Matatalab MTB2106 coding robot for kids User Manual

Matatalab MTB2106 coding robot for kids

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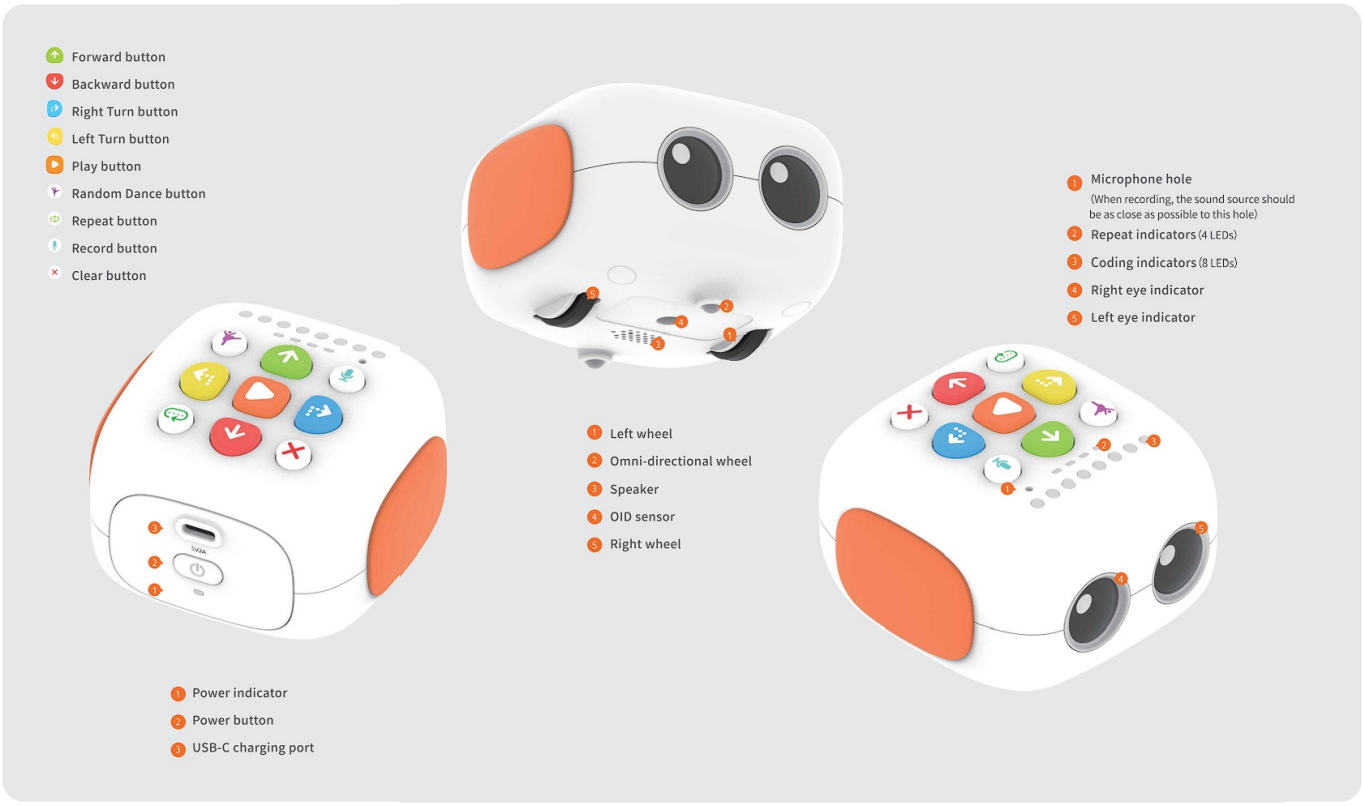
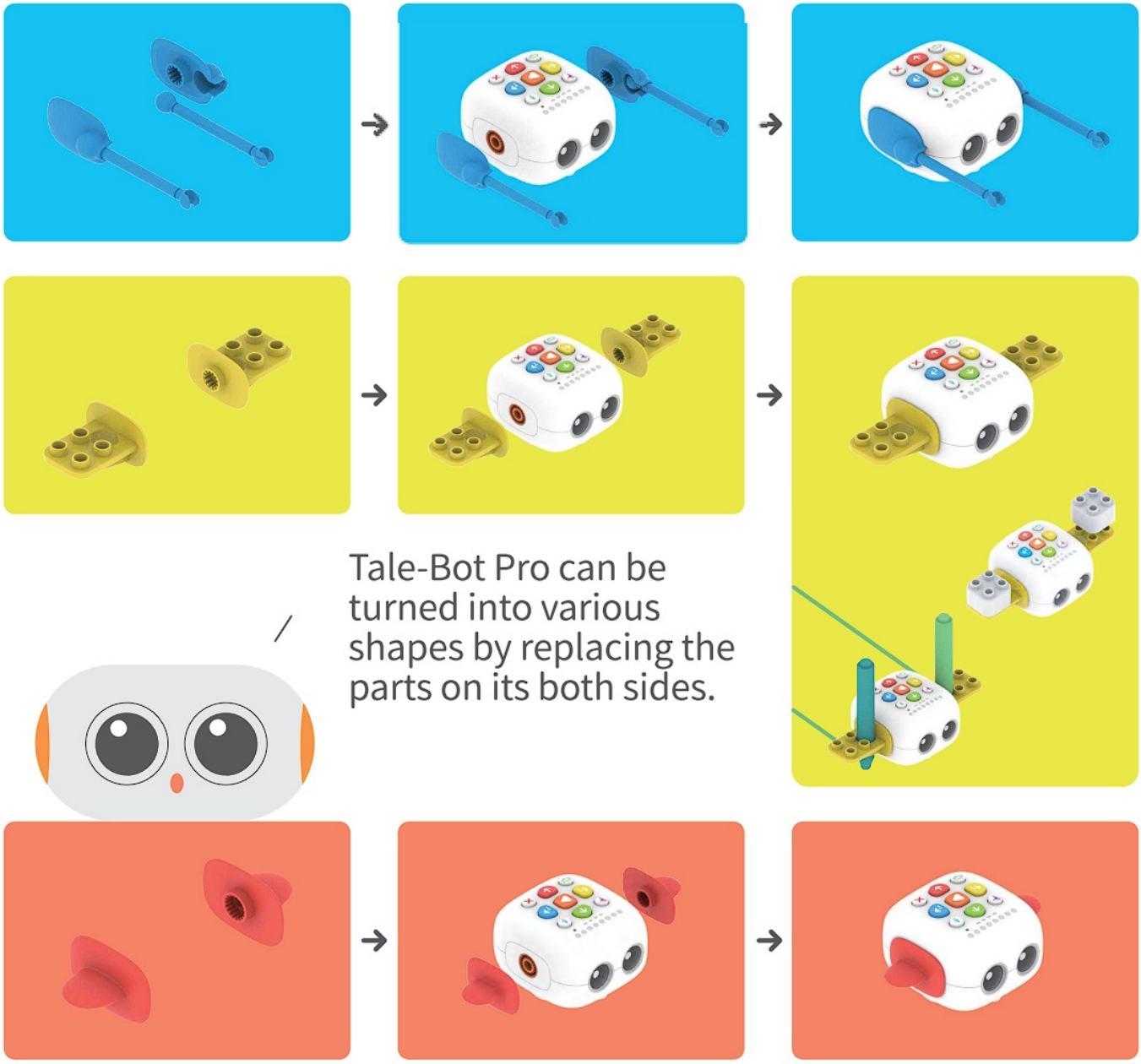
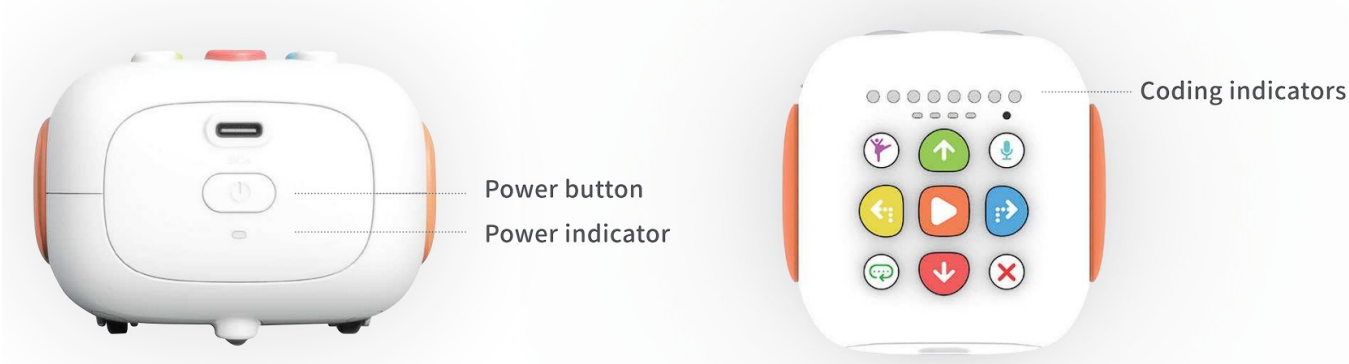
Product Overview



