# Vending Machine With Standard Android Software System Manual

**Operational Staff** 

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#### 1. Preface

The following items are very important, please check one by one before you confirm reception.

- 1. Whether or not the machine surface is damaged.
- 2. Whether the machine looks clean and tidy, and the machine is correctly packed.
- 3. The seal of the lock needs to be removed, you can paste it to the back of the machine just in case you need it next time when transporting the machine.
- 4. Remind the transporting company that they must come with a tailboard or a forklift to reload the machine.
- % X Important tips X X:

When transporting the machine, please make sure that the machine stands upright, if the machine is upside down or it is lying on the ground, please reject.

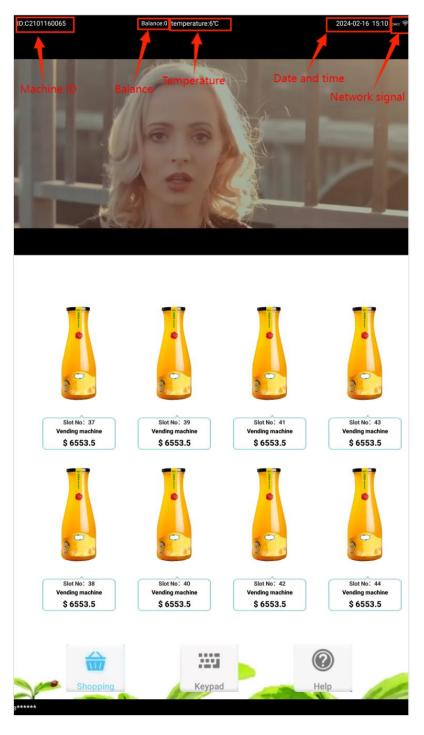
Please make sure you unwrap the package only when the transporting company staff is there, and if you find the machine damaged, please reject. If you unwrap the package when there is not a transporting company staff and you find the machine damaged, you will bear the cost yourself.

Check the following items after you confirm reception:

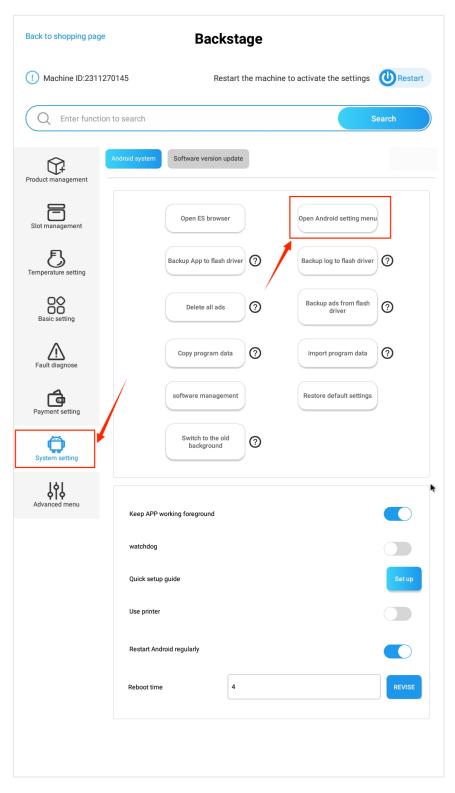
- 1. Check if the surface of the machine is good, check if the spare parts and the user manual are in correct quantity.
- 2. Before you power on the machine, please take the antenna out from inside the machine and install it on the top of the machine.
- 3. Please make sure the machine power cord is plugged to a ground socket.
- 4. Check if the machine's network connection is good.
- 5. Contact the Yunshu customer service and inform the machine ID so that you can open up an account of the back-end system.

# 2. Shopping interface

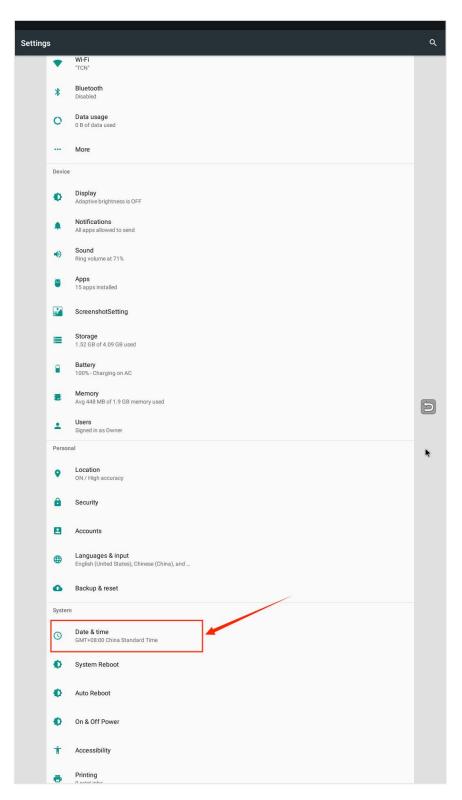
1. The information bar at the top of the screen includes machine number, temperature (non-cooling machines do not display temperature), date and time, and signal icons.



(1)Machine number: After setting up the serial port of the machine, a machine number will be automatically generated after it is powered on and connected to the server. Click on the machine number 5 times to enter the Android background. (2)Temperature: The temperature displayed on the top is the current temperature inside the vending machine cooling cabinet. If the sub-cabinet is connected, multiple temperatures will be displayed according to the number of sub-cabinets. The normal temperature machine does not display the temperature. (3) Balance: Turn on the cash payment switch and after inserting paper and coins, the input balance will be displayed at the top. 4)Date and time: After the machine is connected to the Internet, the date and time will be synchronized with the network time. For devices that are not connected to the Internet, you can go to the Android setting - open Android Settings menu - Date and Time to manually set the date and time.

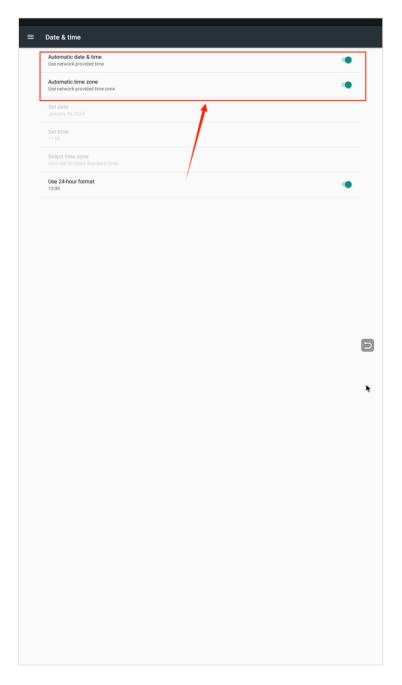


2-1-4-1 Android debug interface



2-1-4-2 System settings interface

These two switches need to be turned on for the machines need to get online; for machines that are not connected to the Internet, turn off these two switches and set the date and time manually.



2-1-4-3 Date and time setting interface

⑤ Signal icon: The specific signal icon is displayed according to the actual situation. The icons and their meanings are shown in the figure below:

Icon meaning	Icon style
LAN connected	<b>\\</b>
WIFI connected	<u>ن</u>
No sim card inserted	SIM X
Sim card inserted	atl
Server disconnected	4G 🛜
Server in connecting	

2-1-5-1 Signal icons

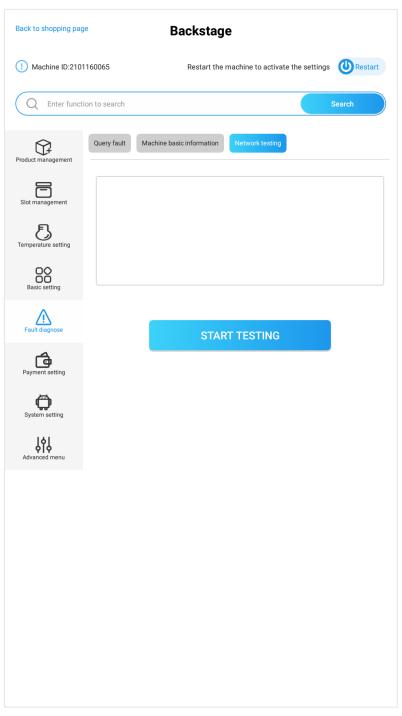
Q:How to do if if the system did not detect a connected SIM card?

A:Check if the sim card is loose or damaged.

Q:How to do if the machine does not connect to the server?

A:There are two reasons why the machine does not connect to the server. The first common reason is that the connection fails due to lack of network, and the second reason is that the background server address is set incorrectly. To check the

network, we can enter the machine background and find the fault query-network test menu to conduct network testing. We can also contact the business manager or customer service for consultation.



