# Integrated 4K UHD Video Conferencing Terminal



**User Manual** 



## **Limitation of Liability**

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

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## 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
Power Cable	1
Remote Control	1
HDMI Cable	1
5G Antenna (Optional)	2
Manual QR Code	1

## 2 Product Instruction

The 4K UHD video conferencing terminal uses a high-performance processor platform and an 8.42 million-pixel CMOS sensor chip, providing 4K@60fps images and AI tracking. Support 12x optical zoom + 16x digital zoom, and accommodates for large, medium, and small conference rooms, perfect for various applications like administrative meetings, emergency command, telemedicine, and distance education.

## 2.1 Product Appearance







No.	Name	Description
1	Camera	4K UHD PTZ camera.
2	Microphone	Built-in microphone 1.
3	STANDBY	STANDBY indicator.
4	IR Window	Infrared signal receiving window.
5	POWER	POWER indicator.
C	Display or	• Display the terminal's IP address.
6	Camera Wide	• Camera Wide: Wide-angle lens.
7	Microphone	Built-in microphone 2.
8	5G Antenna	5G antenna interface (optional).
9	SD Card	SD card slot (optional).
10		LINE IN interface, connect to the external Microphone,
10	LINE IN	Computer, Telephone or other audio sources.
11	MIC IN	MIC IN interface, used to receive the audio.
12	AUDIO OUT	LINE OUT interface, connect to the external Loudspeaker.
13	USB 3.0	USB 3.0 interface, connect to the external Microphone, USB
10	0303.0	flash drive and other USB devices.

No.	Name	Description
14	HDMI IN	HDMI IN interface, connect to the external HD Camera or PC, support audio input.
15 HDMI OUT1		HDMI OUT1 interface, connect to the external HDTV or display device to output the first video source.
16	HDMI OUT2	HDMI OUT2 interface, connect to the external HDTV or display device to output the second video source.
17	LAN	LAN interface, connect to the ethernet network.
18	TOUCH/DMIC	TOUCH/DMIC interface, connect to the external Tablet or digital Microphone (Note: The digital microphone supports cascading).
19	DC 12V	DC 12V power interface.
20	5G Antenna	5G antenna interface (optional).

## 2.2 Technical Specifications

Category	Project	Specifications
Electrical	Operating Voltage	12V 4.5A
Characteristics	Power Consumption	54W
	Operating Conditions	
	Temperature	0°C~40°C
For incompany	Relative Humidity	10%~80%
Environmental	Ambient Noise	<46dBA SPL
Requirements	Non-operating Conditions	
	Temperature	-40°C~70°C
	Relative Humidity	0%~95%
Dhy signal Characteristics	Bare Dimensions	223mmx155mmx167mm
Physical Characteristics	Bare Weight	About 2.5kg

## **3** Installation and Connection

The terminal can be placed on the horizontal desktop or installed on the bracket.

**E** <sub>Note</sub>

- When placing the terminal directly on the desktop, please keep the desktop stable to prevent it from slipping.
- When installing the terminal on the bracket, 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:

- The First Video Stream Input: 4K UHD PTZ camera + Camera Wide (optional).
- The Second Video Stream Input: Connect the HD Camera or the PC to the HDMI IN interface to input the second video source; Or, input the PC streams through the wireless projection.
- Audio Input: Connect a Microphone to the MIC IN interface via a 3.5mm audio cable; Or, connect a Digital Microphone to the TOUCH/DMIC interface via a network cable; Or, connect the Computer or the Telephone audio source to the LINE IN interface via a 3.5mm audio cable.
- Audio Output: Connect a Loudspeaker to the LINE OUT interface via a 3.5mm audio cable.
- The First Video Stream Output: Connect an HDTV to the HDMI OUT1 interface via an HDMI cable.
- The Second Video Stream Output: Connect an HDTV to the HDMI OUT2 interface via an HDMI cable.
- Network: Connect the Ethernet Network via a network cable.
- Power Supply: 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	l are explained in the following table:
--	--------------------------------------	---

Indicator Status	Terminal Status
STANDDV groop in diaster flashing	The STANDBY green indicator flashes during
	startup.
STANDRY groop indicator stoody	The STANDBY green indicator lights steady
	when in standby mode.
DOWED blue indicates fleshing	The POWER blue indicator flashes when
POWER blue indicator itasiling	initiating a call.
	The POWER blue indicator lights steady
	during normal operation, after establishing
POWER blue indicator steady	a call, when the network disconnects, or
	during registration.
Off	Power disconnected.

## 4 AI Tracking

This Terminal support AI tracking, and the selectable tracking mode are People Tracking, Hand Gesture Recognition and People Counting.

## 4.1 People Tracking

#### > Operation

Step 1 Long press the "A" key on the remote control for 3 seconds to activate the AI Tracking (default is People Tracking).

Note: If only one person in the frame, it will track the current target by default. If there are multiple targets in the frame, it will default to selecting the person in the middle, and a green box will flash around the tracked individual.



**Step 2** Use the left and right direction keys on the remote control to switch the tracked person.

- **Step 3** After selecting the tracked person, press the "<sup>()</sup>" key on the remote control to lock the target. At this point, the green box disappears, and it can no longer switch the target by pressing the direction keys.
- Step 4 Long press the "A" key on the remote control for 3 seconds to exit the AI Tracking.