Different shapes of Tale-Bot Pro



Turning on and off



To turn Tale-Bot Pro on

Press and hold the Power button for 1 second, until the startup music rings, the power indicator turns into solid blue, the left & right eye indicators turn into solid orange and the coding indicator flashes startup lights.

To turn Tale-Bot Pro off

When Tale-Bot Pro is on, press and hold the Power button for 1 second, until the shutdown music rings, both the power indicator and the left & right eye indicators go out and the coding indicator flashes shutdown lights.
*Tale-Bot Pro will turn off automatically when its battery level is less than 5% or if not used after 1 hour.

Function buttons

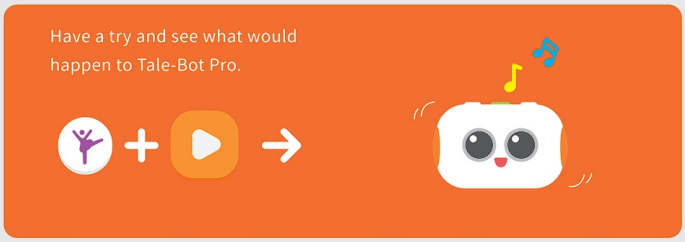
Play button After the Play button is pressed, Tale-Bot Pro will execute the entered command.

*After a command is finished, press the Play button, Tale-Bot Pro will execute the command again.

If the Play button is pressed in the process of executing a command, Tale-Bot Pro will stop executing the command. Press the Play button again, Tale-Bot Pro will re-execute the entered command until it is finished.

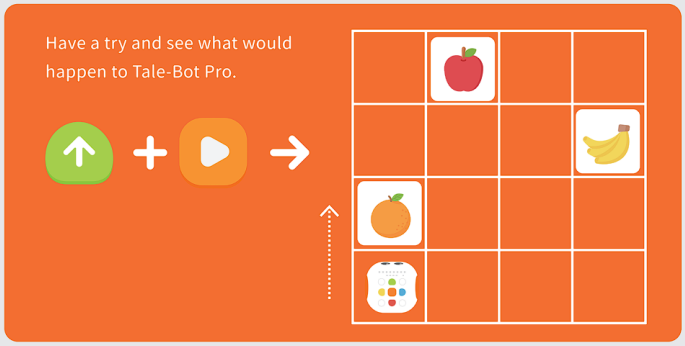
Random Dance button

Press the Random Dance button once to enter a Dance command. There are 6 sets of dance moves in total to be performed randomly. After a Dance command is entered, the Play button has to be pressed to execute it.



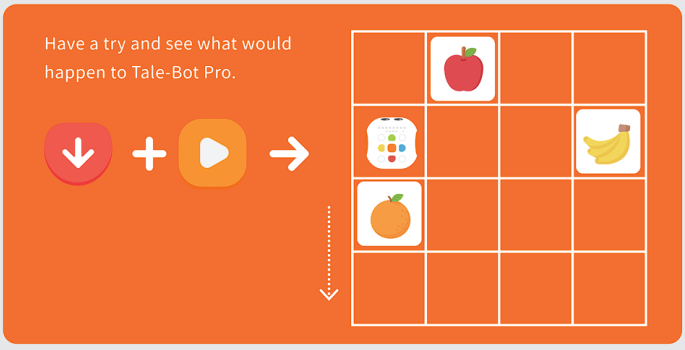
Forward button

Press the Forward button once to enter a One Step Forward command. The robot moves 10cm forward in one step. After a Forward command is entered, the Play button has to be pressed to execute it.



