Intelligent Conference Flat Panel

User Manual

TV-X8186

Please read this user manual carefully before using the system

Content

1.Description

The Intelligent Conference Flat Panel focuses on small and medium-sized conference room scenarios, creating a small conference center.The flat panel integrates functions such as high-definition display, digital whiteboard, 4K camera, array microphone, intelligent central control and high-quality audio ; Equipped with Windows 10 IoT system, it meets the needs of conference presentation, writing, interaction, collaboration, sharing, video, data security, environment monitoring and control and other needs, covering the entire process of the meeting.

2.Features

1．86-inch DLED LCD display with 4K Ultra HD display, narrow frame design, support USB multimedia file playback.

2．Built-in 1200W pixel high-definition camera and 8 array microphones, the sound pickup distance is up to 10m, support automatic noise reduction, automatic gain, echo cancellation, and sound source localization.

3．Equipped with 2.1-channel professional audio, 5 scene sound effects optional: standard, conference, human voice, music, cinema.

4．High-precision touch, support 1.6mm fine recognition.

5．Support Type-C full-featured interface to realize screen projection, reverse control, audio and video signal transmission functions.

6．HDMI supports 4K 60Hz loop-through output; DP supports 4K 60Hz input.

7．The screen and screen protection layer adopt zero bonding technology to effectively prevent light reflection.

8．Support anti-glare, using AG tempered glass to reduce ambient light interference,screen reflection and glare damage to eye.

9．Support hardware-level anti-blue light, filter and reduce harmful high-energy short-wave blue light,long-term viewing without fatigue.

10．Support 85% high color gamut for clearer images, more vivid colors and more saturated colors.

11．The camera array microphone is a detachable module, designed with a 12pogo pin magnetic interface, without separate wiring, and physical protection is used to prevent the possibility of conference information leakage.

12．Support a variety of wake-up methods: voice, keep watching, double-click the touch screen, and button method. The watch wake-up method can be customized to set the watch time.

13．Support the wake-up function by lifting the pen; support quick use of the whiteboard and annotation functions by lifting the pen.

14．With voice assistant auxiliary function,support the operation of main functions by voice assistant, such as: start meeting, end meeting, rest screen, shutdown and other operations.

15．Support meeting reservation function, the meeting list of the day is displayed in real time on the home page, with host and meeting time and other information.

16．Support the preparation of the welcome interface before the meeting, background audio, video, and pictures can be added, and the theme of the welcome interface can be customized.

17．Support fast meetings, meeting ad hoc meetings, multi-person discussions, brainstorming and

other activities。

18．Support confidential meeting, the materials during the meeting cannot be downloaded, and the meeting materials will be automatically burned after the meeting; the materials used during the meeting and the temporarily cached files are automatically encrypted, and cannot be viewed after the meetingp; interface watermark covers the whole meeting to prevent photo recording and leakage of meeting information.

19．Support the installation of third-party video conferencing software to realize remote video conferencing, and the camera supports intelligent framing and speaker tracking.

20．Support quick voting and custom voting/scoring, with voting and satisfaction evaluation templates. Voting methods are divided into scanning code voting and hand-raising voting. Scanning code voting has two options: anonymous voting and real-name voting. Voting/scoring can be customized to vote option.

21．Support scan code sign-in, in the meeting the sign-in can be viewed immediately, and the name of the sign-in person will be displayed in real time after scanning the code sign-in.

22．Support conference recording with 2K, 4K resolution. Support multiple ways to save screen recording: scan code to take away or save to local, conference, U disk.

23．Support multiple screen projection methods such as NFC touch transmission, wireless screen projection, wired screen projection, and one-key projection of the screen projector; support mobile phone and computer mixed screen display, and support up to four screens on the same screen display; support paired screen projection Content reverse operation.

24．Support application screen projection, for example, specified browser projection screen, specified document projection screen; other application messages will not pop up during the screen projection process, and other tasks can be processed to protect privacy.

25．Support mixed split-screen, whiteboard, dynamic video, audio, document, annotation and other pages can be displayed at the same time in the meeting, and any split-screen can be displayed in full screen or different schemes can be compared.

26．Support document presentation function. In the process of document presentation, annotations, video playback, and unlimited picture stacking are available to meet the needs of more content document display.

27．Support scanning codes to upload various file formats during the meeting, including MP4, MP3, PDF, WORD, XLSX, text, JPG, PNG, etc., which can be directly viewed and annotated.

28．Support whiteboard writing; support inserting pictures and video materials into the whiteboard; support multi-point writing; support gesture erasing, sliding to clear the screen, circle eraser, pixel eraser and other erasing methods; with unlimited canvas, support two fingers Zoom

function; support multiple whiteboard file saving formats: PNG, PDF, WORD, PPT.

29．The whiteboard supports OCR intelligent text recognition and graphic recognition functions, which can automatically convert written fonts and patterns into standard text and graphics.

30．Support full-channel annotation function, multiple annotation storage options, scan code to take away or save to local, conference, U disk.

31．Support PPT speech countdown mode.

32．Support abnormal power failure protection function. After abnormal power failure, the internal battery can be quickly activated to save meeting materials and meeting progress in time. After power on, it can continue to be used to ensure the continuity of the meeting.

33．Button logo design, combined with IOT sensing technology, support temperature, humidity real-time monitoring display, automatic adjustment of brightness according to the ambient light.

34．Support centralized control function, which can connect the central control to manage the air conditioner, curtain, microphone and other equipment in the meeting room with one key.

35．Support account switching, switch to the Windows account login interface, to meet the needs of users to install other windows applications

36．With iHUB conference management platform, support web-side login management platform; with multiple roles of common user, operator and administrator.

37．Support the background data kanban function, which can view the unit meeting room, equipment, user account resources and meeting room usage, and can provide real-time statistics on daily participants, daily meeting hours, daily meeting numbers, daily active users, etc. for easy statistics and unified management.

38．Support background meeting management function, which can control the meeting list, unit meeting, historical meeting and meeting recording online

39．Support background meeting settings, set whether the files are encrypted and whether the data is allowed to be downloaded on the meeting management platform, and the storage time of historical meetings can be set, with options of 6 months, 12 months and permanent.

40．Support background unit management, which can manage the organization information and unit information.

41．Support background conference room management, check device usage status and manage conference room equipment in a unified manner.

3.Function introduction

Left   Right
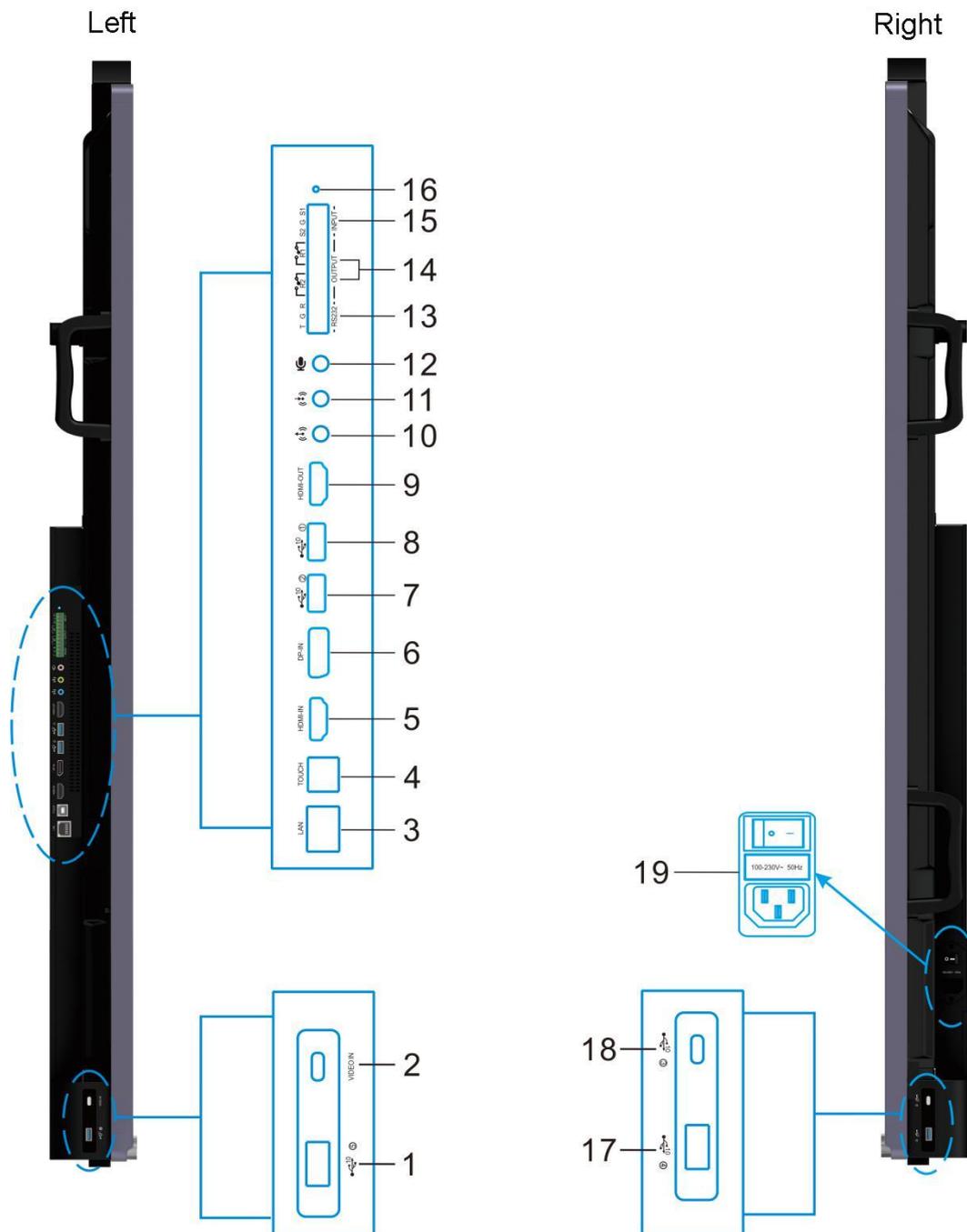
1. $\overset{\bullet\!\to}{\leftrightarrows}$: USB-A interface, which can be connected to the storage device to play multimedia files;

