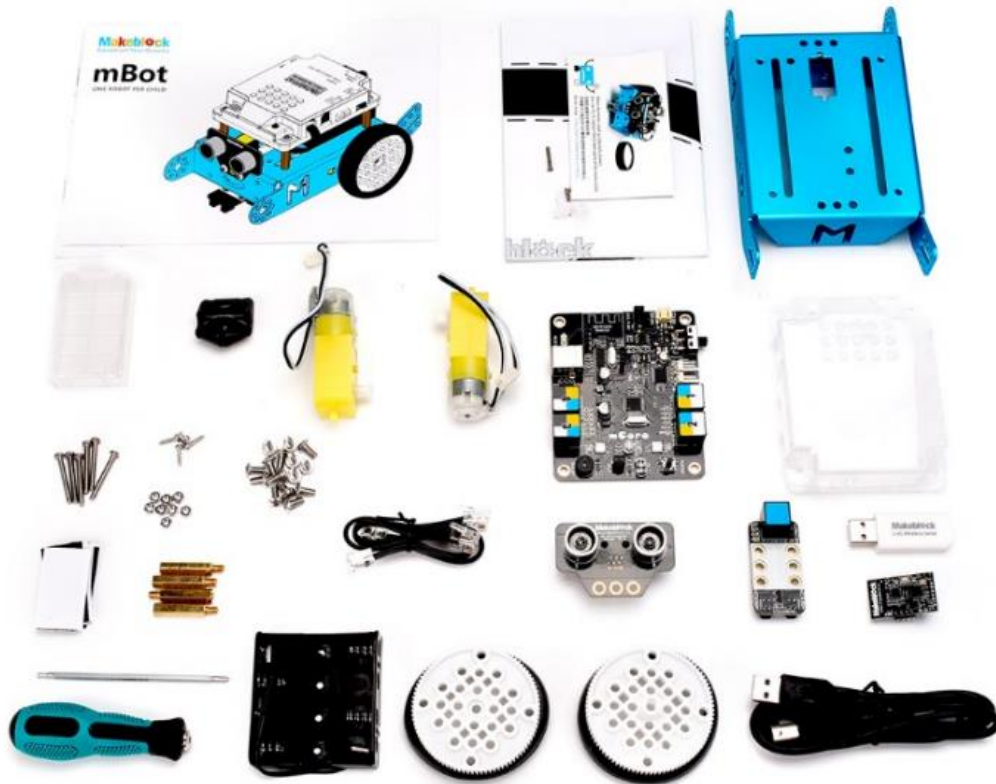
90053 Bluetooth Version
For individual users, family. app supported
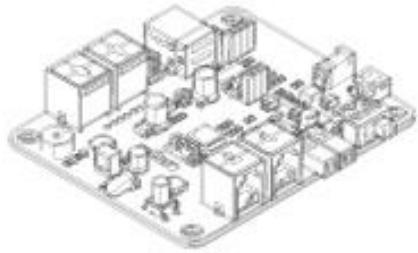
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mBot V1.1

mBot V1.0

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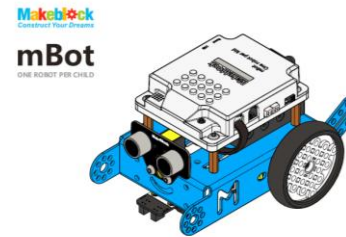
The new mBot comes with below improvements on its design:
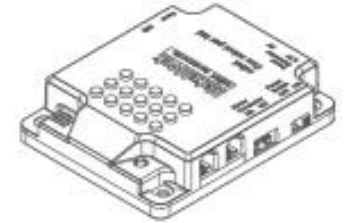
Taller on-board buttons, which is convenient for you to press even if you assemble mCore with its casing
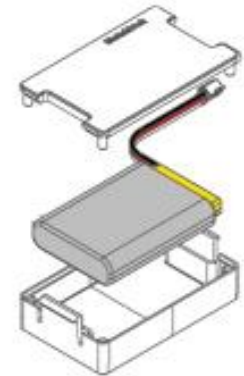
Replace caster wheel with a mini auxiliary wheel, which reduces motion noise and adjusts the center of gravity of mBot

A mCore casing

A lithium battery holder

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Difference between 2.4G version and Bluetooth version

