Prestel VCS-G22

Integrated 4K UHD
Video Conferencing Terminal

USER MANUAL

Copyright Notice

All contents of this manual, whose copyright belongs to our corporation cannot be cloned, copied or translated without the permission of the company. Product specifications and information which were referred to in this document are for reference only. We may change, delete, or update any content at any time without prior notice.

Warning

Operating this equipment in a residential environment may cause radio interference.

Catalogue

1 Pack List 1
2 Product Instruction 2
2.1 Product Appearance 2
2.2 Technical Specifications 4
3 Installation and Connection 5
3.1 Cabling 5
3.2 Power On 8
4 Remote Control 9
5 Operation (Remote Control) 11
5.1 Terminal Guide 11
5.2 Main Interface 17
5.3 Register Account 19
5.3.1 Register SIP Account 19
5.3.2 Register H323 Account 20
5.3.3 Register WeConf Account (Optional) 21
5.4 Meeting Calling 22
5.5 Join Meeting (Optional) 23
5.5.1 Join Meeting with Conference Number 23
5.5.2 Join Meeting through the Meeting List 24
5.6 Create Meeting (Optional) 26
5.7 Call Answering 28
5.8 Conference Control 29
5.8.1 Conference Control (Optional) 29
5.8.2 Carousel (Optional) 29
5.8.3 Send Presentation 29
5.8.4 Picture Switching 31
5.8.5 AI Mode 31
5.8.6 Call Information 31

5.8.7 Camera Control 31
5.9 Address Book 32
5.9.1 Local Contact 32
5.9.2 Enterprise Contact (Optional) 35
5.10 Tencent Meeting Rooms (Optional) 38
5.11 Dongle 39
5.12 GUI Setting 40
5.12.1 Network 40
5.12.2 Video 41
5.12.3 Audio 44
5.12.4 General 45
5.12.5 Layout 48
5.12.6 One Click Detection 48
5.12.7 About 49
6 Operational (WEB) 51
6.1 Login 51
6.2 Meeting Calling 53
6.3 Presentation 55
6.4 Camera Control 56
6.5 Diagnostics 57
6.6 Settings 60
6.6.1 Network Setting 60
6.6.2 H323 Account 61
6.6.3 SIP Account 63
6.6.4 Display Name 65
6.6.5 Picture Layout 67
6.6.6 System Security 72
6.6.7 Language 73
7 Troubleshooting 75

1 Pack List

When opening the packaging, please inspect and verify all attachments that should be included.

Name	Quantity
Video Conferencing Terminal	1
Power Adaptor	1
AC Cable	1
Remote Control	1
HDMI Cable	1
Wall Mount Bracket (with crews)	1
Quick Start Guide	1
Quick Installation Guide	1

2 Product Instruction

Designed specifically for corporate meetings, the integrated video conferencing terminal delivers high-quality images and sound reproduction, ensuring excellent remote meeting experiences with clear audiovisual transmission. Suitable for applications like cloud conferencing and remote healthcare, it helps businesses enhance meeting efficiency and productivity.

2.1 Product Appearance

2.2 Technical Specifications

Category	Project	Specifications
Electrical Characteristics	**Operating Voltage**	**DC 12V**
	Power Consumption	**36W (Max)**
Environmental Requirements	**Operating Conditions**	
	Temperature	**0°C~40°C**
	Relative Humidity	**10%~80%**
	Ambient Noise	**<46dBA SPL**
	Non-operating Conditions	
	Temperature	**-40°C~70°C**
	Relative Humidity	**0%~95%**
Physical Characteristics	**Bare Dimensions**	**600mm x 114.7mm x 135mm**
	Bare Weight	**About 2.2Kg**

3 Installation and Connection

The terminal can be placed on the horizontal desktop or installed on the TV and wall with bracket.

Note

- **When placing the terminal directly on the desktop, please keep the desktop stable to prevent it from slipping.**
- **When install the terminal on the TV or the wall, please use screws to secure it.**
- **Avoid facing the terminal to bright light sources (such as windows). It is recommended to face the terminal to the participant.**

3.1 Cabling

Before connecting the cables, it is necessary to understand the rear interfaces of the conference terminal. The cable connections shown in the diagram below include optional configurations and is for reference only. Please connect the cables according to the actual needs.

Configuration as follows:

Audio Input

- **Audio input via the built-in Microphone;**
- **Or, connect a USB Microphone to the USB interface via a USB cable;**
- **Or, connect the PC or the Mixer to the LINE IN interface via a 3.5mm audio cable.**

Audio Output

- **Audio output via the built-in Speaker;**
- **Or, connect an HDTV to the HDMI OUT1/2 interface via an HDMI cable;**
- **Or, connect a Speaker to the LINE OUT interface via a 3.5mm audio cable.**

Video Input

- **Video input via the built-in Camera;**
- **Or, connect an HD Camera or PC to the HDMI IN interface via an HDMI cable.**
- **Or, connect an USB Camera to the USB 3.0 interface via an USB cable.**

- **Or, connect an Network Camera to the Touch interface via an network cable.**

Video Output

- **Connect the HDTV or other display devices to the HDMI OUT1 interface via an HDMI cable to output the first video stream.**
- **Connect the HDTV or other display devices to the HDMI OUT2 interface via an HDMI cable to output the second video stream.**

Network

- **Connect the Ethernet Network via a network cable;**
- **Or, connect the Ethernet Network via Wi-Fi.**

Power

- **Connect the Terminal to the power outlet via the supplied power adapter.**

3.2 Power On

Turn on the power after connecting all devices compatible with the conference terminal.

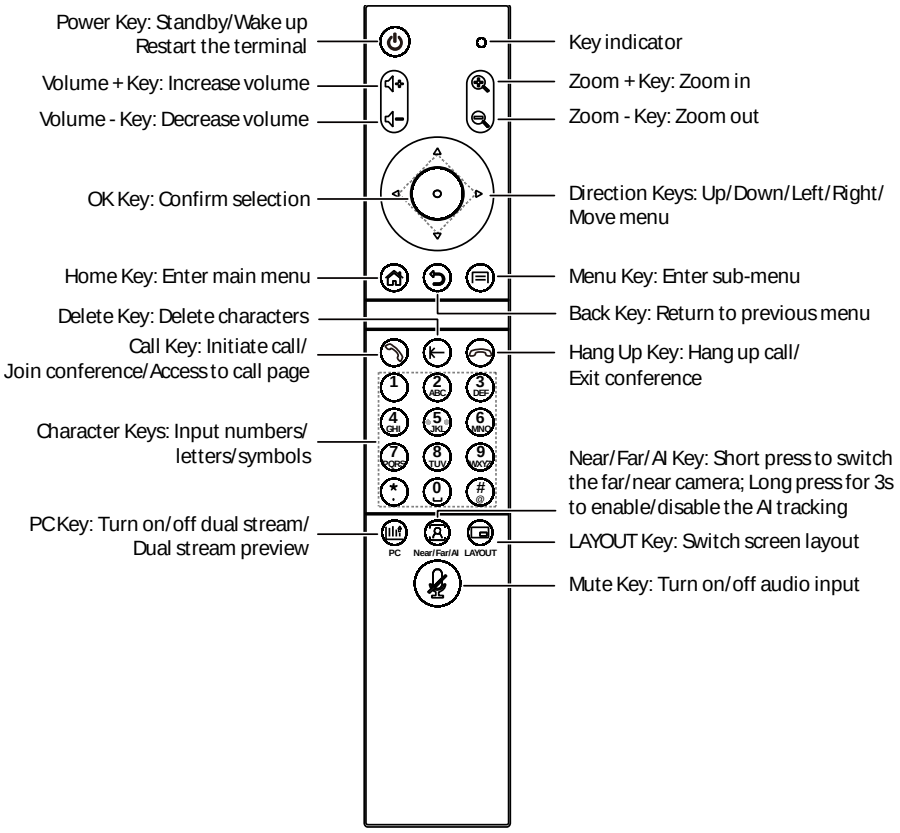
- **While the terminal power is on, prevent the power cord disconnecting, which may lead the terminal to shut off.**
- **Please turn off the terminal first, then turn off the external power supply, and unplug the power cord.**

Use HDMI OUT1 as the output interface. After connecting the cable, plug in the power socket. Turn on the terminal power switch to start up to the main display menu interface.

The indicator lights of the terminal are explained in the following table:

Terminal Status	Indicator Status
Power On	The red Indicator flashes during power on, and the blue Indicator stays on during regular operation.
Standby	The red Indicator is on during standby, and the blue Indicator is on when waking up from standby.
Call Meeting/Receiving Calls	The blue Indicator flashes when calling or receiving a call and stays on after the conference is established.
Power Off	The indicator is off.

4 Remote Control



Notice

The remote control may be affected by strong light and the normal working range is about 10 meters.

Remote Control Shortcut Key Instruction:

Shortcut Key	Function
Press [Hang Up] key for 5 times	Upload the log to the log server
Press [#] + [*] + [#] keys sequentially	Lock the terminal
Press *] + [#] + [*] keys sequentially	Unlock the terminal
Press [Hang Up] key + Numeric key 1/2 sequentially	Switch HDMI OUT1, HDMI OUT2 output resolution
Press [Delete] key + Numeric keys 1-9 sequentially	Call presets
Press [*] + [#] + Numeric keys 1/2/3/4 sequentially	Switch the main video source: Camera, HDMI, USB Extension Camera, VCH
In Tencent Meeting, press [ZOOM+/-] key	Enter PTZ control mode, allowing control of PTZ rotation via directional keys
In Tencent Meeting, press [ZOOM+/-] key + any key other than the directional key	Exit PTZ control mode

5 Operation (Remote Control)

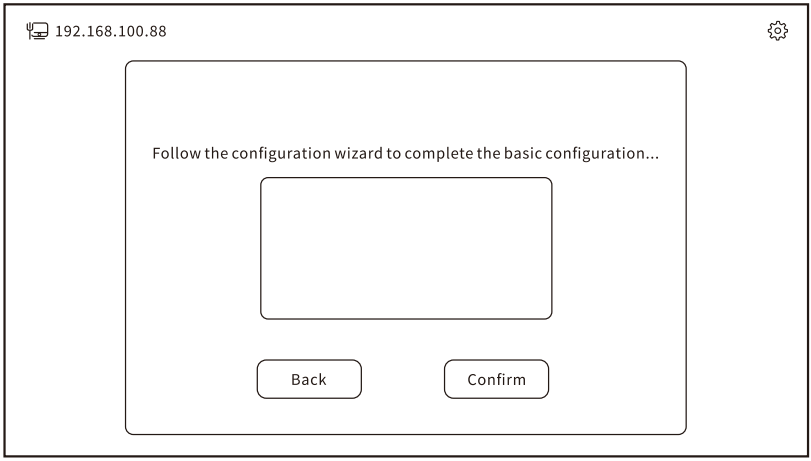
5.1 Terminal Guide

Note

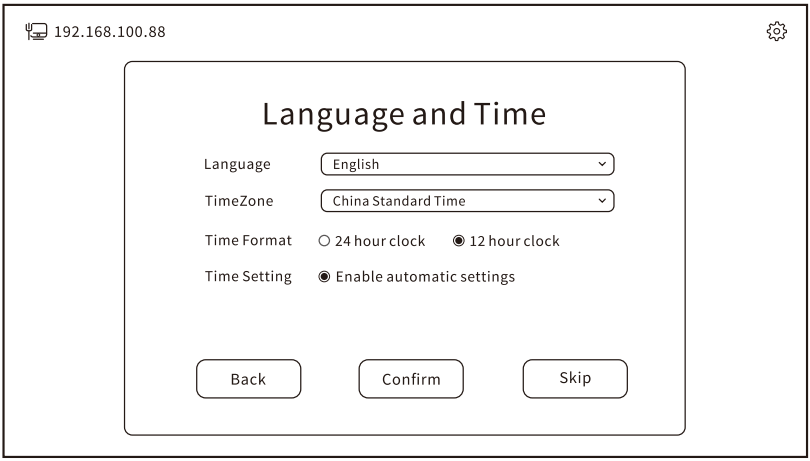
The device will automatically enter the Terminal Guide interface when using this product for the first time.

On the GUI main menu interface, select "> > Quick Configuration" and manually initiate the terminal guide to complete the basic settings.

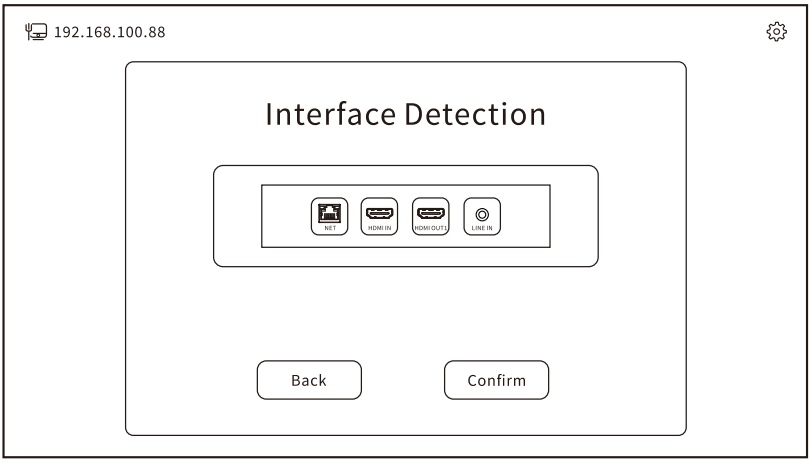
1. **Navigate to the configuration Guide interface, choose "Confirm" and follow the configuration guide to complete the basic device setup (select "Back" to cancel the configuration and return to the previous menu).**



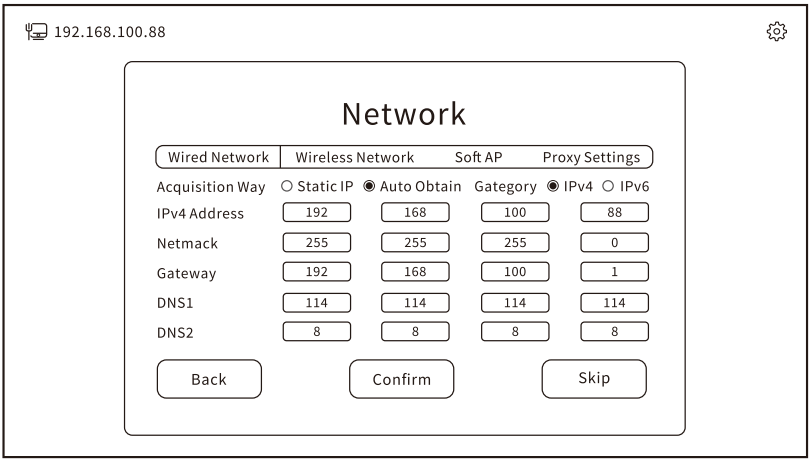
2. **Set the Language and Time parameters and select "Confirm" to go ahead.**



