# A10 Pro

Auto-Empty Robot Vacuum Cleaner

# **User Manual**

EN	English	
DE	Deutsch	
ES	Español	
FR	Français	
ІТ	Italiano	Find more information at   ZACO

### Dear Customer,

thank you for choosing the ZACO A10 Pro robot vacuum cleaner! You are now among the millions of people who clean with robots the smarter way to get things done.

Please take a few minutes to read this manual and familiarize yourself with your robot so you can get the best performance out of it. If you have a problem, please contact the ZACO customer service first or visit our website **www.zaco.eu** for more information.

Best regards, ZACO Customer Service

### **ZACO Customer Service**

### **Customer Service Number**

00800-42377961 (European Free Call)

0209-513038-38 (Direct Line - DE)

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### **Table of Contents**

Safety Instructions	5
Product Overview	8
List of accessories	8
Main device	9
Indicator status	9
Sensors and structure	10
Self-emptying charging station	11
Dustbin & water tank	11
Installation	12
Precautions	12
Mopping function	18
App download & user instructions	20
Product Operation	22
Operating instructions	22
Intelligent cleaning (default mode)	24
Spot-mode cleaning	25
Room-specific cleaning	26
Cleaning of defined areas	27
Setting up restricted areas (no-go-areas)	28
Scheduled cleaning	29
Do-not-disturb mode (DND)	29
Other app functions	29

### Table of Contents

Routine Maintenance	30
Main brush	30
Side brushes	31
Dustbin and filter	32
Wash the dustbin	33
Clean the infrared obstacle avoidance sensor	34
Clean the cliff sensors	34
Clean the charging contacts	34
Clean the signal output range the self-emptying charging station	35
Battery	35
Firmware update	35
Change the dust bag	36
Clean the suction shaft of the self-emptying charging station	38
Clean the infrared sensor & charging contacts of the self-emptying charging station	39
Product Specification	40
Main device	40
Self-emptying charging station	40
ErP information	41
Common Problems	42
Troubleshooting	44
Frequency Band	45
EU Declaration of Conformity	45

### Safety instructions

#### **Use Restrictions**

- The product is for home use only. Please do not use it in outdoor (such as an open balcony), non-ground (such as a sofa), commercial or industrial environments. This can affect the warranty.
- Do not use the robot in suspended environments (such as open balconies or on top of furniture) without protective rails or barriers.
- Pick up any cables from the floor before using the robot to prevent it from dragging them while cleaning.
- Please remove fragile objects from the floor to prevent damage and hinderance while the robot is cleaning.
- This product may not be used by people with physical, sensory, or intellectual disabilities, or people without relevant experience and knowledge (including children), unless there is an adult present to ensure that they can use the product safely.
- Children must not use the robot vacuum cleaner as a toy. Please ensure that children and pets are not in the vicinity while the robot is cleaning.
- Keep the cleaning tool out of reach of children.
- Do not place any objects (including children and pets) on the stationary or moving robot.
- Make sure to keep your fingers and hair away from the suction inlet of the robot.

### Safety instructions

- Do not use the robot to clean high pile carpets. Some dark carpets might not be cleaned normally as it can be difficult for the sensors to distinguish it from the ground.
- Ensure the robot does not vacuum around fragile or sharp objects (e.g., decoration wastes, broken glass, iron nails, etc.
- Do not use the protective cover of the laser sensor or bumper as a handle to carry the robot.
- Only clean and maintain the robot and the charging station when the power is off.
- Do not use wet cloths or liquids to clean the robot.
- Follow the instructions in the manual and Quick Start Guide to ensure proper use of the robot. In case of improper use, the user is liable for all damages or injuries caused.
- Do not use the mopping function on carpets or on top of furniture.
- Make sure there is no more residual water in the water tank and remove it before charging the robot.

### Safety instructions

#### **Battery and Charging**

- Do not use any third-party spare batteries, charging stations or charging devices.
- Do not disassemble, repair, or refit the battery or charging station yourself.
- Do not place the charging station near heat sources such as radiators.
- Do not use a damp cloth or wet hands to clean the charging contacts of the charging station.
- Before scrapping the robot, turn it off and remove the battery. Properly dispose of used batteries and send them to professional recycling companies.
- If the power cord is damaged or broken, stop using it immediately and replace it with a new one.
- When transporting the device, make sure that the robot is switched off. It is recommended to use the original packaging for transport.
- If you do not use the robot for a long time, charge it fully and store the product in a dry and shaded place. It is recommended to charge the robot at least once every three months to avoid battery damage due to overcharging or discharging.

