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 results.
📖 NOTE	Provides additional information as a supplement to the text.
🔑 TIPS	Provides methods to help you solve a problem or save time.

Revision History

Version	Revision Content	Release Time
V1.0.1	Added content such as Wireless Module, Camera, NFC, etc.	November 2025
V1.0.0	First release.	May 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 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 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 ℃ to +60 ℃, or–4 ℉ to +140 ℉) 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.

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 ℃ to 40 ℃, or 32 ℉ to 104 ℉) 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.

ENERGY STAR

● ENERGY STAR

As an ENERGY STAR Partner, Dahua has followed the EPA's enhanced product qualification and certification process to ensure that the products marked with the ENERGY STAR logo are ENERGY STAR qualified per the applicable ENERGY STAR guidelines for energy efficiency. The logo appears in the event that brightness settings or power mode settings are changed by the user, energy consumption of the panel may increase beyond the limits required for ENERGY STAR certification.

Additional information on the ENERGY STAR program and its environment benefits are available on the EPA ENERGY STAR website at http://www.energystar.gov

The Manufacturer-reported maximum luminance L Max Reported is 400cd/m².

⚠️

● Modifying screen brightness may affect energy consumption.

● Turning off No-signal Shutdown may result in exceeding the Energy Star requirements.

Go to **Settings > system > Power Status > ENERGY STAR:**

To configure energy star option, default on, the device will enter standby mode after 4 hours of inactivity.

Table of Contents

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.
- 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	Pack of wall mount screws	1
Wireless plug-in module	1	—	—

1.3 Structure

1.3.1 Appearance and Ports

Figure 1-1 Appearance
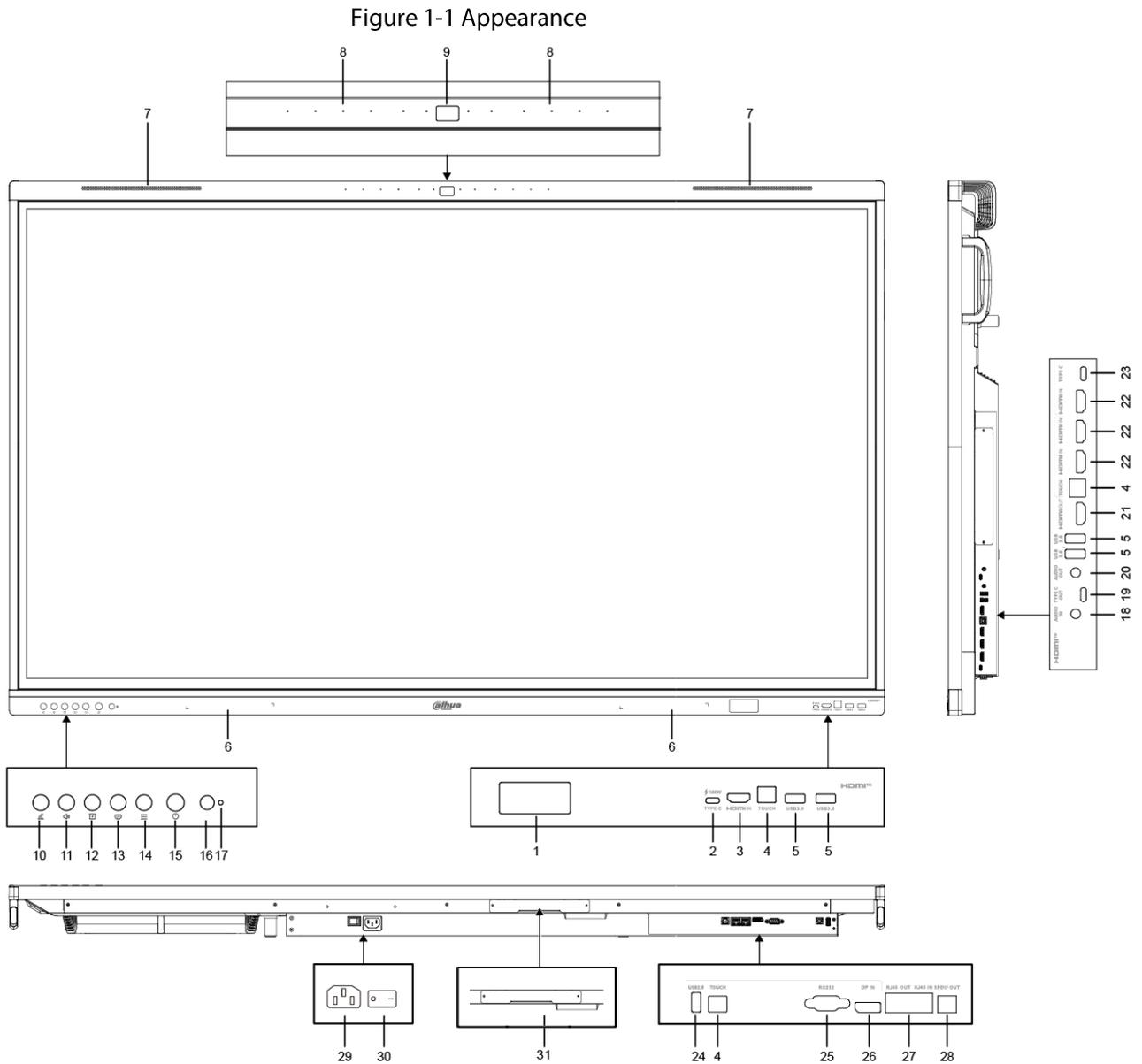
Table 1-2 Appearance description

| No.	Items	Function description
1	NFC	NFC reading area.
2	USB Type C	USB Type C: Supports charging, data transmission, extension for audio and video output interface, etc. Note: The maximum rated power of the USB Type-C port of this product is 20 V 5 A (20 V 3.25 A when OPS is plugged in); When using this port to charge electronic devices, the charging power of the electronic device cannot exceed the rated power of this port. If the charging power of the electronic device exceeds the rated

		charging power of this port, please do not directly use this port for charging.
3	HDMI IN	High-definition multimedia interface signal input, connect to devices with HDMI output interface (personal computer with HDMI output, set-top box, or another video device).
4	TOUCH	Touch signal output to the external computer.
5	USB 3.0	Connect USB devices such as mobile hard disk, U disk, USB keyboard, mouse, USB drives, etc.
6	Magnetic zone	Area for placing the absorptive magnetic pen.
7	Loudspeaker	Sound output.
8	Array microphone	The sound is collected when the microphone is on.
9	HD camera	The images are collected when the camera is on.
10	✎	Enter comment mode.
11	🔊	Adjust volume.
12	▨	Enter curtain mode.
13	⊡	Select signal sources.
14	☰	Open or close the navigation bar.
15	⏻	Power button. Turn on or turn off the screen.
16	Remote control signal receiver	Receive remote control signal.
17	Light sensor	Automatically adjusts the brightness of the screen.
18	AUDIO IN	Connect to devices with audio output capabilities.
19	TYPE C OUT	Supports data transmission, extension for audio and video output interface, etc.
20	AUDIO OUT	Audio output to the external speaker.
21	HDMI OUT	Connected to the devices with HDMI input function (monitor).
22	HDMI IN	High-definition multimedia interface signal input, connect to devices with HDMI output interface (personal computer with HDMI output, set-top box, or another video device).
23	TYPE C	Supports charging, data transmission, extension for audio and video output interface, etc. Note：The maximum rated power of the USB Type-C port of this product is 5V 3A; When using this port to charge electronic devices, the charging power of the electronic device cannot exceed the rated power of this port. If the charging power of the electronic device exceeds the rated charging power of this port, please Do not directly use this port for charging.
24	USB 2.0	Connects USB devices such as mobile hard disk, U disk, USB keyboard ,mouse, USB drives, etc.

| 25	RS232	Serial interface, used for mutual transfer of data between devices.
26	DP IN	Connected to devices with Display Port output function.
27	RJ45 OUT RJ45 IN	Connect to Ethernet.
28	SPDIF OUT	Carry multichannel sound via optical signals.
29	AC IN	AC power input, connecting AC power supply.
30	AC SWITCH	To open or shut down AC power supply. "I" means power on, "O" means power off.
31	Wireless Module	After unboxing, insert the wireless module from the accessories into the slot.