### 4.2 Hand Gesture Recognition

After enabling the AI tracking, the terminal enter/exit the Hand Gesture Recognition mode according to the specific hand gestures performed by tracked person.

#### > Operation

- Step 1 Long press the "<sup>A</sup>" key on the remote control for 3 seconds to activate the AI Tracking with selected the tracked person.
- Step 2 The camera automatically focuses and zooms in on the gesture's position while the tracked person aligns with the camera and performs the "<sup>𝔅</sup>" gesture. When the camera finishes zooming and the tracked person stops the gesture, the camera automatically adjusts to an appropriate size for a close-up of the hands.
- **Step 3** The tracked person aligns with the camera and performs the "<sup>(1)</sup>" gesture to exit the Hand Gesture Recognition mode. After exiting, the camera re-enters the People tracking mode with the tracked person remaining unchanged.
- Step 4 Long press the "A" key on the remote control for 3 seconds to exit the AI Tracking.

### 4.3 People Counting

People counting can recognize the number of people in the venue. Long press the "A" key on the remote control for 3 seconds to activate the AI Tracking, the number of people in the venue will be displayed automatically in the bottom right corner of the screen as below:



## 5 Remote Control



## A 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	Switch HDMI OUT1, HDMI OUT2 output
sequentially	resolution
Press [Delete] key + Numeric keys 1-9 sequentially	Call presets
Press [*] + [#] + Numeric keys 1/2/3/4/5/6 sequentially	Switch the main video source: Camera, Camera Wide (optional), HDMI, Camera Compose, VIDEO, USB
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

## 6 Operation (Remote Control)

## 6.1 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 "<sup>∞∞</sup> > 绞 > 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).

₩ 192.168.100.88	ŝ
Welcome to CX310 Follow the configuration wizard to complete the basic configuration	
Back Confirm	

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

192.168.100.88		ŝ
	Language and Time	
	Language English >	
	TimeZone China Standard Time >	
	Time Format O 24 hour clock 💿 12 hour clock	
	Time Setting	
	Back Confirm Skip	

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.

₩⊋ 192.168.100.88	ŝ
Interface Detection	
Back Confirm	

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.

Netwo	ork
Wired Network Wireless Net Soft	t AP Proxy Set Mobile Net)
Wired Network   Open O Off	
Acquisition Way O Static IP   Auto O	btain Gategory ◉IPv4 ○IPv6
IPv4 Address 192 168	100 88
Netmask 255 255	255 0
Gateway 192 168	100 1
DNS1 114 114	114 114
DNS2 8 8	8 8
Back	Skip

**Note** 

- The terminal requires a 5G module for mobile network usage.
- When using a mobile network, both the wired network and Wi-Fi must be turned off.
- 5. Configure the Account parameters and select "Confirm" to go ahead.

₩ 192.168.100.88	ŝ
Account	
Account Type SIP 🗸	
Register SIP	
Account	
Register Password	
Register Server	
Proxy Server	
Authentication Username	
Back Confirm Skip	

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

₽ 192.168.100.88		ŝ
	Microphone Detection	
	Q	
ift in	Please speak into the microphone to detect whether the sound input is normal he wireless gooseneck microphone is provided, please access the LINE IN terface of the terminal and adjust the volume of the wireless gooseneck microphone receiver to a comfortable position Back Confirm	

7. Configure the Volume parameters and select "Confirm" to go ahead.

囗 192.168.100.88	ŝ
Volume Adjustment	
Audio Input Volume	
Audio Output Volume	
<b>■</b> ())	
Back Confirm	

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

₩ 192.168.100.88	ŝ
General	
Auto Answer	
Venue Name HD Video Terminal	
Back Confirm Skip	

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.

₩⊒ 192.168.10	00.88	ŝ
	Setup Completed	
	Start using HD Video Terminal	
	Back Confirm	

## **Note**

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

### 6.2 Main Interface

Press the main menu key "命" 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 "B" and press the "O" key on the remote control to enter the Meeting menu interface; Move the cursor to "C" and press the "O" key on the remote control to enter the Dongle menu interface; Move the cursor to "O" and press the "O" key on the remote control to enter the More menu interface to select and enter the Settings or Camera menu interface for corresponding operations.

### 6.3 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).

#### 6.3.1 Register SIP Account

#### Operating Steps

Step 1 On the main menu interface, select "<sup>(ooo)</sup> > <sup>(C)</sup> > Account" to enter the Account

menuinte	errace.

₩ 192.168.100.88	ŝ
Account	
Account Type SIP ~	
Register SIP	
Account	
Register Password	
Register Server	
Proxy Server	
Authentication Username	
Confirm Cancel	

**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.

B 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.

#### 6.3.2 Register H323 Account

#### > Operating Steps

**Step 1** On the main menu interface, select "<sup>∞</sup> > <sup>ζ</sup> > Account" to enter the Account menu interface.

