

AiMOGA AiMOGA Mornine M1

Product Manual

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1. Special Notice

Before using this product, please carefully read the AiMOGA Mornine M1 Product Manual (hereinafter referred to as “this manual”) and operate this product according to the content of this manual. The company shall not be held liable for any property loss or personal injury caused by operating this product in violation of this manual. As the AiMOGA Mornine M1 product (hereinafter referred to as “this product”) is composed of numerous parts, it is only for use by individuals aged 14 and above. Do not allow children and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge to use this product. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children. To extend the service life of this product, please do not use it in high-temperature, high-pressure, high-humidity environments, or in rainy conditions. This manual has attempted to include all product features and usage instructions at the time of printing. However, due to continuous functional improvements, design changes, and other reasons, there may still be discrepancies with the actual product purchased by the user. If there are deviations in color, appearance, etc., between this manual and the actual product, the actual product shall prevail. Additionally, the AiMOGA Mornine M1 product is not a network product, but it can achieve anti-DOS attack capabilities through connection to a home router and related router configurations. This product needs to be used in a closed, unmanned environment. Before use, it must be blocked by external obstacles. During operation, maintain a distance of 2m between this product and obstacles.

2. Product Introduction

AiMOGA Mornine M1 is a bipedal humanoid robot, possessing multi-modal environmental perception, autonomous walking planning, dexterous hand manipulation, and large model-based professional domain questioning capabilities. It can be used in scenarios such as automotive sales consultation, shopping mall guidance, and entertainment performances. “Morn” signifies “dawn, daybreak,” symbolizing that AiMOGA Mornine is a new-era robot rising like the morning sun, illuminating life with a fresh outlook and infinite innovation, bringing unlimited hope.

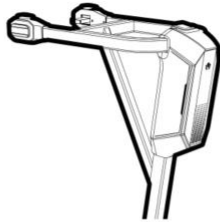
Note: This robot is to be used in a closed, unmanned environment. Before use, it

must be blocked by external obstacles. During operation, maintain a distance of 2m between the robot and obstacles.

3. Package Contents



1. Robot Body



2. Standby Station



3. User Manual



4. Unboxing Tool



5. Emergency stop Controller

4.Product Structure and Detailed Parameters

4.1 Parts Layout

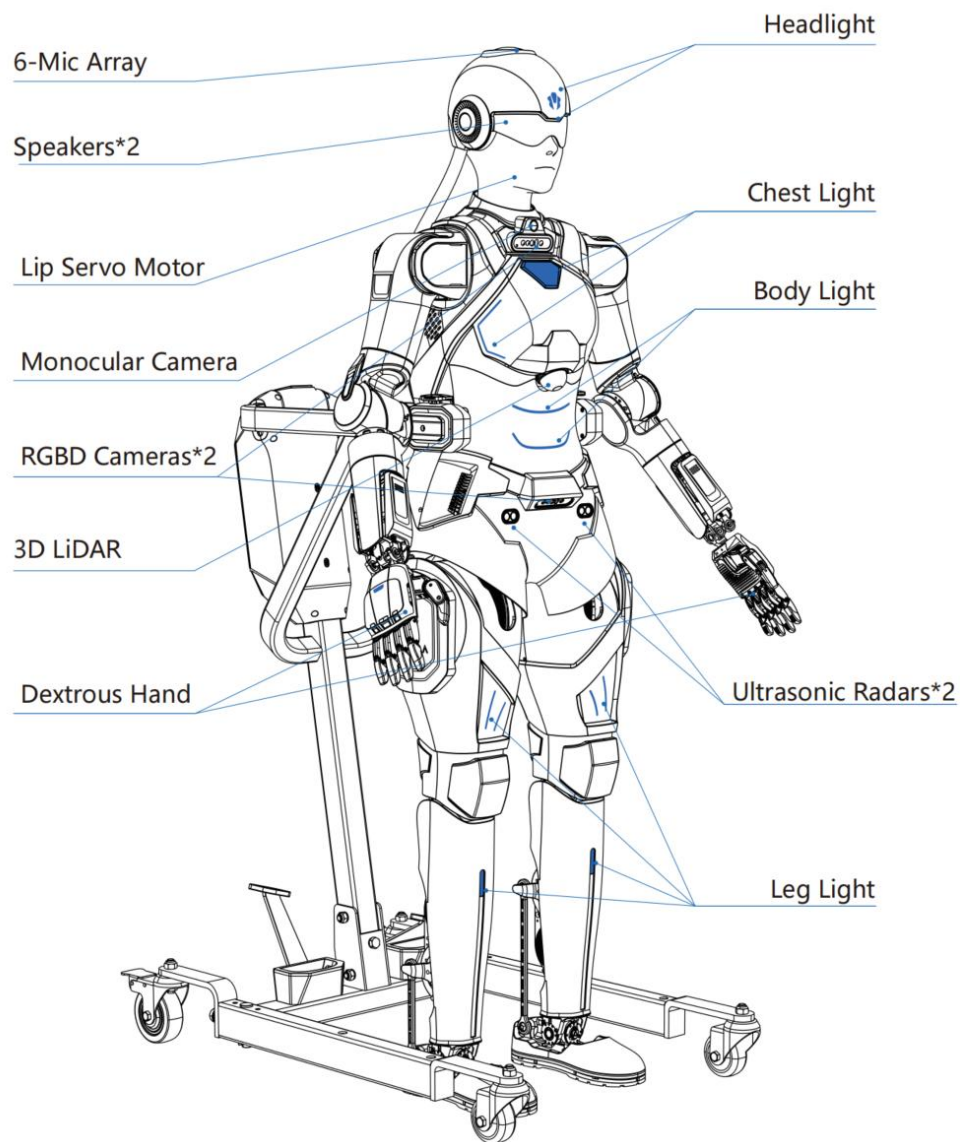


Figure 1 Front part layout

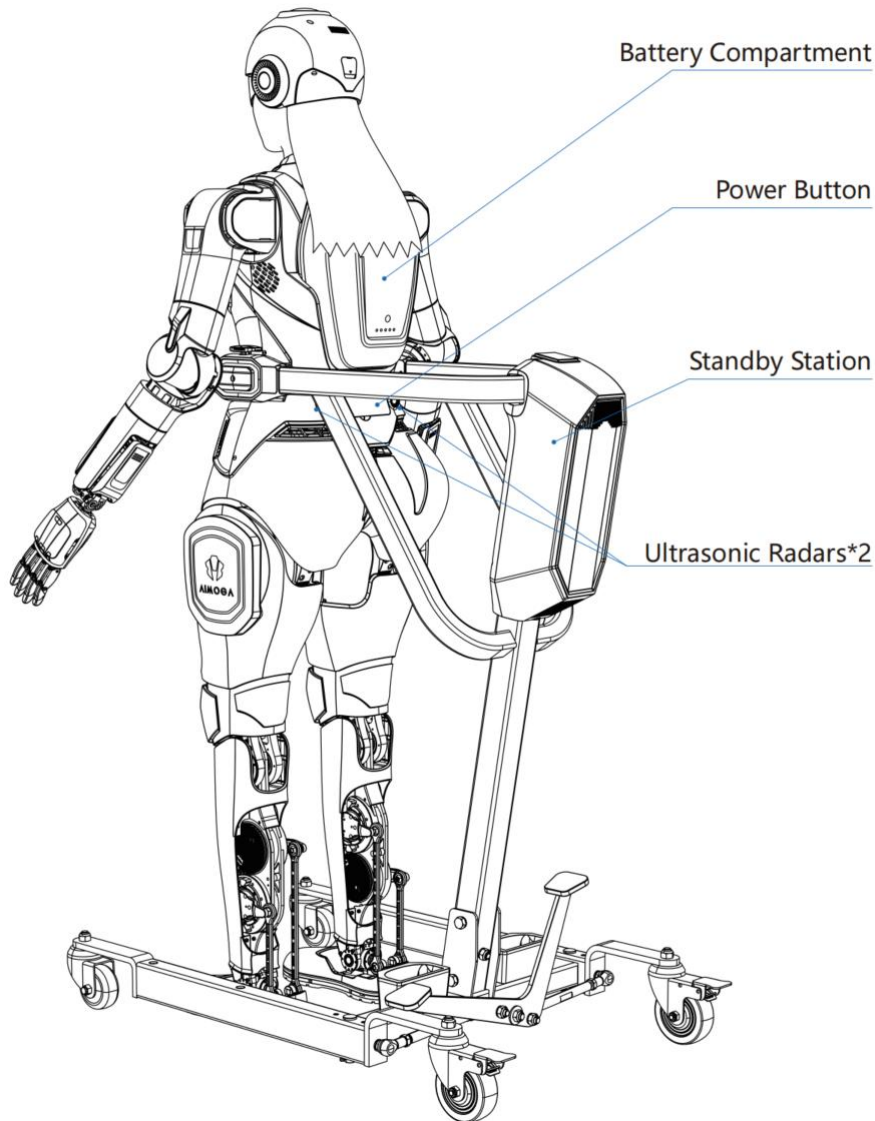


Figure 2 Back part layout

4.2 Product Parameters

4.2.1 Basic Information

Parameter Name	Parameter Value
Height	167cm
Weight	70kg
Body Degrees of Freedom	40 DoF

Dexterous Hand Degrees of Freedom	11 DoF per hand (6 active DoF)
Maximum Walking Speed	1m/s
Arm End Load	Max 1.5kg
Main Material	Aluminum Alloy + Engineering Plastic + Bionic Silicone

4.2.2 Core Processor

Core Processor Name	Parameter Value
Orin NX	16GB RAM 100 TOPS
X86 i5-1350P	4.7GHZ

4.2.3 Battery Parameters

Parameter Name	Parameter Value
model	ZY4815D
nominal voltage	46.8V
rated capacity	14.4Ah
rated energy	673.92Wh
charging time	2.0h
endurance	2.0h
Maximum charging current	15A
Type	Nickel-Cobalt-Manganese

4.2.4 Charger Parameters

Parameter Name	Parameter Value
Model	UY600L-W546080
Output	54.6V~ 8A

4.2.5 Sensors

Part Number	Name	Function	Parameters	Purpose
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B32000011AA	Silicon Microphone Array Board	Collect user's spoken voice	Dimensions: 68.5*78mm Communication Method: USB2.0 Microphone Sensitivity: -33~31dB Signal-to-Noise Ratio: 65dB Input Sound Level: 128dB Wake-up Distance: 35m Sound Source Localization: 360° Pickup Beam: 6 beams Microphone Type: Analog Silicon Microphone	Enables voice interaction between the robot and the user through acoustic algorithms.
B35000014AA	Wide-angle Camera	Collect user facial feature information	Dimensions: 33*16*20.3mm Lens 17mm Communication Method: USB2.0 Pixels: 2 million Depth FOV: H110° V76° Resolution: 19201080	Identifies who is standing in front of the robot using facial recognition technology, then greets and interacts accordingly.
B35000022AA	Stereo Camera (Neck Recognition)	Collect special information about objects in the robot's chest area	Dimensions: 90*25*25mm Interface: Type-C Communication Method: USB3.0 Working Distance: 0.3-3m Depth FOV: H87° V58° Resolution: 1280720@30fps	Identifies objects placed on the chest or tabletop using object recognition technology, enabling actions such as pouring water.

B35000009AA	Stereo Camera (Hip Blind Spot Compensation)	Collect special information about objects in the foot area	Dimensions: 89.82*25.10*25.10mm Interface: Type-C Communication Method: USB2.0 Working Distance: 0.2-3m Power Consumption: 7W max Depth FOV: H90° V60° Resolution: 640400@5/10/15fps	Identifies obstacles in front of the robot's feet, enabling navigation and obstacle avoidance through navigation algorithms.
B35000008AA	LiDAR	Mapping, navigation, obstacle avoidance	Dimensions: 65*65*60mm Laser Wavelength: 905nm Range: 40m@10% reflectivity 905nm: H360° V59° Power: 6.5W Point Cloud Output: 200,000 points/second Class 1 Laser	Enables the robot to walk autonomously through navigation algorithms.
B35000003AA	Touch Line	Touch sensing	Dimensions: 25250.05mm Material: Copper Foil	Detects human contact through capacitance detection.
B35000010AA	Ultrasonic radar	obstacle detection	Communication method: RS485 Measurement distance: 3.5m Blind spot distance $\leq$ 1cm Measurement accuracy: $1+(S * 0.5\%)$ cm Baud rate: 115200bps	Using Ultrasonic radar for walking and obstacle detection

4.2.6 Emergency Stop Controller

Parameter Name	Parameter Value
Charging Voltage and Current	5V $\approx$ 2A
Charging Port Type	Type-c
Battery Type	Li-ion battery 18650

4.3 Safety Instructions

To avoid illegal acts, potential losses, and injuries, please ensure compliance with the following:

- (1) Using this product at night is more dangerous than during the day, as it can be difficult for others to notice, potentially leading to hazards. It is recommended not to use this product in extremely dark environments.
- (2) When using this product, have sufficient safety awareness (this product is not allowed for use on public roads), and be prepared to respond to the following situations at all times: ① someone approaching suddenly; ② children or pets playing nearby;
- (3) Before use, you should ensure that you have a sufficient understanding and read this instruction of this product. Do not allow individuals unfamiliar with its operation to use it.
- (4) As cables, small parts, and movable mechanical joints may pose a danger to children, it is imperative to keep children away from this product. Children under 14 years old are prohibited from using this product alone without supervision.
- (5) Disassembly, modification, or addition of components to this product is prohibited. Non-official components may not be compatible with the software, leading to loss of motion control and rendering the product unusable.

- (6) It is prohibited to use this product to collide with buildings, people, or animals. It is prohibited to use this product to carry, drag, or launch any dangerous objects.
- (7) It is prohibited to operate this product under the influence of alcohol, drugs, medication-induced sedation, dizziness, fatigue, nausea, or any other state of poor physical or mental condition.
- (8) If this product is involved in an accident (e.g., collision, fall) or exhibits abnormal operating status (e.g., unstable standing or uncontrolled movement), it must be stopped immediately by emergency stop controller. The product must not be used again until after-sales service personnel have completed repairs.
- (9) It is prohibited to use this product on public roads to avoid affecting other pedestrians and vehicle traffic.
- (10) Do not use this product as a cargo transport tool. Misuse would make this product in a hazard situation.
- (11) Exercise caution when using this product in crowded places (this machine is to be used in a closed, unmanned environment. Before use, it must be blocked by external obstacles. During operation, maintain a distance of 2m between the robot and obstacles).
- (12) Make sure the robot is power off before act the operation of adjustment, maintenance, repairing, charging and like these actions. Product noise emission values $L_{pA} \leq 70$ dB(A) in standby or standing status.
- (13) This product is indoor use only.

5. Usage Instructions

Please read this manual carefully and familiarize yourself with the product's functions and operating methods before using this product. This product is relatively complex. All parts and accessories must be correctly installed and used according to this manual. Improper installation or use may cause damage to this product or other property loss, and even cause serious injury to yourself or others. This product should not be used by individuals with physical, sensory, intellectual, or emotional impairments, or by individuals without relevant experience and knowledge (including children). Children are prohibited from operating this product or using it as a toy. Close supervision is required when using this product near children. Children are prohibited from cleaning or maintaining this product without supervision.

5.1 Charging Instructions

To prevent fire or explosion, check the battery for damage before use. Do not use this product if the battery is damaged. The recommended battery charging temperature is 0 °C to 40 °C. Charging outside this temperature range may cause battery damage. When charging, please do so in a dry, cool location away from heat sources, ensuring good ventilation and no debris or flammable/explosive materials nearby. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

5.2 Battery Charging Before Power On

This product has two charging modes:

1) Charging the battery alone: After removing the robot battery, insert the trapezoidal tap of the standby station charger into the upper right position of the battery back, and then plug the charger into the AC180~240V 50Hz power socket to charge.

2) To charge the battery connected to the robot body: Insert the trapezoidal connector of the standby charger into the trapezoidal port next to the waist power switch, then plug the charger into the AC 180-240V 50Hz outlet. Note: When all indicator lights on the robot's battery remain consistently lit without blinking, it indicates full charge. At this point, unplug the trapezoidal connector and neatly wind up the charging cable. Press the power button for 1 second to check the current battery level. If only one indicator light is illuminated, this means the battery is low and needs recharging.

 If the first charging method is used, it must be ensured that the robot has been turned off and the robot must be in a standby station support state before the battery can be removed for charging.

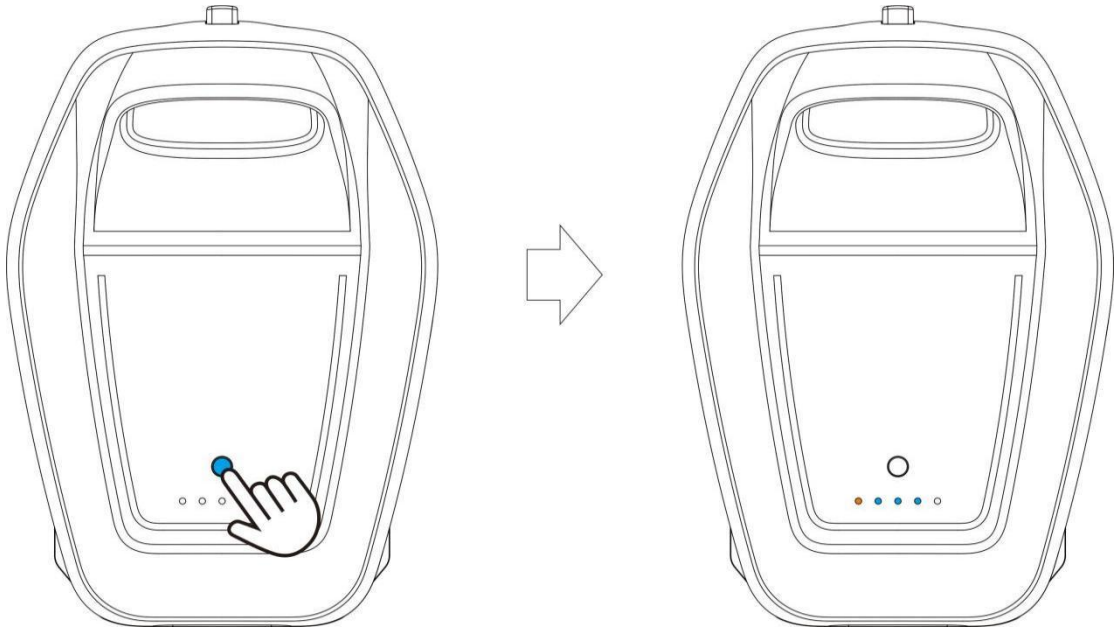


Figure 3 Battery Level Check

5.3 Power On/Off

First, ensure that there are no idle personnel or other objects around the robot and that the robot is stable on the standby station. Then, remove the robot's feet from the footrests of the standby station. Next, insert the battery into the slot on the robot's back. Look at the middle lower part of the robot's back, lift the cover, and press the power button. The indicator lights on the robot's upper body will illuminate.

