



Smart Interactive Whiteboard

User Manual



Foreword

General

This manual introduces the functions and operations of the smart interactive whiteboard (hereinafter referred to as "the whiteboard"). Read carefully before using the whiteboard, and keep the manual safe for future reference.

Safety Instructions

The following signal words might appear in the manual.

Signal Words	Meaning
 WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
 CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable result.
 NOTE	Provides additional information as a supplement to the text.

Revision History

Version	Revision Content	Release Time
V1.0.1	Feature updates: Screen sharing System settings	May 2025
V1.0.0	First release.	August 2024

Privacy Protection Notice

As the device user or data controller, you might collect the personal data of others such as their face, audio, fingerprints, and license plate number. You need to be in compliance with your local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures which include but are not limited: Providing clear and visible identification to inform people of the existence of the surveillance area and provide required contact information.

About the Manual

- The manual is for reference only. Slight differences might be found between the manual and the product.
- We are not liable for losses incurred due to operating the product in ways that are not in compliance with the manual.

- The manual will be updated according to the latest laws and regulations of related jurisdictions. For detailed information, see the paper user's manual, use our CD-ROM, scan the QR code or visit our official website. The manual is for reference only. Slight differences might be found between the electronic version and the paper version.
- All designs and software are subject to change without prior written notice. Product updates might result in some differences appearing between the actual product and the manual. Please contact customer service for the latest program and supplementary documentation.
- There might be errors in the print or deviations in the description of the functions, operations and technical data. If there is any doubt or dispute, we reserve the right of final explanation.
- Upgrade the reader software or try other mainstream reader software if the manual (in PDF format) cannot be opened.
- All trademarks, registered trademarks and company names in the manual are properties of their respective owners.
- Please visit our website, contact the supplier or customer service if any problems occur while using the device.
- If there is any uncertainty or controversy, we reserve the right of final explanation.

Important Safeguards and Warnings

This section introduces content covering the proper handling of the whiteboard, hazard prevention, and prevention of property damage. Read carefully before using the whiteboard, and comply with the guidelines when using it.

Storage Requirements



- Stably put the whiteboard onto a support platform that is strong enough to prevent the whiteboard from falling.
- Do not place the whiteboard in a place exposed to sunlight or near heat sources.
- Store the whiteboard under allowed humidity (10%–90% (RH)) and temperature (–20 °C to +60 °C, or –4 °F to +140 °F) conditions.

Installation Requirements



- Use the wall mount bracket with yellow labels on it. Installation and maintenance must be performed by qualified professionals.
- Do not install the whiteboard in a place exposed to sunlight or near heat sources.
- Keep the whiteboard away from dampness, dust, and soot.
- Install the whiteboard on a stable surface to prevent it from falling.
- Install the whiteboard in a well-ventilated place, and do not block its ventilation.
- The power supply must conform to the requirements of ES1 in IEC 62368-1 standard and be no higher than PS2. Please note that the power supply requirements are subject to the device label.
- The whiteboard is a class I electrical appliance. Make sure that the power supply of the whiteboard is connected to a power socket with protective earthing.
- The appliance coupler is a disconnection device. Keep it at a convenient angle when using it.

Operation Requirements



WARNING

- High voltage inside the whiteboard. Do not disassemble the whiteboard without a qualified professional present to avoid the risk of being exposed to danger.
- Improper use of the battery might result in a fire or explosion.
- Replace unwanted batteries with new batteries of the same type and model.
- Use the standard power adapter. We will assume no responsibility for any problems caused by the use of a nonstandard power adapter.
- Use the power cords that are recommended for the region and conform to the rated power specifications.
- Make sure all cables are connected correctly before plugging the whiteboard into the power. Do not overload the power socket or pull the power code. Otherwise, it might cause fire or electric shock.



- Do not drop or splash liquid onto the whiteboard, and make sure that there is no object filled with liquid on the whiteboard to prevent liquid from flowing into it.
- Operate the whiteboard within the rated range of power input and output.
- Do not disassemble the whiteboard without professional instruction.
- Use the whiteboard under allowed humidity (10%–90% (RH)) and temperature (0 °C to 40 °C, or 32 °F to 104 °F) conditions.
- The whiteboard is a class I electrical appliance. Make sure that the power supply of the whiteboard is connected to a power socket with protective earthing.
- The appliance coupler is a disconnection device. Keep it at a convenient angle when using it.

Maintenance Requirements



- Power off the whiteboard before maintenance. Do not use the liquid cleaner or spray cleaner when cleaning the whiteboard.
- Use the clean and soft cloth or use the special lens wiping cloth when cleaning the surface of display screen. Do not use the wet cloth to clean the display screen. Otherwise, it may do harm to the screen.

Table of Contents

Foreword.....	I
Important Safeguards and Warnings.....	III
1 Overview.....	1
1.1 Introduction.....	1
1.2 Packing List.....	1
1.3 Appearance.....	2
2 Initial Settings.....	5
2.1 Turning on the Whiteboard.....	5
2.2 Turning off Screen.....	5
2.3 Initializing the Whiteboard.....	5
2.4 Home Screen.....	8
3 Basic Operations.....	10
3.1 Quick Operations.....	10
3.1.1 Bringing up the Navigation Bar.....	10
3.1.2 Bringing up the Assistive Touch.....	11
3.1.3 Quick Tools.....	12
3.2 Electronic Whiteboard.....	18
3.3 File Management.....	21
3.4 Screen Sharing.....	23
3.4.1 Sharing Screen through Client.....	27
3.4.2 Sharing Screen through Software Protocol.....	27
3.4.3 Sharing Screen through Wireless Presentation Dongle.....	28
3.5 Person Management.....	29
3.6 Person Sign-in.....	30
3.7 Non-contact Control.....	31
3.8 Welcome Page.....	32
3.9 Self Check.....	33
3.10 Help Center.....	33
3.11 System Settings.....	34
3.11.1 Configuring Network and Bluetooth Connection.....	34
3.11.2 Configuring General Settings.....	36
3.11.3 Configuring Advanced Parameters.....	38
3.11.4 Configuring System Parameters.....	41
4 Shutdown.....	45
5 System Update.....	46
5.1 Online Update.....	46
5.2 Update through USB.....	46

6 FAQ.....	47
Appendix 1 Touch Operation.....	48
Appendix 2 Security Commitment and Recommendation.....	49

1 Overview

1.1 Introduction

The smart interactive whiteboard is an integrated multimedia device, which integrates large HD screen, computer, electronic whiteboard, audio amplifier, application, and central control system.

The whiteboard supports the following functions and features:

- 4K HD LCD display.
- Switch between Android and Windows systems (for Windows, you need to install a computer module).
- One-tap projection of devices such as mobile phones and tablets.
- Electronic whiteboard.
- Various software such as WPS and audio and video players.
- Supports video conference.

1.2 Packing List

Check whether there is any obvious damage on the packing box. Unpack the box and check whether the components are complete according to the packing list.

Table 1-1 Packing list

Name	Quantity	Name	Quantity
Smart interactive whiteboard	1	Power cord	1
Stylus pen	2	Quick Start Guide	1
Wall mount bracket	1	Remote control	1
Legal and Regulatory Information	1	Wall-mount screw pack	1

1.3 Appearance

Figure 1-1 Appearance

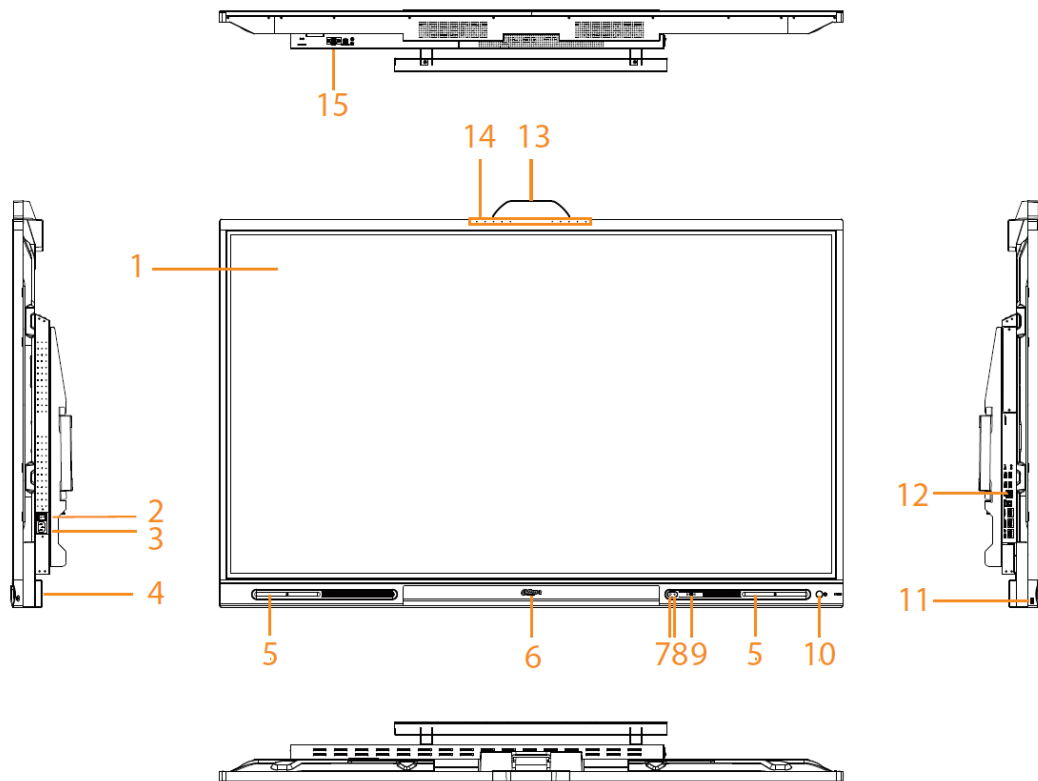


Table 1-2 Appearance description

No.	Description
1	LCD.
2	Power switch. Turn on or turn off the power supply of the whiteboard.
3	Power input port. Inputs 100–240 VAC power.  After connecting to power supply, press the power switch to turn on the whiteboard.
4	Power button. Turn on or turn off the screen.
5	Magnetic stylus pen attach area.
6	Indicator light. The light is red when the whiteboard is on standby and blue when the whiteboard is in normal use.
7	IR sensor. Receives signals from the remote control.
8	Light sensor. The whiteboard recognizes the ambient brightness through the light sensor and automatically adjusts the backlight brightness according to the ambient brightness.
9	NFC module. You can touch this area with a mobile phone that supports NFC to unlock the screen in Android system.

No.	Description
10	Fingerprint reader. After adding your fingerprint, you can unlock the whiteboard through fingerprint recognition.
11	USB 3.0 port.
12	Ports on the side panel.
13	Built-in flip HD camera.
14	Microphones. Pick up live audio.
15	Ports on the bottom panel.

Figure 1-2 Ports on the side panel

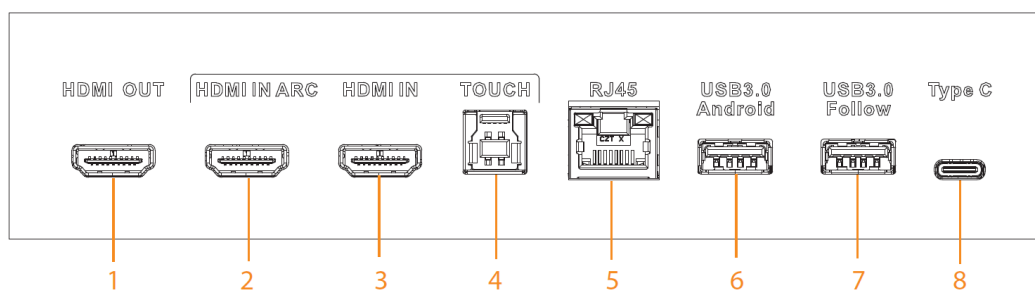


Table 1-3 Description of ports on the side panel

No.	Name	Description
1	HDMI OUT	HD audio and video signal output port. Transmits uncompressed HD video and multi-channel audio data.
2	HDMI IN ARC	HD audio and video signal input port. Connects to the computer, set-top box, and other video devices with HDMI output ports.
3	HDMI IN	 HDMI IN ARC also supports bidirectional audio communication over a single HDMI cable.
4	TOUCH	Transmits touch signals. After you connect your computer with the whiteboard through HDMI port, connect the TOUCH port to the USB port of the computer, and then you can control the computer through touch operations on the whiteboard.
5	RJ-45	1000 Mbps network port. Connects to network cable to access network.
6	USB 3.0 Android	Connects to USB devices such as mobile hard disk, USB flash drive, USB keyboard, and USB mouse.
7	USB 3.0 Follow	- USB 3.0 Android: The USB devices are accessible only in Android system. - USB 3.0 Follow: The USB devices can follow and connect to Android and OPS signal sources.

