



Gomer

User Manual V1.0

Contents

Included in the Box.....	1
Hardware Introduction	2
Working Environment.....	3
Switch Button and Connection.....	4
Idle Mode.....	7
App.....	8
FAQ.....	18
Caution and Warning.....	21
FCC Warning Statement.....	22

Included in the Box



Gomer X1



Building Block
X3



Charger X1

Included in the Box



Soft Hand	Gomer can grab and hold various objects, whether it is toy or household goods, or soft, fragile item. The maximum diameter it can hold is about 50mm, and the maximum payload is about 200g.
Upper Arm & Forearm	Upper arm and forearm can achieve multiple degrees of freedom, together with soft hand, they can grasp more effectively. Please do not put your finger between the two arms, otherwise it may nip and hurt your finger.
* Head	The screen on the head is used to show the expressions and product information of Gomer, such as product ID, Wi-Fi connection and so on. Camera is used to perceive the information of environment. The head can rotate about 90 degrees to see from different perspectives.
Apron Wheel	It can adapt to various ground conditions, even to climb some low hurdles. It will underperform in long wool material surface, such as some carpets, lawns and so on, as these will affect its speed and turning. If apron wheel falls out from the wheel, you can set it back manually.
Indicator	The colors and states of indicator will tell you the stage of Gomer, you can find the details as shown in the following table.
Reset Key	Poke it with a thin stick to restart the system of Gomer.
Charging Jack	Connected with charger to charge Gomer when it is in a low battery level.



* Warning: Do not rotate the head of Gomer with your hand, it will damage the motor in it. You can adjust the angle of head in the "Control" interface

Indicator

Indicator	Gomer
A solid white light	The system is initializing, and it will last about 30 seconds, please be patient.
A solid red light	The capacity of battery is in a low level, please charge it as soon as possible.
A solid orange light	Gomer is charging
A solid green light	Gomer is fully charged.

CHARGER DETAILS :

Model: MX24W1-1202000U

INPUT: 100-240V ~ 0.7A 50-60Hz OUTPUT: 12V 2A

Working Environment

As Gomer can move and turn around, it is better to provide a wide space for it. The ground should be flat and firm to help Gomer perform fluently. If you hope Gomer to work on a desk or other high platforms, you should be very cautious, as Gomer may fall on and be broken, even hurt you and your kids. Gomer perceives and analyzes the environment with the built-in AI and computer vision technology. Please try to make the light bright and the ground not reflective heavily, otherwise it will affect some functions of Gomer, such as the recognitions of face and expression..

Button Switch and Connection

1 Starting up

Press the switch button for about three seconds, and then the indicator will turn into a solid white light. Please wait for about 30 seconds, and Gomer will start and enter into "Idle" mode.



Switch Button & Indicator

2 The download of App

For iOS Users: Searching "Gomer" in App Store, and then download it.

For Android Users, Searching "Gomer" in Google Play, and then download it.

3 The show of information

In "Idle" mode, click the switch button, then the information of connection will be available in the screen of Gomer. It includes the product ID, the mode of connection, the name of Wi-Fi and its password. Please note that if the mode of connection is STA mode (via router and will be introduced in the coming paragraph), to keep it private, the password will not be displayed on screen.



4 Connection Gomer with App

For the connection of AP mode, choosing the Wi-Fi displayed in screen in the Settings of your mobile phone, and then entering the password, normally the password is 88888888, and you can change it by yourself.

Launch the App and click the Connect button, and then choose the Wi-Fi of Gomer you have activated. In this way, the connection of AP mode will be ready, now let us start to experience of the App of Gomer.

The default connection of Gomer is AP mode.



From the interface of Setting and Help in the App, you can find an option to change connection between the mode of AP and STA.

If you choose to connect with the mode of STA, please refer to the following guideline of process.

Enter into the Wi-Fi name and password of your router, and then save it. Open your App and then choose the name of Router to connect Gomer.

If you want to change the mode from STA to AP, tap the option of AP, and then open your App to choose the name of Wi-Fi generated by Gomer to connect.

5 Power off

Press the Button Switch for 3 seconds, the system will be powered off.



Switch Button

You can also power off Gomer by tapping the "Sleep Gomer" option in the Settings part of the App.



6 Charging

When you want to charge Gomer, please plug the power supply into the charging jack and connect to a power source, you will find indicator light turns into a solid yellow.

When the indicator light turns into a solid green light, it means Gomer is fully charged. Please notice that only our own charger is capable to charge Gomer, otherwise it may cause some potential risks.