2-1-5-2 Error diagnosing - Network testing

- 2. AD replacement. The AD display column includes the main advertising space on the left and the secondary advertising space on the right. There are two ways to replace ADs:
- ①Remote Release: Contact customer service or sales manager, send the machine number, replacement advertising file, and replacement advertising space to customer service, who will issue the replacement remotely.
- ②Manual installation: Prepare a USB flash drive and put the advertising file into the USB flash drive. After opening the device door, find the USB interface, insert the USB flash drive, copy and paste the replaced advertising file into the local designated advertising folder, and then delete the original advertising and restart it to take effect.
- ③Before replacing ADs, prepare files supported by the AD slot. The file formats supported by the AD slot are shown in the table below:

		Advertis	ement Setting	g Format and Po	osition	
Screen size	Display	Screen resolution	Ads position	File resolution	Folder	Support format
10.1-inch screen	Vertical screen	1280*800	The main advertising space	1280*800/vedi≎ 10M	TcnFolder\PollFile	mp4.mkv.avi.vmv.flv .jpg.jpeg.png
10.1-inch screen	Vertical screen	1280*800	Help Image	774*758	TcnFolder\ImageHelp	jpg.jpeg.png.gif
10.1-inch screen	Half vertical screen	1280*800	Standby Advertisement	1280*768	TcnFolder\ImageScreen	mp5. mkv. avi. vmv. flv . jpg. jpeg. png
10.1-inch screen	Full vertical screen	1280*800	Standby Advertisement	1280*768	TcnFolder\ImageScreen	mp5.mkv.avi.vmv.flv .jpg.jpeg.png
10.1-inch screen	Half vertical screen	1280*800	Background Image	858*768	TcnFolder\ImageBackground	jpg, jpeg, png
10.1-inch screen	Full vertical screen	1280*800	Background Image	858*768	TcnFolder\ImageBackground	jpg, jpeg, png
10.1-inch screen	No limit	1280*800	Commodity Images	290*290	TcnFolder\ImageGoods	jpg. jpeg. png
21.5-inch screen	Vertical screen	1920*1080	The main advertising space	1920*1080/vedi≎ 10M	TcnFolder\PollFile	mp4. mkv. avi. vmv. flv . jpg. jpeg. png
21.5-inch screen	Vertical screen	1920*1080	Help Image	1080*1060	TcnFolder\ImageHelp	jpg. jpeg. png. gif
21.5-inch screen	Half vertical screen	1920*1080	Standby Advertisement	1820*1080	TcnFolder\ImageScreen	mp5.mkv.avi.vmv.flv .jpg.jpeg.png
21.5-inch screen	Full Vertical screen	1920*1080	Standby Advertisement	1820*1080	TcnFolder\ImageScreen	mp5. mkv. avi. vmv. flv . jpg. jpeg. png
21.5-inch screen	Half vertical screen	1920*1080	Background Image	1212*1080	TcnFolder\ImageBackground	jpg, jpeg, png
21.5-inch screen	Full Vertical screen	1920*1080	Background Image	1820*1080	TcnFolder\ImageBackground	jpg、jpeg、png
21.5-inch screen	No limit	1920*1080	Commodity Images	420*420	TcnFolder\ImageGoods	jpg、jpeg、png
32-inch screen	Landscape screen	1080*1920	Help Image	1080*608	TcnFolder\ImageHelp	jpg. jpeg. png. gif
32-inch screen	Landscape screen	1080*1920	Standby Advertisement	1080*1920	TcnFolder\ImageScreen	mp5. mkv. avi. vmv. flv . jpg. jpeg. png
32-inch screen	Landscape screen	1080*1920	Background Image	1080*1920	TonFolder\ImageBackground	jpg, jpeg, png
32-inch screen	Landscape screen	1080*1920	Commodity Images	420*420	TcnFolder\ImageGoods	jpg. jpeg. png

2-3-3-1 AD storage position and parameter

- 3. Product list: includes product pictures, product names, channel numbers and prices. Product information can be set in the Android back—end replenishment operation menu. Networked devices can use mobile phones or computer backgrounds for remote distribution;
- 4. Machine vending software version at the bottom: Press and hold the machine number for 3 seconds to view the basic information of the vending machine;

If you do not need to display the version number, please contact customer service or business manager.

## machine basic info

machine number	2101160065	tank ID	
Screen type	大屏-Large screen	Screen orientation	竖屏-Vertical screen
OT Card Number	898604631119c1568049	Port number	4150
firmware version	K518_ALI_SJG	single chip version	
wechat face pay version		ali face pay version	
pay system type	不使用主板支付系统	pay code type	不显示二维码-None
main board type	弹簧驱动-Spring	main board type	NONE
App service program	CDZZF	Server IP	qrc.ourvend.com
UI type	6~外贸UI-Multi- languages	main board serial port baud rate	9600
serial port 1	/dev/ttyS1	serial port 2	
cash acceptor type		coin acceptor type	
card reader type		version of MDB protocol	
Touch screen drive version number		screen resolution	1920x1080

67.2%

Memory usage ratio
1.31 GB/1.95 GB

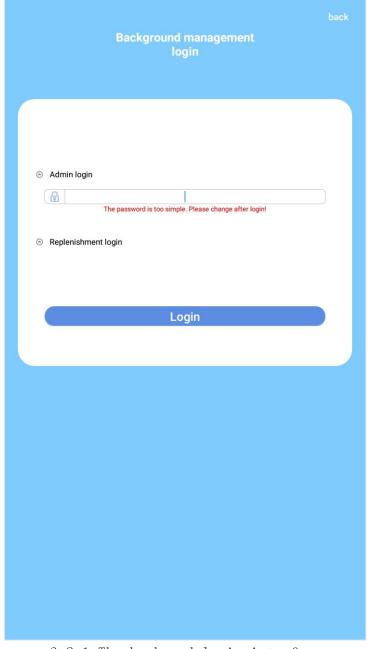
15.9% Storage usage ratio

666 MB/4.09 GB

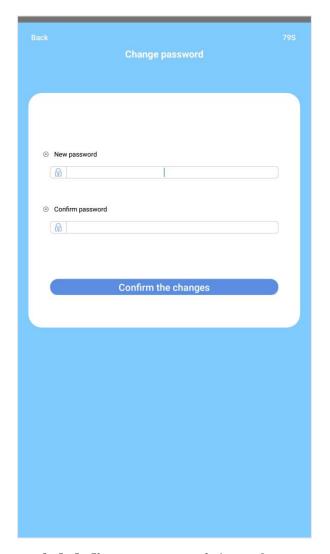
2-5-1 Basic information setting interface

## 3. Back-end management system

- 1, Click the machine ID 5 times to enter the login interface.
- 2. Enter the initial password "000000", it will jump to the change password interface, enter your new password and you can enter the back-end system.



3-2-1 The back-end login interface



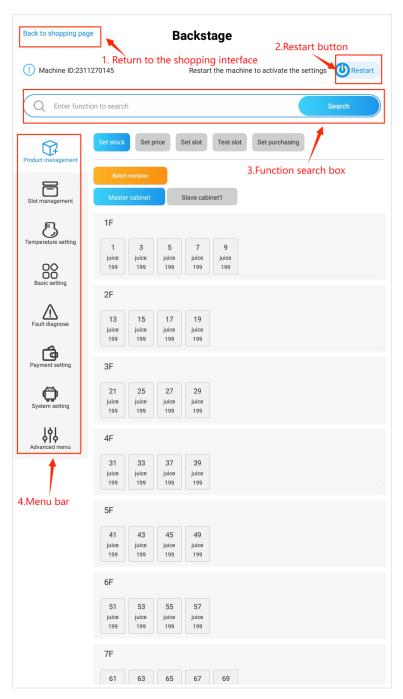
3-2-2 Change password interface

# 4. Back-end system homepage

- 1. On the top left corner is the "Back to shopping interface" button, when you finish configuring the system, click this button to return to the shopping interface.
- 2. The search box: click there and the keyboard will pop up, then you can enter the functions to search.
- 3. Restart: if you changed the slot configuration (combine or split or change the slot type) or you installed a bill validator

or a coin changer to the machine, restart the machine to activate.