埕 192.168.100.88	ŝ
Account	
Account Type H323 v	
Enable H.323	
Enable GK Enable H.460	
GK Discovery Mode	
GK Address	
Account	
Authentication Username	
Authentication Password	
Confirm	
	-

- **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.

#### 6.3.3 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 "<sup>∞</sup> > <sup>€</sup>C > Account" to enter the Account menu interface.

₩ 192.168.100.88	
Account	
Account Type WeConf ~	
Sign Up for Cloud Video	
Account	
Conference Control Host	
Confirm Cancel	

**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.



The WeConf account can only be registered in GUI.

### 6.4 Join Meeting

The terminal supports calling meetings through the address book, call record, and by entering the meeting account, number, or IP address. After registering the WeConf account, the terminal supports joining and creating WeConf meetings.

#### 6.4.1 Meeting Calling

#### Operating Steps

**Step 1** Select "[D]" on the main menu interface and press the "()" key on the remote control to enter the Join Meeting 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.

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

Parameter	Parameter Declaration	Parameter Setting
	Select call rates: 64K, 128K, 192K, 256K,	
Call Rate	384K, 512K, 768K, 1M, 1.5M, 2M, 4M, 6M,	Default Rate: 2M
	8M.	

**Step 4** Select the interface button "<sup>Cont</sup>" or press the call key "<sup>Son</sup>" on remote control to initiate the meeting.

#### 6.4.2 Join Weconf Meeting (Optional)

After registering the WeConf account, the terminal supports joining Weconf meetings through the meeting ID and the meeting list.

#### 6.4.2.1 Join a WeConf Meeting via Meeting ID

#### > Operation

Step	1	On the	main	menu	interface,	select '	< <u>ا</u>	Join	Meeting".
------	---	--------	------	------	------------	----------	------------	------	-----------



Step 2 Enter the meeting number and move the cursor to select the interface button

" $\bigcirc$ " to select the Weconf protocol and confirm with the " $\bigcirc$ " key.

**Step 3** Select the interface button "<sup>(C)</sup>" or press the call key "<sup>(N)</sup>" 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:

'도 192.168.100.88 🕾 H323: 123450 옱 SIP: 123451 옱 WeConf: 123452	ŝ
Q 9198831498	
Join Meeting Please Enter The Conference Password	
Please enter the password	
Confirm Cancel	
Join Meeting Address Book Create Meeting Meeting List	

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

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

#### 6.4.2.2 Join a WeConf Meeting via Meeting List

#### > Operation

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



**Step 2** Move the cursor to select the meeting and press the "<sup>()</sup>" key on remote control to enter the conference detail interface.

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

५⊒ 192.168.10	0.88 🗟 H323:12	23450 🛛 🔏 SIP: 1234	51 🔏 We	Conf: 123452	ŝ
	Conference Name	xxxxxx	• Pending		
	Conference Time	2024/01/16 08:00-10:00			
	Creator	XXXXXX		Enter	
	Conference Number	1234567890			
	Password	None		Back	
	🛞 Xiaoyu Hu	12345		Cancel Appo	
	8 Dou Chen	12346			
	8 Hui Deng	12348			
				)	
	Join Meeting	g Address Book Cre	▶ ]   ate Meeting	(E) Meeting List	

**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:

🏣 192.168.100.88 🖀 H323:123450 🖀 SIP:123451 🖀 WeConf:123452	\$ <u>\$</u>
Conference Name XXXXXXX	
Conference Time 2024/01/15 08:00-10:00	
Creator XXXXXX	
Conference Number 1234567890 Reissue	
Password None	
🛞 Xiaoyu Hu 12345 Back	
B Dou Chen         12346	
B Hui Deng 12348	
Image: Solution of the section of	

**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.

#### 6.4.3 Create WeConf Meeting (Optional)

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

#### > Operation

```
Step 1 On the main menu interface, select "Decreate Meeting".
```

🖵 192.168.100.88 🖀 H323:123450 🙈 SIP:123451 🖀 WeConf:123452	ŝ
Conference Na Conference Name 0/30	
Conference Type	
Conference Du 1h 0h 6h Add Particip	
Select Parti	
	ļ
Join Meeting Address Book Create Meeting List	
John Meeting Address book Create Meeting Meeting List	

- **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.

### 6.5 Call Answering

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

1042345890	
(E)	
Please Answer	

- Select the screen button " $\overset{\bigcirc}{\underline{\bigcup}}$ " to establish the audio meeting.
- When receiving the video call, select the screen button "□4" or press the call key
   " ③" 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.

### 6.6 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.

#### 6.6.1 Conference Control

During the built-in MCU or 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, Reinvite, Extend and set Free Talk etc.



#### 6.6.2 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 "□11<sup>†</sup>" 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.

#### 6.6.3 Picture Switching

During the meeting, press the menu key "=" on the remote control and select the screen icon "<sup>1</sup>," to configure the HDMI1/HDMI2 video display screen; Or press the display key "<sup>1</sup>," on the remote control to switch the screen layout.

#### 6.6.4 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.

#### 6.6.5 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 " $^{\odot}$ " key to refresh the video image. Press the zoom keys on the remote control to zoom in/out the camera image.

