

Yonbo Product Manual



Quick Start Guide

Start Up

Place the robot on a flat surface, then press and hold the chest button for 2 seconds until the white light turns on, and then release. The startup process takes approximately 20 seconds, so please be patient. When you hear the robot say "I am ready," it indicates a successful startup.

Create AI Character

Scan the QR code below to download the XORIGIN AI app. After registering and logging in, click the "+" icon on the homepage labeled "Add Robot & AI Character," and follow the prompts to fill in your child's information to create an AI character.



App Download QR Code

Connect to the Internet

After creating the AI character, enter the device search page, click on the corresponding device to connect, select WiFi, and enter the password. Wait for the verification to complete.

Dialogue

Once the connection is successful, the robot will automatically enter voice conversation mode, allowing you to engage in continuous dialogue with it.

Explanation of relevant terms and pronouns

Yonbo

Yonbo is the category name of this AI robot and the initial name of the robot. You can define a personalized nickname for the robot in the APP, and after modifying it, you can use your name to wake up the robot by voice, but Yonbo is still valid.

AI character

AI character is a virtual identity of the robot Yonbo, which uses Yonbo's body as a carrier to build and refine its personalized interaction mode by communicating and conversing with the child, and each AI character is unique.

Awakening

To bring Yonbo from standby or hibernation state into the operation state of voice dialog, use the voice wake-up and key wake-up methods respectively.

Main functions of the product

Intelligent voice interaction

- No need to wake up words, you can have a continuous voice dialog with the

robot Yonbo.

- Support the interrupt function, you can interrupt the robot at any time when it is talking without waiting, closer to the mode of conversation between people.
- With rich emotional expression and action interaction, and sense each other's emotions, making it more like a close companion for children.
- Powerful large language models provide rich knowledge content, children's encyclopedias, to answer a variety of whims.

AI character

- Create a unique companion for each child.
- It has the ability to cycle memory, summarizing the child's interesting topics and basic information.
- Leads the child to grow in a braver, more confident and healthier direction.

Multimodal identification

- Using advanced multimodal recognition technology, the robot Yonbo can “see” the surrounding environment through the camera, real-time recognition of objects, scenes and characters.
- Yonbo can not only recognize the surrounding things can also actively express their own views to communicate, like people through the eyes to perceive the outside world and have their own thinking about it, such as a real partner to accompany the children around.

Multi-functional control

- Supports both voice control and wristband remote control.
- Not only can it handle simple commands such as “forward and backward”, but it can also parse more complex commands such as “walk a square”, and you can even change its expression and movement through voice to give it more personalized performance.

Books and games

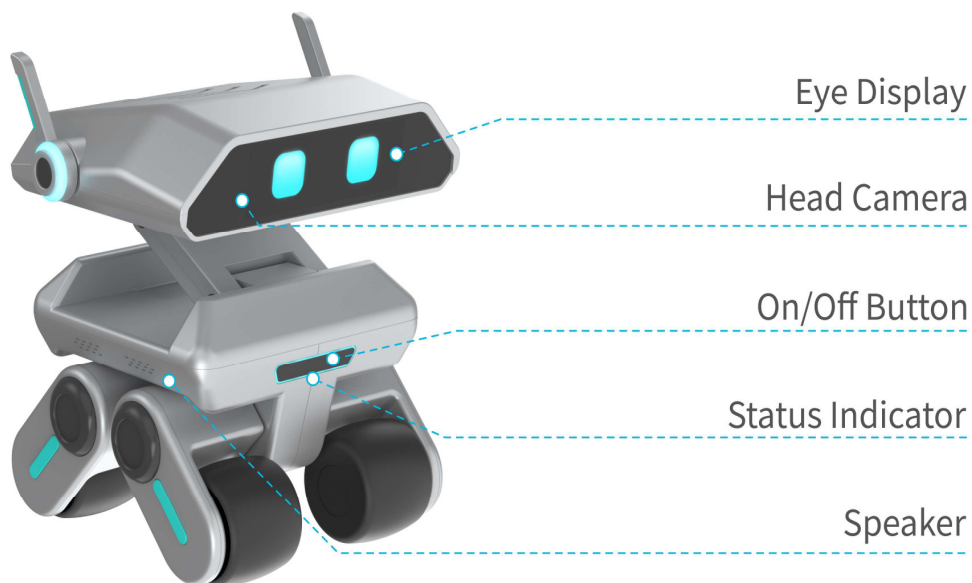
- With the ability to tell stories, the child can ask questions around the content of the book at any time, and even with Yonbo to play with imagination to adapt the content of the story, so that the child to regain the fun of reading.

