User Manual

ProMerc-100

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English

Thank you for choosing our product. Please read the instructions carefully before operation. Follow these instructions to ensure that the product is functioning properly. The images shown in this manual are for illustrative purposes only.

For further details, please visit our Company's website www.zkteco.com.

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The product will be updated from time to time without prior notice. The latest operation procedures and relevant documents are available on http://www.zkteco.com

If there is any issue related to the product, please contact us.

ZKTeco Headquarters

Address   ZKTeco Industrial Park, No. 26, 188 Industrial Road,

                 Tangxia Town, Dongguan, China.

Phone   +86 769 - 82109991

Fax   +86 755 - 89602394

For business-related queries, please write to us at sales@zkteco.com.

To know more about our global branches, visit www.zkteco.com.

About the Company

ZKTeco is one of the world's largest manufacturer of RFID and Biometric (Fingerprint, Facial, Finger-vein) readers. Product offerings include Access Control readers and panels, Near & Far-range Facial Recognition Cameras, Elevator/floor access controllers, Turnstiles, License Plate Recognition (LPR) gate controllers and Consumer products including battery-operated fingerprint and face-reader Door Locks. Our security solutions are multi-lingual and localized in over 18 different languages. At the ZKTeco state-of-the-art 700,000 square foot ISO9001-certified manufacturing facility, we control manufacturing, product design, component assembly, and logistics/shipping, all under one roof.

The founders of ZKTeco have been determined for independent research and development of biometric verification procedures and the productization of biometric verification SDK, which was initially widely applied in PC security and identity authentication fields. With the continuous enhancement of the development and plenty of market applications, the team has gradually constructed an identity authentication ecosystem and smart security ecosystem, which are based on biometric verification techniques. With years of experience in the industrialization of biometric verifications, ZKTeco was officially established in 2007 and now has been one of the globally leading enterprises in the biometric verification industry owning various patents and being selected as the National High-tech Enterprise for 6 consecutive years. Its products are protected by intellectual property rights.

About the Manual

This manual introduces the operations of ProMerc-100 product.

All figures displayed are for illustration purposes only. Figures in this manual may not be exactly consistent with the actual products.

Document Conventions

Conventions used in this manual are listed below:

GUI Conventions

For Device	
Convention	**Description**
< >	Button or key names for devices. For example, press <OK>
[ ]	Window names, menu items, data table, and field names are inside square brackets. For example, pop up the [New User] window
/	Multi-level menus are separated by forwarding slashes. For example, [File/Create/Folder].

Symbols

| Convention	Description
	This implies about the notice or pays attention to, in the manual
	The general information which helps in performing the operations faster
	The information which is significant
	Care taken to avoid danger or mistakes
	The statement or event that warns of something or that serves as a cautionary example.

Table of Contents

1 <u>Introduction</u>

ProMerc-100 is a new-age cafeteria management device that brings you convenience and high work efficiency.

1.1 Standing Position, Facial Expression and Standing Posture

<u>Recommended distance</u>
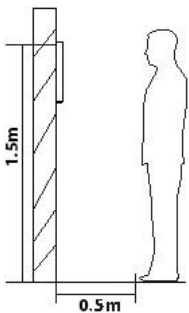
The distance between the device and a user whose height is within 1.55m to1.85m is recommended to be 0.5m. Users may slightly move forward and backward to improve the quality of facial images captured.

<u>Facial expression and Standing posture</u>

Note: During enrollment and verification, please keep natural facial expression and standing posture.

1.2 Verification Method

This Device includes three different methods for verifying the Consumer**.** They are **Facial** verification, **Fingerprint** verification, and **Card** verification. A snippet of these methods is given below.

1.2.1 Facial Verification

<u>1:N (One-to-Many) Facial Verification mode</u>

In this mode, the acquired facial images are compared with all the facial templates that are stored in the device.

1:1 (One-to-Many) Facial Verification mode

In this mode, the captured facial images are compared with the facial templates associated with the entered ID.

1.2.2 Fingerprint Verification

1:N Fingerprint Verification mode

This mode compares the fingerprint that is being pressed onto the fingerprint reader with all of the fingerprint templates stored in the device.

1:1 Fingerprint Verification mode

This mode compares the fingerprint that is being pressed onto the fingerprint reader with the entered ID.
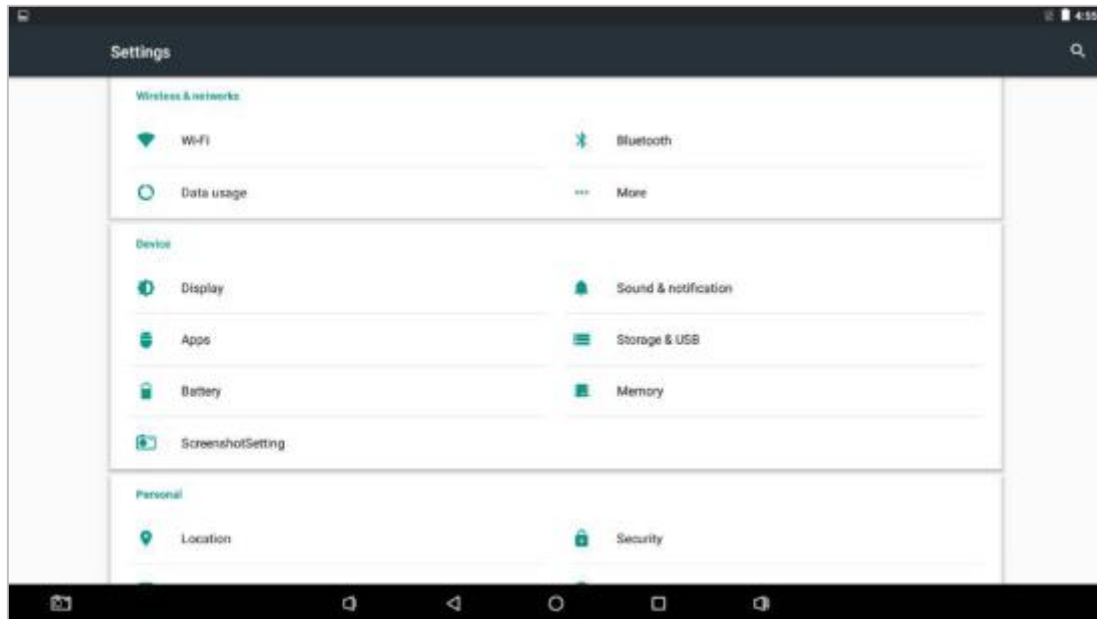
1.2.3 Card Verification

The device supports ID or MF card, enabling Consumers to use ID or MF card to swipe and consume.