### 6.7 Address Book

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

#### 6.7.1 Local Contact

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

#### 6.7.1.1 Add Contact

#### > Operating Steps

Step 1 On the main menu interface, select "D > Address Book> Add Contact".

🖵 192.168.100.88 🗟 H323:123450 🗟 SIP:123451	ŝ
Q Please enter the number/initials         (Add to Local Contacts         Add to Local Contacts         Name         Number         Protocol         SIP         V	
Cancel Confirm	
Join Meeting     Address Book     Create Meeting     Meeting List	

Step 3 Enter the contact Name and Number.

**Step 4** Select the Protocol and Rate.

Step 5 Select "Confirm" to save.

#### 6.7.1.2 Edit Contact

#### > Operating Steps

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

₩ 192.168.1	L00.88 🕾 H323	: 123450 🛛 🕾 SIP: 12	23451		ŝ
	Q Please enter	the number/initials			
	Q Local Address B	3ook	Edit	Add Contact	
	🛞 Hu Xiaoyu	12345678912	SIP: 2M	$\bigcirc$	
	8 Chen Du	1234560001	SIP: 2M	6	
	⊗ Deng Hui	1042345890	SIP: 2M	6	
	🛞 Lao Yang	1921681895	H323: 2M	$\bigcirc$	
	🛞 нру	19216810088	H323: 2M	<u>()</u>	
	Peng Chuan	19216819100	H323: 2M	©	
	Join Meet	ing Address Book	Create Meeting Meetin	gList	
		ţ			
₩⊒ 192.168.1	LOO.88 🗟 H323	: 123450 🔏 SIP: 12	23451		ŝ
	Q Please enter	the number/initials			

🙁 🛛 🖉 Hu Xiaoyu	12345678912	SIP: 2M	Q	Ŵ
8 Chen Du	1234560001	SIP: 2M	Ø	۵
⊗ Deng Hui	1042345890	SIP: 2M	Ø	Ŵ
🛞 Lao Yang	1921681895	H323: 2M	Ø	Ŵ
8 нру	19216810088	H323: 2M	Ø	Ŵ
8 Peng Chuan	19216819100	H323:2M	Ø	Ŵ

Step 2 Move the cursor to choose the contact for editing, then click "之" to enter the "Add to Local Contacts" interface.
₩ 192.168.100.88 🕾 Н323		ŝ						
Q Please enter								
R Local Address	Add to Local Contacts     Add Contacts							
8 Ни Хіаоуи	Name Hu Xiaoyu	2 🖻						
8 Chen Du	Number 12345678912							
🛞 Deng Hui	Protocol SIP ~	l d						
🛞 Lao Yang	Rate 2M ~	2 th						
8 нру	Cancel	2 ū						
8 Peng Chuan	19216819100 H323: 2M	2 11						
Join Mee	ting Address Book Create Meeting Mee	eting List						

Step 3 Edit the contact Name and Number.

**Step 4** Select the Protocol and Rate.

Step 5 Select "Confirm" to save.

#### 6.7.1.3 Delete Contact

#### > Operating Steps

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

192.168.100.8	88 🗟 H323:	123450 🔏 SIP: 1	23451			ŝ		
	Q Please enter the number/initials							
ß	Exit Edit     Add Contact							
	8 Hu Xiaoyu	12345678912	SIP: 2M	Ø	Ŵ			
	8 Chen Du	1234560001	SIP: 2M	Ø	Ŵ			
(	8 Deng Hui	1042345890	SIP: 2M	Ø	Ŵ			
	8 Lao Yang	1921681895	H323: 2M	D	0			
	8 нру	19216810088	H323: 2M	D	1			
	8 Peng Chuan	19216819100	H323: 2M	Q	0			
	Join Meeti	ng Address Book	Create Meeting Meeti	ng List	)			

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

무 192.168.100.88	🗟 Н323:	123450 🖀 SIP: 1	.23451			ŝ			
	Q Please enter the number/initials								
R	Local Addres     Delete Local Contacts     Add Contact								
8	Hu Xiaoyu			Q					
8	Chen Du	Are you sure to delete	this local contacts?	Q	۵				
8	Deng Hui				<u> </u>				
8	Lao Yang	Cancel	Confirm	Ø	۵				
8	НРҮ	19216810088	H323: 2M	Ø	Ŵ				
8	Peng Chuan	19216819100	H323: 2M	Ø	Ŵ				
	Join Meeti	ng Address Book	Create Meeting Me	eting List	)				

Step 3 Select "Confirm" to delete the contact.

