

Smart Interactive Whiteboard

User's Manual





Foreword

General

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

Safety Instructions

The following signal words might appear in the manual.

Signal Words	Meaning
DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
A CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable results.
© TIPS	Provides methods to help you solve a problem or save time.
MOTE	Provides additional information as a supplement to the text.

Revision History

Version	Revision Content	Release Time
V1.1.0	Added 55-inch series.	May 2022
V1.0.0	First release.	March 2022

Privacy Protection Notice

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

About the Manual

- The manual is for reference only. Slight differences might be found between the manual and the product.
- We are not liable for losses incurred due to operating the product in ways that are not in compliance with the manual.
- The manual will be updated according to the latest laws and regulations of related jurisdictions. For detailed information, see the paper user's manual, use our CD-ROM, scan the QR code or visit our official website. The manual is for reference only. Slight differences might be found between



the electronic version and the paper version.

- All designs and software are subject to change without prior written notice. Product updates
 might result in some differences appearing between the actual product and the manual. Please
 contact customer service for the latest program and supplementary documentation.
- There might be errors in the print or deviations in the description of the functions, operations and technical data. If there is any doubt or dispute, we reserve the right of final explanation.
- Upgrade the reader software or try other mainstream reader software if the manual (in PDF format) cannot be opened.
- All trademarks, registered trademarks and company names in the manual are properties of their respective owners.
- Please visit our website, contact the supplier or customer service if any problems occur while using the device.
- If there is any uncertainty or controversy, we reserve the right of final explanation.



Important Safeguards and Warnings

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

Storage Requirements



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

Installation Requirements



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

Operation Requirements



WARNING

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



• Do not drop or splash liquid onto the whiteboard, and make sure that there is no object filled



with liquid on the whiteboard to prevent liquid from flowing into it.

- Operate the whiteboard within the rated range of power input and output.
- Do not disassemble the whiteboard without professional instruction.
- Use the whiteboard under allowed humidity and temperature (0 °C to 40 °C, or –4 °F to +140 °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-screen HD display, computer, TV, 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 white board.
- 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	3
Stylus pen	2	Quick Start Guide	1
Wall mount bracket (installed on whiteboard already)	1	Accessory package	2
Remote control	1	_	_



The accessory packages contain expansion bolt \times 8, plastic pad \times 6, self-tapping screw \times 8, and gasket \times 8.



1.3 Structure

1.3.1 Appearance

Figure 1-2 Appearance (65/75/86-inch series)

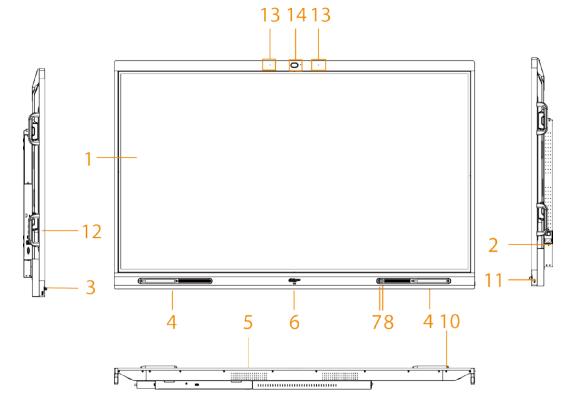




Table 1-2 Appearance description

No.	Description
1	LCD.
2	Power input port. Inputs 100–240 VAC power. After connecting to power supply, press the rocker switch to turn on the whiteboard.
3	USB 3.0 port.
4	Magnetic stylus pen attach area.
5	Speaker. Plays multimedia sound.
6	Indicator light. The light is red when the whiteboard is on standby and blue when the whiteboard is in normal use.
7	Light sensor. The device recognizes the ambient brightness through the light sensor and automatically adjusts the backlight brightness according to the ambient brightness.
8	IR sensor. Receives signals from the remote control.
9	RS-232 port. Transmits data between devices. You can connect to central control devices with RS-232 port.
10	LINE OUT. An audio output port that connects to the earphone or speaker.
11	 Power button. Press the button to turn on or turn off the screen. Press and hold the button for 5 seconds to turn on or turn off the whiteboard. When the touch lock is enabled, press the power button 3 times to unlock the touch lock.
12	Side panel ports. For details, see Table 1-3.
13	Microphones. Pick up live audio.
14	Built-in HD camera.



