Digital VTH (Version 3.1)

User's Manual

V1.0.2

Cybersecurity Recommendations

Mandatory actions to be taken towards cybersecurity

1. Change Passwords and Use Strong Passwords:

The number one reason systems get “hacked” is due to having weak or default passwords. It is recommended to change default passwords immediately and choose a strong password whenever possible. A strong password should be made up of at least 8 characters and a combination of special characters, numbers, and upper and lower case letters.

2. Update Firmware

As is standard procedure in the tech-industry, we recommend keeping NVR, DVR, and IP camera firmware up-to-date to ensure the system is current with the latest security patches and fixes.

“Nice to have” recommendations to improve your network security

1. Change Passwords Regularly

Regularly change the credentials to your devices to help ensure that only authorized users are able to access the system.

2. Change Default HTTP and TCP Ports:

● Change default HTTP and TCP ports for systems. These are the two ports used to communicate and to view video feeds remotely.

● These ports can be changed to any set of numbers between 1025-65535. Avoiding the default ports reduces the risk of outsiders being able to guess which ports you are using.

3. Enable HTTPS/SSL:

Set up an SSL Certificate to enable HTTPS. This will encrypt all communication between your devices and recorder.

4. Enable IP Filter:

Enabling your IP filter will prevent everyone, except those with specified IP addresses, from accessing the system.

5. Change ONVIF Password:

On older IP Camera firmware, the ONVIF password does not change when you change the system’s credentials. You will need to either update the camera’s firmware to the latest revision or manually change the ONVIF password.

6. Forward Only Ports You Need:

● Only forward the HTTP and TCP ports that you need to use. Do not forward a huge range of numbers to the device. Do not DMZ the device's IP address.
● You do not need to forward any ports for individual cameras if they are all connected to a recorder on site; just the NVR is needed.

7. Disable Auto-Login on SmartPSS:
Those using SmartPSS to view their system and on a computer that is used by multiple people should disable auto-login. This adds a layer of security to prevent users without the appropriate credentials from accessing the system.

8. Use a Different Username and Password for SmartPSS:
In the event that your social media, bank, email, etc. account is compromised, you would not want someone collecting those passwords and trying them out on your video surveillance system. Using a different username and password for your security system will make it more difficult for someone to guess their way into your system.

9. Limit Features of Guest Accounts:
If your system is set up for multiple users, ensure that each user only has rights to features and functions they need to use to perform their job.

10. UPnP:
● UPnP will automatically try to forward ports in your router or modem. Normally this would be a good thing. However, if your system automatically forwards the ports and you leave the credentials defaulted, you may end up with unwanted visitors.
● If you manually forwarded the HTTP and TCP ports in your router/modem, this feature should be turned off regardless. Disabling UPnP is recommended when the function is not used in real applications.

11. SNMP:
Disable SNMP if you are not using it. If you are using SNMP, you should do so only temporarily, for tracing and testing purposes only.

12. Multicast:
Multicast is used to share video streams between two recorders. Currently there are no known issues involving Multicast, but if you are not using this feature, deactivation can enhance your network security.

13. Check the Log:
If you suspect that someone has gained unauthorized access to your system, you can check the system log. The system log will show you which IP addresses were used to login to your system and what was accessed.

14. Physically Lock Down the Device:

Ideally, you want to prevent any unauthorized physical access to your system. The best way to achieve this is to install the recorder in a lockbox, locking server rack, or in a room that is behind a lock and key.

15. Connect IP Cameras to the PoE Ports on the Back of an NVR:

Cameras connected to the PoE ports on the back of an NVR are isolated from the outside world and cannot be accessed directly.

16. Isolate NVR and IP Camera Network

The network your NVR and IP camera resides on should not be the same network as your public computer network. This will prevent any visitors or unwanted guests from getting access to the same network the security system needs in order to function properly.

General

This document mainly introduces function, structure, network, installation process, debugging process of VTH products matched with Version 3.1 VT UI interface, together with operating instruction and technical parameter of UI interface.

Models

Type	Model Series		Specific Model
Digital VTH	VTH15 series	Type A	VTH1520A, VTH1520AS-H, VTH1520AH, VTH1520AS
		Type B	VTH1550B, VTH1560B(W)
		Type CH	VTH1510CH, VTH1520CH, VTH1550CH, VTH1550CHM
	VTH16 series		VTH1660CH
	VTH2X series		VTH2221A
2-wire VTH			VTH1550CHW-2, VTH5222CH

Safety Instructions

The following categorized signal words with defined meaning might appear in the Manual.

Signal Words	Meaning
DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, lower performance, or unpredictable result.
TIPS	Provides methods to help you solve a problem or save you time.
NOTE	Provides additional information as the emphasis and supplement to the text.

Revision History

No.	Version	Revision Content	Release Date
1	V1.0.0	First release	2017.10.16
2	V1.0.1	Add privacy protection notice	2018.05.23
3	V1.0.2	Update rear panel drawing	2018.06.28

Privacy Protection Notice

As the device user or data controller, you might collect personal data of others' such as face, fingerprints, car plate number, Email address, phone number, GPS and so on. You need to be in compliance with the local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures include but not limited to: providing clear and visible identification to inform data subject the existence of surveillance area and providing related contact.

About the Manual

- The Manual is for reference only. If there is inconsistency between the Manual and the actual product, the actual product shall prevail.
- We are not liable for any loss caused by the operations that do not comply with the Manual.
- The Manual would be updated according to the latest laws and regulations of related regions. For detailed information, see the paper User's Manual, CD-ROM, QR code or our official website. If there is inconsistency between paper User's Manual and the electronic version, the electronic version shall prevail.
- All the designs and software are subject to change without prior written notice. The product updates might cause some differences between the actual product and the Manual. Please contact the customer service for the latest program and supplementary documentation.
- There still might be deviation in technical data, functions and operations description, or errors in print. If there is any doubt or dispute, please refer to our final explanation.
- Upgrade the reader software or try other mainstream reader software if the Guide (in PDF format) cannot be opened.
- All trademarks, registered trademarks and the company names in the Manual are the properties of their respective owners.
- Please visit our website, contact the supplier or customer service if there is any problem occurred when using the device.
- If there is any uncertainty or controversy, please refer to our final explanation.

Important Safeguards and Warnings

The following description is the correct application method of the device. Please read the manual carefully before use, in order to prevent danger and property loss. Strictly conform to the manual during application and keep it properly after reading.

Operating Requirement

- Please don't place and install the device in an area exposed to direct sunlight or near heat generating device.
- Please don't install the device in a humid, dusty or fuliginous area.
- Please keep its horizontal installation, or install it at stable places, and prevent it from falling.
- Please don't drip or splash liquids onto the device; don't put on the device anything filled with liquids, in order to prevent liquids from flowing into the device.
- Please install the device at well-ventilated places; don't block its ventilation opening.
- Use the device only within rated input and output range.
- Please don't dismantle the device arbitrarily.
- Please transport, use and store the device within allowed humidity and temperature range.

Power Requirement

- Please make sure to use batteries according to requirements; otherwise, it may result in fire, explosion or burning risks of batteries!
- To replace batteries, only the same type of batteries can be used!
- The product shall use electric wires (power wires) recommended by this area, which shall be used within its rated specification!
- Please make sure to use standard power adapter matched with this device. Otherwise, the user shall undertake resulting personnel injuries or device damages.
- Please use power supply that meets SELV (safety extra low voltage) requirements, and supply power with rated voltage that conforms to Limited Power Source in IEC60950-1. For specific power supply requirements, please refer to device labels.
- Products with category I structure shall be connected to grid power output socket, which is equipped with protective grounding.
- Appliance coupler is a disconnecting device. During normal use, please keep an angle that facilitates operation.

Table of Contents

1 Product Overview

1.1 Product Profile

VTH series product is a digital video intercom home station for numerous homes, integrating monitoring, intercom and unlocking. With embedded technology, all IP network, SNMP (Simple Network Management Protocol) network management technology and network encryption technology, achieve more stable system operation, richer functional extension, more convenient system management and safer data transmission.

1.2 Product Function

Wi-Fi Networking

Realize Wi-Fi networking of devices.

Video Intercom

Call or connect VTO and VTH; realize talk.

Monitoring

Monitor fence station, VTO and IPC devices.

Emergency Call

Press the key to call the Management Center in case of an emergency.

Auto Snapshot

Snapshot the call picture or monitoring picture, and store them in SD card or FTP.

DND (Do Not Disturb)

Avoid other’s incoming call interference.

Remote Unlock

Realize remote unlock.

Arm and Disarm

Provide 6/8-channel area setting, arm and disarm them.

Playback

Play back videos and pictures in SD card of this device.

Alarm

After 8/6-channel area triggers an alarm, pop up an alarm prompt interface, provide linkage alarm output and report to Management Center.

Record Inquiry

Inquire call records and alarm records.

Message Inquiry

Inquire guests' message, videos, pictures and announcements issued by Property Management Center.

2 Product Structure

2.1 Front Panel

2.1.1 VTH15 Series Type A/B

In VTH15 series, different types of devices have different front panels.

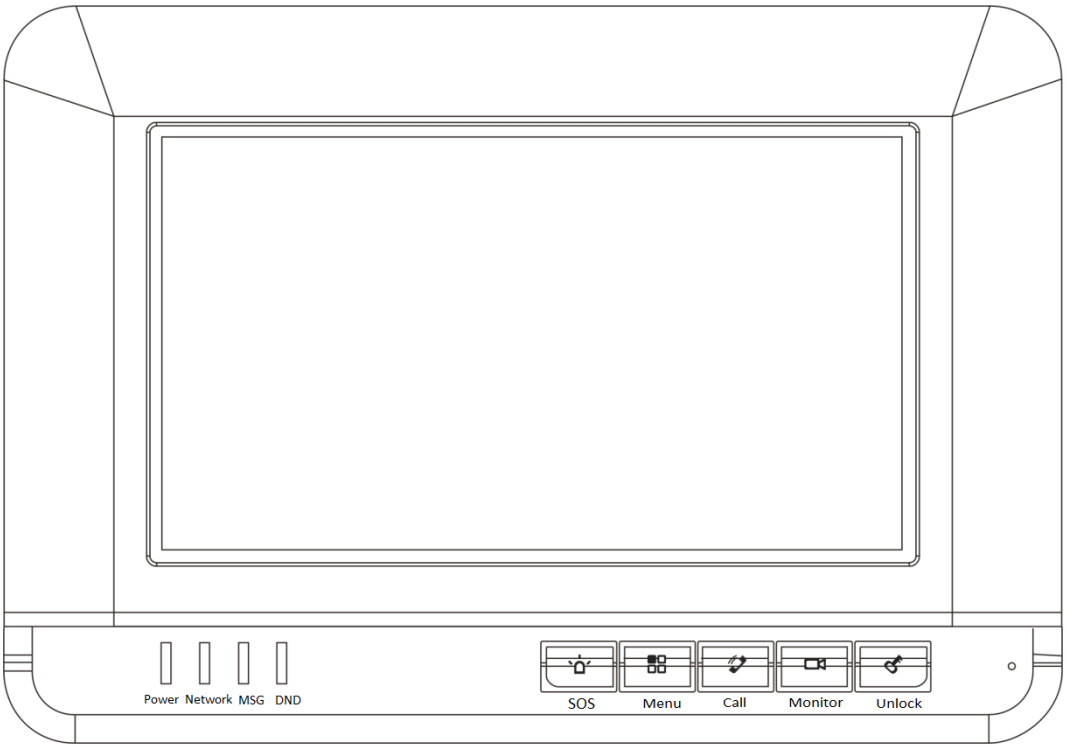

Figure 2-1 VTH15 Series Type A

Icon	Name	Description
	SOS	Press this key to call the Call Center in case of emergency.
	Menu	Press this key to return to main menu.
	Call	● In case of incoming call, press this key to answer the call. ● During talk, press this key to hang up. ● During monitoring, press this key to speak to apartment VTO, villa VTO and fence station. ● During speaking, press this key to exit speaking.
	Monitor	● In standby mode, press this key to monitor the main VTO.

Icon	Name	Description
		● During monitoring, press this key to exit monitoring.
Unlock	Unlock	Press this key during calling, talking, monitoring and speaking of VTO, so corresponding VTO will be unlocked.
Power	Power indicator	If this indicator turns on in green, it represents normal power supply.
Network	Network indicator	● If this indicator turns on, it represents normal communication with VTO. ● If this indicator turns off, it represents abnormal communication with VTO.
MSG	Message indicator	If this indicator turns on, it represents that there are unread messages.
DND	DND indicator	If this indicator turns on in green, it represents that DND function is enabled. Note For DND settings, please refer to “6.2.1.5 DND Settings”.

Table 2-1

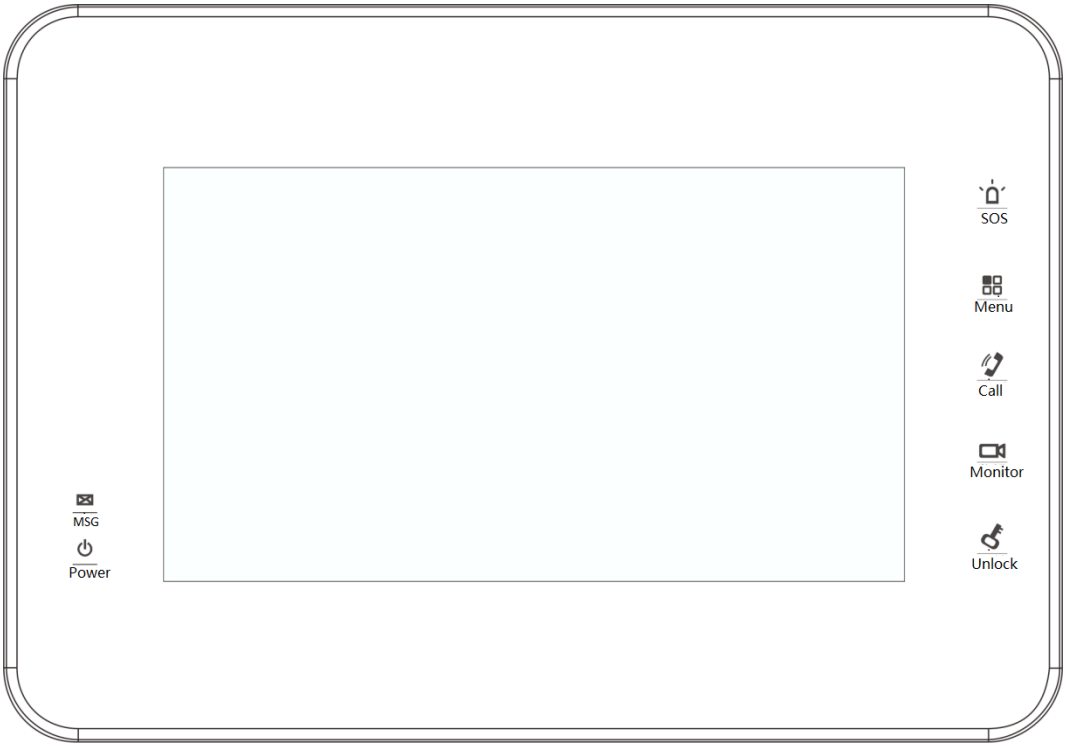

Figure 2-2 VTH15 Series Type B

Icon	Name	Description
SOS	SOS	Press this key to call the Call Center in case of emergency.
Menu	Menu	Press this key to return to main menu.

Icon	Name	Description
Call	Call	● In case of incoming call, press this key to answer the call. ● During talk, press this key to hang up. ● During monitoring, press this key to speak to apartment VTO, villa VTO and fence station. ● During speaking, press this key to exit speaking.
Monitor	Monitor	● In standby mode, press this key to monitor the main VTO. ● During monitoring, press this key to exit monitoring.
Unlock	Unlock	Press this key during calling, talking, monitoring and speaking of VTO, so corresponding VTO will be unlocked.
MSG	Message indicator	If this indicator turns on, it represents that there are unread messages.
Power	Power indicator	If this indicator turns on in green, it represents normal power supply.

Table 2-2

2.1.2 VTH15 Series Type CH/5222CH

Figure 2-3

Icon	Name	Description
	SOS	Press this key to call the Call Center in case of emergency.
	Menu	Press this key to return to main menu.
	Call	● In case of incoming call, press this key to answer the call. ● During talk, press this key to hang up.

Icon	Name	Description
		● During monitoring, press this key to speak to apartment VTO, villa VTO and fence station. ● During speaking, press this key to exit speaking.
	Monitor	● In standby mode, press this key to monitor the main VTO. ● During monitoring, press this key to exit monitoring.
	Unlock	Press this key during calling, talking, monitoring and speaking of VTO, so corresponding VTO will be unlocked.

Table 2-3

2.1.3 VTH1660CH

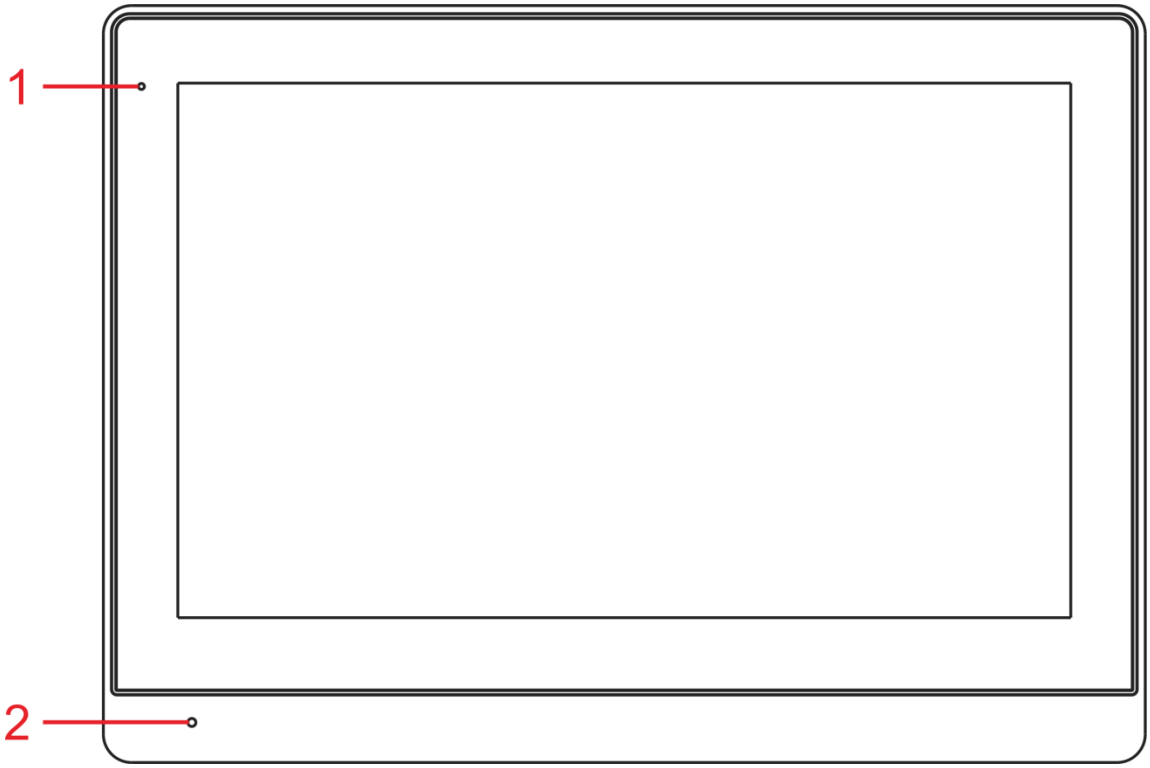

Figure 2-4

No.	Name	Description
1	Power indicator	If this indicator turns on in green, it represents normal power supply.
2	Microphone	Audio input.

Table 2-4

2.1.4 VTH2221A

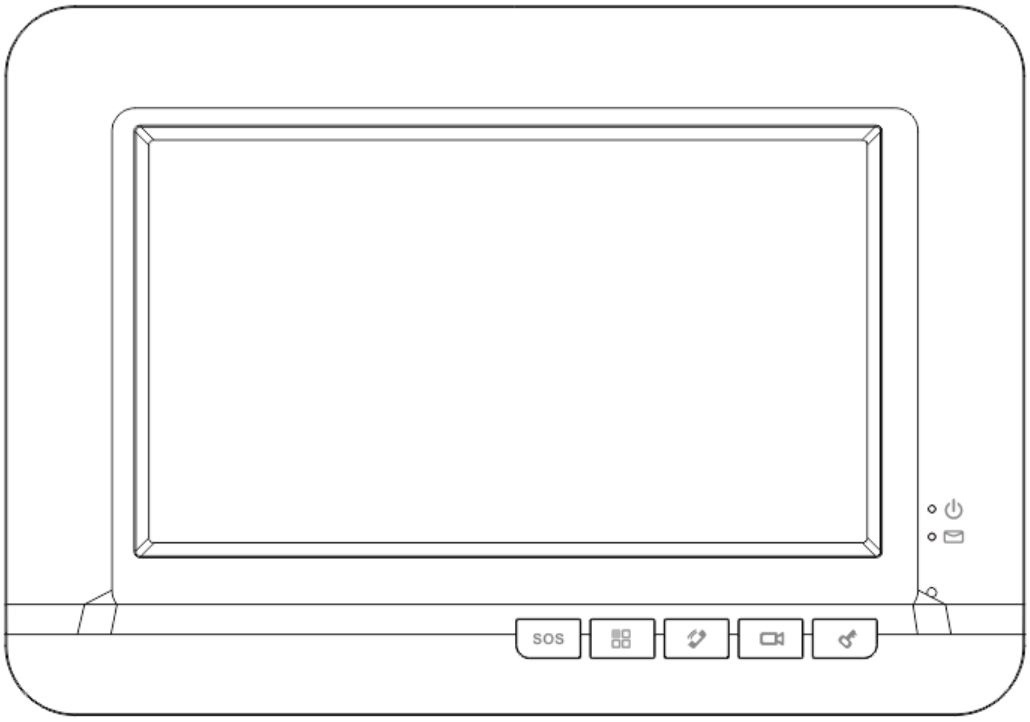

Figure 2-5

Icon	Name	Description
SOS	SOS	Press this key to call the Call Center in case of emergency.
	Menu	Press this key to return to main menu.
	Call	● In case of incoming call, press this key to answer the call. ● During talk, press this key to hang up. ● During monitoring, press this key to speak to apartment VTO, villa VTO and fence station. ● During speaking, press this key to exit speaking.
	Monitor	● In standby mode, press this key to monitor the main VTO. ● During monitoring, press this key to exit monitoring.
	Unlock	Press this key during calling, talking, monitoring and speaking of VTO, so corresponding VTO will be unlocked.
	Power indicator	If this indicator turns on in green, it represents normal power supply.
	Message indicator	If this indicator turns on, it represents that there are unread messages.

Table 2-5

2.2 Rear Panel Port

2.2.1 VTH15 Series Type A/ Type B/ Type CH

In VTH15 series, different types of digital VTH have different port positions, but the same port owns the same function. Taking VTH1550CH as an example, specific functions of ports are introduced, as shown in Figure 2-6.

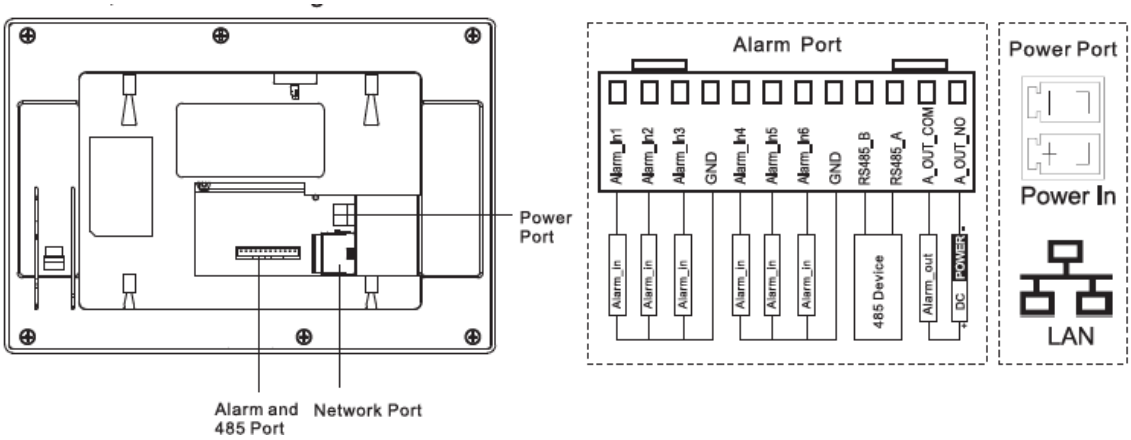

Figure 2-6

In VTH type A/type B series, different types of digital VTH have different port positions, but the same port provides the same function. Taking VTH1560B as an example, specific functions of ports are introduced, as shown in Figure 2-7.

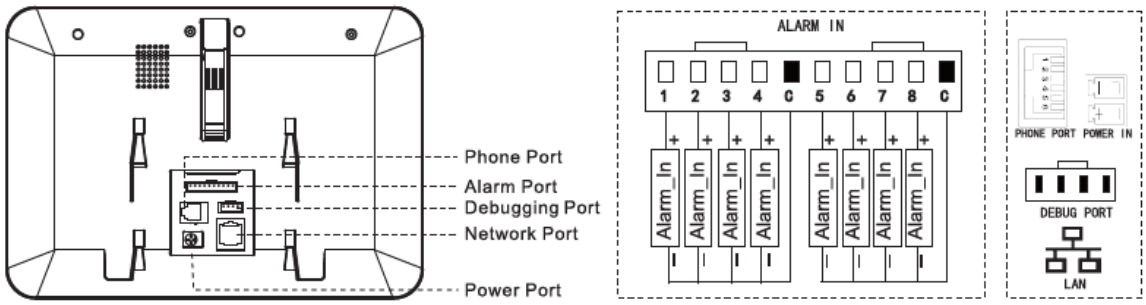

Figure 2-7

2.2.2 VTH5222CH

VTH5222CH 2-wire VTH provides 6 alarm input ports, 1 alarm output port, 1 RS485 port and 1 group of 2-wire port, as shown in Figure 2-8. VTH1550CHW-2 has 3 groups of 2-wire port.