Backward button

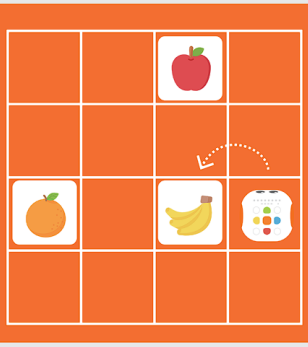
Press the Backward button once to enter a One Step Backward command. The robot moves 10cm backward in one step. After a Backward command is entered, the Play button has to be pressed to execute it.



Left Turn button

Press the Left Turn button once to input a Turn 90° Left command. After a Left Turn command is entered, the Play button has to be pressed to execute it.

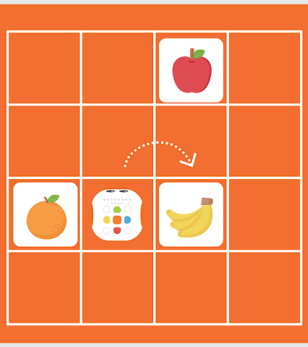
Have a try and see what would happen to Tale-Bot Pro.



Right Turn button

Press the Right Turn button once to enter a Turn 90° Right command. After a Right Turn command is entered, the Play button has to be pressed to execute it.

Have a try and see what would happen to Tale-Bot Pro.



Record button

- Press and hold the Record button [for >1 second] to record an audio file. One audio file recorded cannot exceed 30 seconds. Up to 256 audio files can be recorded.
- Press the Record button [for <1 second] to copy the previous audio file.
- Every time the robot is turned off, the audio files recorded will be automatically cleared, while those which come with it will resume.

Try to record a voice now~

Press

Hello!
I'm Tale-Bot~

Reflection

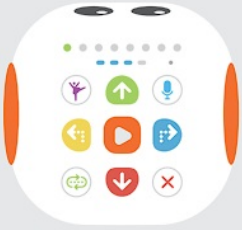
How to use the Record button to make the robot say: Hello! I'm Tale-Bot~

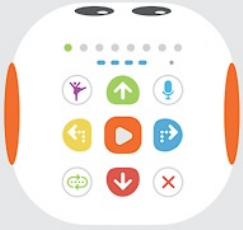
Clear button

- Press and hold the Clear button [for >1 second] to delete all commands entered
- Press the Clear button [for <1 second] to delete the previous (last) command entered.
- Once all entered commands are deleted, all coding command indicators will go out.

Repeat button To set how many times the execution of inputted commands is repeated.

Observe how the robot moves when it is started in the following four situations respectively.





Conclusion:

Execute Forward command once

Execute Forward command twice

Execute Forward command 3 times

Execute Forward command 4 times

Reflection

Is it possible to repeatedly execute the commands an unlimited number of times?

Example Repeat the Forward command infinitely:

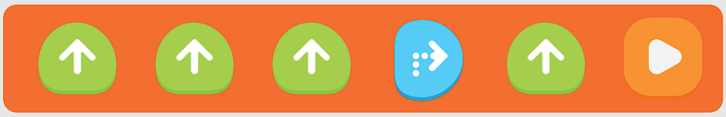
As shown in the picture below, after the Repeat button is pressed 5 times in a row, the Repeat indicators change from blue to orange. Press the Play button, the robot will repeatedly execute the Forward command infinitely.

Special note

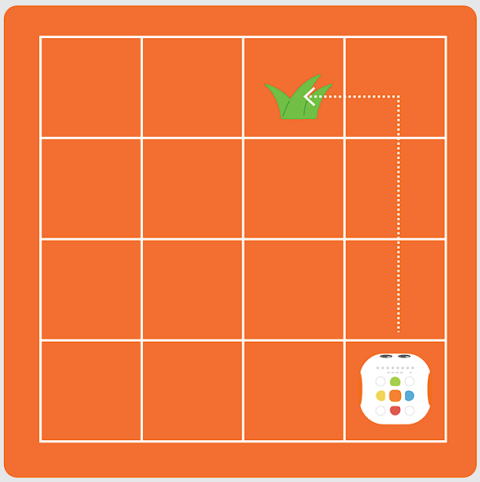
Special note

Command deletion corresponds to DEBUGGING in computer programming, which is a process that involves identifying and removing faults in a program. Faults found should be removed in order to correct the program.

The command below cannot help Tale-Bot Pro eat grass, please fix it~



Press the ✕ twice to delete the last two commands, then enter the corrected commands.