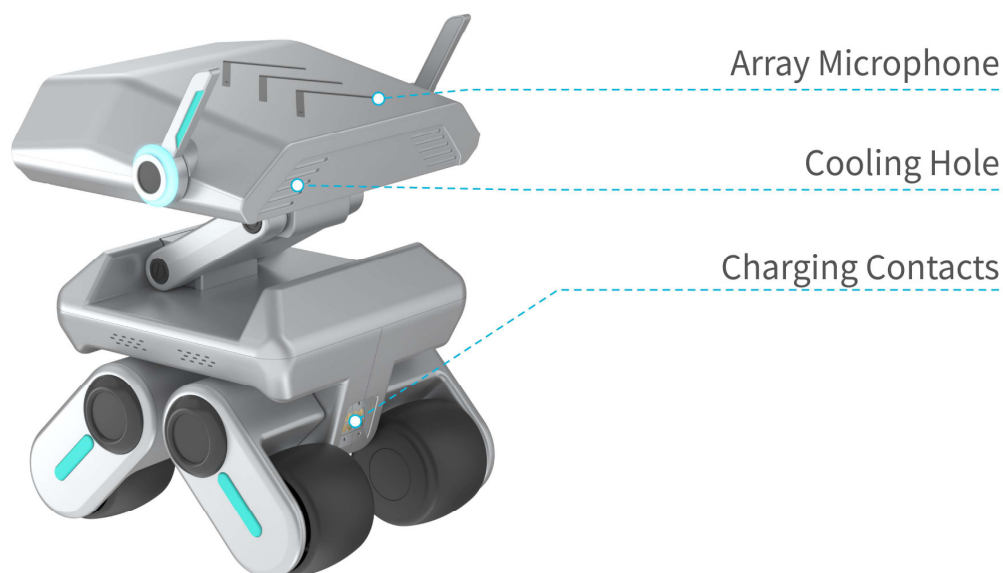
- There are a variety of interactive games, exercise the child's reaction ability memory ability thinking and logic ability, in playing games for growth.
- With OTA upgrading ability, from time to time to update picture books and games, no longer unchanged.
- The introduction of the development mode, so that the robot and the child to upgrade together to increase the child's communication activity.

Daily summaries and psychoanalysis

- Analyze your child's daily mood changes, record and summarize what happened in the day's conversation.
- With psychological state assessment, MBTI assessment, the five major personality analysis, security analysis, so that parents can better understand the state of their children's mental health.
- Emergency message alerts remind parents to pay attention when there is a mental health risk, so that problems can be detected from the beginning and the occurrence of mental illness can be minimized.

Part Name





Precautions Before Use

Before using Yonbo, routinely check the following to ensure safe use.

- Whether Yonbo is sufficiently charged.
- Is the wristband remote control fully charged.
- Whether Yonbo's limbs are intact. Whether the front and rear legs can move flexibly and are not stuck with foreign objects.
- Whether there are signs of looseness or damage on the head, neck, chest, legs, etc. of the Yonbo.
- Whether the surface of the camera and microphone on the head of Yonbo is clean and free from foreign objects.
- Whether the App is running normally.
- Please do not turn on the Yonbo while holding it to avoid injury.
- Do not place the Yonbo in a place where there is a risk of falling or where it is unstable, to prevent the Yonbo from falling or tipping over and causing injury.
- Do not place fragile or dangerous objects around the Yonbo.

Preparation before manipulation, please pay attention to the following matters before using the bracelet to control Yonbo.

- Before each manipulation, you should check the basic condition of the Yonbo, including the battery power, operation status, and appearance parts. If there is any abnormality, please stop using it and contact the official after-sales service for help.
- If the Yonbo makes abnormal noise, please stop using it immediately and contact the official after-sales service for repair.
- If the status indicator shows red light after power on, it means that the battery is low and Yonbo may not have enough power to complete your normal operation, please make sure that the battery is sufficient before operation.
- Before lending your Yonbo to others, please help them to learn the basic operation of Yonbo.
- Please do not push or pull the limbs of Yonbo or move Yonbo when it is turned on to prevent your hands from being pinched.

Packing List

To ensure you enjoy a quality user experience, please double check the following box contents when you first open the package.

Item name	Quantities	Description of use
XORIGIN YONBO	1	main products
Charging Dock	1	used for charging Yonbo
Charging Adapter	1	charging adapter
Charging Cable	1	charging cable
Wristband Remote Control	1	for remote control of Yonbo within line-of-sight
AAA battery (PRC)	2	for powering the bracelet remote control
User Guide Book	1	teach children the basic use of Yonbo in

		picture book format
Yonbo Gaming Festival Book	1	background, triggers, and gameplay of the Yonbo game
Warranty Card	1	warranty coverage only, more warranty content please see the official website “after-sales service policy”.
Disclaimer and Safety Operation Guide	1	disclaimer
Quick Start Guide	1	quick start guide for users
Camera Cover Sticker	1	on-demand affixing to Yonbo's head camera position to protect user privacy
Game Card	6	game props, with Yonbo Gaming Festival Book for play experience
Game Card Base	6	game props, with Yonbo Gaming Festival Book for play experience

Guidelines for use

Switch-on instructions

Switch on method

- Please press and hold the on/off button for 2 seconds, and let go after the status light on the chest lights up white to complete the power-on operation. Yonbo needs to load a lot of smart applications during the boot process, so the whole boot process needs you to wait for about 20 seconds patiently. When you see Yonbo open its eyes and say “I'm ready for you.”, it means Yonbo has been successfully turned on.
- Please turn on the device on a flat surface.

Shutdown method

- Please press and hold the on/off button for 2 seconds, then release the button when the status light in front of the chest lights up yellow to finish the shutdown operation.
- If you don't wake up Yonbo within ten minutes in the dormant mode, Yonbo will turn off the power by its own initiative.