No.	Name	Description
8	Type C	Connect a laptop, Type C USB flash drive, or other devices to the whiteboard through the Type C port for screen sharing or other operations.

Figure 1-3 Ports on the bottom panel

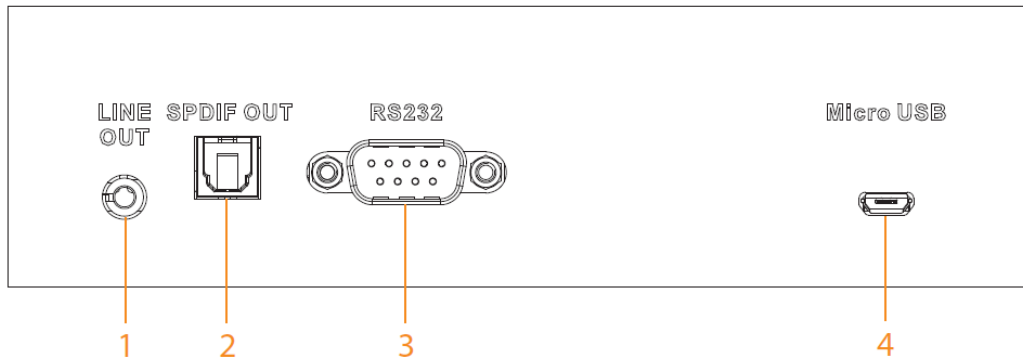


Table 1-4 Description of ports on the bottom panel

No.	Name	Description
1	LINE OUT	An audio output port that connects to the earphone or speaker.
2	SPDIF OUT	Used to transmit digital audio signals to external devices such as audio receivers, amplifiers, and digital audio converters.
3	RS-232	Transmits data between devices. You can connect to central control devices with RS-232 port.
4	Micro USB	Used to debug Android system.

2 Initial Settings

2.1 Turning on the Whiteboard

Prerequisites

- Before starting the whiteboard, check whether the input voltage is correct against the power supply requirements.
- To ensure the stable work of the whiteboard and the external devices connected to the whiteboard and to prolong the service life, we recommend you refer to the national related standard to use the power source that provides stable voltage with less interference from ripples.

Procedure

- Step 1 Connect the power cord.
- Step 2 Press the "I" end of the rocker switch next to the power cord.
- Step 3 Press the power button on the right panel to turn on the screen.
- After startup, the system displays the home screen by default.

2.2 Turning off Screen

When the screen is on, press the power button once to turn off the screen.

To wake up the whiteboard, you can:

After the screen has been off for 3 seconds, you can wake up the whiteboard in either of the following ways:

- Press the power button again.
- Touch the screen.



- In the Windows system, if you have set a screen lock password, you need to enter the right password to wake up the whiteboard.
- If you turn on the **Turn Off Screen with Five Fingers** function, you need to press with five fingers for more than 1 second to wake up the screen.

2.3 Initializing the Whiteboard

For first-time use or after restoring the system to factory settings, you need to initialize the whiteboard. After that, you can configure and operate your device.

Procedure

- Step 1 Power on the whiteboard.
- Step 2 Select the language, and then click **Next**.

Figure 2-1 Select the language

Please select a language to start initialization

- ☒ English
English
- ☐ العربية
Arabic
- ☐ Français
French
- ☐ Italiano
Italian
- ☐ 日本語
Japanese
- ☐ Polski
Polish
- ☐ Español Europeo
European Spanish
- ☐ 繁體中文
Traditional Chinese
- ☐ Čeština
Czech

Next

Step 3 Select the time zone, and then click **Next**.

Figure 2-2 Select the time zone

Please select your time zone

- ☒ GMT+00:00,Coordinated Universal Time
- ☐ GMT+01:00,Casablanca
- ☐ GMT+01:00,London
- ☐ GMT+02:00,Amsterdam
- ☐ GMT+02:00,Belgrade
- ☐ GMT+02:00,Brussels
- ☐ GMT+02:00,Madrid
- ☐ GMT+02:00,Sarajevo
- ☐ GMT+02:00,Windhoek

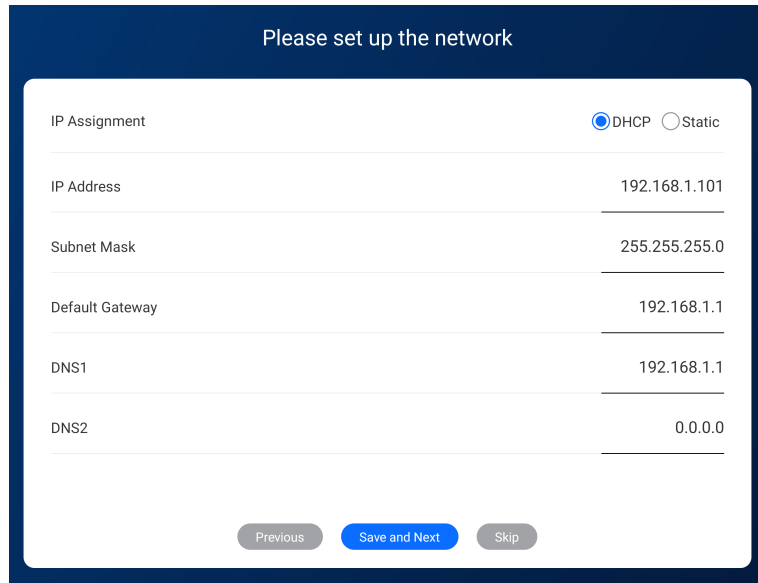
Previous Next

Step 4 Read the privacy policy, select **I have read and agree to all the terms**, and then click **Next**.

Step 5 Read the software license agreement, and then click **Next**.

Step 6 Set up the network, and then click **Save and Next**.

Figure 2-3 Set up the network



Please set up the network

IP Assignment ☒ DHCP ☐ Static

IP Address 192.168.1.101

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS1 192.168.1.1

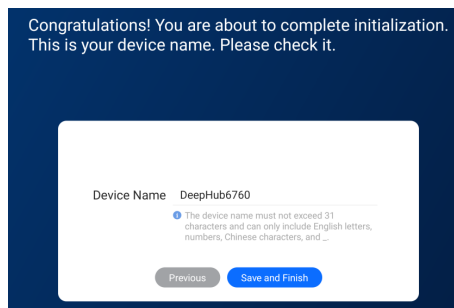
DNS2 0.0.0.0

Previous Save and Next Skip

- DHCP: When there is a DHCP server on the network, after selecting the DHCP option, the Device automatically obtains IP address from the DHCP server.
- Static: After selecting **Static**, configure **IP Address**, **Subnet Mask**, **Default Gateway**, and then enter the IP address according to your network plan.

Step 7 Set the device name, and then click **Save and Finish**.

Figure 2-4 Set the name



Congratulations! You are about to complete initialization.
This is your device name. Please check it.

Device Name DeepHub6760

The device name must not exceed 31 characters and can only include English letters, numbers, Chinese characters, and _.

Previous Save and Finish

2.4 Home Screen

Figure 2-5 Home screen

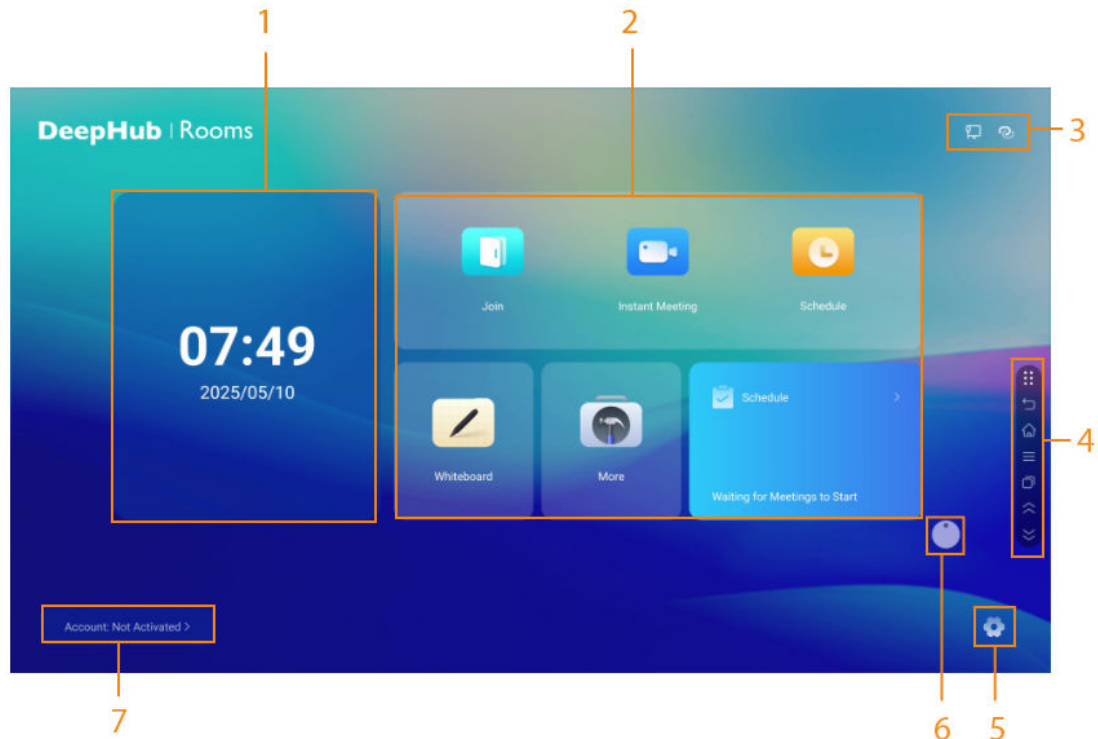


Table 2-1 Description of home screen

No.	Description
1	Displays date and time of the current day.
2	Function area. Tap a function icon to go to the corresponding operation screen. - Join: Join the meeting. - Instant Meeting: Start a meeting. - Schedule: Make a meeting appointment. - Whiteboard: Enters the electronic whiteboard feature. - More: View more features.  Schedule: Displays the current meeting schedule.  - For a third-party app, you can tap and hold the app to uninstall it. The apps that come with the system cannot be uninstalled in such way. - You can select More > App Adviser to download recommended applications as needed.
3	Displays different status information. Tap each icon to view details.
4	Tap to bring up the navigation bar. For details, see "3.1.1 Bringing up the Navigation Bar".

No.	Description
5	Tap to configure DeepHub meeting.
6	Assistive touch. Tap the icon to quickly use functions such as electronic whiteboard, annotation, and file management. For details, see "3.1.2 Bringing up the Assistive Touch".
7	Displays the meeting account information.

3 Basic Operations

The whiteboard can act as a computer or electronic whiteboard. This chapter introduces the basic operations of those functions. We recommend using the stylus pen to interact with the screen. For details on touch control, see "Appendix 1 Touch Operation".

3.1 Quick Operations

You can use the navigation bar or assistive touch to quickly use basic functions.

3.1.1 Bringing up the Navigation Bar

Tap  on the left or right side of the home screen to bring up the navigation bar.

Figure 3-1 Navigation bar

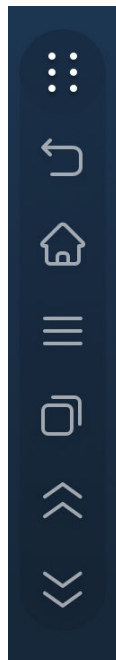


Table 3-1 Description of navigation bar

Icon	Description
	Display or hide the navigation bar.
	Go back to the previous screen.
	Go back to the home screen.
	Tap the icon to display quick tools such as annotation, screen sharing, and camera. For details, see "3.1.3 Quick Tools".

Icon	Description
	Displays the apps that are running in the background. You can close the background apps one by one or in batches.
	Adjust the position of screen image up or down.

3.1.2 Bringing up the Assistive Touch

Tap  on the home screen to bring up the compass menu. For details, see "3.11.2 Configuring General Settings".

Figure 3-2 Assistive touch

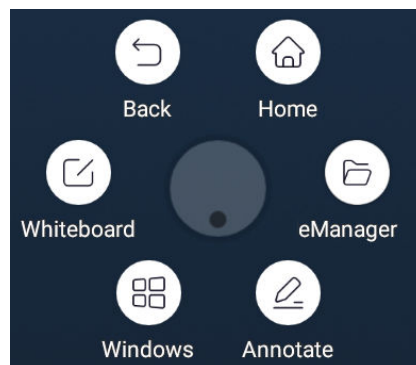


Table 3-2 Description of assistive touch

Icon	Description
	Go back to the home screen.
	Go back to the previous screen.
	Go to the electronic whiteboard screen. For details, see "3.2 Electronic Whiteboard".
	After you insert the computer module, tap the icon to switch to the Windows system.

