

# Operation guide

## Quick Start Guide

### Power on

Step 1 Make sure the key switch is turned to ON.

Step 2 Move the robot to the startup location.

Step 3 Press and hold the power switch for 1 second.

The light strip flashes, and the screen displays boot logo, animation, and Android desktop in turn, indicating that the robot is powered on.

□Note

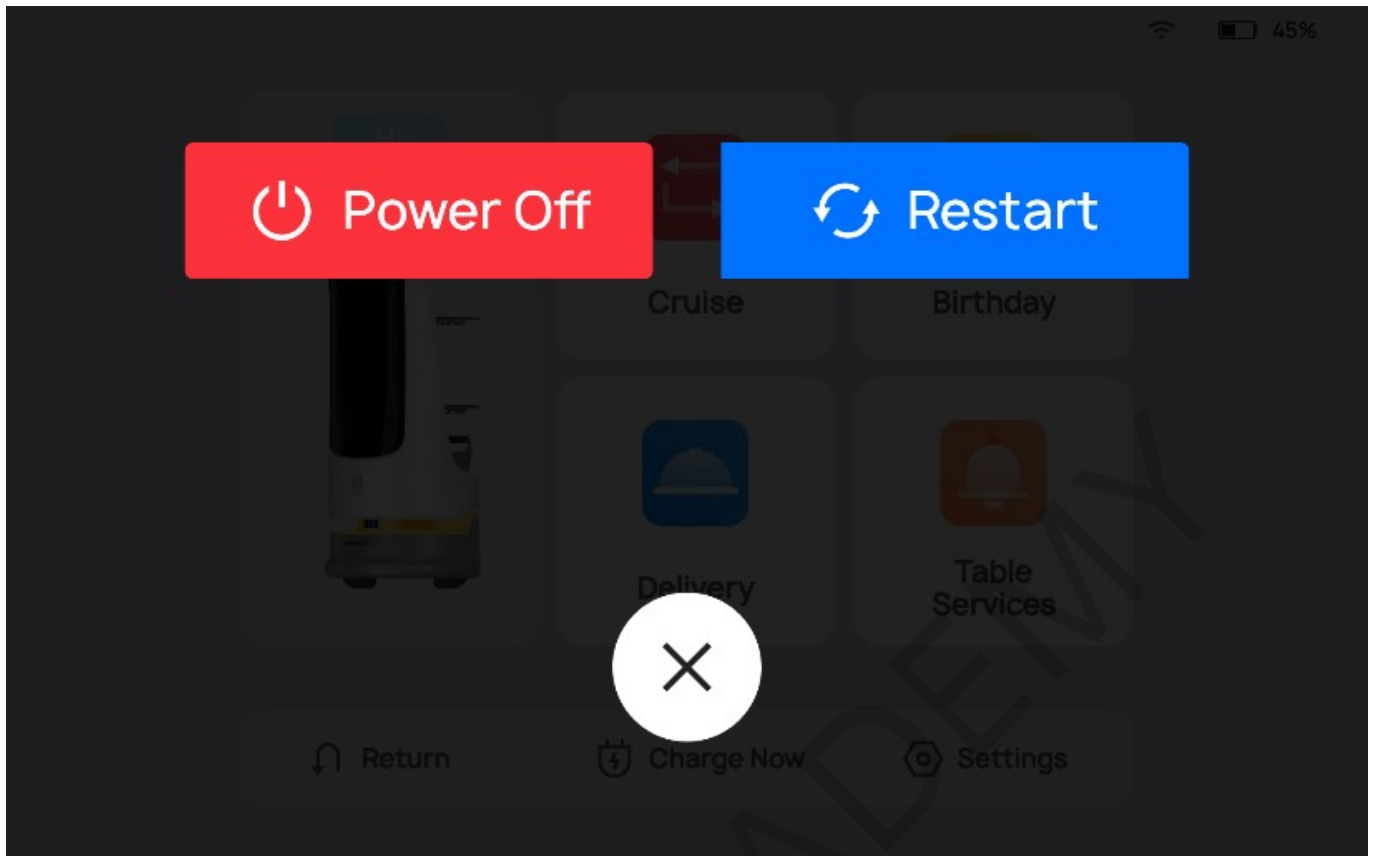
The system will automatically start Pudu App by default after powering on. If not, tap the Pudu App icon on the system desktop to start it.

Step 4 The robot is powered on, let's try it out!

### Power Off

Step 1 Press and hold the power switch for 3 seconds.

The screen will pop up the **Power Off** and **Restart** options.



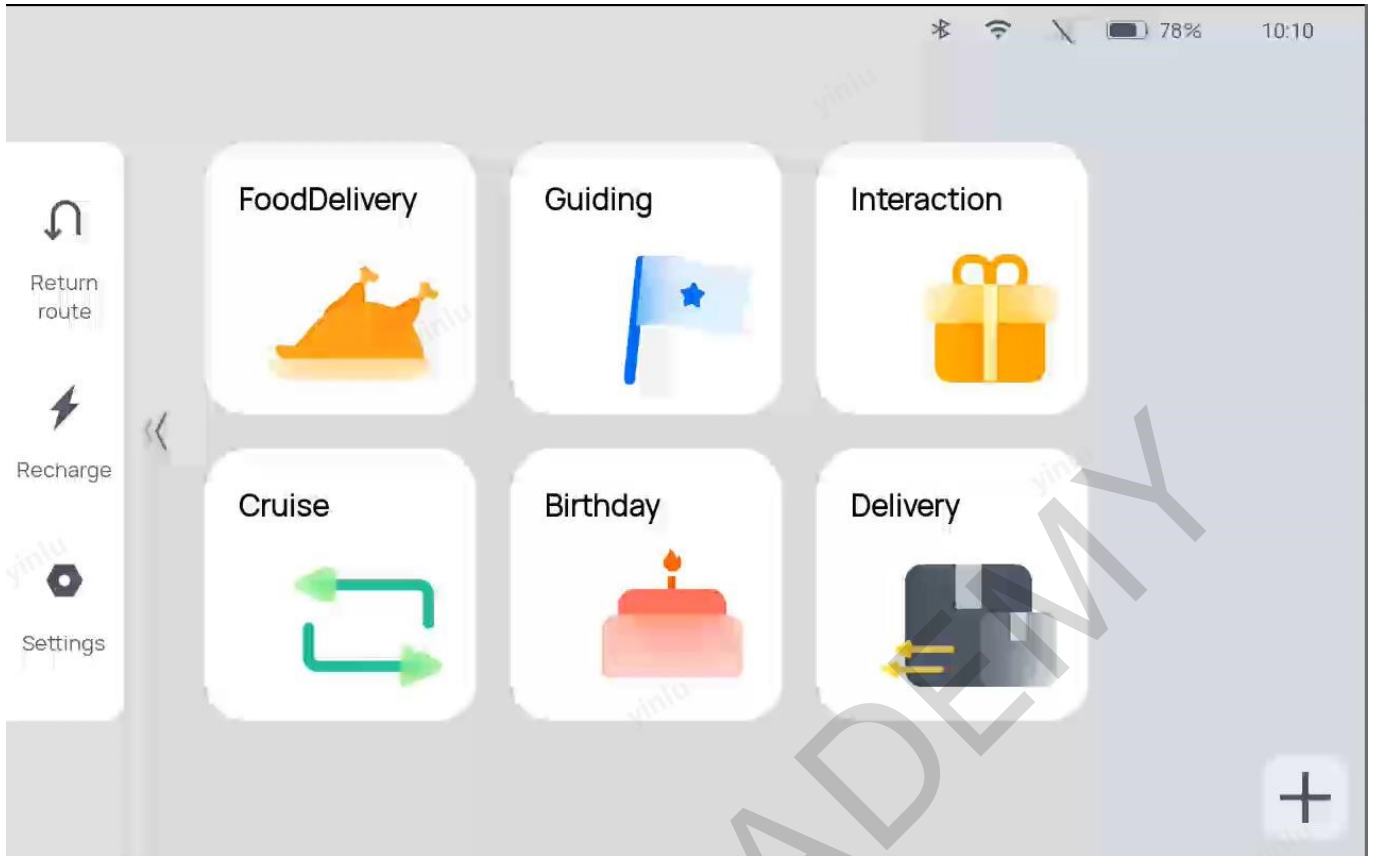
Step 2 Tap **Power Off**.

The light strip and screen will go off, indicating that the robot is powered off.

## Task Scenarios

### Product Features

The robot comes with various modes, including Delivery Mode, Non-food Delivery Mode, Cruise Mode, Guiding Mode, Birthday Mode, and Interactive Mode to cater to the needs of different scenarios.

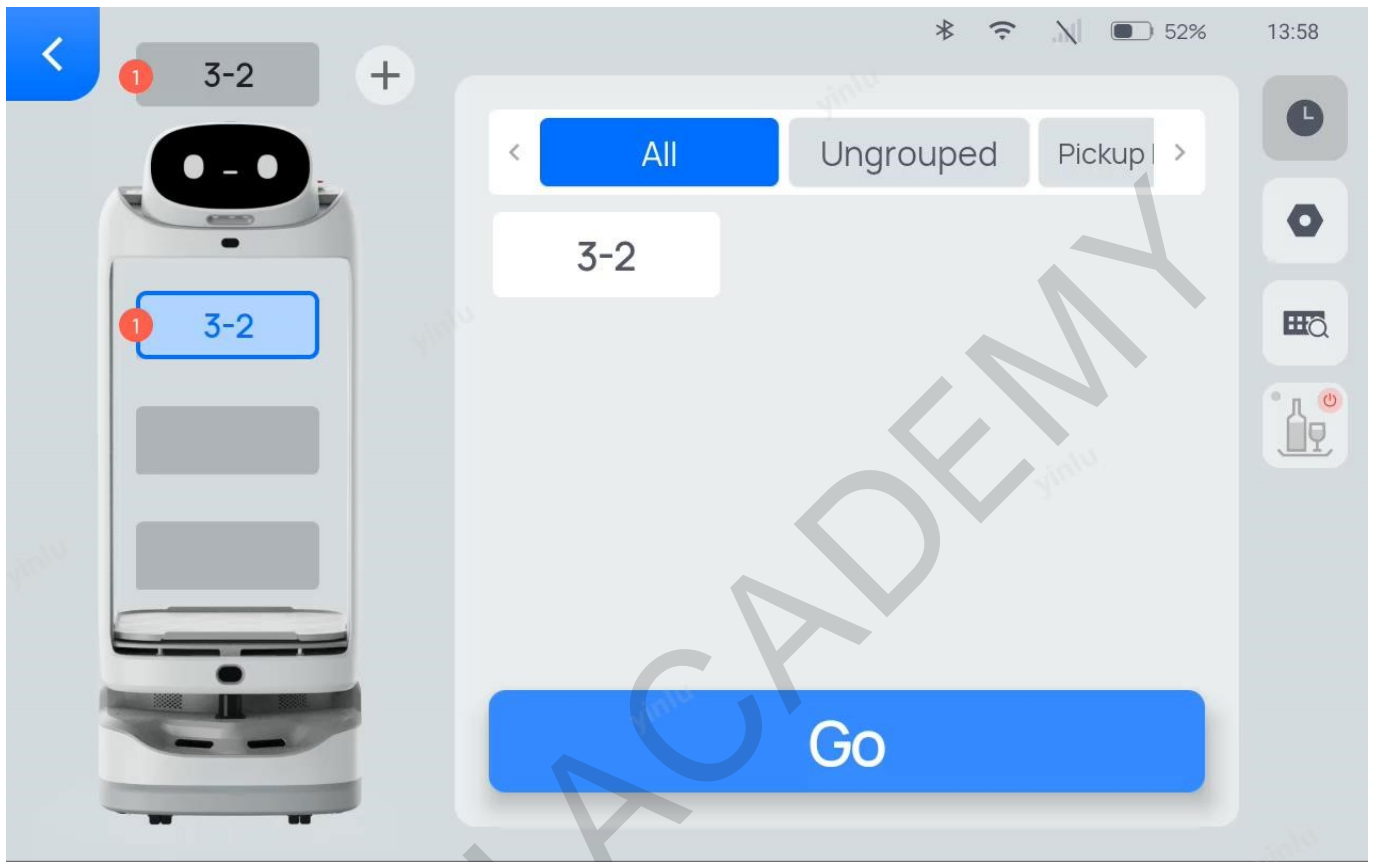


| Mode             | Description  |
|------------------|--|
| Food Delivery    | The robot delivers food to multiple tables at the same time. After the dishes ordered by different customers are placed on the trays and the table numbers are entered, the robot automatically plans the best routes for delivery. After that, the robot automatically returns to the pick-up position. |
| Delivery mode    | The user may select this mode to deliver items in non-dining scenarios. Its operation is generally the same as that of Delivery Mode, with differences in interaction voice and interface prompts.   |
| Cruise mode      | The robot can cruise along a predetermined route with self-service desserts, snacks, drinks, brochures, or napkins. The user may also set up stay locations along the cruise route. The robot can invite customers to take free samples or try out the food via voice broadcast when cruising.           |
| Birthday mode    | The robot delivers birthday cakes or gifts to customers, accompanied by customized background music.   |
| Guiding mode     | The robot leads customers to their tables. Then, it automatically returns to the greeting location.  |
| Interactive mode | After the robot delivers to the destination, the customer can tap its screen for a lucky draw.   |
| Return           | The robot directly returns to the pickup location or the departure location.   |
| Auto charging    | The robot directly returns to the charging pile for charging. This function is only available if the user has purchased a charging pile and set up its location during mapping.  |
| Settings         | The user can connect the robot to the Internet and Bluetooth devices, set the number of trays, turn on delivery lights, laser projector, etc.  |


# Food Delivery





Step 1 Tap **Food Delivery** on the main interface.

The Food Delivery mode interface is shown below.

