

# **Digital Villa VTO (VTO6 Series)**

## **User's Manual**

**V2.0.1**

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## Important Safeguards and Warnings

Please read the following safeguards and warnings carefully before using the product in order to avoid damages and losses.

Note:

- Do not expose the device to lampblack, steam or dust. Otherwise it may cause fire or electric shock.
- Do not install the device at position exposed to sunlight or in high temperature. Temperature rise in device may cause fire.
- Do not expose the device to humid environment. Otherwise it may cause fire.
- The device must be installed on solid and flat surface in order to guarantee safety under load and earthquake. Otherwise, it may cause device to fall off or turnover.
- Do not place the device on carpet or quilt.
- Do not block air vent of the device or ventilation around the device. Otherwise, temperature in device will rise and may cause fire.
- Do not place any object on the device.
- Do not disassemble the device without professional instruction.

Warning:

- Please use battery properly to avoid fire, explosion and other dangers.
- Please replace used battery with battery of the same type.
- Do not use power line other than the one specified. Please use it properly. Otherwise, it may cause fire or electric shock.

## Special Announcement

- This manual is for reference only.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks are the properties of their respective owners.
- If there is any uncertainty or controversy, please refer to the final explanation of us.
- Please visit our website for more information.

# 1 Product Overview

## 1.1 List of Models

This manual applies to multiple product models; please carefully confirm your model and its features.

Model	Chassis Material	Color	Unlock via IC card	Button Type	Lock Control Module
VTO6000A	Metal	Metal grey	N/A	Mechanical key	External
VTO6110B	Fireproof ABS	Black	Support	Touch button	External
VTO6110BW	Fireproof ABS	White	Support	Touch button	External
VTO6210B	Fireproof ABS	Black	Support	Touch button	Built-in
VTO6100C	Fireproof ABS	White	Support	Mechanical key	Built-in
VTO6000C	Fireproof ABS	White	Not support	Mechanical key	Built-in
VTO6000CM	Metal	Metal grey	Not support	Mechanical key	Built-in

## 1.2 VTO6000A

### 1.2.1 Front Panel

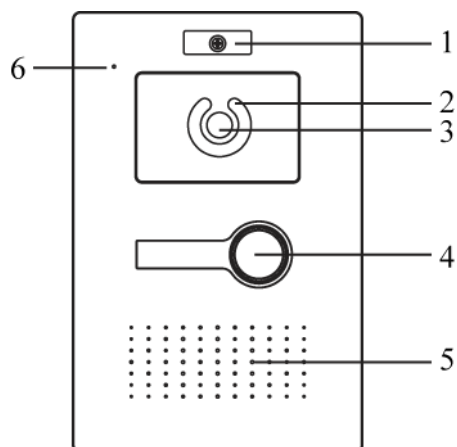


Figure 1- 1 VTO6000A

No.	Port Name	Note
1	Nameplate	You can fix company nameplate here.
2	Compensation Light	Light compensation will automatically turn on during monitoring, calling, or connecting status if there is no enough light in environment.
3	Camera	It monitors corresponding door region.
4	Call Button	Call center or VTH.
5	Speaker	Audio output.
6	MIC	Audio input.

## 1.2.2 Rear Panel

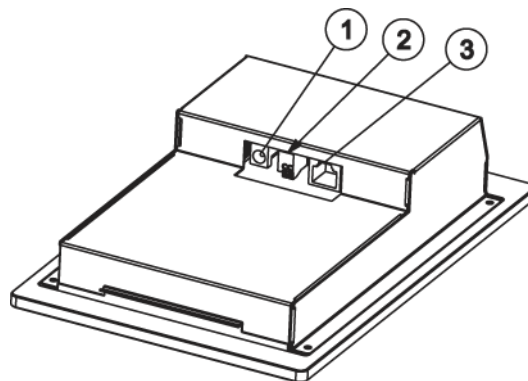


Figure 1- 2 VTO6000A

No.	Component Name	Note
1	Power	Connect to 12V DC.
2	RS485 Port	May connect to access control extension module
3	Network Port	Plug in network cable (RJ45 port) .

## 1.3 VTO6110B/VTO6110BW/VTO6210B

### 1.3.1 Front Panel

VTO6110B, VTO6110BW and VTO6210B's front panel is as in Figure 1- 3.