2. VIDEO IN: Video input interface, which can be connected to video signal source;

3. LAN: Network interface, connect to RJ45 port;

4. TOUCH: touch signal output interface;

5. HDMI-IN: High-definition multimedia interface signal input, connected to a computer, set-top box or other video equipment with HDMI output;

6. DP-IN: DP interface, high-definition digital display signal input;

7. ⟿ : USB-A interface, connect USB devices, such as mobile hard disk, U disk, USB keyboard and mouse, etc.;

8. ⟿ : USB-A interface;

9. HDMI-OUT: High-definition multimedia interface signal output, connected to electronic video equipment with HDMI input;

10. LINE-OUT: audio output interface;

11. LINE-IN: audio input interface;

12. MIC-IN: Microphone interface; connect to sound collection equipment with microphone;

13. RS232: Connect the central control equipment with RS232 interface;

14. R1/R2: 2 relay interfaces;

15. I/O: 2 digital I/O interfaces;

16. Reset button indicator light;

17. ⟿ : USB-A interface; can access storage devices to play multimedia files;

18. ⟿ : USB Type-C interface; can access USB storage device to play multimedia files;

19. POWER: AC power input and power switch.

4.Specification

Model	TV-X8186
Processor	I3-1115G4<Standard 3.0G, Turbo-4.2G>
System version	Windows 10 IoT Enterprise Entry
RAM	8GB
Storage	128GB
Screen type	DLED LCD display
Screen size	86 inches（16：9）
Screen display size	1895V x 1066H
Physical resolution	3840（H）×2160（V）
Color gamut NTSC	85%
Display color	1.07B(10bit)
Brightness	350CD/㎡（min.）　400CD/㎡(typ.)
Contrast	1200:1(typ.)
Anti-blue light	Support
Glare	Support
Frame rate	60Hz
Color degree/color depth	1.07B (10bit),10.7 billion colors
Viewing angle	178°(H/V)
Camera type	Magnetic camera, pluggable, plug and play
Camera pixel	1200W
Maximum field of view angle	105°±5°
Horizontal field of view angle	90°±5°
Lens focusing	Auto focus

Angle adjustment	15° downward adjustment
Low illuminatio	New CMOS image sensor, application of noise reduction algorithm to greatly reduce image noise, image noise ratio ≥ 55dB
Drive standard	UVC/UAC national standard
Camera Module Dimensions (L×W×H)	292mm×41mm×31mm
Microphone pickup distance	10m
Input interface	1*LAN ； 1*TOUCH ； 1*HDMI-IN ； 1*DP-IN ； 1*VIDEO-IN （ USB-C+reverse control ） ； 1*LINE-IN ； 1*MIC-IN ； 4*USB-A(gen3 10G rate)； 1*USB-C （ gen3 10G rate ） ； 1*RS232；2*IO；2*RELAY
Output Interface	1*HDMI-OUT；1*LINE-OUT；
Touch sensing technology	Infrared induction recognition touch technology
Maximum input points	40 points
Response time	8ms(typ.)
Writing method	Opaque objects such as fingers, touch pens, etc.
Writing height	2.0mm
Touch Accuracy	The middle 90% touch area is ±1mm
Two-point identification distance	>20mm
Theoretical clicks	Unlimited
Touch diameter	Single point ≥ 1.6mm, multi-point ≥ 2mm
Glass Specification	3.2mm tempered glass
Writing screen surface hardness	7H
Interpolation resolution	32768 × 32768
Operating voltage	DC 5V±5%
Power	≤2.5W

WiFi	2.4GHz and 5GHz
Power supply	90-264V~50/60Hz input
Standard power consumption	≤460W
Standby power consumption	<0.5W
Audio channel	2.1 channel
Sound power	2*20W @ 4Ω+2*16W @ 4Ω
Storage temperature	-10℃~+60℃
Storage humidity	10%~80%RH, No condensation
Working temperature	0℃~+40℃
Working humidity	20%~80%RH，No condensation
Working altitude	≤5000m
Bare metal size (L×W×H)	1962.6mm ×102.1mm × 1149.4mm
Package size (L×W×H)	2095mm × 225mm × 1310mm
Display size	1895mm × 1066mm
Thickness	102.1mm
Net weight	75.4Kg
Gross weight	90.8Kg
Shell color	Aurora purple
Shell material	Aluminum Profile/Sheet Metal

5.Bracket installation (optional)

5.1.Completion effect picture

The completed installation of the bracket is as follows:

5.2.Installation

The bracket has a total of six accessories: two side foot supports, one fixed tray, two wall hangings for adjusting height, two interactive flat panel wall hangings.

1. Two supports are respectively connected to the screw holes of the trays on both sides for fixing.

2. Two wall hangings for adjusting height are fixed to the bracket.

3. Two interactive flat panel wall hangings are fixed to the back of the interactive flat panel. Hang it directly on the bracket to complete the installation.The diagram of the completed installation is as follows:

6.Power on

⚠️**Note:** For your safety and the conference panel, please do not connect any power plugs before the external equipment is installed.

Use the pins plug of the power adapter to connect to a power socket, and the other end to connect to the power outlet on the left side of the back of the interactive flat panel.

Power switch and socket

7.Start up

After the power is turned on, there is a power switch on the left side edge of the back. When the switch is enabled, the screen of the interactive flat panel lights up automatically, and the button light is displayed in white.

7.1. Start-up screen

Wait for a few seconds, then this screen will be displayed. Click on the button directly below the interactive flat panel to enter the main page, where the button is displayed in white.
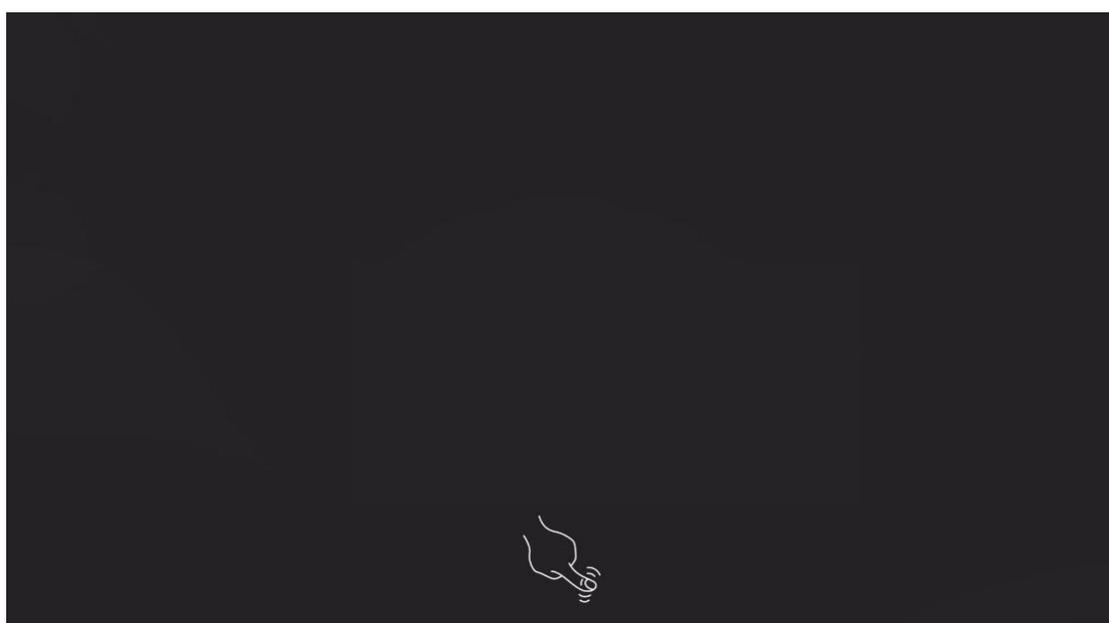
7.2. Configuration guide

7.2.1.Basic network connection

There are two ways to connect to the network: one is wireless WIFI and the other is wired network. If you connect to the wired network directly, you can skip this configuration network page to enter the activation page; if there is no network, you need to connect to the wireless network manually to proceed to the next step. The top right corner will show the connection status of the network. After connecting to the network, click Next to enter the activation page.
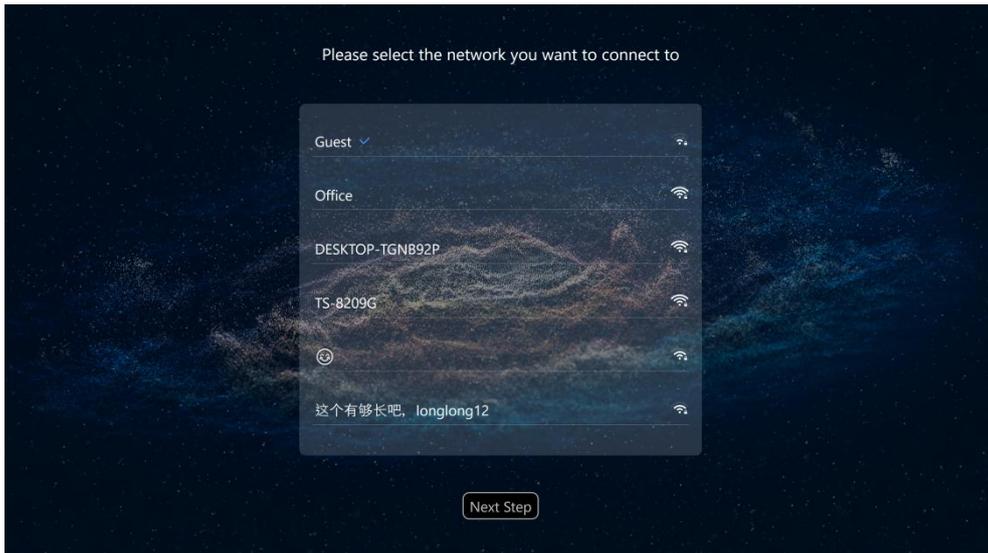
7.2.2.Device activation

1．Using a computer or mobile phone, type in the web address：https://ihub.itc-pa.cn.