Product Name	mBot - 2.4G Version	mBot - Bluetooth Version
Parts	one 2.4G module for mBot + one 2.4G dongle for computer	Only one Bluetooth module for mBot
Software and programming	• mBlock(graphical) based on Scratch 2.0 - Mac, Windows. • C language Arduino IDE - Mac, Windows.	
Inputs	Light sensor, button, infrared receiver, ultrasonic sensor, line follower	
Outputs	Buzzer, RGB LED, Infrared emitting, two motor ,ports	
Microcontroller	ATmega328 based on Arduino Uno	
Power	3.7VDC lithium battery(charger on board) or four 1.5V AA batteries (not included)	
Dimensions	17 x 13 x 9 cm after assembled	
Weight	400g after assembled	
Wireless Communication	2.4GHz wireless serial	Bluetooth(4.0+2.0)
Wireless technology details	Including one 2.4G module for mBot and one 2.4G dongle for computer. Using wireless frequencies in the 2.4GHz range to create a point-to-point communication, but not WIFI standard and Bluetooth standard.	Only include one Bluetooth module for mBot (Support both Bluetooth 2.0 and 4.0 standard)
Advantage	• Suitable for classroom teaching. There is no signal interference like Bluetooth when 5+ students use in classroom simultaneously • Easy to connect. No pairing trouble and driver needed	One joypad App provided for battle is available on Android & iOS, one entry-level graphical programming App is available on iPad.
Disadvantage	Can't connect to smartphone, so no App available.	There is signal interference when 5+ people use in classroom simultaneously. And the host computer must have built-in Bluetooth or extra Bluetooth dongle.
App	N/A	yes

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How to learn mBot with fun ?

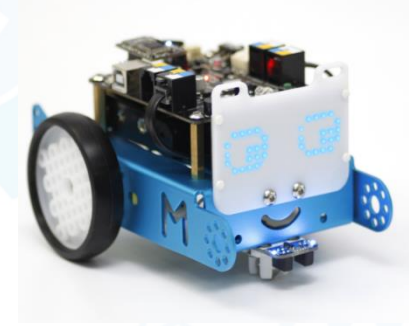The user manual helps you to interact with your robot quickly.

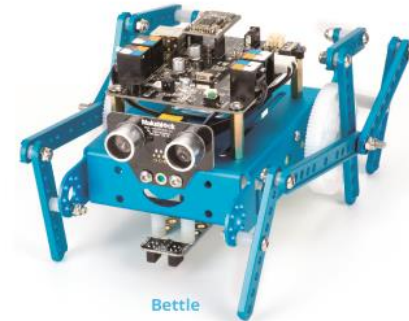Two tutorial books help teachers and kids get started easier.
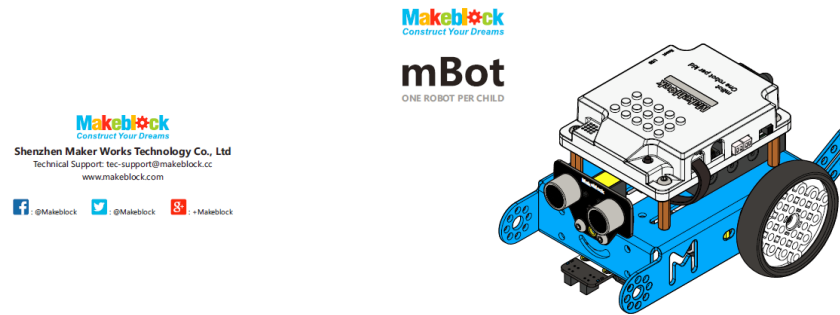
Add-on and Accessories

13412 Me LED Matrix 8 x 16

98050
mBot Add-On Pack
Six-Legged Robot

Bettle

98052
mBot Add-On Pack
mBot Servo Pack

Dancing Cat

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Add-on and Accessories

11012 Me 3-Axis Accelerometer and Gyro Sensor

11020 Me Touch Sensor

11010 Me PIR Motion Sensor V1

13402 Me 7-segment display-Red

11024 Me Compass

11032 Me Temperature and Humidity Sensor V1

MORE…

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What mBot can bring for you?

For schools: **mBot** will perfectly meet the needs of both children and their educators. **mBot** & **mBlock** meets the essentials to enter and advance in the world of graphical programming, electronics and robotics . It will allow many activities or lessons in class with a single product.

For families: Interest is the best teacher for kids, mBot aim to be the right teacher to help kids improve powers of observation, hands-on practice ability, problem finding and solving skills, cultivate creativity, imagination, thinking and learning ability.