# 6.7.2 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".

₩ 192.168.100.88	🗟 H323: 123450	🗟 SIP: 123451	🕾 WeConf: 123452	<u>ب</u>	2
Q Plea	ase input number Enterprise Contact		Local Contact		
	oud Platform				
Pri Soft Pri Test	ware Development Depa t Department	rtment			
8 Xiao	duct Center oyu Hu	50948	0		
8 Du C 8 Huil	Chen Deng	50352 50118	@		
8 Ann.	a	50529			
	Join Meeting Addre	A   D ess Book Create Me	eeting Meeting List	)	

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

192.168.100.88	🗟 H323: 123450	🗟 SIP: 123451	🔏 WeCo	onf: 123452	ŝ
	Please input number Enterprise Contact	Local Co	ntact	Create Conf.	
	Cloud Platform Software Development Depar	tment		Selected (1)	
	۸ Product Center کانومی ال	50948	© 7	Cancel All	
	) Du Chen ) Hui Deng ) Anna	50352 50118 50529			
	Join Meeting Address	S   Create	▷] e Meeting M	eeting List	

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

🖵 192.168.100.88 🙈 H323: 123450 🙈 SIP: 123451 🗟 WeConf: 123452	ŝ
Conference Na       Conference Name       0/30         Conference Type       Immediately       O Appointment         Password       Image: Create Conf.         Conference Du       1h       0h         Generation       Gh       Add Particip         Xiaoyu Hu       Select Parti	
Join Meeting     Address Book     Create Meeting     Meeting List	

**Step 4** After configuring the conference parameters, select "Create Conf." to create the meeting.

# 6.8 Tencent Meeting ROOMS Controller (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 " $\overleftrightarrow{2}$  > About Us > Help Center" to scan the QR code to enter the official website of Tencent Meeting Deems"

Tencent Meeting to check the use guide of "Tencent Meeting Rooms".



# 6.9 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 "<sup>(1)</sup>" key on remote control to exit the Dongle Instructions interface.

# 6.10 GUI Setting

# 6.10.1 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 " > أَنْ > Network > Wired Network".

₩ 192.168.100.88		ŝ
	Network	
	Wired Network Wireless Net Soft AP Proxy Set Mobile Net)	
W	ired Network 🖲 Open 🔿 Off	
Ac	cquisition Way O Static IP  Auto Obtain Gategory  IPv4 O IPv6	
Ne Ne	V4 Address         192         168         100         88           etmask         255         255         255         0	
Ga	ateway 192 168 100 1	
10 10	NS1 114 114 114 114 NS2 8 8 8 8	
	Confirm	

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

Step 3	Select	"Confirm"	to save.
--------	--------	-----------	----------

Parameter	Parameter Declaration	Parameter Setting
Wired Network	Open/Off wired network.	Default: Open
Acquisition Way	<ul> <li>Auto obtain: The terminal automatically obtains the IP address through the DHCP server.</li> <li>Static IP: The IP address of the terminal is assigned by the network administrator, with the IP address, subnet mask, default gateway, and DNS address being configured.</li> </ul>	Default: Auto obtain
Protocol Configure the network protocol: IPv4, IPv6.		Default: IPv4
IPv4/6 Address	Configure the IP address of the terminal.	Default: Auto obtain

Parameter	Parameter Declaration	Parameter Setting
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

# 6.10.2 Video

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

#### > Operating Steps

Step	1	On	the	mai	n menu	ı interf	face.	select	"•••• >	. 😳 -	Video".
							,				

192.168.100.88	备。H323:123450 备。SIP:123451	\$
	Video	
	Mainstream Input Signal Source Camera v Resolution 3840 x 2160P30 Presentation Input Signal Source (HDMI v) Resolution 1920 x 1080P30 Video Output HDM11 Output Mode (HDMI v)	

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	Signal source: Camera, Camrea Wide (optional), HDMI, Camera Compose, VIDEO, USB.	Default: Camera	
Input	Resolution: Displays the resolution value of the mainstream input signal source.	Default: Displays the actual value for the current signal input	
	Signal source: The default signal source is HDMI	Default: HDMI	
Presentation Input	Resolution: Displays the resolution value of the presentation input signal source.	Default: Displays the actual value for the current signal input	
	Output mode: The default output mode is HDMI.	Default: HDMI	
Video Output HDMI1	Resolution: 4KP60, 4KP30, 1080P60, 1080P50, 720P60, 720P50 (the output resolution is obtained through EDID negotiation, and different monitors negotiate different resolutions).	Default: 4KP30	
	Output mode: The default output mode is HDMI.	Default: HDMI	
Video Output HDMI2	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
	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.	/
Camera Settings	Image mode: Default, Standard, Outdoor, Warm, Light, PC.	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.	/

### 6.10.3 Audio

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

#### > Operating Steps

**Step 1** On the main menu interface, select "<sup>(m)</sup> > <sup>()</sup>

₽ 192.168.100.88	磊 H323: 123450	ŝ
	Audio	
	Audio Input Auto ~	
	Input Detection Detection	
	Input Volume Q 8	
	Audio Output Auto ~	
	Output Volume 🛒 🔊 8	
	Ring Ringtone1 ~	
	АРР ЗА	

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

**Step 3** Press the "<sup>(1)</sup>" key on remote control to save and return to the upper-level interface.

Parameter	Parameter Declaration Parameter Settin		
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	
АРР ЗА	Enable/disable the APP 3A function, when APP 3A is enabled, third-party applications will use system 3A to process the audio.	Default: Enabled	

#### 6.10.4 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

🖵 192.168.100.88 🖀 H323: 123450 🙈 SIP: 123451	ŝ
General	
Venue Name (HD Video Terminal Color ( Y Front Size (Medium ) Position (Right-B)	
Auto Answer No Disturbing Self-help Sleep O 10 min O 30 min O 60 min O Never Interface Style O Traditinal Style WEB Access SIP Transmission Mode O TCP O UDP O TLS	
SRTP Encryption Access Right HTTP Access Language English	