2．Register an administrator account：New user, please click 【Register】, enter the mobile phone number and verification code. Click 【Next】 for complete information. Click【Next】 to fill in the name of the unit.

3．Log in to the Smart Meeting Management Platform and open the Device Management module of Meeting Room Management. Click "+" in the room area to add a new meeting room.
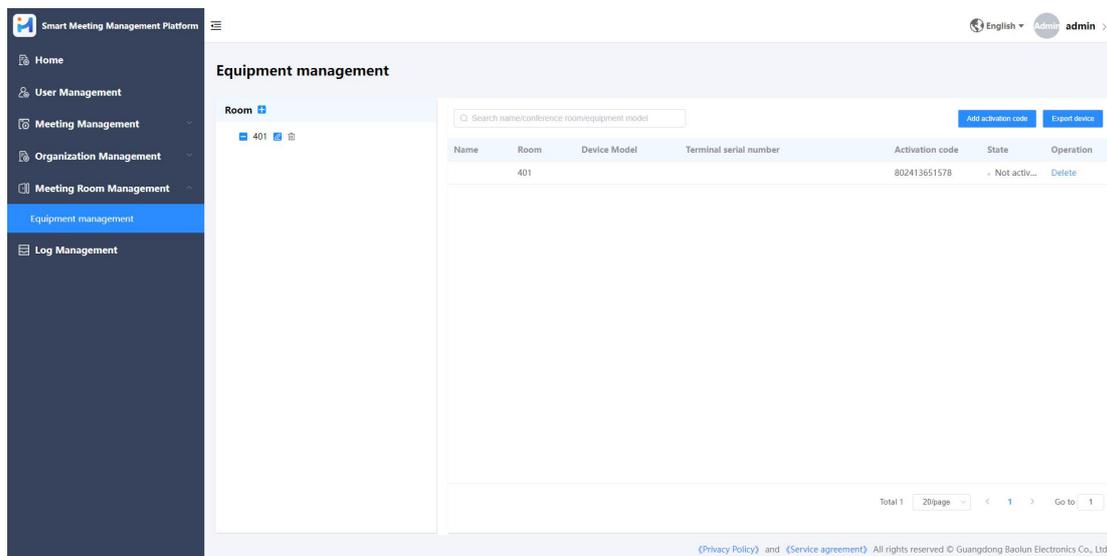
4．Click [Add Activation code], select the conference room just created, and generate the activation code after confirmation. Enter the activation code into the activation page of the Smart Meeting tablet to activate the device.
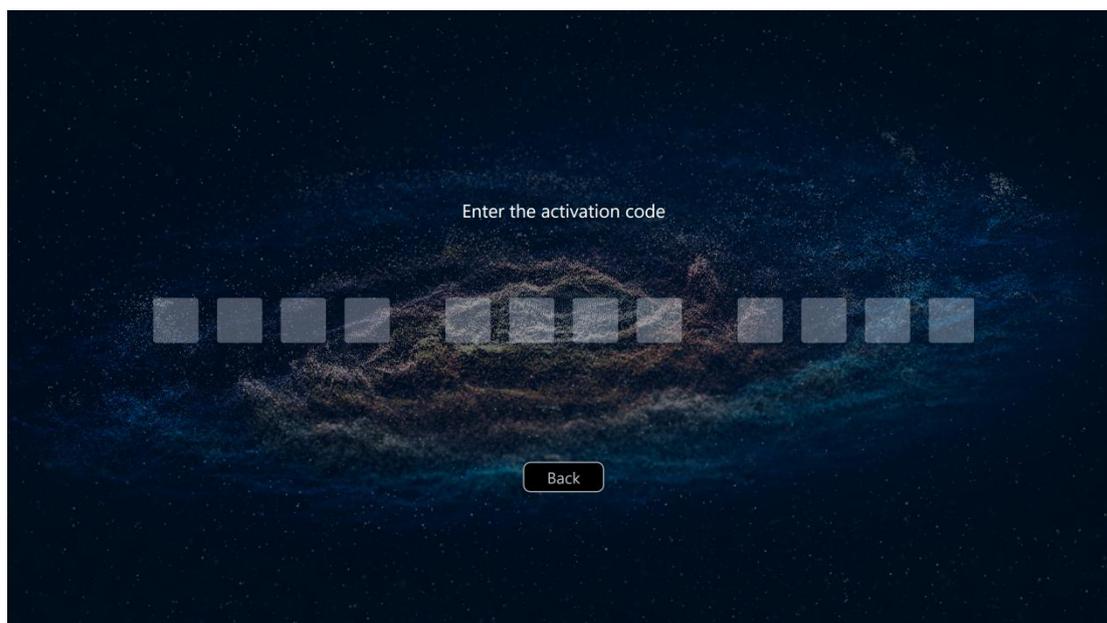
7.3. Notes

7.3.1.Indicator status description

No light: Not powered on

Green light always on: Last 1 second when first powered on

Green light breathing: Wait for 640 to start up

Green light always on: Shutdown completed status (non-quick start)

White light breathing: (1) Display the boot guide picture; (2) Shutdown completed state (quick start)

White light flash: Booting. Display startup image

White light always on: Running status

Blue light breathing: Screen Off status

Red light and white light flash: Shutting down. Display shutdown image

Red light breathing: Abnormal status

8.Home page

Configure the network to activate the device to enter the home page or after activation, it goes to the home page automatically after the interactive flat panel boots up.

8.1. Home page interface introduction (No meeting)

➤ The top right corner of the home page displays the somatosensory index and the connection status of the network.

➤There are three functions displayed in the centre of the home page [Quick Meeting], [Confidential Meeting], and [Screen Projection].

➤ Right above the three functions is the display of time, date, and weather.

➤ Directly below are two guide points, the highlighted white one is the page where it is located. Swipe right to enter the welcome page. If there is no scheduled meeting on the home page, it displays a message that there is no scheduled meeting; and if there is a scheduled meeting, it displays a list of meetings.

➤The left and right sides are centred on the floating menu bar, which cannot be moved.

➤The upper left corner shows the location of the meeting room where the interactive flat panel is located (this location is set through the background management).
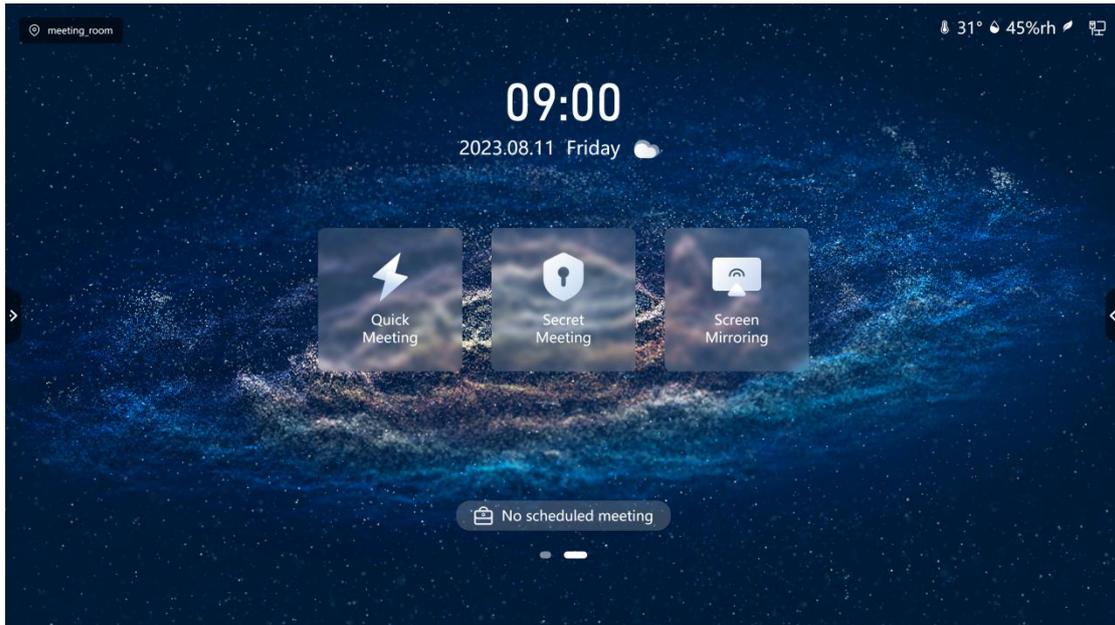
8.2. Home page interface introduction (with meeting)

