

**ClicBot**<sup>®</sup>  
entertaining and educational toy



KEYI TECH.

002 **English**

026 **简体中文**

050 **日本語**

074 **русский**

098 **Deutsche**

124 **Français**

150 **Español**

Product Model:KY002CK10

## ClicBot App Installation

You can find and download the ClicBot App on the App Store/Android, or scan the QR code below to download.

① The ClicBot App supports iOS 10, Android 5.0 and higher versions.



## Advice on Using

The Quick Start Guide gives basic instructions on how to control your ClicBot. Please refer to the User Manual for detailed information on the product, including module specifications/connections, how to charge the battery, security & privacy, after-sale services, and FAQs. Please see the Module Function Card for information on the operational applications and how to use each modular function.

## Usage Instructions

- ⊗ Contains small parts, not suitable for children under 3 years old;
- ⊗ Contains precision parts, avoid dropping;
- ⊗ Keep away from flammable objects;
- ⊗ Keep your ClicBot dry; keep the product away from water;
- ⊗ Keep the golden module “po-go” pins away from metal;
- ⊗ Do not directly or indirectly connect two or more brain modules together;
- ⊗ Do not remove or replace the built-in battery; please contact our after-sales service team for repairs in case of damage;
- ⊗ The charger is not a toy, only use the charger recommended (the output voltage recommended: DC 5V/2A);
- ⊗ Do not use while charging;
- ⊗ Do not force your ClicBot to move when the movement function is locked;
- ⊗ Do not touch the ClicBot while it is moving;
- ⊗ When finished with the ClicBot, please recycle it; do not carelessly discard it and pollute the environment;
- ⊗ This package contains important information, please keep it at hand.

## Contents

5	Introduction to the ClicBot	16	Assemble the Modules
6	Specification of Modules	18	Battery Capacity and Charging
6	Brain Module	19	Connection
7	Joint Module	19	Internet Connection
8	Skeleton Module	20	Device Connection
9	Wheel Module	21	Security and Privacy
10	Base Accessory - Mount	21	Security Information
10	Reinforcement Accessory - Locker	22	User Privacy
11	Accessory - Holder	23	After-sales Service
12	Smart Foot Module	24	FAQs
13	Suction Cup Module		
14	Distance Sensor Module		
15	Grasper Module		

## Introduction to ClicBot

ClicBot is an intelligent robot designed for kids & adults with built-in functions for education and entertainment.

ClicBot has a unique modular design, which makes it easy to assemble and disassemble, create all sorts of imaginative robots, and allows for thousands of programmable functional uses. This makes ClicBot is more than just a robot, companion, or even toy – but additionally as a means of creative expression, learning, and experiment. ClicBot is also alive with over 200+ unique interactions. With its big, blinking eyes, and sound module, ClicBot is able to interact with you in a very lively way. ClicBot can see, feel, hear, think, communicate, and perform lots of actions. Reaching out to pet its head will cause ClicBot to react sweetly towards you, while programming it to recognize

you will allow it to warmly greet you when you interact. You can also program ClicBot to react in specific ways, so you can be very imaginative in your creations.

Through the ClicBot App there are a variety of easy-to-use programmable tools, robotic design setups, and features that let you share your creations with the community. Build an exciting racing robot, cute animal companion, a wall climbing adventurer, a bionic explorer, and many other exciting possibilities.

ClicBot is designed to help children shape the future with STEAM learning. Through the app, there are two creative functions that allows for scripting programs in ClicBot, motion or 'demo' script, and drag & drop graphical programming. Motion script means users only need to make

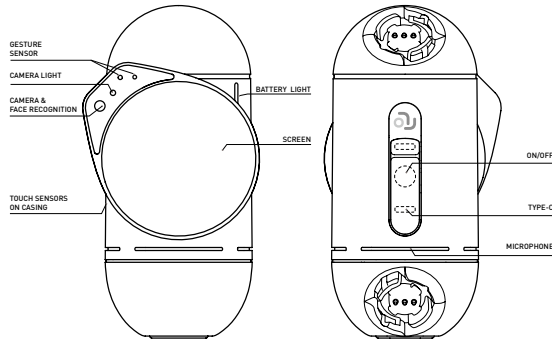
& save adjustments made to ClicBot in order to play back the entire routine in an easy and smooth manner. For more intermediate and advanced actions, users can use the drag & drop graphical programming feature to create a wider variety of amazing programs and actions.