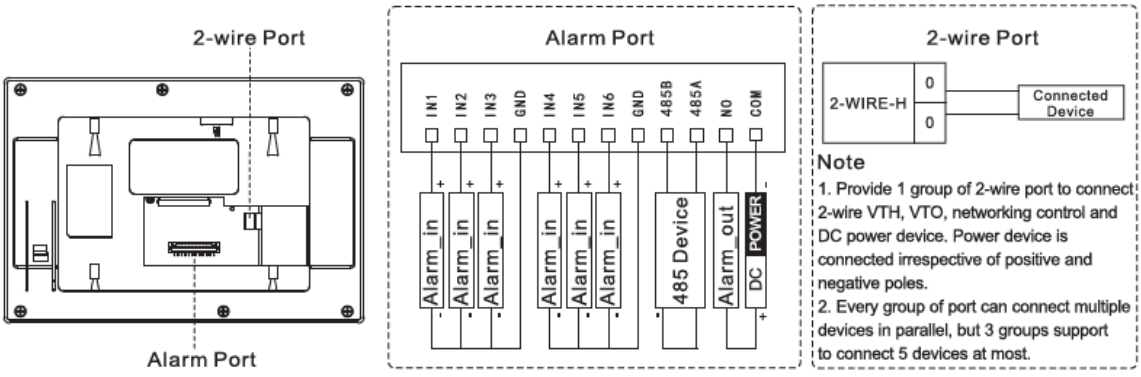

Figure 2-8

2.2.3 VTH1660CH

VTH1660CH digital VTH provides 8 alarm input ports, 1 RS485 port, 1 debugging port, 1 network port and power port, as shown in Figure 2-9.

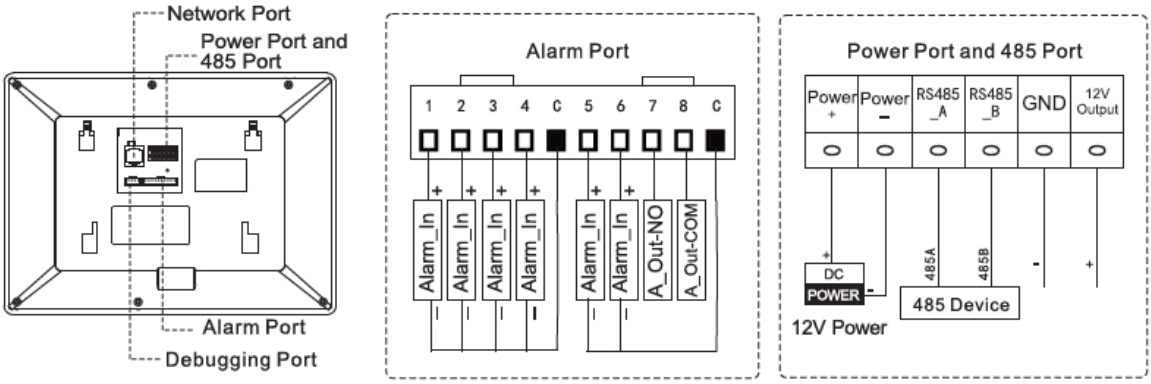

Figure 2-9

2.2.4 VTH2221A

VTH2221A digital VTH provides 8 alarm input ports, 1 network port and power port, as shown in Figure 2-10.

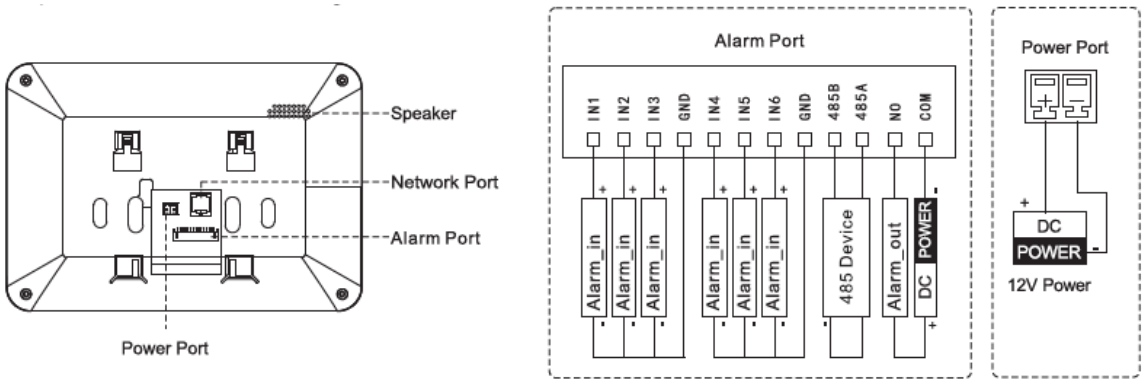

Figure 2-10

3 Network Diagram

3.1 2-wire System

Network diagram of 2-wire system is shown in Figure 3-1.

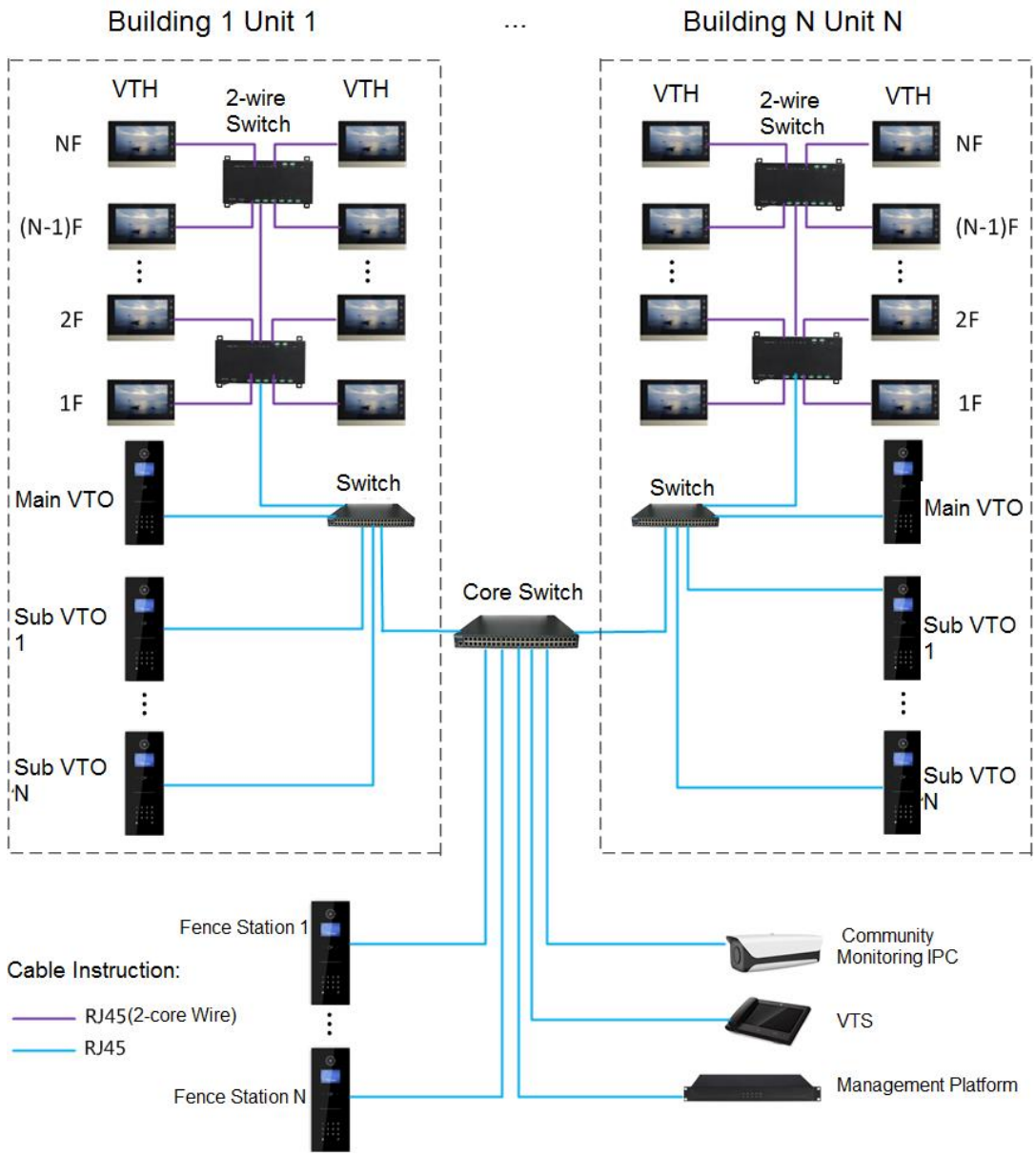

Figure 3-1

3.2 Digital System

Digital system network consist of two types:

- VTH adopts PoE power supply from floor switch, as shown in Figure 3-2.

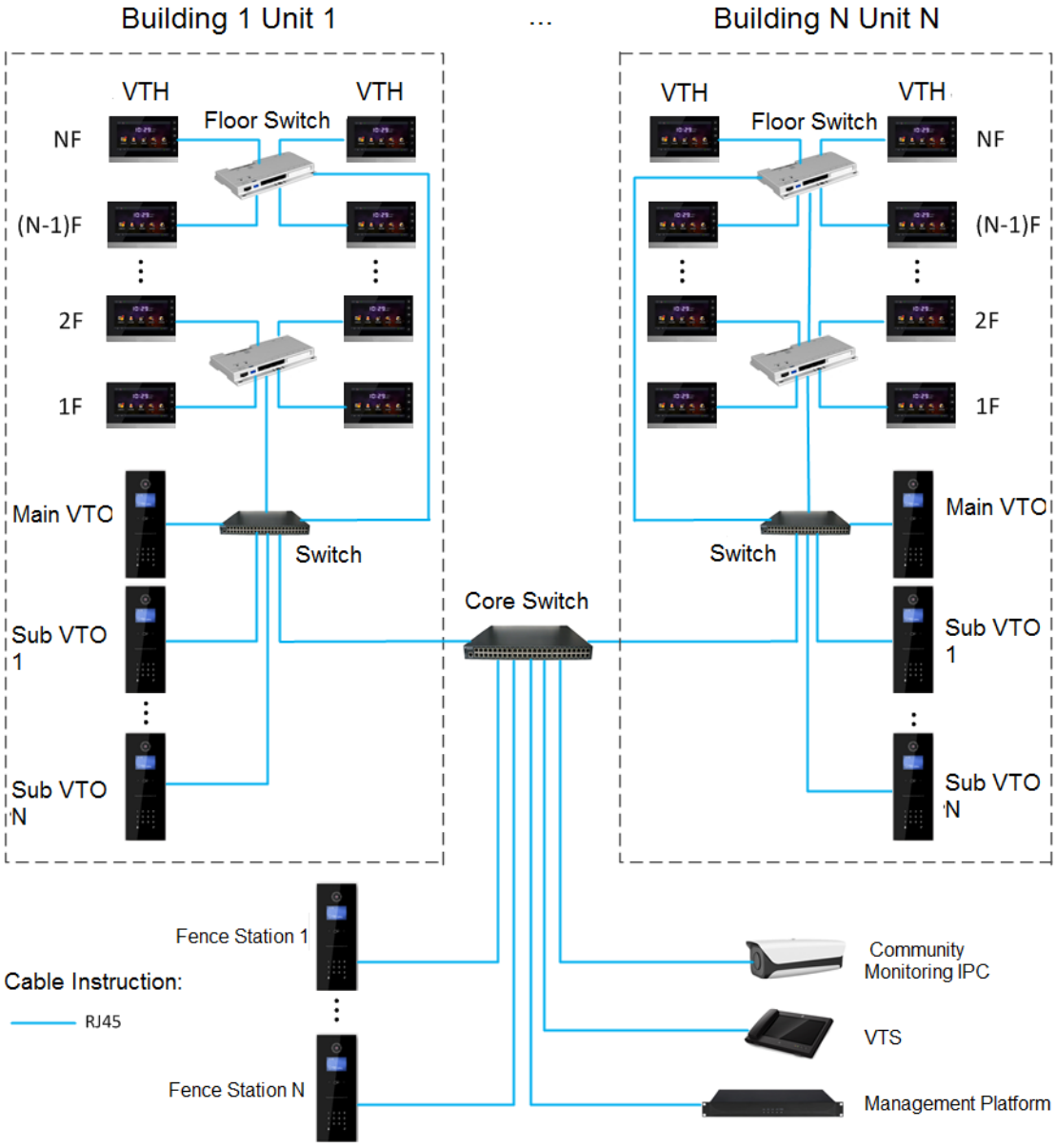

Figure 3-2

- VTH adopts independent power supply from power supply device, as shown in Figure 3-3.

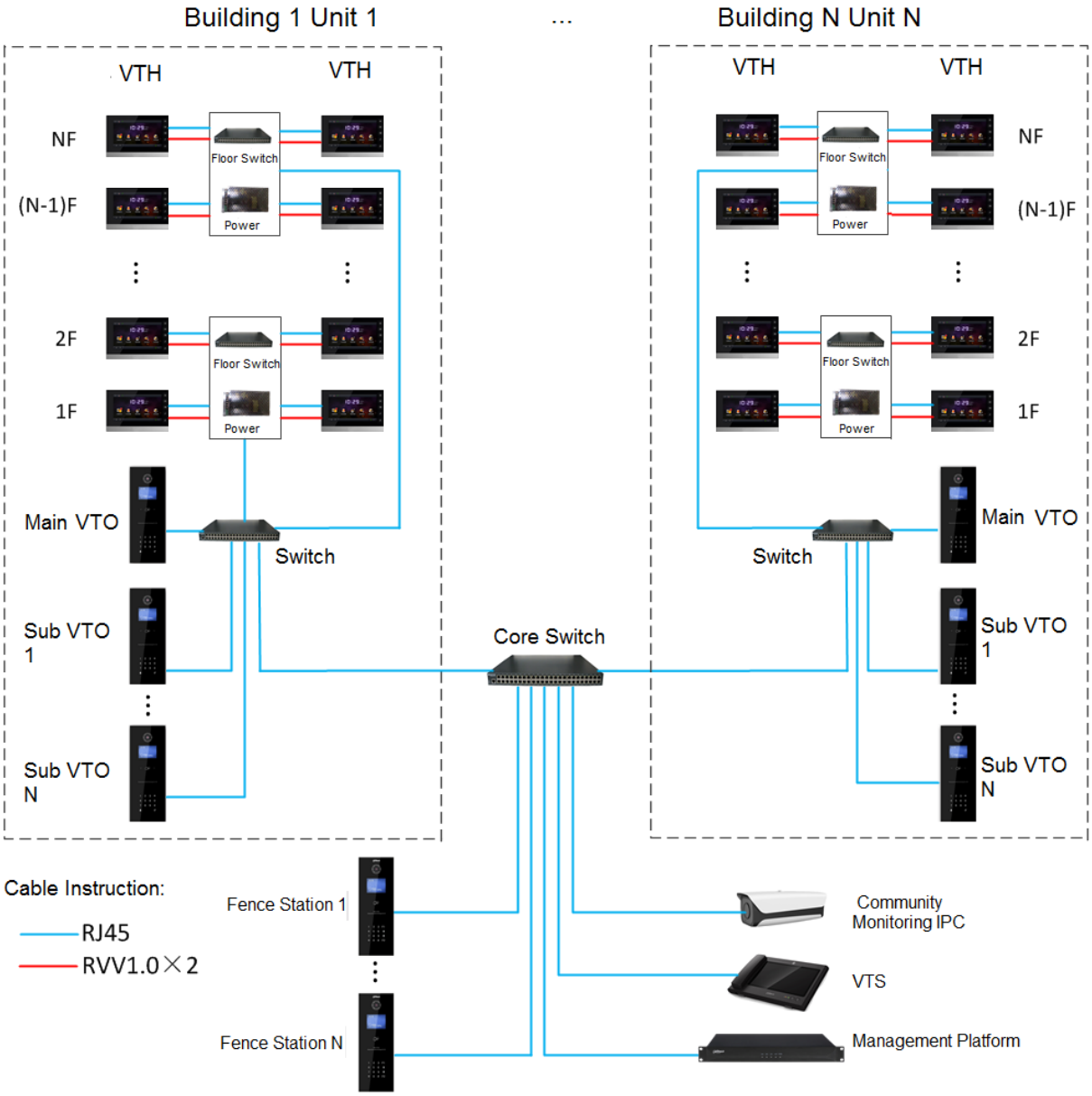
Building 1 Unit 1
...
Building N Unit N
VTH
VTH
NF
(N-1)F
2F
1F
Floor Switch
Power
Main VTO
Switch
Sub VTO 1
Sub VTO N
Core Switch
Cable Instruction:
RJ45
RVV1.0×2
Fence Station 1
Fence Station N
Community Monitoring IPC
VTS
Management Platform

Figure 3-3

4 Device Installation

4.1 Installation Flow Chart

VTH installation flow chart is shown in Figure 4-1. Please install VTH in the following steps.

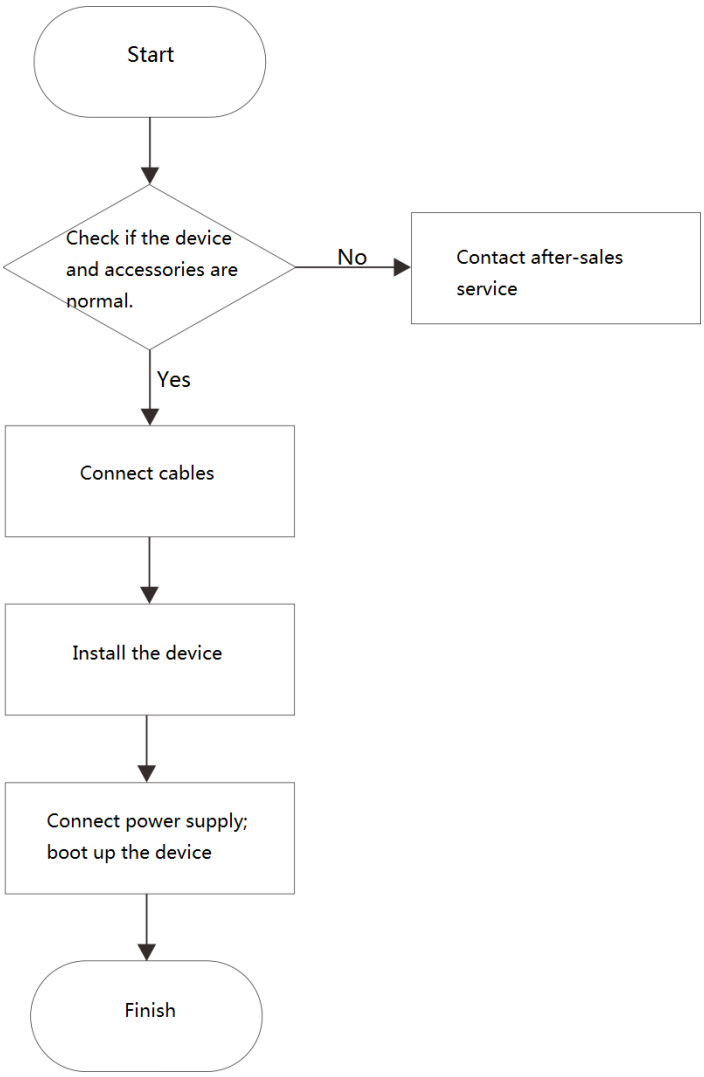

Figure 4-1

Note

- For cable connection, please refer to “2.2 Rear Panel ”.
- For device installation, please refer to “4.4 Device Installation”.

4.2 Open-case Inspection

Please carry out open-case inspection when receiving the device. Please timely contact our

after-sales service personnel in case of any problems.

Sequence	Item		Content
1	Overall package	Appearance	Inspect whether there are obvious damages.
		Package	Inspect whether there are accidental impacts.
		Fittings	Inspect whether fittings are complete.
2	Model and label	Device model	Inspect whether it is consistent with order contract.
		Label on the device	Inspect whether it is torn or damaged. Note Don't tear or discard the label, otherwise warranty service won't be provided. When dialing our after-sales hotline, please provide serial number of the product.
3	Device	Appearance	Inspect whether there are obvious damages.

Table 4-1

4.3 Installation Requirement

- Don't install VTH in bad environment, such as condensation, high temperature, stained, dusty, chemically corrosive and direct sunshine environment.
- Engineering installation and debugging shall be done by professional teams. Please don't dismantle or repair arbitrarily in case of device failure.

4.4 Device Installation

Note

It is suggested that installation height of device central point shall be 1.4cm～1.6cm above the ground.

4.4.1 Surface Installation

Directly install the device with a bracket onto a wall, which is suitable for all types of devices. Take "VTH1550CH" for example.

Step 1 Drill holes in the wall according to hole positions of the bracket.

Step 2 Fix installation bracket directly onto the wall with screws.

Step 3 Put the device into installation bracket from top down.

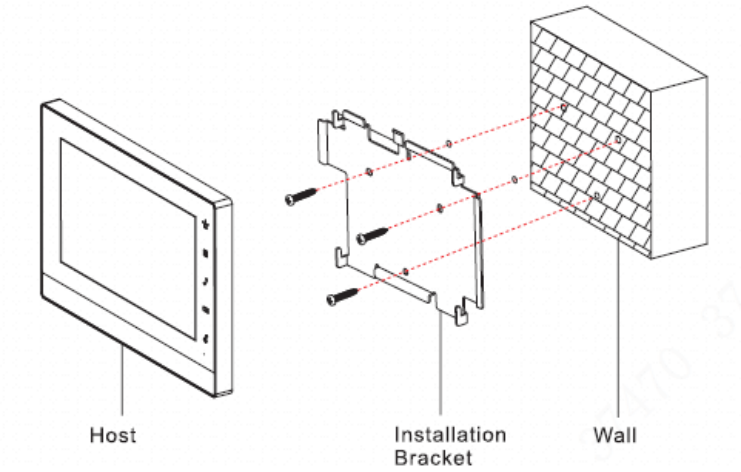

Figure 4-2

4.4.2 Installation with 86 Box

Install the device with 86 box, which is suitable for all types of devices. Take “VTH1560B/BW” for example.

Step 1 Embed 86 box into a wall at a proper height.

Step 2 Fix installation bracket onto 86 box with screws.

Step 3 Put the device into installation bracket from top down.

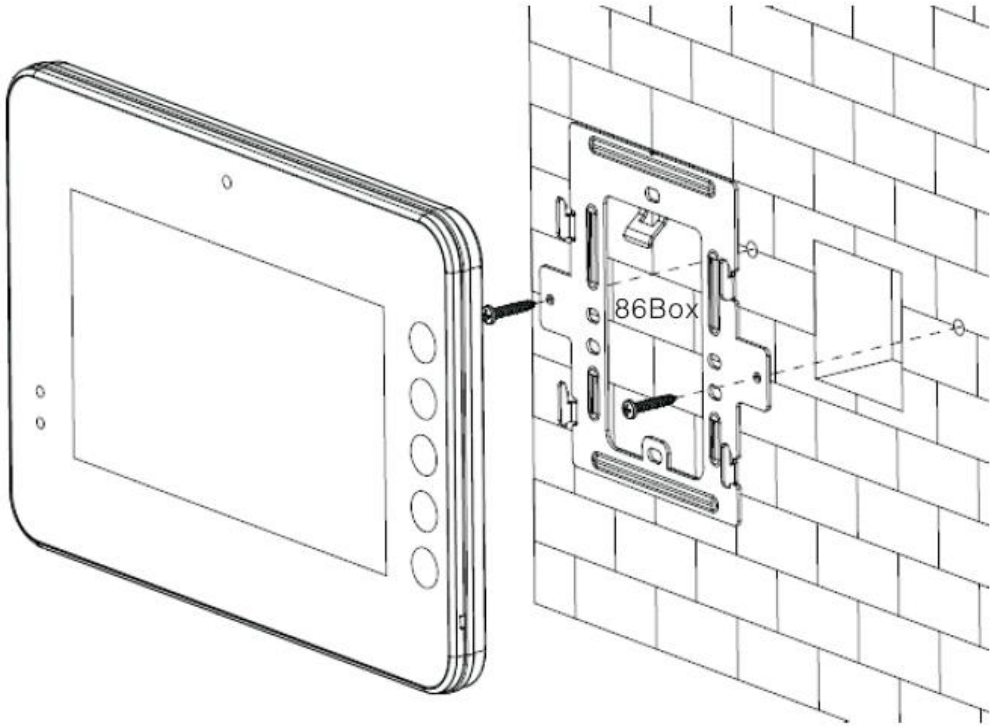

Figure 4-3

5 Device Debugging

Carry out debugging to ensure that the device can realize basic network access, call and monitoring functions after installation. Before debugging, please check whether the following work has been completed.

- Debugging personnel get familiar with relevant documents, device installation, wiring and use.
- Check whether there is short circuit or open circuit. Power on the device only after the circuit is confirmed to be normal.

5.1 Debugging Settings

The system provides two debugging methods. Please select according to actual needs.

- Single debugging: set VTO info and VTH info at WEB interface of every VTO, set VTH info, network info and VTO info on every VTH, and thus realize video intercom function.
- Batch debugging: set VTO info and VTH info at WEB interface of every VTO, set VTH network segment and enable it at WEB interface of a unit VTO, and then add info about all VTOs. Initialize every VTH to realize video intercom function.

5.1.1 Single Debugging

5.1.1.1 VTO Settings

For the first time, please initialize and modify login password.

Note

Please ensure that default IP addresses of PC and VTO are in the same network segment. Default IP address of VTO is 192.168.1.110.

Step 1 Connect VTO power and boot up.

Step 2 Enter default IP address of VTO at the address bar of PC browser.

The system displays “Setting” interface, as shown in Figure 5-1.

