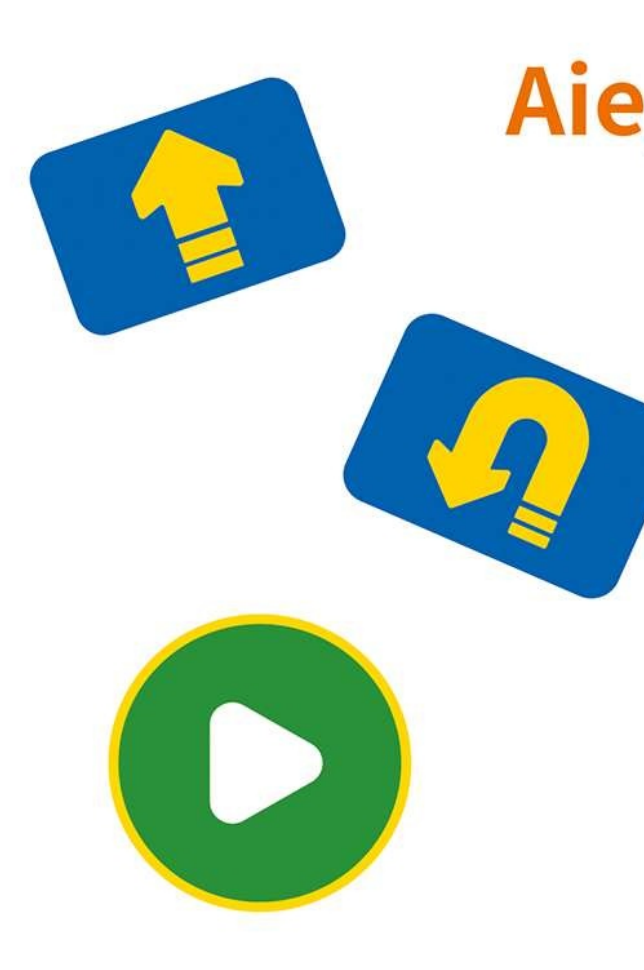
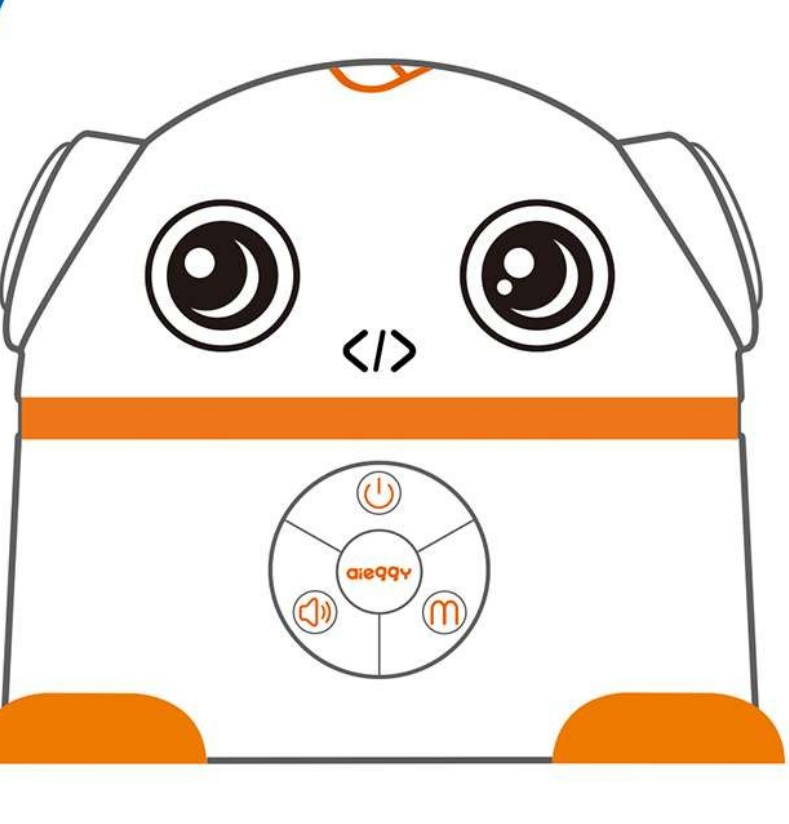
Aieggy Coding Robot

User Manual

ages 4+





⚠WARNING:
CHOKING HAZARD
This article contains small parts which pose a hazard to children under 3 years.

Aieggy Coding Robot System

Why Robotics?

-Robotics is a hands-on and fun way for kids to learn STEAM concepts.
-Prepares kids with 21st century skills.

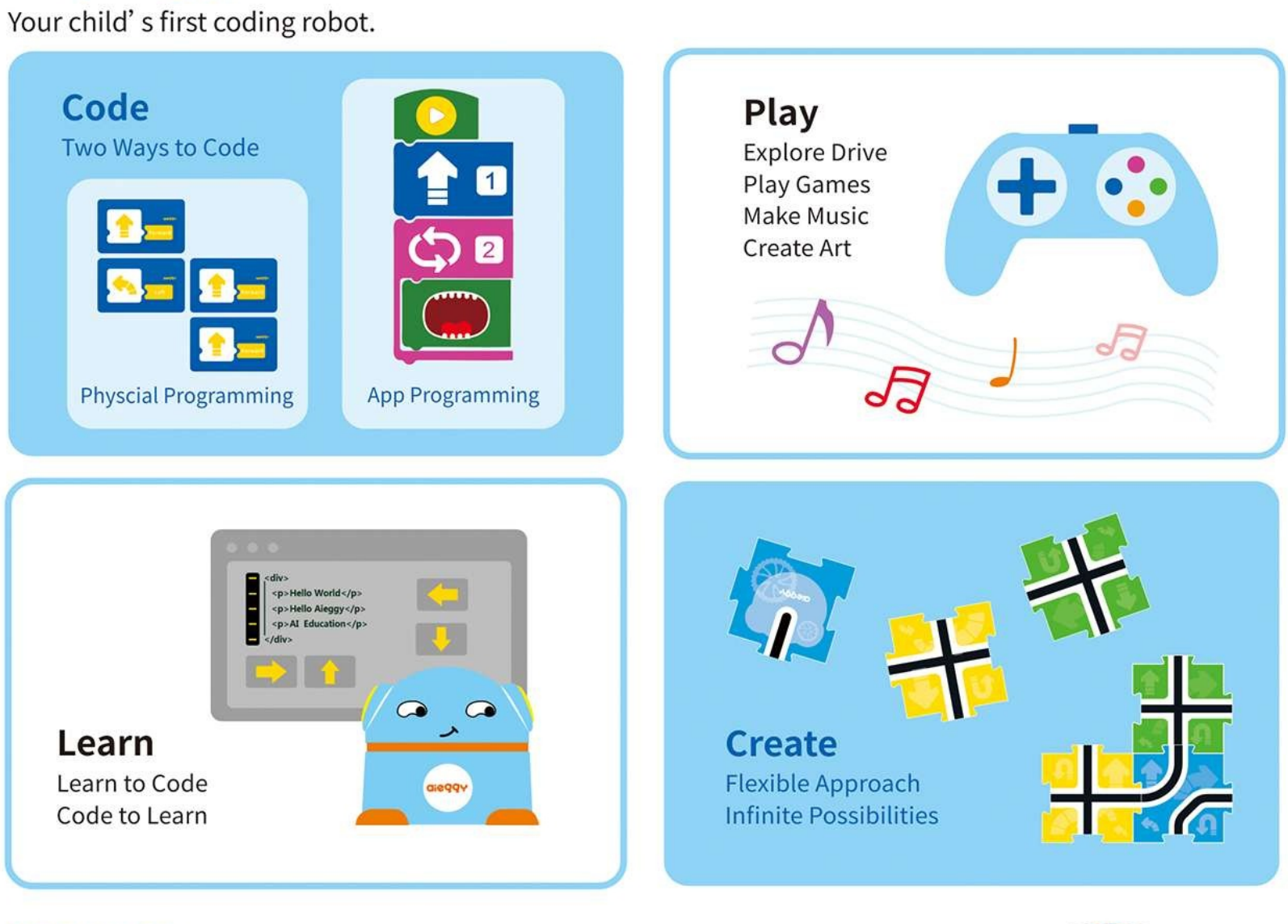
- Creativity
- Technology
- Leadership and Initiative
- Information Media
- Collaboration
- Critical Thinking
- Productivity
- Communication and Social