**Step 1** On the main menu interface, select " $^{\circ\circ\circ}$  >  $^{\circ\circ}$  > General".

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

Step 3 Press the "<sup>()</sup>" key on remote control to save and return to the upper-level

Parameter	Parameter Declaration	Parameter Setting	
	Venue name: Configuration terminal		
	display name.	Default: Empty	
	Color: Select the text display color.	Default: White	
venue Name	Size: Select the text display size	Default: Medium	
	Location: Select the text display	Default Dielet hattaur	
	location.	Default: Right-bottom	
	Enable/disable Auto Answer, the		
Auto Answer	terminal will automatically answer the	Default: Disabled	
	call meeting when enabled.		
	Enable/disable No Disturbing, the		
No Dicturbing	terminal will enter call no disturb	Default: Disabled	
NO DISLUIDING	mode and refuse to answer all call	Delault. Disableu	
	meetings when enabled.		
	Configure the terminal self-service		
Self-help Sleep	sleep time: 10min, 30min, 60min,	Default: Never	
	Never.		
Interface Style	The default terminal Interface style is	Default: Traditional	
Interface Style	Traditional Style.	Style	
Web Access	Enable/disable the WEB access rights.	Default: Disabled	
Automatically	Enable/disable automatically close in		
Close in 30	30 minutes (valid only when WEB	Default: Enabled	
Minutes	access is enabled).		
SIP Transmission	Configure the SIP transmission mode:	Dofault: TCD	
Mode	TCP, UDP, TLS.		
SPTD Encruption	Enable/disable the SRTP encryption	Default Dischlad	
SKTP Encryption	function.	Delault. Disableu	
Access Right	Enable/disable HTTPS access right.	Default: Disabled	
	Configuration of terminal system		
Language	language: 中文(简体), 中文(繁体),	Default: 中文(简体)	
	English.		
Time Zone	Select the time zone of the area	Default: China	
	Standard Time		

interface.

Parameter	Parameter Declaration	Parameter Setting	
	Configure the system time display		
Time Format	format: 24 Hours Clock, 12 Hours	Default: 12 Hours Clock	
	Clock.		
	Enable/disable the automatic setting		
Set Time	time. When this function is enabled,	Default: Enabled	
Automatically	the system automatically obtains the	Delault: Ellableu	
	network time.		

### 6.10.5 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 " $\overline{\circ\circ\circ} > \overline{\zeta}$  > Layout".



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

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

interiace.
------------

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.	

# 6.10.6 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 " $\frac{1}{2}$  >  $\frac{2}{2}$  > One Click Detection".



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

### 6.10.7 About

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

#### 6.10.7.1 Reset to Factory Settings

#### > Operating Steps

**Step 1** On the main menu interface, select " $^{\circ\circ\circ}$  >  $\xi_{\circ}^{\circ}$  > About".

192.168.100.88	🗟 H323: 123450 🖉	🕉 SIP: 123451		ŝ
		About		
	Device Model	CX310		
	SN	a37e6a219865ec41		
	MAC	6A-D9-41-2C-55-B8		
	Software Version	V0.0.47-20231127-VC		
	Camera Version	0.0.1		
	Check Code	658985		
	Remote Upgrade	Check Version	Start	
	USB Upgrade	USB is Not Detected	Start	
	Reset to Factory Setting	gs	Start	
				/

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

recovery factory setting	zs notice.
	Notice
	Click "Confirm", the terminal will immediately resume factory settings!
	Confirm

**Step 3** Select "Confirm" to immediately restore the factory settings and restart the terminal.



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

# 7 Operational (WEB)

# 7.1 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 "<sup>∞∞</sup> > <sup>C</sup>/<sub>2</sub> > General" in the GUI interface to enable the "WEB Access" permission).

HD Video Conference Terminal	English ¥
Username:	
Password:	
Remember Account	
Login Reset	

 Enter the default username "admin" and default password "Cw + the last six digits of the terminal's serial number in reverse order + \$", select "Login" to enter the terminal WEB configuration page (as shown below).



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

# 7.2 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 " $\mathcal{C}$ " to enter the call menu page.

	IP:192.168.100.88 H323:123450 (Registered) SIP:123451 (Registered) Exit
Place a Call	Recent Calls O All O Match Delete All Place a Call
(b) Control	
ရှိနိုင် Diagnostics	
ô Settings	

**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
		The venue
Venue Account/ Number/IP	Remote venue account, number, or IP address.	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 " corr to end the meeting.

# 7.3 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 "<sup>b</sup> > Presentation".

	IP:192.168.100.88 H323:123450 (Registered) SIP:123451 (Registered) Exit
Place a Call Place a Call Address Book Control Diagnostics Settings	Presentation       Presentation         Camera Control       Presentation Preview         Audio Control       Presentation Preview         Record Control       Switch Video Source         Picture Switching       Conference Control         Conference Lock       Power Control

**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 " $\bigcirc$ " to end the meeting.

# 7.4 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 "<sup>b</sup> > Camera Control".



Step 2 For the camera contro	l operation, please refe	r to the following table:
------------------------------	--------------------------	---------------------------

Parameter Option	Parameter Declaration		
Local/Remote	Switch between local or remote cameras.		
	▲: Turning the camera upward.		
	▶: Turning the camera to the right.		
Directions	▼: Turning the camera down.		
	<ul> <li>Turning the camera to the left.</li> </ul>		
_	Click the "+" repeatedly to enlarge the image.		
FOCUS	Click the "-" repeatedly to shrink the image.		

