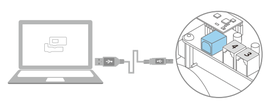
蓝牙手柄使用说明书
Bluetooth Controller User Manual

A 自定义手柄功能

蓝牙手柄仅适配 Makeblock 带蓝牙模块的机器人（如 mBot、mBot Ranger 以及 Airblock 等），本文以配置蓝牙手柄遥控 mBot 为例。

使用蓝牙手柄遥控 Airblock 请查看：http://learn.makeblock.com/cn/airblock-controller/

❶ 开启您的机器人，使用 USB 连接线连接机器人到电脑。



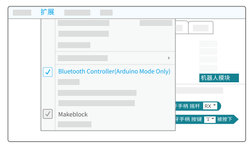
❷ 打开 mblock（目前仅支持 mblock 3），选择当前连接的机器人对应的控制板。

mblock 下载和学习请访问：http://www.mblock.cc

❸ 连接当前使用的串口。
若出现多个串口选项，请选择连接机器人后新增的串口。

❹ 选择“扩展->扩展管理器”。下载手柄扩展文件。

❺ 勾选手柄扩展文件，编程模块将出现在“机器人模块”区域。



❻ 开始编程，我们提供了示例供您参考，下载请访问：
http://example.makeblock.com/c001.sb2

编程完成后，将程序上传到机器人中。

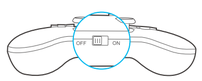
B 安装 5 号电池 (不包含)

● 指示灯红色常亮时表示电池电量低，请及时更换电池。

C 蓝牙配对

❶ 开启蓝牙手柄，指示灯蓝色慢闪。

开机后手柄自动处于配对状态，即可连接机器人。



❷ 将手柄靠近机器人，长按手柄上 按键直到 指示灯闪烁频率加快，松开按键，蓝牙自动配对。

长按至指示灯快闪　　指示灯蓝色常亮，配对成功。

- 手柄未配对时 50 秒内或配对成功后 5 分钟内无任何操作，将自动进入睡眠状态，按下除摇杆外的任意按键即可唤醒手柄。
- 手柄开机后将搜寻上一次配对成功的机器人，自动进行配对。

开始遥控吧！

产品有毒有害物质或元素的名称及含量表

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
塑料外壳	○	○	○	○	○	○
PCB	○	○	○	○	○	○
线材	○	○	○	○	○	○
焊锡	○	○	○	○	○	○
金属件	×	○	○	○	○	○
电子元器件	○	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006 标准规定的限量要求以下。
×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求。
备注：以上“×”的部件中，部分含有有害物质超标是由于目前行业水平有限，暂时无法实现替代或减量化。

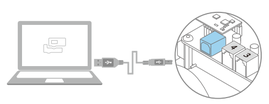
本标识内数字表示产品在正常使用状态下的环保使用期限为10年。

A Customize the Controller Functions

Bluetooth Controller can only be connected to the Makeblock robots with a Bluetooth module (such as mBot, mBot Ranger, Airblock and so on). In this guide, we configure the controller to control mBot as an example.

To learn how to control Airblock with the controller, please visit: http://learn.makeblock.com/en/airblock-controller/

❶ Turn on your robot and connect it to the computer via USB cable.

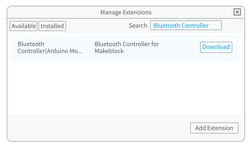


❷ Open mblock (currently only supports mblock 3), and select the board of the connected robot.

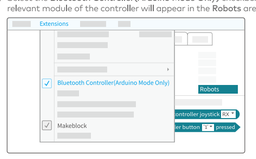
To download mblock and learn more, please visit: http://www.mblock.cc

❸ Select the currently used serial port.
If multiple serial port options appear, please select the port that is newly added after the robot is connected to the computer.

❹ Select **Extensions->Manage Extensions**. Download the extension file.



❺ Select the **Bluetooth Controller(Arduino Mode Only)** checkbox. The relevant module of the controller will appear in the **Robots** area.



❻ Start to program the controller. An example is provided for you to download, please visit: http://example.makeblock.com/e001.sb2

Upload the program to your robot after the programming is completed.

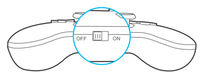
B Install 2 AA Batteries (not included)

● When the indicator turns solid red, it indicates low battery warning. Please replace the batteries in time.

C Bluetooth Pairing

❶ Turn on the controller. The indicator flashes blue.

The controller will automatically calibrate the joystick precision when turned on and the indicator shows solid on. During this period, please do not touch the joystick.



❷ Get the controller close to your robot. Long press the button until the indicator flashes more quickly, then release the button, and the controller will connect to your robot automatically.

Long press until the indicator flashes more quickly

The indicator shows solid blue, indicating the pairing is successful.

- When the controller maintains disconnected and left unattended for 50 seconds or left unattended for 5 minutes after connected, it enters into a sleep mode automatically. Press any button (except the joystick) to wake the controller.
- When the controller is powered on, it will search for the last paired robot and connect to the robot automatically.

Control your robot now!

FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.
Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
·Reorient or relocate the receiving antenna.
·Increase the separation between the equipment and receiver.
·Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
·Consult the dealer or an experienced radio/TV technician for help.

RF warning statement

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

DECLARATION OF CONFORMITY

Declaration of conformity Hereby, Makeblock Co., Ltd., declares that this product is in compliance with the essential requirements and other relevant provisions of Directive RED 2014/53/EU and the RoHS directive 2011/65/EU

Specification

Frequency range: 2402-2480MHz
RF transmit power: 4dBm
Bluetooth version: BT4.0
Maximum controlling distance: 20 meters

D1.2.1_KD010024000