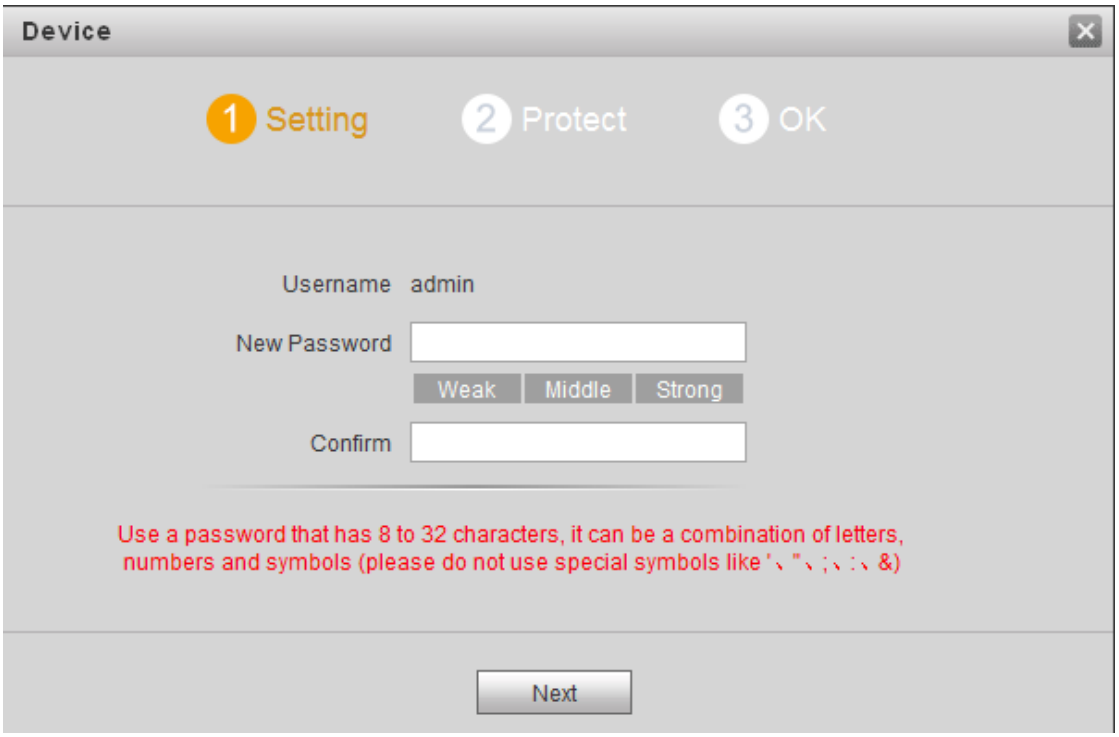

Figure 5-1

Step 3 Enter “New Password” and “Confirm”, and click “Next”.

The system displays “Protect” interface, as shown in Figure 5-2.

Note

This password is used to login WEB interface. It shall be at least 8 characters, and shall include at least two types of number, letter and symbol.

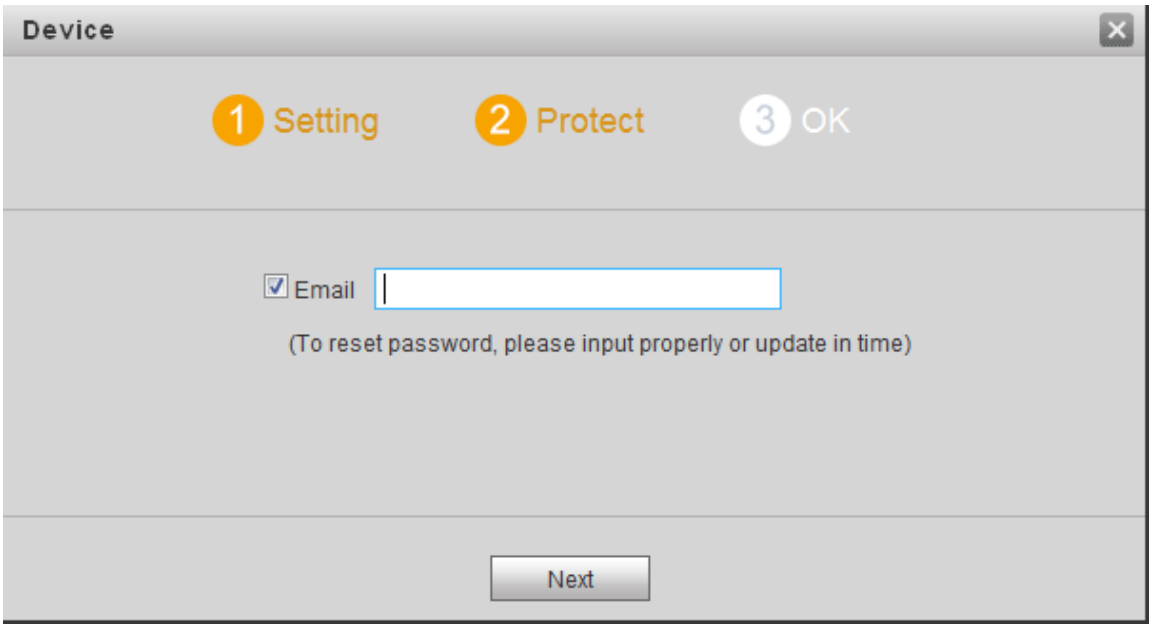

Figure 5-2

Step 4 Select “Email” and enter your Email address.

This Email address is used to reset the password, so it is recommended that it should be set.

Step 5 Click “Next”.

The system displays “OK” interface, as shown in Figure 5-3, and shows “Device succeed!”

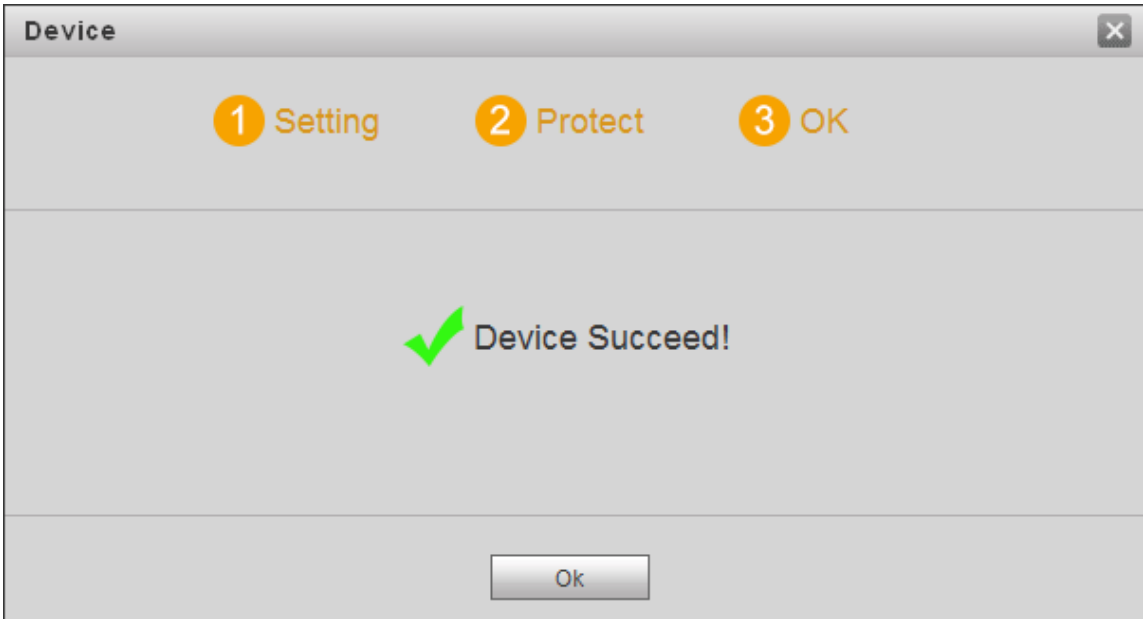

Figure 5-3

Step 6 Click “OK”.

The system displays WEB login interface, as shown in Figure 5-4.

Figure 5-4

Step 7 Enter user name and password, and click “Login”.

Log in the WEB interface of the device.

Note

- Default user name is admin.
- Password is the one set during initialization.

Step 8 Select “System Config > Network Config > TCP/IP”.

The system displays “Network Settings” interface, as shown in Figure 5-5.

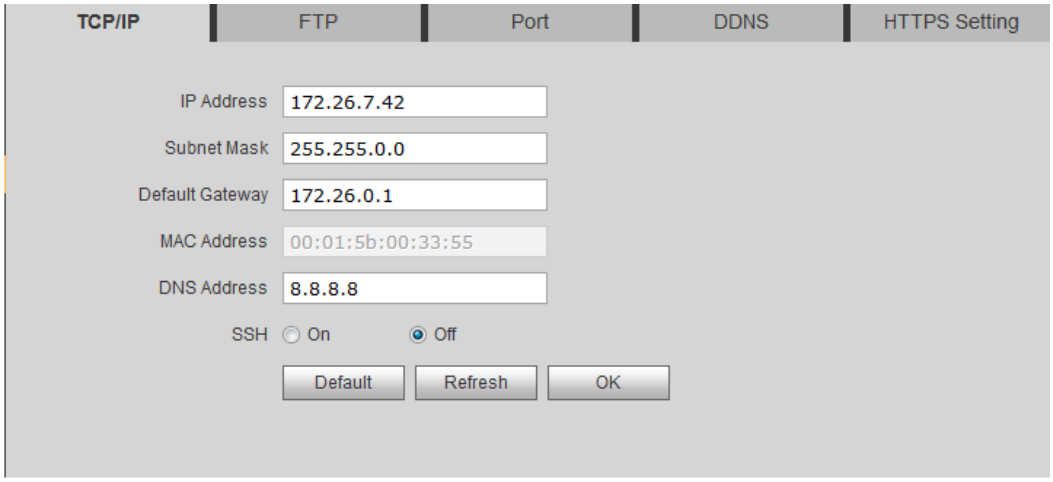

Figure 5-5

Step 9 Enter the planned “IP Address”, “Subnet Mask” and “Default Gateway”, and click “OK”. After modification is completed, VTO reboots automatically, while the following two cases occur at WEB interface.

- If PC is in the planned network segment, WEB interface jumps to new IP login interface automatically.
- If PC is not in the planned network segment, the webpage cannot be displayed. Please enter a new IP address in the browser.

Step 10 Login WEB interface again.

Step 11 Select “System Config > LAN Config”.

The system displays “LAN Config” interface, as shown in Figure 5-6.

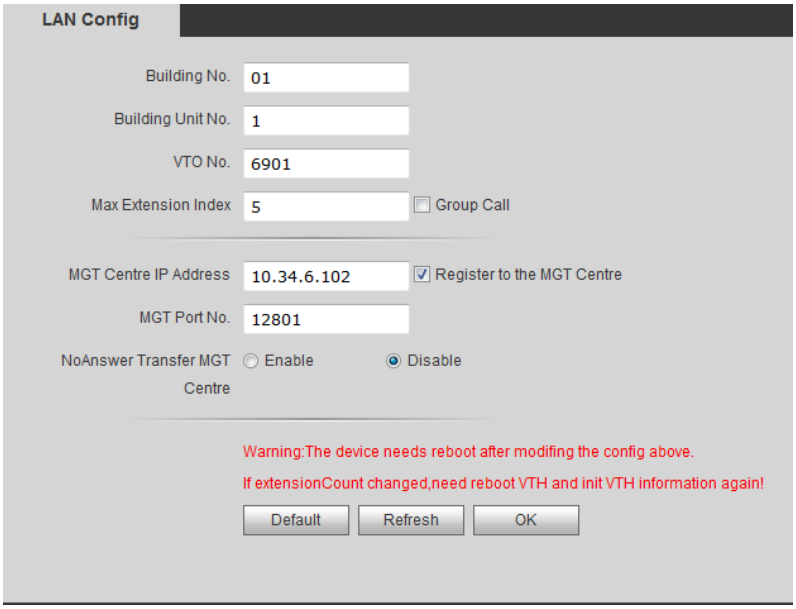

Figure 5-6

1. Enter VTO “Building No.”, “Building Unit No.” and “VTO No.”.
2. Click “OK”.

Step 12 Select “System Config > Digital Indoor Station Manager”. The system displays “Digital Indoor Station Manager” interface, as shown in Figure 5-7.

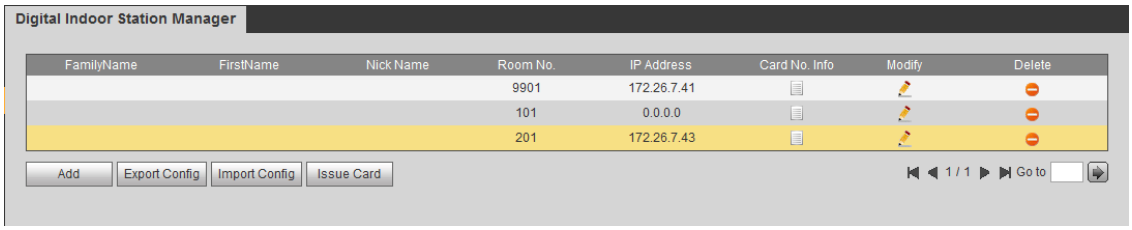

Figure 5-7

Step 13 Click “Add”.

The system displays “Add” interface, as shown in Figure 5-8.

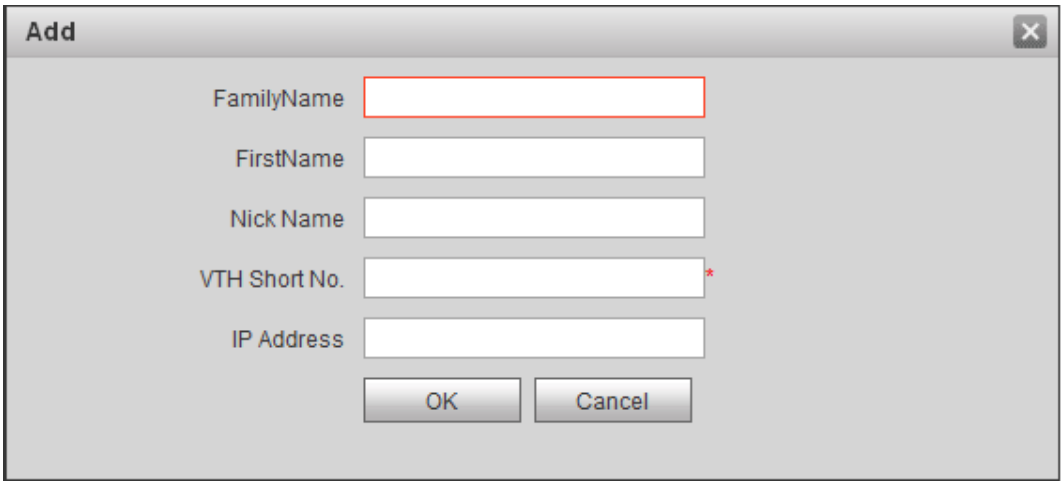

Figure 5-8

1. Enter VTH “Family Name”, “First Name”, “Nick Name”, “VTH Short No.” (VTH room no.) and “IP Address”.
2. Click “OK”.

5.1.1.2 VTH Settings

5.1.1.2.1 Initialization

Set the password and bind your Email.

- Password: it is used to enter project setting interface.
- Email: it is used to retrieve your password when you forget it.

Step 1 Power on the device.

The system displays “Welcome” and enters “Initialization” interface, as shown in Figure 5-9.

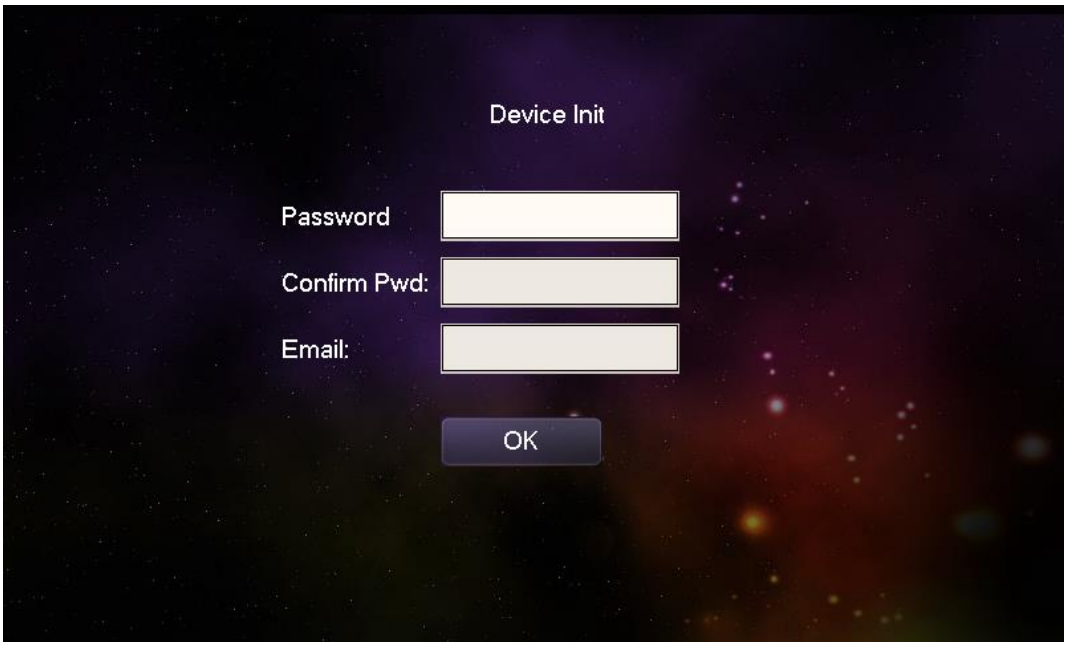

Figure 5-9

Step 2 Enter “Password”, “Confirm Pwd” and “Email”.

Step 3 Click [OK].

The system displays “Info Init” interface, as shown in Figure 5-10.

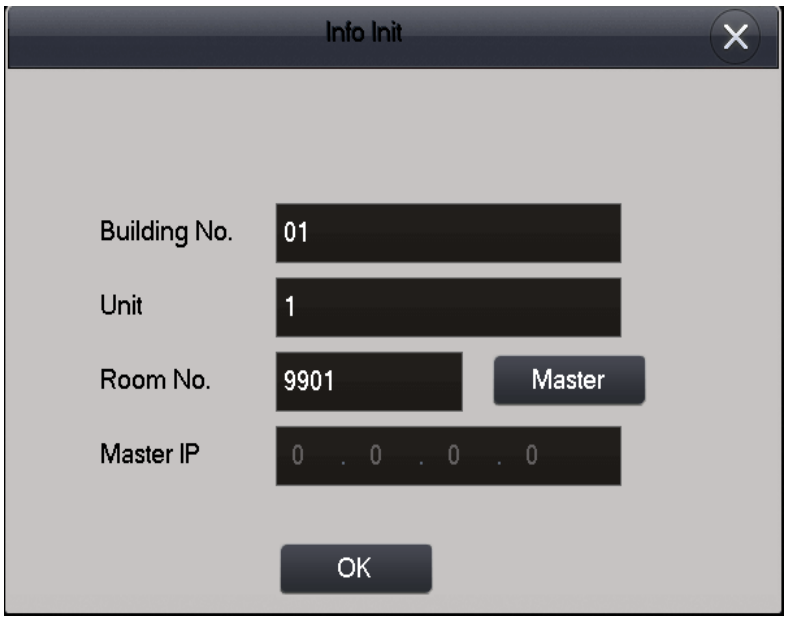

Figure 5-10

Step 4 Click  to turn off the interface.

5.1.1.2.2 Network Settings

Set VTH network info, which supports static IP and DHCP.

Note

IP addresses of VTH and VTO shall be in the same network segment. Otherwise, VTH will fail to obtain VTO info after configuration.

Step 1 Select “System Config >Project Settings”.

The system pops up “Password” prompt box.

Step 2 Enter the password set during initialization, and click [OK].

Step 3 Click [Net Set].

The system displays “Net Set” interface, as shown in Figure 5-11.

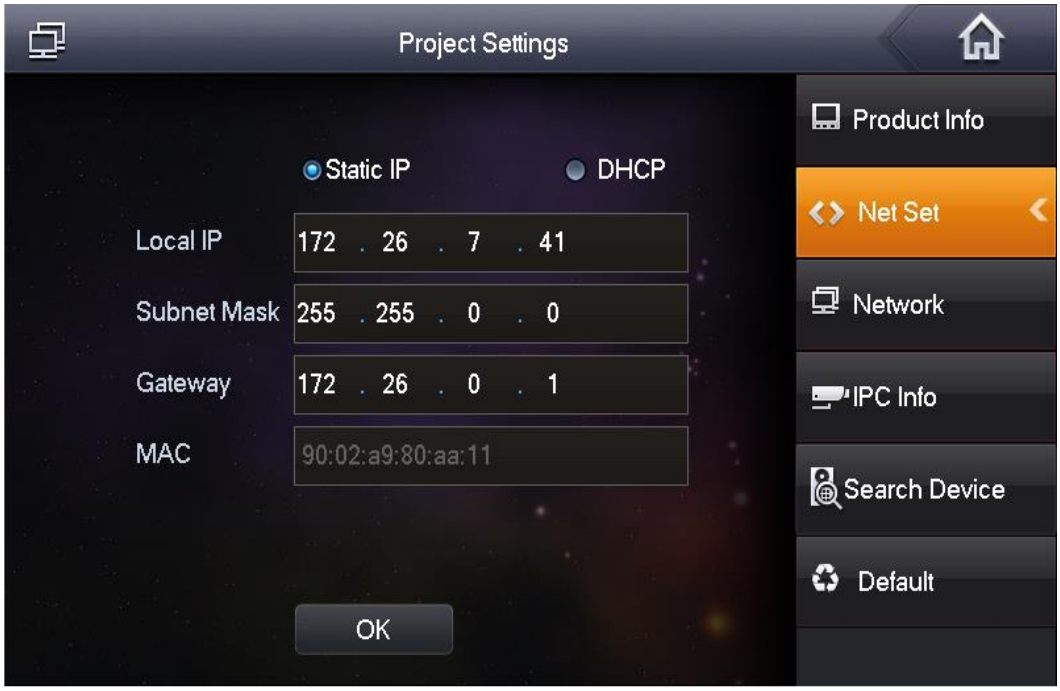

Figure 5-11

Step 4 Set according to actual network access mode.

- Static IP

1. Select “Static IP”.
2. Enter “Local IP”, “Subnet Mask” and “Gateway”.

- DHCP

Select “DHCP” to obtain IP address automatically.

Step 5 Click [OK] to save the settings.

5.1.1.2.3 Product Info Settings

Set VTH “Room No.”, “Type” and “Master IP”.

Step 1 Select “System Config >Project Settings”.

The system pops up “Password” prompt box.

Step 2 Enter the password set during initialization, and click [OK].

Step 3 Click [Product Info].

The system displays “Product Info” interface, as shown in Figure 5-12.

Figure 5-12

Step 4 Set VTH info.

- Be used as a master VTH.

Enter “Room No.” (such as 9901).

Note

“Room no.” shall be the same with “VTH Short No.”, which is set when adding VTH at WEB interface. Otherwise, it will fail to connect VTO.

- Be used as a VTH extension.

1. Press [Master] and switch to “Extension”.
2. Enter “Room No.” (such as 9901-1) and “Master IP” (IP address of master VTH).

Note

“User Name” and “Password” are the user name and password of master VTH. Default user name is admin, and the password is the one set during device initialization.

Step 5 Click [OK] to save the settings.

5.1.1.2.4 Network Terminal Setting

Add VTO and fence station info; at VTH interface, bind VTH with VTO.

Step 1 Select “System Config >Project Settings”.

The system pops up “Password” prompt box.

Step 2 Enter the password set during initialization, and click [OK].

Step 3 Click [Network].

The system displays “Network” interface, as shown in Figure 5-13.

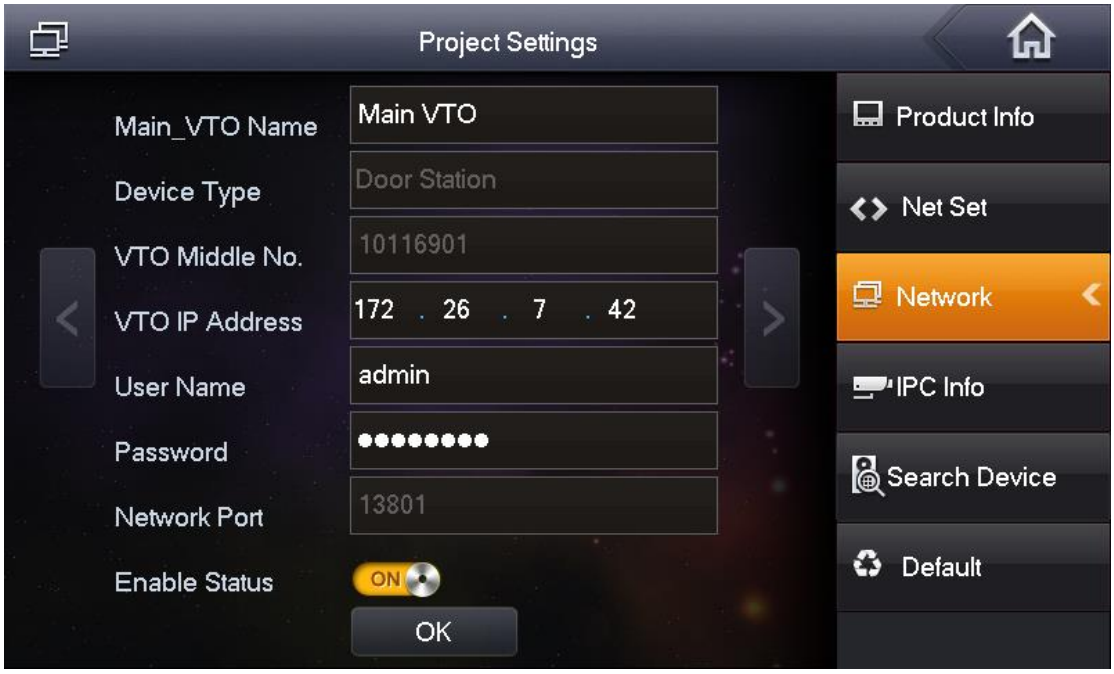

Figure 5-13

Step 4 Enter main/sub VTO name, IP address, “User Name” and “Password”. Meanwhile, switch “Enable Status” to 

.

Note

- Press left and right arrows to switch VTO setting tabs.
  To add a fence station, select device type and middle no. (fence station no.) and obtain IP address automatically. To add a VTO, middle no. will be obtained automatically as long as IP address is set.
- “User Name” and “Password” shall be consistent with WEB login user name and password of VTO. Otherwise, it will fail to connect.