Icon	Description
	Turn on the annotation mode which supports multi-page annotations.. • Tap  to select the type of pen and the size of the brush. • Tap  to clear content. ◇ Tap Erase to clear unwanted content. ◇ Tap Circle and Erase to circle unwanted content, and then erase the selected content. ◇ Tap  to clear all content on the screen. • Tap Confirm to finish the annotation on the current page and choose a new background for the next annotation. A page number will appear in the lower right corner, which you can tap to select the annotated page. It supports sharing, saving, and exiting the annotation. • Tap Save, and then select the path to save your annotations. • Tap Exit to exit the annotation screen. If there is annotated content, a pop-up window will prompt you to save when exiting.  The annotation feature and the electronic whiteboard feature cannot be used simultaneously.
	Manage files.

3.1.3 Quick Tools

Procedure

- 
- Step 1 Tap  on the left or right side of the home screen to display the navigation bar.
- Step 2 Tap  to display the quick tools.

Figure 3-3 Quick tools

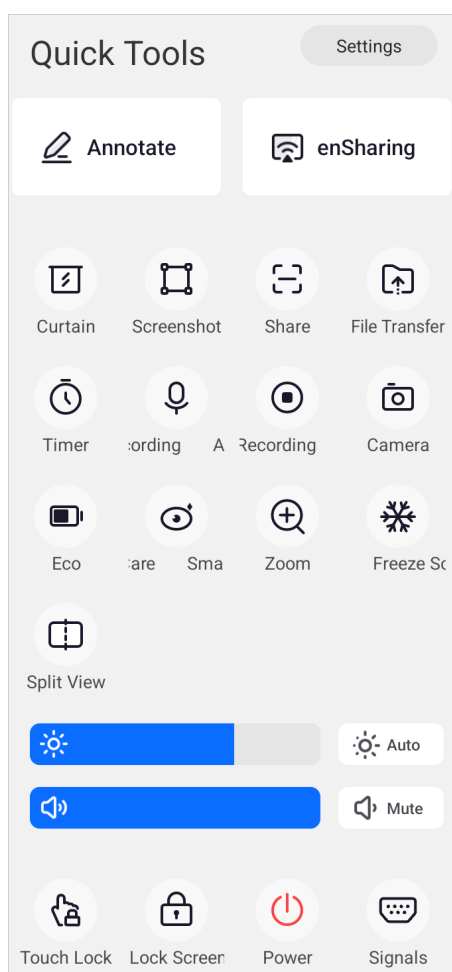


Table 3-3 Description of quick tools

Function	Description
Settings	Go to the Settings screen. For details, see "3.11 System Settings".

Function	Description
Annotate	Turn on the annotation mode which supports multi-page annotations. ● Tap  to select the type of pen and the size of the brush. ● Tap  to clear content. ◇ Tap Erase to clear unwanted content. ◇ Tap Circle and Erase to circle unwanted content, and then erase the selected content. ◇ Tap  to clear all content on the screen. ● Tap Confirm to finish the annotation on the current page and choose a new background for the next annotation. A page number will appear in the lower right corner, which you can tap to select the annotated page. It supports sharing, saving, and exiting the annotation. ● Tap Save, and then select the path to save your annotations. ● Tap Exit to exit the annotation screen. If there is annotated content, a pop-up window will prompt you to save when exiting.  The annotation feature and the electronic whiteboard feature cannot be used simultaneously.
Screen Sharing	Tap the icon to use the screen sharing function. You can transfer content to the whiteboard through the computer or phone.
Curtain	Tap the icon to activate the curtain mode. You can manually select the corresponding screen area to highlight as needed.
Screenshot	Tap the icon, and then the middle area is selected by default. You can drag the four corners of the square to customize the area size. ● Tap , and then you can import the screenshot to the whiteboard with one tap. ● Tap  to capture the full screen. ● Tap  to switch the screenshot shape, supporting rectangular or hexagonal screenshots. ● Tap  to cancel the screenshot. ● Tap , and then the screenshot named year - month - day - hour - minute - second.jpg will be saved to the screenshot folder.

Function	Description
Share	1. Tap the icon, and then select the files that you want to share.  • You can select different types of files but cannot select folders. • The size of the shared file must not exceed 200 MB every time. • When the selected files have the same name, the QR code cannot be generated. 2. Tap OK, a note about privacy information is displayed. You need to tap I have read it, set a password of 4 to 8 characters and tap OK. After the confirmation, the system will generate a QR code. 3. After a QR code is generated, you can scan the QR code to download the file. • Device accessing the Internet: Directly use the camera function of your mobile phone or scan the QR code via the browser to download the file. • Device not accessing the Internet (i.e., using an internal network): The interface will display the device's hotspot name and password. After you connect your mobile phone to the device's hotspot, use the mobile phone camera or browser to scan the QR code.  The QR sharing function connects to the LAN and it displays the name and password of the whiteboard hotspot. After you connect to the hotspot, use the camera app or browser on your phone to scan the code.
File Transfer	Tap the icon to transfer files. 1. Connect your mobile phone to the whiteboard hotspot, and then scan the QR code with a camera or browser. 2. Select the files (the file format can be PDF, Excel, Word, and PPT) /videos/ pictures, and then tap Send. 3. Tap Files Uploaded to check the uploaded information. And the files will be saved to File Management automatically.  • Tap  to turn on the whiteboard (Only pictures supported). • Tap  to delete the file.
Timer	Tap the icon, and then the timer setting screen is displayed. You can start and pause the timer, set full-screen display of information on the timer, and reset the timer.  Reset is only available when the timer is paused, and it will reset to the initial state 00:00:00.

Function	Description
Audio Recording	Tap the icon to display the audio recording toolbar. - Tap   to select the local microphone or Bluetooth microphone. - Tap  to start recording. If no action is taken on the toolbar within 5 seconds after the recording starts, the toolbar will automatically collapse and display the recording status icon . When the recording is finished, tap the recording status icon to expand the toolbar, tap , set the recording file name in the pop-up window, and then press Save to save the recording file. - Tap  to exit the audio recording toolbar.
Screen Recording	Tap the icon to display the screen recording toolbar. - Tap   to select the local microphone, Bluetooth microphone, or disable the microphone feature. When enabled, the screen recording will simultaneously capture the microphone audio. - Tap  to start the screen recording. If no action is taken on the toolbar within 5 seconds after starting the recording, the toolbar will automatically collapse and display the screen recording status icon . When the screen recording is finished, tap the screen recording status icon to expand the toolbar, set the screen recording file name in the pop-up window, tap , and then tap Save to save the screen recording file. - Tap  to exit the audio recording toolbar.  - Each time the screen recording feature is enabled for the first time after device startup, a prompt regarding information security will appear. You must confirm it before continuing to use this feature. - Audio recording and Screen recording cannot be enabled simultaneously.
Camera	Tap the icon to take a picture. - The built-in camera supports mirror switch, white balance, wide dynamic range, exposure level settings, and 52-megapixel photo capture. - Supports countdown settings, including: off, 3 seconds (default), 5 seconds, and 10 seconds. - Tap Import Whiteboard, and then you can import the screenshot to the whiteboard with one tap. - Tap  to save the picture to the local default folder. The picture is named year-month-day-hour-minute-second.jpg by default. - Supports sharing pictures with others.
Eco	With this function enabled, the backlight is set to a lower value. The backlight brightness can be adjusted manually or automatically.

Function	Description
Smart Eye Care	Enable or disable the eye care function. With this function enabled, the whiteboard will reduce the intensity of its blue light and change the screen to eye care mode.
Zoom	Tap the icon, and drag the magnifying glass to enlarge the content of the selected area as needed.
Freeze Screen	Tap the icon to freeze the current screen content. When sharing the screen, you can operate the computer while the whiteboard screen displays the same content without changing.
Split View	Supports displaying and using 2 applications at the same time. - You can drag the screen divider to adjust the size ratio between the left and right screens. The default ratio is 2:1. - Supports swapping split-screen windows. - Tap the close button within the corresponding window to close the app on one side of the split screen. The device will then exit split-screen mode and display the interface of the app on the other side in full screen. - If the divider is dragged to the right, resulting in a screen ratio greater than 2:1 between the left and right sides, the device will exit split-screen mode and the app on the left side will be displayed in full screen.  Only specific applications that are compatible with the conference tablet are supported after split-screen mode is enabled.
Brightness	Drag the slider to adjust the backlight brightness. You can tap AUTO to enable the auto adjustment function. The whiteboard can automatically adjust the brightness according to the environment. For details, see "3.11.2 Configuring General Settings".
Volume	Drag the slider to adjust the volume. Tap MUTE to enable mute.
Touch Lock	Tap the icon to disable touch control for the screen.  Press the power button 3 times in 2 seconds to unlock the touch control.
Screen Lock	Tap the icon to lock the screen. Swipe the button in the middle of the screen to unlock the screen.
Power	Tap the icon to shut down, restart the whiteboard, or close Windows.
Signals	Tap the icon to switch the signal source.  The interaction method is the same as the signal source button on the remote control.

Related Operations

Update notification bar:

- After you enable update through the cloud platform and connect the whiteboard to a WAN network, the system will pop up an update prompt window when a newer version is pushed from the platform. If you choose to update later, the message that prompts you to update the system appears in the update notification bar.

- When the update package is downloaded, the system prompts you to install the package. If you choose to install later, the message that prompts you to install the package appears in the update notification bar.



When there is no newer version available, the update notification bar is hidden.

3.2 Electronic Whiteboard

Tap **Whiteboard** on the home screen to open the whiteboard software. You can write or draw pictures on the screen.

Figure 3-4 Electronic whiteboard

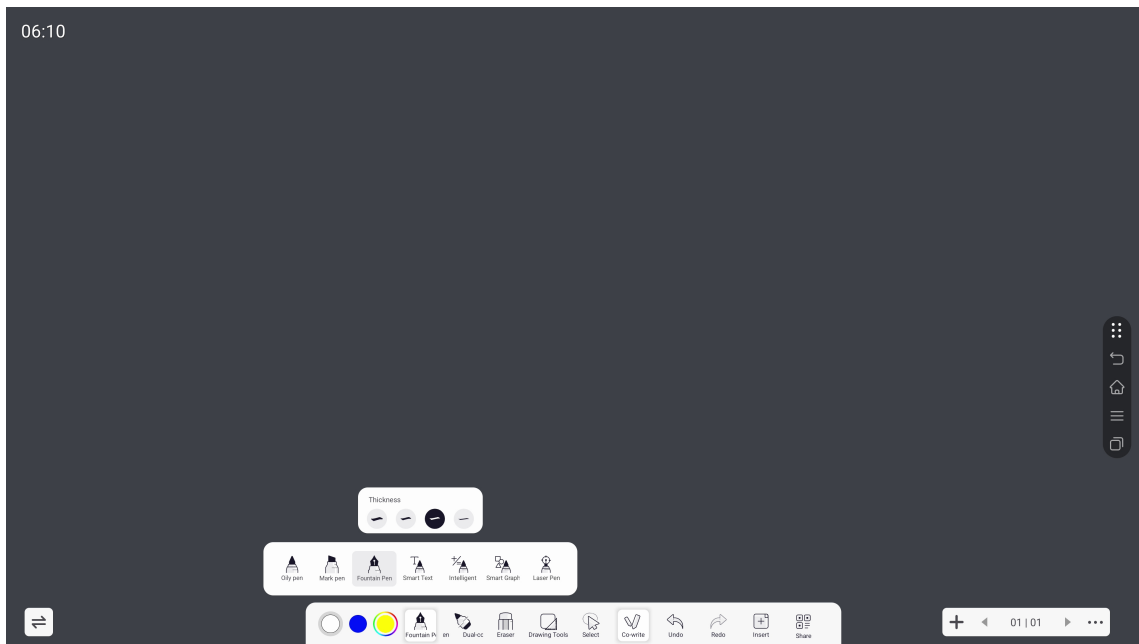


Table 3-4 Description of whiteboard icons

Icon	Description
	Adjust the location of the whiteboard tool bar.
	Select or customize the color of the pen.

Icon	Description
	Select the type of pen and the thickness of the brush. • Oily pen: By default, the color of the brush is white. • Mark pen: By default, the color of the brush is yellow. • Fountain pen: By default, the color of the brush is white. • Smart text: The handwritten content is recognized and transformed to the standard font with the color and thickness the same as the oily pen. • Intelligent formula: Simple equations (such as addition, subtraction, multiplication and division) can be calculated by the system. • Smart graphics: The hand-drawn graphics are recognized and transformed to standard graphics with the color and thickness the same as the oily pen. The system can recognize lines, arrows, circles, quadrilaterals, pentagrams, and more. • Laser pen: The written content appears with a trail and disappears in 1 second. The color can be green, red, and pink.
	Select or customize the type, color, and thickness of top and bottom of pen.
	Erase content. • Tap  to clear unwanted content. • Tap , circle unwanted content, and then erase the selected content. • Tap  to clear all the contents on the screen.  You can press your palm on the screen and then move your hand over the words and graphics to erase them.
	Tap the icon to draw the following shapes. • Plane figures: Straight line, dashed line, arrow, triangle, circle, rectangle, etc. • Solid figures: Cube, cuboid, tetrahedron, cone, frustum, sphere, etc. • Measuring tools: Ruler, triangle ruler, isosceles triangle ruler, protractor, and compass.
	Select content on the screen to zoom in, zoom out, move or rotate. You can also copy, overturn, mirror, or delete the selected content.
	Switch between zoom mode and co-write mode. • Zoom mode: Only supports 1-point writing. You can zoom in and zoom out the canvas. • Co-write mode: ◇ Supports up to 5-points writing simultaneously. You cannot zoom in or zoom out the canvas. ◇ Supports writing and erasing on a canvas at the same time. To use this function, you can only write in oily pen, mark pen, or fountain pen.
	Undo the previous action. You can undo up to 10 actions.