Reflection

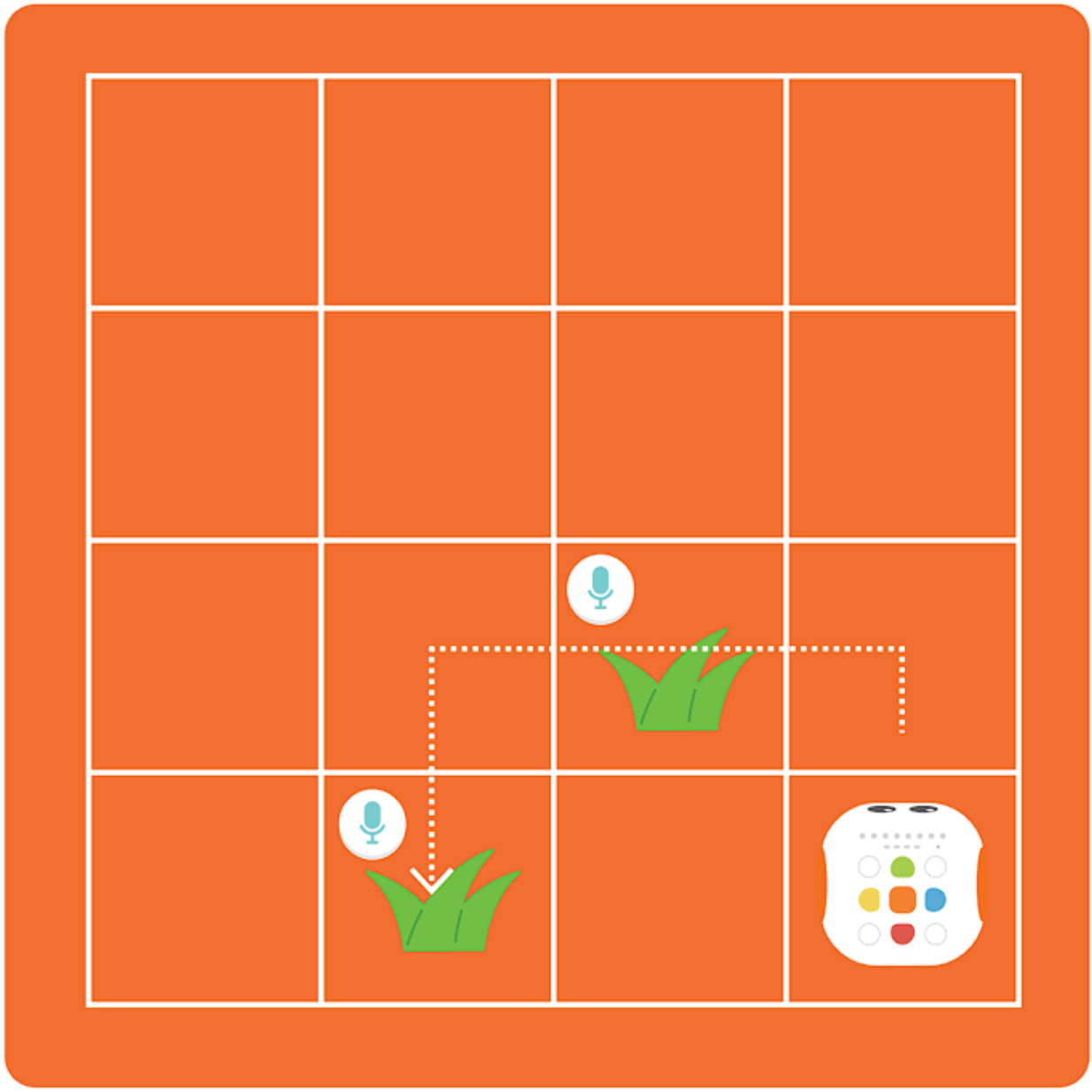
How can we correct the program by pressing and holding the Clear button?