Create AI character

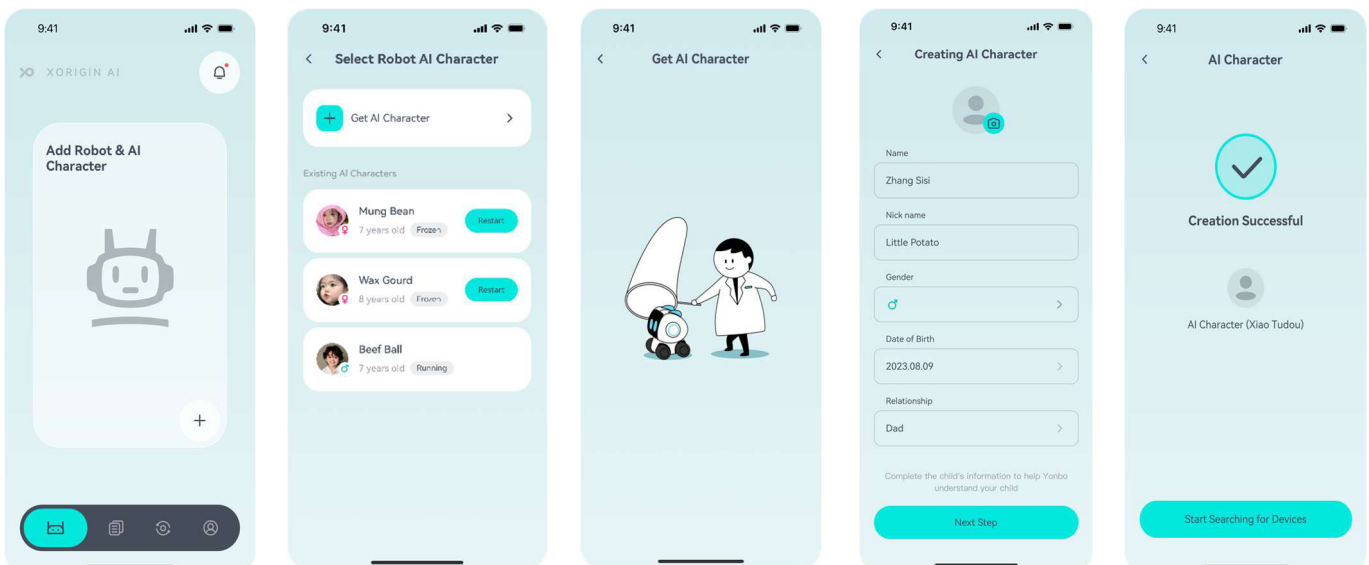
1. First of all, you need to download XORIGIN AI APP, complete account registration and login.



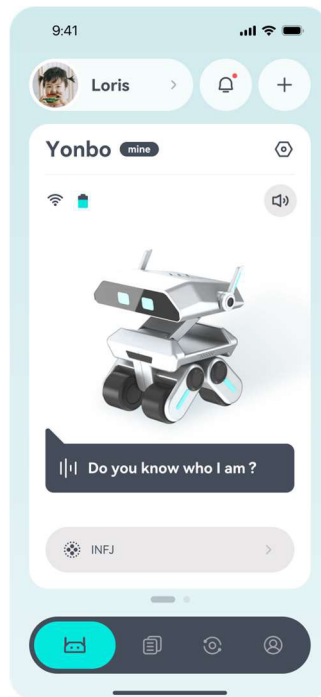
App Download QR Code

2. Creating the portal

If it is the first time to create an AI character, click the “+” sign in “Add Robot & AI Character” on the home page of the app to enter the interface of “Select Robot AI Character”, and then click to get the AI character. Click “Get AI Character” and follow the prompts to fill in the child's information to create the AI character.



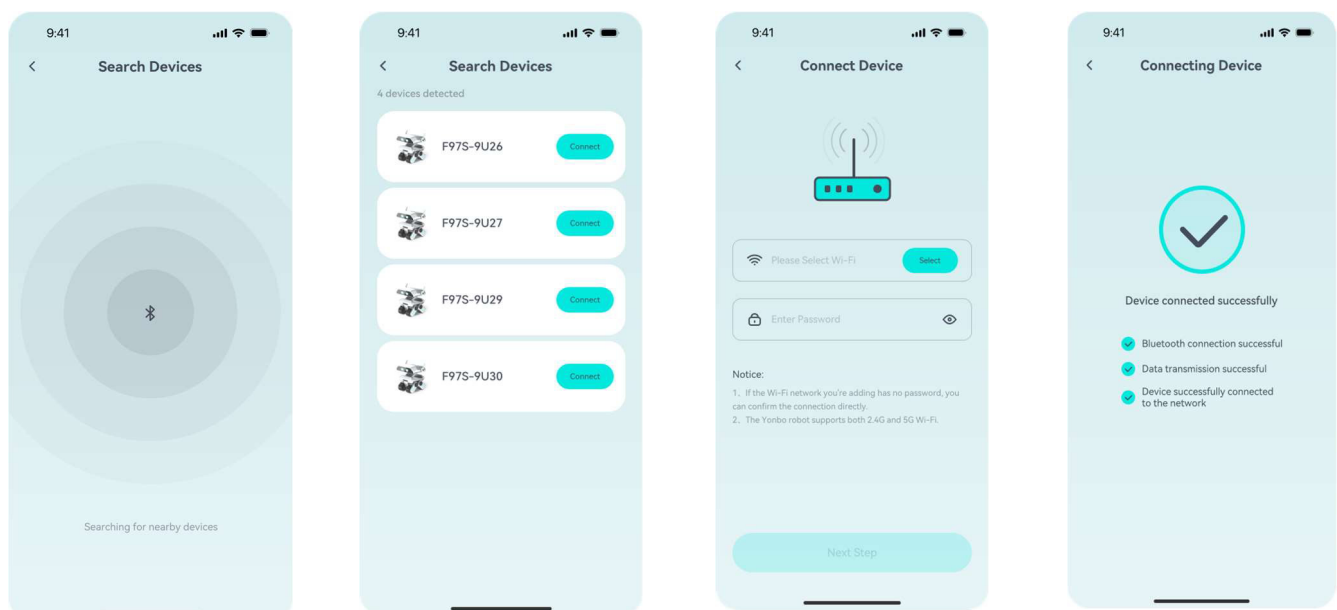
If you want to add a new AI character, click the “+” sign in the upper right corner of the console to enter the creation interface, and follow the same steps as above.



