

User Manual

IFPD (Interactive Flat Panel Display)

- The images and illustrations in this document may differ from the actual product.
- The contents of this document are subject to change without notice.

For models

AHA-HD50-65

AHA-HD50-75

AHA-HD50-86



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1. Product Precautions

Icon	Name	Meaning
	Warning	Indicates a risk of electric shock, serious injury, or death.
	Caution	Indicates a risk of minor injury or property damage.

Please read this manual carefully before operating the set.

Warning

The color and appearance of the product may vary depending on the model, and specifications are subject to change without prior notice for performance improvement.

Warning :

To prevent the risk of electric shock, do not remove the cover or back panel. There are no user-serviceable parts inside. Please contact qualified service personnel.
To reduce the risk of fire or electric shock, do not expose the back of the product to rain or moisture. Do not rub, scratch, or press the LCD with hard objects, as this may cause permanent damage.

Caution :

Unauthorized tampering with the internal components of the monitor will void the warranty. The manufacturer is not responsible for damage resulting from improper maintenance or repair performed by unauthorized personnel.

Important Safety Instructions for You and Your New Product

Your product has been safely tested during manufacturing. However, improper use may still pose a risk of electric shock or fire. To ensure the proper functioning of the safety features built into your new product and to prevent accidents, please read this manual carefully, follow the installation instructions, observe the safety precautions below, and keep this manual for future reference.

Notice

Note: This display is not certified for use in patient diagnosis. Responsibility for primary diagnosis lies with hospitals or clinics.
DICOM is a registered trademark of NEMA for publications relating to Digital Imaging and Communications in Medicine.
The "IPS" word mark/trademark and related technologies are owned by their respective holders.



ENERGY STAR is a program run by the U.S. Environmental Protection Agency(EPA) and U.S. Department of Energy (DOE) that promotes energy efficiency. This product qualifies for ENERGY STAR in the "factory default" settings and this is the setting in which power savings will be achieved. Changing the factory default picture settings or enabling other features will increase power consumption that could exceed the limits necessary to qualify for ENERGY STAR rating. For more information on the ENERGY STAR program, refer to energystar.gov.

※ **Note: The Economy Model does not include ENERGY STAR certification.**

1.1 Safety Precautions

1) Read the User Manual

Be sure to read this manual thoroughly.

2) Follow the Instructions

All operations must be performed in accordance with the instructions in this manual.

3) Keep the Manual

This manual should be retained for future reference.

4) Observe Warnings

All warnings on the product and in this manual must be followed.

5) Cleaning

Disconnect the device from the power supply before cleaning.

Do not use abrasive cleaners. Do not use a wet cloth.

1. Do not use sharp objects other than the dedicated pen provided, as they may damage the screen and cause malfunction.
2. Do not use chemicals such as wax, benzene, alcohol, thinner, insecticides, or lubricants, as these may corrode the sensors and cause malfunction.
3. When cleaning the screen with water, do not spray water directly. Lightly moisten a soft cloth and wipe the screen. Water entering the unit may cause malfunction.
4. For products with sensor filters attached on the top, bottom, left, and right sides of the screen
 - Do not apply excessive force or impact to the front of the filter. Deformation may affect touch sensitivity and cause malfunction.
 - Do not use water. Use a soft brush to remove dust or foreign substances. Moisture entering the sensor filter may affect touch sensitivity and cause malfunction.

6) Water and Moisture

Do not use this product near water.

7) Moving the Product

Exercise caution when moving the product together with a cart. Sudden stops, excessive force, or uneven surfaces may cause the cart and product to overturn.

8) Ventilation

Do not block ventilation openings. Install the product in accordance with the instructions in this manual.

9) Power Source

This product must be operated only with the power source specified on the label located on the back of the unit.

10) Power Cord Grounding

This product is equipped with a three-wire grounding cord as a safety feature.

Do not remove or disable the grounding prong from the power cord.

11) Power Cord Protection

Pay special attention to the plug, outlet, and the point where the cord exits the product. Ensure that the cord is not walked on, pinched, or placed under objects, and that power is transmitted properly.

12) Lightning

During lightning storms or when the product will not be used for an extended period, disconnect the plug from the wall outlet and unplug the antenna or cable system.

13) Product Grounding

This product must be properly grounded in accordance with the electrical safety regulations of the country of use. If you are unsure of these requirements, consult a qualified electrician.

14) Servicing

Do not attempt to open or service the product yourself. Removing the cover may expose you to dangerous voltage or other hazards.

Refer all servicing to qualified service personnel. If the product does not operate properly, turn off the power switch and contact your dealer.

15) Damage Requiring Service

Unplug this product from the power source and contact qualified service personnel if any of the following occurs:

- 1) The power cord or plug is damaged.
- 2) The front glass is broken.
- 3) Moisture has entered between the glass and LCD screen.
- 4) The product has been dropped or the enclosure is damaged.
- 5) The product shows a distinct change in performance.

16) Safety Check

After any service or repair, request that the service technician perform safety checks to confirm that the product is operating properly and that the cabinet has not been damaged.

17) Installation

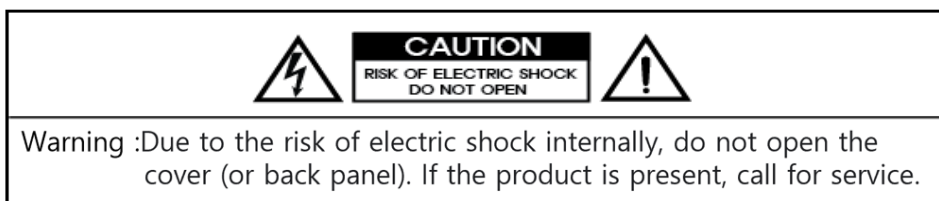
It is recommended to mount this product on a dedicated wall bracket or stand.

18) Power Supply

This product operates on AC power, and the voltage must match the rating specified on the label on the back of the unit. The power cord must always be properly grounded.

19) Placement

Do not install this product in an unstable location. Ensure sufficient space for safe operation.

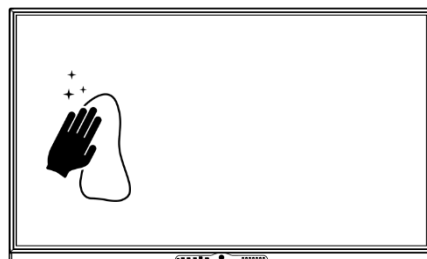


1.2 Storage and Maintenance

Exterior and Screen Care

Wipe with a soft, dry cloth.

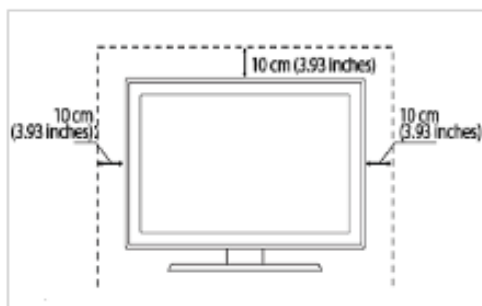
- Do not use flammable substances such as benzene or thinner, or a wet cloth. This may cause malfunction.
- Do not scratch the screen with fingernails or sharp objects. This may leave permanent scratches or damage the product.
- Do not spray water directly onto any part of the product. Water entering the product may cause fire, electric shock, or malfunction.
- For high-gloss models, using an ultrasonic humidifier may cause white stains to appear on the product.
 - ▷ Appearance and color may vary depending on the model.



Securing Installation Space

- Leave sufficient space around the product to allow proper ventilation. A rise in internal temperature may cause fire or malfunction.
- Install the product with at least the clearance indicated in the diagram.
 - ▷ Appearance may vary depending on the model.

When installing with a stand



When installing with a wall-mount

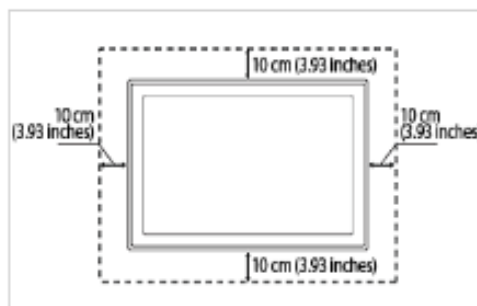


Image Retention Notice

- Prolonged display of a fixed image may cause image retention or blemishes. When the product is not in use for an extended period, turn off the power or use power-saving mode.

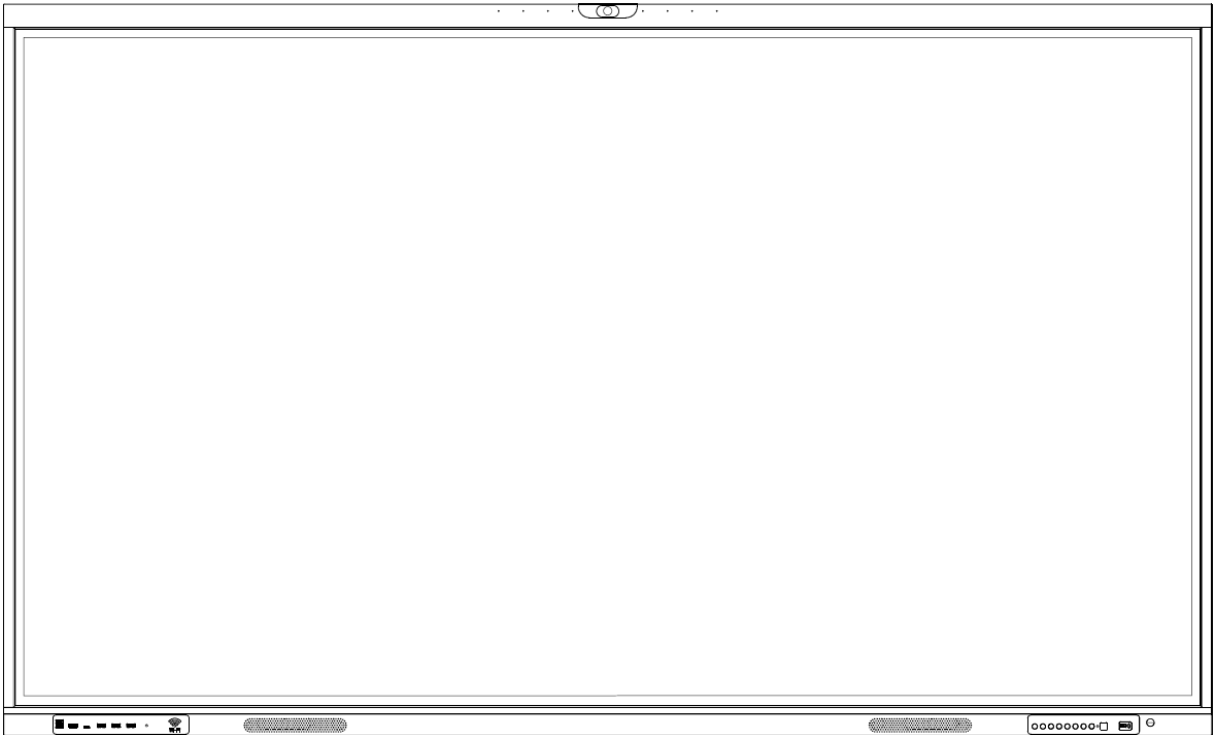
Condensation Due to Temperature Difference on Glass Surface











- When using the product for the first time or after a long period of non-use, condensation may occur on the inner glass surface of the screen due to temperature differences between the inside and outside.
- This is a temporary phenomenon and not a product defect. If this occurs, operate the product while powered on for 1–3 hours until the condensation disappears.