Step 5 Click [OK] to save the settings.
Debugging has been completed.

5.1.2 Batch Debugging

5.1.2.1 VTO Settings

For the first time, please initialize and modify login password.

Note

Please ensure that default IP addresses of PC and VTO are in the same network segment. Default IP address of VTO is 192.168.1.110.

Step 1 Connect VTO power and boot up.

Step 2 Enter default IP address of VTO at the address bar of PC browser.
The system displays “Setting” interface, as shown in Figure 5-14.

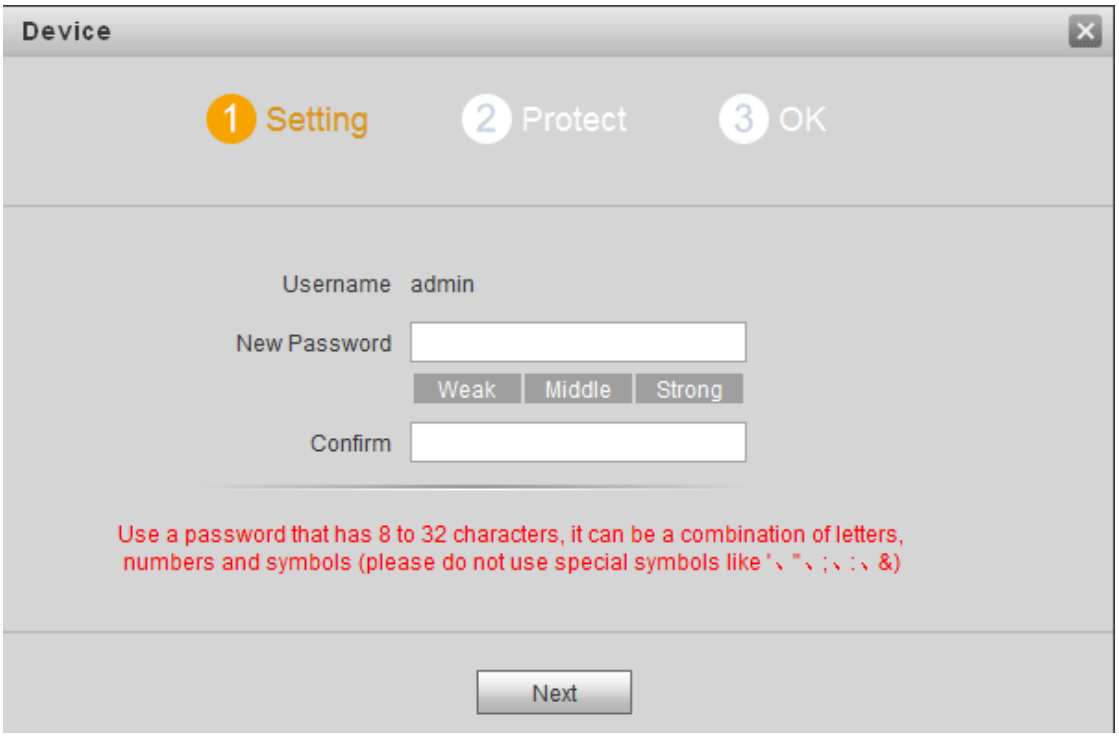

Figure 5-14

Step 3 Enter “New Password” and “Confirm”, and click “Next”.

The system displays “Protect” interface, as shown in Figure 5-15.

Note

This password is used to login WEB interface. It shall be at least 8 characters, and shall include at least two types of number, letter and symbol.

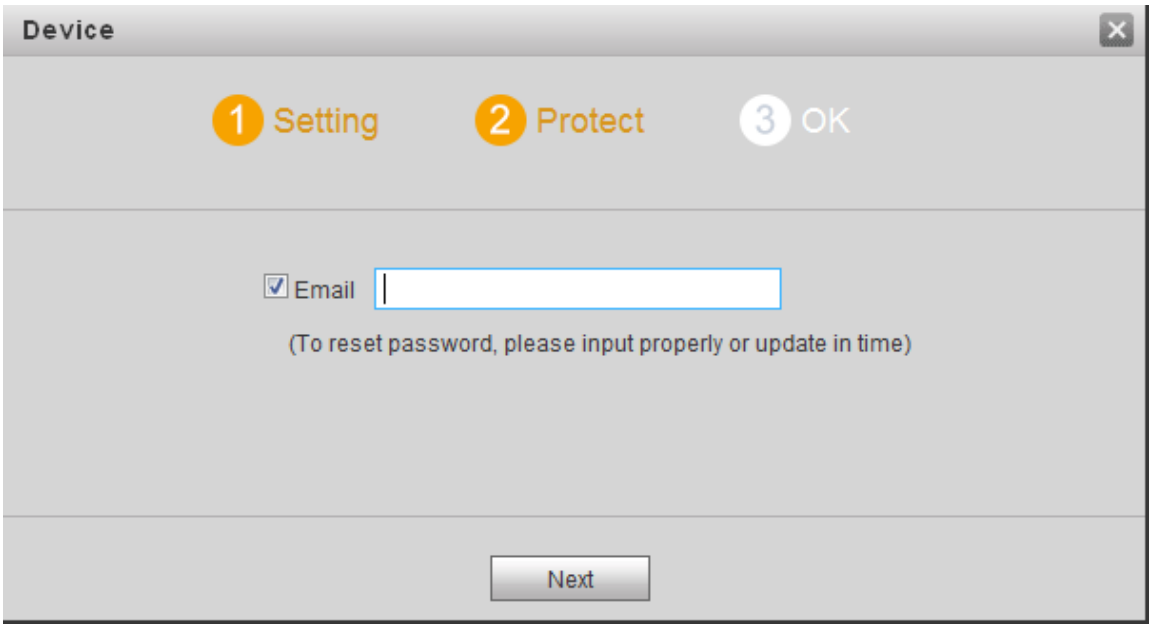

Figure 5-15

Step 4 Select “Email” and enter your Email address.

This Email address is used to reset the password, so it is recommended that it should be set.

Step 5 Click “Next”.

The system displays “OK” interface, as shown in Figure 5-16, and shows “Device succeed!”

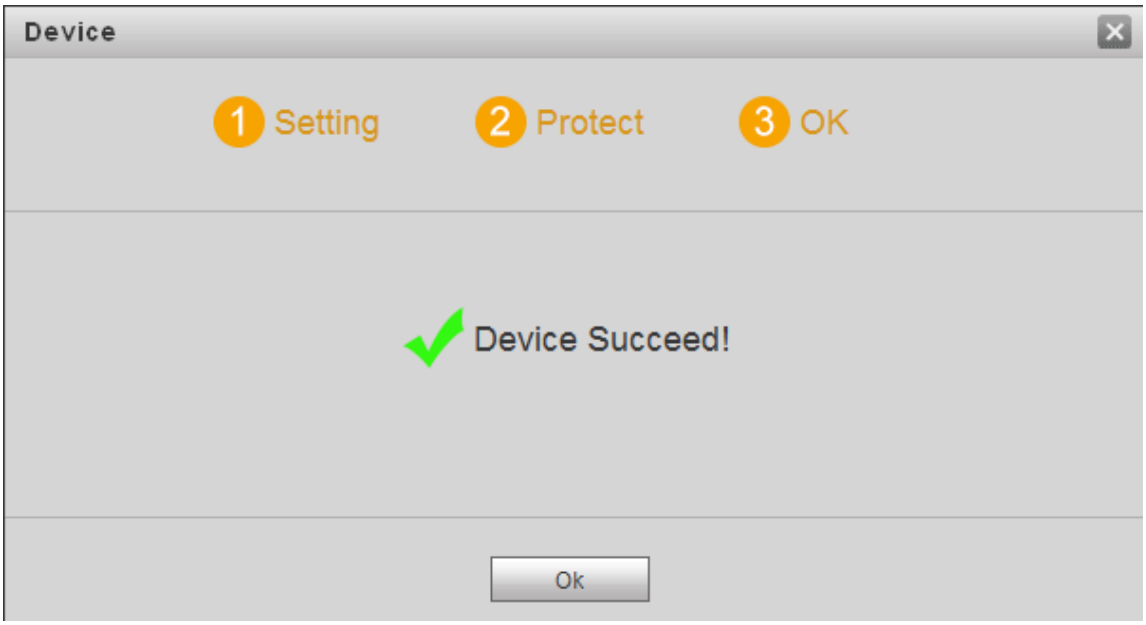

Figure 5-16

Step 6 Click “OK”.

The system displays WEB login interface, as shown in Figure 5-17.

Figure 5-17

Step 7 Enter user name and password, and click “Login”.

Log in the WEB interface of the device.

Note

- Default user name is admin.
- Password is the one set during initialization.

Step 8 Select “System Config > Network Config > TCP/IP”.

The system displays “Network Settings” interface, as shown in Figure 5-18.

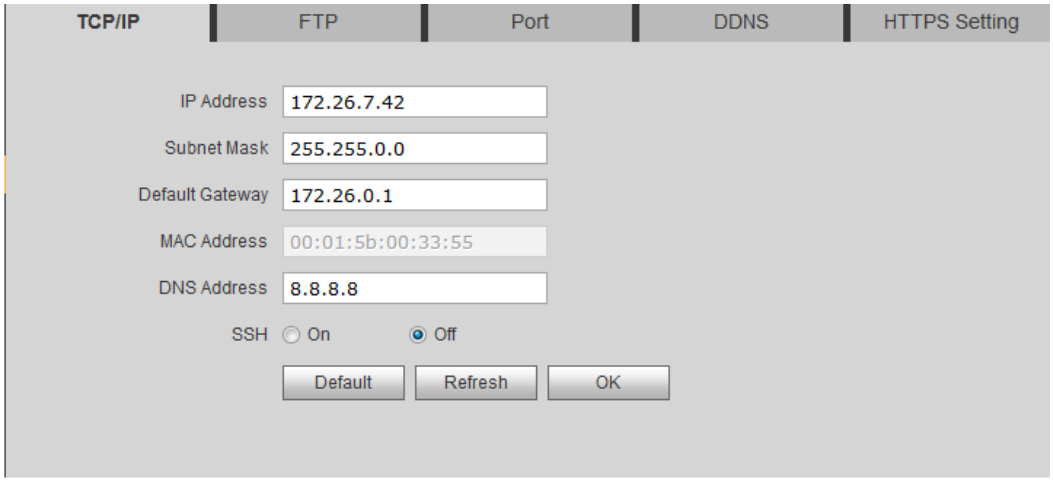

Figure 5-18

Step 9 Enter the planned “IP Address”, “Subnet Mask” and “Default Gateway”, and click “OK”. After modification is completed, VTO reboots automatically, while the following two cases occur at WEB interface.

- If PC is in the planned network segment, WEB interface jumps to new IP login interface automatically.
- If PC is not in the planned network segment, the webpage cannot be displayed. Please enter a new IP address in the browser.

Step 10 Log in WEB interface again.

Step 11 Select “System Config > LAN Config”.

The system displays “LAN Config” interface, as shown in Figure 5-19.

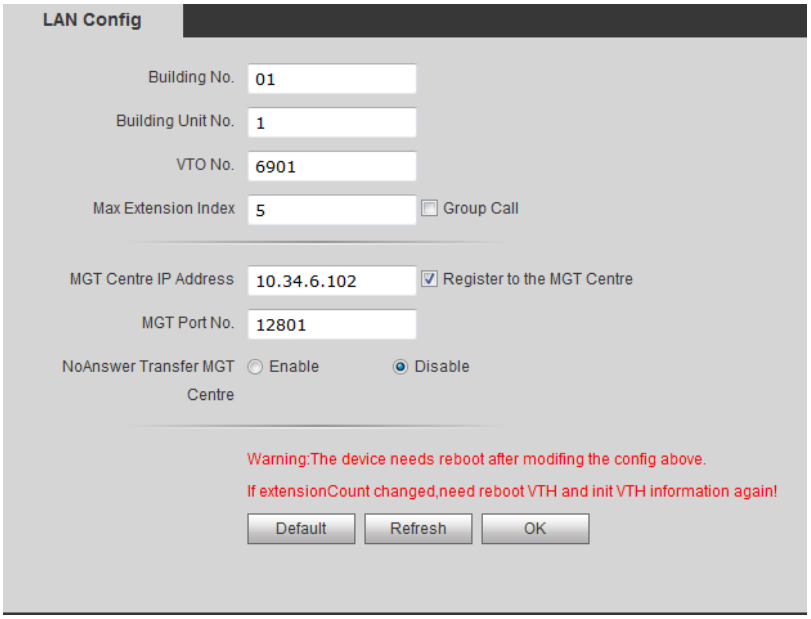

Figure 5-19

1. Enter VTO “Building No.”, “Building Unit No.” and “VTO No.”.
2. Click “OK”.

Step 12 Select “System Config > Digital Indoor Station Manager”. The system displays “Digital Indoor Station Manager” interface, as shown in Figure 5-20.

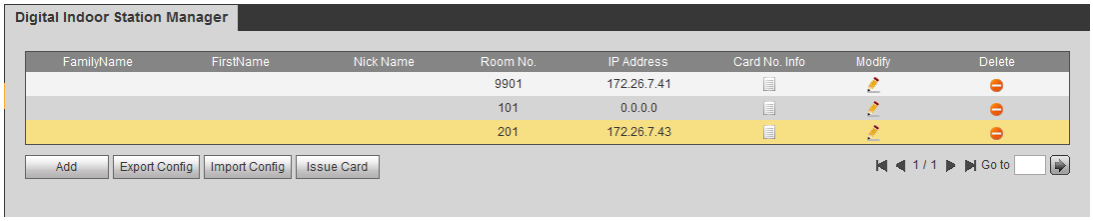

Figure 5-20

Step 13 Click “Add”.

The system displays “Add” interface, as shown in Figure 5-21.

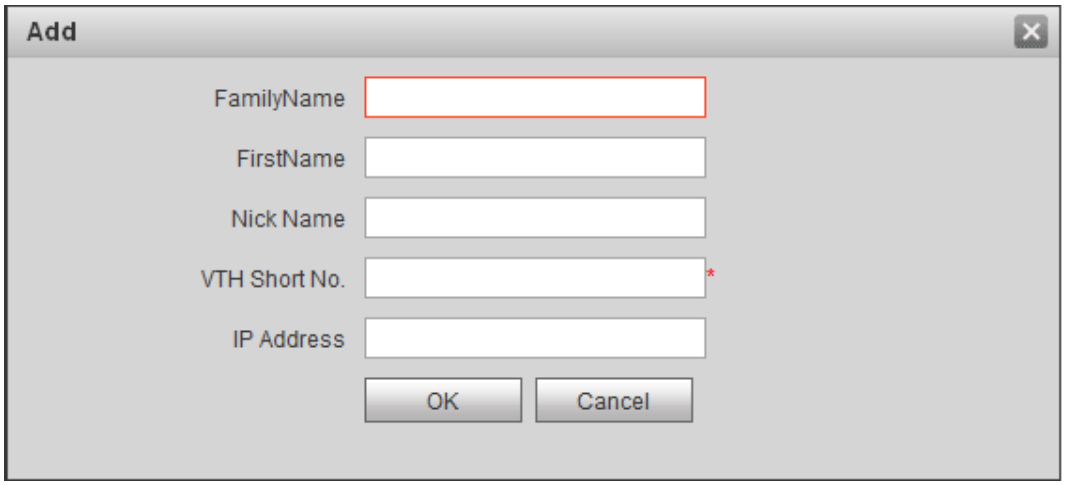

Figure 5-21

1. Enter VTH “Family Name”, “First Name”, “Nick Name”, “VTH Short No.” (VTH room no.) and “IP Address”.
2. Click “OK”.

Step 14 Select “System Config >VTO Info”.

The system displays “VTO Info” interface, as shown in Figure 5-22.

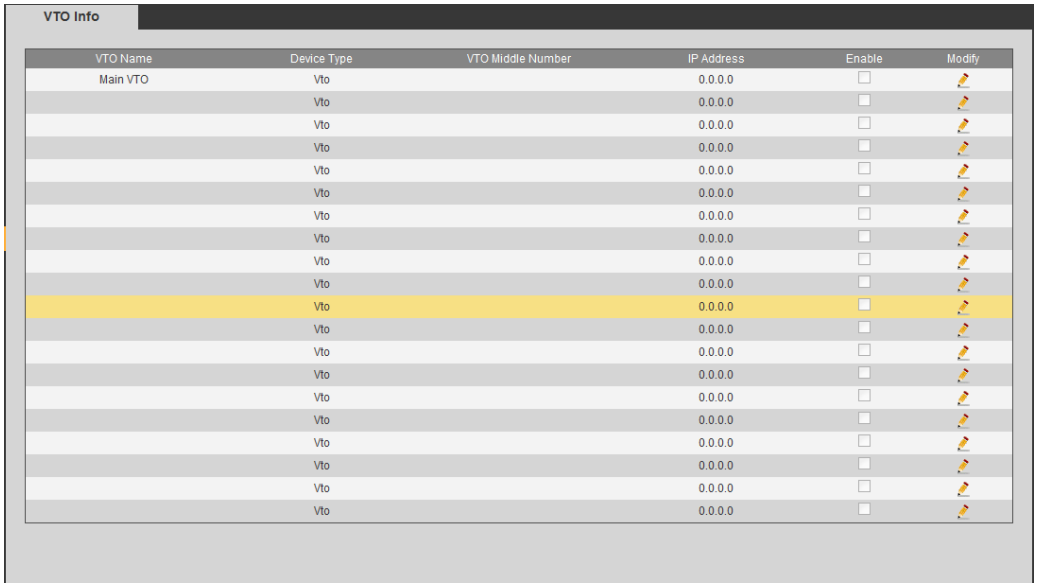

Figure 5-22

1. Click  .

The system displays “Modify” interface, as shown in Figure 5-23.

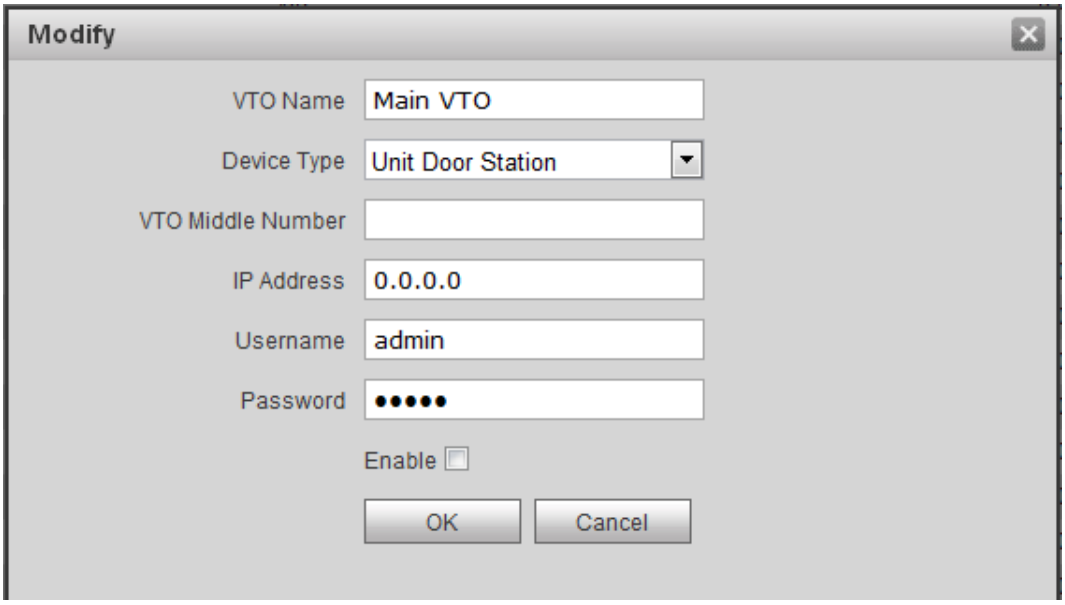

Figure 5-23

2. Enter “VTO Name”, “VTO Middle Number” and “IP Address”; select “Device Type”.

Note

VTO middle number consists of “1+ Building No. + Unit No. + VTO No.”. Building no. has 2 digits, unit no. has 1 digit, VTO no. has 4 digits, so middle number has 8 digits in total. For example, regarding 01 Building 1 Unit 6901, middle number is 10116901.

3. Select “Enable”.
4. Click “OK” to add VTO info.

Step 15 Select “System Config > IP Allocate Auto”.

The system displays “IP Allocate Auto” interface, as shown in Figure 5-24.

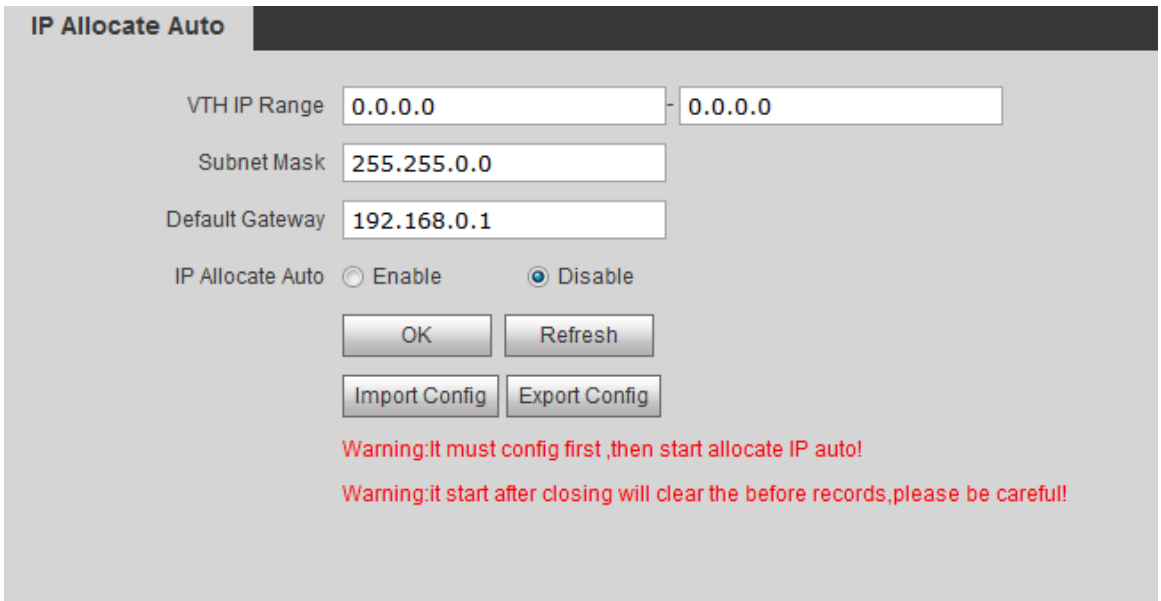

Figure 5-24

1. Enter “VTH IP Range”, “Subnet Mask” and “Default Gateway”.
2. “IP Allocate Auto” selects “Enable”.
3. Click [OK] to save the settings.

5.1.2.2 VTH Settings

Set the password and bind your Email.

- Password: it is used to enter project setting interface.
- Email: it is used to retrieve your password when you forget it.

Step 1 Power on the device.

The system displays “Welcome” and enters “Initialization” interface, as shown in Figure 5-25.

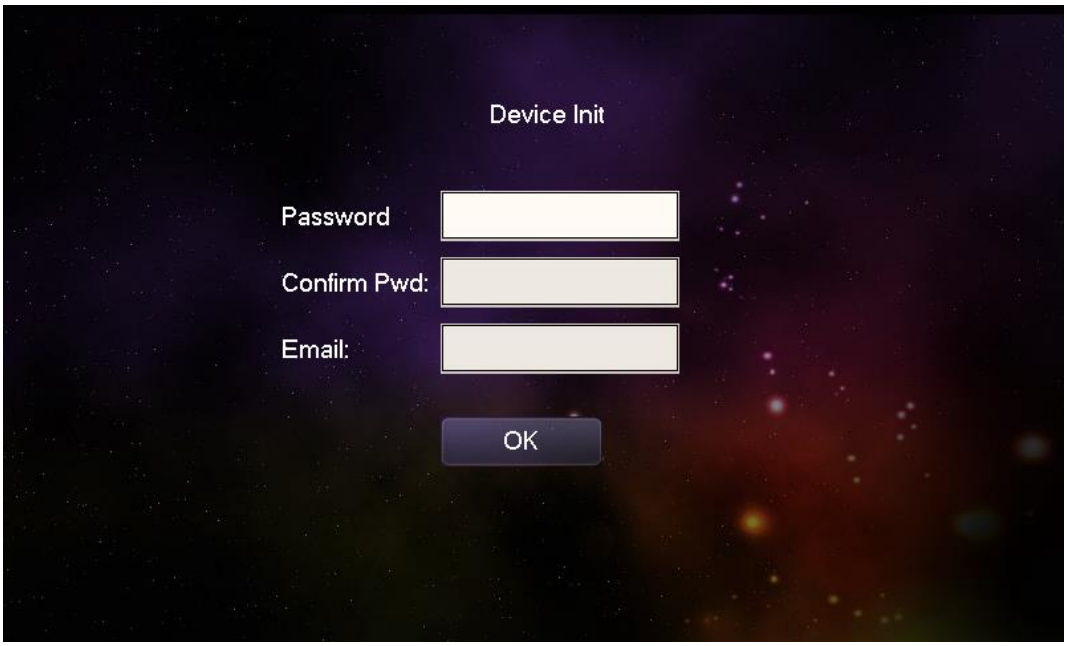

Figure 5-25

Step 2 Enter “Password”, “Confirm Pwd” and “Email”.

Step 3 Click [OK].

The system displays “Info Init” interface, as shown in Figure 5-26.