2   Set up the Network

2.1 Wi-Fi

Set up Wi-Fi: In Android settings, select **Settings** > **Wi-Fi**. Click the Wi-Fi you need to connect and enter the Wi-Fi password. Refer the figure shown below:

2.2 TCP/IP

Set TCP/IP: In the device, open the Android settings. To set the TCP/IP settings click **More** > **Ethernet** > **Ethernet IP Mode** > **Static.**

3 Voice APP Installation, TTS Settings

After installing the TTS voice package, it needs to be enabled in **Settings**. Here, Iflytek Voice Engine is used as an example to explain the setup process. The other TTS voice packages can be set up similarly.

1. Go to **Settings** of the Android system and click the **Language & input** at the bottom of the interface.
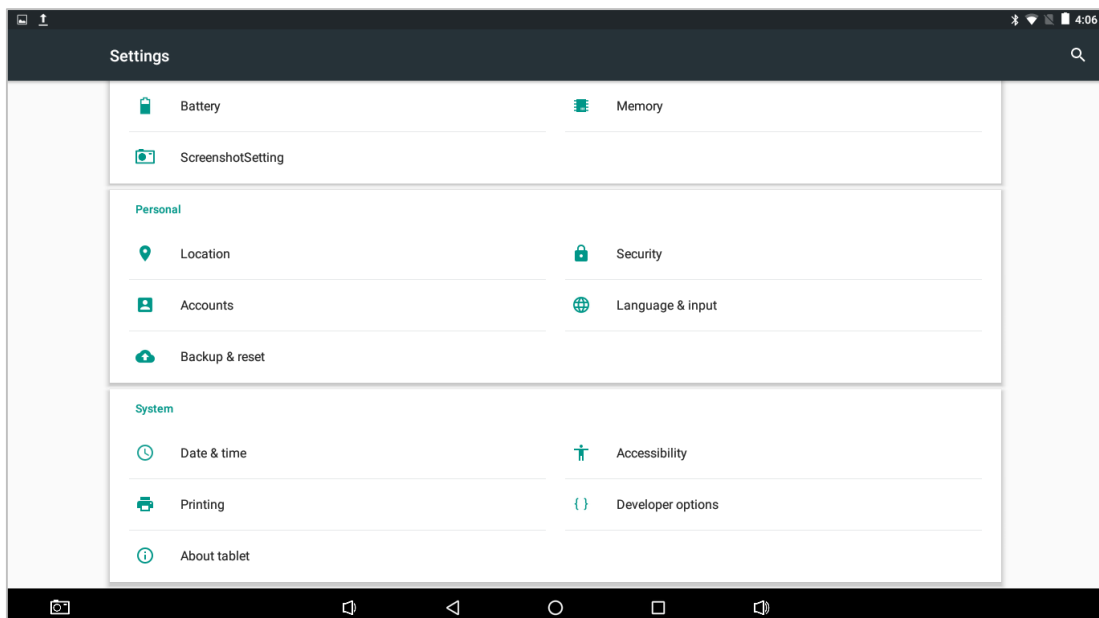
2. Click **Text-to-speech output** and select "Iflytek Voice Engine 3.0".
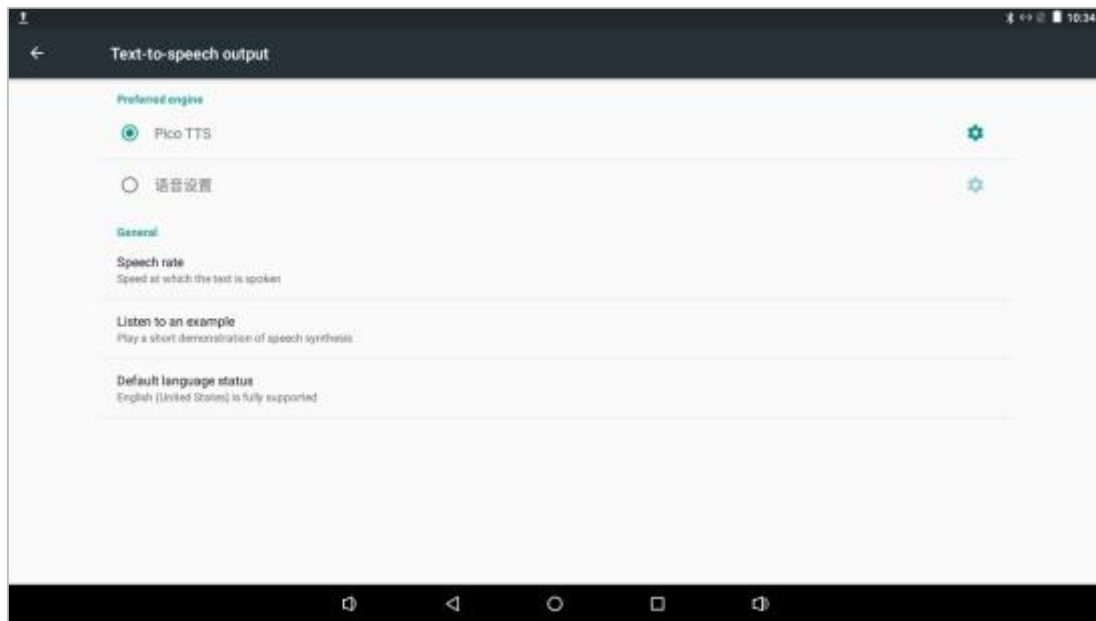
4 Device Usage Process

This section describes the complete process of using the device in a step-by-step manner. Relevant screen grabs have also been given for better understanding.

