



## User Manual of YalaTech Electronic Shelf label

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# STATEMENT

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# ABOUT THE DOCUMENT

Thank you for using YalaTech Cloud ESL Management System. Please read the documentation before using this product.

## TARGET USERS

This manual introduces how to use the basic functions of the YalaTech cloud ESL. It is suitable for the following groups of people:

- Operation and maintenance engineer
- Service Engineer
- Storage administrator
- Information related management and application personnel

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# 1 Function overview

YalaTech electronic shelf label is an electronic display device with information sending and receiving function, based on server system, wireless access point, electronic shelf Labels and smart phone terminals can quickly transmit product information to the electronic shelf label (display end) in real time, so as to achieve the same price between the cashier or database product information and the shelf, and help physical stores get rid of the cumbersome and inconvenience caused by traditional paper price labels.

## 2 Product composition and introduction

By default, the use of electronic shelf labels needs to include 5 main parts: base station, electronic shelf label, accessories, ESL management system, and APP. Among them, the base station and electronic shelf label are the main hardware; the ESL management system and APP are the main software. Accessories are applicable to different installation methods of electronic shelf labels.

## 2.1 Product Topology

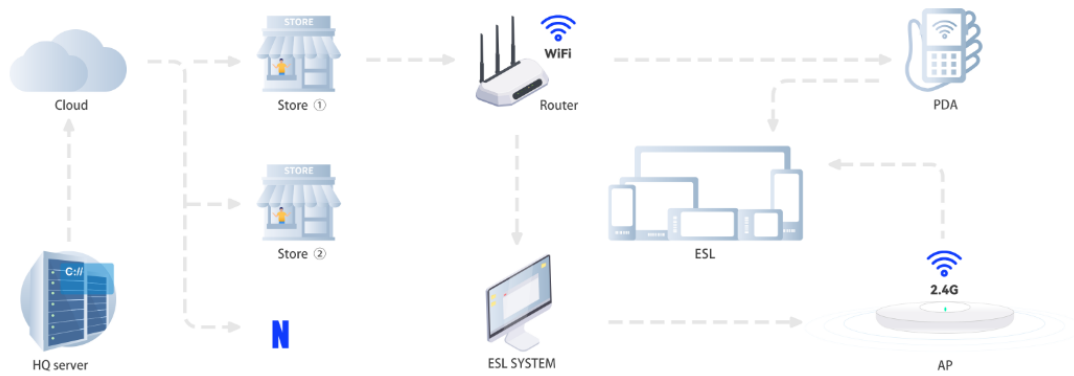


Figure 2-1 Product Topology (full version)

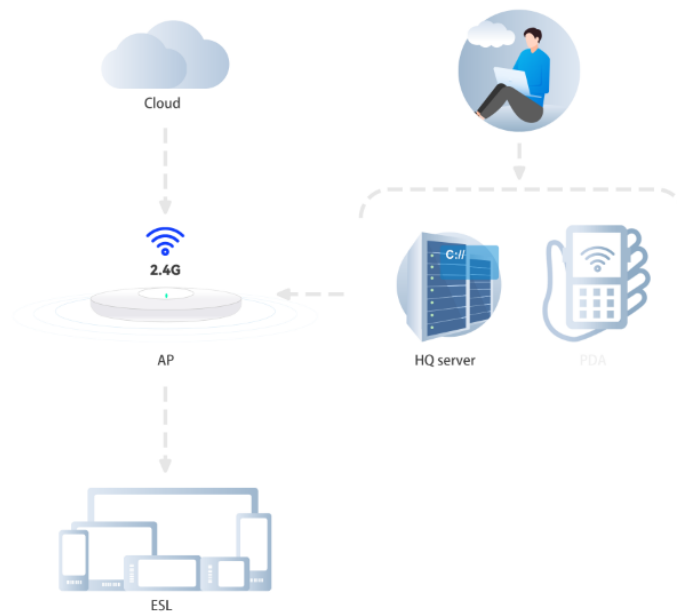


Figure 2-2 Product Topology (simple version)

## 2.2 Base Station Introduction

2.2.1 The front of the base station mainly includes the working indicator (for details, please refer to the "Common Problems and Maintenance" section). As shown in Figure 2-3.



Figure 2-3 Front of the base station

2.2.2 The back of the base station mainly includes product labels and interfaces. The product labels include product name, product model, operating voltage, ID, and MAC address. As shown in Figure 2-4.

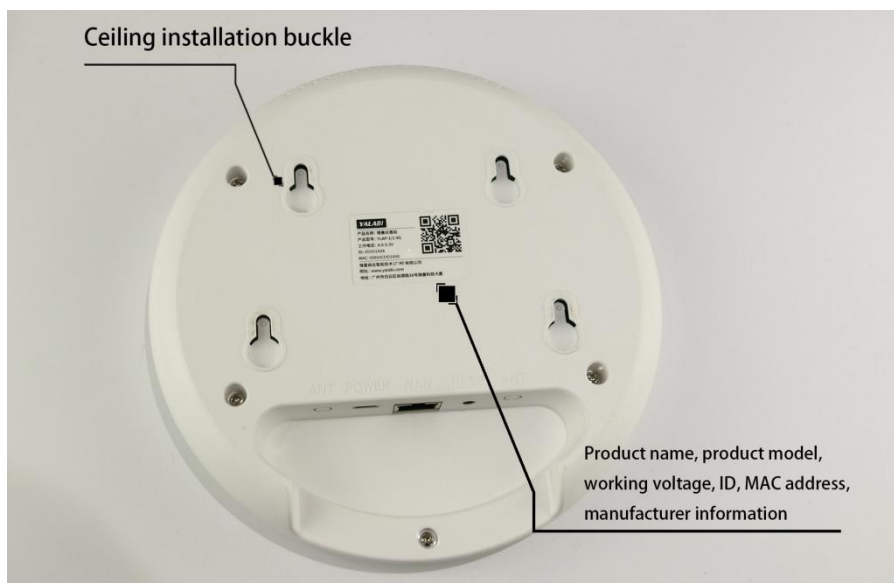


Figure 2-4 Back of the base station



2.2.3 The interface on the back of the base station includes a power interface, a network interface, and a reset interface. As shown in Figure 2-5.

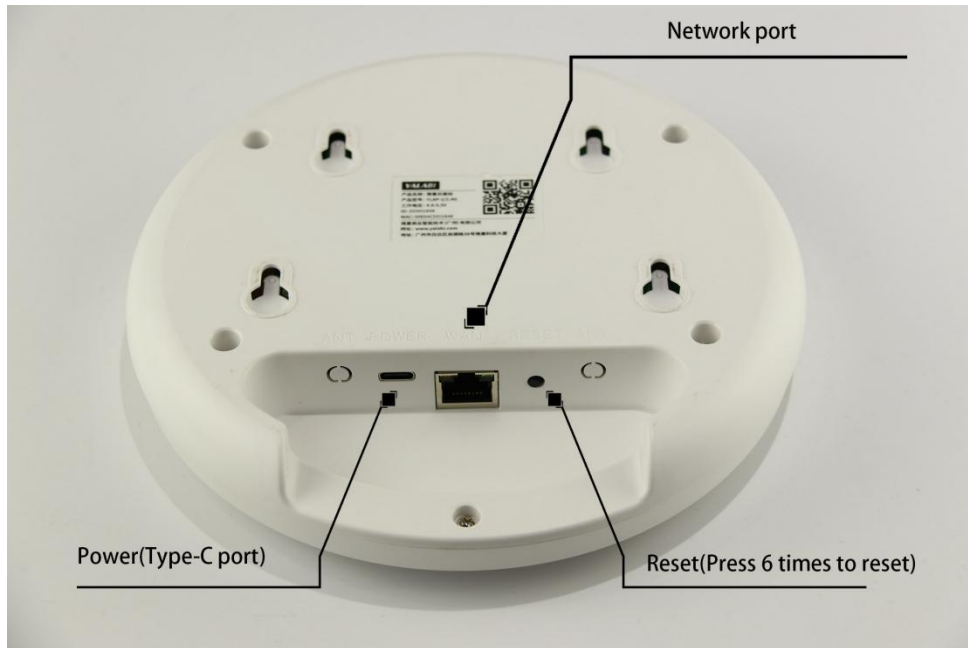


Figure 2-5 Interfaces of the base station

## 2.3 ESL Introduction

2.3.1 The electronic shelf label is divided into different sizes according to the screen size. The front mainly includes the electronic shelf label number and bar code, and the display of electronic shelf label. As shown in Figure 2-6

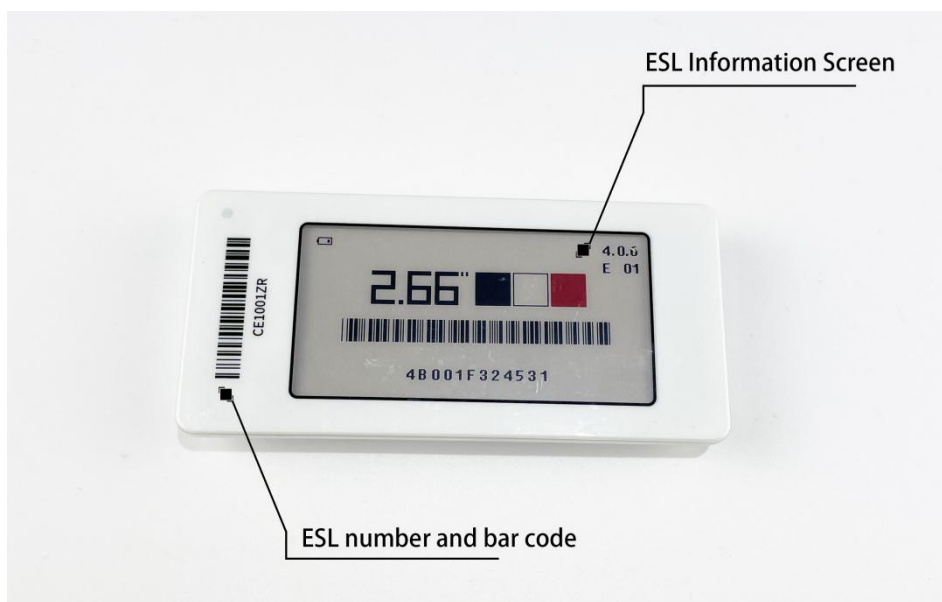


Figure 2-6 Front view of the electronic shelf label

2.3.2 The back of the electronic shelf label mainly contains the product information of the electronic shelf label and the buckle.

2.3.3 The back of the electronic shelf label is a detachable back cover. As shown in Figure 2-8



Figure 2-8 The notch to open the base case

2.3.4 The default template diagram of the electronic shelf label when it leaves the factory, including power, size, supported color, bar code and serial number, and version number. As shown in Figure 2-9

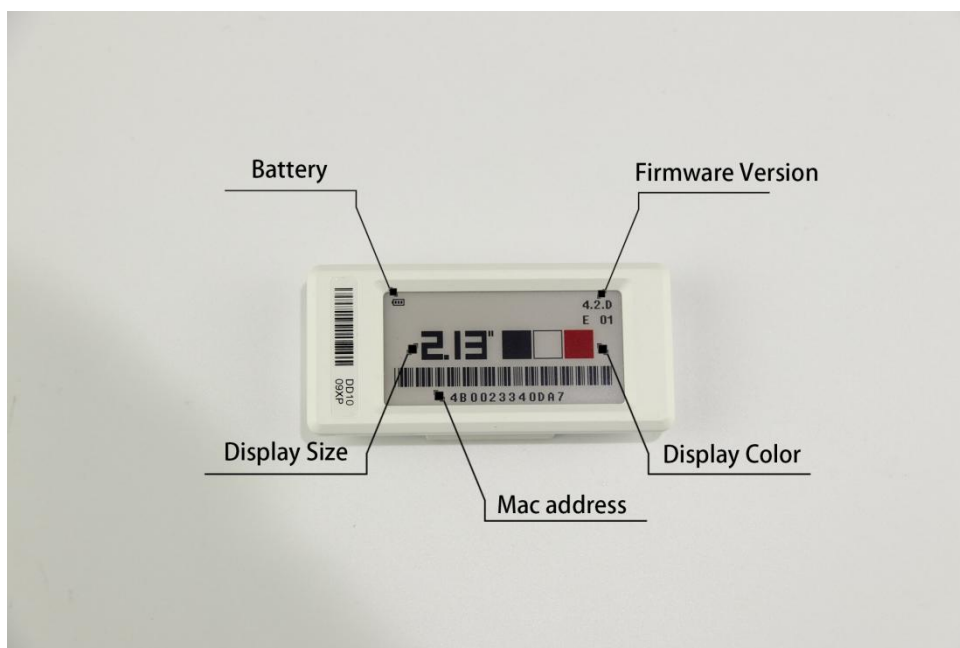


Figure 2-9 Introduction to the ESL screen

# 3 Product Installation

## 3.1 Base station Installation

The base station is generally installed on the ceiling, and the recommended installation height is between 3 meters and 5 meters from the ground.

The base station installation steps are as follows:

(1). Open the box, it contains base station\*1, ceiling plate\*1, power cord\*1, charging head\*1.

(2) To install the base station on the ceiling, fix the ceiling plate on the top of the wall or on the bracket, and then hang the base station on the ceiling plate. As shown in Figure 3-2



Figure 3-2 Ceiling installation of base station

(3) After the base station is installed, it needs to be connected to the power and network. The power supply is inserted into the "POWER" port, and the network cable is inserted into the "WAN" port. The installation method is shown in Figure 3-3.