Icon	Description
	Redo the action that has been undone. You can redo up to 10 actions.
	● Online Video: You can search the online video, and then display the video on the whiteboard. ● Online Image: You can search the online image, and then insert it. ● Image: You can insert images in the bmp, png, jpg, jpeg or gif format. Up to 10 images in total can be inserted and each one should be no more than 5 M. ● Table: The default table layout is 3 × 3. The table supports up to 12 columns and 12 rows. ● Mind Map: You can insert horizontal and vertical mind maps. ◇ Supports adding and deleting mind map controls. ◇ The text box in the mind map supports handwriting and automatic text recognition. The recognized text is adapted to fit within the box. ◇ Mind maps can be exported together with whiteboard files or separately as images. ● Local Video: You can insert up to 10 local videos for a single whiteboard file, and each video cannot exceed 400 M.  Functions might be vary depending on the whiteboard models.
	Tap the icon to generate a QR code, and then you can scan the QR code to view or download the file.
	Add a whiteboard page. You can add up to 50 pages.
	Tap  to preview the saved file list. Tap the file to edit. When you have created several files, tap  or  to switch to the previous file and the next file. You can browse the thumbnail of the switch page.

Icon	Description
...	Tap the icon, and then you can perform the following operations. ● New : Create a new whiteboard file. Remember to save your content before creating a new file, or else you will lose all your changes. ● Open : Open the saved writing file. Only the whiteboard file format can be opened. After you tap Open, the system will jump to the whiteboard file column on file manager screen. ● Change Background : You can use a local background template or custom template.  The custom template only supports images in bmp, png, jpg and jpeg formats. The image size is limited to 5 MB. The recommended image ratio is 16:9. ● Save : Save the file. The default name of the file is year-month-day-hour-minute-second. You can customize the file name. The file format can be wbh (source file format), pdf, and png. The source file format is used by default. ● Save as : Save as a new file. The default file name is year-month-day-hour-minute-second. The file format can be wbh (source file format), pdf, and png. The source file format is used by default. ● Share by Email : To use this function, you need to configure the email information first. ● Exit : Exit the whiteboard app.  Remember to save your modifications before exiting, or you will lose all your changes.

3.3 File Management

Tap **File Manager** on the home screen to download files form Google Drive and OneDrive, and manage local files, such as whiteboard files, images, documents and more.



- You need to bind a Google Drive or OneDrive account on the account information screen before you can view the thumbnails in the drive.
- You have to download thumbnails in the drive to the local and go to the local path to see the full-size images.



- Tap and hold a file or folder to select the file or folder.
- Double-tap a file or folder to open the file or folder.

Figure 3-5 File management

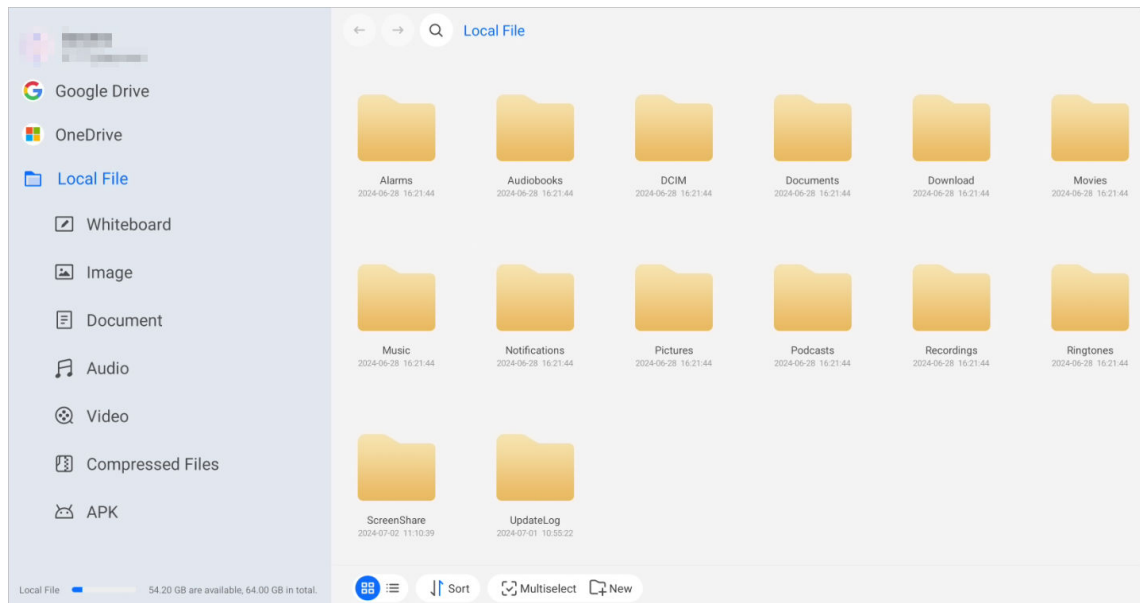


Table 3-5 File management icons

Icon	Description
	View local files on the previous or next screen.
	Enter keywords to search for files.
	Displays files in thumbnail or list format.
	Sort files in the ascending or descending order by name, size and time.
	You can select multiple files or all the files.
	Create a new folder.
	Select a file or folder, tap Copy or Cut , and then tap Paste to paste the file or folder.
	
	
	Delete files or folders.
	Rename the files and folders. You cannot change the suffix of the file name.

Icon	Description
	Send the selected information through Bluetooth.

3.4 Screen Sharing

You can remotely control the whiteboard on the phone, computer, or tablet, and project the content to the whiteboard screen.

On the Android home screen, select **More** > **Screen Sharing**, or bring up the navigation bar and select **Quick Tools** > **Screen Sharing** to display the main interface of screen sharing.

Figure 3-6 Screen sharing

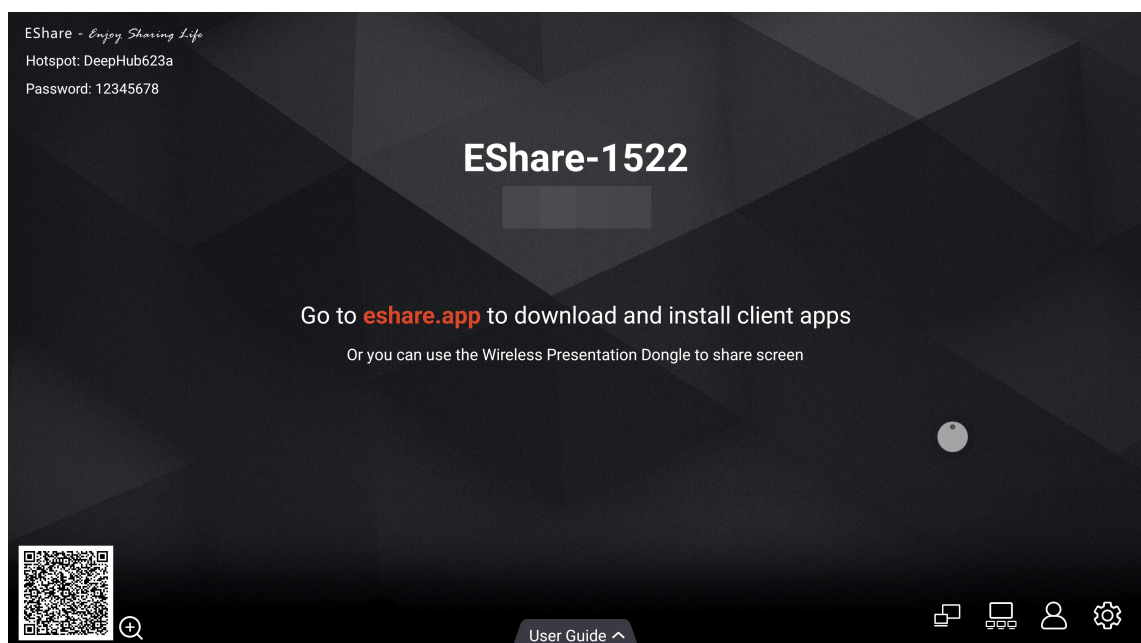


Table 3-6 EShare description

Icon	Description
Current network	Displays the network currently connected to the device. When it is connected via wired connection, show Ethernet . When it is connected to Wi-Fi, show the SSID. If there is no network connection but a hotspot is available, display the hotspot SSID and password. If there is no connection at all, display the device name.
Device name	Displays the device name when it is connected via screen mirroring from a client. If the screen mirroring connection method is set to connection code, the connection code will be displayed here, and the device name will be moved to display below the current network.
IP	Displays the IP address of the current device. If there is no network connection and the hotspot is also turned off, a prompt will display No Network Connection .
Sharing reminder	Constantly displays a prompt to guide users on how to share screen, including where to download the client applications, and displays the corresponding screen sharing prompt based on the screen sharing connection method configured by you.

Icon	Description
QR code	Includes the download address for the client application and the network information of the device. Scanning the QR code with a mobile browser or camera will directly access the Eshare.app page for convenient download of the client application. Scanning the QR code with a mobile client can directly search for and connect to the current device for screen sharing. Tapping the icon  can enlarge the QR code.  Before screen sharing, the mobile phone and the device must be on the same local network.
User guide	Tap the icon to see the user guide on how to use EShare.
	Enable WebCast so that you can use a browser to share the screen without the help of the EShare app.  This feature can only be used normally when the device is connected to the public network.
	Group settings. • Duplicate displays. ◇ Enable: Duplicate your screen to all other devices in the display group. ◇ Only valid in client screen sharing: Only when you share the screen of your phone or other devices using the client, the screen is mirrored to other devices in the group. ◇ Disable: Stop duplicating your screen to the devices in the group. • Invitation for joining display group. ◇ Auto-accept: Other devices can duplicate their screen to your screen without any permissions. ◇ Notify me: The system will prompt you when you receive an invitation for joining a display group. ◇ Disable: Refuse to join any display groups. • Device list: Displays the names and IP addresses of other devices on the same local network. The current device acts as the host of the screen group, and the selected devices, acting as clients, will synchronously display the host's screen content based on the configuration.

Icon	Description
	Moderator control center. ● Share screen or files. ◇ All allowed: You can project the screen or send files from your phone or other devices to the whiteboard without further authorization. ◇ Need authorization: The system will ask for authorization when you project the screen or send files from your phone or other devices to the whiteboard. ◇ Disable: You are not allowed to project the screen or send files from your phone or other devices to the whiteboard. ● View, control and wireless annotation. ◇ Allowed: You can view and control the whiteboard screen and make annotations from your phone or other devices. ◇ View only: You can view the whiteboard screen from your phone or other devices but cannot control the whiteboard or make annotations. ◇ Need authorization: The system will ask for authorization to view and control the whiteboard screen and make annotations from your phone or other devices. ◇ Disable: You cannot view and control the whiteboard screen and make annotations from your phone or other devices. ● Floating moderator button. ◇ Always display: The floating moderator button appears on any screen. You can tap the button to go to the moderator control center. ◇ Only on Home screen: The floating moderator button appears only on the home screen. ◇ Disable: Hide the floating moderator button. ◇ Auto: The floating moderator appears when the whiteboard is connected to the phone or other devices. You can view the number of connected devices.