4. The menu bar, which shows the menu by functions.



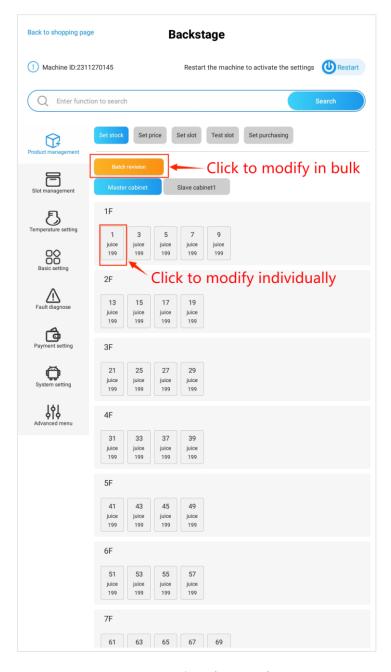
4-4-1 Android Back-end interface

# 5 Reload products

As the most frequently-used function for operational-staff we placed it at the first place of the menu.

#### 1. Stock setting

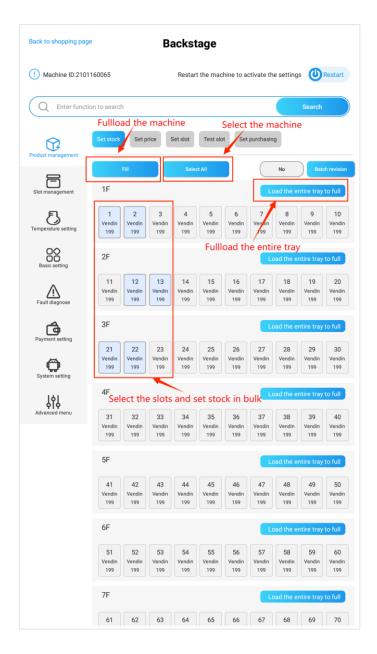
The slots will be displayed in trays, click the slot number and you can revise the stock of that slot.



5-1-1Revise slot stock

Click the batch edit button to perform batch modification inventory operations:

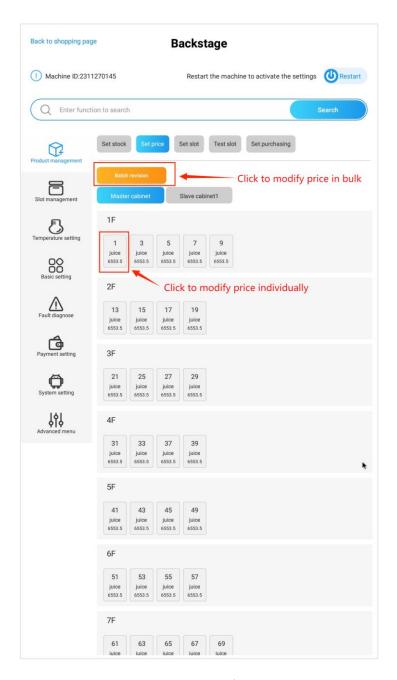
- ①Click the replenishment button to replenish the inventory in all slots
- ②Click the Select All button to select all slots and then click the Batch revision button to batch modify the inventory of all slots.
- 3Click the replenish button for the entire layer and replenish the inventory of all slots on the selected layer.
- ④You can also select different slots number and click the 'Batch revision' button to modify the inventory in batches.



5-1-4-1 Set stock

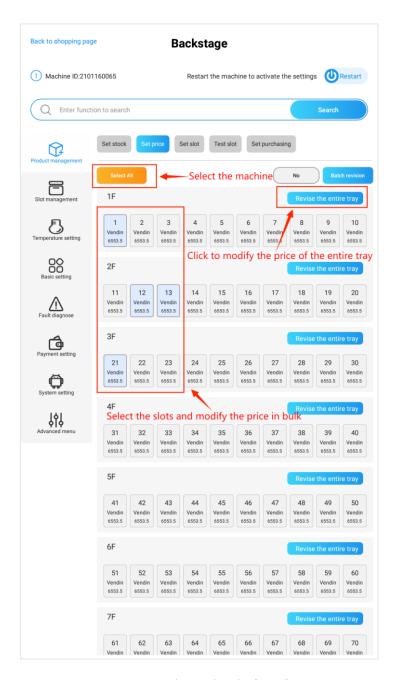
#### 2. Set price

In "Set price" menu, select a slot to change the price of that slot.



5-2-1 Set price

Click the "Revise the entire tray" button you can revise the prices for all slots on a tray, you might as well select a few slots and revise the prices together. After revising the prices, click the "Back" button.



5-2-2 Revise price in batch

#### 3, Slot configuration

All slots will be displayed, you can click the trays at the top of the menu to show the slots of those trays. If you click a single slot, you configure a single slot, if you click the "Batch revision" button, you can revise in batch.



5-3-1 Slot configuration page

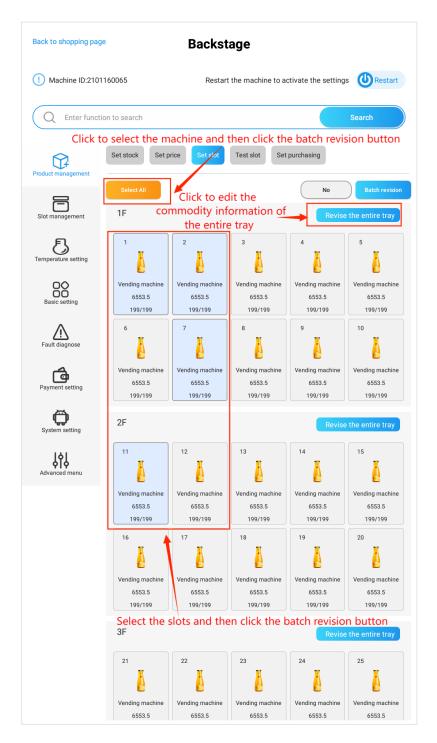
Click the "Batch revision" button, select the slots and then revise the information:

①Click the [Select All] button to select all slots, and then click the [Batch Modify] button to set the slot information.

This operation is suitable for the entire machine that only sells one product.

②Click the [Modify Whole Floor] button to modify the slots information on the entire layer. After modification, the slot information on the entire layer will be consistent. This operation is applicable to the same product being sold on the entire layer.

③Select the slots and then click the "Batch revision" to revise the slots information。

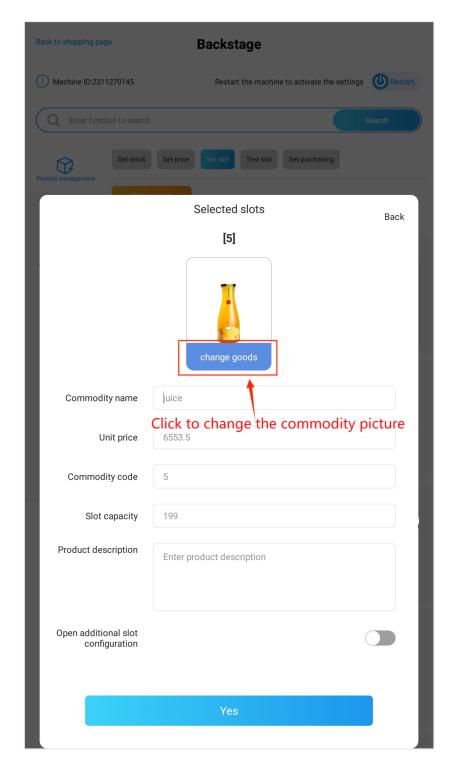


5-3-2 Revise slot information in batch

#### 3.1, Modify product image

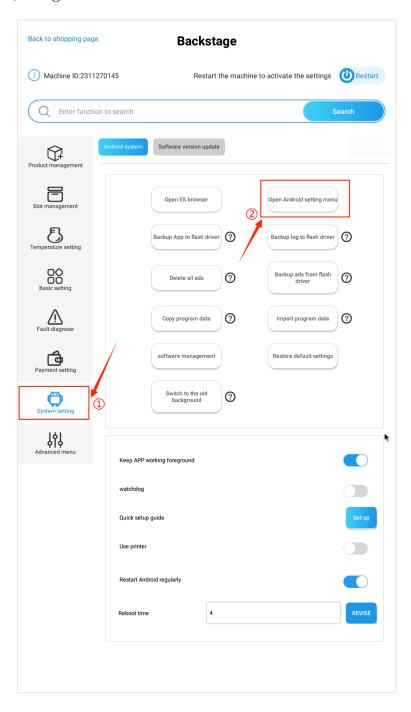
Click the slot to enter the slot details, and click the [Change Product] button to enter the local product library. If the machine has a back-end, product information can also be

distributed through the back-end.

