



Hello.  
I am **Aisoy1**.

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User's Guide  
[www.aisoy.com](http://www.aisoy.com)

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# Welcome. A quick view at Asioy KiK

Life is feeling, connecting, learning, getting excited and provoking emotions. That's why we have created a robot for feeling those emotions. Congratulations! We are glad to introduce you Aisoy KiK. It has social capabilities and a complex technological architecture, that, among others, allows them to be coded:

- ▶ Expressing emotions
- ▶ Reacting to what happens in its external environment
- ▶ Talking.

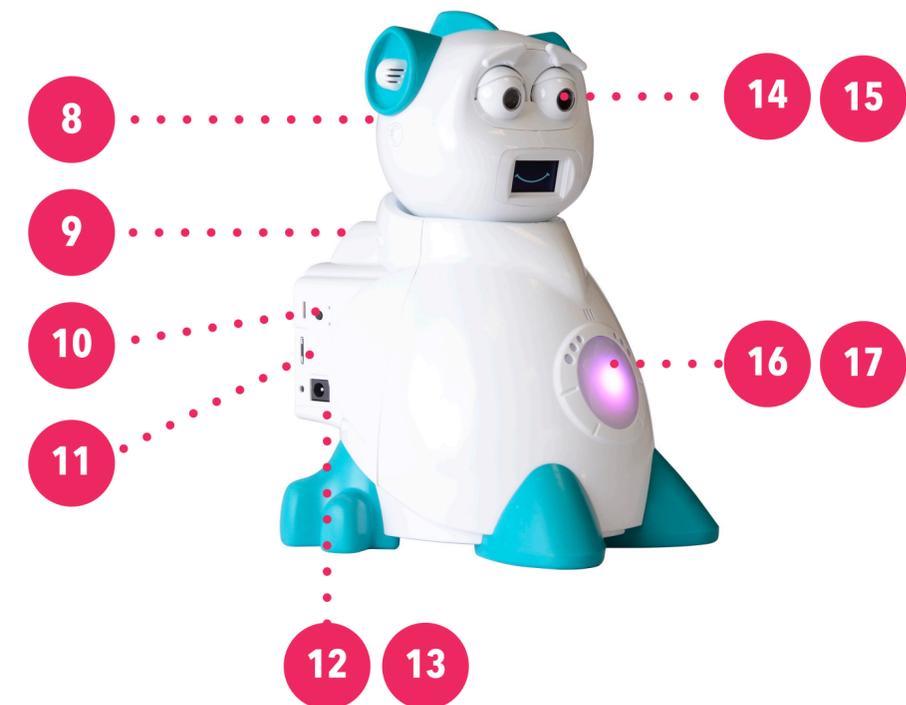
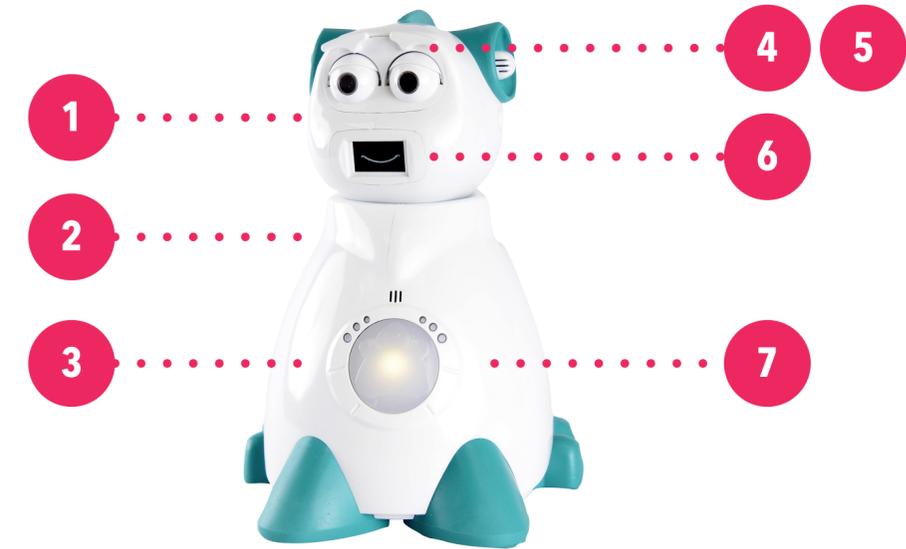