Figure 3-3 Power and network cable connection example

(4) The power supply and the network is normal, and the indicator light on the front of the base station is green and flashes once every second, indicating that the base station is working normally. Log in to the ESL system, from "Device Management" and "Device Heartbeat", you can see that the base station status is "Online". As shown in Figure 3-4



Figure 3-4 Flashing lights on the front of the base station

## 3.2 Electronic Shelf Label Installation

Electronic shelf labels will be equipped with different accessories according to different application scenarios, mainly including the following installation methods, namely rails, clips, table supports, hooks, poster stands.

### 3.2.1 Installation of Rails

Main application scenarios: Shelves

The rails can be fixed on the shelf by glue or screws, and the electronic shelf label is installed on the rail.



### 3.2.2 Clips

Main application scenarios: shelves, promotion stand, etc.

When the electronic shelf label needs to be moved frequently, or the ESL tags cannot be installed with rails, it is recommended to use clips. Clips need to be equipped with an adaptor to fix the ESL tag.

Main application scenarios: non-standard shelves, aquatic glass boxes, etc.



### 3.2.3 Table Supports

Main application scenarios: placed on the countertop.



Due to the wide variety of ESL accessories, there is no detailed description for each one here, please contact our service team to get the installation guide if you need it.

# 4 ESL System Introduction

The ESL system is developed by YalaTech to facilitate the daily use of electronic shelf labels. It can not only help us manage product information, prices, hardware, template display design, etc effectively, but also quickly synchronize the specified product information to different stores in real time through this system, without having to arrive at the scene.

## 4.1 Basic Functions

This part mainly introduces the account login and management operations of the system.

### 4.1.1 Conditions of use

A. For customers using YalaTech cloud, you only need to confirm that your web browser can access the Internet normally, and you can access it normally;

B. For customers who use local server deployment or private cloud deployment, you are required to install and deploy the ESL system first, then you can use the ESL system through a web browser;

### 4.1.2 Log in

On the login page, enter the user name and password, and then click "Login", you can log in normally.

### 4.1.3 Interface after login

Depending on the type of account, the system will display the corresponding page. Account types are mainly divided into merchant accounts and store accounts.

#### Merchant account

If you log in with a merchant account, you will see the merchant management page, as shown in Figure 4-2. The left menu includes Access Control, Product Management, Store Management, Template Management, Device Management, ESLs Check, System Settings, and Help Center.

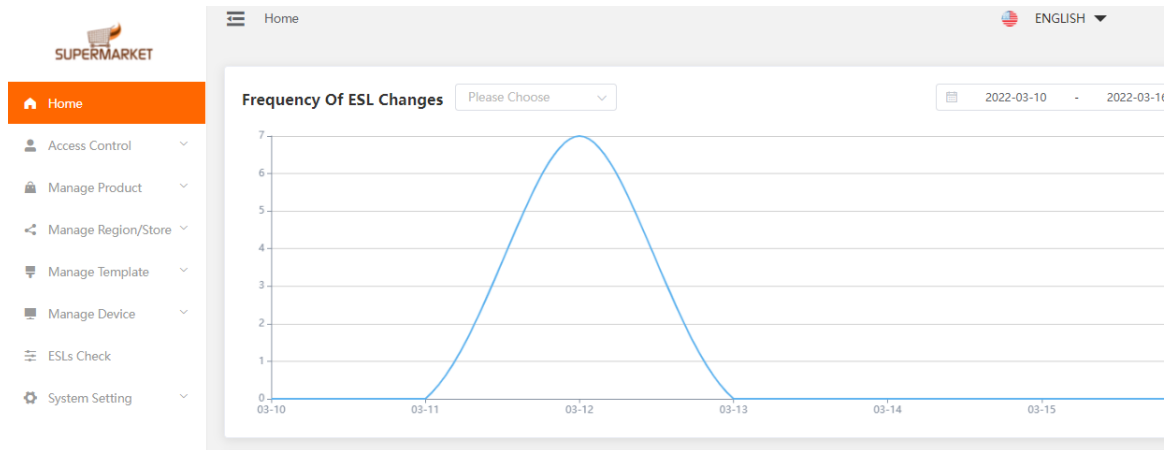


Figure 4-2 Merchant Homepage Interface

### Store account

If you log in with a store account, you will see the store management page. The left menu includes Access Control, Product Management, Template Management, Device Management, ESLs Check, System Settings, and Help Center.

### 4.1.4 Select language

You can switch the language of the system by selecting the language. The language options currently include English, Simplified Chinese and Traditional Chinese. In the upper right corner of the system, select a language from the language box.

### 4.1.5 Password change

After logging in to the system, the current login name is displayed in the upper right corner of the page. You can click the name and then click "Change Password" to change the password. As shown in Figure 4-5 and Figure 4-6.

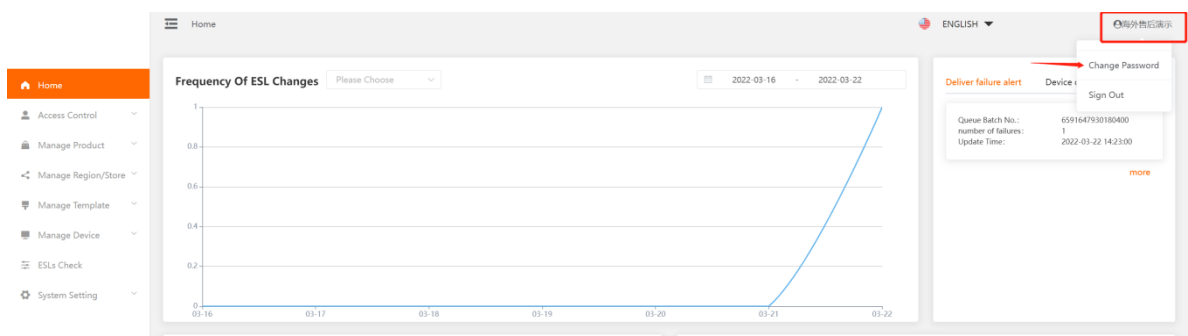


Figure 4-5 Click the user name



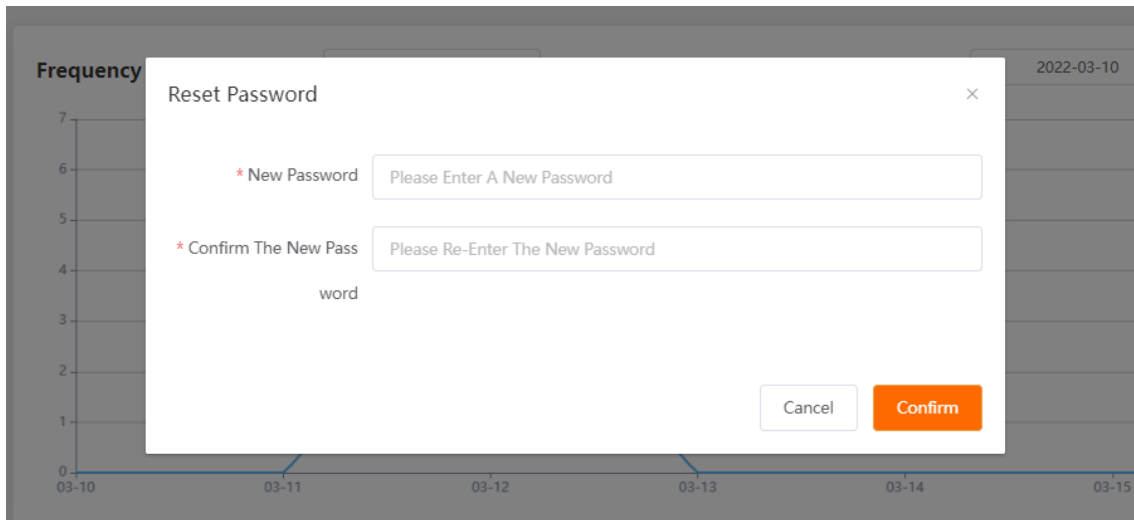


Figure 4-5 Change password

### 4.1.6 Logout

When you need to log out of the current account, click the name in the upper right corner and click log out to log out.

### 4.1.7 Basic Settings

The system basic settings are mainly used to update or view the basic information of the current account. You can click on the left menu bar, select "System Settings", "Basic Settings" to enter the basic settings page, as shown in Figure 4-8. Including merchant LOGO, merchant number, merchant name, number of stores, account number, custom domain name, base station sleep, ESL heartbeat, reserved decimal for price, abnormal alarm settings, merchant key.

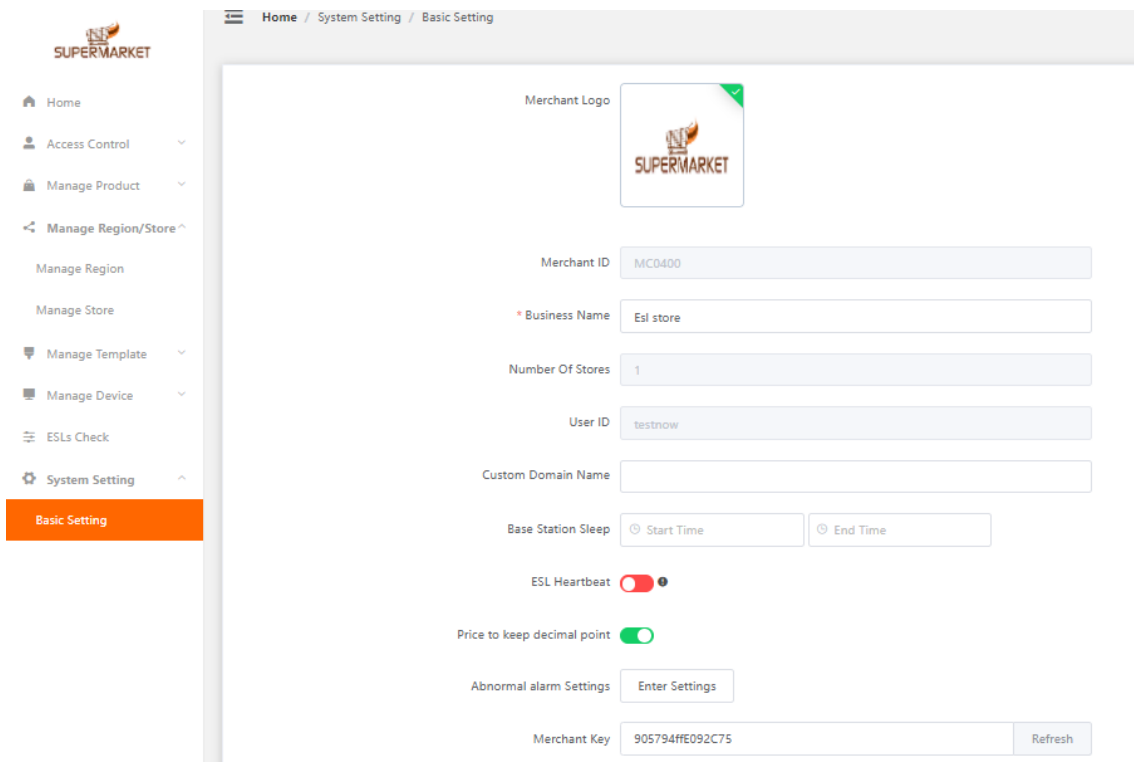


Figure 4-8 Basic settings

**Merchant LOGO:** By uploading the LOGO, the LOGO information can be displayed in the upper right corner of the system management platform.

**Merchant ID:** merchant account starts with MC, store account starts with SC. A merchant account can manage 0-N store accounts.

**Merchant Name:** You can customize the display name of the current account. After changing, it will be displayed in the upper right corner.

**Number of stores:** If the merchant ID starts with MC, it can display how many subordinate stores the merchant account manages. If the merchant number starts with SC, it will be displayed as 0 for the store number.

**Custom domain name:** custom domain name as access address.

**Base station sleep:** The user needs to specify the time to set the time when the base station enters the sleep state. It is not enabled by default.

**ESL heartbeat:** used for the ESL tag to actively report the heartbeat status every day.

**Price with decimals:** You can set whether the price needs to be kept with two decimal places.

**Abnormal alarm settings:** abnormal alarms such as failure to update, base station offline, etc.

will be sent to the designated mailbox.

**Merchant key:** It is mainly used for API connection and cannot be changed.

## 4.1.8 Data Report

The data report shows you 4 parts, namely the price change frequency report, the list of early warning information, the ESL & base station summary, and the proportion of store device. When you log in to your account, the page directly presented by the system is the data report, or you can open the data report page by clicking "Home" on the left menu bar. As shown in Figure 4-9

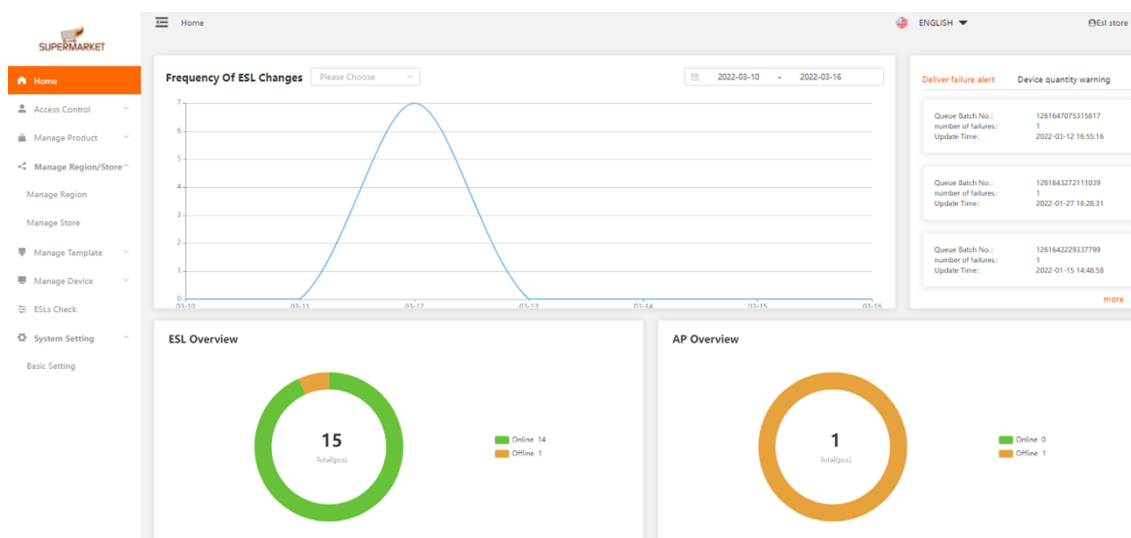


Figure 4-9 Homepage Data Report

## 4.2 Access Control

Access Control can help you set different store permissions and different role permissions to facilitate the management of electronic shelf labels and device. Access Control is divided into two parts: role management and account management.