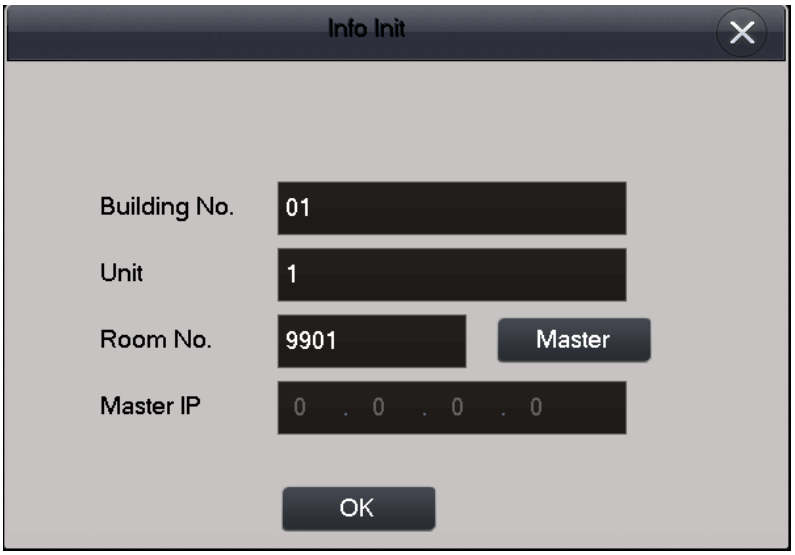

Figure 5-26

Step 4 Set VTH info.

- Be used as master VTH.

Enter “Building No.”, “Unit” and “Room No.” (such as 9901).

Note

“Room no.” shall be the same with “VTH Short No.”, which is set when adding VTH at WEB interface. Otherwise, it will fail to connect VTO.

- Be used as a VTH extension.

1. Press [Master] and switch to “Extension”.
2. Enter “Building No.”, “Unit” and “Room No.” (such as 9901-1) and “Master IP” (IP address of master VTH).

Step 5 Click [OK] to save the settings.

If initialization is successful, IP address of the bound VTH can be viewed at “Digital Indoor Station Manager” of VTO WEB interface, as shown in Figure 5-27.

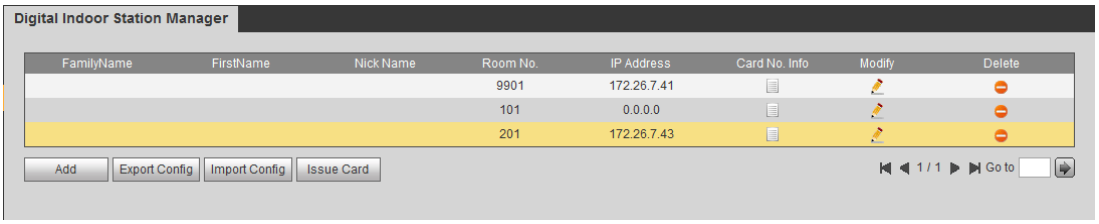

Figure 5-27

5.2 Debugging Verification

5.2.1 VTO Calls VTH

Dial VTH room no. (such as 9901) at VTO, and thus call VTH. VTH pops up monitoring image and operating keys, as shown in Figure 5-28. It represents successful debugging.

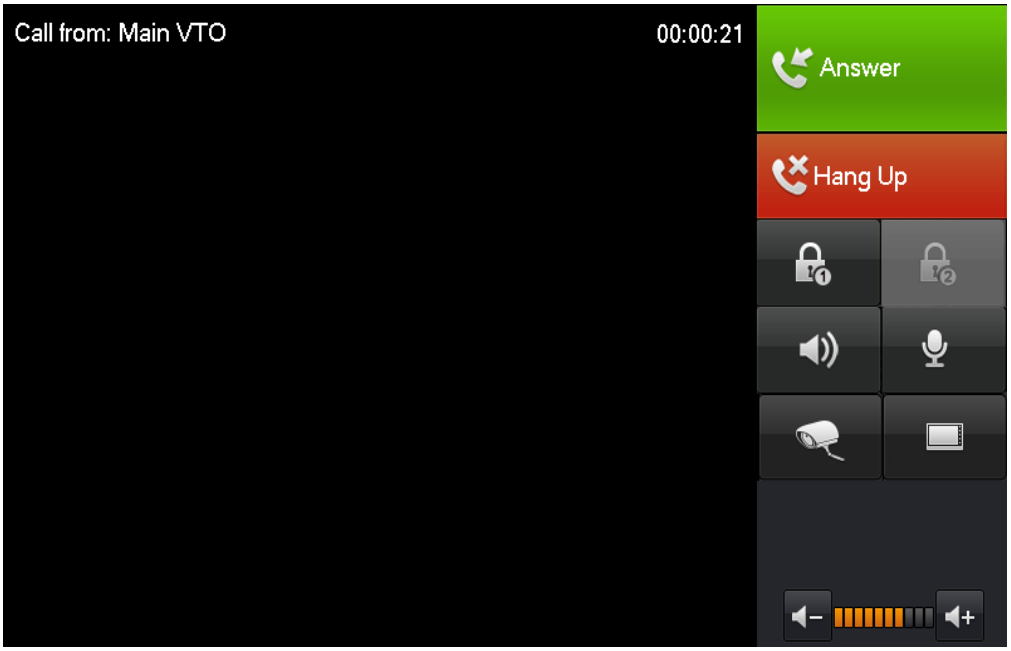

Figure 5-28

5.2.2 VTH Monitors VTO

VTH is able to monitor VTO, fence station or IPC. Take “IPC” for example.

Select “Video Talk > Monitor > Door Station”, as shown in Figure 5-29. Select the VTO to enter monitoring image, as shown in Figure 5-30.

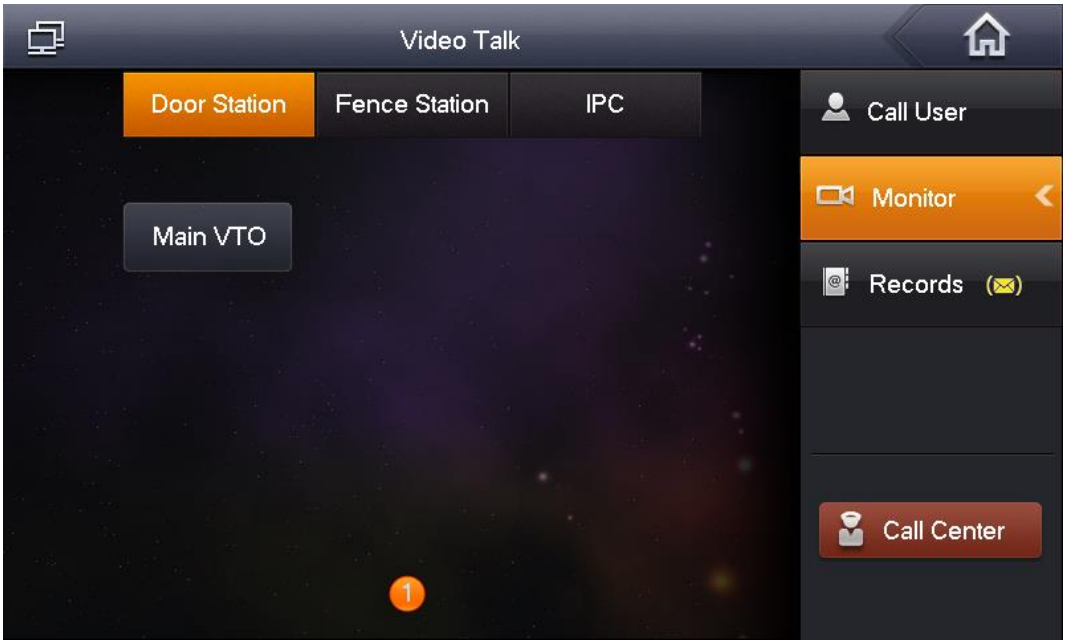

Figure 5-29

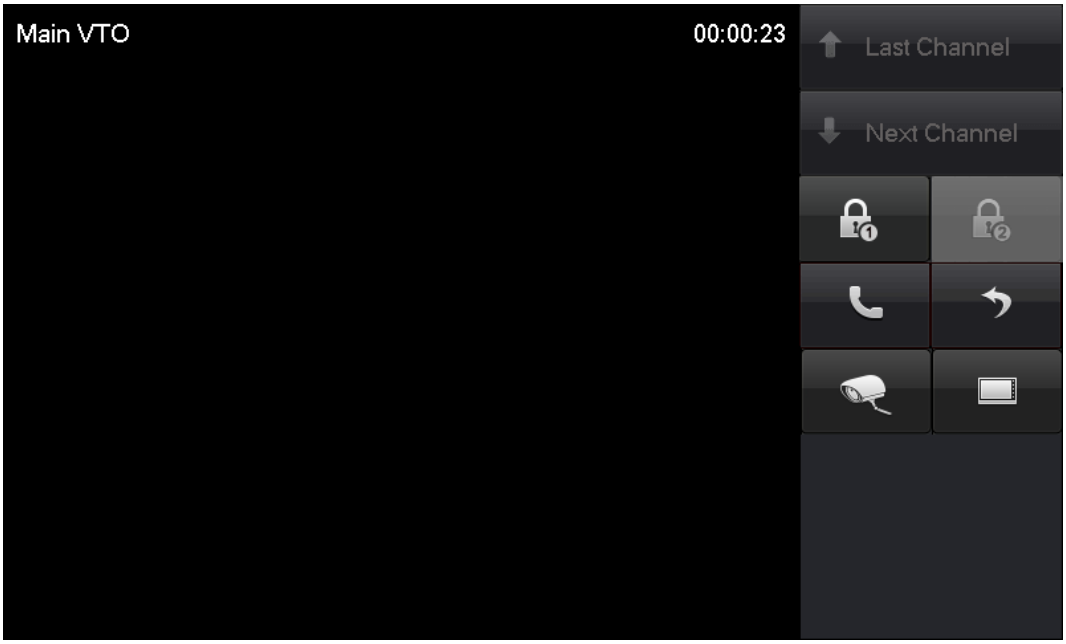

Figure 5-30

6 Interface Operation

6.1 Main Interface

There are four items at the main interface, namely, video talk, security alarm, info search and settings, as shown in Figure 6-1. For description of every item, please refer to Table 6-1.

Figure 6-1

No.	Name	Description
1	Status Bar	• : Network connection icon. It means network connection is normal. • : Main VTO connection icon. It means that the device fails to connect main VTO. Without this icon, it means that the device connects main VTO successfully. • : SD card icon. It means that SD card has been inserted into the device. Without this icon, it means that SD card hasn't inserted or it doesn't support SD card. • : DND icon. It means that the device has enabled DND (do not disturb) function. It is disenabled by default. • : Unread message icon. It means that there are unread

No.	Name	Description
		messages.
2	Time Display	Display date, week and time.
3	Video Talk	● Call the user. ● Manage contacts. ● Set alarm output. ● Monitor VTO, fence station and IPC. ● View and manage call records. ● Call the Management Center with one key.
4	Security Alarm	● Set area type, status, delay time and area switch. ● View alarm records. ● Set arm mode.
5	Info Search	● View, delete and clear notice info issued by Property Management Center. ● View, delete and clear message info of VTO/VTH. ● View, delete and clear photo files and recording files.
6	Settings	● User setting. ● Project setting. ● Time setting. ● View product introduction. ● Device initialization.
7	Arm	Press this button to arm the area. Note Before using this button, please confirm that arm mode has been set. Otherwise, arm is invalid.

Table 6-1

6.2 Settings

6.2.1 User Settings

This function is used to set password, display, ring, talk, DND, local IPC and touch ring. Meanwhile, restore default user settings and clean the touch screen.

Select “System Config > User Settings”, as shown in Figure 6-2.

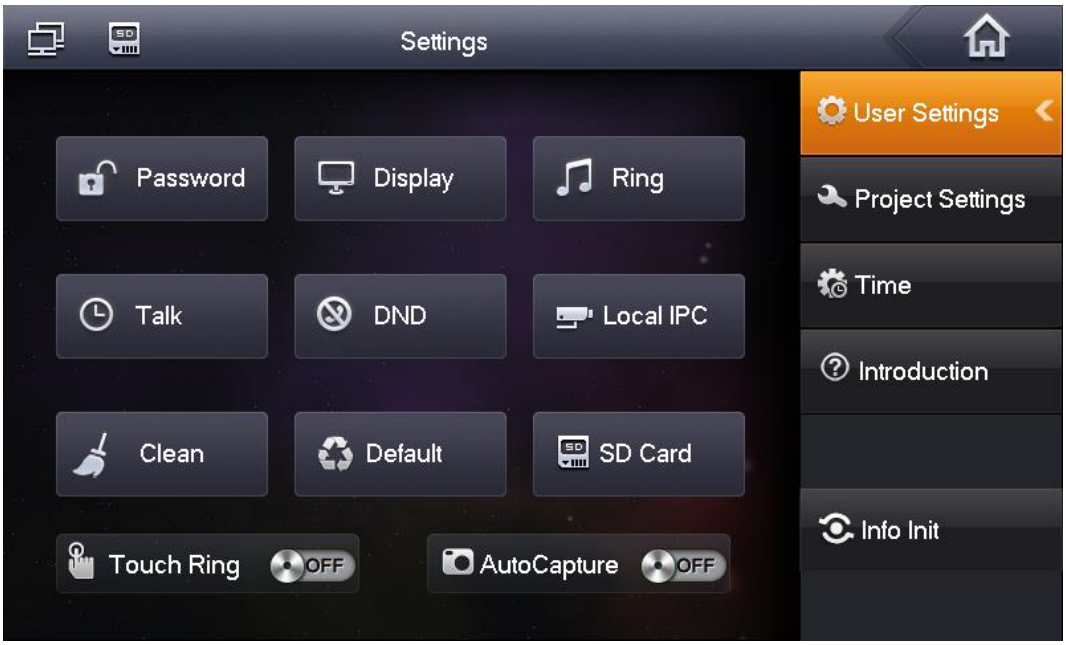

Figure 6-2

6.2.1.1 Password Settings

Set the user password, unlock password, arm/disarm password and anti-hijack password, which will be used during setting, unlock, arm/disarm and anti-hijack process.

Note

User password is used to enter “SD Card”, “Default” and “Area Settings” interfaces.

Step 1 Select “System Config > User Settings> Password”.

The system displays “Password Settings” interface, as shown in Figure 6-3.

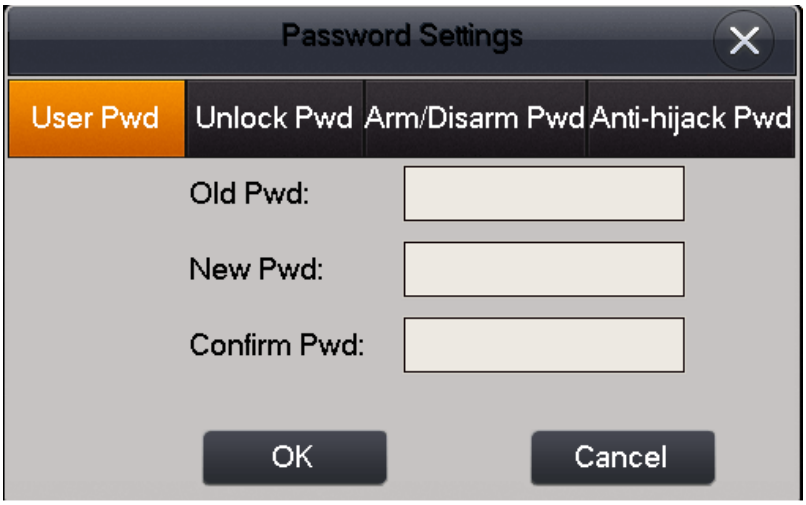

Figure 6-3

Step 2 Click the tabs to select password type, such as “User Pwd”.

Step 3 Enter “Old Pwd”, “New Pwd” and “Confirm Pwd”.

Note

- Original user password and arm/disarm password is 123456.
- Unlock password doesn’t have an original password.
- Original anti-hijack password is 654321.

Step 4 Press [OK] to complete password settings.

6.2.1.2 Display Settings

Set the brightness and screensaver time of touch screen.

Step 1 Select “System Config > User Settings> Display”.

The system displays “Display Settings” interface, as shown in Figure 6-4.

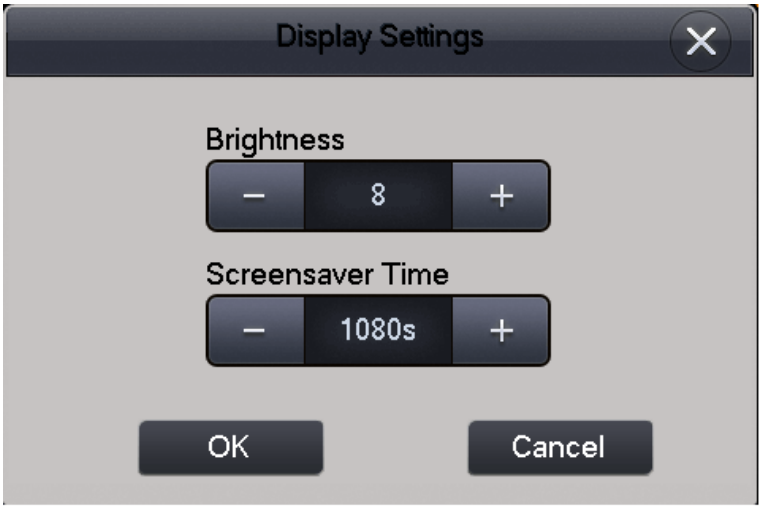

Figure 6-4

Step 2 Press + and − to set screen “Brightness” and “Screensaver Time”.

Step 3 Press [OK] to complete settings.

6.2.1.3 Ring Settings

Set phone ring, ring volume, alarm ring, alarm volume and volume settings.

Step 1 Select “System Config > User Settings> Ring”.

The system displays “Ring Settings” interface, as shown in Figure 6-5.

Figure 6-5

Step 2 Select rings in the text box, and press + and − to set the volume.

Step 3 Press [OK] to complete settings.

6.2.1.4 Talk Settings

Set VTO or VTH ring time, talk time, monitor time and message time. Maximum VTH ring time is 120s, while maximum VTO message time is 90s.

Step 1 Select “System Config > User Settings> Talk”.

The system displays “Talk Settings” interface, as shown in Figure 6-6.

Figure 6-6

Step 2 Press + and − to set the time.

- If VTO message time is not 0, when VTO calls VTH, and VTH doesn’t answer, VTO will ask if you want to leave an image and a message.
- If VTO message time is 0, when VTO calls VTH, and VTH doesn’t answer, VTO will hang up after VTH ring time comes to an end.

Step 3 Press [OK] to complete settings.

6.2.1.5 DND Settings

Set to avoid calls within a time period after the present time point.

Step 1 Select “System Config > User Settings> DND”.

The system displays “DND Settings” interface, as shown in Figure 6-7.

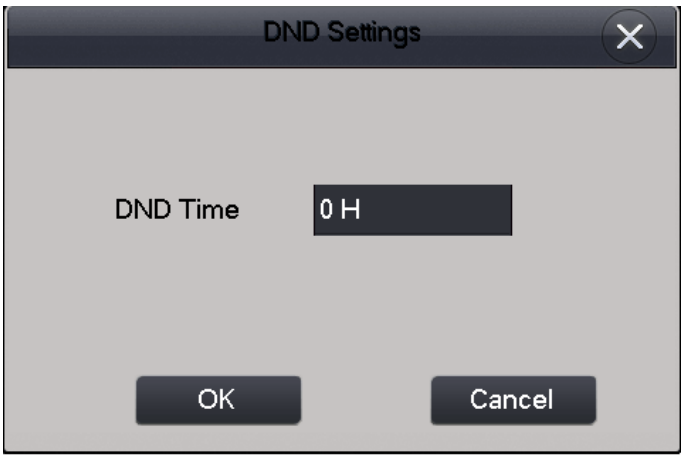

Figure 6-7

Step 2 Select the time in the text box.

Step 3 Press [OK] to complete settings.

Note

- DND function is not enabled by default.
- After DND function is enabled, there is no ring in case of incoming calls. Missed calls can be viewed at “Video Talk> Records > Missed Call” interface.

6.2.1.6 Local IPC

Manage local 32-channel IPC, depending on different series of products. Please use according to actual conditions.

Step 1 Select “System Config > User Settings> Local IPC”.

The system displays “Local IPC” interface, as shown in Figure 6-8.

Note

- Press > to switch IPC adding interface.
- Press [Monitor] to monitor the added IPC.

Figure 6-8

Step 2 Please refer to Table 6-2 for IPC configuration info.

Parameter	Description
IPC	Press this key to select IPC, NVR, XVR and HCVR devices. ● By selecting IPC, VTH obtains video stream from the connected IPC directly, whose info shall be configured. ● By selecting NVR/XVR/HCVR, VTH obtains IPC video stream from these connected devices, whose info shall be configured.
IPC/NVR/XVR/HCVR Name	Enter IPC/NVR/XVR/HCVR name.
IP Address	Enter IP address of the connected IPC/NVR/XVR/HCVR.

User Name	Enter user name and password to log in IPC/NVR/XVR/HCVRWEB interface.
Password	
Port	Default port is 554.
Protocol	It consists of local protocol and Onvif protocol. Please select the protocol supported by the connected device.
Stream	According to needs, select stream type, including main stream and extra stream. ● Main stream: large stream, high definition, large occupied bandwidth, suitable for local storage. ● Extra stream: relatively smooth images, small occupied bandwidth, suitable for low-bandwidth network transmission.
Channel	If IPC device is connected, default channel is 1. If NVR/XVR/HCVR device is connected, it is set to be IPC channel no. at NVR/XVR/HCVR device.

Table 6-2

Step 3 Press [Save] to complete adding local IPC.

6.2.1.7 Clean

Lock the screen to facilitate cleaning.

Step 1 Select “System Config > User Settings> Clean”. The screen is locked for 10s.

Step 2 Start to clean the screen. It returns to normal after 10s.

6.2.1.8 SD Card

Note

- This option is displayed only when SD card is inserted.
- Verification password to enter SD card settings interface is “User Password” 123456. Please refer to “6.2.1.1 Password Settings” to modify it.

Step 1 Select “System Config > User Settings> SD Card”.

Pop up “Password Verification” prompt box.

Step 2 Enter user password and press [OK].

The system displays “SD Card” interface to view its free space, or press [Format] to format SD card.

6.2.1.9 Default

All configuration info at user setting interface can be restored to factory defaults.

Step 1 Select “System Config > User Settings> Default”.

Pop up “Password Verification” prompt box.

Step 2 Enter user password and press [OK].

The system displays “Default” interface.

Note

Default user password is 123456. Please refer to “6.2.1.1 Password Settings” for details.

Step 3 Press [OK] to restore defaults.

6.2.1.10 Touch Ring

Press  to turn on or turn off the touch ring. ON means that touch ring is turned on, whereas OFF means that touch ring is turned off.

6.2.1.11 Auto Capture

Note

This option is displayed only when SD card is inserted.

Press  to turn on or turn off auto capture function. ON means that auto capture is turned on, whereas OFF means that auto capture is turned off. When VTO calls VTH but VTH doesn't answer, 3 pictures will be captured automatically, and can be viewed in "Info Search> Video Pictures" interface.

6.2.2 Project Settings

6.2.2.1 Forget Password

If you forget initialization password when entering project settings interface, reset password through "Forget Password" at the interface or in VDPconfig tool.

6.2.2.1.1 Reset the Password at the Interface

Step 1 Select "System Config > Project Settings".
Pop up "Password Verification" prompt box.

Step 2 Press [Forget Password].
The system displays "Reset the password" interface, as shown in Figure 6-9.

Note

"Redraw" is used to refresh QR code.

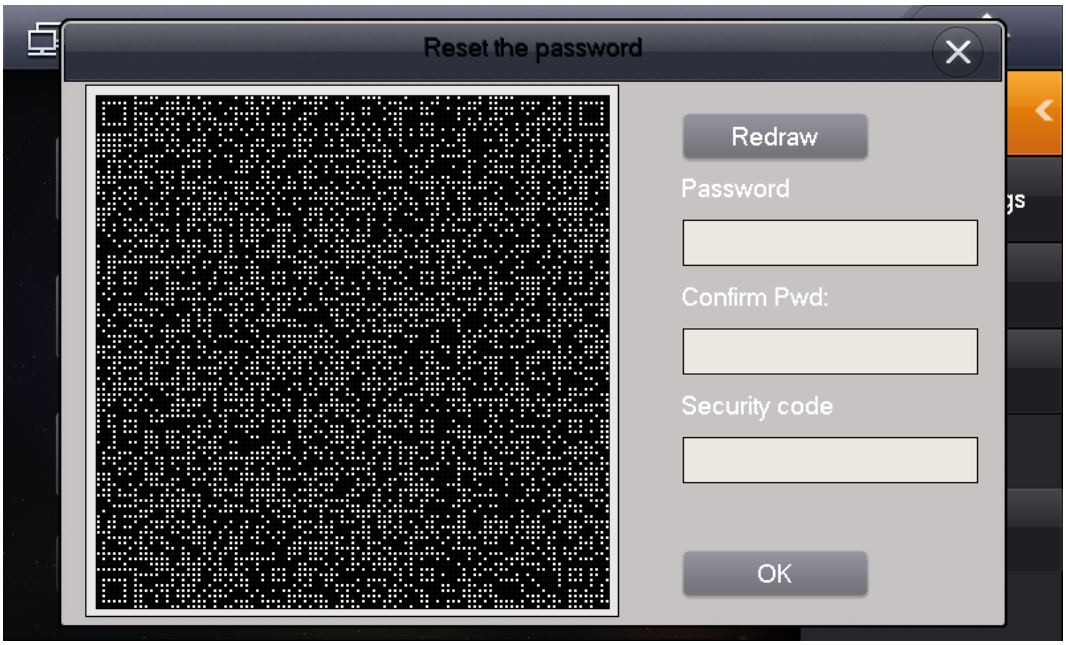

Figure 6-9

Step 3 Scan the QR code with any code-scanning APP, bind your mobile phone, send the scanning results to 10690546980662 with short message, and thus obtain security code.

Step 4 Enter “Password”, “Confirm Password” and obtained “Security Code”.

Step 5 Press [OK] to complete resetting the password.

6.2.2.1.2 Reset the Password in VDPconfig

Use VDPconfig tool to export XML file (ExportFile.xml), send it by email to support_cpwd@htmicrochip.com, and obtain XML file (result.xml). then, import the file and reset a new password.

Note

Please refer to “VDPconfig Help Document” for details.

6.2.2.2 Product Info

Set VTH info, SSH function and mobile phone info.

Step 1 Select “System Config > Project Settings”.

Pop up “Password Verification” prompt box.

Step 2 Enter the password set during device initialization, and press [OK].

Step 3 Press [Product Info].