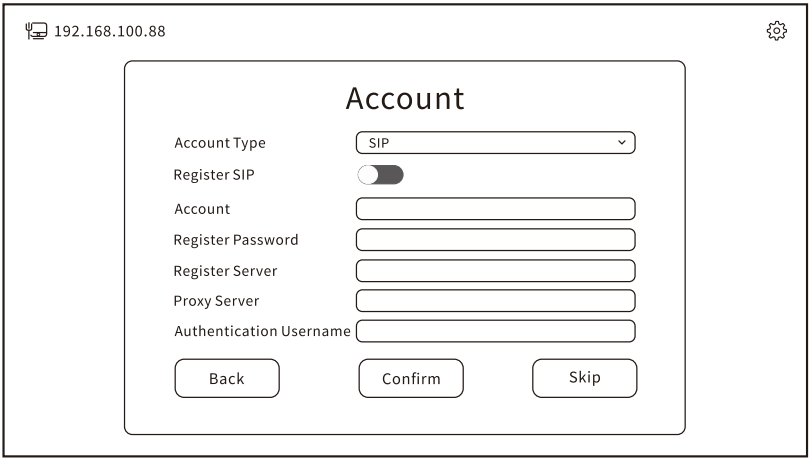
3. **Enter the "Interface Detection" interface to check the device interface connection status (if the connection is abnormal, it is recommended to follow the instructions to complete the connection), select "Confirm" to go ahead.**



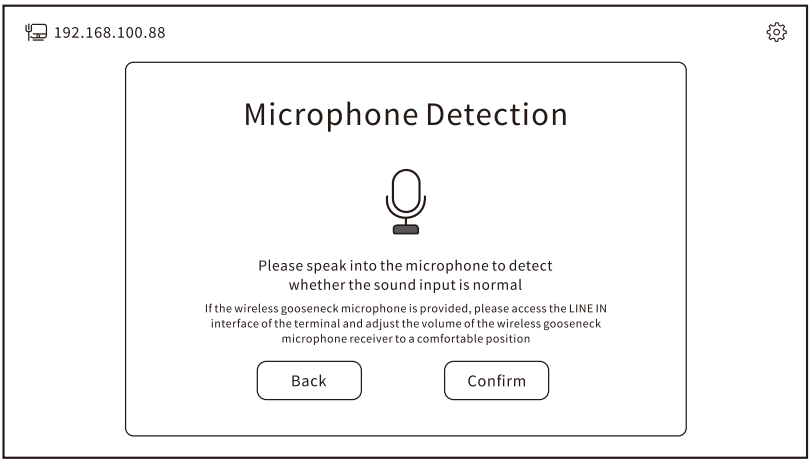
4. **Configure the Network parameters (in Wired Network mode, if selected static IP, you need to manually configure the IP address, Netmask, Gateway and DNS address), select “Confirm” to go ahead.**



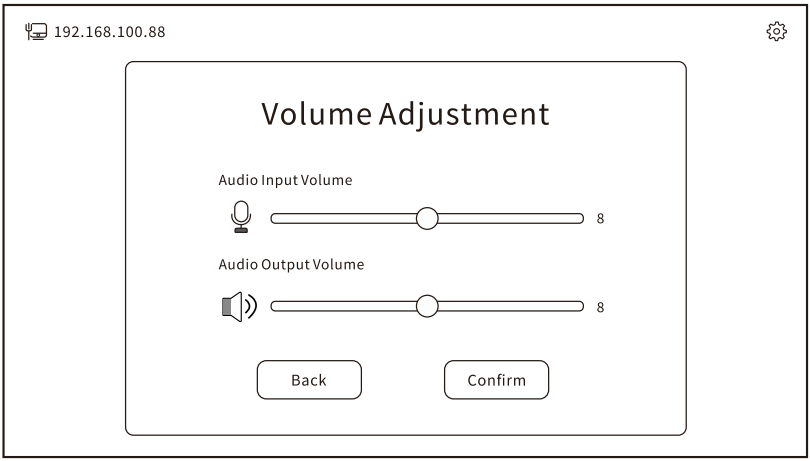
5. **Configure the Account parameters and select “Confirm” to go ahead.**



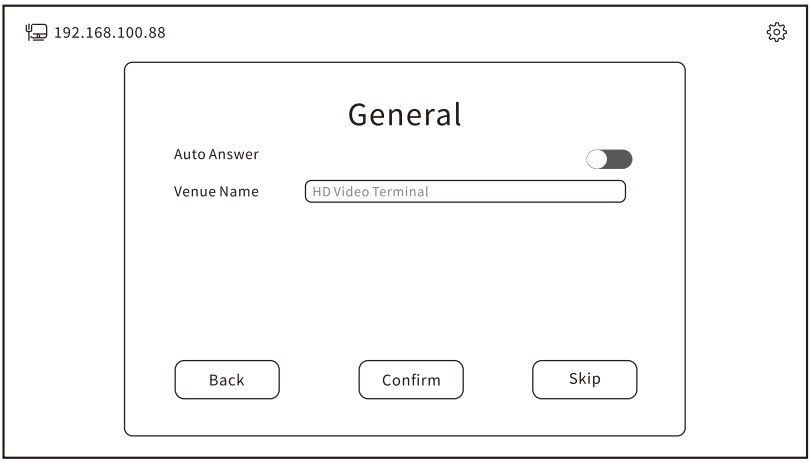
6. **In the "Microphone Detection" interface, speak into the microphone to detect whether the sound input is normal, select “Confirm” to go ahead.**



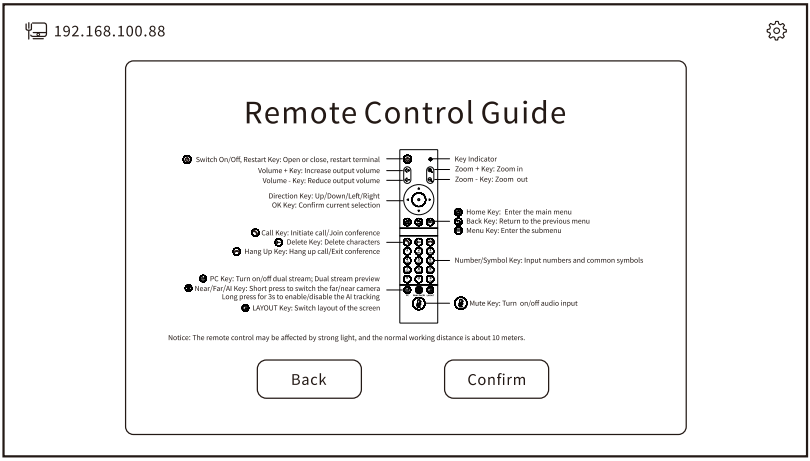
7. **Configure the Volume parameters and select “Confirm” to go ahead.**



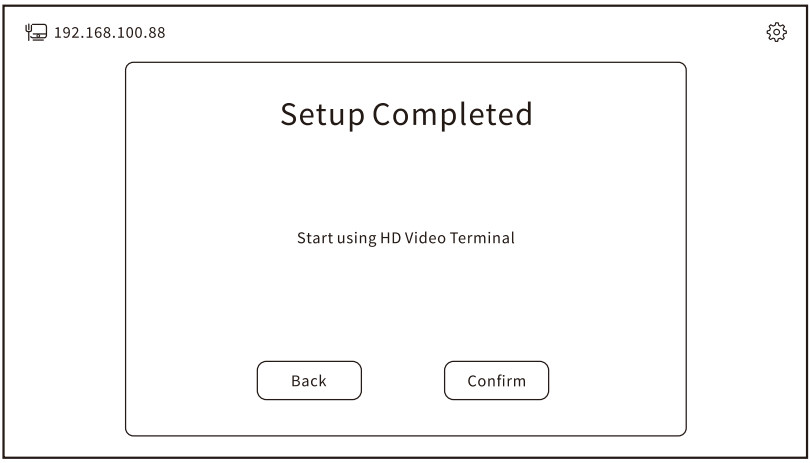
8. **Enable or disable the Auto Answer function, configure the Venue Name and select “Confirm” to go ahead.**



9. **Enter the Remote Control Guide interface to check the remote control key instructions and select “Confirm” to go ahead.**



10. On the "Setup Completed" interface, select “Confirm” to exit the "Quick Configuration" interface.

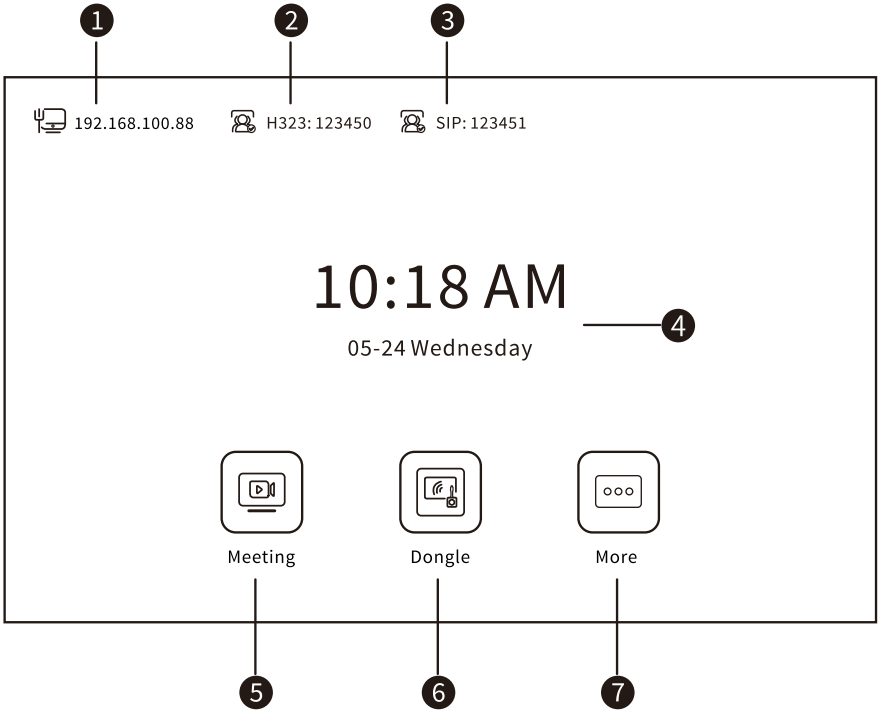


Note

Select “Back” to go back and modify the configuration. Interface includes “Skip” can be selected to skip the current configuration interface.

5.2 Main Interface

Press the main menu key "⌂" on remote control to enter the GUI main interface which is shown as below.



No.	Description	No.	Description
1	IP Address	5	Meeting Menu
2	H 323 Registration Status	6	Dongle Menu
3	SIP Registration Status	7	More Menu
4	System Time	-	-

Move the cursor to "▣" and press the "⊙" key on the remote control to enter the Meeting menu interface; Move the cursor to "▣" and press the "⊙" key on the remote control to enter the Dongle menu interface; Move

the cursor to "[...]" and press the "[◎]" key on the remote control to enter the More menu interface to select and enter the Settings or Camera menu interface for corresponding operations.

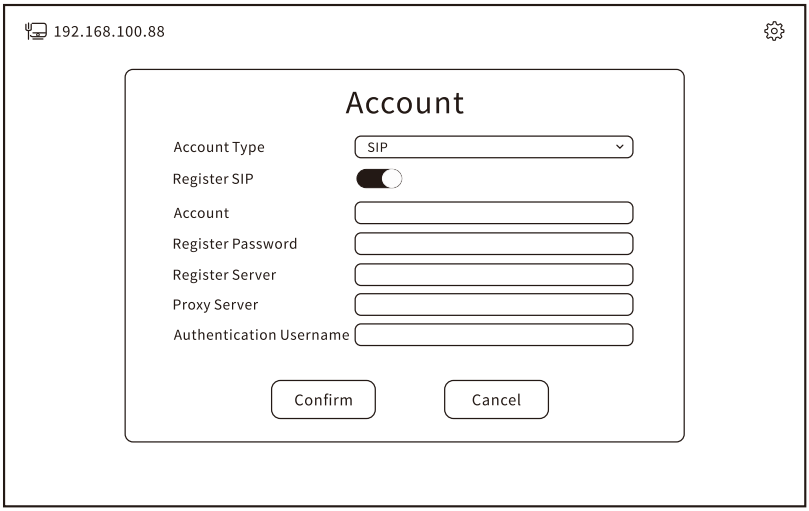
5.3 Register Account

After successfully registering the account, the terminal can make account calls (only IP point-to-point calls are supported before the account is logged).

5.3.1 Register SIP Account

➢ **Operating Steps**

Step 1 On the main menu interface, select “ > > Account" to enter the Account menu interface.



Step 2 Select the Account Type: SIP.

Step 3 Open the “Register SIP”.

Step 4 Enter the information of Account Number, Registration Password, Registration Server, Proxy Server and Authentication Username.

Step 5 Select “Confirm” to register the SIP account.

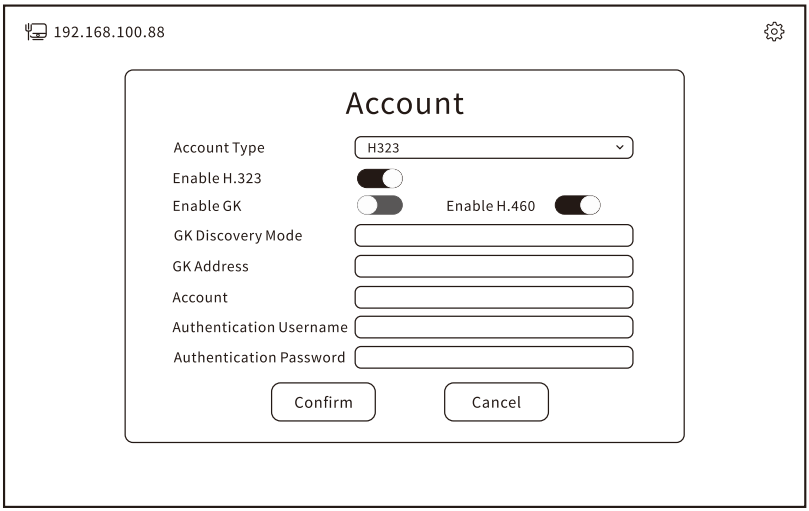
Note

After the SIP account is successfully registered, the terminal will automatically block the SIP server calls of the non-registered account (the H323 server is not affected). Please login the WEB configuration page and select “Settings > Protocol > SIP” to uncheck “Ignore calls from unregistered server” to cancel.

5.3.2 Register H323 Account

➢ **Operating Steps**

Step 1 On the main menu interface, select “ > > Account" to enter the Account menu interface.



Step 2 Select the Account Type: H323.

Step 3 Open the “Enable H323”.

Step 4 Open the “Enable GK”, configure GK Discovery Mode (Manual/Auto), enter GK Address, Account, Authentication Username and Authentication Password.

Step 5 Select "Confirm" to register the H323 account.