The list of scheduled meetings only shows the meetings scheduled on the day, not the meetings scheduled on the previous day or the day after. If you have scheduled a meeting on the day in the backend, the home page displays the booking list page. The meeting list is arranged in ascending order of time, the meeting that has not started is displayed at the top, and the meeting that has ended is displayed at the back, and you can enter the meeting by clicking the meeting that is to be started.(Note: Quick Meeting and Confidential Meeting can also enter the meeting, and the scheduled meeting is two different meeting modes).
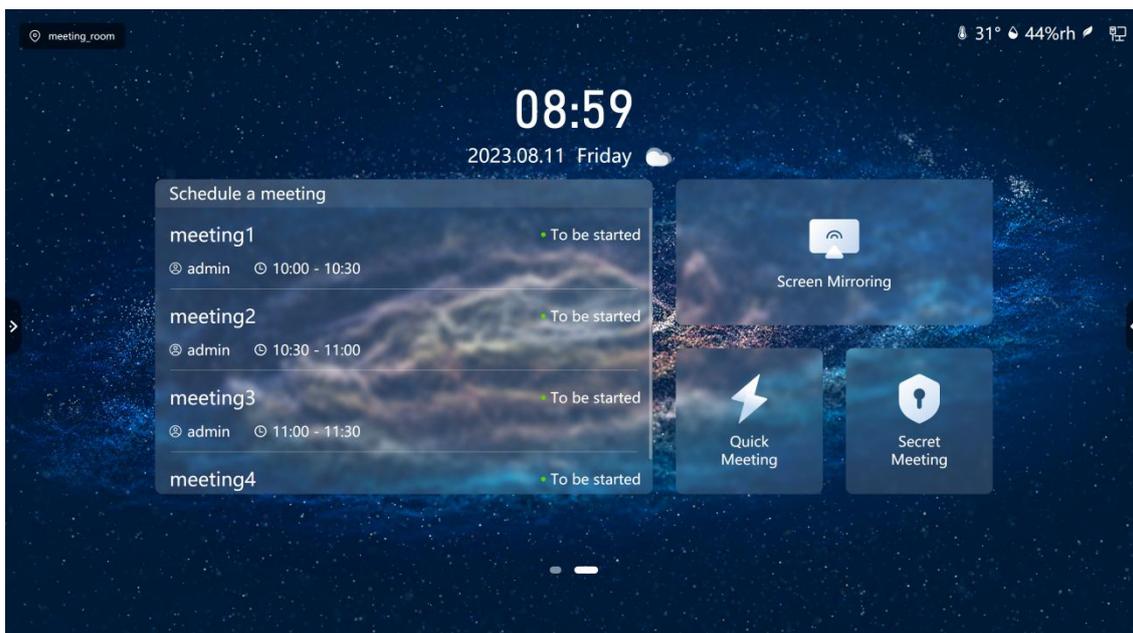
8.3. Floating menu bar on the homepage

The floating menu bar has [File], [Annotate], [Signal Source], [Keyboard] and guidance points for three functions. The signal source is the external switchable device signal; the guide points are the [Setting], [Shut off] and [Help] functions of the device.

8.4. More applications

Open the application of the second-level tool menu of the floating menu bar to download more functional applications. After downloading, the second-level tool menu can open functions such as calendar, signature wall, timer, voice assistant, taking photos, and screen recording.
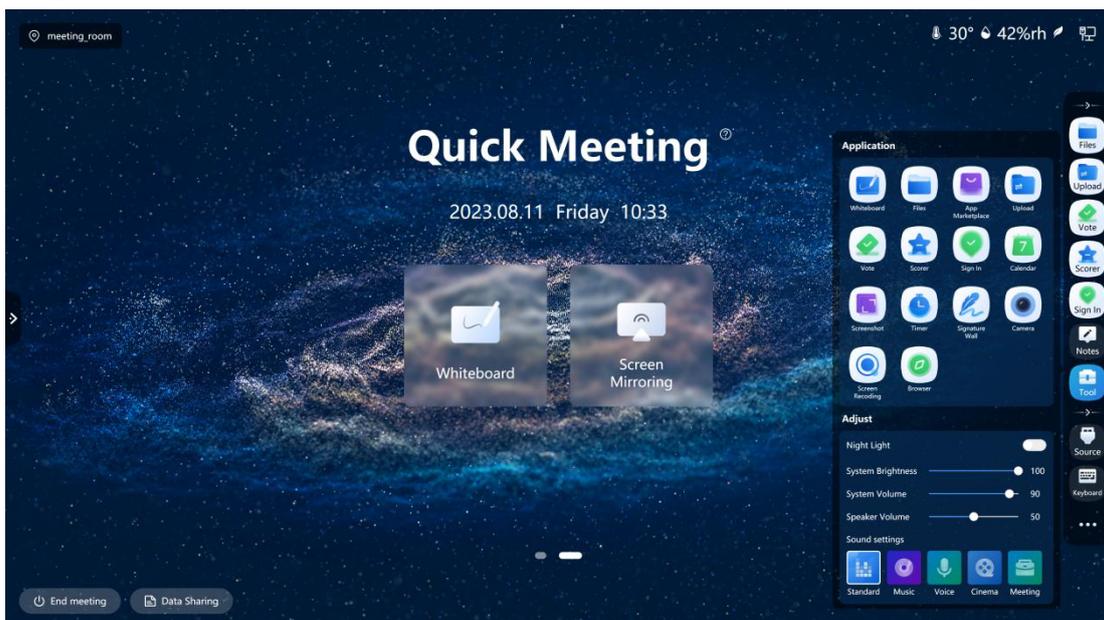
9.Settings

9.1.Network

9.1.1.Wired network

The wired network is an access network. When the network cable is connected to the network, it will show the logo of the connected network. If the network cable is not connected to the network, a red disconnected logo will appear.
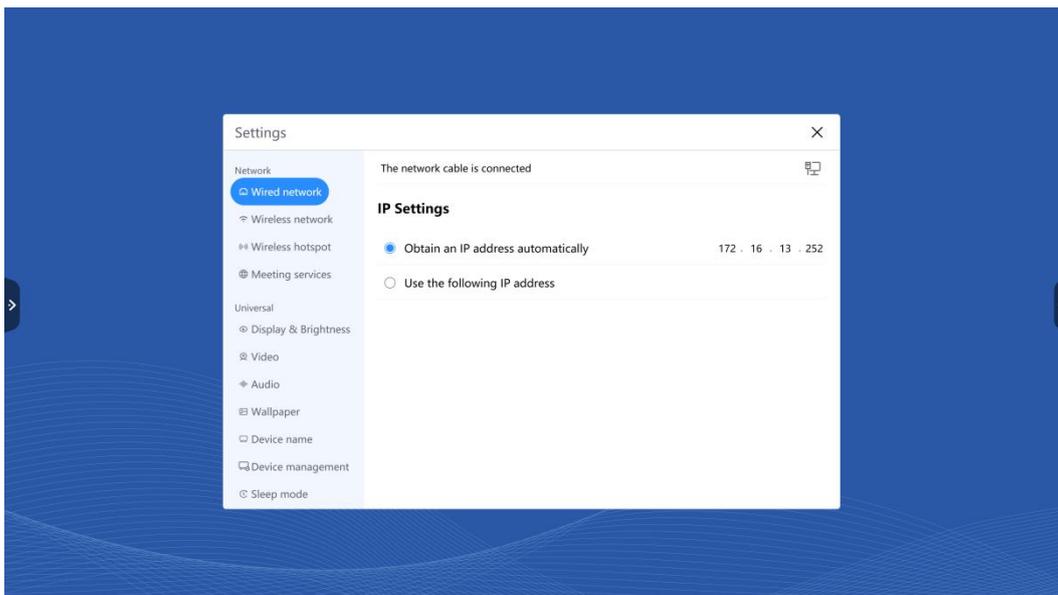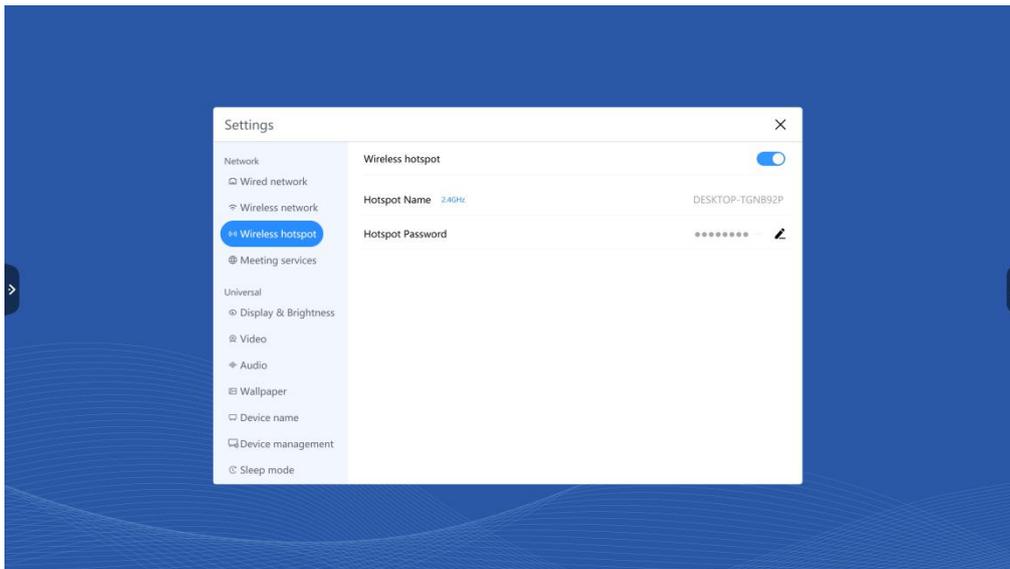