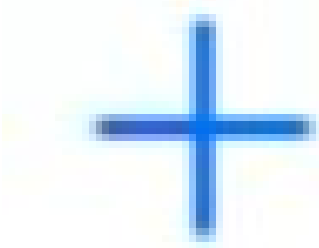
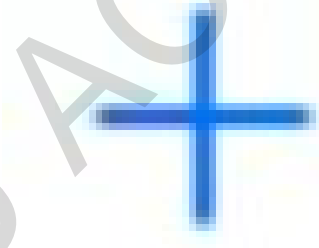


Shortcut buttons on the Food Delivery mode interface are explained below.

| Buttons   | Description             |
|---|-------------------------|
|  | View the previous task. |

| Buttons   | Description   |
|---|---|
|    | <p>Allows you to set the arrival voice, the music during delivery, etc. See the table below for details.</p>  |
|   | <p>Allows the smart search of table numbers. Tap the icon to quickly search for table numbers when there are too many tables.</p>   |
| Buttons   | Description   |
|  | <p>Allows you to open/close the cabin door.<br/>This function is only available on SWFD11.<br/>If the cabin door is open, the icon changes to</p>   |
|  | <p>Allows you to set the Smooth Mode.<br/>The icon will be displayed after Smooth Mode is enabled in the Food Delivery Settings interface.<br/>There are three states for Smooth Mode:</p> <ul style="list-style-type: none"> <li>• : Disabled. Tap the icon to enable Smooth Mode once, and it will be disabled by default after the task is completed; tap and hold for 1 second to enable Smooth Mode permanently.</li> <li>• : Enabled once. Tap the icon to disable Smooth Mode; tap and hold for 1 second to enable Smooth Mode permanently.</li> <li>• : Enabled permanently Tap the icon to disable Smooth Mode.</li> </ul> <p>When Smooth Mode is enabled, the robot will move at 0.4 m/s(1.31 ft/s) during food delivery. After the task is completed, the robot will return at the currently set return speed.</p> |

The Delivery Settings interface and descriptions of the settings are shown below.

| Food Delivery Settings                     | Description  |
|--|--|
| Show emoticons during task                 | Choose whether to enable Food delivery animation. If enabled, the robot will show emoticons rather than the table number during delivery.  |
| Arrival voice                              | <p>Choose whether to enable Arrival voice of delivery and set the custom voice and the playback interval.</p>  <p>If enabled, tap <a href="#">+</a> to add custom voices. If a custom voice is selected, it will be played upon delivery arrival rather than the system default voice. A random voice will be played if more than one voice is selected.</p> <p>Requirements for custom voices:</p> <ul style="list-style-type: none"> <li>• Up to 20 custom voices can be entered.</li> <li>• Up to 50 characters or 25 Chinese characters for each custom voice. Special characters are not supported.</li> <li>• If you wish to remove a custom voice, tap and hold to delete it.</li> </ul> |
| Play music during task                     | <p>Choose whether to enable Play music during delivery.</p>  <p>If enabled, tap <a href="#">+</a> to add music from the music library (up to 20 pieces of music). If you wish to remove a piece of music, tap and hold to delete it. If no music is available in the music library, you may scan the QR code in the Settings &gt; Music interface to import music. If a piece of music is added and selected, it will be played during delivery. Only one piece of music can be selected at a time.</p>   |
| Auto-open of compartment door when waiting | Choose whether to enable Auto-open of compartment door when waiting. If enabled, the compartment door will open automatically after the robot completes its delivery task and returns to the pickup location. The user can determine whether to enable this function according to the speed of meal preparation and the actual scenario. This function is only available on SWFD11.  |
| Smooth Mode                                | Choose whether to enable Smooth Mode. If enabled, the Smooth Mode icon will be displayed on the Food Delivery mode interface. The Smooth Mode can be set up on the Food Delivery mode interface.   |
| Single-layer multi-table delivery          | Choose whether to enable Single-layer multi-table delivery. If enabled, multiple table numbers can be set for a single tray. Up to 10 table numbers can be set for a single tray. If you wish to delete a table number, tap the tray with the table number. A table number management interface will pop up where you can delete the table number.   |

| Food Delivery Settings      | Description  |
|-----------------------------|--|
| Delivery parameter settings | <p>Allows you to set delivery parameters.</p> <ul style="list-style-type: none"> <li>• Automatic pick up time: If Done is not tapped within the set time after the robot arrives at the desired table, the robot automatically completes the current task and continues to perform the next one.<br/>Value range: 1 to 600 seconds. Default: 30 seconds</li> <li>• Auto resume time of pause: The pause time during delivery, that is, if the robot does not perform any operation during the pause time, it will automatically resume the current task.<br/>Value range: 5 to 600 seconds. Default: 20 seconds</li> </ul> |
| Delivery order              | <p>Allows you to select the delivery order for the robot.</p> <ul style="list-style-type: none"> <li>• Distance-priority delivery: The robot plans the optimal path and performs delivery tasks from near to far based on the distance on the map.</li> <li>• Sequential delivery: The robot performs delivery tasks from up to down in the order of tray number.</li> </ul>   |
| Delivery speed              | <p>Allows you to set the moving speed of the robot during delivery.<br/>If Smooth Mode is enabled, the set speed will not take effect, and the robot will deliver at 0.4 m/s(1.31 ft/s).</p> <p>Speed range: 0.5 m/s, 0.6 m/s, 0.7 m/s, 0.8 m/s, 0.9 m/s (1.64 ft/s, 1.97 ft/s, 2.30 ft/s, 2.62 ft/s, 2.95 ft/s)</p>   |
| Return speed                | <p>Allows you to set the speed of the robot during return.</p> <p>Speed range: 0.5 m/s, 0.6 m/s, 0.7 m/s, 0.8 m/s, 0.9 m/s (1.64 ft/s, 1.97 ft/s, 2.30 ft/s, 2.62 ft/s, 2.95 ft/s)</p>   |
| Pickup location selection   | <p>Allow you to select the pickup location.<br/>When creating a new map, the user can set different pickup locations according to the actual scenario, which can be manually selected on the Food Delivery Settings interface.<br/>This function is applicable to scenarios with multiple pickup locations.</p>  |

Step 2 (Optional) Tap  to open the compartment door.

□Note

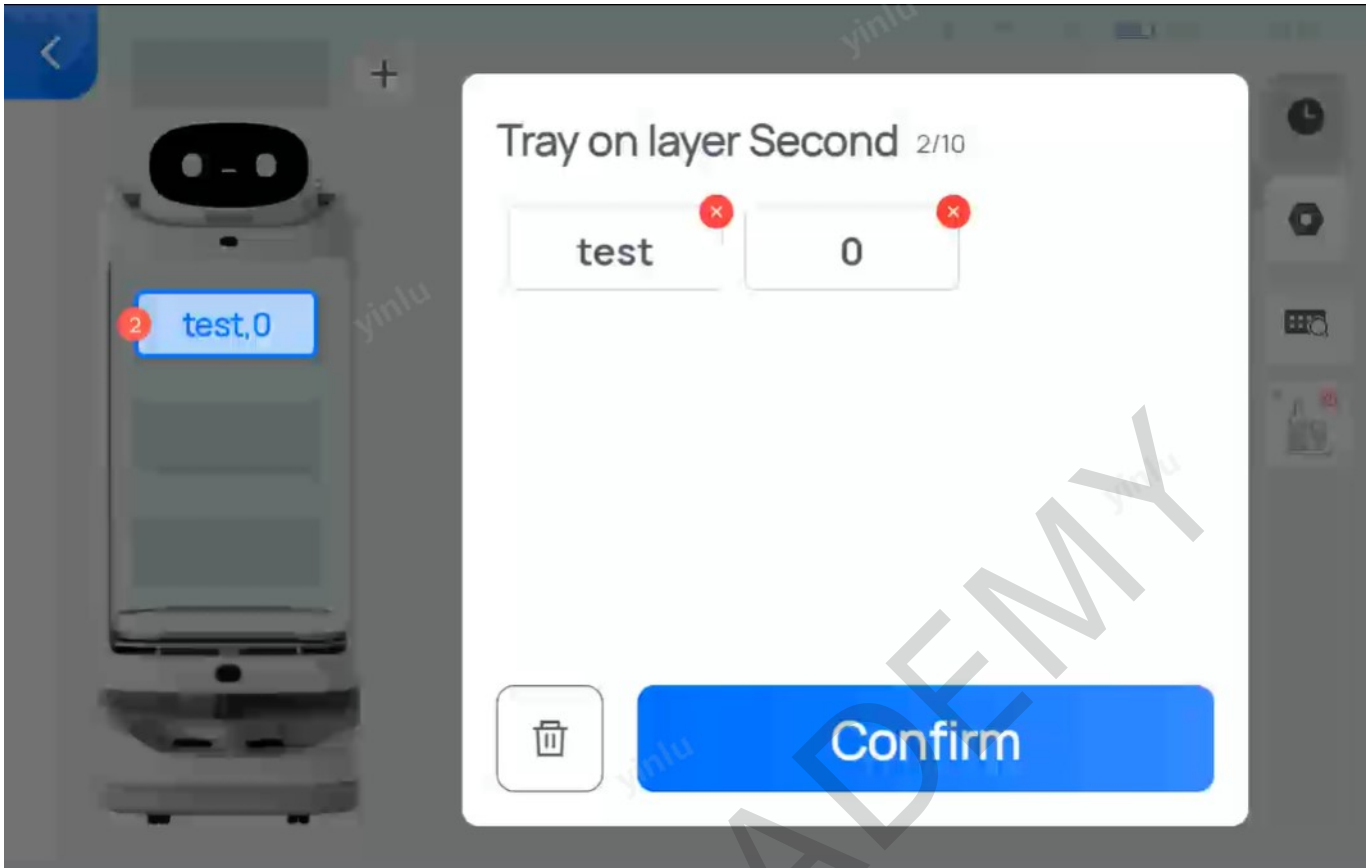
This function is for SWFD11 only.You may skip this step if the compartment door is already open or original trays are not used.

Step 3 Put the dishes on the corresponding tray.

Step 4 Tap the tray on the screen and select the desired table number.

The desired table number will be displayed on the corresponding tray.

If **Single-layer multi-table** is enabled on the Food Delivery Settings interface, the user can put multiple dishes for different tables on a single tray.



Step 5 After entering the table numbers, tap **Start**.

The robot arrives at the specified table along the predetermined path.

For an SWFD11 robot using original trays in the compartment, the compartment door will be closed automatically after tapping **Start**.

Step 6 After arriving at the desired table, the robot issues a voice prompt. The waiter then takes the dishes following the screen display and voice prompts.

takes the dishes following the screen display and voice prompts.

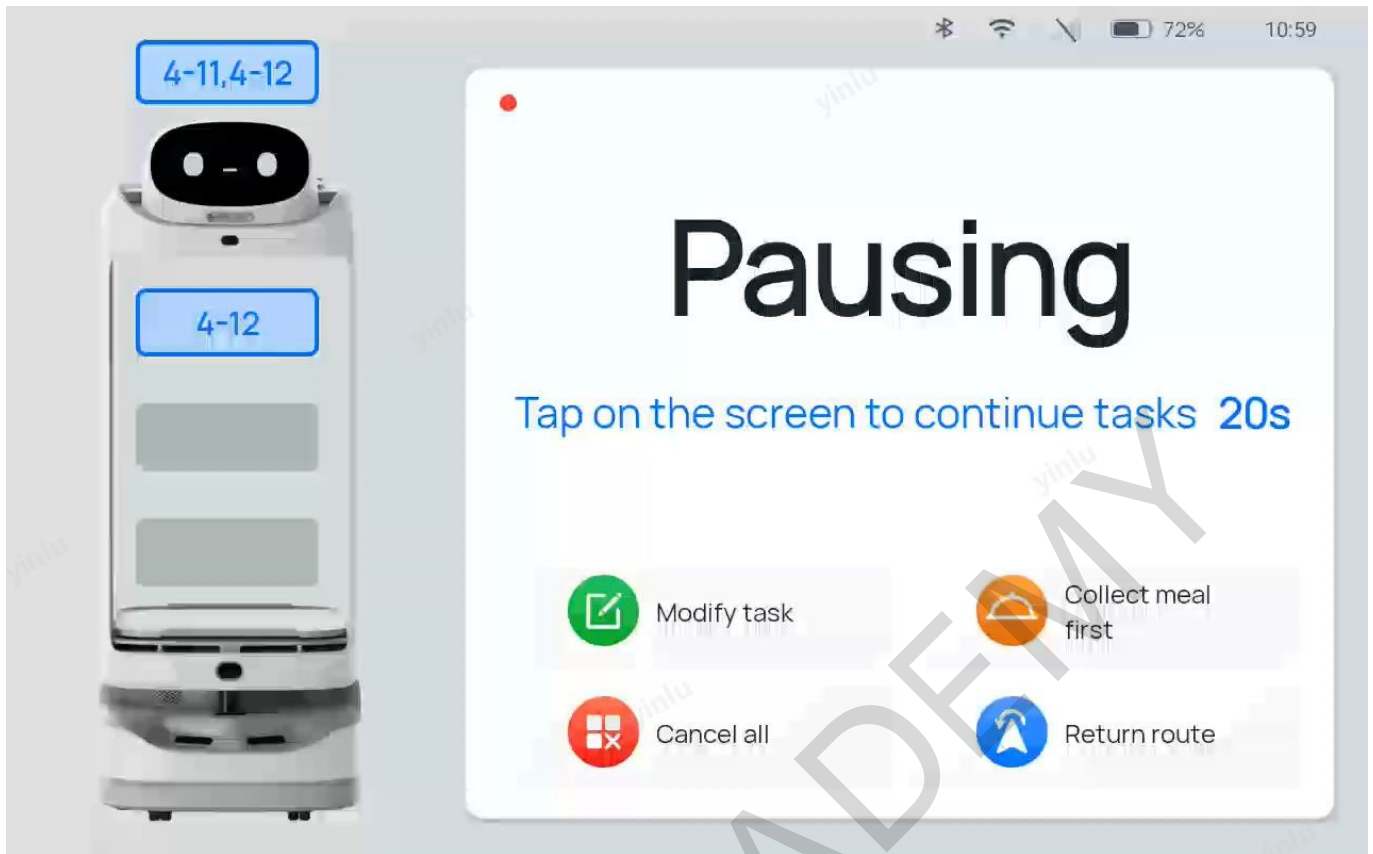
For an SWFD11 robot using original trays in the compartment, the compartment door will be opened automatically.

Step 7 After taking the dishes, tap **Done** and the robot will perform its next task.

For an SWFD11 robot using original trays in the compartment, the compartment door will be closed automatically before the robot starts the next task.

- If Automatic pick up time is enabled on the Food Delivery Settings interface, the robot automatically completes the task and performs the next task if Done is not tapped within the set time after the food arrives at the destination.
- To make any modifications during food delivery (e.g., modify task, pick up in advance, cancel all, or return), tap the screen to pause the robot before any operation. If no operation is performed within the pause time (Auto resume time of pause), the robot will proceed with its current task. Pause time (Auto resume time of pause) can be set on the Food Delivery Settings interface.



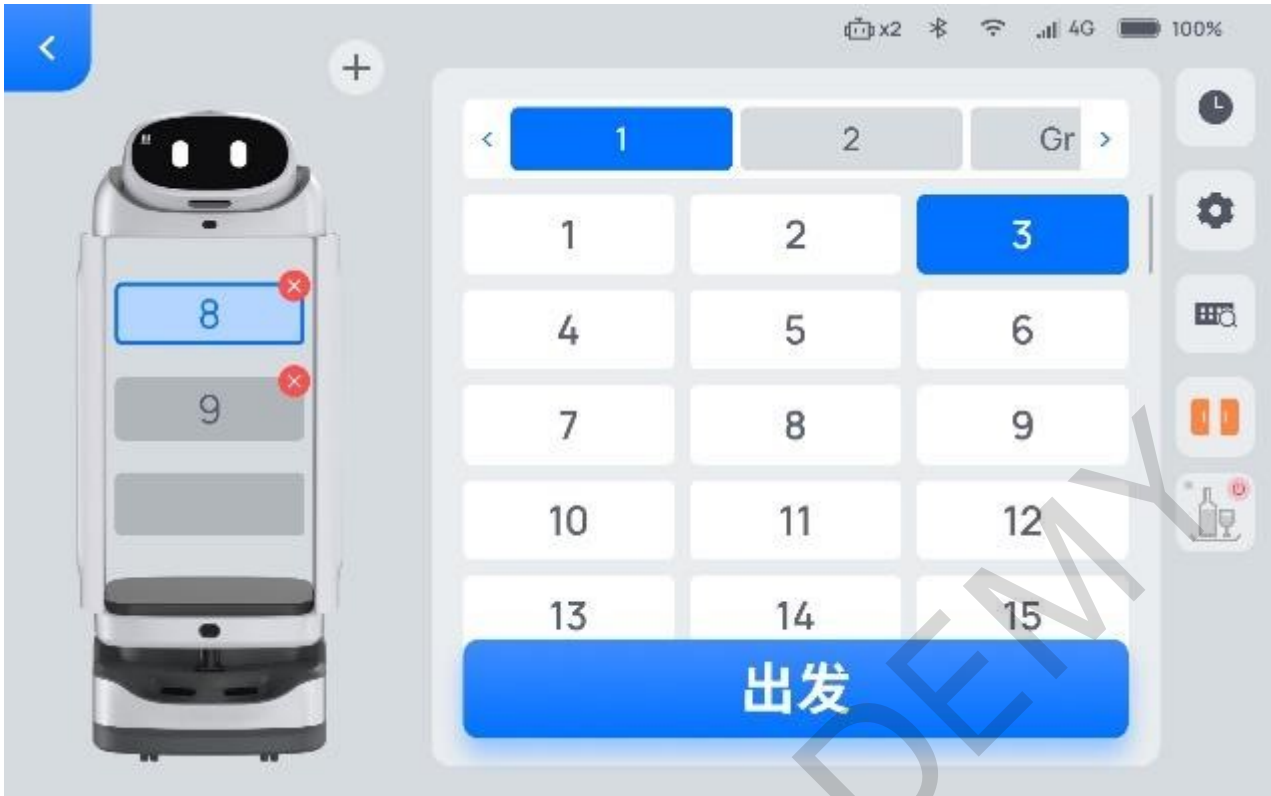


| Buttons            | Description   |
|--------------------|---|
| Modify task        | Tap to modify the table number of delivery.                                     |
| Pick up in advance | Tap to pick up the dishes in advance and proceed with the next task.            |
| Cancel all         | Tap to cancel all food delivery tasks without returning to the pickup location. |
| Return             | Tap to return to the pickup location.   |

## Delivery mode



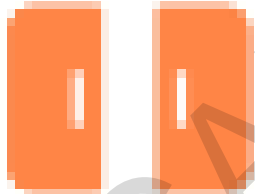

In Delivery Mode, the robot delivers items to the designated locations.