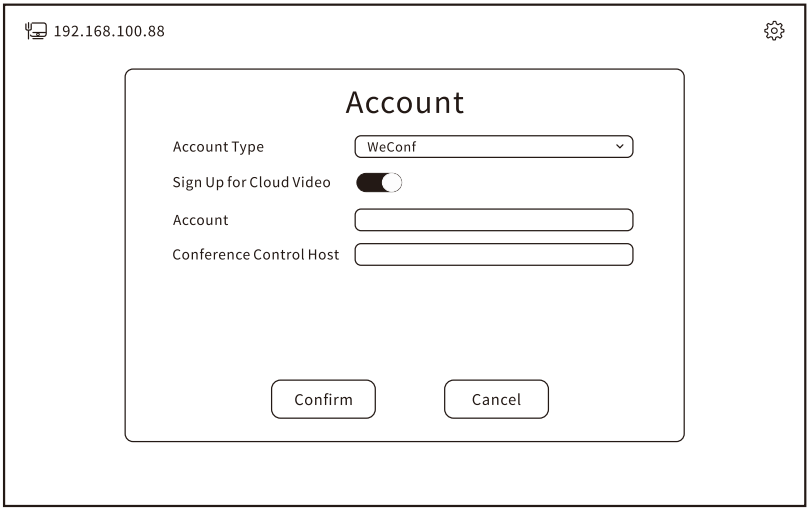
5.3.3 Register WeConf Account (Optional)

➢ **Prerequisites**

Before registering for a WeConf account, you need to inform the platform administrator of the terminal serial number to apply for an account.

➢ **Operating Steps**

Step 1 On the main menu interface, select “ > > Account" to enter the Account menu interface.



Step 2 Select the Account Type: WeConf.

Step 3 Open the “Sign Up for Cloud Video”.

Step 4 Configure the “Conference Control Host” information.

Step 5 Select "Confirm" to register the WeConf account.

Note

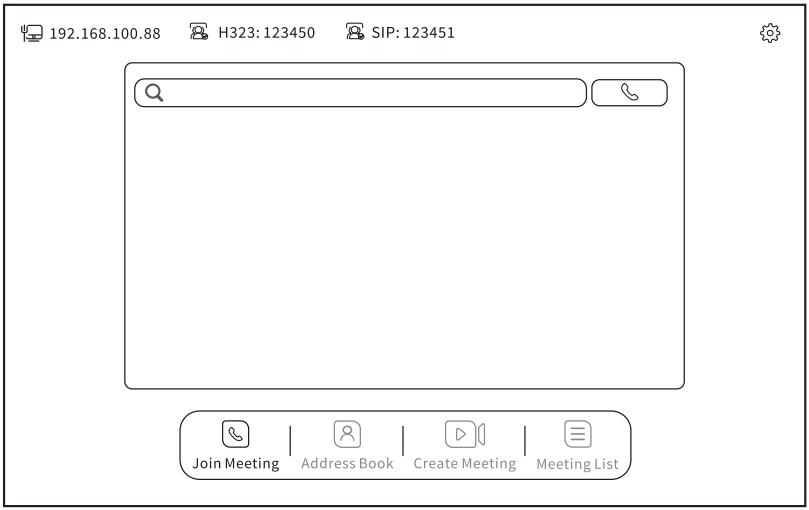
The WeConf account can only be registered in GUI.

5.4 Meeting Calling

The terminal supports meeting initiation through the address book, call record and input meeting account, number or IP address.

➢ **Operating Steps**

Step 1 Select "" on the main menu interface and press the "" key on the remote control to enter the call menu interface.



Step 2 There are several ways to choose the distal venue:

- **Manually enter the remote venue Account, Number or IP Address in the input box;**
- **Select the remote venue Account, Number or IP Address to be called in the call list;**
- **Select the remote venue Account, Number, or IP Address in the address book list.**

Step 3 The configuration venue parameters are shown in the table below.

Parameter	Parameter Declaration	Parameter Setting
Venue Account, Number and IP Address	Remote venue Account, Number, or IP Address.	The venue Account, Number/IP Address of the

		latest call are displayed by default
Call Protocol	Select the call protocol: H.323, SIP, WeConf (optional).	Default Protocol: SIP
Call Rate	Select call rates: 64K, 128K, 192K, 256K, 384K, 512K, 768K, 1M, 1.5M, 2M, 4M, 6M, 8M.	Default Rate: 2M

Step 4 Select the interface button "" or press the call key " " on remote control to initiate the meeting.

Step 5 Press the hang up key " " on remote control to end the meeting.

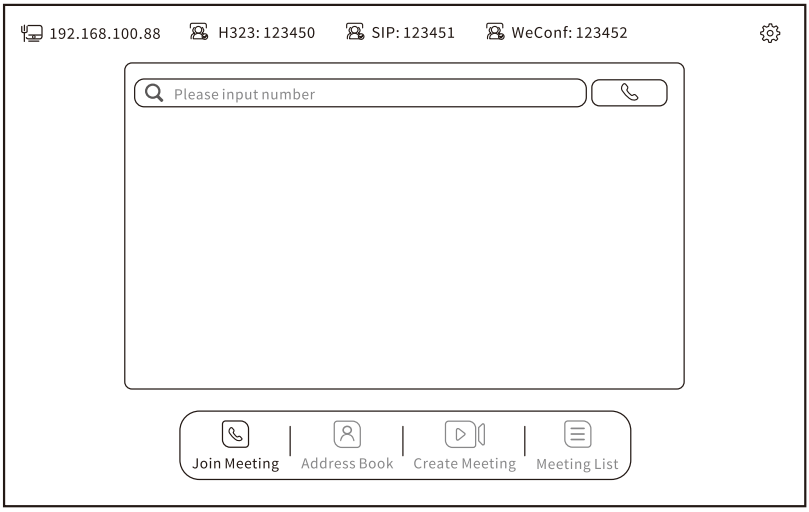
5.5 Join Meeting (Optional)

After registering a WeConf account, the terminal supports joining the meeting either by calling in the conference number or through the Meeting List.

5.5.1 Join Meeting with Conference Number

- **Operation**

Step 1 On the main menu interface, select " > Join Meeting".



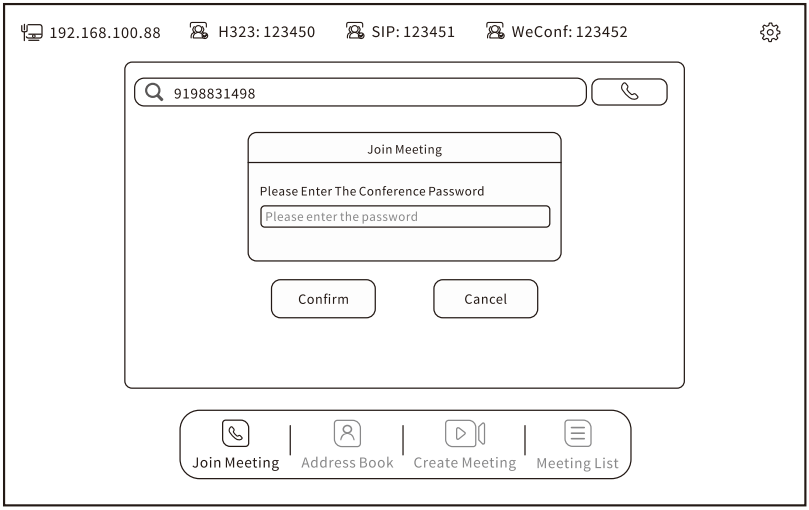
Step 2 Enter the conference number and move the cursor to select the

interface button

"" to select the Weconf protocol and confirm with the "" key.

Step 3 Select the interface button "" or press the call key "" on remote control to join the meeting.

Or, if there is a meeting password is needed, the interface will pop-up the "Joining Meeting" dialog box as below:



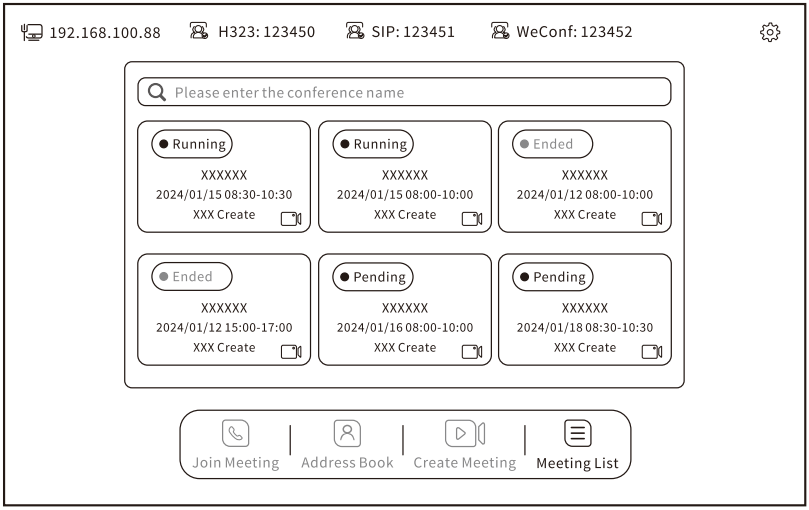
Step 4 Enter the conference password and select "Confirm" to join the meeting.

Step 5 Press the hang up key "" on remote control to exit the meeting.

5.5.2 Join Meeting through the Meeting List

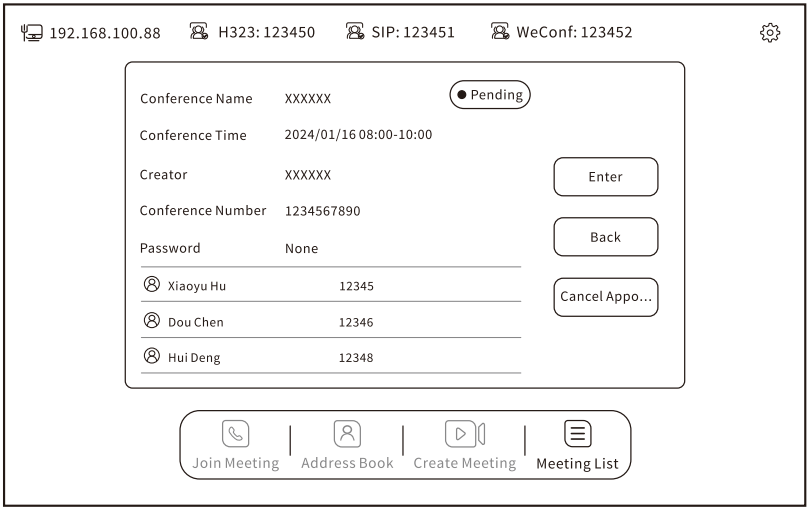
- **Operation**

Step 1 On the main menu interface, select "> Meeting List".



Step 2 Move the cursor to select the meeting and press the "⊙" key on remote control to enter the conference detail interface.

- **When selected "Pending" meeting, the conference detail interface will show as below:**

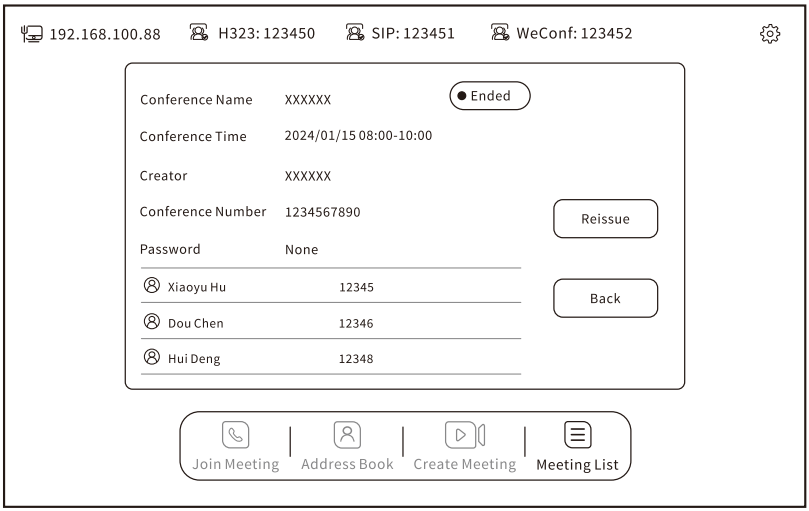


Step 1 Select "Enter" to pop-up the "Initiate a Meeting?" dialog box.

Step 2 Select "Re-invite" or "Join Only" to join the meeting.

Step 3 Press the hang up key " " on remote control to exit or end the meeting.

- **When selected "Ended" meeting, the conference detail interface will show as below:**



Step 1 Select "Reissue" to restart the ended meeting, and the original participants will be automatically added to the meeting.

Step 2 Select "Re-invite" or "Join Only" to join the meeting.

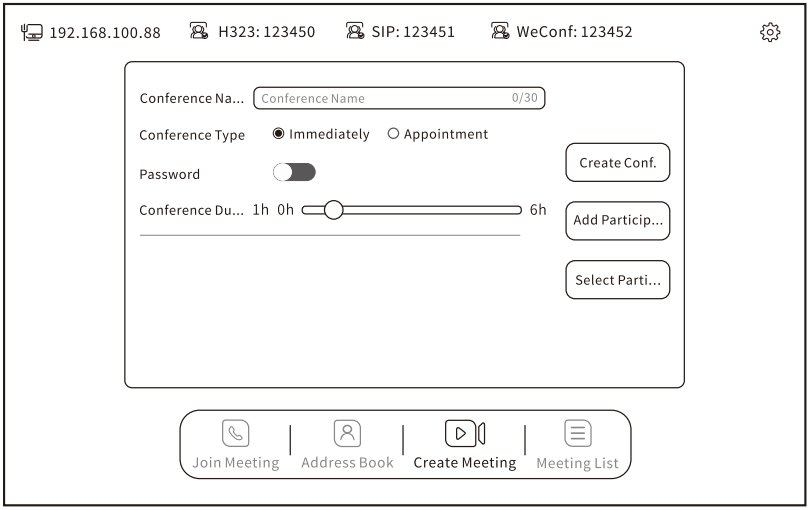
Step 3 Press the hang up key " " on remote control to exit or end the meeting.

5.6 Create Meeting (Optional)

After registering a WeConf account, the terminal supports create the Immediately Conference and the Appointment Conference.

- **Operation**

Step 1 On the main menu interface, select " > Create Meeting".



Step 2 Configure the parameters of Conference Name, Conference Type, Password and Conference Duration.

Step 3 Select "Add Participants" to enter the Address Book interface to add the participants.

Step 4 Select "Create Conference" to create a meeting.

5.7 Call Answering

When there is a conference call, the terminal rings and the call ID interface pops up.