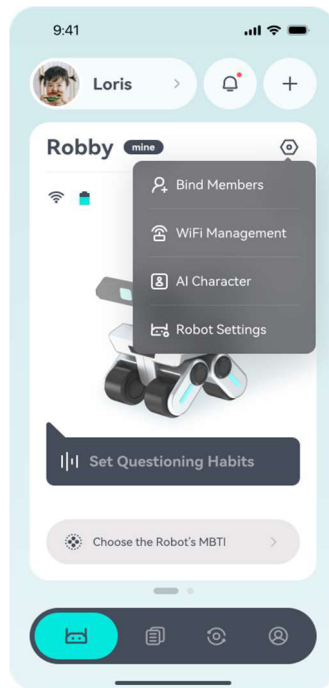
3. After the creation is completed, select the robot that needs to be connected for AI role granting in the search device interface, and finally select the WIFI network and enter the password to connect to the network before the robot is considered to be successfully granted the AI role.

Network setup

When adding a new robot device, you need to configure the WiFi network after creating the AI role.



To add a new network to the current robot device, click the gear icon in the upper right corner of the robot card and click WiFi Management to enter the network configuration interface.



***Note:** 1. The network setting requires the robot device to be powered on and in the same space as the cell phone, and you need to turn the cell phone's Bluetooth on.

2. You can't use any voice interaction function when there is no network, if you have configured the network, Yonbo will automatically network into the conversation state when it is turned on, when the screen shows no network state, you need to go to the cell phone app to configure the network.

Description of functional use

1. Voice interaction

- After assigning the AI character and configuring the network successfully, and when Yonbo says “The network is successful, come and talk to me”, you can start the voice dialog.
- Yonbo will always listen to what you say, i.e. you can interrupt Yonbo while he is talking.

I'm going to school today.

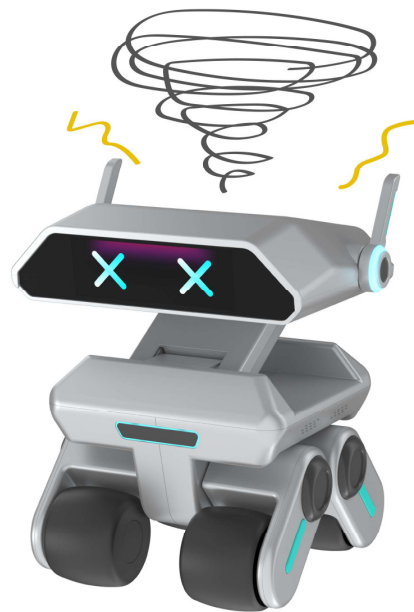
Wow. School must be fun.



- Yonbo will listen to you carefully. It is recommended that you have a voice conversation with Yonbo in a quieter environment; noisy environments can interfere with Yonbo's voice recognition.

♪ # ☆...Aa..啊-呀...

@%..^&~、



- If the conversation appears to be lagging, it may be due to network latency, so please check your network status.

What do you think we'll have for dinner tonight?

.....



- Yonbo has a rich set of facial expressions and body movements during conversations. Gemba has a rich knowledge base and can answer all kinds of questions for you.

Do you know why the sky is blue?

The sky looks blue because of



- Yonbo can also handle simple motion control commands, the supported commands are as follows: dance, turn around, walk forward, walk backward, turn left, turn right, pout, make a scared face. If you want to realize complex commands please enter the control mode.

Give me a dance.

Yeah, la-la-la-la! Let's see how I'm doing.



2. Multimodal map recognition

- Say voice triggers with “look” to Yonbo, e.g. “Look what's in front of you”, “Look at the picture I drew”.

Look what I'm wearing today.

You're wearing a pair of black trousers today.
I think they look really nice.



3. Control Mode

- Complex voice control: Say “exchange control” to Yonbo to enter the control mode, you can say complex action commands to Yonbo, such as “walk a square”, “walk forward 1 meter and then turn right 60°”. You can say complex action commands such as “walk a square”, “walk forward 1 meter and then turn right 60°”.

exchange control

Control has now been switched.
Please be.....