### List of accessories



#### Main device



 Press and hold the button for 3 seconds to power on/off

Status	Light
Cleaning	Blue light on
Recharging	Blue light on
Charging	Blue light flashing
Low power	Red light flashing
Fully charged	Blue light on
Alarming	Red light flashing
Standby	Off

### Indicator status

#### Sensors and structure





### Self-emptying charging station



### Dustbin & water tank



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### Installation

#### Precautions

Before operating the robot vacuum cleaner, please put cables and other objects scattered on the floor aside. Also remove fragile, valuable, and potentially dange-rous objects as well as objects that can easily be tipped over. Please avoid getting the robot tangled, stuck, dragged or knocked over. Failure to do so may result in injury or property damage.





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### Installation

#### Precautions

Do not use the robot to clean up liquids.



#### Note

If the robot is used in a suspended environment, it should be protected by rails or barriers to prevent it from accidentally falling or hitting other objects. Failure to do so may result in personal injury or property damage.

### Installation

1. Remove the protective material from both sides of the robot.



### 2. Install side brushes

Insert the left side brush (L) and the right side brush (R) into the openings provided on the bottom of the robot. The brushes are also marked with L and R. Press the side brushes down firmly until they engage with a "click" sound.





### Installation

3. Place the self-emptying charging station on a flat surface against the wall. Ensure that the cabling is neat and tidy.



### Installation

4. Connect the power cord to a power supply that meets the requirements of the device.



#### Note

Keep a minimum distance of 0.5 m to both the left and right of the charging station and 1.5 m in front of the charging station.

5. Do not move the charging station once it has a set position and avoid direct sunlight on the charging station.



### Installation

#### Note

Sunlight can interfere with the charging signal. This may cause the robot vacuum cleaner not to return to the charging station.

#### 6. Power on and charge

Press and hold the power button for 3 seconds to turn on the robot (when it is not in the charging station). When the indicator light is on (constant blue light), place the robot on the charging station. When you hear the voice prompt "start charging" the robot is charging successfully.



#### Note

If the battery is too low, the robot cannot be turned on. Place the robot vacuum cleaner on the charging station. The device will be switched on automatically.

### Installation

### Mopping function

1. Open the water tank cap and add the appropriate amount of water. Close the cap. Do not add any cleaning detergent.



2. Put the water tank back into the robot.



### Installation

3. Attach the mop to the mopping plate.



4. Attach the mopping plate to the underside of the robot.



### App download & user instructions

Scan the QR code to install the app. 1. Or search "ZACO Smart" in the iOS App Store or the Google Play Store and download the App.

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- 3. Click "Add a device" or "+" in the top right corner.

12 74 862 9 0

Register and log in to the app. 2.





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ZACO Smart		





### App download & user instructions

5. Select a 2.4GHz Wi-Fi network and enter the password.



 Select the "SMARTlife-XXXX" WiFi on your mobile device to connect to the device.



 Press and hold both buttons (Home & Power Button) simultaneously for at leas 3 sec., until you hear the voice prompt "AP mode" and the Wi-Fi indicator light flashes.



8. Return to the ZACO Smart App.



### **Product operation**

#### **Operating instructions**

#### 1. Power On / Power Off

Press and hold the Power button for 3 seconds. When the indicator light is on, the robot has booted up successfully. If the robot vacuum cleaner is in standby mode, press and hold the Power [Image] button for 3 seconds. When the indicator light turns off, the device has successfully powered off.

#### Note

The robot vacuum cleaner cannot be switched off during the charging process.

#### 2. Cleaning / Pause

After the device is turned on, you have 2 options to start the cleaning process:

- 1. Press the Home button on the robot
- 2. Use the mobile app.

- The robot vacuum cleaner should not be used for cleaning liquids.
- When the battery charge is less than 15%, the robot will stop cleaning and return to the charging station to recharge the battery.
- Make sure that there are no cables in the way. The robot can get tangled in loose cables and can also pull a cable out of the socket. Under certain circumstances, this can lead to damage to electrical equipment.



### **Product operation**

#### **Operating instructions**

#### 3. Charging

Automatic mode:

After cleaning is complete, the robot vacuum cleaner automatically returns to the charging station to recharge.