1.3.2 Dimensions

1.3.2.1 Dimensions (55-inch)

46.6 [1.84] 1211.7 [47.70] 682.5 [26.87] 816.6 [32.15] 500.0 [19.68] 1261.4 [49.66] 80.7 [3.18] 400.0 [15.75] 400.0 [15.75] ======= 158.4 [6.23] \square

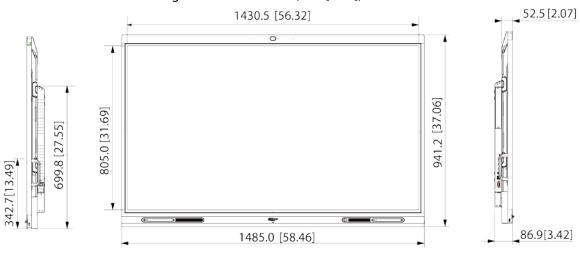
Figure 1-3 Dimensions (mm [inch])

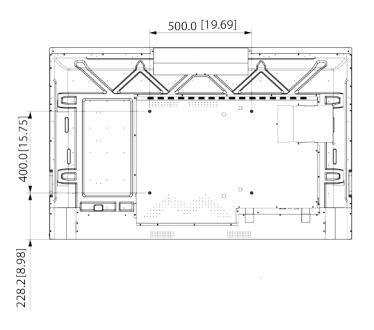
VESA pattern: 400 mm × 400 mm (15.75" × 15.75").



1.3.2.2 Dimensions (65-inch)

Figure 1-4 Dimensions (mm [inch])





VESA pattern: $500 \text{ mm} \times 400 \text{ mm} (19.69" \times 15.75").$



1.3.2.3 Dimensions (75-inch)

52.5 [2.07] 1651.7 [65.03] 930.0 [36.61] 1066.4 [41.98] 723.2 [28.47] 317.0 [12.48] 1707.2 [67.21] 87.1 [3.43] 600.0 [23.62] 400.0 [15.75] 268.3 [10.56]

Figure 1-5 Dimensions (mm [inch])

6

VESA pattern: $600 \text{ mm} \times 400 \text{ mm} (23.62" \times 15.75")$.



1.3.2.4 Dimensions (86-inch)

Figure 1-6 Dimensions (mm [inch]) 1897.0 [74.69] 52.5 [2.07] 1068.0 [42.05] 1205.1 [47.45] 883.1 [34.77] 740.6 [29.16] 1953.4 [76.90] 86.9 [3.42] 750.0 [29.53] 400.0 [15.75]

VESA pattern: 750 mm \times 400 mm (29.53" \times 15.75").

1.3.3 Ports

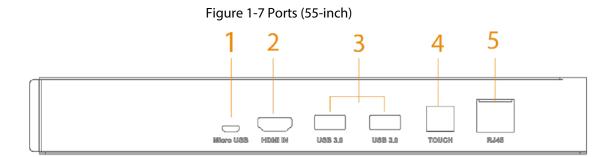




Figure 1-8 Ports (65/75/86-inch)

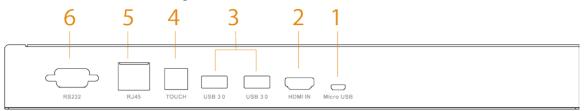


Table 1-3 Port description

No.	Name	Description
1	Micro USB	Used for debugging Android system.
2	HDMI IN	HD audio and video signal input port. Connects to the computer, set-top box, and other video devices with HDMI output ports.
3	USB 3.0	Connects to USB devices such as mobile hard disk, USB flash drive, USB keyboard, and USB mouse. They are accessible both from the built-in Android system and the optional OPS computer module.
4	Touch	Transmits touch signals. The port is used together with the HDMI port to allow you to control the computer through touch operations on the whiteboard.
5	RJ-45 port	1000 Mbps network port. Connects to network cable to access network.
6	RS-232 port	Transmits data between devices. You can connect to central control devices with RS-232 port.