Why Coding?

CODING
problem
confidence
patience
empowerment
creativity
focus
collaboration
organization
math
resilience
experimentation
communication
storytelling
writing
solving
preparation

Why Aieggy?

Your child’ s first coding robot.



Code
Two Ways to Code
Physcial Programming
App Programming

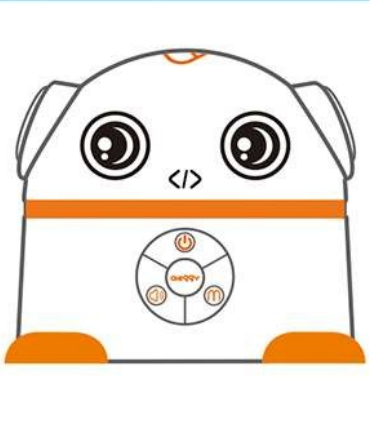
Play
Explore Drive
Play Games
Make Music
Create Art

Learn
Learn to Code
Code to Learn

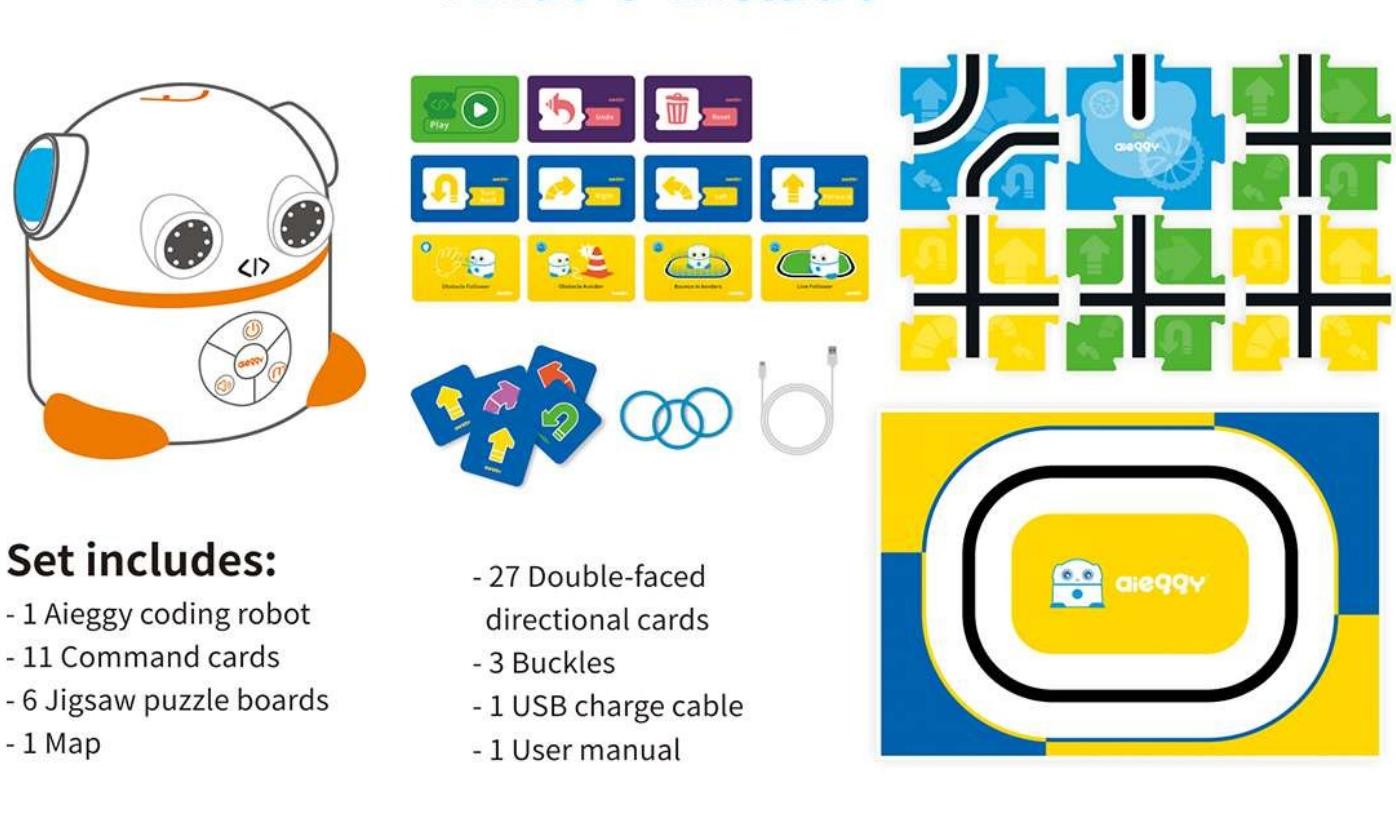
Create
Flexible Approach
Infinite Possibilities

Features

Up to 100 step program memory
Built-in MP3 player
Firmware can be upgrade by USB
Digitally controlled motor
Programmable lights and sounds
Screen-free coding to Icon-based app coding