2. Product Overview (Standard Model)

2.1 Package Contents

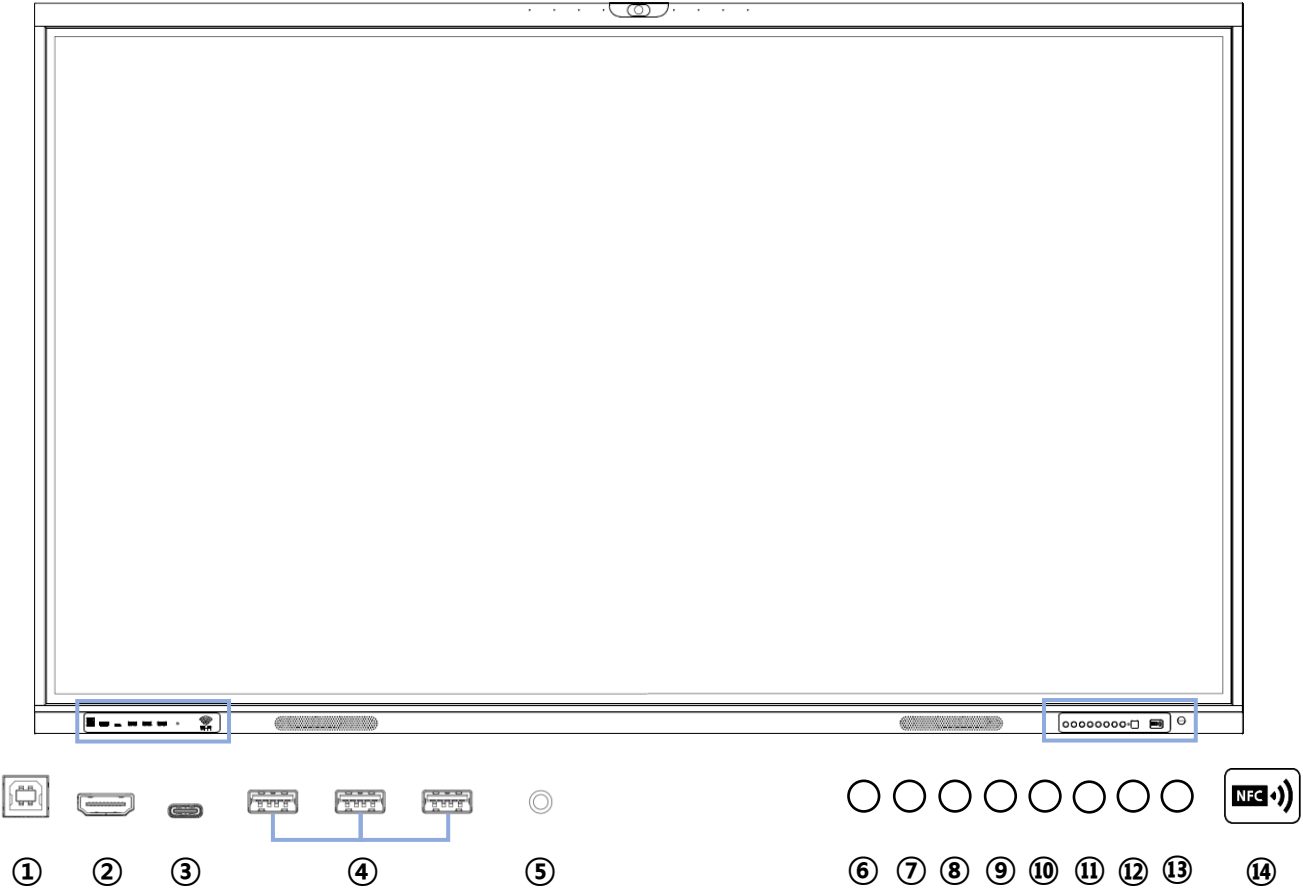
- ① Check that the following items are included in the product box.
- ② If any parts are missing, please contact the retailer from whom you purchased the product.
- ③ The illustrations in this manual may differ from the actual product and components.



Package Contents				 Smart Pen (Option)
				 Eraser (Option)
				

3. Product Description (Standard Model)

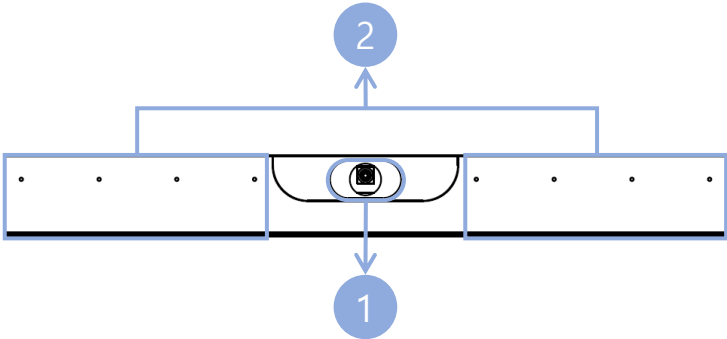
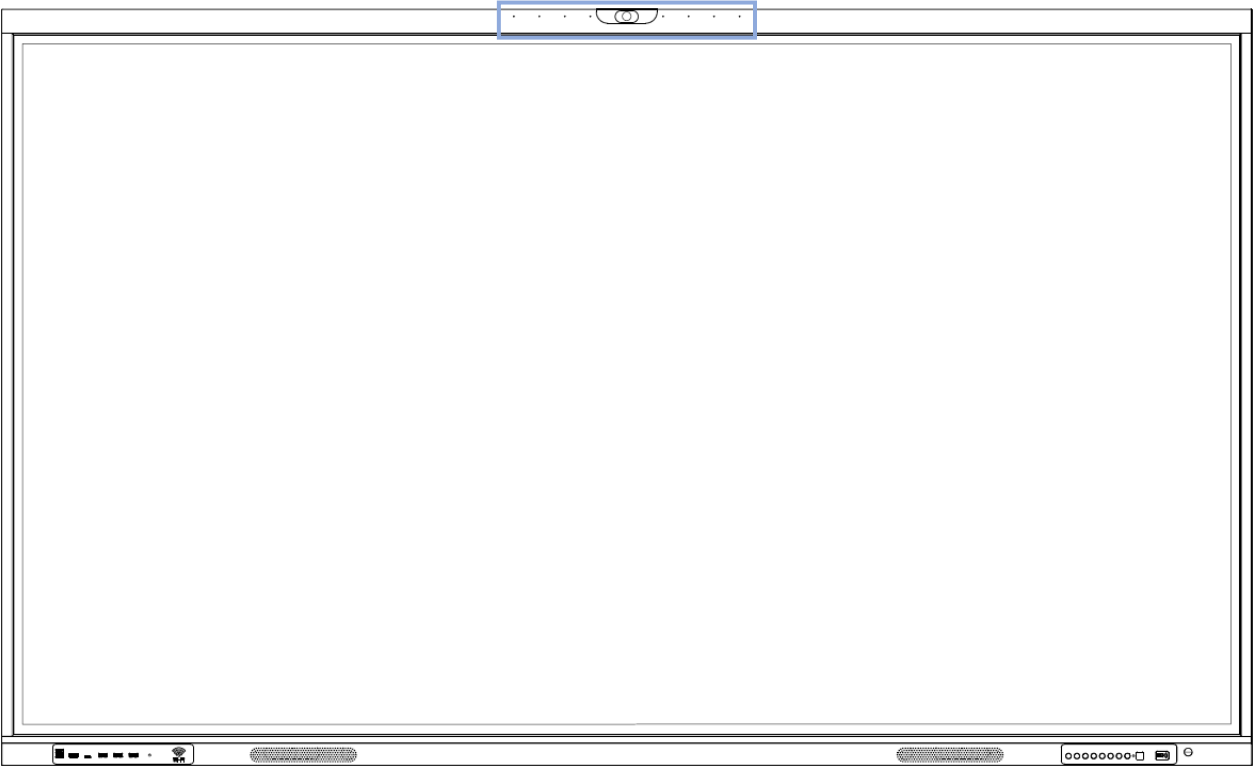
3.1 Front View



1	Front HDMI Touch (USB-B 3.0)
2	Front HDMI Input
3	USB-C Input (supports up to 65W charging), DP Alt Mode (Option)
4	USB 3.0 Input
5	Ambient Light Sensor
6	Power On/Off Button
7	Home
8	Back
9	External Input Selection
10	Screen Freeze
11	Capture Button (Screenshot)
12	Volume -
13	Volume +
14	NFC (Power On/Off Control)

3. Product Description (Standard Model)

3.2 Front Camera and Microphone (Option)



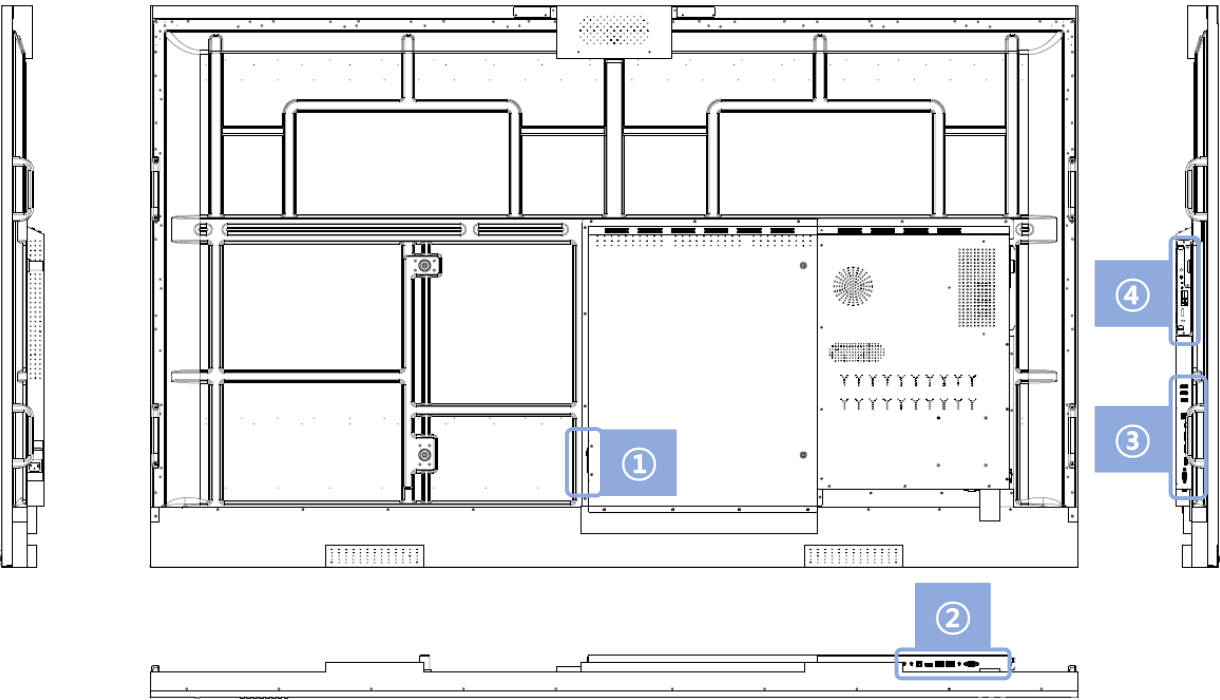
1	Camera Lens
2	8-Channel Array Microphone

<Note>

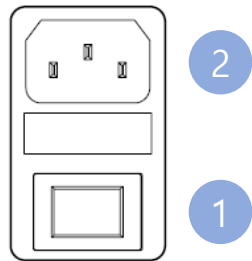
The 3m USB cable provided in the accessory box is intended for connection to the rear Touch USB port. Therefore, if you connect the USB cable to the Touch USB port, an additional USB cable will be required. To ensure proper touch sensor signal strength, it is recommended that the cable length be kept under 3m.

