User Manual

Mini Outdoor Station

S Series Digital System Mini Outdoor Station

User Manual_V1.3

Model No.:

SO001(One-button)

SO002(Two-button)

SO003(Four-button)

Attentions

1、Please keep devices away from strong magnetic field , high temperature , wet environment ;

2、Please do not fall the devices to the ground or make them get hard impact ;

3、Please do not use wet cloth or volatile reagent to wipe the devices ;

4、Please do not disassemble the devices.

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Chapter 1 Product Introduction

This product is the mini outdoor stations of the S series Digital system VDP. By using standard CAT5 cables, it makes visual intercom call to indoor monitor and guard station possible. Besides, it supports IC access control.

1.1. Function

- **Support SIP protocol**
- **Support IC card**
- **Support calling to indoor monitor and guard unit**
- **Adjustable unlock time**
- **Door status detection, and unlock state timeout alarm.**
- **Support normal open/close unlock output**
- **Support online update**
- **Support 2 door locks management**

1.2. Parameter

Working Parameter

Working voltage: DC 24V/PoE 48V

Static Current: ≤75mA/PoE 48V

Working Current: ≤300mA/DC12~24V

Working Temperature: -20℃~70℃

Storage Temperature: -40℃~70℃

Dimension(W/H/D): 120×194×44.7mm

Camera

Type: CMOS

Pixel: 2 MP

View Angle: Diagonal 95°

Min. Illumination: 0 lux

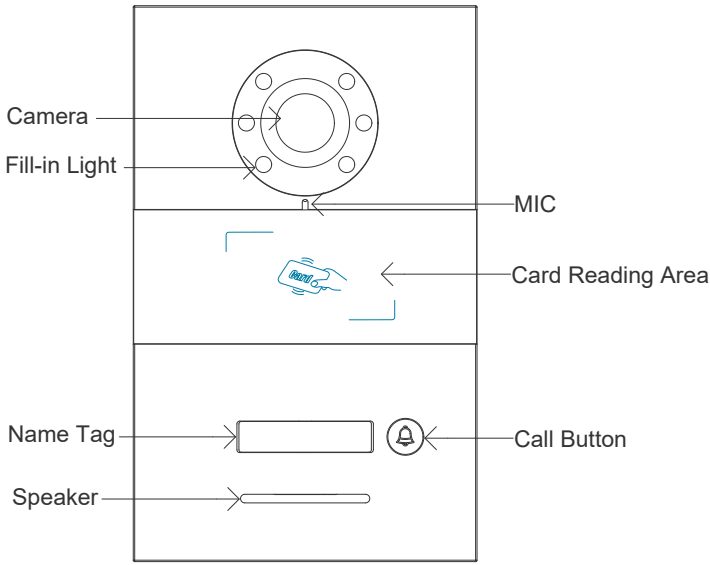
Focus Length: 2.2mm

Fill-in Light Type: white

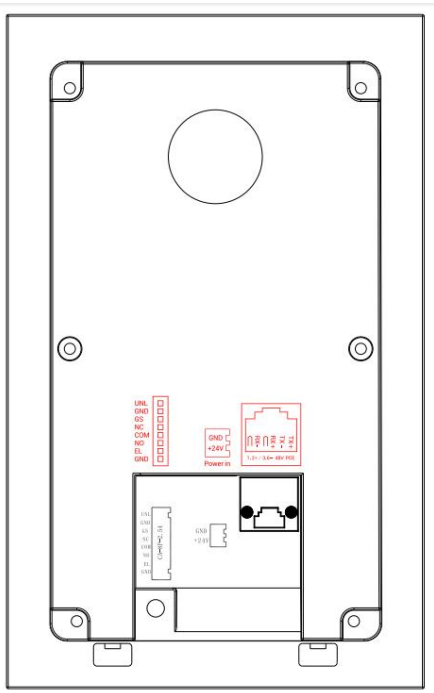
Adjustable Angle: up/down/left/right 12°

Chapter 2 Product Introduction

2.1. Front View



2.2. Back View



Interface Description:

RJ45 Network Interface：cable interface, connecting standard 48V POE switch

GND +24V：independent DC 24V power supply interface

UNL GND：Door inside unlock interface

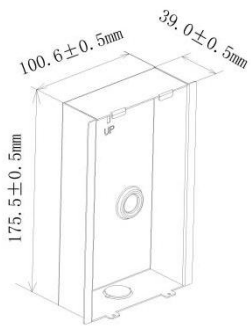
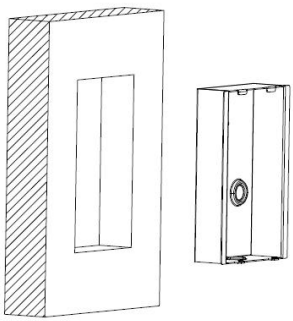
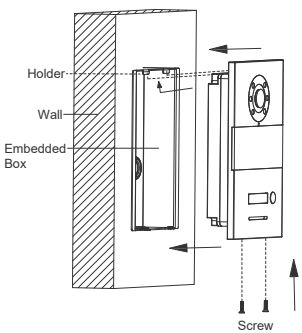
GS GND：door status detection interface

NO COM NC：normal open/close interface

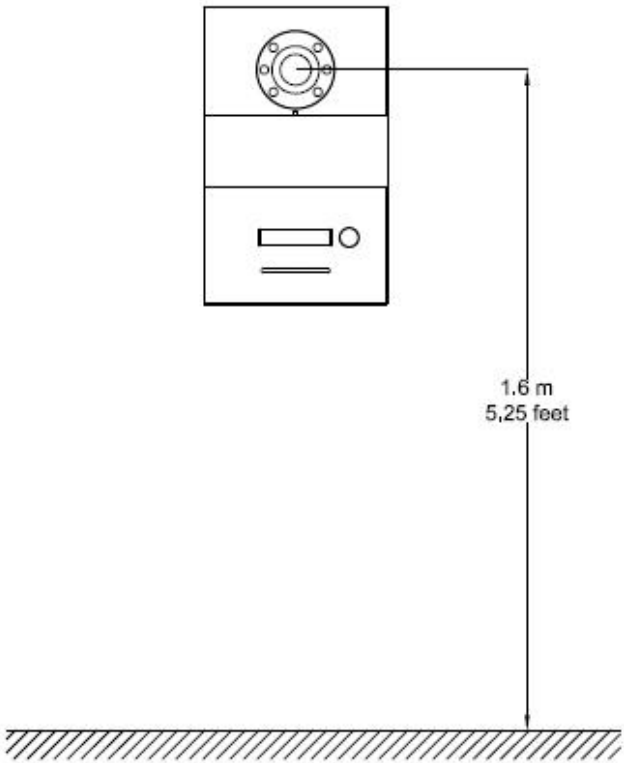
EL GND：12V electric lock

Chapter 3 Installation

3.1. Installation Steps

	Embedded box dimension（W/H/D）： 100.6×175.5×39mm
	Step 1: Embedded box slot on the wall.
	Step 2: Fix the embedded box into the slot, and fasten with screws.