4.1 Login

4.1.1 Home Screen

After opening the device, click **Consumption Pattern** or **Consumption Inquiry** To open the login interface, enter the account and password (default account/password is *admin*) and click the **Login** button.
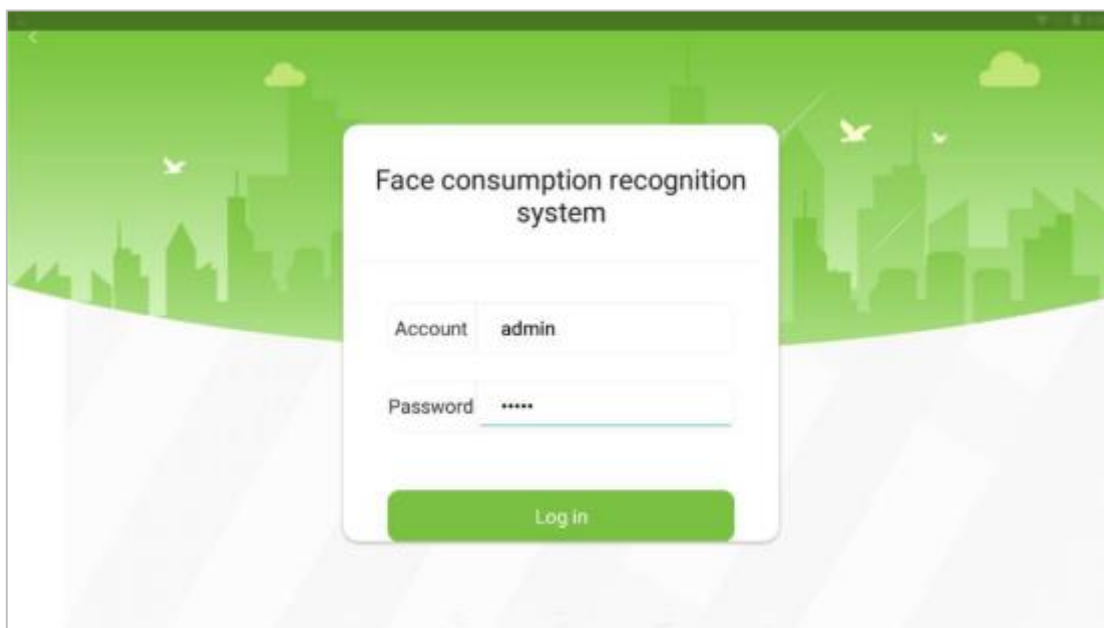
After logging in successfully, the main interface of the device will appear as shown below:

4.2   Consumption Pattern

The consumption mode of this device is divided into five modes: Fixed value mode, Commodity mode, Amount mode, Counting mode, and Offline mode. Operator can modify the consumption mode on the software.

### 4.2.1   Fixed Value Mode (Fixed Amount per Transaction)

In this mode, a fixed amount is added for the Consumer. For example, in the device, if we have added this fixed amount as 100$. Then the Consumer can order a maximum of 100$ from the device in one transaction. The Fixed Value mode means that the amount of money utilized by consumers every time is a fixed value, and the specific fixed amount can be modified in the software. Open the fixed value mode interface by clicking the **Consumption Pattern** of the main interface, as shown in the figure below:

In this way, after verification (Face/swipe card/fingerprint recognition), the Operator only needs to click **OK** to confirm the payment.

4.2.2   Commodity Mode (Item Mode)

In this mode, Consumer can select commodities on the device or WeChat applet or scan the barcode using scanner, the device calculates the final amount and the money gets deducted from the Consumer account after the Consumer verifies through the Device. The commodity information can be added, deleted, modified, in the device. We can enter the commodity mode interface by clicking **Consumption Pattern**, as shown in the figure below:
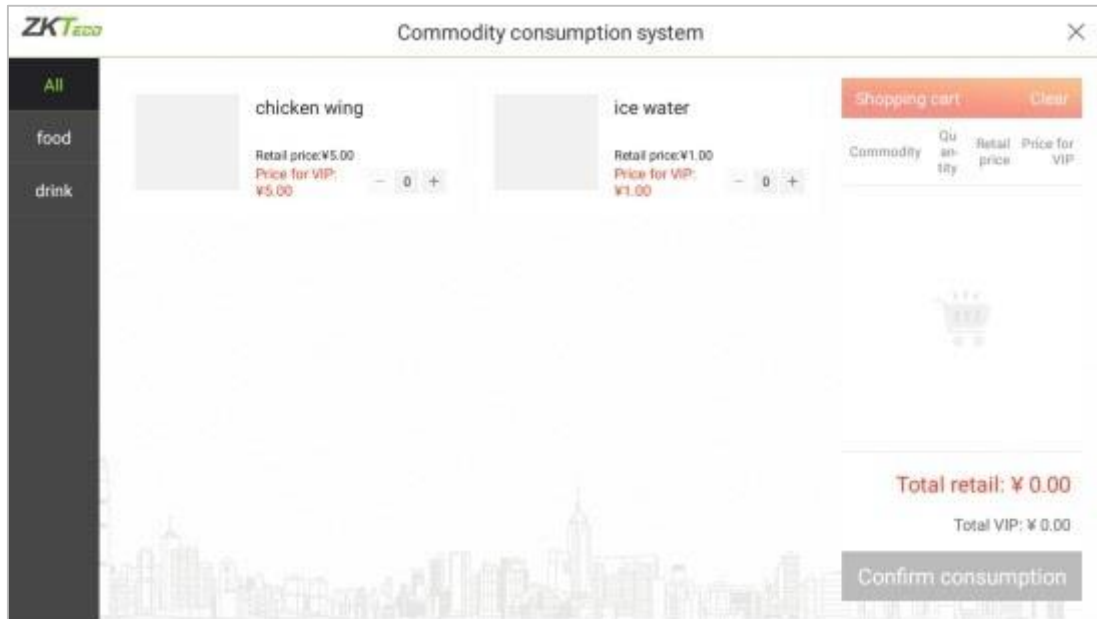
### 4.2.3 Amount Mode (Calculation Mode)