3. Product Description (Standard Model)

3.3 Rear View

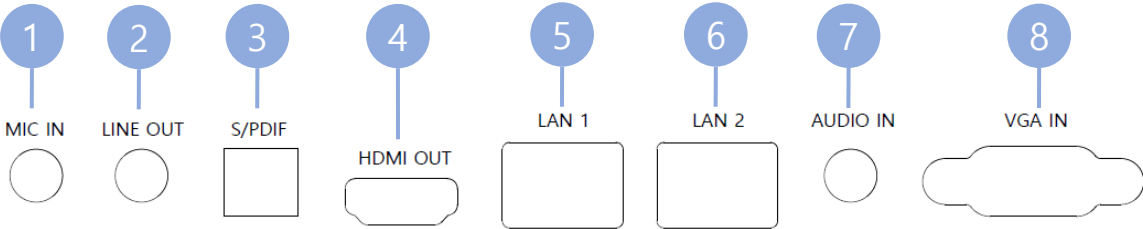


① Power Control and AC Input



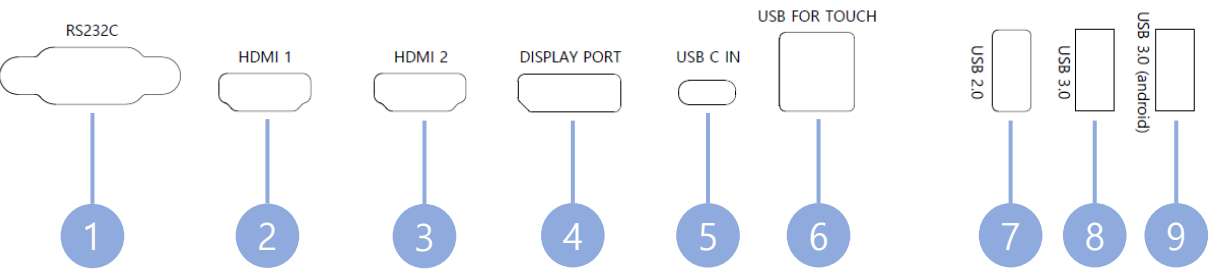
1	Power Switch (I : On , O : Off)
2	AC IN 100V~240V 50/60Hz

② Rear Panel Connections (Bottom)



1	MIC In	5	LAN (RJ45) 1000M
2	LINE Out	6	LAN (RJ45) 1000M
3	S/PDIF Out	7	VGA Audio In
4	HDMI Out	8	VGA In

③ Rear Panel Connections (Side)



1	RS232C	6	USB-B Touch In
2	HDMI 1 In	7	USB 2.0 In
3	HDMI 2 In	8	USB 3.0 In
4	Display Port In	9	USB 3.0 In (Only Android)
5	USB-C In (DP Alt Mode)		

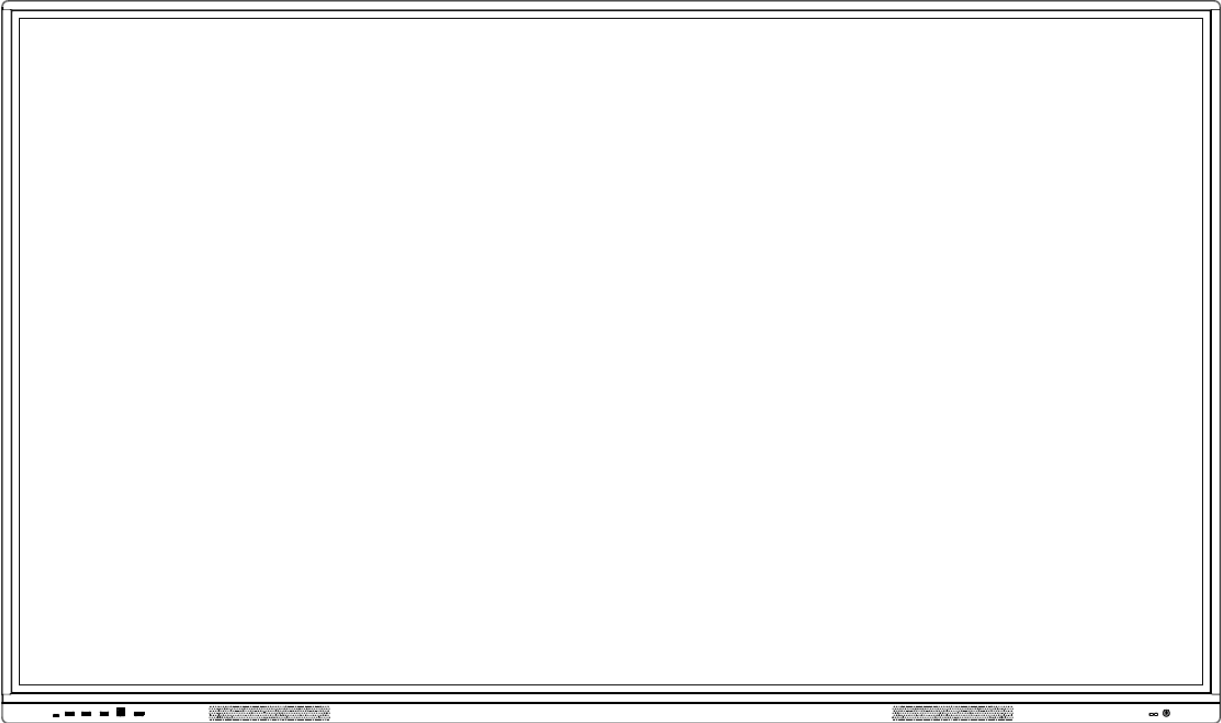
④ OPS PC Installation









Slot (4) is reserved for the OPS PC. Install the OPS PC in this slot when using it.
The OPS PC is sold separately.

4. Product Overview (Economy Model)

4.1 Package Contents

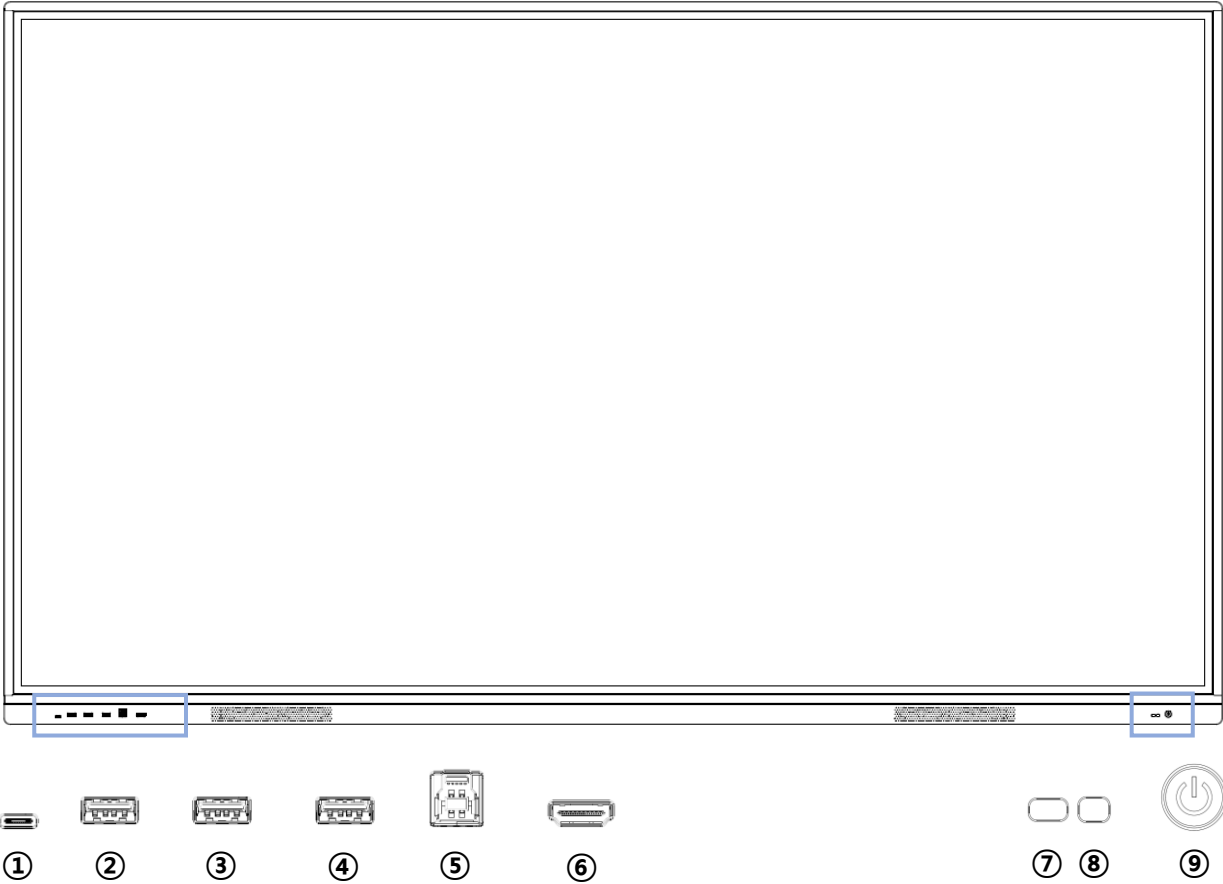
- ① Check that the following items are included in the product box.
- ② If any parts are missing, please contact the retailer from whom you purchased the product.
- ③ The illustrations in this manual may differ from the actual product and components.



Package Contents				 Smart Pen (Option)
	 Remote Control	 Pen	 Wall Mount (Option)	 Settop (Option) (Korea Only)

5. Product Description (Economy Model)

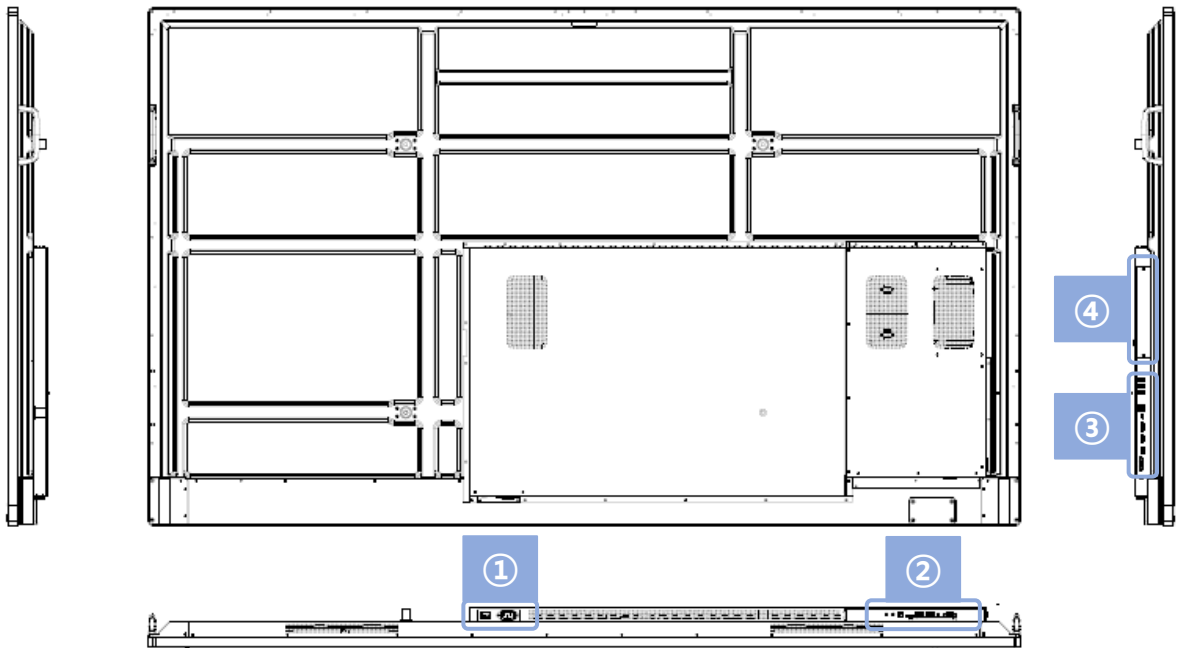
5.1 Front View



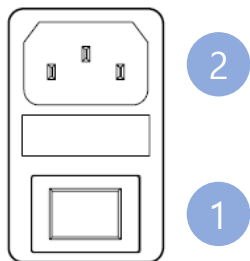
1	Front USB-C (USB 3.0 Only Data)
2	USB-A 3.0 In
3	USB-A 3.0 In
4	USB-A 3.0 In
5	USB-B 3.0 Touch In
6	Front HDMI In
7	Remote Control Sensor
8	Ambient Light Sensor
9	Power On/Off Button