Walk forward 30 centimeters,
then turn left 120° and lie down.

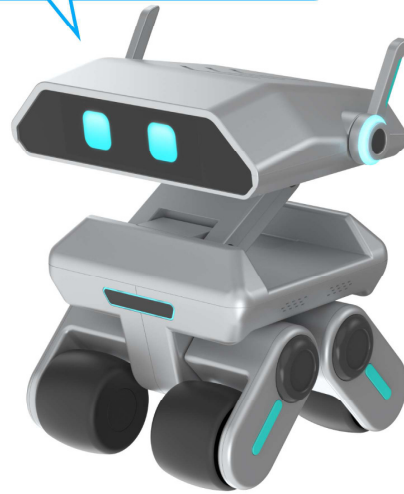
get it



- Wristband Remote Control: Use the wristband remote control to control Yonbo, for detailed instructions, please read the eighth point of the wristband remote control instructions, note that at this time you can not carry out voice dialog.
- Say “Exit” to Yonbo to return to voice dialog mode.

exit

It's back in conversation mode.



4. Book Mode

- Take out the picture book and point the QR code to Yonbo and say “scan QR code”, after successful scanning Yonbo will say “I am ready for the story” and enter the picture book mode successfully.

scan QR code

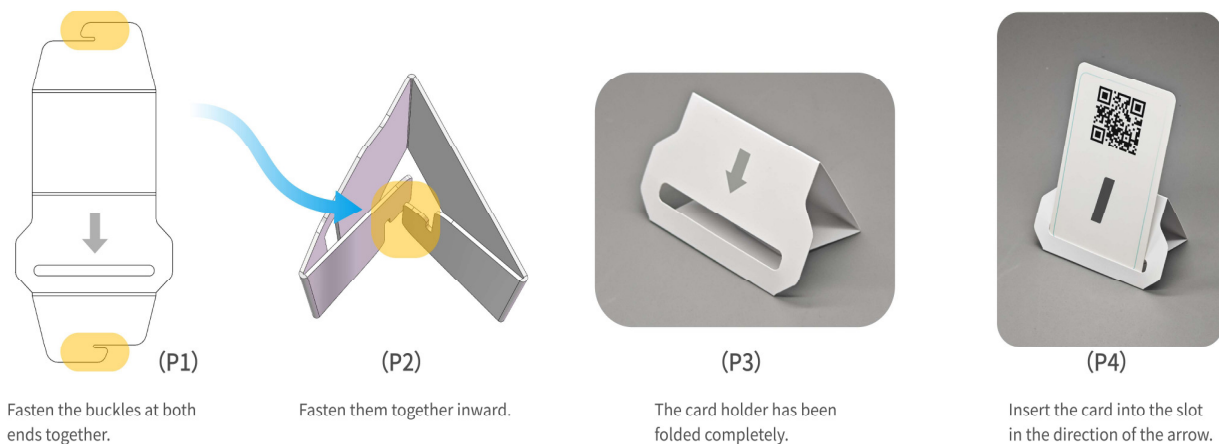
Start recognizing the QR code.



- In Book Mode, you can listen to Yonbo tell a story, ask Yonbo questions about the story, or even work with Yonbo to adapt and create a new story of your own.
- Say “exit” to Yonbo to return to conversation mode.

5. Game Mode

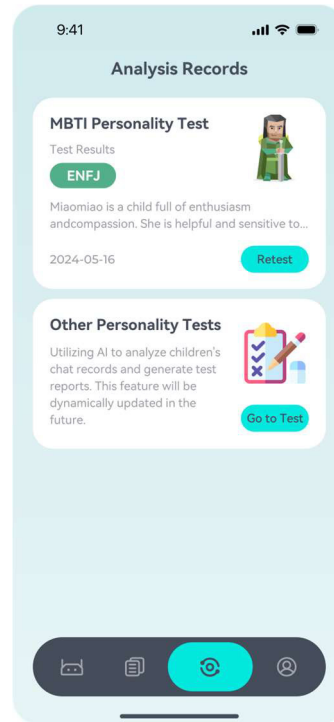
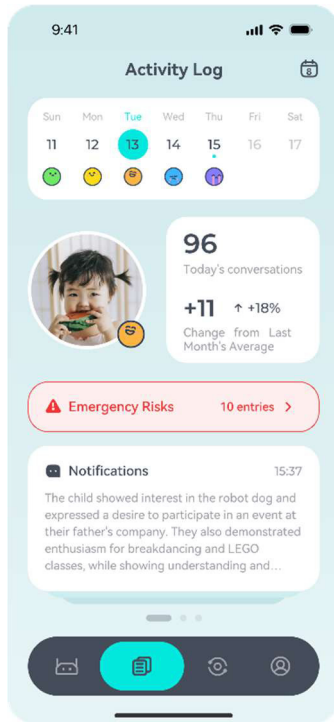
- Take out your gamepad, point the QR code at Gamba and say “Scan the QR code”, then start the game after successful scanning.
- After starting the game, please listen carefully to the voice guidance of Gamba and follow the voice guidance to operate the game.
- Some of the games will use related game props, which are game cards and game card bases. You need to assemble the card base, fold it according to the folding line and connect the seams at both ends to get the complete game card base.



- Use the corresponding props as required by the game.
- Say “Exit” to Yonbo to return to conversation mode.

