



# mBot v1.1 - Blue (2.4G Version)

SKU 110090104

**All-in-one solution**

**Hands-on experience of programming, electronics, and robotics**



What is mBot?

mBot is an all-in-one solution to enjoy the hands-on experience of programming, electronics, and robotics. Working with mBlock inspired by Scratch 2.0, connecting with computers or smart devices via Bluetooth or 2.4G (by different version), this easy-to-assemble mBot provides infinite possibilities for you to learn STEM (Science, Technology, Engineering, Mathematics).

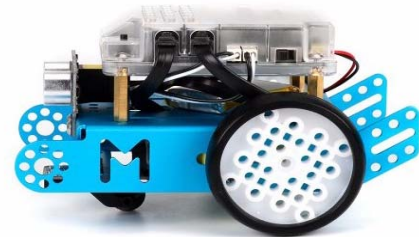
## What's New? – Children Safeguard

Compared to the previous version, mBot v1.1 comes with a casing specially designed for protecting main control board. Meanwhile, the casing is atomized to safeguard children's eyes from the glare of the onboard LED.



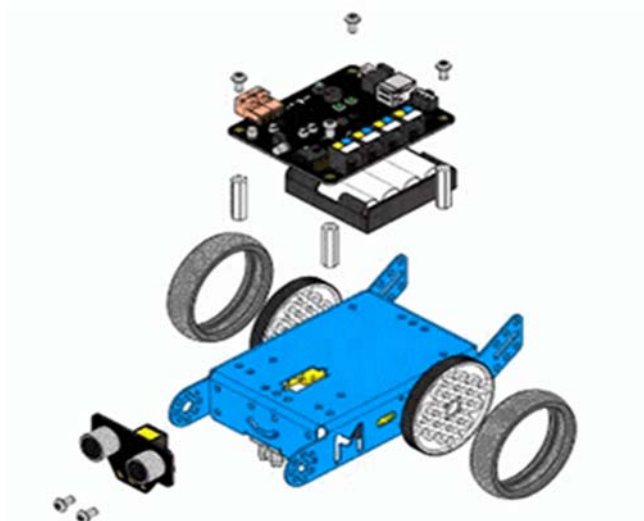
## What's New? – Better Auxiliary Wheel

The ball omni-directional wheel of previous version is replaced by a mini nylon caster wheel that performs better when moving to any direction and dramatically reduces the little clack sound caused by a steel ball.



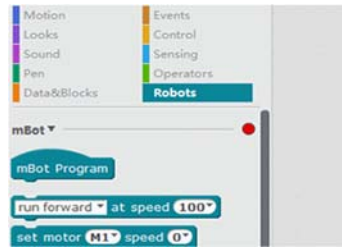
## Contracted But Not Simple

Contains 38 assembly parts that can be assembled in 10 minutes and color-labeled RJ25 ports for convenient wiring, making sure more time can be spent on programming and creativity.



# Graphical Programming

Drag-and-drop graphical programming software mBlock developed based on Scratch 2.0 provides a quick way to learn programming, control the robot, and realize multiple functions from the robot.



## Fun, and Fun

mBot is all about fun and creativity. It comes with various basic pre-assembled options, including obstacle-avoidance car, line-following vehicle, remote control car, and can be used in multiple games like balloon bursting game, soccer playing, sumo, and etc.



## Infinite Extensibility

The mechanical body of the mBot is compatible with Makeblock platform and most of Lego parts, while the electronic parts of it is developed based on the Arduino open source ecosystem. This makes sure that the mBot has infinite extensibility, using any mechanical parts and electronic modules you need to turn it into your "dream robot".



## Unique Curriculum System

To help teachers, parents, or children get started easier and faster, you will also find that we provide online manuals and two online courses that will be updated regularly. These online tutorials are developed and maintained by teachers, especially Scratch teachers, at home and abroad.



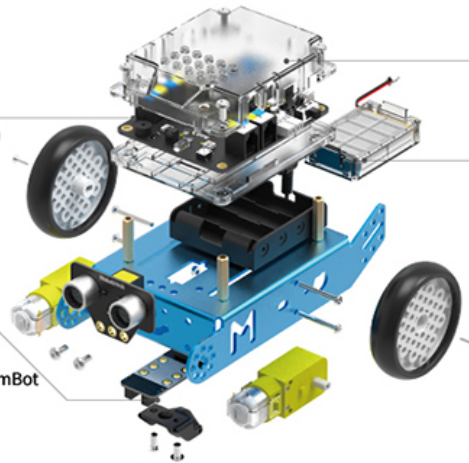
## What's New?

The new mBot comes with below improvements on its design:

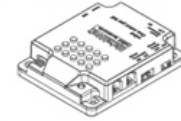
Taller on-board buttons, which is convenient for you to press even if you assemble mCore with its casing



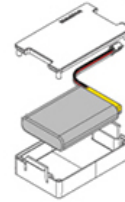
Replace caster wheel with a mini auxiliary wheel, which reduces motion noise and adjusts the center of gravity of mBot



A mCore casing



A lithium battery holder



## What's New? Bluetooth or 2.4G?

If you're trying to figure out the difference between Bluetooth version and 2.4G version, or your smart device cannot connect to mBot, please check the version of your mBot first. Here is comparison chart:

	Bluetooth Version	2.4G Version
Suitable	Individual users of family	Classroom
Host computer	Support Bluetooth	No
Pairing	Bluetooth Pairing	No pairing, the same technology with wireless mouse
Driver needed	Yes	No
App	Yes	No
Connection	Wireless connection with smartphones, tablets, and PCs with Bluetooth capability	Wireless connection with PC via 2.4G adapter
Apple® device	1) iOS 7 or above 2) Bluetooth®4.0 or above *exclude iPad®1, iPad®2, iPhone®4 or below	Not Support

Android™ device	1) Android™2.3 or above 2) Bluetooth®2.0 or above	Not Support
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Specifications	
Software and programming	mBlock (graphical) Mac, Windows,iPad mBlocky
	Arduino IDE
Inputs	Light sensor, button, infrared receiver, ultrasonic, sensor, line follower
Outputs	Buzzer, RGB LED, infrared emitting, two motors, ports
Microcontroller	Based on Arduino Uno
Power	3.7VDC lithium battery (charger on board) or four 1.5V AA batteries (not included)
Wireless Communication	Bluetooth (Bluetooth Version)
	2.4GHz wireless serial (2.4G Version)
Dimensions	17 x 13 x 9cm assembled
Weight	1034g assembled

## Part List

2.4G Version		
1 x Chassis	1 x mCore Case	1 x mBot Li Battery Shell
1 x Battery Holder	2 x Wheel	1 x Mini Caster Wheel
1 x Route Map	2 x Velcro	1 x Screw Driver
2 x 6P6C RJ25 Cable	1 x USB Cable	15 x Screw M4 x 8mm
4 x Brass Stud M4 x 25mm	8 x M3 Nut	6 x Screw M3 x 25mm
4 x Screw M2.2 x 9mm	1 x mCore	1 x Me Ultrasonic Sensor
2 x Motor	1 x Me Line Follower	1 x 2.4G Module
1 x IR Controller		