5. Product Description (Economy Model)

5.2 Rear View

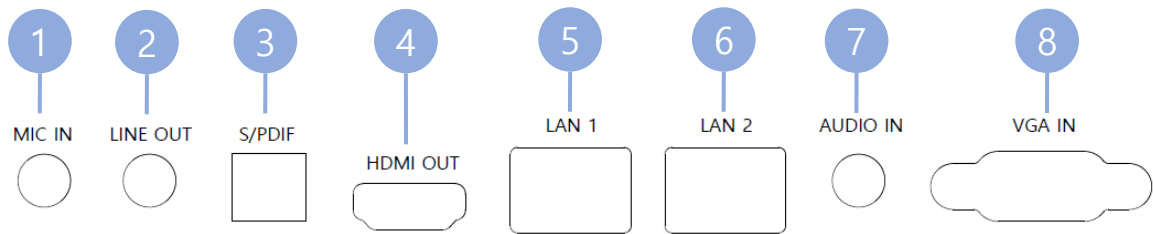


① Power Control and AC Input



1	Power Switch (I : On , O : Off)
2	AC IN 100V~240V 50/60Hz

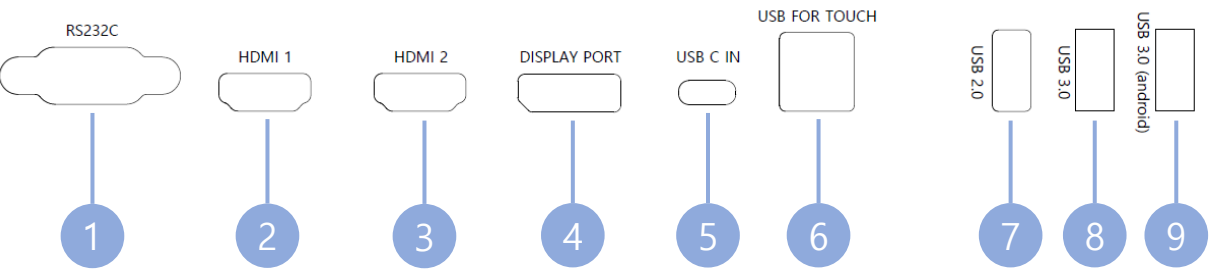
② Rear Panel Connections (Bottom)



1	MIC In
2	LINE Out
3	S/PDIF Out
4	HDMI Out

5	LAN (RJ45) 1000M
6	LAN (RJ45) 1000M
7	VGA Audio In
8	VGA In

③ Rear Panel Connections (Side)



1	RS232C	6	USB-B Touch In
2	HDMI 1 In	7	USB 2.0 In
3	HDMI 2 In	8	USB 3.0 In
4	Display Port In	9	USB 3.0 In (Only Android)
5	USB-C In (DP Alt Mode)		

④ OPS PC Installation

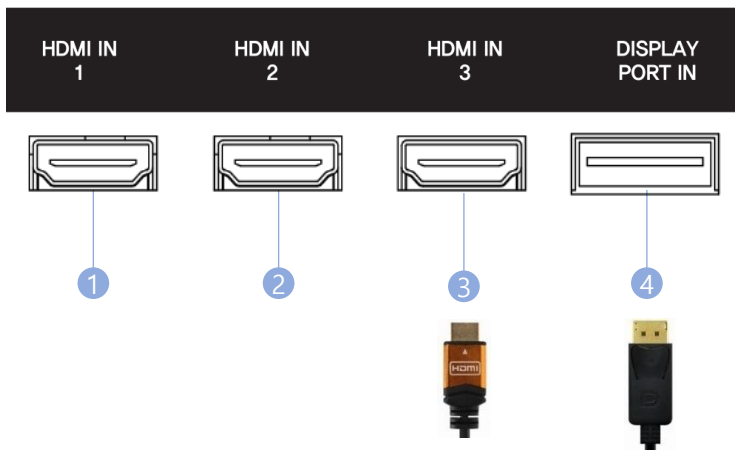
Slot (4) is reserved for the OPS PC. Install the OPS PC in this slot when using it.
The OPS PC is sold separately.

5. Product Description

5.3 Connections

1) HDMI/DisplayPort Connection

To transmit digital video and audio signals from an external device to the screen, connect the HDMI/DisplayPort cable as shown below.



1	HDMI 1 Input – Connect PC/Laptop using an HDMI cable
2	HDMI 2 Input – Connect PC/Laptop using an HDMI cable
3	HDMI 3 Input – Connect PC/Laptop using an HDMI cable
4	DisplayPort Input – Connect PC/Laptop using a DisplayPort cable

2) VGA Connection

When transmitting video signals from an external device to the screen, connect the external device and the product using a VGA cable. To transmit audio signals, connect an audio cable separately to the VGA AUDIO IN port.

3) OPS Connection

Do not connect the touch USB cable to the port. The touch cable is already connected internally to the OPS docking board.





















6. Remote Control (Standard Model)



Button	Description
	Power On / Off
INFO	Display status information
	Move to Home Screen
	Execute Annotation on current screen
	Touch On / Off
	TV Screen Mode (Not Supported)
OPS	Switch to OPS PC Screen
HDMI	Front HDMI→HDMI1→HDMI2→HDMI3
DP USB-C	DISPLAY PORT→TYPE C
VGA AV	VGA→AV
	Play previous media file
	Pause or Play media file
	Stop media file
	Play next media file
	Display OSD menu
	Activate external input selection
	Internal camera menu
	Exit OSD menu or return to previous screen
OK	Confirm selected menu option
	Navigation keys (Up/Down/Left/Right)
	Volume Down
	Mute
	Volume Up
PSM	Picture Mode (Standard/Vivid/Bright/User)
SSM	Sound Mode (Standard/Sports/User)
ECO	Brightness adjustment (Eco Mode)
FREEZE	Freeze current screen
MIRROR	E-share Mode
EYE	Eye Protection Mode On / Off
AUTO	Auto channel search (Not Supported)
LIST	TV channel list (Not Supported)
ADD	Add/Delete TV channels (Not Supported)

6. Remote Control (Economy Model)

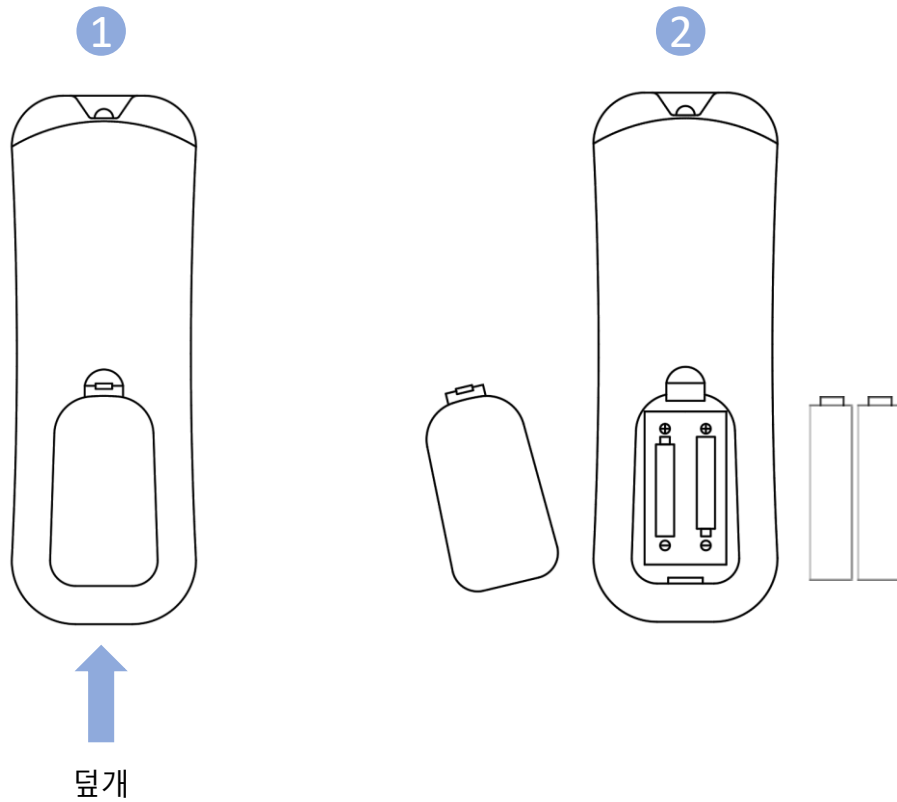


Button	Description
	Power On / Off
	Mute
	Activate External Input Selection
	Decrease Screen Brightness
	Freeze Screen (when input signal is active)
	TV Screen Mode (Not Supported)
	Move Up
	Move Down
	Move Left
	Move Right
	Confirm Selection
	Cancel or Exit OSD Menu Selection
	Move to Home Screen
	Launch Whiteboard App
	Open Settings Menu
	Increase Volume
	Decrease Volume
	Switch to OPS Screen
	Execute Annotation on Current Screen
	Launch Side Menu

6.1 Battery Replacement

Insert the batteries according to the correct polarity.

Battery Type: 1.5V Alkaline Battery (AAA)



Battery Precautions

When using batteries in this device, please follow these precautions.

Batteries can typically last about one year depending on remote control usage.

Replace the batteries if the remote control does not operate properly.

Use only the specified battery size and type.

When installing batteries, follow the correct polarity as indicated on the batteries. Failure to do so may damage the device.

Do not use different types of batteries together (e.g., alkaline, zinc-carbon, or rechargeable). Also, do not mix old and new batteries.

Remove the batteries if the device will not be used for a long period of time.

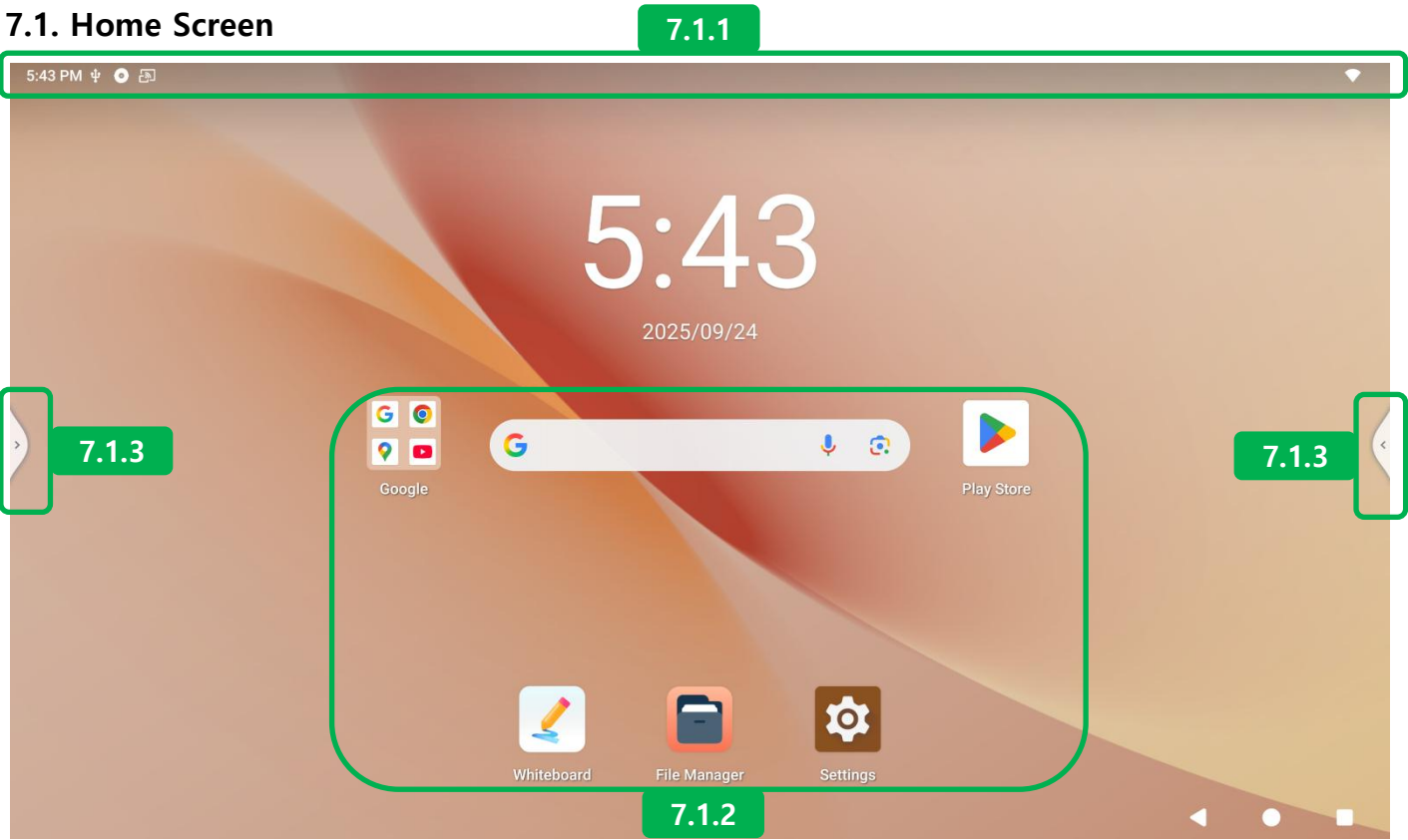
Do not attempt to recharge non-rechargeable batteries. They may overheat or rupture. (Follow the battery manufacturer's instructions.)