In this mode, the Consumer orders the food of his choices and the operator calculates the payable amount and then the amount gets deducted after the Consumer verifies through the Device. We can enter the amount mode interface by clicking the **Consumption Pattern**, as shown in the figure below:
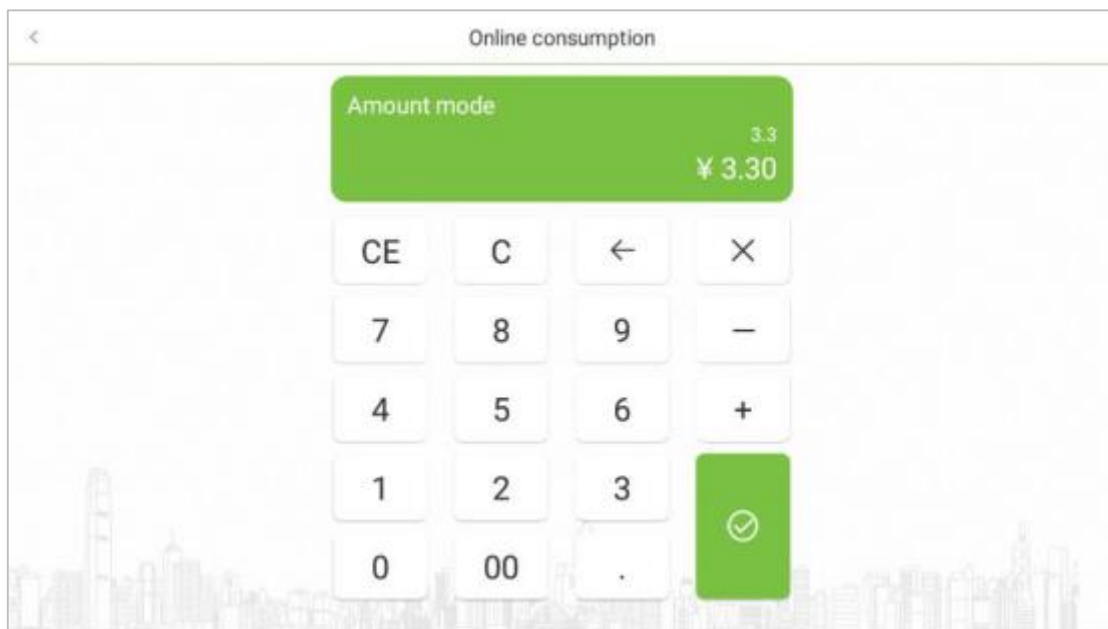
The operator calculates or directly enters the amount of the item purchased by the Consumer on the device, and then clicks **Confirm** to perform verification (Face/Swipe card/Fingerprint recognition) on the consumer.

4.2.4 Counting Mode (Count Mode)

In this mode, a fixed number of daily consumptions is set for the Consumer. There is no need for recharge and deduction, every consumption is counted as one. The specific number can be modified in the Device. We can enter the counting mode interface by clicking the **Consumption Pattern**, as shown in the figure below:
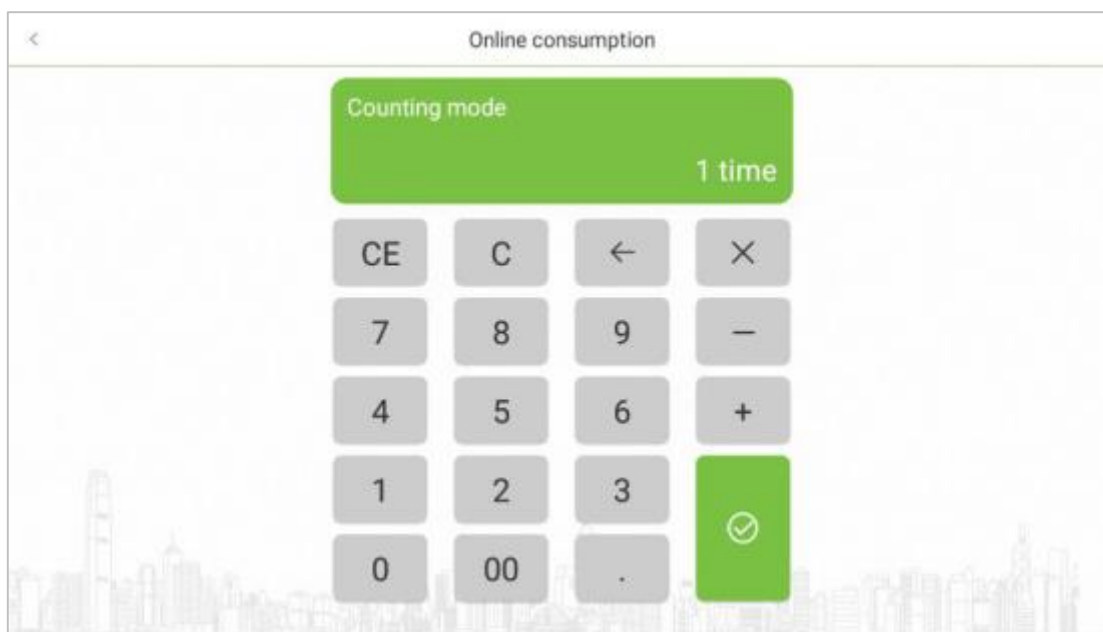

The Operator clicks **Confirm**, and the Consumer is verified (Face/Access Card/Fingerprint) to confirm the counted consumption.