What’ s Include

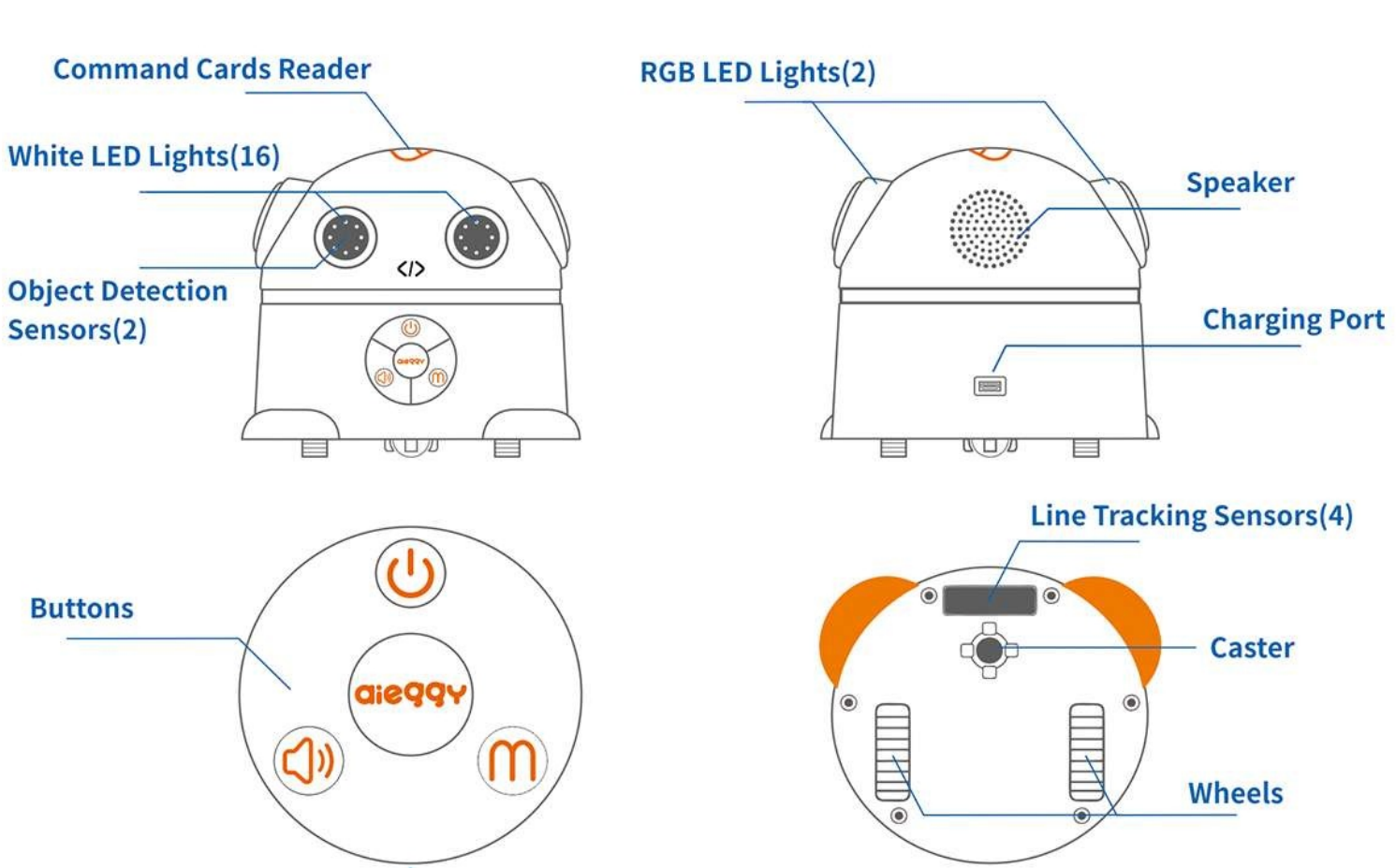


Set includes:

- 1 Aieggy coding robot
- 11 Command cards
- 6 Jigsaw puzzle boards
- 1 Map
- 27 Double-faced directional cards
- 3 Buckles
- 1 USB charge cable
- 1 User manual

Name	Aieggy coding robot
Version	Aieggy-v2
Battery	1000 mAh Li-Ion rechargeable
Life	Around three days of play per charge (~3h continuous driving)
Charge time	2h
Wireless connectivity	Bluetooth BLE 4.0
Size	136mm(L)*120mm(W)*125mm(H)
Weight	370g
Safety certificates	FCC、ASTM F963、CPSIA

Meet Aieggy

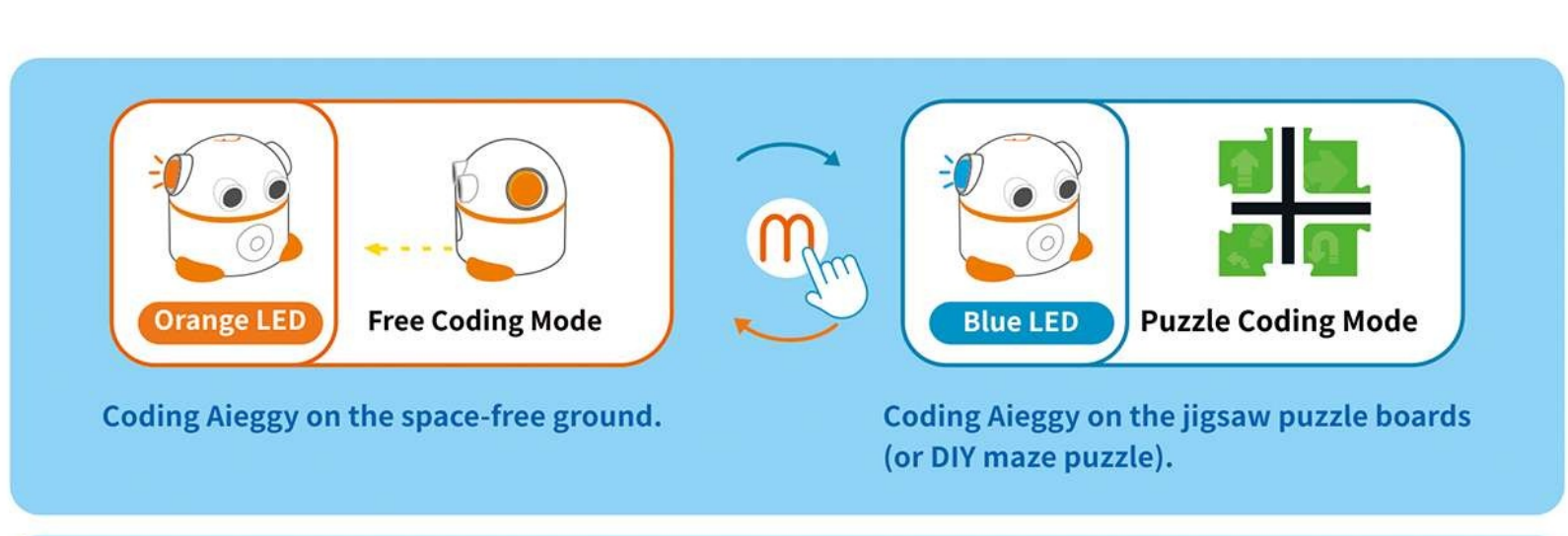


Power Button
Power **ON**/**OFF**.

Volume Button
Select the desired volume setting from **Low** , **Middle** or **High**.

Mode Button:
Switch between **Free Coding Mode** and **Puzzle Coding Mode.**
The robot will automatically be in "Free Coding Mode" when powered on.