Icon	Description
	Display settings. ● Device Name: You can customize the device name. ● Connection Mode: Configure the connection mode for screen sharing. By default, devices are connected by selecting the device name. For details, see "3.4.1 Sharing Screen through Client". ● Device name floating window: It is disabled by default. When enabled, it displays in the upper right corner of the device screen according to the selected connection mode mentioned above, allowing you to directly see the screen sharing connection mode in any scenario for convenient screen sharing. The floating window supports horizontal movement along the top of the screen. ● Multiple Screens: Select Disable , 2 Screens, 4 Screens, 6 Screens, or 9 Screens. ● BYOM camera: It is disabled by default. When enabled, it can be used in conjunction with a Type-C screen sharing adapter or the latest PC version of the screen sharing software client, allowing direct access to the device's camera, microphone, and speaker on a PC. ● Show Device Name on Screen: Show the name of the devices connected with the whiteboard. ● Auto Fullscreen: The screen of the connected device covers the full screen of the whiteboard even though the screen aspect ratios of the whiteboard and the connected device are different. ● AirPlay Visible: Allow iOS and macOS devices on the same network with the whiteboard to share screen without installing the EShare app. ● Miracast: It is disabled by default. When enabled, it will first check whether the device's Wi-Fi function is turned on. If not, a prompt will appear to turn on Wi-Fi. After that, smartphones or Windows computers that support the Miracast protocol can search for and directly projected to this device.  ◇ Android devices can use Miracast through the built-in wireless screen sharing function. ◇ Windows devices can check for Miracast support by pressing the Windows key and the K key simultaneously. ◇ If the device is discoverable but cannot be connected, try enabling compatibility mode. ● GoogleCast: It is disabled by default. When it is enabled, computers on the same local network as the device can use the feature in the Chrome browser to share their screens. The available sources for casting include browser tabs, application windows, and the desktop. Other devices with the ChromeCast operating system can also use this feature to share their screens to the whiteboard, provided they are on the same local network.

3.4.1 Sharing Screen through Client

After sharing the screen between the whiteboard and your phone or other devices such as tablets, you can project content from the phone or other devices to the screen of the whiteboard and control the whiteboard on your phone or other devices.

Procedure

- Step 1** Visit eshare.app to download and install the client corresponding to your system. Supported systems include Windows, macOS, iOS, Android, Chrome, and Linux.
- Step 2** Ensure that the whiteboard and the screen-sharing device are on the same local network. The following 3 connection methods are supported:
- The screen sharing device and the whiteboard are connected to the same Wi-Fi network.
 - The screen sharing device connects to the hotspot of the whiteboard. The whiteboard can be connected to the internet or not.
 - The screen sharing device connects to Wi-Fi, while the whiteboard connects to a wired network that is part of the same local network as the Wi-Fi.
- Step 3** Configure the connection method for screen sharing. The default method is connecting by device name.
- Connecting by device name
When using a mobile phone or other device for screen sharing, you can directly connect by selecting the device name. The password is disabled by default and can only be configured when the connection method is set to device name.
Once it is enabled, the client must enter the password to connect to this device. After enabling the password, the app will automatically generate a 6-digit random number, which can be manually modified and refreshed. You can also set the automatic refresh interval, which defaults to 10 minutes. Options include disabling the refresh, 10 minutes, 30 minutes, 1 hour, and 1 day.
 - Connecting by PIN Code (6 digits)
After it is enabled, the system will automatically generate a 6-digit PIN code.
When using a mobile phone or other device for screen mirroring, you must first enter the correct 6-digit PIN code. Manual and automatic refresh options are supported. The default automatic refresh interval is 10 minutes, and options include disabling the refresh, 10 minutes, 30 minutes, 1 hour, and 1 day.
 - Connecting by PIN Code (8 characters)
After it is enabled, the system will automatically generate an 8-character PIN code. When using a mobile phone or other device for screen sharing, you must first enter the correct 8-character PIN code. Manual and automatic refresh options are supported. The default automatic refresh interval is 10 minutes, and options include disabling the refresh, 10 minutes, 30 minutes, 1 hour, and 1 day.

3.4.2 Sharing Screen through Software Protocol

Through the common screen sharing software protocols for mobile phones and computers, you can directly project the screen content onto the whiteboard's screen for display.

You can select the appropriate connection method based on the actual situation of your device:

- Miracast: Enable Miracast, and Android phones and some laptops can directly share their screens using the built-in screen sharing feature.

- Airplay: It is enabled by default, allowing iOS devices to directly share their screens using the default screen sharing feature.

3.4.3 Sharing Screen through Wireless Presentation Dongle

After sharing the screen between the computer and whiteboard, you can project content from the computer to the screen of the whiteboard and control the whiteboard on your computer.

Prerequisites

- The whiteboard and your computer are on the same LAN network and the hotspot of the whiteboard has been enabled.
- Get a compatible wireless presentation dongle. It does not come with the whiteboard. Purchase it as needed.

Procedure

Step 1 Pair the wireless presentation dongle with the whiteboard.

1. Tap **Screen Sharing** on the Android home screen of the whiteboard.
2. Insert the wireless presentation dongle into the USB port on the front panel of the whiteboard.

The wireless presentation dongle starts pairing with the whiteboard.

3. Wait until the system prompts successful pairing.
4. Tap **OK**.

Step 2 Project content from your computer to the whiteboard.

1. Connect the wireless presentation dongle to the USB port of your computer.



For the first-time use, you might need to install the driver of the wireless presentation dongle. The installation might take a while. If installation failed, download the driver manually and then try again.

2. Press the button on the wireless presentation dongle to project content from your computer to the whiteboard.



Type-C presentation dongle supports the BYOM (Bring Your Own Meeting) function. After successfully pairing with the whiteboard, the laptop can use the dongle to access the camera, microphone, and speaker of the whiteboard.

Figure 3-7 Sharemax (Type-C mode)

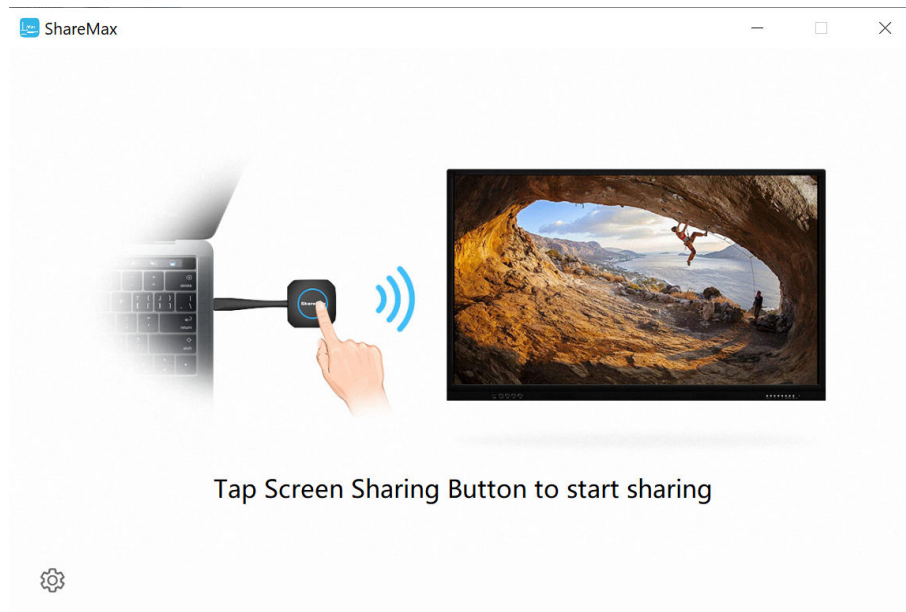
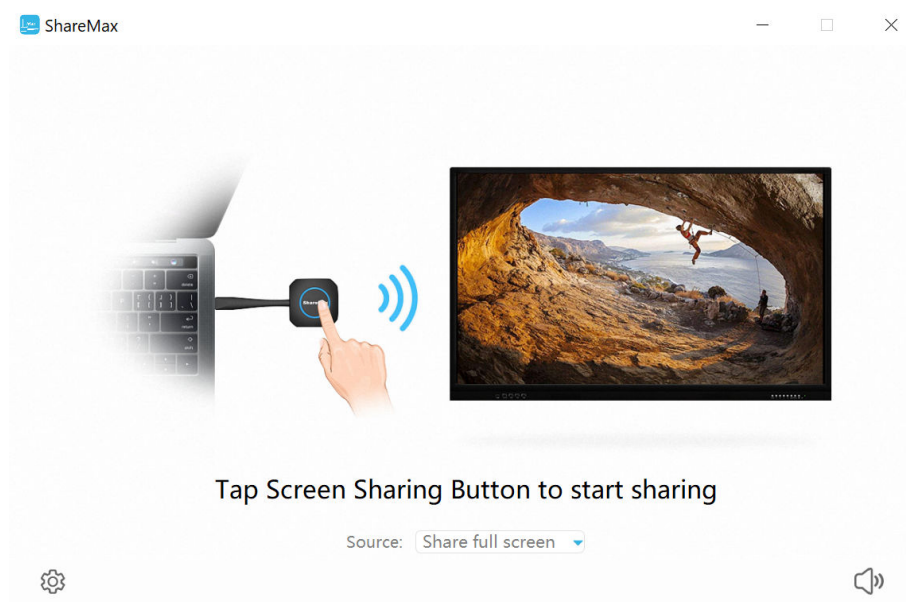


Figure 3-8 Sharemax (USB mode)



3.5 Person Management

Register person information for meeting sign-in.

Prerequisites

- Make sure that you have enabled **Target Recognition**. For details, see "3.11.3 Configuring Advanced Parameters".
- Make sure that you have configured the digital password or unlock pattern.

Procedure

- Step 1 Select **More > Person Management** on the home screen of the Android system.
- Step 2 Enter the password.

Step 3 Tap **Add Person**.

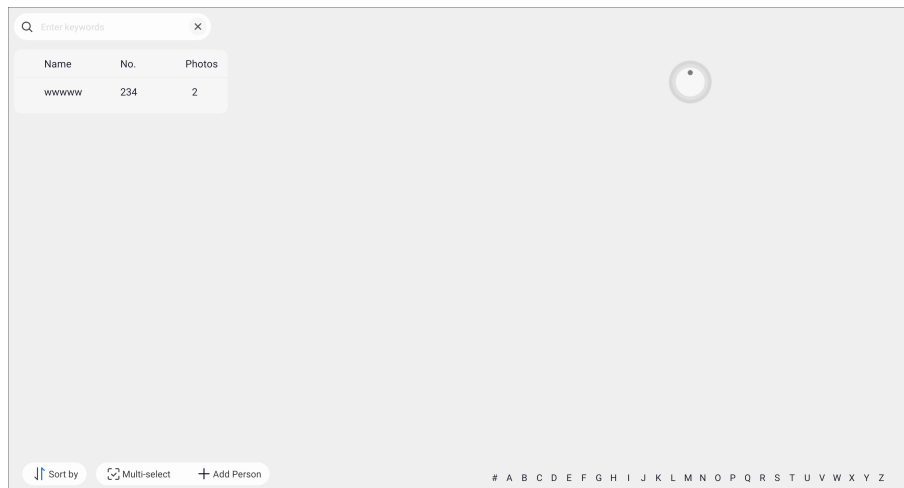
Step 4 Make sure that the person is located in the recognition frame. When the system will recognize the person and then automatically take a snapshot.



If 2 or more persons appear in the recognition frame, you need to register the person information again.

Step 5 Enter the name and No. of the person, and then tap **Save**.

Figure 3-9 Person management



Related Operations

- Sort: Sort the persons by name in the alphabetic order or by No. in the ascending order.
- Multi-select: Select one or more persons and then delete them in batches.
- Add person: Add more persons. You can register up to 20,000 persons.
- Modify: Tap a person record, and then you can modify the information on the person, such as editing the name and adding corresponding photos.

3.6 Person Sign-in

Prerequisites

- Make sure that the camera works well.
- Make sure that you have enabled **Target Recognition**. For details, see "3.11.3 Configuring Advanced Parameters".
- Make sure that you have registered the persons that attend the meeting. For details, see "3.5 Person Management".

Procedure

Step 1 Select **More** > **Sign in** on the home screen of the Android system.

Step 2 Tap **Sign in**. The whiteboard recognizes persons whose information has been added to its database and registers their attendance.

Step 3 When the whiteboard detects a person whose information is not found in the database, the person appears on the **Unregistered** list. Tap **Add Participant** to add the person to the temporary person database.

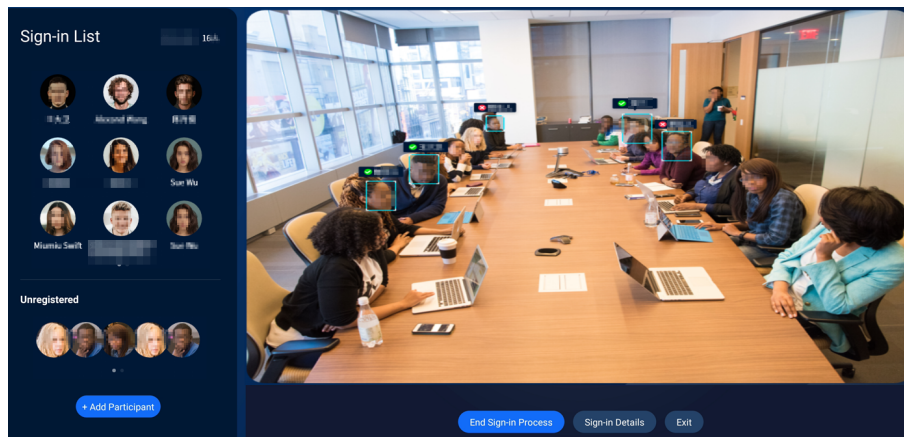


The temporary person database will be deleted automatically after you end the sign-in process.