### 4.2.1 Role Management

Click "Access Control", "Role Management" to open the role management list, and you can see the included role names. As shown in Figure 4-10

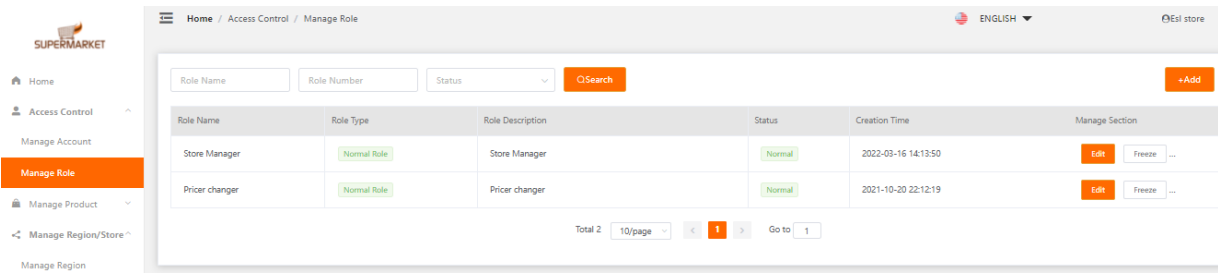


Figure 4-10 Role management list

If you need to view the permissions of a role, click the "Edit" button of the corresponding role to open the role setting dialog box, and check the box to indicate the permissions it has. As shown in Figure 4-11.

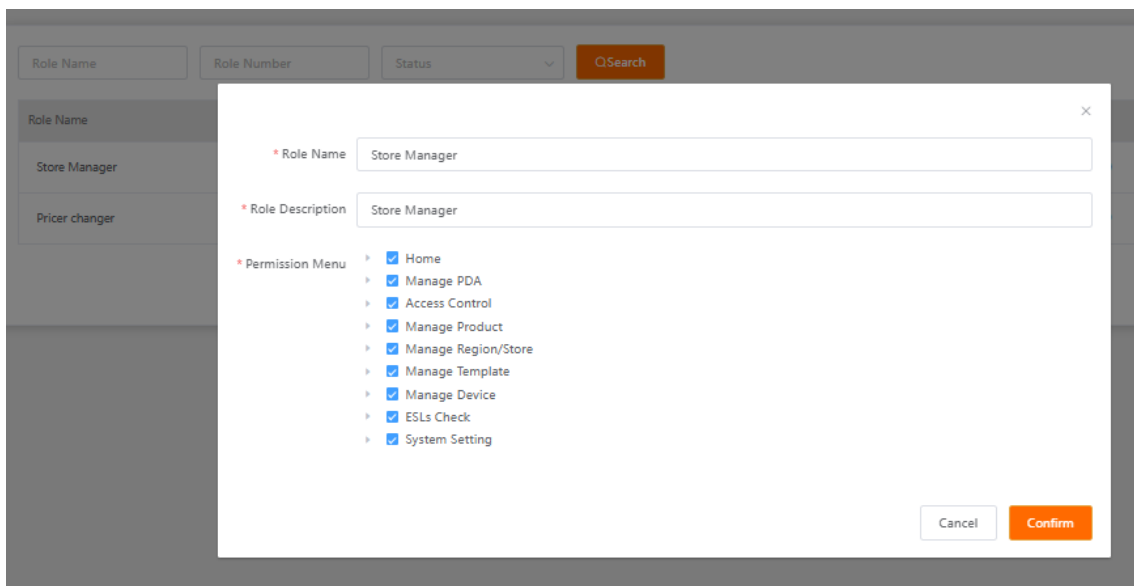


Figure 4-11 Role setting dialog box

If you want to add a role, click "Access Control", "Role Management", and the "Add Common Role" button in the upper right corner to open the role setting dialog box, and enter the role name and role description. In the permission menu list, for the permissions that need to be granted to the current role, make sure to tick them in front of them, and uncheck them if they are not needed, and click OK. As shown in Figure 4-12.

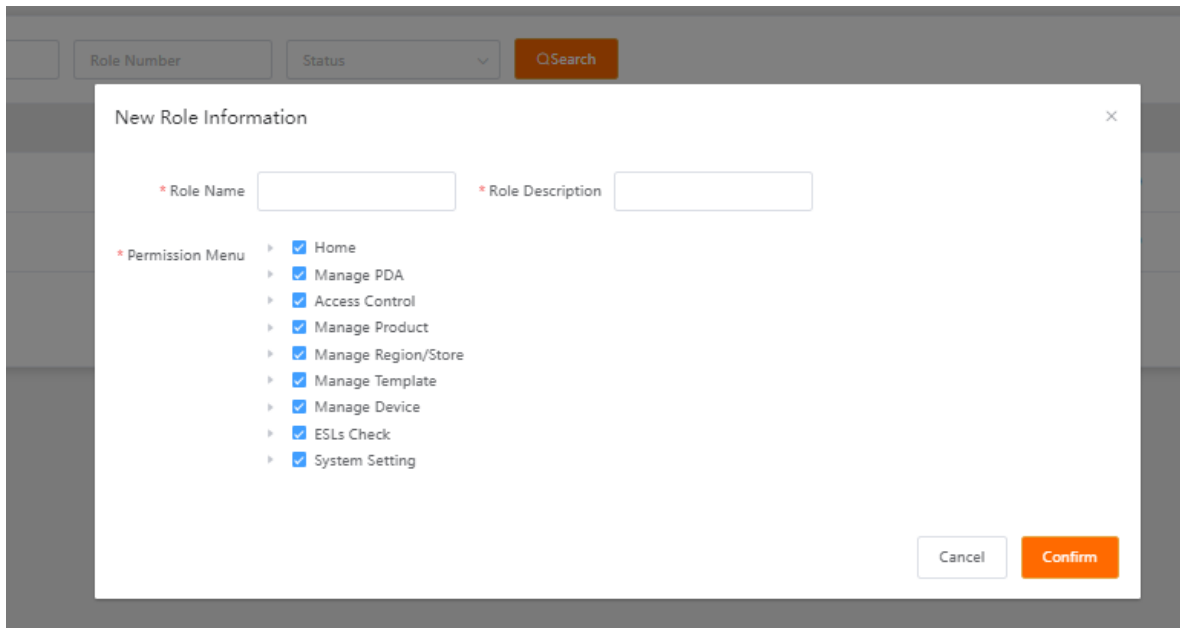


Figure 4-12 Add new role

## 4.2.2 Account Management

After adding a role, click "Access Control", "Account Management" to open the account management list, and the currently owned accounts can be displayed. As shown in Figure 4-13.

Username	Mobile Number	Alias Name	Role	Status	Creation Time	Manage Section
Simon	+8613538102306	Simon	Pricer cha...	Normal	2022-03-16 14:19:06	Edit Freeze Reset Password Delete
Alan	+8613538102306	Alan	Store Man...	Normal	2022-03-16 14:18:46	Edit Freeze Reset Password Delete

Total 2 10/page < 1 > Go to 1

Figure 4-13 Account management list

To add an account, click the "Add" button in the upper right corner to open the "Add Account Information" dialog box, and enter the user name, mobile phone number, password, and role. Click OK to create an account with the "Store Staff" role permission. This will allow you to log in with the newly created username and password.

## 4.3 Device Management

The device management function mainly manages the base station and ESL device included in the current account, including device heartbeat, ESL management, device transfer, and LED flashing management.

### 4.3.1 Device Heartbeat

The device heartbeat is used to check the basic information of the base station. Click "Device Management", "Device Heartbeat" to open the device heartbeat list. The list mainly includes two parts: device search function and device list.

Device search function, you can search for device by entering the device number, or the store it belongs to, or selecting the device status.

The device list shows the device number, device type, device alias, device model, firmware version, store, device temperature, heartbeat time, device power, device status, and operating area.

(Note: Heartbeat time refers to when the last base station became online.)

Device ID	Device Type	Alias Name	Device Model	Firmware Version	Related Store	Device Temperature	Manage Section
XD002363	Base Station		Station2.4G	2.1.1 (Dec 23 2020 16:23:50)	海外售后演示		

Figure 4-15 Device heartbeat list

In the operation area, there are mainly 3 buttons, namely, modify the base station, set the alias, and upgrade.

Click the "Modify Base Station" button to open the edit upgrade text. By default, please do not modify any content, otherwise the base station may not work properly. This page mainly includes the device model, base station number, MAC address, NFC code, and automatic upgrade.

Set alias: You can set an alias for the base station, and the alias can easily allow you to distinguish which area of the store the current base station is responsible for.

## 4.3.2 ESL Management

ESL management is used to check the basic information of ESL tags. Click "Device Management", "ESL Management" to open the ESL management list. The list mainly includes 3 parts: device search function, device list, and batch binding.

Search function, you can enter the device number, or product information, or store information, or device model to search for the device.

The device list shows the device number, MAC address, store, ESL model, template name, product name, and operation area. As shown in Figure 4-18.

Device ID	MAC Address	Related Store	ESL Model	Template Name	Product Name	Manage Section
CE1005J5	0012480023A7D747	Esl store	LiteSeries2.66in-Bla...	Electric Vehicle BWY	Мобильный телефон Xiaomi	Modify Check
DC10004C	00124800253E32A5	Esl store	SlimSeries1.54in-BL...	1.54 QiQi	Мобильный телефон Xiaomi	Modify Check
CG101580	0012480025667281	Esl store	SlimSeries4.2in-Bla...	法语	Мобильный телефон Xiaomi	Modify Check
DE100363	0012480021D5F835	Esl store	LiteSeries7.55in-Bla...	Unbound	Unbound	Modify Check
DG1003K1	0012480023419387	Esl store	LiteSeries4.2in-Blac...	Qiqi4.21	Мобильный телефон Xiaomi	Modify Check
DF10037H	0012480023A86C31	Esl store	LiteSeries2.9in-Blac...	2.9	Milk	Modify Check
DD1002E0	001248001F30D799	Esl store	LiteSeries2.13in-Bla...	Unbound	Unbound	Modify Check
DD1009W5	0012480023340E47	Esl store	LiteSeries2.13in-Bla...	011-2.13 Video	Fun riding A30C	Modify Check
CF101X8Y	0012480022D38F4D	Esl store	SlimSeries2.9in-Bla...	2.9-S062	Shirts	Modify Check
CG100PB8	001248001FBFB166	Esl store	SlimSeries4.2in-Bla...	迷你攝	Fun riding A30C	Modify Check

Figure 4-18 ESL management list

In the operation area, there are two buttons, namely Modify and View Updates.

Click the "Modify" button to enter the ESL update operation page, and you can update the currently selected ESL separately. For operation instructions, please refer to "4.6.2 Single Electronic Price Label Update Operation" section.

Click "View Update" to open the "Query Update" dialog box, and you can query the update history of the currently selected ESL. For operation instructions, please refer to the "4.6.2 Single

ESL Update Operation" section.

Click "Batch Binding" in the upper right corner of the current page, you can open the "Batch Binding" dialog box, and you can update the product information of two or more ESL tags at the same time through the template file. For operation instructions, please refer to "4.6. 3 Bulk Update Operations" section.

### 4.3.3 LED Flash Management

LED Flashing management refers to the LED light that comes with the ESL tag itself, which can be used to set the timing and flashing frequency through flashing management for the purpose of reminder.

Click "Device Management", "Flash Management" to open the flash list. It mainly includes 3 parts: search function, flashing plan list, add new plan.

Through the search area, you can search for the specified plan by plan name and status.

The flashing schedule list includes the schedule name, flashing frequency, display color, flashing time period, associated template, status, and operation. The operation area will be displayed as "stop" or "complete" in different states. As shown in Figure 4-19.

Plan Name	Flicker Frequency	Display Color	Flashing Time Period	Associated Template	Status	Manage Sec
111	5Second/Time	Red	2022-02-11 11:00:00至2022-02-11 11:30:00	2.9	Over	Carry On
222	5Second/Time	Red	2022-03-11 11:00:00至2022-03-11 17:30:00	QIQ4.2	Over	Carry On
222	5Second/Time	Red	2022-03-10 11:00:00至2022-03-10 17:30:00	QIQ4.2	Over	Carry On
222	5Second/Time	Red	2022-03-09 11:00:00至2022-03-09 17:30:00	QIQ4.2	Over	Carry On
222	5Second/Time	Red	2022-03-08 11:00:00至2022-03-08 17:30:00	QIQ4.2	Over	Carry On
222	5Second/Time	Red	2022-03-07 11:00:00至2022-03-07 17:30:00	QIQ4.2	Over	Carry On
222	5Second/Time	Red	2022-03-06 11:00:00至2022-03-06 17:30:00	QIQ4.2	Over	Carry On
222	5Second/Time	Red	2022-03-05 11:00:00至2022-03-05 17:30:00	QIQ4.2	Over	Carry On
222	5Second/Time	Red	2022-03-04 11:00:00至2022-03-04 17:30:00	QIQ4.2	Over	Carry On
222	5Second/Time	Red	2022-03-03 11:00:00至2022-03-03 17:30:00	QIQ4.2	Over	Carry On

Figure 4-19 LED Flashing plan list



Click "Add Plan" in the upper right corner to open the New Plan dialog box. As shown in Figure 4-20.