Normally, it will take 3 hours to charge the battery, and it will work about 3 hours. When you pull up the charger, Gomer will be quiet, you can click the switch button to wake it up.

If you do not have an immediate use, please turn off the Gomer, otherwise the

capacity of battery
will be consumed
until runs out.

Charging Jack



Idle Mode

When power on Gomer, it will enter into the “Idle” mode, which is a rich embodiment of the advanced intelligence of Gomer. Without any outside control, Gomer can perform autonomously to move, to grab and stack blocks and other complex tasks. With the help of AI and computer vision technology, Gomer can recognize the pattern, your face and expression. In the scenario of pattern recognition, Gomer will complete the planning of the motion planning of mobile body and robotic arms according to the distance, size and pose of the objects. In the mode of face and expression recognition, Gomer will interact with you autonomously according to the specific scene.

Normally, Gomer will interact with you with the following ways.

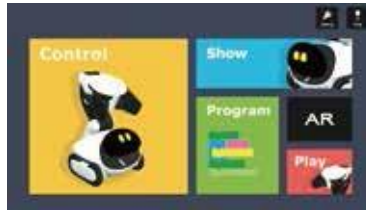
User	Gomer
Stranger	Say Hi, Shaking hands, Smile
Friends	Call your name, Shaking hands, Smile and so
Happy	Happy , Wave the arm, Rotating
Surprise	Excited, Interested
Unhappy	Unhappy, Making you happy
Poker-faced	Yawn, Puzzled

Please note that Gomer will perform autonomously, according to the scenarios and your expression. He will interact flexibly with its playful sound, movement and so on.

App

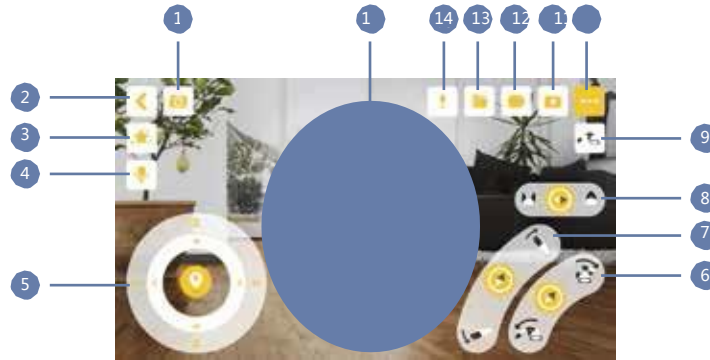
The content of App is very rich, and we will update it constantly to improve user experience.

The content of App is mainly divided into five modules, which show the functions of Gomer respectively. In addition, it also includes the parts of Setting and Help to guide customers to learn and adjust some parameters of Gomer, such as volume and connection.



Control	Control Gomer to move, grasp, transfer message, express multiple expressions, take photos, record videos, etc.	AR	You can add rich virtual objects in the real scene, and control Gomer to go through it to find the target.
Show	Gomer will remember your name, greet, shake hands, and interact with you. Gomer will also identify the building blocks to make	Play	Users can play game with
Program	Based on the language of Blockly, users can program their own robots. You Just need to drag and drop blocks to program	Setting/ Help	In the part of setting, you can adjust the parameters of Gomer, such as his volume, connection mode, power off Gomer and so on. In the part of Help, you can learn more information about the five functional modules of App.

1 In Control module, the use of each icon is as follow.



- 1 Camera change: Between the camera of Gomer and smart devices (mobile phones, tablets, etc.).
- 2 Exit from control mode.
- 3 Expressions: Including happiness, sadness, love, etc., it will perform accompanied with sound and motion.
- 4 Message transfer: Press the icon to record message, Gomer will convey it with his vivid voice.
- 5 Motion control of body: Control Gomer to go forward, backward, to turn left and right. The speed of movement can be adjusted with the distance of slide.
- 6 The motion control of upper arm.
- 7 The motion control of forearm.
- 8 The motion control of soft hand.
- 9 One key to grasp and recover: Press the icon, Gomer will be quickly realized to the position for grasp and recover.
- 10 More options: Show more functions of Gomer.
- 11 Image shooting: Taking pictures from the perspective of Gomer or your smart phone.
- 12 Video shooting: Recording videos from the perspective of Gomer or your smart phone.
- 13 Album: Used to store images and videos.
- 14 Tips: Help users to learn the functions of each icon.
- 15 Motion control of head: To control the movement of head in the marked areas.