Be careful not to damage the batteries when inserting them. If the spring terminal of the remote control contacts the side of a damaged battery, it may cause a short circuit. Never use damaged batteries, as they may become very hot and dangerous.

Do not expose batteries (battery pack or installed batteries) to excessive heat such as direct sunlight or fire.

7. Features and Functions

7.1. Home Screen



7.1.1 Top Status Bar

- Time and Date: Displays the current time and date
- Network Status: Check Wi-Fi connection status
- Notification Icons: System notifications and update information

7.1.2 Main App Area


- Google App Folder: A collection of Google-related apps such as Google, Chrome, YouTube
- Play Store: Download and manage app updates
- Google Search Bar: Perform internet searches with Google
- Whiteboard: Writing and drawing functions
- File Manager: Manage stored files and folders
- Settings: Configure system preferences

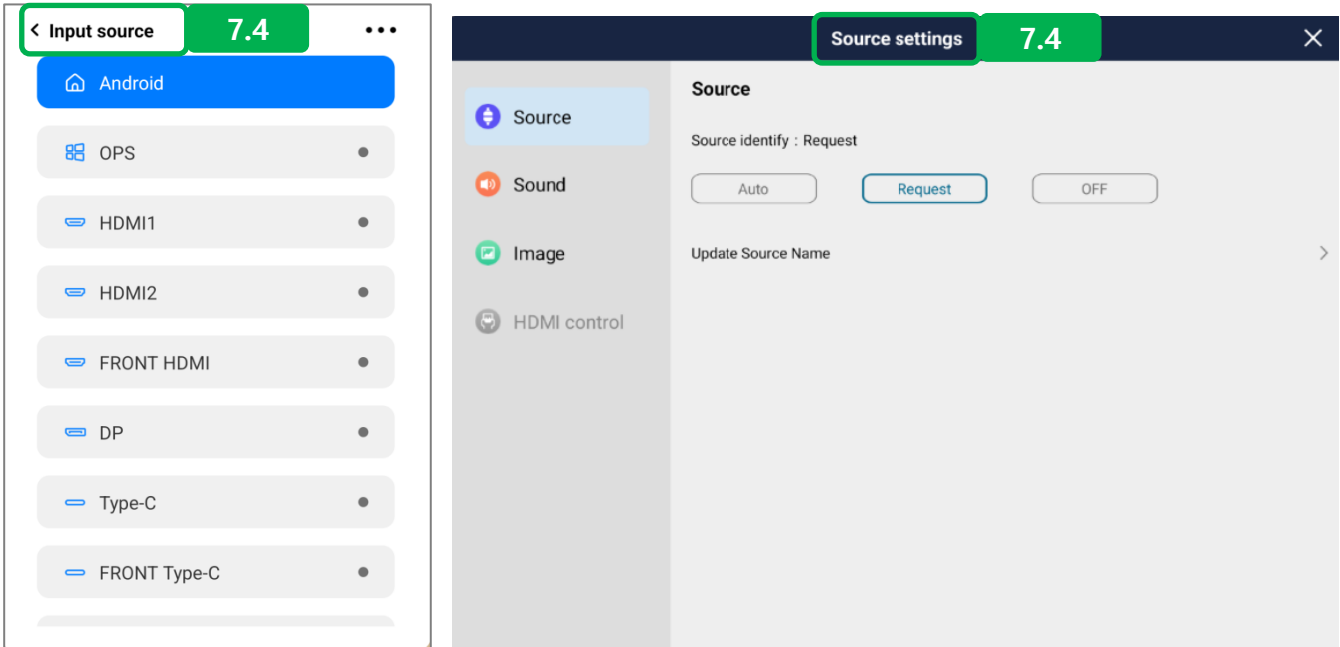
7.1.3 Side Toolbar



- Use the functions of the side toolbar for easier and faster operation of the device

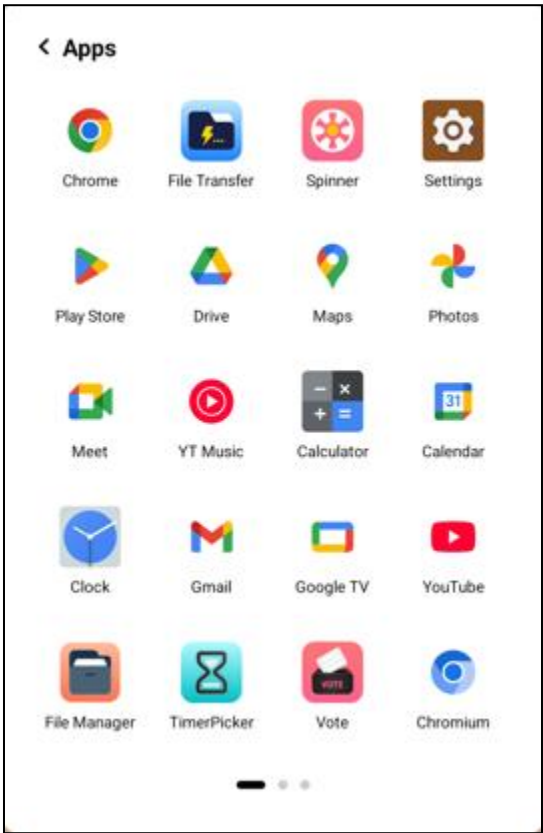
- ❖ 🏠 Home: Returns to the main home screen
- ❖ ⬅️ Back: Returns to the previous screen
- ❖ 📄 Recent Apps: View recently used apps and close running apps
- ❖ 🖱️ Source: Displays connected or available input sources

7.1 Home Screen


- ❖  Source: Displays the connected or available input sources.
 - ... You can press it to configure the source detection switching method, as well as adjust audio and display settings.



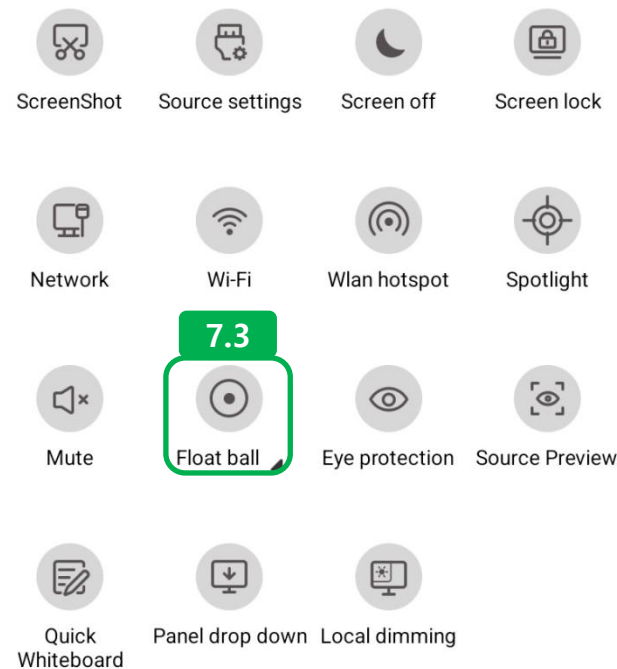
- ❖  Annotation: Allows you to write or draw on the screen regardless of the current screen status.
- ❖  Apps: Displays the apps installed on the device.

















7.1 Home Screen




❖  Tool Shortcuts: Quickly access frequently used functions on the device

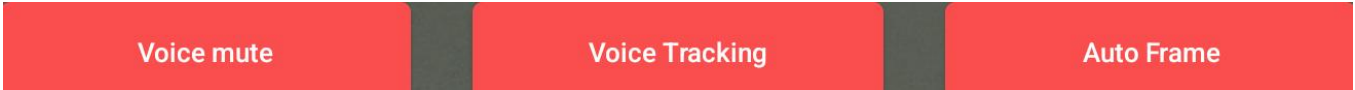
< Tool shortcuts



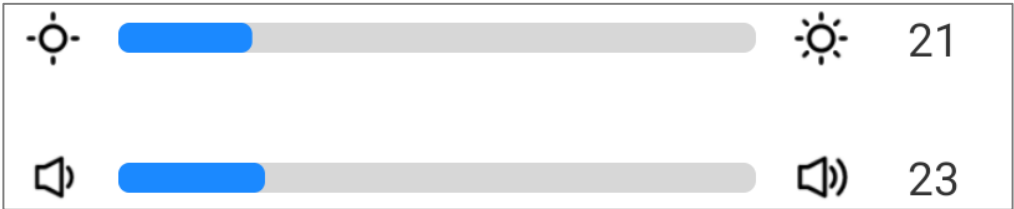
-  Screenshot: Select an area of the current screen to capture.
-  Source Settings: Configure source detection switching and adjust audio and display settings.
-  Screen Off: Turns off the screen and activates power-saving mode.
-  Screen Lock: Locks the screen.
-  Network: Configure wired network settings.
-  Wi-Fi: Configure wireless network settings.
-  WLAN Hotspot: Configure hotspot settings.
-  Spotlight: Dims all areas of the screen except for a designated area.
-  Mute: Sets the device volume to zero.
-  Float Ball: Provides quick access to frequently used buttons even when switching screens.
-  Eye Protection Mode: Activates the blue light filter.
-  Source Preview: View the connected source screen before switching to it.
-  Whiteboard Shortcut: Quickly switch the screen to the Whiteboard app.
-  Panel Dropdown: Pulls down the panel.