The dialog box contains the following fields and options:

- \* Plan Name: Text input field.
- Display Color: Radio buttons for Red (selected), Yellow, Green, Green, Blue, and Purple.
- Flicker Frequency: Radio buttons for 1Second/Time, 5Second/Time (selected), 10Second/Time, and 15Second/Time.
- \* Associated Template: Dropdown menu with "Please Choose" selected and a red border. Below it is the text "Please Select An Associated Template".
- \* Flashing Date: Date range selector with "Start Date" and "End Date" fields.
- \* Flashing Time Period: Time range selector with "09:00:00" and "17:30:00" fields.
- Number Of Flashes: Text input field.
- Estimated Power Consumption: Text input field.
- Buttons: "Cancel" and "Confirm".

Figure 4-20

The dialog box mainly includes the plan name, display color (6 different colors are supported), flashing frequency (4 different frequencies of flashing lights are supported), associated template, flashing date, flashing time period, flashing times, estimated power consumption.

In the dialog box, those with a red "\*" prompt must be filled in. When all the information is filled in, the number of flashes will be automatically calculated. Click to confirm, the flash plan is added normally.

## 4.4 Product Management

Product management is an important function of ESL System for product information management, and it is also one of the necessary information for the updating of ESL tags. The product management module mainly includes 5 parts: category management, product management, price change management, timed tasks, and timed price changes.

### 4.4.1 Category Management

Category management refers to the classification management function for different products. Through category management, it is easy to know the number of products contained in the

current account under different product categories.

Click "Product Management", "Category Management", the category of the product, you can see the categories contained in different stores and the number of products contained in different categories through the category management list.

You can also use the search function in the upper left corner to search for categories by category name or the date the category name was created.

To add a new category, click "Add Category" in the upper right corner, enter the category name in the "Add Category Information" dialog box that pops up, and then click OK to add the category.

#### **4.4.2 Add New Product**

Click "Product Management"--"Product List" to open the product list. If you need to add a single product, click "Add Product" in the upper right corner to open the "Add Product Information" dialog box.

The "Add Product Information" dialog box contains fields related to the product, mainly including product image, category name, product name, bar code, product number, product SKU, retail price, member price, promotion price, market price, inventory , unit, ingredients, specifications, storage conditions, edible method, item number, grade, origin, distributor, production license, shelf life, promotion start date, promotion end date, production date, production time, QR code.

The "Bar code" field is a field with a red "\*", indicating that it is a field that must be filled in. You can fill in the corresponding product information according to actual needs, and then click OK.

After adding the product information, if you find that the product is incorrectly filled in, or you need to update the product information, you can click the "Edit" button to open the "Edit Product Information" dialog box of the selected product, and make adjustments to the product. To modify the product information, click OK. As shown in Figure 4-26.

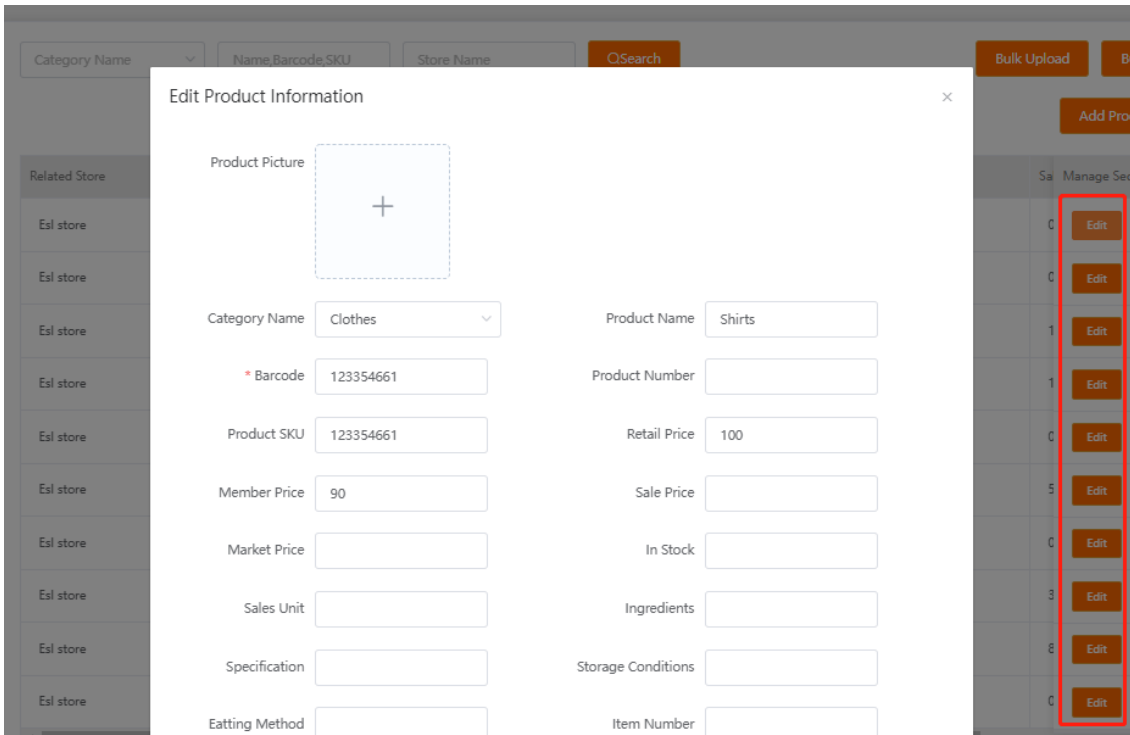


Figure 4-26 Product Information Editing Dialog Box

If the edited product information has been bound to the electronic shelf label and has been displayed on the ESL screen, click OK after re-editing or changing the product information. The updating instruction will be automatically triggered, and the ESL screen will be updated and display the latest product information.

### 4.4.3 Upload The Products In Bulk

Click "Product Management", "Product List", and click the "Batch Upload" button in the upper right corner. Open the batch upload dialog box, as shown in Figure 4-27.

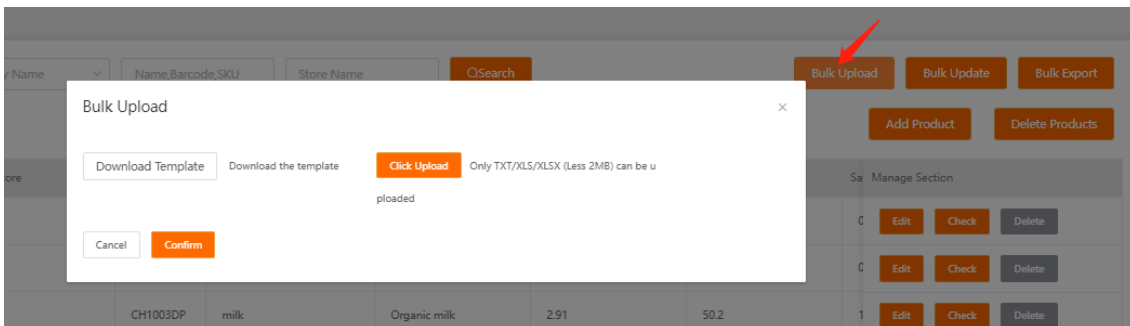


Figure 4-27 Batch upload

In the pop-up dialog box, select "Download Template" to download the template file to the computer, as shown in Figure 4-29.

Open the downloaded file (the file name is "Goods.xlsx"), and the table shows the various fields of the product. The bar code is a field that must be filled in, and other fields are optional. As shown in Figure 4-29.

A	B	C	D	E	F	G	H	I
Products name	Category	Products barcode	SKU	Retail price	Member price	Promotion price	Market price	Charge unit

Figure 4-29 Batch product upload template file

Add several products here, and save the file after filling in the contents of the file.

After the file is saved, click "Product Management", "Product List", click the "Batch Upload" button, select "Click to upload", then select the template file (default The template file name is "Goods.xlsx"), click Open to add the template file.

After adding, in the "Batch Upload" dialog box, you can see that the template file has been added, click "OK". The system will prompt "Import successful". Refresh the page, you can see that the product information has been imported in batches.

#### 4.4.4 Export The Product Information In Bulk

To export all the product information, click "Product Management", "Product List", click the "Batch Export" button in the upper right corner, the system will prompt whether to download the file, click the file to download (Note: Different browsers may prompt different message, just download the file according to the prompt).

#### 4.4.5 Modify Product Information In Batches

When you need to edit, add, and delete product information in batches, you can use the batch export function. By default, the product information will be downloaded to the local in the form of an Excel file, and you only need to batch edit, add, and delete operations in the table. , save it after completion, and upload it through "Batch Import".

Note: product information uses "product barcode" as the only field, and the product information is modified in batches. If the product barcode is not modified, the corresponding product information is updated in an overwritten manner. If the product barcode is modified, the system will process it according to the newly added corresponding product information.

## 4.4.6 Clear the products

Select "Product Management", "Product List", click the "Clear Product" button in the upper right corner, the system will open the "Delete All Products" dialog box, if you want to clear all product information, you need to enter the password for confirmation.

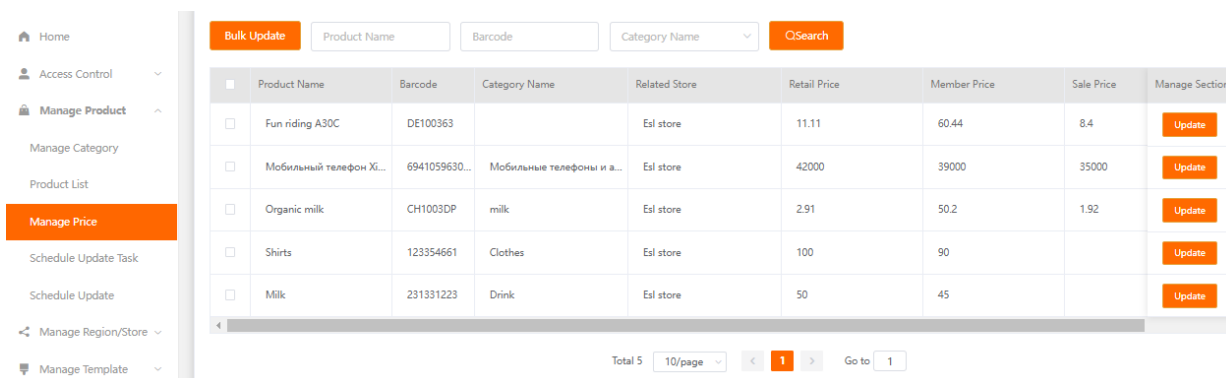
(Tip: There is no special reason, it is recommended not to clear the product. After clearing the product, all the product information displayed on the ESL will be restored to the default factory template.)

## 4.4.7 Price Update

When the price of the product changes, the ESL of the associated product will be refreshed automatically.

The prerequisite for the use of price change management is that the product must have been bound to the ESL. If it is not bound, it will not be displayed in the "change price management" list.

Click "Manage Product", "Manage Price", you can open the price management list, and display the product information that has been bound to the ESL. As shown in Figure 4-36.



	Product Name	Barcode	Category Name	Related Store	Retail Price	Member Price	Sale Price	Manage Section
<input type="checkbox"/>	Fun riding A30C	DE100363		Est store	11.11	60.44	8.4	Update
<input type="checkbox"/>	Мобильный телефон X...	6941059630...	Мобильные телефоны и а...	Est store	42000	39000	35000	Update
<input type="checkbox"/>	Organic milk	CH1003DP	milk	Est store	2.91	50.2	1.92	Update
<input type="checkbox"/>	Shirts	123354661	Clothes	Est store	100	90		Update
<input type="checkbox"/>	Milk	231331223	Drink	Est store	50	45		Update

Figure 4-46 price management list

There are 2 ways to change the price: single price change, price change in bulk.

### Single Price Change

Price change refers to adjusting the price of a single product information, select the product information that needs to be adjusted, and click the corresponding "Change Price" button to open the "Single Price Change" dialog box. You can modify the market price, promotion price, member price, and retail price of the current product information. The price modification of a single product information supports direct price modification. After the modification is completed, click OK to complete the price modification of the single product information. Using the price change function, the price information of the corresponding product list will change

synchronously. As shown in Figure 4-37.

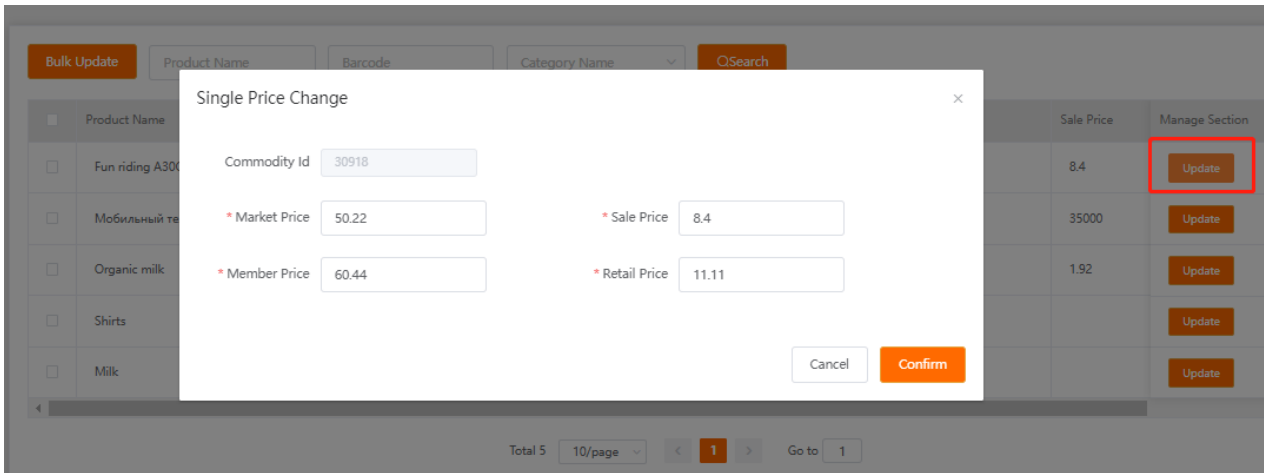


Figure 4-37 Single Price Change

### Price Change in Bulk

Price change in Bulk refers to the adjustment of the price of a batch of product information. For the required product information, keep a check mark in front of it. As shown in Figure 4-38.