- **Select the screen button "" to establish the audio meeting.**
- **When receiving the video call, select the screen button "" or press the call key "" on remote control to establish the video meeting.**
- **Select the screen button "" or press the hang up key "" on remote control to end the meeting.**

Note

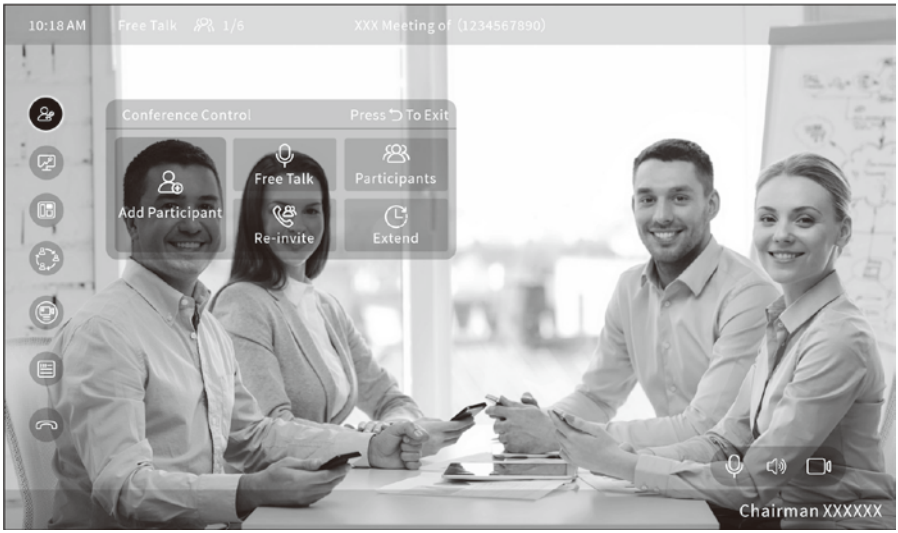
If the incoming call is from a contact stored in the address book, it is displayed as the contact name + number, otherwise, only the number will be displayed.

5.8 Conference Control

In the conference control interface, you can choose to send presentation, switch picture layout, check call information, control camera PTZ and do other functional operations etc.

5.8.1 Conference Control (Optional)

During the WeConf meeting, press the menu key "☰" on the remote control and select the screen icon "👤" to enter the conference control interface (see below figure), move the cursor to select to view the Participants, Add Participant, Re-invite, Extend and set Free Talk etc.



5.8.2 Carousel (Optional)

During the WeConf meeting, press the menu key "☰" on the remote control and select the screen icon "🔄" to enter the carousel interface to configure the Carousel Status and the Carousel Time.

5.8.3 Send Presentation

Connect a computer or HD camera to the terminal through an HDMI cable as the auxiliary stream source. Or use the computer as a wireless auxiliary stream source through a wireless screen projector. When the terminal detects the secondary stream source, it can send presentation and the remote end can see the shared screen of the local end.

Prerequisite>>

The terminal accesses the secondary video source and is in the conference normally, and the remote terminal supports dual streams.

- **Operating Steps**

Step 1 Press the menu key "☰" on the remote control and select the screen icon "🖥" to send presentation to participating terminals. Or press the dual-stream key "📊" on the remote control to send or close dual-stream.

Step 2 Press the hang up key "📞" on the remote control to exit the conference.

5.8.4 Picture Switching

During the meeting, press the menu key "☰" on the remote control and select the screen icon "⊞" to configure the HDMI1 video display screen; Or press the display key "▭" on the remote control to switch the screen layout.

5.8.5 AI Mode

During the meeting, press the menu key "☰" on the remote control and select the screen icon "AI" to select the AI mode: Manual, Group, Voice Locate.

5.8.6 Call Information

During the meeting, press the menu key "☰" on the remote control and select the screen icon "📋" to check the call information in real time, such as Call Status, Video Information, Audio Information and Network Information etc.

5.8.7 Camera Control

During the meeting, press the direction keys on the remote control to control the local/remote camera to rotate up/down/left/right, press the "⊙" key to refresh the video image. Press the zoom keys on the remote control to zoom in/out the camera image.

5.9 Address Book

The terminal support Local Contact and Enterprise Contact, you can directly initiate calls to relevant contacts in the address book.

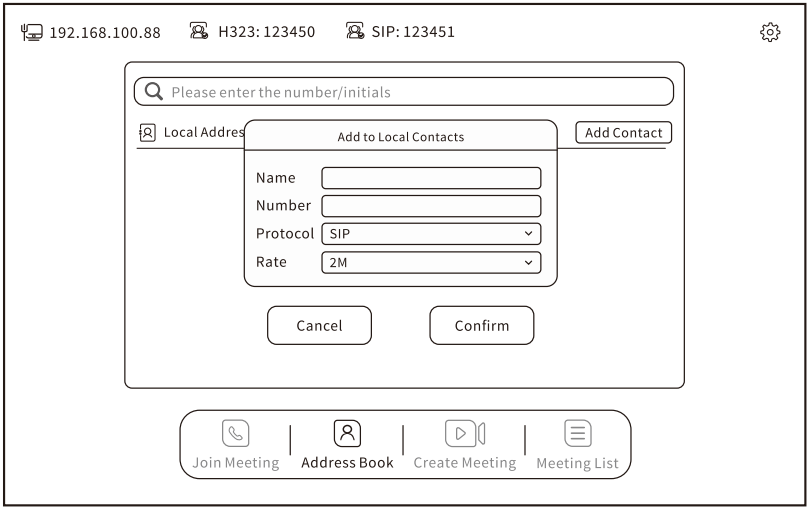
5.9.1 Local Contact

The local contact support Add, Edit, and delete contact.

5.9.1.1 Add Contact

➢ **Operating Steps**

Step 1 On the main menu interface, select “> Address Book> Add Contact”.



Step 3 Enter the contact Name and Number.

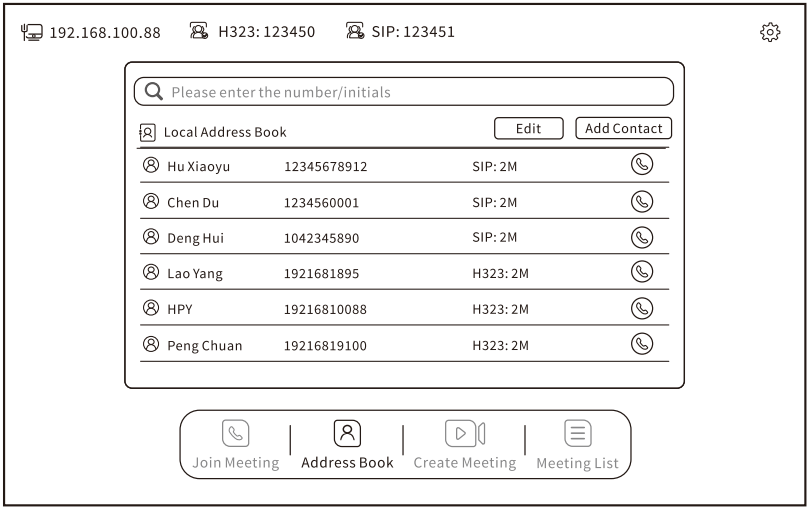
Step 4 Select the Protocol and Rate.

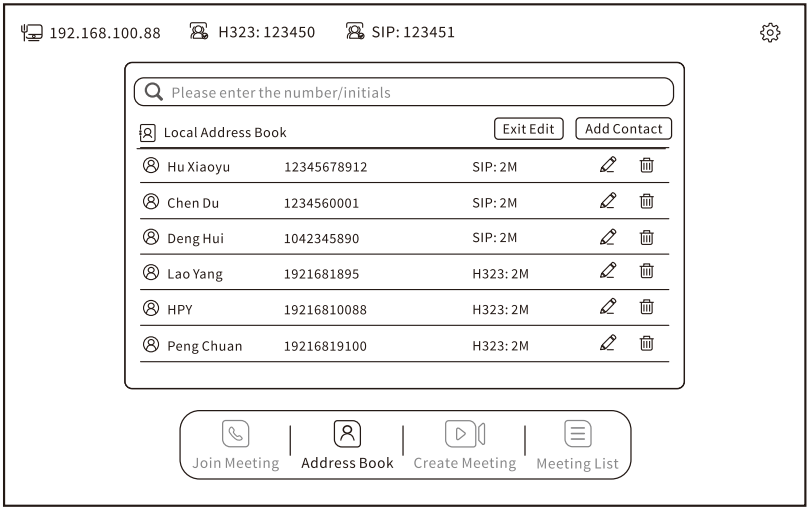
Step 5 Select “Confirm” to save.

5.9.1.2 Edit Contact

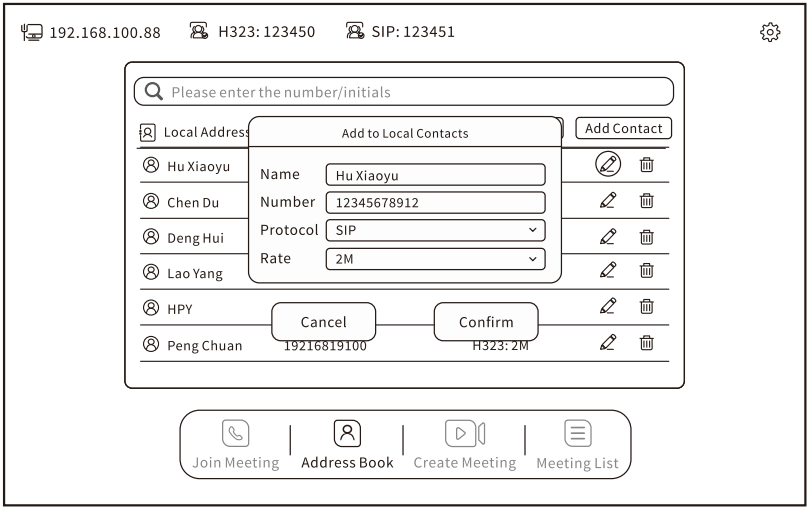
➢ **Operating Steps**

Step 1 On the main menu interface, select “> Address Book> Edit”.





Step 2 Move the cursor to choose the contact for editing, then click "✎" to enter the "Add to Local Contacts" interface.



Step 3 Edit the contact Name and Number.

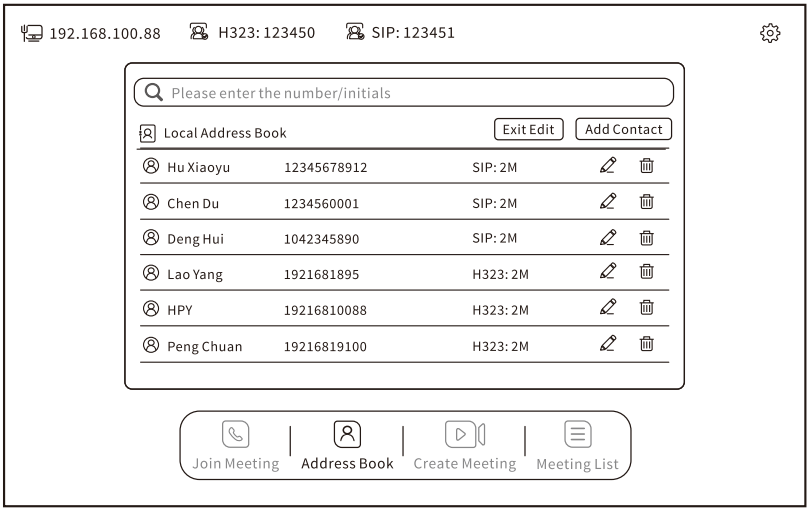
Step 4 Select the Protocol and Rate.

Step 5 Select "Confirm" to save.

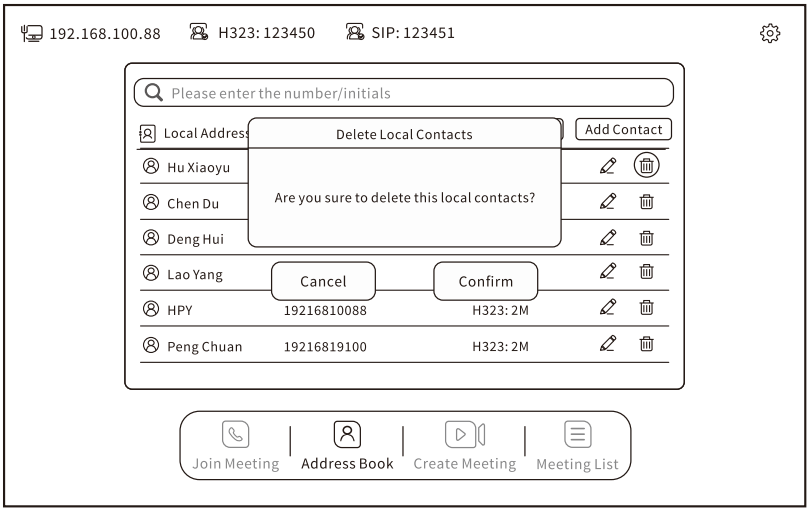
5.9.1.3 Delete Contact

- **Operating Steps**

Step 1 On the main menu interface, select "> Address Book> Edit".



Step 2 Move the cursor to select the contact to delete, select the icon "🗑" to pop up the "Delete Local Contacts" dialog box.



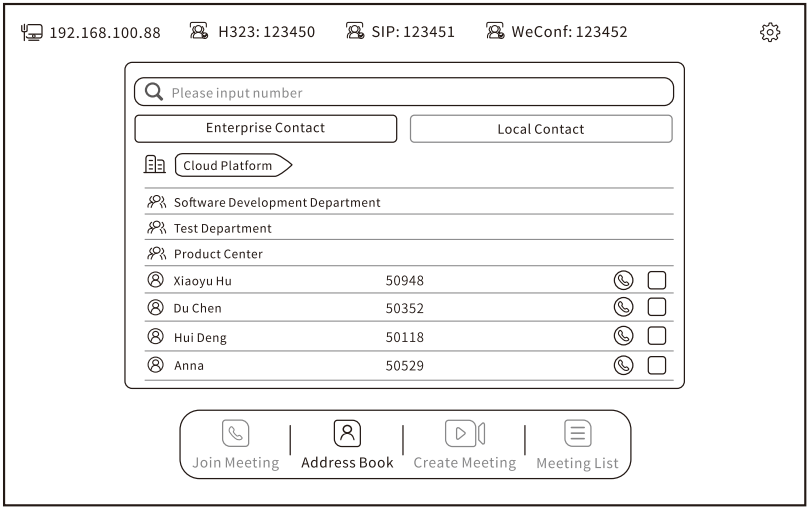
Step 3 Select "Confirm" to delete the contact.

5.9.2 Enterprise Contact (Optional)

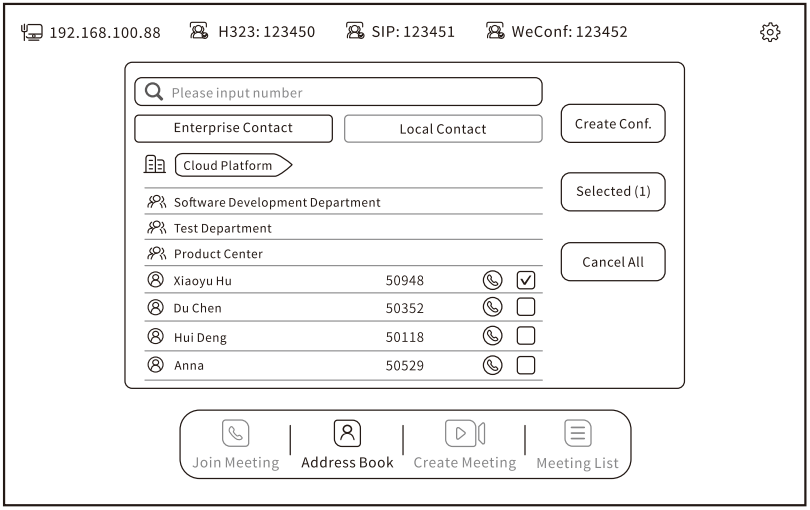
After registering a WeConf account, terminals can automatically download the contact information from the address book server and achieve synchronized updates.