Step 4 Tap **End Sign-in Process**.

The system generates a sign-in list.

Figure 3-10 Sign-in



3.7 Non-contact Control

You can use non-contact gestures to swipe screens or take snapshots.

Prerequisites

- Make sure that you have enabled **Non-contact Control**. For details, see "3.11.3 Configuring Advanced Parameters".
- The camera that comes with the whiteboard works well.

Procedure

Step 1 Keep waving hands for 3 to 5 seconds.  appears on the screen for 1 s, meaning the whiteboard enters non-contact control mode.

In non-contact control mode, the camera keeps track of your gestures. If no gesture is detected within 10 minutes, the whiteboard automatically exits non-contact control mode. You need to turn on the mode again.



- We recommend you perform gestures 1 to 3 m away from the screen.
- Make sure to look directly at the camera with nobody standing between you and the whiteboard or closely behind you.
- If your face leaves the view range of the camera or is blocked, the camera cannot find the target and the whiteboard automatically exits non-contact control mode.

Step 2 Use your gestures to control the screen.

- Turn the screen left: Make a fist with one hand with the thumb pointing to the left (a

gesture like , place the hand in front of your right shoulder, and then slowly move your hand to the left for 1 to 2 seconds.

- Turn the screen right: Make a fist with one hand with the thumb pointing to the right

(a gesture like ) , place the hand in front of your left shoulder, and then slowly move your hand to the right for 1 to 2 seconds.

- Take a screenshot: Make a V-sign (a gesture like ) , place the hand in front of you at the head height, and then slowly move your hand downward for 1 to 2 seconds.

The whiteboard takes a full screenshot by default. After the screenshot, you can view the storage path on the upper-right corner of the page.

3.8 Welcome Page

Prerequisites

Import the media such as images and audio files used to create the welcome page.

Procedure

Step 1 Select **More** > **Welcome Page** on the home screen of the Android system.

Step 2 Tap **Setting** on the lower-right corner to configure the welcome page.

Figure 3-11 Configure the welcome page

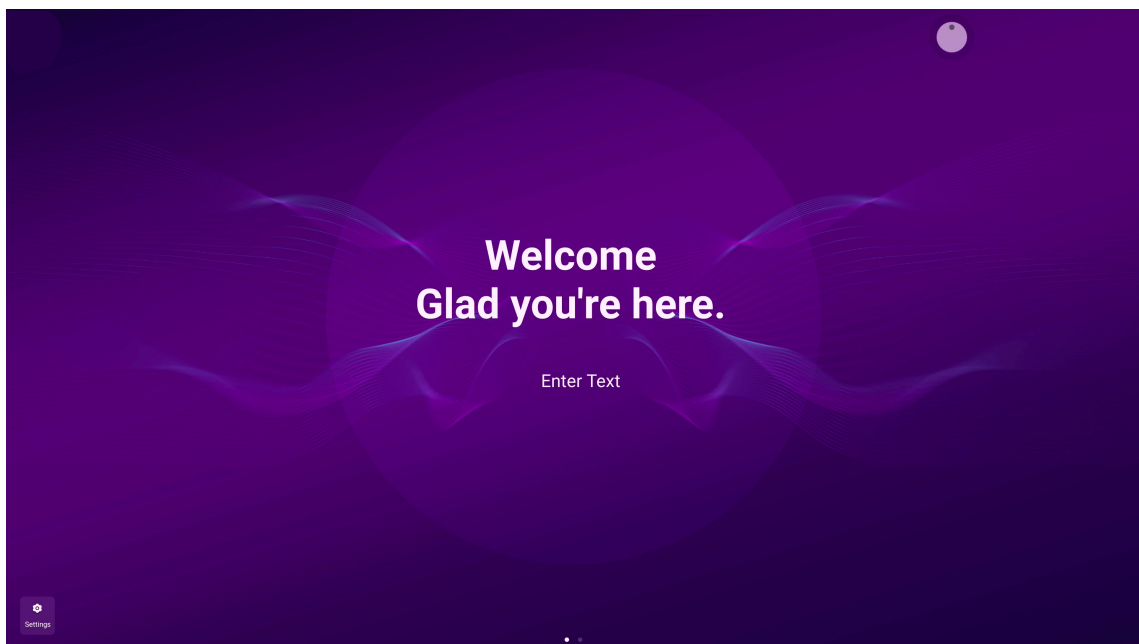


Table 3-7 Icon description

Items	Description
	Change the position of the toolbar.
Insert	Insert a background image or other images and text. Up to 10 images can be inserted and each one should be no more than 5 M.
Template	You can use local background template or custom template. Up to 10 custom templates can be inserted.
Audio	Insert audio. Up to 10 audio clips can be inserted.

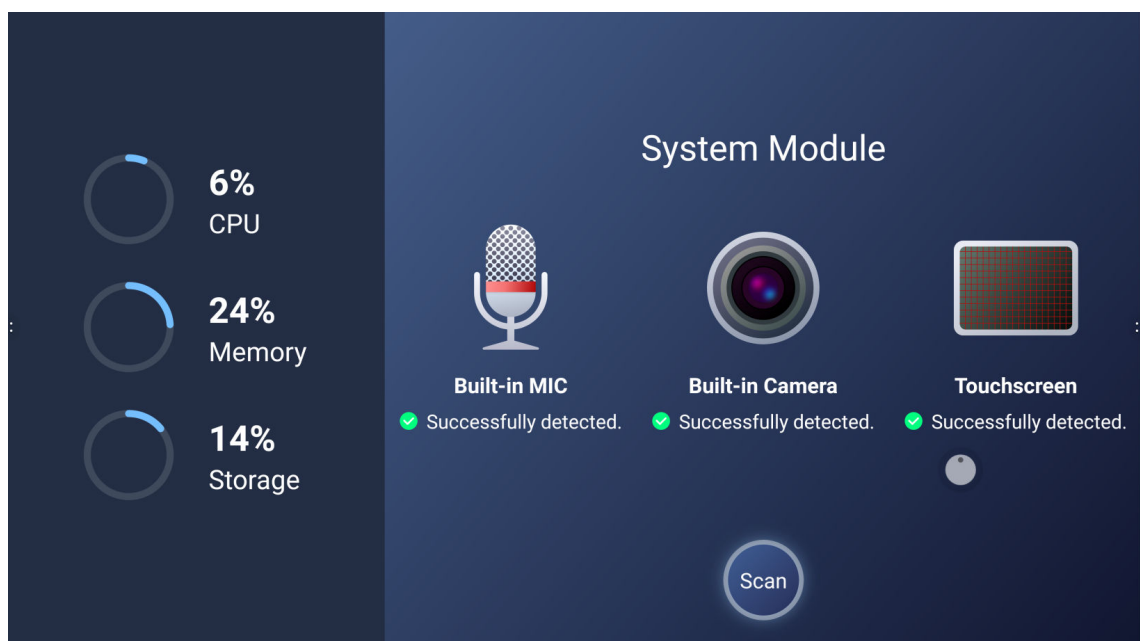
Items	Description
Save	Save your configurations.
Restart	Restore the welcome page to the default template.
Start Presenting	Show the presentation effect of the welcome page.

Step 3 Tap **Save**.

3.9 Self Check

Select **More** > **Self Check** on the home screen of the Android system, tap **Scan**, and then wait for a while. The system shows the results.

Figure 3-12 Self check result

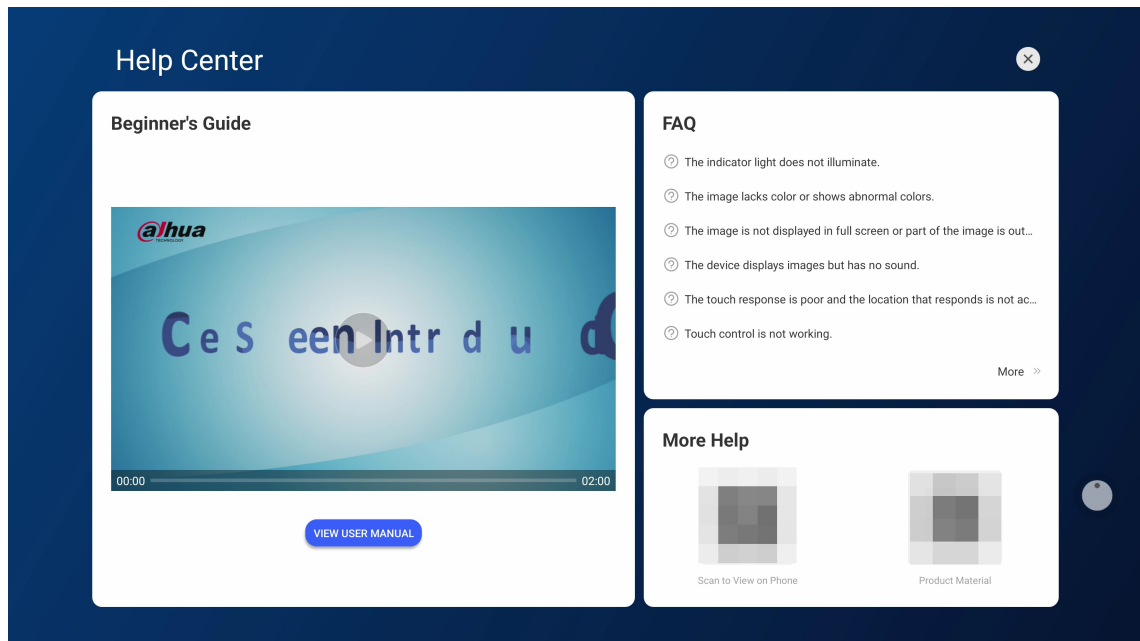


3.10 Help Center

On the homepage, select **More** > **Help Center**, and then you can view the content of **Beginner's Guide**, **FAQ** and **More help**.

- When the whiteboard is connected to the Internet, you can tap **VIEW USER MANUAL** under **Beginner's Guide** and **More** under **FAQ** to see more content.
- Scan the QR code of **Scan to View on Phone** to access the Help Center page on your phone.
- Scan the QR code of **Product Material** to learn about more product information about the whiteboard.

Figure 3-13 Help Center



3.11 System Settings

Configure network settings, general and advanced settings, and other system settings.

3.11.1 Configuring Network and Bluetooth Connection

On the home screen, tap **More** > **Settings** to configure the network, email, and Bluetooth settings.



You can enable wireless network or wired network. Wireless network and wired network cannot be enabled at the same time. The whiteboard itself can also act as a hotspot to share network connection with other devices.

Figure 3-14 Configure network

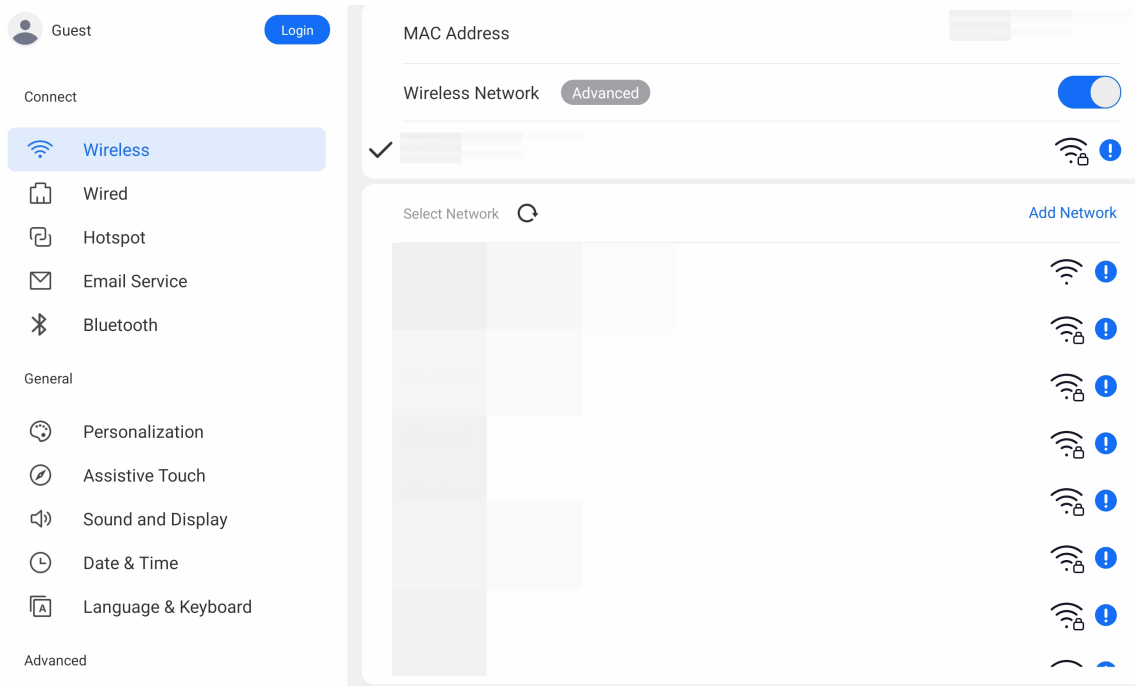


Table 3-8 Description of connection parameters

Parameter	Description
Wireless	- Enable Wireless Network, and then the whiteboard can connect to an available Wi-Fi network in the area. - Tap Add Network to add a wireless network, enter the SSID network name and password, and then configure advanced settings as needed. - Tap Advanced to install certificates.  We recommend you select a secure authentication method to connect to a wireless network.
Wired	Configure wired network connection parameters. IPv4 and IPv6 are available. DHCP : When there is a DHCP server on the network, you can enable Wired, and then the whiteboard gets a dynamic IP address automatically. Static : Set IP address, subnet mask, default gateway and DNS manually for the whiteboard.
Hotspot	Enable Hotspot, configure the network SSID and then enter the password. You can view hotspot name, hotspot password, encryption method, frequency band and other information.
Email Service	Enable Email Service, configure relevant parameters, and then you can send whiteboard file through the email.
Bluetooth	Enable Bluetooth, and then the whiteboard can connect to an available Bluetooth in the area. Supports connecting wireless audio equipment, keyboards and more.