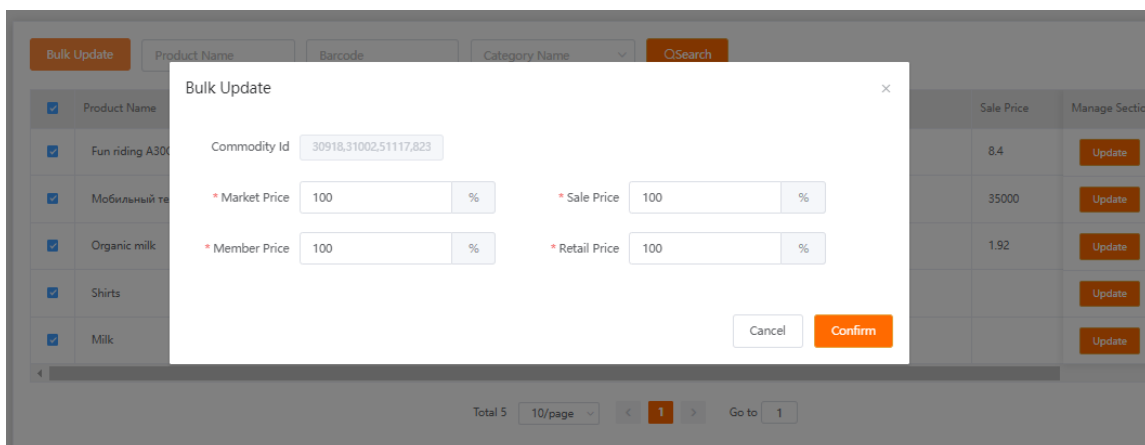


Figure 4-38 Price Update in Bulk

Then click the "Bulk Update", and you can change the market price, promotion price, member price, and retail price in batches. Price changes can only be adjusted by percentage, and accurate product price information is not supported.

## 4.5 Template Applications

The ESL screen can be designed into any pattern you want, and the pattern can be applied to any ESL of the corresponding size, which is called a template. Templates can contain static text, dynamic fields, geometric shapes, or other images you want to display. The ESL template only

supports black, white and red or black and white.

The templates of ESL are mainly obtained through the template market, or created by users.

### 4.5.1 Template Market

The template market has preset templates, which are mainly aimed at users who are new to ESL, or users who have low demand for templates or the templates provided in the template market can fully meet their needs.

Click "Template Management" and "Template Market" to open the template market page, where the templates of all ESL models are listed, just select the template corresponding to the size of the ESL tag, and click the corresponding template at the bottom left, click the "Copy Template" button in the corner, enter the template name, and you can see the selected template in the template list, as shown in Figure 4-40 and Figure 4-41.

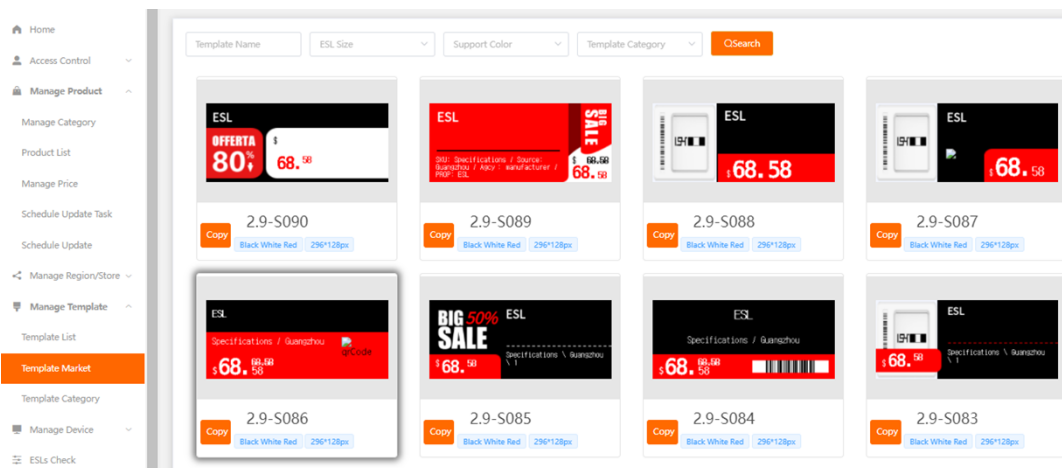


Figure 4-40 Template Market

Template ID	Template Source	Template Category	Template Preview	Template Name	Manage Section
7869	Headquarters	General template		010-7.5	Edit Copy Associated Template Delete
7867	Headquarters	General template		七七	Edit Copy Associated Template Delete
7665	Headquarters	General template		2.9-S062	Edit Copy Associated Template Delete
7664	Headquarters	General template		2.9	Edit Copy Associated Template Delete
7663	Headquarters	General template		2.9-S068	Edit Copy Associated Template Delete
7662	Headquarters	General template		2.9 inches testing	Edit Copy Associated Template Delete

Figure 4-41 The copied template in the template list

Or you can use the filter function at the top of the template market to quickly filter templates of a specified size or supported color, and then copy and use them.

## 4.5.2 Custom Template

Click "Template Management", "Template List", and "Add Normal Template" in the upper right corner to enter the template creation page. You can enter a template name, select a template category, select an ESL model, and enable or disable image optimization ( If you plan to add a picture or logo to the template, it is recommended to choose Open. The file size of the picture must be less than 250KB), choose the display direction of the text (including four directions of left, right, up, and down), and you can also choose the split-screen style (It refers to an ESL screen that displays several product information at the same time), here the split-screen style is selected by default as the first one, which is the single-screen style.

Remarks: For functional templates (promotions, memberships, etc.), when creating a normal template, keep it checked and unchecked. For detailed usage, the requirements can be determined with developers.

The fields marked with a red "\*" are required. As shown in Figure 4-43.

After filling in, click Next to enter the template design page.



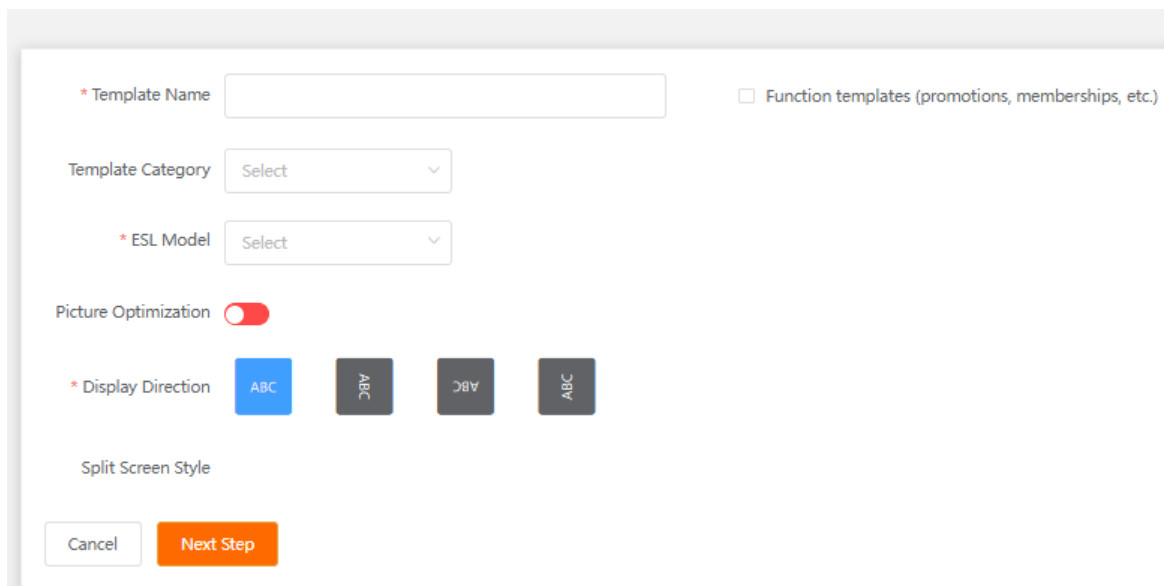


Figure 4-43 Template basic properties page

In the template design page, there are 3 areas, namely the left control and dynamic data area, template design area, property and layer area. In the upper right corner, there are 4 buttons of "Cancel", "Preview", "Reset" and "Save". As shown in Figure x-x.

Preview: You can preview the designed template that is displayed on the ESL screen.

Reset: Redesign all the current layers of the ESL.

Save: Save the current template (if the current template has been bound with an ESL tag, after saving, a updating command will be sent to all the bound ESL tags).

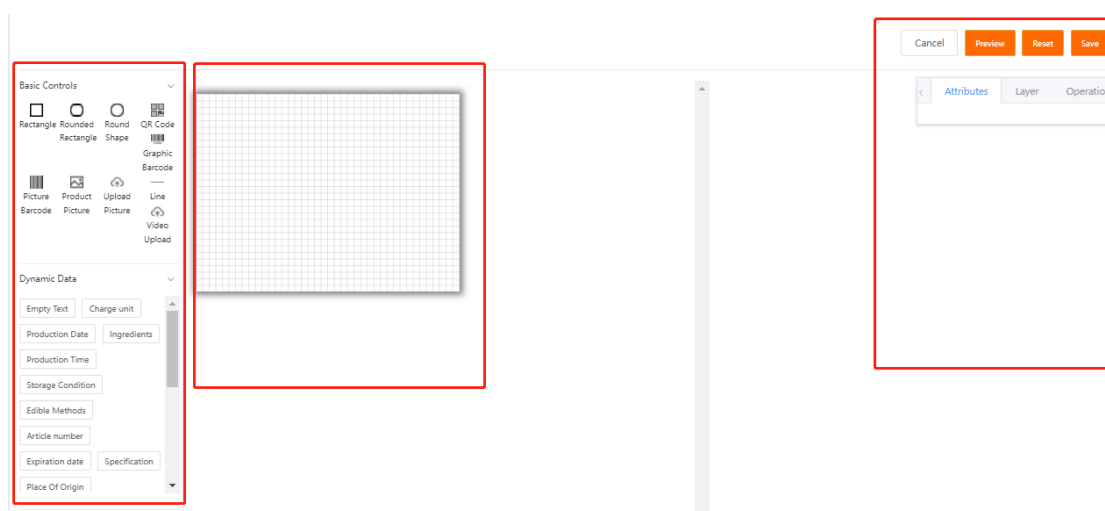


Figure 4-44 Template design page area

The control and dynamic data area includes 3 parts, namely basic controls, dynamic data, and decorative pictures.

The "rectangle, rounded rectangle, circle, line" in the basic controls are generally used for background filling;

"QR code", add information in the QR code field of the newly added product information, and the QR code can be displayed when the ESL is updated;

"Graphic and text bar code, picture bar code", display bar code, graphic bar code is the display of bar code plus numbers;

"Product picture", add the product picture when you are adding product information, and it will be displayed when it is updated;

"Picture upload, video upload" is used to upload local pictures and videos for display in the ESL tags. Note that the ESL does not support video play, so no need to upload the video.

Dynamic data: Dynamic data contains 2 types of data, one is empty text, you can enter any text information that needs to be entered. The other is all data fields except empty text, that is, dynamic data. There is a one-to-one correspondence between dynamic data fields and fields of product information. When the template is selected, the corresponding product can be displayed as the product information changes. information.

For example, when you select the "product name" of dynamic data, you will notice that it uses curly brackets "{}" to enclose the field, indicating that this field can display product information dynamically. Enter a "product name" without curly braces, which is represented as a static field.

After saving, select the "2.9-inch template design demo" template on the ESL updating page, select a product information, you can see that the "{product name}" above is displayed as "fish meat", which is the product information we selected (the lower right corner is the product information), and the "product name" below has not changed due to the selection of product information. As shown in Figure 4-46.

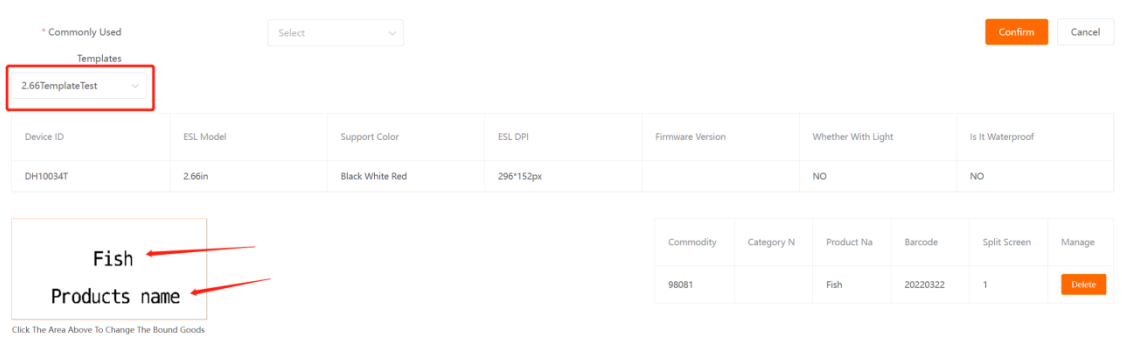


Figure 4-46

Decorative pictures: It can be considered as an extension of the basic controls, mainly some graphics, used for background decoration and beautification.