1.3.2 Dimensions

1.3.2.1 Dimensions (65-inch)

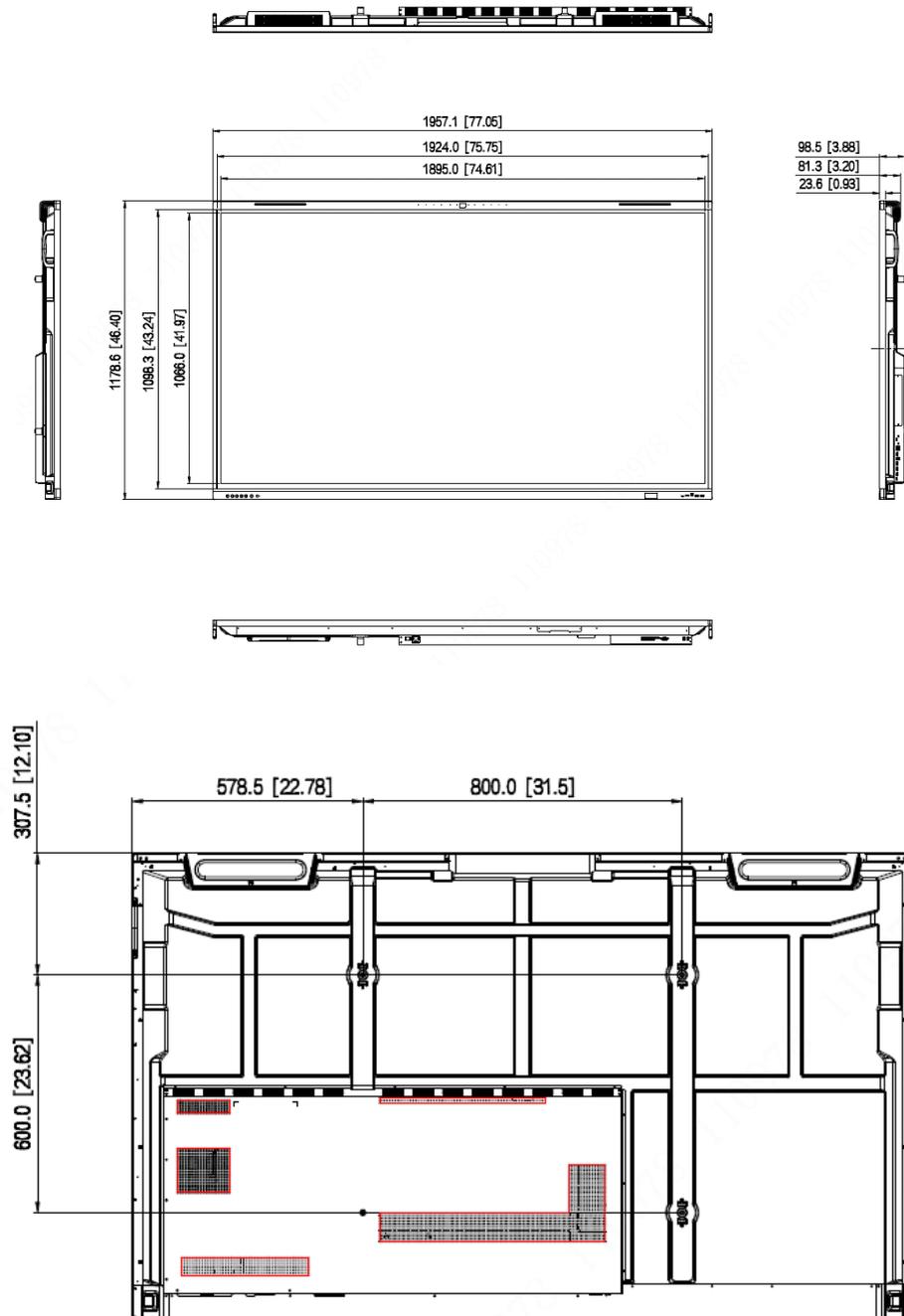Figure 1-2 Dimensions (mm [inch])
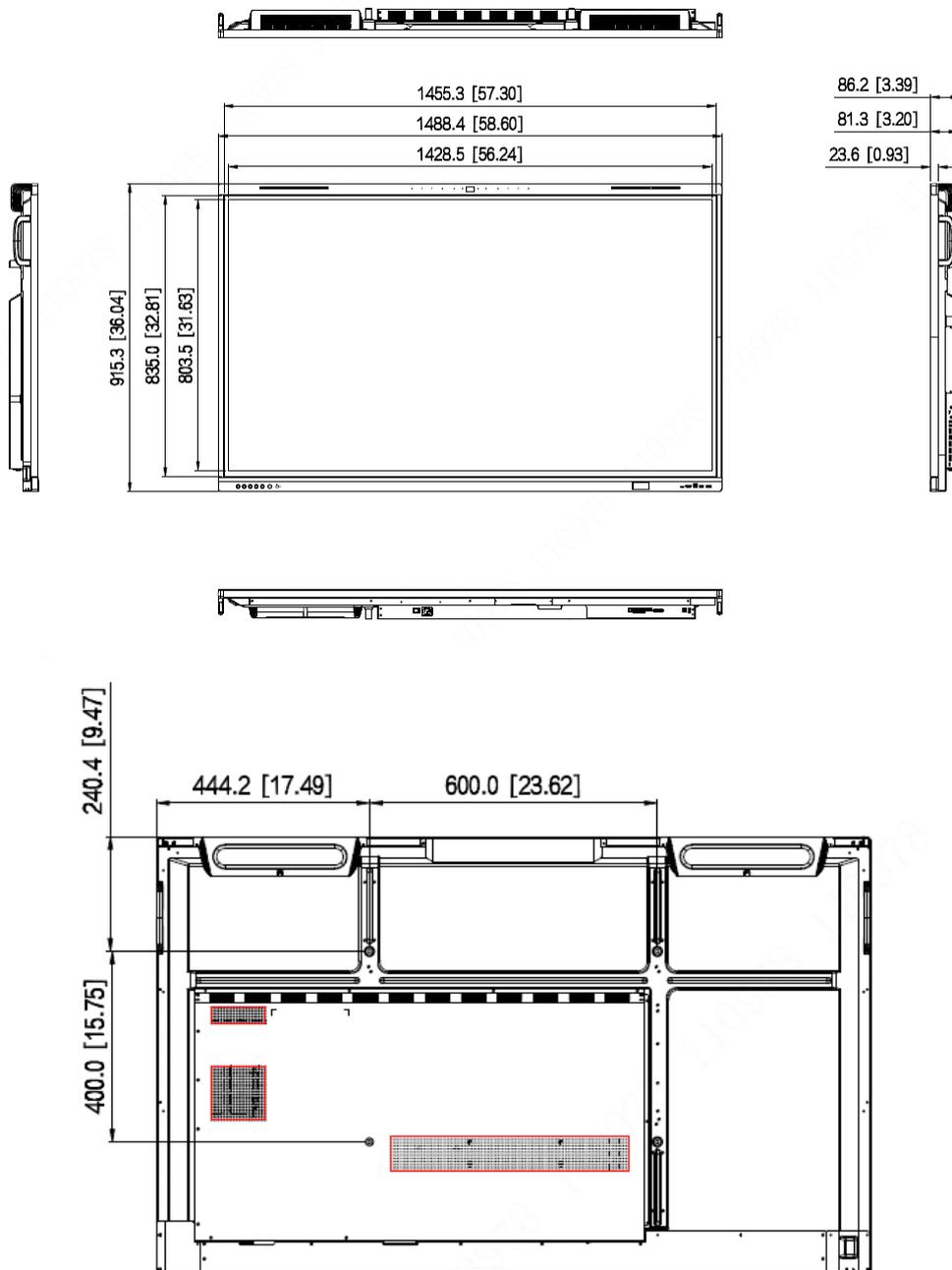
1.3.2.2 Dimensions (75-inch)