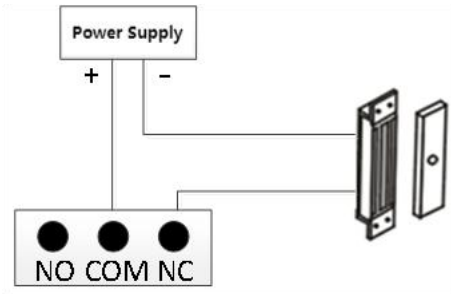
3.2. Installation Height



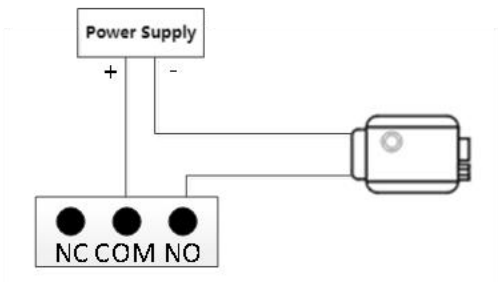
Recommended Installation Height: camera is 1.6m above the ground

3.3. Wiring Diagrams

- **Wiring for Signal Unlock Mode**



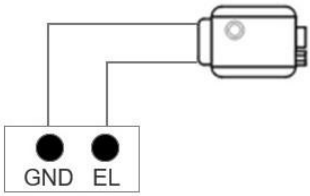
Wiring for normally closed type lock(Magnetic Lock)



Wiring for normally open type lock(Electronic lock)

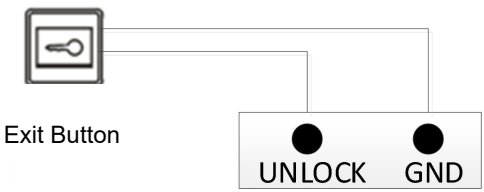
Note: If device is used for power supply under signal unlock mode, the device can only be powered by extra power supply. At the mean time, lock input

- **Electric Lock Unlock Mode**



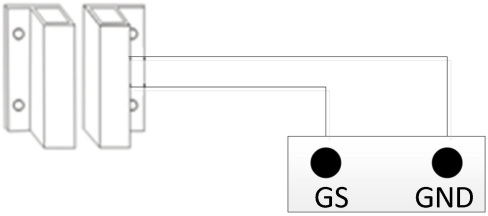
12V electric lock wiring method (12V electric lock) directly controls the lock without the need for additional power supply.

- **Wiring for Exit Button Unlock Mode**



Note: The wiring has no polarity.

- **Wiring for Door Status Alarm**



Normal Closed Type

Note: The door status alarm function can be switched off in two ways.

1. Grounding GS port of the host.

2. Enter"Engineering Setting->System Setting->Door Status Alarm", turn off the door status status alarm switch

Chapter 4 Operation Instructions

4.1. Calling Indoor Station/ Management Center

Prerequisite: In the configuration tool, set the called party.

The user presses the button for a long time/short time, and the mini outdoor device will call the Indoor Monitor/ Guard Unit according to the settings in the configuration tool, and ring back. If there has no answer within 30 seconds, the call will be ended automatically. During the call, the Indoor Monitor/Guard Unit can unlock the door and take screenshots.

After resetting to factory settings, the network defaults to automatic configuration mode with DHCP enabled.

Automatic configuration mode: This machine can discover other S-series devices in the same network segment. For small system networking within 16pcs, automatic discovery is preferred. It is a plug and play mode that does not require complicated configuration. Networking requires Router routers to allocate IP addresses to each device, and devices use MDNS protocol to discover each other.

Address book mode: To disable automatic configuration mode, address book mode is required. The devices connected to the address book network need to download a unified address book configuration table, which can be pushed locally by Update&Configuration Tool or pulled online from the intelligent management platform. For detailed functions, please refer to the address book configuration and usage instructions.

4.2. Unlock

(1) Access IC card unlock

Swipe a registered card to the card reading area of Outdoor Station to unlock the door, then form the unlock record .

(2) Indoor Monitor unlock

When a resident is called or the resident is monitoring the mini outdoor station, the

indoor monitor can control the unlocking of the mini outdoor station and form the unlock record.

(3) Unlock by Exit Button

There is an interface on the Outdoor Station that can wire to a button inside the door, which residents inside can just press and unlock, then create the unlock record.

(4) Management Center unlock

After setting correctly in the management center, click the unlock button for all, and enter the user password to unlock the mini outdoor station, then generate an unlock record at the same time.

(5) Unlock by App

In the device list of the APP, click the nominated device to unlock, then outdoor station will generate the unlock record. To use the APP to unlock the lock, the following conditions must be met at the same time:

a. In the configuration tool, enter the community identification code to bind the outdoor device to the community platform.

b. The APP account is bound to the community platform and passed the personnel review.

c. The APP account has the access control authority of mini outdoor station.

(6) Unlock the app during a call with the door machine.

a. Scan the code on the app to bind the indoor unit.

b. The door machine calls the indoor machine, and the indoor machine transfers to the APP. The APP can unlock and answer calls.

4.3. Restore factory setting

Within 60 seconds after the device is powered on, press and hold the button for 3 seconds until you hear a "beep beep beep" sound. Release and then short press the button, and the device will automatically restore the factory settings with a long "beep".

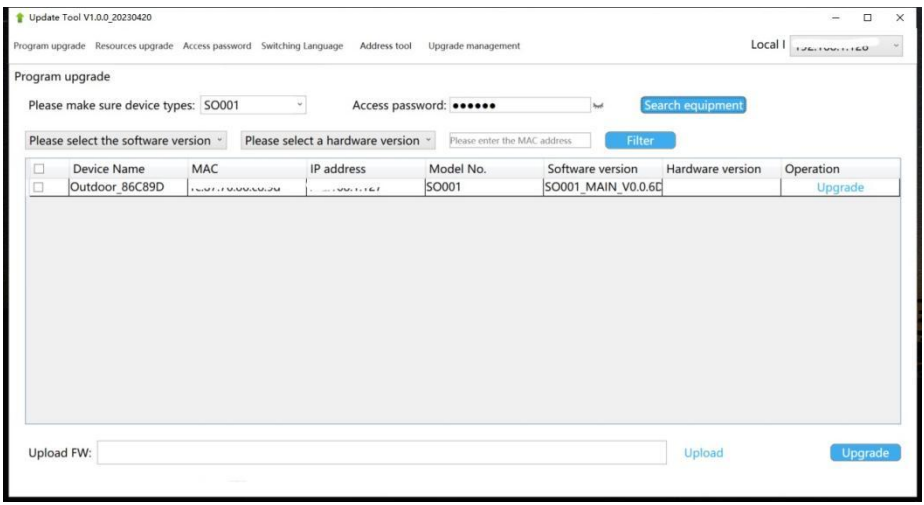
Chapter 5 Configuration

Operation steps of the mini outdoor station configuration tool:

1. Run the "Update & Configuration Tool.exe" program as an administrator.

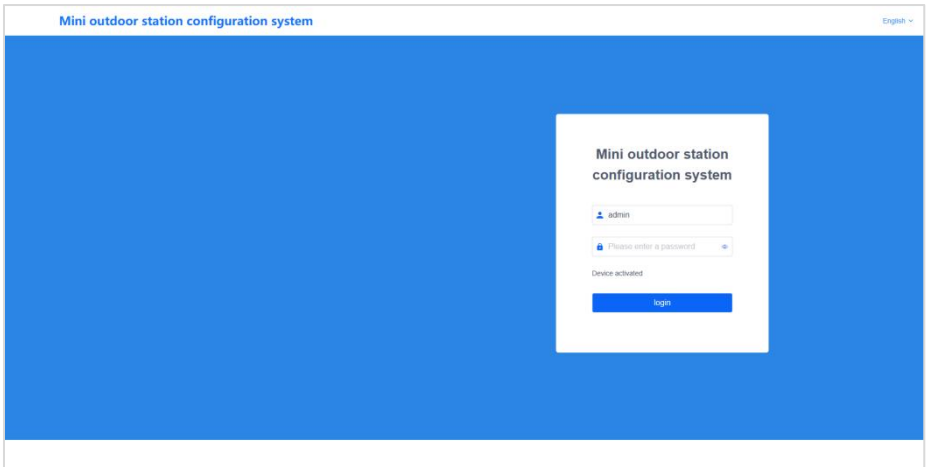
2. Switch language.

3. Select the device type as "SO001/SO002/SO003" or other customized device models for customers. Enter the Access password as "801801". Click "Search Equipment" to view the corresponding IP address according to the MAC address of the device.



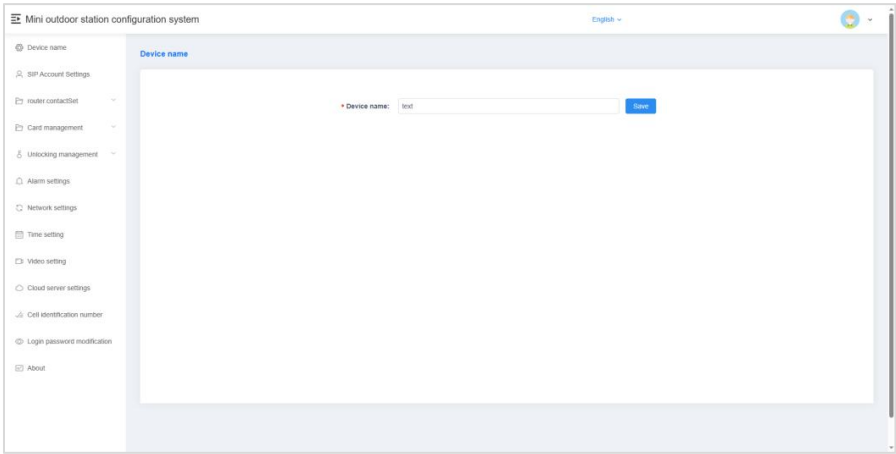
1. Enter the URL ‘http://ip_address/#/’ in the browser, such as http://192.168.151.5/#/, to enter the configuration system web page of the mini outdoor station. The default password is ‘**admin**’.

Note: Please make sure that the IP of the computer and the IP of the device to be configured are in the same network segment.



5.1. Device Name

The device name can be modified. If the SIP account information in the address book is required, the device name needs to be set to the device name corresponding to the account information in the address book. The device will pop up a window to prompt whether to use the account information of the address book.Large scale community networking requires the use of address book methods, with unified address book distribution in the community and batch rule generation of address book device information.



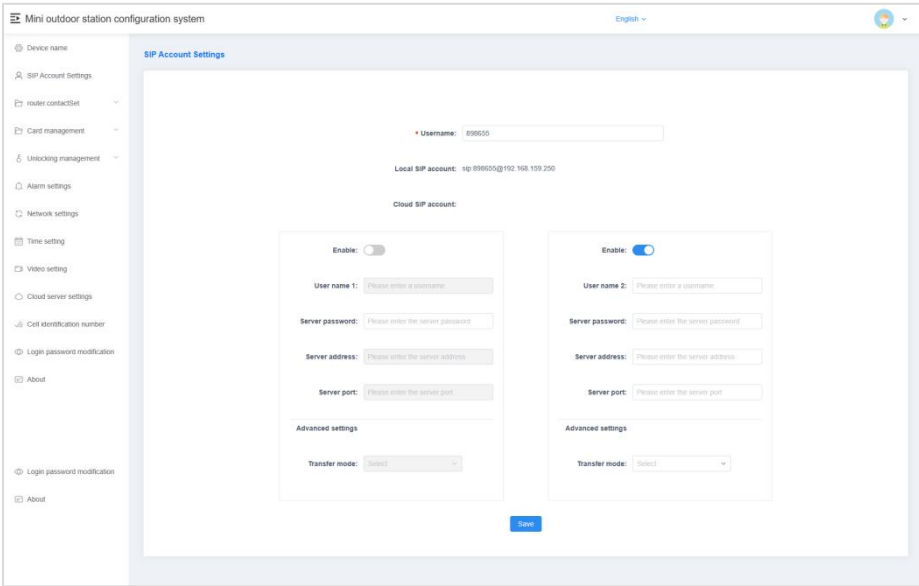
5.2. SIP Account Setting

(1) Local user name: Enter user name, configure the local SIP account, for dial-up calls. Note: Cannot be duplicated with other usernames under the same network.

(2) Local SIP account: Display the local SIP account is generated by the local user name and IP address, for call accounts under the same network.

(3) Cloud SIP account: Display when the device is connected to the cloud server, the cloud intercom SIP account assigned by the server to the device.