2 Turning on or off the Screen

2.1 Turning on the Screen

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 Turn on the rocker switch on the rear panel.
- Step 3 Press the power button on the right panel to turn on the screen.After startup, the whiteboard 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	Compass. Tap the icon to quickly use functions as electronic whiteboard, annotation, and file management. See "3.1.2 Bringing up the Compass Menu" for details.
3	Device status bar. Displays different status information. Tap each icon to view details.



No.	Description	
4	Tap to bring up the navigation bar, See "3.1.1 Bringing up the Navigation Bar" for details.	
5	Input source. Supports HDMI and Windows.	
6	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.	

2.2 Turning off the Screen

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

To wake up the whiteboard, you can:

- 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, TV 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 compass 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
::	Display or hide the navigation bar.
\bigcup	Go back to the previous screen.
	Go 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.

3.1.2 Bringing up the Compass Menu

Tap on the home screen to bring up the compass menu. For details, see "3.5.2 Configuring"



General Settings".

Figure 3-2 Compass

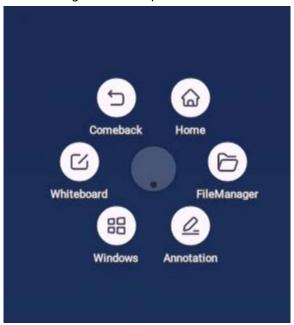
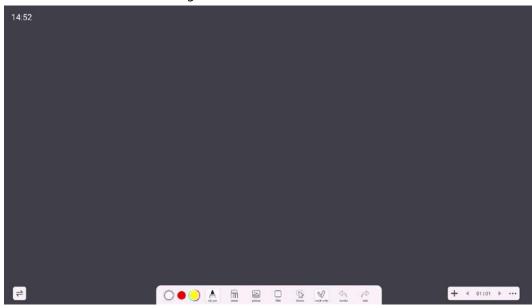


Table 3-2 Description of compass menu

Icon	Description	
	Go back to the home screen.	
₽	Go back to the previous screen.	
C	Go to the electronic whiteboard screen. For details, see "3.2 Electronic Whiteboard".	
88	After you insert the computer module, tap the icon to switch to the Windows system.	
<u>Q</u>	 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.	



Figure 3-3 Annotation



3.1.3 Common Tools

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 3-4 Common tools

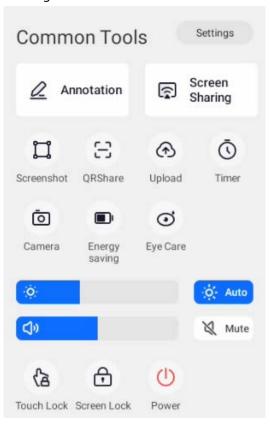




Table 3-3 Description of common tools

Function	Description	
Settings	Go to the Settings page. For details, see "3.5 System Settings".	
	Turn on the annotation mode.	
	Tap	
	Tap	
	→ Tap to clear unwanted content.	
Annotation	⋄ 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.	
Screen Sharing	Tap the icon to use the wireless screen sharing function. You can transfer content to the whiteboard through the computer or phone. For details, see "3.4 Screen Sharing".	
	Tap the icon, and then the middle area is selected by default. You can drag the four corners of the square to customize the area size.	
	Tap [2], and then you can import the screenshot to the whiteboard	
	with one tap	
Screenshot	Tap to capture the full screen.	
	Tap to cancel the screenshot.	
	 Tap , and then the screenshot named year - month - day - hour - 	
	minute - second. png will be saved to the screenshot folder.	