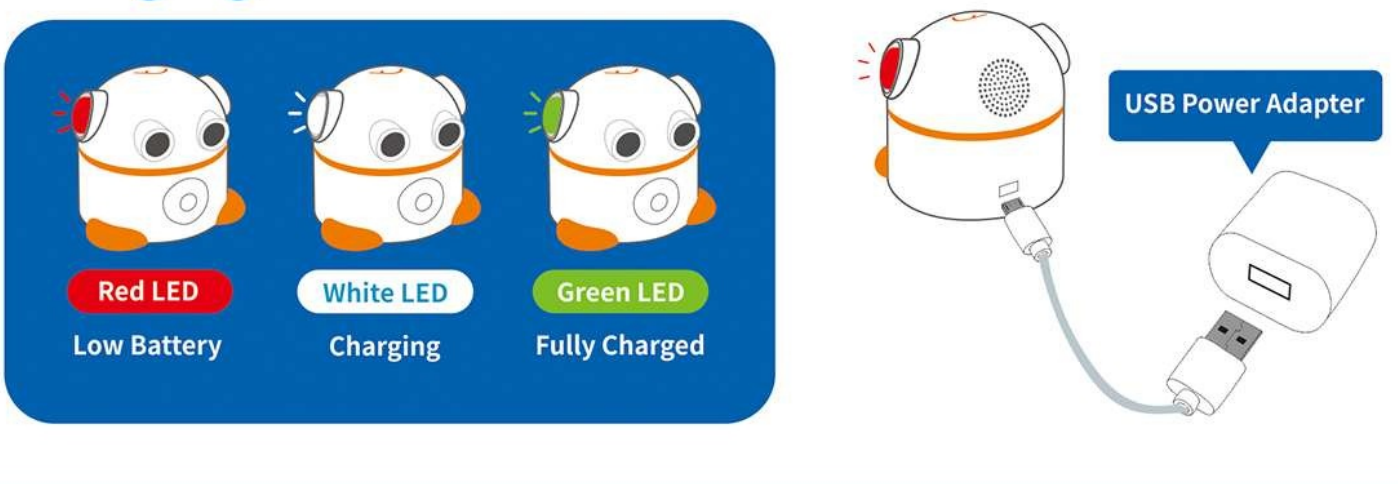
Single Click



Coding Aieggy on the space-free ground.

Coding Aieggy on the jigsaw puzzle boards (or DIY maze puzzle).

Charging



Note:
Make sure your Aieggy charged. It takes approximately two hours to do a full charge.When fully charged, Aieggy has up to 3 hours of continuous play time.
Aieggy's OD sensors are in his two eyes.He only detects objects that are directly in front of him and at least 3½" tall by 2½" wide.
Aieggy works best in ordinary room lighting. His performance may be inconsistent in very bright sunlight.

Command Cards

Command cards are the core of the Aieggy, making every interaction tactile and hands-on. There are two distinct types of cards: Pre-Coded Cards and Coding Cards.

Pre-Coded Cards

These cards are pre-coded and make Aieggy do some cool stuff! Try it out and watch what Aieggy does. Tap or swipe the card on Aieggy’ s head to activate the following function.

Line Follower

Line Follower
Aieggy tracks and moves along a black line on the map or even a line drawn with a back marker.

Obstacle Avoider

Obstacle Avoider
Aieggy detects and automatically avoids obstacles that it hits or gets in its way.

Bounce in borders

Bounce in borders
Place Aieggy inside the borders.Aieggy will drive forward until the line tracking sensor detects the line, then reverse back, turn and continue driving.

Tap the corresponding card again to make Aieggy perform different speeds!

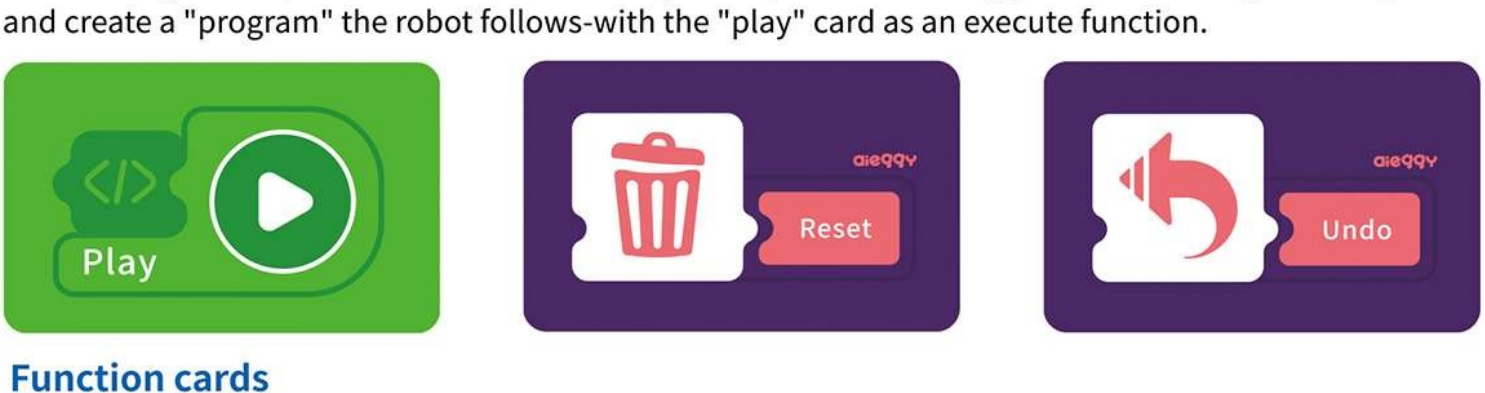
Obstacle Follower

Obstacle Follower
Aieggy follows your hand.It goes forward as your hand goes forward and goes backward as your hand goes backward.

Command Cards

Coding Cards

Each coding card represents a block of code.Tap or swipe them on Aieggy's head to string them together and create a "program" the robot follows-with the "play" card as an execute function.

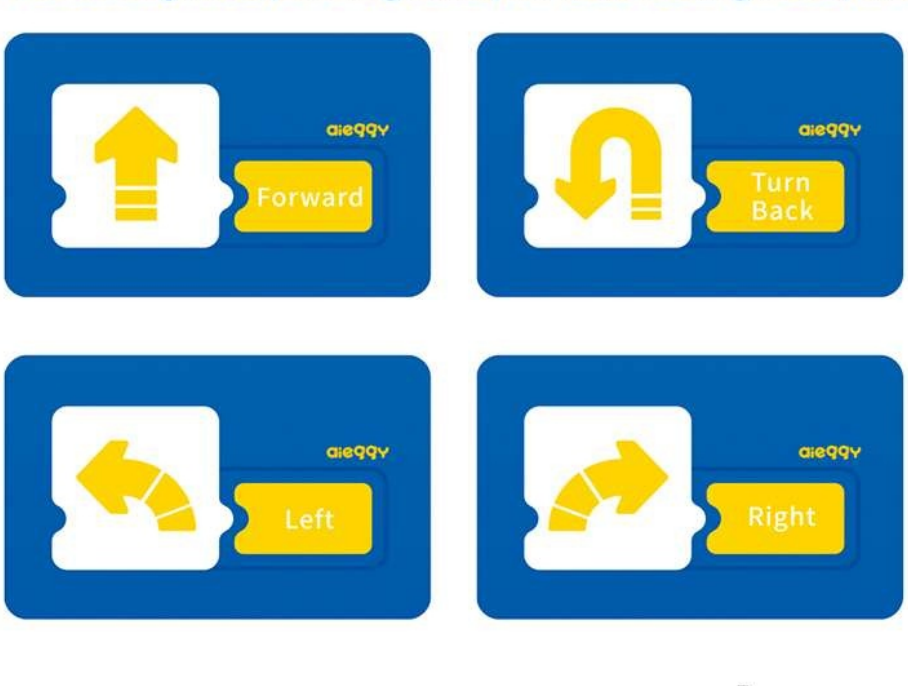


Function cards

Play – Execute all the steps programmed into Aieggy’ s memory using the command cards.
Reset – Clear Aieggy’ s memory to allow a new sequence of cards.
Undo– Cancel the last command.