7.1 Home Screen

-  Screenshot: Select an area of the current screen to capture.
-  Local Dimming : Configure source detection switching and adjust audio and display settings.
-  Camera Menu: Auto Frame, Voice Tracking On/Off Control

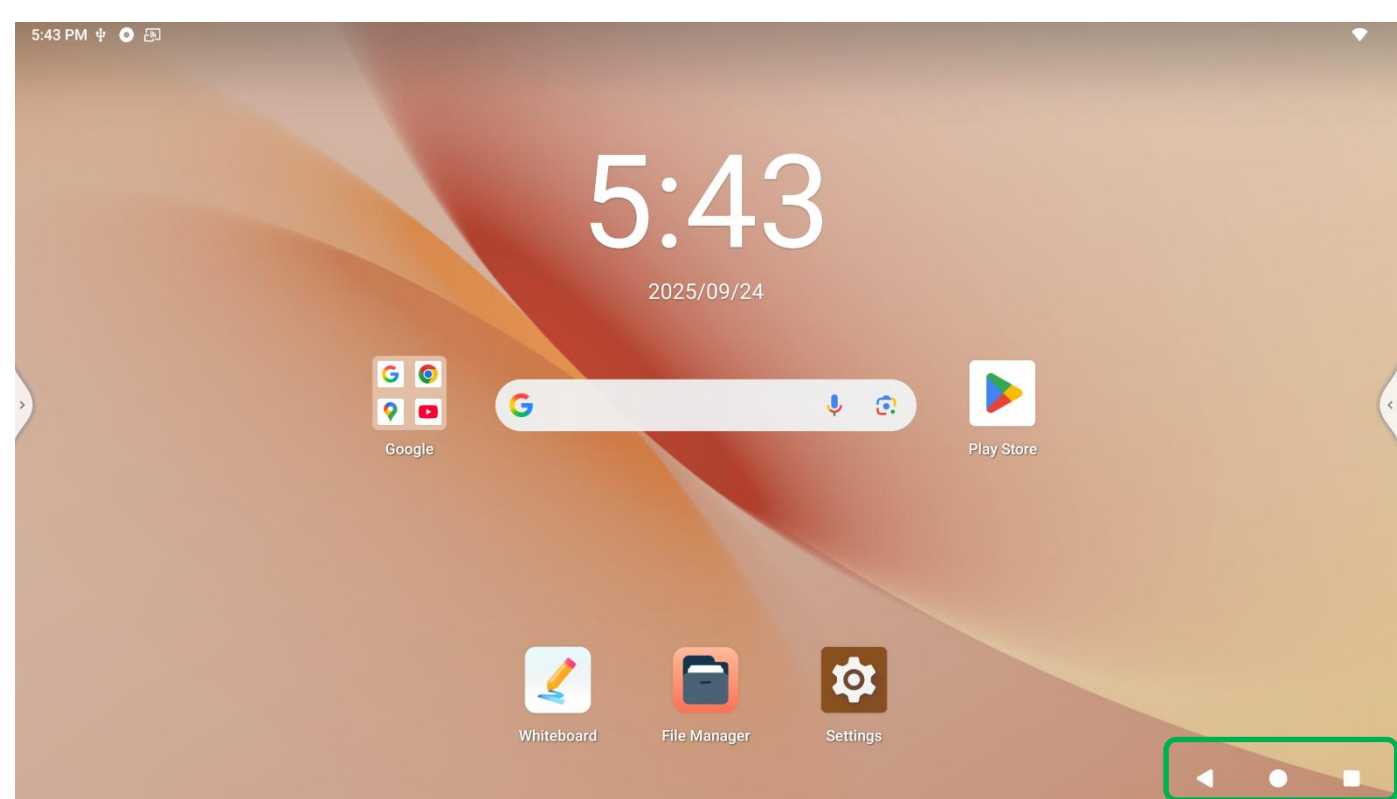


- Mute: Disables the array microphone function.
 - Voice Tracking: Detects voices within the camera range and zooms in on the active speaker.
 - Auto Frame: Detects people within the camera range and expands the view to the maximum range.
-
- Brightness and Volume Control: Adjust the device's brightness and volume



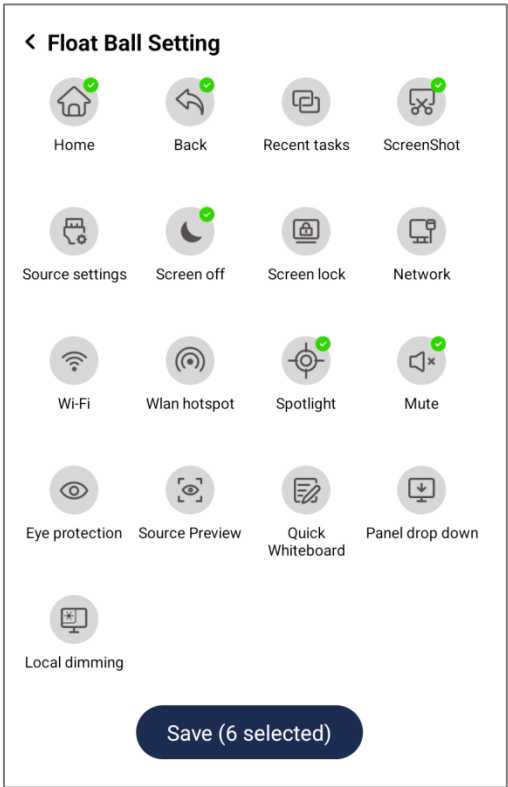
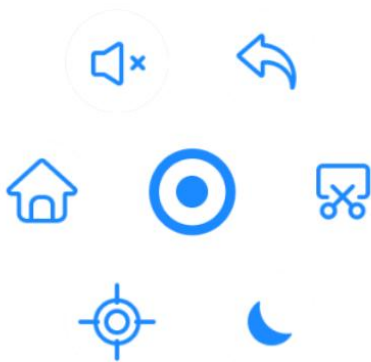
7.2 Navigation Bar

- ◀ Back: Returns to the previous screen
- ● Home: Returns to the home screen
- ■ Recent Apps: Shows a list of recently used apps



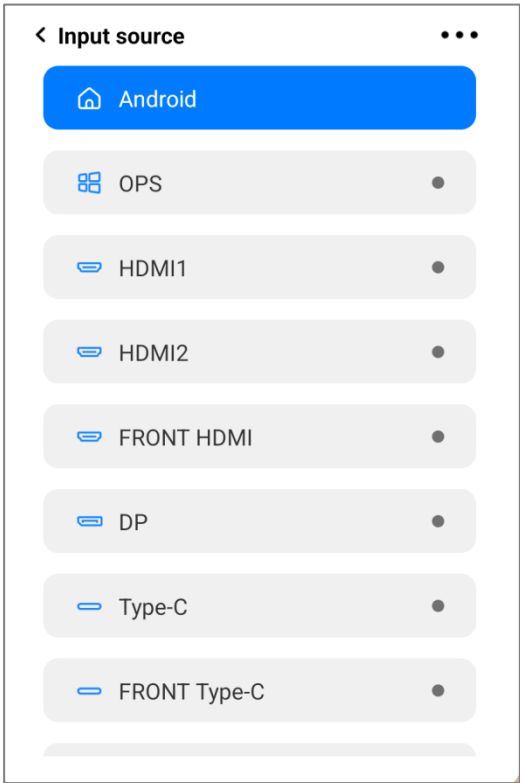
7.3 Floating Menu

- Provides quick access to frequently used buttons even when switching screens.
- Up to six frequently used buttons can be set from the side toolbar.



7.4 External Input

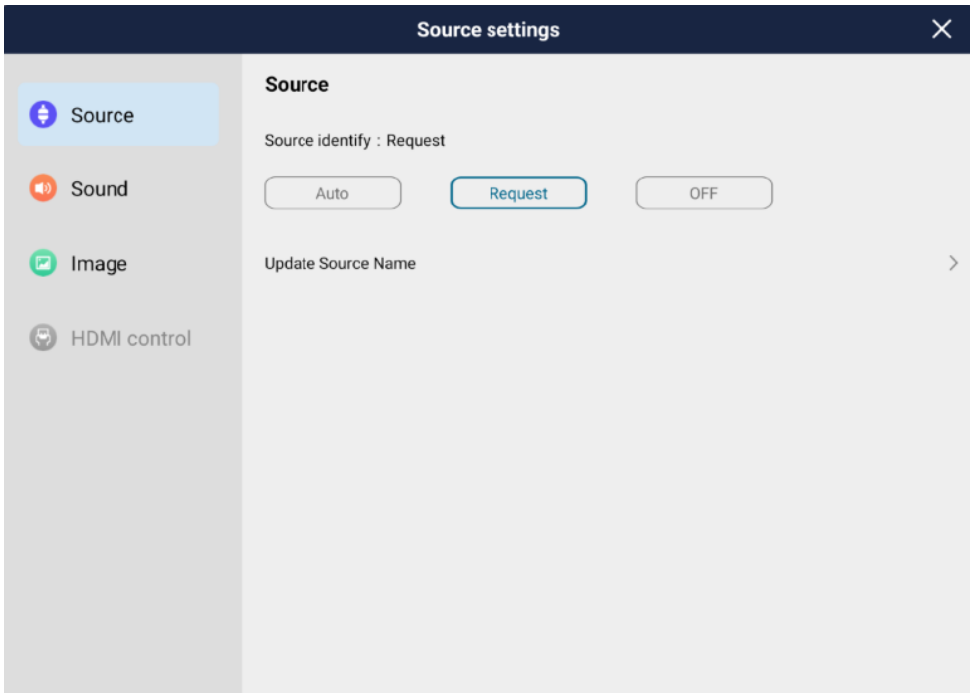
- Quickly switch between input sources from connected external devices.



7.4 External Input

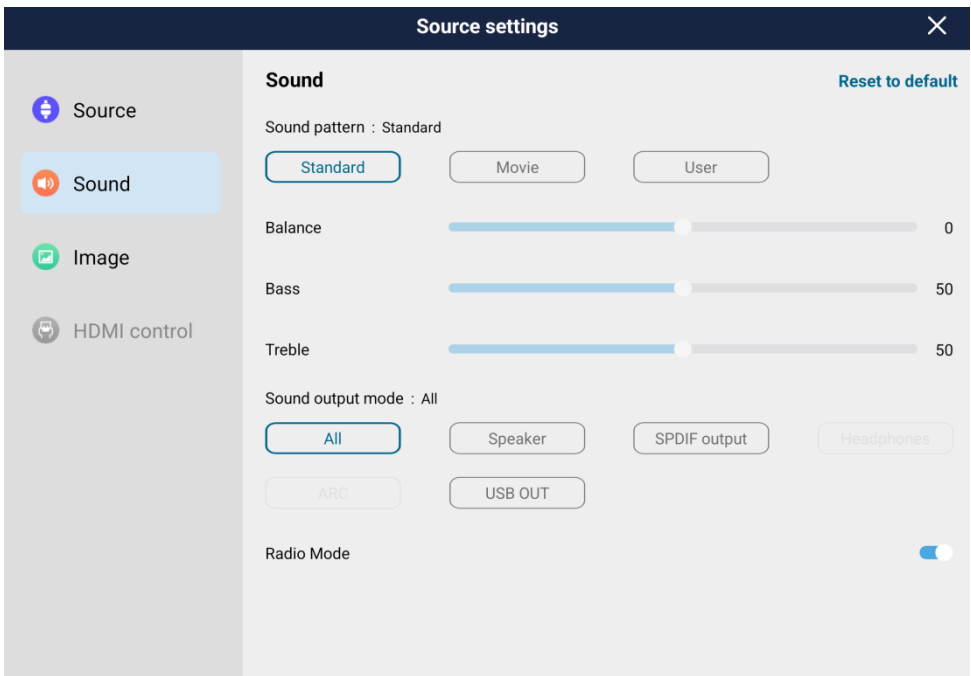
7.4.1 External Input Settings

- Source Switching: Configure how the input switches when a cable is connected.
- Rename Input: Set custom names such as "Laptop" or "Document Camera."



7.4.2 Audio Output Settings

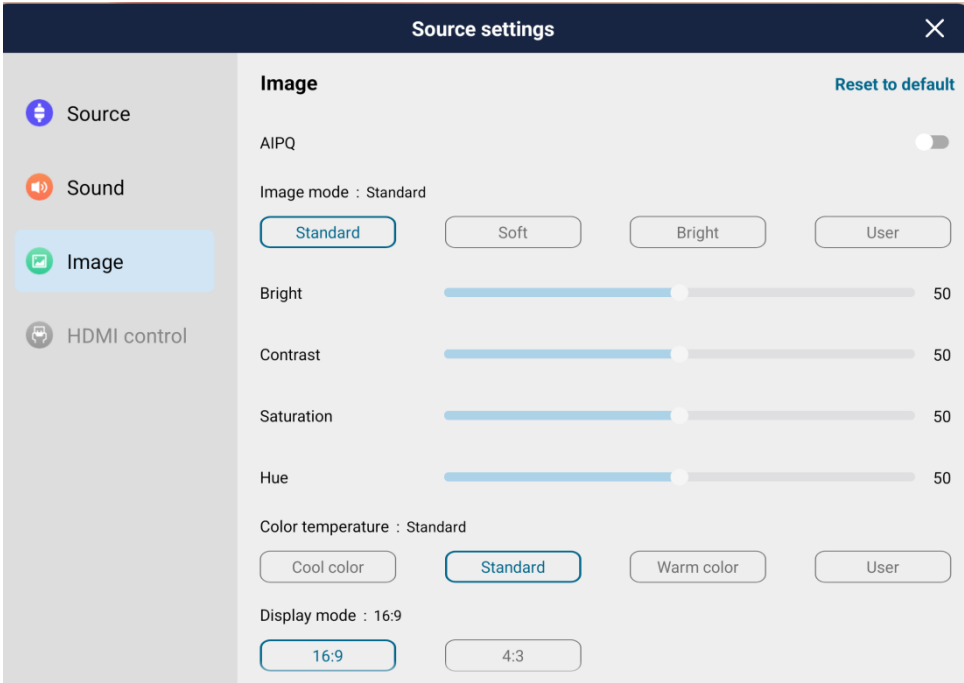
- Sound Mode: Set to [Standard / Movie / User]
- Audio Output Mode: Select the audio output device.
- Radio Mode: Allows audio output even when the device enters power-saving mode.