Manual mode:

In pause mode, either press the Home button [Image], or use the mobile app to make the robot return to its charging station to recharge.

#### Note

If the robot vacuum cleaner does not find the charging station, it will automatically return to the starting point. Please place the robot on the station manually for charging.

#### 4. Selection of suction power

Use the app to select from 3 different modes

- 1. Energy-saving
- 2. Standard (default)
- 3. Powerful

### **Product operation**

### Intelligent cleaning (default mode)

The robot vacuum cleaner scans the environment, creates a map and intelligently divides the areas into different rooms. When cleaning is complete, the robot returns to the charging station to recharge. (To better create the map, the robot must start from the charging station during the first cleaning).



#### Note

Do not move the robot vacuum cleaner indiscriminately during operation. After moving the robot, place it back near the original location. When the robot is restarted, it attempts to recalculate its position in the room. After successful positioning, the robot continues cleaning where it left off. If the robot is unable to determine its exact position, it will cancel the cleaning process it has started and begin a new map. This may result in the robot skipping the automatic return to the charging station.

### **Product operation**

### Spot-mode cleaning

Use the mobile app to select the spot-mode cleaning function: Select a location on the map for the robot hoover to clean. The robot will move to the specified location to clean a 1.6 m x 1.6 m area with itself as the centre. It will perform the cleaning in an efficient "zigzag" path.



#### Note

Before you can use this function, the robot must first create a map. Only then the map will be displayed in the mobile app and you will be able to select this function.

### **Product operation**

#### **Room-specific cleaning**

Use the mobile app to select the function of room-specific cleaning. Select the room to be cleaned on the map, and the robot vacuum cleaner will move to the selected room and clean it. You can have multiple rooms cleaned and also set the order of cleaning.



- Before you can use this function, the robot must first create a map. Only then the map will be displayed in the mobile app and you will be able to select the function.
- 2. The robot may also clean parts of the room that are not considered in the planning. Make sure that there are generally no obstacles in the area of the planned cleaning and beyond to ensure a safe cleaning process.

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### **Product operation**

#### Cleaning of a defined area

Use the app to select the cleaning mode, or to define specific areas that will be cleaned directly.



- 1. Before you can use this function, the robot must first create a map. Only then the map will be displayed in the mobile app and you will be able to select the function.
- 2. The robot may also clean parts of the room that are not considered in the planning. Make sure that there are generally no obstacles in the area of the planned cleaning and beyond to ensure a safe cleaning process.

### **Product operation**

### Setting up restricted areas (No-go areas)

Use the app to define no-go areas on the map. The robot will ignore these areas during the cleaning process.



- Before you can use this function, the robot must first create a map. Only then the map will be displayed in the mobile app and you will be able to select the function.
- This function is only used to define the cleaning areas and cannot be used to block dangerous areas. The robot may also clean parts of the room that are not considered in the planning. Make sure that there are generally no obstacles in the area of the planned cleaning and beyond to ensure a safe cleaning process.
- 3. When moving the robot vacuum cleaner or there are obvious changes in your home environment, the map might become ineffective and the restricted area might be lost.

### **Product operation**

#### Scheduled cleaning

If you have created a scheduled cleaning, the robot will start cleaning at the specified time and will automatically return to the charging station when the cleaning is completed.

#### Do-not-disturb mode (DND)

The default starting time period where the robot should be silent is 20:00 - 6:00 o´clock. This can be changed or deactivated in the mobile app. When in DND mode, the robot vacuum cleaner will stop the following functions: Automatic continuing of the cleaning cycle, active voice prompts and timing.

#### Other app functions

- Remote control
- Real-time map updating
- Search robot
- Language selection
- Map management
- Cleaning history
- Cleaning mode selection
- Maintenance management
- Partition area editing
- Defining cleaning cycles of selected areas
- Area attribute customizing

### **Routine maintenance**

### Main brush

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 Turn the robot over, press the clips on the main brush cover and remove it. Take out the main brush.

3. Use the brush of the cleaning tool to remove dust from the main brush. Use the small blade on the cleaning tool for tangled up hairs.

#### Note

Recommended cleaning frequency: once a week.