Attribute and layer area refers to setting the selected control or field. Select a control or field at will, and the attribute and layer area will open the corresponding attribute information, and you can make more detailed or precise settings. It mainly includes content, font selection, font size, text spacing, font color, font position, text direction, background color, border color, rotation, and coordinates. As shown in Figure 4-47.



Figure 4-47

Select a layer to display all layers of the current template, delete layers, or move up and down positions. As shown in Figure 4-48.



Figure 4-48

For more template design, you can learn video by clicking "05 Custom Template Making [Video]" in "Help Center", "User Guidance".

### 4.5.3 Split Screen Template

In section 4.5.2, we have learned about the design of a single-screen template. Sometimes you may want to display multiple product information on the same ESL. When creating the template basic property page, you can select more than one in the "split screen style", as shown in Figure 4-50.

\* Template Name   Function templates (promotions, memberships, etc.)

Template Category

\* ESL Model

Picture Optimization

\* Display Direction

ABC	ABC	ABC	ABC
-----	-----	-----	-----

Split Screen Style

1	1 2	1 2	1 2 3	1 2 3	1 2 3	1 2 3 4	1 2 3 4 5 6 7 8 9 10
---	-----	-----	-------	-------	-------	---------	----------------------

Figure 4-50 Split Screen Template

After selecting, click Next. On the template design page, you can see the template design area, which divides the screen into two independent parts. We only need to select one of them for template layout design. After the design is completed, click another part to continue the design. The layout of split-screen template editing is exactly the same as that of single-screen template editing.

## 4.6 Update operation

The update operation means that the specified product information (which can contain multiple fields, such as price, picture, product, specification, grade, etc.) is wirelessly transmitted to the electronic shelf label screen through the base station.

YalaTech ESL system is divided into two update modes for different application scenarios: single ESL update and batch update.

### 4.6.1 Check Before Update

There are three prerequisites for the successful ESL update: A. There is at least one template suitable for the size of the ESL in the template list; B. Complete product information for display; C. The base station status shows "online"; only if these three are satisfied conditions to ensure that the update is successful.

It can be checked by the following steps:

(1). Click "Device Management", "ESL Management", in the list, you can directly see whether the template and product are bound to the ESL. If the template and product have been bound, the corresponding template name and product name will be displayed. If there is no bound template and product, it will display unbound. As shown in Figure 4-52.

Device ID	MAC Address	Related Store	ESL Model	Template Name	Product Name	Manage Section
CE1005J5	00124B0023A7D747	Esl store	LiteSeries2.66in-Bla...	Electric Vehicle BWY	Мобильный телефон Xiaomi	<a href="#">Modify</a> <a href="#">Check</a>
DC10004C	00124B00253E32A5	Esl store	SlimSeries1.54in-BL...	1.54 Q/Qi	Мобильный телефон Xiaomi	<a href="#">Modify</a> <a href="#">Check</a>
CG101580	00124B0025667281	Esl store	SlimSeries4.2in-Bla...	法语	Мобильный телефон Xiaomi	<a href="#">Modify</a> <a href="#">Check</a>
DE100363	00124B0021D5F835	Esl store	LiteSeries7.55in-Bla...	Unbound	Unbound	<a href="#">Modify</a> <a href="#">Check</a>
DG1003KI	00124B0023419387	Esl store	LiteSeries4.2in-Bla...	Qiqi4.21	Мобильный телефон Xiaomi	<a href="#">Modify</a> <a href="#">Check</a>
DF10037H	00124B0023A86C31	Esl store	LiteSeries2.9in-Bla...	2.9	Milk	<a href="#">Modify</a> <a href="#">Check</a>
DD1002E0	00124B001F30D799	Esl store	LiteSeries2.13in-Bla...	Unbound	Unbound	<a href="#">Modify</a> <a href="#">Check</a>
DD1009W5	00124B0023340E47	Esl store	LiteSeries2.13in-Bla...	011-2.13 Video	Fun riding A30C	<a href="#">Modify</a> <a href="#">Check</a>
CF101X8Y	00124B0022D38F4D	Esl store	SlimSeries2.9in-Bla...	2.9-S062	Shirts	<a href="#">Modify</a> <a href="#">Check</a>
CG100PB8	00124B001FBFB166	Esl store	SlimSeries4.2in-Bla...	京东福	Fun riding A30C	<a href="#">Modify</a> <a href="#">Check</a>

Total 15    10/page    < 1 2 >    Go to 1

Figure 4-52 ESL binding check list

(2). By clicking "template management", "template list", in the list, you can see whether there are templates of suitable size. If there is no template in the list, please refer to "4.5 Template Management".

(3). By clicking "product management", "product list", in the list, you can see whether there is added product information. If there is no product in the list, please refer to the "4.4 product Management" section.

By checking, you can see that the template and product information that you need to use have been included.

(4). Click "Device Management", "Price Label Heartbeat", and you can view the online status of the current base station. Only when the base station is in the "online" status can the update be successful.

## 4.6.2 Single ESL Update

Click "Device Management", "ESL Management", the system will automatically display the list of electronic ESLs owned by the current account, the list includes the device number, MAC address, store, ESL model, template name, product name, operation area.

(1). When you need to update a specified electronic shelf label, click "Modify" in the operation area to enter the electronic shelf label update operation page. Here, the electronic shelf label numbered "DH1005CJ" is used for demonstration (the operation of other different sizes is the same). Click the "Edit" button in the numbered "DH1005CJ" operation area, as shown in Figure 4-56.

(2). After clicking the "Edit" button, the system will enter the single electronic shelf label update operation area. In the upper left corner of the operation area, if there is a template that matches the current ESL size, the system will automatically select it, or you can select the desired template through the drop-down selection box. As shown in Figure 4-57

Device ID	ESL Model	Support Color	ESL DPI	Firmware Version	Whether With Light	Is It Waterproof
CH1003SL	7.55in	Black White Red	800*480px		NO	NO

Figure 4-57

(3). After the template is selected, click the gray area on the lower left with the mouse to open the product selection dialog box, select the product by selecting the product name or bar code, and select the product to be displayed. As shown in Figure 4-58

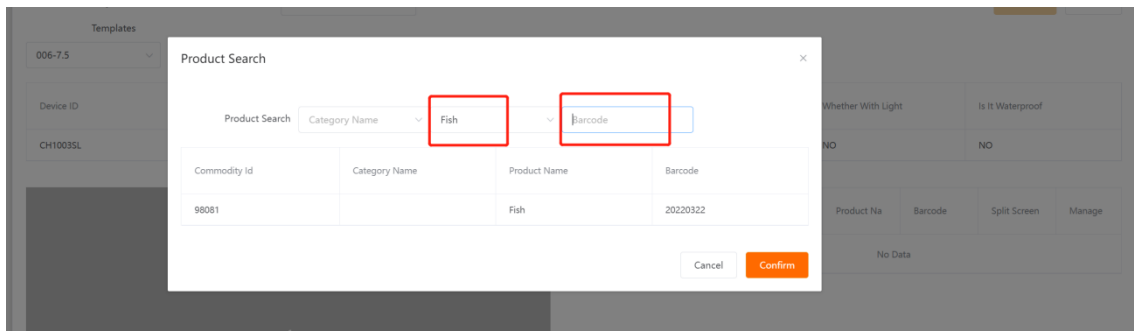


Figure 4-58

(4). After the product is selected, click "OK", and the preview image that will be displayed on the electronic shelf label screen will be displayed on the lower left. The product information is displayed on the right. If the wrong product is selected, you can click the "Delete" button and repeat the operation in step 3. Click "OK" in the upper right corner to start updating the product. As shown in Figure 4-59.

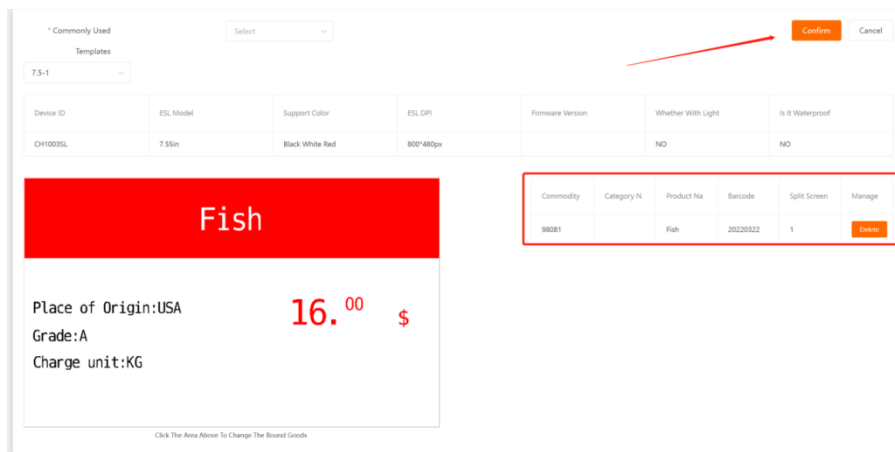


Figure 4-59

(5). After you update the electronic shelf label, if you want to know the progress of the update, you can find the updated ESL code "DH1005CJ" in "ESL Management", and click "View Update" to open the View Update Status dialog box. The result of the current electronic shelf label update can be queried. As shown in Figure 4-60 and Figure 4-61.



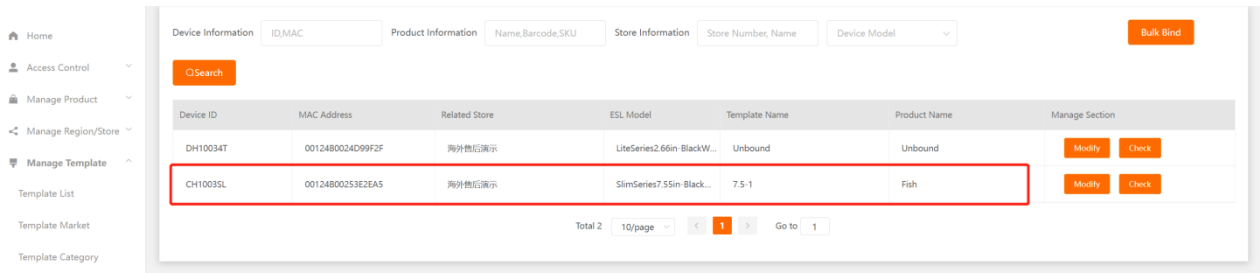


Figure 4-60

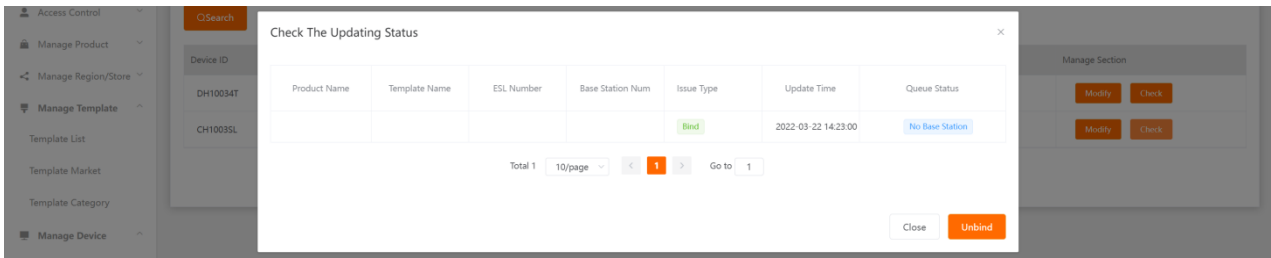


Figure 4-61

### 4.6.3 Batch Update

Three prerequisites are also required for the successful update of batch electronic ESLs. For the inspection of these three conditions, you can refer to the "4.6.1 Inspection Before Update" section.

Click "Device Management", "ESL Management", and click "Batch Bind" in the upper right corner of the ESL management page, as shown in Figure 4-62.

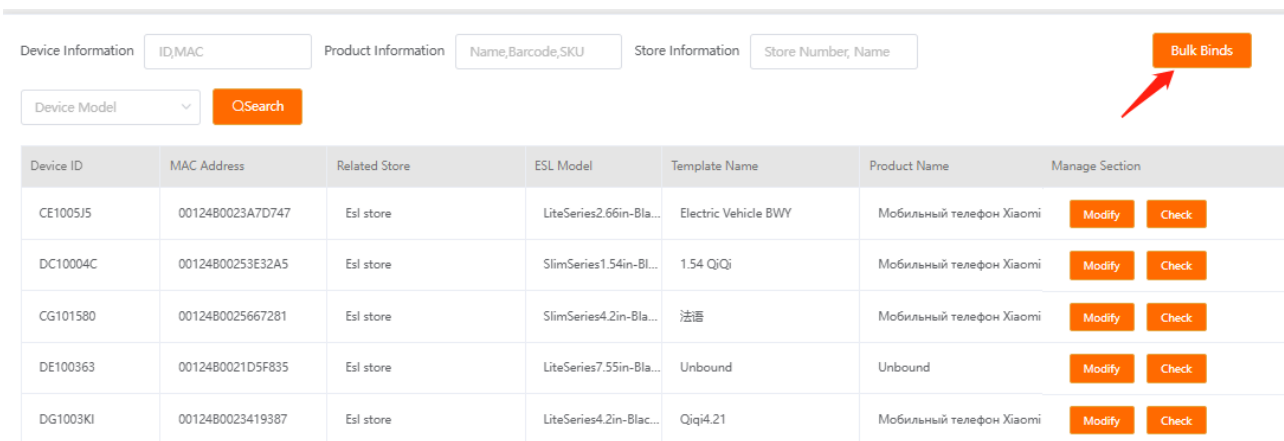


Figure 4-62 Bulk bind

In the pop-up dialog box, select Download Template to download the template file to the local computer, as shown in Figure 4-63.