7.4 External Input

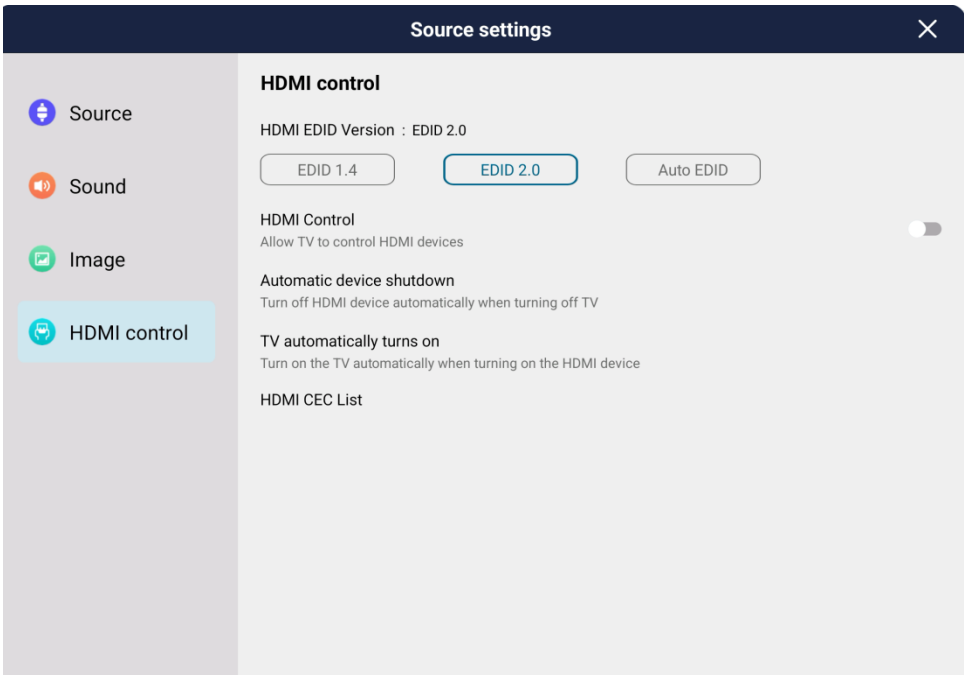
7.4.3 Display Output Settings

- Picture Mode: Can be set to [Standard / Soft / Bright / User]
- Color Temperature: Can be set to [Cool / Standard / Warm / User]
- Aspect Ratio: Select aspect ratio such as 16:9 or 4:3

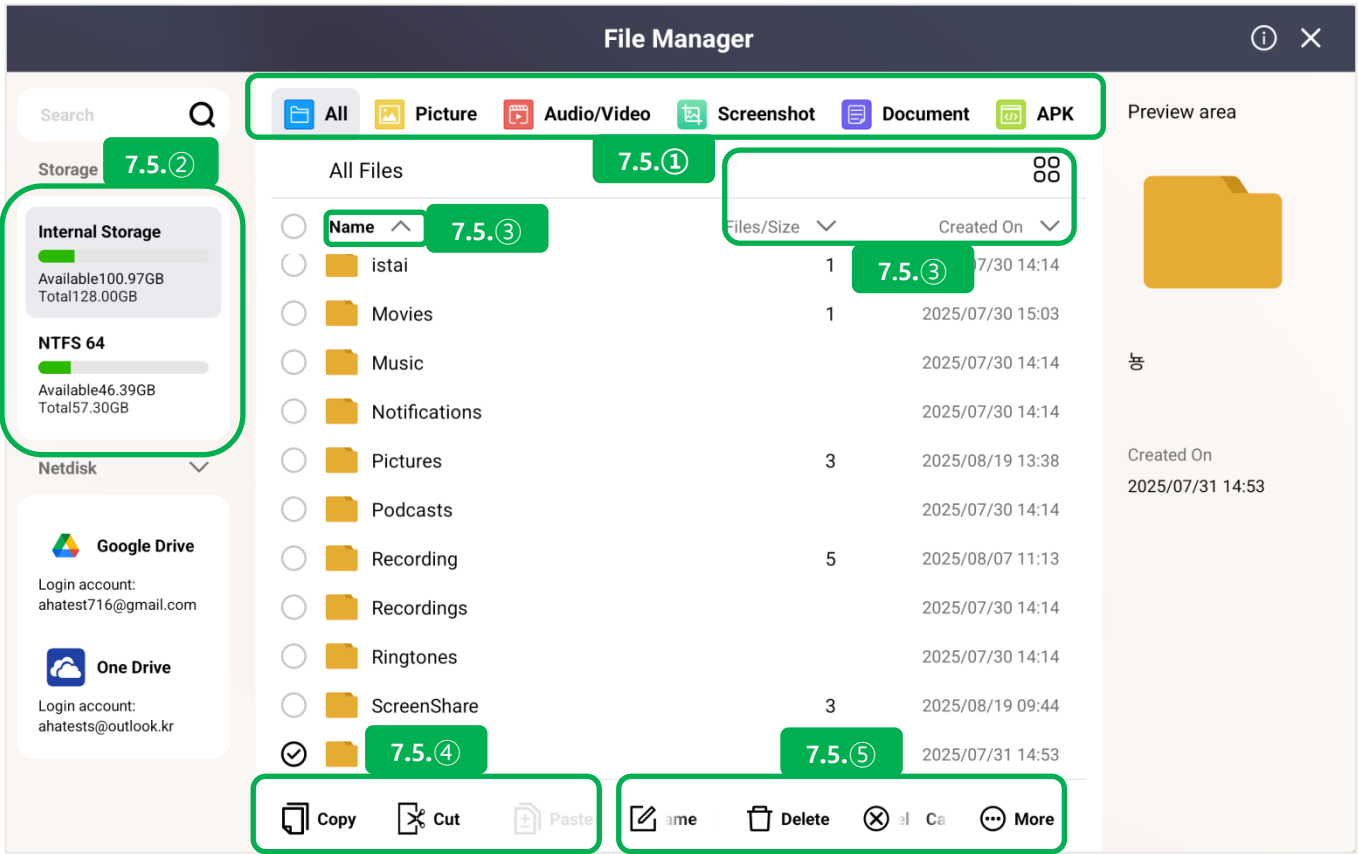


7.4.4 HDMI Control Settings

- HDMI EDID Version: Can be set to [EDID 1.4 / EDID 2.0 / Auto EDID]
- HDMI Control Settings



7.5 File



7.5.1 File Management

- Manage stored files on the device.



① Category

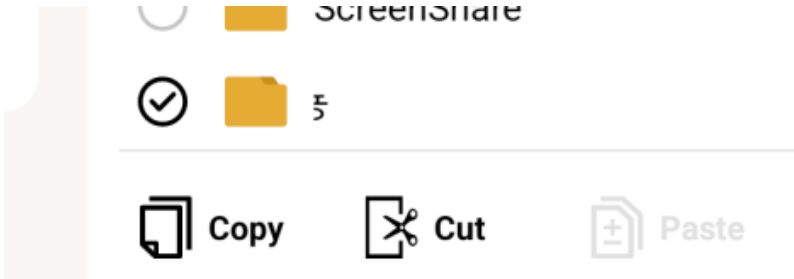
- Displays files by user-selected extensions.

② Storage

- Shows the device's internal storage and any additional connected storage.

③ File Sorting

-  Press to enlarge file icons or display detailed information.
-  Press to sort files in ascending or descending order.



④ File Editing_1


- Copy: Copies the selected file.
- Paste: Places the copied file into another folder or storage device.
- Cut: Moves the selected file to another folder or storage device (the file will be removed from the original storage).


7.5 File


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2025/07/31 14:53

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Delete

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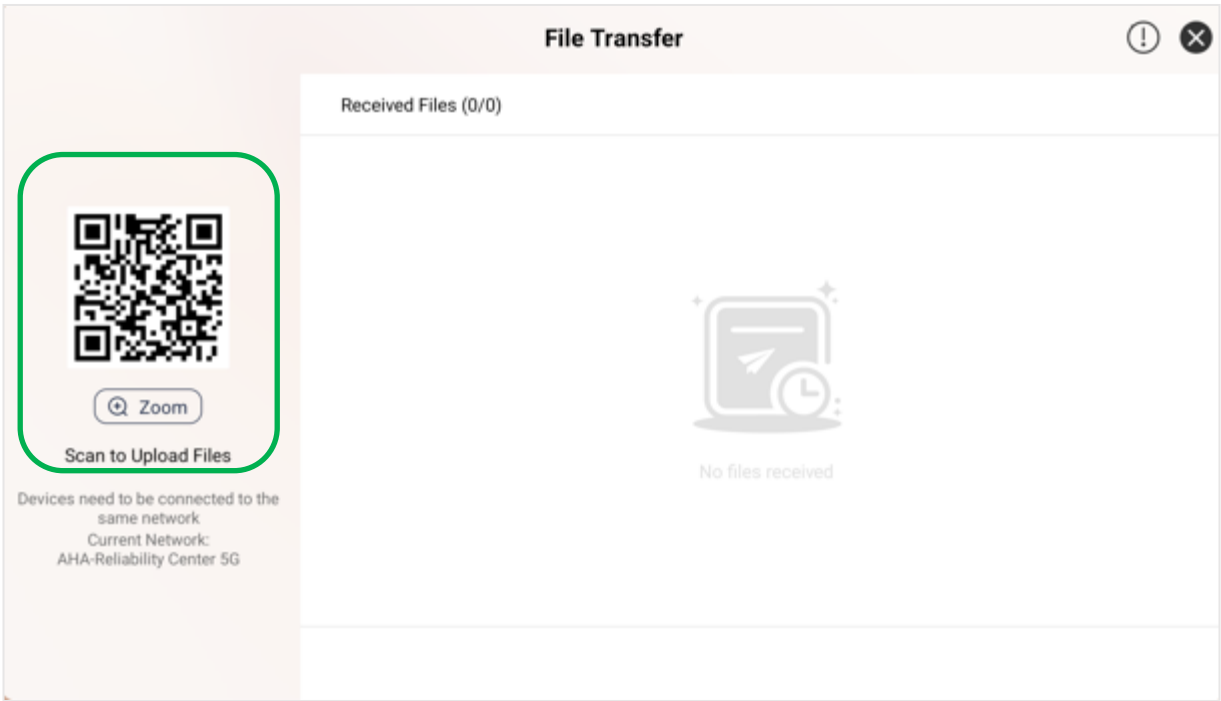
More

⑤ File Editing_2

- Rename: Select a file or folder and change its name.
- Delete: Delete the selected file or folder.
- Cancel: Cancel file selection, copying, or other actions.