Figure 1-3 Dimensions (mm [inch])
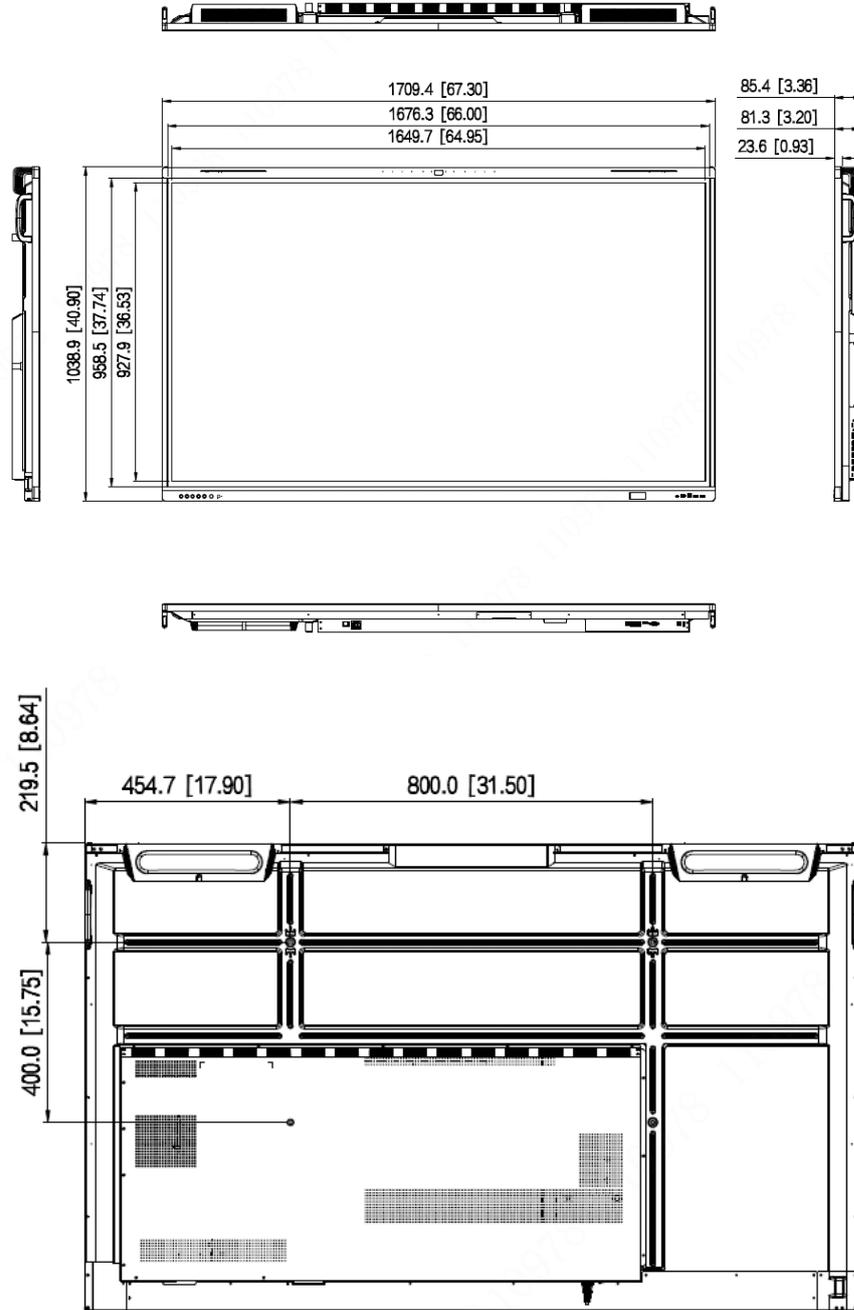
1.3.2.3 Dimensions (86-inch)

Figure 1-4 Dimensions (mm [inch])

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 front 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.
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.

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   Choose a language, and then click **Start**.

Step 3   Set up the network, you can connect to Wi-Fi.
If set up offline, you need select Date & Time zone, and then click **Next**.

Step 4   Choose to copy your apps & data, and then click **Don't copy** or **Next**.

Step 5   Sign in with your Google Account, and then click **Skip** or **Next**.

Step 6   Read the Google Privacy Policy, and then click **Accept**.

Step 7   Set a PIN, and then click **Skip** or **Next**.

Step 8   Set system navigation, and then click **Next**.

Step 9   Read the privacy policy and the software license agreement, and then click **Accept**.
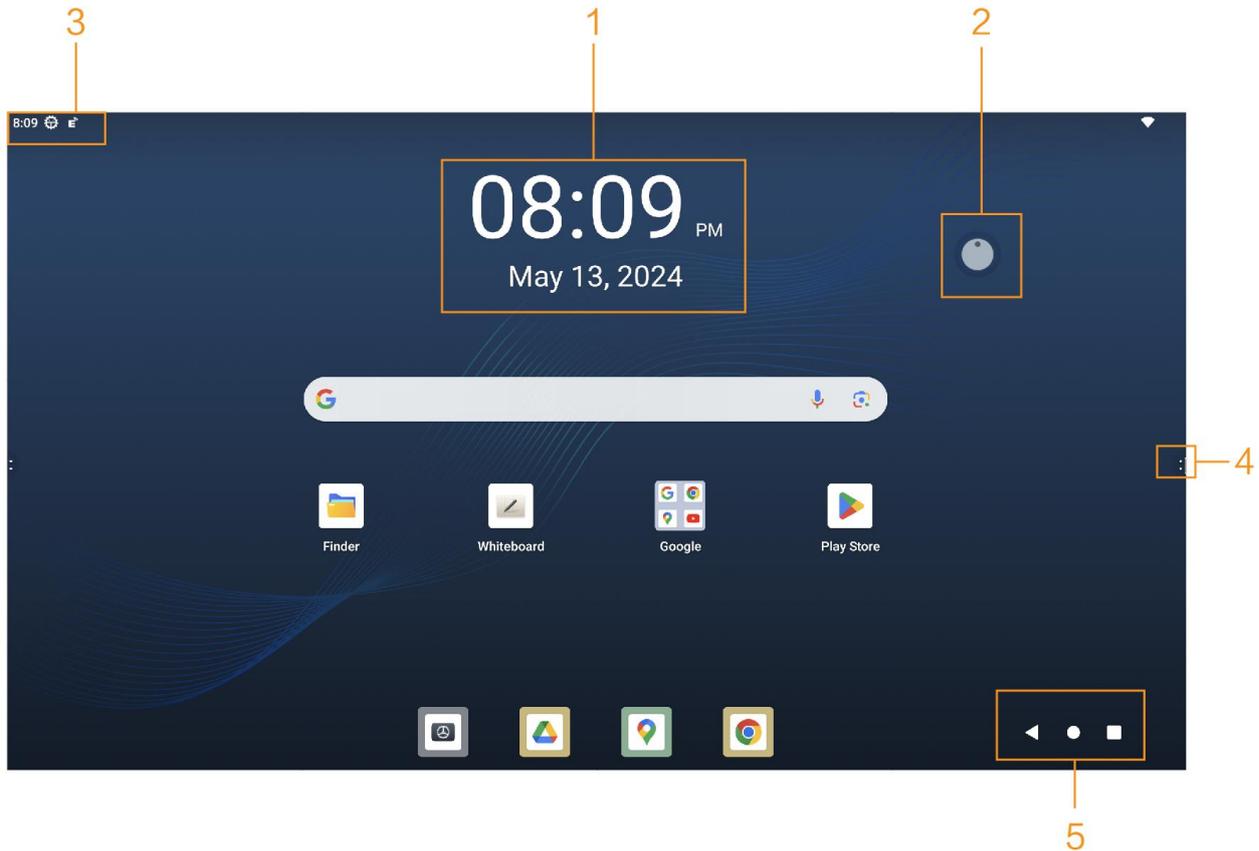
2.4 Home Screen

Figure 2-1 Home screen

Table 2-1 Home screen description

No.	Description
1	Displays date, time and the day of the week.
2	Assistive touch. Tap the icon to quickly use functions as electronic whiteboard, annotation, and file management. See "3.1.2 Bringing up the Assistive Touch" for details.
3	Device status bar. 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".
5	Android Navigation Bar. Supports Back, Home, and Recent tasks.

