

I. Legal Statements

Before using the product, users must read the Users’ Manual of MagicDog (hereafter referred to as the “Manual”) carefully and strictly follow the instructions in this manual to operate the product. The company will not be liable for property loss or personal injuries resulting from a violation of the content specified in this manual during the use of the product. This product consists of multiple parts and should be kept out of the reach of children to prevent accidents. This product is intended for use by individuals aged 18 and over. To extend the product’s service life, do not use the product in high-temperature and high-pressure environments. This manual endeavors to provide comprehensive descriptions of the product's features and detailed instructions for its use. However, the product may be different from the content of the manual due to continuous feature improvements and design changes. Where the product differs in the color and appearance specified in the manual, please refer to the actual product. We will update the electronic version of the Users’ Manual of MagicDog in the MagicDog application from time to time. Users can download it as needed.

II. Disclaimer

To prevent illegal behaviors and possible injuries and losses, users are obliged to observe the following requirements:

This product is not a toy and is unsuitable for use by those under the age of 18. Ensure that this product is beyond the reach of children. In particular, be prudent when operating the product in scenarios where there are children.

Before use, read this document carefully. You need to know how to use this product properly and understand your legitimate interests, responsibilities, and safety notices. Otherwise, it may result in property damage, safety incidents, and personal safety hazards. Your use of this product means that you have known, recognized, and accepted all the conditions and contents specified in this document. Users should be liable for their behaviors and resulting consequences and agree to MagicDog’s relevant policies or rules.

To the fullest extent permitted by law, MagicDog does not provide any warranties, whether express or implied, for this product, including but not limited to implied warranties of merchantability, fitness for a particular purpose, or non-infringement. MagicDog is not liable for any losses incurred to users due to the reason that users does not use the product in accordance with this document. Meanwhile, MagicDog is not liable for any indirect, consequential, punitive, incidental, special or criminal damages, including losses suffered due to your purchase or use of or failure to use this product (even if MagicDog has been notified of the possibility).

It is strictly prohibited to perform unauthorized disassembly, modification, or maintenance of this product. MagicDog is not liable for the malfunctions or damages caused by the unauthorized disassembly, modification, or maintenance of this product. Additionally, MagicDog does not assume any responsibility for any malfunctions and damages caused by operating this product in extreme conditions (such as high temperature, extreme cold, chemical corrosion, fire, or water).

Malfunctions and risks arising from normal wear of components and battery aging are considered normal risks within the scope of regular product use. MagicDog assumes no responsibility for such risks.

The laws of some countries may prohibit the waiver of warranty clauses, so you may enjoy different relevant rights in different countries. MagicDog reserves the right to make a final interpretation of the aforementioned terms and to update, revise, or terminate this clause without prior notice.

III. Precautions

1. Environmental requirements

(1) Selection of operation environments

Due to the significant kinetic energy generated during running and braking, the braking distance may exceed 1 m. Therefore, keep the product away from the crowd during use and select an open place indoors or outdoors for use.

(2) Surroundings

The four legs of the product are mainly made of metal. In particular, the knees are very hard, making the product prone to damaging hard ground or objects around it (such as glass, stone, and floors). Before, during, and after use, pay attention to the surroundings and prevent unnecessary damage to the product, or surrounding objects, personnel, or small animals.

(3) Considerations for indoor use

To ensure safety and reduce potential risks during use, you must select an indoor area paved with a piece of rubber mat, blanket, or other soft protective material. Such arrangements help absorb impact, significantly reducing the risk of damage to the product from falls or accidental collisions. Especially, when the product needs to perform many activities or do some activities requiring a higher level of space flexibility, soft floor coverings can provide additional protection for the product. Thus, the soft floor coverings help protect the product from being damaged due to a collision with the hard floor. Furthermore, ensure that no sharp or hard objects exist around the area where the product is used, further ensuring its safety during use.

(4) Considerations for using the power supply adapter

III. Precautions

The power supply adapter that meets Chinese specifications should work in an environment with an altitude of less than 2000 m in a non-tropical area. Adapters meeting specifications of other countries are not subject to such environmental restrictions.

(5) Bad weather and disaster conditions

Do not operate the product in adverse weather conditions, such as gale, snow, rain, thunder, and fog. Use of the product is not allowed in disaster events, such as fire, explosions, thunder, storm wind, tornadoes, floods, earthquakes, and sandstorms.

(6) Unsuitable places

Do not use the product in such places as uneven ground, steep slopes, muddy roads, roads with loose materials and sandstones, wet ground, ice surfaces, ground with water pits, and complicated grass ground.

(7) Water tightness and cleaning

The product is not waterproof. Therefore, do not submerge the product in water and avoid using high-pressure water jets for cleaning to prevent the risk of fire or explosion.