Function	Description
QRShare	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 a single file must not exceed 200 MB. Tap OK to compress 2 or more files into a zip file for transmission. 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.
	Supports QR code encryption. If the whiteboard is connected to WAN, the QR sharing function will automatically use WAN. If the whiteboard is not connected to the WAN, the QR sharing function will automatically switch to the LAN.
	 LAN mode: 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. WAN mode: Does not display the name and password of the whiteboard hotspot. If encryption is enabled, you need to enter the verification password after scanning the code with the camera app or browser on your phone, and the download screen will be displayed after successful verification.
	 File sharing poses a risk of data leakage. Keep the QR code safe. When the files selected have the same name, the QR code cannot be generated.
Upload	 After tapping the icon, tap REGISTER to register to the cloud management platform. Enter the server address or domain name, and then tap Register. You can enable or disable the cloud management platform registration (the whiteboard will be registered to the cloud management platform after the function is enabled). After registering on the cloud management platform, you can upload the files on the whiteboard to the cloud platform to be saved and managed. You can upload different types of files but cannot upload folders. The files are compressed into zip files. Tap Upload, and then the meeting list of the day and the previous two days is displayed. The default is the meeting at the upload time point meeting. If there is no meeting at this time point, the default is the nearest meeting before that time point.
Timer	Tap the icon, and then the timer setting screen is displayed. You can start and pause the timer, set full-screen display of information on the timer, and reset the timer (reset is only available when the timer is paused, and it will reset to the initial state 00:00:00).



Function	Description	
Camera	 Tap the icon to take a picture. The built-in camera supports mirroring. 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 QR sharing. 	
Energy saving	With this function enabled, the backlight is set to a lower value. The backlight brightness can be adjusted manually or automatically.	
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 "3.5.2 Configuring General Settings".	
Volume	Drag the slider to adjust the volume. Tap to enable mute.	
Touch Lock	Tap the icon to disable touch control for the screen. Press the power button 3 times to unlock the touch lock.	
Screen Lock	Tap the icon to lock the screen.	
Power	Tap the icon to shut down, restart the whiteboard, or exit Windows.	

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 3-5 Electronic whiteboard

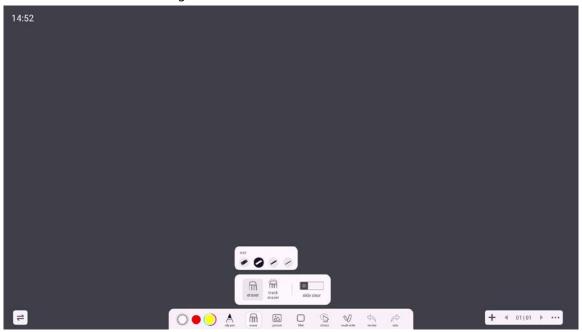


Table 3-4 Description of whiteboard icons

lcon	Description	
=	Adjust the location of the whiteboard tool bar.	
$\bigcirc \bullet \bigcirc$	Select or customize the color of the pen.	
\triangle	Select the type of pen and the size of the brush.	
M	 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. 	
	Tap the icon, and then you can insert images in the .bmp, .png, .jpg, or .jpeg format. Up to 10 images in total can be inserted.	
	Select the shape of the graph to draw.	
	Select content on the screen to zoom in, zoom out, move or rotate.	
\vee	 Switch between zoom mode and multi-write mode. Zoom mode: Only supports one-point writing. You can zoom in and zoom out the canvas. Multi-write mode: Supports two pens writing simultaneously. You cannot zoom in or zoom out the canvas. 	
\$	Undo the previous action. You can undo up to 20 actions.	
\Leftrightarrow	Redo the action that has been undone. You can redo up to 20 actions.	
+	Add a whiteboard page.	



Icon	Description	
4 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 wallpaper: You can use local background template or custom template. Custom template: Only images in bmp, png, jpg and jpeg formats are supported. 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. QR share: Download the written whiteboard file. For details, see Table 3-3. Quit: Quit 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 FileManager on the home screen to view the whiteboard files, images, documents and more.