# A quick view at Aisoy KiK

## Aisoy KiK General Overview

Aisoy KiK components, which are shown in the figure on the side, allow them to keep in contact with the surrounding reality or provide information about their current status.

1. Head
2. Body
3. Touch sensor: right
4. Eyebrows
5. Eyelids
6. Mouth
7. Touch sensor: left
8. Touch sensor: head
9. Touch button: back
10. Power button
11. MicroSD card
12. Power connector
13. Led de carga de batería
14. Camera
15. Microphone
16. Emotions Heart
17. Speaker



# A quick view at Aisoy KiK

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## Behaviour modes

Aisoy KiK is a robot for coding using Scratch, a visual programming platform.

## Power button

**Turn Aisoy KiK on:** Press power on/off button to turn it on. You will briefly hear a sound and a white light appears in the emotions heart during 20 seconds. Then, it starts flickering in blue and you can observe the starting process on its mouth. This process will take between 1 and 3 minutes. This lets Aisoy KiK to review the status, recalibrate and readjust the system. Aisoy KiK will be ready when it shows a smile and the emotions heart appears in yellow.

**Turn Aisoy KiK off:** Press and hold the power button for 3 seconds, until you hear the sound that indicates the shutdown process has started. In case of an emergency power-off, press and hold the power button for 10 seconds, until it is turned off. Please, do not use this method unless it is necessary.

## Sleep

Aisoy KiK goes to sleep if it does not detect any activity in a period of 10 minutes. You can reactivate it with a "hug" (holding its body with both hands for 10 seconds).

## MicroSD Card

Aisoy KiK includes a microSD card with Airos operating system. Please, do not remove the card because this may damage your robot. To upgrade the robot, it is not necessary to remove it from the microSD slot. Therefore if something occurs and you consider you should remove it, refer previously to the technical support.

## Including accessories in Aisoy KiK

An AC/CD power adapter is included, to apply electrical power to Aisoy KiK and recharge the battery.

# A quick view at Aisoy1

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## Mouth

Mouth shows you specific information about what Aisoy KiK is feeling or doing at the momento. The needed codes regarding to this information are included in the corresponding module of the guide. It also provides control information.

## Touch sensors

Small touch sensors are integrated in Aisoy KiK's back and both sides of its body. As a result, Aisoy KiK knows when somebody touches or hugs it, among other functions.

## Accelerometer

Thanks to this sensor, Aisoy KiK is able to know its 3D inclination, with values on the X, Y and Z axis. This lets Aisoy KiK to know when it is being turned or shaken.

## Mobility grades

Aisoy KiK is able to move its head and show its feelings with these movements. It uses 4 basic servomotors:

- ▶ **Head rotation:** left, right, up and down.
- ▶ **Eyelids:** opening and closing.
- ▶ **Eyebrows:** up and down.

## Emotions Heart

It can show you any color combination. Aisoy KiK normally uses it to reinforce some kind of information, as the emotional state (happiness = yellow).

## Ojos

Aisoy KiK has 3 Mpx USB camera in its left eye, which is very useful for artificial vision tasks, such as face detection and object recognition. Next to it, there is a microphone that allows to capture surrounding sounds, as human voices or music.

## Speaker

A small speaker is included in Aisoy KiK, in order to be listened when it speaks, plays some music or sounds. It is designed to provide a close relationship, so if you want to use it in a noisy environment, you will need an external speaker. To that end, there is an audio output in its back.

## Battery

Aisoy KiK includes a rechargeable high-performance lithium-ion battery. Battery life is higher than 2 hours usually.