To help guide children in realizing the full potential of their ideas and creativity, the makers of ClicBot will produce a series of STEAM videos to better guide children on how to build, program, and play with different robotic creations. Additionally, you can share your magical creations or search for inspiration through the ClicBot App Community. Simply upload your artworks, photos, code programs, or robotic designs for others to download and try for themselves!

### ■ Brain Module

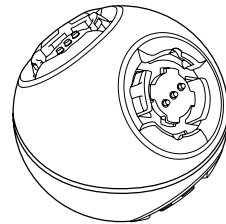
The Brain module is the master control and power supply unit of the ClicBot. It uses an ARM-A7 processor and includes a rechargeable polymer lithium battery with a capacity of 1550mAh. The eye of the ClicBot is a 2.1-inch rotational, circular touch screen. It contains a camera & facial recognition software, gesture sensors and camera optics can be found within the upper-left area of the screen. There are three touch sensors which are located on the upper, left, and right side of the Brain respectively, and two connectors are located on the upper and bottom rear side. The Brain module is integrated with a number of the function modules, and it includes an accelerometer, gyroscope, microphone, loudspeaker, and WiFi.

Dimensions	66.7*66.7*125.3 mm	Touch sensors on casing	Upper, left and right side
Net weight	256 g	Microphone	Volume detection
Size of Touch Screen	2.1"	Loudspeaker	Mono
Rotation Range	-24°~+24°	Wi-Fi	2.4G
Camera	2-megapixel camera Face detection & recognition, motion detection (identification distance < 5m)	Battery Capacity	1550 mAh
Gesture Sensors	8 gestures (identification distance ≤ 20cm)	Type of Charging Port	USB-C
		Connector	Upper and bottom rear side

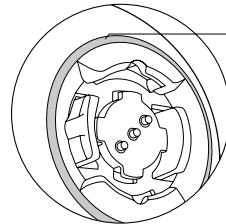


### ■ Joint Module

The Joint module, which is the “joint” of the ClicBot, is used for integrated motion. It functions with a high-precision servo system and uses a built-in DC geared motor, and build-in angular rate/angle position sensors. There are four connectors in total, two in each hemisphere. Each connector has a status indicator which shows the connection and update status in relation to other module pieces.



Dimension	55 mm (diameter)
Net Weight	73 g
Rotation Voltage	2.64 W
Max. Rotor Speed	216°/s
Connector	2 in each hemisphere



#### Status of Joint's indicator

##### Connection Status

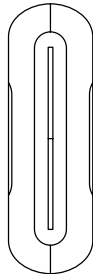
- Light On→Connected correct
- Light flashing→Waiting for module connection
- Light flashing quickly→Connection is wrong

##### Update Status

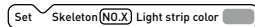
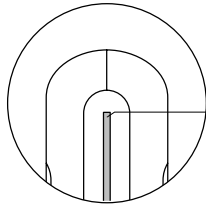
- Light On→Successfully updated
- Light flashing→Currently updating

### ■ Skeleton module

The Skeleton module is the 'bone' of the ClicBot, and is primarily used for building limbs. There are two connectors at the top and bottom of the Skeleton, and two strip status indicators located on the front, which show the connection and update status in relation to other module pieces.