9.1.2.Wireless network

Wireless network is WiFi. As long as you turn on WiFi, it will automatically detect the signal, select and click on the network and enter the correct password to connect. If you access wired network and WiFi at the same time, the wired network will be recognized in priority.
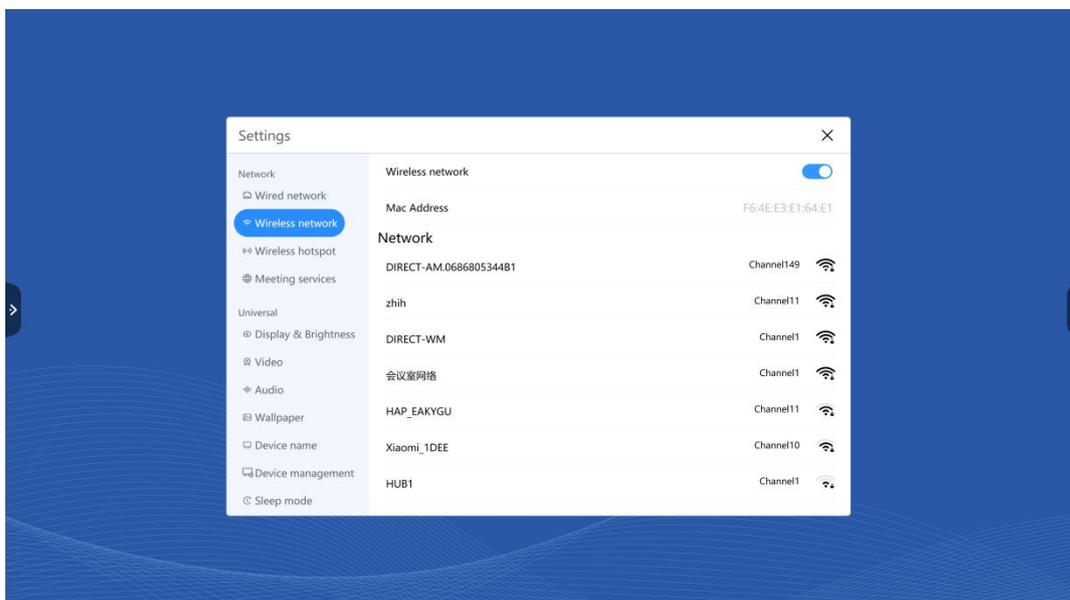
9.1.3.Wireless Hotspot

9.1.4.Conference services

The conference service status cannot be changed during a meeting, with its button gray and disabled. The button is set gray and disabled. This can be changed when you are on the home page after the meeting. Enable conference service, the conference data of interactive flat panel will be uploaded to the cloud service. Turn off the conference service, interactive flat panel enters standalone mode, and is currently in standalone mode, under standalone mode, you cannot connect to the server or make a meeting reservation. In stand-alone mode, there are only [Quick Meeting] [Confidential Meeting] and no [Scheduled Meeting], and the home page only shows [Quick Meeting] [Confidential Meeting] [Screen Projection], and does not show the list of reserved meetings. When meeting in standalone mode, files can only be saved in [Local] or [U-disk], no [Share] [Save to Meeting]. Functions such as [Sign-in] [Voting] [Rating] [File Transfer] are not available in stand-alone mode.
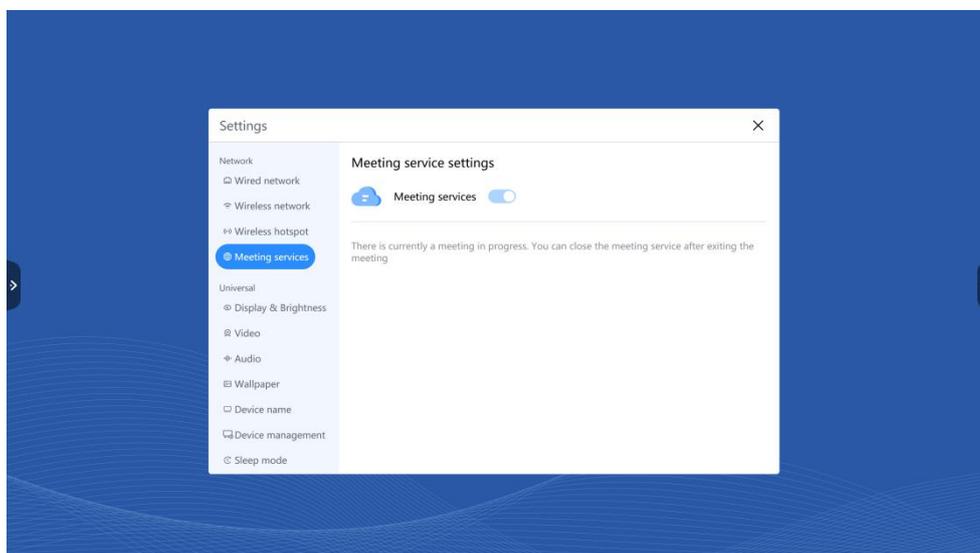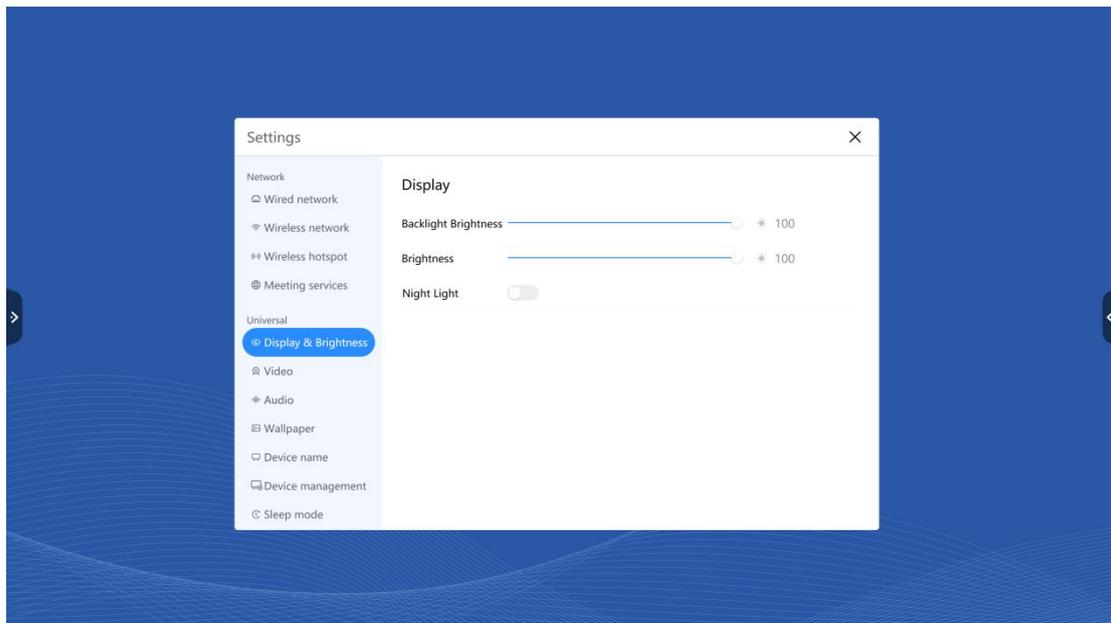
9.2. General

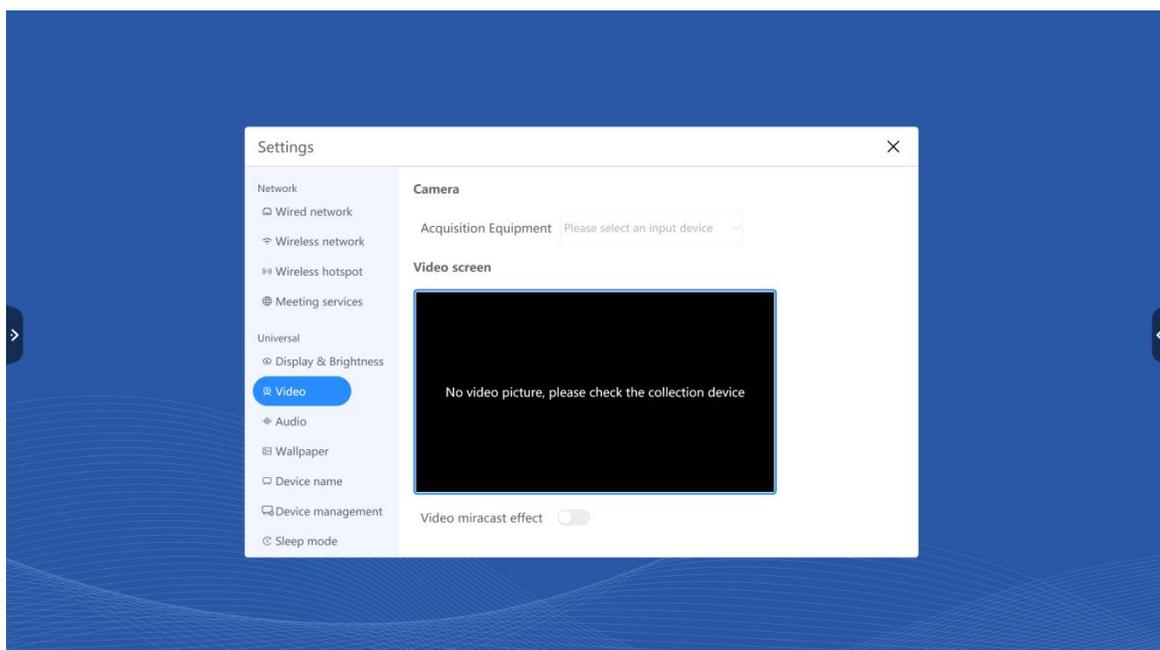The General section focuses on personalizing the system.

9.2.1.Display and Brightness

With brightness adjustment and an eye protection mode switch.


9.2.2.Video

It mainly detects whether the system's camera is normal or not; and if there is an external camera, it can be selected.

