

AI Service Robot **INSTRUCTION MANUAL**

Product Model: OS-R-DP01

Disclaimer

Thank you for purchasing the product of Beijing OrionStar Technology Co., Ltd. (hereinafter referred to as "OrionStar"). Before using this product, please read this Disclaimer (hereinafter referred to as "this Disclaimer") and the User Manual of OrionStar AI service robot (hereinafter referred to as "User Manual") carefully to ensure the correct setting of this product. Failure to follow this Disclaimer and the User Manual may cause personal injury, or damage to this product or its surroundings. OrionStar reserves the final interpretation right of this Disclaimer, the User Manual and all related documents of this product (hereinafter collectively referred to as "product documents"), and the right to update the product documents at any time without prior notice. Please visit the official website of OrionStar (<https://www.orionstar.com>) for the latest product documents.

Once you start using this product, you are deemed to have carefully read the product documents and understand, acknowledge and accept all terms and content thereof. In case of any objection to any of the terms of this Disclaimer, please immediately stop using all products and services provided by OrionStar. You undertake to take full responsibility for the use of this product and the possible consequences caused thereby. You promise to use this product only for legitimate purposes, and not to use this product in any way to directly or indirectly engage in behaviors that violate Chinese laws and social ethics.

For all personal injuries, accidents, property losses, legal disputes, and other adverse events that cause conflicts of interest caused by force majeure factors, you are responsible for the relevant responsibilities and losses, and Orion will not bear any responsibility. OrionStar will not be liable for the damage, injury, or any legal liability caused by failure to use this product in accordance with the product documents. You shall comply with all safety instructions, including but not limited to those referred to in this Disclaimer.

Notwithstanding the foregoing, your consumer rights and interests are still protected by local laws and regulations.

We reserve the right to modify the technical parameters and function settings due to product software upgrades; and the right to adjust the hardware configuration due to the adjustment of technical parameters of product hardware and other reasons. Please refer to the actual product for details. To use the latest features described in this User Manual, it may be necessary to update the software of this product.

This User Manual is for user's reference only. The description may not be detailed and accurate enough. Please refer to the actual product for details. In case of any problem, please contact the after-sales service. The pictures in this manual are schematic diagrams only, please refer to the actual product for details.

Basic Functions

Startup & Shutdown

Startup: Press and hold the power button for about 3s to power on the product.

Initial Startup: After unpacking, press and hold the power button for about 10s until the screen lights up (due to the system configuration, the startup may take 60s–90s before it can be operated, please wait patiently).

Power Off: In the power-on state, press and hold the power button for about 3s, and then click "Shutdown".

Forced Shutdown: In the power-on state, press and hold the power button for about 8s.

Restart: Press and hold the power button for 3s, the shutdown confirmation pop-up window will pop up on the screen, and select "Restart".

Charging

Manual

The robot can be charged by voice commands or by manually pushing the robot to the charging pile.

Auto

1. When the battery is too low, the machine will automatically return to the charging pile to charge.
2. Set timing charging task, the machine will automatically return to charging pile when the time is up.

Emergency Stop

Emergency Stop: Under special circumstances, you may press the emergency stop button on the back of the robot. Then, the robot will enter the off state, and the screen will display "emergency stop".

Resume: Turn the emergency stop button to the right to resume and the robot can be used normally.