Step 1 Tap **Delivery** on the main interface.

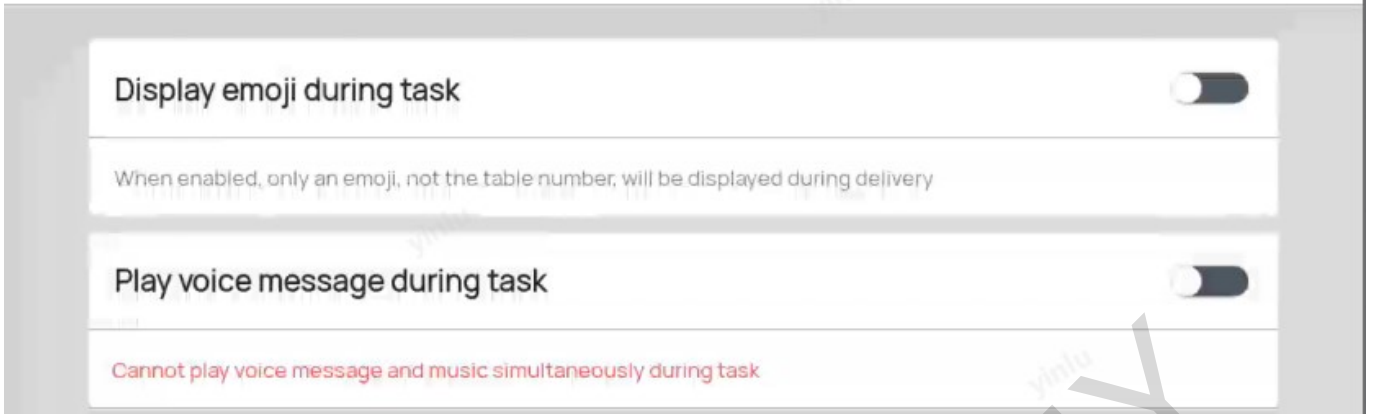


The Delivery mode interface is shown below.

| Buttons   | Description  |
|---|--|
|  | <p>View the previous task.</p>   |
|  | <p>Allows you to set the arrival voice, the music during delivery, etc. See the table below for details.</p> |

| Buttons   | Description   |
|---|---|
|    | <p>Smart search for destinations. Tap the icon to quickly search for destinations when there are too many destinations.</p>   |
|    | <p>Allows you to open/close the cabin door. This function is only available on SWFD11. If the cabin door is open, the icon changes to</p>   |
|  | <p>Allows you to set the Smooth Mode. The icon will be displayed after Smooth Mode is enabled in the Delivery Settings interface.</p> <p>There are three states for Smooth Mode:</p> <ul style="list-style-type: none"> <li>• : Disabled. Tap the icon to enable Smooth Mode once, and it will be disabled by default after the task is completed; tap and hold for 1 second to enable Smooth Mode permanently.</li> <li>• : Enabled once. Tap the icon to disable Smooth Mode; tap and hold for 1 second to enable Smooth Mode permanently.</li> <li>• : Enabled permanently Tap the icon to disable Smooth Mode.</li> </ul> <p>When Smooth Mode is enabled, the robot will move at 0.4 m/s (1.31 ft/s) during delivery. After the task is completed, the robot will return at the currently set return speed.</p> |

The Delivery Settings interface and descriptions are shown below.



| Delivery Settings          | Description   |
|----------------------------|---|
| Show emoticons during task | Choose whether to enable Food delivery animation. If enabled, the robot will show emoticons rather than the destinations during delivery.   |
| Arrival voice              | <p>Choose whether to enable Arrival voice of delivery and set the custom voice and the playback interval.</p> <p>If enabled, tap <a href="#">Add Custom Voice</a> to add custom voices. If a custom voice is selected, it will be played upon delivery arrival rather than the system default voice. A random voice will be played if more than one voice is selected.</p> <p>Requirements for custom voices:</p> <ul style="list-style-type: none"> <li>• Up to 20 custom voices can be entered.</li> <li>• Up to 50 characters or 25 Chinese characters for each custom voice. Special characters are not supported.</li> <li>• If you wish to remove a custom voice, tap and hold to delete it.</li> </ul> |
| Play music during task     | <p>Choose whether to enable Play music during delivery.</p> <p>If enabled, tap <a href="#">Add Music</a> to add music from the music library (up to 20 pieces of music). If you wish to remove a piece of music, tap and hold to delete it. If no music is available in the music library, you may scan the QR code in the Settings &gt; Music interface to import music. If a piece of music is added and selected, it will be played during delivery. Only one piece of music can be selected at a time.</p>  |

| Delivery Settings                          | Description   |
|--|---|
| Auto-open of compartment door when waiting | Choose whether to enable Auto-open of compartment door when waiting. If enabled, the compartment door will open automatically after the robot completes its delivery task and returns to the departure location. The user can determine whether to enable this function according to the delivery requirements and the actual scenario. This function is only available on SWFD11.  |
| Smooth Mode                                | Choose whether to enable Smooth Mode. If enabled, the Smooth Mode icon will be displayed on the Delivery mode interface. The Smooth Mode can be set up on the Delivery mode interface.  |
| Single-layer multi-table delivery          | Choose whether to enable Single-layer multi-table delivery. If enabled, multiple destinations can be set for a single tray. Up to 10 destinations can be set for a single tray. If you wish to delete a destination, tap the tray with the destination. A destination management interface will pop up where you can delete the destination.  |
| Delivery Settings                          | Description   |
| Delivery parameter settings                | Allows you to set delivery parameters. <ul style="list-style-type: none"> <li>Automatic pick up time: If Done is not tapped within the set time after the robot arrives at the destination, the robot automatically completes the current task and continues to perform the next one. Value range: 1 to 600 seconds. Default: 30 seconds</li> <li>Auto resume time of pause: The pause time during delivery, that is, if the robot does not perform any operation during the pause time, it will automatically resume the current task. Value range: 5 to 600 seconds. Default: 20 seconds</li> </ul> |
| Delivery order                             | Allows you to select the delivery order for the robot. <ul style="list-style-type: none"> <li>Distance-priority delivery: The robot plans the optimal path and performs delivery tasks from near to far based on the distance on the map.</li> <li>Sequential delivery: The robot performs delivery tasks from up to down in the order of tray number.</li> </ul>   |
| Delivery speed                             | Allows you to set the moving speed of the robot during delivery. If Smooth Mode is enabled, the set speed will not take effect, and the robot will deliver at 0.4 m/s (1.31 ft/s). Speed range: 0.5-1.2 m/s (1.64-3.94 ft/s)  |
| Return speed                               | Allows you to set the speed of the robot during return. Speed range: 0.5-1.2 m/s (1.64-3.94 ft/s)   |
| Departure location selection               | Allows you to select departure locations. When creating a new map, the user can set different departure locations according to the actual scenario, which can be manually selected on the Delivery Settings interface. This function is applicable to scenarios with multiple departure locations.  |



Step 2 (Optional) Tap  to open the compartment door.

#### Note

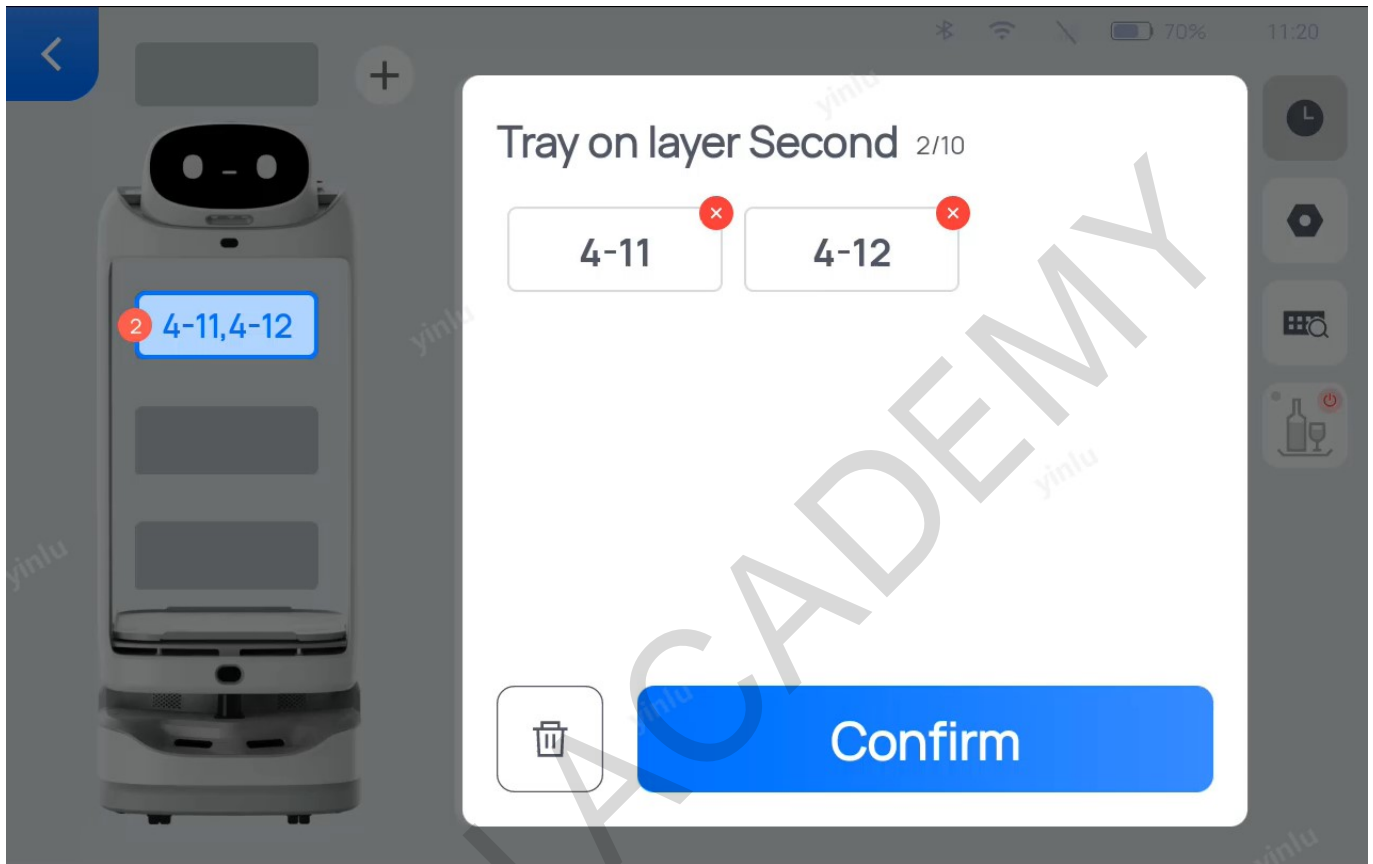
This function is for SWFD11 only. You may skip this step if the compartment door is already open or original trays are not used.

Step 3 Put the items on the corresponding tray.

Step 4 Tap the tray on the screen and select the destination.

The destination will be displayed on the corresponding tray.

If **Single-layer multi-table** is enabled on the Delivery Settings interface, you can put multiple items for different destinations on a single tray.



Step 5 After entering the destination, tap **Start**.

The robot arrives at the destination along the predetermined path.

For an SWFD11 robot using original trays in the compartment, the compartment door will be closed automatically after tapping **Start**.

Step 6 After arriving at the destination, the robot issues a voice prompt. The waiter then takes the dishes following the screen display and voice prompts.

For an SWFD11 robot using original trays in the compartment, the compartment door will be opened automatically.

Step 7 After taking the dishes, tap **Done** and the robot will perform its next task.

For an SWFD11 robot using original trays in the compartment, the compartment door will be closed automatically before the robot starts the next task.

- If Automatic pick up time is enabled on the Delivery Settings interface, the robot automatically completes the task and performs the next task if Done is not tapped within the set time after arriving at the destination.
- To make any modifications during delivery (e.g., modify task, pick up in advance, cancel all, or return), tap the screen to pause the robot before any operation. If no operation is performed

within the pause time (Auto resume time of pause), the robot will proceed with its current task. Pause time (Auto resume time of pause) can be set on the Delivery Settings interface.

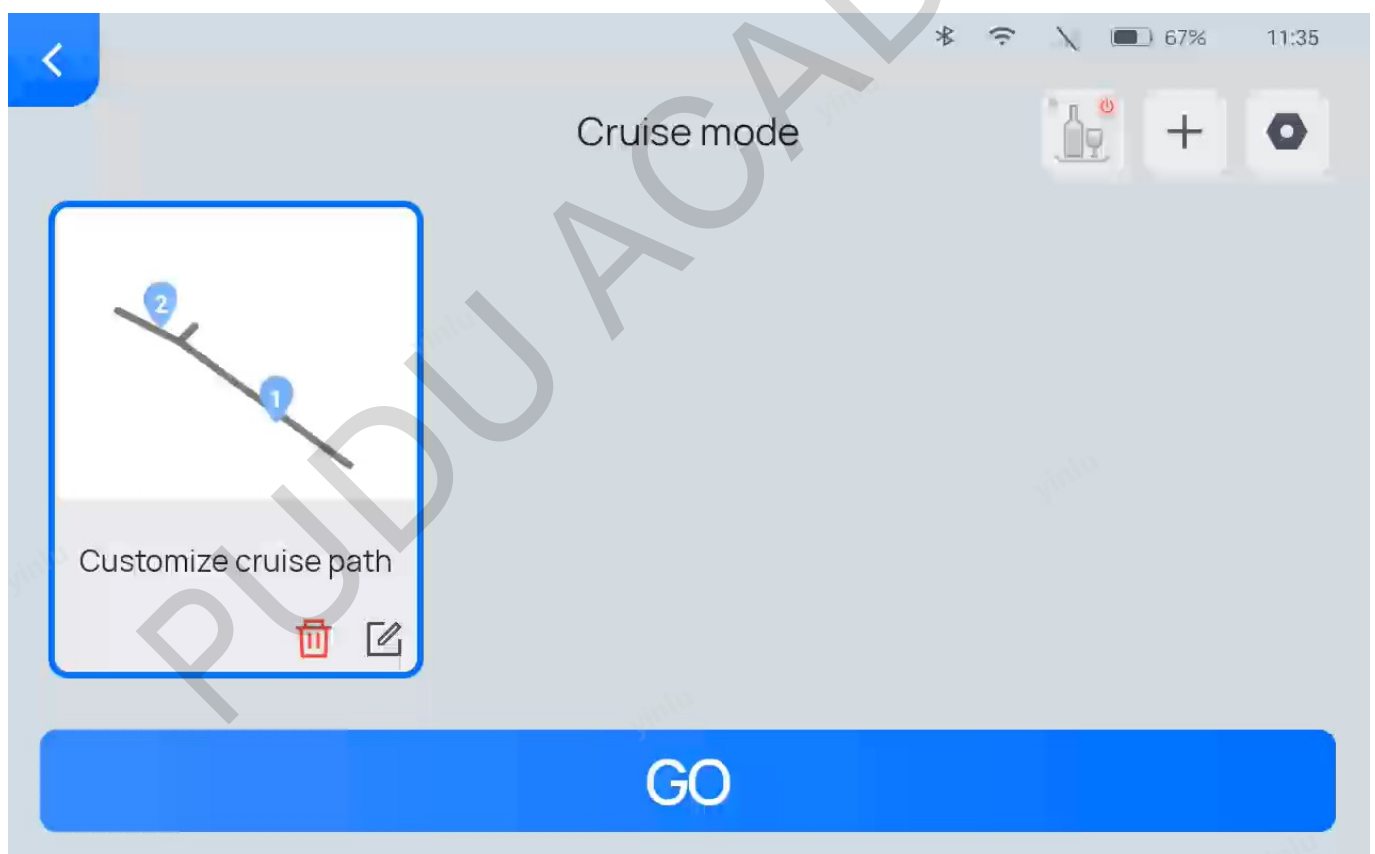
| Buttons            | Description   |
|--------------------|---|
| Modify task        | Tap to modify the delivery destination.                                       |
| Pick up in advance | Tap to pick up the items in advance and proceed with the next task.           |
| Cancel all         | Tap to cancel all delivery tasks without returning to the departure location. |
| Return             | Tap to return to the departure location.                                      |

## Cruise Mode




In Cruise Mode, the robot cruises around a specific large area.