Dimension	37.8*37*120 mm
Net Weight	57 g
Connector	Top and bottom



#### Status of Skeleton's indicator

##### Connection Status

- Light On→Connected correct
- Light flashing→Waiting for module connection
- Light flashing quickly→Connection is wrong

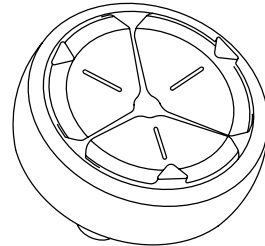
##### Update Status

- Light On→Successfully updated
- Light flashing→Currently updating

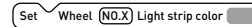
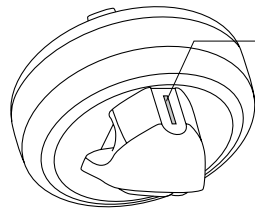
The color of Skeleton's indicator can be changed in Drag & Drop program.

### ■ Wheel module

The Wheel module is a functional module used for vehicle setups. The Wheels include a DC geared motor and a magnetic speed sensor, with a maximum rotor speed of 4.5 rounds-per-second. There is a status indicator near the main connector which shows the connection and update status in relation to other module pieces.



Diameter of wheel	83.8 mm
Net Weight	140g
Rotated Voltage	2.4 W
Max. Rotor Speed	4.5 rounds per second
Connector	1



#### Status of Wheel's indicator

##### Connection Status

- Light On→Connected correct
- Light flashing→Waiting for module connection
- Light flashing quickly→Connection is wrong

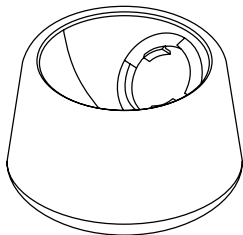
##### Update Status

- Light On→Successfully updated
- Light flashing→Currently updating

The color of Wheel's indicator can be changed in Drag & Drop program.

### ■ Base Accessory - Mount

The Mount can be used to fix your ClicBot to a table with Mount Stickers.

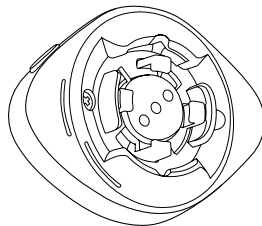


Dimension	75.1*75.1*45.2 mm
Net Weight	61 g

❗ Please use the Mount stickers provided by KEYi Tech to ensure the product is fixed properly.

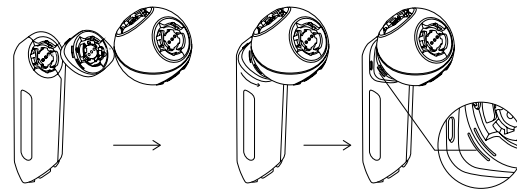
### ■ Reinforcement Accessory - Locker

The Locker is used to reinforce connections between two modules.



Dimension	47*36*14.4 mm
Net Weight	10g

❗ It can be used for connecting modules when additional reinforcements are required.



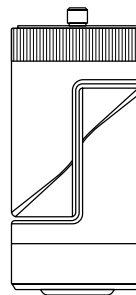
Step1  
Connect Locker  
between modules.

Step2  
Rotate Locker.

Step3  
Rotate until  
baseline is aligned

### ■ Fixation Accessory - Holder

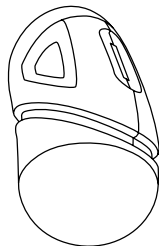
The Holder can be used to connect a cellphone or sports camera to your ClicBot. It uses a standard 1/4 screw.



Diameter	40*40*86.6 mm
Net Weight	55 g
Degrees of Freedom	Universal joint on the bottom: 0°~180° Horizontal knob of the main part: -90°~90°
Connector	bottom

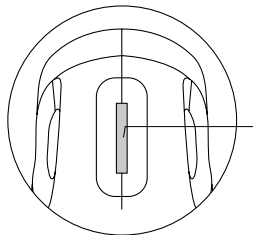
### ■ Smart Foot module

The Smart Foot module is a functional sensor module that primarily serves as the 'feet' of the ClicBot. The Smart Foot includes a highly-sensitive pressure sensor and a micro-processor to control and measure terminal pressure.