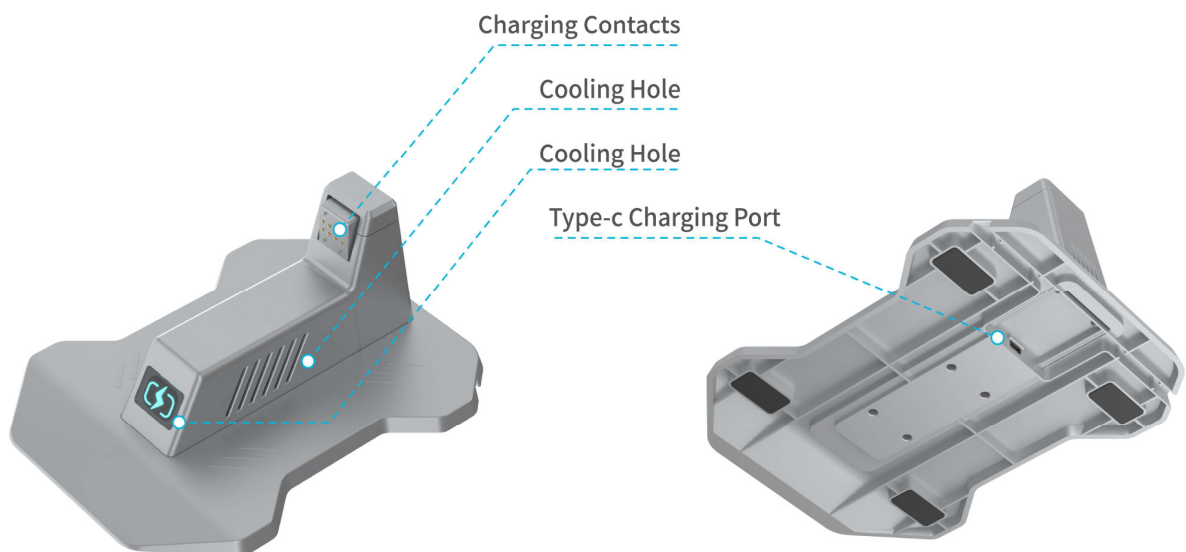
6. Daily summaries and psychoanalysis

- The accompanying log in the app allows you to view your child's daily mood changes as well as message alerts.
- Emergency alerts will be provided if there is a psychological risk.
- By analyzing the conversation data, the corresponding personality analysis report is generated.



7. Charging instructions

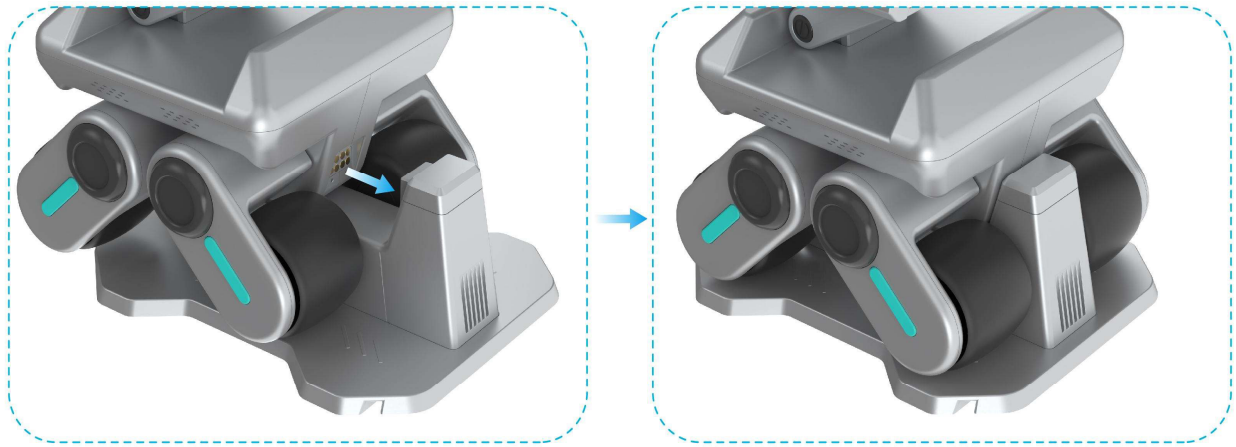
Charging Dock



Operating instructions

- After connecting the charging base to the power supply, if the indicator light of the charging base lights up white, it means it is working normally.
- Place the robot Yonbo manually on the charging base, when the bottom plane of the robot is in contact with the charging base plane, push the robot

back to the bottom, when you hear the sound of “snap”, the robot chest light turns orange and the charging base turns blue, it means that Yonbo is being charged.



- *NOTE:** 1. The robot should be charged normally, otherwise charging will fail.
2. Please do not use conductive materials to connect the charging base contacts / contacts behind the robot, before charging you need to make sure that the charging contacts are dry and not covered by foreign objects, during the charging process, please do not touch the robot randomly to cause displacement.

Standing upright with both legs causes the charging base and the charging contacts to have no contact.



Charging light effects

- Charging base light: plugged in -- not connected to the robot -- white light, plugged in -- connected to the robot -- blue light
- Robot chest light:
 - connected to the charging base -- charging power < 90% -- orange light,
 - connected to the charging base -- charging power $\geq 90\%$ -- green light

app power query

- Yonbo power on state, you can in the app home page in the upper left corner of the remaining power block query.