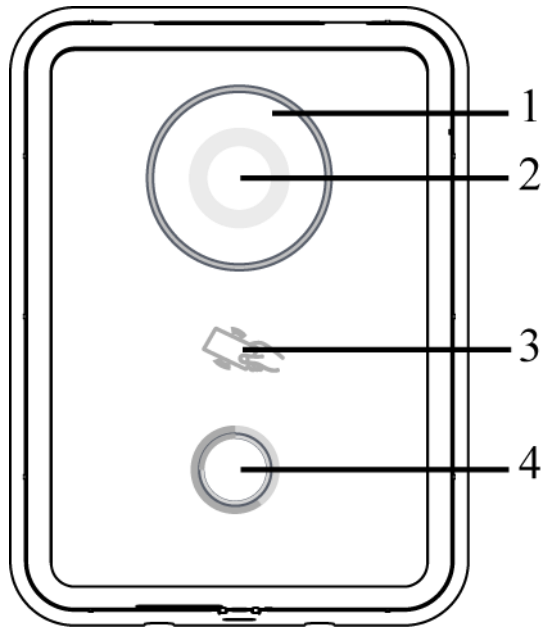


Figure 1- 3 VTO6110B/VTO6110BW/VTO6210B

No.	Component Name	Note
1	Compensation Light	Light compensation will automatically turn on during monitoring, calling, or connecting status if there is no enough light in environment.
2	Camera	It monitors corresponding door region.
3	Card Swiping Area	Authorize IC card and unlock by swiping IC card (must connect to access control extension module).
4	Call Button	Lightly touch button area, to call center or VTH. Blue NO: VTO is under standby status.

### 1.3.2 Rear Panel

VTO6110B and VTO6110BW's rear panel is as in Figure 1- 4 VTO6110B and VTO6110BW.

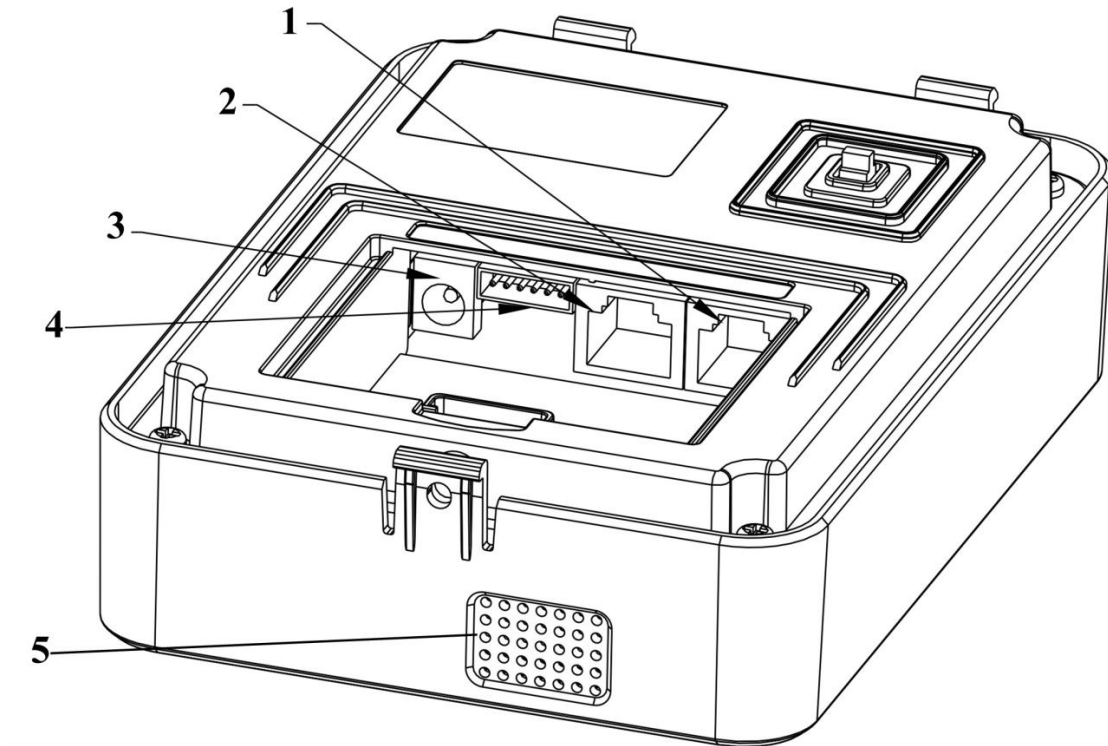


Figure 1- 4 VTO6110B and VTO6110BW

No.	Component Name	Note
1	Vandal Proof Switch	It will generate alarm sound and report to the center once VTO is forced to leave the wall.
2	Network Port	Plug in network cable (RJ45 port) .
3	Power	Connect to 12V DC.
4	RS485 Port	May connect to access control extension module.
5	Speaker	Audio output

VTO6210B's rear panel is as in Figure 1- 5 VTO6210B.