Motion Cards

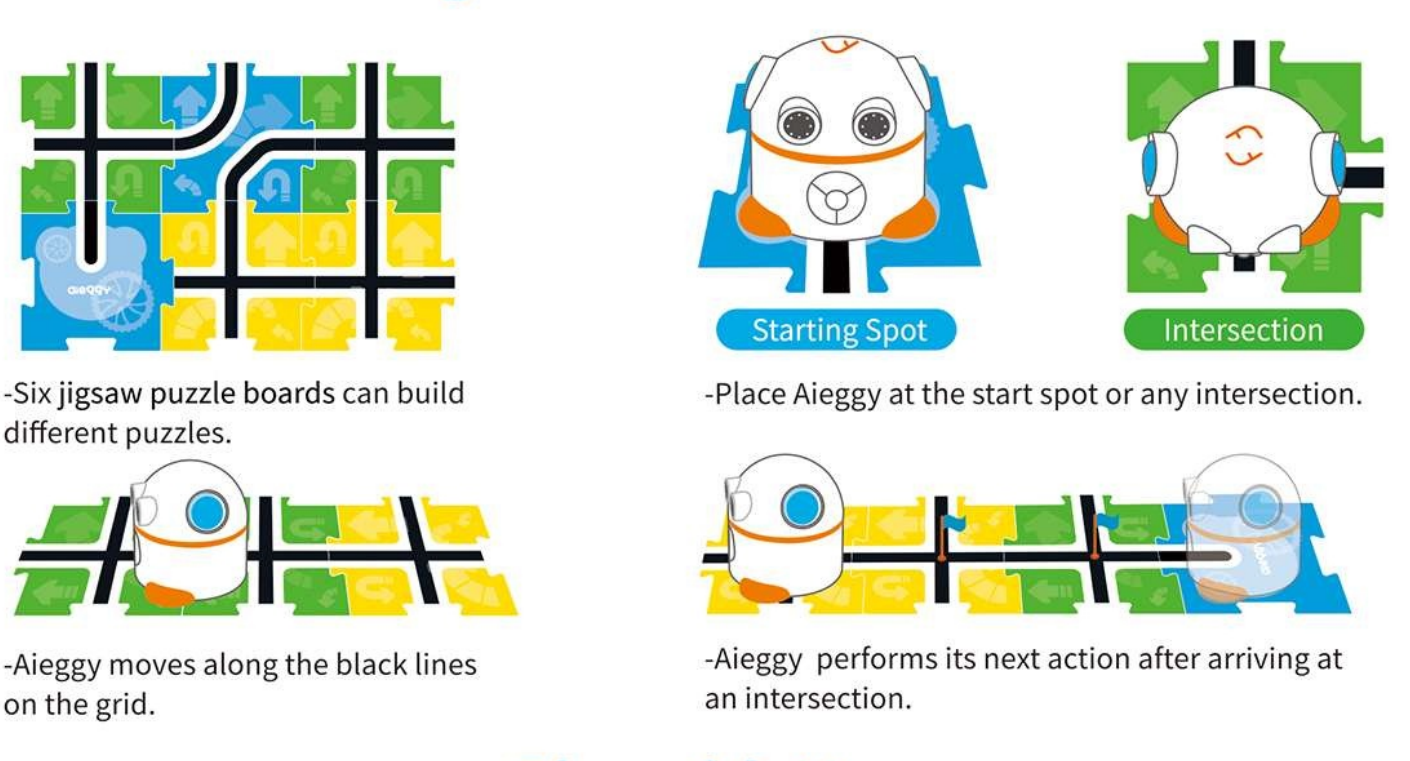
Free Coding Mode(on the ground) & Puzzle Coding Mode(on the jigsaw puzzle boards)



Free Coding Mode
Forward – Move one block forward
Turn Back – Spin turn 180°
Right – Turn 90° to the right
Left – Turn 90° to the left

Puzzle Coding Mode
Forward – Move forward along the line
Turn Back – Turn around at a intersection
Right – Turn right at a intersection
Left – Turn left at a intersection

Jigsaw Puzzle Boards



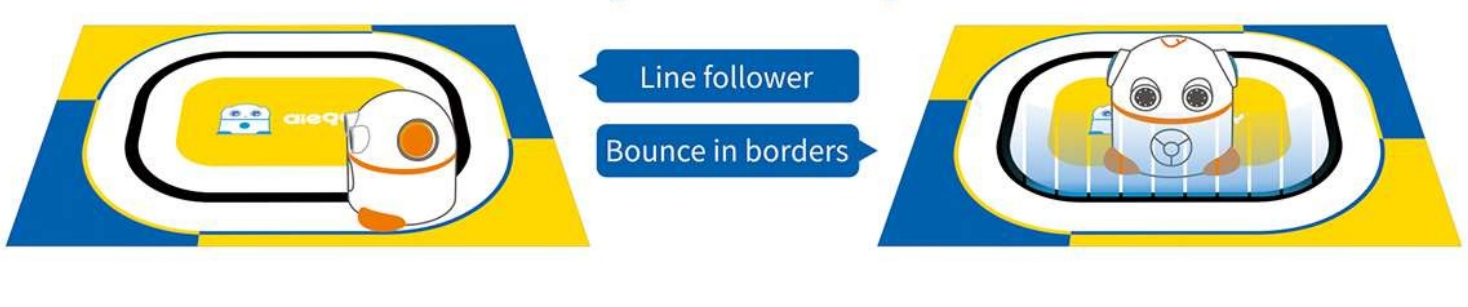
-Six jigsaw puzzle boards can build different puzzles.

-Place Aieggy at the start spot or any intersection.

-Aieggy moves along the black lines on the grid.

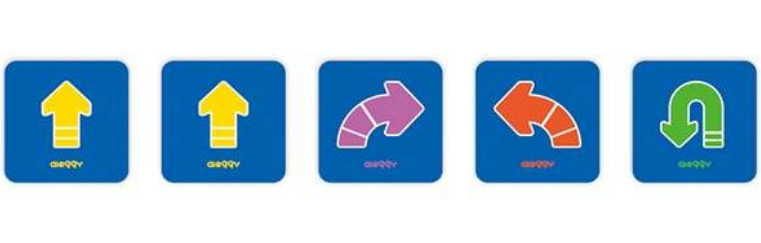
-Aieggy performs its next action after arriving at an intersection.