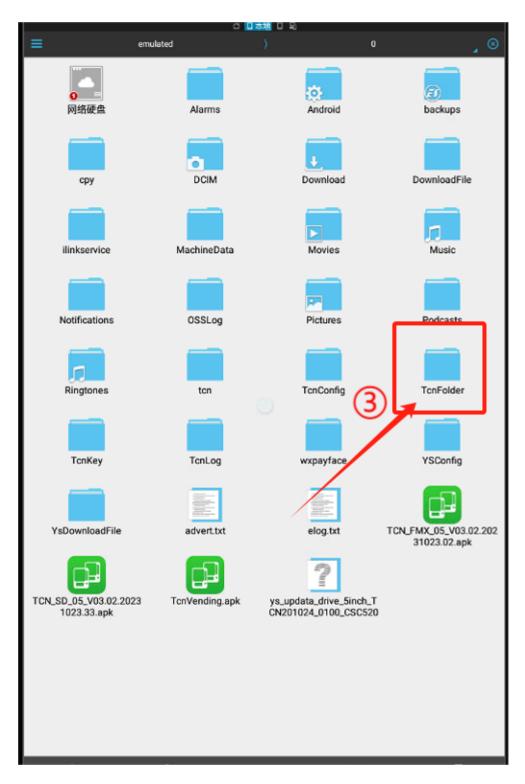


5-3-1-1 Product details interface

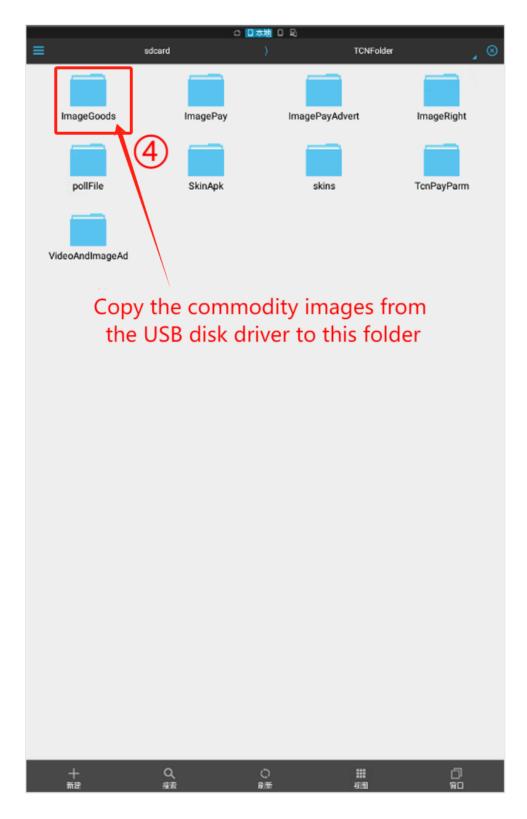
Use a USB flash drive to copy the image in advance, then open the ES browser through the Android debugging menu to enter the local folder, and put the product image into the local TcnFolder/ImageGoods folder.



5-3-1-2 Android system interface



5-3-1-3 File manager interface

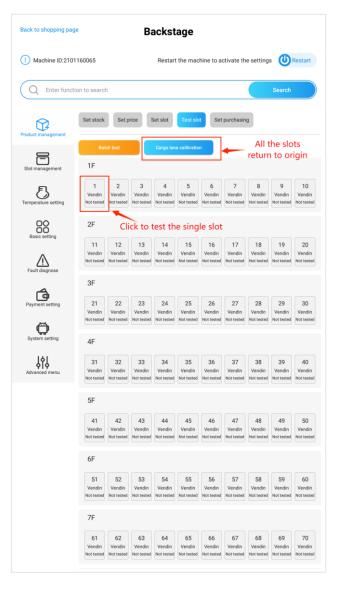


5-3-1-4 Commodity image folder

#### 4. Slot test

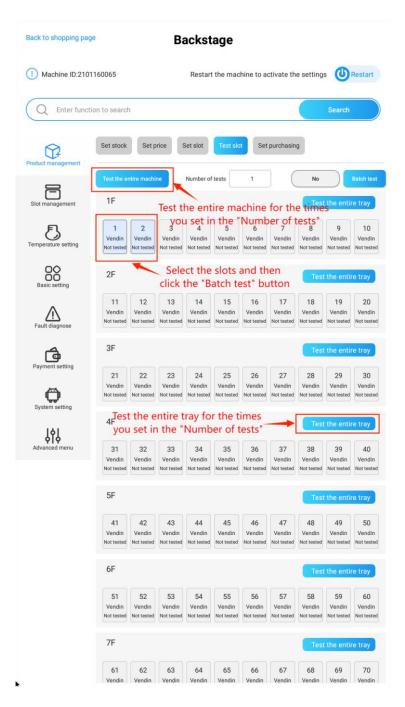
The slot test function is mainly used to detect whether the

slot can be deliver products normally. Click on the corresponding slot to perform a single slot test. After the test is completed, the slot list will display the test status. The normal slot will display normal. The faulty slot will display the corresponding fault code. Click the clear button to clear the fault. If the fault code is still displayed after testing again, you need to check whether there is a problem with the hardware. Click one button to reset and all slots will be reset.



5-4-1 Slot test page

Click the "Test in batch" button, select the rounds for testing, click the "Test all slots" or "Test a tray" to try different slot test modes. You can also select certain slots and test them in sequence.

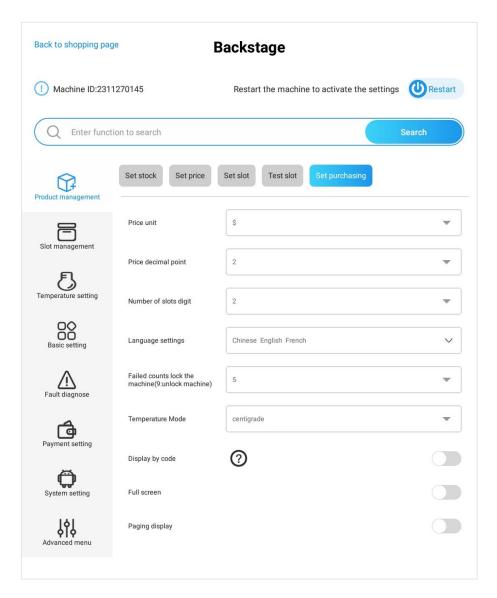


5-4-2 Test slots in batch

#### 5, Purchasing setting

This part includes the shopping interface information setting, price, currency, price decimal, language, number of slots digit, display products by product codes, etc.

- ①Price unit: default unit Chinese Yuan, click the scroll-down box to change.
- 2 Price decimal places: two places.
- ③Slot number digit: one-digit, if there are two digits, there will be a "0" before slot numbers 1-9.
- 4) Language: If there are three optional languages, select one of them.



5-Purchasing setting

⑤ Display products by product codes: when activated for products with the same code, only one product will be displayed in the shopping interface. If this function is turned on, we need to set the mode of sale.

A. Sell according to the top up order of the slot: the first product in the slot with the same product code will be sold first, then the second product in the slot with the same product code will be sold next, and so on.

B. Always sell the first slot: the same coded slot follow the order of the slots. After all the products in the first slot are sold out, the products in the second slot will be sold, and so on.

C. Supports keyboard selection and sales by order: For machines that use a physical keyboard to select goods, you need to select this sales method after turning on the function of selecting goods by product code.

#### Mode of sale

- Sale in order of goods
- Always sell the front one
- Sold in the order in which the goods are added and supports keyboard selection of designated goods lanes

YES

#### 5-2 Display products by product codes

D. Full screen: After turning on the full screen switch, the shopping interface will not display the top advertisement and will display it in full screen.

E. Pagination display: After opening, the shopping interface automatically slides left and right to paginate.

F. Temperature unit: In the drop-down box option of the temperature unit, you can choose Fahrenheit or Celsius. Display on the shopping interface.