Diameter	39.3*41.8*69.4 mm
Net Weight	41g
Pressure Range	± 9.8 N
Connector	top

Smart foot has an orange indicator. After connecting onto ClicBot, the luminance of the indicator will automatically brighten when pressure is increasing. The indicator can also indicate the connection status and update status.



#### Connection Status

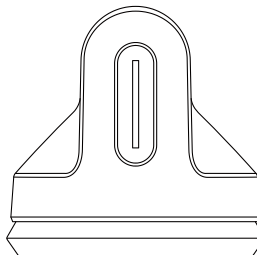
- Light On→Connected correct
- Light flashing→Waiting for module connection
- Light flashing quickly→Connection is wrong

#### Update Status

- Light On→Successfully updated
- Light flashing→Currently updating

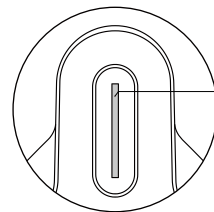
### ■ Suction Cup module

The Suction Cup module is a functional actuator module. The Suction Cup includes a negative pressure pump and a solenoid valve. By utilizing a micro-processor, it can control the air current and turn on/off the valve, allowing the ClicBot to perform climbing functions. It also uses the air pressure sensor to proactively check the stability of the ClicBot's movement.



Diameter	83.5*83.5*82.8 mm
Net Weight	145 g
Adsorption Capacity	Vertical direction: max.~20kg Horizontal direction: max.~5kg
Buckle Position	Top

Suction Cup has a green strip indicator. The indicator light keeps breathing when Suction Cup is functioning and stays on if the suction is successful. The indicator can also indicate the connection status and update status.



#### Connection Status

- Light On→Connected correct
- Light flashing→Waiting for module connection
- Light flashing quickly→Connection is wrong

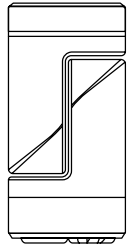
#### Update Status

- Light On→Successfully updated
- Light flashing→Currently updating



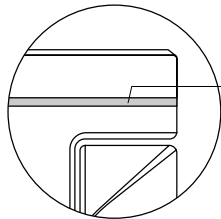
### ■ Distance Sensor module

The Distance Sensor module is a functional sensor module. It uses a high-precision infrared probe and built-in micro-processor to control and measure the distance from an obstacle.



Diameter	40*40*82 mm
Net Weight	53 g
Detection Distance Range	2~100 cm
Degrees of Freedom	Universal joint on the bottom: 0°~180° Horizontal knob of the main part: -90°~90°
Buckle Position	Bottom

Distance sensor has a red indicator. After connecting onto ClicBot, the luminance of indicator will automatically brighten when the distance is shortening. The indicator can also indicate the connection status and update status.



#### Connection Status

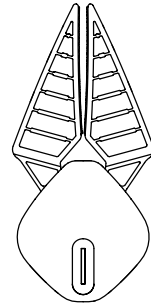
- Light On→Connected correct
- Light flashing→Waiting for module connection
- Light flashing quickly→Connection is wrong

#### Update Status

- Light On→Successfully updated
- Light flashing→Currently updating

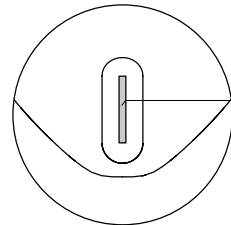
### ■ Grasper module

The Grasper module is a functional actuator module. It has a flexible bionic design and is controlled via a built-in micro-processor. It is able to grasp objects of various shapes and sizes.



Dimension	75*57*165 mm
Net Weight	98 g
Max. Weight	250 g
Max. Dimension	6 cm
Buckle Position	Bottom

Grasper has a yellow indicator which can also indicate the connection status and update status.