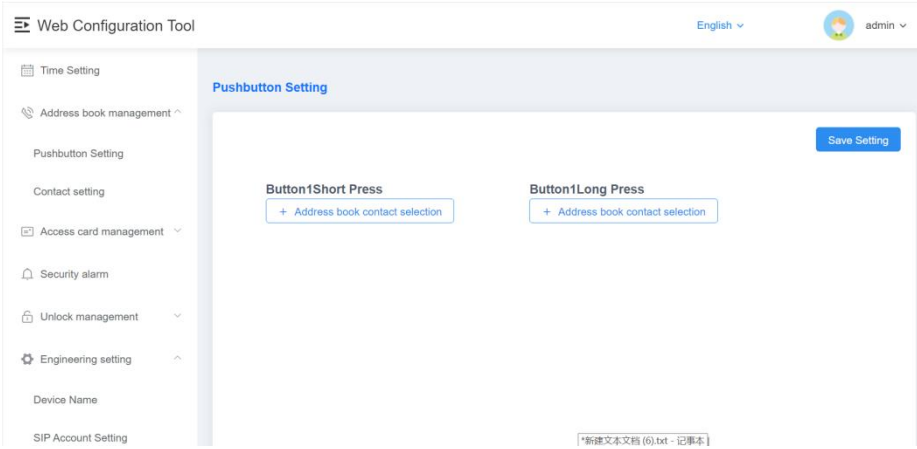
(4) SIP Account 1、2: Can manually configure SIP account information and select whether to enable it. Enter user name, server password, server address and server port, select transmission method (UDP、TLS); also can use the account information of the address book by configuring the device name.



5.3. Contact Setting

5.3.1. Call Setting

Configure the called party for the button on the single outdoor unit. Click < address book selection > button, In the pop-up window, select the contact as the short/long pressed called party, each button has a maximum of 8 contact.



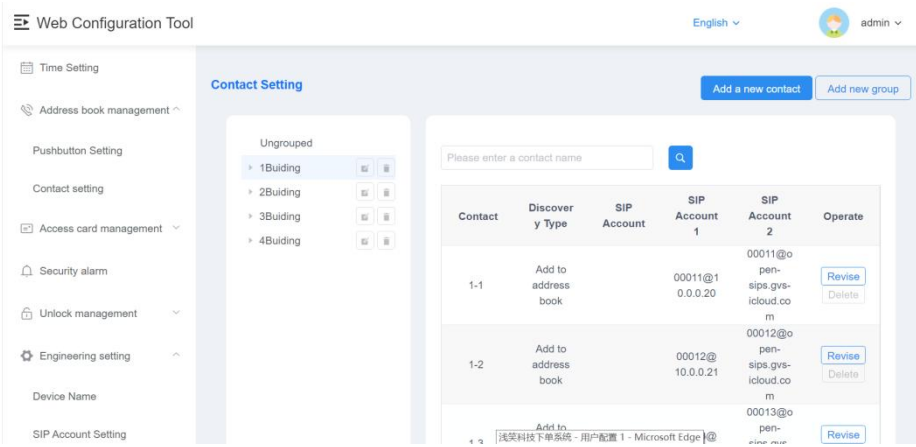
5.3.2. Contacts List

Display information about the current contact. Contacts include: Network devices discovered after automatic configuration is enabled、Address book Imported devices and manually added devices.

- Search: You can vaguely search for contacts in the list.
- Add contact person: You can add a contact person in this machine by filling in the remarks, SIP account, and group;
- Add group: You can add groups in this machine by filling in the group name, belonging group, and whether group calling is supported;
- Delete: This contact data can be deleted. Note: Connected devices discovered through enabling automatic configuration cannot be deleted when they are online.

Devices imported through the address book cannot be deleted either.

- Editor: This contact data can be edited. Note: Address book contacts can only modify notes.



5.4. Card Management

5.4.1. Card Management

Use this configuration tool to register、modify、delete and empty the card information for local device. Under the default server or custom server mode, the local card data is automatically synchronized with the platform. The maximum storage capacity of access cards is 20,000 cards.

(1) Single addition: Enter card numbers or put the IC card to the card reading area of mini outdoor station to read the card numbers, select card type (user card、

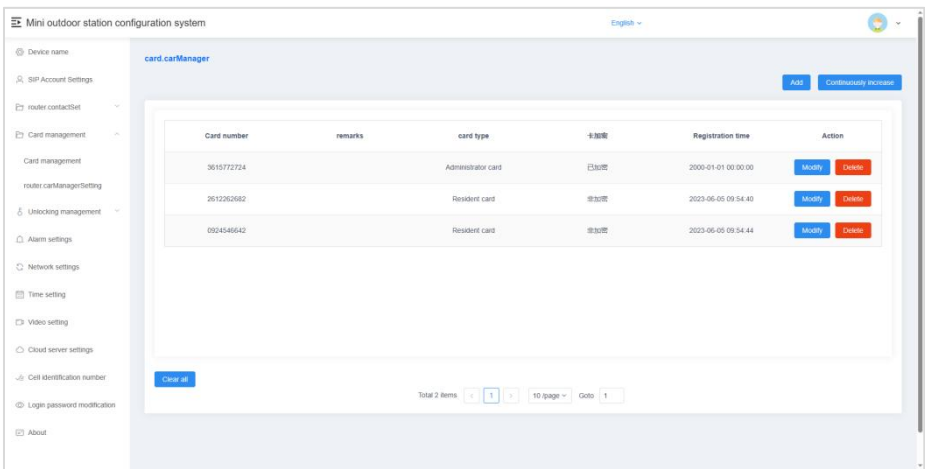
Administrator card) , click the confirm button to add successfully.

(2) Continuous addition: Select the card type,put the IC card to the card reading area of mini outdoor station, hear a beep indicating successful registration, cycle swiping card registration operation.

(3) Modification: Click the modify button in the action bar, to modify the information about access card.

(4) Deletion: Click the delete button in the action bar, to delete the corresponding access card, and the access card will lose the unlocking permission.

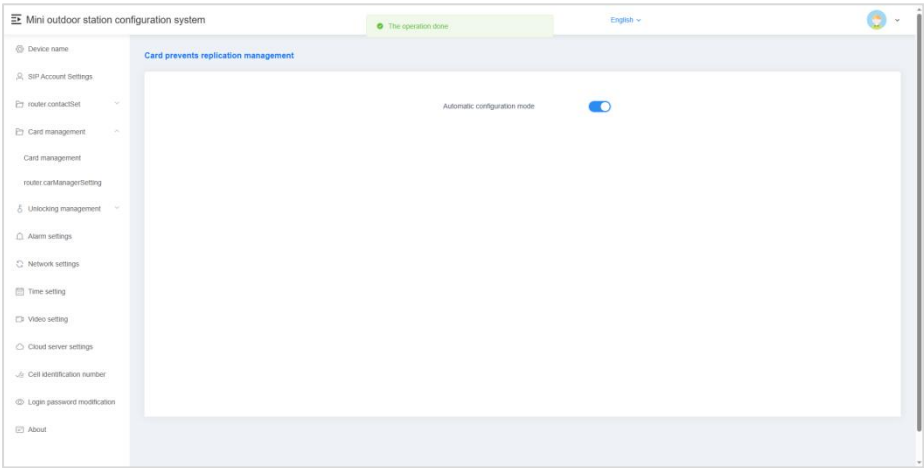
(5) Empty: Empty the data of resident cards and administrator cards of the device.