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 and right sides of the home screen to bring up the navigation bar.

Figure 3-1 Navigation bar

Table 3-1 Description of navigation bar

Icon	Description
⠿	Displays or hide the navigation bar.
↪	Goes back to the previous screen.
⌂	Goes back to the home screen.
≡	Tap the icon to display common tools such as annotation, screen sharing, and camera. For details, see "3.1.3 Common Tools".
⧉	Displays the apps that are running in the background. You can close the background apps one by one or in batches.
⌨	Switches the signal inputs.

Icon	Description
	Pull the On-Screen Display (OSD) up and down to support one-third or one-half Screen Down Reachability.

3.1.2 Bringing up the Assistive Touch

Tap on the home screen to bring up the compass menu. For details, see "3.10.2 Configuring General Settings".
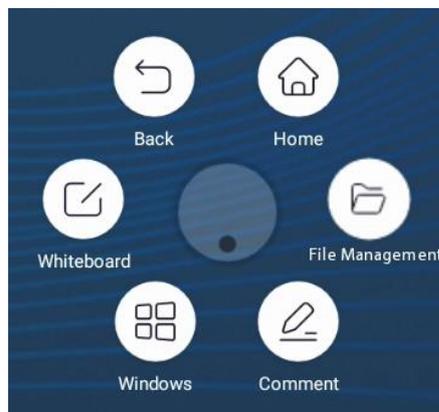
Figure 3-2 Assistive touch

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.

	Turn on the annotation mode.
	● Tap to select the type of pen and the size of the brush.
	● Tap to clear content.
	  ◇ 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.

3.1.3 Common Tools

Procedure

Step 1   Tap ⋮ on the left and right sides of the home screen to bring up the navigation bar.

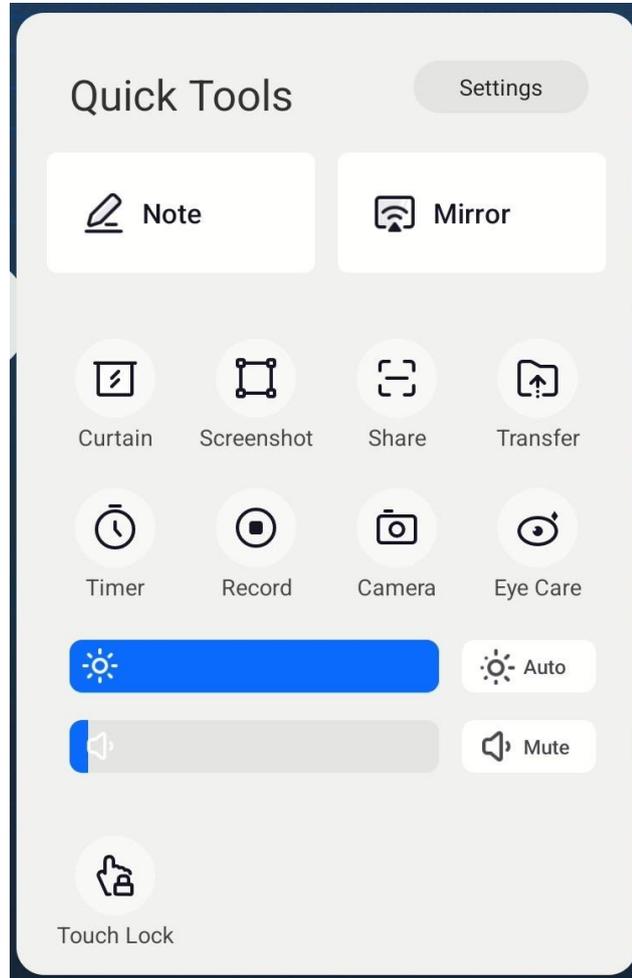Step 2   Tap ☰ to display the common tools.

Figure 3-3 Common tools

Table 3-3 Description of common tools

Section	Function	Description
Quick tools	Settings	Go to the **Settings** screen. For details, see "3.7 System Settings".

Section	Function	Description

	Note	Turn on the annotation mode which supports multi-page annotation.
		● 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 to enable the pen and touch control feature. When the pen makes contact, it is automatically recognized as writing. when the finger makes contact, it is recognized as selection.
		● Tap **Cancel** to exit the annotation mode.
		● Tap **Finish** 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 **Exit** to exit the annotation screen. If there is annotated content, a pop-up window will prompt you to save when exiting.

	Mirror	Tap the icon to use the wireless 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	Tap the icon, and then the middle area is selected by default. You can drag the 4 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 choose the desired screenshot shape. ● 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.

Section	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 files to be shared every time 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. ⚠ ● 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. 📖 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.

Section	Function	Description
	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.

Section	Function	Description
	Record	Tap the icon to record the screen. ● ![Rec] : Tap it to start recording after the 3-second countdown ends; ● ![pause icon] : Tap it to pause the recording; ● ![play icon] : Tap it to continue the recording; ● ![stop icon] : Tap it to end the recording and save. After saving it, the screen will prompt whether to open the file to view; ● ![expand icon] : Tap it to expand the bar, and tap it again to collapse; ● ![settings icon] : Tap it to set the resolution and path to save the recording; ● ✕ : Tap it to exit the screen recording feature.
	Camera	Tap the icon to take a picture. ● Built-in camera supports 48-megapixel switch (SDH button); ● Camera settings: Support switching cameras, default to built-in camera; after inserting an external camera, switch in the settings; supports resolution switching, with resolutions including: 3840×2160, 2560×1440, 1920×1080, 1280×720; ● Default 3-second photo capture; after taking the photo, click the save button to save it to the default local folder; ● Click the back button to return to the camera preview interface.
	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.
	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 "3.7.2 Configuring General Settings".

Section	Function	Description
	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. 📖 You need to long-press the volume button for 3 seconds to unlock it.

3.2 Electronic Whiteboard

Tap **Whiteboard** on the home screen to open the whiteboard software. You can write or draw pictures on the screen.
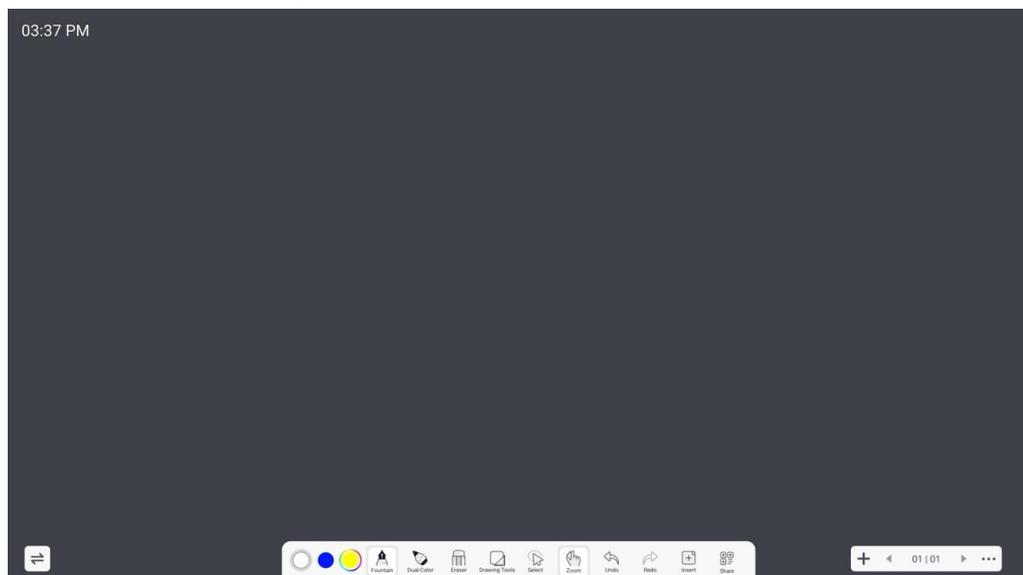
Figure 3-4 Electronic whiteboard

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.
✒	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

Icon	Description
	the system. ● Laser pen: The written content appears with a trail and disappears in 1 second. The color can be green, red, and pink.
	Tap to use the dual-color function, which defaults to the pen. The fine tip of the writing pen is white, while the broad tip is red. The type, color, and thickness of both tips can be customized. The dual-color feature only supports single-user writing.
	Erase content. ● Tap ⊞ to clear unwanted content. ● Tap ⊞, circle unwanted content, and then erase the selected content. ● Tap [≡] to clear all content on the screen. 📖 ● You cannot erase graphics or tables directly. ● 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.
	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 2-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.
	Redo the action that has been undone. You can redo up to 10 actions.
	● 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.