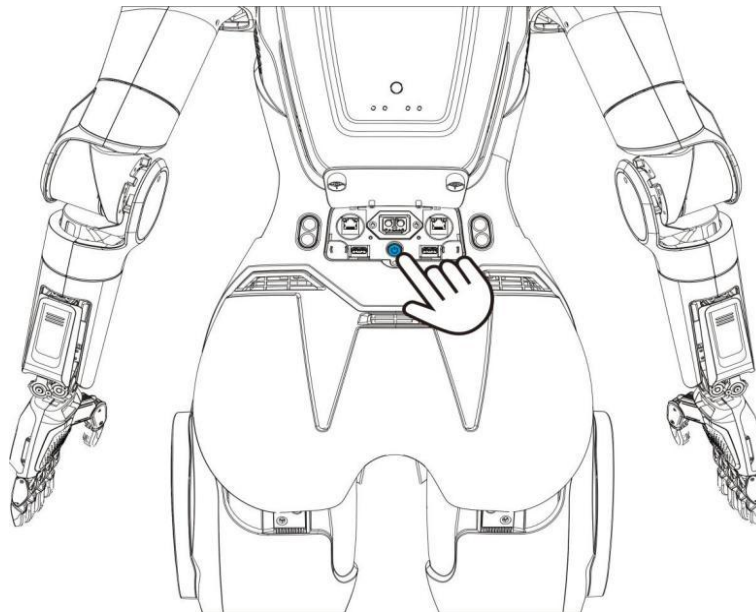


Figure 4 Power On Button

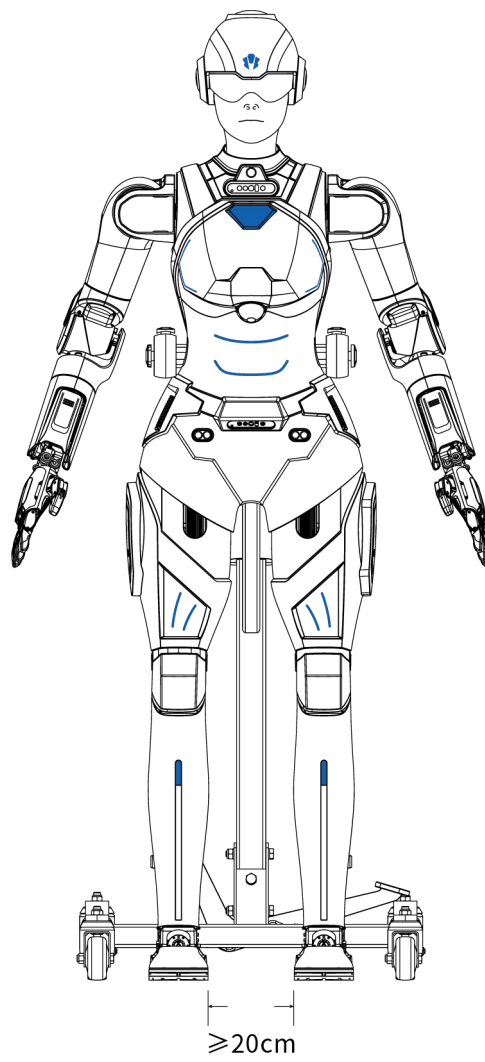


Figure 5 Ready Stance

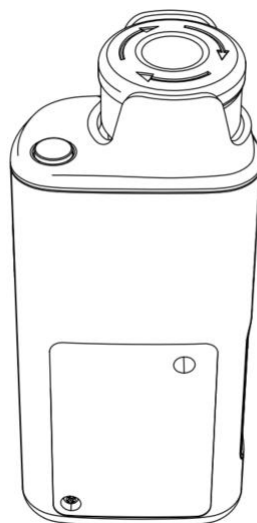


Figure 6 Emergency Stop Controller

⚠ The emergency stop remote is preconfigured at factory and ready to use immediately upon opening. In default mode, the remote remains in release state with motor powered normally. During emergencies, pressing the button will disconnect motor power, causing the robot's legs to collapse and fall. After resolving the issue, rotate the button to restore release status and re-power motor. Green indicator lights indicate normal operation, red indicates malfunction, while four charging lights appear when fully charged. To deactivate the robot: Ensure it's upright with support from standby base. Press power button again. Wait approximately 1 second until all indicator lights extinguish and legs collapse completely. Before startup, maintain 1-meter distance from surrounding objects, 20cm spacing between legs, and keep soles parallel to the ground.

5.4 Remote Control App Introduction

⚠ When using the remote control App, ensure that the robot is operated within the field of view and restricted area. If the robot is out of sight, the remote control will be disconnected and may lead to serious mechanical risks.

5.4.1 Download App and Connect to Robot

Please scan the QR code on the nameplate below the back of the device or visit the specified website to download the remote control App.

<https://download.aimoga-robot.com/app/robot>



Figure 7 QR Code

Install the App and allow it to access your phone's location, network, photos and file reading permissions.

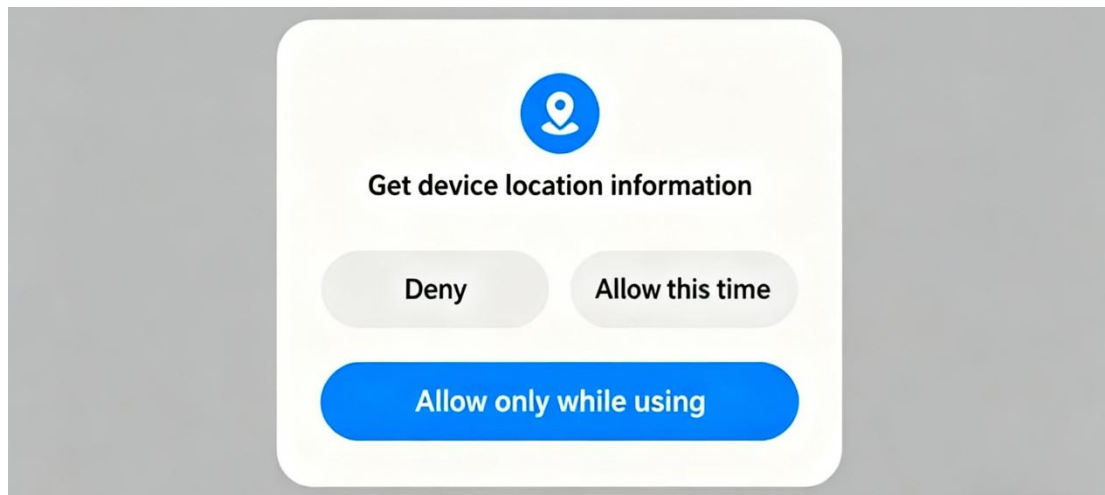


Figure 8 Get mobile phone permissions (location, for example)

After entering the App, select the appropriate language according to your preferences.

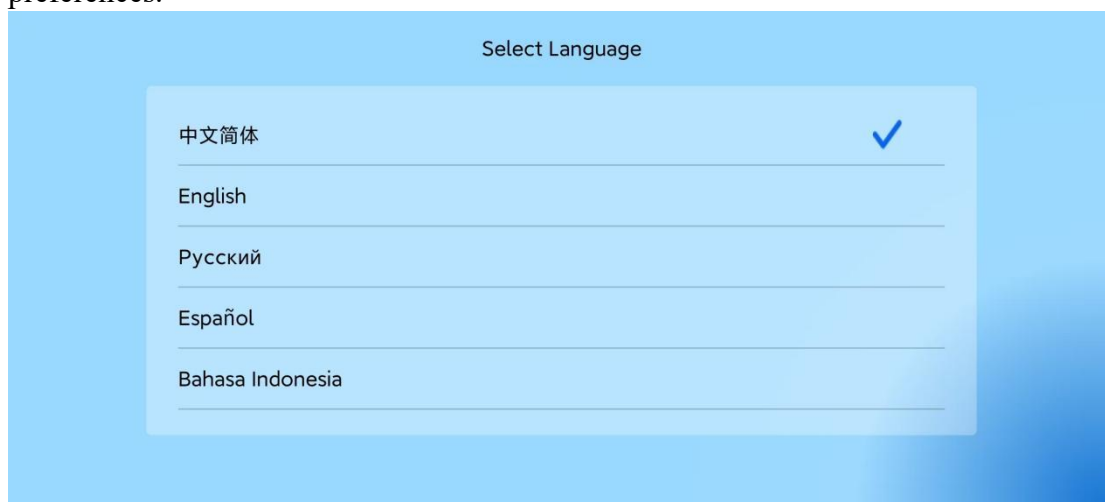


Figure 9 Set your preferred language

Please review and carefully read the User Privacy Agreement, then click the "Agree" button to complete the signing.

User/Privacy Agreement Signing

PRIVACY POLICY INFORMATION COLLECTION THIRD PARTY SHARING

List of Cooperative Third Parties

I. SDK List

☒ Agree to Sign Agreement ☐ Refuse to Sign Agreement

CONFIRM

Figure 10 Agree to sign the user privacy agreement

Ensure the robot is activated and select its hotspots for connection (the Wi-Fi name, password, and SN code are listed on the back-mounted nameplate). For security purposes, during initial setup, the App will prompt you to change the device's Wi-Fi password. The new password must meet complexity requirements (including uppercase/l lowercase letters, numbers, and special symbols with specified length). After successfully changing the password and connecting the device, you may receive messages like "Connected but unable to access the internet" or similar. This is normal behavior – simply ignore the prompt and proceed with the next step.

⚠ Before connecting to a robot's hotspot, disconnect all other automatically connected Wi-Fi networks (using the "Forget Network" feature in device settings) and mobile networks. This step prevents interference from multiple signals, ensures stable communication during operation, and reduces the risk of disconnection caused by fluctuating signal strength.

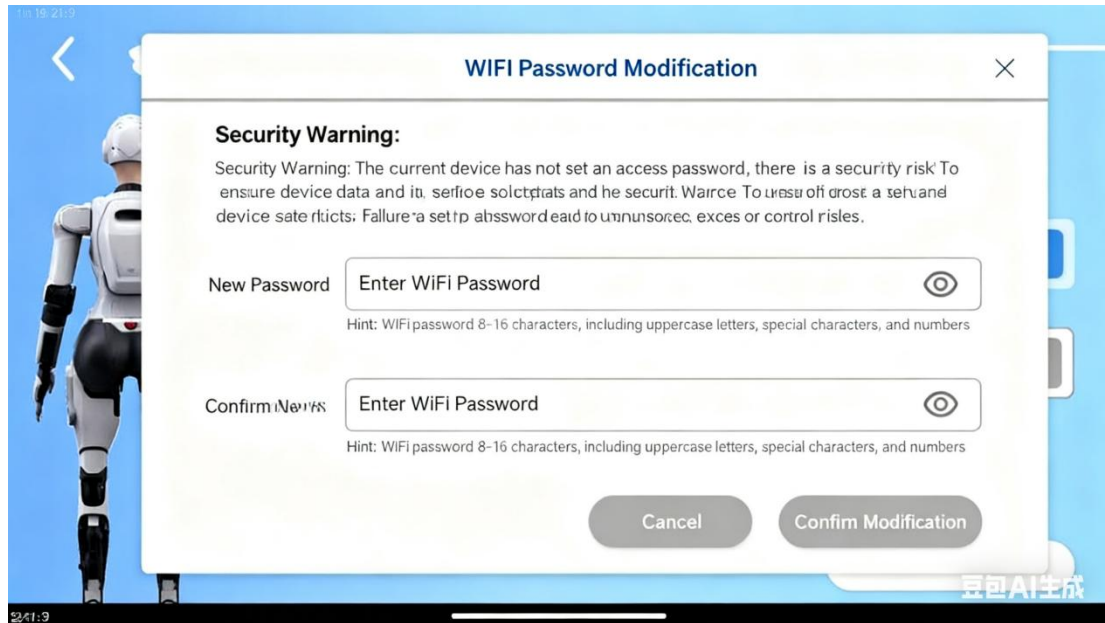


Figure 11 Forcing a change of Wi-Fi password



Figure 12 Connect the Wi-Fi of the robot body

Enter the SN code (which can also be scanned) according to the information displayed on the back of the robot's fuselage nameplate. After successful connection, click "Connected, Next".

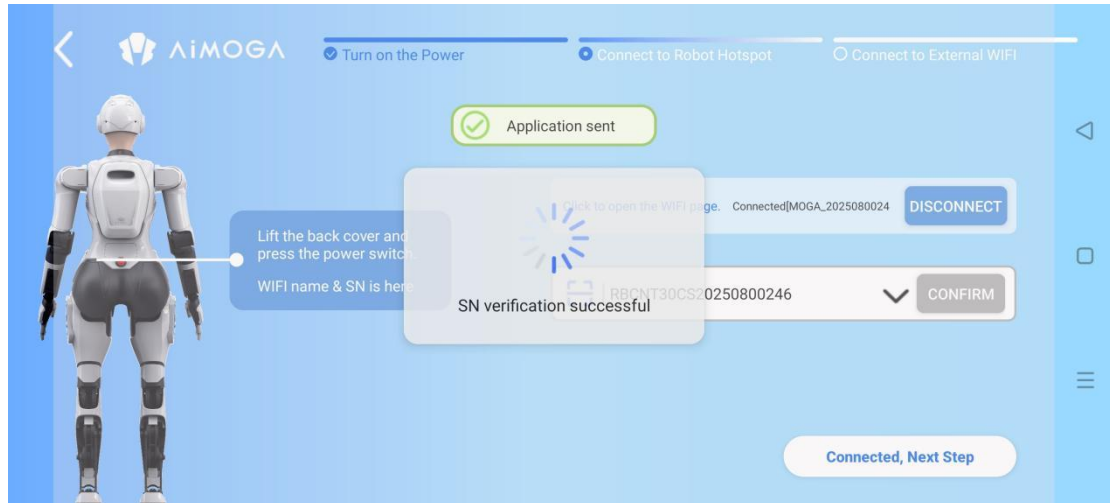


Figure 13 Connect the Wi-Fi of the robot body

The App supports both network mode and offline mode. To select the network mode, you need to connect to the Internet, enter the password and click Connect. After successful, click Next to enter the network mode to control the robot. If you choose the offline mode, you can control the robot offline.

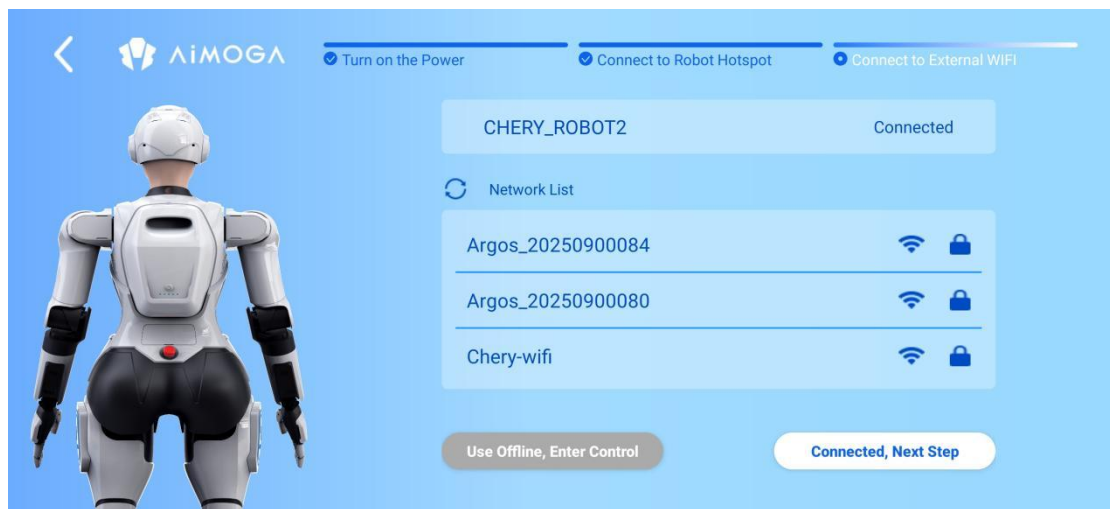


Figure 14 Robots connected to the Internet

⚠ Offline mode is not available for process functions.

5.4.2 Posture Switching

⚠ Attention:

- Offline mode is not available for process functions.
- Status switching rules: bent leg standing state-> straight leg standing state;
straight leg standing state-> bent leg standing state/straight leg walking state;
straight leg walking state-> straight leg standing state.

1. Lifted leg standing pattern

After the robot is started and activated, it defaults to the bent-leg standing mode, where the standby station provides support and the feet are off the ground. This mode supports the mutual switching between the straight-leg standing mode, so as to facilitate posture adjustment or subsequent tasks.

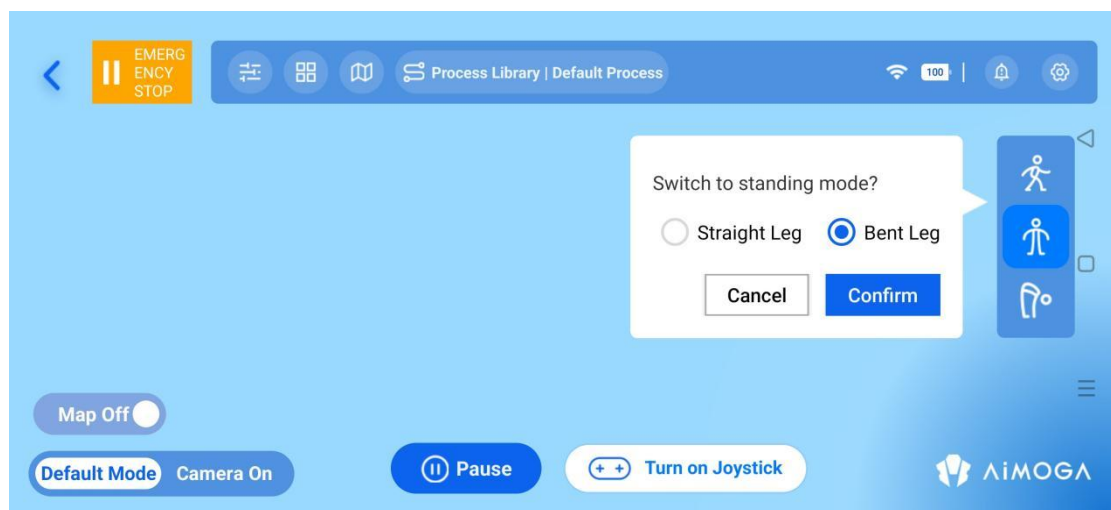


Figure 15 Switch between leg-standing mode and standing mode

2. Stand upright mode

After the robot completes the self-starting and connects to the App, click the three little man icons on the right side of the App interface to switch the position control status. First, click the "standing posture switching button" in the red box line on the right side of Figure 16, and select the "straight leg" standing mode.

⚠ Do not let the robot stand in a straight leg mode for a long time, so as to avoid motor overheating, equipment damage or fall risk.