(8) Handling water ingress problems

If the product gets wet in the rain or accidentally falls into water while powered on, immediately disconnect the power to prevent continuous operation. Further use of the product may cause permanent damage to the product or even potential safety risks. Be careful during the operation and take appropriate protection measures as soon as possible. If the product is unfortunately wet by rain or falls into water in the off state, remove its power supply immediately and

III. Precautions

avoid re-starting or charging it. Doing so is to prevent damage to the internal circuit and reduce the risk resulting from accidental contact with water.

(9) Electromagnetic interference

Avoid using the product in environments with frequent radio communication activity. Meanwhile, when the product is used in environments with a poor communication signal or strong electromagnetic interference, pay attention to the potential impact on its sensor and communication signal.

The building walls, rocks, and trees may cause interference with the sensor and communication signal. Thus, use of the product should be in an open area.

Use of the product near an electromagnetic interference source (such as a Wi-Fi hotspot, router, Bluetooth device, high-voltage line, high-voltage substation, mobile phone base station, and TV broadcast signal tower) may influence its control effectiveness.

(10) Temperature and heat source

Do not put the product into a fire or heater, and do not use the product in high-temperature environments, to prevent the battery from overheating, firing, or function failure.

2. Notices for use

(1) Check of joints and wire harnesses

Check the joints for any foreign bodies and inspect the wire harnesses for damage. Also, ensure that the foot pads are intact.

III. Precautions

(2) Battery level and camera cleaning

Check the battery level to ensure that it is sufficient and to prevent the product from suddenly falling to the floor. Meanwhile, keep the surfaces of its head and belly clean and protect them from being scratched by hard objects. In case there is any dirt on the surfaces, wipe them clean with a piece of dry, soft cloth.

(3) Considerations for cleaning the product

Do not use alcohol or other fluids that contain soluble or corrosive ingredients to clean the product.

(4) Reasonable placement and floors

During placement, ensure that the legs are in a natural state without being loaded and prevent damage to the leg joints due to the robot's weight. Do not put the product on a hard, sharp, or uneven ground to prevent the lens at the bottom of the body from being scratched.

(5) Foot pads and wear

The foot pads are consumables. Pay attention to their wear condition during use. In case of serious wear of or damage to the foot pads or increased impact noise made by the robot during movement, replace the foot pads in time to avoid impairing the movement of the robot.

(6) Safe use and terrain adaptability

During the use, keep the robot within your line of sight, at a safe distance from you, and away from obstacles that the robot may collide with. Note that the terrain where the robot moves meets requirements, even though the product features good terrain adaptability.

(7) Speed, turning, and complicated terrain

III. Precautions

Quick turning of the robot is prone to being out of control. Particularly, on a steep slope, uneven ground, or unknown terrain, never take a risk in operation but reduce the speed.

(8) Steep slope and climbing angle

Ensure that the robot operates within its rated forward climbing angle. Do not turn the movement direction of the robot at a large climbing angle to prevent loss of balance of the robot. Operate your robot properly on a steep slope or in a terrain with a large slope gradient.

(9) Maximum speed and no-use conditions

The maximum operation speed of the robot in a flat terrain is up to 2.0 m/s. Do not use the product on a complicated ground, wet ground, ground with debris, ground with a slope exceeding the specification, or conditions where there are sharp objects.

(10) Check of joint and battery statuses

If any joint becomes loose, cannot stand normally, or makes a loud noise during operation, stop using the robot immediately and power it off for inspection, and seek professional maintenance.

(11) Low battery alarm

In a low battery state, the product may not have enough power to keep moving. In this case, charge the battery promptly to avoid possible dangers.

(12) Safety considerations

III. Precautions

Do not touch moving parts of the robot with your hand or body to avoid getting pinched or bumped. Meanwhile, do not touch metal parts on the joint motor surfaces to prevent you from being burned.

(13) Heat dissipation and cleaning

Using the product for a long time may result in overheating of the motors. It is recommended to take regular breaks. If the product is contaminated, please clean it promptly.

(14) Power cable specifications

Connect the product using a quick-charge cable that meets the specifications.

(15) Power-off considerations

After the use, power off the robot immediately.

3. Battery and charging

((1) Restrictions on the use of the battery

It is prohibited to dismantle the battery or pull the battery pole piece out of the battery in any manner for use.

(2) Adapter and cleaning

It is prohibited to clean the power supply adapter using alcohol or other flammable detergents, to avoid potential safety risks.

(3) Countermeasures for battery leakage

If the electrolyte comes into your eye when a battery leakage occurs, do not rub the eye but wash it with clean water immediately, and then see a doctor.

III. Precautions

(4) Handling of abnormalities

In case of odors, smoking, deformation, or other abnormalities during the battery charging, remove the power supply adapter immediately and check it.

(5) Safe temperature

Because the power supply adapter may be very hot during charging, do not touch it for a long time to avoid scalding.

((6) Power supply adapter

Do not use a damaged power supply adapter. Only a genuine power supply adapter should be used. Use of a non-genuine power supply adapter may cause lithium battery leakage, overheating, fire, or explosion.

(7) Charging time

The battery charging time should not exceed 24 hours. Overcharging the battery may shorten the battery’s service life.

