



Smart Interactive Whiteboard

User's 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
V1.0.2	<ul style="list-style-type: none">Updated quick tools, electronic whiteboard, screen sharing and system settings.Added description of login, welcome page, and self check.	June 2024
V1.0.1	Updated quick tools, electronic whiteboard and general settings.	December 2023
V1.0.0	First release.	November 2023

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 to: 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 (–10 °C to +50 °C, or –14 °F to +122 °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.
- Only applicable for use in altitudes below 5,000 meters.

Operation Requirements



- 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 ingest battery. Chemical Burn Hazard. This product contains a coin cell battery. If the coin cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
- Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children.
- If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.



- The whiteboard can run continuously for up to 16 hours each day. Please do not keep it running for longer than this time, otherwise the life of the screen will be affected.
- 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.

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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 Microsoft Office and audio and video players.

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	HDMI cable	1
Wall mount bracket (installed on the whiteboard already)	1	Quick start guide	1
Accessory package	1	Remote control	1
Legal and Regulatory Information	1	—	—

1.3 Structure

1.3.1 Appearance and Structure

Figure 1-1 Appearance

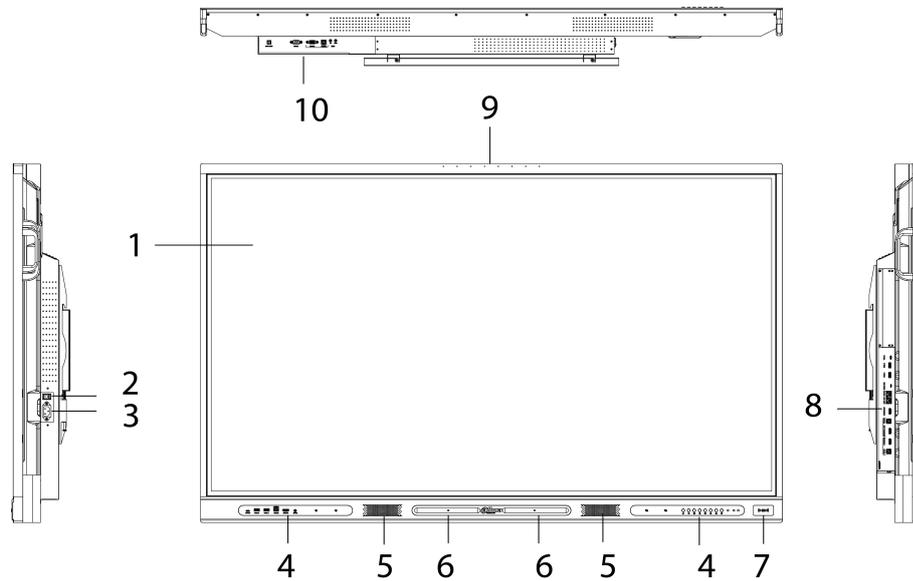


Table 1-2 Appearance description

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	Front panel.
5	Speaker holes.
6	Magnetic stylus pen attach area.  Some models of 65-inch series do not have plastic pen holders. You can directly attach the pen to the magnetic area.
7	NFC detector to unlock the whiteboard.
8	Side of the rear panel.
9	Microphones. Pick up live audio.  Some models do not have microphones at this location.
10	Bottom of the rear panel.

Front panel

Figure 1-2 Front panel (1)

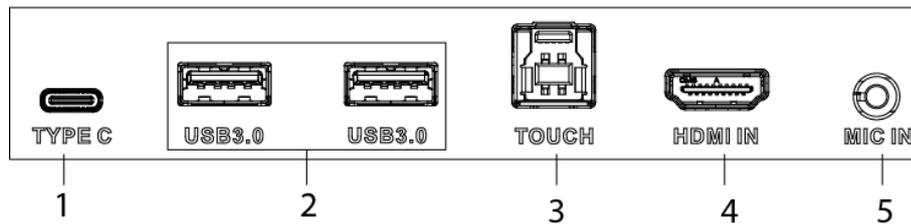


Figure 1-3 Front panel (2)

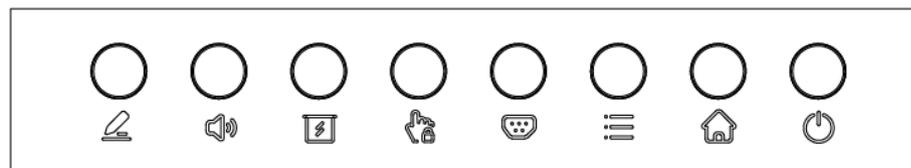


Table 1-3 Description of the front panels

No./Button	Description
1	Multi-function Type C port. It can be used for signal input and touch control. After you connect the whiteboard with your computer through the HDMI IN port and TOUCH port on the front panel, insert a USB device to the Type C port and then the USB device will be read and found on your computer.
2	Connects to USB devices such as mobile hard disk, USB flash drive, USB keyboard, USB mouse. It is applicable to Android system and computer module. After you connect the whiteboard with your computer through the HDMI IN port and TOUCH port on the front panel, insert a USB device to the USB 3.0 port and then the USB device will be read and found on your computer.
3	Transmits touch signals. The port only works with the HDMI IN port next to it. After you connect your computer with the HDMI IN 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.
4	Inputs uncompressed HD video signals and multichannel audio signals from the external HDMI signal source.
5	Audio input port.
	Enter comment mode.
	Adjust volume.
	Enter curtain mode.
	Press the button to enable the touch lock. When the touch lock is enabled, the touchscreen is not available. Press the power button 3 times in 2 seconds to unlock the touch lock.
	Select signal sources.

No./Button	Description
	Open or close the navigation bar.
	Go back to the home screen.
	Power button. Turn on or turn off the screen.

Side of the rear panel

Figure 1-4 Side of the rear panel

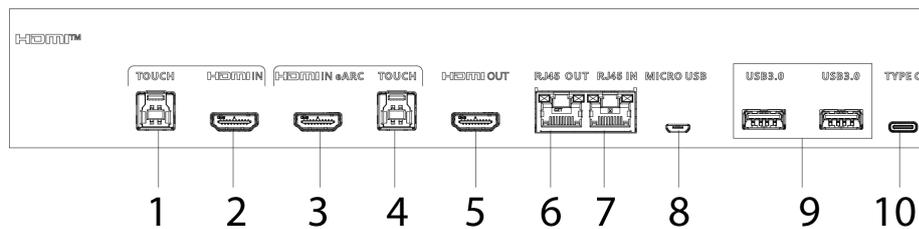


Table 1-4 Description of ports on the side of the rear panel

No.	Port	Description
1	TOUCH	<p>Transmits touch signals. The port only works with the HDMI IN port next to it.</p> <p>After you connect your computer with the whiteboard through the HDMI IN 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.</p>
2	HDMI IN	<p>Inputs uncompressed HD video signals and multichannel audio signals from the external HDMI signal source.</p> <p></p> <p>HDMI IN port is only available on select models.</p>
3	HDMI IN eARC	<p>HDMI input port supports enhanced audio return channel (eARC). Inputs video and audio signals from the external HDMI signal source.</p> <p></p> <ul style="list-style-type: none"> To use the eARC function, you need to connect to devices that support eARC. This port is only available on select models.
4	TOUCH	<p>Transmits touch signals. The port only works with the HDMI IN eARC port next to it.</p> <p>After you connect your computer with the whiteboard through the HDMI IN eARC 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.</p>
5	HDMI OUT	<p>HD audio and video signal output port. Transmits uncompressed HD video and multichannel audio data.</p>

No.	Port	Description
6	RJ-45 OUT	Network output port. Connects to other devices so that the whiteboard can share network like a router.
7	RJ-45 IN	Network input port. Connects to the network cable to access network.
8	Micro USB	Only applicable to Android system. Uses for system debugging.
9	USB 3.0	Connects to USB devices such as mobile hard disk, USB flash drive, USB keyboard, and USB mouse. It is applicable to Android system and computer module.
10	Type C	Multi-function Type C port. It can be used for signal input, and touch control.