- **Operating Steps**

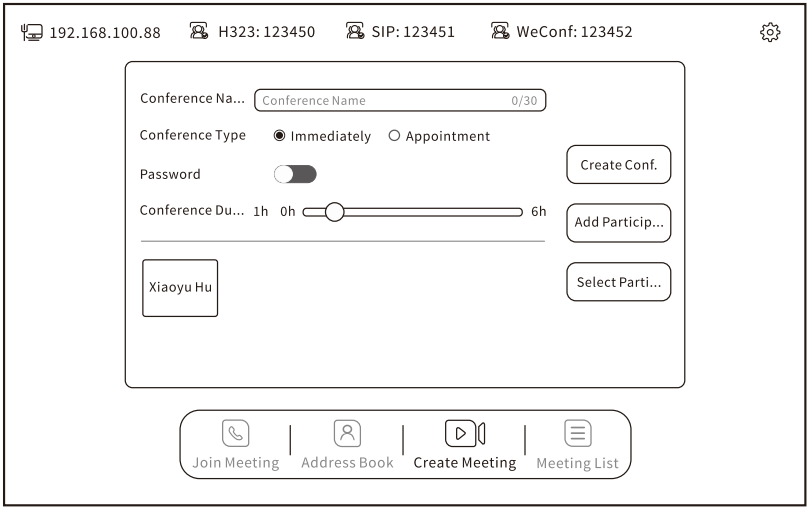
Step 1 On the main menu interface, select "⚙ > Address Book> Enterprise Contact".



Step 2 Move the cursor to the contact and confirm with "○" key to pop-up Create Conf., Selected (1), Cancel All option box.



Step 3 Select "Create Conf." to enter to the Create Meeting interface.

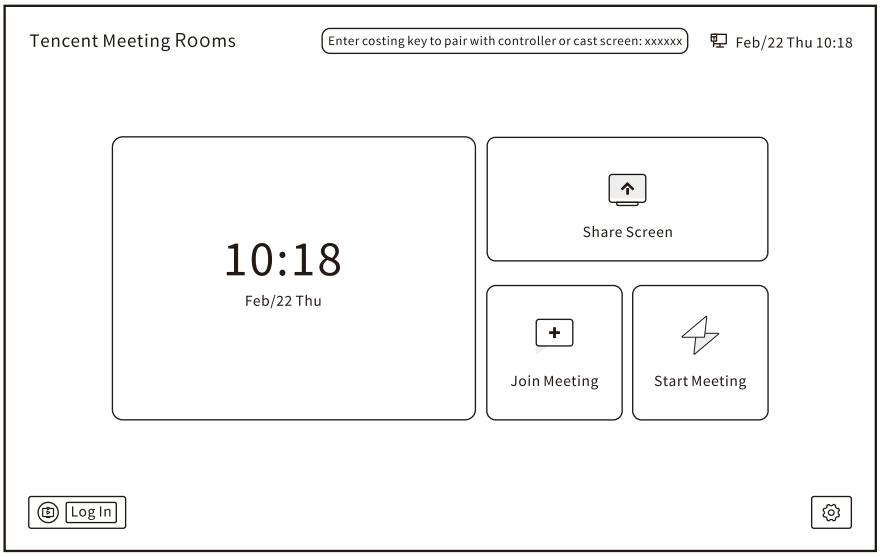


Step 4 After configuring the conference parameters, select “Create Conf.” to create the meeting.

5.10 Tencent Meeting Rooms (Optional)

The Tencent Meeting is a third-party application software that supports the creation and joining of Tencent Meeting.

After entering the Tencent Meeting operation interface (as shown below), you can choose "⚙ > About Us > Help Center" to scan the QR code to enter the official website of Tencent Meeting to check the use guide of "Tencent Meeting Rooms".

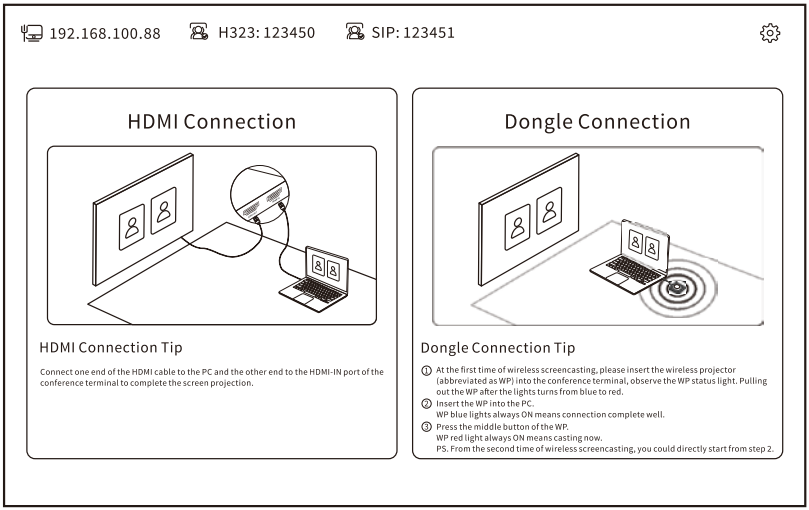


5.11 Dongle

The terminal supports both wired and wireless Dongle as input sources for local preview or remote transmission.

- **Operating Steps**

Step 1 On the main menu interface, select "" to enter the conference terminal Dongle Instruction interface.



Step 2 Please refer to the Dongle Help Instructions to complete the operation and project the PC display screen to the terminal.

Step 3 Press the "" key on remote control to exit the Dongle Instructions interface.

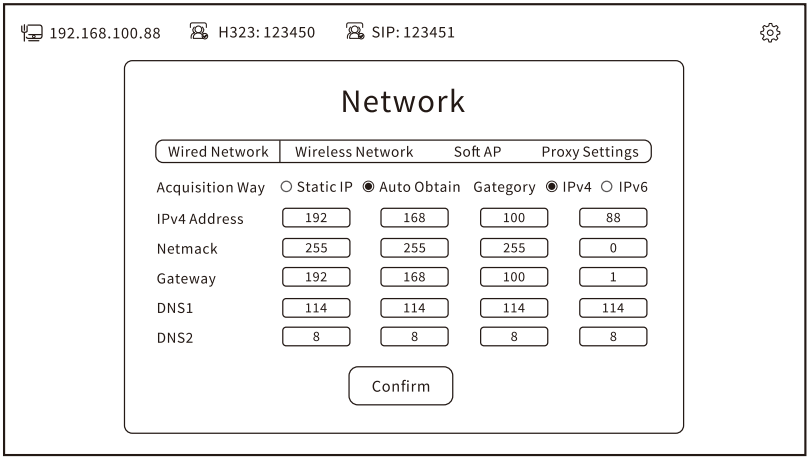
5.12 GUI Setting

5.12.1 Network

The conference terminal supports a wired network and wireless network (Wi-Fi) connection. Ethernet parameters (such as IP address, subnet mask, gateway information, etc.) must be configured before using the static IP of a wired network.

- **Operating Steps**

Step 1 On the main menu interface, select " > > Network > Wired Network".



Step 2 Configure the Ethernet parameters, which are shown in the following table.

Step 3 Select "Confirm" to save.

Parameter	Parameter Declaration	Parameter Setting
Acquisition Way	• **Auto obtain: The terminal automatically obtains the IP address through the DHCP server.** • **Static IP: The IP address of the terminal is assigned by the network administrator, with the IP address, subnet mask, default gateway, and DNS**	**Default: Auto obtain**

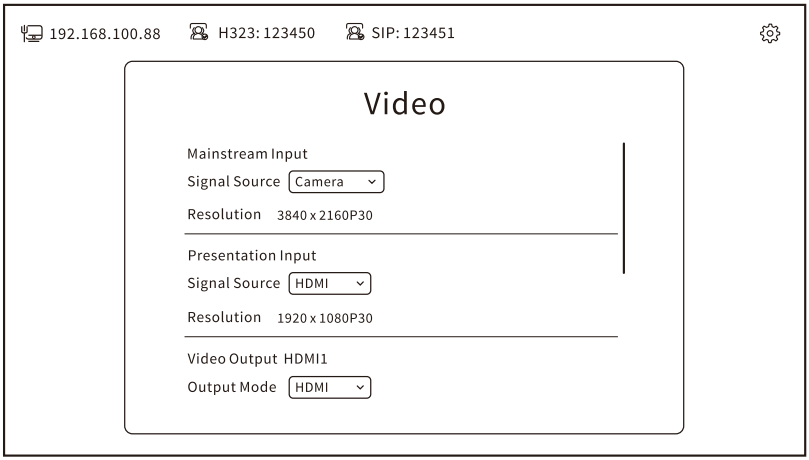
Parameter	Parameter Declaration	Parameter Setting
	address being configured.	
Protocol	Configure the network protocol: IPv4, IPv6.	Default: IPv4
IPv4/6 Address	Configure the IP address of the terminal.	Default: Auto obtain
Netmask	Configure the subnet mask for the terminal.	Default: Auto obtain
Gateway	Configure the gateway address corresponding to the terminal's IP.	Default: Auto obtain
DNS	After the IP address of the DNS server is configured, the domain name can be used for the address of the GK server and the SIP server. The DNS server will resolve the IP address of the GK server and the SIP server according to the domain name.	Default: Auto obtain

5.12.2 Video

Configure Video Mainstream Input, Presentation Input, Video Output, Media Optimization, and Camera Settings parameters etc.

- **Operating Steps**

Step 1 On the main menu interface, select “ > > Video”.



Step 2 Configure the "Video" parameters, which are shown in the following table.

Step 3 Press the "↩" key on remote control to save and return to the upper-level interface.

Parameter	Parameter Declaration	Parameter Setting
Mainstream Input	Signal source: Camera, HDMI, USB Extension Camera, VCH.	Default: Camera
	Resolution: Displays the resolution value of the mainstream input signal source.	Default: Displays the actual value for the current signal input
Presentation Input	Signal source: The default signal source is HDMI	Default: HDMI
	Resolution: Displays the resolution value of the presentation input signal source.	Default: Displays the actual value for the current signal input
Video Output HDMI1	Output mode: The default output mode is HDMI.	Default: HDMI
	Resolution: 4KP60, 4KP30, 1080P60, 1080P50, 720P60, 720P50 (the output resolution is obtained through EDID negotiation, and different monitors negotiate different resolutions).	Default: 4KP30
Video Output HDMI2	Output mode: The default output mode is HDMI.	Default: HDMI
	Resolution: 4KP60, 4KP30, 1080P60, 1080P50, 1080I50, 720P60, 720P50 (the output resolution is obtained through EDID negotiation, and different monitors negotiate different resolutions).	Default: 4KP30
Media Optimization	Enable/disable the media optimization feature.	Default: Disabled

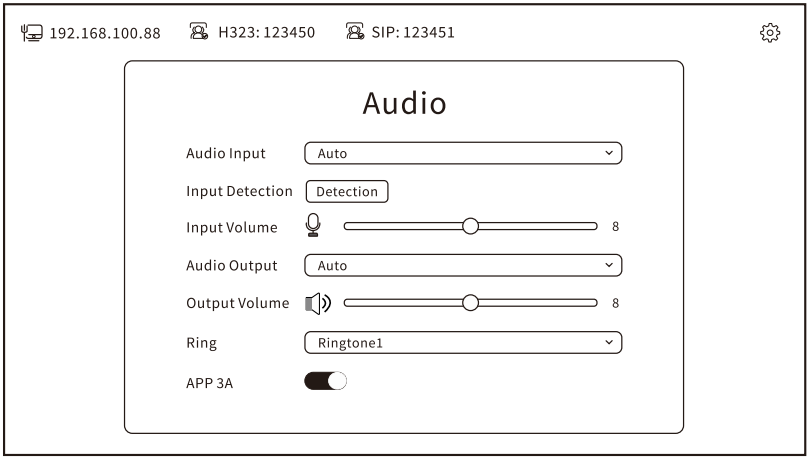
Parameter	Parameter Declaration	Parameter Setting
Camera Settings	Focusing: Select "Start" to enter the camera interface to adjust the PTZ (Pan-Tilt-Zoom), enabling control for moving the camera up//down/left/right and zooming in and out of the image.	/
	Image mode: Default, Clarity, Standard, Bright, Soft.	Default: Default
	Preset position: Select "Edit" to enter the Preset Position interface to set the preset bit (1~9).	/
	Built-in Menus: Select “Start” to enter the OSD menu interface to set the camera parameters.	/

5.12.3 Audio

Configure Audio Input, Input Detection, Audio Output, Output Volume, Ring and others parameters.

- **Operating Steps**

Step 1 On the main menu interface, select “ > > Audio”.



Step 2 Configure the “Audio” parameters, which are shown in the

following table.

Step 3 Press the "↩" key on remote control to save and return to the upper-level interface.

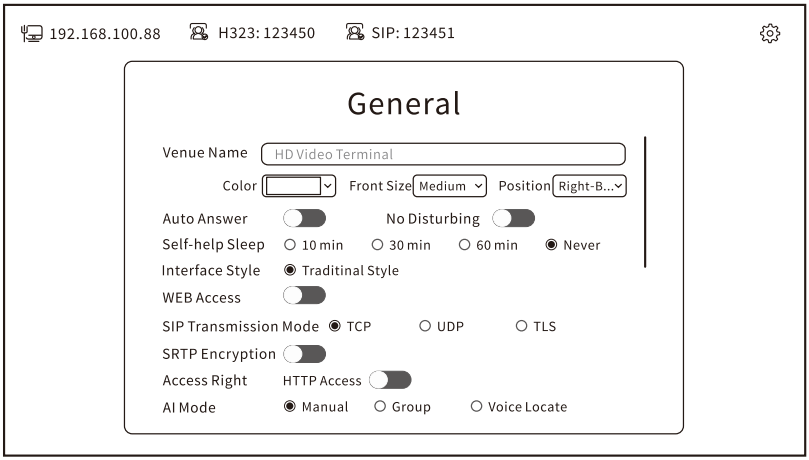
Parameter	Parameter Declaration	Parameter Setting
Audio Input	Configure the audio input: Auto, Customize.	Default: Auto
Input Detection	Select "Detection" to enter the Microphone Detection interface. Please speak into the microphone to detect whether the sound input is normal.	/
Input Volume	Configure the audio input gain.	Default: 8
Audio Output	Configure the audio output: Auto, Customize.	Default: Auto
Output Volume	Configure the audio output gain.	Default: 8
Ring	The default ring is Ringtone 1.	Default: Ringtone 1
APP 3A	Enable/disable the APP 3A function, when APP 3A is enabled, third-party applications will use system 3A to process the audio.	Default: Enabled

5.12.4 General

Configure the terminal Venue Name, Self-help Sleep, SIP Transmission Mode, Language, Time Zone, and select whether to enable Auto Answer, No Disturbing, WEB Access, and other functions.