Step 1 Tap Cruise on the main interface.

The Cruise mode interface is shown below. If a cruise route is created during mapping, it will be displayed on the Cruise mode interface. The cruise route is shown in blue on the map below.



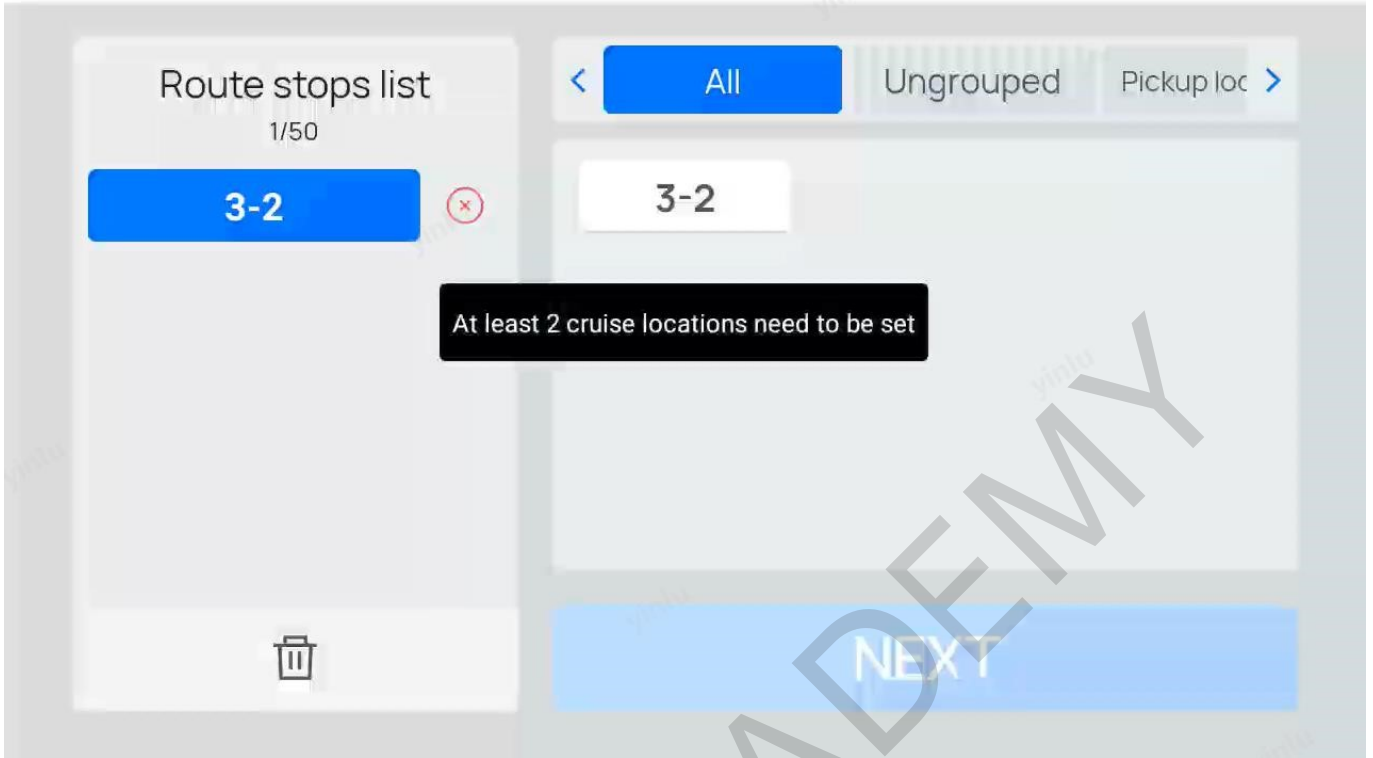
Shortcut buttons on the Cruise mode interface are explained below.

| Buttons   | Description   |
|---|---|
|    | <p>Allows you to add custom cruise routes for a fixed-point cruise.</p>   |
|   | <p>Allows you to set the arrival voice, the music played when cruising, etc. See the table below for details.</p>   |
|  | <p>Allows you to set the Smooth Mode.<br/> The icon will be displayed after Smooth Mode is enabled in the Cruise Mode settings.<br/> There are three states for Smooth Mode:</p> <ul style="list-style-type: none"> <li>• : Disabled. Tap the icon to enable Smooth Mode once, and it will be disabled by default after the task is completed; tap and hold for 1 second to enable Smooth Mode permanently.</li> <li>• : Enabled once. Tap the icon to disable Smooth Mode; tap and hold for 1 second to enable Smooth Mode permanently.</li> <li>• : Enabled permanently Tap the icon to disable Smooth Mode.</li> </ul> <p>When Smooth Mode is enabled, the robot will move at 0.4 m/s (1.31 ft/s) when cruising.</p> |

Follow the steps below to customize cruise routes.

1. Tap to enter the interface for selecting stay locations during cruise.

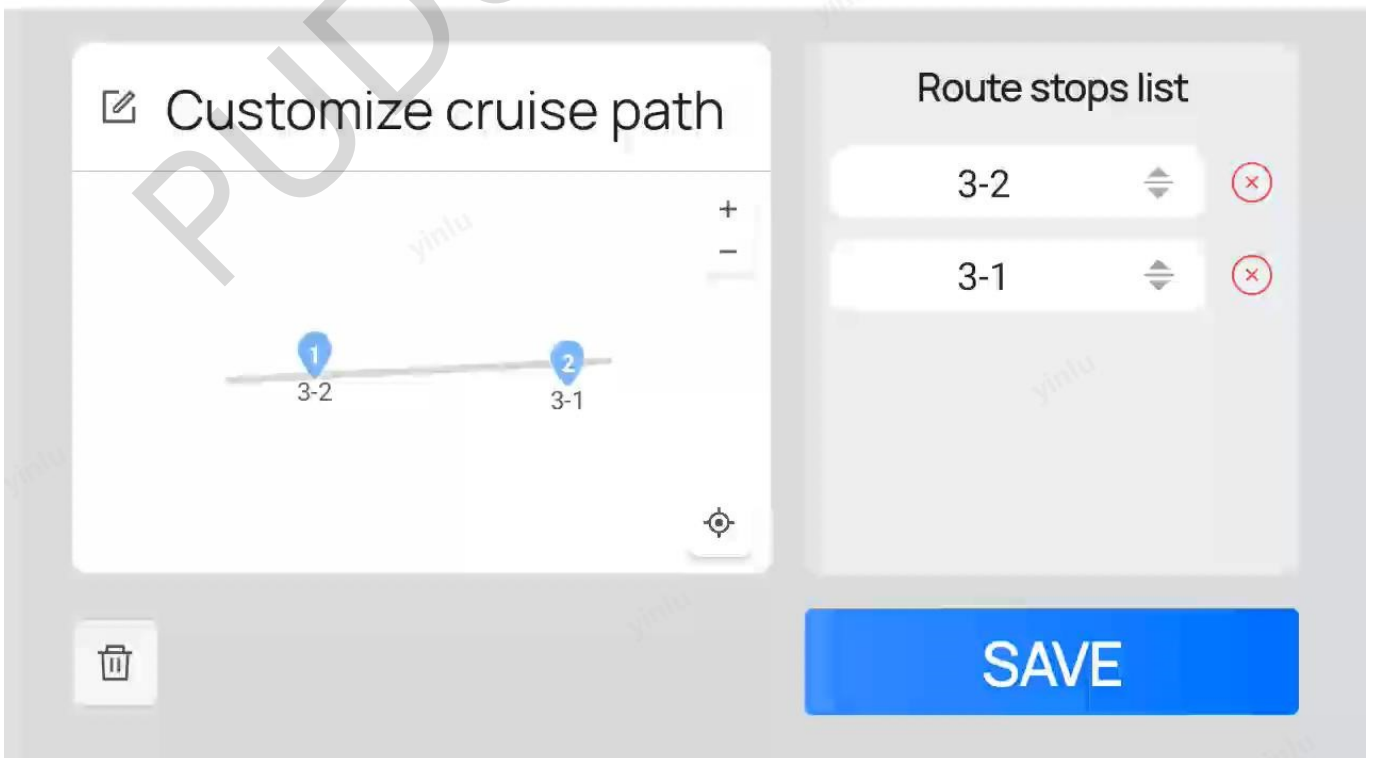




Please select at least two stay locations. You can select up to fifty stay locations for cruising. One stay location can be selected multiple times, but not in a row.

2. Select stay locations on the interface and tap Next.

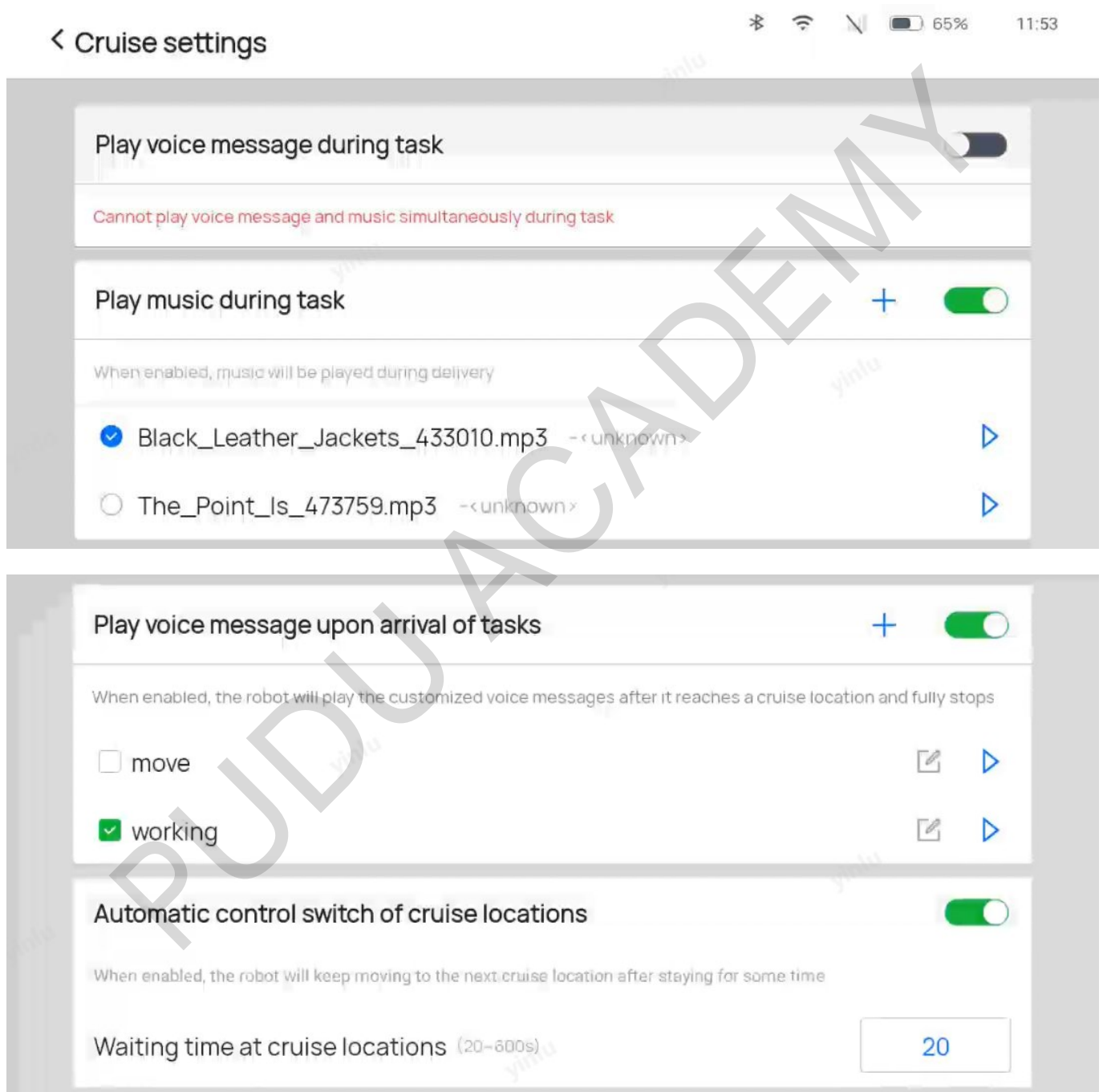
The interface for customizing cruise routes is shown below.