3.11.2 Configuring General Settings

On the home screen, tap **More** > **Settings** to configure the general settings.

Figure 3-15 General settings

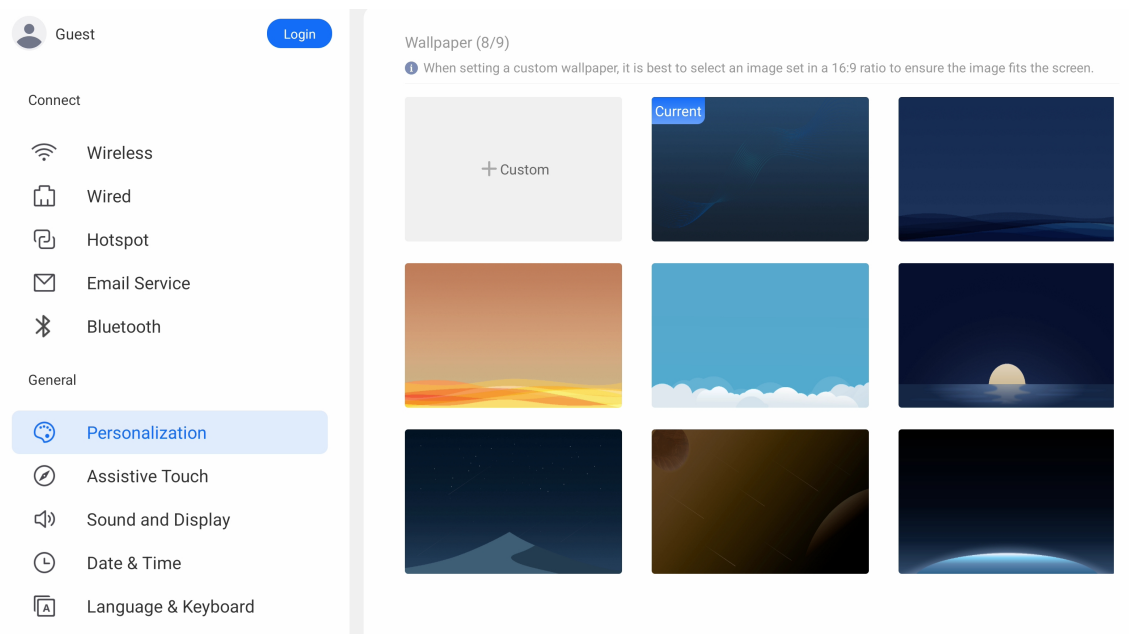


Table 3-9 General settings description

Parameter	Description
Personalization	Set the background image, and you can customize the boot screen. - The system provides 8 wallpapers by default. - You can also customize and upload wallpapers. The recommended image ratio is 16:9.
Assistive Touch	Enable for disable the assistive touch. Select or customize when the assistive touch is automatically hidden away, and the manner in which it is hidden (small circle or disappear).  After you enable the assistive touch, double-tap with 3 fingers in 2 seconds to bring it up.

Parameter	Description
Sound and Display	- Adjust the level of volume. If the volume is 0, a mute sign will be displayed at the lower-left corner of the screen. - Sound effect: You can select Standard , Music, Meeting and Theater. - System sound prompt: You can use the default audio or external audio. You can add up to 10 external audio files with each file smaller than 500 KB. - Brightness can be adjusted manually in the range of 1–100 or automatically according to the ambient brightness.  In eco mode, you cannot adjust the brightness or enable Auto Brightness. - Image mode: Vivid mode and professional mode are available. - Color temperature: You can select among Warm , Default, and Cold.  Smart Eye Care is identified as one of the color temperatures. After you enable it, adjustment of Color Temperature is not available. - Indicators: You can select Breathing Light , Marquee Light, or Always depending on how you want the indicator light to indicate the running or update status. The indicator light is solid blue by default.
Date & Time	Set the date and time automatically or manually. You can configure the format of the time, date and time zone. With Auto Sync Time enabled, the system time is synchronized with the server time. When it is disabled, you need to manually set the date and time.
Language & Keyboard	Select the system language and the input method.

3.11.3 Configuring Advanced Parameters

On the home screen, tap **More** > **Settings** to configure the advanced parameters.

Figure 3-16 Advanced parameters

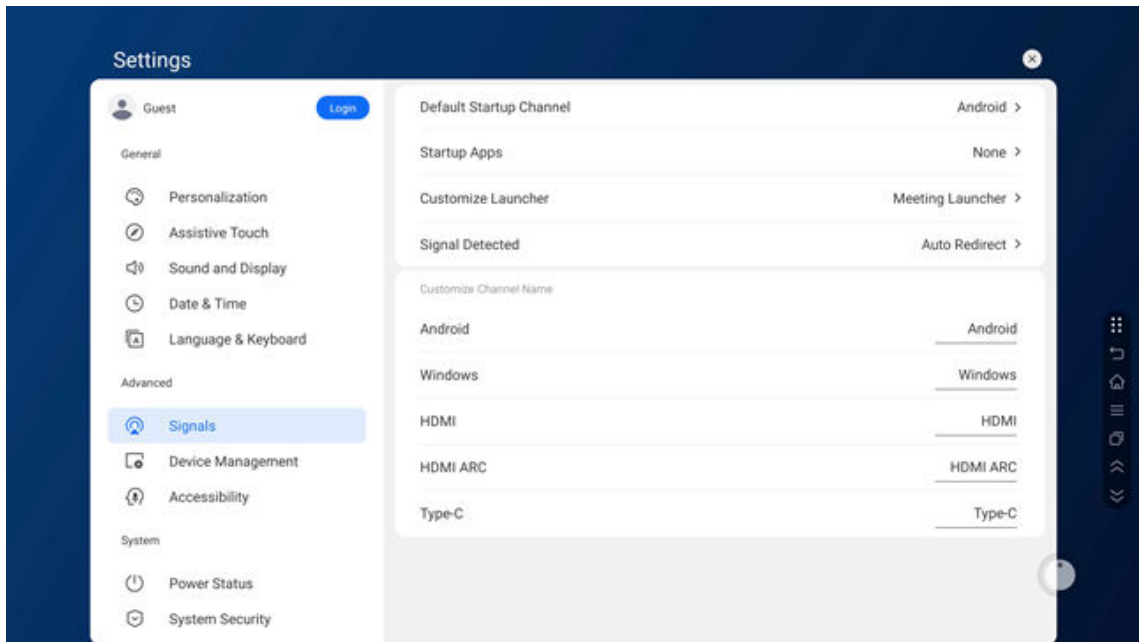


Table 3-10 Description of advanced parameters

Parameter	Description
Signals	● Default Startup Channel : Select the channel to be enabled at startup. ● Startup Apps : Select an application that is on the whiteboard to be opened every time the system starts. ● Customize Launcher : Meeting launcher and DeepHub launcher are available. Meeting launcher is selected by default. ● Signal Detected : ◇ Auto Redirect : Connect to the signal source and automatically redirect to the corresponding channel. ◇ Pop-up Window : When a signal source is connected, a pop-up window appears asking whether to jump to the connected source channel. ● Customize Channel Name : Customize the channel name. After the name is modified, the corresponding channel name of the whole system will be modified synchronously.

Parameter	Description
Device Management	- View and configure the information of camera, microphone, and speaker. HDMI OUT : The function is available after the whiteboard is connected to a monitor through the HDMI OUT port. After you enable HDMI OUT, the whiteboard outputs signals at the maximum resolution of the monitor by default. You can select different resolutions depending on the capacity of the monitor. Pick-up Pen Detection : After you enable the function and pick up a stylus pen from the pen attaching area at the bottom of the whiteboard, the system pops up a window and prompts you to open electronic whiteboard or enter annotation mode.  The system does not give pick-up pen prompt during the setup wizard, update or under split screens. RS-232 Control : With RS-232 Control enabled, you can connect the whiteboard to the RS-232 transparent debugging serial port for data transmission between devices. Touch Frame Version : Tap Update to update the version of the touch frame. SCM Version : Tap Update to update the firmware program of the single-chip microcomputer. Type-C Version : Tap Update to update the Type-C firmware program of the whiteboard. NR MIC Version : Tap Update to update the audio firmware program of the whiteboard.

Parameter	Description
Accessibility	● Non-contact Control : Use gestures to swipe screens and take screenshots. ● Target Recognition : Recognizes target. ◇ Person Unlock : Applies to screen lock and touch lock. After you enable the function, a registered person can unlock the whiteboard and an unregistered person can wake up the screen. ◇ Speaker Tracking : Applies to video conference. ○ Audio tracking: The whiteboard tracks the participant who is speaking, places the speaker in the middle of the image and adjusts the image size through digital zoom. ○ Auto-framing: The camera supports self-adaptive panoramic shooting. It can adjust the image to include all participants according to the number of participants and their positions. The participants are located in the middle of the image with the size of the nameplates of the participants in the panoramic image automatically adjusted.  ● This feature is only available when the built-in camera and microphone are enabled. Audio tracking is only available on the Android system. ● Non-contact control and target recognition cannot be enabled at the same time.

3.11.4 Configuring System Parameters

On the home screen, tap **More** > **Settings** to configure the system parameters.

Figure 3-17 System parameters

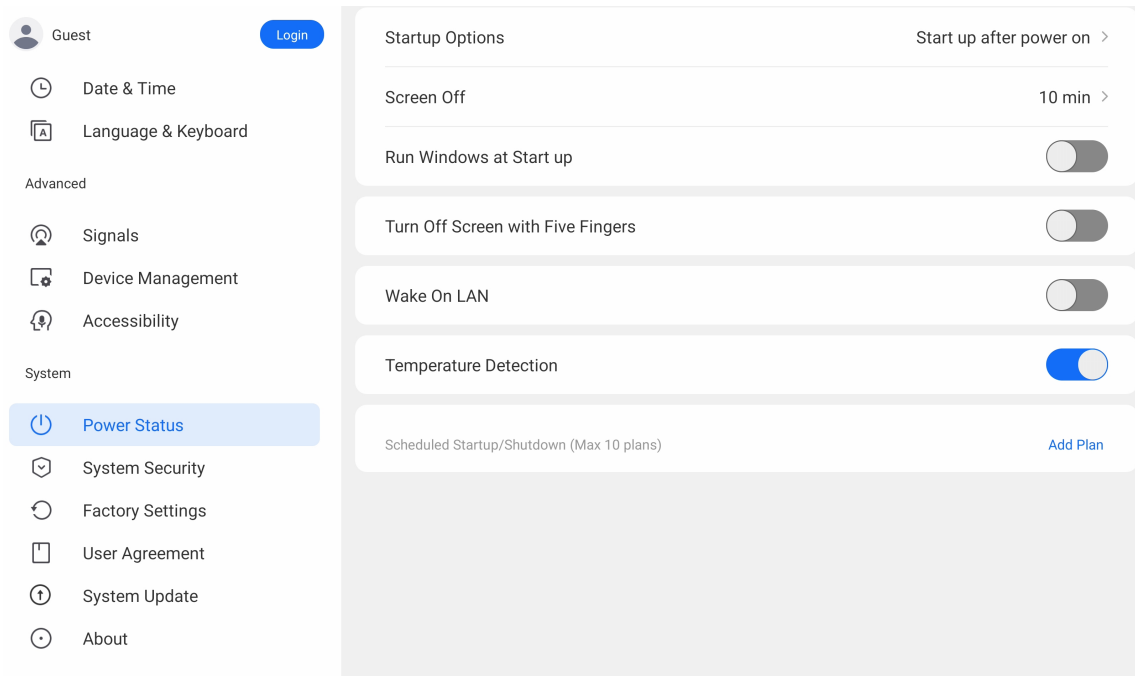


Table 3-11 System parameter description

Parameter	Description
Power Status	Configure the startup and shutdown functions of the whiteboard. - Startup options: Select standby after power on or startup after power on (default). - Screen off: Offers always on, sleep after 10-minute inactivity and no operation after 1 minute, 5 minutes and 10 minutes. It also has custom configuration from 1 to 60 minutes. - Run windows at start up: After you enable this feature, the whiteboard automatically runs the Windows system at start up. - Turn Off Screen with Five Fingers : With this function enabled, you can simultaneously touch the screen with five fingers to quickly turn off the screen. - Wake on LAN: After you enable this function, you can remotely wake up or power on the whiteboard through the network, without having to physically operate it.  The feature will be disabled once the device enters sleep mode. - Temperature detection: After you enable the function,  appears on the upper-right corner of the home screen. When the CPU temperature exceeds 95℃, the icon will turn yellow; when it exceeds 100℃, the icon will turn red. Once the temperature goes above 95℃, the system will display a pop-up Windows of The device temperature is too high. Please shut down and cool it down before using it again . It will include the Shut down immediately and Remind later options. The Shut down immediately button will initiate a 10-second countdown before shutting down the device. - Scheduled startup/shutdown: Tap Add Plan to set when to automatically power on and off the system. Tap  to delete the plan.  You can add up to 10 plans.