Figure 1- 5 VTO6210B

No.	Component Name	Note
1	Vandal Proof Switch	It will generate alarm sound and report to the center once VTO is forced to leave the wall.
2	Network Port	Plug in network cable (RJ45 port) .
3	Power	Connect to 12V DC.
4	RS485 Port	May connect to door lock, door sensor and unlock button. It reserves port for other device.
5	Speaker	Audio output

## 1.4 VTO6000C/VTO6000CM/VTO6100C

### 1.4.1 Front Panel

VTO6000C and VTO6000CM's front panel is as in Figure 1- 6 and VTO6100C's front panel is as in Figure 1- 7.

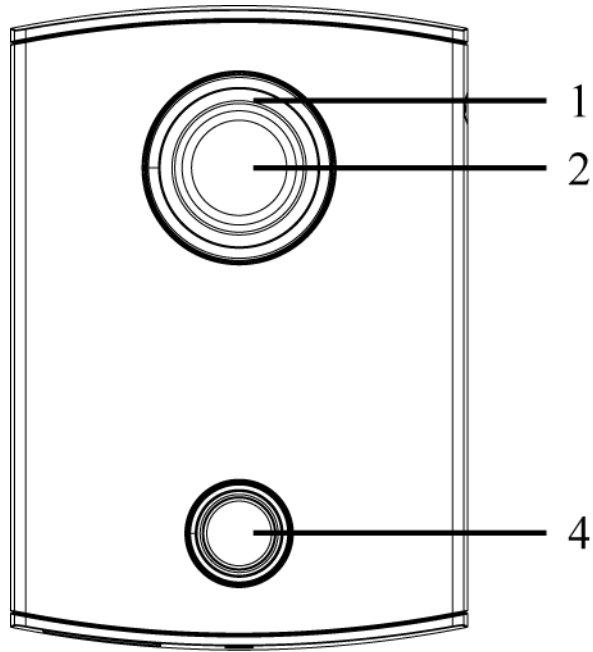


Figure 1- 6 VTO6000C and VTO6000CM

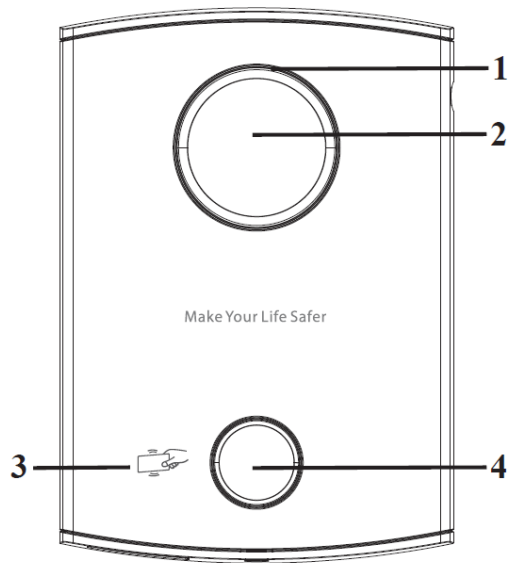


Figure 1- 7 VTO6100C

No.	Component Name	Note
1	Compensation Light	Light compensation will automatically turn on during monitoring, calling, or connecting status if there is no enough light in environment.
2	Camera	It monitors corresponding door region.

3	Card Swiping Area	<p>Authorize IC card and unlock by swiping IC card (must connect to access control extension module).</p> <p>Note: Only VTO6100C supports IC card unlocking function. Silk-screen in this area may vary for different product.</p>
4	Call Button	<p>Lightly touch button area, to call center or VTH.</p> <p>Blue NO: VTO is under standby status. Blue flashing: VTO is calling or in call status. Yellow: IC card unlocking or call is abnormal.</p>