- Operating Steps

Step 1 On the main menu interface, select "⋯ > ⚙ > General".



Step 2 Configure the "General" parameters, which are shown in the following table.

Step 3 Press the "↩" key on remote control to save and return to the upper-level interface.

Parameter	Parameter Declaration	Parameter Setting
Venue Name	Venue name: Configuration terminal display name.	Default: Empty
	Color: Select the text display color.	Default: White
	Size: Select the text display size	Default: Medium
	Location: Select the text display location.	Default: Right-bottom
Auto Answer	Enable/disable Auto Answer, the terminal will automatically answer the call meeting when enabled.	Default: Disabled
No Disturbing	Enable/disable No Disturbing, the terminal will enter call no disturb mode and refuse to answer all call meetings when enabled.	Default: Disabled
Self-help Sleep	Configure the terminal self-service sleep time: 10min,	Default: Never

Parameter	Parameter Declaration	Parameter Setting
	30min, 60min, Never.	
Interface Style	The default terminal Interface style is Traditional Style.	Default: Traditional Style
Web Access	Enable/disable the WEB access rights.	Default: Disabled
Automatically Close in 30 Minutes	Enable/disable automatically close in 30 minutes (valid only when WEB access is enabled).	Default: Enabled
SIP Transmission Mode	Configure the SIP transmission mode: TCP, UDP, TLS.	Default: TCP
SRTP Encryption	Enable/disable the SRTP encryption function.	Default: Disabled
Access Right	Enable/disable HTTPS access right.	Default: Disabled
AI Mode	Configure the AI mode: Manual, Group, Voice Locate.	Default: Manual
Language	Configuration of terminal system language: 中文(简体), 中文(繁体), English.	Default: 中文(简体)

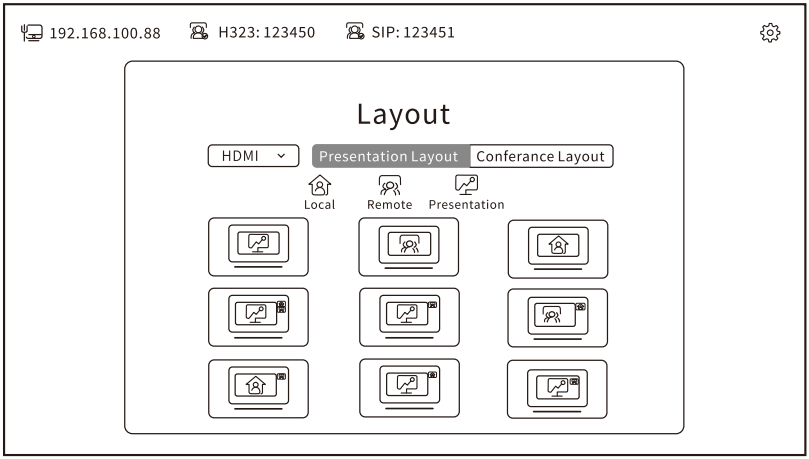
Parameter	Parameter Declaration	Parameter Setting
Time Zone	Select the time zone of the area.	Default: China Standard Time
Time Format	Configure the system time display format: 24 Hours Clock, 12 Hours Clock.	Default: 12 Hours Clock
Set Time Automatically	Enable/disable the automatic setting time. When this function is enabled, the system automatically obtains the network time.	Default: Enabled

5.12.5 Layout

When you need to watch a combined image of the venue video and the demonstration screen on a display device, you can choose to switch the screen layout.

- **Operating Steps**

Step 1 On the main menu interface, select "[...] > [gear] > Layout".



Step 2 Configure the Picture Layout parameters, which are shown in the following table.

Step 3 Press the "[back]" key on remote control to save and return to the upper-level interface.

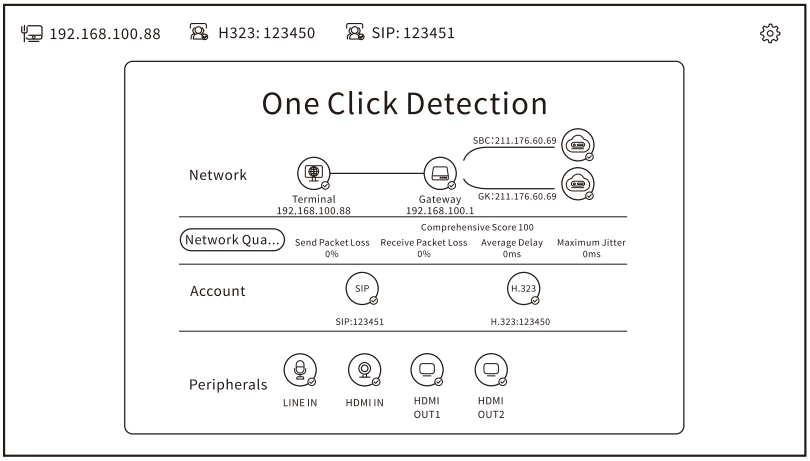
Parameter	Parameter Declaration
Layout Output Interface	Select the video output interface to switch the layout.
Layout Options	Select the layout option: Presentation Layout, Conference Layout.
Presentation Layout	Configure the presentation layouts.
Conference Layout	Configure the conference Layouts.

5.12.6 One Click Detection

On the One-click Detection interface, you can check the terminal network, account, and whether each interface recognizes device access.

- **Operating Steps**

Step 1 On the main menu interface, select “ > > One Click Detection”.



Step 2 Press the “ ” key on remote control to save and return to the upper-level interface.

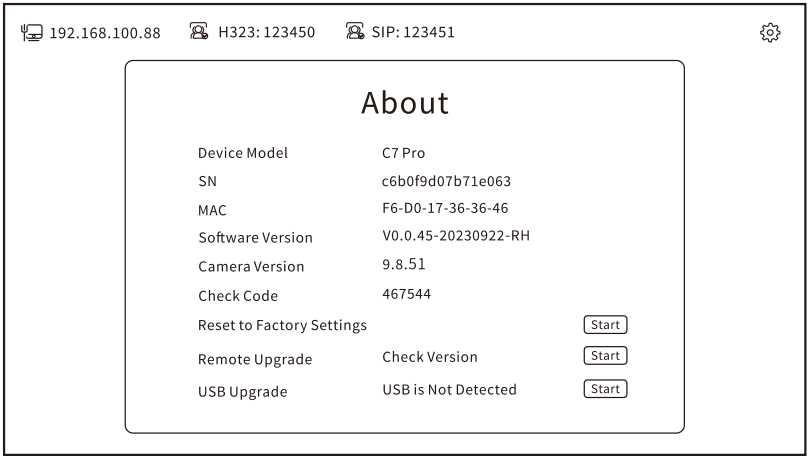
5.12.7 About

In the "About" interface, you can view Device Model, SN, Software Version etc., and operate equipment upgrade and reset to factory settings.

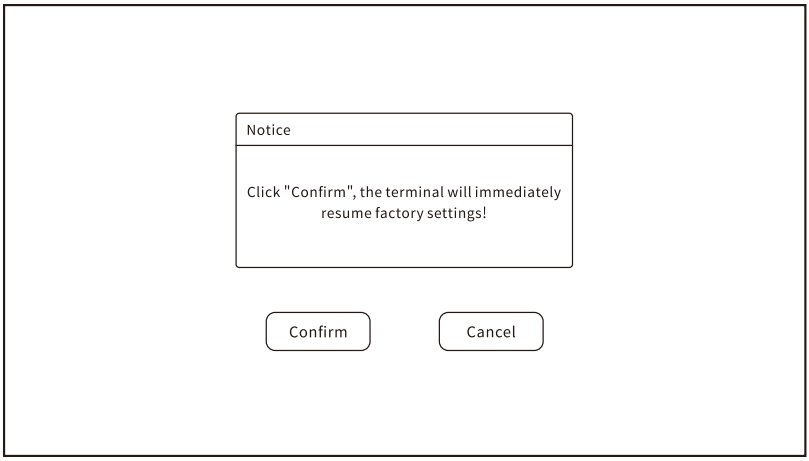
5.12.7.1 Reset to Factory Settings

- **Operating Steps**

Step 1 On the main menu interface, select “ > > About”.



Step 2 Select the “Start” button in the Reset to Factory Settings bar to pop-up the recovery factory settings notice.



Step 3 Select “Confirm” to immediately restore the factory settings and restart the terminal.

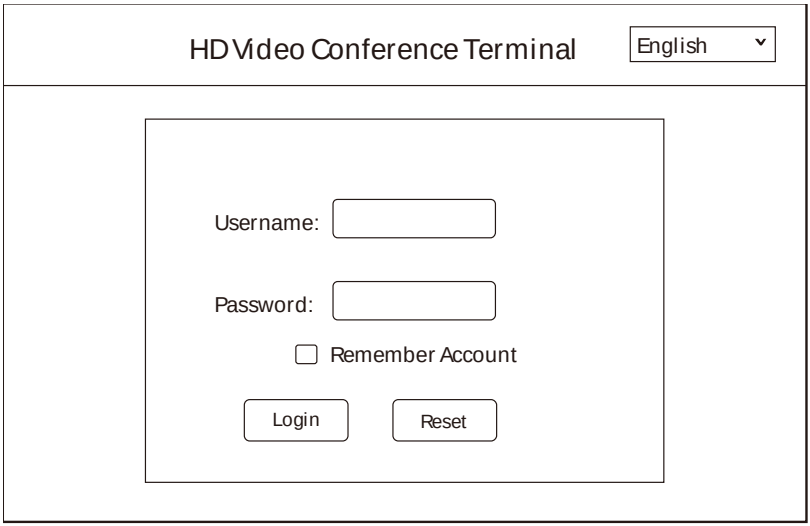
Notice

After restoring the factory setting, all the previous configured parameters will be lost. Please perform this operation with caution.

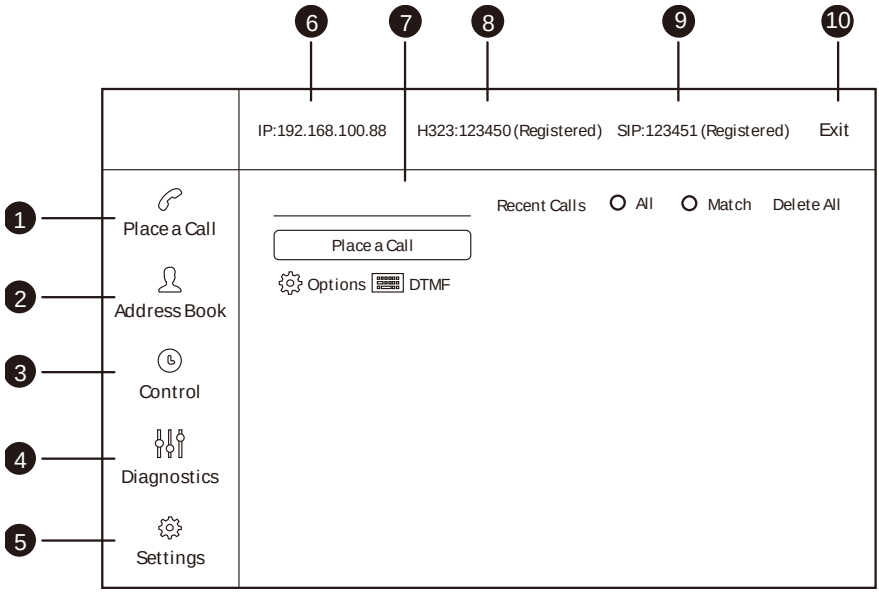
6 Operational (WEB)

6.1 Login

1. **Access the terminal IP address + port number (8081) in the browser to enter the terminal WEB login page (before logging in to the WEB page, you must first select "[ooo] > ⚙ > General" in the GUI interface to enable the "WEB Access" permission).**



2. **Enter the default username "admin" and default password "Cw111000$", select "Login" to enter the terminal WEB configuration page (as shown below).**



Number	Name	Explain
1	Place a Call	Move the cursor to select and enter the Place a call menu page to configure the relevant parameters.
2	Address Book	Move the cursor to select and enter the address book menu page to configure relevant parameters.
3	Control	Move the cursor to select and enter the control menu page to configure the relevant parameters.
4	Diagnostics	Move the cursor to select and enter the diagnostics menu page to configure the relevant parameters.
5	Settings	Move the cursor to select and enter the Settings menu page to configure relevant parameters.
6	IP Address	Displays the current IP address.
7	Place a Call	Displays the place a call menu page

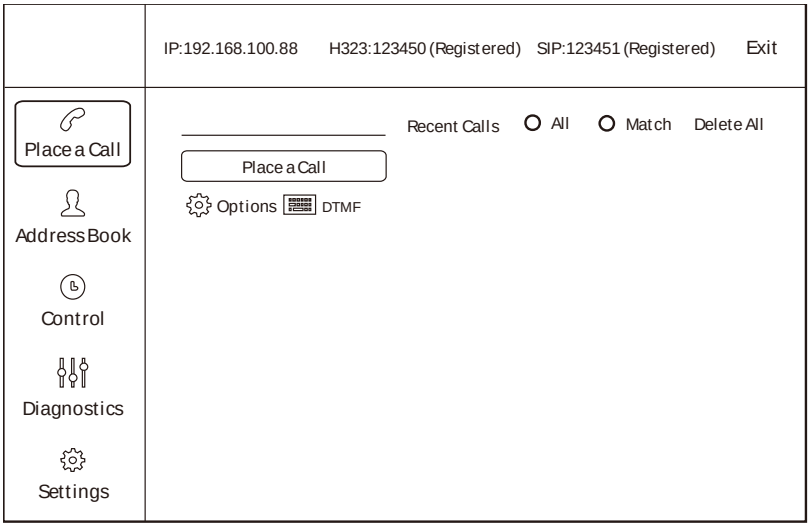
Number	Name	Explain
		parameters options, such as: recent calls, delete all, match, etc.
8	H323 Account	H 323 account registration status.
9	SIP Account	SIP account registration status.
10	Exit	Move the cursor to select and exit the terminal WEB configuration page.

6.2 Meeting Calling

The terminal supports meeting initiation through address book, call record and input meeting account, number or IP address.

- **Operating Steps**

Step 1 On the WEB configuration page, select "" to enter the call menu page.



Step 2 There are several ways to choose the remote venue:

- **Manually enter the remote venue account, number or IP address in the input box;**
- **Select the remote venue account, number or IP address to be called in the call list;**

- **Select the remote venue account, number, or IP address in the address book list.**

Step 3 The configuration venue parameters are shown in the table below.