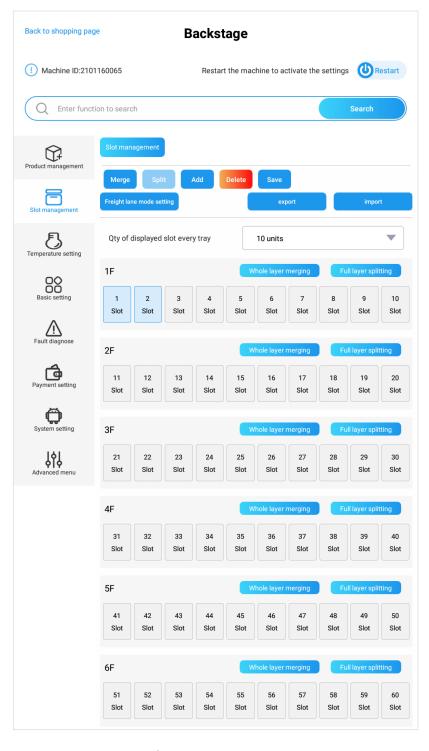
## 6. Slot management

This menu is for the debugging staff, when we replace a driver board or we replace a slot we can divide, combine, add and delete slots.

- 1. Combine slots: select neighboring slots, click the "Combine" button to combine slots.
- 2. Divide slots: select those double-slot slots or combined slots and divide them into single slots.
- 3. Add slots: if a slot is added on a tray and the slot number is not shown in the driver board, we can add manually.
- 4. Delete slots: delete unnecessary or non-existing slots.
- 5. Slot mode setting: Set after changing the slot type. It can be set to spring slot and belt slot.
- 6. Slot import: Prepare the U disk, create a new folder named tcn\_product.xls in the U disk, create an excel form containing the slot data, insert the U disk and click the [slot import] button. Slot data is automatically imported into the machine.
- 7. Slot export: After inserting the U disk into the machine, click the [slot export] button, and a slot data document will be automatically generated in the U disk.
- 8. Number of slot displayed on each layer: If the number of slot on each layer exceeds 10, select 20. If the number does not

exceed 10, the default is 10.

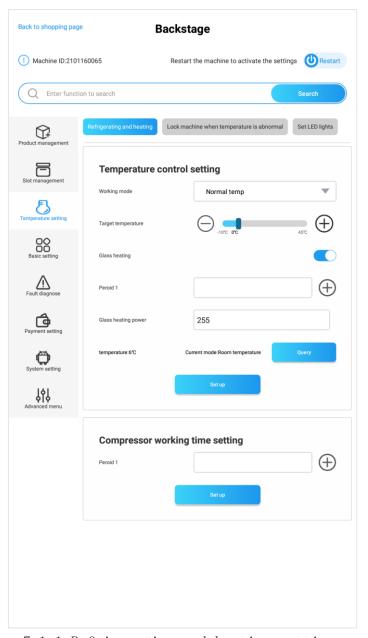
Tip: After all slots management operations are completed, click the Save Settings button before powering off and restarting. Only then will the new slots take effect.



6-1 Slot management page

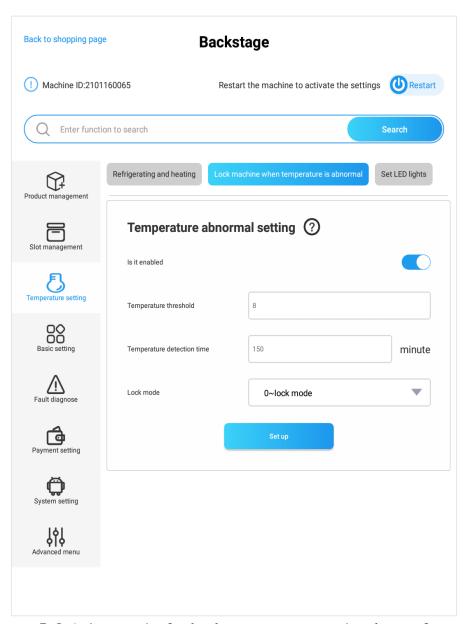
## 7. Refrigerating and heating

- 1, Refrigerating and heating
- ①Select the working mode of the compressor and the target temperature inside the cooling cabinet according to the needs of the equipment scenario. For machine without a temperature controller, select normal temperature as the working mode.
- ② After the glass heating time period is set, the glass defogging function will be turned on within the set time to prevent excessive water vapor on the glass door.
- ③ In order to save electricity, you can set the compressor working time period. The compressor will stop working if it is not within the set time period.



7-1-1 Refrigerating and heating setting

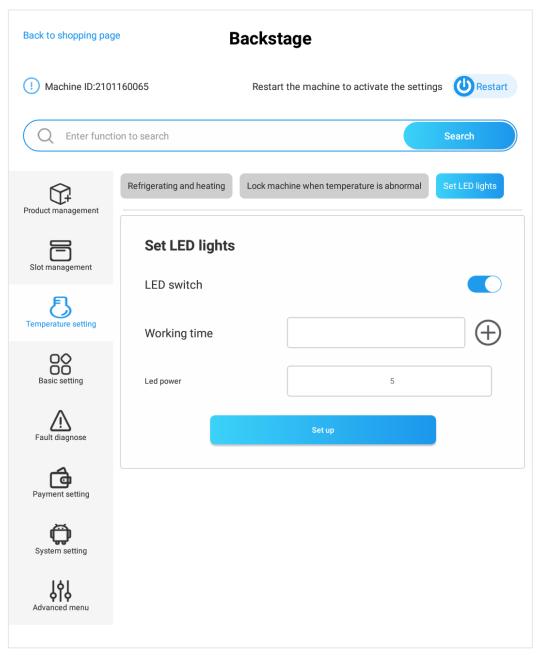
2. Automatic self-lock when temperature is out of range
If the interior temperature is too high the products will go
bad, we can set temperature alarm so that the machine will lock
automatically when the interior temperature is going high.
Refrigerating and heating has to be turned on priorly.



7-2-1 Automatic lock when temperature is abnormal

## 3, LED lights

Control the ON/OFF of the LED lights and periods that the lights are on and off.



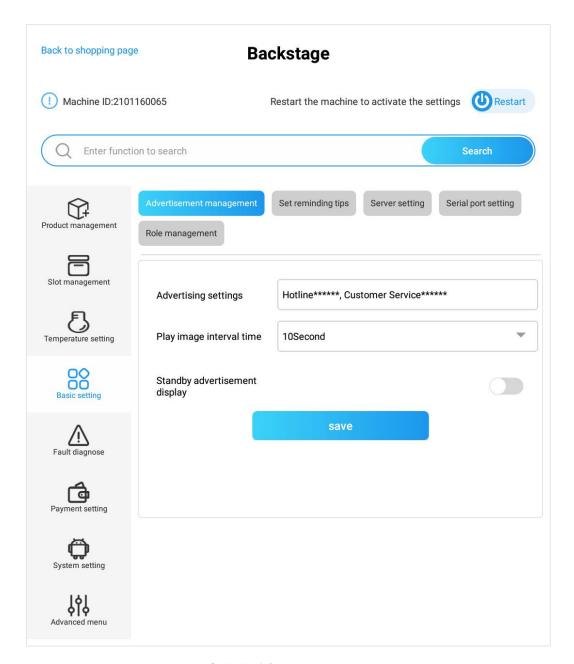
7-3-1 LED light setting

# 8. Basic information setting

#### 1, Advertisements

You can put in your contact number in the ad words so that the customers can contact you when they need assistance. Before turning on the "Standby advertisement display" switch, you need to put your advertisement into corresponding folder or

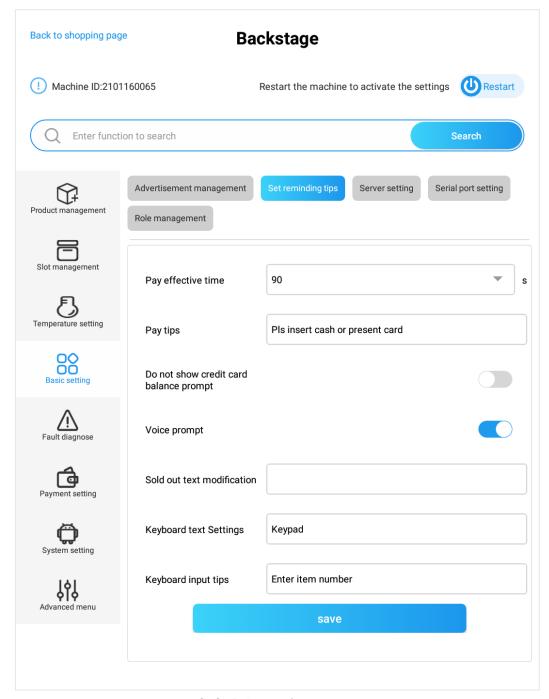
contact customer service.



8-1-1 Advertisements

#### 2. Reminding tips

For reminding payment and card payment and voice tips.