2 Show

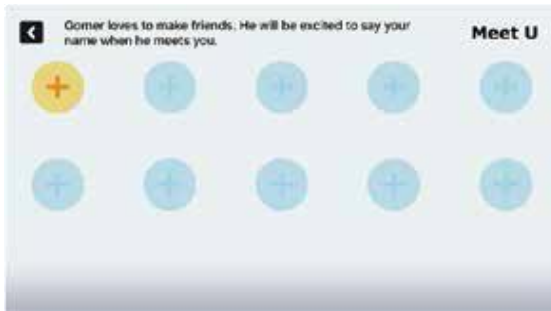
In this interface, you will find five skills of Gomer, including meet U, shaking hands, expression recognition, grasping and stacking of building blocks. Notably, more skills will be updated continuously in the future.



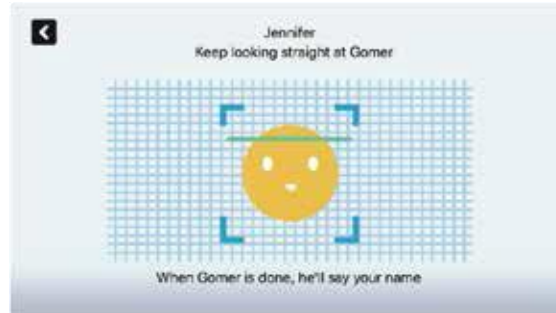
1) Meet U

Click the + icon to add a new name.

Enter the name or other content you want to add, such as "Jennifer", and it should be within 20 letters.



When Gomer scans your face, you need to look at the screen straightly within the distance of 30-70 centimeters, and when the scan is successful, Gomer will call you name.



2) Shake Hands

After the click of the "Start" , Gomer will stretch out his hand to stand by, you just need to put your hand into his hand, and then Gomer will shake hands with you.



3) Expression Detection

After the click of "Start" , Gomer will try to read your expression and engage in rich expressional interaction with you.



4) Auto Grab

After the click of "Start" , Gomer will try to find and grab blocks. Gomer will be very happy if he succeeds.

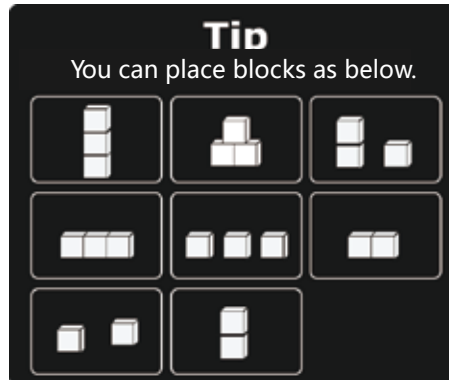


5) Stack Blocks

After the click of “Start” , Gomer will search for blocks and stack them. If succeeds, Gomer will be happy to celebrate. If not, Gomer will be disappointed.

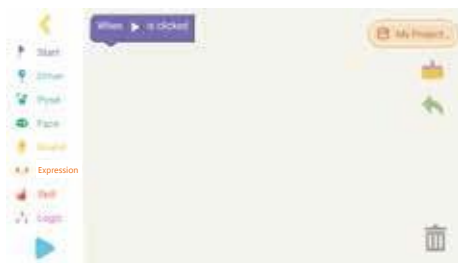


In addition, Gomer can stack blocks in various forms according to the number and layout of blocks. You can find them in the following tips.



3 Program

The graphical programming of Gomer, is based on the language of Blockly from Google. It is designed for the beginners especially kids to learn the basic knowledge of programming. According to the aim of your program, you can choose blocks in various groups of modules, and then combine them together to design your own program. After the design is completed, click the “run” icon, Gomer will perform as your design.



Start	The “Start” on the left column, it will work when the condition is satisfied, such as when Gomer sees a person. Another option is Back to “Start” .
Motion	You can adjust the movement of Gomer, such as move forwards, backwards, turn right and so on, the speed of Gomer can also be set.
Pose	You can design the pose of head, arms, hand, and the angle of them can also be set.
Face	With the drawing board, you can design the contents that you want to show on the screen of Gomer, such as your name or a birthday cake, you can also set the time of display.
Sound	You can input the words or record message.
Expressio	A lot of expression modules you can choose to design.
Skill	Options for the skills of Gomer, such as shaking hands, stacking the blocks and so on.
Logic	Containing the logic blocks of conditions and selections.

The samples of Graphical programming:

You can follow the tutorial about how to control Gomer step by step, such as his motion, sound and expression. You can also set the logic of the program, to design you own Gomer robot.



