

AI智能递送机器人
Delivery Robot

使用说明书

Instruction Manual

免责声明

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猎户星空对于未按照产品文档使用本产品而造成的损坏、伤害以及任何法律责任不承担任何责任。您应遵守包括但不限于本声明提及的所有安全须知。

即使存在上述规定，您的消费者权益依然受当地法律法规所保障。

我公司保留因产品软件升级而对技术参数及功能设置进行修改的权利；我公司保留因调整产品硬件技术参数等原因而对硬件配置进行调整的权利，具体以实物为准。若要使用本说明书中所述的最新功能，可能需要更新机器人的软件。

本使用说明书仅供用户参考，描述可能不够详尽、准确，具体请以实物为准，如果遇到的问题无法解决请联系售后。本说明书中的图均为示意图，以实物为准。

应用场景

本产品适用于在餐厅，茶室等场所，通过人工下达指令，完成搬运酒水、餐食、餐具等工作。产品具备自动导航，躲避障碍物功能。

使用须知

在使用猎户机器人的过程中，请避免以下行为，一旦违反，由客户承担全部相关费用、法律责任和风险。

- 未按产品使用须知的内容使用、维护、保管而导致产品故障或损坏；
- 意外因素导致的产品损坏，如输入不匹配的电压、高温、进水、机械破坏、摔坏、产品严重氧化、生锈或电路板烧毁等；
- 人为行为导致的产品损坏，如人挡在机器人前方造成的撞伤，或者机器人倾倒等情况造成的三方损害，以及未按照使用要求定位，或者绘制禁行线造成的机器人跌落事故；
- 使用盗版软件而导致产品故障或损坏，使用过程中感染病毒导致产品故障或损坏；
- 浸液、受潮、发霉、昆虫破坏或动物啃咬等不正当使用导致产品故障或损坏；
- 因不可抗力（火灾、地震、水灾等）而导致产品故障或损坏；
- 未经许可请勿拆卸机器人或充电器，擅自拆卸失去保修资格，引发的安全问题。
- 请勿在危险的环境中使用本产品，如高温高压，易燃易爆场所。请勿在室外使用本产品。
- 请勿在没有围栏的地点或者楼梯口使用本产品，可能会由于跌落产生伤害。
- 未成年人接触本产品的时候请监护人在旁监护，防止因为外力作用产生倾斜或者倾倒造成伤害。
- 请勿将身体部位或其他异物放置在机器人底盘下方，可能在机器人运动的过程中造成伤害。
- 请勿使用机器人配送液体（敞口餐具），避免出现配送液体洒出而导致机器人短路或者高温烫伤事故

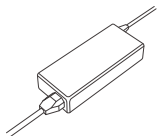
运输及储存须知

机器人在存储和运输的过程中请装入包装箱或转运箱中固定，运输过程中应采取防潮、防振和抗冲击措施，本产品包含锂电池请按照当地锂电池法律法规进行运输。

机器人长期不使用，请充满电后关机，存放在-10~50摄氏度的干燥处。

当运输和存放条件与规定范围不符时，客户和供方有必要达成协议。

包装清单



适配器 (位于包装箱顶部EPS泡沫)



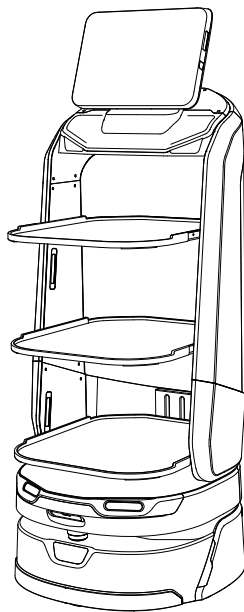
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辅料包