Coding example

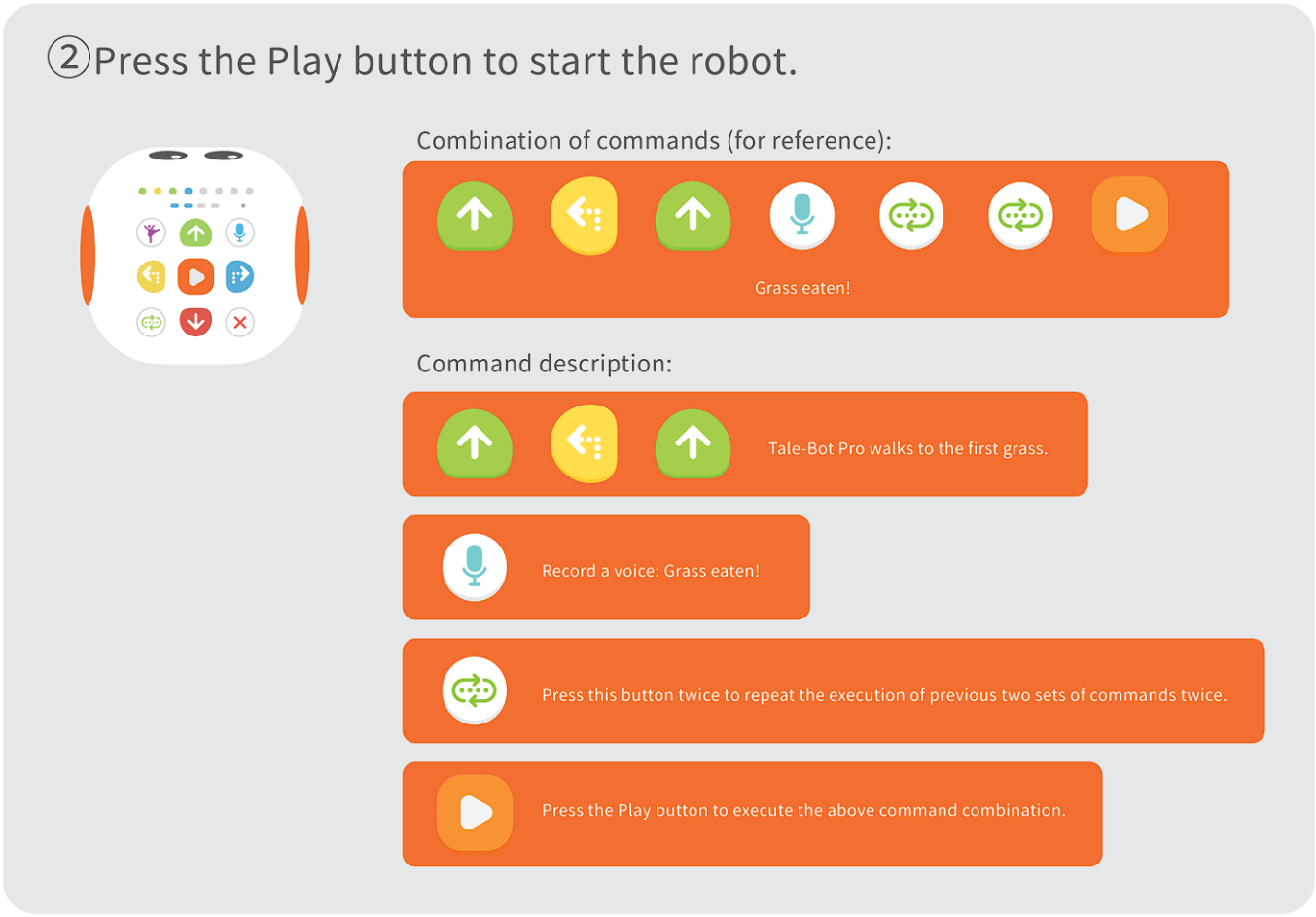
Let’s play a game with Tale-Bot Pro now!

Task

Help Tale-Bot Pro walk along the path planned in the picture below by coding commands to eat the two blades of grass, and make Tale-Bot Pro say “Grass eaten!” every time it eats one!



①Enter commands as per the path planned in the picture.



Use of interactive map

Tale-Bot Pro can recognize a specific map or sticker through the OID sensor at the bottom, so as to realize the interaction and feedback between the robot and the map or sticker.

How to access interactive Themed Map mode?