Play with Map



Double-Faced Directional Cards

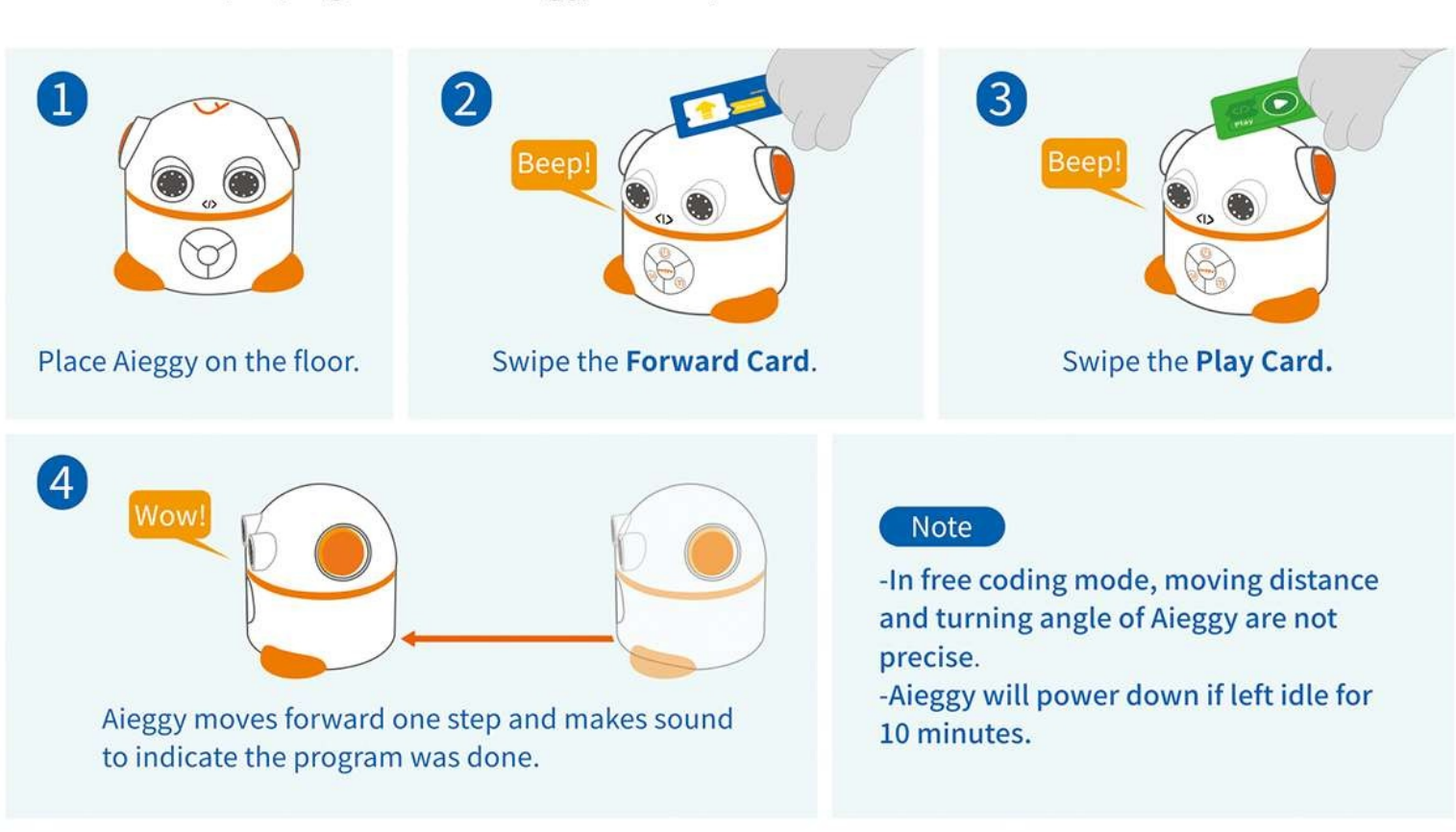
Use the small double-faced directional cards will help to keep track of each step in your code.Each card features a direction(step) to program into Aieggy. We suggest lining the cards up horizontally in sequence to mirror each step in your program, and to help you remember the sequence.



Get Started

Free Coding Mode

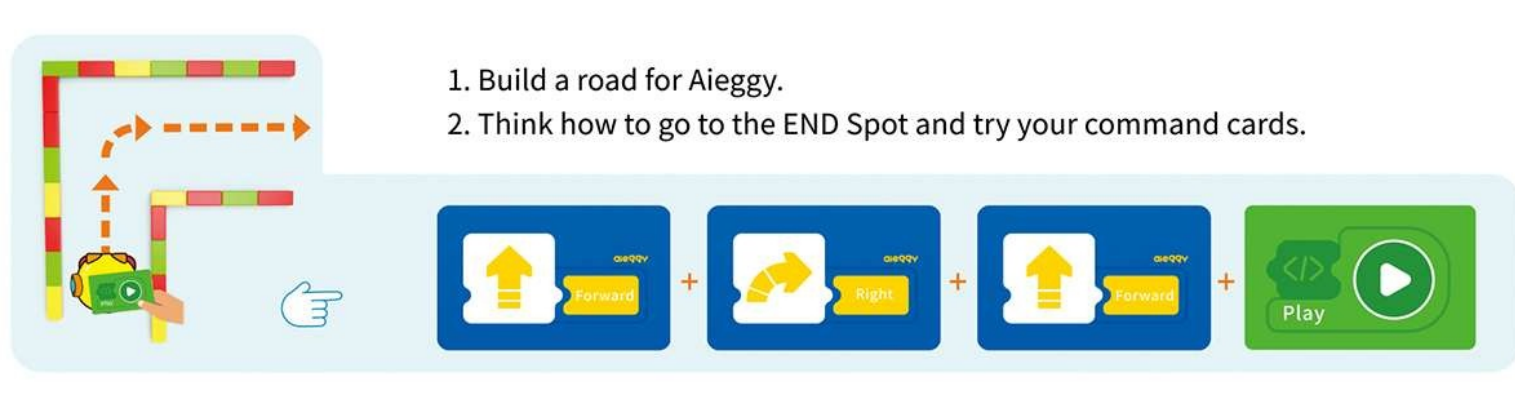
Start with a simple program: Move Aieggy one step forward.


Beep!
Beep!
Wow!

1. Place Aieggy on the floor.
2. Swipe the **Forward Card**.
3. Swipe the **Play Card.**
4. Aieggy moves forward one step and makes sound to indicate the program was done.

Note
-In free coding mode, moving distance and turning angle of Aieggy are not precise.
-Aieggy will power down if left idle for 10 minutes.