5.4.2. Card management Setting

Card anti-copy: When this is enabled, the registered card will be encrypted and cannot

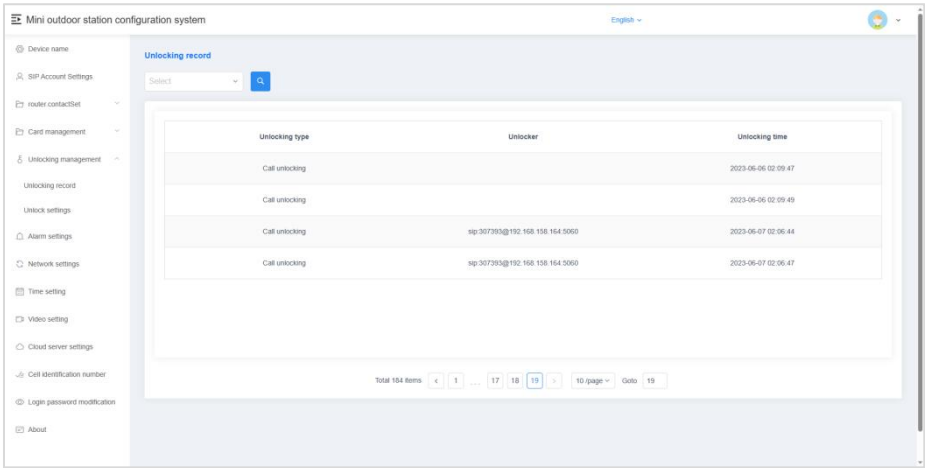
be copied.



5.5. Unlocking management

5.5.1. Unlocking Records

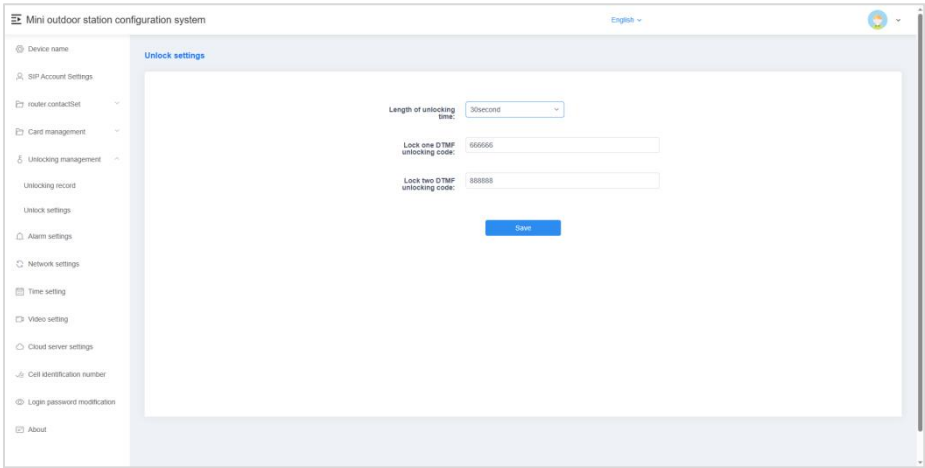
Used to view the unlocking record of the device.



5.5.2. Unlocking Setting

(1) Unlocking time: Support modify the duration of unlocking , automatically closes the door after timeout. The value ranges from 1-30 second.

(2) Lock 1 / Lock 2 DTMF unlock password：Set the unlock password of Lock 1 / Lock 2 DTMF, Lock 1 default password is 666666, Lock 2 default password is 888888. When the DTMF password on the local device is same as the indoor unit's, outdoor station can unlock Lock 1 / Lock 2 .

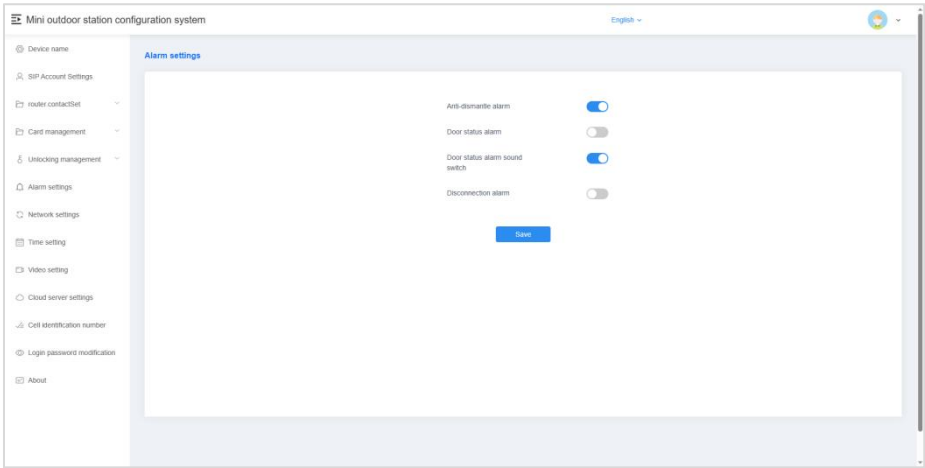


5.6. Alarm Setting

（1）Tamper alarm: When this is enabled, If the device is removed by external force, the device will sound an alarm tone.

（2）Disconnected alarm: When this is enabled, If the device is disconnected, the device will sound an alarm tone, and the status bar displays the disconnected icon.

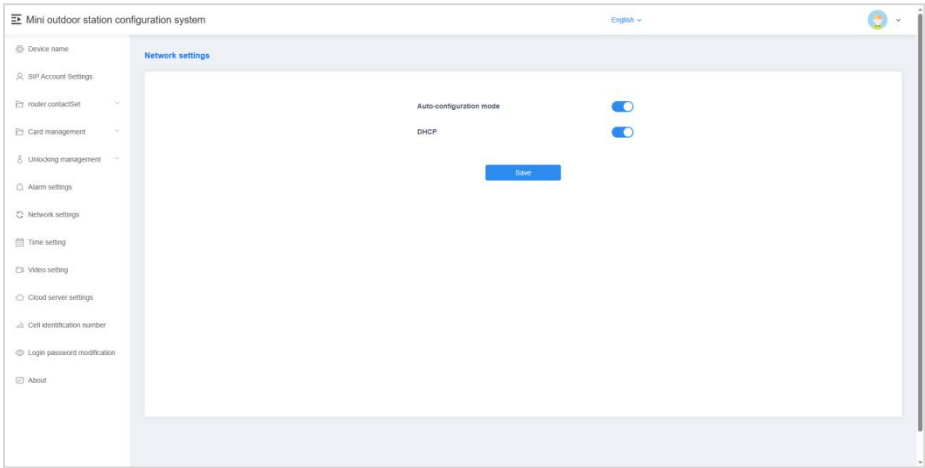
（3）Door status alarm and door status alarm tone: When this is enabled, the door is detected opened over 120 seconds,the device will sound an alarm tone.