Power	Icon
>80%	
20-80%	
<20%	

***Note:** 1. When the robot's chest lights up red it means the power is less than 20% please charge it in time.

8. Wristband Remote Control

Rotary ring

Illuminated ring

Switch Button

watch strap



Battery cover

Install AAA battery (7 gauge)



Switching on/off and connections

- Long press the white button in the center of the wristband remote control for 2 seconds, if the sky blue indicator light is on it means the power on is successful.
- Long press the center white button for 2 seconds during the power on state, the indicator light effect goes out to indicate the power off is successful.

Wristband remote control light effect

Statuses

Light

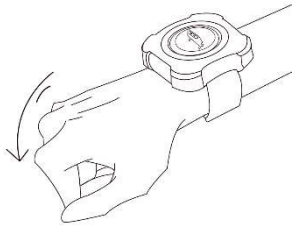
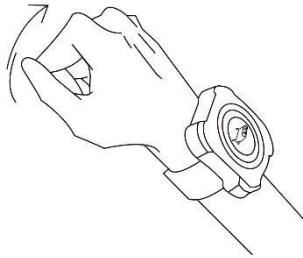
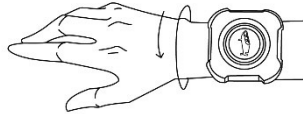
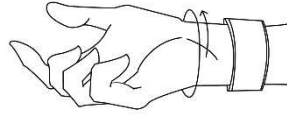
The wristband is not connected to the robot. Please wait.	Sky Blue Lights Flash
The wristband is successfully connected to the robot	Sky blue light is always on
Wristband power is too low and turns off automatically	red light flashing

***Note:** 1. One-to-one pairing connection is adopted between the remote control of the bracelet and the robot. Every time you start the bracelet, it will automatically establish a connection with the paired robot, i.e., the bracelet can not connect to other Yonbo robots.

2. If the bracelet remote control does not turn on, please replace the batteries with new ones.

Control methods

- Wear the bracelet on your wrist, turn on the bracelet and wait until the sky blue indicator light is always on, then send a command to the Yonbo robot “exchange control” to enter the control mode, and then swing your arm back and forth to perform remote control operations.

			
moving forward	moving backward	moving left	moving right

***Note:** 1. When the control mode is not entered, remote control operation cannot be performed even if the bracelet is successfully connected to the robot.

2. Voice control is not available when using the bracelet control.

9. Description of transitions of status

- **Running state:** In the normal running state, all the functions can be used normally.
- **Standby state:** In standby state, Yonbo will not respond to the voice dialog content. You can say “Bye bye bye” or after no voice communication for 10 minutes, Gemba will enter standby mode. If you want to wake up Yonbo again, you just need to call its name such as “Call Yonbo” (or the name you set in the app), and it will enter the voice operation state again.
- **Hibernation state:** In the hibernation state, Yonbo will not respond to the voice conversation content.
- **Hibernation state:** In hibernation state, only the ear light and the on/off state breathing light are left, which means that Yonbo is in low power consumption state and cannot be used. You can say “turn off the power” or in standby mode for 20 minutes without waking up the Yonbo, it will enter the hibernation state. In the dormant state, press the switch button briefly to wake it up and re-enter the voice operation state.

10. Significance of chest indicator

chest indicator	Status Description
white always on	robot powered on successfully but not yet in runtime
sky blue always on	robot is in normal operation mode/standby mode
sky blue breathing light	robot is hibernating and needs to be woken up with a short press of a button
red always on	robot's battery is below 20%, indicating that it needs to be recharged
orange always on	robot is in charging state with <90% battery level
green always on	robot is in charging state with ≥90% battery level

11. Significance of ear indicator

ear indicator	Status Description
white always on	robot powered on successfully but not yet in running state/robot not yet bound/not networked
white flash	AI Character unbinding
sky blue always on	voice dialog runtime/standby mode
sky blue darkening	sleep mode
yellow always on	book mode
blue always on	control mode
purple always on	game mode
red flash	get wrong

Technical Specification

Physical parameters such as size and weight of the product

Parameter name	Parameter
Weight	3.2kg
Normal standing (length, width and height)	219*196*256mm
CPU	Quad-core ARM Cortex-A55 64bit processor, up to 1.9GHz
Memory	4GB LPDDR4X RAM; 32GB EMMC5.1 ROM

Screen Type	TFT LCD
Screen resolution	320*960
WIFI	2.4G/5.85G dual-band, 802.11a/b/g/n/ac
BLE	BT5.0/4.2/2.1
Camera Pixels	5 megapixels
Microphone	4-wheat ring array
Pickup Distance	3m
Speaker	2W*2
Battery capacity	5000mAh
Charging power	65W
Combined range	3.5h
Charging time	1h
Max speed	1.5m/s
Temperature Range	0-35°C

Security and Legal Information

1. Legal statements

- Before using the robot Yonbo, please be sure to read this manual carefully and operate the robot in accordance with the contents of the manual.
- X-Origin(Shenzhen Xuanyaun Technology Co., Ltd.) will not be responsible for personal injury, property damage and other accidents caused by the use of the robot in violation of the instructions.