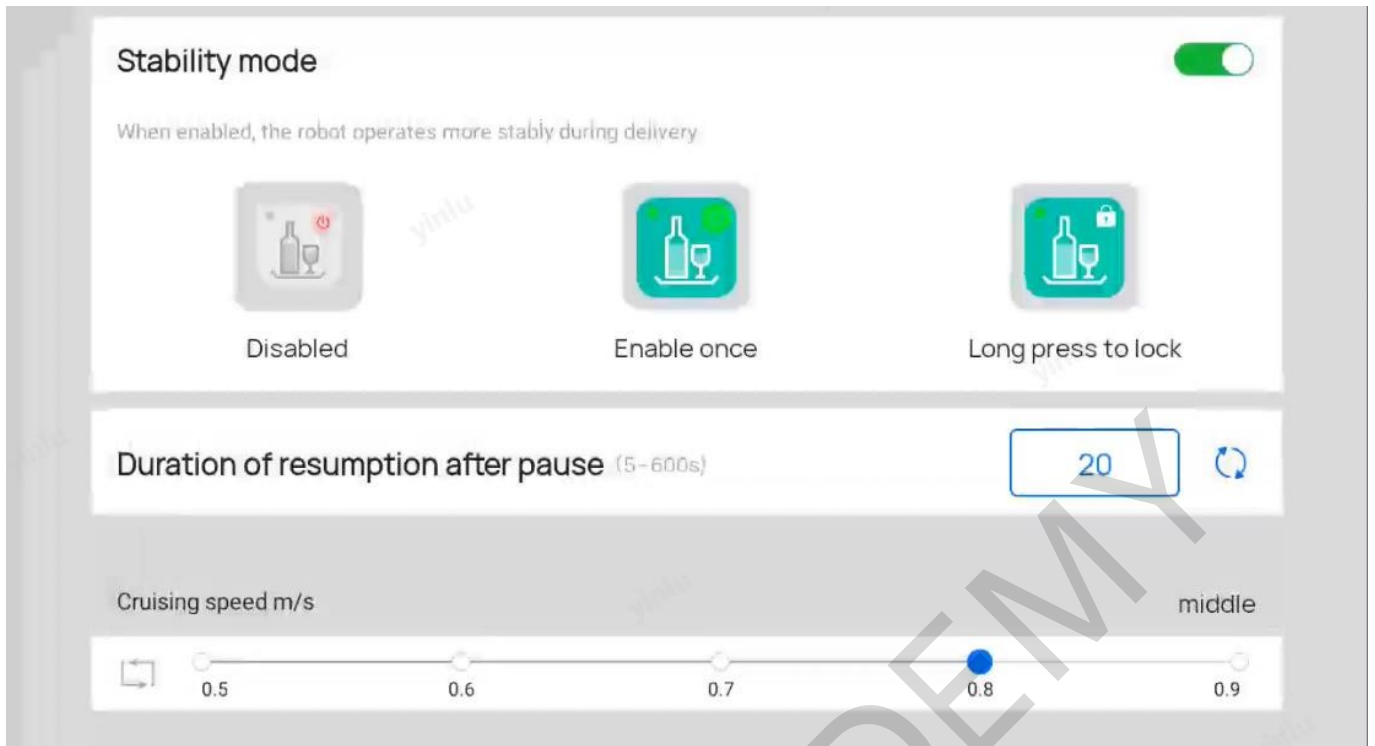


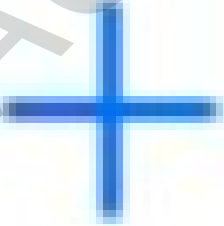
3. Rename the cruise route on the cruise route customization interface and tap Save. A custom cruise route is now generated.

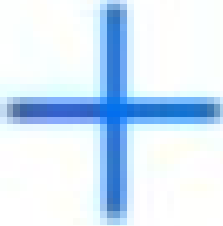
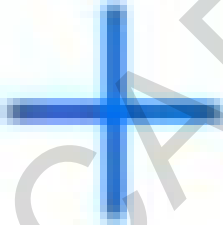
On the interface for customizing cruise routes, you can check the list of stay locations, change the order of stay locations, or delete the current cruise route.

The Cruise Settings interface and descriptions of the settings are shown below.





| Cruise Settings        | Description   |
|------------------------|---|
| Play voice during task | Choose whether to enable <b>Play voice when cruising</b> and set the custom   |
|                        | voice and the playback interval.<br><br>If enabled, tap  to add custom voices. If a custom voice is selected, it will be played when cruising rather than the system default voice. A random voice will be played if more than one voice is selected.<br>Requirements for custom voices: <ul style="list-style-type: none"> <li>• Up to 20 custom voices can be entered.</li> <li>• Up to 200 characters or 100 Chinese characters for each custom voice. Special characters are not supported.</li> <li>• If you wish to remove a custom voice, tap and hold to delete it.</li> </ul> Note: <b>Play voice during task</b> and <b>Play music during task</b> cannot be enabled at the same time. |

| Cruise Settings                                 | Description  |
|---|--|
| Arrival voice                                   | <p>Choose whether to enable Arrival voice of cruise and set the custom voice and the playback interval.</p>  <p>If enabled, tap <a href="#">+</a> to add custom voices. If a custom voice is selected, it will be played upon the arrival at stay locations when cruising rather than the system default voice. Only one piece of voice can be selected at a time.</p> <p>Requirements for custom voices:</p> <ul style="list-style-type: none"> <li>• Up to 20 custom voices can be entered.</li> <li>• Up to 50 characters or 25 Chinese characters for each custom voice. Special characters are not supported.</li> <li>• If you wish to remove a custom voice, tap and hold to delete it.</li> </ul> |
| Play music during task                          | <p>Choose whether to enable <b>Play music when cruising</b>.</p>  <p>If enabled, tap <a href="#">+</a> to add music from the music library (up to 20 pieces of music). If you wish to remove a piece of music, tap and hold to delete it. If no music is available in the music library, you may scan the QR code in the Settings &gt; Music interface to import music. If a piece of music is added and selected, it will be played when cruising. Only one piece of music can be selected at a time.</p> <p>Note: <b>Play voice during task</b> and <b>Play music during task</b> cannot be enabled at the same time.</p>  |
| Manual control switch at stay locations         | <p>Choose whether to enable <b>Manual control switch at stay locations</b>. If enabled, after the robot arrives at stay locations, manual operations are required before proceeding with its tasks. This function is only available when cruise routes are customized.</p>   |
| Stay time at stay locations                     | <p>Allows you to set Stay time at stay locations. After the robot arrives at a stay location, it stays at the stay location for the preset time. When the Stay time at stay locations is up, the robot will proceed with its tasks. Value range: 5 to 600 seconds. Default: 30 seconds</p> <p>If <b>Manual control switch at stay locations</b> is enabled, this time will be invalid.</p> <p>This function is only available when cruise routes are customized.</p>   |
| Auto-open of compartment door at stay locations | <p>Choose whether to enable Auto-open of compartment door at stay locations. If enabled, the cabin door will open automatically after the robot arrives at a stay location. The cabin door will close automatically after the task is completed. This function is only available on SWFD11.</p>  |
| Smooth Mode                                     | <p>Choose whether to enable Smooth Mode</p> <p>If enabled, the Smooth Mode icon will be displayed on the Cruise mode interface. The Smooth Mode can be set up on the Cruise mode interface.</p>  |

| Cruise Settings  | Description   |
|------------------|---|
| Auto resume time | Allows you to set the pause time in Cruise Mode. If the robot does not perform any operation during the pause time, it will automatically resume the cruise. Value range: 5 to 600 seconds. Default: 20 seconds           |
| Cruise speed     | Allows you to set the moving speed of the robot when cruising. If Smooth Mode is enabled, the set speed will not take effect, and the robot will cruise at 0.4 m/s (1.31 ft/s). Speed range: 0.5-1.2 m/s (1.64-3.94 ft/s) |

Step 2 Put desserts, snacks, or other items on the trays.

For an SWFD11 robot taking a non-custom cruise route, only the top tray is available.

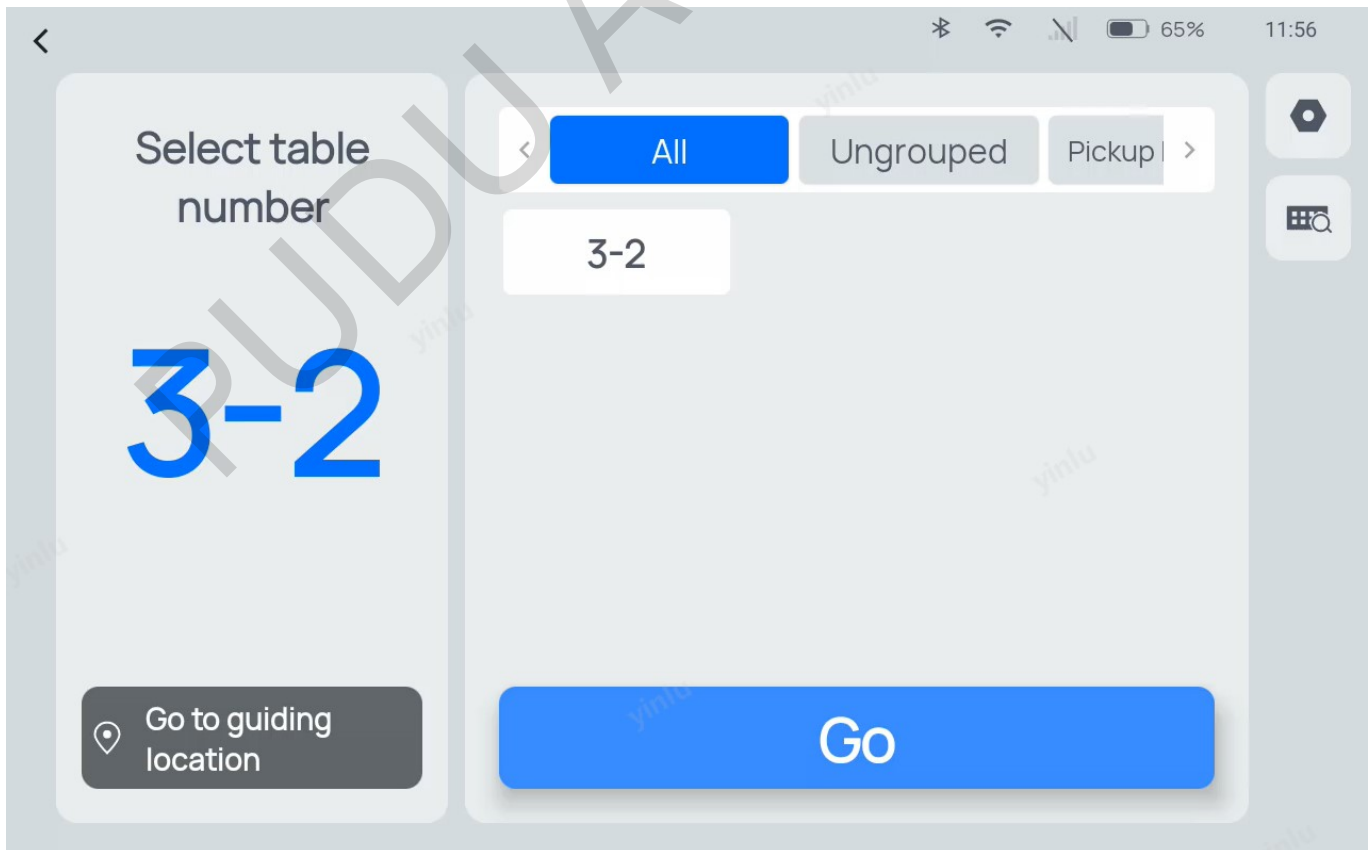
Step 3 Select the desired cruise route and tap **Start**.

If a robot is taking a non-custom cruise route and you need to pick something up during the cruise, tap the robot's screen to pause the robot before any operation. If no operation is performed within the pause time (Auto resume time of pause), the robot will proceed with its current task. Pause time (Auto resume time of pause) can be set on the Cruise Settings interface.



## Guiding Mode

In Guiding Mode, the robot acts as a receptionist and guides them to a designated location.

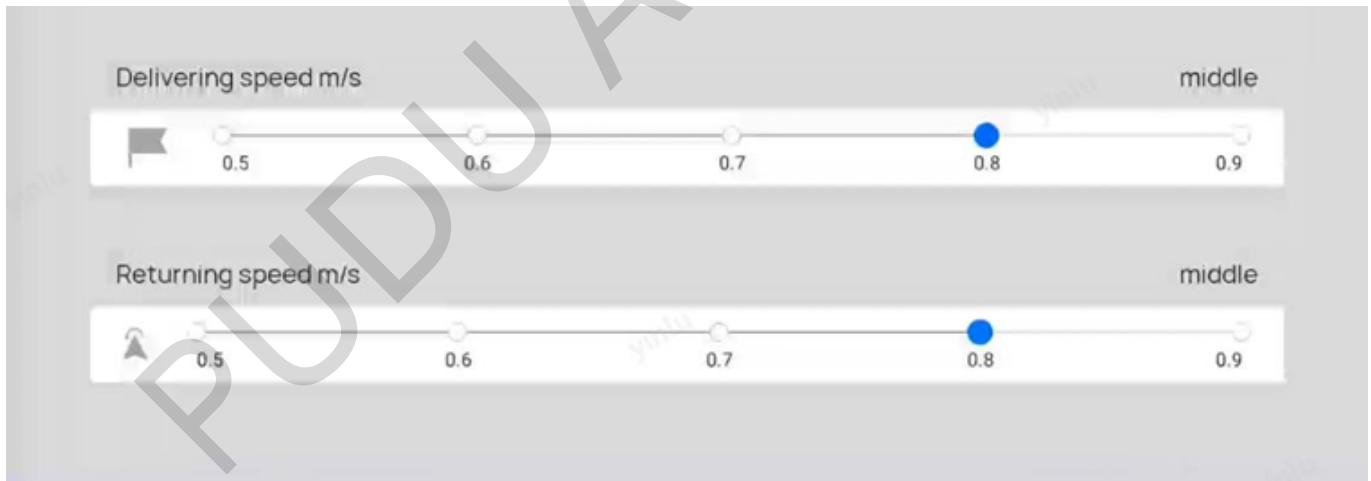
Step 1 Tap **Guiding** on the main interface.

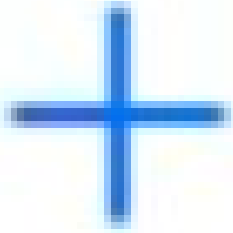
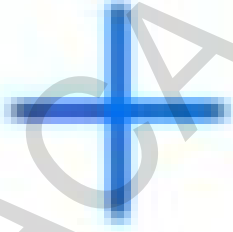


Shortcut buttons on the Guiding mode interface are explained below.

| Buttons  | Description   |
|--|---|
|   | <p>Allows you to set the arrival voice, music, etc. when the robot is guiding customers. See the table below for details.</p>     |
|  | <p>Allows the smart search of table numbers. Tap the icon to quickly search for table numbers when there are too many tables.</p> |

The Guiding Settings interface and descriptions of the settings are shown below.



| Guiding Settings                      | Description  |
|---------------------------------------|--|
| Voice upon guided arrival             | <p>Choose whether to enable Voice upon guided arrival and set the custom voice.</p>  <p>If enabled, tap <a href="#">Add Custom Voice</a> to add custom voices. If a custom voice is selected, it will be played upon guided arrival rather than the system default voice. A random voice will be played if more than one voice is selected.</p> <p>Requirements for custom voices:</p> <ul style="list-style-type: none"> <li>• Up to 20 custom voices can be entered.</li> </ul>   |
| Guiding Settings                      | Description  |
|                                       | <ul style="list-style-type: none"> <li>• Up to 50 characters or 25 Chinese characters for each custom voice. Special characters are not supported.</li> <li>• If you wish to remove a custom voice, tap and hold to delete it.</li> </ul>  |
| Play music when guiding customers     | <p>Choose whether to enable <b>Play music when guiding customers</b>.</p>  <p>If enabled, tap <a href="#">Add Music</a> to add music from the music library (up to 20 pieces of music). If you wish to remove a piece of music, tap and hold to delete it. If no music is available in the music library, you may scan the QR code in the Settings &gt; Music interface to import music. If a piece of music is added and selected, it will be played when guiding customers. Only one piece of music can be selected at a time.</p> |
| Show emoticons when guiding customers | <p>Choose whether to enable <b>Animation when guiding customers</b>. If enabled, the robot will show emoticons rather than the table number when guiding customers.</p>  |
| Guiding location selection            | <p>Allows you to select a guiding location. While creating a new map, the user can set different guiding locations according to the actual scenario, which can be manually selected on the Guiding Settings interface. This function is applicable to multiple-entrance scenarios.</p>   |
| Delivery speed                        | <p>Allows you to set the moving speed of the robot when guiding customers. Speed range: 0.5-1.2 m/s (1.64-3.94 ft/s)</p>   |
| Return speed                          | <p>Allows you to set the moving speed of the robot when returning to the guiding location. Speed range: 0.5-1.2 m/s (1.64-3.94 ft/s)</p>   |

| Guiding Settings           | Description  |
|----------------------------|--|
| Guiding parameter settings | <p>Allows you to set Guiding parameters.</p> <ul style="list-style-type: none"> <li>• Auto complete time of guiding: If Done is not tapped within the set time after the guiding is completed, the robot will automatically complete the task and return to the guiding location.<br/>Value range: 1 to 600 seconds. Default: 30 seconds</li> <li>• Auto resume time of pause: The pause time when guiding customers, that is, if the robot does not perform any operation during the pause time, it will automatically resume the current task.<br/>Value range: 5 to 600 seconds. Default: 20 seconds</li> </ul> |

Step 2 Select the desired table number and tap **Start**.