5.7. Network Setting

(1) Automatic configuration mode: When this is enabled, the local device can discover other S-series devices in the same network segment.

(2) DHCP: Need manually configure the network after closed, enter IP address、subnet mask、gateway、DNS .



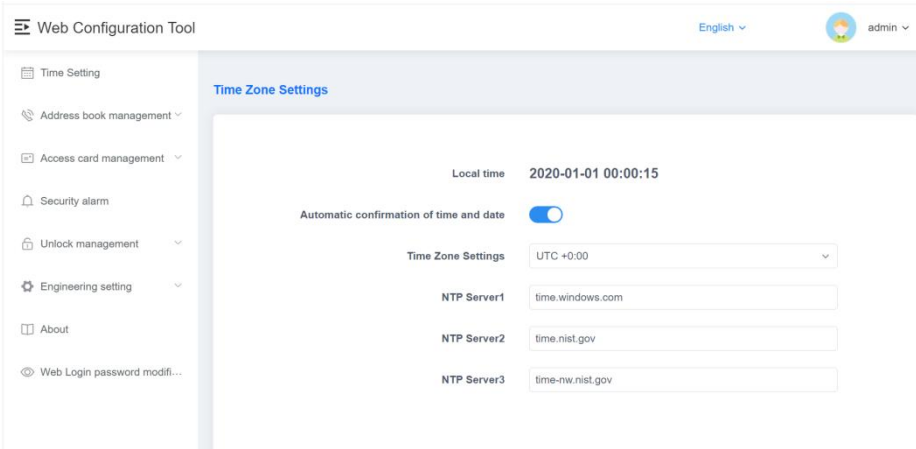
5.8. Time Setting

(1) Automatic synchronization, when enabled, automatically synchronizes date and time from the network NTP server according to the set time zone and format.

(2) Turn off automatic synchronization and manually set the date and time.

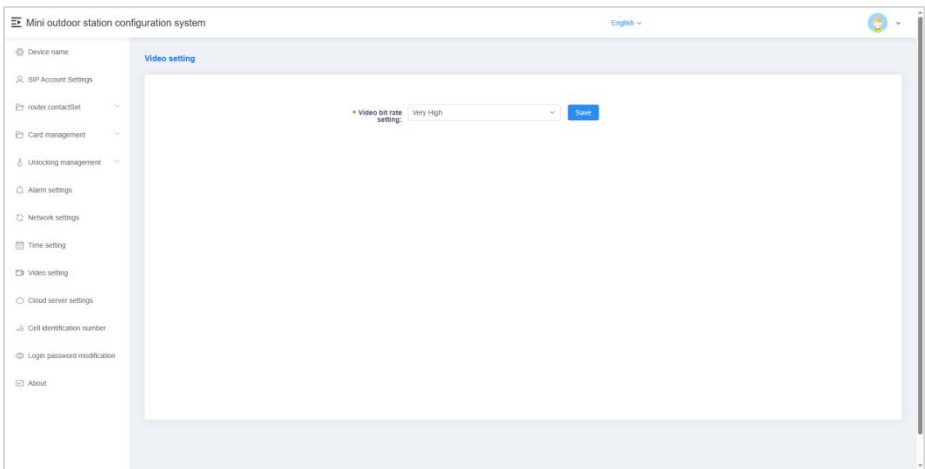
(3) NTP server settings: Enter the server address to enable the local machine to obtain accurate clock time from the set NTP server address. By default, there are three built-in NTP servers that users can manually modify.

(4) Time zone setting: Select the corresponding time zone based on the country you are in. The local machine will convert the local time based on the set NTP server and time zone.



5.9. Video Setting

Support to set the video bit rate during the call and monitoring.



5.10. Cloud Server Setting

(1) Default server /Custom server

Upload the registered face and access card data to the server,and synchronize the data download from the server.

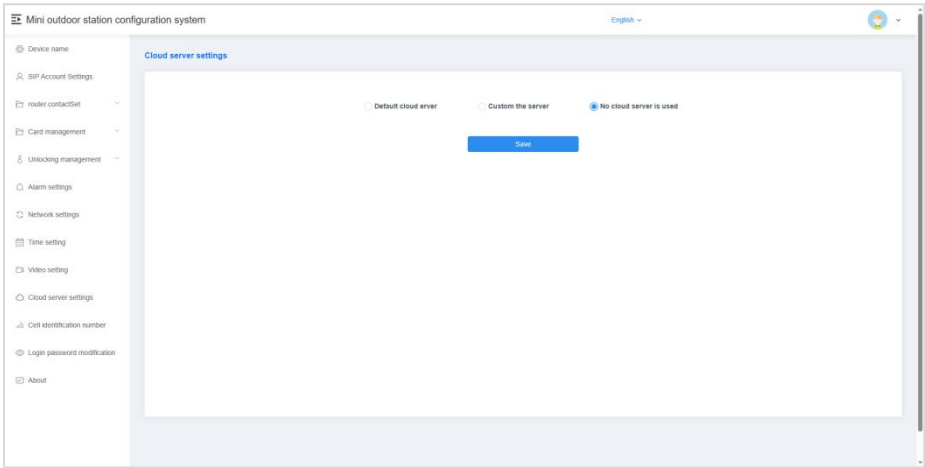
When switching to no server mode, you can choose whether to retain server data. If choose to retain, the device will not clear the data sent by the serve; If choose not to retain, the device will empty the data.

The default server refers to a server deployed on the public network. To connect to this default server, the device must be able to access the external network. A custom server can be a locally deployed server or a regional server, and it must also ensure that the device and server network are reachable.