- The output of the Yonbo robot in the voice interaction is based on the limited data on which the artificial intelligence algorithm relies, and does not represent the position of Xuan Yuan, Xuan Yuan does not guarantee the truthfulness, accuracy and completeness of this output.
- The robot shown in this manual is intended to guide users on how to properly and better experience the robot, the robot in the display pictures may differ from the robot you purchased in terms of color, appearance, etc. Please refer to the actual product you received.
- In order to continuously improve the product features and your experience, the robot source treasure will continue to upgrade and optimize the electronic version of the instruction manual will be synchronized in the official website, APP and updated from time to time, you can get the latest version in a timely manner.
- Users should comply with the laws and regulations of the People's Republic of China when using the robot, and shall not use the robot to harm others/animals, otherwise you may lose the product warranty and other customer rights.
- This statement applies to the laws of the People's Republic of China.

2. Cautions

- Please be sure to check the operation status of Yonbo before maneuvering to avoid injury.
- Please start Yonbo on a flat surface.
- Do not disassemble the parts installed at the factory by yourself, otherwise it may affect the performance of the robot and even cause accidents.
- Do not use non-original parts to replace or add parts to Yonbo.
- Please keep alert when maneuvering, keep Yonbo and the area where Yonbo is moving within your line of sight, avoid hitting other people or property.
- Please do not operate Yonbo smooth, fall-prone surfaces such as ice or glass.
- If the robot is not used on the ground (e.g., on a table without edges), please pay attention to the movement trend of the robot to prevent falling problems that may cause damage to the robot and injuries to people.
- Do not mechanically hit, run over, or throw the robot. Do not place heavy

objects on the head of the robot.

- Do not pick up or hold the robot during its movement (including wheel rotation, leg and head movement) to avoid injury.
- Do not try to stop any moving parts of the robot during operation.
- If the joint motors or neck servos do not move properly during use, power off immediately for inspection.
- Please avoid Yonbo encountering the event of immersing into liquid, getting into debris, lifting chemical substances, scratching, etc., which will cause it to be damaged.
- This product is non-waterproof design, do not immerse the robot in water or get it wet, and do not use the robot in the rain.
- If your Yonbo has been wet or the body has been watered, please stop using it immediately and do not turn it on, and contact the after-sales service personnel in time.
- Do not leave the robot running for a long period of time, as this may impair the performance of the battery.
- Do not repair the parts, modify the circuit and battery pack without authorization, use the charger and charging base improperly.

If you use Yonbo in violation of the above tips, it may lead to Yonbo itself or cause damage to your and others' personal and property safety, and it may also lead to the loss of free after-sales service rights of Yonbo under warranty, for details of specific after-sales policy, please refer to "After-sales Service Policy".

Maintenance and upkeep

1. Mainframe maintenance

Please check that all parts of the Yonbo are in good condition. If in doubt, please contact the after-sales service team. Before maintenance cleaning, please make sure that Yonbo is turned off.

- Please use the original charging base for charging to avoid any damage to the battery or risk of fire.

- Please do not try to stop any moving parts in the work while Yonbo is in use.
- Please clean the surface dust of the charging contacts, microphone and other parts of Yonbo regularly.
- Please check the battery level and health condition regularly, and contact the after-sales customer service when the endurance time of Yonbo is obviously shortened.
- Please store Yonbo in a cool and dry place.

2. Battery maintenance

- Do not charge the battery for more than 24 hours, overcharging will shorten the battery life.
- It is recommended to re-charge the battery at least every 3 months or so to keep the battery active, if the battery is left unused for a long period of time, it will affect its performance.
- Do not over-discharge the battery deeply to avoid permanent failure of the battery, which cannot be recharged.
- The battery will automatically stop charging when it is fully charged. It is recommended to disconnect the battery from the charging base when it is full.

3. Maintenance of charging base

- Please use the original charging adapter for power supply.
- Please clean the surface of the charging contacts regularly.

4. Maintenance of wristband remote control

- Please do not shake the wristband violently, please pay attention to shockproof when using and storing.
- If you don't use the wristband for a long time, please take out the dry battery in time to avoid liquid leakage.

Frequently Asked Questions and Solutions

1. How do I know that Yonbo has been powered on successfully?

When Yonbo opens his eyes and says “I am ready for you”, the start-up is complete.

2. Yonbo screen is off but the light is still on.

At this point, Yonbo is dormant and requires a short press of the on/off button to wake it up.

3. I'm having a conversation with Yonbo, but it's not responding.

Yonbo may be in standby mode at this time, you need to call its name voice to wake it up. Or at this time the network state is not good, please check whether the network signal is not good, if the current location of the network is not good, Yonbo will appear voice interaction lag or voice interaction stops.

Help

If you encounter any problems or need help in the process of using the program, you can contact us at any time through the following ways.

Website: <https://www.xorigin.ai>

Email: xuanyuan@xoriginai.com

If you have any comments or suggestions about Robot Yonbo, you are also welcome to let us know. We sincerely look forward to your valuable comments or suggestions, your understanding and support is our driving force.

For detailed after-sales policy, please visit the official website to get it.

FCC Warning

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 1: 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.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF Exposure Statement

To maintain compliance with FCC'S RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm between the radiator and your body. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.