Parameter Option	Parameter Declaration	
Duranat Danitina	Setting: Set the preset bit (1~9).	
Preset Position	Activation: Call the camera to reach the preset position.	
	Image parameters: Configure image Contrast, Brightness,	
	Aperture Mode, and Aperture Value.	
	Backlighting settings: Select whether to enable the	
Camera Parameters	Backlight Compensation.	
	Flinker mode: Off, 50Hz and 60Hz.	
	Others: Select whether Flip Vertical and Mirroring are	
	enabled.	

# 7.5 Diagnostics

After the meeting begins, select  $\sqrt[4]{9}$  > Call Information" to know the quality of the meeting in real time (please refer to the following table for parameters).

	IP:192.168.100.88 H323	3:123450 (Registered)	SIP:123451 (Regi	stered) Exit
Place a Call <u>Q</u> Address Book © Control	Call Information Call Information Call Audio Loopback Of Video Intra Update Call Video Information Call Video Input Call Packet Interceptio	Termina l Nam e : 19 Encrypt or Not Call Bandwidth(Kb Audi o Protocol Audi o Rate(Kbps ) Prima ry Vide o Ban Prima ry Vide o Rat Prima ry Vide o Res Prima ry Vide o Res	Sen d AE S 128 1920 G.722.1 C 48K 47 1872 1080 H264H P 1920 x 1080 30	Receive AES 128 1920 G.722.1 C 48K 48 1872 1661 H264H P 1920 x 1080 30
0 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	System Information	Presen tation Ban Presen tation Rate Presen tation Pro Presen tation Res	0 0 Unkn ow n 0 x 0	640 75 H264H P 1920 x 1080
ô Settings	Log Information	Presen tatio n Fram Jitter(Ms ) Pac ket Loss Rate	0 8 0	30 10 0

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.	
	The real-time rate of the audio value will change dynamically	
Audio Rate (kbps)	in real-time.	

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

# 7.6 Settings

# 7.6.1 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 " $\xi_{ij}^{CS}$  > 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	Default: Auto
	Configure the network connection type:     Automatic IP acquisition: The terminal     automatically obtains the IP address	
Connection Type	<ul> <li>through the DHCP server.</li> <li>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.</li> </ul>	Default: Automatic IP acquisition

Parameter	Parameter Declaration Parameter Setti		
IP Address	Configure the IP address of this terminal.	Default: Auto obtain	
Netmask	Configure the subnet mask of this terminal.	Default: Auto obtain	
Catal	Configure the default gateway address		
Gateway	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	Default: Auto obtain	
	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.		

#### 7.6.2 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".

	IP:192.168.100.88 H323:123450 (Registered) SIP:123451 (Registered) Exi	t
igcarrowPlace a Call	Network     Account     Way of Collocation:      Manual	
<u>)</u> Address Book	Display Name     Gatekeeper Address: 218 28 249 132       H323 Account     *Registered Name: 123450	
له Control	SIP Account <u>Terminal Number:</u> Mqtt Configur <u>Username: 123450</u>	
Diagnostics	Image: Second secon	
Settings		

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

Parameter	Parameter Declaration	Parameter Setting	
Way of	Select H.323 Account configuration mode:	: Default: Manual	
Collection	Manual, Unregister.	Default: Manual	
	Set up the IP address or domain name of		
Gatekeener	the GK server.	No default value	
Addross	When set to the domain name, you need	(consult GK server	
Address	to enable the DNS server and set the	administrator)	
	correct mapping on the DNS server.		
	The name of the terminal registered on		
Desistand	the GK.	No default value	
Nama	After the terminal is registered to the GK	(consult GK server	
Name	server, the GK server identifies the	administrator)	
	terminal with that name.		
	The venue number corresponding to the		
Taurainal	terminal.	No default value	
Terminat	After the terminal is registered to the GK	(consult GK server	
Number	server, other terminals can use the	administrator)	
	number to call the terminal.		
		No default value	
Username	Username of the terminal registered on	(consult GK server	
	GK.	administrator)	
Password	The password registered by the terminal		
	with the GK server is used for the GK	No default value	
	server to authenticate the legitimacy of	(consult GK server	
	the terminal.	administrator)	

### 7.6.3 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 " $\xi_{ij}^{C}$  > Account > SIP Account".

	IP:192.168.100.88	H323:123450 (Registered) SIP:123451 (Registered) Exit
P	P Network	Enable SIP:
Place a Call	🖹 Account	Way Of Collocation: 🗲 Manual >
Ω	Display Name	Transport Protocol: <b>&lt;</b> TCP <b>&gt;</b>
Address Book	H323 Account	*Username:50001
6	SIP Account	*Password: ****** *Proxy Server: 218.28.249.132
Control	Mqtt Configur	Alternate Proxy Server:
₽₽¢	Call	Authentication Username: <u>*Authentication Realm: 218 28 249.132</u> (Reauired Field)
Diagnostics	Record	Save
Settings	🕑 Security 🗸	

**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)

### 7.6.4 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 " $\{\widehat{\mathcal{G}}\}$  > Account > Display Name".