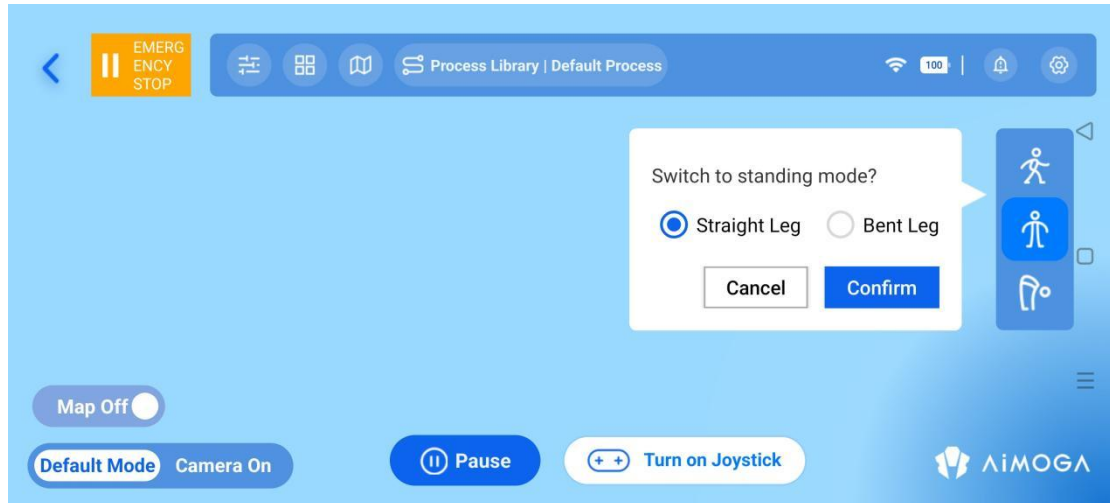


Figure 16 Straight leg standing mode switch

3. Straight leg walking pattern

Next, click the "Walking Posture Switch Button" in the red box on the right side of Figure 17. The system will automatically switch to straight-leg walking mode and emit a voice prompt (such as "Entering straight-leg walking state"), while the robot's upper limbs perform synchronized slight swinging. After the announcement completes and the upper limbs stabilize, release the locks on both sides of the standby station. Ensure there are no people or obstacles around, then smoothly remove the standby station. Once the standby station is removed, the robot enters walking mode and can perform normal movement operations.

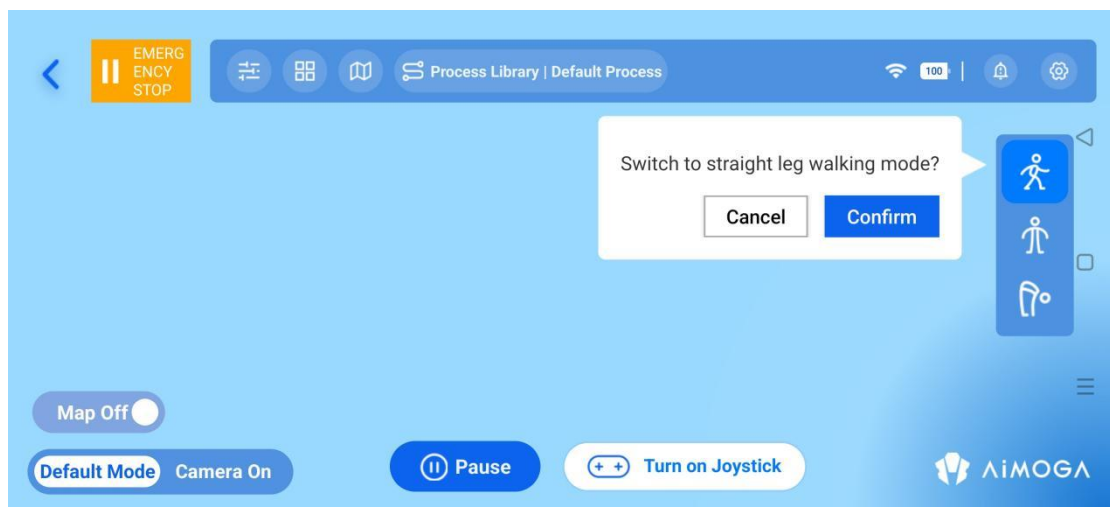


Figure 17 Straight leg walking mode switch

⚠ The standby station can only be removed/installed when the robot is in straight leg walking mode.

4. Force Release Mode

If you click the third little man icon on the right side of Figure 18, the robot will enter the unloading mode. Please pay attention to the prompt slogan. When entering this mode, the robot will have its lower limbs cut off and its legs will be paralyzed.

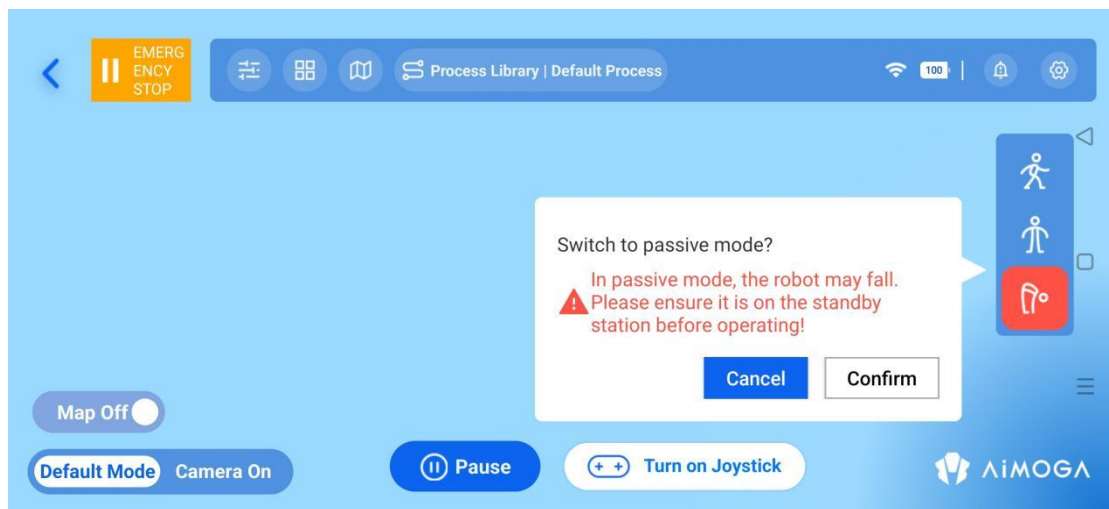


Figure 18 Force Release Mode

⚠ Before switching to the unloading mode, please confirm that the robot is fully supported by the standby station. Otherwise, the direct switch will cause the robot's lower limb power failure, imbalance and fall.

5.4.3 Remote walking

Click "Open joystick" to display the left and right joysticks on the control interface. The left joystick controls the robot's forward and backward movement and crab step movement, while the right joystick controls the robot's steering movement. Click "Close joystick" to hide the left and right joysticks.

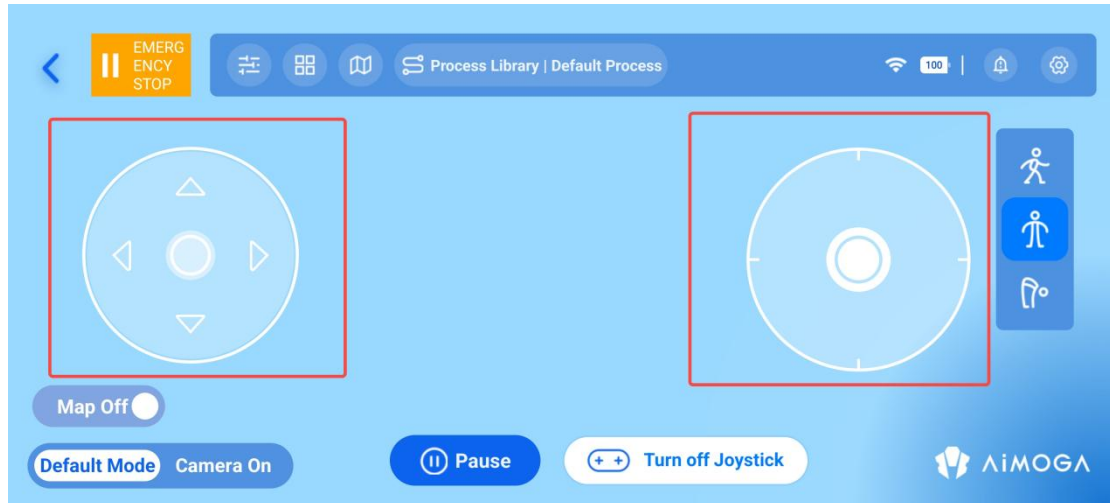


Figure 19 Virtual Remote Control

5.4.4 Mode configuration

In the mode configuration interface, users can customize robot operation parameters including movement speed, angular velocity, and volume level. They can select between pure voice mode and autonomous motion mode, configure voice recognition activation, enable leisure mode, and adjust the pause duration between audio reception and voice response.

⚠ The speed adjustment here applies only to walking speed in manual remote control mode, excluding speeds during automatic navigation operations.

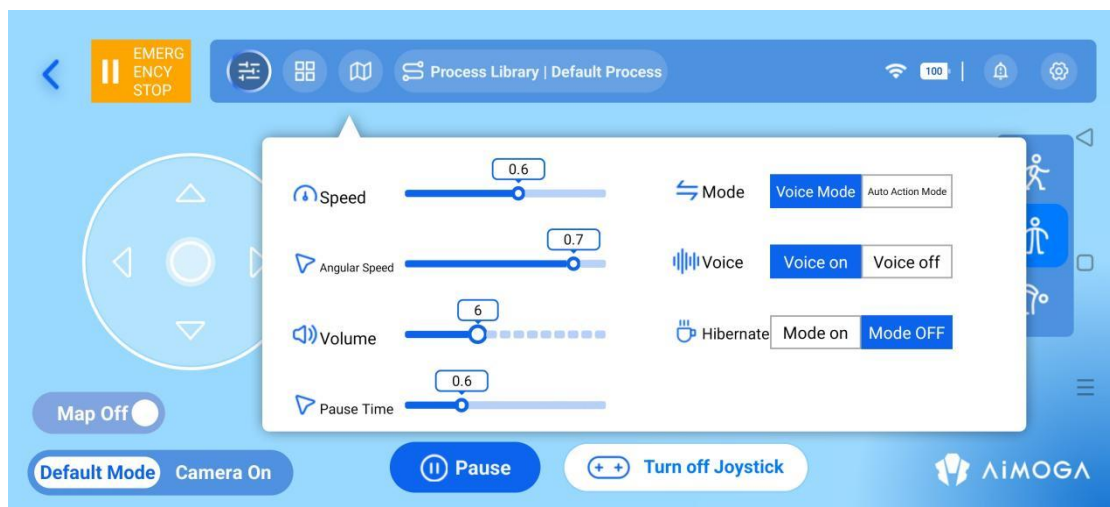


Figure 20 Mode configuration interface

💡 In pure voice mode, the robot only outputs verbal dialogues without physical movements. The autonomous action mode enables simultaneous output of both components. When voice recognition is disabled, the robot will stop audio reception and cease voice interaction. The leisure mode remains inactive by default. When activated, the robot randomly executes upper limb movements to enhance interactive expressiveness.

5.4.5 Use of the action library

Ensure that the robot is in the straight leg walking mode, and then click the action library button (red box line in Figure 21). Users can select different action and speech ability capsules according to the scene (as shown in Figure 22 and 23), and can also customize combinations as needed (as shown in Figure 24).

When users select and execute specific actions or scripts, the system dynamically displays their execution status through color gradients, providing real-time progress updates. For custom operations, users can click "Add Custom", enter a combination name, set start times for actions/scripts, select corresponding content, then save and run them. The capability capsule supports manual sorting by dragging within categories. Clicking the pause button will immediately stop the robot's current action or script playback.

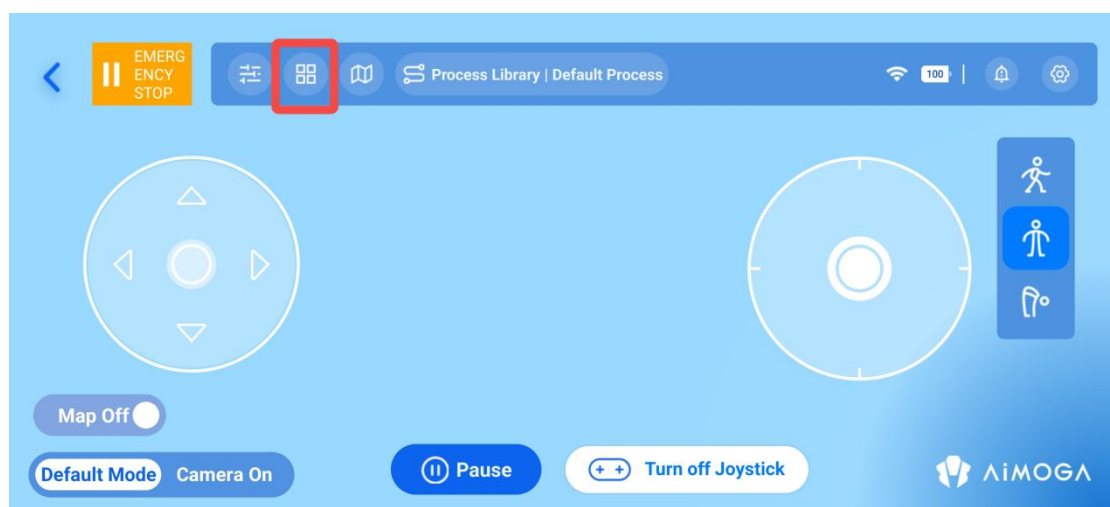


Figure 21 Motion Library Button

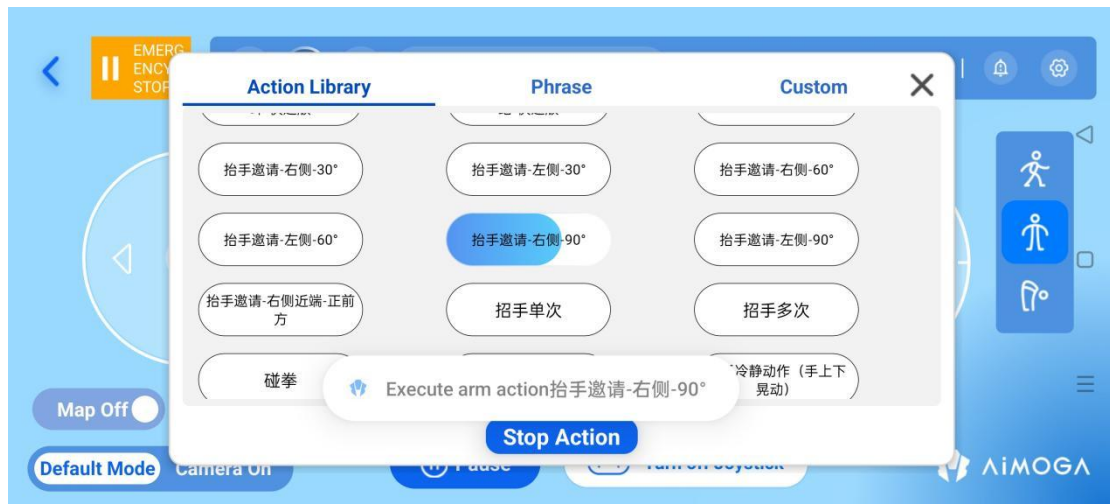


Figure 22 Independent action

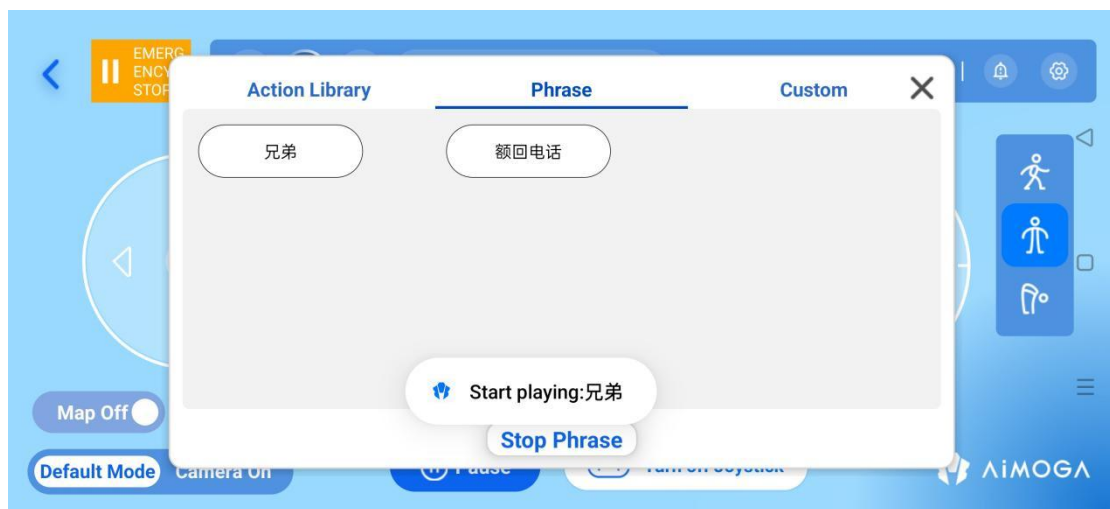


Figure 23 Verbal skills

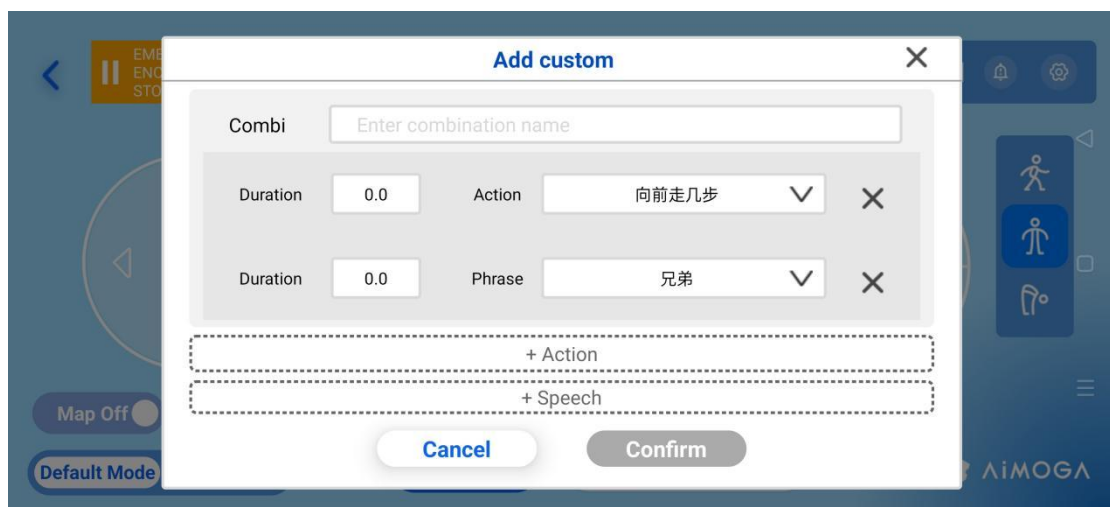


Figure 24 Add customizations

5.4.6 Activated Map (How to create and edit maps, see 5.4.13 App Settings for details)

Activation requirements for maps: Ensure stable positioning of the robot to prevent mechanical risks such as presser foot compression or drop. Maintain a 2-meter distance between the robot and surrounding obstacles, with no stairs or elevation changes within the area. Position the robot in standby mode using its curved legs, then push it to the starting position of the new map or remotely guide it to this location while maintaining alignment with the initial direction of the mapping origin. Next, go to App settings> Map Library, select the required map, and activate it. After successful activation, the following message will appear: "Activated" will be highlighted in the lower-left corner of the map.