(2) Without server

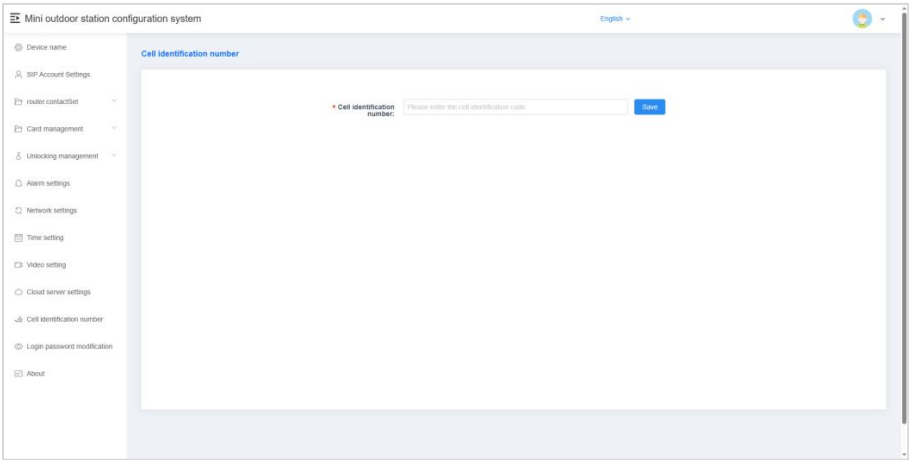
Stand-alone mode, the face and access card data registered on the machine are saved locally.

When switching to a default server or a custom server, can select whether to upload local data. If choose upload,then upload the local data to the server and synchronize server data; If choose not upload, then empty the local data and synchronize server data.



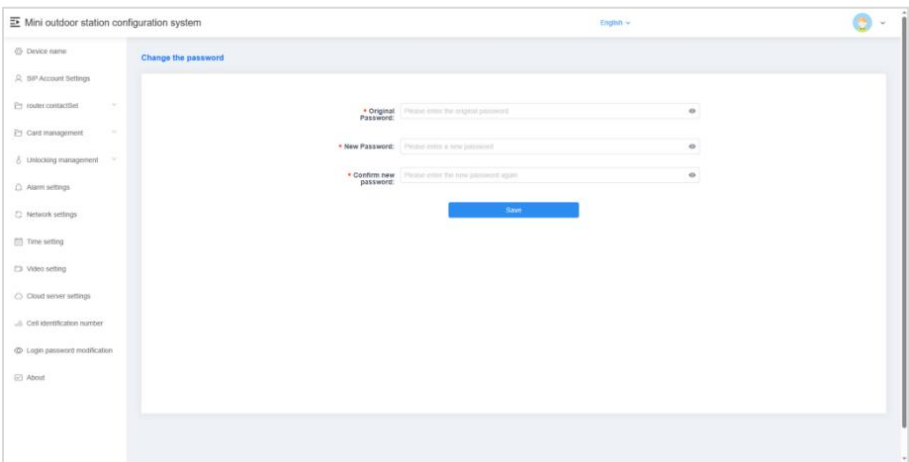
5.11. Community Identification Code

In default server or custom server mode, the local machine can be bound to the corresponding community by entering the community identification code.After the device is bound to the community, access card management and other operations can be performed on the platform.



5.12. Login Password Change

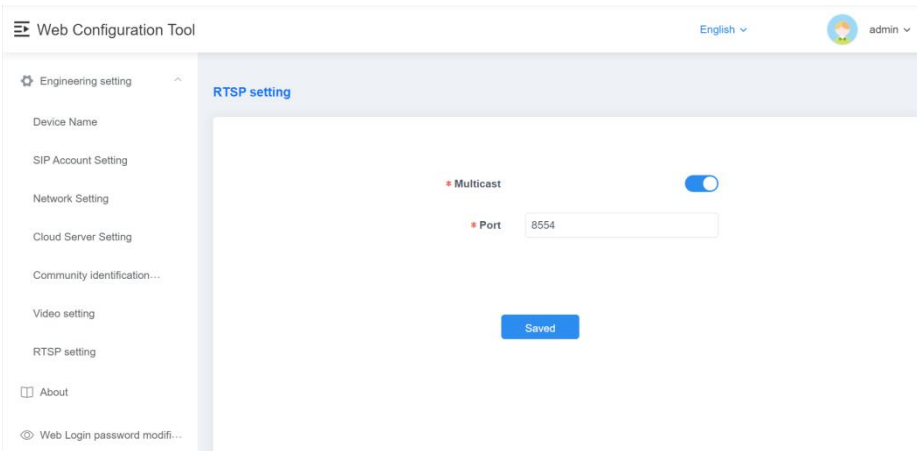
Login Password can be changed .



5.13. RTSP Setting

Multicast: When the multicast switch is turned on, multiple indoor units can receive video streams from the door unit through multicast addresses (devices must be connected through switches). When the switch is turned off, only up to two indoor units can receive video streams from the door unit (direct connection between devices is supported).

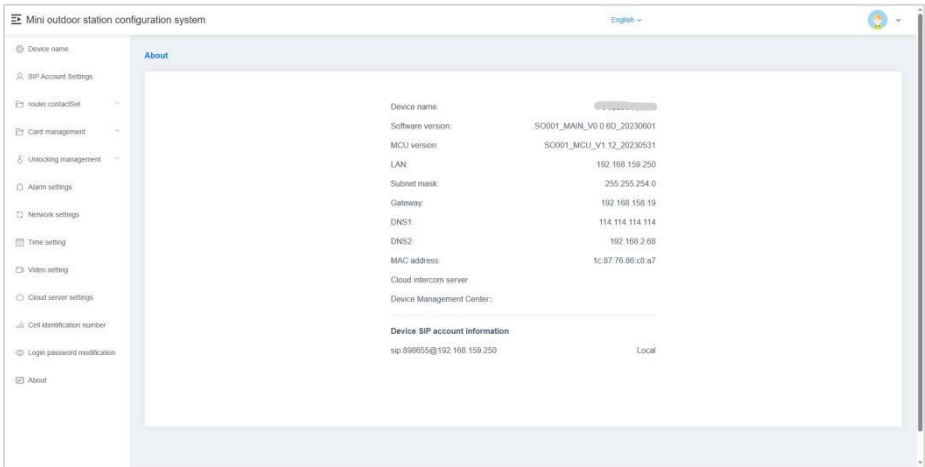
Port: default is 8554, input range is 1~65535. When the ports of the door unit and the indoor unit are inconsistent, the indoor unit will not be able to monitor the door unit.