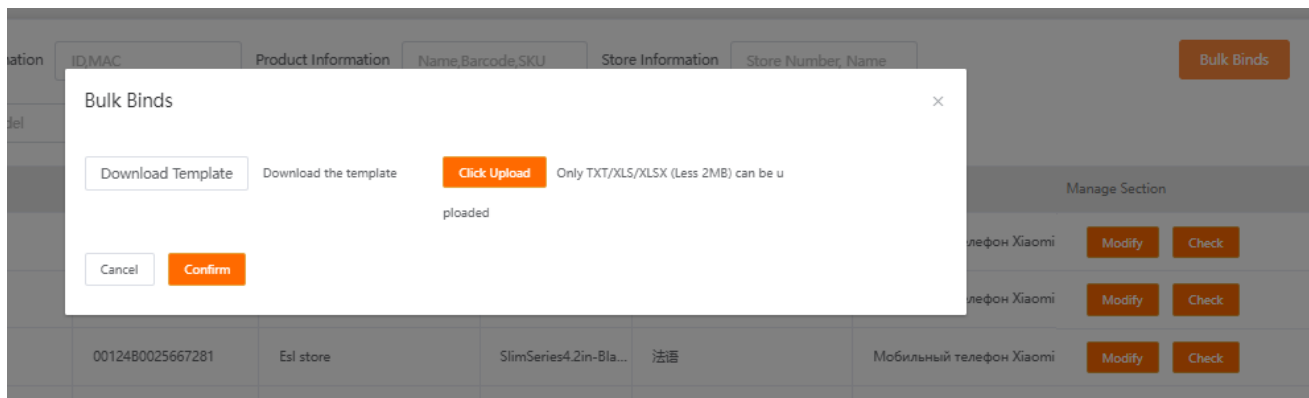


Figure 4-63 Download template

After the download is complete, open the downloaded file (the file name is "PriceTagBindingTemplate2.xlsx"). The table presents 5 fields, including the product bar code, ESL number, template number, ESL location, and base station number. Among them, the product bar code, ESL number, and template number are three fields that must be filled in.

Product bar code: refers to the bar code information of the product. You can find it through "product Management" and "product List".

ESL number: refers to the number information of the electronic shelf label. You can check it through the list of "Device Management" and "Price Label Management". When entering the price label number, you need to pay attention to the size of the price label currently used, which can be found by the price label model.

Template ID: Refers to the template ID, which can be queried through "Template Management" and "Template List". When entering the template ID, it should be noted that the size of the template corresponding to the template ID needs to be consistent with the size of the ESL model.

Here, 3 different ESL sizes are used to perform batch binding demonstration operations corresponding to ESL template IDs of different sizes. The number "DE1002KW" is a 10.2-inch electronic shelf label, and the template number "13464" is a 10.2-inch electronic shelf label; the

number "DH1005CJ" is a 7.5-inch electronic shelf label, and the template number "13413" is a 7.5-inch electronic shelf label. Template; the number "CG10089K" is a 4.2-inch electronic shelf label, and the template number "13465" is a 4.2-inch electronic shelf label template; after filling in the file content, save the file.

Note: If in actual use, the size of the ESL is the same model and the same template is used, for example, there are 100 4.2-inch electronic ESLs, you only need to fill in the product bar code and ESL number respectively, and the template number is the same. .

After the file is saved, click "Device Management", "Price Label Management", "Batch Binding", in the pop-up dialog box, select "Click Upload", in the pop-up "Open" dialog box, select the template file (default The template file name is "PriceTagBindingTemplate2.xlsx"), you can add template files.

After adding, in the "Batch Binding" dialog box, you can see that the template file has been added, click "OK". The system will prompt "Import successful". When the operation reaches this point, the entire process of the batch update operation has been completed.

#### **4.6.4 Unbinding Operation**

When you want the electronic shelf label to display the initialization interface, or cancel the binding of the current template, you can click "Device Management", "Price Label Management", find the electronic shelf label that needs to be unbound, and click "View Update" in the editing area. In the lower right corner of the pop-up "Query Update" dialog box, click "Unbind", the electronic shelf label will unbind the currently bound template, and the electronic shelf label screen will display the initialization interface. As shown in Figure 4-71 and Figure 4-72.

Product Name	Template Name	ESL Number	Base Station Nu	Issue Type	Update Time	Queue Status
Мобильный телефо	Electric Vehicle BWY	CE1005J5	XD004006	Bind	2022-01-22 17:3...	Success
Мобильный телефо	Electric Vehicle BWY	CE1005J5	XD004006	Bind	2022-01-22 17:3...	Success
			XD004006	Unbind	2021-12-28 17:3...	Success
苹果22	Arabic 3	CE1005J5	XD004006	Bind	2021-12-28 17:2...	Success
苹果22	Electric Vehicle BWY	CE1005J5	XD004006	Bind	2021-12-27 10:5...	Success

Total 5    10/page    < 1 >    Go to 1

Close    Unbind

Figure 4-71



Figure 4-72 ESL Initialize interface preview

### 4.6.5 Other Update Operations

In addition to the above update operations, there are two other situations that will trigger the update instruction of the electronic shelf label;

product information editing and modification: When any field information of the product information is changed or edited, after clicking OK to save, the system will automatically trigger an update instruction for the electronic shelf label that has been bound with the current product information.

Editing and modifying template information: When the template is changed or modified, whether it is the template name, basic controls, dynamic data, or decorative images, click Save, and the system will automatically trigger an update to the electronic shelf label that has been bound to the current template. instruction.

## 4.6.6 ESLs Check

Whether updating a single electronic shelf label or updating electronic ESLs in batches, you may want to know the progress of the update. Click the "ESLs Check" command on the left menu bar, wait for a while, and then you can view the update history of the electronic shelf label on the "ESLs Check" page. The queue management list contains single electronic shelf label update records and batch electronic shelf label update records. As shown in Figure 4-73.

Queue Batch No.	Issue Type	Update Time	Operator	Issued Status	Failure Success Waiting	Manage Section
1261647079010248	Bind	2022-03-12 17:56:50	testnow	100%	0   1   0	Progress Details
1261647078815037	Bind	2022-03-12 17:53:35	testnow	100%	0   1   0	Progress Details
1261647075584871	Bind	2022-03-12 16:59:45	testnow	100%	0   1   0	Progress Details
1261647075315817	Bind	2022-03-12 16:55:16	testnow	100%	1   0   0	Progress Details
1261647075246365	Bind	2022-03-12 16:54:06	testnow	100%	0   1   0	Progress Details
1261647055648210	Untie	2022-03-12 11:27:28	testnow	100%	0   1   0	Progress Details
1261647054812040	Bind	2022-03-12 11:13:32	testnow	100%	0   1   0	Progress Details
1261646815256373	Bind	2022-03-09 16:40:56	testnow	100%	0   1   0	Progress Details

Total 8 10/page < 1 > Go to 1

Figure 4-73 ESLs Check

The ESLs Check list contains the queue batch, update type, update time, operator, update status, failure|success|waiting, and operation. If you want to view all the update progress of a batch, you can click the "Progress Details" of this batch, you can view the progress of all electronic ESLs, including all process statuses of success, failure, and waiting. As shown in Figure 4-74.

Product Name	Barcode	Template Name	ESL Number	Base Station Number	Update Time	Queue
Organic milk	CH1003DP	TV 7.5 inch	CH1003DP	XD004006	2022-03-09 16:40:56	

Total 1 10/page < 1 > Go to 1

Close

Figure 4-74

If you just want to view the failure status, success status, or waiting status, you can directly click the number corresponding to "Failure|Success|Waiting" to view it. If you choose this way to view, the system will only display the corresponding queue status information, not All queue status information will be displayed.

## 4.7 Other operations

### 4.7.1 Category Management

In the left menu of the YalaTech ESL system, there are "category management" and "template category" in "product management" and "template management", both of which have similar functions, both of which are classified and managed for different commodities or templates. function.

Similarly, templates can also be classified differently, which is helpful for template management.

### 4.7.2 Region Management

#### Regional management

Create an area to divide regional stores. You only need to click "Manage Region/Store", "Manage Region", and click the "Add Region" button in the upper right corner to add a region. As shown in Figure 4-76.

Area Name	Number Of Stores	Creation Time	Manage Section
South part	0	2022-03-16 17:11:50	<a href="#">Edit</a> <a href="#">Delete</a>
North part	0	2022-03-16 17:11:42	<a href="#">Edit</a> <a href="#">Delete</a>
Middle part	0	2022-03-16 17:11:34	<a href="#">Edit</a> <a href="#">Delete</a>
Western part	0	2022-03-16 17:11:25	<a href="#">Edit</a> <a href="#">Delete</a>

Total 4 10/page < 1 > Go to 1

Figure 4-76 Manage Region

## **Store management**

It is used to create a store account (sub-account). Compared with the master account, the sub-account lacks the permission function, and other functions can be used normally. Click "Manage Region/Store", "Manage Store", and click "Add Store" in the upper right corner. In the pop-up "Add Store Information" dialog box, all items marked with a red "\*" are required. You can also see the "area", which is the information created by the area management, just select the corresponding information.

Tip: The account created here is a sub-account, and the sub-account can synchronize the product information and templates of the master account.

The master account can transfer the devices under the sub-account and delete the sub-account, but cannot interfere with other uses of the sub-account.

### **4.7.3 Help Center**

The Help Center mainly provides users with user guidance and material management.

User guidance is a video recorded on how to use the intelligent cloud platform. Users can watch and learn from the video.

Material management is to provide users with material libraries that may need to be used. The material library pictures are mainly used for product pictures of product information.

## **5 Introduction of ESL assistant APP**

### **5.1 Basic Introduction**

The ESL assistant is a mobile APP specially developed for the daily management of YalaTech electronic shelf labels. It is a part of the YalaTech ESL system, it can help you to manage products simply, conveniently and quickly.

### 5.1.1 Download and log in

After downloading and installing the APP through the Android system and Apple system, enter the account password to log in. As shown in Figure 5-1 and Figure 5-2.

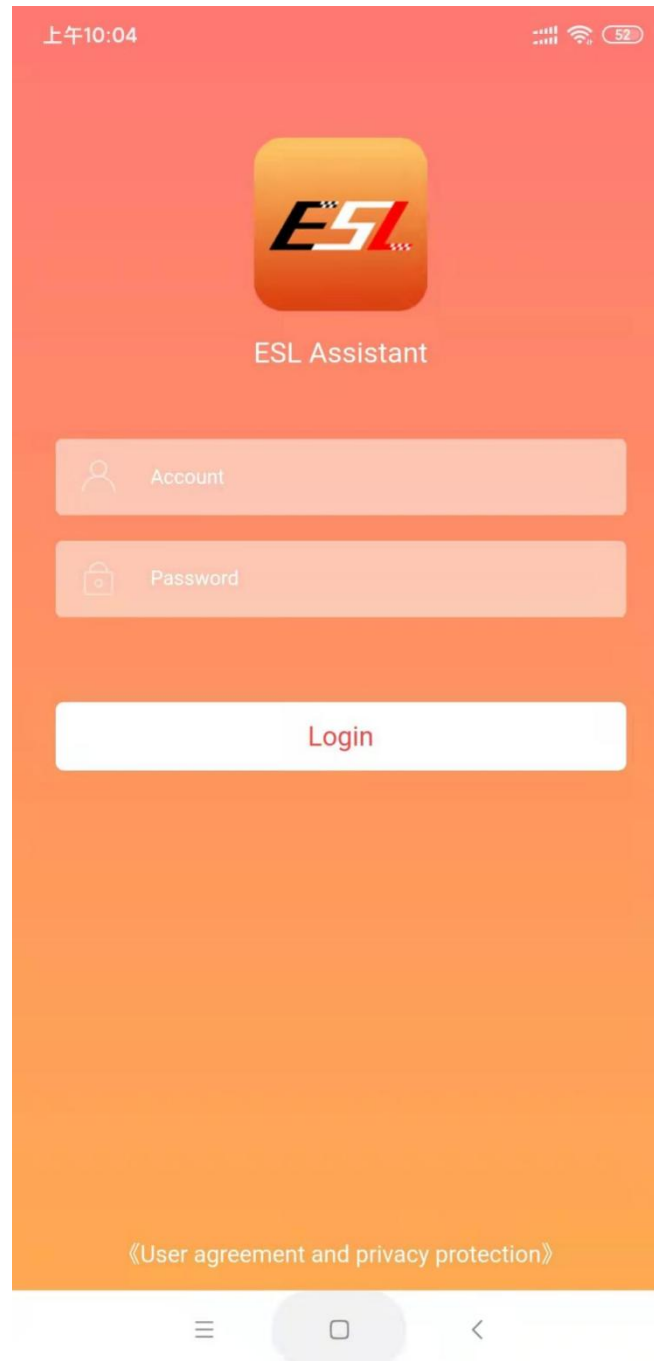


Figure 5-2 Login interface

Just below the login page, click "Entrance For Overseas" to log in to the English version of the APP. As shown in Figure 5-2.



## 5.1.2 Interface Introduction

The main page of the APP mainly includes three parts, the orange area, the core function area, and the menu bar area. As shown in Figure 5-3.

### Orange Area

Mainly includes equipment status, price change by scanning code, number of base stations, number of ESLs.

Device status, there are two statuses, normal and offline.

To change the price by scanning the code, you can directly scan the barcode of the electronic shelf label to change the price of the currently bound product.