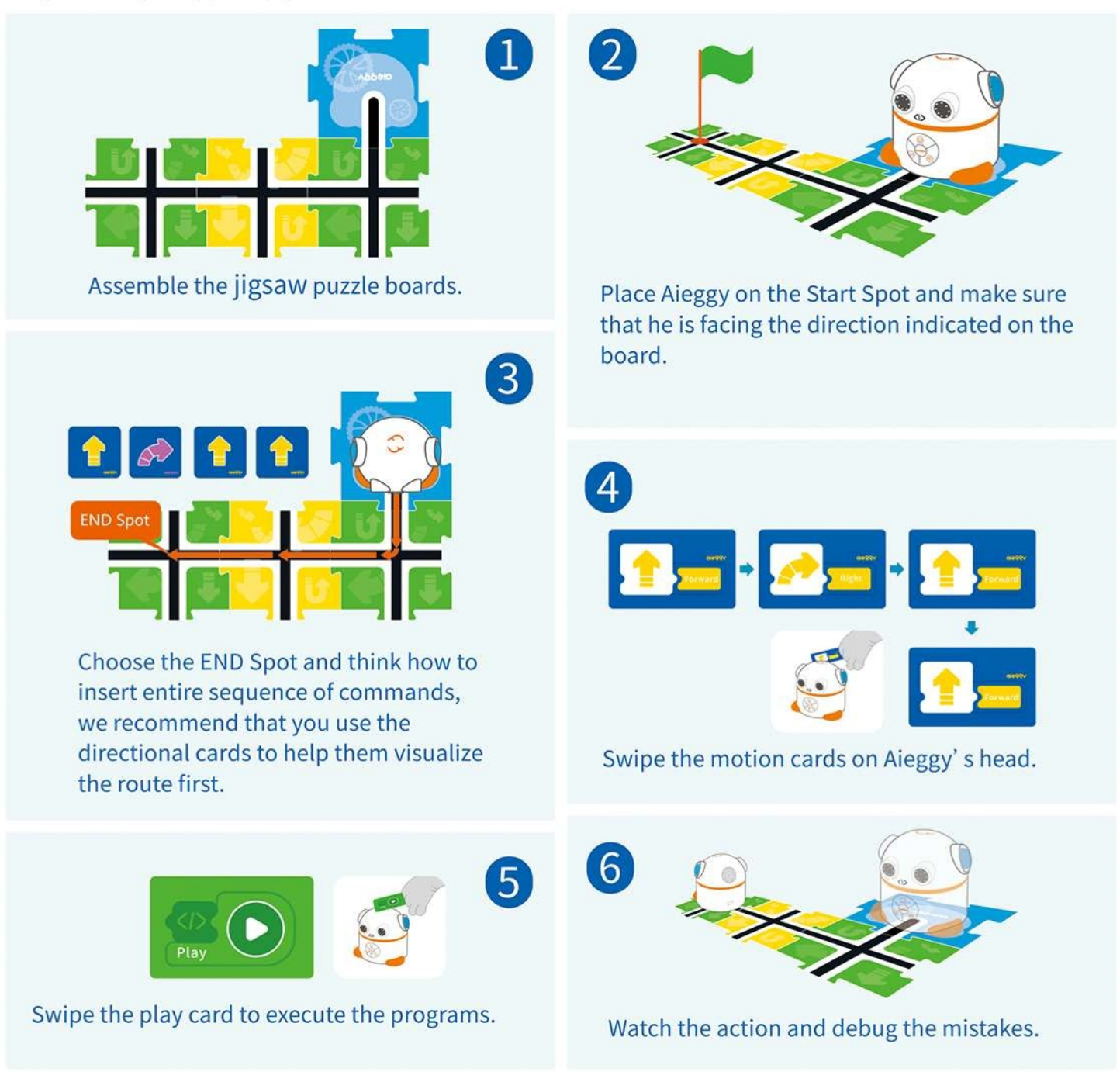
Try more programs:



1. Build a road for Aieggy.
2. Think how to go to the END Spot and try your command cards.

Puzzle Coding Mode

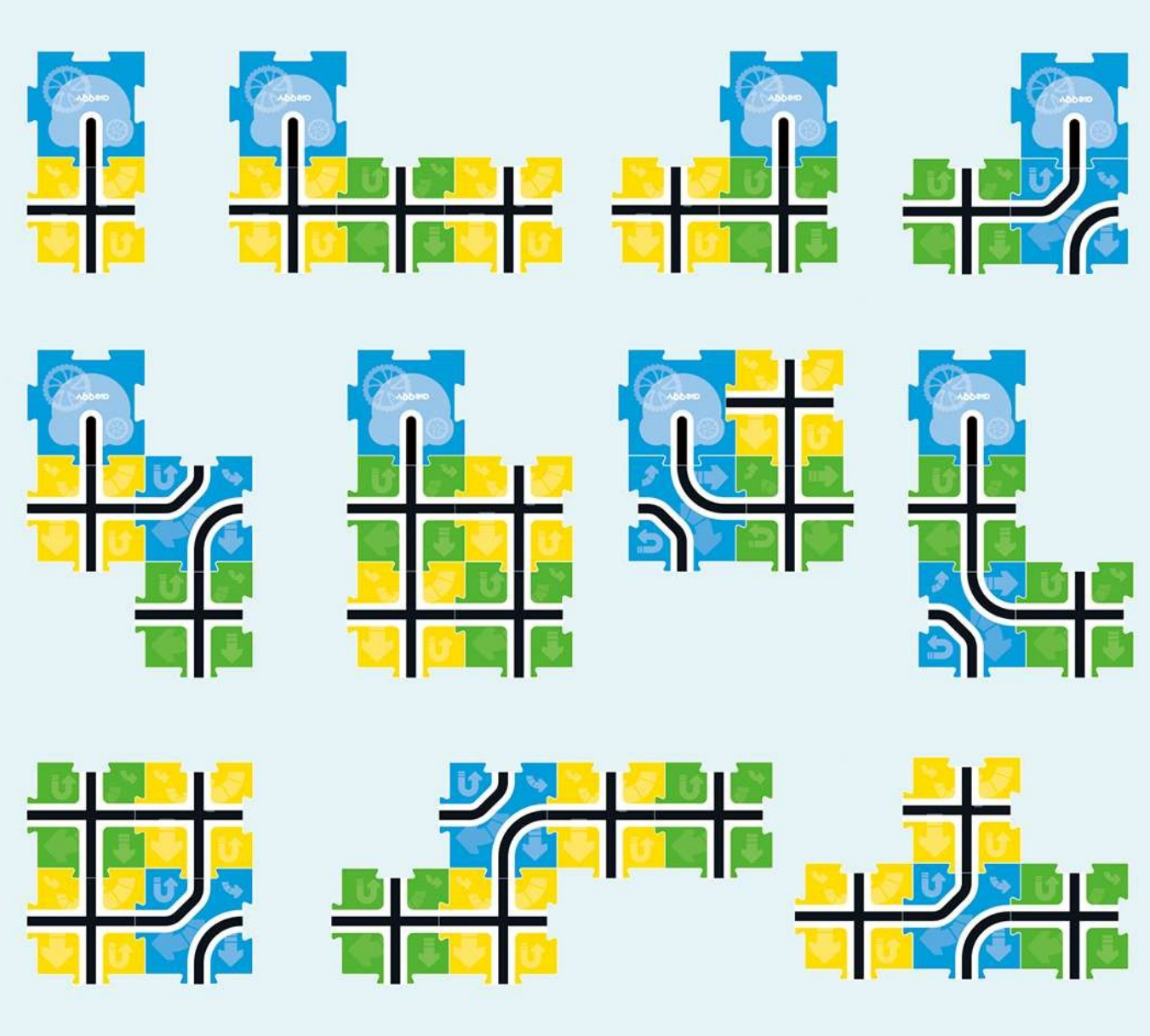
Change to puzzle coding mode by clicking M button.
Progamming Aieggy in jigsaw puzzle boards.



1. Assemble the jigsaw puzzle boards.
2. Place Aieggy on the Start Spot and make sure that he is facing the direction indicated on the board.
3. Choose the END Spot and think how to insert entire sequence of commands, we recommend that you use the directional cards to help them visualize the route first.
4. Swipe the motion cards on Aieggy’ s head.
5. Swipe the play card to execute the programs.
6. Watch the action and debug the mistakes.

Coding Challenges(Puzzle Coding Mode)

The coding challenges below are designed to get you familiar with coding Aieggy.
You can choose different END Spots to test your coding skill levels.