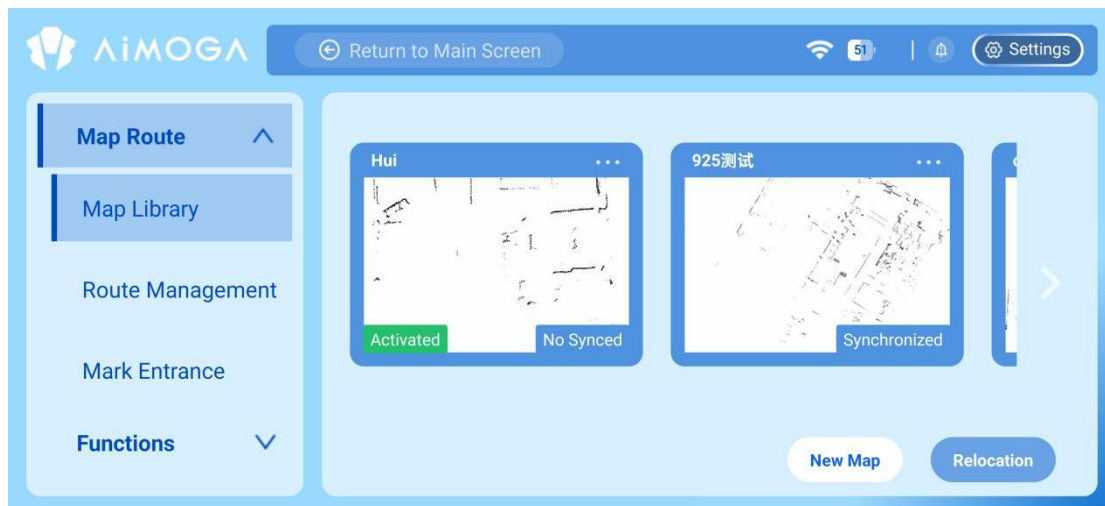


Figure 25 The map was activated successfully

⚠ When activating a map, note the following: If activation fails, re-activate the map. Ensure the robot returns to its original mapping starting point and maintains alignment with the initial orientation. (Navigation Reorientation: When the robot's position on the map deviates from its actual location, perform reorientation to correct navigation positioning.)

5.4.7 Route usage (How to create and edit routes, see 5.4.13 App Settings for details)

The route function enables robots to execute predefined paths after map creation and activation. During navigation, users can perform operations such as obstacle calibration and destination setting (Settings> Map Routes> Route Management). The system follows the selected path with fixed navigation trajectories and voice announcements, allowing real-time monitoring of the robot's operational status.

After activating the map successfully, ensure the robot is in a straight-legged walking position. Click the "Run Route" button in the control interface to select your desired route and click "Start Run". During the route execution, you can pause by clicking "Pause" -this will stop the robot from continuing its path. Clicking "Continue" will proceed to the remaining route points. Clicking "Stop" will terminate the route task and return the robot to the control interface.

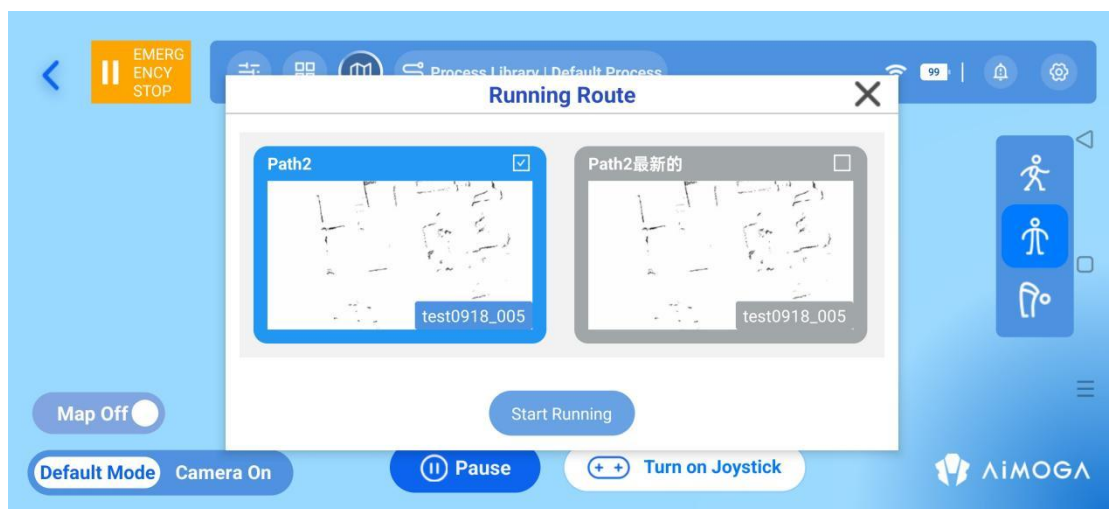


Figure 26 Open route interface



Figure 27 Route running interface

! The route needs to be activated in advance, and the initial point of the running route can be determined as needed. After starting the running route, the robot will walk from the current placed initial point to the first calibrated point, and then execute the route.

5.4.8 Process usage (Please refer to the App Settings chapter for process download and the relevant cloud platform chapter for process editing)

"Process" Introduction: The robot can perform autonomous dialogue, automatic navigation, and other functions based on the selected process. Process creation must be conducted through the cloud platform's web interface. For detailed instructions, please refer to the subsequent section explaining the cloud platform setup. After completion, download the new process from "Configuration"> "Smart Process Download" to install on your App.

Operation process: Click the process library and select "Download more processes" to display the process list. You can download or delete relevant processes in the process list. After downloading the desired process, return to the process library interface and activate it (the button can be moved to the right to activate the process).

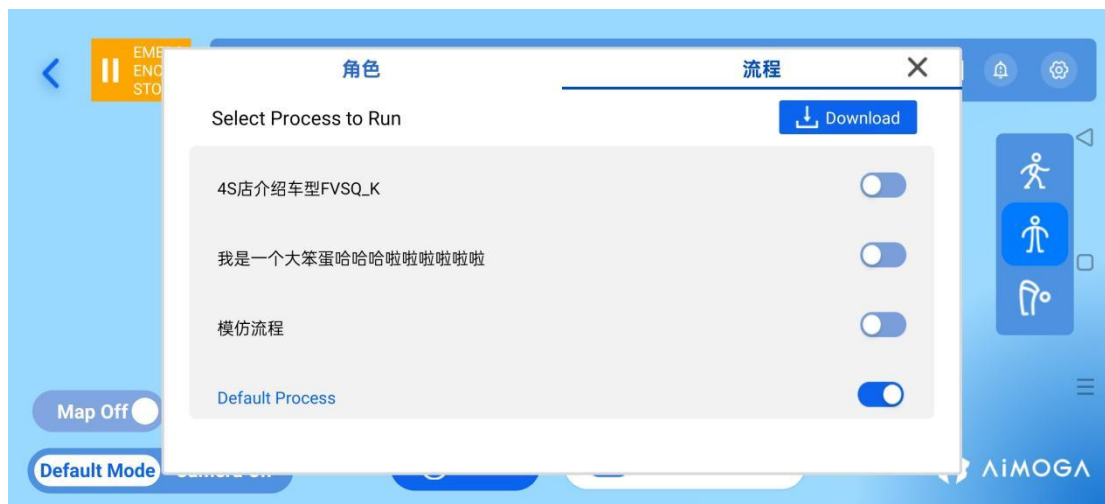


Figure 28 Operation flow interface



Figure 29 Intelligent process download interface

5.4.9 Emergency stopping function

When encountering improper remote operation or unexpected anomalies, clicking the emergency stop button (marked in the red box at the top-left corner of Figure 30) will terminate an robot functions—including process control, navigation, brain module activation, and motion execution—while silencing audio output and freezing the upper limb. (Note: The current emergency stop

function is activated through an App button, which differs from the emergency stop controller's operational mechanism.)

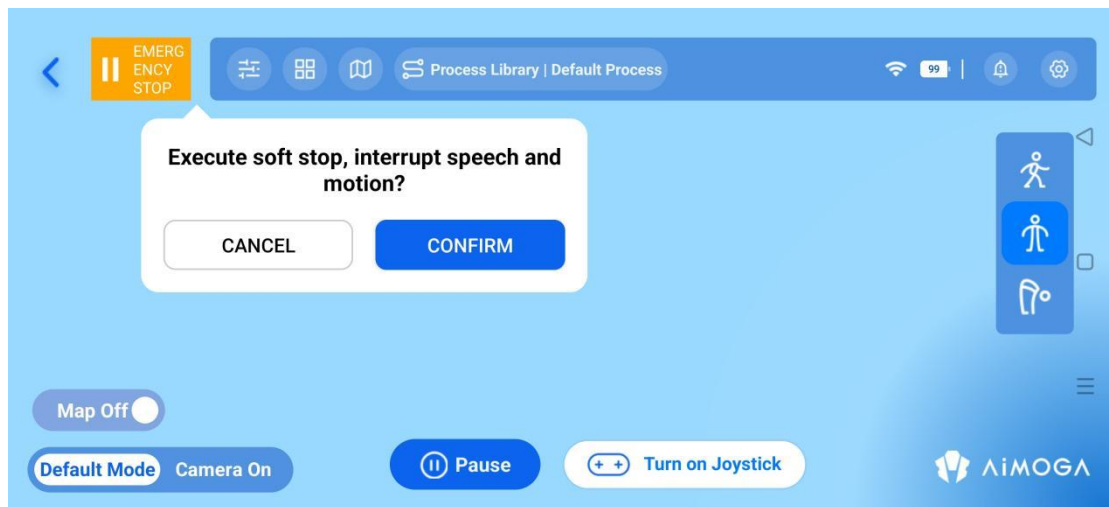


Figure 30 Emergency stops

5.4.10 Pause function

Click the pause button (red box line in Figure 31) to stop the current broadcast and automatically turn off the ASR function. After clicking continue, the robot will re-recording and continue to support voice interaction.

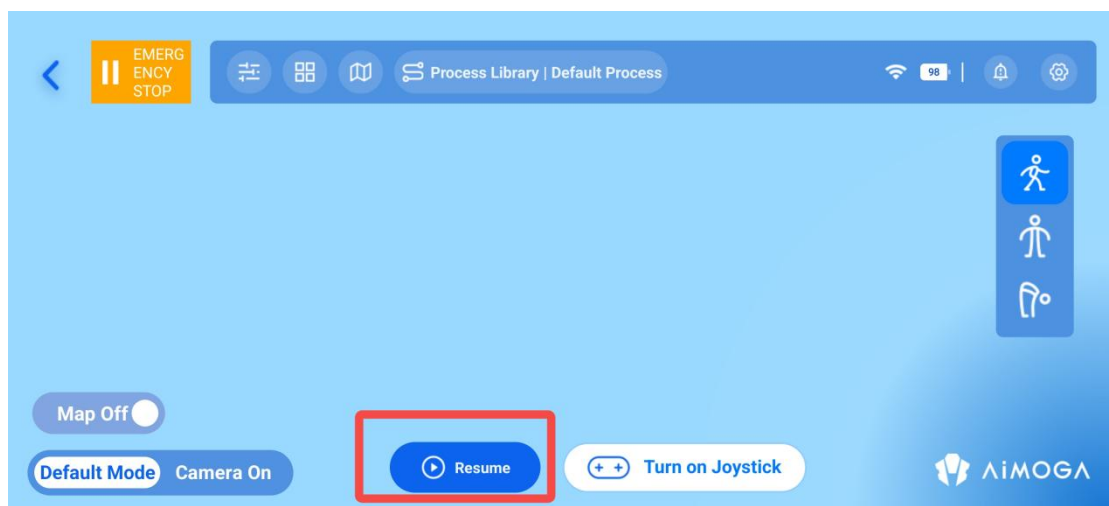


Figure 31 Suspension

5.4.11 Open/close map

Users can click the "Map Open" button (marked in red within Figure 32) to activate the 2D map interface. Upon entering the map, tap the zoom icon in the

top-right corner to fully expand it across the entire control panel (as shown in Figure 33). This full-screen display allows users to clearly view the robot's position, navigation routes, and the layout of the operational area.

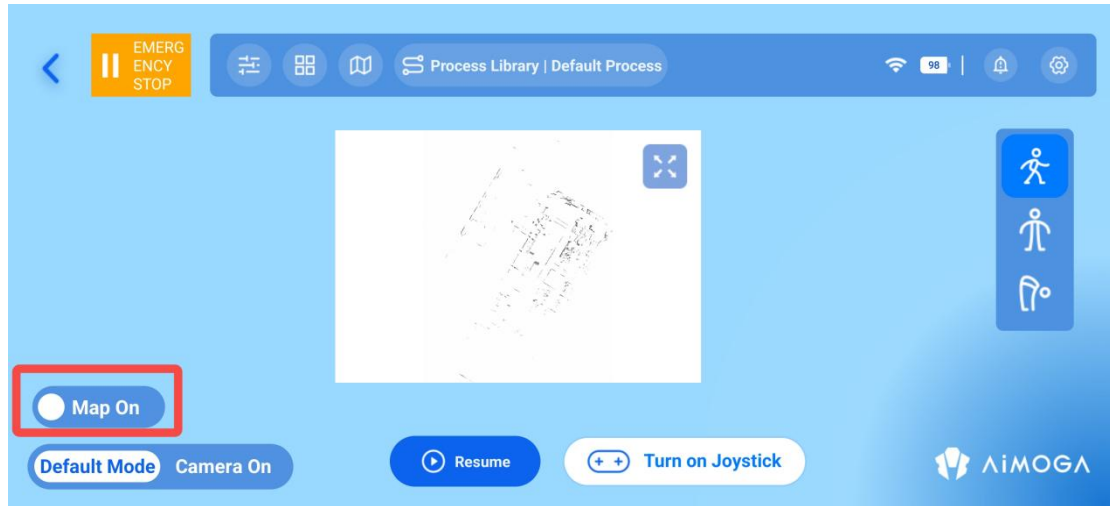


Figure 32 Open the map

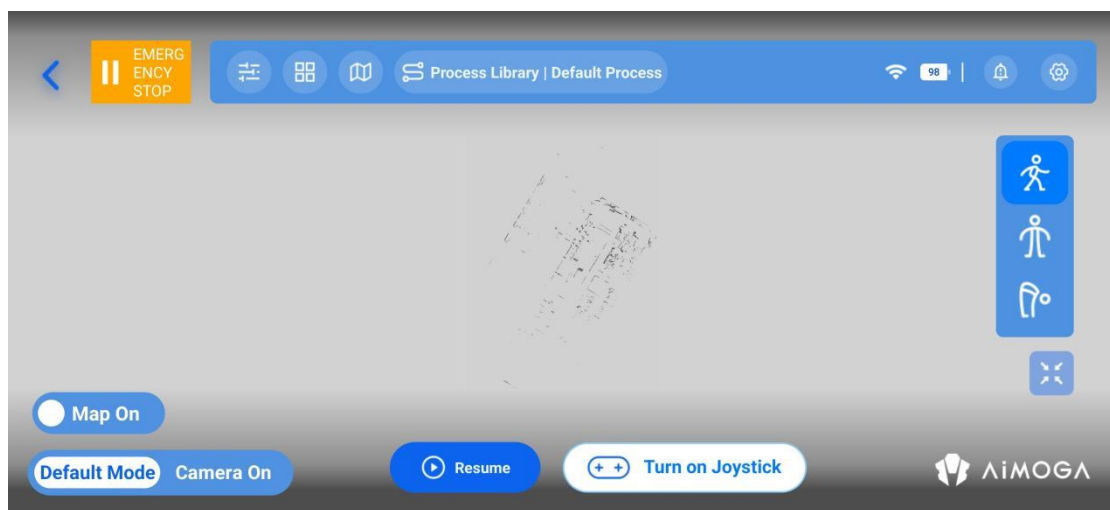


Figure 33 Unfolding the map

5.4.12 Turn the camera on/off

When users enter the control interface, they are initially in normal operation mode. Clicking the "Open Camera" button (marked by the red box in Figure 34) automatically switches to real-time view from the robot's chest camera, which will fill the entire screen by default. The data collected through this camera is exclusively used for transmission and display purposes and will not be stored.

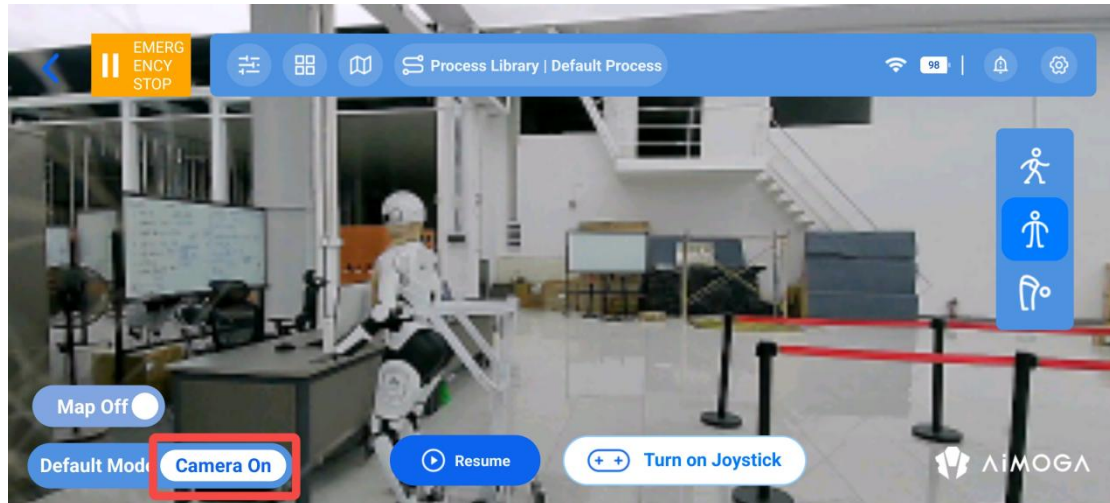


Figure 34 Turn on the camera

5.4.13 App Settings

1. Map Library:

⚠ When creating a new map, note that:

- Before clicking to start building the map, the robot should stand on a flat ground. It is forbidden to operate the robot on a sloped ground or uneven place (make sure that the robot is in a horizontal state). At the same time, observe whether the robot itself is tilted or shaking. If it is tilted or shaking, adjust the position of the robot appropriately;
- Ensure the stability of the machine in position, prevent mechanical risks such as pressure foot and fall, and keep a distance of 2m between the machine and peripheral obstacles. There should be no stairs or height difference within the range;
- After clicking to start building the map, you must wait for the display interface to appear the point cloud, and then you can carry out the mapping operation;
- When the point cloud appears, if the robot is in standby mode, ensure it stands with legs bent before moving to capture the map (consult the manufacturer if the mapping area exceeds 3000 m^2 or one-way distance surpasses 60m). For remote-controlled navigation, set the robot to straight-legged walking mode. In smaller areas, the first method is recommended for efficient map construction.