9.2.3.Audio

Mainly for audio source selection and control, speaker detection and volume control. Different sound effects are selected, there are standard sound mode, music mode, vocal mode, cinema mode, conference mode, each mode has different effects. Perform microphone detection. The settings are the same as the adjustment settings at Tools in the floating menu bar.

1. If the interactive flat panel is connected to lin in, you have to select it in the audio source to get the sound of lin in.

2. If the interactive flat panel is connected to mic in, you have to select the mic in device from the microphone to use it.
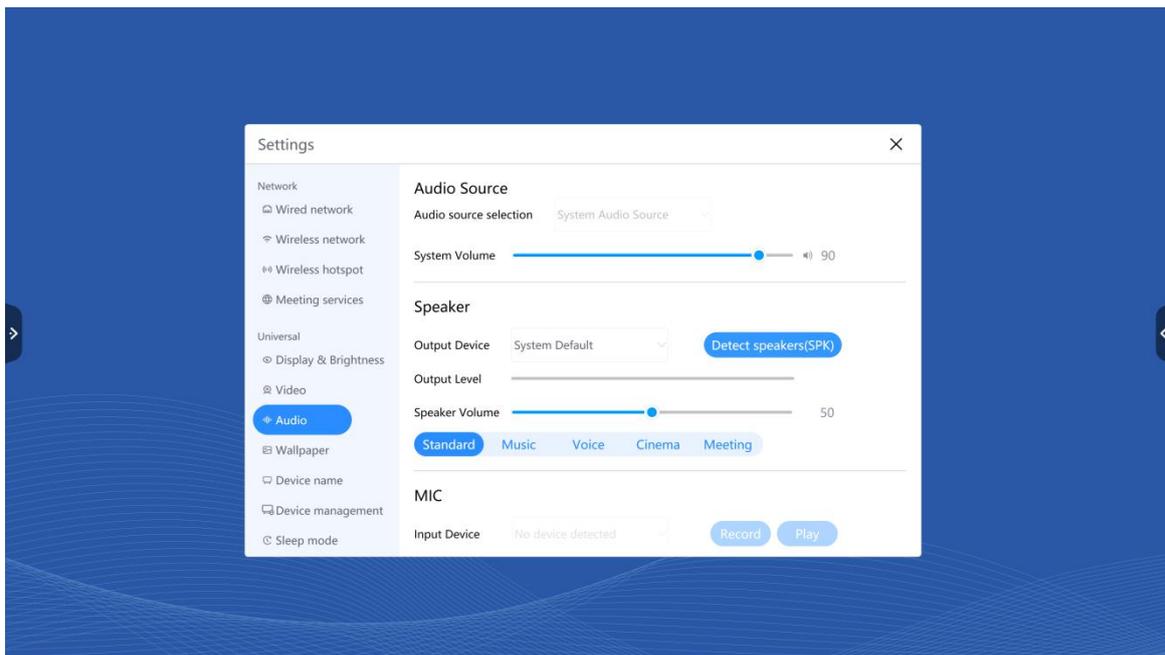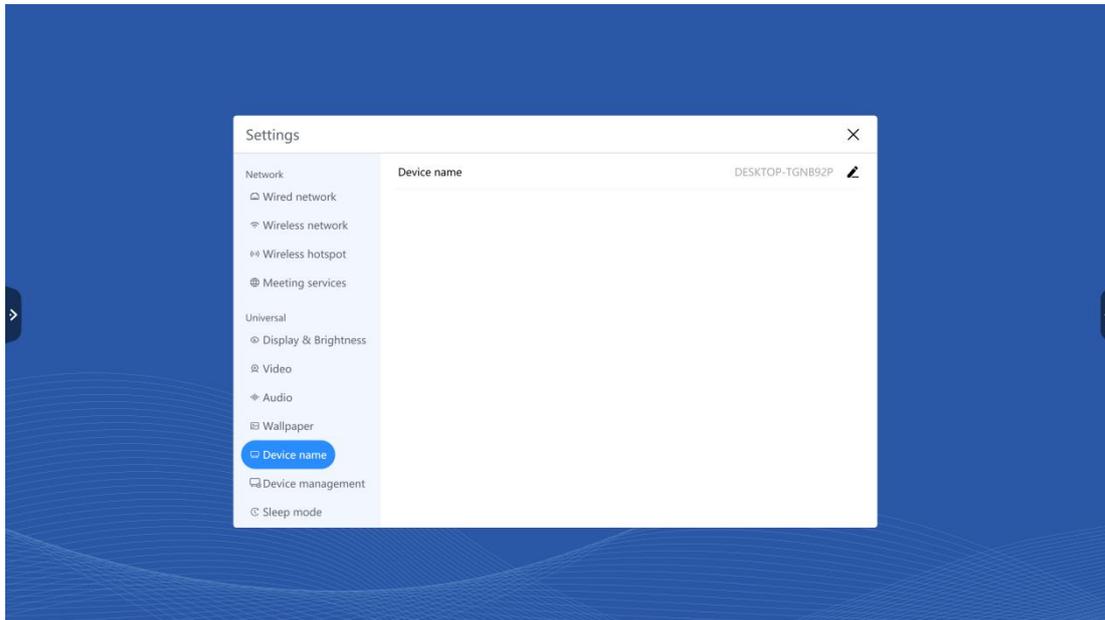

9.2.4.Wallpaper

The wallpaper can be displayed on the homepage after being set, and can be customized.
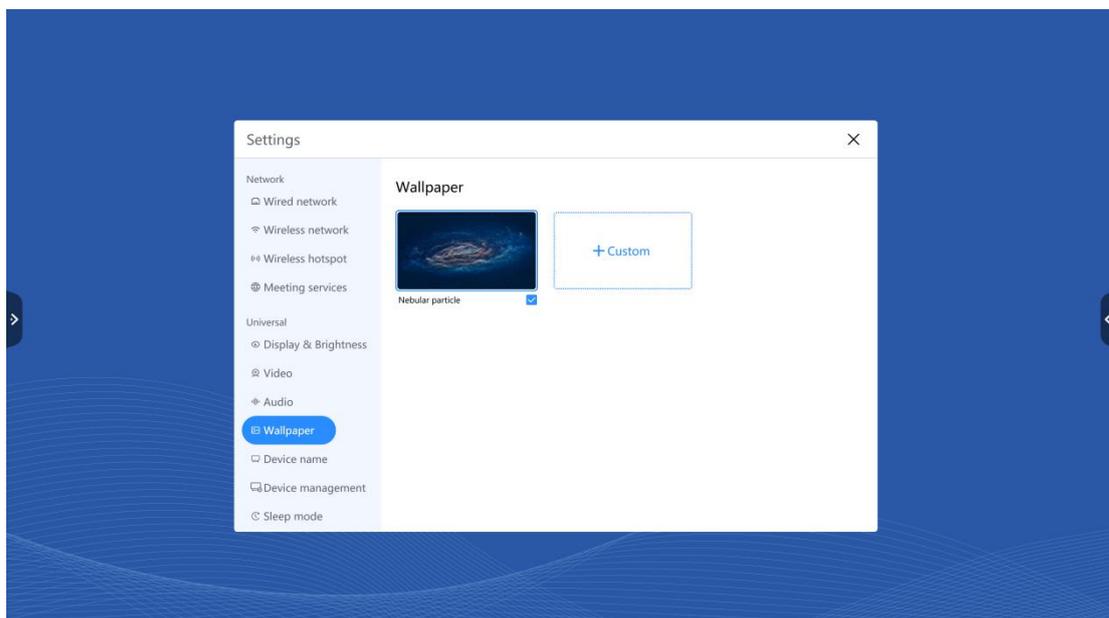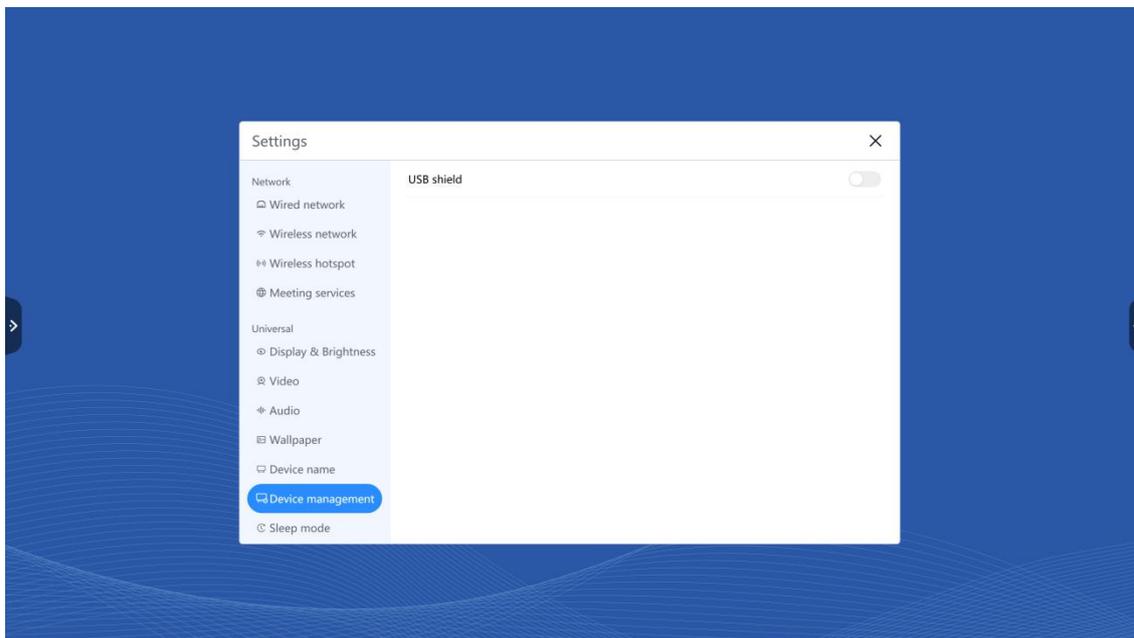
9.2.5.Device Name

The hotspot name will change as the display name of the current device changes.