4.2.5 Offline Mode

When the device is disconnected from the network, you can enter the offline mode. Only the amount mode and the counting mode can be used in the offline mode. The recorded data will be automatically saved. When the device is reconnected to the network, you can query to get offline consumption record through **Consumption Inquiry** to review the account, as shown below:
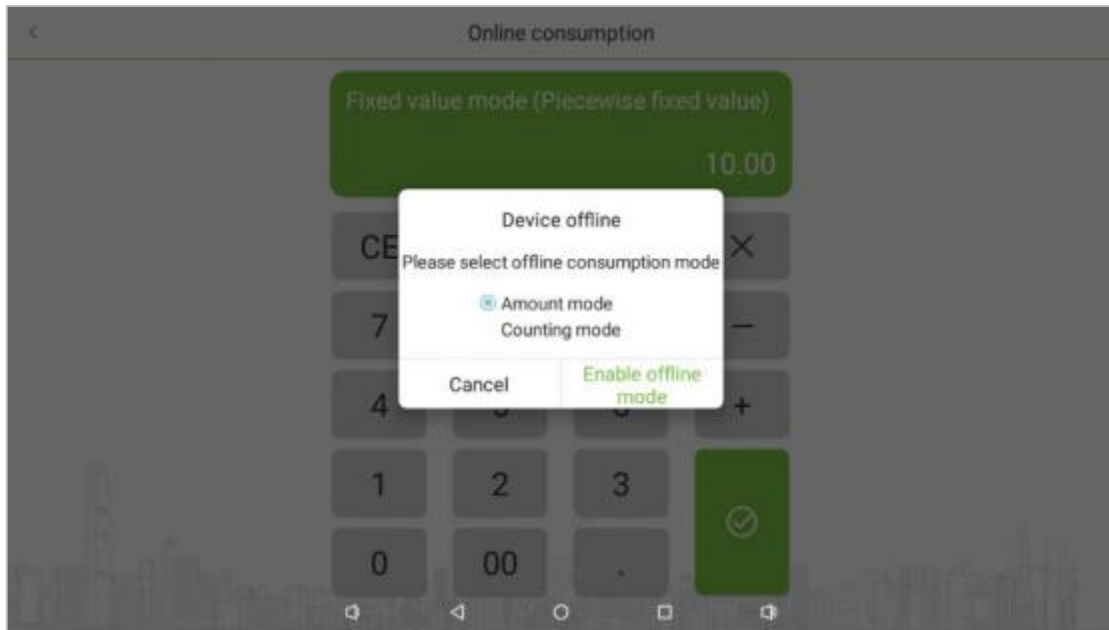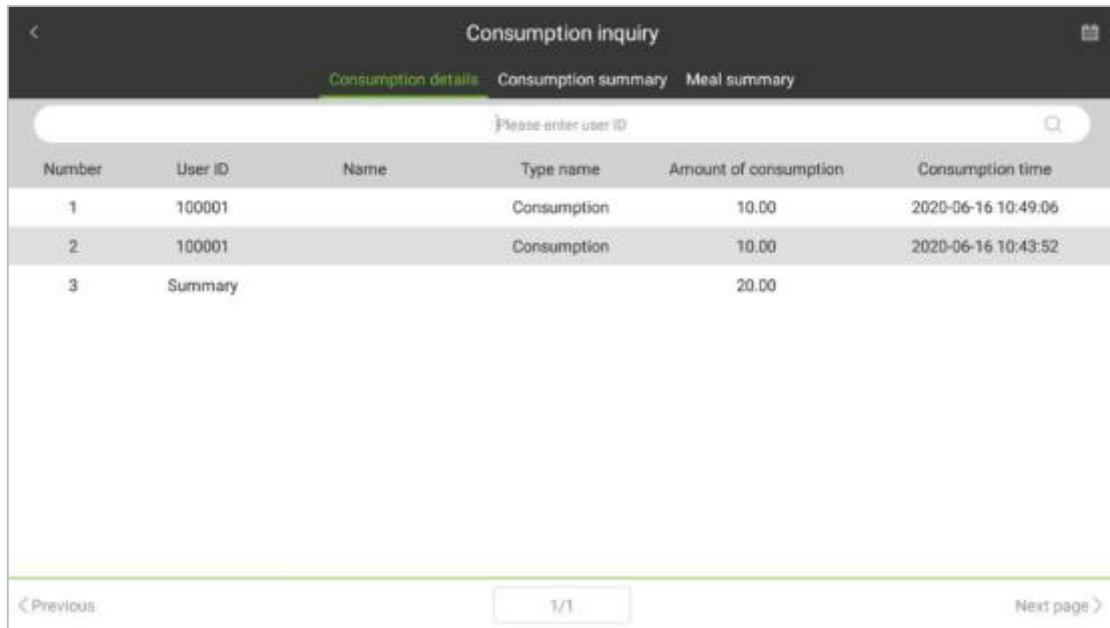
Note: In all the above modes, if the Consumer is not registered on the device, the verification will be failed. In such a case, please re-confirm whether the account has been successfully created and face/fingerprint and other information have been saved.
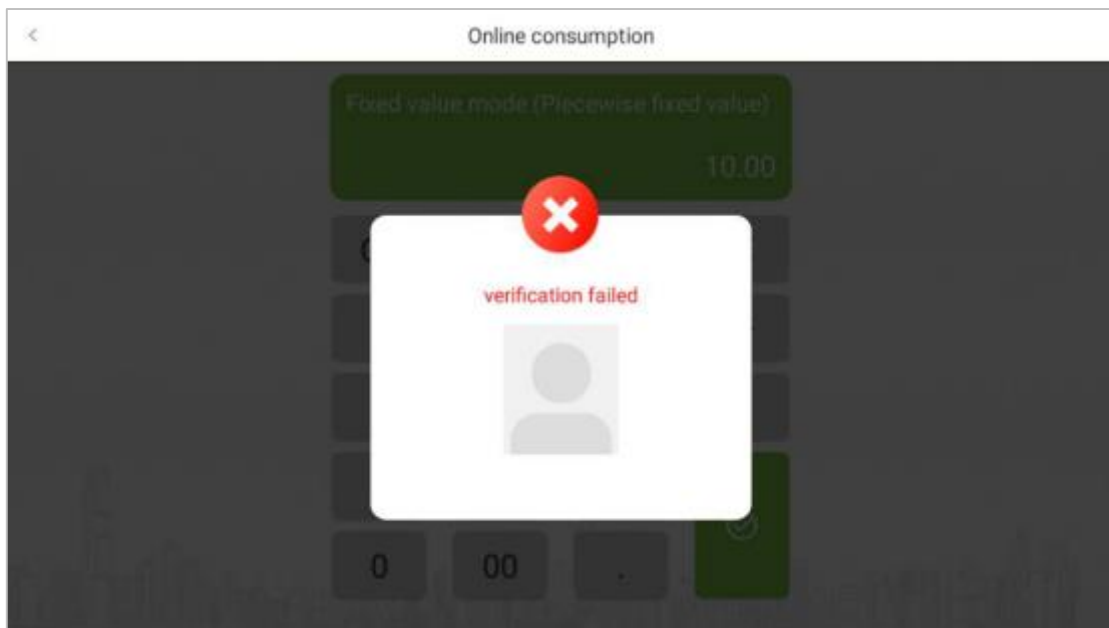
4.3 Consumption Inquiry