Bottom of the rear panel

Figure 1-5 Bottom of the rear panel

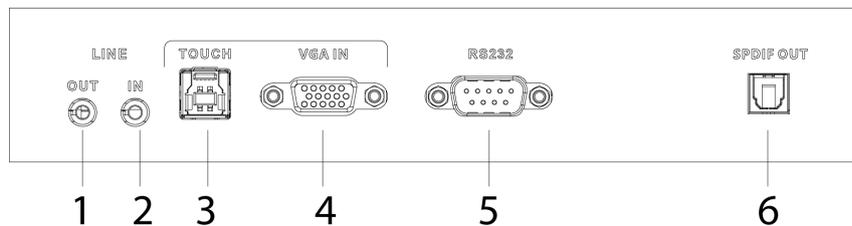


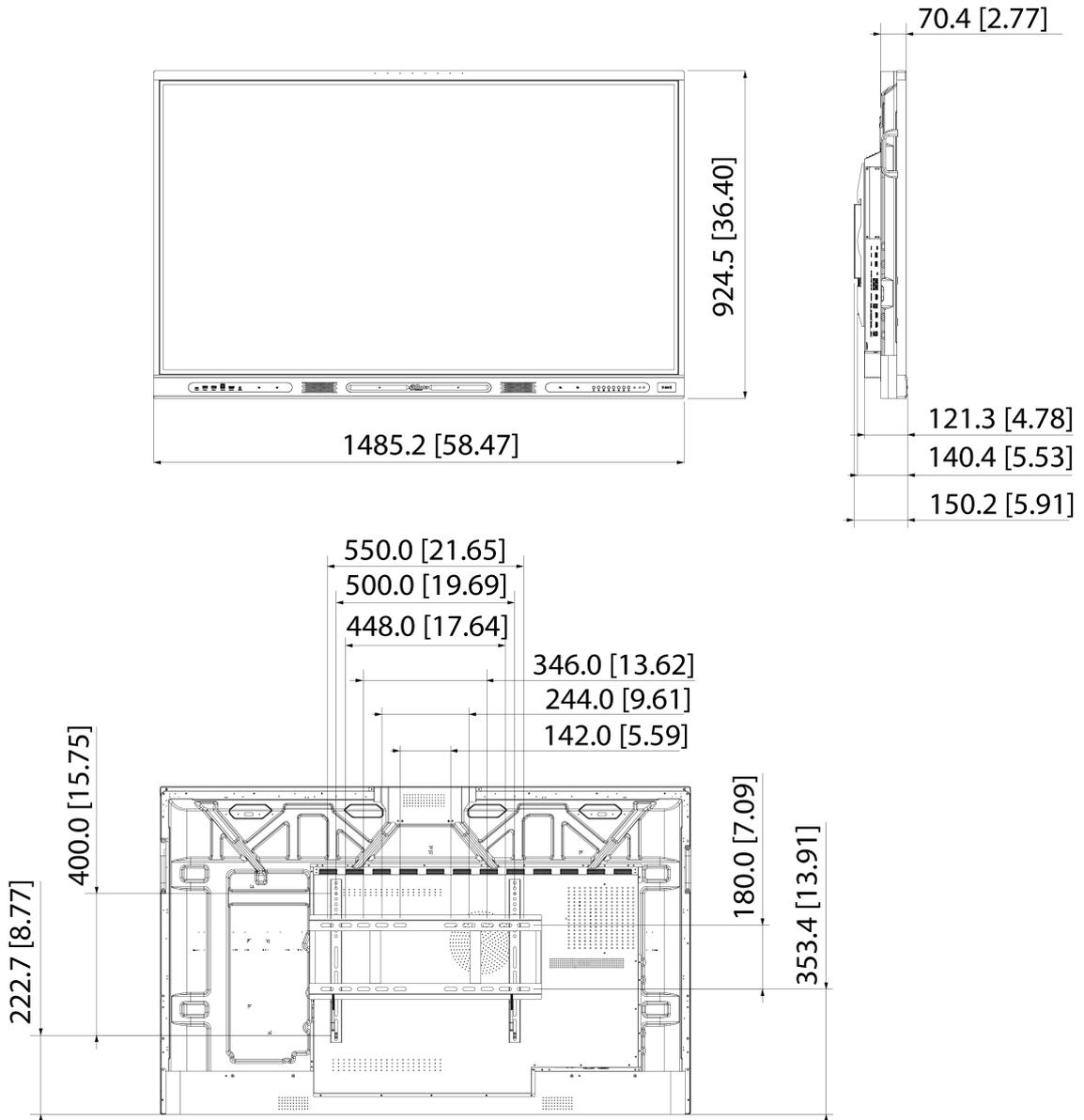
Table 1-5 Description of ports on the bottom of the rear panel

No.	Port	Description
1	LINE OUT	Line output port. Connects to earphones or speakers.
2	LINE IN	Line input port. Works with VGA IN port.
3	TOUCH	Transmits touch signals. The port only works with the VGA IN port next to it. After you connect your computer with the whiteboard through the VGA IN 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.
4	VGA IN	Video input port. Connects to computers, set-top boxes, and other video devices with VGA output ports.
5	RS-232	Transmits data between devices. Can connect to central control devices with RS-232 port.
6	SPDIF OUT	Sony/Philips Digital Interface. Outputs audio to earphones or speakers.

1.3.2 Dimensions

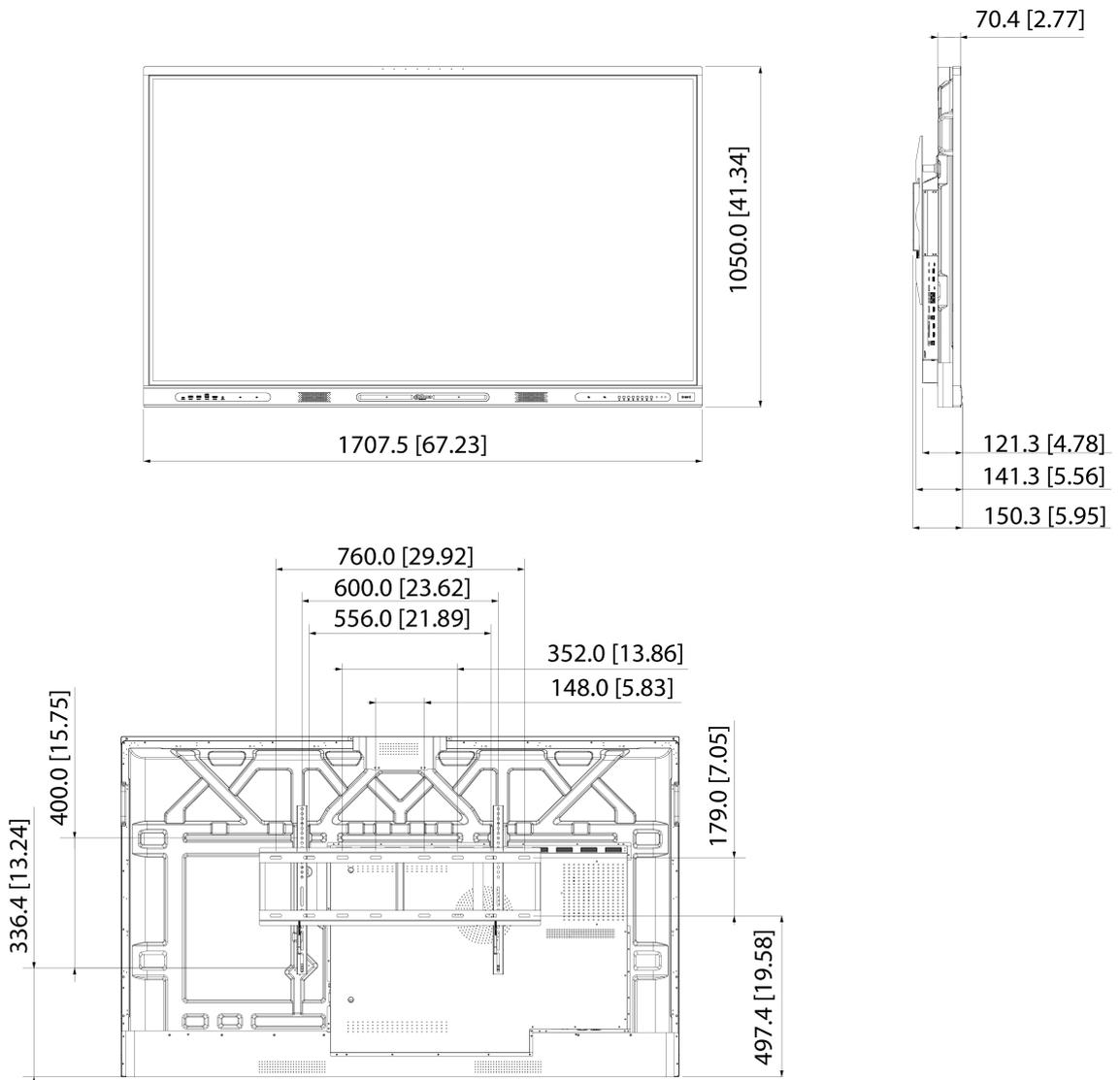
1.3.2.1 Dimensions (65-inch)