### Core Functional Area

It mainly includes ESL binding, ESL unbinding, product management, device heartbeat, price change record, and activation.

### Menu Bar Area

It mainly includes ESL assistant and mine.

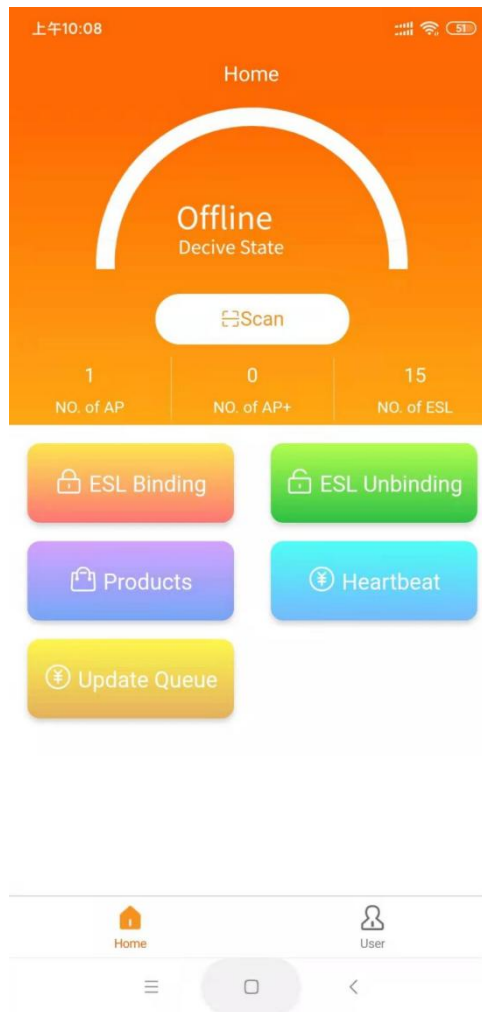


Figure 5-3 Main interface

### 5.1.3 Mine

The "Mine" interface mainly displays the current account name. It also includes three functions: merchant information, password modification, and logout.

#### Merchant Information

Entering the merchant profile editing page, you can edit and modify the current account information.

#### change Password

Used to change the password of the current account.

#### sign out

Log out of the current account.

## 5.2 ESL Binding

On the main page, click the "ESL binding" button, scan the bar code of the electronic shelf label with the mobile phone camera, and the ESL binding operation page will be automatically opened. Including selection template, selection of network base station, selection of product information.

Select a template. If there are multiple templates, you need to select the specified template, and click to select the template to select the corresponding template.

Select the network base station, which is not required by default.

Product information, click "Product Information" on the mobile phone, you can open the product selection page, you can enter the product information or bar code to search through the search box at the top. You can also use the mobile phone to scan the bar code of the product. After searching the product information, click to select it with your finger, and it will be automatically selected,. Then click Save to trigger the update.

## 5.3 ESL unbinding

When binding the electronic shelf label, the product information or template is bound incorrectly, or you want to restore the electronic shelf label to the original state. You can use the ESL to unbind to operate.

Just click the "Unbind ESL" button, scan the bar code of the designated ESL with the camera of your mobile phone, and you can unbind it.

## 5.4 product Management

When you need to find or add product information, you can enter the product management list by clicking "Product Management". You can quickly find product information through all categories, all stores, search boxes, and scans.

If you want to add product information, click "Add Product" in the lower right corner to add product information on the product new page. It should be noted that the product name and product barcode are the information that must be filled in, and other options are optional boxes. Then click "Save" in the lower right corner.

## 5.5 Device Heartbeat

The device heartbeat is used to check the online information of the electronic shelf label and the base station. Click "Device Heartbeat" to open the device heartbeat page, and you can check whether the electronic shelf label and the base station are online. If it is not online, it will display offline. As shown in Figure 5-9. On the homepage of the ESL assistant, the heartbeat of the device in the orange area can quickly check whether the base station is online. As shown in Figure 5-10.

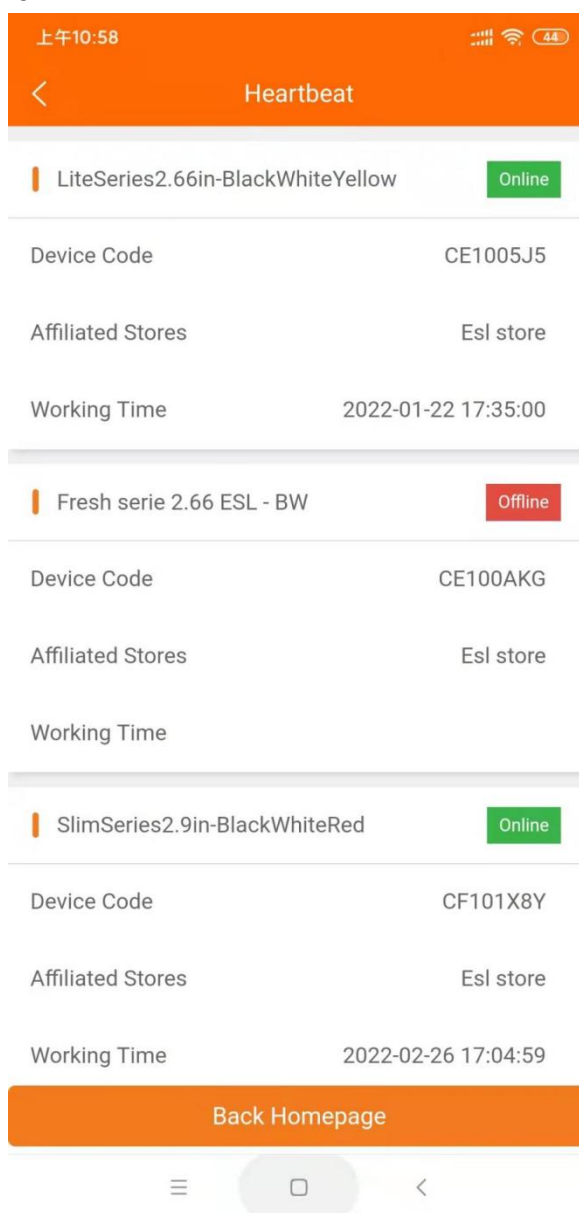


Figure 5-9 Device heartbeat

## 5.6 Price change records

After you bind the product information through "ESL binding", if you want to know the progress of the update, you can click "change price record" to open the price change record page, as shown in Figure 5-11. This page mainly includes three different categories: success, waiting, and failure.

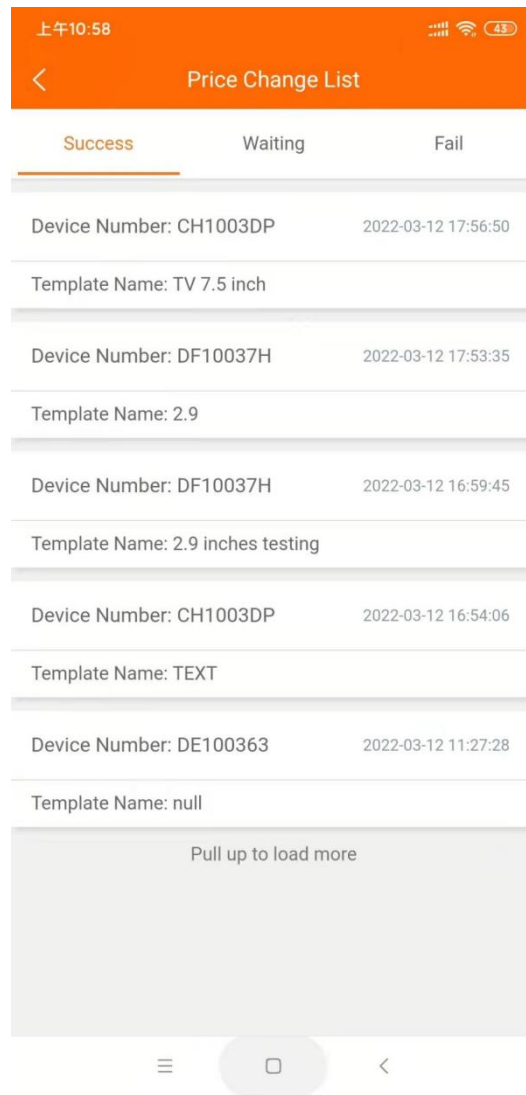


Figure 5-11 List of price change records

## 6. Common Problems and Maintenance

### 6.1 Common base station faults and troubleshooting methods

#### 6.1.1 Introduction of base station indicator light

Type	Color	Flashing Status	Flashing Description	Description
Power instructions	In RED	constant red light	-	The adapter input voltage is too high. The appropriate power adapter should be selected according to the product description.
Hardware instructions	In Green	Flash	Light up for 1 second, off for 1 second	The system status is normal.
		Flashing light one long and two short	Light up for 2 second, off for 1 second	An abnormal communication of the 433M RF module was detected. The 2.4G base station can ignore this indication.
		Flashing light one long and three short	Light up for 2 second, off for 1 second	An abnormal hardware of the base station network card was detected.
Application instructions	In Blue	Flashes frequently	Light up for 0.5 second, off for 0.5 second	The communication between the base station and the server is abnormal, and the server cannot be connected.
		Flashes frequently	Blink 4 times in 1 second	The base station is sending wake-up broadcasts or data.
		Flash	Light up for 1 second, off for 1 second	The base station waits for the current radio frequency channel to be idle for data transmission.
		constant blue light	The light stay on for about 30 seconds after power on	Appears when the base station is powered on and initialized.

#### 6.1.2 Reset the Base Station

If the base station cannot be used normally, you can try to reset the base station by pressing the reset button 6 times continuously.

#### 6.1.3 Base Station Offline Troubleshooting

1. Check whether the base station is properly connected to the power supply
2. Check whether the base station is connected to the network normally
3. If the connection is normal, press the "Reset" button of the base station 6 times continuously to restore the initialization of the base station;

## 6.2 Common faults and troubleshooting methods of ESL

### 6.2.1 Failed to update electronic shelf label, queue troubleshooting table

Serial number	Refresh status	Status description	Operation guide
1	Waiting to be processed	The server generates the queue initialization state, that is, no base station in the queue returns the processing result	No need to operate, wait for the processing result to be returned
2	ESL has no response	<p>The base station cannot detect the response of the ESL within the set wake-up period. The reasons are generally:</p> <ol style="list-style-type: none"> <li>1. The ESL is outside the coverage of the base station signal, or there is an obstacle between the ESL and the base station, the ESL cannot receive the base station wake-up command, or the data packet of the ESL response cannot reach the base station.</li> <li>2. ESLs that exceed the battery life of the bid ESL may have insufficient power. At this time, the radio frequency part of the ESL cannot work normally.</li> <li>3. The specified ESL type does not match the actual ESL hardware, and the ESL used does not match the frequency band of the base station.</li> </ol>	<ol style="list-style-type: none"> <li>1. The ESL is placed within the coverage of the base station signal of the base station.</li> <li>2. Replace the battery.</li> <li>3. Change the ESL/base station model to the same frequency band</li> </ol>
3	The queue expired	The same base station can process multiple refresh queues in the same time period. For the same ESL, when a refresh queue is not processed, if an updated refresh queue is received, the base station will correspond to the old queue and return the queue expired and discard the related processing of the old queue, and execute the processing of the new queue.	No need to operate

4	Parameter error	<p>The parameter field provided by the refresh queue is incorrect:</p> <ol style="list-style-type: none"> <li>1. The data format of the refresh queue is inconsistent with the protocol, such as incorrect parsing caused by mismatched quotation marks.</li> <li>2. According to the agreement description, the required fields are missing, field types do not match and other formatting issues.</li> <li>3. Base station version is low</li> </ol>	Online upgrade the base station firmware version
5	Loss of dispatched data (offline/battery problem)	<p>For each refresh queue, if the corresponding ESL cannot completely receive the wireless transmission data packets of the queue, and some data packets are lost and cannot be completed after a limited number of retries, the base station will return the return code of the data loss, generally including the following situations:</p> <ol style="list-style-type: none"> <li>1. When the queue is delivered, there is other radio frequency interference in the same frequency band in the environment where the base station is located.</li> <li>2. The ESL is in the critical area of base station signal coverage.</li> <li>3. The ESL battery is low and the radio frequency reception capability is weak.</li> </ol>	<ol style="list-style-type: none"> <li>1. Stagger the simultaneous use of the same frequency band radio frequency</li> <li>2. Make sure the ESL is within the coverage of the base station signal</li> <li>3. Replace the battery</li> </ol>
6	No base station	The business/store does not have the corresponding base station model equipment information	<ol style="list-style-type: none"> <li>1. Active the base station</li> <li>2. Contact our tech support</li> </ol>
7	base station is offline	<ol style="list-style-type: none"> <li>1. The device indicator light or the network interface light does not light up</li> <li>2. Device parameter setting error</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the power and internet</li> <li>2. Increase MQ</li> <li>3. Configure parameters</li> <li>4. Contact our tech support</li> </ol>

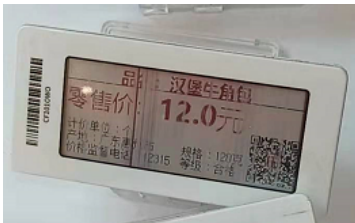


## 6.2.2 Snowflakes appear on the screen(external screen)



Solution: Re-update again.

## 6.2.3 Snowflakes appear on the screen(internal screen)



Solution: The inner screen is broken, you need to contact the after-sales person to return the product to the factory for repair.

## 6.2.4 Low battery performance failure



Solution: Contact after-sales person to replace the battery

## 6.2.5 Product information is not fully displayed



Solution: If the information is not displayed completely due to the template design, re-adjust the template, re-set the font size of the text, or re-adjust the display size of the text box.