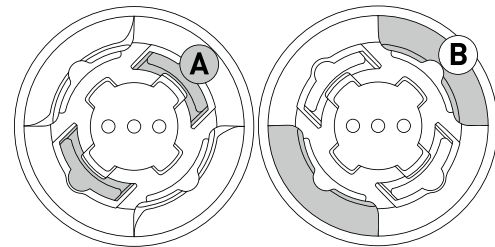
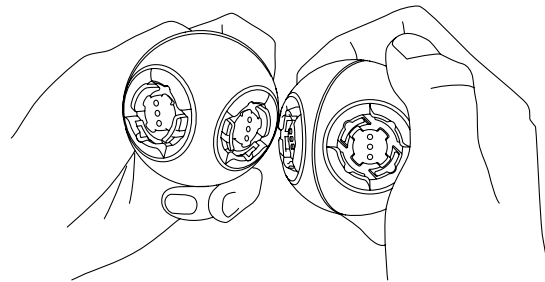
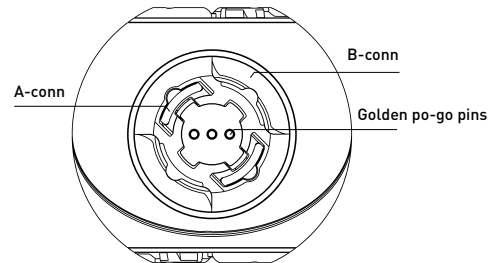
#### Connection Status

- Light On→Connected correct
- Light flashing→Waiting for module connection
- Light flashing quickly→Connection is wrong

#### Update Status

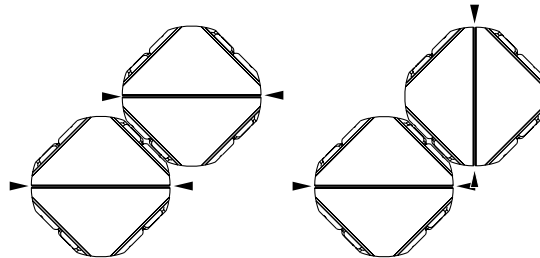
- Light On→Successfully updated
- Light flashing→Currently updating

All ClicBot modules can be connected to each other by connectors. A connector contains an A-conn, a B-conn and 'po-go' pins. You can connect two modules by interlacing the A-conn and B-conn, and the golden po-go pins transfer instruction and supply power.



**Note:** Align the A-conn of one module with the B-conn of the other to connect two modules

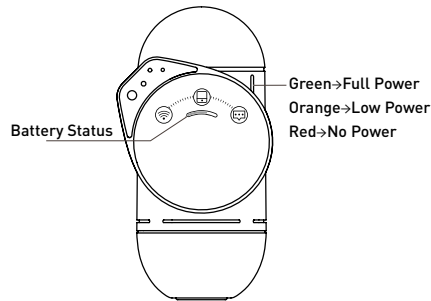
① Modules can be connected at opposite ends & in non-parallel directions.



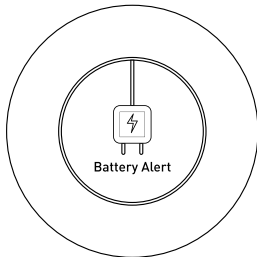
Parallel Connection

Non-Parallel Connection

The battery status of the ClicBot is indicated by different colors on the Brain Module power light. It can also be checked on the system menu.



When the power is low, an alert will show on the screen. Please charge the battery to ensure normal operations and to maintain battery life.

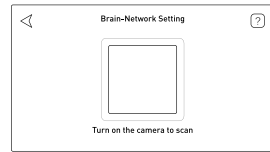


### Internet Connection

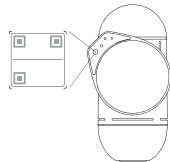
The Brain module can connect to the internet via Wi-Fi, and you can find updates for functions on the cloud server.