4 AR(Augmented Reality)

Select a flat place to lay out virtual objects, such as candles, lamps, cups, etc. You can also control Gomer to go through from these virtual objects.



The AR game is only available for iOS system at present, which requires iPhone 6s or above running on iOS 11.0 or later.

5 Play

In the game of Racing Escape, after you click the button of "Start" , please follow the guideline and you will learn how to compete with Gomer. Gomer will respond differently after winning and losing the game.

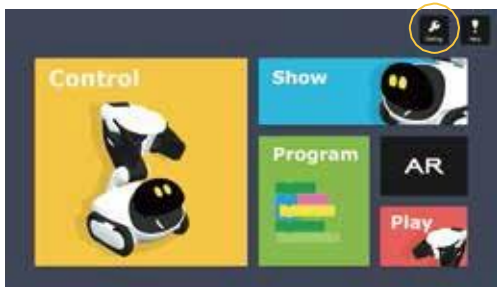


Racing Escape



6 Setting and help

Clicking the icon of "Setting", you can adjust some information of Gomer, such as volume adjustment, connecting mode setting, software updating and so on.



AP Mode



STA Mode

1) The volume adjustment of Gomer :

There are three levels for adjustment, low, medium and high.

2) Sleep control

Tap "Sleep Gomer", and it will turn Gomer off.

3) Connection mode selection (AP and STA)

There are two ways of connections, which are the modes of AP and STA, and AP is the default mode.

In AP mode, the Wi-Fi is generated by Gomer, so it can be accessible anywhere, but you can't surf the Internet during this period.

In the STA mode, the Wi-Fi is from the router in your house or office, so it is on the basis of Internet. You can be free to use other Applications of your phone, such as mailbox, WhatsApp and so on. You can also take pictures and record videos from the perspective of Gomer and then share them in the social media.

Transformation between the mode of AP and STA, you can choose it according to the environment you are, and for the detailed guideline, please refer to the part of connection above.

4) Language

You can set the language as you want.

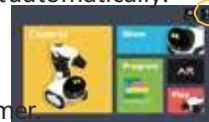
5) The version information of hardware and App

If the version of hardware and App are not the latest, you can choose to update them. Gomer should be charging during the time of update. When it succeeds, Gomer will restart automatically.

6) The privacy and terms of App

It introduces the policy about the privacy and term of App.

Click on “ Help” , and you can learn the instructions to use Gomer.



FAQ

1 Can Gomer work without a phone/tablet, remote controller or App ?

Yes, definitely. In the “Idle Mode” of Gomer, he doesn’ t need any external control. He can just like a little boy of three year old, wants to explore the world naively. He will be glad to say hello, catch everything he is interested in, stack blocks, interact with you and so on.

2 Besides blocks, can Gomer grab other objects?

You can control Gomer to grab banana, cake, kettle and so on. You can also stick specified label on the objects, Gomer will find the pattern and grab the object automatically.

3 Can I use it on the carpet?

Gomer can walk on the carpet, but the speed will be affected and the Apron Wheel will fall off sometimes. It is recommended to make Gomer run on a flat and hard ground.

4 Can Gomer avoid the obstacles automatically ?

Gomer is too young to avoid obstacles automatically. When Gomer goes into the bottom of the bed or stuck in the corner, he needs to get help from others.

5 How to deal when Gomer performs abnormally?

a If there is no response of Gomer to the operation and command of App, please try to return to the main page of App and then re-enter.

If it is still unsolved, try to close the App and launch it again.

Reset Hole



b If the issues continues, please try to press the Button Switch of Gomer for 3 seconds, to turn off Gomer, and then start the Gomer after 1 minute.

c If you find the problem persists or you can't turn off Gomer, use a needle or other thin items to poke the Reset Hole in the back of Gomer to turn it off, and then to start it again.

6 I can't access the Internet when my phone is occupied to connect the Wi-Fi of Gomer. Is there any other way to connect?

Gomer supports both AP and STA connection modes. As AP uses the Wi-Fi generated by Gomer, it can be accessible anywhere, but you can't surf the Internet during this period. The STA is workable on the basis of Internet, you can enjoy the Internet in this way.

7 The photos in the album of App can be shared directly?

In the STA connection mode, you can choose and share these photos directly on Facebook, Instagram and other social media.

8 Is Gomer waterproof?

No, Gomer is not waterproof, so you should be careful when Gomer is near from water. Do not clean Gomer with liquid. Please note that the warranty for Gomer does not cover the situations of damages caused by liquids.

9 Can Gomer be upgraded later? How to upgrade it?

In order to enrich the functions of Gomer and enhance the user experience, we will update the software of Gomer continuously. Be sure to download the latest App in App store.