<u>~~</u>

- 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 3-6 File management

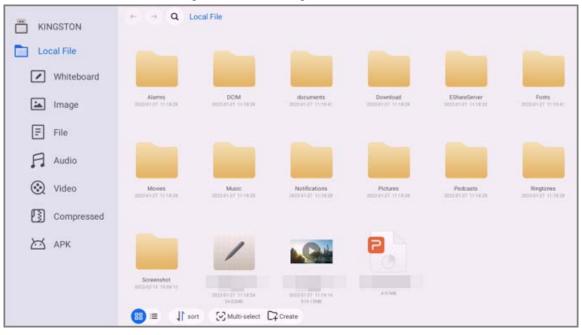


Table 3-5 File management icons

Icon	Description		
← / →	View local file on the previous or next screen.		
Q	Enter file names to search for.		
88 /	Display files in thumbnail or list format.		
Sort	Sort files in the ascending or descending order by name, size and time.		
Multi-select	You can select multiple files or all the files.		
Create	Create a new folder.		
Сору	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.		

3.4 Screen Sharing

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



The whiteboard and your phone, computer and tablet have been on the same LAN network. For details on network connection, see "3.5.1 Configuring Network Connection".

On the home screen, tap ScreenSharing, and then follow the on-screen instructions to finish the



settings.

Figure 3-7 Screen sharing



After you connect the client app with the whiteboard, you can:

- Share images, audio and video files, and documents to the whiteboard.
- Share screen to the whiteboard. You can share screens of multiple devices installed with the client to the whiteboard at the same time.
- Use the device installed with the client to control the whiteboard remotely. For details, see the user's manual of the client app.

3.5 System Settings

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

3.5.1 Configuring Network Connection

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



You can enable wireless network or wired network as needed. 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 3-8 Network

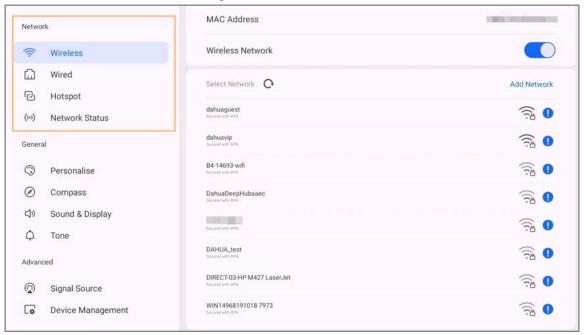


Table 3-6 Network parameters

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.	
	We recommend you select a secure authentication method to connect to a wireless network.	
Wired	 Configure wired network connection parameters. Getting the IP address automatically: When there is a DHCP server on the network, you can enable Wired, and then the whiteboard gets a dynamic IP address automatically. Setting the IP address manually: 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.	

3.5.2 Configuring General Settings

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



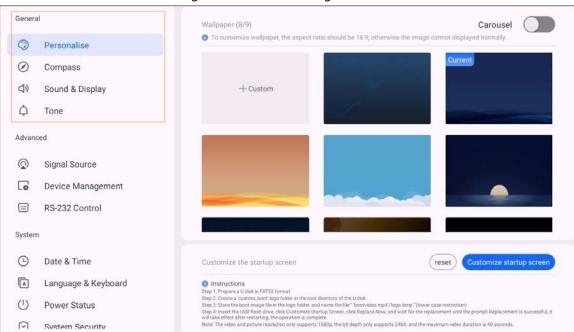


Figure 3-9 General settings

Table 3-7 General settings description

Parameter	Description	
Personalise	 Set the background image, and you can enable Carousel to play the selected background images in turn and customize the boot screen. The system provides 8 wallpapers by default. You can also customize and upload wallpapers. The recommended image ratio is 16:9. 	
Compass	Select or customize when the compass is automatically hidden away, and the manner in which it is hidden (small circle or disappear). After you enable the compass, double-tap with two fingers to bring it up.	
Sound & Display	 Adjust the level of volume. If the volume is 0, a mute sign will be displayed at the lower-left corner of the screen. Sound effect: You can select Standard, Music, Meeting and Theater. Brightness can be adjusted manually or automatically. 	
Tone	The system provides 4 tones by default. Tap Add Audio to add external audio. You can add up to 10 audio files and the size of each file must be less than 500 KB.	