4. Safe use

(1) To prevent illegal behaviors and possible injuries and losses, users are obliged to observe the following requirements:

(2) Using the product outdoors at night is more dangerous than in the daytime because others find it difficult to see the product, thus resulting in possible dangers. It is recommended that users should not use the product at dawn, twilight, or night and in dark environments because the vision follow-up, navigation, and other features cannot work normally.

(3) Users should have sufficient safety awareness during the use of the product, always pay attention to incoming

III. Precautions

and outgoing vehicles and pedestrians, and prepare for responses to the following conditions from time to time: 1. A person approaches the robot suddenly; 2. There are children or pets playing around the robot; 3. There are pits, sewer separation boards, railway tracks, expansion joints, road construction sites, and surrounding obstacles. These obstacles may cause an accident.

(4) The autonomously intelligent and obstacle-avoidance features are designed to increase the product's interaction level and entertainment value. The features are available as auxiliary tools, but no guarantee is made that they are completely reliable in all conditions. Complicated or unpredictable environmental conditions may influence the performance of the autonomously intelligent and obstacle-avoidance features. Ensure that MagicDog is used in safe, open, and easy-to-monitor environments.

(5) Before use, you should ensure that you already have enough knowledge about the product. Do not allow any person who is not familiar with the product to use it.

(6) Because wires, small parts, and movable mechanical joints may result in danger to children, the product must be kept out of reach of children.

(7) It is prohibited to dismantle or modify parts of the product or add any parts to the product. Using non-genuine parts may result in software incompatibility, leading to loss of control during operation and rendering the product unusable.

(8) Do not use the product to collide with buildings, or do not allow the product to rush into the crowd or animals. Additionally, refrain from using the product to carry, haul, or launch any dangerous objects.

(9) Do not operate the product under the influence of alcohol, drugs, or anesthetics, or when experiencing dizziness, weakness, nausea, or any other adverse physical or mental conditions.

III. Precautions

(10) In case of any accidents (such as collision or falls) or if the product exhibits instability or is out of control, you must immediately stop using it. Do not use the product until the after-sales service personnel have the product repaired properly.

(11) Do not use the product on public roads to avoid obstructing pedestrians or vehicular traffic.

(12) Do not use the product as a transportation tool or cargo carrier.

(13) Do not use the product in densely populated places.

5. Maintenance and transportation

(1) Appearance check

Check whether the appearance of the product is intact, and especially note whether damage to the product is caused by the impact of external forces. Should you have any questions, feel free to contact our after-sales service personnel.

(2) Scheduled maintenance and cleaning

Before its cleaning, ensure that the product is already off and remove the power supply adapter.

Regularly clean dust off the product's surface, including the camera, sensors, and other components.

Additionally, periodically remove dust from the heat dissipation vents to ensure optimal heat dissipation.

(3) Replacement of parts

During the replacement of a part, you must use the genuine part specified by the manufacturer to avoid damage to the product due to the mismatch between a non-genuine part and the product.

(4) Storage environments

III. Precautions

During the storage of the power supply adapter and machine, put them in a dry and cool environment and keep them from direct sunlight, fire sources, as well as strong electromagnetic environments. The recommended storage temperature ranges from 20°C to 25°C .

Do not store the product in an environment with a temperature higher than 60 ° C or lower than -10 ° C. During the long-term storage, it is advisable to control the temperature within the range of 20°C –25°C, the relative humidity within 0 ~ 60% RH, and the total battery level below 50%.

(5) Considerations for the storage of the battery

Prolonged periods of inactivity may affect battery performance. To maintain the battery's condition, avoid deep discharge.

After being fully charged, the battery will stop charging. However, we recommend that you remove the charger to maintain the state of charge of the battery.

Check the battery level on a regular basis, and charge and discharge the battery once about every three months to maintain the battery activity.

If the state of charge of the battery is lower than 20%, charge the battery to 40–60% in time before storage to prevent damage to the battery.

(6) Gently handling

After the power-on, avoid lifting or handling the product. Before handling the product, you must power off the robot.

During handling, gently handle it to avoid damage to the parts of the robot due to a mechanical impact.

III. Precautions

6. Laws and regulations

(1) It is prohibited to use the product for any illegal behaviors or misconducts (including, but not limited to, espionage activities, military actions, and illegal investigations).

(2) It is prohibited to use the product in any way that infringes upon the property rights of others.

(3) It is prohibited to use the product for any activities that violates others' privacy. When the use of the product is for taking pictures or recording, users must respect the privacy rights of others. It is prohibited to use the product for any surveillance activities, including, but not limited to, spying on individuals, group of people, events, performances, exhibitions, or buildings.