Figure 1-6 Dimensions (mm [inch])



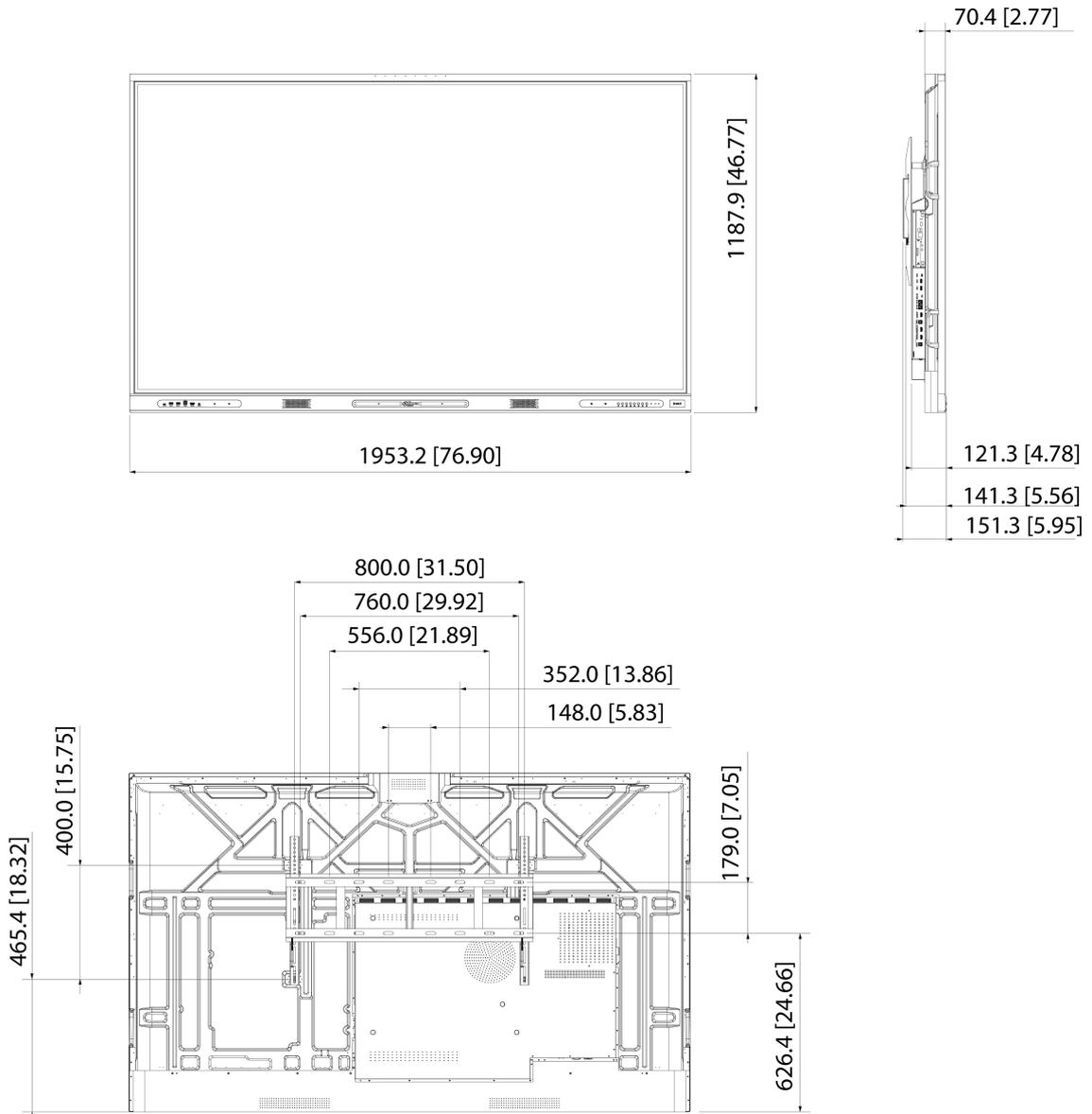
1.3.2.2 Dimensions (75-inch)

Figure 1-7 Dimensions (mm [inch])



1.3.2.3 Dimensions (86-inch)

Figure 1-8 Dimensions (mm [inch])



2 Startup and Wakeup

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 power switch next to the power cord.

After startup, the system displays the home screen by default.

Figure 2-1 Home screen



Table 2-1 Home screen description

No.	Description
1	Displays date, time and the day of the week.
2	Device status bar. Displays different status information. Tap each icon to view details.
3	Tap to bring up the navigation bar. For details, see "3.2.1 Bringing up the Navigation Bar".
4	Change the position of Input Source and account login.

No.	Description
5	Function area. Tap a function icon to go to the corresponding operation screen.  For a third-party app, you can tap and hold the corresponding icon to uninstall the app. The apps that come with the system cannot be uninstalled in such way.
6	Assistive touch. Tap the icon to quickly use functions as electronic whiteboard, annotation, and file management. For details, see "3.2.2 Bringing up the Assistive Touch".
7	Tap to log in to your account. For details, see "3.1 Login"
8	Input source. Supports different input sources such as Windows, HDMI, and Type C.

2.2 Turning off the Screen

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



On the home screen, select **More** > **Settings** > **Power Status**, enable **Turn Off Screen with Five Fingers**, and then you can simultaneously touch the screen with five fingers to quickly turn off the screen.

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.

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 Login

Procedure

Step 1 On the bottom of the home screen, tap  to go to the account login screen.

Step 2 Enter mailbox and password, and then click **Login**.



- You can also scan the QR code on the right of the screen with a mobile phone or tablet to log in to the account.
- You can log in with a Google or Microsoft account.

Related Operations

- After login, you can customize the profile picture and username, change password, select country or region, and bind NFC card and cloud disk accounts. Only Google Drive and OneDrive are supported now.
- If you have bind a NFC card to the whiteboard, you can touch the NFC sensor with the NFC card to quickly log in to the account.
- On the home screen, you can also tap **More** > **Settings**, and then click the account on the upper-left corner to view and configure your account information.