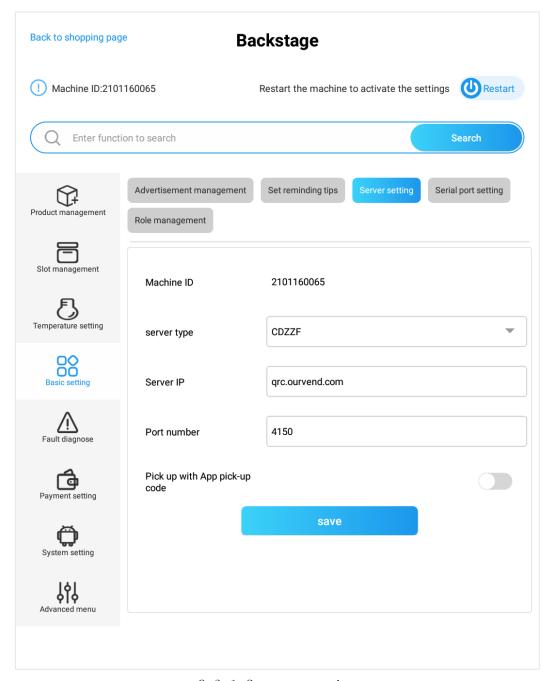
8-2-1 Reminding tips

#### 3. Server setting

①The server type and IP address must be configured after using the back-end system on a computer

②App pickup code: it is used to make a reservation to pick up goods in the online mall. The reservation pickup function needs

to be enabled in the background.

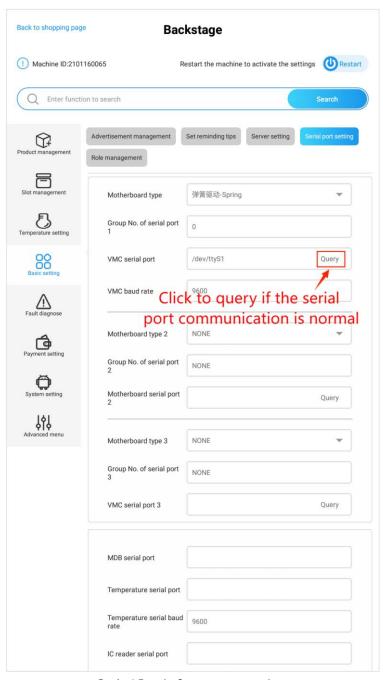


8-3-1 Server setting

### 4. Serial port settings

The machine needs to set up the corresponding functional serial port before normal operation, so as to ensure the normal operation. If the machine reports "system busy", "serial communication exception" and other errors when running, find

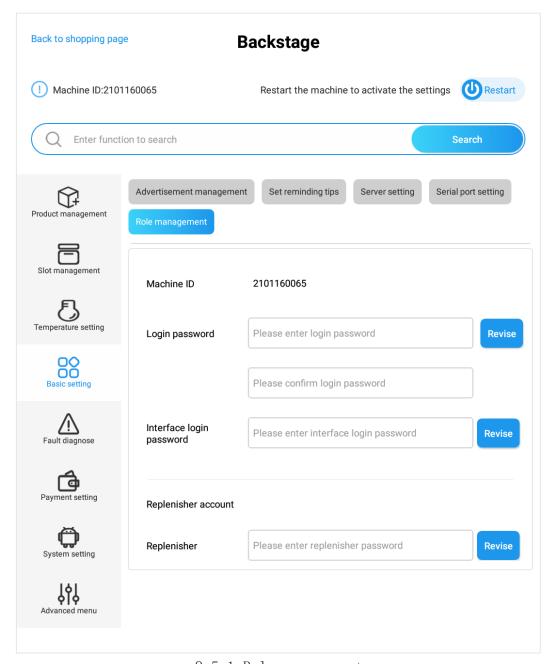
the corresponding functional serial port on the serial port setting page and click [Query] button, if the query result is that if the communication is normal, the serial port connection is normal. If the communication is abnormal, you need to check whether the serial port access is normal.



8-4-1Serial port setting

#### 5, Role management

Revise administrator password or reloading staff password.



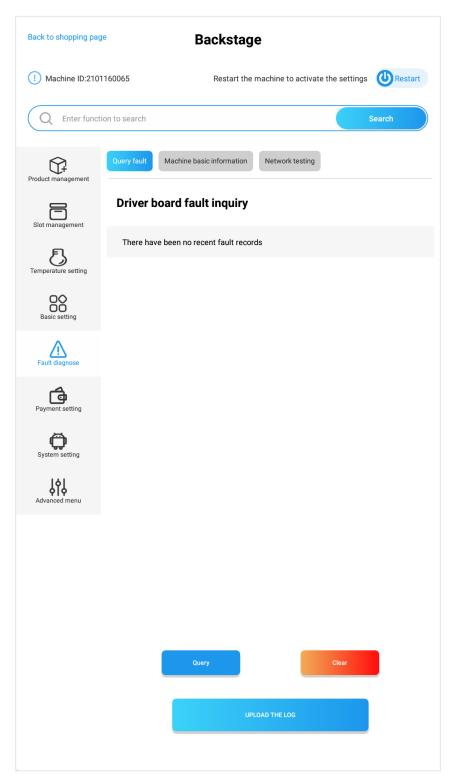
8-5-1 Role management

# 9 Error diagnosing

#### 1. Error querying

You can query the latest fault information, save up to 3 fault information records, and click the [Clear Fault] button

to clear the fault.



9-1-1 Error diagnosing

### 2, Machine basic information

Where you can check the basic information of this machine.

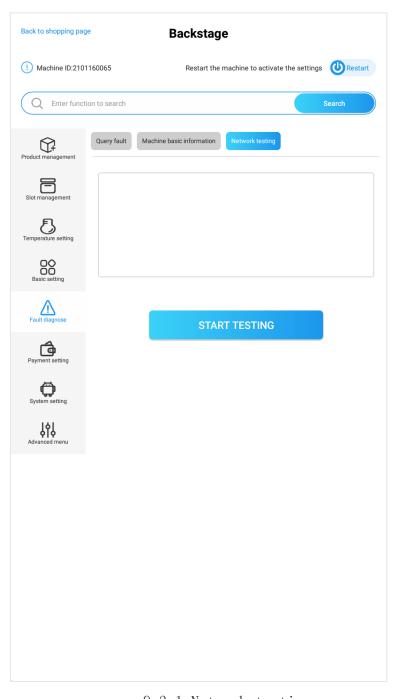
You can also click the machine code 3 times at the bottom of the shopping page.



9-2-1 Machine basic information page

### 3. Network testing

After clicking the [Start Test] button, the machine queries the current network status and displays it in the result column. If the machine network signal is abnormal, you need to check whether the antenna is installed correctly, whether the network access is normal, and whether the SIM card is normal.

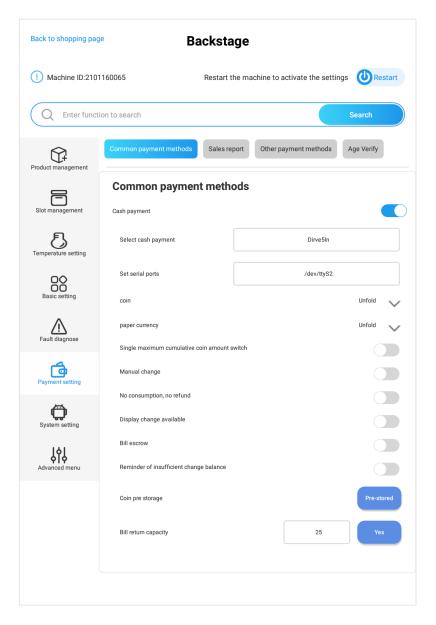


9-3-1 Network testing

# 10 Payment method settings

#### 1. Common payment methods

Those payment methods that are most frequently used in or outside China, you can turn on/off the switches to enable/disable the payment methods.