### 1.4.2 Rear Panel

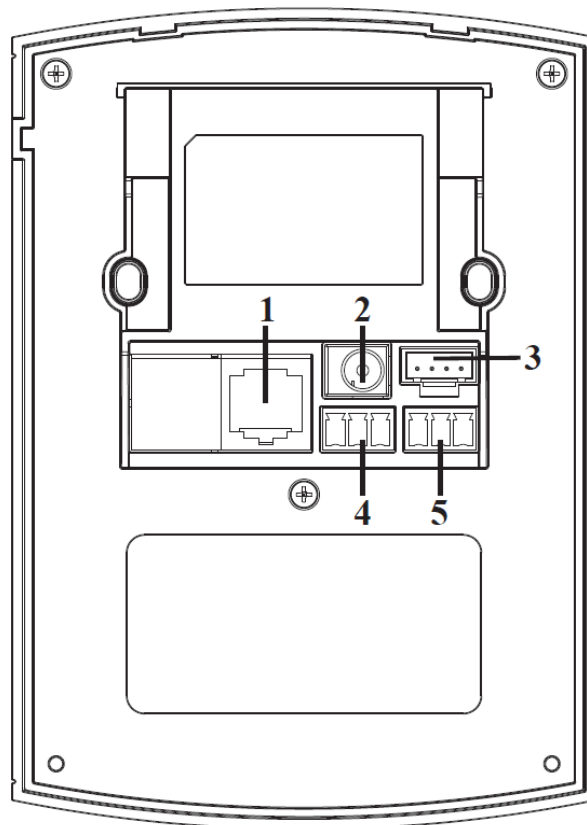


Figure 1- 8 VTO6000C/VTO6000CM/VTO6100C

No.	Port Name	Note
1	Network Port	Connect to network cable (RJ45 port) .
2	Power	Connect to 12V DC.
3	Debug Port	For installer use.
4	Green Port 1	Connect to lock.

<b>5</b>	Green Port 2	Connect to door sensor and unlock button.
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## 2 Introduction to Web

### 2.1 Login

Here takes VTO6210B as an example.

First, make sure both PC and the VTO are connected to the Internet and follow these steps to login Web management page.

Step 1. In Internet Explorer input the IP address of VTO, press Enter. You will see the login page as in Figure 2- 1.



Figure 2- 1

Step 2. Input username and password.

Step 3. Click on Login.

Note: The default IP address of VTO is 10.22.5.189 or 192.168.1.110. Default username password is admin/admin. After you login for the first time, please change the password for security purpose.

### 2.2 System Config

## 2.1.1 Local Config

### 2.2.1.1 Local Config

In Local Config interface, you can view VTO model, version info and etc.