The system displays “Product Info” interface, as shown in Figure 6-10.

Figure 6-10

6.2.2.2.1 Set VTH Info

Step 1 Set VTH info.

- Be used as master VTH. Enter “Room No.” (such as 9901).

Note

“Room no.” shall be the same with “VTH Short No.”, which is set when adding VTH at WEB interface. Otherwise, it will fail to connect VTO.

- Be used as a VTH extension.

1. Press [Master] and switch to “Extension”.
2. Enter “Room No.” (such as 9901-1) and “Master IP” (IP address of master VTH).

Note

“User Name” and “Password” are the user name and password of master VTH. Default user name is admin, and the password is the one set during device initialization.

Step 2 Press 

to turn on or turn off SSH.

Step 3 Press [OK] to complete setting.

6.2.2.2.2 Reset MSG

Press [Reset MSG], enter a “New Mobile Phone No.” and press [OK]. It is reset successfully.

Note

The mobile phone is used to obtain security code during password resetting. Please refer to “6.2.2.1 Forget Password” to reset the password.

6.2.2.3 Network Settings

Set VTH network info, which supports static IP and DHCP.

Note

IP addresses of VTH and VTO shall be in the same network segment. Otherwise, VTH will fail to obtain VTO info after configuration.

Step 1 Select “System Config >Project Settings”.

The system pops up “Password” prompt box.

Step 2 Enter the password set during initialization, and click [OK].

Step 3 Click [Net Set].

The system displays “Net Set” interface, as shown in Figure 6-11.

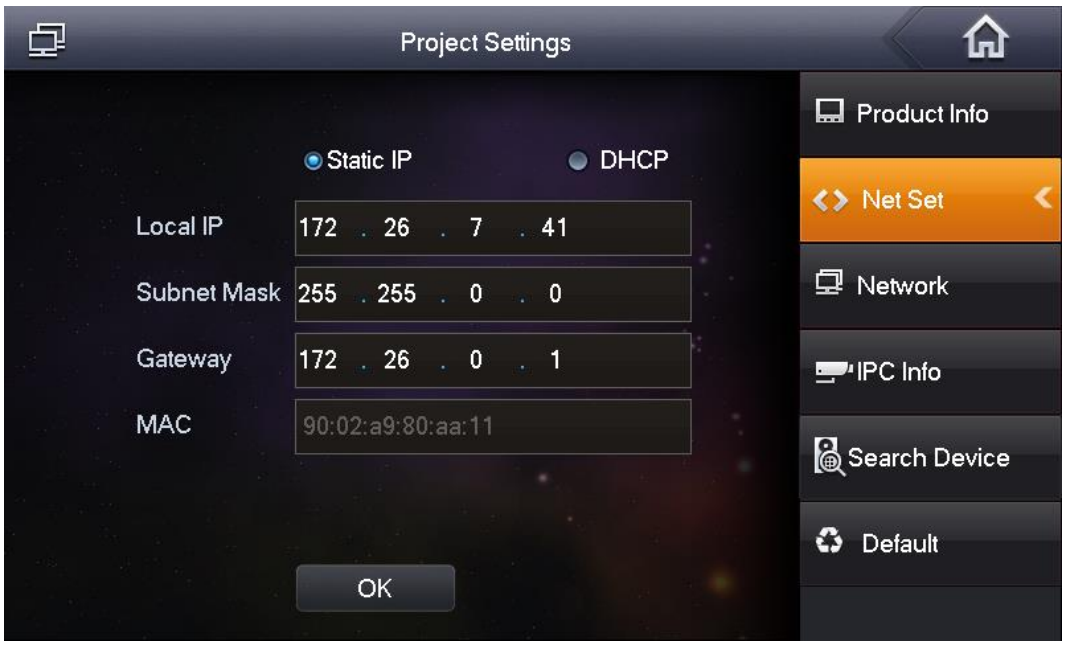

Figure 6-11

Step 4 Set according to actual network access mode.

- Static IP

1. Select “Static IP”.
2. Enter “Local IP”, “Subnet Mask” and “Gateway”.

- DHCP

Select “DHCP” to obtain IP address automatically.

Step 5 Click [OK] to save the settings.

6.2.2.4 Network Terminal

Bind network VTO and fence station.

Step 1 Select “System Config >Project Settings”.

The system pops up “Password” prompt box.

Step 2 Enter the password set during initialization, and click [OK].

Step 3 Click [Network].

The system displays “Network” interface, as shown in Figure 6-12. Press or to page up and down.

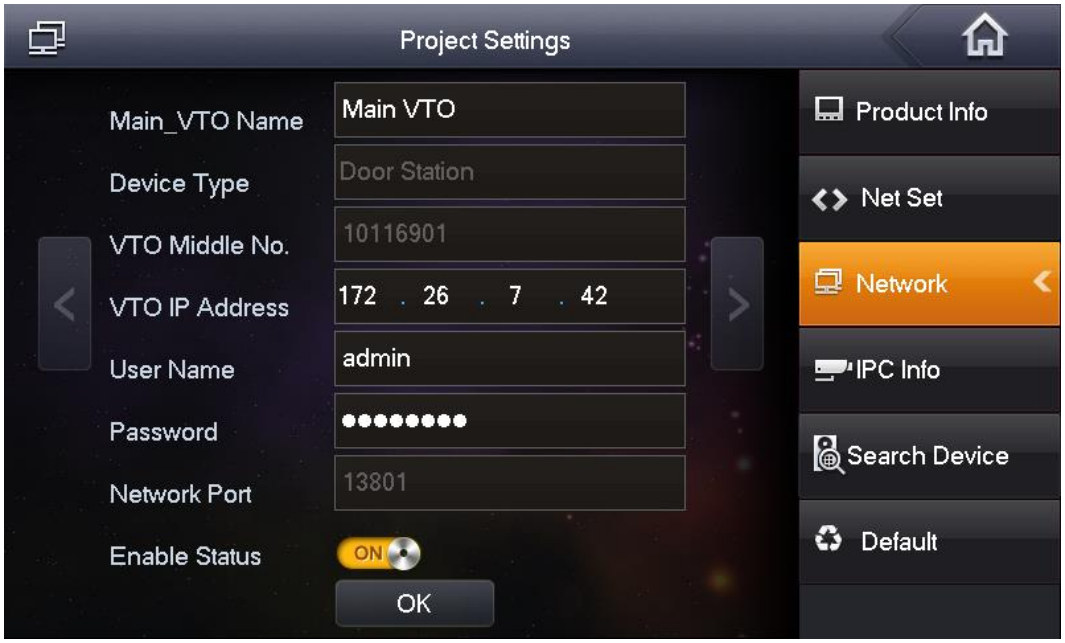

Figure 6-12

- Add VTO

1. Enter main/sub VTO name, IP address, “User Name” and “Password”.

   Note

   - Select device type of sub VTO, which is “Door Station” by default.
   - “User Name” and “Password” shall be consistent with WEB login user name and password of VTO. Otherwise, it will fail to connect.

2. Switch “Enable Status” to ON.
3. Press [OK] to save the settings.

- Add fence station.

1. Enter VTO name, “VTO Middle No.” (fence station no.), “User Name” and “Password”.
2. Select device type as “Fence Station”.
3. Switch “Enable Status” to ON.
4. Press [OK] to save the settings.

6.2.2.5 IPC Info

VTH automatically synchronizes IPC info added in VTO WEB, and monitors designated IPC. It is able to synchronize 24 IPCs at most.

Step 1 Select “System Config >Project Settings”.

The system pops up “Password” prompt box.

Step 2 Enter the password set during initialization, and click [OK].

Step 3 Click [IPC Info].

The system displays “IPC Info” interface to view IPC info.

6.2.2.6 Search Device

Search online devices in the same network segment with VTH, add, modify IP and delete it.

After adding successfully, this VTO can call VTH.

Caution

Support to modify IP address of villa VTO, rather than IP address of unit VTO.

Step 1 Select “System Config >Project Settings”.

The system pops up “Password” prompt box.

Step 2 Enter the password set during initialization, and click [OK].

Step 3 Click [Search Device].

The system displays “Search Device” interface, as shown in Figure 6-13.

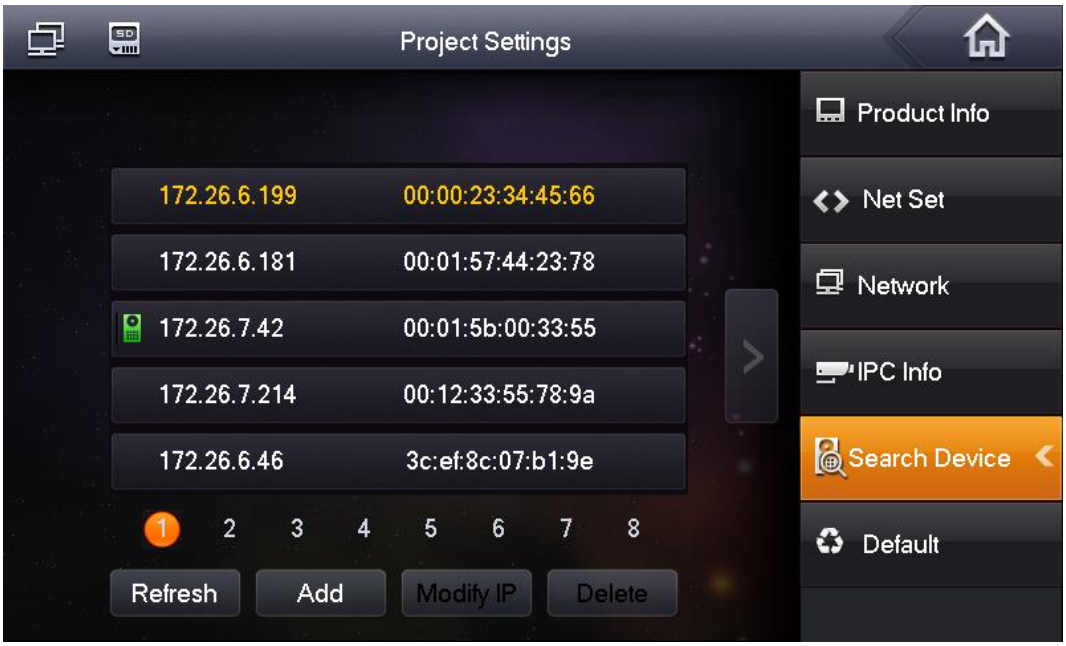

Figure 6-13

6.2.2.6.1 Search Device

Press [Refresh] to refresh device list; press  to view the device.

6.2.2.6.2 Modify IP

Step 1 Select the needed VTO and press [Modify IP].

The system displays “Modify VTO IP” interface, as shown in Figure 6-14.

Note

If “Modify IP” is gray, it means that this device is unit VTO whose IP cannot be modified.

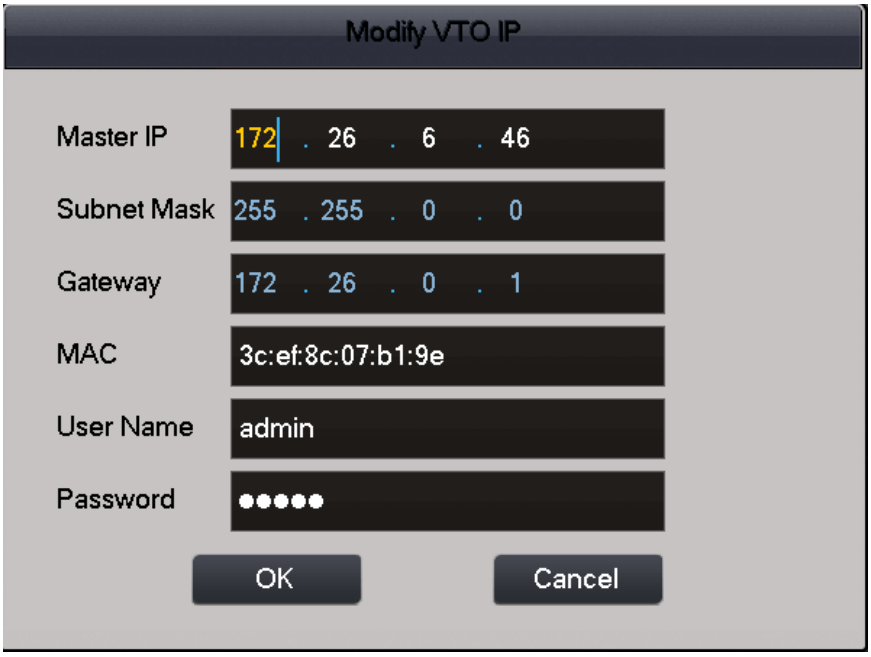

Figure 6-14

Step 2 Fill in “Master IP”, “Subnet Mask” and “Gateway” of the VTO.

Step 3 Press [OK] to save the settings.

6.2.2.6.3 Add Manually

Step 1 Select the needed VTO and press [Add].

The system displays “Add VTO” interface, as shown in Figure 6-15.

Figure 6-15

Step 2 Enter “VTO Name”, “Channel”, “IP” and “Port” (default port is 554), and set “Status” to be “On”.

If this VTO is a sub VTO, press  to page down and set.

Step 3 Press [OK] to complete configuration.

After successful configuration, this VTO can call VTH.

6.2.2.7 Default

All parameters of the device, except IP address, can be restored to initial default values.

Step 1 Select “System Config >Project Settings”.

The system pops up “Password” prompt box.

Step 2 Enter the password set during initialization, and click [OK].

Step 3 Click [Default].

The system displays “Default” interface.

Step 4 Press [OK].

The device reboots and enters initialization interface, representing successful restoration.

6.2.3 Time Setting

Set system date and time. The system will synchronize the time to VTO.

Step 1 Select “System Config > Time”.

The system displays “Time” interface, as shown in Figure 6-16.

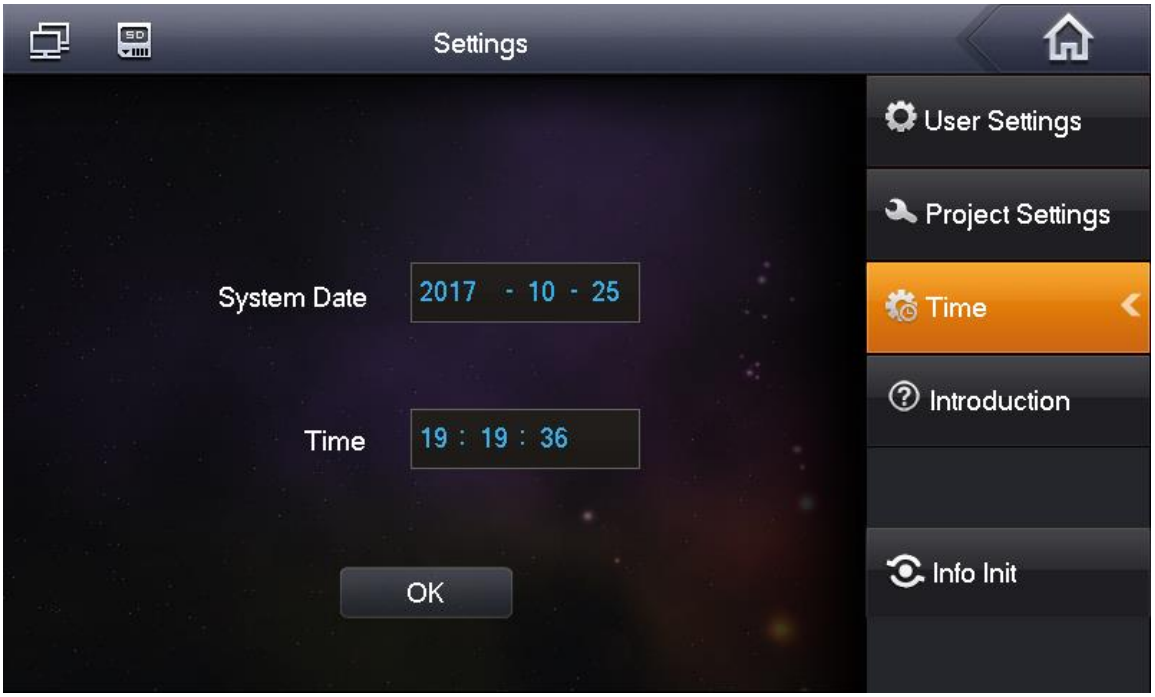

Figure 6-16

Step 2 Set system date and time.

Step 3 Press [OK] to save the settings.

6.2.4 Product Introduction

Display product introduction, feature, brief instruction and FAQ.

Step 1 Select “System Config > Introduction”.

The system displays “Introduction” interface, as shown in Figure 6-17.

Figure 6-17

Step 2 Press or to switch and view.

6.2.5 Info Initialization

This function applies to connect VTO, including unit VTO, configures master/extension VTH info quickly and realizes call.

Caution

Please ensure that the following operations have been completed.

- Every door has VTO no. and info.
- WEB of a unit VTO has configured VTO info and VTH network segment. It is enabled.

Step 1 Select “System Config > Info Init”.

The system displays “Info Init” interface, as shown in Figure 6-18.

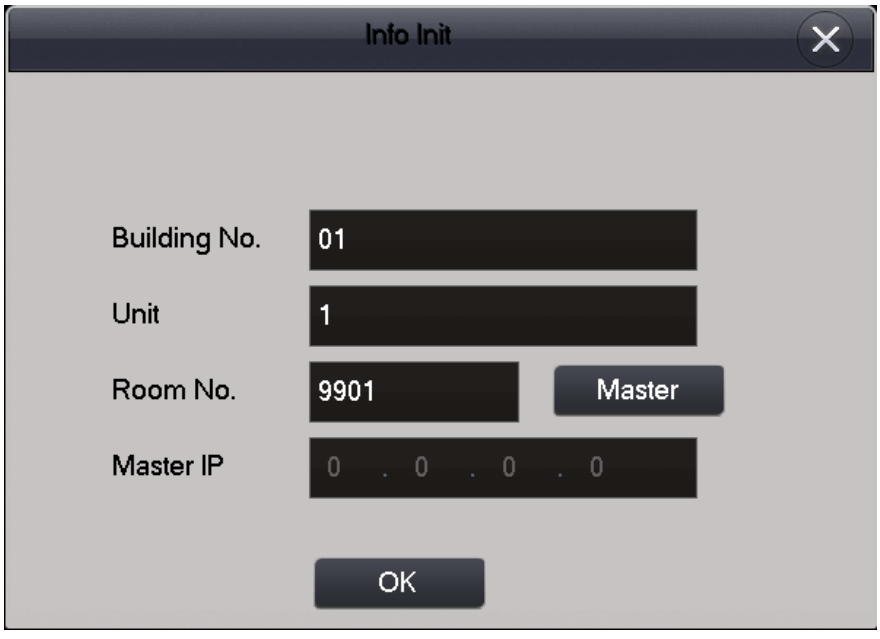

Figure 6-18

Step 2 Set VTH info.

- Be used as a master VTH.

Enter “Building No.”, “Unit” and “Room No.” (such as 9901).

Note

“Room no.” shall be the same with “VTH Short No.”, which is set when adding VTH at WEB interface. Otherwise, it will fail to connect VTO.

- Be used as a VTH extension.

1. Press [Master] and switch to “Extension”.
2. Enter “Building No.”, “Unit”, “Room No.” (such as 9901-1) and “Master IP” (IP address of master VTH).

Step 3 Click [OK] to save the settings.

After successful initialization, view IP address of the bound VTH at “Digital Indoor Station Manager” at WEB interface of VTO.

6.3 Video Talk

6.3.1 Call User

Call the user, manage contact, set alarm output and internal call.

Select “Video Talk> Call User”, as shown in Figure 6-19.

Figure 6-19

6.3.1.1 Contact

Add and edit VTH and extension number.

Press  to enter contact management interface, as shown in Figure 6-20.

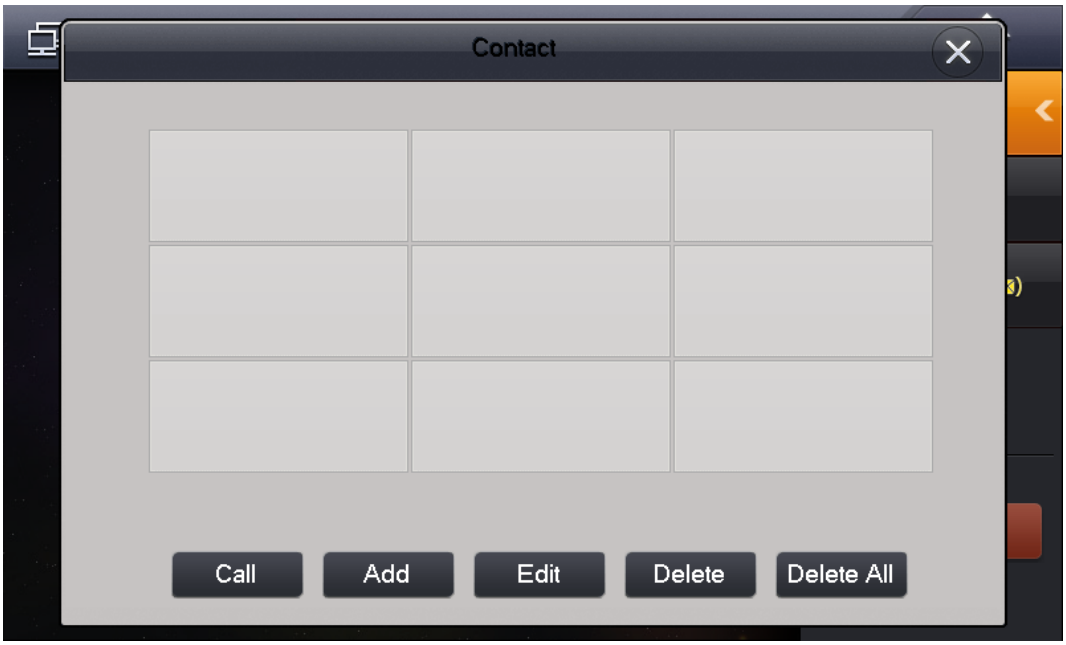

Figure 6-20

6.3.1.1.1 Add User

Step 1 Press [Add] or blank table cell.

The system displays “User Info” interface, as shown in Figure 6-21.

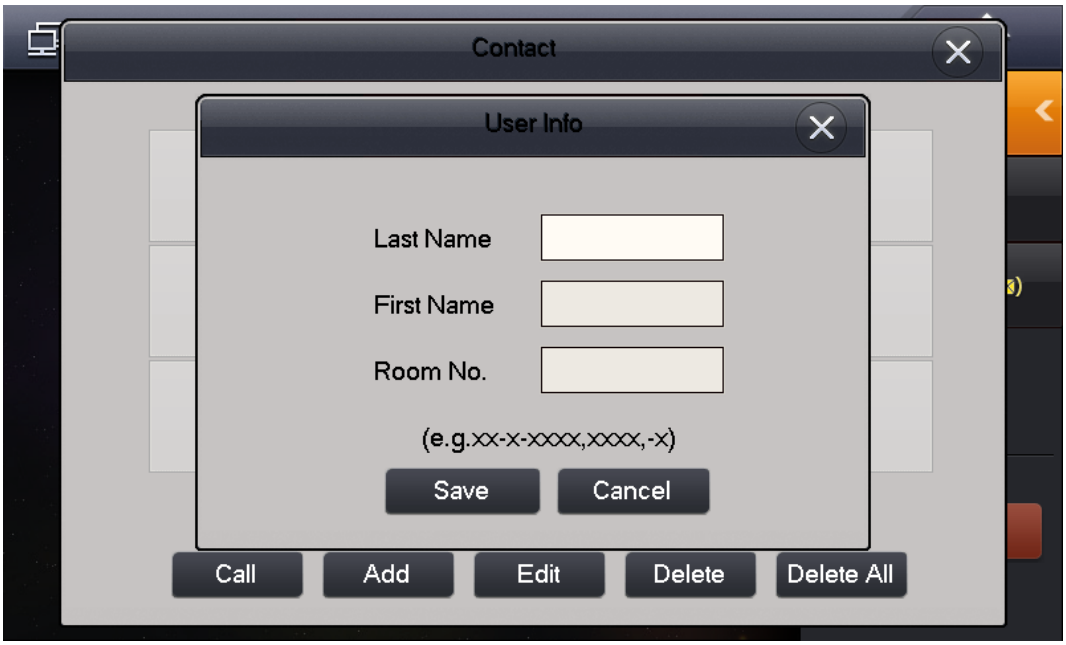

Figure 6-21

Step 2 Enter “Last Name”, “First Name” and “Room No.” of contact person.

Step 3 Press [Save] to complete adding.

The added user info is shown in Figure 6-22.

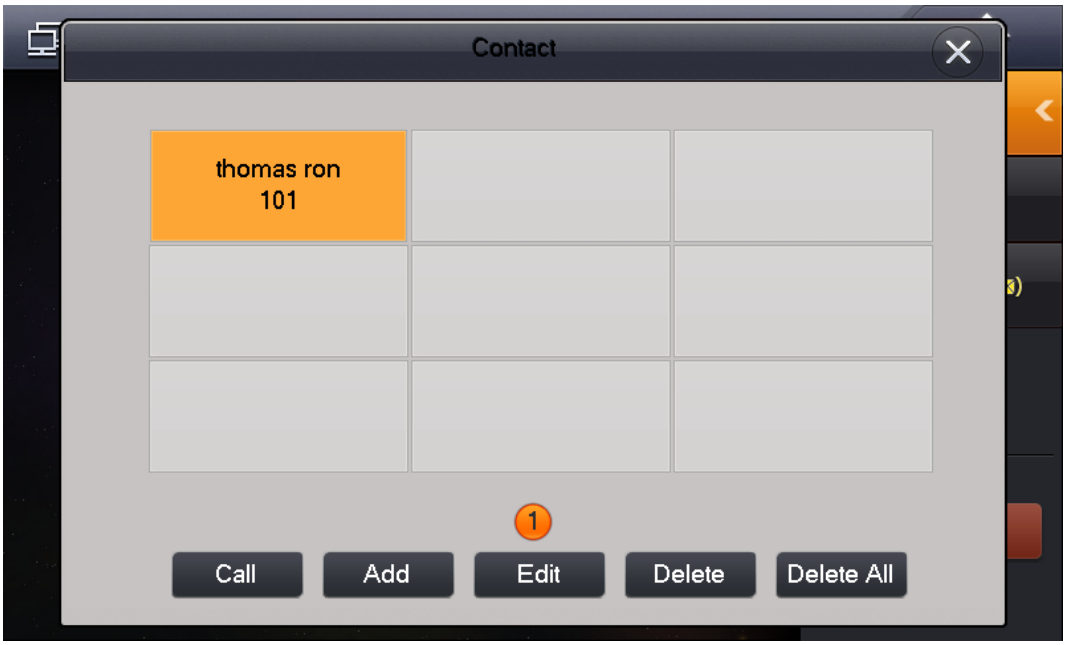

Figure 6-22

6.3.1.1.2 Modify Contact Info

Select the contact person, press [Edit] to modify the info.