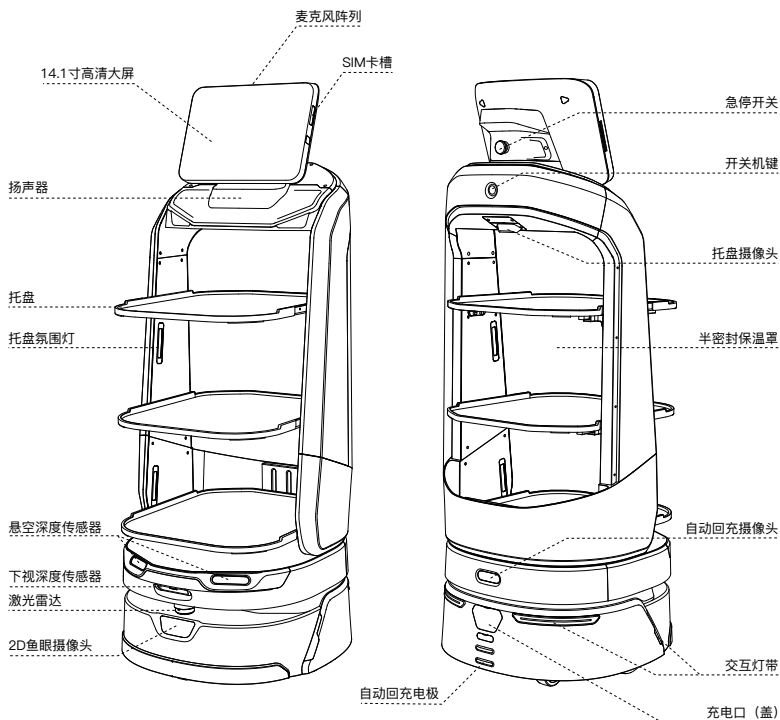
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合格证



主机

认识AI智能递送机器人



基本功能

开关机

开机方法：长按电源键5秒钟，即可开机。

关机方法：长按关机键3秒钟，可以直接关机。

远程关机方式请参考软件使用功能介绍。

充电

使用适配器充电时，先将底盘尾部的充电盖打开，随后将充电头插入充电孔中，完成充电。

当充满电或不希望再充电时，请及时断开适配器与机器人的连接，并盖上充电盖。

使用充电桩充电时，你可以设置机器人触发自动回充的电量，或者手动推动机器人至充电桩开始充电。

紧急制动

特殊情况下，您可以按下机器人背后的急停按钮，此时机器人会进入停止运行状态；按钮恢复后机器会继续当前任务。

按钮按下为开启急停，向右旋转按钮为恢复。

软件使用

由于软件功能频繁更新，可以通过扫码查看最新功能的介绍。



常见问题

问题	解决方法
无法开机	电池电量不足，请连接充电器充电。
无法充电	充电器未接通电源，请确认充电器电源线插头插入电源插座。 接触不良，请确认机器人与充电线的接触良好。
网络异常	Wi-Fi或SIM卡信号不好，请确认机器人处在良好的信号范围内。 Wi-Fi或SIM卡网络连接异常，请在系统设置中重新连接网络。
定位丢失	请根据提示，将机器人推至天花板定位标签下方。 或者推行至充电桩上【如果有】重定位。 或者推行至定位点上重定位。

导航异常	建议清除机器人前方/目标点上的临时障碍物并尝试继续任务。 取消任务，将机器人推到天花板定位标签下方，重启机器人。
提示任务未完成	递送任务中，未及时取货，机器超时返回，可取消未完成任务或重新开始递送任务。
无法识别声音	网络信号不好，请确认机器人处在良好的网络信号覆盖内。 环境噪音过大，请将机器人移至环境分贝适宜处。
无法识别人脸	摄像头被遮挡，请清理摄像头处的遮挡物。 光线过强或人脸背光，请将机器人移至光线环境适宜处。
无法运动	紧急停止按钮被按下，请将紧急停止按钮悬起。 机器人轮子缠绕有异物，请关机后进行清理。 定位丢失，将机器人推至天花板定位标签下方。
如果问题仍然存在，请联系售后电话400-898-7779	