The Operator can see the specific consumption details, consumption summary, and meal summary by clicking **Consumption Inquiry** on the main interface in the device. To view the details, enter the specific ID (refer the figure given below).

4.4 Parameter Management

The Operator can perform threshold settings, verification settings, device settings, and server settings by clicking **Parameter Management** on the main interface.

Threshold Settings includes: Face recognition threshold.

Verification Settings include: Number of times face recognition is tried, Face recognition retry interval, Popup display duration, and Vice screen confirms consumption.

Device Settings include: Voice prompts, and Volume.

Server Settings include: Enable domain name mode, Server address, and Server port. The specific parameter management interface is shown in the figure below:
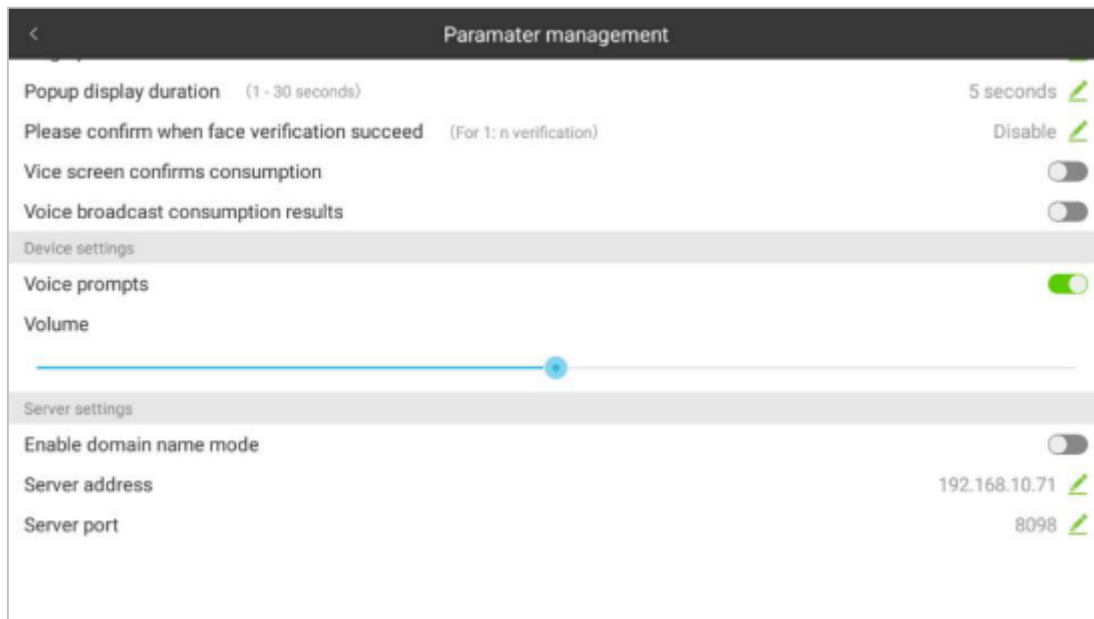
Face recognition threshold: It refers to the contrast between the recognized face and uploaded face information. The higher the threshold setting, the more accurate the comparison. To ensure the success rate and reduce the false recognition rate, it is recommended to set the value between 70 to 80.

Verification settings: Face recognition retries indicate the number of comparisons between the system and the uploaded information during face recognition verification. Face recognition retry interval refers to the interval between each retry among the number of face recognition retries. Pop-up display duration indicates the duration of displaying the information pop-up window after recognition.

After **Vice screen confirms consumption** is enabled, when the consumption is successful, a pop-up window will appear on the vice screen prompting consumption information, and the payment can be confirmed or cancelled.
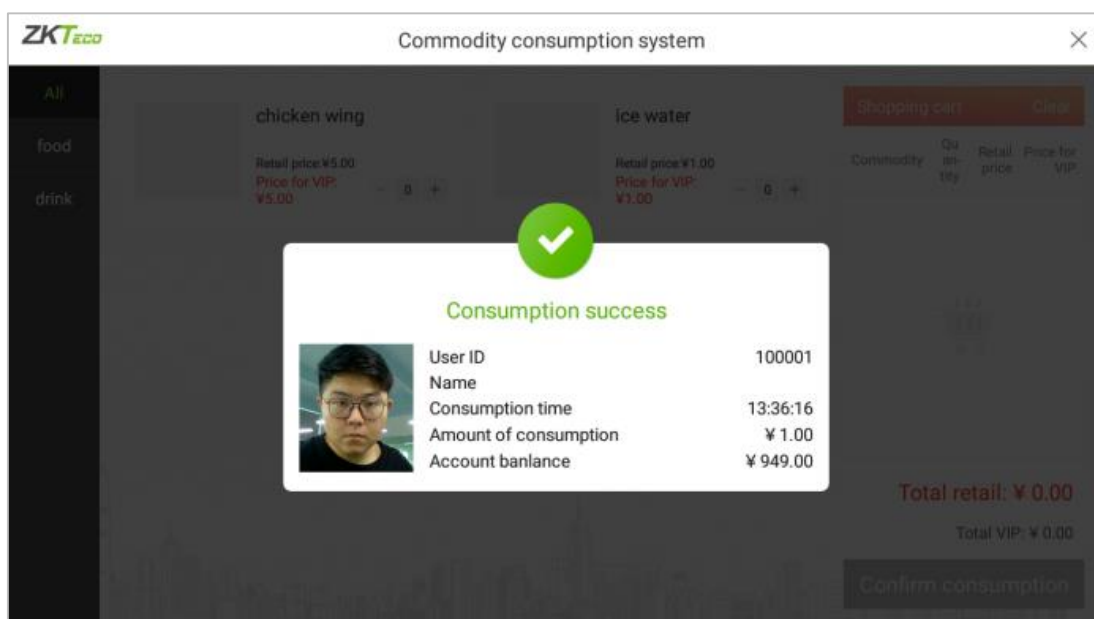
Device settings: You can enable the device voice prompts and adjust the volume.