### **Routine maintenance**

#### Side brushes

- 1. Turn the robot over so that the underside is facing upwards. Pull out the side brushes vertically.
- 2. Remove the tangled hairs and dirt and replace the side brushes. Use the small blade on the cleaning tool for stubborn tangles.
- 3. Be sure to reinsert the side brush in the correct position (L to L and R to R) and gently push it down until it locks into place.



- It is recommended to replace the side brush every three months to ensure an effective cleaning process.
- Recommended cleaning frequency: once a week.

### **Routine maintenance**

### Dustbin and filter

1. Press the dustbin release button and draw out the dustbin.

2. Press the button on the dustbin to open the cover and empty it into a trash can.



#### Note

Recommended cleaning frequency: after each cleaning cycle.



### **Routine maintenance**

#### Wash the dustbin

- 1. Remove the sponge filter and the high-performance filter after prolonged use.
- Clean the primary filter, dustbin and sponge filter under running water. CAUTION: The high-efficiency filter cannot be cleaned and must not come into contact with water.
- 3. After washing, shake off the remaining water, let the filter and dustbin air dry, and do not use them again until they are completely dry.



- Wash the primary filter and the sponge filter with clean water and do not add any detergent.
- Do not use a brush to clean the filter. Only use your fingers to avoid any damage.
- The filter shall be dried in the air for at least 24 hours. This ensures that it is dried thoroughly.

### **Routine maintenance**

Clean the infrared obstacle avoidance sensor

Clean the cliff sensors





### Clean the charging contacts





#### Note

Recommended cleaning frequency: once a month.



### **Routine maintenance**

# Clean the signal output range on the self-emptying charging station





#### Battery

A rechargeable high-performance lithium-ion battery is installed in the robot vacuum cleaner. To maintain battery performance, keep the robot charged during daily use.

If you do not use the robot for a long time, charge it fully and store the product in a dry and shady place. It is recommended to charge the robot at least once every three months to avoid battery damage due to overcharging or discharging.

#### Firmware update

Open the tab "update firmware" in the mobile app. If an outstanding firmware update is detected, perform the update according to the instructions. The battery capacity should not be less than 50% during the firmware update. It is recommended to place the robot on the charging station during the update.

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### **Routine maintenance**

### How to change the dust bag

1. Unplug the power cord and lift the self-emptying charging station cover.

2. Pull up the lifting handle of the dust bag to seal it.

3. Remove the dust bag from the station.



### **Routine maintenance**

4. Dispose the used dust bag in the household waste.

 Install the new dust bag into the station.
 Ensure that the handle of the new dust bag is lowered (not pulled out) and the dust bag is firmly in place.

6. After closing the cover of the self-emptying charging station, plug in the power cord again.







### **Routine maintenance**

### Clean suction shaft of the self-emptying charging station

If the indicator light of the station flashes red after replacing the dust bag, please disconnect the power plug. Then turn the station upside down (the bottom side is now on top) and check the viewing window of the suction shaft for blockages.

If the suction shaft is blocked, remove the cover with a screwdriver (as shown in the figure below) and clean the suction shaft.



#### Caution

Violent disassembly is strictly prohibited. Please reinstall it after cleaning.



### **Routine maintenance**

# Clean the infrared sensor & charging contacts of the self-emptying charging station

Gently wipe the two areas regularly with a clean, soft, dry cloth. It is recommended to clean them once a month.



### **Product Specification**

### Main device

Product name	Robot vacuum cleaner
Product model	A10 Pro
Overall dimension	320 x 320 x 93 mm
Net weight	2.8kg
Battery	3200 mAh
Rated voltage	14.4 V
Rated power	42 W
Charging time	300 min
Capacity of dustbin	250 ml
Capacity of water tank	240 ml

### Self-emptying charging station

Product name	Self-emptying charging station
Product model	A10 Pro
Overall dimension	320 x 240 x 165 mm
Net weight	2.7kg
Rated Input	220-240 V~50/60 Hz
Rated Output	19 V1A
Rated power	680 W

# **ErP information**

	Shenzhen KingChuang Smart Navi Technology Co., Ltd.
Manufacturer information	Add:3rd Floor, Building 10, Furong Indus- trial Zone, No.179 Furong Avenue, Xinqiao Street, Baoan District, Shenzhen
AC adapter Model identifier	A10 Pro
Input voltage	220-240V
Input AC frequency	50/60Hz
Output voltage	19V
Output current	1A
Output power	19W
Average active efficiency	≥83.43%
Efficiency at low load (10 %)	≥82.43%
No-load power consumption	≤0.923W