The robot will then guide the customers to the desired table.

Step 3 Tap **Done** after the robot reaches the desired table.

The robot returns to the Guiding location.

If **Auto complete time** is enabled on the Guiding Settings interface, the robot will automatically complete the task and return to the Guiding location if **Done** is not tapped within the set time after the robot arrives at the destination.

To cancel the task when guiding customers or return to the Guiding location, tap the screen to pause the robot before any operation. If no operation is performed within the pause time (Auto resume time of pause), the robot will proceed with its current task. Pause time (Non cruise resume time of pause) can be set on the Guiding Settings interface.

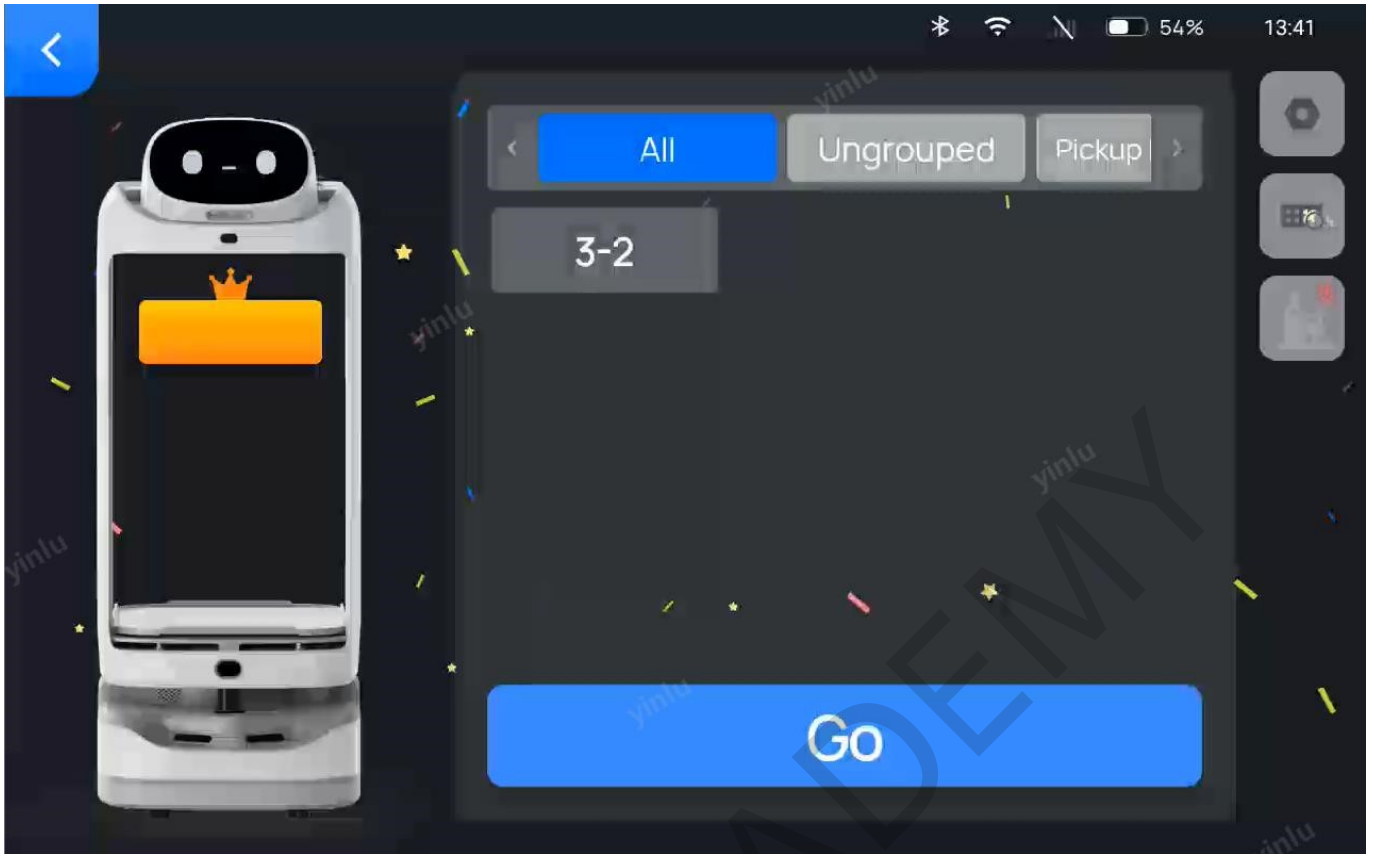
## Birthday Mode

In Birthday Mode, the robot delivers gifts and plays birthday songs for customers who celebrate their birthdays.



Step 1 Tap **Birthday** on the main interface.


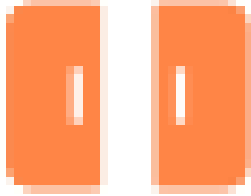

The Birthday mode interface is shown below.



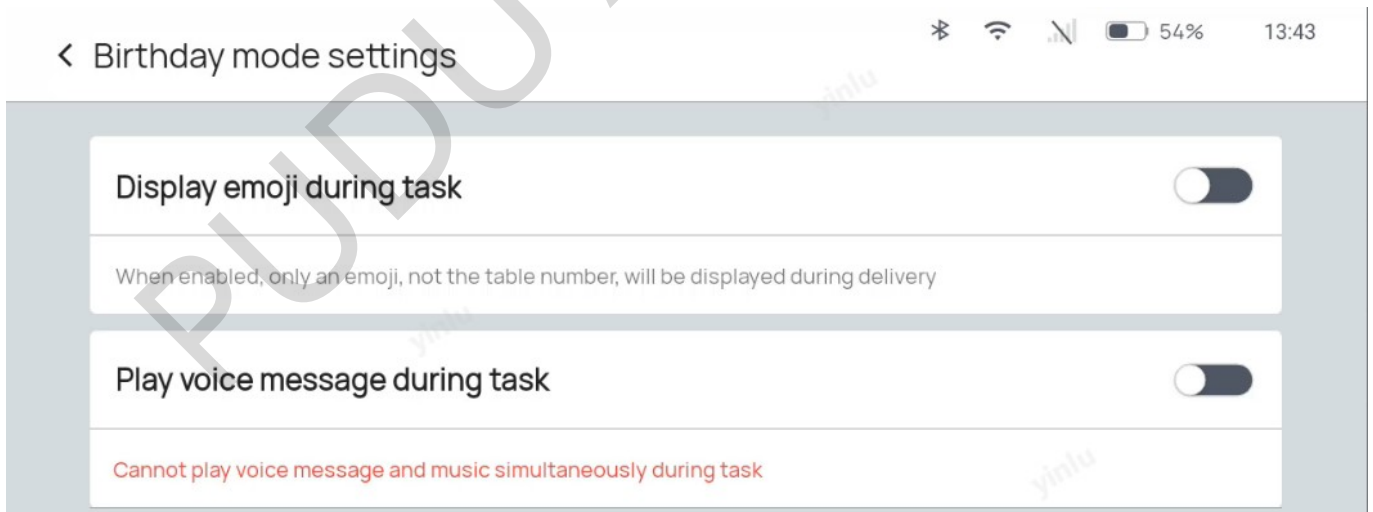


Shortcut buttons on the Birthday mode interface are explained below.

| Buttons   | Description   |
|---|---|
|  | <p>Allows you to set the delivery arrival blessings and the music during delivery, etc.<br/>See the table below for details.</p>  |
|  | <p>Allows the smart search of table numbers. Tap the icon to quickly search for table numbers when there are too many tables.</p> |

| Buttons  | Description   |
|--|---|
|   | <p>Allows you to open/close the cabin door.<br/>This function is only available on SWFD11.<br/>If the cabin door is open, the icon changes to</p>    |
|  | <p>Allows you to set the Smooth Mode.<br/>The icon will be displayed after Smooth Mode is enabled in the Birthday Settings interface.</p> <p>There are three states for Smooth Mode:</p> <ul style="list-style-type: none"> <li>• : Disabled. Tap the icon to enable Smooth Mode once, and it will be disabled by default after the task is completed; tap and hold for 1 second to enable Smooth Mode permanently.</li> <li>• : Enabled once. Tap the icon to disable Smooth Mode; tap and hold for 1 second to enable Smooth Mode permanently.</li> <li>• : Enabled permanently Tap the icon to disable Smooth Mode.</li> </ul> <p>When Smooth Mode is enabled, the robot will move at 0.4 m/s (1.31 ft/s) during delivery. After the task is completed, the robot will return at the currently set return speed.</p> |

The Birthday Settings interface and descriptions are shown below.



## Play music while servicing



When enabled, music will be played during delivery

The\_Point\_Is\_473759.mp3 - <unknown>



Birthday song 1



## Greetings upon arrival



When enabled, the robot will play the greeting messages after it reaches its destination and fully stops

Default greetings

Customize greetings



Input restaurant ...

Select identity ▲

Input name

Input age

Today is a very special day. We wish You a happy birthday and good luck in everything. Make a wish, , and may all your dreams come true!



## Stability mode



When enabled, the robot operates more stably during delivery



Disabled



Enable once



Long press to lock

## Task parameters settings

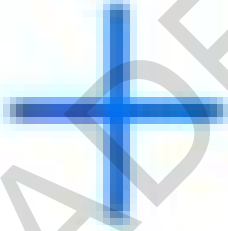
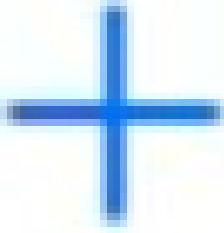
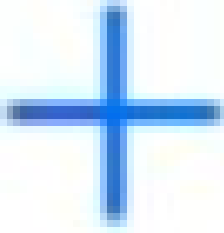
Duration of automatic task completion (1-600s)




Duration of resumption after pause (5-600s)

20



| Birthday Settings          | Description   |
|----------------------------|---|
| Delivery arrival blessings | <p>Choose whether to enable <b>Delivery arrival blessings</b> and set or customize blessings.<br/>           If enabled, the default or customized blessings will be played upon delivery arrival.<br/>           Default blessings:<br/>           General blessings: Happy birthday! Make a wish, and may all your wishes come true.<br/>           The user can enter the following information according to the actual scenario, and the robot will automatically generate blessings based on the general blessings.</p> <ul style="list-style-type: none"> <li>• Store name: Enter the store information. Up to 50 characters can be entered. If the store name is entered, "Welcome to xxx" will be added to the front of the general blessing text.</li> <li>• Objects: children, women, men, or the elderly. The default blessings vary by different objects.</li> <li>• Name: Up to 50 characters can be entered. If the name is not entered, "you" will be addressed by default.</li> <li>• Age: Up to 3 digits can be entered. If the age is not entered, it will not be played by default.</li> </ul> <p>Custom blessings: Tap  to add custom blessings. If a custom blessing is selected, it will be played upon delivery arrival. A random blessing will be played if more than one blessing is selected.</p> <p>Requirements for custom blessings:</p> <ul style="list-style-type: none"> <li>• Up to 20 custom voices can be entered.</li> <li>• Up to 200 characters or 100 Chinese characters for each custom voice. Special characters are not supported.</li> <li>• If you wish to remove a custom voice, tap and hold to delete it.</li> </ul> |
| Play music during task     | <p>Choose whether to enable Play music during delivery.</p> <p></p> <p>If enabled, tap  to add music from the music library (up to 20 pieces of music). If you wish to remove a piece of music, tap and hold to delete it. If no music is available in the music library, you may scan the QR code in the Settings &gt; Music interface to import music. If a piece of music is added and selected, it will be played during delivery. Only one piece of music can be selected at a time.</p>   |
| Show emoticons during task | <p>Choose whether to enable Food delivery animation.<br/>           If enabled, the robot will show emoticons rather than the table number during delivery.</p>   |
| Birthday Settings          | Description   |

| Birthday Settings                          | Description   |
|--|---|
| Auto-open of compartment door when waiting | Choose whether to enable Auto-open of compartment door when waiting. If enabled, the compartment door will open automatically after the robot completes its delivery task and returns to the pickup location. The user can determine whether to enable this function according to the speed of meal preparation and the actual scenario. This function is only available on SWFD11. |
| Smooth Mode                                | Choose whether to enable Smooth Mode. If enabled, the Smooth Mode icon will be displayed on the Birthday mode interface. The Smooth Mode can be set up on the Birthday mode interface.  |
| Auto resume time                           | Allows you to set the pause time during delivery in Birthday Mode. If the robot does not perform any operation during the pause time, it will automatically resume the current task. Value range: 5 to 600 seconds. Default: 20 seconds   |
| Delivery speed                             | Allows you to set the moving speed of the robot during delivery. If Smooth Mode is enabled, the set speed will not take effect, and the robot will deliver at 0.4 m/s (1.31 ft/s). Speed range: 0.5-1.2 m/s (1.64-3.94 ft/s)  |
| Return speed                               | Allows you to set the speed of the robot during return. Speed range: 0.5-1.2 m/s (1.64-3.94 ft/s)   |
| Pickup location selection                  | Allow you to select the pickup location. When creating a new map, the user can set different pickup locations according to the actual scenario, which can be manually selected on the Birthday Settings interface. This function is applicable to scenarios with multiple pickup locations.   |

Step 2 (Optional) Tap  to open the compartment door.

□Note

This function is for SWFD11 only. You may skip this step if the compartment door is already open.

Step 3 Place the gifts on the first tray and select the desired table number.

The desired table number will be displayed on the corresponding tray.

□Note

Only a single table number can be selected in Birthday Mode.

Step 4 Tap **Start**.