6.3.1.1.3 Delete Contact Person

Select the contact person, press [Delete] to delete the contact person.

6.3.1.1.4 Delete All

Press [Delete All], press [OK] at the popped-up “Info Prompt” interface and delete the info about all contact persons.

6.3.1.2 Internal Call

After enabling internal call function, VTH can call each other.

Step 1 Select “Video Talk> Call User”.

Step 2 Press 

to turn on or turn off internal call function.

6.3.1.3 Alarm Output

After enabling alarm output, when other devices call this VTH, the alarm output device will output alarm info.

Step 1 Select “Video Talk> Call User”.

Step 2 Press 

to turn on or turn off alarm output function.

6.3.1.4 Call User

Note

- Make sure that internal call function has been enabled. Please refer to “6.3.1.2 Internal Call” for details.
- Call function is used by VTH to call VTH.
- If both VTHs have a camera, bilateral video call can be provided.

6.3.1.4.1 Dial and Call User directly

At “Call User” interface, dial and call the user.

Step 1 Select “Video Talk> Call User”.

Step 2 Enter the user’s room no. (VTH room no.).

Note

- To call Building 1 Unit 1 Room 9901, please enter room no.: 1-1-9901.
- If master VTH (9901) calls extension (9901-1), please enter room no.: -1; if the extension calls master VTH (9901), please enter room no.: 9901.

Step 3 Press  to start.

The system displays calling interface, as shown in Figure 6-23. After the user answers the call, both parties talk to each other, as shown in Figure 6-24. For interface key description, please refer to Table 6-3.

Note

If VTH owns a camera, there will be videos after answering the call.

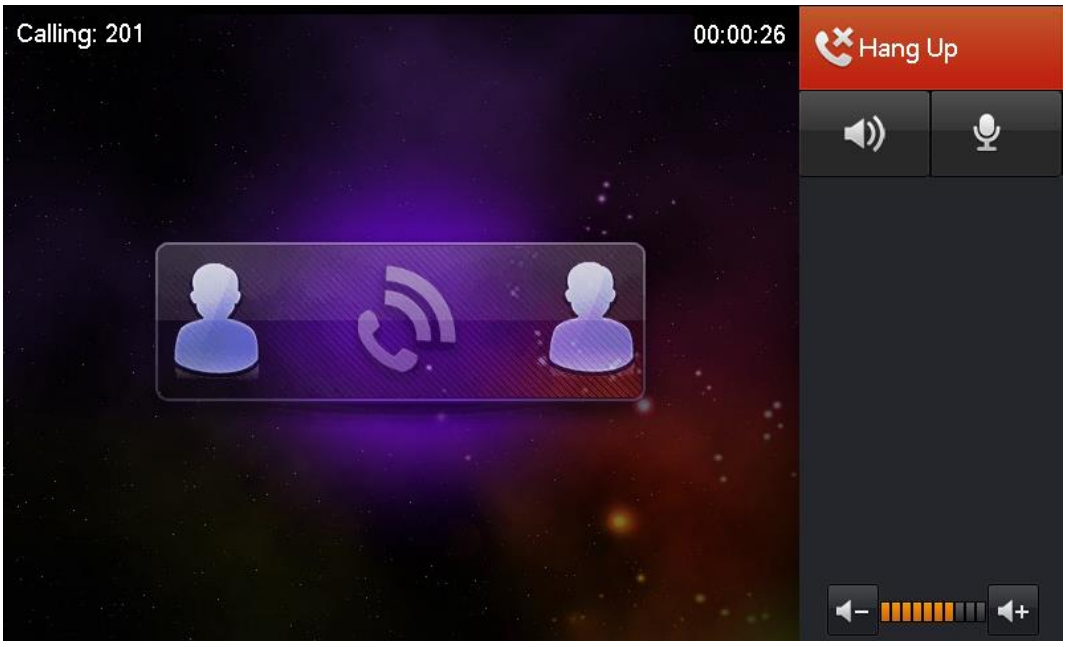

Figure 6-23

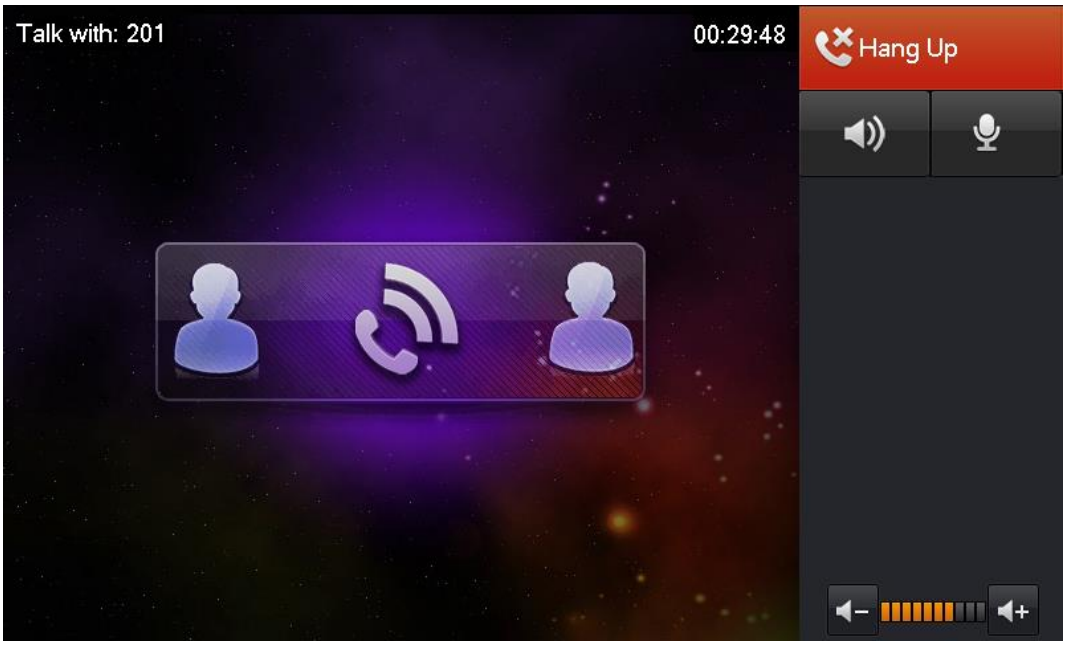

Figure 6-24

6.3.1.4.2 Call User in Contact

Caution

Please add contact persons to the contact, by reference to “6.3.1.1.1 Add User”.

Step 1 Select “Video Talk> Call User”.

Step 2 Press  to enter “Contact” interface.

Step 3 Select the user you want to call, press [Call] and start.

6.3.2 Call from User

When another VTH calls this VTH, the call interface will be displayed, as shown in Figure 6-25. Press [Answer] to talk with each other, as shown in Figure 6-26. For interface key description, please refer to Table 6-3.

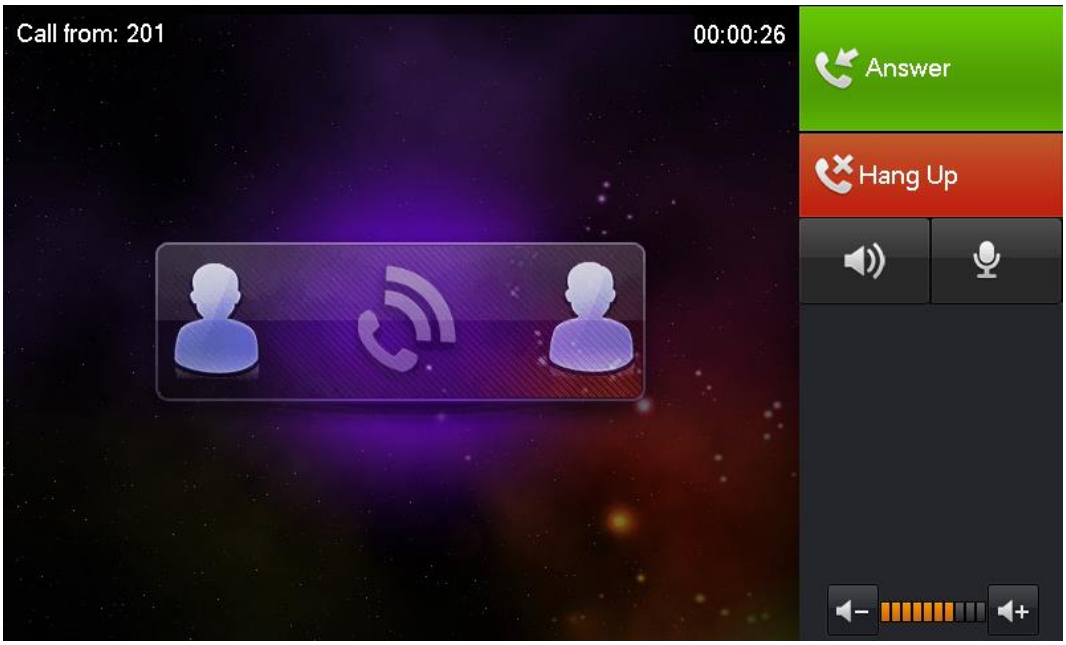

Figure 6-25

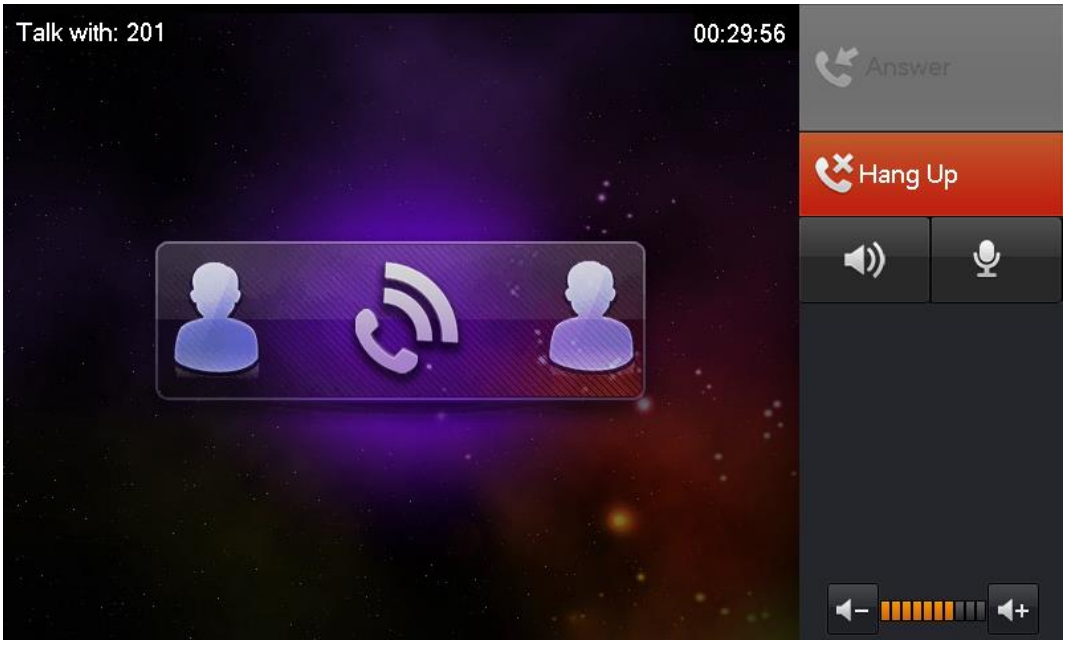

Figure 6-26

6.3.3 Call from VTO

Step 1 Dial VTH room no. (such as 9901) at VTO, to call VTH.

VTH pops up monitoring picture, as shown in Figure 6-27.

Step 2 At VTH interface, press [Answer].

Answer the call and talk with each other. For key description, please refer to Table 6-3.

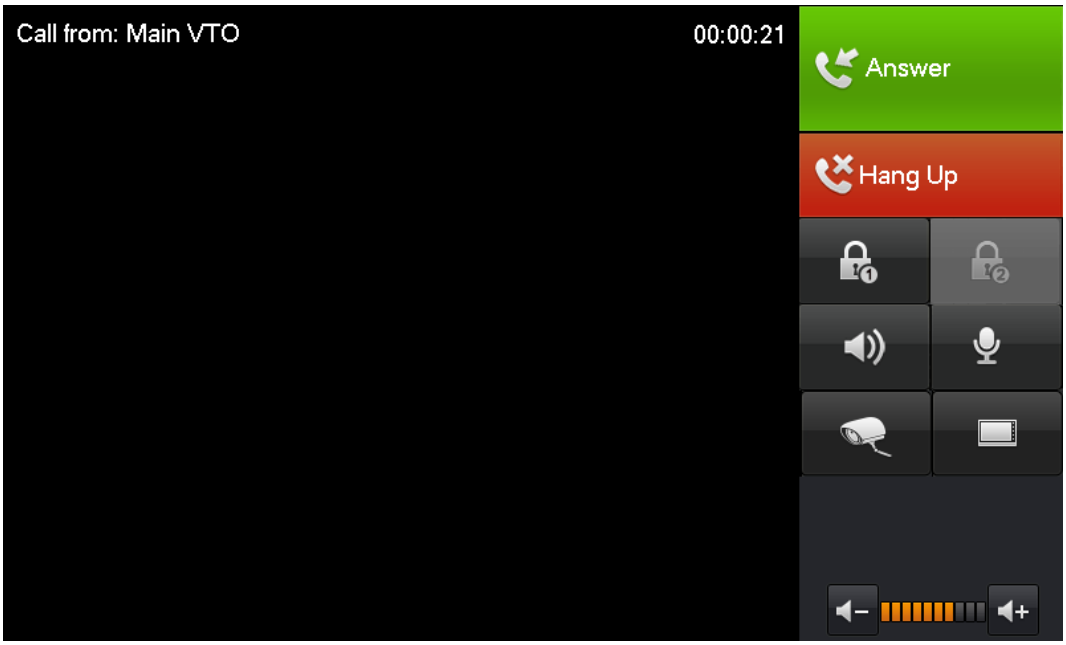

Figure 6-27

Key	Description
Answer	Press this key to answer the call and talk with each other.
Hang up	Press this key to hang up.
	Press this key to unlock the VTO remotely. Note The system provides 2-channel unlock function. If the icon is gray, it means that unlock function of this channel is not available.
	This key means that voice of the opposite end device can be heard. Press this key to prohibit monitoring voice of the opposite end; press it again to switch back to monitoring status.
	This key means to talk with the opposite end device. Press this key to prohibit talking; press it again to switch back to talking status.
	Press this key to select IPC that shall be monitored.
	During IPC monitoring, press this key to switch to monitor VTO.
	Press this key to reduce volume.
	Press this key to increase volume.

Table 6-3

6.3.4 SOS

Caution

Please ensure that Management Center has been connected; otherwise, it is impossible to call.

In case of emergencies, press SOS key on the front panel, or press Call Center at "Video Talk" interface to call the Management Center, as shown in Figure 6-28. For key

description, please refer to Table 6-3.

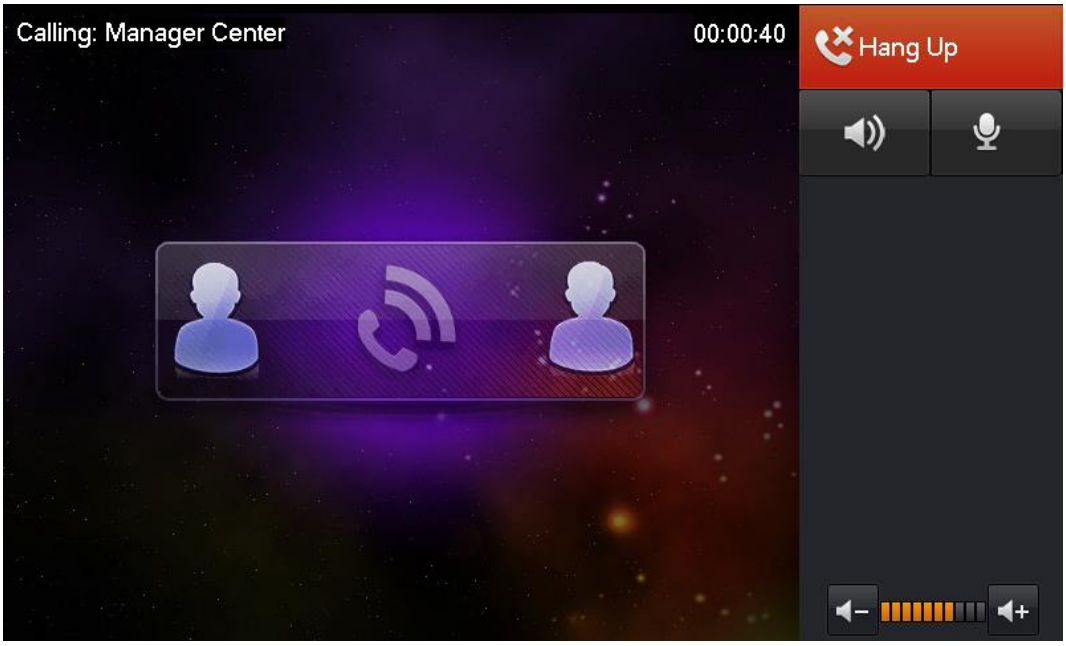

Figure 6-28

6.3.5 Records

View and manage the missed call, accepted call and called records of this VTH. Meanwhile, call back and save info about the contact persons.

Select “Video Talk > Records”, as shown in Figure 6-29.

Note

- If there is a call key on the front panel, press this key to enter records interface.
- If contact person is VTO, callback and saving are not available.

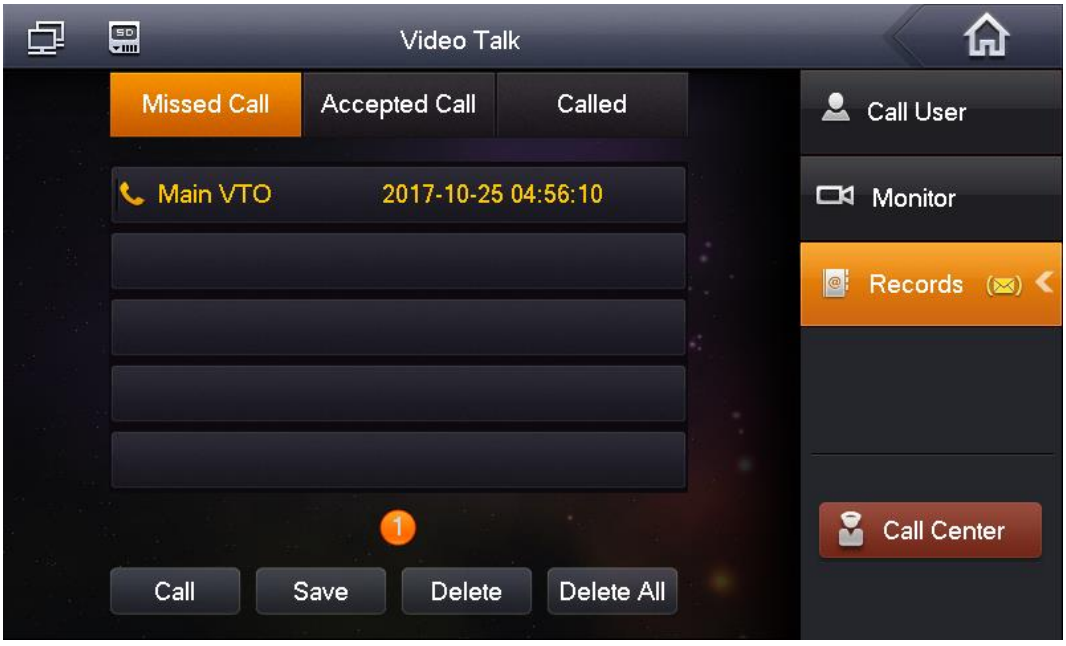

Figure 6-29

6.3.5.1 Callback

Select the required VTH record, press [Call] to call the contact person.

6.3.5.2 Save

Select a record, press [Save] to enter “Last Name”, “First Name” and “Room No.”, and save this number to the contact.

6.3.5.3 Delete

Select a record, press [Delete] to delete it.

6.3.5.4 Delete All

Press [Delete All] to delete all records in the tab.

6.3.6 Monitor

Caution

Please confirm user name and password in VTH, which are set when adding VTO. They shall be consistent with WEB login user name and password of VTO. Otherwise, it will fail to obtain videos during monitoring.

VTH is able to monitor VTO or fence station. Under the condition of monitoring, press call key on the front panel to talk to VTO. VTO will pick up the call automatically.

Take “Monitoring of VTO” as an example.

Step 1 Select “Video Talk > Monitor> Door Station ”, or press monitoring key on the front panel.

The system displays the list of added VTO, as shown in Figure 6-30.

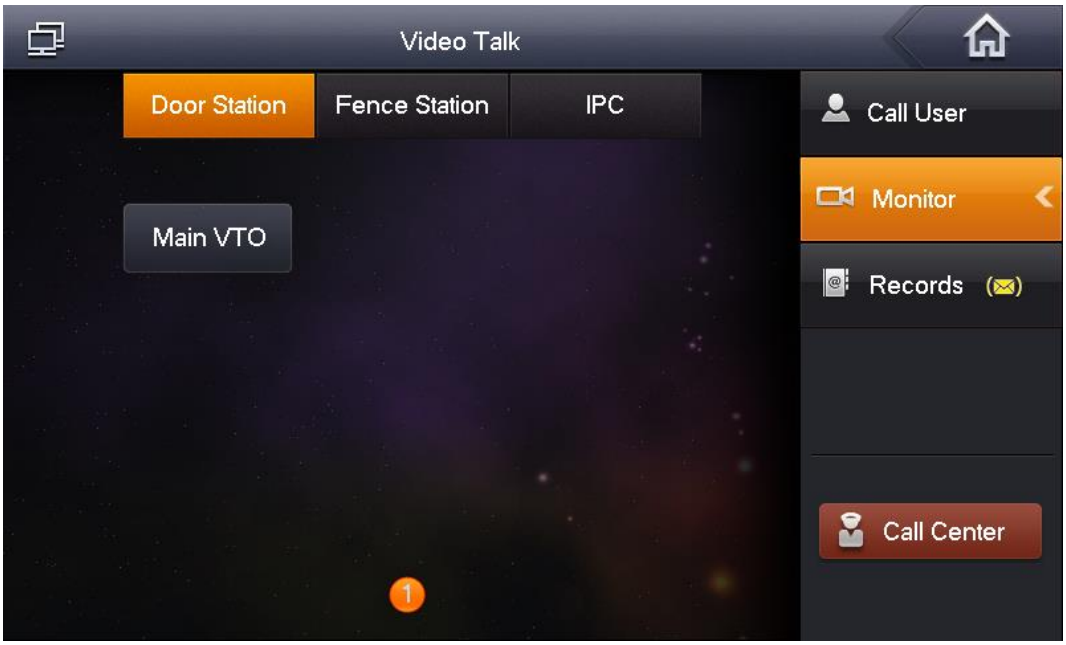

Figure 6-30

Step 2 Select VTO that shall be monitored.

The device enters monitoring, as shown in Figure 6-31. For relevant monitoring operations, please refer to Figure 6-31.

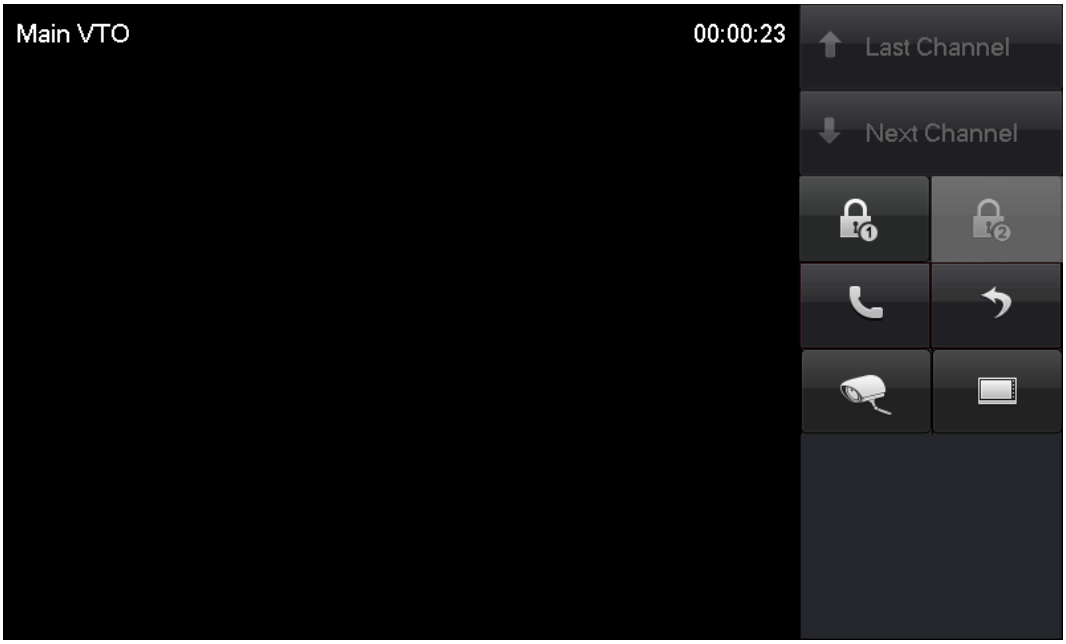

Figure 6-31

Key	Description
Last Channel	Press this key to switch the terminal device; realize circulatory monitoring.
Next Channel	
	Press this key to unlock VTO remotely. Note The system provides 2-channel unlock function. If the icon is gray, it means that unlock function of this channel is not available.
	Press this key to talk with the VTO.