9.2.6.Device Management

Inserting keyboard, mouse, U-disk and others is invalid after USB blocking is turned on.


9.2.7.Standby Mode

This module consists of two modules, Fast Boot and Hibernate.

When Fast Boot is on, the interactive flat panel shutdown will be "in fast state"; if the interactive flat panel is turned off, press the Interactive flat panel Button for fast boot.

When Hibernate is on, you can set the time, with the default of 1 minute, which means the interactive flat panel will rest automatically with no operation in 1 minute. The options contain 1 minute, 5 minutes, 10 minutes, 30 minutes, 60 minutes.
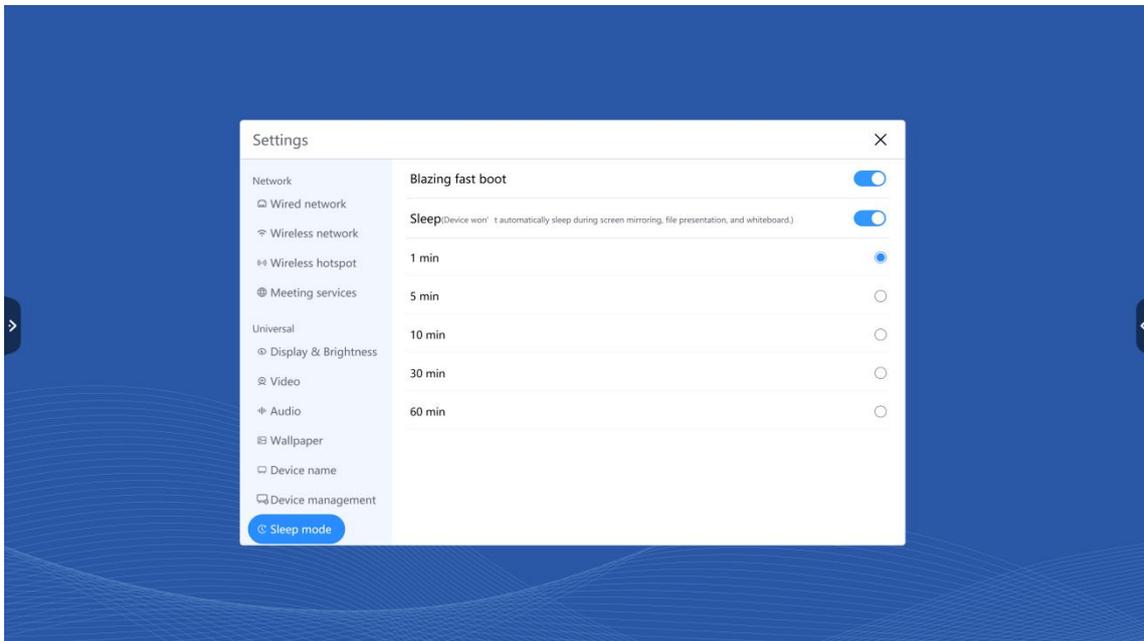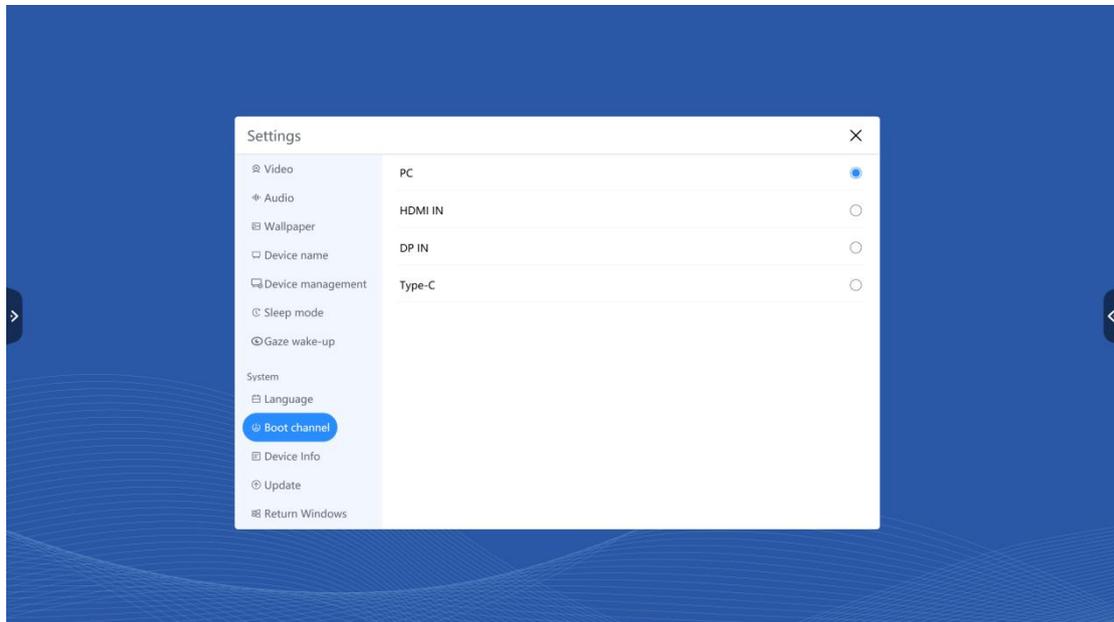

9.2.8.Gaze to awaken

When [Gaze to light the screen] is [On] in the general settings of interactive flat panel, and the interactive flat panel is in the state of [Rest Screen], the interactive flat panel lights up after the user's eyes gaze at the camera for 3s (for a custom time).
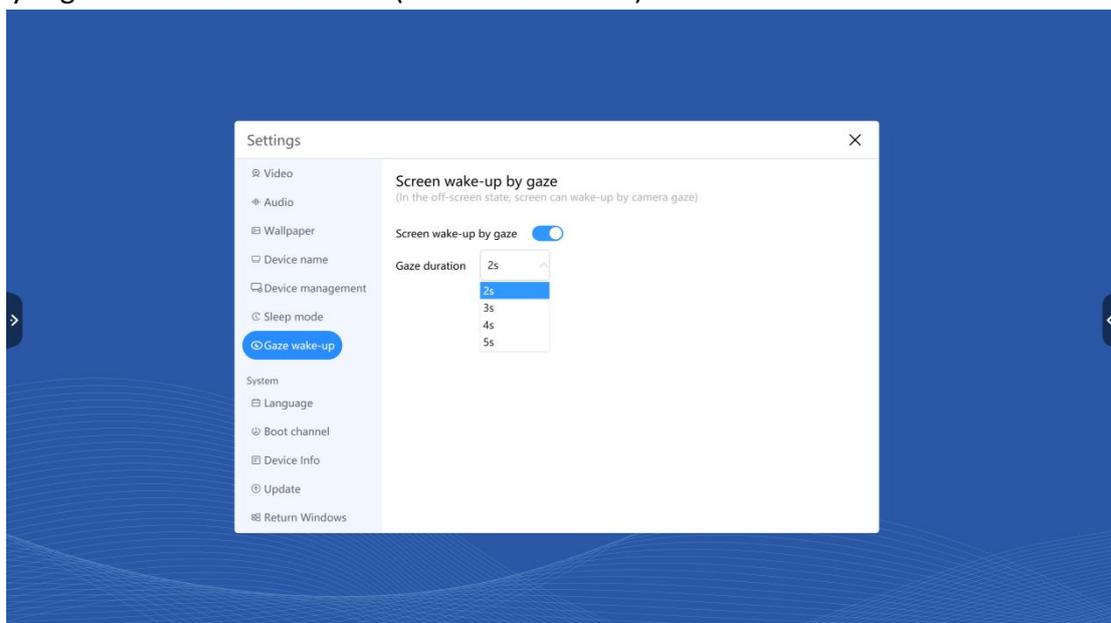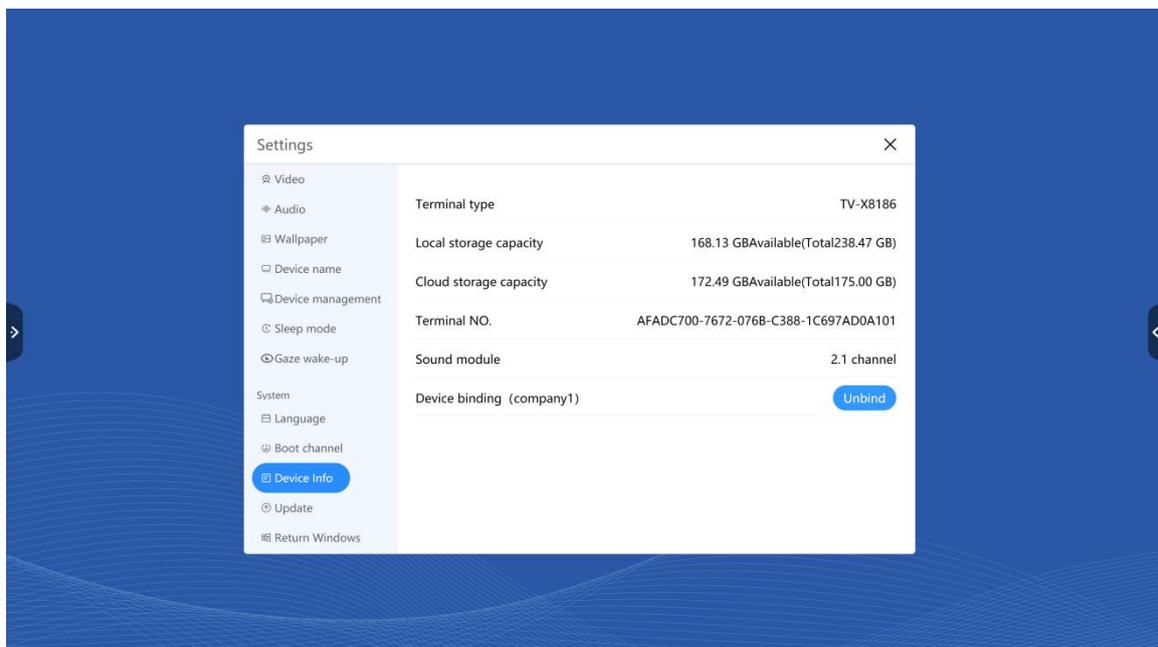
9.3.System

9.3.1.Boot Channel

The boot channel is PC by default. It can be set to HDMI IN, DP IN or Type-C.