Parameter	Parameter Declaration	Parameter Setting
Venue Account/ Number/IP	Remote venue account, number, or IP address.	The venue account/number/IP address of the latest call are displayed by default

Parameter	Parameter Declaration	Parameter Setting
Options	Select call rates: 64Kbps, 128Kbps, 192Kbps, 256Kbps, 384Kbps, 512Kbps, 768Kbps, 1Mbps, 1.5Mbps, 2Mbps, 4Mbps, 6Mbps, and 8Mbps.	Default Rate: 2Mbps
	Select the call protocol: SIP, H.323, automatic.	Default Protocol: SIP
Parameter	Parameter Declaration	Parameter Setting

Step 4 Click "Call" to initiate the meeting.

Step 5 Click "" to end the meeting.

6.3 Presentation

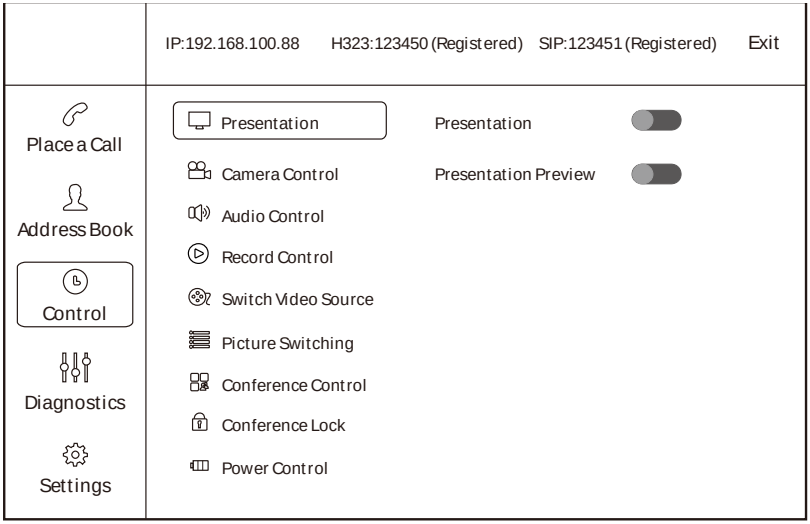
Connect a computer or HD camera to the terminal via HDMI for the auxiliary stream or wirelessly project from a computer. The terminal sends dual streams only when a secondary source is detected, allowing the remote end to view the shared local screen during dual-stream transmission.

Prerequisite>>

The terminal is connected to the auxiliary video source and is normally in the meeting, and the opposite terminal supports dual streams.

- **Operating Steps**

Step 1 On the WEB configuration page, select " > Presentation".



Step 2 Select enabling "Presentation" to send the second video to the participating terminal, enable "Presentation Preview" only support the local preview of the Presentation.

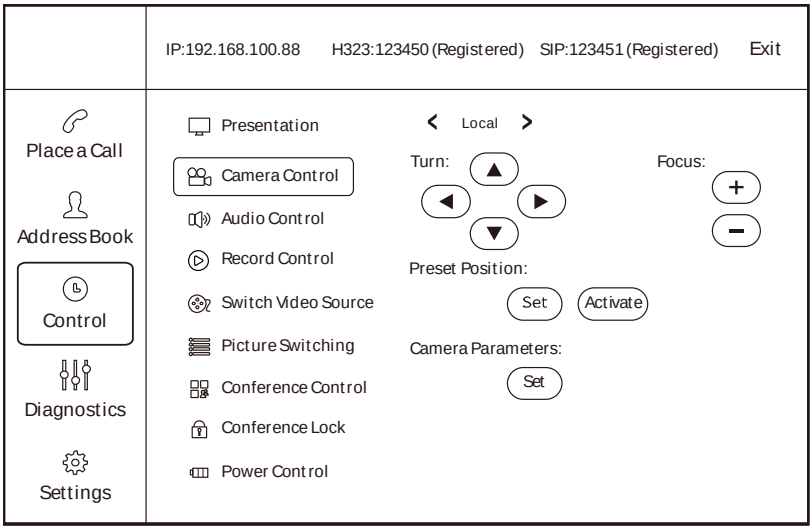
Step 3 Go to the call menu page and select "" to end the meeting.

6.4 Camera Control

On the camera control page, you can choose to perform PTZ (Pan/Tilt/Zoom) control on local or remote cameras, set preset positions, and other operations.

- **Operating Steps**

Step 1 On the WEB configuration page, select " > Camera Control".

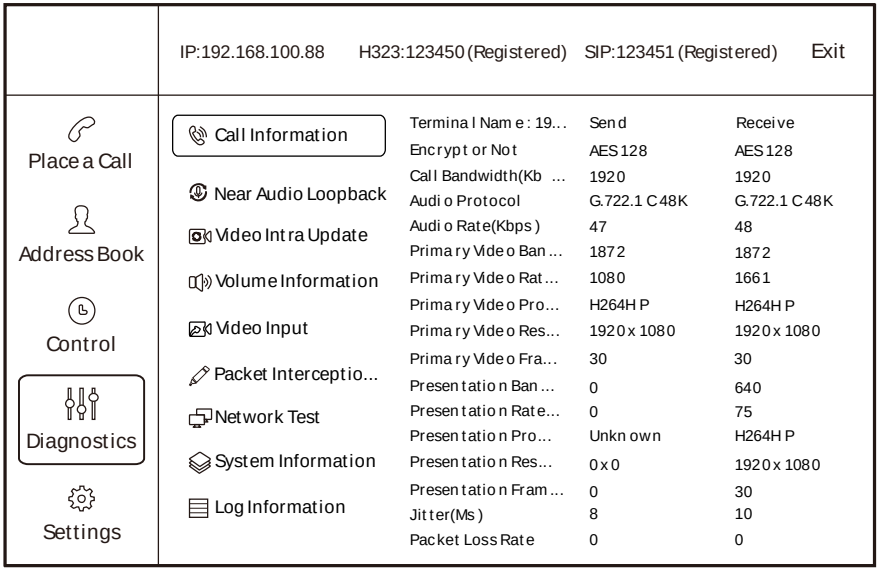


Step 2 For the camera control operation, please refer to the following table:

Parameter Option	Parameter Declaration
Local/Remote	Switch between local or remote cameras.
Directions	▲: Turning the camera upward. ▶: Turning the camera to the right. ▼: Turning the camera down. ◀: Turning the camera to the left.
Focus	Click the "+" repeatedly to enlarge the image.
	Click the "-" repeatedly to shrink the image.
Preset Position	Setting: Set the preset bit (1~9).
	Activation: Call the camera to reach the preset position.
Camera Parameters	Image parameters: Configure image Contrast, Brightness, Aperture Mode, and Aperture Value.
	Backlighting settings: Select whether to enable the Backlight Compensation.
	Flinker mode: Off, 50Hz and 60Hz.
	Others: Select whether Flip Vertical and Mirroring are enabled.

6.5 Diagnostics

After the meeting begins, select "⚙ > Call Information" to know the quality of the meeting in real time (please refer to the following table for parameters).



Parameter	Parameter Declaration
Encrypt or Not	Meeting encryption status.
Call Bandwidth (kbps)	The actual call bandwidth after the negotiation.
Audio Protocol	Capability is negotiated after the actual audio protocol.
Audio Rate (kbps)	The real-time rate of the audio value will change dynamically in real-time.
Primary Video Bandwidth (kbps)	The bandwidth allocated to the main video.
Primary Video Rate (kbps)	The real-time rate of the main video, this value will change dynamically in real time.
Primary Video Protocol	Capability is negotiated after the actual master video protocol.
Primary Video	Main video at the resolution of the current session.

Parameter	Parameter Declaration
Resolution	
Primary Video Frame Rate (fps)	The number of frames sent or received for the primary video per second, depending on the dynamics of the current network environment.
Presentation Bandwidth (kbps)	Bandwidth allocated to the secondary video.
Presentation Rate (kbps)	The real-time rate of the auxiliary video, this value will change dynamically in real time.
Presentation Protocol	Capability negotiation after the actual supplementary video agreement.
Presentation Resolution	Auxiliary video at the resolution of the current session.
Presentation Frame Rate (fps)	The number of frames sent or received per second for the auxiliary video, depending on the dynamics of the current network environment.
Jitter (ms)	The degree of variation in the network delay.
Packet Loss Rate	Network packet loss is caused by network instability.

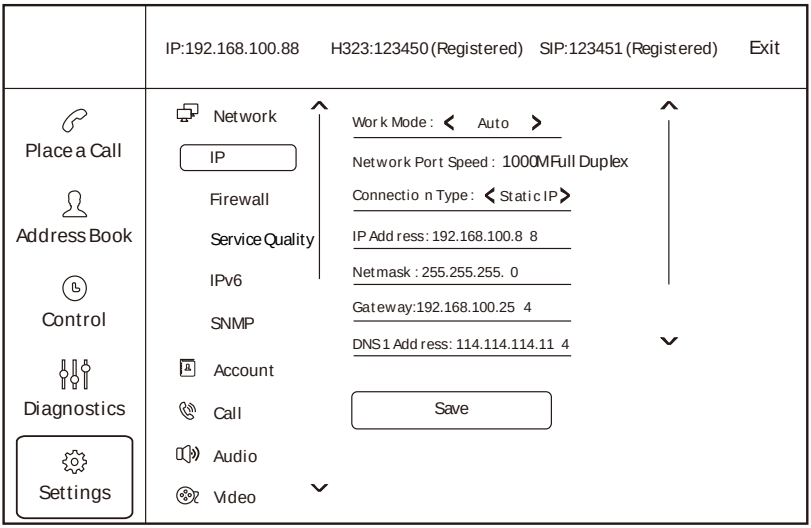
6.6 Settings

6.6.1 Network Setting

Before using Ethernet for video communication, configure the terminal's Ethernet parameters, including the IP address, subnet mask, and gateway address.

➢ **Operating Steps**

Step 1 On the WEB configuration page, select " > Network > IP".



Step 2 Configure the "IP" parameters, which are shown in the following table.

Step 3 Select "Save".

Parameter	Parameter Declaration	Parameter Setting
Work Mode	**Configuring network working mode: automatic, 10M full duplex, 100M full duplex, 1000M full duplex.**	**Default: Auto**
Connection Type	**Configure the network connection type:** ● **Automatic IP acquisition: The terminal automatically obtains the IP address through the DHCP**	**Default: Automatic IP acquisition**

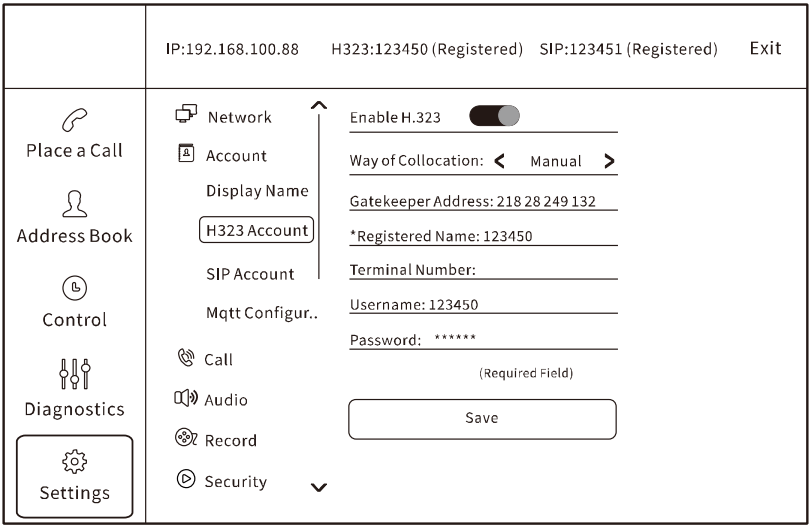
Parameter	Parameter Declaration	Parameter Setting
	server. ● Static IP: The IP address of the terminal is assigned by the network administrator, and the IP address, Subnet mask, Gateway and DNS address need to be set.	
IP Address	Configure the IP address of this terminal.	Default: Auto obtain
Netmask	Configure the subnet mask of this terminal.	Default: Auto obtain
Gateway	Configure the default gateway address corresponding to the IP of the terminal.	Default: Auto obtain
DNS Address	After the IP address of the DNS server is configured, the domain name can be used for the address of the GK server and the SIP server. The DNS server will resolve the IP address of the GK server and the SIP server according to the domain name.	Default: Auto obtain

6.6.2 H323 Account

When using the H.323 protocol for video communication, H323 account information such as GK Address, Registered Name and other parameters shall be configured.

➢ **Operating Steps**

Step 1 On the WEB configuration page, select "⚙ > Account > H323 Account".



Step 2 Configure the "H323 Account" parameters, which are shown in the table below.

Step 3 Select "Save".

Parameter	Parameter Declaration	Parameter Setting
Enable H.323	Select whether to enable the H.323.	Default: Enabled
Way of Collection	Select H.323 Account configuration mode: Manual, Unregister.	Default: Manual
Gatekeeper Address	Set up the IP address or domain name of the GK server. When set to the domain name, you need to enable the DNS server and set the correct mapping on the DNS server.	No default value (consult GK server administrator)
Registered Name	The name of the terminal registered on the GK. After the terminal is registered to the GK server, the GK server identifies the terminal with that name.	No default value (consult GK server administrator)

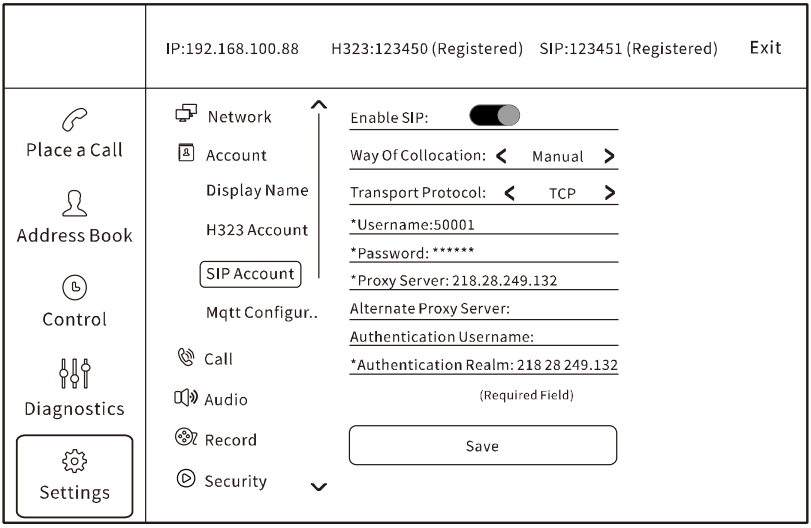
Parameter	Parameter Declaration	Parameter Setting
Terminal Number	The venue number corresponding to the terminal. After the terminal is registered to the GK server, other terminals can use the number to call the terminal.	No default value (consult GK server administrator)
Username	Username of the terminal registered on GK.	No default value (consult GK server administrator)
Password	The password registered by the terminal with the GK server is used for the GK server to authenticate the legitimacy of the terminal.	No default value (consult GK server administrator)

6.6.3 SIP Account

When using the SIP (Session Initiation Protocol) protocol for video communication, the SIP account information such as the Username, Password and other parameters should be configured.

- **Operating Steps**

Step 1 On the WEB configuration page, select "⚙ > Account > SIP Account".