Icon	Description
	• Online Image: Enter to search online images. Only supports inserting up to 10 images and images defaults to the center of the screen. • Local videos: Videos will be stacked in order of dislocation. • Online videos: Enter to search online videos. Only supports inserting up to 10 videos and video defaults to the top left corner. 📖 Supported formats include AVI, RMVB, RM, MP4, 3GP, and MOV. • Audio: Supports inserting local audio files. • Table: Click to insert a table, and you can manually select the number of rows and columns to insert. The interface will display the selected number of rows and columns. After completing the selection, release your hand to insert the table. The table supports up to 12 rows and 12 columns. • Mind map: Insert a horizontal or vertical mind map, positioning the level 1 title either vertically or horizontally, and include sub-titles. For the level 2 title, arrange it in either the vertical or horizontal direction.
🔲 Share	**Scan to Go**: Download the written whiteboard file
➕	Add a whiteboard page. You can add up to 50 pages.
◀ 01 | 01 ▶	Tap 01|01 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.
...	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 management 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-

Icon	Description
	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

Manage local files and files on the USB drive.
Tap **Finder** on the home screen to manage files from Google Drive and OneDrive, files from USB drive and local files, such as whiteboard files, images, documents and more.

📖

● You need to bind a Google Drive or OneDrive account 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.
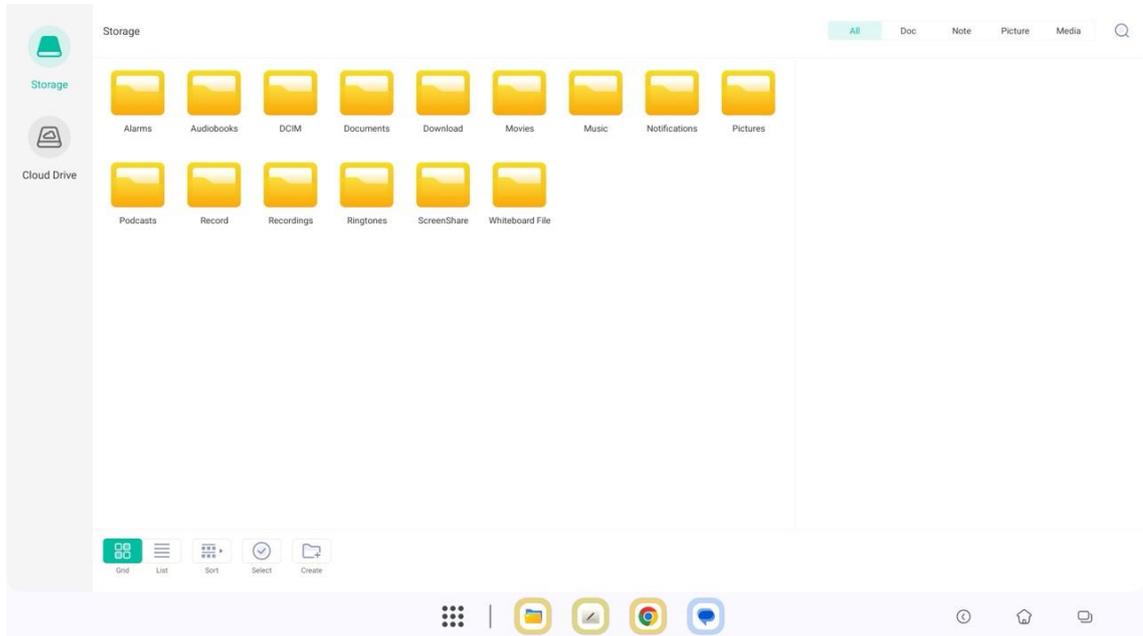- Double-tap a file or folder to open the file or folder.

Figure 3-5 File management

Table 3-5 File management icons

Icon	Description
‹	Return to the previous page.
Search 🔍	Enter file names to search for.
Grid / List	Display files in thumbnail or list format.
Sort	Sort files in the ascending or descending order by name, size and time.
Select / SelectAll	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.

Icon	Description
[T]	Rename the files and folders. You cannot change the suffix of the file name.

3.4 Screen Sharing

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

3.4.1 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. For details, see "3.10.1 Configuring Network Connection".

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 out 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
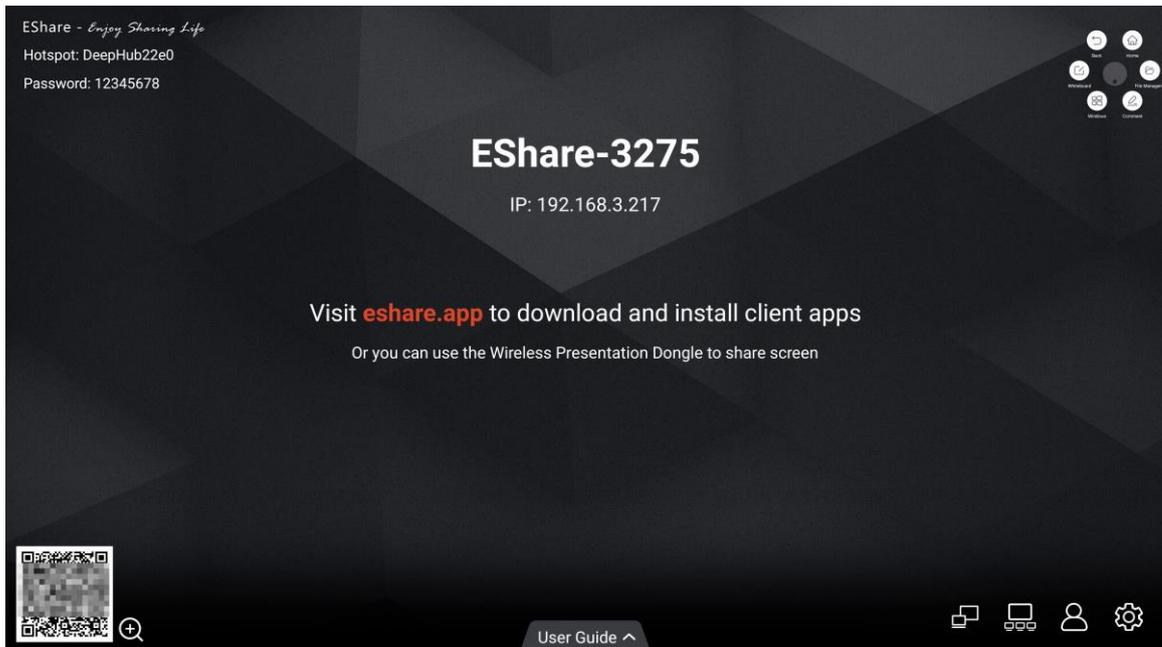
Step 3 Open the EShare app, and then select the device name of the whiteboard to connect the whiteboard and EShare.
After connection is successful, you can control the whiteboard on your phone or other devices and project content to the whiteboard screen.

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. ● 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.

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**: Select a connection mode.
	  ◇ 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 (4 digits): You need to enter the 4-digit PIN code to connect the whiteboard and EShare.
	  ◇ PIN code (6 characters): You need to enter the 6-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.

User Manual	View the basic guide of screen sharing.

3.4.2 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. For details, see "3.10.1 Configuring Network Connection".
● 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.