Key	Description
	Press this key to return to previous menu.
	Press this key to select the IPC that shall be monitored.
	During IPC monitoring, press this key to switch to monitor VTO.

Table 6-4

6.4 Security Alarm

6.4.1 Area Settings

VTH supports 8-channel alarm areas, and sets area type, current status and delay time.

Note

Alarm area can be set only in disarm status.

Select “Security Alarm > Area Status”, as shown in Figure 6-32.

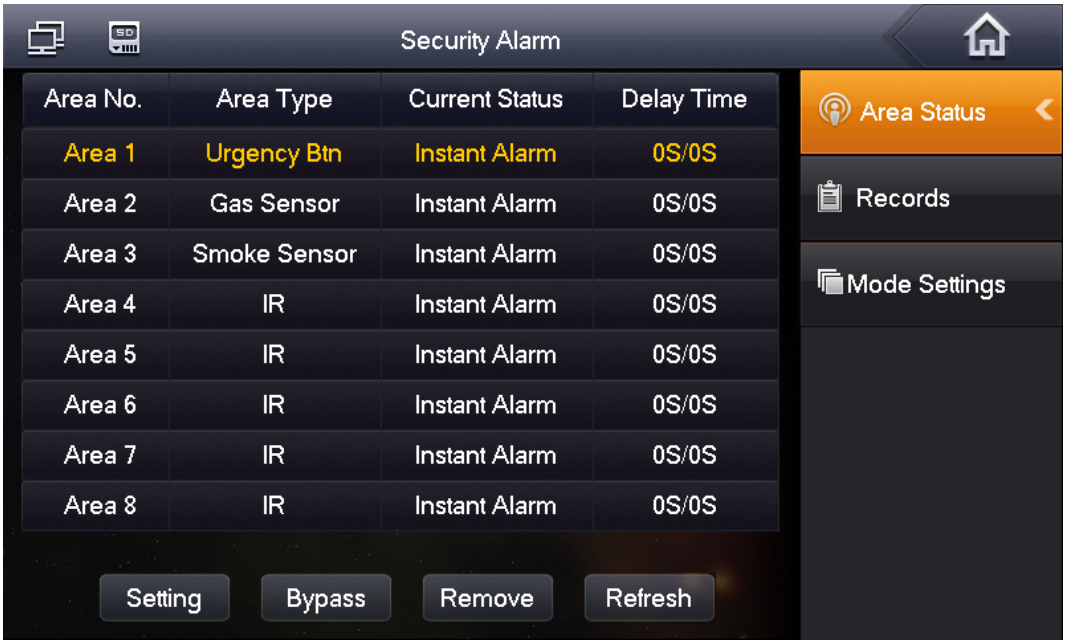

Figure 6-32

6.4.1.1 Area Settings

Step 1 Press [Setting].

The system pops up “Password” prompt box.

Step 2 Enter user password to enter area setting interface, as shown in Figure 6-33.

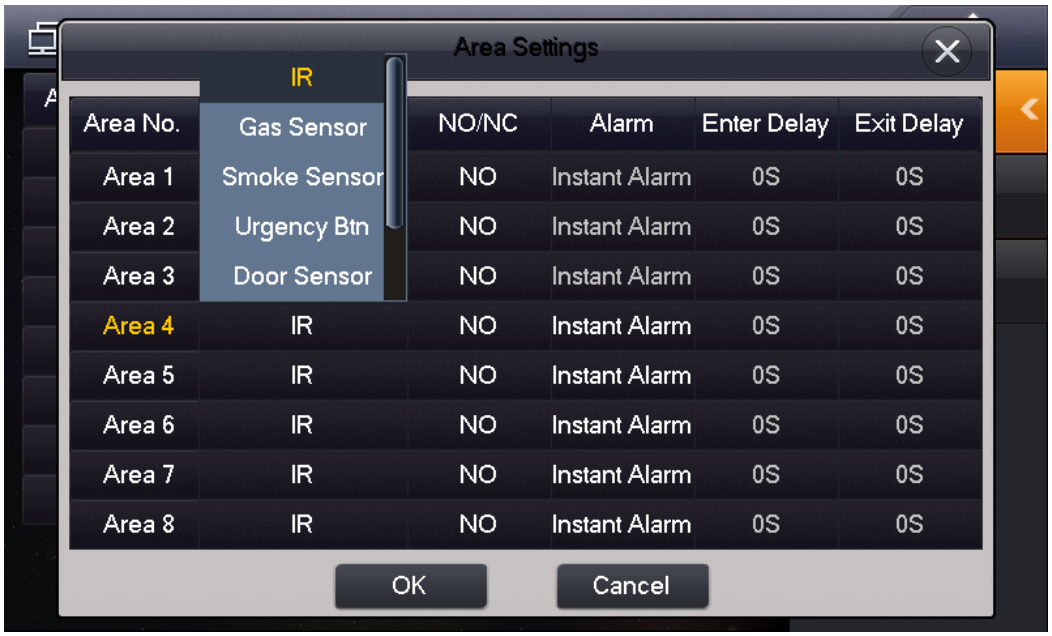

Figure 6-33

Step 3 According to Table 6-5, set area type, NO/NC, alarm, enter delay and exit delay at corresponding positions.

Parameter	Description	
Area No.	Area no. cannot be modified.	
NO/NC	Select NO or NC according to detector type, which shall be consistent with detector type.	
Area Type	According to detector type in every area, select corresponding area type, including IR, gas sensor, smoke sensor, urgency button, door sensor, steal alarm, perimeter and doorbell.	Note Type and alarm status of Area 1～Area 3 shall keep system defaults and cannot be set.
Alarm	It consists of instant alarm, delay alarm, bypass and remove. ● Instant alarm: in case of alarm after arm, produce alarm sound at once and enters alarm status. ● Delay alarm: in case of alarm after arm, enter alarm status after some time. Within the time period, you can disarm and cancel the alarm. ● Bypass: this area is shielded from this arm. After disarm, this area will restore normal working status. ● Remove: this area is invalid during arm/disarm.	
Enter Delay	After entering delay, when armed area triggers an alarm, entering armed area from non-armed area within the delay time period will not lead to linkage alarm. Linkage alarm will be produced if delay time comes to an end and it is not disarmed.	Note Delay is only valid to the areas of “delay alarm”.
Exit Delay	After arm, “delay alarm” area will enter arm status at the end of “exit delay”. Note If multiple areas set the exit delay, interface prompt will conform to maximum delay time.	

Table 6-5

Step 4　Press [OK] to complete setting.

6.4.1.2 Bypass

Caution

- Area 1～Area 3 cannot be bypassed.
- Area in “Remove” status cannot be bypassed.

Select an area, press [Bypass] and the current status becomes “Bypass”. This area will be shielded during arm, and restore normal working status after disarm.

6.4.1.3 Remove

Caution

Area 1～Area 3 cannot be removed.

Select an area, press [Remove] and the current status becomes “Remove”. This area will be invalid during arm and disarm.

6.4.1.4 Refresh

Press [Refresh] to refresh settings of 8 areas.

6.4.2 Mode Settings

Caution

Area mode can be set only in disarm status.

Add the areas to corresponding mode, arm and disarm uniformly.

Step 1　Select “Security Alarm > Mode Settings”.

The system displays “Mode Settings” interface, as shown in Figure 6-34.

Figure 6-34

Step 2 Select arm mode in every tab.

Step 3 Press  corresponding to every area; add the area to the arm mode.

Note

Multiple areas can be added into one arm mode simultaneously.

6.4.3 Alarm Records

When the alarm is triggered, the device emits alarm sound for 15s and pops up alarm prompt interface, as shown in Figure 6-35. Meanwhile, upload the alarm info to alarm record interface and management platform.

Figure 6-35

Under normal conditions, select “Security Alarm > Records”, as shown in Figure 6-36. View alarm messages.  means that this message is not read yet.

- Select one message and press [Delete] to delete it.
- Press [Delete All], confirm and delete all records.

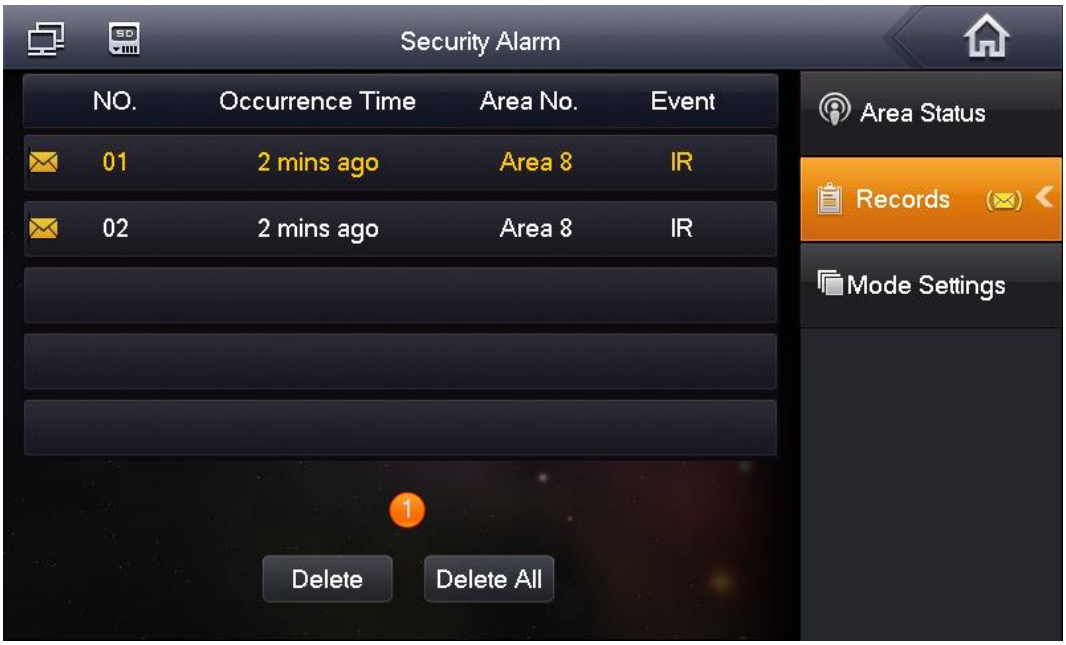

Figure 6-36

6.5 Info Search

6.5.1 Publish Info

Select “Info Search > Publish Info”, as shown in Figure 6-37. View, delete and delete all info released by Property Management Center.

Note

If VTH owns info indicator light, the info light will turn on when receiving info from Property Management Center, and will turn off after it is read by the user.

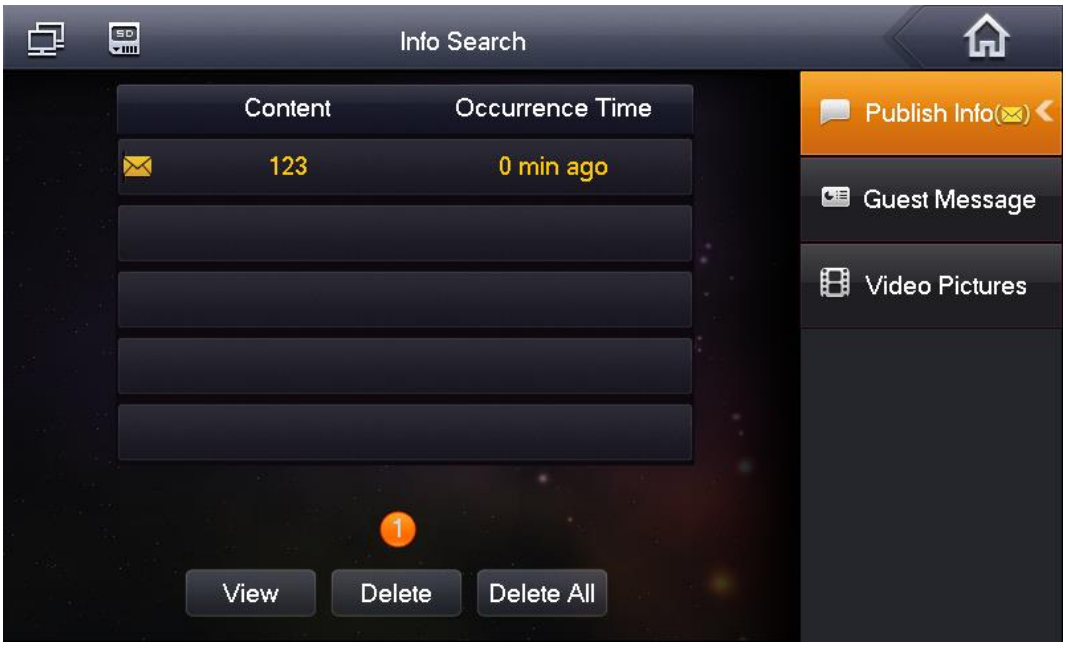

Figure 6-37

6.5.2 Guest Message

Select “Info Search > Guest Message”, as shown in Figure 6-38. View, delete and delete all messages of VTO/VTH.

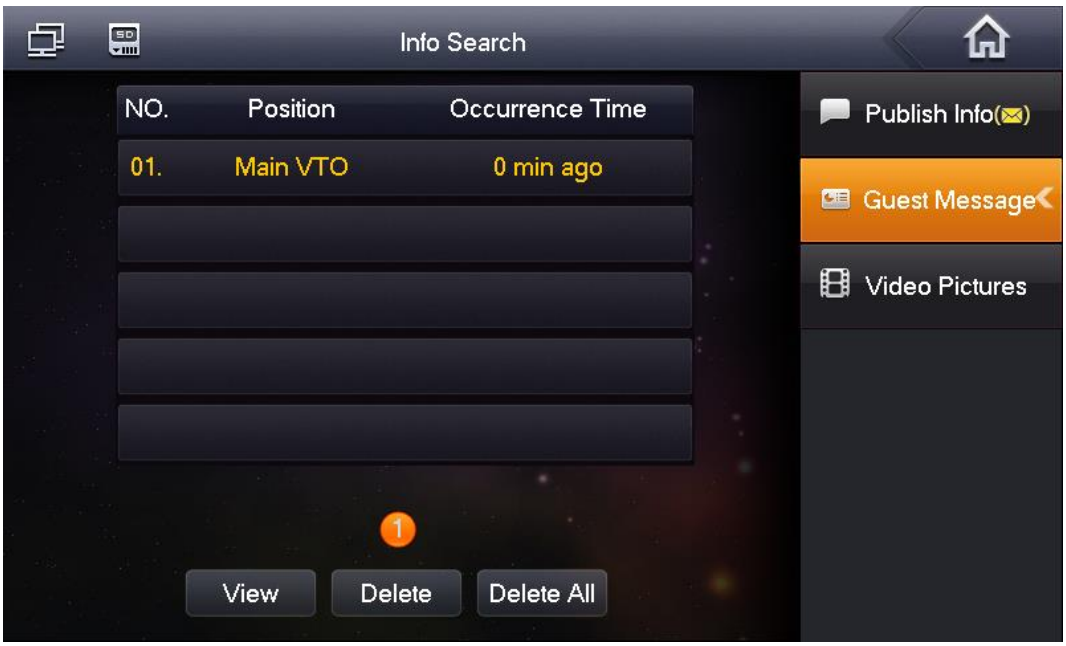

Figure 6-38

6.5.3 Video Pictures

6.5.3.1 Records

Step 1 Select “Info Search > Video Pictures”.

Step 2 Select “Records” tab.

The system displays “Records” interface, as shown in Figure 6-39.

- Select a file and press [View] to view it.
- Select a file and press [Delete] to delete it.
- Press [Delete All] to delete all files.

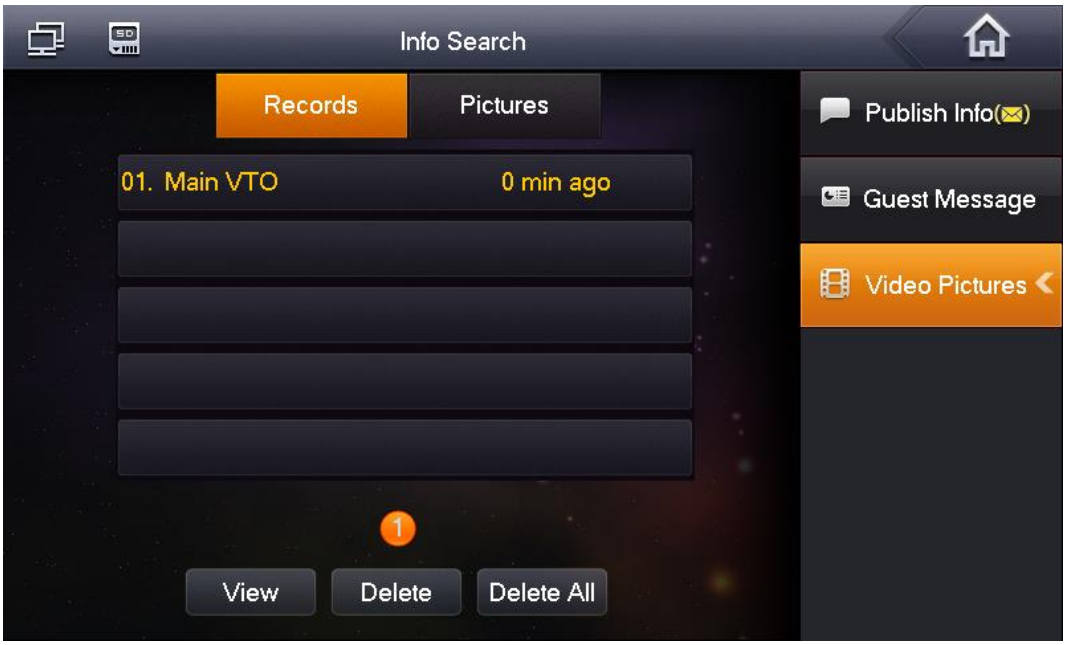

Figure 6-39

6.5.3.2 Pictures

Step 1 Select “Info Search > Video Pictures”.

Step 2 Select “Pictures” tab.

The system displays “Pictures” interface, as shown in Figure 6-40.

- Select a file and press [View] to view it.
- Select a file and press [Delete] to delete it.
- Press [Delete All] to delete all files.

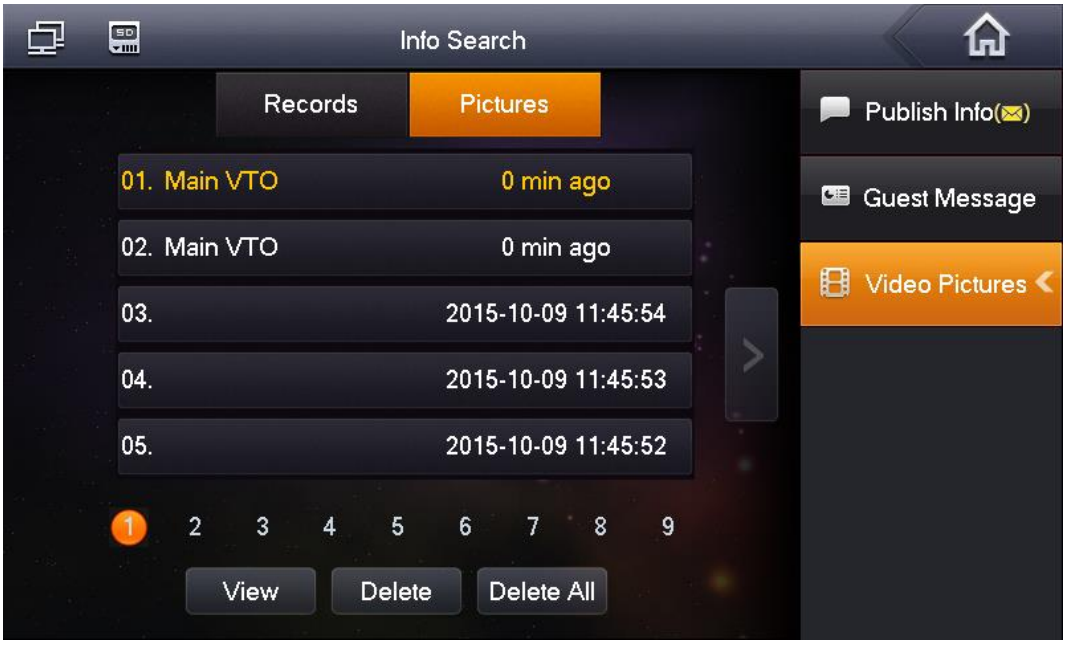

Figure 6-40

6.6 Unlock Function

When the VTH is being called, during monitoring and calling status, press exit button, and the VTO will be unlocked remotely.

6.7 Arm and Disarm Function

6.7.1 Arm

Caution

- Please ensure that the area has been added into arm mode. Otherwise, there will be no alarm triggering after arm.
- Please ensure that it is in disarmed status. Otherwise, arm will fail.

In case of triggering alarm after arm, produce linkage alarm and upload alarm info.

Step 1 Press Arm at the lower right corner of the main interface.

The system displays arm mode, as shown in Figure 6-41.

Figure 6-41

Step 2 Select arm mode.

The system displays password input interface.

Step 3 Enter arm and disarm password; press [OK].

The device beeps continuously, which represents successful arm. The key displays corresponding arm mode.

Note

Default password of arm and disarm is 123456. Please refer to “6.2.1.1 Password Settings” for details.

6.7.2 Disarm


Caution

Please ensure that it is in armed status. Otherwise, disarm will fail.

Step 1 Press disarm symbol at the lower right corner of the main interface.

The system displays password input interface.

Step 2 Enter arm and disarm password; press [OK].

The system displays successful disarm.

Note

- Default password of arm and disarm is 123456. Please refer to “6.2.1.1 Password Settings” for details.
- If you are forced to enter disarm password in case of emergencies, enter anti-hijacking password. The system will disarm, and at the same time, upload alarm info to Management Center/Platform. Default anti-hijacking password is 654321. Please refer to “6.2.1.1 Password Settings” for details.

Appendix 1 Technical Parameters

Appendix 1.1 VTH5222CH

Model		**VTH5222CH**
System	Main Processor	Embedded microcontroller
	Operating System	Embedded LINUX Operating System
Video	Video Compression Standard	H.264
	Video Resolution	800×480
	Front Camera	None
Audio	Input	Omnidirectional microphone
	Output	Built-in speaker
	Talk	Support two-way audio talk
Display	Screen Size	7-inch TFT color screen
Operating Mode	Input	Touch key (SOS, menu, call, monitor and unlock), touch screen technology
Alarm	Alarm Input	Support 6-channel alarm input
	Alarm Output	Support 1-channel alarm output (dry contact)
Network	Ethernet	10M/100Mbps self-adaptive
	Network Protocol	TCP/IP
	Wi-Fi	Not supported
Specification	Power Supply	Direct power supply from private exchange
	Power Consumption	Standby ≤1.5W; working ≤7W
	Working Environment	-10℃～+55℃
		10%RH～90%RH
	Size (Length× Width × Height)	200mm×136mm×22mm
	Weight	0.8kg

Appendix 1.2 VTH15 Series Type A/B/CH

Model		**VTH15 Series Type A**	**VTH15 Series Type B(W)**	**VTH15 Series Type CH**
System	Main Processor	Embedded microcontroller		
	Operating System	Embedded LINUX Operating System		

Video	Video Compression Standard	H.264		
	Video Resolution	800×480		
	Front Camera	Only VTH1520CH supports front camera, 300,000 pixels		
Audio	Input	Omnidirectional microphone		
	Output	Built-in speaker		
	Talk	Support two-way audio talk		
Display	Screen Size	7-inch TFT color screen		
Operating Mode	Input	Mechanical key (SOS, menu, call, monitor and unlock), touch screen technology		
Alarm	Alarm Input/output	● For VTH15 series type A/type B and VTH1550 CHM,alarm in/out: 8/0; ● For VTH15 series type CH, alarm in/out: 6/1.		
Network	Ethernet	10M/100Mbps self-adaptive		
	Network Protocol	TCP/IP		
Specification	Power Supply	DC10V – 15V or direct power supply from private exchange		
	Power Consumption	Standby ≤1.5W; working ≤7W		
	Working Environment	-10℃～+55℃		
		10%RH～90%RH		
	Size (Length× Width × Height)	221mm×154mm×25mm	221mm×154mm×25mm	200mm×136mm×22mm
	Weight	0.8kg		

Appendix 1.3 VTH16 Series

Model		**VTH1660CH**
System	Main Processor	Embedded microcontroller
	Operating System	Embedded LINUX Operating System
Video	Video Compression Standard	H.264
	Video Resolution	800×480
	Front Camera	None
Audio	Input	Omnidirectional microphone
	Output	Built-in speaker

Model		VTH1660CH
	Talk	Support two-way audio talk
Display	Screen Size	10.2-inch TFT color screen
Operating Mode	Input	Touch screen technology
Alarm	Alarm Input	6-channel
	Alarm Output	1-channel
Network	Ethernet	10M/100Mbps self-adaptive
	Network Protocol	TCP/IP
Specification	Power Supply	DC10V – 15V or direct power supply from private exchange
	Power Consumption	Standby ≤1.5W; working ≤7W
	Working Environment	-10℃～+55℃
		10%RH～90%RH
	Size (Length× Width × Height)	260mm×189mm×22.7mm
	Weight	0.8Kg

Appendix 1.4 VTH2221A

Model		VTH2221A
System	Main Processor	Embedded microcontroller
	Operating System	Embedded LINUX Operating System
Video	Video Compression Standard	H.264
	Video Resolution	800×480
	Front Camera	None
Audio	Input	Omnidirectional microphone
	Output	Built-in speaker
	Talk	Support two-way audio talk
Display	Screen Size	7-inch TFT color screen
Operating Mode	Input	Mechanical key (SOS, menu, call, monitor and unlock), touch screen technology
Alarm	Alarm Input	Support 6-channel local alarm input
	Alarm Output	Reserve 1-channel local alarm output
Network	Ethernet	10M/100Mbps self-adaptive
	Network Protocol	TCP/IP
Specification	Power Supply	DC10V – 15V or direct power supply from private exchange
	Power Consumption	Standby ≤1.5W; working ≤7W
	Working	-10℃～+55℃

Model		VTH2221A
	Environment	10%RH～90%RH
	Size (Length× Width × Height)	220mm×153mm×22.5mm
	Weight	0.8kg