3.5.3 Configuring Advanced Parameters

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



Figure 3-10 Advanced parameters

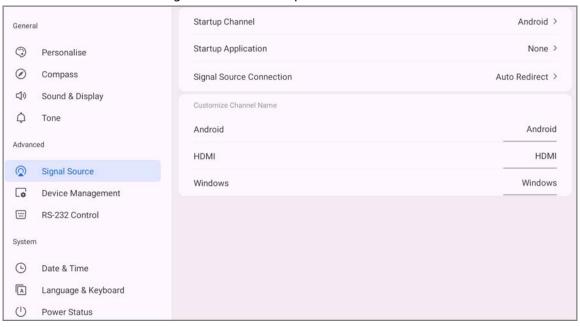


Table 3-8 Description of advanced parameters

Parameter	Description		
Signal Source	 Startup Channel: Customize the channels to be enabled at startup. Startup Application: Select any application that is on the whiteboard to be opened every time the system starts. Signal Source Connection: 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 		
Device Management	name of the whole system will be modified synchronously. View information on the camera, microphone, and speaker.		
RS-232 Control	With RS-232 Control enabled, connect the whiteboard to the RS-232 transparent debugging serial port to support data transmission between devices.		

3.5.4 Configuring System Parameters

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



Figure 3-11 System parameters

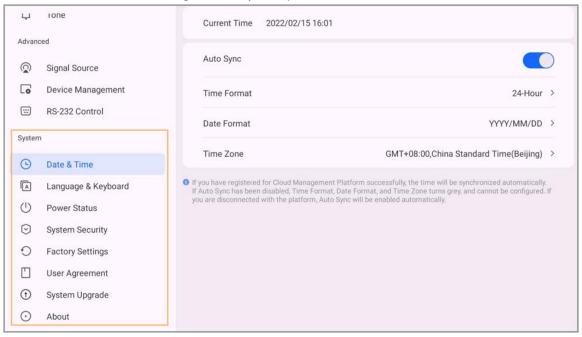


Table 3-9 System parameter description

Parameter	Description	
	Set the date and time automatically or manually. You can configure the format of the time, date and time zone.	
Date & Time	With Auto Sync 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.	
Power Status	 Set the startup and shutdown functions of the whiteboard. Startup Options: Standby with power on; Startup with power on. Screen Turn 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. Scheduled Power On/Off (Max. 10 plans): Tap Add Plan to set 	
	when to automatically power on and off the system. Tap to delete the plan.	



Parameter	Description	
System Security	 Passcode: After enabling Passcode, you can unlock the whiteboard with digital password. Pattern: After enabling Pattern, you can unlock the whiteboard by drawing a pattern. Lock Screen: Tap Lock screen, and then select a screen lock option, including 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 to unlock the touch lock. USB Permission: With USB permissions disabled, the system does not detect the access of USB devices. The system does not support the simultaneous use of pattern password and digital password.	
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 Upgrade	View the current system version. When the whiteboard is connected to a network, tap CHECK FOR UPDATES to check whether there is a new version available.	
About	View MAC address, device serial number, device name (can be edited), running memory, storage space, resolution, system version, Android version, and security baseline version.	



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.



5 System Update

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.

You can update the system online or through USB.

Procedure

- <u>Step 1</u> On the home screen, select **More** > **Settings** > **System Upgrade**.
- Step 2 Tap CHECK FOR UPDATES.
- Step 3 When the system detects that a newer version available, tap **Download** to download the update package.
- <u>Step 4</u> After the package is downloaded, automatic update starts. 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.

- <u>Step 1</u> Save the update.zip file to the root directory of the USB flash drive.
- <u>Step 2</u> Plug the USB flash drive into the USB port of the whiteboard.