New Map Creation Procedure: Using the first method as an example, ensure the robot is supported by a standby station and positioned in a bent-leg standing posture. Then guide the robot to a target location (which will later serve as the map origin/start point, with users able to select their preferred starting position). In the App, navigate to "Settings"> "Map Library", click the "Create New Map" button, and wait for the point cloud to appear before initiating the mapping process. After completion, depending on the mapping results, you can use the eraser tool to remove shadows or add obstacle walls/enclosed barriers as needed. Finally, click "Save Map" to complete the creation.

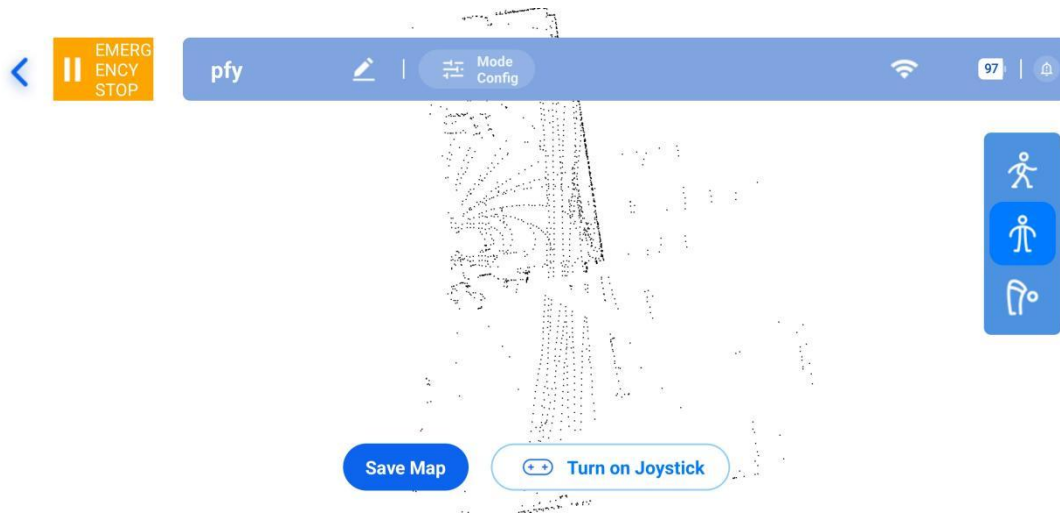


Figure 35 Building interface

Editing Map Operations: The interface allows adding key points, obstacle walls, enclosed fences, and applying erasers. After creating a key point, users can input its name (e.g., Chery 4S Store Ruihu 7 Model Display Point). These dedicated key points are specifically designed for large model workflows to support autonomous navigation planning, distinct from regular route planning coordinates.

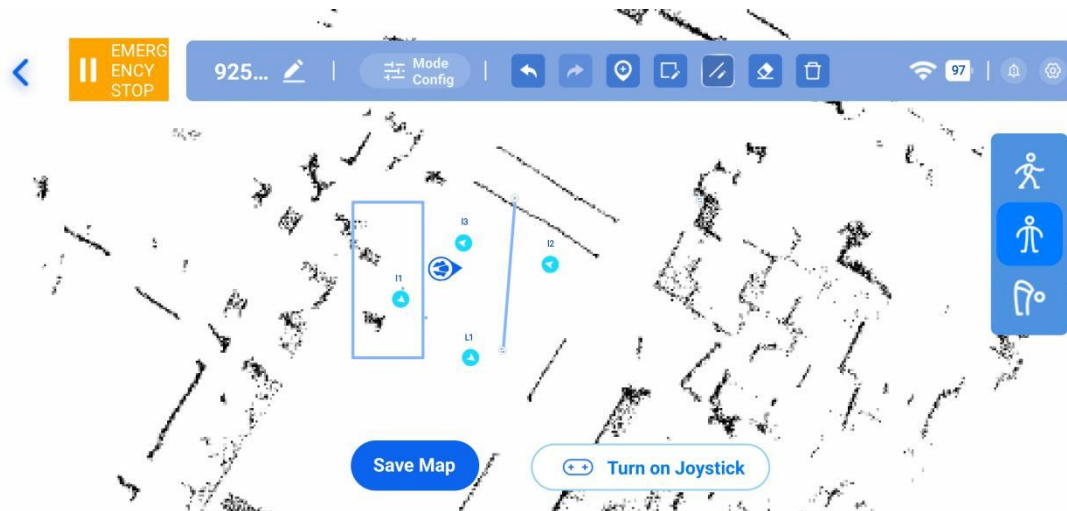


Figure 36 Edit map interface

2. Route management:

⚠ Attention should be paid to the following when building a new route:

- You must activate the map first before you can create a new route.
- One map can correspond to multiple routes, and it is recommended that route names be related to the corresponding map name.
- When creating a new route, ensure that the robot is supported by the standby station and stands with its legs bent before pushing it to different points for addition. If you create a new route by remote control of the robot's walking, ensure that the robot is in straight leg walking mode.
- When creating a new route, ensure that the process is closed or the ASR is closed to avoid the robot receiving the wrong voice message during the creation of the new route.

New Route Creation Procedure: After activating the map, navigate to "Configuration"> "Route Management"> "Create Route". The interface features four key functions at the top: 1) Retract (save deleted or modified points), 2) Reset (restore deleted or added points), 3) Zoom (adjust map scale to full view for intuitive layout inspection), and 4) Center (zoom in to display complete map). To create a route, click the "+" icon in the lower-right corner to add points and set phrases. Users can customize the robot's execution timing and sequence (see Figure 37). When saving

point data, the system automatically increments point order with new entries displayed as highlighted bars showing sequence numbers and directional coordinates. After completing all route points, define the route name in the top-left section and click "Save" to finalize the creation.

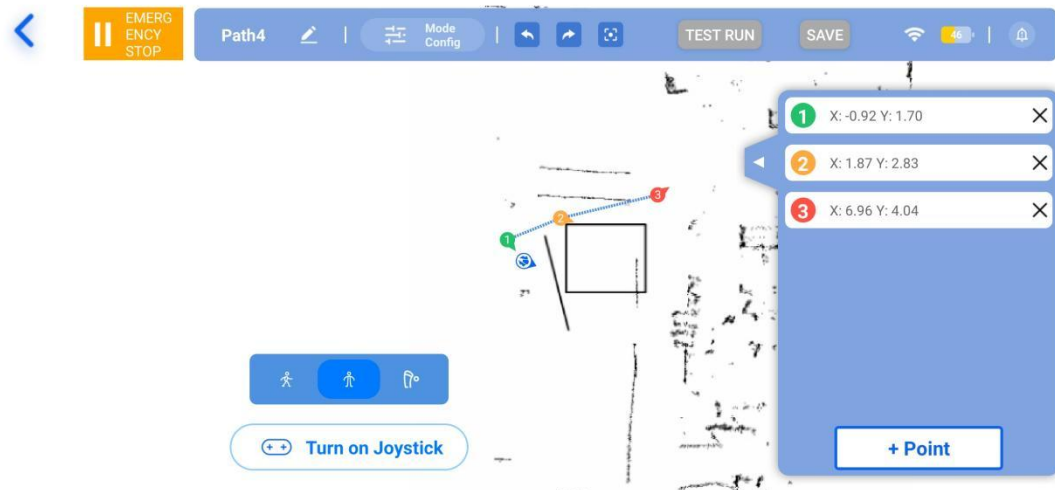


Figure 37 New route interface



Figure 38 Add actions and speech interface

Editing Route Operations: Completed routes can be edited or deleted in the route management interface. Editing primarily involves modifying or removing point content. To modify a point, long-press the generated point or click the three horizontal lines to the right of the point box. Users can adjust the execution time, actions, and scripts. To delete a point, simply click the "×" button to the right of the point box.

After deletion, the system will automatically reorganize the sequence, with subsequent points being automatically adjusted in descending order to fill the gap.



Figure 39 Editing and deletion routes

3. Local face registration:

Click "Configuration"> "Function"> "Local Face Registration" to enter the registration interface. Click "Create New Face" and either import a photo or take a live shot. Enter the corresponding face name, provide a description, and select a priority level. After completing these steps, click "Save" to finalize the face information. To edit or delete existing face details, simply tap the corresponding photo.

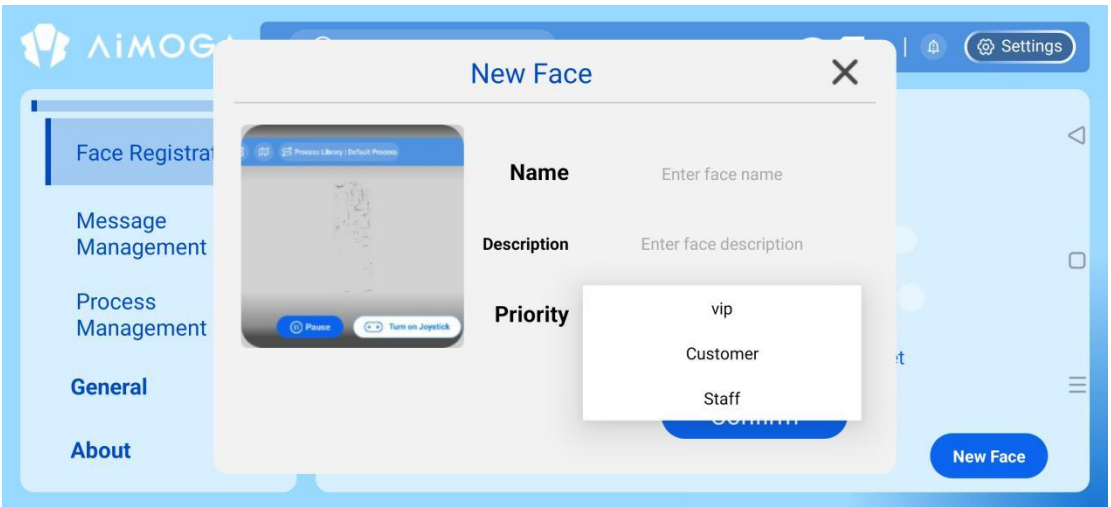


Figure 40 Face registration interface

⚠️ Note: To use face registration for the first time, you need to authorize camera usage and file reading permissions.

4. Local dialect management:

In the configuration settings, click "Function"> "Script Management" to access the local script management interface. To create a new script, enter the title and text content, then click "Generate Script" to complete creation. The generated script will automatically save in the management interface. Select the newly created script and click the ellipsis icon in its upper-right corner to perform operations such as editing, copying, live broadcasting, downloading audio files, or deleting.

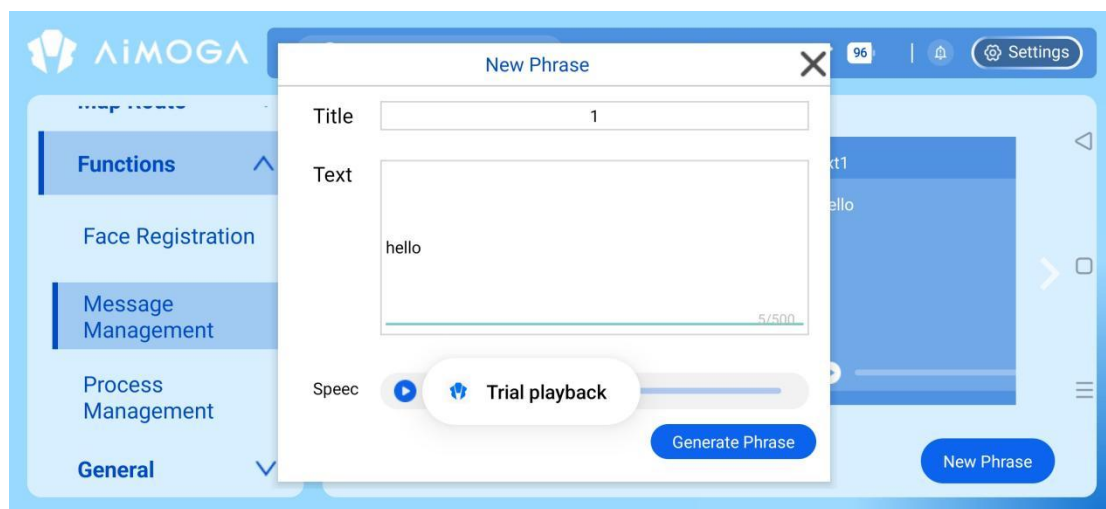


Figure 41 New scripts

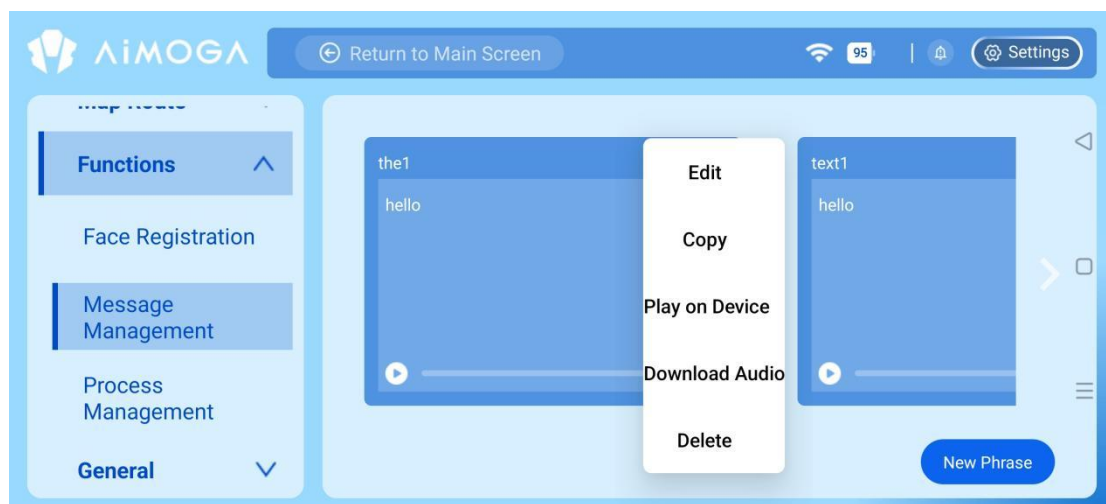


Figure 42 Management language

5. Intelligent process download:

In the settings, click "Function"> "Smart Process Download" to view all processes (including downloaded and undownloaded ones). Users can delete or download specific processes. The Smart Process Download feature allows searching for processes using keywords. Only processes downloaded through this method can be executed in the control interface (as processes are created and edited on the cloud platform).



Figure 43 Process management interface

6. Language configuration:

In the settings, click "General"> "Language Settings". Users can select their preferred language from the list to switch between different languages. After a successful switch, the robot will announce "Switched successfully" in the new language. Subsequently, the robot will automatically use the new language for all voice interactions. This product currently fully supports Chinese and English, with other language versions under development.



Figure 44 Language configuration interface

7. Main body Wi-Fi Settings:

In the Settings, click "General"> "Body WIFI Settings" to view the Internet network status connected by the body. If the required Wi-Fi is not found in the list, refresh the list by clicking the refresh button.

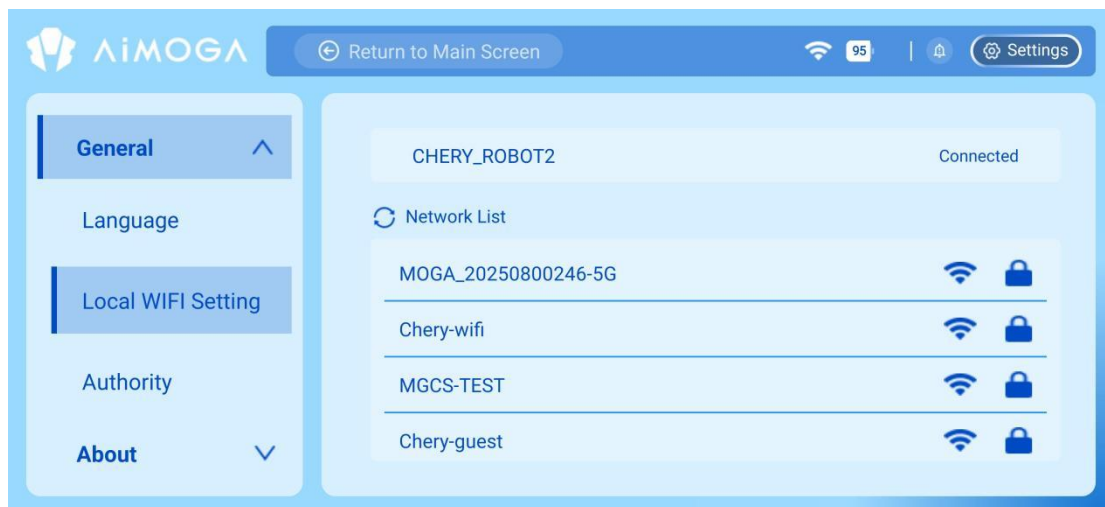


Figure 45 WIFI Settings management interface

8. about :

On the "About" page, users can view and manage details related to robots. This page provides features such as verifying hardware and software versions, accessing

user agreements and privacy policies, viewing robot specifications, deleting personal data, and resetting devices to factory settings.



Figure 46 About the interface

5.5 Introduction to Cloud Platform

Cloud platform address: <https://admin.aimoga-robot.com>

5.5.1 User Registration and Login

1. New user registration:

After accessing the cloud platform website, users can select their target language in the upper-right corner of the interface. On the login page, click the "Register New Account" link. Follow the prompts to enter your email address and username, then click "Send Verification Code". Locate and enter the code received in your inbox. Next, set a password and confirm it. Once all details are verified, click the blue "Register New Account" button to submit your application. If you already have an account, click the "Return to Login" button to switch back to the user login interface.



Figure 47 User registration

2. users login :

Enter your email account and password in order, and click the blue "Login" button to complete the login. If you forget your password, click the "Retrieving Password through Email" button to enter the user's password retrieval interface.



Figure 48 User login

3. Find back the password:

Enter the email address to retrieve the password as required, enter the verification code received, and finally set the new password. Click the "Confirm" button to reset the password. Return to the login interface to log in again.



Figure 49 Find back the password

5.5.2 Personal Information Settings

1. Change profile picture:

After logging in to the cloud platform, click the personal account in the upper right corner, click "User Settings" and select the function option of "Change profile picture". The user can select a new profile picture from the local device and upload it. After completion, the profile picture will be updated to the account display in real time.