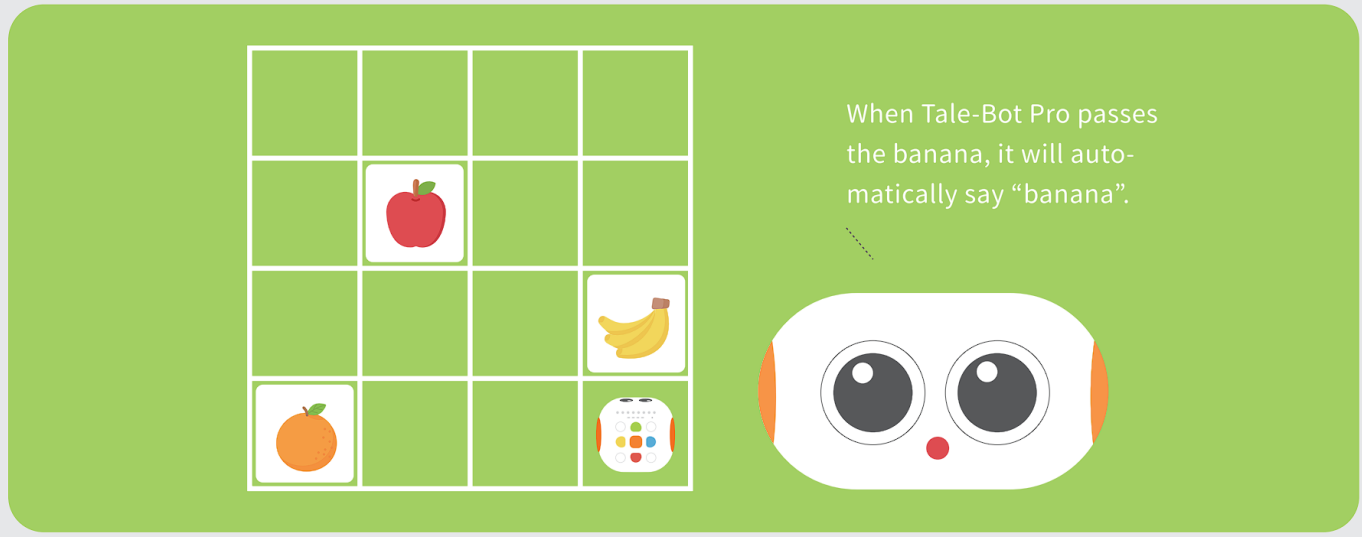
Find the OID game task identification area.
Place the robot in the OID game task identification area.
Perform the tasks as per the voice instructions.

Note: The Interactive map picture shown here is for illustration purpose only. Actual map may vary!

How to exit Interactive Themed Map?

To exit interactive Themed Map mode, simply press the Power button of the robot!

Affix Interactive stickers on a normal map, and see what would happen when Tale-Bot Pro passes these cards or stickers?



Charging Instructions

Tale-Bot Pro will sound an alarm when its battery level is less than 15%. Charge it immediately.
Use a 5V/2A power adapter to charge the robot.
For safety reasons, the robot is set to turn off automatically and enter charging mode after being charged for three minutes. None of the robot’s functions are available while charging.

Indicator Status

Status	Power indicator	Coding indicators	Eye indicators
Startup	Solid blue light	Light effect: all LEDs illuminate orange light in sequence from the center (4th and 5th LEDs) to both sides. All LEDs go out after this light effect repeats 3 times.	Solid orange light
Shutdown	Off	Light effect: all LEDs illuminate orange light in sequence from both sides (1st and 8th LEDs) to the center. All LEDs go out after this light effect repeats 3 times.	Off
Low power	Red light	Flash red light twice	Red breathing lights
During charging	Red light	Off	Off
Full charged	Green light	Off	Off
OID mode	Solid blue light	-	Flashes blue light
Bluetooth connected	Solid blue light with the luminance increased to 90%	-	Solid orange light
Bluetooth not connected	Solid blue light with the luminance of 50%	-	Solid orange light
Firmware upgrading	Solid blue light	Illuminate orange light [with luminance of 80%] in sequence from 1st LED to 8th LED as the firmware upgrades. All 8 LEDs illuminate when the firmware is 100% upgraded.	Orange breathing light
Firmware upgraded	Solid blue light	Flash orange light twice [at an interval of 0.3 s]. (After that, the robots automatically shuts down and restarts)	Solid orange light

Software update

When Matatalab releases an Activity Box update or a system software update, you can download the updates through the MatataCode APP to upgrade your device. Please note that this device supports a wireless connection range of 10 meters in an open area. To upgrade the device’s system through the APP, make sure the device is within the range and in a stable network before pairing with your phone.