3.5 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 **Settings** on the lower-left corner to configure the welcome page.
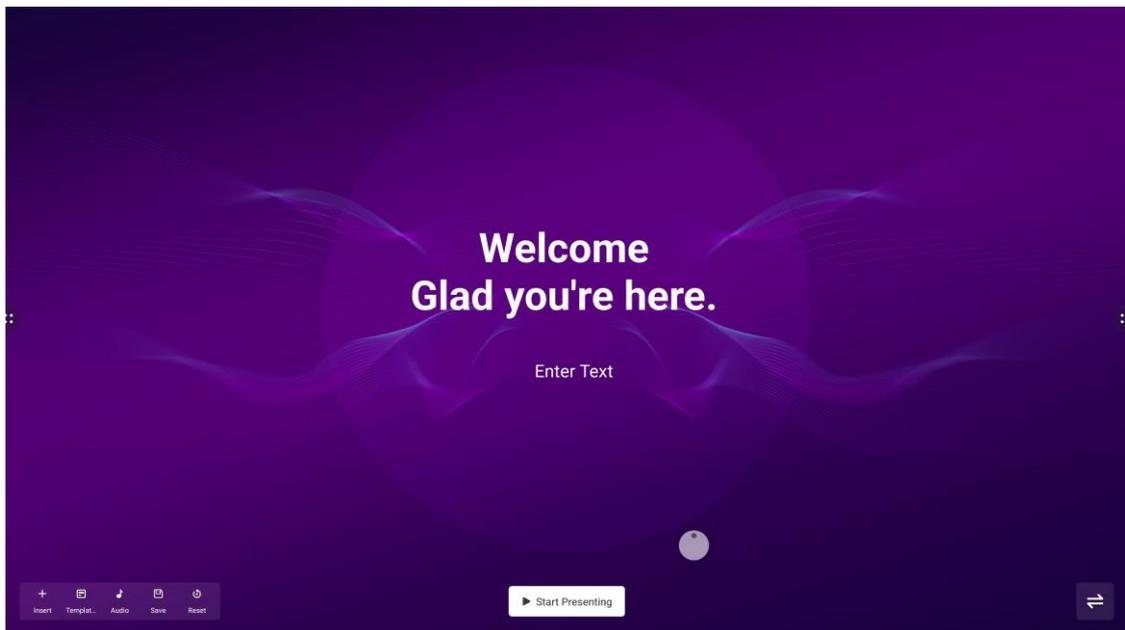
Figure 3-7 Configure the welcome page

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.
Reset	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.

3.6 Self Check

Select **swipe up** > **Self Check** on the home screen of the Android system.

Figure 3-8 Self check result
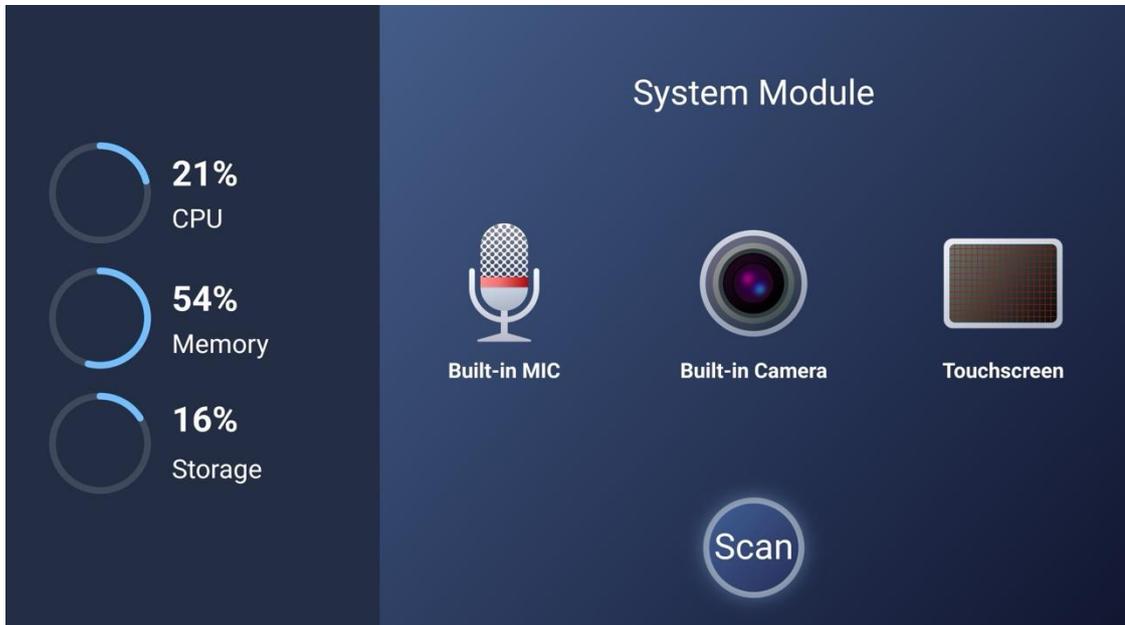
3.7 System Settings

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

3.7.1 Configuring Network Connection

On the home screen, select **swipe up** > **Settings** to configure the network settings.

📖

You can enable wired network. The whiteboard itself can also act as a hotspot to share network connection with other devices.
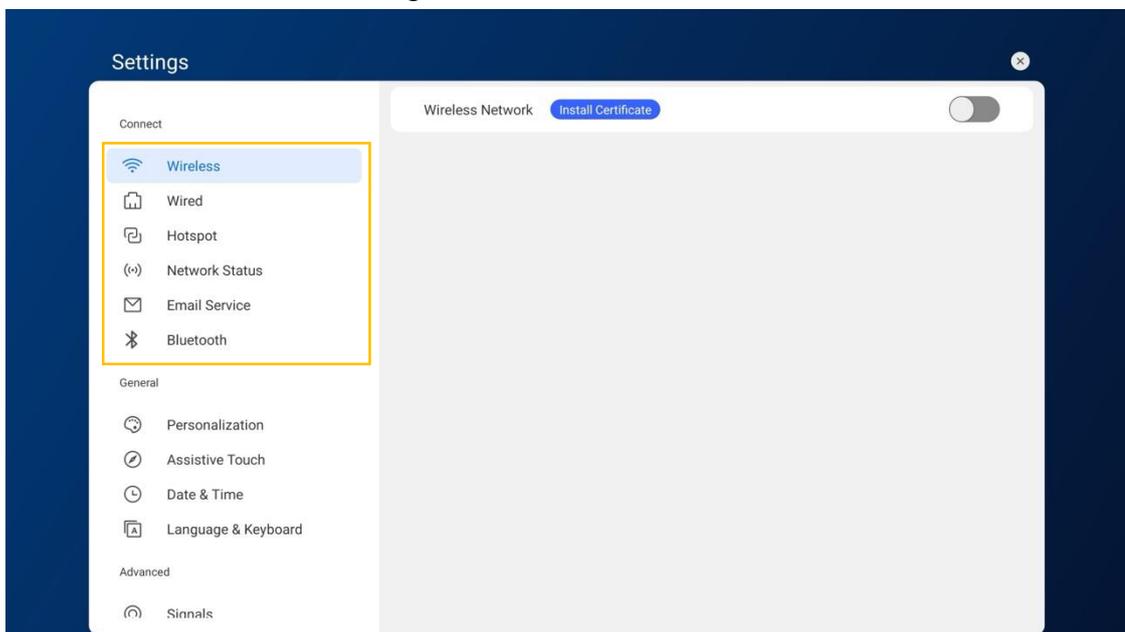
Figure 3-7 Network

Table 3-7 Network parameters

Parameter	Description
Wireless	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. 📖 ● You can tap **Install Certificate** to install certificates from local files. ● We recommend you select a secure authentication method to connect to a wireless network.

Parameter	Description
Wired	Configure wired network connection parameters. ● **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.
Network Status	Displays information such as the current network connection mode, IP address, default gateway, subnet mask, and DNS.
Network Status	Displays information such as the current network connection mode, IP address, default gateway, subnet mask, and DNS.
Email Service	Enable **Email Service**, configure relevant parameters, and then you can send whiteboard file through the email. Gmail and Outlook are supported. You can also tap **Other** to log in with other mailboxes.
Bluetooth	Enable **Bluetooth**, and then the whiteboard can connect to an available Bluetooth in the area. Supports connecting wireless audio equipment, keyboards and more.