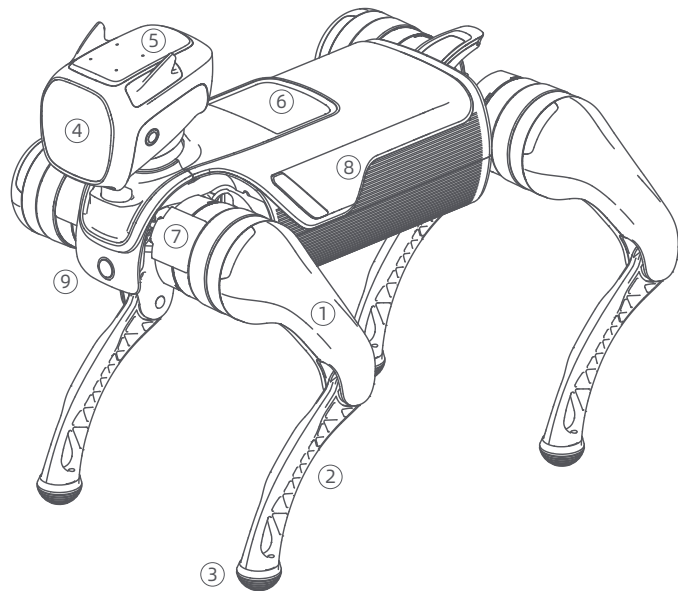
(4) It is prohibited to operate the product near or within sensitive buildings or facilities, including, but not limited to, boundary lines, power generation stations, substations, jails, main roads, railway and highway traffic hubs, government buildings, and military bases and facilities.

(5) Users are obliged to be aware of and comply with laws and regulations of the region in which they are located. If there are other relevant requirements for robots, cameras, and electronic products specified in laws and regulations in the area where they stay, users should use the product according to the requirements.

IV. Brief Instructions

1. Component names

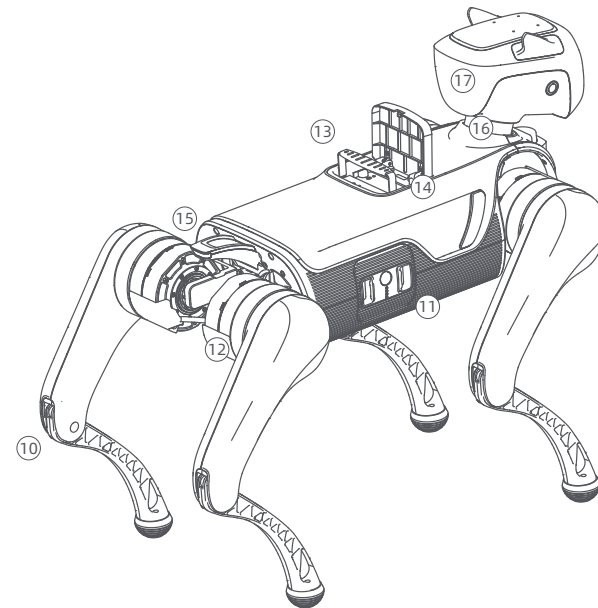
1. Upper leg
2. Lower leg
3. Foot pad
4. Head screen
5. Head touchpad
6. Extension interface cover
7. Front leg joint motor module
8. Body
9. Prothorax