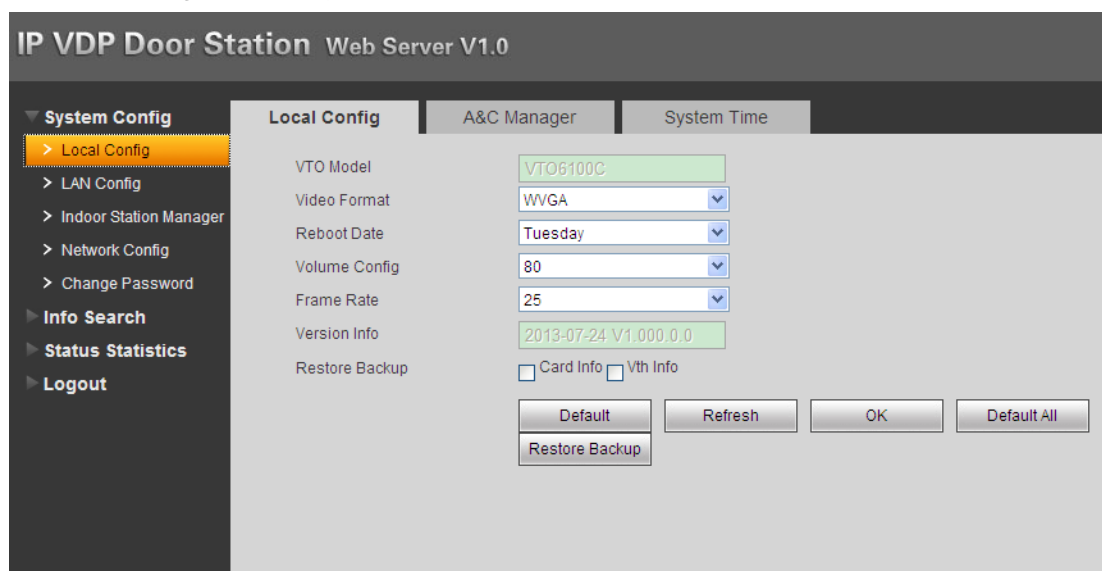


Figure 2- 2

Parameter	Note
VTO Model	Display VTO model, such as villa VTO, unit VTO.
Video Format	Set video format that collected by the camera, including: WVGA and D1. WVGA resolution is 800x480; D1 resolution is 704x576.
Reboot Date	On the set date, device will automatically reboot.
Volume Config	Adjust device volume, range 0~100.
Frame Rate	NTSC: 30 fps, PAL: 25 fps.
Version Info	Display device version info.
Restore Backup	Mainly used to restore card no. and VTH info, refer to Ch 3.7.
Default	Only restore current Local Config page to default settings.
Default All	Device restores all parameters to default settings. Every 30 minutes, VTO automatically saves card no. and VTH information in the system.

### 2.2.1.2 A&C Manager

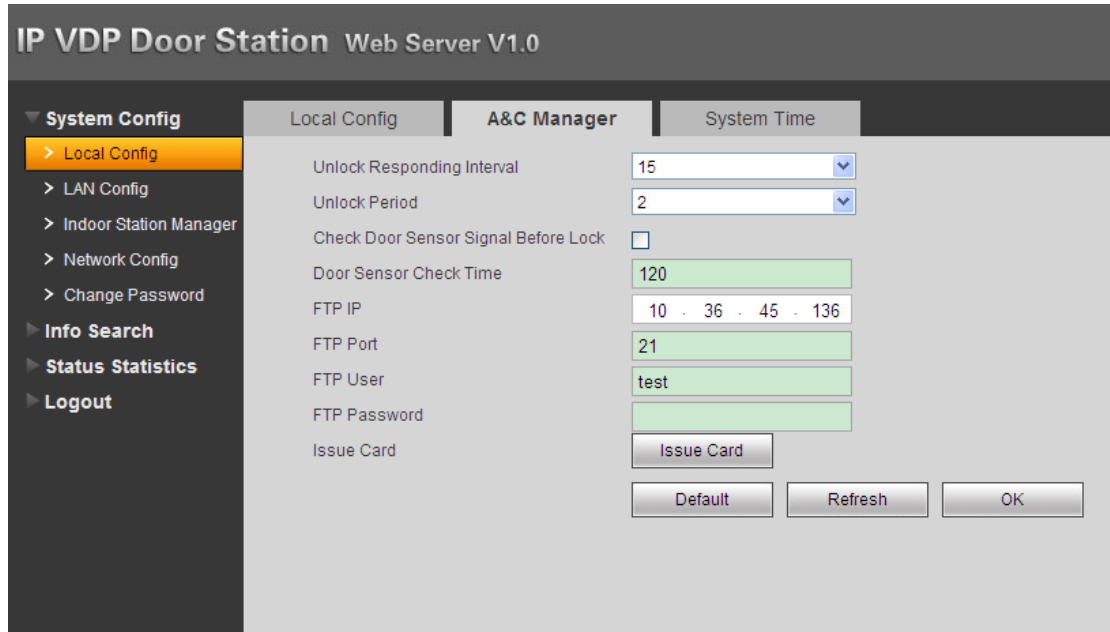


Figure 2- 3

Parameter	Note
Unlock Responding Interval	The interval between current unlock and next one, unit is second.
Unlock Period	Period door remains unlocked, unit is second.
FTP IP, FTP port, FTP user, FTP password	FTP server is used to store picture taken when card is swiped at VTO. User can login FTO to get these pictures.
Issue Card	Activate IC card of the VTO so user can swipe the IC card to unlock. Note: Please refer to Digital Villa VTO (VTO6 Series) Installation Guide V 2.0.0

### 2.2.1.3 System Time

Here you can set date format, time format, and input system date and time. You can also click on Sync PC to synchronize system time with PC time.

## 2.2.2 LAN Config

Here you can register VTO to center and set how to call center. Please refer to Ch 3.1.1.

## 2.2.3 Indoor Station Manager

In Indoor Station Manager interface, you can add VTH (digital indoor station), view VTH info and delete VTH.