 \square

Update the system with a USB flash drive in the FAT 32 format. Otherwise, update might fail.

Step 3 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 VGA or 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 a computer, unplug the VGA or 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.

- Make sure to place the pen or finger on the screen vertically at a 90-degree angle.
- Check whether other objects such as paper or your sleeve 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 cable is correctly connected.



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	
Тар	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 Cybersecurity Recommendations

Cybersecurity is more than just a buzzword: it's something that pertains to every device that is connected to the internet. IP video surveillance is not immune to cyber risks, but taking basic steps toward protecting and strengthening networks and networked appliances will make them less susceptible to attacks. Below are some tips and recommendations from Dahua on how to create a more secured security system.

Mandatory actions to be taken for basic device network security:

1. Use Strong 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; character types include 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 overlapped characters, such as 111, aaa, etc.

2. Update Firmware and Client Software in Time

- According to the standard procedure in Tech-industry, we recommend to keep your device (such as NVR, DVR, IP camera, etc.) firmware up-to-date to ensure the system is equipped with the latest security patches and fixes. When the device is connected to the public network, it is recommended to enable the "auto-check for updates" function to obtain timely information of firmware updates released by the manufacturer.
- We suggest that you download and use the latest version of client software.

"Nice to have" recommendations to improve your device network security:

1. Physical Protection

We suggest that you perform physical protection to device, especially storage devices. For example, place the device in a special computer room and cabinet, and implement well-done access control permission and key management to prevent unauthorized personnel from carrying out physical contacts such as damaging hardware, unauthorized connection of removable device (such as USB flash disk, serial port), etc.

2. Change Passwords Regularly

We suggest that you change passwords regularly to reduce the risk of being guessed or cracked.

3. Set and Update Passwords Reset Information Timely

The device supports password reset function. Please set up related information for password reset in time, including the end user's mailbox and password protection questions. If the information changes, please modify it in time. When setting password protection questions, it is suggested not to use those that can be easily guessed.

4. Enable Account Lock

The account lock feature is enabled by default, and we recommend you to keep it on to guarantee the account security. If an attacker attempts to log in with the wrong password several times, the corresponding account and the source IP address will be locked.

5. Change Default HTTP and Other Service Ports

We suggest you to change default HTTP and other service ports into any set of numbers between



1024–65535, reducing the risk of outsiders being able to guess which ports you are using.

6. Enable HTTPS

We suggest you to enable HTTPS, so that you visit Web service through a secure communication channel.

7. MAC Address Binding

We recommend you to bind the IP and MAC address of the gateway to the device, thus reducing the risk of ARP spoofing.

8. Assign Accounts and Privileges Reasonably

According to business and management requirements, reasonably add users and assign a minimum set of permissions to them.

9. Disable Unnecessary Services and Choose Secure Modes

If not needed, it is recommended to turn off some services such as SNMP, SMTP, UPnP, etc., to reduce risks.

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

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

10. Audio and Video Encrypted Transmission

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

Reminder: encrypted transmission will cause some loss in transmission efficiency.

11. Secure Auditing

- Check online users: we suggest that you check online users regularly to see if the device is logged in without authorization.
- Check device log: By viewing the logs, you can know the IP addresses that were used to log in to your devices and their key operations.

12. Network Log

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

13. Construct a Safe Network Environment

In order to better ensure the safety of device and reduce potential cyber risks, we recommend:

- Disable the port mapping function of the router to avoid direct access to the intranet devices from external network.
- The network should be partitioned and isolated according to the actual network needs. If
 there are no communication requirements between two sub networks, it is suggested to use
 VLAN, network GAP and other technologies to partition the network, so as to achieve the
 network isolation effect.
- Establish the 802.1x access authentication system to reduce the risk of unauthorized access to private networks.
- Enable IP/MAC address filtering function to limit the range of hosts allowed to access the



device.

More information

Please visit Dahua official website security emergency response center for security announcements and the latest security recommendations.

ENABLING	A SAFER SOCIETY A	ND SMARTER LIVING