IV. Brief Instructions

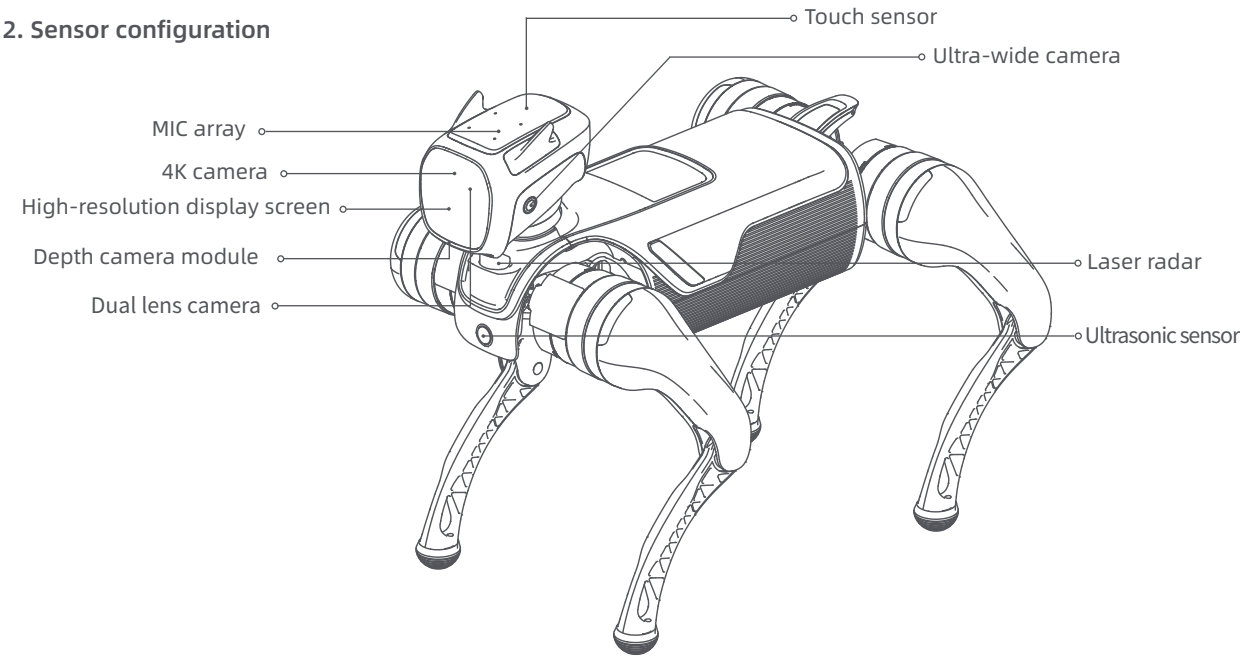
1. Component names

10. Knee joint
11. Battery
12. Rear-leg joint motor module
13. Handle
14. Extension interface slot
15. Tail light
16. Neck
17. Head



IV. Brief Instructions

2. Sensor configuration



IV. Brief Instructions

3. Function descriptions

	MagicDog PRO
List of features	Intelligent follow-up
	Emotion engine
	Head-body interaction
	All-terrain mode
	Action imitation
	Human-body recognition
	Cruise mode
	Intelligent obstacle avoidance
	Graphical programming
	Special action
	Emotional expression display
	Light display
	AI speech interaction [1]
	Touch interaction
	Photographing and recording

	MagicDog PRO
List of features	Real-time photo upload
	OTA upgrade
	Secondary development [2]
	APP
	Handle

IV. Brief Instructions

3. Function descriptions

Notes:

[1] AI speech interaction: refers to the offline speech interaction and command, speech dialog, music play, and large language model dialog, of which the large language model dialog is enabled by the paid subscription.

[2] Detailed features are described in the secondary-developed manual.

*The parameters specified above differ in different business scenarios, model parameter configurations, and applications. Thus, the actual parameters of your robot should prevail.

* The appearance of the product may be adjusted slightly. The actual appearance of the product should prevail.

* Tips: Due to the limitations of current technologies and computing resources, some features need to be operated manually or achieved by secondary development.

* This manual will be improved based on the product and, without any additional notification, modified due to reasons such as a change in the specification.

IV. Brief Instructions

4. Names and contents of harmful substances in the product

Description of parts	Hazardous substances					
	Lead (P b)	Mercury (Hg)	Cadmium (C d)	Hexavalent chromium (C r (V I))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Circuit board	×	O	O	O	O	O
Metal plate	×	O	O	O	O	O
Housing	O	O	O	O	O	O
Battery	×	O	O	O	O	O
Other spare parts	O	O	O	O	O	O
This table is compiled according to the requirements of SJ/T 11364. O indicates that the content of the hazardous substance in all homogeneous materials of the part is lower than the limit specified in GB/T 26572. × indicates that the content of the hazardous substance in a homogeneous material of the part is lower than the limit specified in GB/T 26572. 						

IV. Brief Instructions

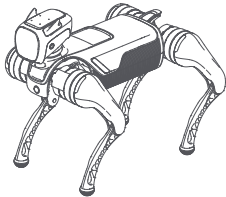
4. Names and contents of harmful substances in the product

The product has a chargeable lithium battery that is hazardous to the environment during scrapping. Before being scrapped, the battery should be removed from the robot by the following tips and disposed of properly:

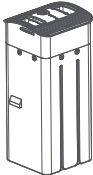
- * Before the removal of the battery, power off the robot and deplete the battery’s electrical charge to the greatest extent possible.
- * Pay attention to not damaging the battery housing and preventing the occurrence of any danger.
- * Remove the battery from the robot and send it to a professional battery recovery body.

V. Packaging

To ensure that you can enjoy a superb user experience, check the following articles carefully when you unpack the robot for the first time. If you find any of the following items missing from the package, contact us immediately, and we will always be at your service.



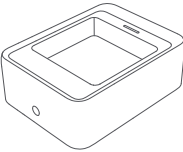
MagicDog x1



Battery x1



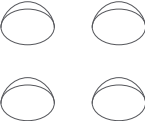
Power supply adapter x1



Battery charger block x1



Users’ manual x1



Spare foot pads x4

VI. Operation Instructions

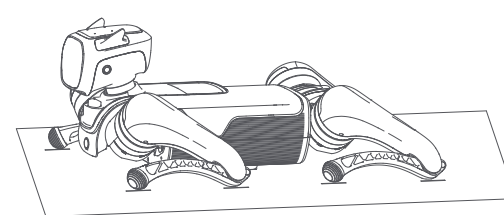
Before using the product, please read this manual carefully to familiarize yourself with its features and operation methods. This product is very complicated, and all its parts and accessories must be installed and used properly according to the manual. Improper installation or use of the parts and accessories may result in damage to the product, other property losses, or even serious injuries to yourself or others. The product cannot be used by the persons with physical, sensory, intellectual, or affective disabilities or persons (including children) without any operation experience and knowledge. Children are not allowed to operate this product or use it as a toy. During the use of the product in a place near children, pay close attention to it. It is prohibited for a child to clean or maintain the product without a guardian present.