扫码关注小豹机器人公众号

型号参数

项目	参数规格
产品尺寸	55.8cm×52.5cm×137.5cm
产品重量	净重54KG
产品颜色	白色
环境要求	储存温度: -10℃~50℃ 工作温度: 0℃~40℃
承载重量	标配3层托盘, 可调整层高获取4层配送层 (包含最底层盖装载) 典型单层承载重量15KG, 整体承载重量45KG 最大单层承载重量15kg, 最底层底盘盖承重15kg, 最大60kg (注: 典型承载是推荐客户可使用的保守评估建议值 最大单层承载重量测试结果来自猎户星空实验室, 要求地面平整, 无斜坡, 无地毯, 瓷砖缝隙起伏≤1mm)
移动速度	0.5m/s~1.2m/s, 可设置
屏幕尺寸	14.1 Inch
屏幕分辨率	1920*1080px
运营商支持	4G (支持TDD-LTE、FDD-LTE)
无线连接	Wi-Fi支持2.4G/5G
电池	锂电池
充电器规格	线充 (249.6W) / 自动回充【选配】 (224W)
具体配置及参数请以实物为准	

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Disclaimer

Thank you for purchasing the products of Beijing Orion Star Technology Co., Ltd. (hereinafter referred to as "Orion Star"). Before using this product, please carefully read this disclaimer and the Orion Star AI intelligent delivery robot instruction manual to ensure that the product is set correctly. Failure to follow the disclaimer or the instruction manual may cause injury to you and the people around, or damage the product or the objects in its surrounding environment. The final interpretation right of this disclaimer, this manual and all related documents of the product belongs to Orion Star. Orion Star has the right to update product documentation at any time without prior notice. Please visit the official website of Orion Star (<https://www.ainirobot.com>) for the latest product documentation.

Once you start using this product, it is deemed that you have carefully read the product documentation and understood, approved and accepted all the terms and contents of the product documentation. If you disagree with any of the terms of this disclaimer, you should immediately stop using all products and services provided by Orion Star. You promise to take full responsibility for the use of this product and the possible consequences. 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 behavior that violates Chinese laws and social ethics. For all personal injuries, accidents, property losses, legal disputes, and all other unfavorable events that cause conflicts of interest caused by force majeure, you shall bear the relevant responsibilities and losses yourself, and Orion Star will not bear any responsibility.

Orion Star is not responsible for any damages, injuries and any legal liabilities caused by the use of this product not in accordance with the product documentation. You should comply with all safety instructions including but not limited to those mentioned in this statement. Even if the above regulations exist, your consumer rights are still protected by local laws and regulations. Our company reserves the right to modify the technical parameters and function settings due to product software upgrades; our company reserves the right to adjust the hardware configuration due to adjustment of product hardware technical parameters and other reasons, and the actual product shall prevail. To use the latest functions described in this manual, it may be necessary to update the robot's software. This manual is for user reference only. The description may not be detailed and accurate enough. Please refer to the actual product for details. If the problem you encounter cannot be solved, please contact the after-sales service.

Applications

This product is suitable for manually issuing instructions in restaurants, tea rooms and other places for transporting drinks, meals, tableware, etc. The product has the function of automatic navigation and avoiding obstacles strategies.

Usage notes

When you are using Orion robots, please avoid the following behaviors. Once violated, the customer shall bear all related costs, legal liabilities and risks.

- Failure or damage to the product caused by failure to use, maintain, and keep in accordance with the contents of the product use instructions;
- Product damage caused by accidental factors, such as unmatched voltage input, high temperature, water ingress, mechanical damage, breakage, severe oxidation of the product, rust, or circuit board burned, etc.;
- Product damage caused by human actions, such as a collision caused by a person blocking the front of the robot, or tripartite damage caused by a robot toppling, and a robot falling accident caused by not positioning in accordance with the requirements of use, or not drawing a prohibition line;
- The use of pirated software causes product failure or damage, and virus infection during use causes product failure or damage;
- Improper use of soaking liquid, dampness, mold, insect damage, or animal bites causes product failure or damage;
- Product failure or damage caused by force majeure (fire, earthquake, flood, etc.);
- Do not disassemble the robot or charger without permission, or dismantle without authorization and lose the warranty qualification, which may cause safety problems.
- Do not use this product in dangerous environments, such as high temperature and high pressure, flammable and explosive places. Do not use this product outdoors.
- Do not use this product in places without fences or at the top of stairs, as it may cause injury due to falling.
- When minors come into contact with this product, please guard by their side to prevent injury caused by tilting or falling due to external force.
- Do not place body parts or other objects under the chassis of the robot, as they may cause injury during the movement of the robot.