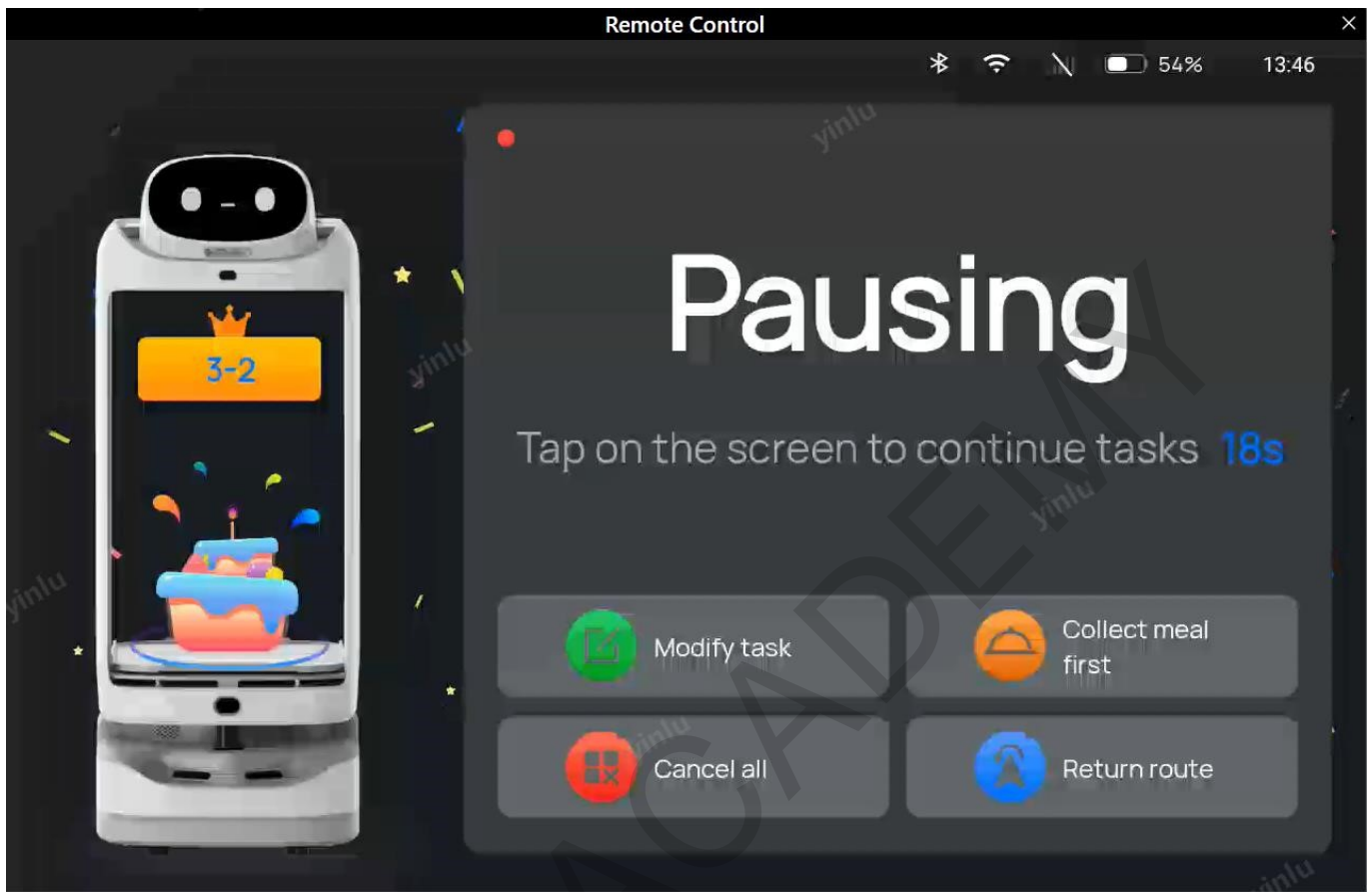
The robot arrives at the desired table along the predetermined path and plays songs in the set playlist for Birthday Mode.

Step 5 Tap **Done** after the task is completed.

The robot returns to the pickup location.

To make any modifications during the delivery of birthday gifts (e.g., modify task, pick up in advance, cancel all, or return), tap the screen to pause the robot before any operation. If no

operation is performed within the pause time (Auto resume time of pause), the robot will proceed with its current task. Pause time (Auto resume time of pause) can be set on the Birthday Settings interface.



| Buttons            | Description   |
|--------------------|---|
| Modify task        | Tap to modify the table number of delivery.                               |
| Pick up in advance | Tap to pick up the dishes in advance and return to the pickup location.   |
| Cancel all         | Tap to cancel the delivery task without returning to the pickup location. |
| Return             | Tap to return to the pickup location.                                     |

## Interactive mode

In the Interactive mode, customers can attend a lucky draw or other store activities upon delivery arrival of the robot.

□Note



To use the Interactive mode, please set up interactive functions in **Advanced Settings** to set the winning rate of each prize in the lucky draw.



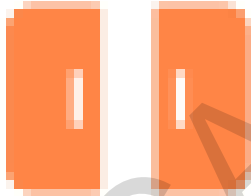

Step 1 Tap **Interaction** on the main interface.

The Interactive mode interface is shown below.



Shortcut buttons on the Interactive mode interface are explained below.

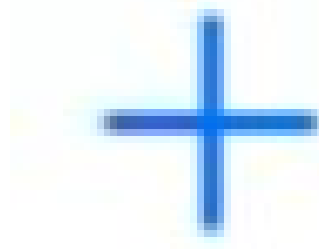
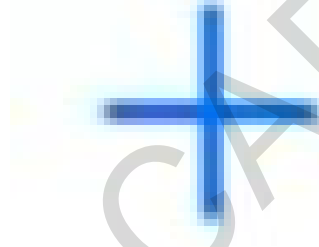
| Buttons   | Description  |
|---|--|
|  | <p>View the previous task.</p>   |
|  | <p>Allows you to set the arrival voice, the music during delivery, etc. See the table below for details.</p> |

| Buttons   | Description  |
|---|--|
|    | <p>Allows the smart search of table numbers. Tap the icon to quickly search for table numbers when there are too many tables.</p>  |
|    | <p>Allows you to open/close the cabin door. This function is only available on SWFD11. If the cabin door is open, the icon changes to</p>    |
|  | <p>Allows you to set the Smooth Mode. The icon will be displayed after Smooth Mode is enabled in the Interactive Settings interface.</p> <p>There are three states for Smooth Mode:</p> <ul style="list-style-type: none"> <li>• : Disabled. Tap the icon to enable Smooth Mode once, and it will be disabled by default after the task is completed; tap and hold for 1 second to enable Smooth Mode permanently.</li> <li>• : Enabled once. Tap the icon to disable Smooth Mode; tap and hold for 1 second to enable Smooth Mode permanently.</li> <li>• : Enabled permanently Tap the icon to disable Smooth Mode.</li> </ul> <p>When Smooth Mode is enabled, the robot will move at 0.4 m/s (1.31 ft/s) during delivery. After the task is completed, the robot will return at the currently set return speed.</p> |

The Interactive Settings interface and descriptions are shown below.


| Interactive Settings              | Description  |
|-----------------------------------|--|
| <p>Show emoticons during task</p> | <p>Choose whether to enable Food delivery animation. If enabled, the robot will show emoticons rather than the table number during delivery.</p> |



| Interactive Settings                       | Description   |
|--|---|
| Arrival voice                              | <p>Choose whether to enable Arrival voice of delivery and set the custom voice and the playback interval.</p>  <p>If enabled, tap <a href="#">Add Custom Voice</a> to add custom voices. If a custom voice is selected, it will be played upon delivery arrival rather than the system default voice. A random voice will be played if more than one voice is selected.</p> <p>Requirements for custom voices:</p> <ul style="list-style-type: none"> <li>• Up to 20 custom voices can be entered.</li> <li>• Up to 50 characters or 25 Chinese characters for each custom voice. Special characters are not supported.</li> <li>• If you wish to remove a custom voice, tap and hold to delete it.</li> </ul> |
| Play music during task                     | <p>Choose whether to enable Play music during delivery.</p>  <p>If enabled, tap <a href="#">Add Music</a> to add music from the music library (up to 20 pieces of music). If you wish to remove a piece of music, tap and hold to delete it. If no music is available in the music library, you may scan the QR code in the Settings &gt; Music interface to import music. If a piece of music is added and selected, it will be played during delivery. Only one piece of music can be selected at a time.</p>   |
| Auto-open of compartment door when waiting | <p>Choose whether to enable Auto-open of compartment door when waiting. If enabled, the compartment door will open automatically after the robot completes its delivery task and returns to the pickup location. The user can determine whether to enable this function according to the speed of meal preparation and the actual scenario. This function is only available on SWFD11.</p>  |
| Smooth Mode                                | <p>Choose whether to enable Smooth Mode. If enabled, the Smooth Mode icon will be displayed on the Interactive mode interface. The Smooth Mode can be set up on the Interactive mode interface.</p>   |
| Single-layer multi-table delivery          | <p>Choose whether to enable Single-layer multi-table delivery. If enabled, multiple table numbers can be set for a single tray. Up to 10 table numbers can be set for a single tray. If you wish to delete a table number, tap the tray with the table number. A table number management interface will pop up where you can delete the table number.</p>   |
| Delivery parameter settings                | <p>Allows you to set delivery parameters.</p> <ul style="list-style-type: none"> <li>• Auto complete time: If the button <a href="#">Please click this button</a> after taking a picture is not tapped within the set time after the customer attends the lucky draw, the robot will automatically complete the current task and proceed with the next one.<br/>Value range: 1 to 600 seconds. Default: 120 seconds</li> <li>• Auto resume time of pause: The pause time during delivery, that is, if the robot does not perform any operation during the pause time, it will automatically resume the current task.<br/>Value range: 5 to 600 seconds. Default: 20 seconds</li> </ul>  |

| Interactive Settings      | Description   |
|---------------------------|---|
| Delivery order            | Allows you to select the delivery order for the robot. <ul style="list-style-type: none"> <li>Distance-priority delivery: The robot plans the optimal path and performs delivery tasks from near to far based on the distance on the map.</li> <li>Sequential delivery: The robot performs delivery tasks from up to down in the order of tray number.</li> </ul> |
| Delivery speed            | Allows you to set the moving speed of the robot during delivery. If Smooth Mode is enabled, the set speed will not take effect, and the robot will deliver at 0.4 m/s (1.31 ft/s).<br>Speed range: 0.5-1.2 m/s (1.64-3.94 ft/s)   |
| Return speed              | Allows you to set the speed of the robot during return.<br>Speed range: 0.5-1.2 m/s (1.64-3.94 ft/s)  |
| Pickup location selection | Allow you to select the pickup location. When creating a new map, the user can set different pickup locations according to the actual scenario, which can be manually selected on the Interactive Settings interface. This function is applicable to scenarios with multiple pickup locations.  |



Step 2(Optional) Tap  to open the compartment door.

□Note

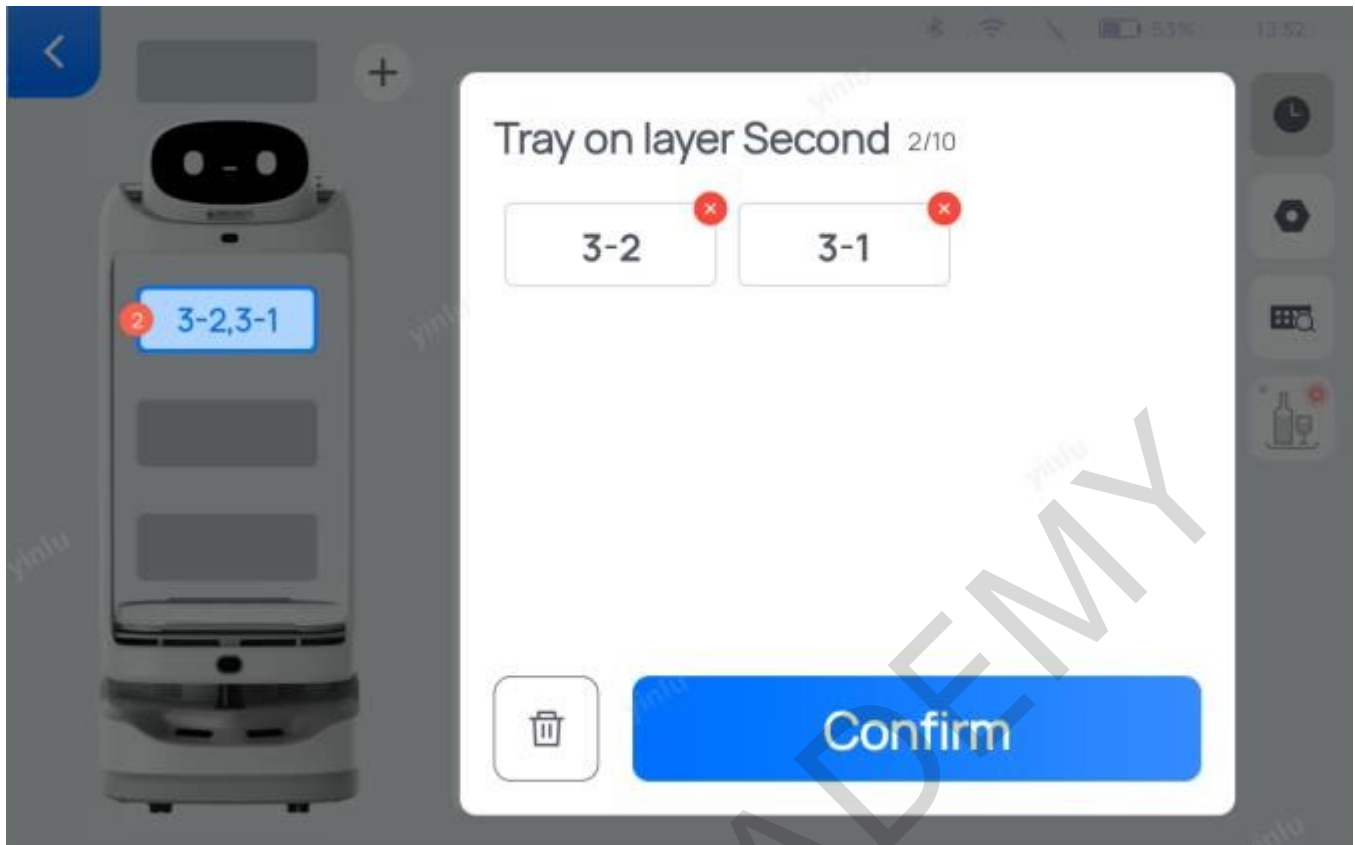
This function is for SWFD11 only.You may skip this step if the compartment door is already open or original trays are not used.

Step 3 Put the dishes on the corresponding tray.

Step 4 Tap the tray on the screen and select the desired table number.

The desired table number will be displayed on the corresponding tray.

If **Single-layer multi-table** is enabled on the Interactive Settings interface, you can put multiple dishes for different tables on a single tray.



Step 5 After entering the table numbers, tap **Start**.

The robot arrives at the specified table along the predetermined path.

For an SWFD11 robot using original trays in the compartment, the compartment door will be closed automatically after tapping **Start**.

Step 6 After arriving at the desired table, the robot issues a voice prompt. The waiter then takes the dishes following the screen display and voice prompts.

For an SWFD11 robot using original trays in the compartment, the compartment door will be opened automatically.