Server settings: After opening the domain name mode, you can manually enter the server domain name, server address and server port .
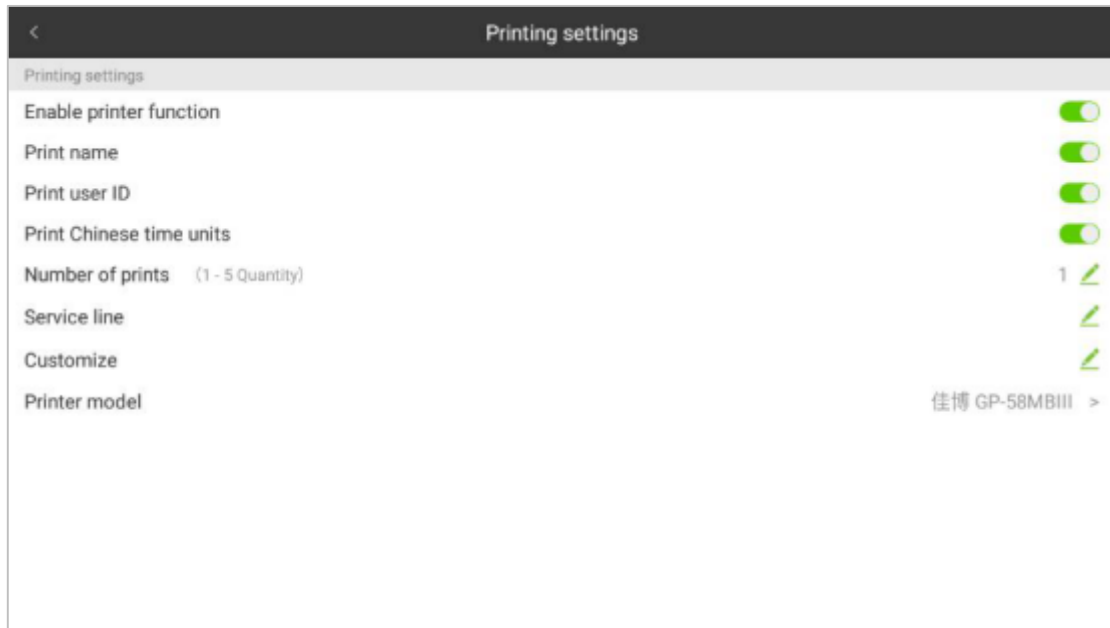
4.5 System Settings

The Operator can enter the interface by clicking **System Settings** on the main interface (refer the figure given below)

4.5.1 Printing Settings

Click **Printing settings** on the device to open the print interface. Here Operator can modify the print content, as shown in the following figure:

4.5.2 Upload Log

When the Operator clicks **Upload Log** on the device, a prompt box will pop up. The Operator can decide whether to upload the log by selecting **Confirm** or leave it by selecting **Cancel**, as shown in the following figure:
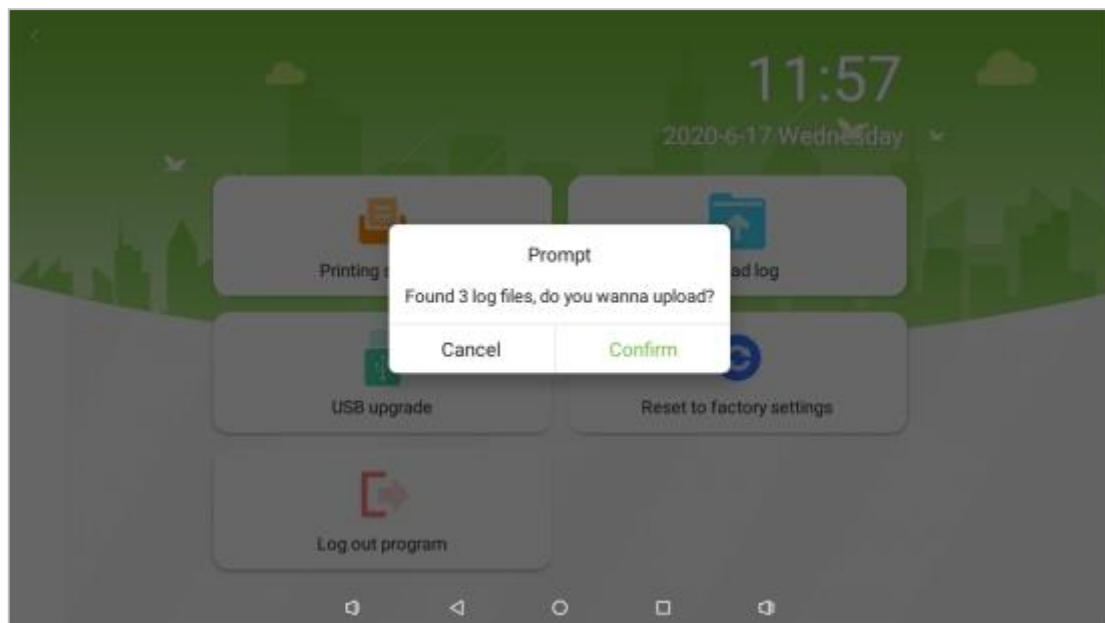
4.5.3 USB Upgrade

Connect the U disk to the device, and then click **USB upgrade** on the device to upgrade.