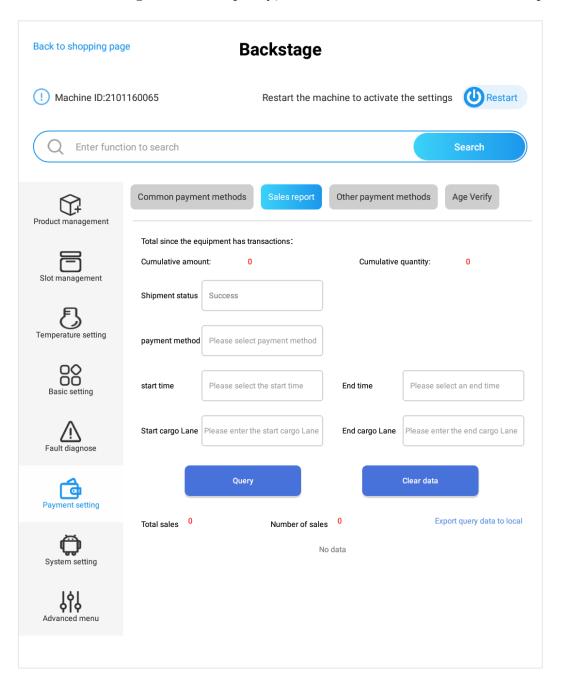


10-1-1 Common payment methods

### 2. Sales report

Mostly used on those always off-line machines. It is Used to

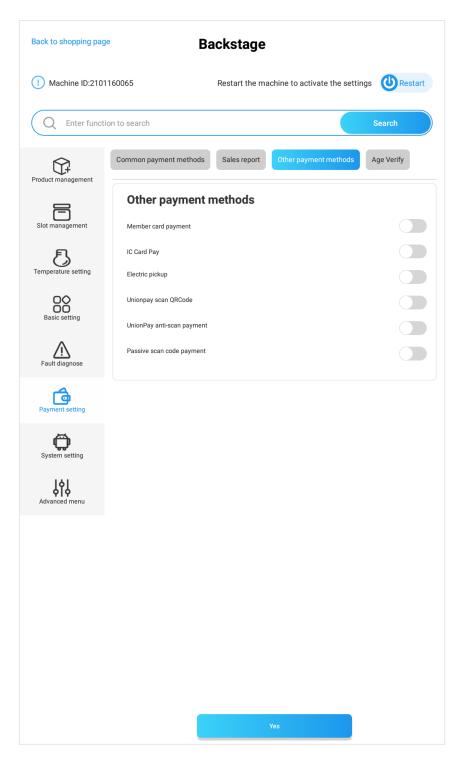
count sales data and historical sales data before machine replenishment. Click the payment method scroll-down box, select a payment method, enter starting time, ending time, starting slot and ending slot to query, the sales data will show up.



10-2-1 Sales report

# 3. Other payment methods

All the payment methods here require certain payment parameters or configured serial ports. Turn on the payment method you want to use, and then configure its parameters. After the configuration is completed, restart to take effect. please test before you turn them on.

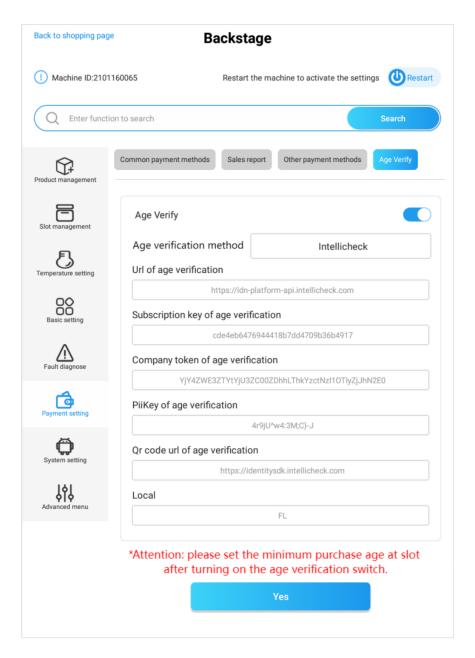


10-3-1 Other payment methods

### 4, Age Verification

After turning on the age verification switch, select the corresponding age verification method, including DCM5 card reader age verification and Intellicheck age identification.

- ① To use DCM5 age recognition verification, you need to first connect the corresponding card reader, and then set the purchase age limit before payment in each slot, and restart to take effect.
- ② Use Intellicheck age verification: turn on the age verification switch, enter the configuration parameters, click OK, and restart to take effect. Return to the shopping interface, select the goods in the slots, the age verification pop-up window will pop up, use your mobile phone to scan the QR code, and finally use your mobile phone to scan your face.



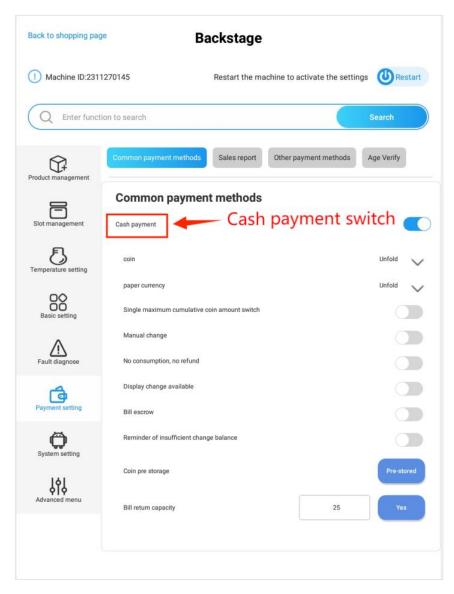
10-4-1 Age verification Interface

	change goods
Commodity name	Vending machine
Unit price	6553.5
Commodity code	1
Slot capacity	199
Product description	Enter product description
Open additional slot	
configuration heated or not ?	
Slot status	Available
Commodity category	Set the minimum
Age verification before	purchase age
payment	
Minimum purchase age	18
Product details image	Replace product images
	Yes

10-4-2 Age verification limitation setting in the slot

# 5. Cash payment

Turn on the cash payment switch and select cash mode. Select serial port or USB connection according to the interface type of the paper coin machine (after serial port connection, the corresponding serial port needs to be set in the background). After the connection is completed, click the Restart button. It will take effect after restarting.



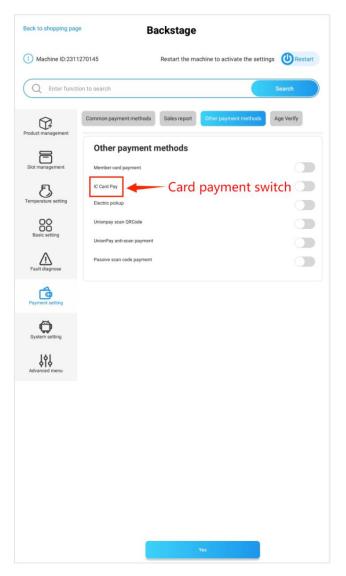
10-5-1 Cash payment

#### 6. Card payment

Turn on the card payment switch. Connect the motherboard to the

card reader through the serial port, then select the serial port mode (configure the serial port to which the motherboard is connected), click the restart button, and it will take effect after restarting.

Note: Configure the serial port that the Zhou Ligong card reader is connected to. After restarting, you need to wait for the card reader to flash or wait for one minute before using it.

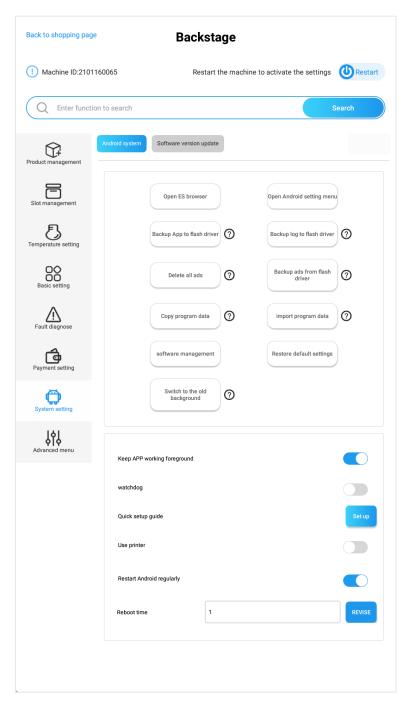


10-6-1 Card payment

# 11. The Android system

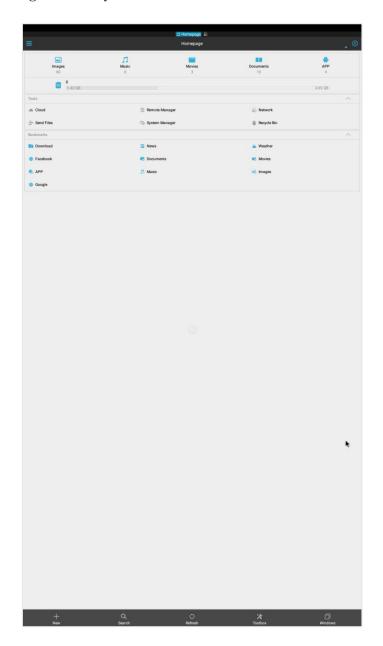
## 1. The Android system

Here we introduce the functions included in the Android system.