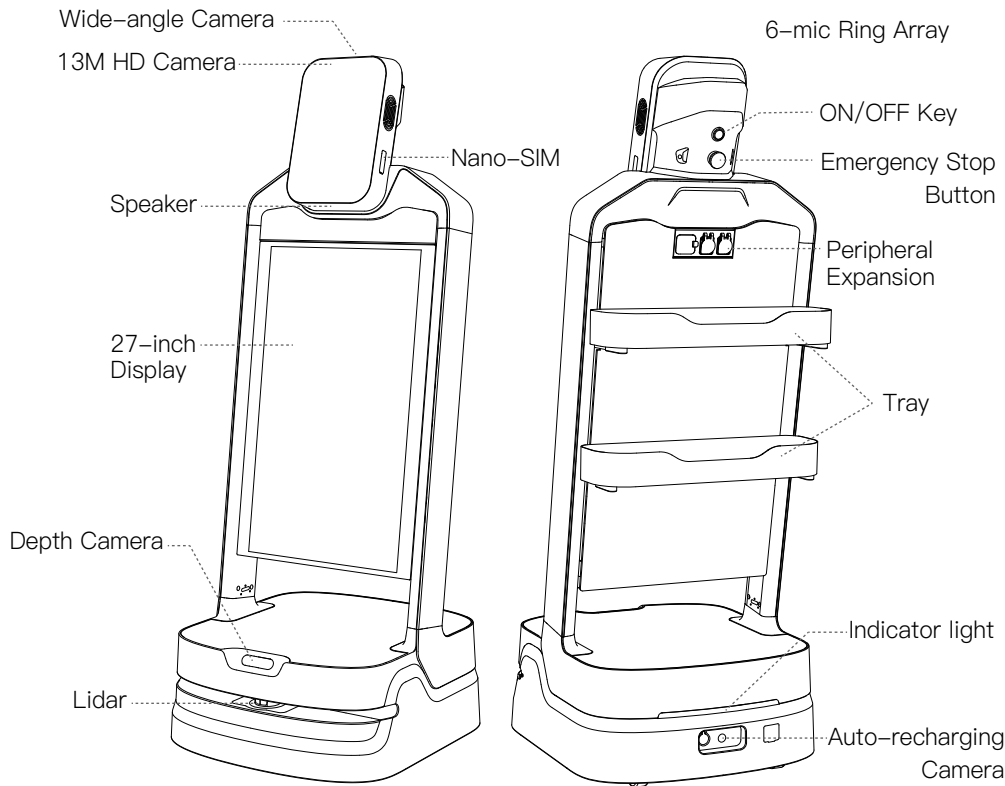
Software

Software functions include navigation, leading, advertising, custom homepage, dancing, and custom Q&A, etc.

Safety Instruction

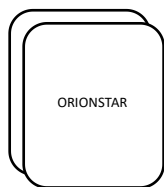
- The robot may be damaged by collision, dumping and falling.
- Do not disassemble the robot, charging pile or charger without permission. Unauthorized disassembly will cause the product to lose its warranty, and the Company will not be responsible for the safety problems caused thereby.
- When moving the robot, do not put force on the head, which will cause the head to break. Do not use this product in dangerous environments, such as high temperature, high pressure, flammable or explosive places. Do not use this product outdoors.
- Do not use this product in places without fences or on stairs, as it may cause injury due to falling.
- Minors should be supervised by their guardians when they contact with the product to prevent tilting or dumping caused by external forces.
- Do not place your body or other foreign objects under the robot chassis, which may cause injury during robot movement.
- Please keep the charger away from direct sunlight and humid environment.
- In case that the charger or the robot comes into contact with a large volume of liquid, please shut down and power off immediately and contact the after-sales service. Do not touch the robot and charging pile with hard objects.
- The robot can only be charged using the attached charger, which can only be used to charge the robot.
- Please press the red emergency stop button to stop the movement in case of emergency during the use of the robot.
- Do not push the robot until the emergency stop button is pressed.
- Please do not use this product near water, and do not immerse this product in any liquid or drip or splash any liquid on this product.

Product Composition

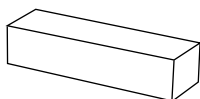


The position of the above product structure is subject to the specific product

Packing List



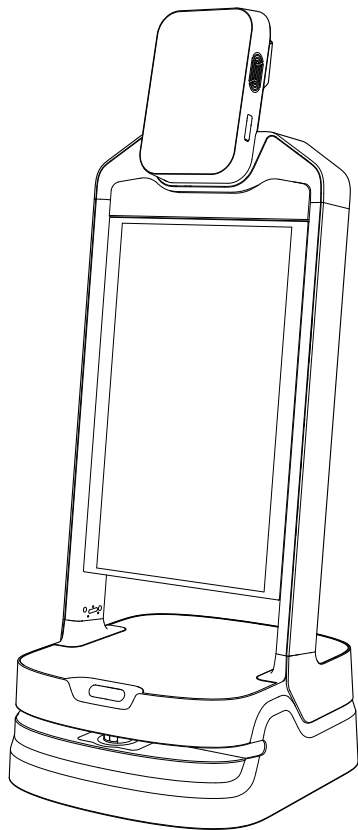
User Manual



Power cord



Charging pile



Robot

The above packing list is for reference only.
The specific accessories are subject to the product.