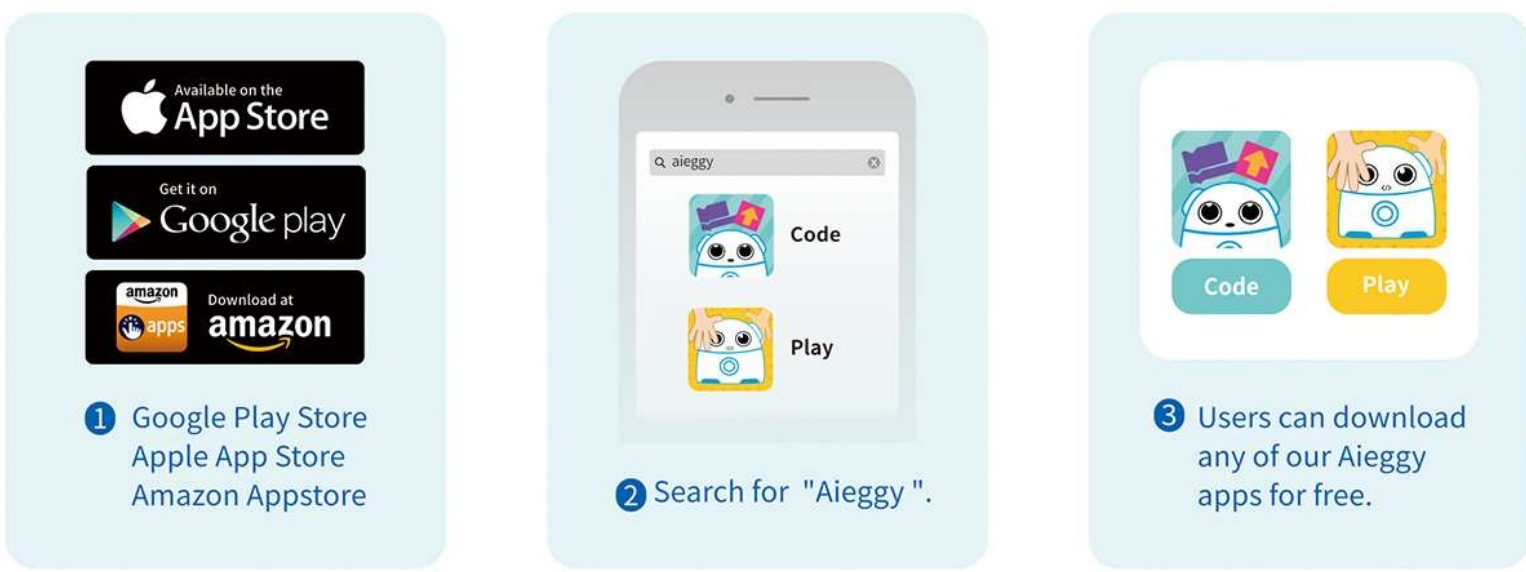


APP

Play and code with Aieggy apps

You can control Aieggy in real time with the apps.There are two basic apps.
1)Play App: Easy to use remote control app for Aieggy.
2)Code App: Pure graphical touch-and-play interface that even non-readers can program the robot with it.

Download App to your device



1. Google Play Store
   Apple App Store
   Amazon Appstore
2. Search for "Aieggy ".
3. Users can download any of our Aieggy apps for free.

Connecting to Aieggy with your device:

1. Locate the Bluetooth settings on your device and switch Bluetooth on.
2. Turn your Aieggy on to make it discoverable with your device.
3. Open the Aieggy app and search for nearby devices.
4. The Aieggy will appear on the list of devices available.
5. Select the Aieggy on the list.

Once Aieggy has paired ,it can be controlled from Aieggy app .

FCC Compliance state

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.

-NOTE:This equipment has been tested and found to comply with 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 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.

-Change or modifications not expressly approved by the party responsible for compliance could void the user’ s authority to operate the equipment under FCC rules.

FCC Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

WARNING:Read before operating Aieggy

- Do not throw, drop, puncture, kick, step on, or otherwise subject Aieggy to physical abuse. Which can damage Aieggy and compromise its safe operation.
- Do not apply excessive force to Aieggy’ s motors / wheels.
- Do not attempt to dismantle, reconstruct, or modify Aieggy.In these circumstances, free repair service is not available.
- Due to various physical factors, Aieggy’ s moving distance or turning angle may not be precise.
- Due to the nature of motors, each DC motor may have a slight difference in RPM.
- Motor RPMs may be slight different depending on usage time and battery consumption.
- Sensor values may vary slightly among multiple Aieggy bots.
- Sensor values may vary according to the usage environment.
- Consumable parts performance may deteriorate according to the usage pattern of the user.
- Bluetooth connectivity may be affected by usage environment.
- Each Aieggy is individually tested and inspected before shipment. This may result in a small amount of dust on the product.
- Aieggy Co., Ltd. reserves the right to amend or improve the product design, application software, and user manual without any restriction or obligation to notify users.
- Recommended operating condition.Temperature:10°~28°C.Humidity:10%~80% based on 25°C.
- Aieggy works best in regular room lighting and may performance inconsistently in bright light.

Child Safety

- Children must use Aieggy under adult supervision.
- Please keep out of the reach of children to avoid unsupervised use.
- Incorrect usage and disassembly of product can cause harm to yourself or others.
- Be careful not to get your hair or any part of your body caught on Aieggy’ s wheels.
- This product contains small parts that can possibly be swallowed and cause choking.

Please observe the followings to reduce risk of overheating, fire or explosion

- Do not use Aieggy if the battery’ s plastic cover has been cracked or broken in any way.
- Do not expose the battery to excessive physical shock or vibration.
- Do not expose Aieggy or its battery to heat or put them in or near fire.
- Do not attempt to dismantle, pierce, distort or cut the battery and do not attempt to repair the battery.
- Do not clean the charging cable with a solvent, denatured alcohol, or other inflammable solvent. When cleaning, be sure to unplug the charging cable and clean only with a dry cloth.
- Do not subject Aieggy and its battery to large temperature variations. Do not place Aieggy near a source of heat.
- Disconnect the charging cable when not charging the battery.
- Do not expose to moisture or water.

Charging

-Before first use, the battery needs to be fully charged.

-Do not cover Aieggy or its charger while the battery is charging.

-Charge the battery only in a place where the temperature is between 0°and 40° C(32° to 104° F).

-Use an approved charger to charge Aieggy. (CE, FCC, ASTM, UL and/or any other applicable standards as per your country)

-Examine the charging cable regularly for damage. Never use a damaged charging cable. Use only the supplied charging cable. Misuse of the charger or the charging cable may cause electrical shock.

-Do not charge the battery near inflammable materials,on an inflammable surface (such as carpet, wooden flooring, wooden furniture, etc.), or on a conducting surface (such as metallic surfaces, wet surfaces etc.).

-Do not leave Aieggy unattended during charging.

-Never charge Aieggy immediately after use or while it is still hot. Allow Aieggy to cool down to room temperature before charging.

Battery Warning

-Lithium polymer batteries are extremely hazardous and may cause serious injuries to persons or property. As the manufacturer, the distributor, and Aieggy cannot ensure the battery is used correctly (such as when charging, discharging, or storing, etc.), the user accepts liability for any damages caused by the use of a Lithium Polymer battery.

-In the event of battery leakage, avoid the liquid coming into contact with skin and eyes. In case of contact with the skin, wash with soap and water. In case of contact with the eyes, rinse with cold water and consult a physician. If you notice a suspicious smell or noise or observe smoke around the charger, disconnect it immediately.

Warranty

-Consumable parts (motor, battery, wheel, etc.) are covered by warranty for 6 months after purchas.
-This product is guaranteed for a period of one year from the date of delivery to the customer.
-This warranty does not apply to defects resulting from the action of a user such as misuse, improper wiring, any operations outside of its specification, improper maintenance orrepair, or
-More information is available online at **aieggy.com/support/warranty**.

Questions

Question about your Aieggy?
Visit **aieggy.com/support/faq** or **email us at support@aieggy.com**.

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