3.7.2 Configuring General Settings

On the home screen, select **swipe up** > **Settings** to configure the general settings.
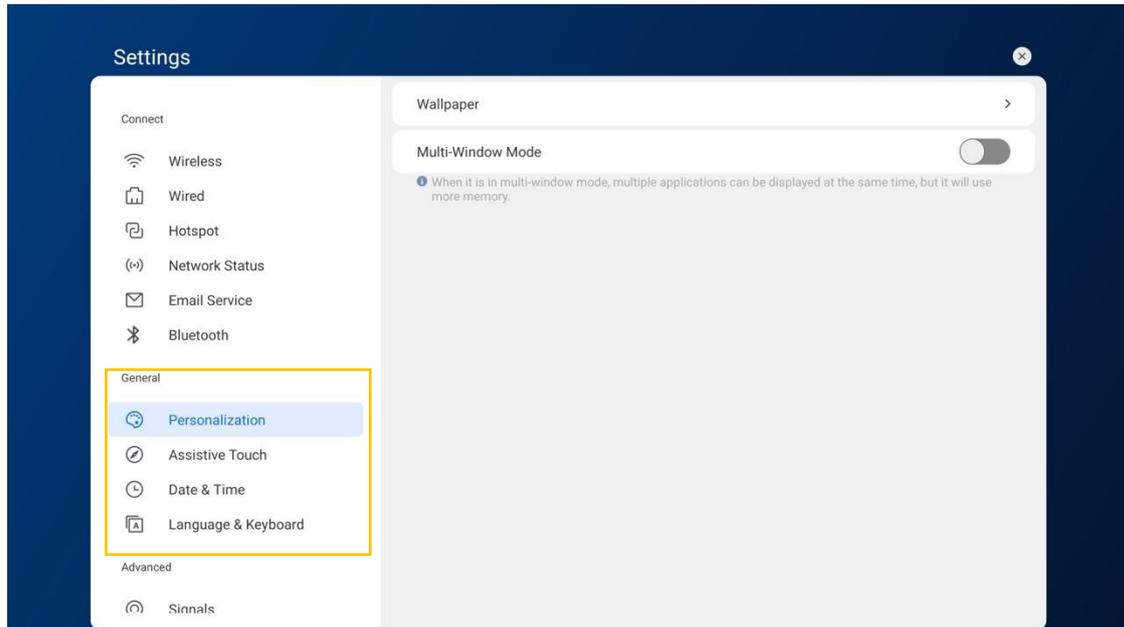
Figure 3-8 General settings

Table 3-8 General settings description

Parameter	Description
Personalization	● Set the wallpaper. ◇ The system provides 8 wallpapers by default. ◇ You can also customize and upload wallpapers. The recommended image ratio is 16:9. ● Multi-window mode: Enable the mode, and then the application interface supports zooming in, zooming out, exiting, and defining positions (top-left, top-right, bottom-left, bottom-right, left half of the screen, right half of the screen). Tap **Title Bar Style** to choose the position of the title bar, supporting top, left and right. 📖 Enabling or disabling the feature will need device reboot.
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, press with 3 fingers in several seconds to bring it up.

Parameter	Description
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.

3.7.3 Configuring Advanced Parameters

On the home screen, select **swipe up** > **Settings** to configure the advanced parameters.
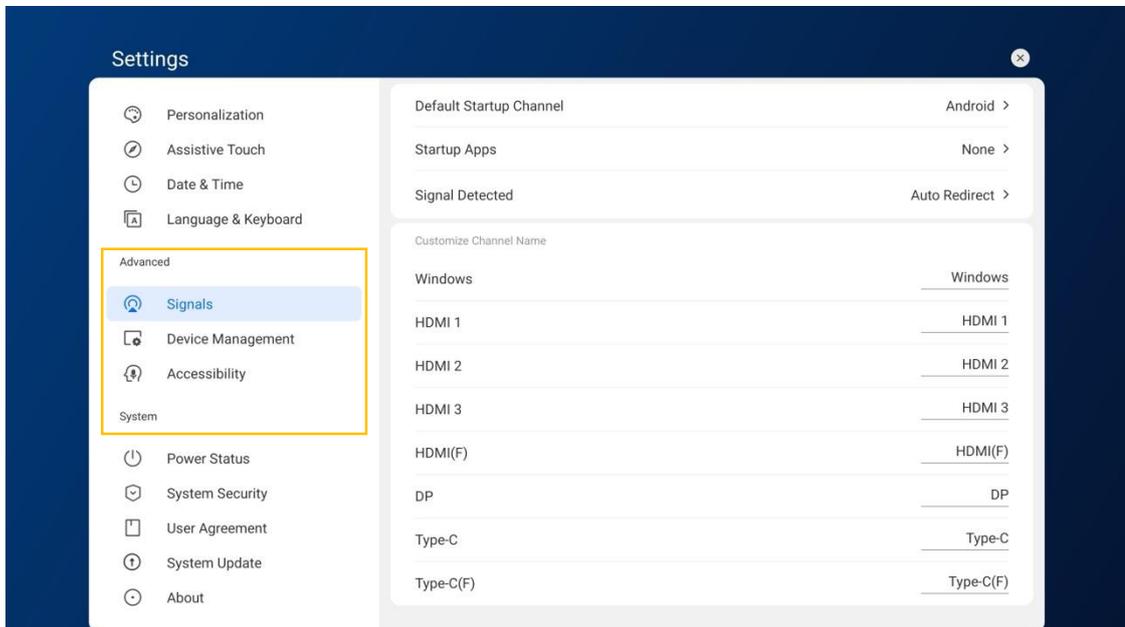
Figure 3-9 Advanced parameters

Table 3-9 Description of advanced parameters

Parameter	Description
Signals	- Default Startup Channel: Select the channel to be enabled at startup. - Default Apps: Select an application that is on the whiteboard to be opened every time the system starts. - 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.
Device Management	**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. **Five fingers close screen**: If the five-finger switch screen is turned on, the five-finger Press and Hold can wake up the Device for more than 1 s after the screen is turned off. **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.

Parameter	Description
Accessibility	◇ **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-farming: 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.

3.7.4 Configuring System Parameters

On the home screen, tap **More** > **Settings** to configure the system parameters.
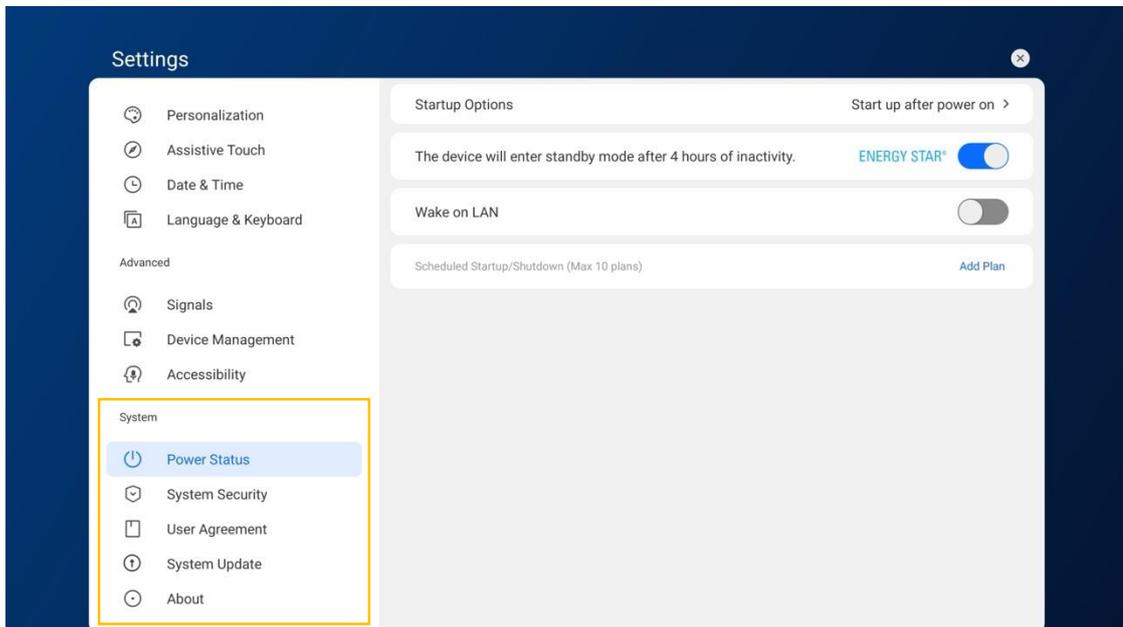
Figure 3-10 System parameters