3.2 Quick Operations

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

3.2.1 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 "3.2.3 Quick Tools".
	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.

3.2.2 Bringing up the Assistive Touch

Tap  on the home screen to bring up the compass menu. For details, see "3.8.2 Configuring General Settings".

Figure 3-2 Assistive touch

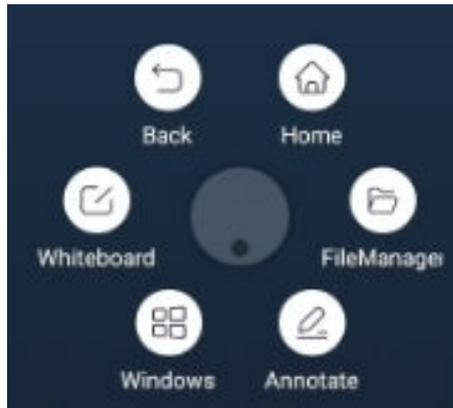


Table 3-2 Description of assistive touch

Icon	Description
	Go back to the home screen.
	Go back to the previous screen.
	Go to the electronic whiteboard screen. For details, see "3.3 Electronic Whiteboard".
	After you insert the computer module, tap the icon to switch to the Windows system.
	<p>Turn on the annotation mode.</p> <ul style="list-style-type: none"> • Tap to select the type of pen and the size of the brush. • Tap to select the type, color, and thickness of the top and bottom of the pen. • Tap to clear content. <ul style="list-style-type: none"> ◇ Tap to clear unwanted content. ◇ Tap , circle unwanted content, and then erase the selected content. ◇ Tap to clear all content on the screen. • Tap Save, and then select the path to save your annotations. • Tap Exit to exit the annotation screen.
	Manage files.

3.2.3 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

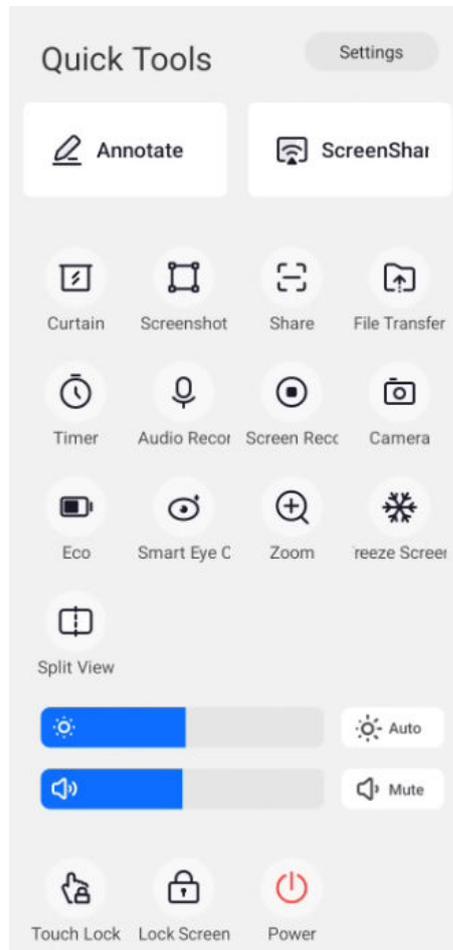


Table 3-3 Description of quick tools

Function	Description
Settings	Go to the Settings screen. For details, see "3.8 System Settings".
Annotate	<p>Turn on the annotation mode.</p> <ul style="list-style-type: none"> ● Tap  to select the type of pen and the size of the brush. ● Tap  to select the type, color, and thickness of the top and bottom of the pen. ● Tap  to clear content. <ul style="list-style-type: none"> ◇ Tap  to clear unwanted content. ◇ Tap , circle unwanted content, and then erase the selected content. ◇ Tap  to clear all content on the screen. ● Tap Save, and then select the path to save your annotations. ● Tap Exit to exit the annotation screen.

Function	Description
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 enable the curtain mode. You can highlight the corresponding area as needed.
Screenshot	<p>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.</p> <ul style="list-style-type: none"> ● Tap , and then you can import the screenshot to the whiteboard with one tap. ● Tap  to capture the full screen. ● Tap  or  to choose the shape of the screenshot. ● 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.
Share	<ol style="list-style-type: none"> 1. Tap the icon, and then select the files that you want to share.  <ul style="list-style-type: none"> ● You can select different types of files but cannot select folders. ● The size of a single file must not exceed 200 MB. 2. Tap OK to compress 1 or more files into a zip file for transmission. 3. After a QR code is generated, you can scan the QR code to download the file, or tap Continue to Select under the QR code to return to the file selection screen to select more files. <p></p> <ul style="list-style-type: none"> ● File sharing poses a risk of data leakage. Keep the QR code safe. ● When the selected files have the same name, the QR code cannot be generated. <p></p> <p>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. If encryption is enabled, you need to enter the verification password after scanning the code, and the download screen will be displayed after the verification is successful.</p>

Function	Description
File Transfer	<p>Tap the icon to transfer files.</p> <ol style="list-style-type: none"> 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. <p></p> <ul style="list-style-type: none"> • Tap to turn on the whiteboard (Only pictures supported). • Tap to delete the file.
Timer	<p>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.</p> <p></p> <p>reset is only available when the timer is paused, and it will reset to the initial state 00:00:00.</p>
Audio Recording	<p>Tap the icon to record the audio.</p> <ul style="list-style-type: none"> • : Start recording. • : Stop recording. <p></p> <p>Only devices with microphone are supported.</p>
Screen Recording	<p>Tap the icon to record the screen.</p>
Camera	<p>Tap the icon to take a picture.</p> <ul style="list-style-type: none"> • Supports countdown settings, including: off, 3 s (default), 5 s, and 10 s. • 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.png by default. • Supports sharing pictures with others. <p></p> <p>Connect the whiteboard with an external camera first before using this function.</p>
Eco	<p>With this function enabled, the backlight is set to a lower value. The backlight brightness can be adjusted manually or automatically.</p>

Function	Description
Smart Eye Care	<p>Enable or disable the eye care function.</p> <p>With this function enabled, the whiteboard will reduce the intensity of its blue light and change the screen to eye care mode.</p>
Zoom	Zoom in to display the specific contents as needed.
Freeze Screen	After enabling this function, you can operate the computer being projected while the whiteboard remains the screen unchanged during screen sharing.
Split View	<p>Supports displaying and using 2 applications at the same time.</p> <ul style="list-style-type: none"> You can drag the screen divider to adjust the size ratio between the left and right screens. The default ratio is 1:1. When you drag the divider to the right, causing the left and right screens to have a ratio greater than 2:1, the whiteboard will exit split view mode and the left application will be displayed in full screen. Supports location switching between the left and right applications, and you can close one of the applications.
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 "3.8.2 Configuring General Settings".
Volume	Drag the slider to adjust the volume. Tap MUTE to enable mute.
Touch Lock	<p>Tap the icon to disable touch control for the screen.</p>  <p>Press the power button 3 times in 2 seconds to unlock the touch control.</p>
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.

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.