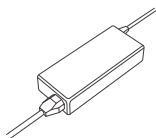
Transportation and storage notes

During storage and transportation, the robot should be fixed in a packing box or transfer box. Moisture-proof, vibration-proof and shock-resistant measures should be taken during transportation. This product contains lithium batteries, please transport them in accordance with local lithium battery laws and regulations.

If the robot will not be used for a long time, please turn it off after fully charged and store it in a dry place at -10 to 50 degrees Celsius.

When the transportation and storage conditions do not meet the specified scope, it is necessary for the customer and the supplier to reach an agreement.

Packaging list



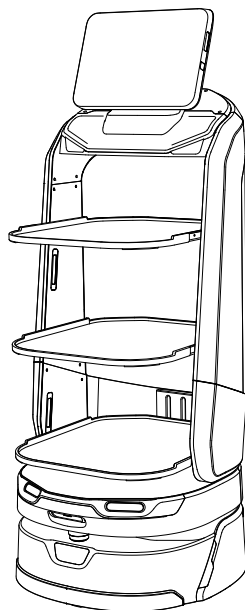
Adapter (In the EPS foam
on the top of the box)



Instruction
manual

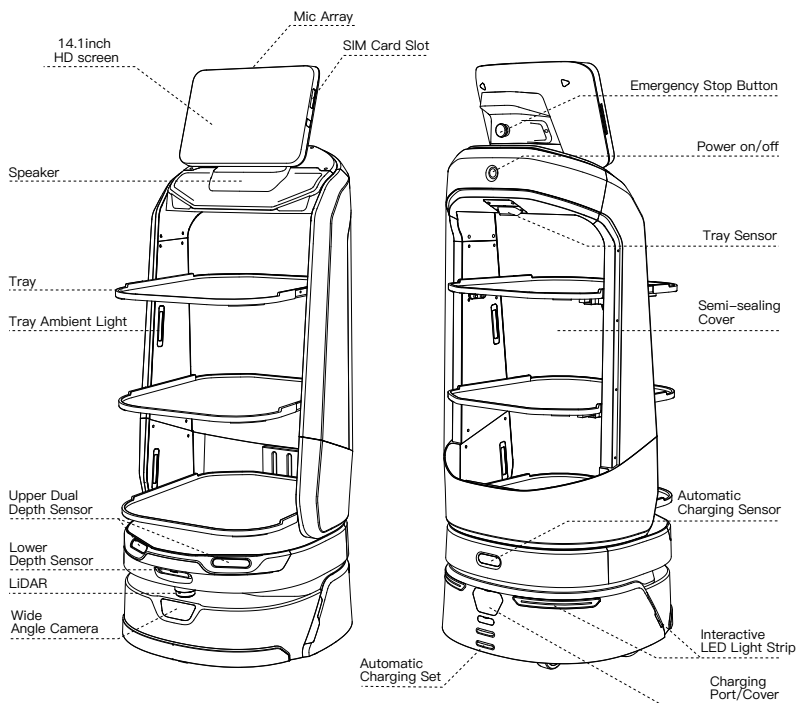


Certification
of conformity



Main Body

Get to know the AI Delivery Robot



Basic features

Power On/Off

Power on: Press the power button for 5 seconds, so that the robot will be turned on.

Power off: Press the power button for 3 seconds, so that the robot will be turned off.

Remote Shutdown method, please refer to the software function introductions.

Recharge

Plug the charger cable into the rear of the robot to recharge the robot.

When the battery is full or you don't want to continue charging, please disconnect the adaptor from the robot.