Parameters

Item	Specifications
Overall Size	530mmx500mmx1320mm
Net Weight	43KG
Color	White & Gray
Operating Humidity	(RH): 10%~90%
Operating Temperature	0°C~+40°C
Screen Size	10.1Inch
Screen Resolution	1200px*1920px
Microphone	6-microphone Ring Array
Wireless Connection	4G
Wireless Connection	Wi-Fi: 2.4G/5G
Camera	13M HD camera
Operating System	Based on Android 9
RAM	8G
ROM	64G
Battery	Lithium battery, Capacity: 24.3Ah, Voltage: 25.55V
Charger	249.6W
For specific configuration and parameters, please refer to the specific product.	

FAQ

	Solutions
Unable to boot	The battery is low, please push it to the charging pile to charge.
Unable to charge	The charger is not plugged in, please make sure the charger is plugged into the power outlet. Poor contact, please confirm that the robot is in good contact with the charging cable.
Behavior anomaly	Restart the robot.
Network anomaly	Wi-Fi or SIM card signal is weak, please make sure the robot is within a good signal range. Wi-Fi or SIM card network connection is abnormal, please reconnect to the network in the system settings.
Positioning Failure	Try to push the robot back to the charging pile manually. After the positioning is successful, an interface display or a voice prompt " Positioning Successful" will be displayed; After restarting in place, it will be automatically relocated at startup (note: do not move the robot during the restarting process).
Unable to walk to the specified location	Check the location of the robot. Check for obstructions around the robot. Check for obstructions in pointed positions
Unable to recognize sound	The mic is blocked, please clear the blocker at the mic. Check the sound performance of the microphone or robot. The network signal is weak, please make sure the robot is in good Wi-Fi signal coverage. The ambient noise is too loud, please move the robot to a place with suitable decibel.
Unable to recognize face	Camera is blocked, please clear the obstacle at the camera. If the light is too strong or the face is backlit, please move the robot to a place with suitable lighting conditions. Restart the robot for recovery.
Unable to move	The emergency stop button is pressed, please suspend the emergency stop button. There are foreign objects wrapped around the wheel of the robot, please turn off the robot and clean it up. Positioning failure, try to manually push the robot back to the charging pile. After the positioning is successful, an interface display or a voice prompt " Positioning Successful" will be displayed.
POST abnormality	Restart the robot for recovery
If the problem is not resolved, please contact the after-sales service hotline 400-898-7779.	

FCC interference statement

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This EUT is a mobile device, maintain at least a 20cm separation between the EUT and the user's body.

ISED interference statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

This EUT is a mobile device, maintain at least a 20cm separation between the EUT and the user's body.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage.

(2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance. Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf. the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems; les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

European Regulatory Compliance

In accordance with Article 10.2 in Directive 2014/53/EU (RED), this device can be operated in at least one Member State without infringing applicable requirements on the use of radio spectrum.

FREQUENCY BANDS AND MAXIMUM RF POWER In accordance with Article 10.8 in Directive 2014/53/EU (RED)

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WLAN1_2.4G(2412-2472MHz): < 20 dBm EIRP

WLAN2_2.4G(2412-2472MHz): < 20 dBm EIRP

WLAN1_5G(5150-5250MHz):< 23 dBm EIRP

WLAN1_5G(5745-5825MHz):<14 dbm EIRP

E-UTRA:

LTE Band 1/3/5/7/8/20/28/38/40

Transmitter maximum output power: < 25dbm

RF EXPOSURE (HEALTH) This device complies with relevant RF radiation exposure

limits set forth for a public/uncontrolled environment. This equipment should be

installed and/or operated with a minimum distance as below between the radiator

and your body: Council Recommendation 1999/519/EC: 0.2 meters

Warning: This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

Information on restrictions

Indoor use only

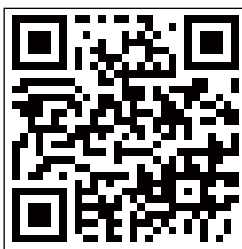


Beijing Orion Star Technology Co. Ltd

Hereby, [Beijing Orion Star Technology Co., Ltd] declares that the radio equipment type [AI Delivery Robot- ORIONSTAR] is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <https://www.orionstar.com>).

The ESP32 and EG255 modules have obtained FCC full module certification and are installed on this product in compliance with FCC regulations.

RF IC:ESP32 Wireless module The function is used only for location
RF IC:EG25G, The Quectel EG25-G Mini PCIe is a LTE Cat 4 wireless communication module designed by Quectel for M2M and applications, featuring a PCI Express® Mini Card standard interface. It meets customers' demands for high cost performance and low power consumption, supporting a maximum downlink rate 150 Mbps and a maximum uplink rate of 50 Mbps.
WIFI and WWAN Can not work at the same time



<https://www.orionstar.com>

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