3.3 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

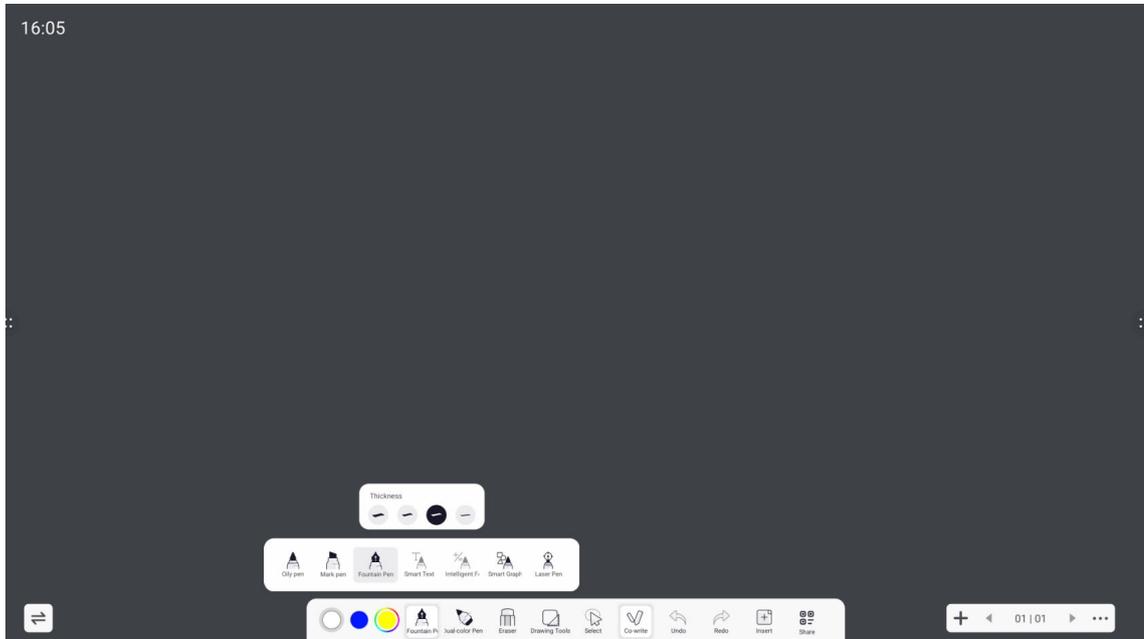
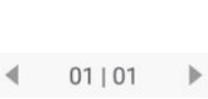


Table 3-4 Description of whiteboard icons

Icon	Description
	Adjust the location of the whiteboard tool bar.
	Select or customize the color of the pen.
	Select the type of pen and the thickness of the brush. <ul style="list-style-type: none"> ● Oily pen: By default, the color of the brush is black. ● Mark pen: By default, the color of the brush is yellow. ● Fountain pen: By default, the color of the brush is black. ● 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.

Icon	Description
	<p>Erase content.</p> <ul style="list-style-type: none"> • Tap  to clear unwanted content. • Tap , circle unwanted content, and then erase the selected content. • Tap  to clear all content on the screen. <p></p> <p>You can press your palm on the screen and then move your hand over the words and graphics to erase them.</p>
	<p>Add different drawing tools.</p> <ul style="list-style-type: none"> • Plane figures: Include straight line, dotted line, arrow, triangle, circle, rectangle, and more. • Solid figures: Include cube, cuboid, tetrahedron, cone, frustum, ball, and more. • Measuring tools: Include ruler, triangle ruler, isosceles triangle ruler, protractor, and compasses.
	<p>Select content on the screen to zoom in, zoom out, move or rotate. You can also copy, overturn, mirror, or delete the selected content.</p>
	<p>Switch between zoom mode and co-write mode.</p> <ul style="list-style-type: none"> • Zoom mode: Only supports 1-point writing. You can zoom in and zoom out the canvas. • Co-write mode: <ul style="list-style-type: none"> ◇ 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.
	<p>Undo the previous action. You can undo up to 10 actions.</p>
	<p>Redo the action that has been undone. You can redo up to 10 actions.</p>

Icon	Description
	<ul style="list-style-type: none"> ● 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. <ul style="list-style-type: none"> ◇ 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.  <p>Functions might be vary depending on the whiteboard models.</p>
	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
	<p>Tap the icon, and then you can perform the following operations.</p> <ul style="list-style-type: none"> ● 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.

3.4 File Management

Tap **File Manager** on the home screen to download files from 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

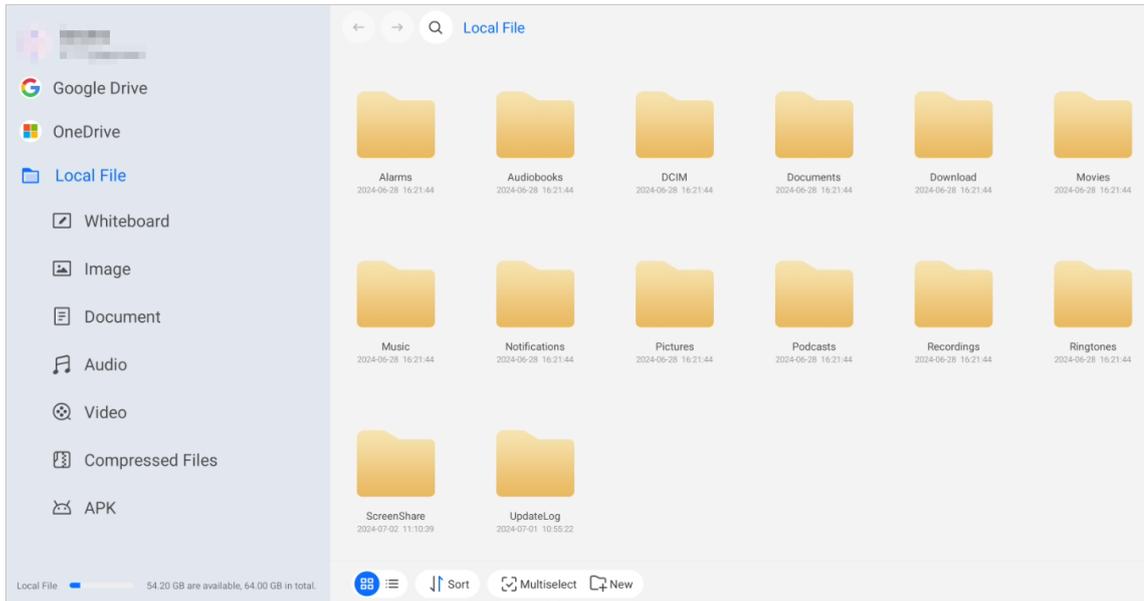


Table 3-5 File management icons

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	Sort files in the ascending or descending order by name, size and time.
Multiselect	You can select multiple files or all the files.
New	Create a new folder.
Copy	Select a file or folder, tap Copy or Cut , and then tap Paste to paste the file or folder.
Cut	
Paste	
Delete	Delete files or folders.
Rename	Rename the files and folders. You cannot change the suffix of the file name.
Send	Send the selected information through Bluetooth.

3.5 Screen Sharing

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

3.5.1 Sharing Screen through App

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.

Prerequisites

The whiteboard and your computer are on the same LAN network and the hotspot of the whiteboard has been enabled.