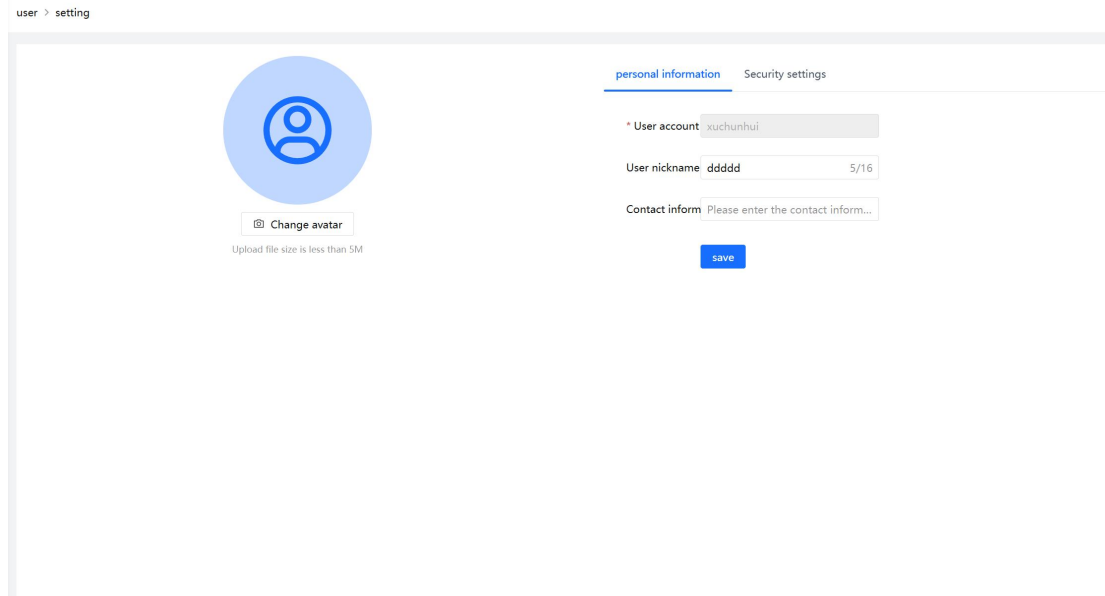


Figure 50 Change profile picture

2. change password :

Click "Security Settings" -> "Edit", enter the current password and then enter the new password, confirm the new password again and click save to change the password.

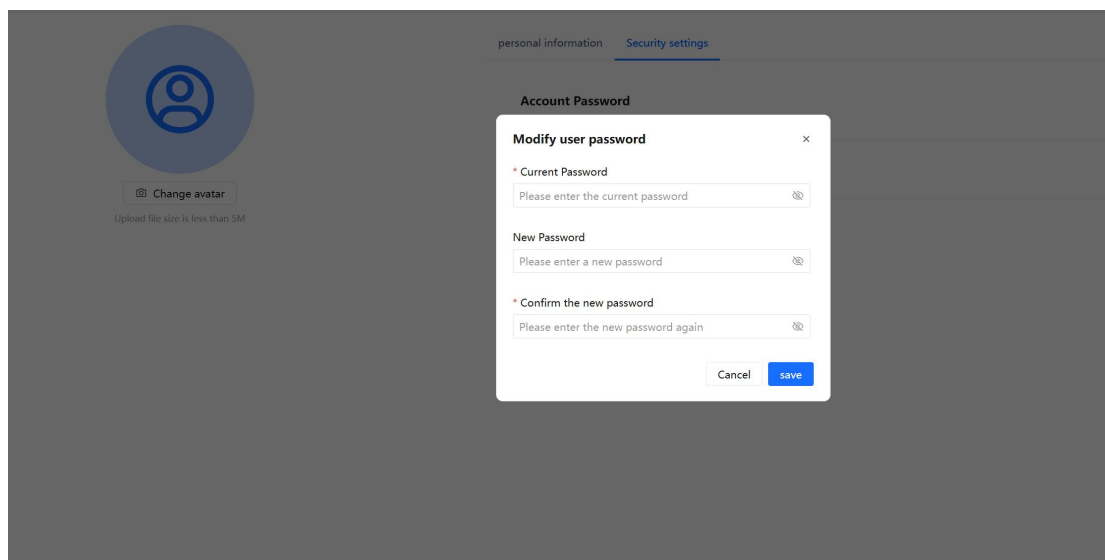


Figure 51 Modify the password

5.5.3 Tenant, Entity and Member Management

1. Create, delete, and edit tenants:

In the tenant management interface, you can view and manage existing tenants. To create a new tenant, click "Add Tenant", enter the tenant name, upload a logo, and click "Save" to complete setup. The three ellipsis icons at the bottom-right corner of each tenant allow deletion or editing. Each user can create multiple tenants, and a single tenant can host multiple robot entities.

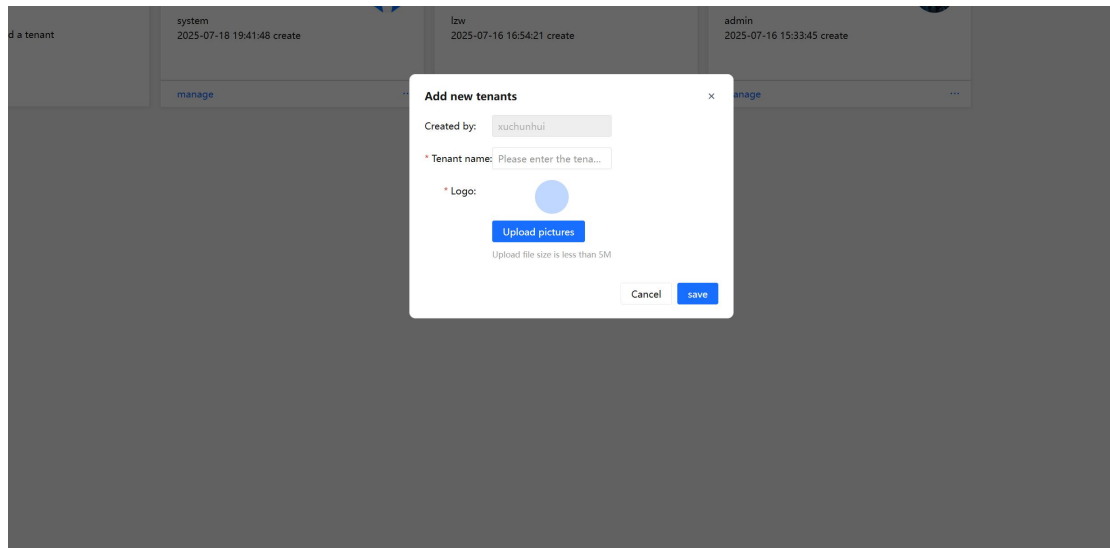


Figure 52 Add tenant interface

2. Body information:

This interface allows viewing the status of various robots under the current tenant. Within the robot information panel, users can configure, edit, or delete different robots while visually displaying their online statuses. The display includes device name, ID, serial number (SN), Wi-Fi name, IP address, firmware version, and assigned administrator (as shown in Figure 53).

To monitor a robot's online status, click the "Online/Offline" icon to view its history in reverse chronological order, allowing you to review past operational periods and connection statuses (as shown in Figure 54). For battery monitoring, tap the "Battery" icon to see real-time charge changes (Figure 55), giving you a clear overview of energy consumption. To register a new device, simply click the "Register Device" button and fill out the required information on this interface (Figure 56).

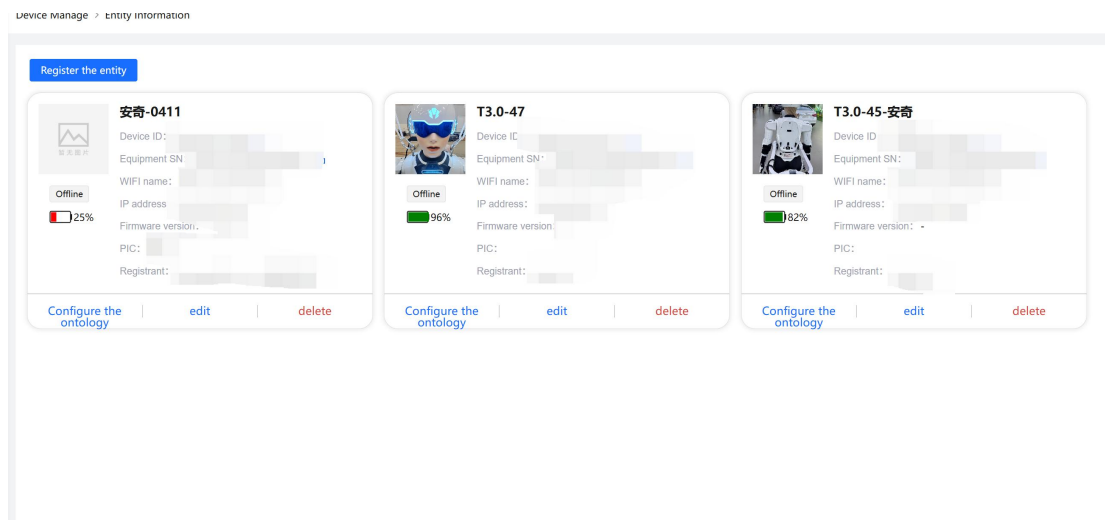


Figure 53 Body management interface

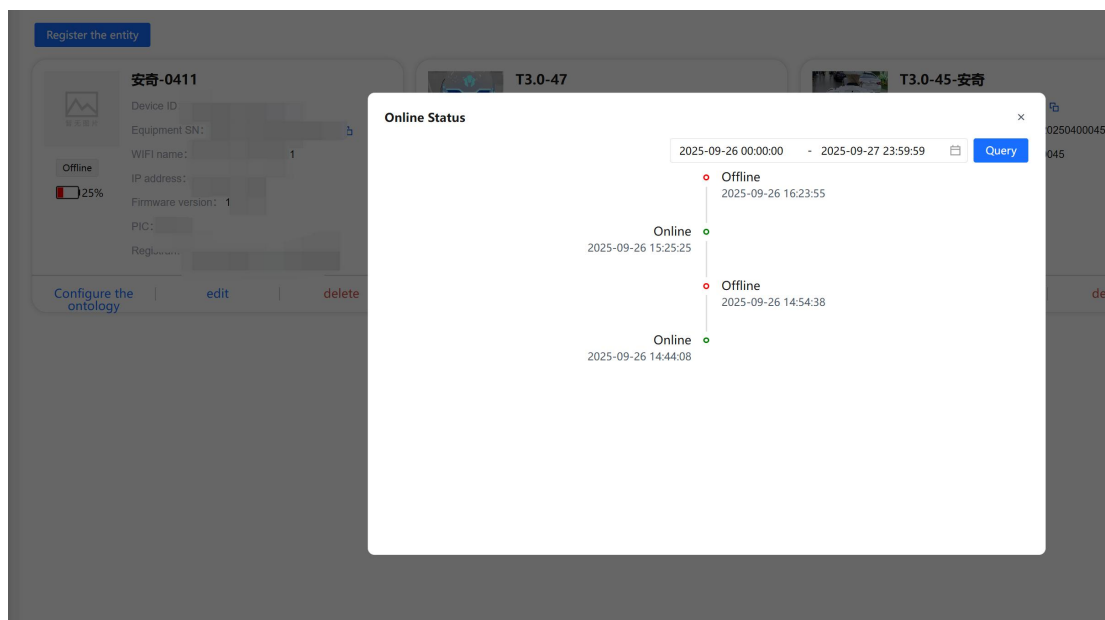


Figure 54 Online status display interface

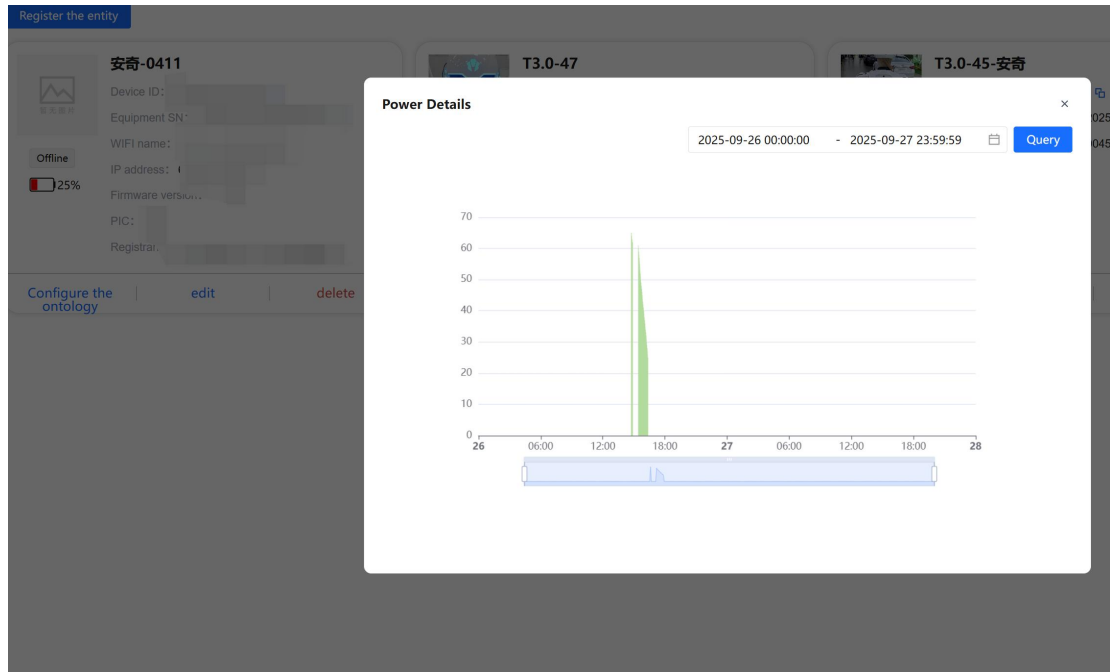


Figure 55 Electricity details

The screenshot shows a 'Register the entity' modal window. It contains four required fields:

- * Device name:
- * Equipment Type:
- * Device serial number:
- * PIC:

 At the bottom right, there are 'Cancel' and 'save' buttons.

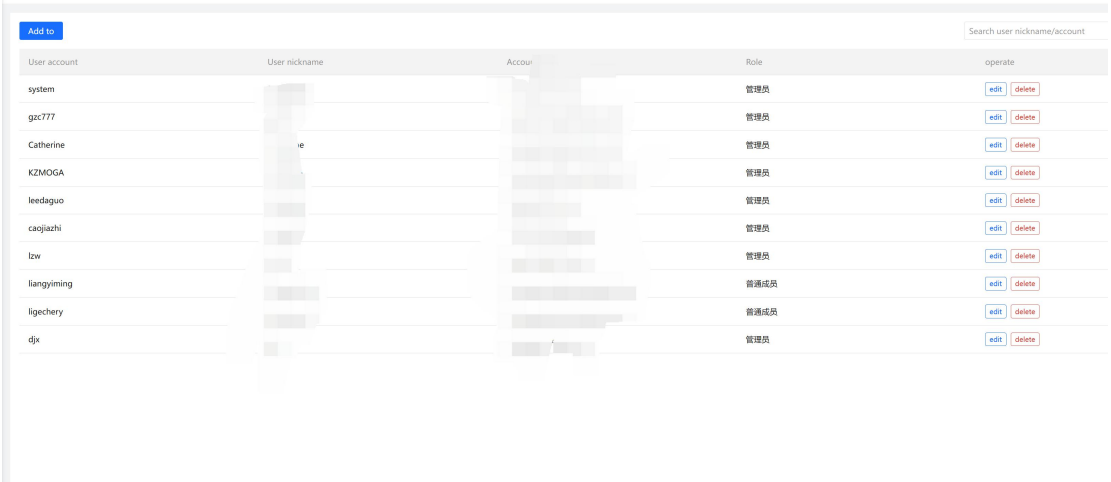
Figure 56 Register body interface

3. Membership management:

In the main management page, click the "Member Management" button on the left side to jump to the member management interface. This page allows you



to view tenants' members and administrators, as well as add new administrators and members. Note: Only administrators can edit, delete, or add members.



User account	User nickname	Account	Role	operate
system			管理员	edit delete
gzc777			管理员	edit delete
Catherine			管理员	edit delete
KZMDGA			管理员	edit delete
leedaguo			管理员	edit delete
caojiashi			管理员	edit delete
lzw			管理员	edit delete
liangyiming			普通成员	edit delete
ligechery			普通成员	edit delete
djx			管理员	edit delete

Figure 57 Member management interface

4. Body configuration

Select the corresponding robot body in the body management interface and click the "configure body" button to start configuration.

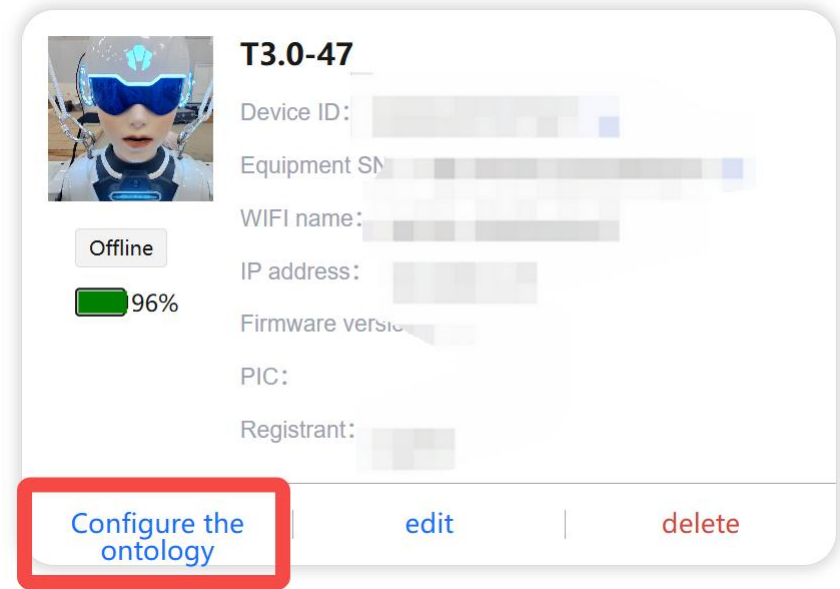


Figure 58 Configuration of the body

(1) basic configuration :

Click "Basic Configuration" to edit the basic attributes of the body (including device name, body type, body image and language identification synthesis) in the

current interface. Click "Body Information Details" to learn more about the configuration parameters of the body.

← T3.0-47

Knowledge base documentRole ManagementSpeech ManagementProcess managementLogsBasic Configuration

Property ConfigurationDetails of the device

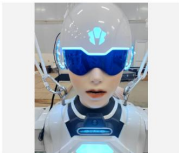
* Device name

T3.0-47

* Ontology Type

墨茵机器人

* The picture of the body



Replace pictures

Uploaded image size is less than 10M

* Recognition and pronunciation synthesis language

zh_CN

save

Figure 59 Body configuration interface

← T3.0-47

Knowledge base documentRole ManagementSpeech ManagementProcess managementLogsBasic Configuration

Property ConfigurationDetails of the device

Equipment SN

WIFI name

WIFI password

Product Id

Ontology Id

Equipment number

Device serial number

Firmware version

Organization Id

Secret

Key

MQTT server address

OTA server address

Figure 60 Body information details interface

(2) KBM :

The knowledge base directory supports creating, editing, deleting, and reordering folders. After creating a new folder, users can add knowledge base documents to it, select the training method (supporting text length segmentation and Q&A splitting), and configure advanced

Import files

* Training method

按文本长度进行分割

Advanced Settings

Scoring by word count

Use character slicing

512

Select a file

Upload

Click "Upload" or Drag file to this area to upload

Upload

Supports pdf, docx, txt, md, csv, html formats, and the size is less than 10M

(word count segmentation and character segmentation). Click "Upload" to complete the process. Subsequent users can view and download the system-generated segmented knowledge base files after the last operation.