9.3.2.Device Information

Unbinding operation can be performed by entering the password when you are not in the conference, and cannot be performed within the conference.
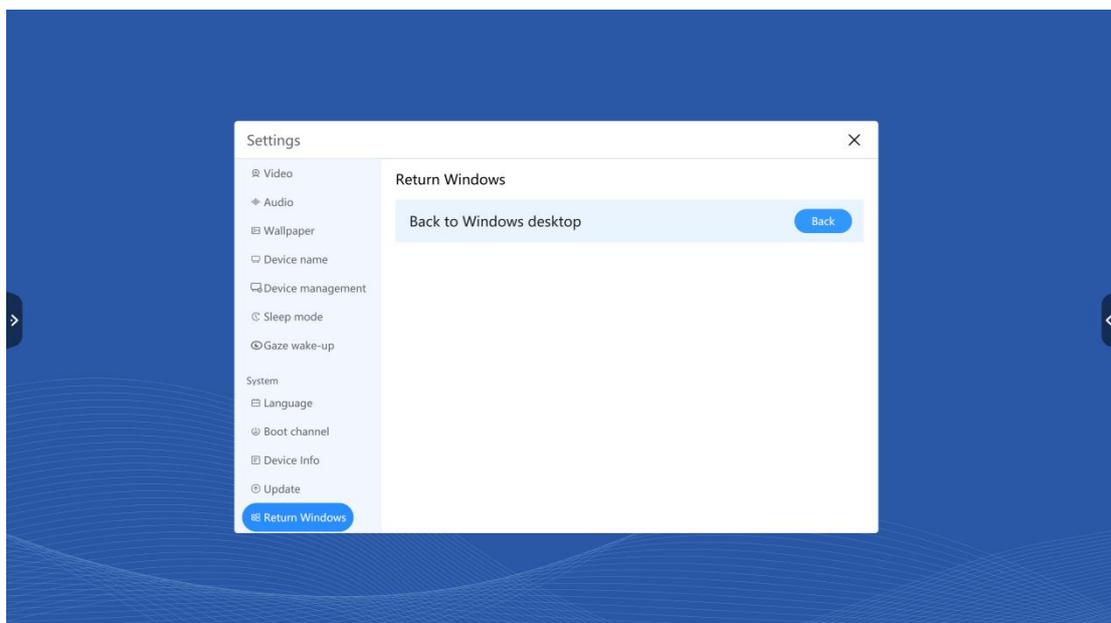
9.3.3.System Update

When there is a new version of the client, there is a red dot to remind the system update. Click to detect the new version will appear to update. If there is no new version, the current version is displayed as the latest version.
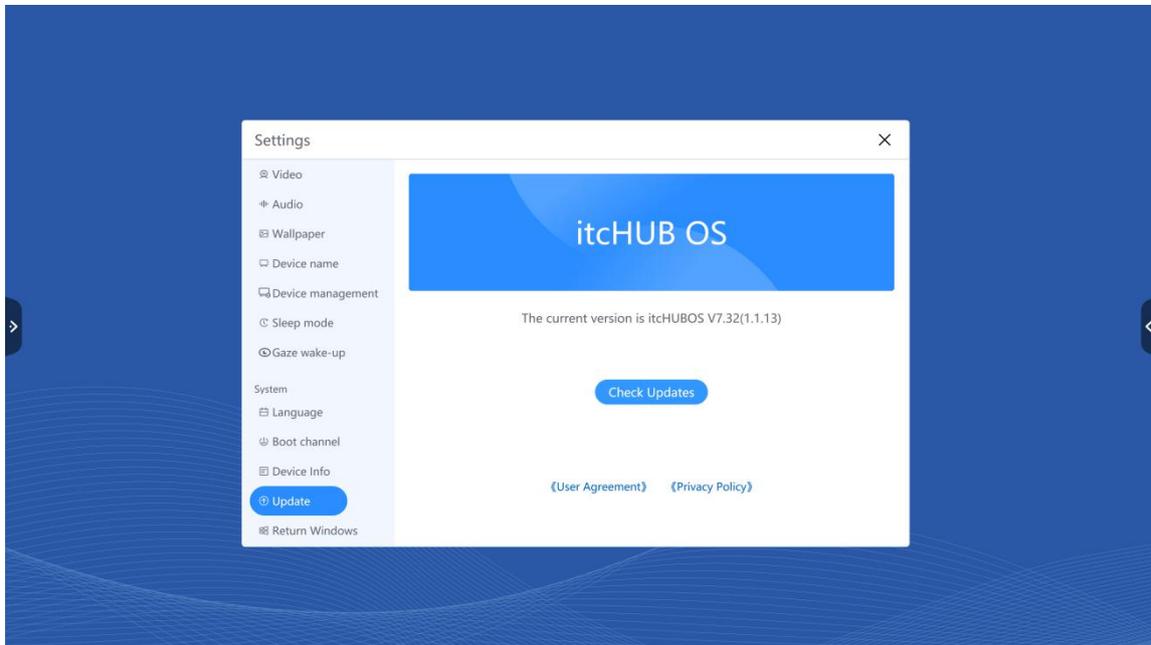
9.3.4.Back to Windows

Click Switch to return to the Windows desktop.

10.FAQ

1. Why does fog appear on the screen frequently?

In order to ensure the safety of the screen, a layer of tempered glass is added to the outside of the screen, and in order to ensure heat dissipation, there must be a certain gap between the two, which is used to reserve air passages for air convection. The main reason for the fog is that there is a temperature difference between the screen temperature and the outside temperature, and the hot air condenses on the lower temperature glass surface to generate water mist. The water mist does not affect normal use. Generally, the mist will slowly evaporate and disappear after several hours of use.

2. Why is the multi-touch function unavailable on some devices?

First of all, the XP system does not support multi-touch. If it is a WIN7 system, no matter the external computer or the built-in computer needs to install the system of Home Premium or above to support multi-touch.

3.The equipped touch pen is limited, what object can replace the touch pen for flexible writing without scratching the screen?

Fingers can be temporarily used instead of writing, and if necessary, they can also be purchased through sales or by calling our national service hotline.

4.Is it normal for the screen to feel overheated after using it for a period of time? Any bad influence?

It is normal for the screen to heat up, just like the TV at home, and there will be no adverse effects. At present, the heat dissipation design of our whole machine is leading in the industry, is the industry standard setter, and complies with international health standards.

5.Will long-term use damage the eyes?

The human eye recognizes flicker at 50Hz, and the human eye can detect it below 50Hz. The eye muscles are constantly adjusting to adapt to the flicker and cause eye fatigue. We use 6OHz and 120Hz LCD screens, so human eyes can't actually feel the flicker of our screen, which can greatly reduce eye fatigue compared with other similar products.

11.Troubleshooting

Abnormal start-up

1. Automatic shutdown

① Check whether the timer shutdown or sleep function is turned on;

② Check the channel where the input source is located, if there is no signal, it will cause automatic shutdown;

③ Check the stability of the power supply.

2. The indicator light is off

① Check whether the power supply is normal;

② Check whether the rocker switch of the conference panel is turned on.

3. The indicator light is red and cannot be turned on

① Please unplug all external connecting wires, and restart the machine after 15 minutes of power failure.

Abnormal computer function

1. The image lacks color and the color is abnormal

① If you use an external computer, check whether the wire is not connected properly or there is a quality problem.

2. The display screen is not full of screen or out of range

① If you use an external computer, adjust the AUTO switch in the lower right corner when plugging and unplugging the connecting wire.

Abnormal sound function

1. The device display is normal but there is no sound

① Please try to adjust the volume;

② If the conference panel is connected to an external computer, check whether the audio cable is connected correctly.

Abnormal touch function

1. Inaccurate touch positioning

① Check whether the touch pen or finger touches the screen vertically at 90 degrees;

② Check whether there are other items touching the screen, such as small notes and sleeves.

2. The touch function is invalid

① If the conference panel uses an external computer, check whether the external touch line is connected correctly.

12.Maintenance

Correct maintenance and maintenance can avoid some simple failures;

Regular and careful cleaning can keep the machine in good appearance and operating condition;

Please unplug the power plug before cleaning and maintenance to prevent electric shock.

Screen clean

1. Please mix a little fabric softener or detergent with warm water and stir evenly;

2. Please use a soft cloth to completely soak in this mixture;

3. Please wring out the soft cloth and wipe the screen of the whole machine;

4. Wipe repeatedly (be careful not to let water drop into the device when wiping the device) to complete the cleaning steps.

Frame clean

Please wipe with a dry, soft, lint-free fabric or towel.

Placing or not using the device for a long time

When placing or not using the device for a long time, please be sure to unplug the plug and cut off the power supply to prevent damage to the device due to external power fluctuations such as lightning.

Intelligent Conference Flat Panel

itC

Ver 0.1