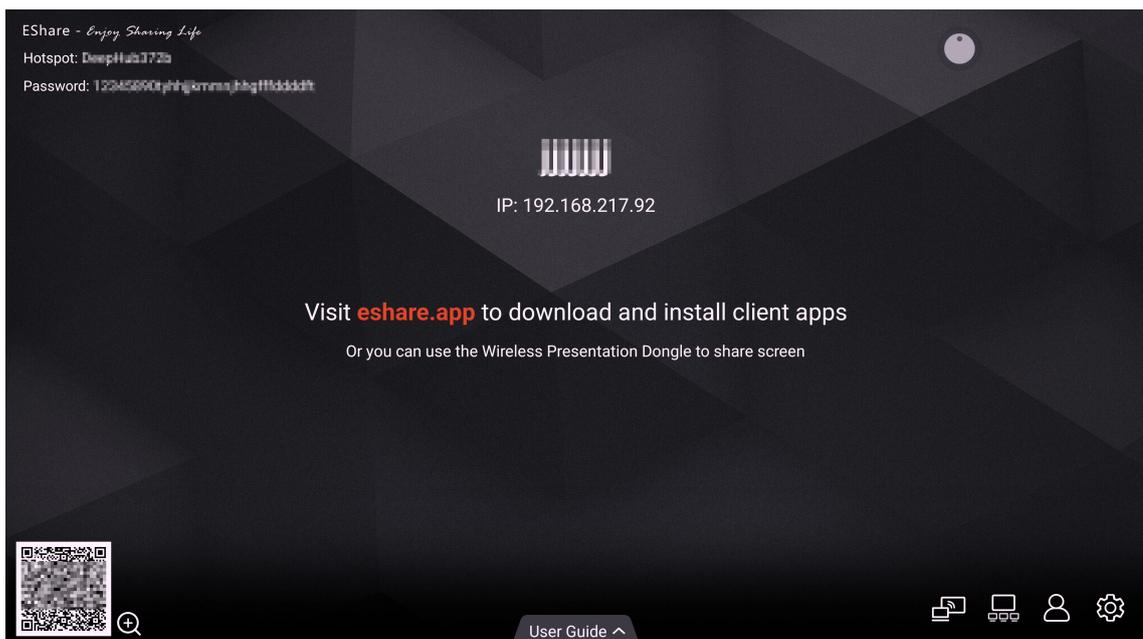
Procedure

- Step 1 Tap **Screen Sharing** on the Android home screen of the whiteboard.
- Step 2 Use your phone or tablet to scan the QR code on the lower-left corner of the screen, and then download and install the EShare app that corresponds to the operating system on your phone or other devices. For example, EShare for Android.



- You can also download the app by visiting `http://IP address:port` on your phone.
- The IP address might vary depending on the network the whiteboard is connected to.
- Tap  to zoom in the QR code.
- Tap  to enable WebCast so that you can use a browser to share the screen without the help of the EShare app.

Figure 3-6 Screen sharing



- Step 3 Open the EShare app, and then select the device name of the whiteboard to connect the whiteboard and EShare.

After connection is successful, you can control the whiteboard on your phone or other devices and project content to the whiteboard screen.

Table 3-6 EShare icon description

Icon	Description
	Enable WebCast so that you can use a browser to share the screen without the help of the EShare app.
	Group settings. <ul style="list-style-type: none"> ● Duplicate displays. <ul style="list-style-type: none"> ◇ 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. <ul style="list-style-type: none"> ◇ 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.

Icon	Description
	<p>Moderator control center.</p> <ul style="list-style-type: none"> ● Share screen or files. <ul style="list-style-type: none"> ◇ 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. <ul style="list-style-type: none"> ◇ 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. <ul style="list-style-type: none"> ◇ 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.
	<p>Display settings.</p> <ul style="list-style-type: none"> ● Device Name : You can customize the device name. ● Connection Mode : Select a connection mode. <ul style="list-style-type: none"> ◇ Device name: When you open EShare, the app will automatically display large display devices on the same network. Select the device name of the whiteboard to connect the whiteboard and EShare. ◇ PIN code (6 digits): You need to enter the 6-digit PIN code to connect the whiteboard and EShare. ◇ PIN code (8 characters): You need to enter the 8-character PIN code to connect the whiteboard and EShare. ● Multiple Screens : Select Disable, 2 Screens, 4 Screens, 6 Screens, or 9 Screens. ● 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.

Icon	Description
User Guide	View the basic guide of screen sharing.

3.5.2 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.

3.6 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 3-7 Configure the welcome page

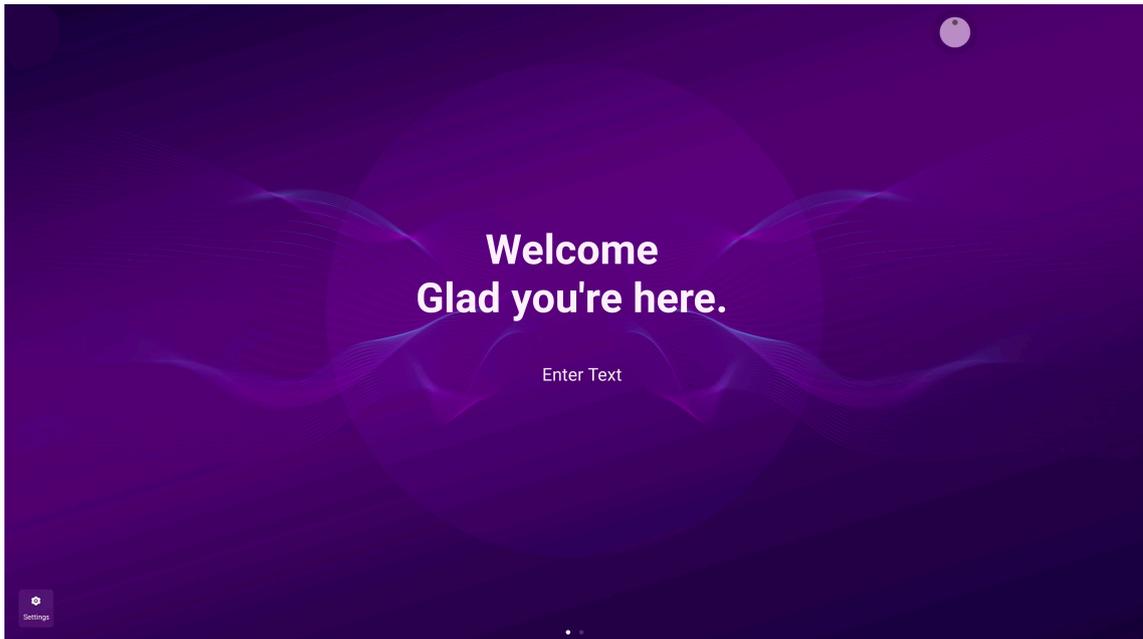


Table 3-7 Icon description

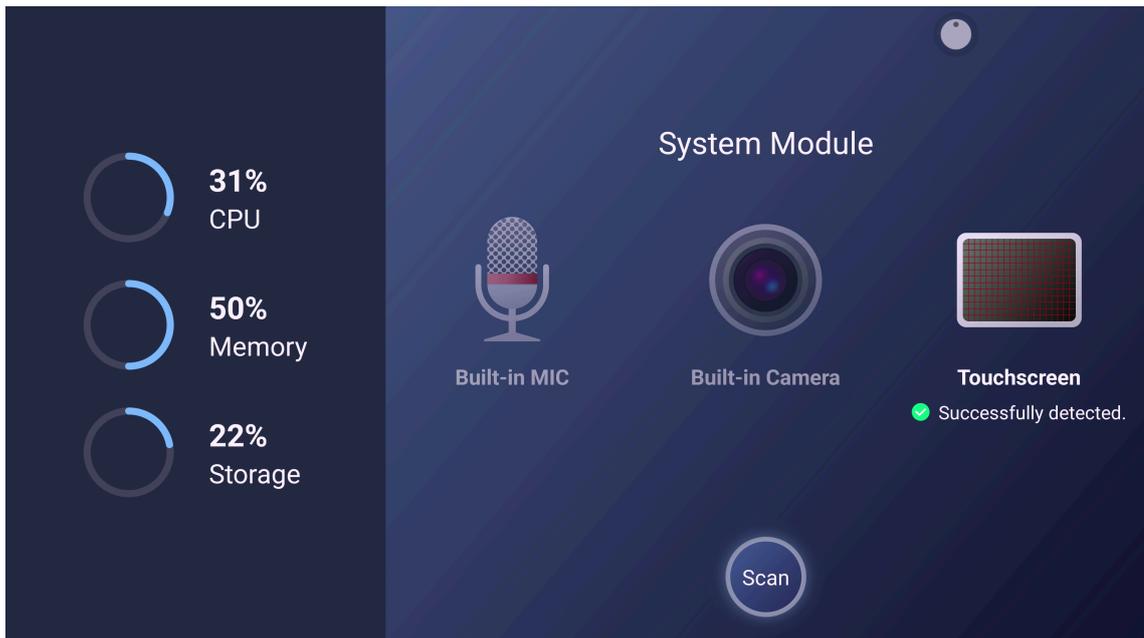
Items	Description
	Change the position of the toolbar.
Insert	Insert a background image or other images and text. Up to 10 images can be inserted and each one should be no more than 5 M.
Template	You can use local background template or custom template. Up to 10 custom templates can be inserted.
Audio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