VI. Operation Instructions

1. Power-on preparations

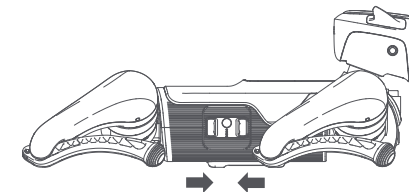
Body placement

Ensure that before the power-on, the product is at a distance of 2 m or more from the surrounding objects, the body is placed on flat ground, the belly is against the ground horizontally, the legs are placed on both sides of the body, the lower legs are fully retracted, and either of the upper or lower legs is not held down under the body (see the following figure).



Battery installation

Place MagicDog on flat ground, and then insert the battery into the battery compartment from the side of MagicDog. Pay attention to the installation direction of the battery during the battery installation. With the battery switch on the top side, the battery installation is complete after you hear a "click" sound.



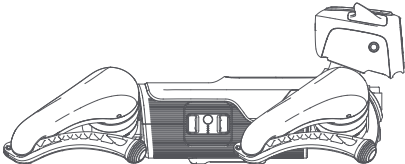
Note: Before use, charge the battery fully! During the battery installation, do not press the battery forcibly to avoid damage to the battery interface and fastener.

VI. Operation Instructions

Power-on/off

Power-on: In the power-off status, press and hold the power key for 5 seconds, the power-on music will sound and the white tail light will turn on, indicating that the robot is powered on.

Power-off: In the power-on status, press and hold the power key for 5 seconds, the tail light will turn off indicating that the robot is powered off.



Note: When MagicDog is moving or standing, do not turn off the power or directly remove the battery from the robot. If the power is turned off while MagicDog is in motion, it will immediately lose power, potentially resulting in property damage, safety hazards, or personal injury. Directly removing the battery from the robot may result in damage to the memory, further making MagicDog impossible to use.

2. Networking and binding

Download and install the MagicDog app.

Scan the QR code to download and install the app.



Wi-Fi networking: Open the MagicDog app, register and log in to your account, and then tap to add your device. Gently touch the MagicDog Bluetooth Enable button. After you hear the voice prompt: The Bluetooth service has been enabled, and now you can start connecting your device. Make sure that your phone is already connected to Wi-Fi and Bluetooth is enabled. Then, tap Next. Start searching for the nearby MagicDog robot.

VI. Operation Instructions

Once your MagicDog robot is detected, tap the MagicDog robot to start the network configuration process and enter your Wi-Fi password. Next, tap Confirm to complete the network configuration. After the connection is successful, enter the remote control page.

Phone hotspot networking: Open MagicDog APP, register and log in to your account, and then tap to add your device. Gently touch the MagicDog Bluetooth Enable button. After you hear the voice prompt: The Bluetooth service has been enabled, and now you can start connecting your device. Make sure that your phone’s hotspot is already enabled and Bluetooth is enabled. Then, tap Next. Start searching for the nearby MagicDog robot. After your MagicDog robot is searched successfully, tap the MagicDog robot to start the network configuration and enter your hotspot password. Next, tap Confirm to complete the network configuration. After the connection is successful, enter the remote control page.

3.Tail light status

Tail light status	Machine status
Red light normally on	Battery SOC lower than 20% and device abnormal
White light normally on	Device normal and task completed
White light flashed quickly three times	Task in progress
White light off	Power-off status
Blue light flashed three times	Mode switch-over
Red light normally on	Low battery and device abnormal
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Please visit the Magic Atom’s official website-magiclab.top to obtain more information.

VI. Operation Instructions

4. Speech interaction

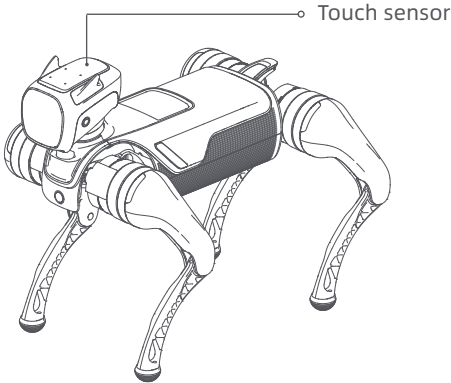
- Wakeup word:
1. English: hi, Magic
 2. Chinese: (pinyin) xiao mai, xiao mai
 3. Speak the wakeup word clearly: Speak clearly towards the MagicDog's head in a normal voice volume, “xiao mai, xiao mai” . Make sure that it is quiet in the surroundings, so MagicDog can identify your voice clearly.

Type	Words
Command	Turn Left
Command	Turn Right
Command	Forward
Command	Backward
Command	Stand up
Command	Sit down
Command	Spin around
Command	Stretch
Command	Stomp
Command	Jump jack

Command	Moonwalk
Command	Swing body
Command	Wiggle hips
Command	Shake hands
Command	Push-up
Command	Cheer
Command	High-five
Command	Dance
....	