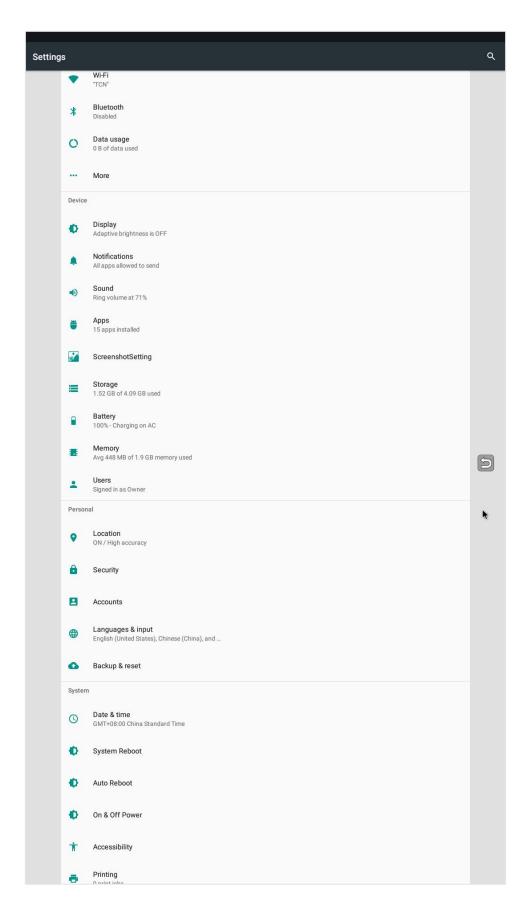
12-1-1 Android system interface

① Open the ES browser to go to the Android file manager where you can manage the system files and flash drivers.



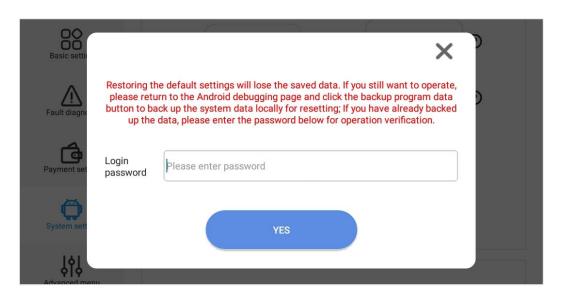
11-1-1 The ES browser

②Open Android system setting menu, there you can set internet connection, display, language, audio and other items like what you do with your phone.



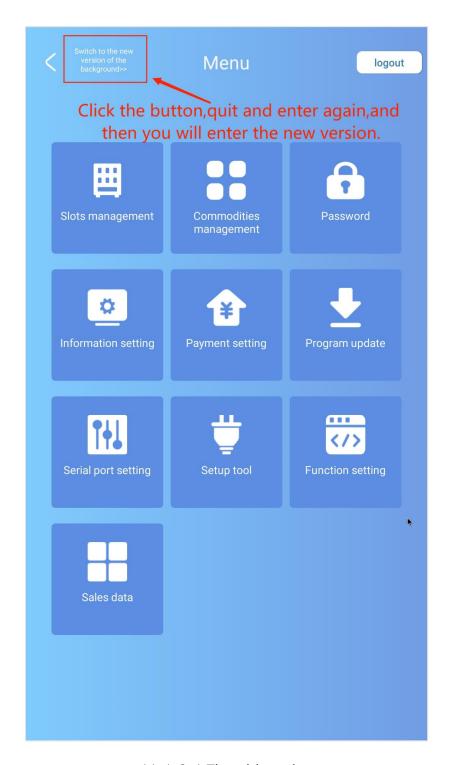
11-2-1 Android system setting

- ③Back the APP to a flash driver: Insert a flash driver to the Android box, click "Backup APP" and a new folder will be created in the flash driver to store the APP, then you can use the flash driver to install the APP on other machines.
- (4) Backup logs to the flash driver: insert a flash driver, click "Backup logs" and the logs will be backed up to a new folder named "TcnLog" in the flash driver.
- ⑤Delete all ads on the machine: click this button you will delete all the ads, please be cautious.
- ©Copy ad files from a flash driver: you need to create a TcnFolder folder in the flash driver first, then create sub-folders in accordance to the ad types, then click the "Copy ads from flash driver" button, the ads will be copied to the machine system.
- Tractory reset: Click this button and enter the advanced menu, the machine will clear all parameters and will recover factory settings, please be cautious.



11-1-7-1Machine debugging

®Switch to old-version page: click the button to go back to the shopping interface, enter the back-end system again and you will enter the old-version page. Likewise, if you click "Switch to new version" button, quit and enter again, you enter the new version.



11-1-8-1 The old version

2. Keep the APP running in the foreground: In order to prevent the system from misoperation when exiting the home page, after this switch is turned on, the software will automatically restart after exiting. 3. Quick Setup Wizard: In order to quickly set the parameters required for machine operation, click the [Setup] button of the Quick Setup Wizard to set the system operating parameters. Including screen size, screen orientation, motherboard type, serial port, UI type, payment system type, payment QR code type, etc. After the setting is completed, click the restart button and it will take effect after restarting.



11-3-1 Quick Setup Wizard

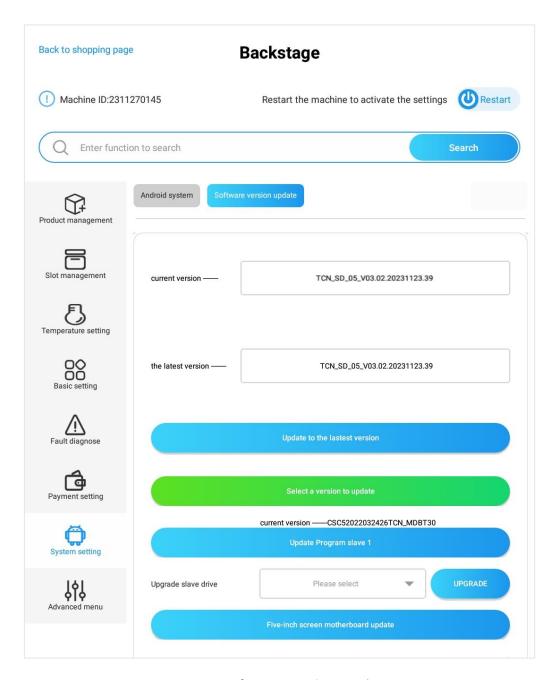
4. Using the printer: Before use, make sure the machine has been

connected to the printer and the serial port settings are correct.

5. Android system scheduled restart: Set the scheduled restart time point to refresh cached data.

#### 6. Software Version Update

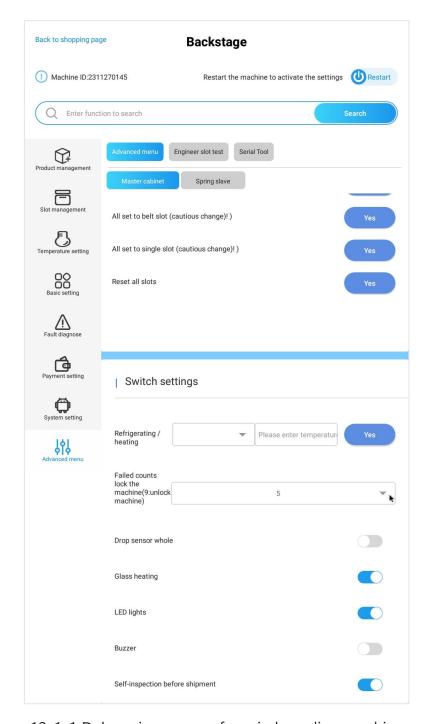
The server will release the latest program version every month, mainly to optimize the use of functions and give everyone a better experience. It can update the main software, main driver board software, slave driver board software and motherboard software. You can also click the Manually Select Version Update button to update the program read from the USB flash drive.



11-2-1 Software version update

# 12. Machine debugging

1. This menu is for professional machine debuggers and it requires a password to enter. In this menu you can configure all different parameters of the motors. Let's take a spiral machine as instance:



12-1-1 Debugging menu of a spiral vending machine

Tip: The parameters in the machine debugging menu have been set before leaving the factory. Please do not change them randomly, otherwise the machine may not operate normally!