4.5.4 Reset to Factory Settings

Click **Reset to factory settings** on the device and a prompt box will pop up. The Operator can accordingly decide to restore the factory settings by selecting **Confirm** or do not restore by selecting **Can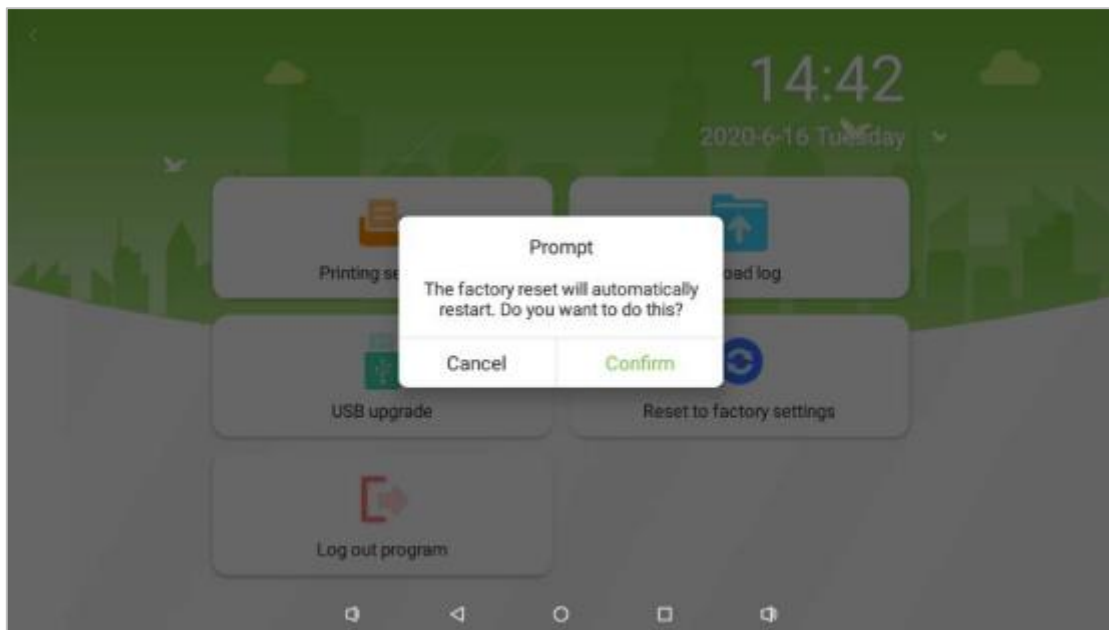cel**. Restoring the factory settings will clear all the user's settings and account information and restart the device. Logging in the device again needs to change the relevant settings of the device. Refer the figure shown below:

4.5.5 Logout

After the Operator clicks **Log out program** the device navigates to the main interface, but the **Consumption Pattern** and **Consumption Inquiry** functions on the main interface will be grayed out, as shown in the figure below:

The operator can automatically jump to the login interface by clicking the **Consumption Pattern** or **Consumption Inquiry**. Enter the account password to use all the functions normally.

4.6 System Information

The Operator can view the detailed information of the system by clicking **System information** on the main interface of the device, as shown below:

Statement on the Right to Privacy

Dear Customers,

Thank you for choosing this hybrid biometric recognition product, which was designed and manufactured by ZKTeco. As a world-renowned provider of core biometric recognition technologies, we are constantly developing and researching new products, and strive to follow the privacy laws of each country in which our products are sold.

We Declare That:

1. All of our civilian fingerprint recognition devices capture only characteristics, not fingerprint images, and do not involve privacy protection.

2. None of the fingerprint characteristics that we capture can be used to reconstruct an image of the original fingerprint, and do not involve privacy protection.

3. As the provider of this device, we will assume no direct or indirect responsibility for any consequences that may result from your use of this device.

4. If you would like to dispute human rights or privacy issues concerning your use of our product, please directly contact your dealer.

Our other law-enforcement fingerprint devices or development tools can capture the original images of citizen's fingerprints. As to whether or not this constitutes an infringement of your rights, please contact your Government or the final supplier of the device. As the manufacturer of the device, we will assume no legal liability.

Note:

The Chinese law includes the following provisions on the personal freedom of its citizens:

1. There shall be no illegal arrest, detention, search, or infringement of persons;

2. Personal dignity is related to personal freedom and shall not be infringed upon;

3. A citizen's house may not be infringed upon;

4. A citizen's right to communication and the confidentiality of that communication is protected by the law.

As a final point, we would like to further emphasize that biometric recognition is an advanced technology that will be certainly used in E-commerce, banking, insurance, judicial, and other sectors in the future. Every year the world is subjected to major losses due to the insecure nature of passwords. The Biometric products serve to protect your identity in high-security environments.

Eco-friendly Operation

	The product's "eco-friendly operational period" refers to the time period during which this product will not discharge any toxic or hazardous substances when used in accordance with the prerequisites in this manual. The eco-friendly operational period specified for this product does not include batteries or other components that are easily worn down and must be periodically replaced. The battery's eco-friendly operational period is 5 years.

Hazardous or Toxic substances and their quantities					
Component Name	Hazardous/Toxic Substance/Element				
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr6+)	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
Chip Resistor	×	○	○	○	○	○
Chip Capacitor	×	○	○	○	○	○
Chip Inductor	×	○	○	○	○	○
Diode	×	○	○	○	○	○
ESD component	×	○	○	○	○	○
Buzzer	×	○	○	○	○	○
Adapter	×	○	○	○	○	○
Screws	○	○	○	×	○	○

○ indicates that the total amount of toxic content in all the homogeneous materials is below the limit as specified in SJ/T 11363—2006.

× indicates that the total amount of toxic content in all the homogeneous materials exceeds the limit as specified in SJ/T 11363—2006.

Note: 80% of this product's components are manufactured using non-toxic and eco-friendly materials. The components which contain toxins or harmful elements are included due to the current economic or technical limitations which prevent their replacement with non-toxic materials or elements.

ZKTeco Industrial Park, No. 26, 188 Industrial Road,

Tangxia Town, Dongguan, China.

Phone   : +86 769 - 82109991

Fax   : +86 755 - 89602394

www.zkteco.com