5. Touch interaction

The touch area is at the rear part of the head. After touching it, MagicDog responds accordingly.

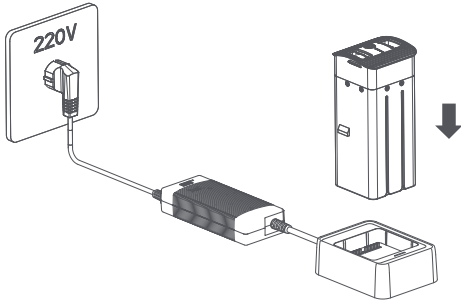


Supported touch actions					
Forward touch	Backward touch	Pat once	Pat twice	Pat several times	

Please visit the Magic Atom’s official website-magiclab.top to obtain more information.

VI. Operation Instructions

6. Battery charging

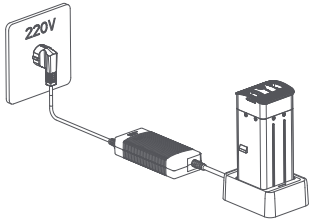


Use the battery charger block for charging.

Insert the battery into the battery charger block as shown in the figure. Connect the battery charger block to the power supply adapter as shown in the figure, and then connect the power supply adapter to the mains.

Note: Ensure that the battery aligns with the charger block during its insertion.

0%-25%	✱ ✱ ✱ ✱	○ Off
26%-50%	● ✱ ✱ ✱	● Normally on
51%-75%	● ● ✱ ✱	✱ Flash
76%-99%	● ● ● ✱	
100%	○ ○ ○ ○	



The illuminated indicator on the charger base indicates that the charger base is properly connected to the power source. During the charging, the battery indicator light keeps flashing, and the four indicator lights of the battery indicate the current state of charge of the battery. When two indicators are continuously on and two are blinking,

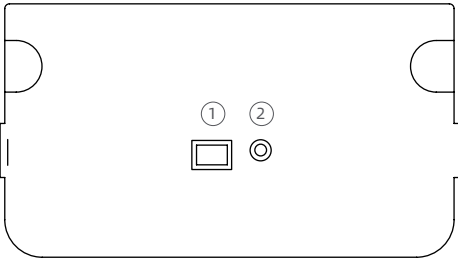
VI. Operation Instructions

it indicates that the current charge level is at 50%. After the battery is fully charged, the battery indicator lights are off.

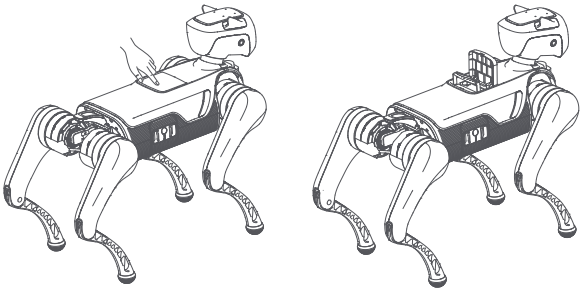
7. Interfaces

Open the extension interface cover to check relevant interfaces.

1. Group control switch: single control/group control change-over switch
2. Networking key: Press this key to enable the Bluetooth feature and enter the networking mode. Also, press and hold this key for 10 s to reset the robot to its factory settings.



8. Handle



Open the cover: gently press the cover on the back of MagicDog and then the cover bounces up. After that, you can pull out the handle of MagicDog.

Close the cover: Before closing the cover, retract the handle. Then, press the cover.

VII. Basic Parameters

	Version	PRO
Basic information	Model	QRML1GD1
	Material information	Aluminum and high-strength engineering plastic
	"Product dimension (standing) (Length x Width x Height)"	67 cm x 35 cm x 56 cm
	Net weight (excluding the battery)	17.02kg
Electric parameters	Maximum power	3200 W
	Supply voltage	22 V-36 V
Performance parameters	Degree of freedom	13
	Basic computing power	8-core, high-performance CPU
	Maximum speed	3.0 m/s
	Maximum climbing height	16 cm
	Falling detection height	10 cm and above
	Maximum climbing angle	40°
	Battery life	1.5-3.0 h

	Version	PRO
Joint parameters	Actuator type	High-power-density movement unit
	Maximum joint torque [1]	Approx. 37.5 N·m
	Aluminum precision joint motor	12 pieces
	Joint movement space (body)	-37.0° -45.0°
	Joint movement space (upper legs)	-207.5° -72.5°
	Joint movement space (lower legs)	-143.0° -30.0°
	Components of joint actuator	Motor, reducer, drive, and encoder
Sensor	MIC array	●
	4K camera	●
	Dual lens camera	●
	Ultra-wide camera	●
	Depth camera	●
	Ultrasonic sensor	●
	Touch sensor	●
	Laser radar	●

VII. Basic Parameters

	Version	PRO
Spare parts	Recharging post [2]	Optional
	Battery	29.6V, 8200 mAh, 242.72 W, quick-release type
	Adapter	33.6V 4.5A 151.2W
	Battery charger block	●
	Replaceable foot pad	●

Notes:

[1] Twelve joint motors have different maximum torques. This is the maximum torque of the biggest joint motor.