How to connect to the internet:

1. Open the ClicBot App, select the . Press "Network Settings" on the Brain Module, then enter your WiFi password. A QR code will generate – scan this to connect;
2. Swipe upwards on the screen of the Brain Module to view the system menu, then select the Network icon to begin scanning;
3. Using the ClicBot App, scan the QR code generated by the Brain module to connect to the internet.



QR code generated in ClicBot App



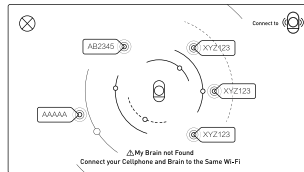
Scan the QR code with Brain module

### Device Connection

Brain module can be connected to ClicBot App via router or hotspot. It is suitable for remotely controlling setup by connecting to ClicBot App via router in the Wi-Fi scenarios.

How to connect to ClicBot App via router:



1. Connect Brain module and install ClicBot App to the same Wi-Fi;
2. Open the ClicBot App, select the . Select "Connect to Brain" and then select "Router Connection". The App will automatically search for the Brain Module connected to the Wifi Network. Choose the number of the Brain Module on the screen, and select "Confirm" to connect.

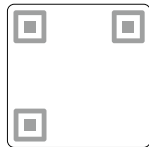


Brain module in ClicBot App

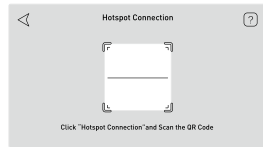
Connection via hotspot is suitable when Wi-Fi is not available or the signal is weak.

How to connect to ClicBot App via hotspot:

1. Swipe upwards on the screen of the Brain Module to view the system menu, then select the Device icon , and click "Hotspot Connection" to generate a QR code.
2. Open the ClicBot App, select . Click "Connect to Brain" and then select "Hotspot Connection" to begin scanning.
3. Scan the QR code with your mobile device to set up the connection.



The QR Code Generated by Brain module



Scan the QR code to Set up the Connection

### ■ Security Information



GB19865-2005、GB6675.1-2014、GB6675.2-2014、GB6675.3-2014、GB6675.4-2014



This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any 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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

FCC ID: 2AWR5-KY002

# IC

RSS-Gen Issue 4 December 2014" & "CNR-Gen 4e Décembre 2014:

--English:  
This device complies with Industry Canada licence-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.

--French:  
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 fonctionnement.

IC ID: 26344-KY002



Manufacturer's Name: Beijing Ke Yi Technology Co., Ltd.

Address: 8th Floor, Dimeng Building, Huayuan Road, Haidian District, Beijing

Product Name: ClicBot modular entertaining and educational toy

Trade Mark: ClicBot

Model number: KY002CK10

Operating Temperature: -10° C to 40° C

This device is in compliance with the essential requirements and other relevant provisions of Directive

2014/53/EU. All essential radio test suites have been carried out.

Detailed DOC file please visit our website: [www.keyirobot.com](http://www.keyirobot.com).

The device complies with RF specifications when the device used at 20cm from your body.

Care for the environment! Must not be discarded with household waste.

RF Secification:

Function	Operation Frequency	Max RF output power:	Limit
2.4G WIFI 802.11b/g/n[HT20,HT40]	802.11b/g/n[20MHz]: 2412-2472MHz;802.11n[40MHz]: 2422-2462MHz	11.96 dBm	20 dBm.

### ■ User Privacy

We understand the importance of personal information security, and will make every effort to protect the personal information of our users. We will take all reasonable and practicable means to avoid collecting irrelevant personal information. If it is necessary for us to do so, we will first obtain your authorization to use your personal information and store this on a local hard drive in accordance with relevant professional standards. Unless absolutely necessary, we will only process your personal information on the local hard drive, to avoid any unauthorized access, disclosure to the public, usage, modification, damage or loss.

For specific privacy policies, please refer to the ClicBot App or visit [www.keyirobot.com](http://www.keyirobot.com).