3.7 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 3-8 Self check result



3.8 System Settings

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

3.8.1 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 3-9 Configure network

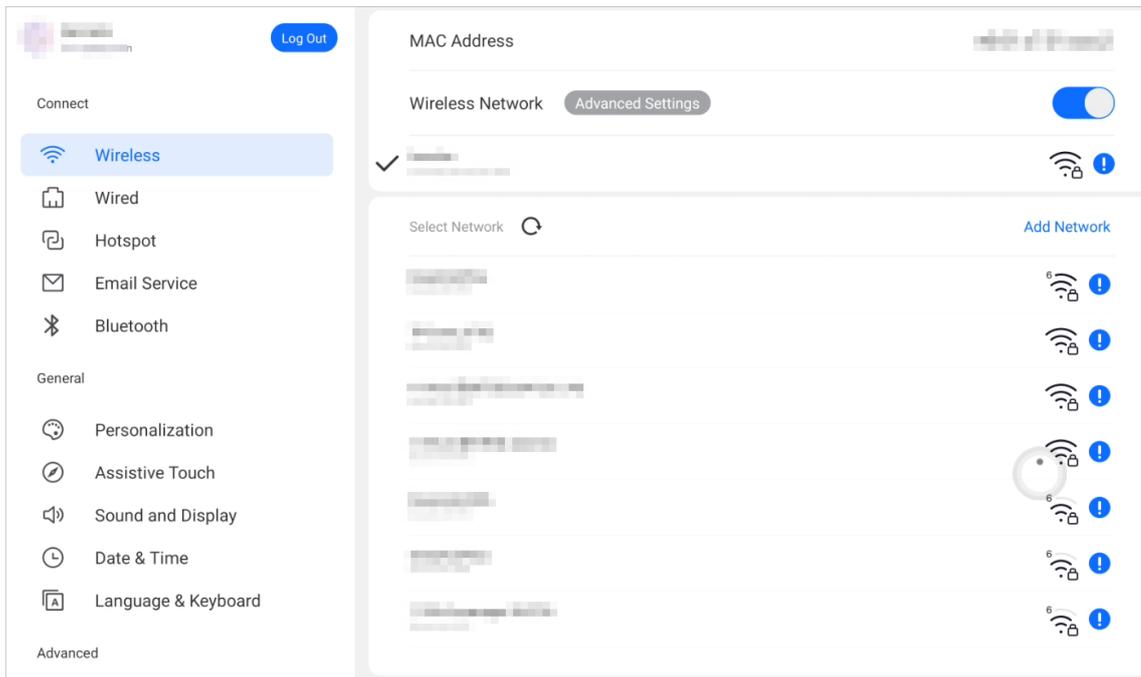


Table 3-8 Description of connection parameters

Parameter	Description
Wireless	<p>Enable Wireless Network, and then the whiteboard can connect to an available Wi-Fi network in the area. To add a wireless network, tap Add Network, enter the SSID network name and password, and then configure advanced settings as needed.</p> <p></p> <p>We recommend you select a secure authentication method to connect to a wireless network.</p>
Wired	<p>Configure wired network connection parameters. IPv4 and IPv6 are available.</p> <ul style="list-style-type: none"> ● 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	<p>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.</p>
Email Service	<p>Enable Email Service, configure relevant parameters, and then you can send whiteboard file through the email.</p>
Bluetooth	<p>Enable Bluetooth, and then the whiteboard can connect to an available Bluetooth in the area. Supports connecting wireless audio equipment, keyboards and more.</p>

3.8.2 Configuring General Settings

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

Figure 3-10 General settings

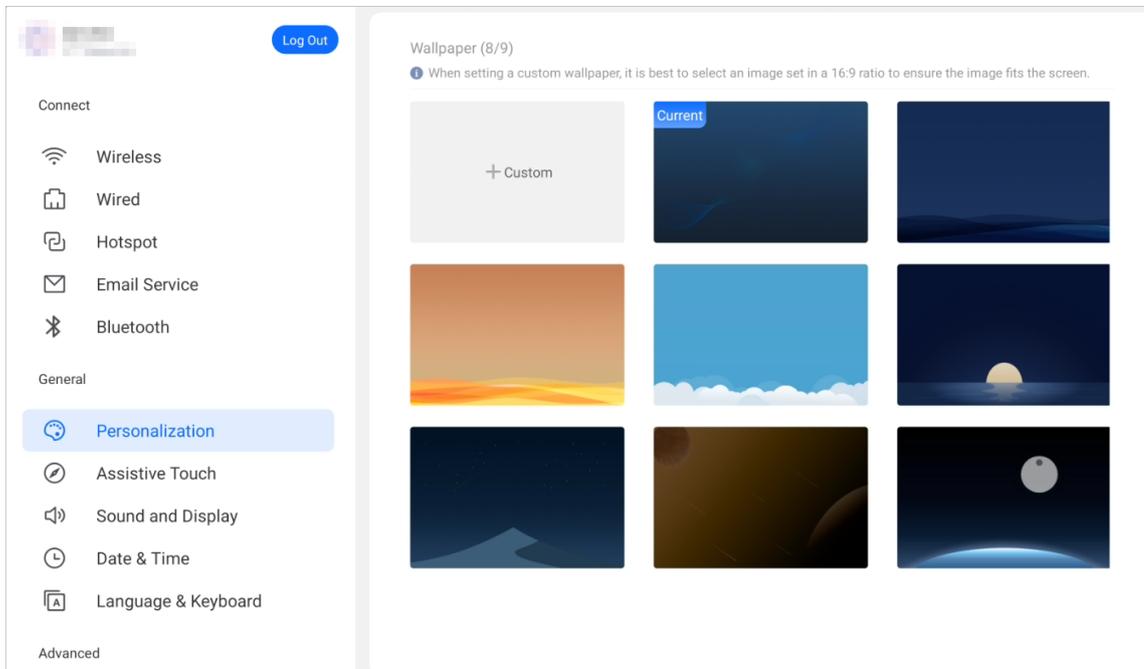


Table 3-9 General settings description

Parameter	Description
Personalization	<p>Set the background image, and you can customize the startup screen.</p> <ul style="list-style-type: none"> • The system provides 8 wallpapers by default. • You can also customize and upload wallpapers. The recommended image ratio is 16:9.
Assistive Touch	<p>Select or customize when the assistive touch is automatically hidden away, and the manner in which it is hidden (small circle or disappear).</p> <p></p> <p>After you enable Assistive Touch, double-tap with 3 fingers to bring it up.</p>

Parameter	Description
Sound and Display	<ul style="list-style-type: none"> 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 mode: You can select Standard, Music, Classroom 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: Adjust brightness manually in the range of 1–100 or enable Auto Brightness, and then the whiteboard automatically adjusts the brightness according to the ambient brightness.  In eco mode, you cannot adjust the brightness or enable Auto Brightness.
Date & Time	<p>Set the date and time automatically or manually. You can configure the format of the time, date and time zone.</p> <p>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.</p>
Language & Keyboard	Select the system language and the input method.