For beginners: Great fun for anyone looking to expand their knowledge of Arduino, electronics, robotics and DIY, since **mCore board** is compatible with Arduino UNO.
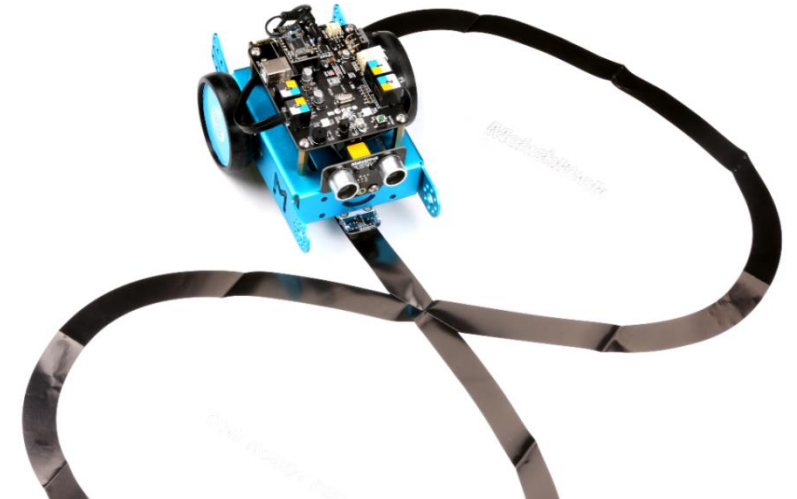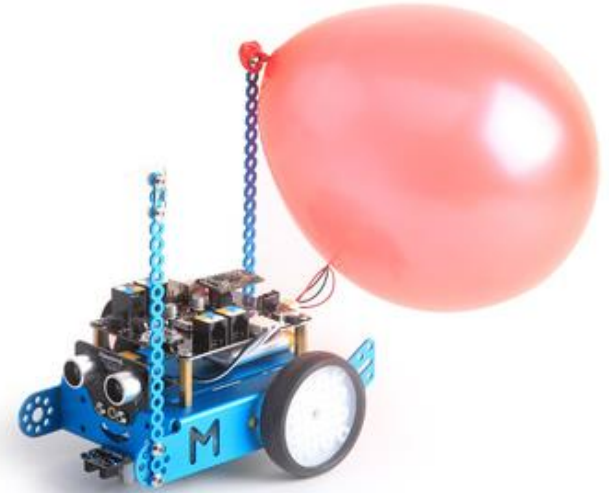
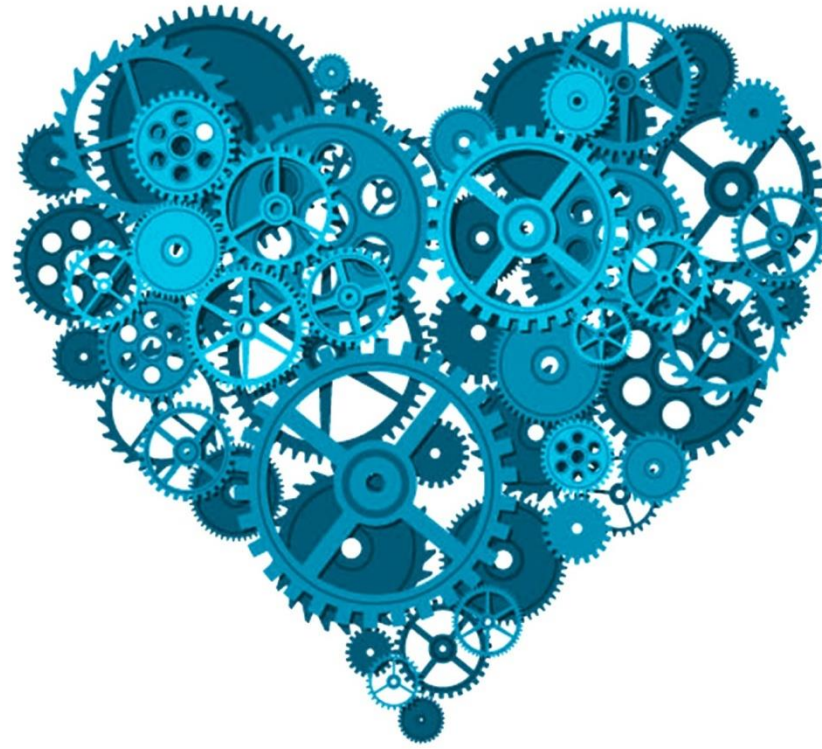Makeblock

Who is interested in mBot?

Have fun with mBot!

2016-06-03

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Construct Your Dreams

www.makeblock.cc