**Battery charge:** When Aisoy KiK is turned off, connect it to a power outlet using the supplied power adapter. Charge it two hours. During this period, a red LED next to the power connection will indicate it is being charged. When fully charged, the red LED will change into blue. Disconnect it and turn it on.

You can use the robot while charging, but charge time will vary depending on the use.



# Starting. First steps with Aisoy KiK



# First steps with Aisoy KiK

## Wake up your Aisoy KiK for the first time

- ▶ **Download Aisoy Lab app.** You can download it from the Play Store if you use an Android device or from the App store if you use an iOS device.

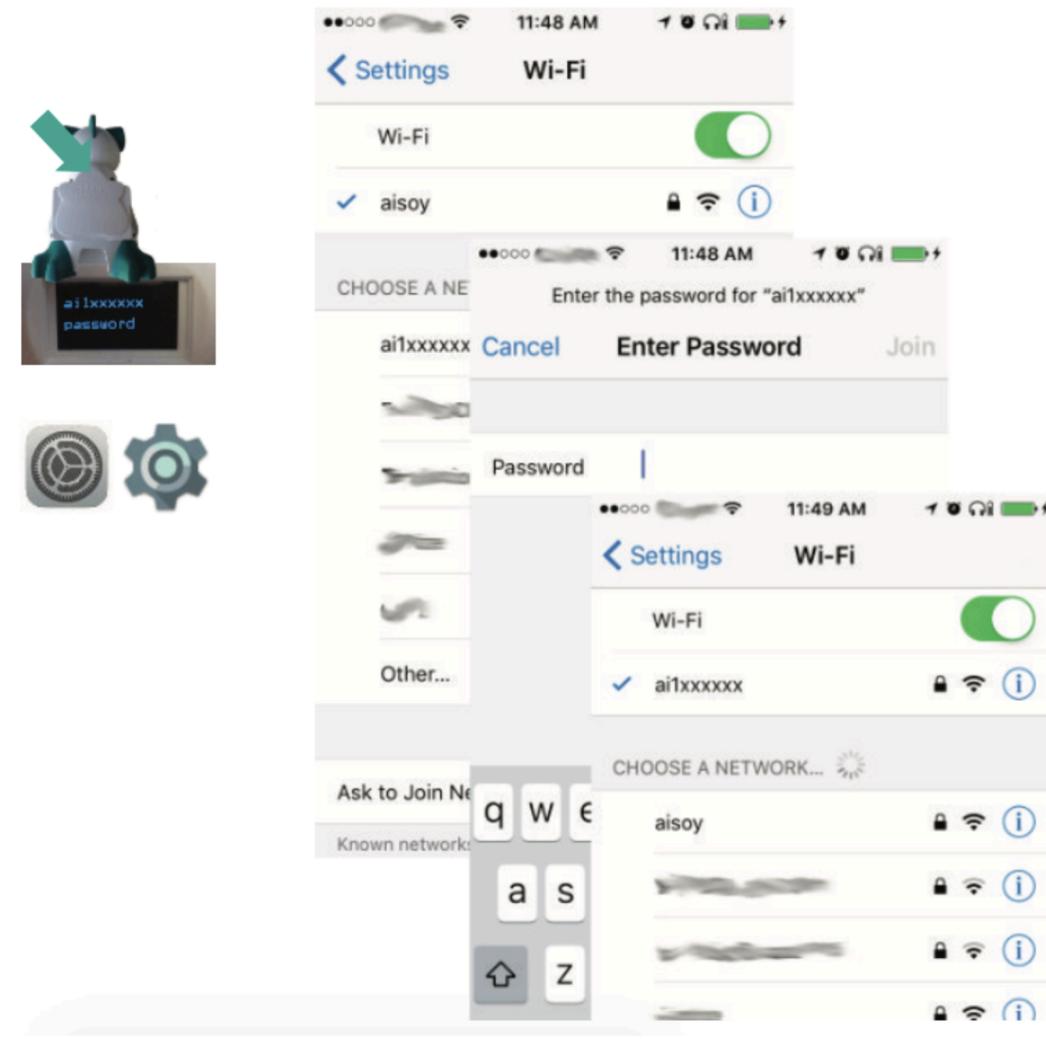


- ▶ **Charge the battery.** Fully charge the battery (page 6).
- ▶ **Turn Aisoy KiK on.** Press power button and wait. You will hear a sound and a white light appears in the heart of emotions. After some seconds, the color will change into blue and the mouth will show a dots span bar. This process may take between 1 and 2 minutes. When this ends, Aisoy KiK may feel a bit disoriented. The boot process finishes when the heart turns to yellow and Aisoy KiK shows a smile.

## Connect to the Wi-Fi network

Aisoy KiK needs Internet to function fully effectively. You need to set up your Aisoy KiK to be able to use your Wi-Fi network and internet access. Follow the steps below:

- ▶ **Connect to Aisoy KiK.** Press the touch button placed in Aisoy KiK's back. You will see in its mouth the necessary data to connect it to your smartphone or table. Two words will appear. The first one is the name of the network you have to connect (p.e. aisoy-xxxxxx o aixxxx) and the second one is the keyword to have access to it (p.e. emotions). Use them as if you were configuring a new Wi-Fi network in your smartphone or tablet.