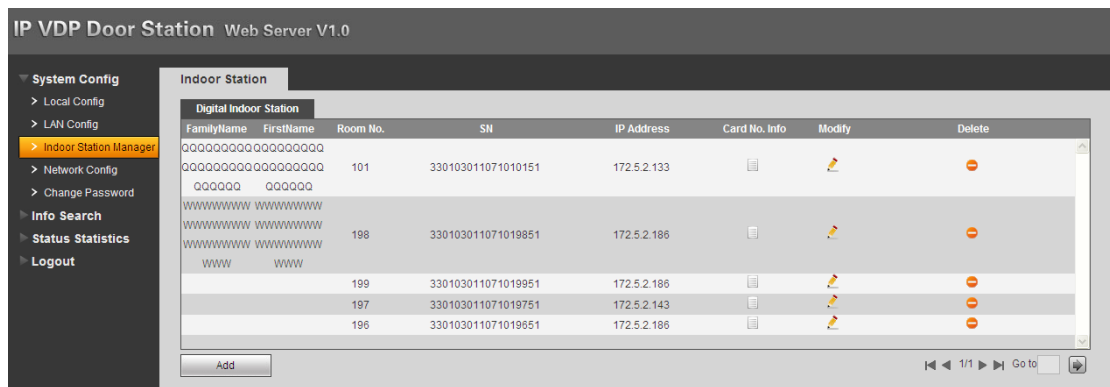


Figure 2- 4

### Add VTH

In Indoor Station Manager interface, click on Add. The system pops up a window as in Figure 2- 5.

FamilyName

FirstName

VTH Short No.

IP Address

OK Cancel

Figure 2- 5

Fill in VTH info as user's name, VTH short no. and IP address.

### Note:

VTH short no. consists of four digits, the first two digits can be within 01~99, the last two digits can be within 01~16.



## 2.2.4 Network Config

Here you can set VTO IP address, Subnet Mask and Default Gateway.

After you have modified IP address, Web page will reboot and go to the new IP address web page.

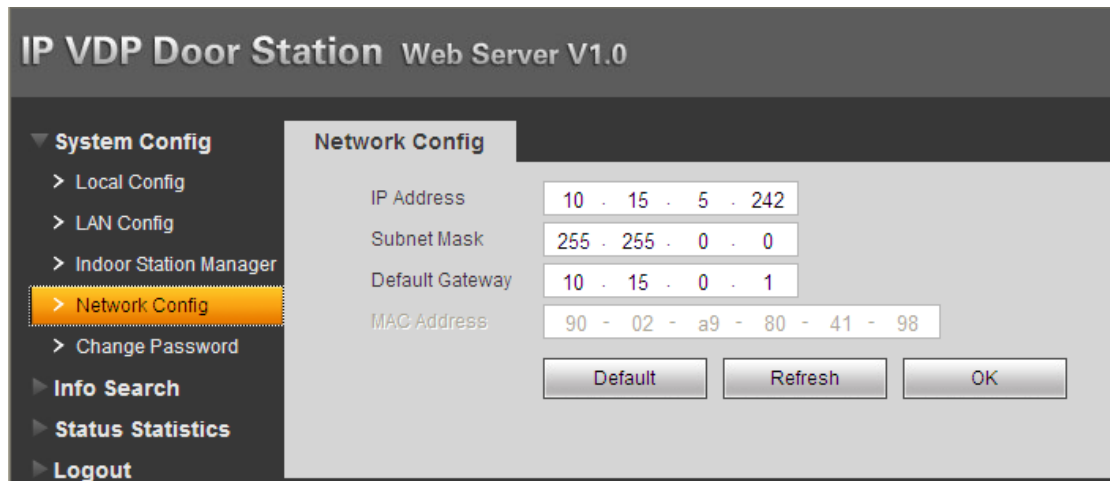


Figure 2- 6

## 2.2.5 Change Password

Here you can change login password of VTO webpage.

## 2.3 Info Search

### 2.3.1 Call History

Here you can view call history of VTO in Call History interface. It can save up to 1124 items. .

IP VDP Door Station Web Server V1.0

System Config  
Info Search  
Call History  
Status Statistics  
Logout

VTO Call History

Index	Call Type	Room No.	Begin Time	Talk Time(m)	End State
1	Outgoing	101	0	00:00	Missed
2	Outgoing	101	0	00:00	Missed
3	Outgoing	101	0	00:00	Missed
4	Outgoing	101	0	00:00	Missed
5	Outgoing	101	0	00:00	Missed
6	Outgoing	101	0	00:00	Missed
7	Outgoing	101	0	00:00	Missed
8	Outgoing	101	0	00:00	Missed
9	Outgoing	101	0	00:00	Missed
10	Outgoing	101	0	00:00	Missed
11	Outgoing	101	0	00:00	Missed

1/94 Go to

Figure 2- 7

## 2.4 Status Statistics

### 2.4.1 VTH Status

Here you can view connection status of VTH.