### Percentage of nameplate output current

Load condition 1	100%±2%
Load condition 2	75%±2%
Load condition 3	50%±2%
Load condition 4	25%±2%
Load condition 5	10%±1%

### **Common Problems**

Fault Prompt	Solution
Failed to power on the robot.	The robot vacuum cleaner could not be switched on. The battery level is insuf- ficient. Please place the robot on the charging station and make sure the charging contacts touch. The robot will automatically turn on and charge.
The robot vacuum cleaner could not be charged.	<ul> <li>Remove the robot from the charging station and check whether the charging station indicator lights up. Make sure that both ends of the power cord are properly connected.</li> <li>The charging station is not properly connected to the robot vacuum cleaner. Please clean the charging station and those of the robot. If necessary, remove the side brushes.</li> </ul>
Failed to return to the charging station.	<ul> <li>The robot vacuum cleaner is too far away from the charging station. Try to place the robot near the charging station.</li> <li>Switch off the robot and switch it on again.</li> <li>Foreign objects may be stuck in the main brush, the side brushes or the wheels. Please check and clean them after turning off the robot.</li> </ul>
The cleaning performance is impaired.	<ul> <li>The dustbin is clogged. Clean the dustbin.</li> <li>The filter is worn. Clean or replace the filter.</li> <li>Foreign objects are caught in the main brush. Clean the main brush.</li> </ul>

### **Common Problems**

Unable to connect to the Wi-Fi network	<ul> <li>The Wi-Fi signal is not strong enough. Make sure the device is in a location with good Wi-Fi signal.</li> <li>The Wi-Fi connection is not normal. Reset the Wi-Fi settings, download the latest version of the app, and then try to connect to the Wi-Fi net- work again.</li> <li>The password is incorrect.</li> <li>This device only supports the 2.4 GHz band.</li> </ul>
Can't perform scheduled cleaning	The power level of the battery is insuffi- cient. Scheduled cleaning is only started when the remaining power of the battery is at least 15 % or above.
Is any power consumed if the robot always stays at the charging station?	The power consumption is extremely low when the robot vacuum cleaner always stays at the charging station. This helps to keep the battery in the best perfor- mance.
Is it necessary to charge the battery for 16 hours when the robot is used for the first three times?	The lithium battery does not have a memory effect. It can be used instantly after it is fully charged. There is no need to wait.

# Troubleshooting

Error Prompt	Solution
Error 1: Insert the dustbin	Cleaning is not possible when the dustbin is taken out. Please reinstall the dustbin.
Error 2: Put the robot vacuum cleaner on the floor before starting	You may have picked up the robot vacu- um cleaner or the robot is suspended. Please move the robot vacuum cleaner to a flat ground and start it again.
Error 3: Please lay the robot vacuum cleaner flat on the ground and then start it	The robot is in a tilted position and cannot move itself. Please place the robot back on a flat surface and then restart it.
Error 4: Please check whether the front bumper is stuck	The edge or collision sensor is jammed. Push the bumper on the left and right side to release possible jams.
Error 5: Low battery, please recharge	Put the robot vacuum cleaner on the charging station for recharging.
Error 6: The robot vacuum cleaner is trapped	Please move the robot vacuum cleaner to an area with more open space and then start it.
Error 7: Please check if the nose wheel is jammed	The nose wheel is jammed or something has become tangled in it. Please check the nose wheel and remove possible foreign objects.
Error 8: Please check whether the main brush is stuck	The main brush is stuck or something has become tangled in it. Please check the main brush and remove the foreign objects.
Error 9: Please check whether the side brushes are stuck	The side brushes are stuck or something has become tangled in the side brushes. Please check them and remove foreign objects.



### **Frequency Band**

#### **Frequency Band and Output Power**

TX Frequency	2.412 ~ 2.472 GHz
RX Frequency	2.412 ~ 2.472 GHz
Antenna Gain	≤3 dBi
RF Output Power	802.11b: 17 dB 802.11g: 14 dB 802.11n: 13 dB

### **EU Declaration of Conformity**

**Robovox Distributions GmbH** hereby declares that the **ZACO A10 Pro** radio complies with Directive 2014/53/EU.

The full text of the EU Declaration of Conformity can be found on the Internet address https://conformity.zaco.eu/download/a10pro.pdf