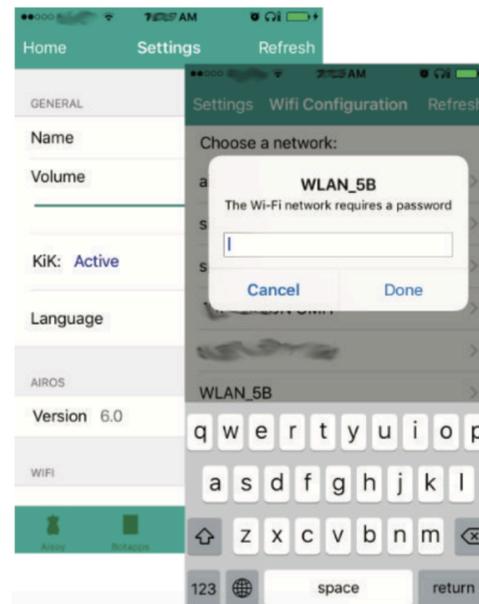


# First steps with Aisoy KiK

- ▶ **Launch Aisoy Lab App.** Once your smartphone or tablet is connected to Aisoy KiK, you can launch Aisoy Lab App. After some seconds, you should see Aisoy1 in the robots list. If you cannot see any robot, exit the App, set your smartphone or tablet in Airplane Mode, then turn this mode off and repeat this step.



- ▶ **Set up Aisoy KiK's network connection.** Once your Aisoy1 appears in the list, click on it. Go into Settings > Wi-Fi and then, click on one of the networks in the list and introduce the password. This process requires some seconds to reset the services in the new network. During the process Aisoy KiK may change the emotions hear color. When it finishes, the emotions heart lights up yellow and shows a smile in its mouth. You can check if it is connected to the new network pressing the touch button on the back.



- ▶ **Setting up a Wi-Fi network on your smartphone or tablet.** Exit Aisoy Lab App. Aisoy KiK and Aisoy Lab App have to be connected to the same Wi-Fi network to communicate with each other. In case you have already configured it, reconnect it. Or configure, if it is new, your new smartphone and table to the same Wi-Fi network where Aisoy1 is configured.

## Update Aisoy KiK

**Important:** Please, check regularly Airos operating system updates. Aisoy KiK will promptly inform you if a new version is available. You can also check it in Aisoy Lab App, Settings > Airos.

If you want to update Aisoy KiK, in Aisoy Lab App go to Settings > Airos, click on the new version and follow the instructions.