	IP:192.168.100.88 H323:123450 (Registered) SIP:123451 (Registered) Exit
Place a Call	<ul> <li>Network</li> <li>Account</li> <li>Display Name</li> <li>H.323 Displays Name Encoding As: &lt; Unicode &gt;</li> <li>H.323 Displays Name Decoding As: &lt; Auto &gt;</li> </ul>
د Control ایم Diagnostics کوئ Settings	SIPAccount Mqtt Configur Call Call Restore Defaults Record Security

- **Step 2** Configure the "Display Name" parameters, which are shown in the following table.
- Step 3 Select "Save".

Parameter	Parameter Declaration	Parameter Setting
Terminal	Configure the terminal display name.	
Name		Default: Empty
H.323 Display	Configure U 222 Display the name	
Name	Configure H.323 Display the name	Default: Unicode
Encoding As	encoding mode: Unicode, GBK.	
H.323 Display	configure H.323 Display the name	
Name	decoding mode: Auto, Unicode, GBK.	Default: Auto
Encoding As		

# 7.6.5 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.

#### 7.6.5.1 HDMI-1 Layout

#### > Operating Steps

**Step 1** On the WEB configuration page, select "ألمان المعادينة Step 1 On the WEB configuration page, select در المعادين الم

	IP:192.168.100.88	H323:123450 (Registered) SIP:123451 (Registered) Exit
P	Network	C Enable POP
Place a Call	🖹 Account	Enable PIP
Я	🕲 Call	Enable equal size layout
Address Book	🕬 Audio	Layout When Idle With Presentation: < Presentat
(B)	ඁ Video	Without Presentation: < Large Far, Small Near >
Control	Video Output	With Presentation: 🗲 Large Presentation, Small 🗲
814	HDMI-1 Lay	~
UYI Diagnostics	HDMI-2 Lay	Save
	Video Capa	Restore Defaults
دی Settings	Encoding 🗸	,

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

#### 7.6.5.2 HDMI-2 Layout

### > Operating Steps

**Step 1** On the WEB configuration page, select " $\{\widehat{O}\}$  > Video> HDMI-2 Layout".

	IP:192.168.100.88 H323:123450 (Re	gistered) SIP:123451 (Registered) Exit
Place a Call	Network Enable F	POP ^
	Call Enable F	PIP equal size layout
Address Book	Audio     Layout When Idl     Without Present     Video Output     With Presentation	le with Presentation: < Presentat > tation: < Local full Screen > on: < Presentation Full Screen >
မှုပုံ Diagnostics ငြှံာ့ Settings	HDMI-2 Lay Kideo Capa Encoding	faults

**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 mode.	Default: Presentation Full Screen

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

#### 7.6.6 System Security

#### > Operating Steps

**Step 1** On the WEB configuration page, select " $\{\widehat{\mathcal{G}}\}$  > 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	Access the terminal WEB interface or	Defeult: Disabled	
Service	API without encryption.	Default: Disabled	
Enable HTTPS	Access the terminal WEB interface or	Default: Disabled	
Service	API by encryption.	Delautt. Disabled	

Parameter	Parameter Declaration	Parameter Setting
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	Select whether to enable the	Default Password:
Password	administrator 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

## 7.6.7 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.

# 8 Troubleshooting

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

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:
		for 3 seconds to restore factory settings.
	powered on	Power on the display device.
Terminal is started but the conference is	Video output cable connection is loose	Tighten the cable connecting the terminal to the display device.
not joined, and the device displays a black screen	The output format of the display device does not match the terminal	On the WEB configuration page, select "ジ > Video > Video Output" to switch to video output resolution; Or use the short key of remote control to switch the resolution.

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

Fault Phenomenon	Possible Cause	Countermeasure
After joining the conference, the local end sends an abnormal content presentation	No secondary video source connected Secondary video source is	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. Tighten the cable connecting
	connected, but the cable is	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 "父 > 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.
	Audio input is not enabled	Enter the WEB configuration page, select "於 > Audio > Audio Input" to enable the corresponding audio input.
No 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	Audio output is not enabled	Enter the WEB configuration page, select "绞 > 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	MCU does not support	If the platform does not support it, replace it with an MCU platform that supports 4K.
terminal will not reach 4K	Video capability does not check H.265	Enter the WEB configuration page, select "绞 > Video > Video Capabilities" to check H.265.
Terminal does not	No 5G card is connected	Connect the 5G card.
respond after the mobile network is enabled	Wired/Wireless network is being used	Disable the wired network and set the WIFI status to "off".

### Make Video Conference Easier

Nore Intelligent Video Conference Terminal -& Smoother Video Cenference System:


## FCC warning statements:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The device has been evaluated to meet general RF exposure requirement This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.