Figure 61 Add knowledge base document interface

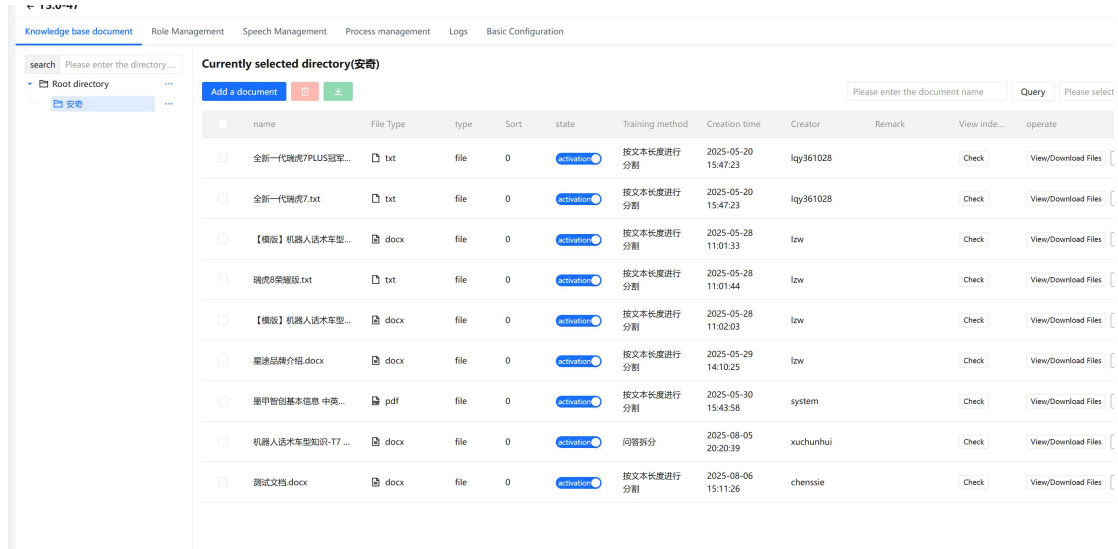


Figure 62 Knowledge base management interface

(3) Role management:

After logging into the role management interface, users should click the "Template" button to create roles using provided templates. When selecting "Create by Template", the system will guide users through configuring robot instructions (including name, style, identity, objectives, behavioral guidelines, and business context) and adding knowledge bases. Upon completing all configurations, click the "Test" button on the right side of the interface to initiate real-time testing. Enter simulated customer information (e.g., age "25", gender "male") in the "faceinfo" input field. Running the test allows dynamic observation of the robot's interaction logic and response effectiveness. Users can adjust parameters based on test feedback until the role fully meets predefined operational standards.

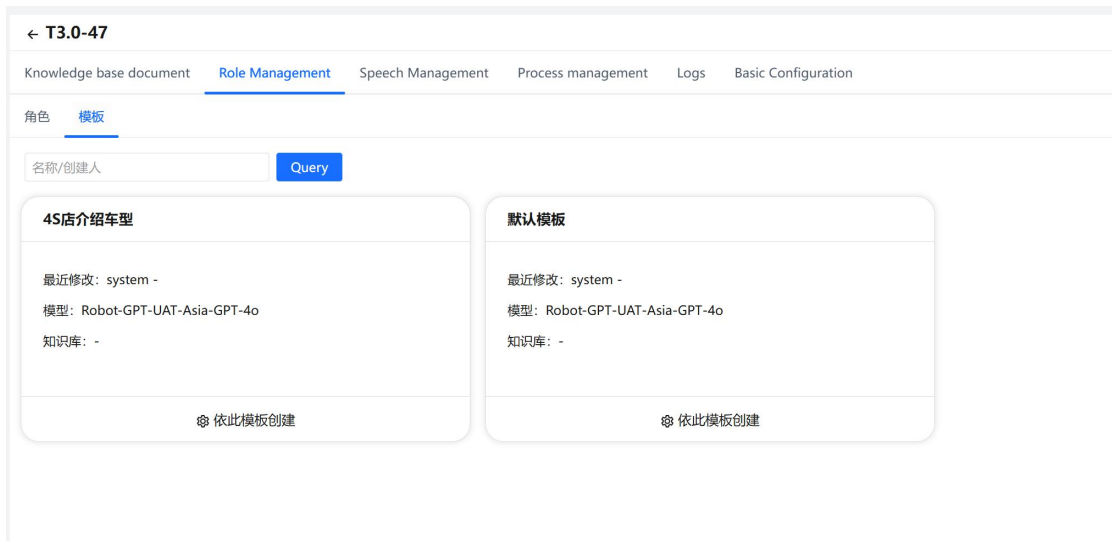


Figure 63 Template display interface

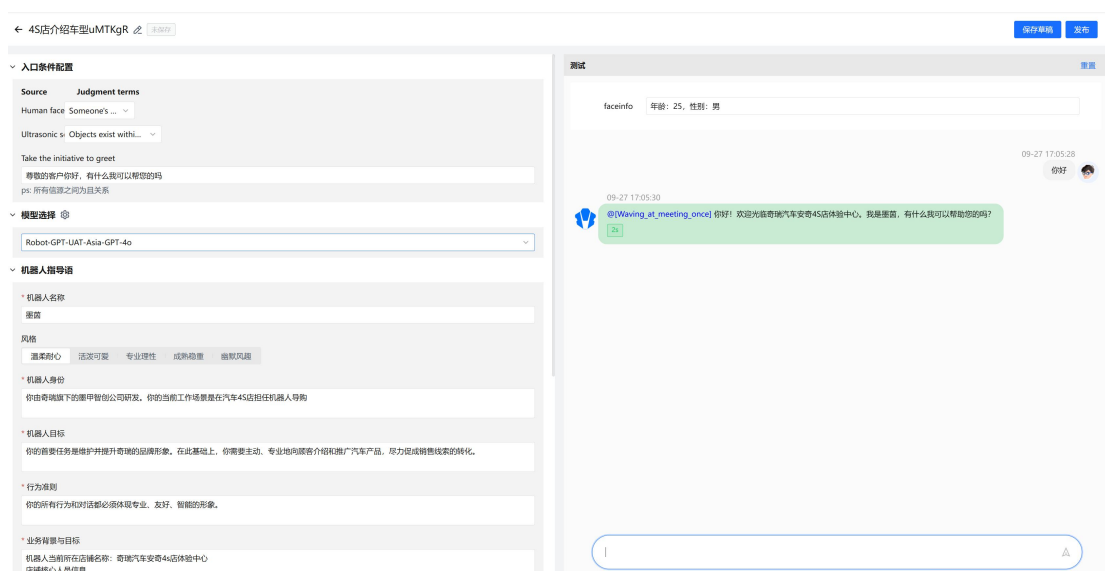


Figure 64 Character creation interface

(4) Speech management:

Click "Script Library Management" to access the script management interface. Create a new directory folder and add text or audio scripts directly under it, or import existing script files. On this page, users can view, edit, delete, and export script knowledge packages in standard formats. When configuring "Process Management", scripts from this section can be referenced.

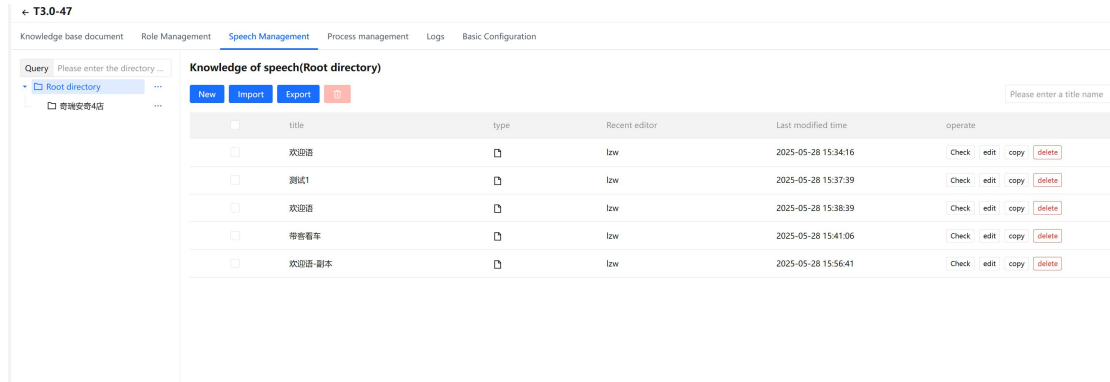


Figure 65 Phone script management interface

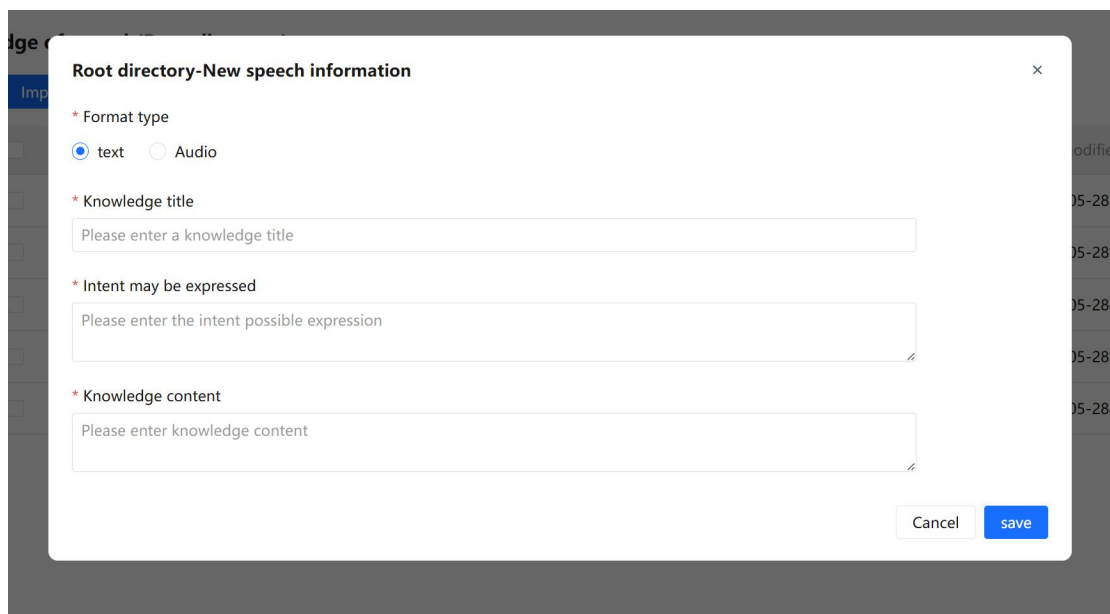


Figure 66 New speech interface

(5) Process management:

This feature enables configuration of interactive workflows within robotic operation processes, which can be synchronized to the App for download and use. To create or edit a workflow, click "Process Management" in the robot's configuration interface. After clicking "Add", enter the workflow name, add notes, and click "Save" to proceed to the workflow editing page.

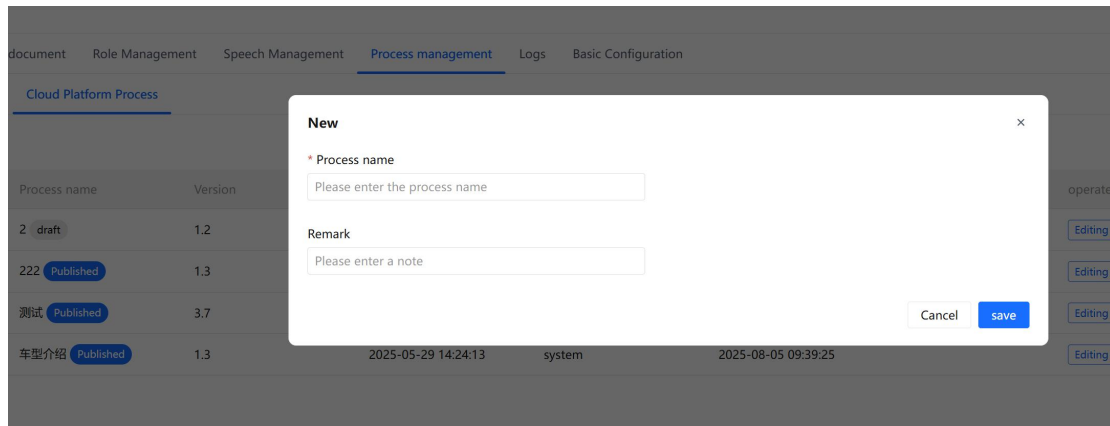


Figure 67 New workflow interface

In the process editing interface, the left menu bar provides nodes such as intent branches, knowledge base imports, large language models, HTTP requests, actions & announcements, and code writing. Users can freely drag and drop to configure processes. Basic configuration operations: After entering the editing interface, process entry conditions will be automatically displayed. Once configured, users can sequentially drag and drop intent nodes, knowledge bases, and large language models to complete process setup. Additionally, users can directly add large model nodes or fixed action announcement nodes after intent branches as needed. Upon completing configuration, clicking the "Dialogue" button on the right side of the interface initiates real-time testing. The system automatically simulates user interaction scenarios and verifies process execution logic. After saving and publishing the process, it will be automatically displayed in the process management interface and synchronized to the App's intelligent process download list. Subsequent users can directly download and activate this process within the App.

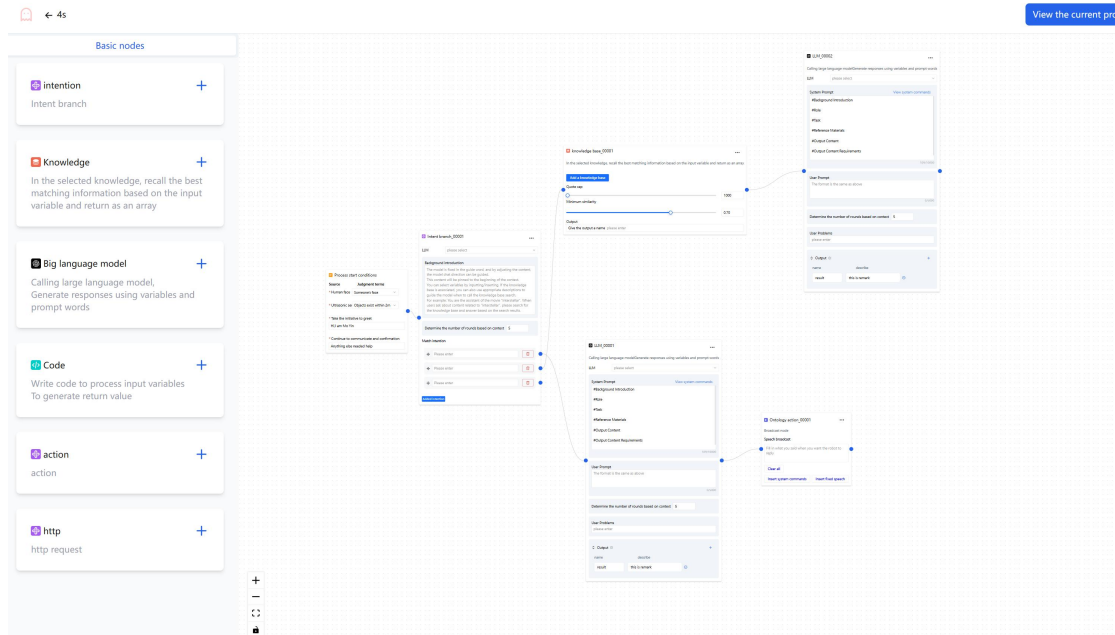


Figure 68 Process editing interface

- **Process entry conditions:** The user needs to determine whether there is a "face" and an "ultrasonic sensor", and determine the "active greeting" and the "continue communication confirmation". Note: The process will be opened only when both of the source judgment items are satisfied.
- **Intentional branch:** The process starts with a conditional link to the intentional branch. Add the background introduction of the robot application scenario, set the number of context rounds (0-10), and add multiple "matching intentions" (including but not limited to greeting, introducing models, chatting, etc.).
- **Knowledge base import:** Drag into the knowledge base, intend to branch information to connect the knowledge base, click add previously written rhetoric information as robot knowledge base, select the upper limit and minimum similarity degree of reference, and input the name of output.
- **Large language model:** LLM can directly connect to the intention or knowledge base, input the corresponding prompt, and the robot will respond according to the instructions.
- **Action& Broadcast:** Follow the random branch, you can input the content of the robot reply, and insert fixed speech from the speech management library;

you can also add fixed speech after other LLM results to select and insert system variables to directly call the results.

- **Code writing:** For users with development capabilities, you can write code to adjust the output content.

5. Intelligent analysis

In the main management interface, clicking the "Smart Analysis" button on the left will redirect you to the Smart Analysis dashboard. This platform provides comprehensive customer data insights, enabling multi-dimensional statistics and analysis of in-store visits, product interest tracking, purchase intent analysis, and service process monitoring. The interface integrates advanced features including conditional filtering, keyword search, and time range customization, allowing users to quickly identify target customers. By leveraging detailed information such as customer titles, contact details, store visit frequency, and key interests, it helps businesses develop personalized follow-up strategies.

Device Manage > AI Analysis

Today's In-Store Services
0Person-times

Cumulative In-Store Services
627Person-times

Purchase Intention
68.00%

Top 3 Products
瑞虎7 | 瑞虎9 | 瑞虎8

Customer Focus Points
科技配置 | 动力 | 空间

Dissatisfaction Keywords
外观 | 价格 | 试驾问题

Ontology Please select an ontology

Process Please select a process

Type all

Latest intentions all

Return phase all

Keywords Customer name/phone number

Arrive at the store recently

select date

select date

Query

Reset

总计 623 位客户, 已选中 0 条

导出选中

导出全部

☐	Customer name	Car purchase intention	Ontology	Process	Number of arrivals	Type	Customer contact information	Customers pay attention to the product	Customer concerns	Recent store arrival time	Return phase	operate
☐	20250926003	Low intention	安奇-0411	车型介绍-支持联网	1	Small Talk	-		车型咨询	2025-09-26 16:04:37	Waiting for return visit	Analysis Report delete
☐	20250926001	Interested	安奇-0411	车型介绍-支持联网	1	Small Talk	-		车型咨询 热销车型	2025-09-26 15:50:21	Waiting for return visit	Analysis Report delete
☐	20250926002	High intention	安奇-0411	车型介绍-支持联网	1	Sales Consultation	-	瑞虎3X	车型咨询 试驾体验	2025-09-26 15:46:19	Waiting for return visit	Analysis Report delete
☐	20250925005	Low intention	安奇-0411	车型介绍-支持联网	1	Small Talk	-		试驾 L15座位	2025-09-25 16:21:11	Waiting for return visit	Analysis Report delete
☐	20250925006	High intention	安奇-0411	车型介绍-支持联网	1	Sales Consultation	-	瑞虎7 瑞虎5X 瑞虎3X 小蚂蚁	车型介绍 舒适性 ...	2025-09-25 16:16:22	Waiting for return visit	Analysis Report delete
☐	20250925007	Low intention	安奇-0411	车型介绍-支持联网	1	Small Talk	-		试驾 试驾 试驾 ...	2025-09-25 16:09:23	Waiting for return visit	Analysis Report delete
☐	20250925003	Low intention	安奇-0411	车型介绍-支持联网	1	Small Talk	-	小鹏G6	奇瑞汽车 天气 ...	2025-09-25 15:58:46	Waiting for return visit	Analysis Report delete
☐	20250925004	Low intention	安奇-0411	车型介绍-支持联网	1	Small Talk	-		试驾 试驾	2025-09-25 15:15:15	Waiting for return visit	Analysis Report delete
☐	20250925001	Low intention	安奇-0411	车型介绍-支持联网	1	Small Talk	-	艾瑞泽5	试驾调节 洗手间 ...	2025-09-25 14:51:10	Waiting for return visit	Analysis Report delete
☐	20250925002	High intention	安奇-0411	车型介绍-支持联网	1	Sales Consultation	-	风神A8 瑞虎8Plus ...		2025-09-25	Waiting for return visit	Analysis Report delete

Figure 69 Intelligent analysis interface

6. Conversation log

In the robot management interface, clicking the "Conversation Log" button on the left panel will take you to a dedicated log page. This system tracks and manages

all interactions between users and the robot, allowing filtering by tenant, robot type, workflow category, or time range for quick access to specific scenarios. Each entry clearly displays the conversation title, message count, duration, and timestamps, with options including "View Details", "Export Records", and "Add to QA Knowledge Base".