Airos updates include:

- ▶ Enhancements and bug fix in Airos
- ▶ Additional and improved contents and dialogues
- ▶ New Botapps
- ▶ New capacities for Aisoy KiK

# Scratch. Aisoy KiK is a programmable robot

Scratch is a program tool with blocks. This platform allows you to execute games and educative programs for Aisoy KiK, or creating your own ones.

Remember that your computer and your Aisoy KiK need to work on the same Wi-Fi network and Internet access.



# Booting ScratchX environment

ScratchX is a web application. If you want to execute it, you need to have a browser installed on your computer.

Once Aisoy KiK and your computer are in the same network, you can access the programming environment following these steps:

**Step 1:** When the robot has completely started up and the IP address appears on the mouth, you can launch your browser. Insert the IP in the browser's address bar:

`https://IP_DE_SU_ROBOT:9090`

**Example:** Using Chrome, if the robot's IP is 192.168.1.2 you have to insert:

`https://192.168.1.2:9090`

In the displayed screen, click on the link at the bottom left Advanced Options.

Click on the new display link Access to... to definitely accept the connection to the browser. If the task is successfully executed, Chrome will show the following message:

*Can "Upgrade" only to "WebSocket"*

This action enables the communication between browser and robot.

**Step 2:** From the previously used browser tab, introduce the following url in the address bar:

<https://www.aisoy.com/scratch>

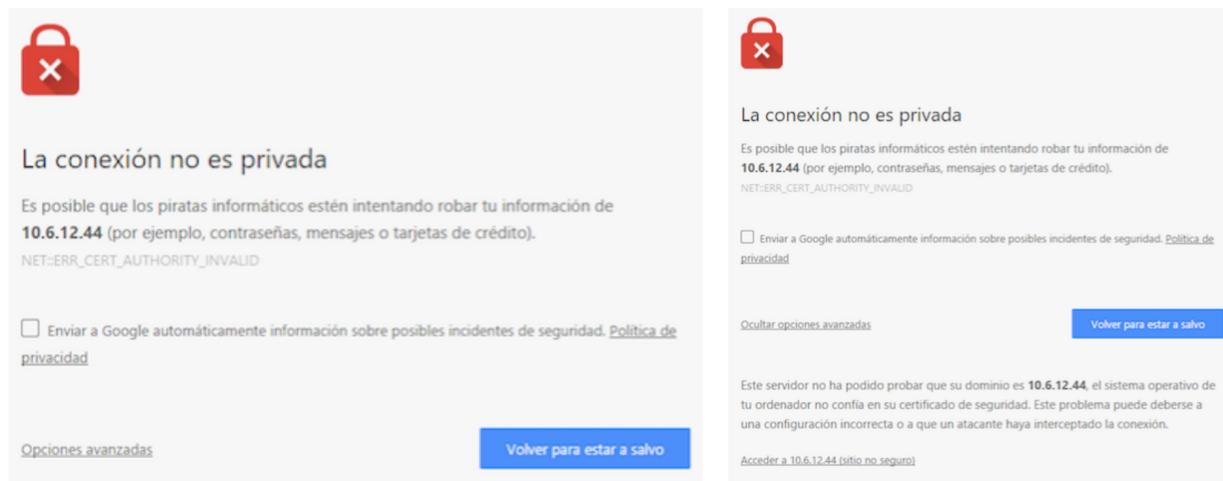
**Step 3:** After loading ScratchX environment, click the option *More blocks*.

More Blocks

**Step 4:** Insert Aisoy1's IP address in the connect block. Then click that block to execute it and establish connection with Aisoy KiK.

connect bot1 to ip 192.168.1.133

**Step 5:** If the connection is correct, apart from a window with an explanation, you will see the extension icon turn from yellow to green. Besides, all the available blocks for programming the robot have to appear.



