

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# mBot v1.1 - Blue (Bluetooth Version)

SKU 110090103

What is mBot? mBot is an all-in-one solution to enjoy the 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).

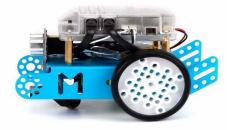
#### What's New? - Children Safeguard

Compared to the previous verison, 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.



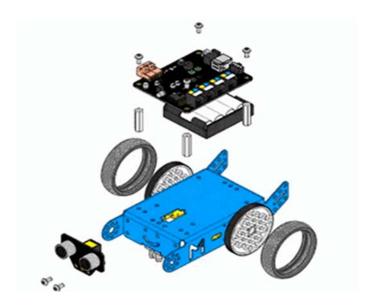
### What's New? - Better Auxiliary Wheel

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

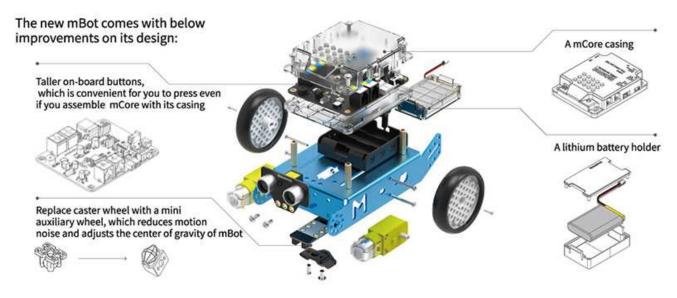
The mechanical body of the mBot is compatible with Makeblock platform and most of Lego parts, while the electronic parts of it is developed based on the Arduino open source ecosystem. This makes sure that the mBot has infinite extensibility, using any mechanical parts and electronic modules you need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



#### 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
Арр	Yes	No
Connection	Wireless connection with smartphones, tablets, and PCs with Bluetooth capability	Wireless connection with PC via 2.4G adapter

	1) iOS 7 or above	
Apple® device	2) Bluetooth®4.0 or above	Not Support
	*exclude iPad®1, iPad®2, iPhone®4 or belo	
Android™ device	1) Android™2.3 or above	Not Support
Android device	2) Bluetooth®2.0 or above	Not Support

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**

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