makeblock

Model:MMT-K01-01

D1.1.1_KD010181000

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mTiny

EN Safety Instructions
FR Consignes de sécurité
ES Instrucciones de seguridad
PT Instruções de segurança
DE Sicherheitsanweisungen
RU Инструкции по технике безопасности
IT Istruzioni di sicurezza
KR 안전수칙
TC 安全使用說明書

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Sleep/Wake up

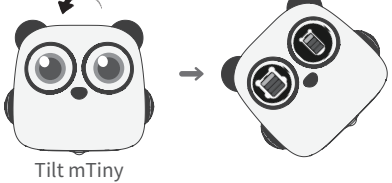
When the displays turn off and the side indicators turn blue breathing lights, mTiny is in Sleep mode.

Move the joystick on the tap pen controller or shake mTiny to wake it up.

Blue breathing light

Check the current battery level

Tilt mTiny and hold it for a while, then the battery level of both mTiny and the tap pen controller will be displayed.



Tilt mTiny

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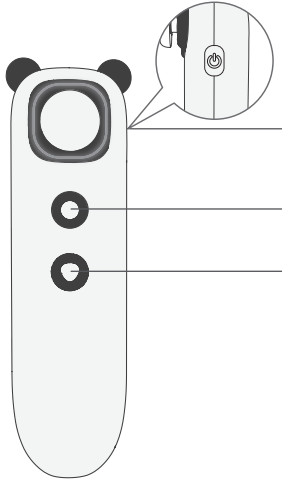
Button instruction



Power button
Long press the button to turn on or turn off the tap pen controller.

Confirm button
Run the input program, or repeat the last program.

Stop button
Stop the action in progress.

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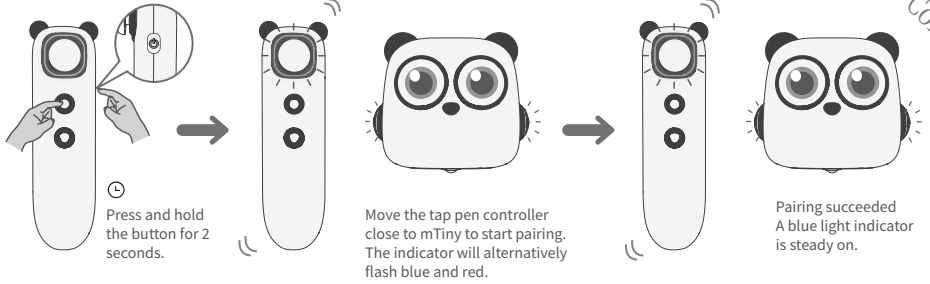
Pairing

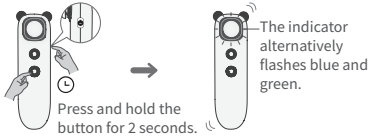
Before pairing, restart the robot and the tap pen controller. Then follow the instructions below to complete pairing:



Joystick calibration

The joystick might misbehave after used for a long term, please follow the instruction below to calibrate it to maintain precise control.

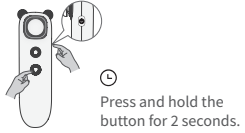
1. Begin calibration.



2. Push the joystick fully forward and then release.

3. Push/pull the joystick fully in the other three directions and then release to complete calibration.

4. Exit calibration.



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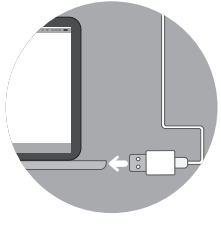
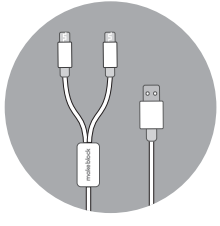
Firmware update

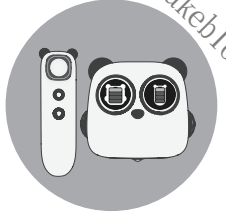
1 Preparation for update



A computer with USB ports



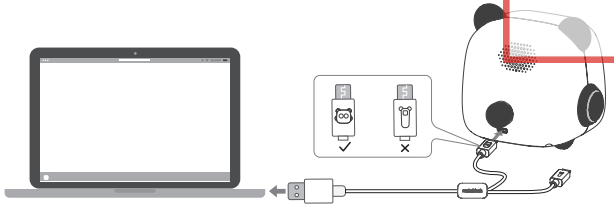
USB cable in the product package



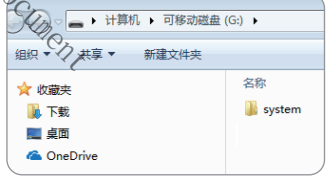
Paired mTiny and tap pen controller
(with at least 50% battery level))