# ScratchX overview

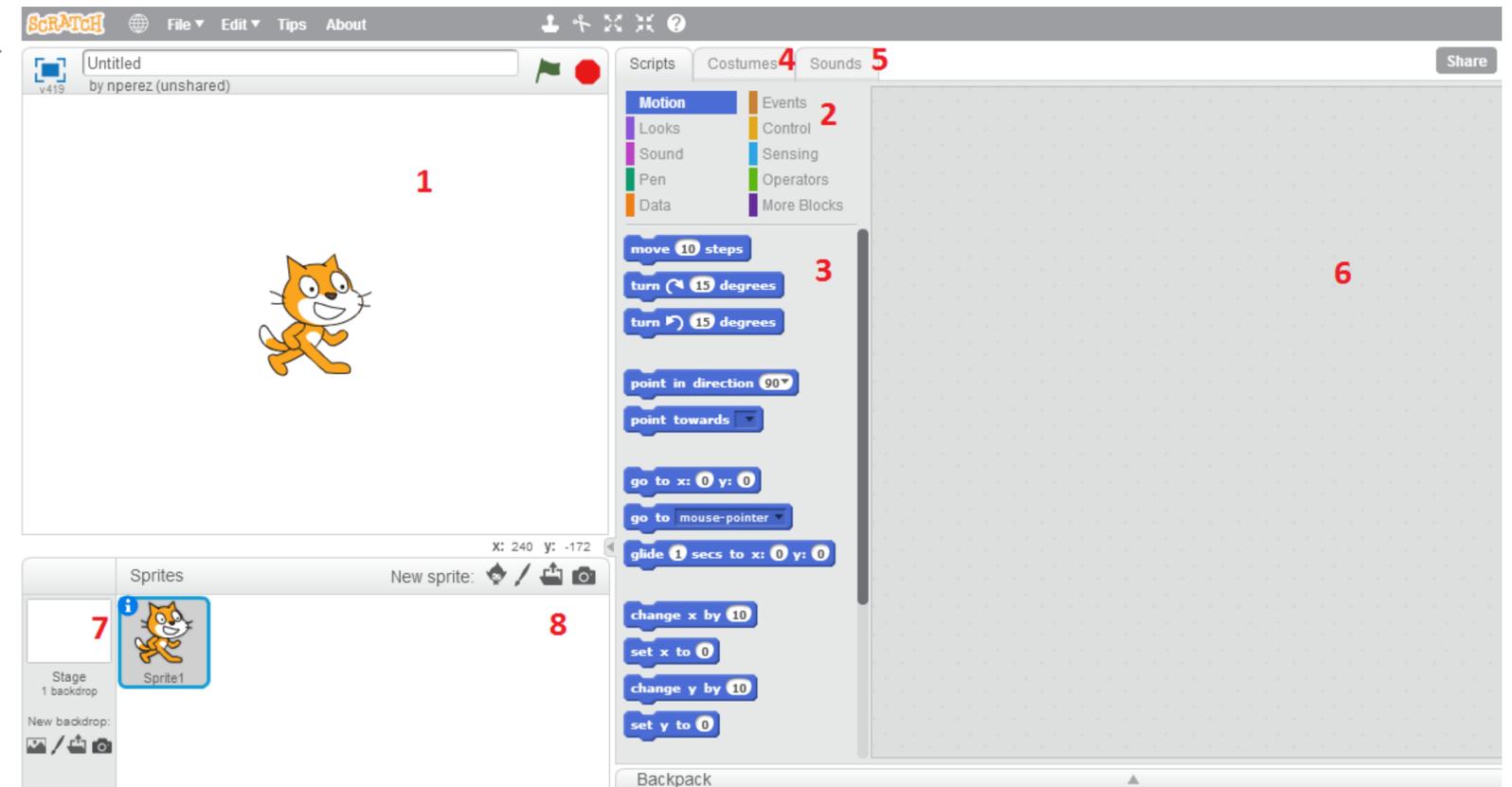
## ScratchX's editor overview

1. Scratch screen. You can interact with it through programming blocks (moving objects, showing the webcam, etc).
2. Categories or block groups.
3. Blocks that belong to the category which has been selected at a particular moment.
4. Costumes tab. From the display menu in this tab, you will be able to change the different costumes or objects that appear on Scratch's screen.
5. Sounds. From this tab menu you can manage the sounds that will be played in certain situations of the chosen program (in case you want to include them).
6. This is the most important part of the interface. It is the scripts programming area, that is, the area where the different blocks are moved and their combination will determine that certain program.
7. Scratch's scenario or wallpaper.
8. Management of the objects on which work is done in the scripts (each object has a script or program associated).