Table 3-10 System parameter description

Parameter	Description
Power Status	Set the startup and shutdown functions of the whiteboard. ● **Startup Options**: Select standby after power on or startup after power on (default). ● **ENERGY STAR**: The device will enter standby mode after 4 hours of inactivity. ● **Wake on LAN**: After you enable this function, you can wake up or power on the whiteboard through the wired network.
System Security	● **USB Permission**: With USB permissions disabled, the system does not detect the access of USB devices. ● **NFC**: When enabled, the NFC function can be used. ● **NFC Card Database**: Manage cards, including adding, modifying names, and deleting. 📖 Before using NFC, you need to set a lock screen password. After setup, only card swiping will unlock the screen (requires the screen to be on for use).
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. ● **Auto Download**: Enable the feature, and the device would automatically download the packages and apps. ● **Auto Install**: Enable the feature. The device would automatically install update packages and restart during the time period you set. 📖 The device must be connected to network before you enable the 2 feature.
About	View MAC address, device serial number, device name (can be edited), system version, Android version, and security baseline version. 📖 The device name can consist of up to 31 characters and contain letters, numbers, and special characters (-@.).

3.8 Android Drop Down Bar

Provide quick settings operation options and display related information
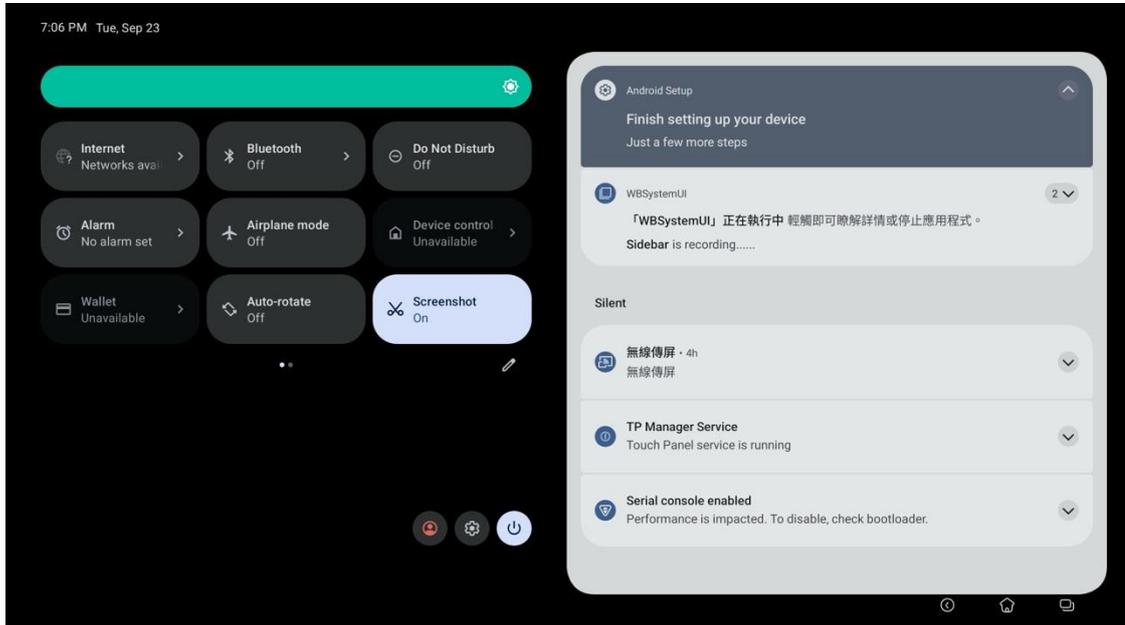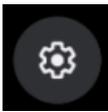
Figure 3-11 Android Drop down bar

Table 3-11 Android drop down bar options description

Option	Description
Internet	Configure wired or Wi-Fi network connection.
Bluetooth	Set Bluetooth connection on/off.
Do not Disturb	Set up do-not-Disturb mode.
Alarm	Set up alarm.
Airplane mode	Set up airplane mode.
Device controls	Not support.
Wallet	
Auto-rotate	
Screenshot	Tap to screenshot the current page, supporting sharing and editing the screenshot.
	User setting management.
	Android Settings menu: Configure network, hotspot, bluetooth, general settings, and other system settings.
	Power Options: Select **Power off** or **Restart** system.

This is a native Google feature and cannot be modified as it requires EDLA certification. Some functionalities are not supported.

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.

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

Prerequisites

- Make sure that the whiteboard is connected to the network.
- Make sure that you have enabled OTA platform in the home screen, **swipe up** > **Settings** > **System Update**.
- Make sure that you have more than 6GB of space, otherwise the OTA update may fail.

Procedure

Step 1   On the home screen, select **swipe up** > **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 the upgrade files to the USB drive and perform the upgrade via device button control. The upgrade file is the "upgrade_3588" folder.

Prerequisites

Get the update package from the technical support.

Procedure

Step 1   Extract the downloaded upgrade package to obtain a compressed file with the same name, then perform a second extraction.

Step 2   Rename the extracted folder to upgrade_3588, copy it to the root directory of a USB drive, and insert the USB drive into the front USB port of the tablet.

📖

Update the system with a USB flash drive in EXFAT. Otherwise, update might fail.

Step 3   While the whiteboard is in standby mode, press and hold the power button until the red and blue LEDs alternate flashing, then release. After it updates, the whiteboard restarts automatically.

6 FAQ

1. **The indicator light is off.**
   - Check whether the power supply is normal.
   - Check whether the rocker switch of the whiteboard is turned on.
2. **Missing or abnormal colors.**
   If the whiteboard is connected to a computer, check whether the HDMI cable is intact and correctly connected.
3. **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.
4. **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.
5. **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.
6. **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.
7. **The external MIC IN cannot pick up sound.**
   Only active mic in is supported, and mic in sound pickup is only supported under the Android signal source.
8. **The whiteboard side cannot control the volume of the external Line out device.**
   Volume control of the external Line out device from the whiteboard is not supported. Please adjust the volume on the external device.
9. **The mobile phone's Bluetooth cannot find the Bluetooth of the whiteboard, or the whiteboard cannot find the Bluetooth of another whiteboard.**
   To ensure the safe use of the whiteboard, only the whiteboard can search for the mobile phone's Bluetooth. The connection with the mobile phone's Bluetooth can be established through the whiteboard side for data interaction and transmission.
10. **Unable to play rmvb format videos.**
    The chip does not support this video format.
11. **The sharing feature of the whiteboard prompts that the upload failed.**
    Please connect to a Wi - Fi network for Internet transmission or turn on a hotspot for local area network transmission.
12. **After switching from Android to OPS, the USB drive inserted into the front I/O panel is not recognized.**
    This is a USB timing-compatibility issue. Unplug and re-insert the USB drive; it should then mount correctly.
13. **After switching from Android to OPS, touch input stops working in OPS.**
    Open Task Manager and end the "Desktop Window Manager" (dwm.exe) process. Touch will resume.
14. **Some features described in the manual are not available in your current version.**

Please contact after-sales service to upgrade the device to the latest version (*Note: The upgrade will reset the device to factory settings, and the VISO application will no longer be available*).

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's 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:

1. Account Management

1.1 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.

1.2 Change passwords periodically

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

1.3 Allocate accounts and permissions appropriately

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

1.4 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.

1.5 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.

2. Service Configuration

2.1 Enable HTTPS

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

2.2 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.

2.3 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.

2.4 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.

3. Network Configuration

3.1 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.

3.2 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.

3.3 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;

Stablish 802.1x access authentication system to reduce the risk of illegal terminal access to the private network.

4. Security auditing

4.1 Check online users

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

4.2 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.

4.3 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.

5. Software Security

5.1 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.

5.2 Update client software in time

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

6. 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