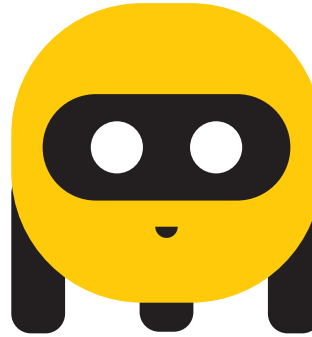
Product Name：Mangobot Coding Set Model
Name：MC1001
Product name: Coding Processor
Name: MC1002

mangobot

Instruction Book



little tinkerer

Parents and Educators: Welcome to the magic world of coding!

What is coding? What is computational thinking?

What is coding? What is computational thinking? Coding is to tell a computer what you want it to do in a way that a computer understands. There are many languages a computer could understand, but the way of thinking for writing commands in those languages is similar. It is called computational thinking (CT). CT involves putting actions together in a certain sequence, recognizing similarities and dissimilarities, abstract thinking etc. For a programmer, writing the codes is not the most difficult part, coming up with the algorithm is.The latter builds on a foundation of good computational thinking.

What can Mangobot teach?

Mangobot helps children with many areas of early learning:

- Motor skills
- Creativity
- Socio-emotional development
- Language skills
- Logical skills
- Math skills
- Reasoning skills
- Problem-solving skills

and more…

How can you help?

Thank you for taking the interest in teaching your child computational thinking. Here is how you could best help:

- Play together with them.
- Do not tell them right or wrong. Encourage them to discover errors by watching Mangobot act.
- Learn together with them.

Pieces Included

Mangobot Core Coding Kit

- 35 Animal and Plant Cards
- 18 Core Blocks
- 1 Coding Processor
- 1 Map
- 1 Mangobot
- 1 Coding Guidebook

Mangobot Complete Coding Kit

- 35 Animal and Plant Cards
- 18 Core Blocks
- 9 Conditional Logic Blocks
- 7 Function Blocks
- 1 Coding Processor
- 1 Map
- 1 Mangobot
- 1 Coding Guidebook

Coding Blocks

The Core Set includes the following coding blocks.

A “**FORWARD**” block makes Mangobot move forward one square on the map.

A “**BACK**” block makes Mangobot move back one square on the map.

A “**TURN RIGHT**” block makes Mangobot turn right 90 degrees.

A “**TURN LEFT**” block makes Mangobot turn left 90 degrees.

A “**TURN BACK**” block makes Mangobot turn 180 degrees.

A “**HAPPY**” block makes Mangobot express a HAPPY emotion.

A “**SAD**” block makes Mangobot express a SAD emotion.

An “**ANGRY**” block makes Mangobot express an ANGRY emotion.

A “**SCARED**” block makes Mangobot express a SCARED emotion.

A “**PLAY REC**” block makes Mangobot play the last recording.

A “**REPEAT 2X{**” block paired with a “**}**” block makes Mangobot repeat twice the commands in between.

The end of a loop, used with a block that includes a “**{**”

The Complete Set also includes the following blocks besides all the blocks Above.

A “**REPEAT 3X{**” block paired with a “**}**” block makes Mangobot repeat three times the commands in between.

A “**FOREVER{**” block paired with “}” makes Mangobot repeat the commands in between forever.

An “**IF{**“ block paired with a “**}**” marks a conditional loop. For example:

The program above makes Mangobot move forward one square if it has detected a sound (at the beginning of the loop), and if not, then not do anything (remain still).

An “**}ELSE{**” block is used in a conditional loop to tell Mangobot what to do when the condition is not met. For example:

The program above makes Mangobot move forward one square if it has detected a sound at the beginning of the loop, and otherwise turn left

A “**WAIT UNTIL**” block makes Mangobot wait until it receives the input specified by the following block, before continuing with the rest of the program.

A “**SOUND DETECTED**” block is an input block that usually follows “**WAIT UNTIL**” or “**IF{**”.

A “**FUNCTION**” block can be defined as a sequence of commands. After it is defined, it can be used in a new program where it represents the sequence of commands.

An “**=**” block is used after the function block and before the sequence of commands, to define the function block.

Switching On and Off

Press the “**Power**” button once and Mangobot will be powered on.

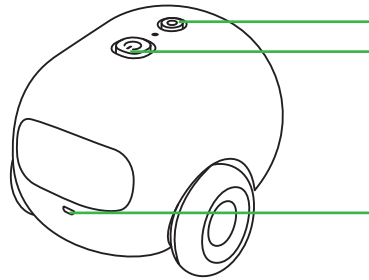
Press and hold the “**Power**” button for 5 seconds and Mangobot will be switched off.

Press the “**Run**” button on the Processor and the Processor will be switched on. The light will be flashing in white and red alternatively.