2 Go to https://www.makeblock.com/cn/tongxiaodian/firmware firmware and download the latest firmware update package.

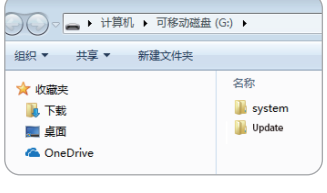
3 Use the USB cable with the mTiny icon to connect mTiny to the computer.



4 After connection, the computer will recognize mTiny as a USB drive. Open it, a folder named "system" will be displayed.



5 Extract the update package. Find the folder named "update" in the extracted directory. Copy and paste the whole "update" folder into the root directory of mTiny's disk.



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6 Disconnect mTiny from the computer.

7 Restart mTiny and the tap pen controller, and the update process will start automatically.
The update process will take 3 to 5 minutes. Please be patient.
There will be a prompt sound when the update is successful.

During the update process, mTiny will automatically check the connection with tap pen controller and the current battery level. The precess might stop if those conditions are not met. Please pair again or charge the battery. Extract the update package.

Update completed. Try mTiny' s new features!

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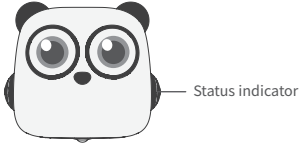
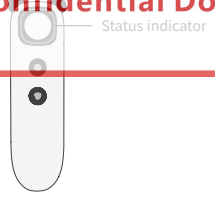
Indicator status





Blue breathing light	Sleep mode
Red breathing light	Charging
Green light steady on	Charging complete
Red light flashes	Low battery
Blue light flashes	Not paired with tap pen controller
The indicator alternatively flashes red and blue	Pairing with tap pen controller
Blue light steady on	Pairing succeeded

Blue breathing light	Sleep mode
Red breathing light	Charging
Green light steady on	Charging complete
Red light flashes	Low battery
Blue light flashes	Not paired with mTiny
The indicator alternatively flashes red and blue	Pairing with mTiny
Blue light steady on	Pairing succeeded

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Cautions:

- The product is recommended for children over 4 years old.
- Do not allow children under 3 years old to use the product.
- An adult must be present when children use the product.
- Do not put the product at the edge of a high place to prevent damage by falling.
- Do not disassemble, repair, or modify the product yourself to prevent from the product failure.
- Battery is not replaceable.
- Do not put the product in water or fire, or expose it to a damp or high temperature environment to avoid product failure or safety hazards.
- Do not use or charge the product at a temperature exceeding the operating temperature range.
- Please fully charge the product before leaving it idle, and charge it at least once every 3 months.
- Please use the recommended adapter (5V/2A) to charge the product.
- The power adapter (not included in the product package) for the product is not a toy.
- Misuse of the power adapter might result in electric shock hazard.
- Please shut down and disconnect the product from the external power supply before cleaning the product with liquid.
- Do not connect the product to more than the recommended quantity of power supplies.
- This product could only be charged under adult's supervision.
- Check the cables, plugs, casing, and other components for any damage on a regular basis. Stop using the product immediately if any damage occurs and get it repaired.
- The toy is only to be connected to Class II equipment bearing the following symbol.
- Faults may occur when the product is charged at a temperature lower than 0°C or higher than 40°C.

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Specifications

Battery (mTiny)	1,800mAh lithium battery
Micro USB input voltage (mTiny)	DC 5V
Micro USB input current (mTiny)	1.5 A
Battery (tap pen controller)	300mAh lithium battery
Micro USB input voltage (tap pen controller)	DC 5V
Micro USB input current (tap pen controller)	270mA
Transmission mode	2.4G
Frequency range	2400MHz ~ 2480MHz
Working distance	Within a 10-meter radius (in an open field)
Operating temperature	0°C ~ 40°C
Storage temperature	-10°C ~ 55°C

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.

CE

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

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 IC 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:
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