- Status

Offline: VTO and VTH are not connected, you cannot call, monitor, talk or etc.

Online: VTO and VTH are connected, you can call, monitor, talk and etc.

- MON

- Unmon: VTH is not monitoring.

- Onmom: VTH is monitoring.

IP VDP Door Station Web Server V1.0

System Config  
Info Search  
Status Statistics  
VTH Status  
Logout

VTH Status

VTH	Status	MON	IP:PORT	REG_TIME	OFFTIME
101	Offline	Unmon	172.5.2.133:0	0	0
196	Offline	Unmon	172.5.2.186:0	0	0
197	Offline	Unmon	172.5.2.143:0	0	0
198	Offline	Unmon	172.5.2.186:0	0	0
199	Offline	Unmon	172.5.2.186:0	0	0

1/1 Go to

Figure 2- 8

## 2.5 Logout

Here you can reboot device or logout.

Click on logout to log out the system and it returns to login page.

## 3 Basic Function Introduction

### 3.1 Call Function

#### 3.1.1 Call Manager Center

Check Register to the MGT Center, you can touch the button to call manager center. Now VTO can only call MGT Center. Manager center's time can be set on management platform or villa VTO's web-end. Once manager center picks up the call, you can perform a visual bidirectional talk with the manager center. You can touch the button on VTO to end call at any time.

Step 1. According to VTO configured for the center, fill in building no, building unit no. and VTO no.

Step 2. In LAN Config, check register to the MGT center, as in Figure 3- 1.

Step 3. Fill in MGT center IP address and MGT port no.

Step 4. Set call VTS time. Within this period, VTO can only call the center.

Step 5. Check Call VTS or not.

Step 6. Confirm all config, and click on OK. Enter Logout→ Reboot Devices, to manually reboot the device.

The screenshot displays the 'LAN Config' page of the 'IP VDP Door Station Web Server V1.0'. The left sidebar menu includes 'System Config', 'Local Config', 'LAN Config' (highlighted), 'Indoor Station Manager', 'Network Config', 'Change Password', 'Info Search', 'Status Statistics', and 'Logout'. The main configuration area includes the following fields and options:

- Group Call
- Building No.: 7
- Building Unit No.: 1
- VTO No.: 6901
- Register to the MGT Centre
- MGT Centre IP Address: 10 . 33 . 5 . 227
- MGT Port No.: 12801
- Call vts time: 00 : 00 To 00 : 00  Call vts or not
- From VTO IP Address: [VTO IP Setup button]

A red warning message at the bottom states: "Warning: The device needs reboot after modifying the config above." At the bottom right, there are three buttons: "Default", "Refresh", and "OK".

Figure 3- 1

### **3.1.2 Call User**

Press Call button under standby status, and the VTO will call user. User may monitor VTO from VTH.

- On VTH, press Unlock button to unlock door.
- When VTH picks up, you can start talk with the VTH.
- If no one answers the call, then the call will end automatically and device returns to standby status.

### **3.1.3 Group Call**

Group call is mainly used for one VTO. Press Call button on VTO to call multiple VTH at the same time.

VTH consists of master VTH and extension VTHs. A system can only have a max of 1 master VTH and 5 extension VTHs. Please refer to Digital Villa VTO (VTO6 Series) Installation Guide V 1.0.0.

## **3.2 Monitor**

Both VTS and VTH are able to monitor this VTO by enabling the camera to capture local circumstance.

## **3.3 Unlock Function**

### **Unlock by Center**

When center is called, calling or monitoring, center can remotely unlock door. VTO will return to standby interface after call ends or countdown stops.

### **Unlock under Calling Status**

When VTH is called, calling or monitoring, VTH can remotely unlock door. VTO will return to standby interface after call ends or countdown stops.

### **Unlock by IC Card**

At the card swiping area on VTO, swipe authorized IC card. You can unlock door when you pass identification.

### **3.4 Issue Card**

Place IC card at the card swiping area to authorize it. User can swipe IC card to unlock door.

Note:

Some products do not support IC card, please refer to Ch 1.1.

The VTO supports two methods to issue card: platform and WEB. Please refer to Digital Villa VTO (VTO6 Series) Installation Guide V 1.0.0.

### **3.5 Compensation of Light**

In dark environment or at night, the VTO adopts auto photoreception technology which achieves light compensation in connecting status.