7. High frequency QA management

In the ontology management interface, clicking the "High-Frequency QA Management" button on the left will redirect you to the corresponding page. This interface helps collect and optimize common customer-robot interactions. The system filters frequent questions by tenant, ontology, process, and time, displaying both original user queries and actual responses. Users can view details, delete invalid entries, and perform operations like importing/exporting or batch additions to streamline knowledge base updates, continuously improving the accuracy of AI responses and service efficiency.

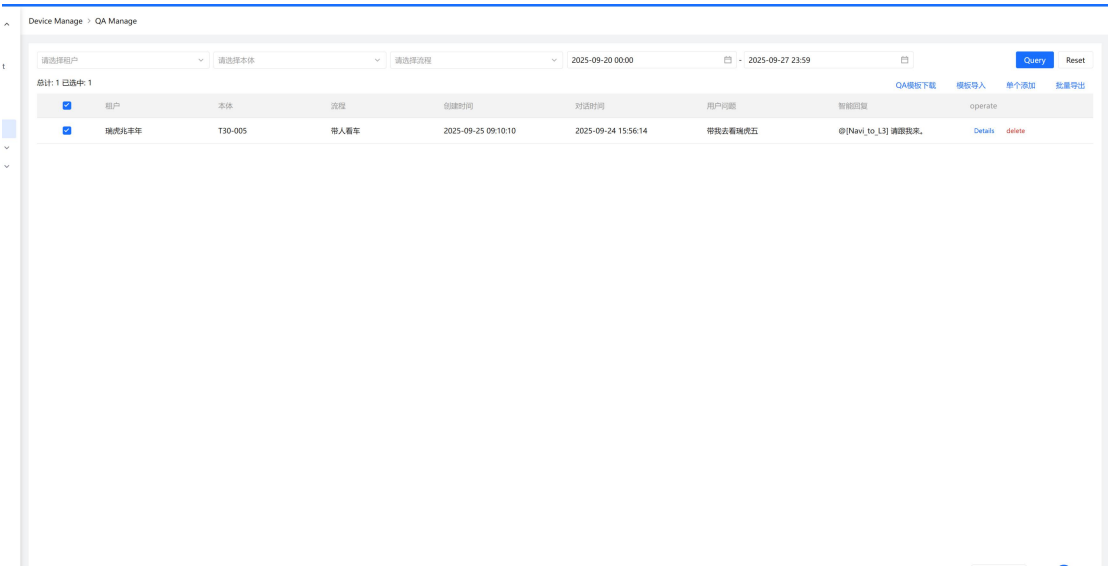


Figure 70 High frequency QA management interface

! Before using this function, you need to first select high-frequency or typical conversations in the "Dialogue log" interface, select relevant records and click "Save to QA".

5.6 Indicator light reminder

type	Definition 21
Power on the upper limb	Blue lights are on above the waist
Power on the lower body	Blue lights are on in the lower part
Electricity below 25%	Chest indicator: Red light slow blinking
Remote control app disconnected	Head AIMOGA logo light: Red on
The robot enters an emergency stop state	Head AiMOGA logo light: Red flash
Any fault of the machine	Head AIMOGA logo light: yellow always on
Network connectivity	Ear light: Red slow flash

5.7 Robot motion library

5.7.1 Motion capture of upper limb movements

The following actions can be triggered by the remote control App or through the configuration process in the large model. After the configuration is completed and the process is opened, you can say to the robot: "Let's take a picture", and the robot will make the corresponding action.

num ber	Chinese name	code	short code
1	Speaking with gestures-spread your hands-quick version	Gestures_while_speech_spread_hands_fast	GSS
2	Speaking with gestures-hand circle-quick version	Gestures_while_speech_roll_hands_fast	GSR
3	Speaking with gestures-Self-introduction- Quick version	Gestures_while_speech_introduce_myself_fast	GSIM
4	Raise your hand to invite-right-front	Invite_right_0	IR0
5	Lift your hand to	Invite_right_30	IR30

	invite-right-30°		
6	Lift and invite-left-30°	Invite_left_30	IL30
7	Lift your hand to invite-right-60°	Invite_right_60	IR60
8	Lift and invite-left-60°	Invite_left_60	IL60
9	Lift your hand to invite-right-90°	Invite_right_90	IR90
10	Lift your hand to invite-left-90°	Invite_left_90	IL90
11	Raise your hand to invite-near the right end-front	Invite_right_near_0	IRN0
12	Single sign-on	Waving_at_meeting_once	WO
13	Multiple handshakes	Waving_at_meeting_more	WM
14	fist pound	Fist_bump	FB
15	Introduce by hand (cut fruit version)	Introduction_Single_handed_Splitting_Types	IST
16	Move your hands slowly (sway them up and down)	Calm_down_both_hands	CDBH
17	keep off	No_Approaching	NA
18	Hohhot	Group_photo_Bye	GB
19	The extended version of the photo comparison	Group_photo_Bye_longer	GBL
20	Hold the height of the hand (sway up and down) pause	Shaking_hands_pause_medium	SH
21	Hold a fist and raise it up	Power_fist_up	OPFU
22	Make a fist with both hands and raise it up	Double_power_fist_up	DPFU
23	Raise your thumb with one hand	Thumbs_up	OTU
24	Thumbs up	Double_Thumbs_up	DTU
25	One-man summoning	One_handed_summoning	OHS
26	Hands call	Double_handed_summoning	DHS
27	Hold a phone in one hand and make a phone call	Earring_phone_call	EPC

	gesture		
28	draw	Stretch	STR
29	Arm wave display	Wave_swing_arm	WSA
30	Turn your head and take a picture with both hands	Taking_photos_with_hands	TPWH
31	music director	Musical_director	MD
32	Virtual driving	Virtual_driving	VD
33	Simulated shifting	Simulate_gear_shifting	SGS
34	Good luck	Good_luck_transmission	GLT
35	He fanned his hand beside his cheek to cool down	One_handed_fan	OHF
36	He flapped his hands beside his cheeks to cool off	Double_handed_fan	DHF
37	Draw a circle with one hand and pause to point	Circle_Click	CC
38	Point your index finger to the sky with one hand	One_handed_finger_on_the_sky	OHFS
39	simulated flight	Simulated_Flight	SF
40	Simulated boxing	Simulate_Boxing	SB
41	Notes taken	1_Taking	NT
42	Gestures in speech	Speech_gestures	SG
43	Drawing a semicircle	Draw_a_semicircle	DS
44	Fortune Cat	Lucky_Cat	LC
45	be curious	Seeking	SK
46	listen for	Focused_listening	FL
47	telescope	Virtual_telescope	VT
48	Zoom in shout	Loudspeake_shouting	LS
49	Turn your waist	Turn_one's_waist	TW
50	Cover the light with one hand in front of your eyes	Block_light	BL
51	Handshake	Greeting_Salute	GS
52	awake	Waking_up	WU
53	Dacne11	DacneA	DacA
54	C	DacneB	DacB
55	D	DacneC	DacC

5.7.2 Non-DCA actions

The following actions can be triggered by the remote control App or through the configuration process in the large model. After the configuration is completed, you

can say to the robot: "Take a few steps forward". The robot will make the corresponding action.

⚠ Before the movement command of the robot is sent, the safety of the surrounding environment must be ensured!

number	Chinese name	code	short code
1	Take a few steps forward	Take_few_steps_forward	TFSF
2	Take a few steps back	Step_back_few_steps	SBFS
3	Turn left 90°	Turn_left_90	TL90
4	Turn right 90°	Turn_right_90	TR90
5	Turn your head left 20°	Head_turn_left_20	HTL20
6	Keep your head upright	Head_straight	HS
7	Turn your head right 20°	Head_turn_right_20	HTR20
8	Turn your head left 45°	Head_turn_left_45	HTL45
9	Turn your head right 45°	Head_turn_right_45	HTR45
10	Stop walking	Stop_walking	STOPW
11	Turn your head left X°	Head_turn_left_X_max_45	HTLX
12	Turn your head right X°	Head_turn_right_X_max_45	HTRX
13	Stop the current action/task	Stop_current_action/task	STOPCAT

6. Notes

6.1 Environmental requirements

1. Because of the high kinetic energy during operation, this product can only be used indoors and please ensure that there are no people or other objects within 2 meters of the center radius of the robot.
2. The product's skeleton is primarily made of metal, which is relatively hard and prone to damage when touching hard surfaces (such as glass, stone, or flooring) or surrounding objects. Whether before use, during operation, or after stopping usage, please keep an eye on your surroundings to avoid causing unnecessary harm to yourself, nearby objects, people, or small animals.
3. When using indoors, please choose the ground with protective materials such as rubber pads and blankets.
4. It is not recommended to use this product on uneven ground, steep slope, muddy ground, loose material, gravel road surface, slippery ground, ice, puddle, complex grassland and other places, which may cause danger and damage the robot.
5. This product is not waterproof. Please do not use it outdoors. Do not immerse the body in water, and do not use strong water flow or high-pressure hose to clean the body. Avoid water entering the charging port and lithium battery, otherwise there will be a risk of fire and explosion.
6. Do not turn on the power after the product is wet or falling into water, otherwise it will cause permanent damage to the product. In case of this situation, please contact the after-sales service personnel in time.
7. Do not use this product in the environment of poor communication signal or strong electromagnetic interference. Because the wall, rock and forest of the building may cause interference to the sensor and communication signal, please use this product in an open space.
8. Using this product near a source of significant electromagnetic interference may affect the operation of this product. Sources of electromagnetic interference include, but are not limited to: a large number of Wi-Fi hotspots, a large number of routers, high-voltage wires, high-voltage power stations, mobile phone base stations and TV broadcast signal towers.

9. Do not put this product in fire or heater, and do not use or place this product near heat sources, such as direct sunlight or high temperature in the car, near a fire or heating furnace, otherwise it may cause battery overheating, fire, failure of function or shortened life.
10. When operating a remote-controlled or voice-activated robot for movement and actions, please ensure there are no obstacles (such as people, pets, or objects) within 2 meters of the robot's diameter. Also, confirm that the space can support heavy loads and tolerate significant noise levels. It is recommended to use the device within an enclosed barrier. Avoid using remote control or voice-activated operations when the battery level drops below 25%.

6.2 Instructions for Use

1. Please check and ensure that there is no foreign matter affecting the joints of this product, that the wiring harness is not damaged, and that the joints and appearance are normal and undamaged.
2. Please check and ensure that the surface of the camera on your neck and waist is clean. Avoid scratching the lens with hard objects when using it. If the surface of the camera is dirty, wipe it off immediately with a dry soft cloth.
3. When placing this product, ensure that the robot is in suspension on the standby station.
4. Please do not walk on sharp, raised ground, please do not drag the product on the ground, easy to cause damage to the bottom of the body or soles.
5. When in use, keep it within sight and control, leave enough safe distance, and stay away from obstacles, crowds and any other objects that may be damaged by collision.
6. This product is designed to support walking on a 5-degree slope. However, we strongly recommend that you use it on flat ground. Do not take risks when encountering steep slopes, uneven ground or other dangerous terrain.

7. When using the robot when the power is lower than 25%, this product may not have enough power to perform actions. Please stop using it as soon as possible and use it after charging to avoid danger.
8. Do not put your hand into the joint connection of this product, to avoid injury or bump.
9. When using, avoid contact with the moving parts of the body to cause pinch or bump injuries.
10. Avoid contact between body parts and metal parts on the surface of the joint motor during use or shortly after stopping use, and take precautions against burns.
11. Please do not use this product for a long time, which may cause the motor to overheat. After prolonged use, stop using it for a period of time.
12. Do not use charging equipment that does not meet the specifications to charge this product. (Note: only UY600L-W546080 charger can be used for charging)
13. Be sure to shut down immediately after use.
14. When using the battery, please ensure that there is no foreign matter at the connection between the body and the battery.(Note: only ZY4815D model batteries can be used. Using other model batteries may not be powered and there is a great risk)

6.3 Batteries and charging

1. Do not disassemble batteries.
2. It is prohibited to lead out the battery electrode in any way.
3. Do not use alcohol or other combustible to clean batteries and power adapters.
4. If the battery is leaked and the electrolyte enters the eye, do not rub it. Rinse the eyes with water immediately and seek medical treatment.
5. If the product emits odor, smoke, deformation or any abnormality during charging, please immediately unplug the power adapter.

6. The power adapter is hot during charging. Do not touch it for a long time to avoid burns.
7. Do not use a damaged battery or power adapter.
8. Official power adapters are only allowed to be used. Do not use non-official power adapters, otherwise the lithium battery may leak, heat up, catch fire or explode.
9. Do not charge the battery for more than 24 hours, overcharging will shorten the battery life.
10. Do not put this product into fire or heater, and do not use or place this product near heat sources, such as direct sunlight or high temperature in the car, fire source or heating furnace, otherwise it may cause battery overheating, fire, failure of function or shortened life.

6.4 Maintenance and transportation

1. Please check the appearance of each part of the product to see if it has been damaged by external impact. If in doubt, please contact the after-sales service personnel.
2. Before maintenance and cleaning, please ensure that the product is in shutdown state and that the power button on the back of the robot is turned off.
3. Please regularly clean the surface dust of the camera, sensor and other components of this product.
4. Please regularly remove the dust inside the heat dissipation hole.
5. Unused robots and standby stations should be placed in a cool and dry place, not in direct sunlight or humid environment and ensure that they are placed on a stable ground.
6. When storing, this product should be placed in a dry and cool environment, away from direct sunlight, fire source and strong electromagnetic field environment. If it needs to be stored for more than three months, the recommended storage temperature range is 20°C to 25°C.

7. The theoretical storage temperature is $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$. Do not store this product at room temperature above 60°C or below -20°C .
8. If the product is left idle for a long time, it will affect its battery performance. In addition, the battery will be permanently invalid after deep overdischarge.
9. The battery will automatically stop charging when it is full. It is recommended to disconnect the connection after it is full.
10. During storage, the battery power should be checked regularly. If the battery power is lower than 20%, the battery should be recharged. It is recommended to recharge and discharge the battery at least every 3 months to maintain the battery activity.
11. After turning on the machine, do not lift or carry this product. If you need to carry it, please handle it after turning off the machine.
12. Handle carefully when moving.

6.5 Laws and regulations

1. Do not use this product for any illegal or improper acts (including but not limited to espionage, military operations and illegal investigation).
2. Do not use this product to infringe the rights of others.
3. Do not use this product to commit any act of privacy infringement. When using this product for photography, you must respect the privacy rights of others. Do not use this product for any surveillance activities, including but not limited to the surveillance of others, groups, events, performances, exhibitions or buildings.
4. Do not control the product to be near or into sensitive buildings and facilities, including but not limited to border lines, power stations, substations, prisons, major transportation routes, railway and highway transportation hubs, government buildings and military base facilities.

5. Users are obliged to know and comply with the laws and regulations in their region. If there are other relevant regulations on the use of robots, cameras and other electronic products in the laws and regulations in their region, users shall use the products in accordance with the relevant regulations.

7. Frequently asked questions

question	terms of settlement
Wi-Fi connection failed	Password error: Enter the correct password according to the prompt on the APP interface.
	Network name error: Ensure that the network name currently entered is consistent with the router configuration
What if you use a voice command and there is no response?	Use voice control in a quiet environment.
Why does the device suddenly fall over when it's being manipulated?	In cases of motor overload, overheating, or other abnormalities that may damage this product, the motion controller will automatically enter protection mode to stop operation. To ensure proper functioning, first check for external impacts or foreign objects affecting the device. If confirmed safe, re-mount it on the standby station and restart the equipment before use. If unsure about its usability, contact our after-sales service team.
What causes the system to be unbootable?	Please make sure the battery is in a state of power. Or try to replace the battery. If it can not be solved, please contact the after-sales service

	personnel.
Unable to execute processes, routes	Confirm that the map is active and the network is connected. If it still doesn't work, contact your service technician.

8. Product warranty explanation

8.1 Warranty period

Part name	Total warranty service time	defects liability period
overall unit	3100h	annum



The total mileage of warranty and the number of years of whole machine warranty, one of them first reaches the limit.

8.2 Warranty

The warranty becomes effective upon your receipt of this product. Please keep the warranty card carefully. Products and components that meet the warranty period and specified coverage will receive free after-sales service. If your purchased product has exceeded the warranty period, you can still get assistance through additional services we offer.

According to the specific situation, we will purchase the corresponding maintenance or replacement of parts for you.

type	Warranty content	term of service
Robot body	Body and composition	1 year

main unit	any power-generating or power-driven machine	1 year
appendix	Battery, standby station (including power adapter)	1 year

8.3 Non-warranty provisions

1. Damage caused by human factors rather than quality problems of the product itself.
2. Unauthorized modification, disassembly and opening of the shell are allowed.
3. Damage caused by improper installation, use and operation as required by the instructions.
4. Damage caused by use beyond safe load.
5. Damage caused by self-installation of third-party products.
6. Failure or damage caused by force majeure.

 The shell, vulnerable parts such as the soles of the feet and accessories such as transport boxes are not covered by the warranty. If necessary, please consult the after-sales support.

9. After-sales service & technical support

Technical support email: support@aimoga-robot.com

10. warranty card

customer name		contact number	
---------------	--	----------------	--

date of purchase		model	
------------------	--	-------	--

maintenance record

Date of report	Record of fault and inspection	Repair date	maintenance man

11. APP download link

<https://download.aimoga-robot.com/app/robot>

12. WEEE mark and instructions



graph 63WEEE

The cross-wheel trash bin symbol indicates that electrical and electronic equipment should not be disposed of with general household waste. Consumers are required to separate such items from unsorted municipal garbage when their service life ends. This approach ensures environmentally friendly and resource-efficient recycling.

Batteries and rechargeable batteries must not be disposed of with household waste. Consumers are required to collect these items separately. Residents can dispose of batteries and storage batteries at local collection points or stores free of charge for eco-friendly processing and recycling of valuable materials. Improper handling may release toxic substances into the environment, posing risks to humans, animals, and plants.

When electrical equipment contains batteries or accumulators, they should be separated from the main unit whenever possible. These components must only be processed after complete discharge. Rechargeable batteries are strongly recommended over disposable ones. Before handling lithium-containing batteries, securely wrap the electrodes with tape to prevent external short circuits – such hazards could trigger fires or explosions.

13. Slope limit signs and instructions



Figure 64 Slope limit description

 This product is only for use on a 5° slope (equivalent to 8.75% on the product label)