[2] For the PRO version, the recharging post is an optional part. If this part is not equipped, MagicDog will not have the autonomous recharging function.

* The maximum speed, maximum payload, maximum climbing angle, and range are measured in laboratory environments.

*The parameters specified above differ in different business scenarios, model parameter configurations, and applications. Thus, the actual parameters of your robot should prevail.

* The appearance of the product may be adjusted slightly. The actual appearance of the product should prevail.

* Tips: Due to the limitations of current technologies and computing resources, some features need to be operated manually or achieved by secondary development.

* This manual will be improved based on the product and, without any additional notification, modified due to reasons such as a change in the specification.

VIII. FAQs

During the use of MagicDog, it may exhibit abnormalities. Most abnormalities are controllable (and can be handled with solutions). Read the following content carefully and handle the problems in steps. For any questions, please contact MagicDog’s official technical support:

Questions	Solutions
What should I do if the robot does not respond when I give a speech command?	Please manipulate MagicDog via the speech feature in a quiet environment. Make sure that all speech commands are identical to those described in the manual.
Why does MagicDog suddenly fall down when being powered off.	Before powering off, ensure MagicDog is in a prone position, and then proceed with turning it off.
Why does MagicDog fall down due to insufficient supporting force from the knee joint motors during operation?	In case of abnormalities (such as motor overload or overheating) or other conditions that may result in damage to the robot, the controller will shut off the motor automatically to protect MagicDog. It is recommended that users turn off MagicDog and check whether MagicDog is influenced by any external forces or objects. Before MagicDog is re-used, ensure that MagicDog is in good condition.
What should I do if MagicDog cannot stand up again after it falls down?	MagicDog cannot stand up when its legs are squeezed or folded. Please turn off the robot and place MagicDog in the correct posture again, as shown in the manual. Then, attempt to power MagicDog on and manipulate it to stand up. Please check whether the battery is fully latched.
Why cannot MagicDog be powered on?	Ensure that the battery has been installed into the MagicDog’s body. Please first charge the battery. Please check whether the battery is fully latched. Improper installation of the battery may cause a false connection of the battery, further resulting in the abnormality of the power supply.
Why cannot MagicDog stand up after being powered on?	MagicDog cannot stand up when its legs are squeezed or folded. Place MagicDog in the right posture again, as shown in the manual, try to power on it, and then manipulate it to stand up. Please check whether the battery is fully latched. Improper installation of the battery may cause a false connection of the battery, further resulting in the abnormality of the power supply.

IX. Warranty

To ensure that you obtain the best use experience, check the product appearance and parts integrity immediately after you receive the product. We will provide free maintenance services as specified in this manual.

- Tips:
- 1.. If the product has any performance faults listed in the List of Product Performance Faults within seven days of receiving the product, you can enjoy the free-of-charge return or exchange services upon being checked and confirmed by our after-sales service center.
 - 2.You are entitled to a 12-month warranty from the date of receiving the product, covering free-of-charge repairs. If the product exceeds the warranty period from the date it is sold, we will charge the necessary cost of the parts for maintenance based on the nature of the fault.
 - 3.Products sent for repair should be securely packaged in their original packaging. Our company is not responsible for any damage or loss incurred during transportation.
 - 4.Our company has the right to refuse any service or charge the cost of the parts and service expenses according to the actual conditions where either of the following circumstances occurs within the warranty period:
 - Fault of or damage to the product resulting from the use of the product not in normal environments (such as extremely hot or cold weather, corrosive environments, fire, flooding, and sandstorm);
 - Faults or damages caused by unofficial maintenance, unauthorized disassembly or modification;
 - Man-made damage caused by intentional actions or negligence, such as mis-operation, transportation, collision, or abnormal voltage input, as well as faults or damage caused by natural disasters or theft;
 - Damage to the product label caused by human factors or natural wear of the parts and accessories during normal use.
- Please read the above warranty terms and conditions carefully and follow them to ensure that your rights and interests are guaranteed. We are looking forward to offering you high-quality services.

IX. Warranty

Description	Performance faults
MagicDog	1. During the movement of MagicDog, a flange stopper breaks. 2. During the process of MagicDog getting up from lying down, the position of its single leg is abnormal. 3. MagicDog cannot be started normally.

2. Warranty contents

Type	Warranty contents	Warranty time
Main unit	Main unit and its composition	1 year
Main parts	Motors	1 year
Accessories	Battery charger block, battery, and power supply adapter	1 year

Note: The foot pads are consumables supplied with the product and are not covered within the warranty range.

If the warranty time specified by national laws is longer than that specified in this manual, the provisions of national law shall apply.

After sales telephone: 400-8288-022