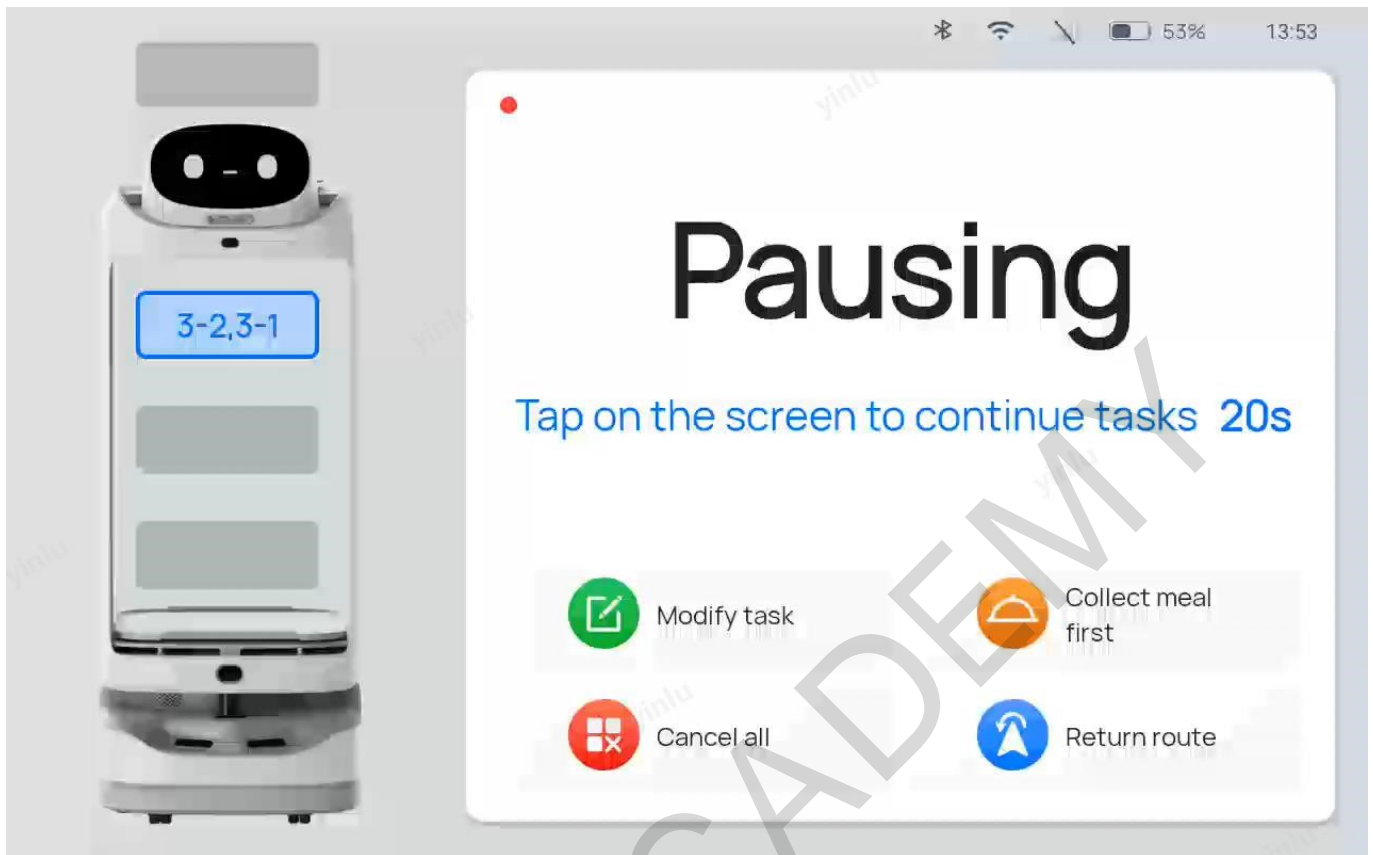
Step 7 After taking the dishes, customers can tap **Attend lucky draw** to participate in the lucky draw.

If a customer wins a prize, he or she will be reminded to contact the waiter to redeem the prize after taking a picture. Tap **Please click this button after taking a picture** for the robot to perform the next task. If the customer doesn't win a prize, the robot will perform the next task after 5 seconds.

For an SWFD11 robot using original trays in the compartment, the compartment door will be closed automatically before the robot starts the next task.

- If Auto complete time is enabled on the Interactive Settings interface, the robot automatically completes the task and performs the next task if the button Please click this button after taking a picture is not tapped within the set time after the customer attends the lucky draw.
- To make any modifications during food delivery (e.g., modify task, pick up in advance, cancel all, or return), tap the screen to pause the robot before any operation. If no operation is performed within the pause time (Auto resume time of pause), the robot will proceed with its current task. Pause time (Auto resume time of pause) can be set on the Interactive Settings

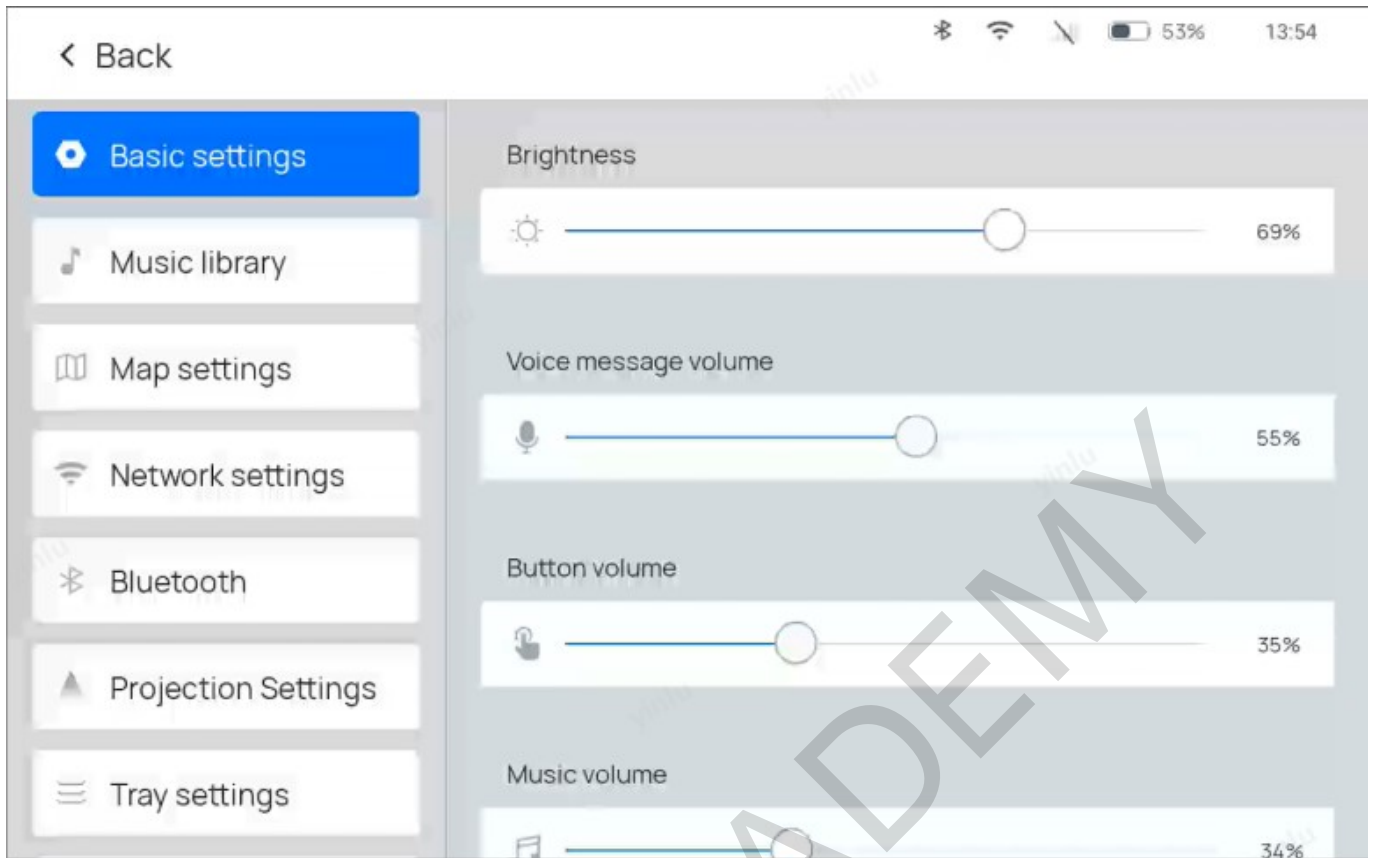
interface.



| Buttons            | Description   |
|--------------------|---|
| Modify task        | Tap to modify the table number of delivery.                                     |
| Pick up in advance | Tap to pick up the dishes in advance and proceed with the next task.            |
| Cancel all         | Tap to cancel all food delivery tasks without returning to the pickup location. |
| Return             | Tap to return to the pickup location.   |

## Settings

### General Settings

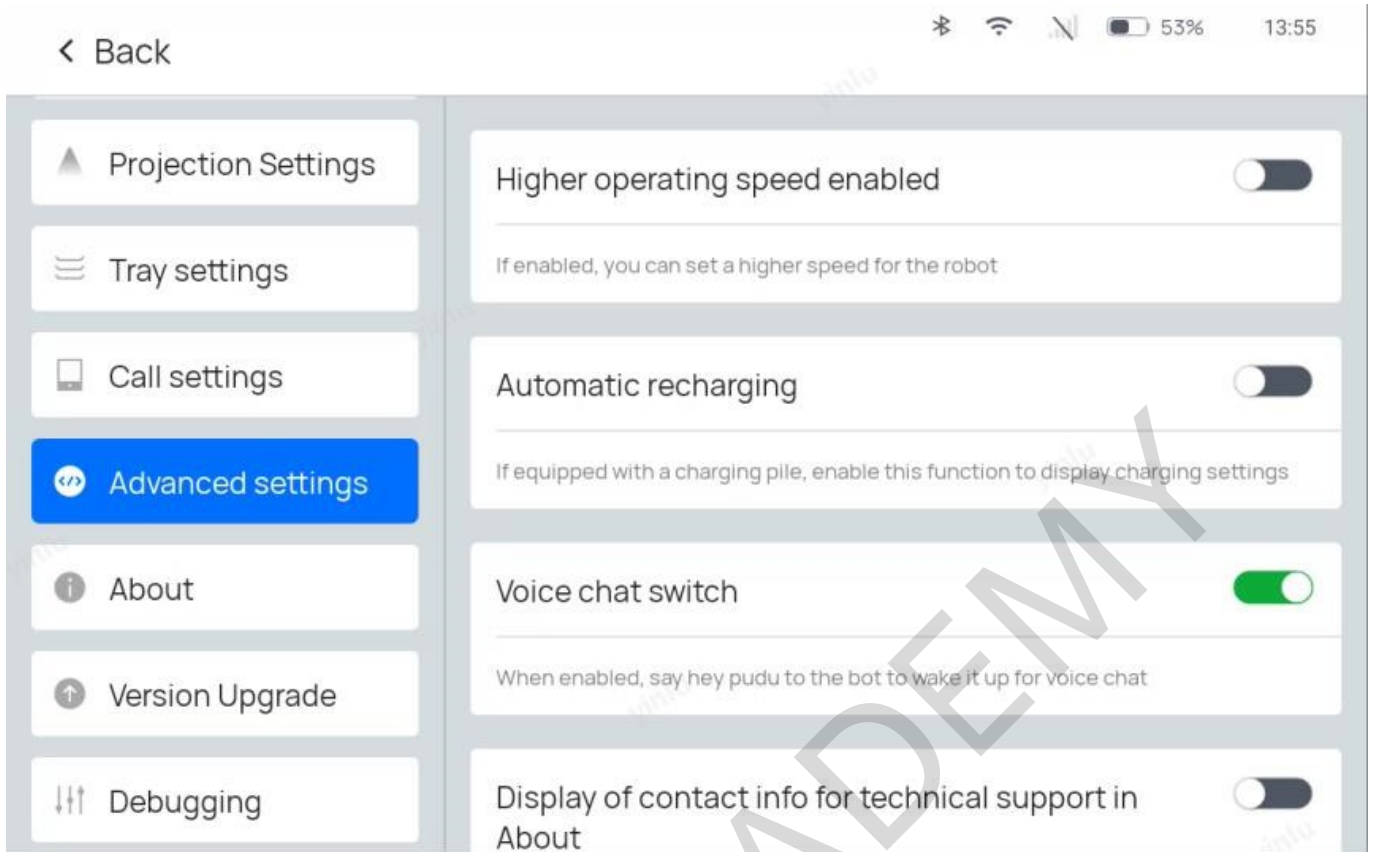


| Settings          | Description  |
|-------------------|--|
| Basic settings    | Allows you to set screen brightness, language, voice volume, music volume, key tone volume, etc.   |
| Network settings  | Allows you to set up the network connection. The robot cannot be upgraded or perform voice interaction without a network connection. Please install a SIM card first if you wish to use 4G networks. Make sure that the robot is powered off before installing or removing the SIM card.   |
| Bluetooth         | Choose whether to enable Bluetooth. If enabled, the devices that can be connected will be displayed on the interface.  |
| Music library     | Scan the QR code to import music for the robot to play during tasks. Only Android phones are supported.  |
| Map settings      | Allows you to create a new map or switch maps.   |
| Charging settings | Choose whether to enable the Auto charging function and set the threshold and time slot for charging. If the auto charging function is enabled and a low battery threshold is set, when the battery level drops below the set threshold, the robot will automatically return to the charging pile for charging after it completes its tasks or during a cruise. After the robot is fully charged, it automatically returns to a pickup location or departure location. The threshold ranges from 5% to 50%. You can also set the time slot for the robot to perform Auto charging. Up to three time slots for auto charging can be set. If it is disabled, Auto charging can be performed throughout the day by default. This function is only available if the user has purchased a charging pile and set up its location during mapping. Otherwise, the robot may work improperly. To use this function, please enable <b>Auto charging</b> in <b>Advanced Settings</b> first. |

| Settings           | Description   |
|--------------------|---|
| Projector settings | Choose whether to enable laser projector.<br>If the laser projector is enabled, the user can set the projection brightness, color, and size and turn on the reference lines.<br>If reference lines are enabled, they will be projected to navigate the robot during its movement.   |
| Tray settings      | Choose whether to enable the top tray and set the number of original trays.<br>If the top tray is disabled, it can not be used in Food Delivery Mode, Delivery Mode, and Interactive Mode. The top tray is enabled by default.<br>On the Tray Settings interface, tap <b>Delete</b> on the first and second layers to delete the corresponding tray. The deleted trays will not be displayed in any mode. |
| Settings           | Description   |
| Calling            | Choose whether to enable Calling.<br>If enabled, the robot can work with PuduBeeper and support third-party APIs. To use this function, please enable <b>Third-party APIs</b> in the Advanced Settings interface first.   |
| Advanced settings  | Allows you to enable Auto charging, third-party APIs and set up Interactive Functions, etc.<br>The Advanced settings are used for advanced operations of the robot. Please contact technical engineers for details. Pudu shall not be held responsible for any accident caused by unauthorized operations.  |
| Software update    | Allows you to check if the current version of the software is the latest.<br>If not, you can download the latest version and upgrade the software.<br>Please keep the battery level above 30% to ensure a successful upgrade.   |
| About              | Allows you to check the MAC address, serial number, hardware version, etc. of the robot.  |
| Debug              | Allows you to debug robot parameters (for technical engineers only).<br>Pudu shall not be held responsible for any accident caused by unauthorized operations.  |

## Advanced settings

The Advanced settings are used for advanced operations of the robot. Please contact technical engineers for details. Functions supported by Advanced settings are shown below.



| Function                    | Description   |
|-----------------------------|---|
| Enable high-speed gear      | Choose whether to enable high-speed gear. If enabled, the robot can move at higher speeds: 1.0 m/s, 1.1 m/s, 1.2 m/s(3.28 ft/s, 3.61 ft/s, 3.94 ft/s). The user can set the speed in different modes. |
| Auto charging               | Choose whether to enable Auto charging. If enabled, the Charging function will be displayed on the Settings interface. This function is only available if the user has purchased a charging pile.     |
| Third-party APIs            | Choose whether to enable third-party APIs. If enabled, the Calling function will be displayed on the Settings interface. It can be used with PuduBeeper and supports third-party APIs.                |
| Function                    | Description   |
| After-sales display in menu | Choose whether to enable after-sales information display in the menu. If enabled, after-sales-related information will be displayed on the About interface.   |
| Interactive function        | Set the winning rates for lucky draws of the Interactive Mode.  |
| Restore all settings        | Choose whether to restore the robot to factory settings. Doing so will delete contents such as the downloaded music, custom voice packets, and maps. Please proceed with caution.                     |

## Docking Instructions

SwiftBot supports three docking modes. In actual scenarios where multiple robots cooperate, users can select any docking mode during mapping. This section only covers the description of the three docking modes. For details about mapping, please contact our technical engineers.

Three docking modes:

- One-to-one Docking mode: Each robot has its fixed pickup location (docking location).
- Free Docking mode: Set multiple pickup locations (docking locations) for the robot to dock by priority, i.e., the robot chooses the nearest pickup location for docking.
- Waiting mode: Set temporary docking location. When the robot has no task and there's no vacancy at the pickup locations (docking locations), the robot docks at the temporary docking location. Once a vacancy appears at a pickup location (docking location), the robot automatically goes there for docking.

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