Parameter	Description
System Security	 Before enabling Pin and Unlock Pattern, you must enter the password reset email, which is used for password recovery. ● Pin : After enabling Pin, you can unlock the whiteboard with digital password. ● Unlock Pattern : After enabling the feature, you can unlock the whiteboard by drawing a pattern.  ◇ The system does not support the simultaneous use of a pattern password and a digital password. ◇ After a password is in use, you can change it and the password reset email. ● Fingerprint : After enabling Fingerprint, you can unlock the whiteboard with your registered fingerprint. ● NFC : Follow the instructions on the screen to add the NFC card, and then you can use the authorized NFC card to unlock the whiteboard. ● NFC Card Database : Tap Manage to add NFC cards or manage NFC cards that are already bound to the whiteboard. ● The password currently in effect on the system will be applied to the following features, and you must enter the password before each feature is enabled. ◇ Password Protect Settings : Once enabled, you need to verify the password first. Only after successful verification, you can proceed with system settings. ◇ Installation Permission : Once enabled, you need to verify the password first. Only after successful verification, you can install third-party software.  The password verification for Password Protect Settings and Installation Permission only supports a pin password or a pattern password. ◇ Lock Screen : With a password is in use, you need to enter the password correctly to unlock the screen. It is enabled by default. You can configure the screen lock time. The feature is off by default (based on the configuration of Screen Off in Power Status). It supports tapping Screen Lock Settings to select 1 min, 5 min, 10 min and Custom as the desired screen lock time. ◇ Touch Lock : With a password is in use, you need to verify the password when unlocking the touch lock. ◇ USB Permission : To enable the permission to access the USB drive functions. After you enable the feature, the whiteboard will prohibit the read and write functions of USB drives.
Factory Settings	Tap FACTORY SETTINGS , and all your operation records and saved content will be deleted. The whiteboard will also be restored to its factory settings.
User Agreement	View the privacy policy, software license agreement, and open source agreement.

Parameter	Description
System Update	View the current system version. When the whiteboard is connected to network, enable OTA platform , and then tap CHECK FOR UPDATES to check whether there is a new version available.
About	View MAC address, device serial number, device name (can be edited), running memory, storage space, resolution, system version, Android version, and security baseline version.  The device name can consist of up to 31 characters and contain letters, numbers, and the special character (_).

4 Shutdown

After the whiteboard is turned on, press and hold the power button for 5 s, and then the system will prompt you whether to shut down the whiteboard. Tap **OK** to shut down the whiteboard.



- The whiteboard provides power-off protection to the computer module. After you shut down the whiteboard, the computer module will shut down a little while afterwards.
- Power-off protection is not available if you cut-off the power of the whiteboard directly.

5 System Update

You can update the system online or through USB.



Please be advised that downgrading to a lower version will make the whiteboard vulnerable to security attacks.

5.1 Online Update

After the whiteboard is registered to the cloud management platform, the platform can send the update package to the whiteboard.

Prerequisites

Make sure the whiteboard is connected to the network.

Procedure

- Step 1 On the home screen, select **More** > **Settings** > **System Upgrade**.
- Step 2 Enable **OTA platform**.
- Step 3 Tap **CHECK FOR UPDATES**.
- Step 4 When the system detects that a newer version available, tap **Download** to download the update package.
- Step 5 After the package is downloaded, you can select to install the package immediately. After it updates, the whiteboard restarts automatically.

5.2 Update through USB

You can upload update.zip file into a USB flash drive and then use the update file to update the system.

Prerequisites

Get the update package from the technical support.

Procedure

- Step 1 Change the name of the update package to update.zip, and then save the file to the root directory of the USB flash drive.
- Step 2 With whiteboard turned on, plug the USB flash drive into the USB port of the whiteboard.
 Update the system with a USB flash drive in the FAT 32 format. Otherwise, update might fail.
- Step 3 When the system prompts whether to update immediately, tap **Upgrade**. The update begins. After it updates, the whiteboard restarts automatically.

6 FAQ

1. The whiteboard shuts down automatically.

- Check whether you have enabled the sleep function. You can refer to the regular computer troubleshooting procedure.
- Check the channel of the input source. If there is no signal, the whiteboard will shut down automatically.
- Check whether the power supply is stable.

2. The indicator light is off.

- Check whether the power supply is normal.
- Check whether the rocker switch of the whiteboard is turned on.

3. Missing or abnormal colors.

If the whiteboard is connected to a computer, check whether the HDMI cable is intact and correctly connected.

4. The image is not displayed in full screen or part of the image is outside the screen.

- Check whether the resolution is 16:9.
- If the whiteboard is connected to an external computer, unplug the HDMI cable and then plug it back in.

5. The whiteboard displays images but has no sound.

- Adjust the volume.
- If the whiteboard is connected to a computer, check whether the audio cable is correctly connected.

6. Touch response is poor and the location that responds is not accurate.

- Check whether other objects such as paper or your sleeves are in contact with the screen.
- Check whether the resolution is 16:9.

7. Touch control is not working.

If the whiteboard is connected to a computer, check whether the TOUCH port of the whiteboard is correctly connected to the USB port of the computer.

8. After you connect the computer with the whiteboard through the Type C port on the front panel, unable to control the computer through touch operations on the whiteboard.

- Change another Type C cable.
- Use the TOUCH port on the rear panel.

Appendix 1 Touch Operation

You can use the stylus pen or directly use your fingers to operate the device screen.



This section uses operation with stylus pen as an example.

Appendix Table 1-1 Touch operations

Operation	Description
Tap	Tap the screen once with the stylus pen.
Double-tap	Tap the screen twice with the stylus pen (The time gap between the taps is around 0.5 s).
Context menu	Slightly touch the screen for 1 to 2 seconds with the stylus pen. Lift the stylus pen when there is a circle on the screen, and then the context menu is displayed.
Drag	Hold the icon that needs to be dragged with the stylus pen and then move the stylus pen to the target place. Lift the stylus pen to drop the item.
Slide	Hold the screen (such as the slider that is used for the web browser) that you want to slide with the stylus pen, and then slide the stylus pen toward the direction you want. Lift the stylus pen to release the screen.
Zoom	Use the stylus pen to press and hold the window (such as the web pages and images), and then use another stylus pen to drag the window to zoom in and zoom out.

Appendix 2 Security Commitment and Recommendation

Dahua Vision Technology Co., Ltd. (hereinafter referred to as "Dahua") attaches great importance to cybersecurity and privacy protection, and continues to invest special funds to comprehensively improve the security awareness and capabilities of Dahua employees and provide adequate security for products. Dahua has established a professional security team to provide full life cycle security empowerment and control for product design, development, testing, production, delivery and maintenance. While adhering to the principle of minimizing data collection, minimizing services, prohibiting backdoor implantation, and removing unnecessary and insecure services (such as Telnet), Dahua products continue to introduce innovative security technologies, and strive to improve the product security assurance capabilities, providing global users with security alarm and 24/7 security incident response services to better protect users' security rights and interests. At the same time, Dahua encourages users, partners, suppliers, government agencies, industry organizations and independent researchers to report any potential risks or vulnerabilities discovered on Dahua devices to Dahua PSIRT, for specific reporting methods, please refer to the cyber security section of Dahua official website.

Product security requires not only the continuous attention and efforts of manufacturers in R&D, production, and delivery, but also the active participation of users that can help improve the environment and methods of product usage, so as to better ensure the security of products after they are put into use. For this reason, we recommend that users safely use the device, including but not limited to:

Account Management

1. Use complex passwords

Please refer to the following suggestions to set passwords:

- The length should not be less than 8 characters;
- Include at least two types of characters: upper and lower case letters, numbers and symbols;
- Do not contain the account name or the account name in reverse order;
- Do not use continuous characters, such as 123, abc, etc.;
- Do not use repeating characters, such as 111, aaa, etc.

2. Change passwords periodically

It is recommended to periodically change the device password to reduce the risk of being guessed or cracked.

3. Allocate accounts and permissions appropriately

Appropriately add users based on service and management requirements and assign minimum permission sets to users.

4. Enable account lockout function

The account lockout function is enabled by default. You are advised to keep it enabled to protect account security. After multiple failed password attempts, the corresponding account and source IP address will be locked.

5. Set and update password reset information in a timely manner

Dahua device supports password reset function. To reduce the risk of this function being used by threat actors, if there is any change in the information, please modify it in time. When setting security questions, it is recommended not to use easily guessed answers.

Service Configuration

1. Enable HTTPS

It is recommended that you enable HTTPS to access Web services through secure channels.

2. Encrypted transmission of audio and video

If your audio and video data contents are very important or sensitive, we recommend you to use encrypted transmission function in order to reduce the risk of your audio and video data being eavesdropped during transmission.

3. Turn off non-essential services and use safe mode

If not needed, it is recommended to turn off some services such as SSH, SNMP, SMTP, UPnP, AP hotspot etc., to reduce the attack surfaces.

If necessary, it is highly recommended to choose safe modes, including but not limited to the following services:

- SNMP: Choose SNMP v3, and set up strong encryption and authentication passwords.
- SMTP: Choose TLS to access mailbox server.
- FTP: Choose SFTP, and set up complex passwords.
- AP hotspot: Choose WPA2-PSK encryption mode, and set up complex passwords.

4. Change HTTP and other default service ports

It is recommended that you change the default port of HTTP and other services to any port between 1024 and 65535 to reduce the risk of being guessed by threat actors.

Network Configuration

1. Enable Allow list

It is recommended that you turn on the allow list function, and only allow IP in the allow list to access the device. Therefore, please be sure to add your computer IP address and supporting device IP address to the allow list.

2. MAC address binding

It is recommended that you bind the IP address of the gateway to the MAC address on the device to reduce the risk of ARP spoofing.

3. Build a secure network environment

In order to better ensure the security of devices and reduce potential cyber risks, the following are recommended:

- Disable the port mapping function of the router to avoid direct access to the intranet devices from external network;
- According to the actual network needs, partition the network: if there is no communication demand between the two subnets, it is recommended to use VLAN, gateway and other methods to partition the network to achieve network isolation;
- Establish 802.1x access authentication system to reduce the risk of illegal terminal access to the private network.

Security Auditing

1. Check online users

It is recommended to check online users regularly to identify illegal users.

2. Check device log

By viewing logs, you can learn about the IP addresses that attempt to log in to the device and key operations of the logged users.

3. **Configure network log**

Due to the limited storage capacity of devices, the stored log is limited. If you need to save the log for a long time, it is recommended to enable the network log function to ensure that the critical logs are synchronized to the network log server for tracing.

Software Security

1. **Update firmware in time**

According to the industry standard operating specifications, the firmware of devices needs to be updated to the latest version in time in order to ensure that the device has the latest functions and security. If the device is connected to the public network, it is recommended to enable the online upgrade automatic detection function, so as to obtain the firmware update information released by the manufacturer in a timely manner.

2. **Update client software in time**

We recommend you to download and use the latest client software.

Physical Protection

It is recommended that you carry out physical protection for devices (especially storage devices), such as placing the device in a dedicated machine room and cabinet, and having access control and key management in place to prevent unauthorized personnel from damaging hardware and other peripheral equipment (e.g. USB flash disk, serial port).

ENABLING A SMARTER SOCIETY AND BETTER LIVING

ZHEJIANG DAHUA VISION TECHNOLOGY CO., LTD.

Address: No. 1399, Binxing Road, Binjiang District, Hangzhou, P. R. China | Website: www.dahuasecurity.com | Postcode: 310053

Email: dhoverseas@dhvisiontech.com | Tel: +86-571-87688888 28933188