## Opening a program

**Opening a program:** go to Archive menu and click on Open. Search the program you want to open and select it.

**Important:** ScratchX programs have .sbx extension and are incompatible with the rest of programs.



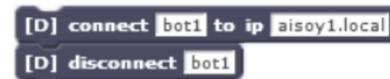
# Aisoy Scratch Blocks

This section explains the available Aisoy Scratch blocks to create you own programs, together with the traditional Scratch blocks. Each block starts with an editable label, which is bot1 by default, that allows to link each block to a robot.

## Connection and disconnection blocks

**Connect.** The connection is established associating the IP address with a descriptive nominal label in the program.

**Disconnect.** Breaks the connection between the robot and the program.



## Movement Blocks

There are four different movements:

**Move head horizontal:** There is a horizontal head movement.

**Move head vertical:** There is a vertical head movement.

**Move eyebrows:** It moves eyebrows.

**Move eyes:** It moves eyelids.

These blocks have two input parameters: position between 0 and 1, and movement speed (fast, medium and slow).

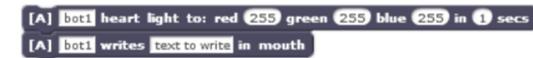


## Visual Expression Blocks

There are two different blocks that reinforce and improve Aisoy KiK's expressiveness:

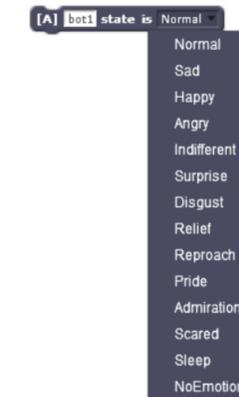
**Heart light to:** The emotions heart changes the color. This color is established using a combination of red, green and blue (taking values between 0 and 255). The transition time of colors can also be observed, in seconds.

**Writes in mouth:** It writes an alphanumeric text in the mouth's screen.



## Predetermined emotions block

**State is.** Aisoy KiK shows one of the 14 predetermined emotions.



## Sounds Blocks

**Plays:** Aisoy KiK plays the selected sound.

**Stops all sounds:** Cancel the play execution and the sound that is being played.



# Aisoy Scratch Blocks

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## Language Blocks

**Says.** Aisoy KiK says what is written as a parameter.

**Says one of the list.** Aisoy KiK says a random word from a list. And this process is the same in the grammar block.



## Events Blocks

**Touch.** Captures if Aisoy KiK has been touched in the head sensor or in the lateral ones.

**Position.** Captures Aisoy KiK's current position. This can be one of the following six positions: left horizontal, right horizontal, forward horizontal, back horizontal, head down.

**Hears.** Captures if anyone says the mentioned word.

The following events blocks are based on Aisoy KiK's camera function.

**Face.** Aisoy KiK detects the number of faces it is looking at and it activates if it matches the indicated parameter.

**Qr.** Aisoy KiK detects the QR it is looking at and it activates if matches the indicated parameter.

**Cover eyes.** Aisoy KiK detects if his eyes are covered (option covered) or discovered (option discovered).

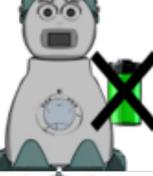


# Important safety information

**Warning: If you do not respect the following instructions, you may cause fire, electrical shock, injuries and Aisoy KiK or other material damages. Please, read all the safety information below before using Aisoy KiK.**