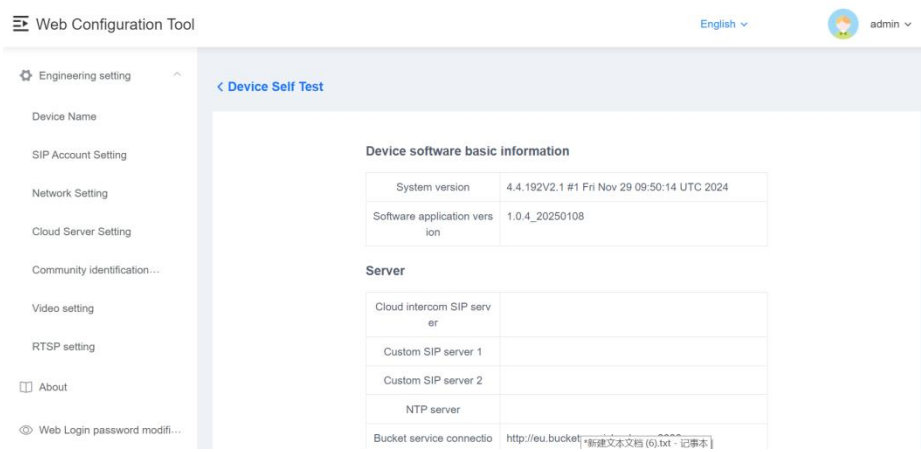


5.14. About

Used to view device related information, including: device name, software version, MCU version, LAN, subnet mask, gateway, DNS, MAC address, cloud intercom server, device management center, and device SIP account information.

The main function of device self-test is to collect device operation data, quickly troubleshoot and locate problems when the device is abnormal, including device version information, server connection status, commonly used network debugging instructions, network status, bandwidth testing data, etc.





Chapter 6 Address Book Configuration

Automatic configuration mode: This machine can discover other S-series devices in the same network segment. For small system networking within 16pcs, automatic discovery is preferred. It is a plug and play mode that does not require complicated configuration. Networking requires Router routers to allocate IP addresses to each device, and devices use MDNS protocol to discover each other.

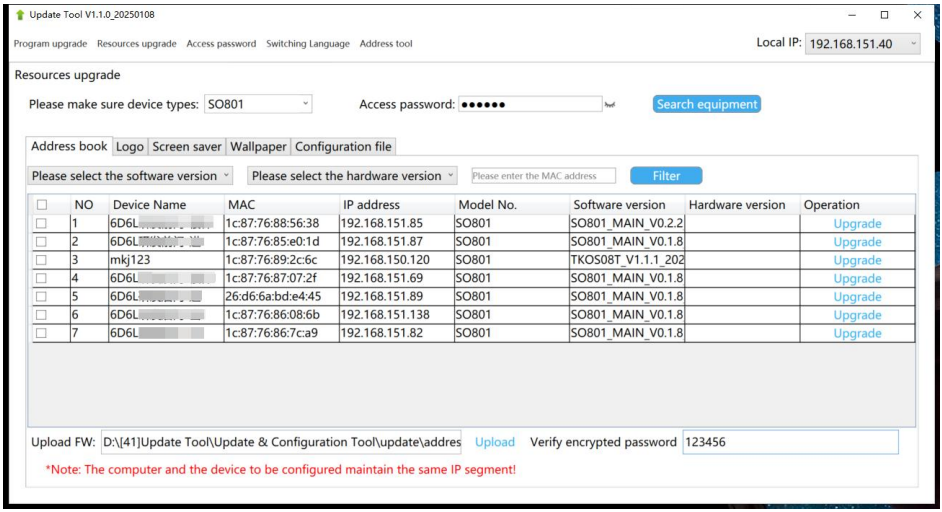
Address book mode: To disable automatic configuration mode, address book mode is required. The devices connected to the address book network need to download a unified address book configuration table, which can be pushed locally by Update&Configuration Tool or pulled online from the intelligent management platform.

6.1. Address Book Generation

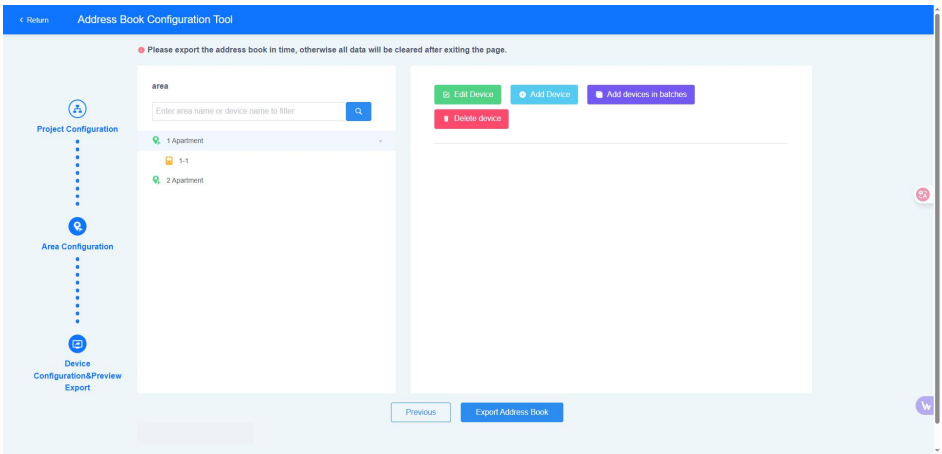
Please refer to Chapter 3.4 Engineering Configuration of the Intelligent Management Platform User Manual for details.

6.2. Address Book Synchronization

For large-scale community networking systems, devices need to use the address book mode uniformly, and there are two ways to synchronize the address book. Method 1: In Chapter 3.4 of the Intelligent Management Platform User Manual, configure the address book and export the address book configuration file addressBook.xml. Then use the Update&Configuration Tool to locally push to devices. For communities that are not connected to the internet, the tool can only be used to push to all devices.



Method 2: In Chapter 3.4 of the Intelligent Management Platform User Manual, in the Device Configuration&Preview Export interface, click<Update Device Address Book>→ The platform will immediately send the saved address book to the corresponding device and update the address book of all online devices in this community. In the device configuration&preview export interface, click<Save Address Book>→ Platform saves the edited address book, but does not distribute it to the device. After logging into the intelligent management platform, the device will automatically synchronize the community address book.



6.3. Address Book Application

After receiving the address book, the device will automatically restart and update the contact information. Go to Engineering Settings - Device Name Settings, enter the device name and click Save. This will prompt that the device exists in the address book. Do you want to use the address book information? Clicking confirm will prompt that the setting is successful and restarting is in progress. For example, the address book contains the device name "1-1" (device name: 1-1, region: 1Guiding, supported functions: outbound/monitoring/elevator control/access control, gateway: 10.00.100), IP： 192.168.0.20, Mask: 255.0.0.0, DNS1:114.114.114.114, DNS2: 8.8.8.8, SIP Username: 00011, Protocol Type: udp） , After the user inputs "1-1" to save, the IP address information and SIP account information will be automatically updated to the above information.

For large-scale community networking systems, after configuring the address book, it is necessary to set the device name for each device separately and apply the address information corresponding to this name.

For detailed instructions on setting device names, please refer to section 5.1 on setting device names.