3.8.3 Configuring Advanced Parameters

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

Figure 3-11 Advanced parameters

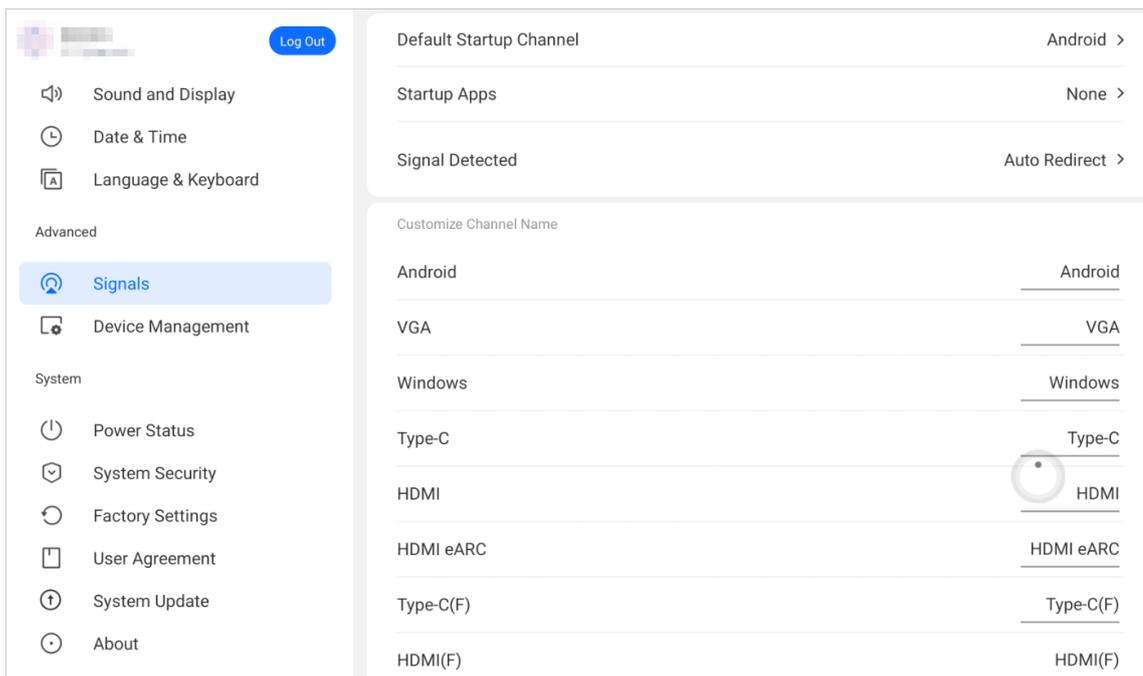


Table 3-10 Description of advanced parameters

Parameter	Description
Signals	<ul style="list-style-type: none"> ● 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. ● Signal Detected : <ul style="list-style-type: none"> ◇ 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.
Device Management	<ul style="list-style-type: none"> ● 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. ● 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. ● IR Frame Version : Tap Update to update the version of the IR 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.

3.8.4 Configuring System Parameters

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

Figure 3-12 System parameters

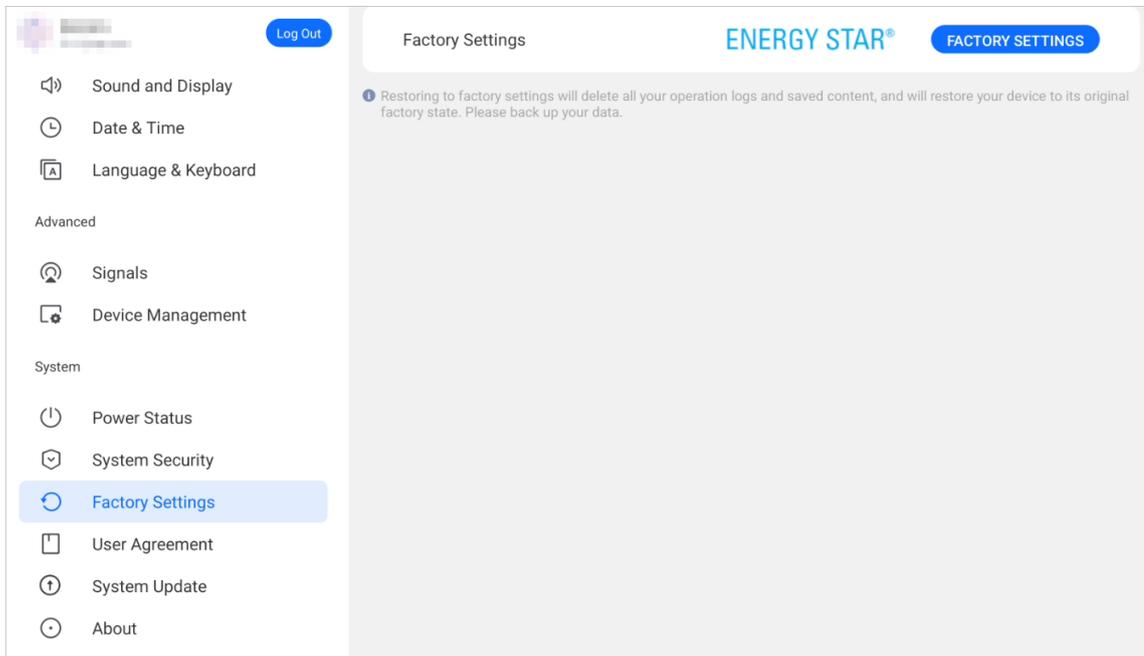


Table 3-11 System parameter description

Parameter	Description
Power Status	<p>Configure the startup and shutdown functions of the whiteboard.</p> <ul style="list-style-type: none"> ● Startup Options : Select standby after power on or startup after power on (default). ● Screen Off: Offers always on and no operation after 1 min, 5 min and 10 min. It also has custom configuration from 1 to 60 min and shut down after 10 minutes without operation (ENERGY STAR). ● Run Windows at Start up : After you enable this function, the whiteboard automatically runs 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. ● Temperature Detection : After you enable the function,  appears on the upper-right corner of the home screen. When the temperature of CPU is higher than 80 °C, the icon becomes orange. When the CPU temperature is higher than 90 °C, the icon becomes red. ● Scheduled Startup/Shutdown : Tap Add Plan to set when to automatically power on and off the system. Tap  to delete the plan.  <p>You can add up to 10 plans.</p>

Parameter	Description
System Security	<ul style="list-style-type: none"> ● Pin : After enabling Pin, you can unlock the whiteboard with digital password. ● Unlock Pattern : After enabling Unlock Pattern, you can unlock the whiteboard by drawing a pattern. ● Fingerprint : After enabling Fingerprint, you can unlock the whiteboard with your registered fingerprint. ● Password Reset Email : Configure the Email information, and then you can reset password through the predefined email. ● NFC : Follow the instructions on the page 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. ● Lock Screen : With this function enabled, you need to enter password correctly to unlock the screen. It is enabled by default. ● Screen Lock Settings : Select a screen lock option, including screen off, no operation after 1 min, 5 min and 10 min, and custom configuration. ● Touch Lock : After enabling touch lock, you cannot use touch control on the screen. Press the power button 3 times in 2 seconds to unlock the touch lock. ● USB Permission : If this function is enabled, the system does not detect the access of USB devices. <div style="margin-top: 10px;">  <ul style="list-style-type: none"> ● The system does not support the simultaneous use of pattern password and digital password. ● Fingerprint is available on select models. </div>
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.
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	<p>View MAC address, device serial number, device name (can be edited), running memory, storage space, resolution, system version, Android version, and security baseline version.</p> <div style="margin-top: 10px;">  <p>The device name can consist of up to 31 characters and contain letters, numbers, and special characters (-@.).</p> </div>

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

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