Emergency stop

Under special circumstances, you can press the emergency stop button on the back of the robot, and the robot will enter a stopped state; the machine will continue the current task after the button is restored.

Press the button to start emergency stop, turn the button to the right to resume.

Common problems

Problems	Solutions
Unable to power on	Battery is too low, please connect to the power source.
Unable to recharge	The charger is not connected to the power source, please make sure that the charger's power cord plug is inserted into the power socket. Poor contact, please confirm that the robot is in good contact with the charging cable.
Network error	The Wi-Fi or SIM card signal is not good, please make sure the robot is in a good signal range. The Wi-Fi or SIM card network connection is abnormal, please reconnect to the network in the system settings.
Position lost	Please follow the instructions to push the robot under the Coded Target on the ceiling Or push the robot to the Automatic Charging Dock(if possible) Or push the robot to the Positioning Point to re-position
Navigation error	It is recommended to clear the temporary obstacles in front of the robot/target point and try to continue the task. Cancel the task, push the robot under the Coded Target on the ceiling and restart the robot.
Task uncompleted notice	In the delivery task, if the goods are not picked up in time, the robot will return, and the unfinished task can be cancelled or the task can be restarted.
Failed to recognize voice	The network signal is not good, please confirm that the robot is in good network signal coverage. The environment is too noisy, please move the robot to a place where the environment is suitable.
Failed to recognize face	The camera is blocked, please clear the obstructions at the camera. If the light is too strong or the human face is backlit, please move the robot to a place where the light environment is suitable.

Unable to move	The emergency stop button is pressed, please hang up the emergency stop button. There are foreign objects entangled in the wheels of the robot, please shut down and clean it up. If the positioning is lost, push the robot to the bottom of the ceiling positioning label.
If the problem still exists, please contact after-sales service 400-898-7779	

Model specifications

Items	Specifications
Product Size	55.8cm×52.5cm×137.5cm
Product Weight	Net weight 54KG
Product Color	White
Environment Requirement	Storage temperature: -10°C~50°C Working temperature: 0°C~40°C
Load Capacity	Load capacity for single tray: 15kg Total load capacity: 45kg Max load capacity: 60kg(include the upper chassis cover)
Moving speed	Maximum speed: 1.2m/s
Screen Size	14.1 inches
Screen Resolutions	1920px*1080px
Operator Support	4G
Wireless Network	Wi-Fi:2.4G/5G
Battery	Lithium Battery
Charging Mode	Cable Charger(Standard Accessory) Automatic Charging Dock(Optional Accessory)
Please refer to the actual product for specific parameters.	

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.

EUT est un dispositif mobile, maintenez une distance séparée d'au moins 20 cm entre EUT et le corps de l'utilisateur.

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 POWERIn accordance with Article 10.8 in Directive 2014/53/EU (RED)

WLAN:

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

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

WLAN1_5G(5180–5320MHz):< 20 dBm EIRP

WLAN1_5G(5500–5700MHz):< 20 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

Information on restrictions

Indoor use only

	AT	BE	BG	CH	CY	CZ	DE	DK
	EE	EL	ES	FI	FR	HR	HU	IE
	IS	IT	LI	LT	LU	LV	MT	NL
	NO	PL	PT	RO	SE	SI	SK	TR

“เครื่องโทรคมนาคมและอุปกรณ์นี้มีความสอดคล้องตามมาตรฐานหรือข้อกำหนดทางเทคนิคของ กสทช.”



เครื่องวิทยุคมนาคมนี้ ได้รับยกเว้น ไม่ต้องได้รับใบอนุญาตให้มี ใช้งานซึ่งเครื่องวิทยุคมนาคม หรือตั้งสถานีวิทยุคมนาคมตามประกาศ กสทช. เรื่อง เครื่องวิทยุคมนาคม และสถานีวิทยุคมนาคมที่ได้รับยกเว้นไม่ต้องได้รับใบอนุญาต วิทยุคมนาคมตามพระราชบัญญัติวิทยุคมนาคม พ.ศ. 2498



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