Technical Specification

Specification	
Recommended age group	3~5 years old
Service time	>=4h
Body shell	Environmentally-friendly ABS material, in line with ROHS
Product dimensions	80*80*58mm
Input voltage and current	5V2A
Battery capacity	1500mAh
Sensor	OID sensor
Operating temperature	0°C-40°C
Storage temperature	-10°C-55°C
Normal charging time [5V2A adapter]	2.5h

Precautions

- This product is not suitable for children under 3 years old;
- The adapter (not included in the package) used to charge this product cannot be used as a toy;
- The product can only be connected to one power adapter;
- When cleaning the product with liquid, please turn off the product and disconnect it from external power supply;
- Children are required to be accompanied by an adult when using this product;
- Please do not place this product on high places and edges to avoid dropping damage;
- Do not disassemble, repair or modify the product yourself to avoid product failure;
- Do not use or charge the product in an environment outside the working temperature range of the product;
- When the product is idle, please fully charge and store it. It needs to be charged at least once every 3 months; Please use the recommended adapter (SV / 2A adapter) to charge this product;
- Please regularly check the wires, plugs, casings or other parts for damage. Stop using it when damage is discovered until fully repaired.

Warranty terms

This product has a one year warranty period.

- The following conditions are not covered by the free warranty:
  a. Failure to present the warranty certificate and valid invoice;
  b. The warranty certificate shows signs of alteration or is inconsistent with the product;
  c. Natural consumption/ wear and aging of consumable materials;
  d. Damage caused by lightning or other electrical issues;
  e. Damage caused by improper use by users, such as liquid penetration and damage of external force;
  f. Damage caused by unforeseen circumstances such as accidents/ disasters;
  g. Products that have been dismantled/ modified/ repaired by users;
  h. Damage beyond warranty or caused by failure to use/maintain/save as required by the product inst

Warning

For more help

Please visit **www.matatalab.com** for more product instructions, exceptions and troubleshooting, and software updates, among others.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

MATATALAB CO., LTD.
NO.504, Building B, Jianxing Technology Building, 3151 Sha he West Road, Nanshan District, Shenzhen, Guangdong, China, 518055
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.
Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this 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.

Frequency range : 2402MHz~2480MHz
Max power for Bluetooth: <=-4dBm(BLE)
The Maximum Permissible Exposure (MPE) level has been calculated based on a distance of20 cm between the device and the human body. To maintain compliance with RF exposure requirement, use product that maintain a 20cm distance between the device and human body.
Hereby, MATATALAB CO., LTD. declares that the radio equipment type Tale-Bot Pro is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity is available at the following internet address:
www.matatalab.com/doc

CE This device complies with the essential requirements and other relevant provisions of the Low Voltage Directive 2014/35/EU, the EMC Directive 2014/30/EU, the Eco-Design Directive 2009/125/EC and the ROHS Directive 2011/65/EU.

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT(WEEE)
The WEEE marking indicates that this product should not be disposed with regular household waste at the end of its life cycle. This regulation is created to prevent any possible harm to the environment or human health.
This product is developed and manufactured with high quality materials and components which can be recycled and/or reused. Please dispose this product at your local collection point or recycling centre for electrical and electronic waste. This will make sure that it will be recycled on an environmentally friendly manner, and will help to protect the environment in which we all live.

Warranty

Warranty period: One (1) Year limited
The following circumstances will void the free warranty:
Not able to provide this warranty certificate, and valid invoice.
This warranty is unilaterally modified or incompatible with the product.
Natural consumption/ wear and aging of consumable parts.
Damage caused by lightning or other electrical system problems.
Damage caused by improper use, such as external force, damage, etc.
Damage caused by force majeure factors such as accidents/ disasters.
Self-dismantled/ reassembled/ repaired products.
Product exceeds warranty period.
Abuse or misuse, including but not solely limited to the failure to use this product beyond the user manual.

Caution-electric Toy

Not Recommended For Children Under 3 Years Of Ages. As With All Electric Products, Precautions Should Be Observed During Handling And Use To Prevent Electric Shock.
Conforms To The Requirements Of Astm Standard Consumer Safety Specifications On Toy Safety F963.

Documents / Resources

	Matatalab MTB2106 coding robot for kids [pdf] User Manual MTB2106 coding robot for kids, coding robot for kids, robot for kids