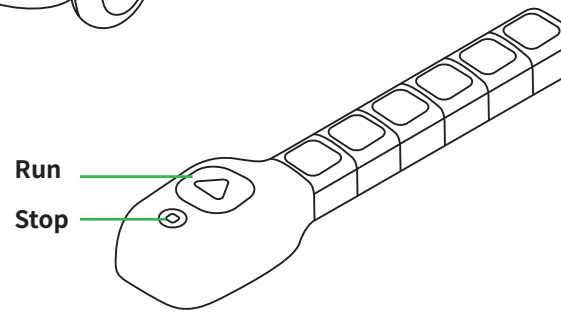
Press and hold the “**Stop**” button for 5 seconds on the Processor and the Processor will be switched off.

If either Mangobot or the Processor stands idle for longer than 10 minutes, it will be automatically switched off to save power.

Mangobot



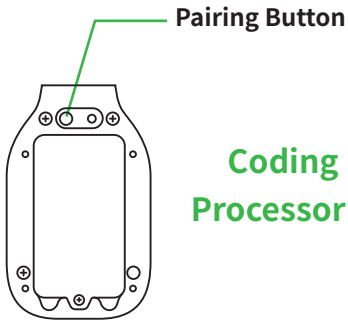
Coding Processor

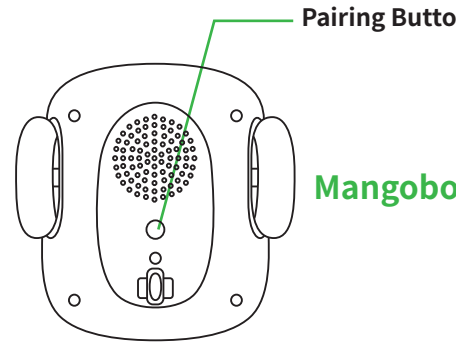


Bluetooth Pairing

Mangobot and Coding Processor will pair automatically by Bluetooth once both are turned on. The light on the Processor will flash in white once the pairing is successful.

When you want to use your Processor to control another Mangobot than the one included in the package,, you need to pair them manually. Press the "**Pairing**" button on both Processor and Mangobot, both indicator lights flash in green when they are pairing. The lights go off when the pairing is successful.





Running Mangobot!

The Coding Blocks flash in white alternatively when they are connected to the Coding Processor and with each other.

Once you have the block sequence ready, press the "run" button on the Coding Processor to run Mangobot.

The block being executed lights in white, while others remain dim.

If there is a bug in your program, the problematic block will light in red, after you run the program.

Charging and Battery Care

Please read these instructions before using.

If Mangobot displays four empty squares , it indicates low battery power. Please recharge.

The Coding Processor is powered by 2x1.5V AA batteries. Batteries should be installed or replaced by an adult. Please make sure that the Processor is powered off when replacing or installing the batteries.

Mangobot running abnormally?

If your Mangobot does not run normally, these are things to check:

If Mangobot/Coding Processor cannot power-on:

- Please check whether it has too low battery power. If so, replace the batteries or recharge it.

If Mangobot cannot pair with Coding Processor:

- Please check if they are placed too far apart.
- Manually pair them by pressing the pairing buttons on both Mangobot and Processor. See the previous Bluetooth Pairing instructions.

If Mangobot cannot be controlled by Coding Processor:

- Please make sure that both Mangobot and Processor are powered on.
- Please make sure the blocks are sequenced correctly, i.e. there is no bug in your program.
- Please restart Mangobot and Coding Processor and try again.

Safety Precaution and Maintenance Tips

- Be sure to insert batteries correctly(with adult supervision) and always follow the toy and battery manufacturer' s instructions.
- DO NOT mix new and used batteries.
- DO NOT short-circuit the supply terminals.
- DO NOT disassemble Mangobot, Coding Processor or Coding Blocks.
- Insert battery with the correct polarity. Positive (+) and Negative(-) ends must be inserted in the correct directions as indicated inside the battery compartment.
- Remove batteries if product will be stored for an extended period of time.
- Store at room temperature and a dry environment. Avoid sunlight, fire and water.
- To clean, wipe the surface of the unit with a dry cloth.

Federal Communications Commission (FCC) statement
This device complies with FCC part 15 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.
You are cautioned that any changes or modifications not approved by Beijing Little Tinkerer Co. Ltd. could void your 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.

This device meets the FCC requirements for RF exposure in public or uncontrolled environments.

Product name: Coding processor FCC ID: 2AQUSMC1002

Product name: Mangobot coding set, FCC ID: 2AQUSMC1001

Industry Canada (IC) statement
This device meets the IC requirements for RF exposure in public or uncontrolled environments. IC Notice to Users in accordance with the current RSS GEN: This device complies with Industry Canada license exempt RSS standard(s).
Operation is subject to the following two conditions:

1. this device may not cause interference, and
2. this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionne-ment.

Dare to Explore!