# Security and support

	<b>DO NOT</b> expose Aisoy KiK or the power adapter to liquids.
	If Aisoy KiK is accidentally wet, <b>DO NOT USE</b> it until it is completely dry.
	<b>DO NOT</b> use Aisoy KiK if you observe physical damages.
	<b>DO NOT</b> open or handle Aisoy KiK.
	<b>DO NOT</b> try to substitute or handle Aisoy KiK's battery on your own.
	Use only the power adapter provided by Aisoy.
	Aisoy KiK includes a rechargeable battery, The robot may be damaged if it is exposed to high temperatures.
	Aisoy KiK includes a rechargeable battery. It is recommended to start the loading process avoiding direct sunlight and in an airy place.

## Important safety information

Aisoy KiK is a robot designed to be used in a domestic environment, indoors mainly, with a close power outlet to easily recharge.

**Management:** Aisoy KiK contains sensitive electronic components which may be damaged if it falls to the ground, it is drilled or crushed. Do not use a damaged Aisoy KiK (for example: if you observe that water has entered) because it can cause you injury. Do not expose Aisoy KiK or the power adapter to liquids, otherwise this could cause an electric shock. If Aisoy KiK is accidentally wet, you should wait until it is completely dry to turn it on.

**Repair:** Do not open or try to repair Aisoy KiK by yourself. If you disassemble Aisoy KiK, it may be damaged and cause you injury. If Aisoy KiK is damaged or does not work properly, please contact Aisoy directly or an authorised dealer. You can find more information about repairing in [www.aisoy.com](http://www.aisoy.com).

**Battery:** Do not attempt to replace the battery because you can damage it, cause over-temperature and be injured. Only Aisoy or an authorised dealer are allowed to provide service repair in relation to the lithium-ion battery. It is possible that if you request maintenance service, you will receive a replacement Aisoy KiK (instead of your original device). Batteries must be recycled or separated from household waste. Do not dispose of your Aisoy KiK in a fire or burn the battery. Do not use batteries which are not explicitly designed for Aisoy KiK, because it may not work properly and can damage the robot or cause you injury. In case the battery leaks, please contact Aisoy. If the liquid comes in contact with skin, wash immediately the affected part and contact a doctor.

# Security and support

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**Charging:** To charge the Aisoy KiK, use only the included power adapter. Using another power adapter could damage your robot or other property. It is important that the Aisoy KiK and the power adapter are in a well-ventilated place when the device is charging. If the Aisoy KiK is wet, the charging process can cause a fire or electric shock, cause injury, or damage the device or other property. Make sure both the Aisoy KiK and the power adapter are dry before charging the device. Avoid charging the Aisoy KiK in direct heat from the sun. Do not use the Aisoy KiK while it is charging.

**Long exposure to heat:** Aisoy KiK and the power adapter fulfil the applicable standards and limits for the surface temperature. Anyway, even within those limits, a continuous contact with hot surfaces for a long time may cause damage. Aisoy KiK and the power adapter are heated when you plug them in. Use common sense to avoid situations where Aisoy or the power adapter is in prolonged contact with skin when charging. For example, when Aisoy KiK is being charged or plugged into a power source, do not replace them under a blanket or a pillow.

## Managing information

Aisoy KiK charges the battery in a 2 hours approximately. Do not use it during that period of time. Examine the battery charger regularly for damage, specially the plug, DC connector (the cord connected to Aisoy KiK) and enclosure. If you find any, you should not use it until it is repaired.

Use only recommended products by Aisoy, for more information about compatible products, please contact us.

Aisoy KiK is environmentally conscious. You can find on its box a crossed-out wheeled bin symbol, which means that Aisoy KiK and accessories cannot be disposed of with household waste. You should handle it to a designated point for the recycling of waste electrical and electronic equipment, in the rare case that you don't want to have it anymore.

## Support Information

Please, consult Aisoy website [www.aisoy.com](http://www.aisoy.com) for more information related to Aisoy KiK.



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