When the App is connected with Gomer, it will detect the version of software automatically. If the software can be updated, you can choose to upgrade it. You can also choose to upgrade the software of Gomer in the Setting part of App. Please keep Gomer charging during the process of updating.

Gomer will restart automatically after the upgrading.

10 Is the volume of Gomer adjustable?

Yes, it is, you can adjust it in the setting of App. There are three options for your choice: low, medium, and high.

11 What can I do if Gomer can't move normally (such as an issue of Apron Wheel)?

Gomer can move fluently with the help of Apron Wheel, make sure the Apron Wheel is properly installed and is not jammed. If it is stuck, try to clear it.

12 How long will it take to charge the battery? What will happen if I forget to pull it out after charging?

It takes about 3 hours to charge the battery. Gomer will stop charging automatically when it is fully charged.

13 Can I pull the head and arm of Gomer?

Do not do like that, it will damage the parts inside.

14 There is no response when I press the Switch Button, what is wrong with it?

Gomer may be in a low level of battery, please charge it

15 How long can Gomer work when the indicator turns red?

Normally, Gomer can continue to work about 15 minutes. It demands on the intensity of task, if Gomer performs very hard, such as moves in a high speed, the power may be off less than 15 minutes, at this time, Gomer will sleep automatically.

16 When I turn on Gomer, I find the indicator is in the state of solid red light, what happened?

The capacity of battery may be low at this time, please charge it.

17 Can Gomer play while charging?

No. Gomer can't. You can wait after it's full of power.

18 I pulled out the power source after I charged Gomer, and the other day, I found that I can't turn Gomer on, what happened?

The Gomer is still in work state after the power source is pulled out, the power will be consumed gradually. If you do not let Gomer work immediately, it is recommended that you turn it off.

19 Gomer can't find blocks in the show of Auto Grab, what happened?

The range of Gomer's vision is limited. It is better to place the blocks in front of Gomer and keep them in the scale of 7 to 70 centimeters. It is also recommended not to move the blocks during the show.

20 Gomer does not perform the show of Stack Blocks, why?

In the vision of Gomer, there should be more than two blocks before him, and then he will start to perform. Please make sure of it.

21 Gomer fails to stack blocks consistently, what happened?

There are many ways for Gomer to stack blocks, sometimes Gomer want to challenge himself, so be patient about it.

22 Is the function of remote monitor and control available now?

From the feedback, for this function, some of our partners have some concerns, as this function may raise potential risks relevant to privacy, especially about kids. We are collecting more information to make sure of this function, when it gets clear, we will update this function in time.

23 Can I have the charging station now?

At the moment, it is not available, it should work together with the function of remote monitor and control, so we will update them together.

Caution and Warning

WARNING: Please read all safety information and operating instructions before using Gomer, to avoid personal injury or damage to property.

CAUTION: It is recommended to examine Gomer charger periodically for conditions that may result in risk of fire, electric shock, or injury to persons (such as damage to the output cord, blades, housing, or other parts) and in the event of such conditions, the charger should not be used until properly repaired. Do not allow children to play with the charger.

WARNING: To avoid damage or injury, do not attempt to remove Gomer's shell. No user-serviceable parts are contained inside. The lithium battery inside can't be replaced.

CAUTION: As with all electric products, precautions should be observed during handling and use to prevent electric shock.

CAUTION: Gomer and blocks are not suitable for use by children under the age of 8.

CAUTION: Do not attempt to charge non-rechargeable batteries with the provided charger. Attempting to charge a non-rechargeable battery can cause an explosion and/or fire.

CAUTION: To avoid pinching, do not attempt to put your hand and fingers into the gap of Gomer's arms.

CAUTION: Be careful to hold Gomer to avoid injury or damage, as it is heavy.

CAUTION: To avoid damage or injury, keep Gomer away from water and other conductive liquids.

WARNING: Gomer and his accessories may contain small parts, which can present a choking hazard to small children and pets. Keep such small parts away from small children.

WARNING: Long cable may cause a strangulation hazard.

WARNING: If you have epilepsy or have had seizures or other unusual reactions to flashing lights or patterns, consult a doctor before playing mixed-reality games (combined video and physical games).

WARNING: To avoid damage and injury, please charge the battery only with a GLI provided charger and cable.

CAUTION: Battery should be only charged by adult.

CAUTION: Please be careful to pick up Gomer and pay attention to safety, so as to avoid the loss of personal injury and property.



FCC Warning Statement

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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

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