Step 2 Configure the "SIP Account" parameters, which are shown in the table below.

Step 3 Select "Save".

Parameter	Parameter Declaration	Parameter Setting
Enable SIP	Select whether to enable SIP.	Default: Enabled
Way of Collocation	Select the SIP account configuration mode: Manual, Unregister.	Default: Manual
Transport Protocol	Select transport protocol: TCP, UDP, TLS, Auto.	Default: TCP
Parameter	Parameter Declaration	Parameter Setting
Username	Enter the username used to register with the SIP server. After registration, the SIP server identifies the terminal by this name.	No default values (please refer to the SIP Server Administrator)
Password	Input the password for registering with the SIP server, ensuring the terminal's legitimacy during authentication. The password set on the terminal must match the one pre-set on the SIP server during authentication.	No default values (please refer to the SIP Server Administrator)

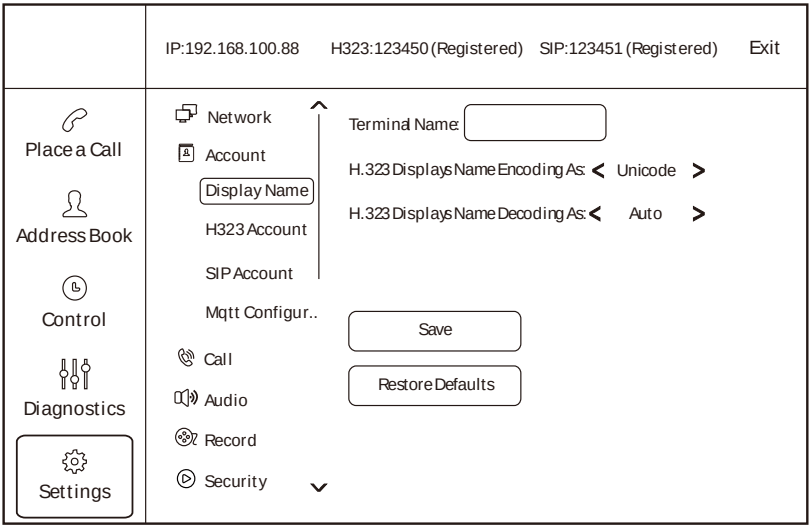
Parameter	Parameter Declaration	Parameter Setting
Proxy Server	Enter the IP address or domain name of the SIP proxy server. Enable this option when the user's network environment requires a proxy server.	No default values (please refer to the SIP Server Administrator)
Alternate Proxy Server	Enter the IP address or domain name for the SIP alternate proxy server.	No default values (please refer to the SIP Server Administrator)
Authentication Username	Enter the username used for the authentication.	No default values (please refer to the SIP Server Administrator)

6.6.4 Display Name

Configure the terminal display name, H.323 Show the name encoding as and H.323 displays the name decoding as.

- Operating Steps

Step 1 On the WEB configuration page, select "⚙ > Account > Display Name".



Step 2 Configure the "Display Name" parameters, which are shown in the following table.

Step 3 Select "Save".

Parameter	Parameter Declaration	Parameter Setting
Terminal Name	Configure the terminal display name.	Default: Empty
H.323 Display Name Encoding As	Configure H.323 Display the name encoding mode: Unicode, GBK.	Default: Unicode
H.323 Display Name Encoding As	configure H.323 Display the name decoding mode: Auto, Unicode, GBK.	Default: Auto

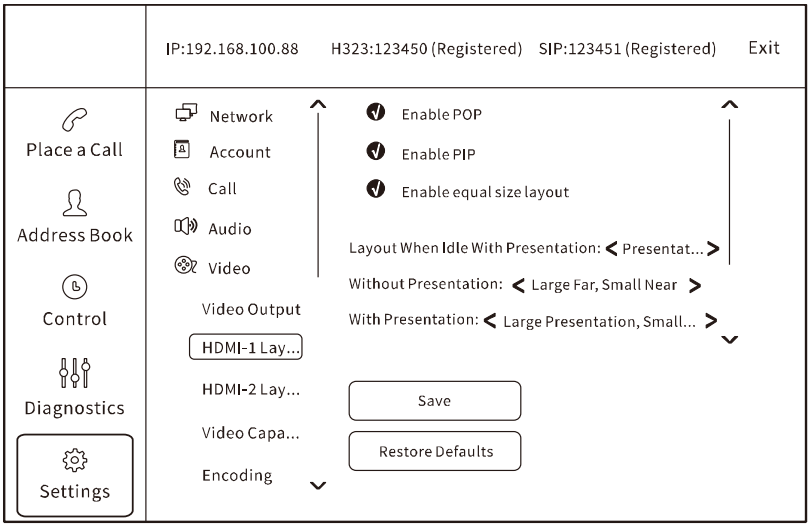
6.6.5 Picture Layout

When need to watch a combined image of the venue video and the demonstration screen on a display device, you can choose to switch the screen layout.

6.6.5.1 HDMI-1 Layout

- **Operating Steps**

Step 1 On the WEB configuration page, select "⚙ > Video> HDMI-1 Layout".



Step 2 Configure the "HDMI-1 Layout" parameters, which are shown in the

table below.

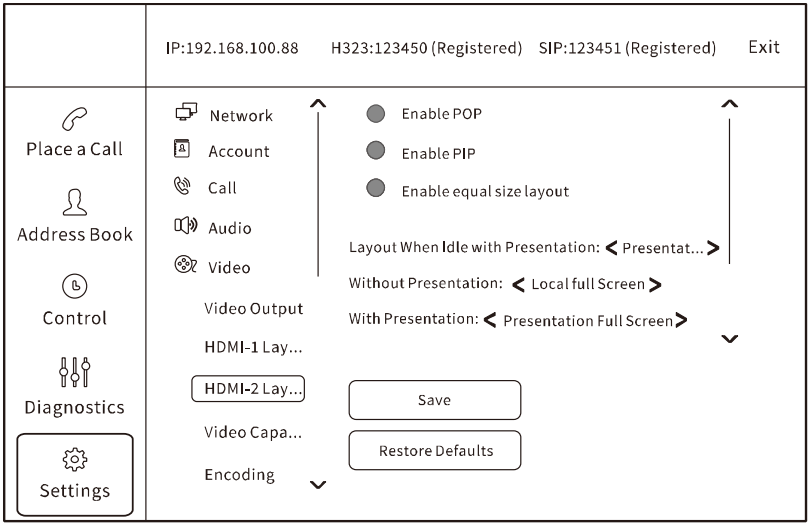
Step 3 Select “Save”.

Parameter	Parameter Declaration	Parameter Setting
Enable POP	Choose whether to enable the picture-by-picture layout. If not enabled, layouts of all sidebar types will not be displayed.	Default: Enabled
Enable PIP	Select whether to enable the picture-by-picture layout, and all in-picture types will not be displayed.	Default: Enabled
Enable Equal Size Layout	Choose whether to enable the equal-size layout. If not enabled, layouts of all Equal Size types will not be displayed.	Default: Enabled
Layout When Idle with Presentation	Choose the layout for idle presentation. The terminal will automatically switch to this layout when in idle presentation mode.	Default: Presentation Full Screen
Without Presentation	Choose the layout for the situation when there is no presentation in the meeting. The terminal will automatically switch to this layout in the absence of a presentation.	Default: Far Full Screen
With Presentation	Choose the layout for the situation when there is a presentation in the meeting. The terminal will automatically switch to this layout when a presentation is active.	Default: Large Far, Small Near

6.6.5.2 HDMI-2 Layout

➢ **Operating Steps**

Step 1 On the WEB configuration page, select "⚙ > Video> HDMI-2 Layout".



Step 2 Configure the "HDMI-2 Layout" parameters, which are shown in the table below.

Step 3 Select "Save".

Parameter	Parameter Declaration	Parameter Setting
Enable POP	**Choose whether to enable the picture-by-picture layout. If not enabled, layouts of all sidebar types will not be displayed.**	**Default: Disabled**
Enable PIP	**Select whether to enable the picture-by-picture layout, and all in-picture types will not be displayed.**	**Default: Disabled**
Enable Equal Size Layout	**Choose whether to enable the equal-size layout. If not enabled, layouts of all Equal Size types will not be displayed.**	**Default: Disabled**
Layout When Idle with Presentation	**Choose the layout for idle presentation. The terminal will automatically switch to this layout when in idle presentation**	**Default: Presentation Full Screen**

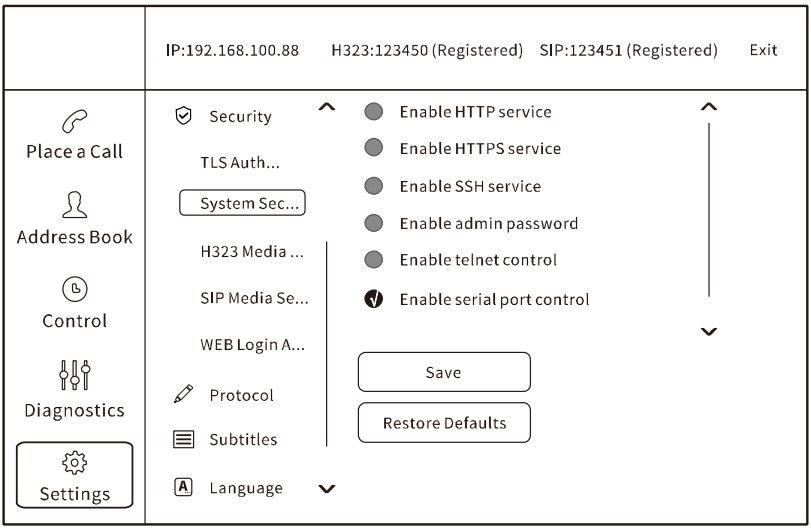
Parameter	Parameter Declaration	Parameter Setting
	mode.	

Parameter	Parameter Declaration	Parameter Setting
Without Presentation	Choose the layout for the situation when there is no presentation in the meeting. The terminal will automatically switch to this layout in the absence of a presentation.	Default: Local Full Screen
With Presentation	Choose the layout for the situation when there is a presentation in the meeting. The terminal will automatically switch to this layout when a presentation is active.	Default: Presentation Full Screen

6.6.6 System Security

➢ **Operating Steps**

Step 1 On the WEB configuration page, select " > Security > System Security".



Step 2 Configure the "System Security" parameters, which are shown in the table below.

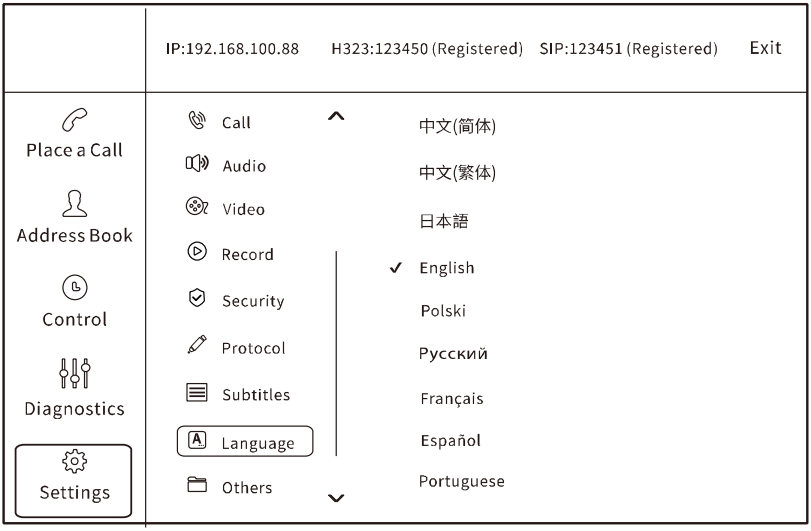
Step 3 Select "Save".

Parameter	Parameter Declaration	Parameter Setting
Enable HTTP Service	Access the terminal WEB interface or API without encryption.	Default: Disabled
Enable HTTPS Service	Access the terminal WEB interface or API by encryption.	Default: Disabled
Enable SSH Service	The SSH protocol encrypts the data transmission of both parties. After the SSH service is enabled, the terminal can be logged in remotely and securely.	Default: Disabled
Enable Admin Password	Select whether to enable the administrator password.	Default Password: Admin123$
Enable Telnet Control	Select whether to enable the Telnet control.	Default: Disabled
Enable Serial Port Control	Select whether to turn on and enable Serial Control.	Default: Enabled

6.6.7 Language

➢ **Operating Steps**

Step 1 On the WEB configuration page, select "⚙ > Languages".



Step 2 After configuring the system language, log back to the WEB page.

7 Troubleshooting

Master the terminal fault diagnosis method and the common fault solution method, which can help to solve the terminal fault in time.

Common image failures, possible causes and solutions are shown below.

Fault Phenomenon	Possible Cause	Countermeasure
Boot stuck	System stuck	Stuck in startup logo: Hold down the Reset button to power on the system until the startup logo is displayed and release the button to restore the backup system.
		Stuck in startup animation: Long press the Reset button for 3 seconds to restore factory settings.
Terminal is started but the conference is not joined, and the device displays a black screen	Display device is not powered on	Power on the display device.
	Video output cable connection is loose	Tighten the video output cable connecting the terminal to the display device.
	The output format of the display device does not match the terminal	On the WEB configuration page, select "⚙ > Video > Video Output" to switch to video output resolution; Or use the short key of remote control to switch the

		resolution.

Fault Phenomenon	Possible Cause	Countermeasure
After joining the conference, the local end sends an abnormal content presentation	No secondary video source connected	Connect the external HD camera or a second video source to the HDMI IN interface of the terminal; Or input a second video image through the wireless projection screen.
	Secondary video source is connected, but the cable is loose	Tighten the video output cable connecting of the terminal to the secondary streaming device.
After joining the conference, there is an echo when the peer speaks	Echo elimination is not enabled	Enter the WEB configuration page and select "⚙ > Audio > Echo Elimination" to select "Enable ECHO elimination on linear input".
Local image flickering	Indoor light frequency causes camera images to flicker	Adjust the corresponding anti-flicker value according to the local AC frequency.
No audio input	Audio input is not enabled	Enter the WEB configuration page, select "⚙ > Audio > Audio Input" to enable the corresponding audio input.
	Audio input device abnormality	Enter the WEB configuration page, select "Diagnosis > Near Audio Loopback" to enable the "Near Audio

		Loopback Test" and test whether the local audio device is normal.
	Audio input gain is small	Press the volume "+" key on the remote control to increase the audio input gain (default is 8).

Fault Phenomenon	Possible Cause	Countermeasure
No audio output	HDMI audio output is not enabled	Enter the WEB configuration page, select "⚙ > Audio > Audio Output" to enable HDMI audio output, linear output, etc.
	Audio output gain is small	Press the volume "+" button on the remote control to increase the audio output gain (default is 8).
The resolution on the terminal will not reach 4K	MCU does not support	If the platform does not support it, replace it with an MCU platform that supports 4K.
	Video capability does not check H.265	Enter the WEB configuration page, select "⚙ > Video > Video Capabilities" to check H.265.