### **3.6 Vandal Proof**

There is one channel of vandal proof which will generate alarm sound and report to the manager center once VTO is forced to leave the wall.

### **3.7 Restore Backup**

#### **Restore Card Info**

If you encounter abnormality with card info or accidentally restore default settings, you can restore card info with this function.

#### **Restore VTH Info**

If VTH info is mistakenly changed, you can restore VTH info with this function.

Note: Every half hour, VTO automatically saves card and VTH info in the system. If you want to restore card and/or VTH info, you must restore within half hour after your last operation that change these info.

## 4. FAQ

1. Q: I pressed the touch button, and the indicator turned on, but the VTO did not start a call?  
A: Please check your operation process.
2. Q: How to end a call when I am calling?  
A: Please press button on VTO and there will be sound from the device.
3. Q: The device could not boot up and there was no sound or light.  
A: Please check if power supply is well plugged.
4. Q: My call did not go through.  
A: It is network connection error; please check the cables of the device and its extension.
5. Q: VTO did not respond after I swiped IC card.  
A: Please check if your card is authorized.
6. Q: It says the card is invalid.  
A: Please contact the administrator for confirmation.
7. Q: I heard a beep sound when I swiped IC card, but the door did is still locked.  
A: Please check if your card is authorized.
8. Q: I have other problems not included above.  
A: Please contact technical staffs for assistance.

## Appendix 1 Technical Specifications

<b>Model</b>	<b>VTO6000A</b>
<b>System</b>	
Main Processor	Embedded microcontroller
OS	Embedded LINUX OS
<b>Video</b>	
Video Compression Standard	H.264
Input/Approaching Induction	1.3 mega pixels CMOS HD camera
Night Vision	Support
<b>Audio</b>	
Input	Omnidirectional microphone
Output	Built-in loudspeaker
Bidirectional Talk	Support bidirectional talk
<b>Operation Mode</b>	
Input	One-key input (with backlight)
Lock Status Check	Support (Optional)
<b>Network</b>	
Ethernet	10M/100Mbps self-adaptation
Internet Protocol	TCP/IP
<b>General</b>	
Power Supply	DC 10~15V
Power Consumption	Standby $\leq 1W$ ; working $\leq 10W$
Temperature	-20°C~+70°C
Relative Humidity	10%~90%RH
Dimensions	151*48.5*230mm (L*W*H)
Weight	0.96kg

<b>Model</b>	<b>VTO6110B/VTO6110BW/VTO6210B</b>
<b>System</b>	

Main processor	Embedded microcontroller
OS	Embedded LINUX OS
<b>Video</b>	
Video compression standard	H.264
Input/Approaching Induction	1.3 mega pixels CMOS HD camera
Night vision	Support
<b>Audio</b>	
Input	Omnidirectional microphone
Output	Built-in loudspeaker
Bidirectional talk	Support bidirectional talk
<b>Operation Mode</b>	
Input	One-key input (with backlight)
Swipe card	Built-in IC card sensor
<b>Alarm</b>	
Vandal proof	Support
Door status check	Support
<b>Network</b>	
Ethernet	10M/100Mbps self-adaptation
Internet protocol	TCP/IP
<b>General</b>	
Power supply	DC 10~15V
Power consumption	Standby ≤1W ; working ≤10W
Temperature	-10℃~+60℃
Relative Humidity	10~95%RH
Dimensions	114.2mm*43mm*154.2mm (L*W*H)
Weight	0.5kg

<b>Model</b>	<b>VTO6000C/VTO6000CM/VTO6100C</b>
<b>System</b>	
Main processor	Embedded microcontroller
OS	Embedded LINUX OS
<b>Video</b>	
Video compression standard	H.264
Input/Approaching Induction	1.3 mega pixels CMOS HD camera



Night vision	Support
<b>Audio</b>	
Input	Omnidirectional microphone
Output	Built-in loudspeaker
Bidirectional talk	Support bidirectional talk
<b>Operation Mode</b>	
Input	One-key input (with backlight)
Swipe card	Built-in IC card sensor (for VTO6100C only)
<b>Alarm</b>	
Vandal proof	Support
Door status check	Support
<b>General</b>	
Ethernet	10M/100Mbps self-adaptation
Internet protocol	TCP/IP
Power supply	DC 10~15V
Power consumption	Standby ≤1W ; working ≤10W
Temperature	-10°C~+60°C
Relative Humidity	10~95%RH
Dimensions	100*42*141mm (L*W*H)
Weight	0.5kg

**Note:**

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