In the event of any defect to your ClicBot modular robot product or its accessories during use, we are committed to ensuring a 12-month maintenance-free service for any electronic components from the date of purchase, and a six-month service for any materials or motors from the date of purchase. This is in accordance with the User Manual, and provided that any faulty workmanship can be confirmed by a test technician.

Please contact [support@keyirobot.com](mailto:support@keyirobot.com) or your local retailer for any after-sales services.

📄 Please keep your receipt on hand to ensure after-sales service.

### ■ How to turn on/off ClicBot?

Long press the power button on the rear side of Brain module for 3 seconds to turn on ClicBot.

Press the power button on the rear side of Brain module and then choose the shutdown option to turn off ClicBot, or long press the power button for 4 seconds to force a shutdown.

### ■ Diagnostics - Auto Shutdown

To maintain the battery and motor performance, ClicBot will be shut down automatically in the following situation:

1. It hasn't been operated over 20 minutes;
2. Battery power is lower than 10%.

### ■ How long does ClicBot take a full charge and how long can it be used continuously ?

It takes 2.5 hours at 5V/2A to have it fully charged, and it can be used continuously up to 4 hours.

### ■ Is it a must to connect ClicBot to the internet while playing?

No, but it needs to connect to the internet to check for update.

### ■ Is it a must to control ClicBot Robot with ClicBot App?

No, it can be controlled manually with the screen of Brain module.

### ■ The maximum distance of remote control with ClicBot App

It depends on how to connect the robot to ClickBot App:

- Via router, it is up to 10m which may be different due to the performance of router.
- Via hotspot, it is up to 5m.

### ■ Can ClicBot's functions be updated ?

ClicBot modules can be upgraded online. Connect Brain module to Wi-Fi, click Home button “—” and choose “Update” to check/download the update.

Connect other modules to Brain module to auto start the update, follow the update instruction on the screen to upgrade modules.

### ■ The identification distance of gestures like shielding, waving and etc.

The gesture sensor is located in the upper-left triangle area of the screen of Brain module. Please keep your hand at a distance of 5-20 cm when shielding and waving, etc.

### ■ The detection distance range of Brain module

The gesture sensor is located in the upper-left triangle area of the screen of Brain Module, and it can detect the obstacle at a distance between 5 and 20 cm in front of robots.

### ■ The face identification distance of Brain module

The camera for face detection & recognition is located in the upper-left triangle area of the screen of Brain Module, and it can identify faces at a distance of 1 m.

### ■ The motion detection distance of Brain module

The camera for motion detection is located in the upper-left triangle area of the screen of Brain Module, and it can detect the movement at a distance between 1 and 5 m.

### ■ The role of the camera of Brain module

Brain module is equipped with a 1.2-megapixel camera which is capable for controlling the robot from the first-person point of view, face detection & recognition and motion detection.

### ■ The rotation range of the screen of Brain module

The rotation range of the screen is up to 24 degree in the horizontal direction which can be set in ClicBot App. Please do not rotate the screen by hand.

### ■ How to assemble a ClicBot Robot?

ClicBot is installed with a smart assembling guidance system. After choosing which robot is to be assembled, there will be a step-by-step instruction shown on the screen of Brain Module. The indicator light will flash to indicate where to be connected. The system will automatically check whether all the modules have been assembled correctly and show alert message on the screen in case of any error while the indicator light is fast flashing. And the system will automatically adjust the angle of connection as long as the two modules are correctly assembled.

### ■ Diagnostics – why does the indicator light of a module flash?

The indicator light is used for indicating the status of a module, mainly including:  
Solid light - Operation  
Breathing – Readiness  
Flashing – Waiting for being connected to a module  
Fast flashing – Connection error

### ■ Programming language applicable to ClicBot

Support graphic programming based on Google Blockly.

### ■ Editable modules applicable to ClicBot

Support over 20 editable modules, including the screen of Brain module, loudspeaker, the motor of Joint module, the motor of Wheel module, and the color of the strip lights of Skeleton module.