7.5.2 File Sharing

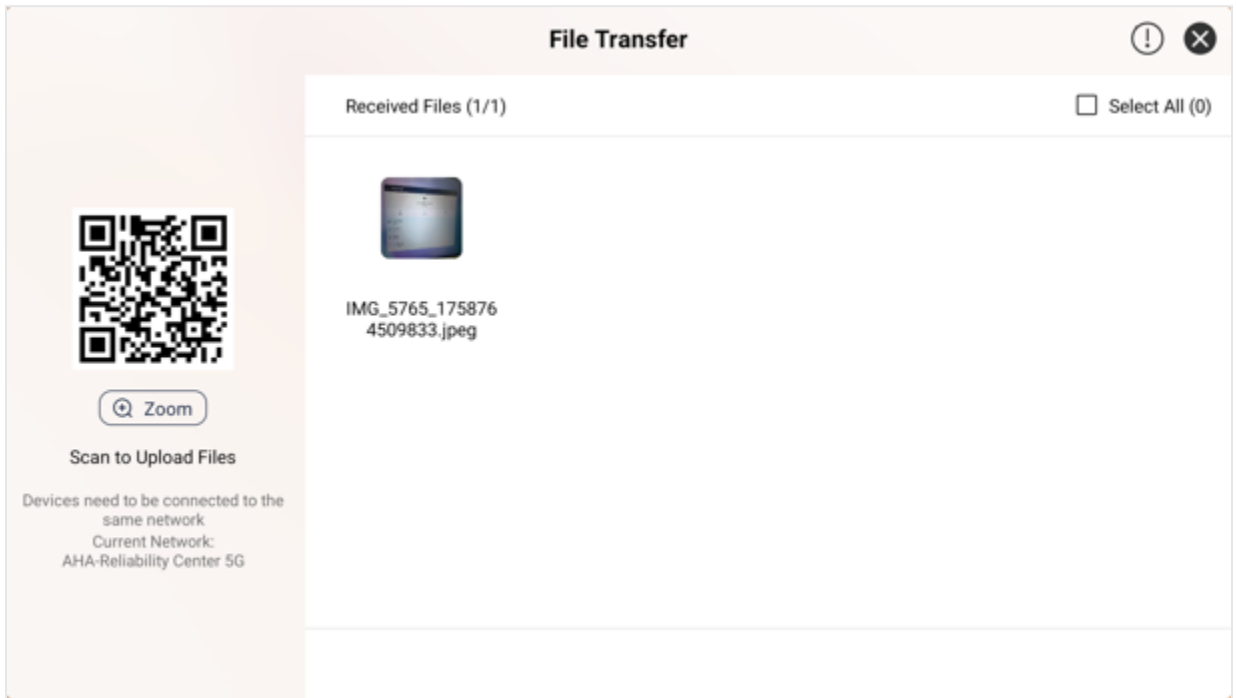
- Quickly transfer files from external devices to this device.



① QR Code Scan

- Scan the QR Code with an external device to instantly upload multiple files from that device.

7.5 File

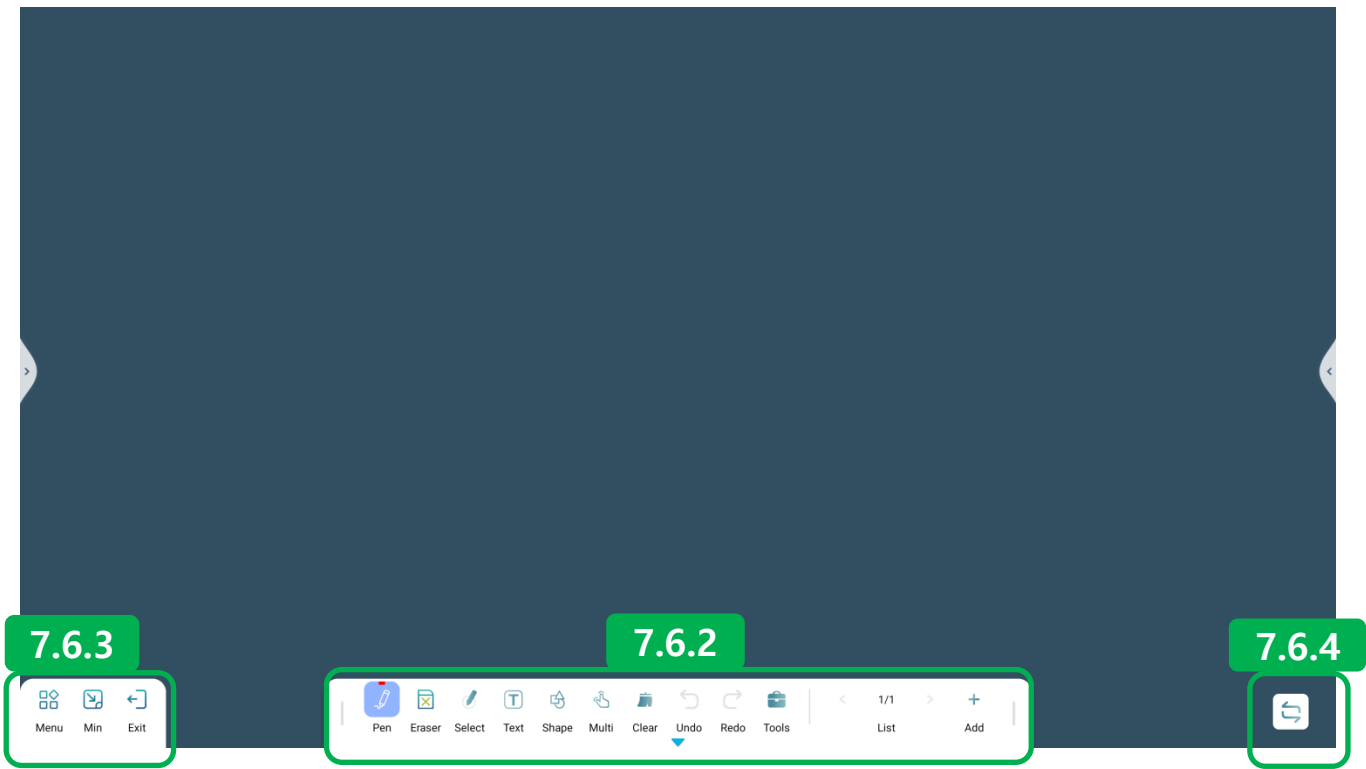


② Uploaded File Management

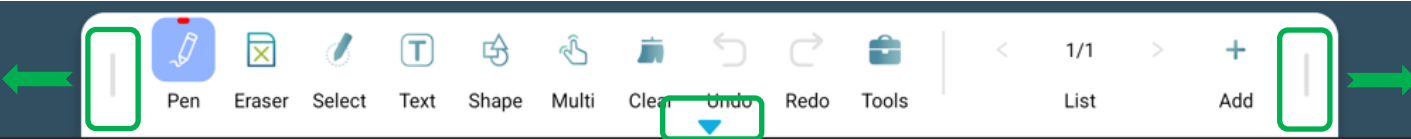
- Insert into Whiteboard: Instantly display the file on the Whiteboard.
- Copy: Copy the uploaded file.
- Save: Save the uploaded file. (Saved in File Manager → Fast Transfer folder.)
- Delete: Delete the uploaded file.
- Cancel: Cancel file selection.

7.6 Whiteboard

7.6.1 Main Screen

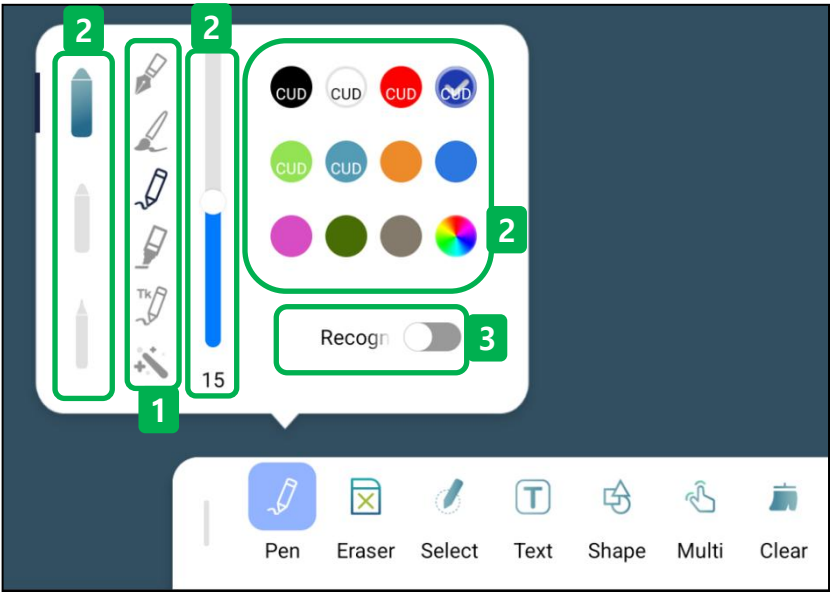


7.6.2 Toolbar Usage



❖ Toolbar Movement

- Drag the left or right buttons to move the toolbar horizontally.
- Press the bottom button to hide the toolbar.



❖ Pen

- You can freely change the type, thickness, and color of the pen.

7.6 Whiteboard

① Pen Types

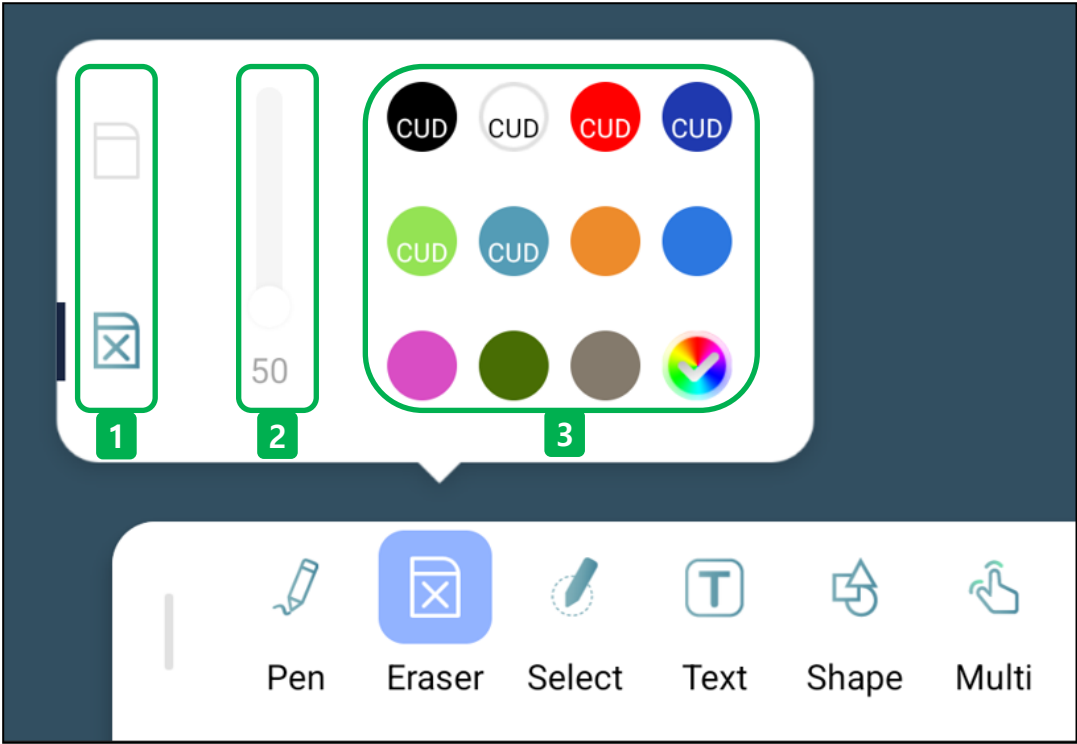
- There are six types of pens: Fountain Pen, Brush Pen, Marker Pen, Highlighter, Text Pen, and Magic Pen.

② Pen Thickness Recognition Settings

- Up to three types of pens can be used simultaneously depending on touch recognition thickness.
- S (Small Finger): 2.8 mm, B (Big Finger): 6.5 mm, F (Stylus Big Finger): 10 mm
- Thickness can be adjusted from 1 to 30 according to recognition type.
- Colors can be freely selected from the Color Board for each recognition type.

③ Recognition Function

- Automatically recognizes handwritten shapes drawn with the pen and converts them into figures.



❖ Eraser

- You can freely change the type, size, and color options of the eraser.

① Eraser Types



<Basic>



<Select>



<Gesture>

- There are three types of erasers: Basic, Select, and Gesture.
- Basic: An adjustable eraser with a size range from 100 to 350.

7.6 Whiteboard

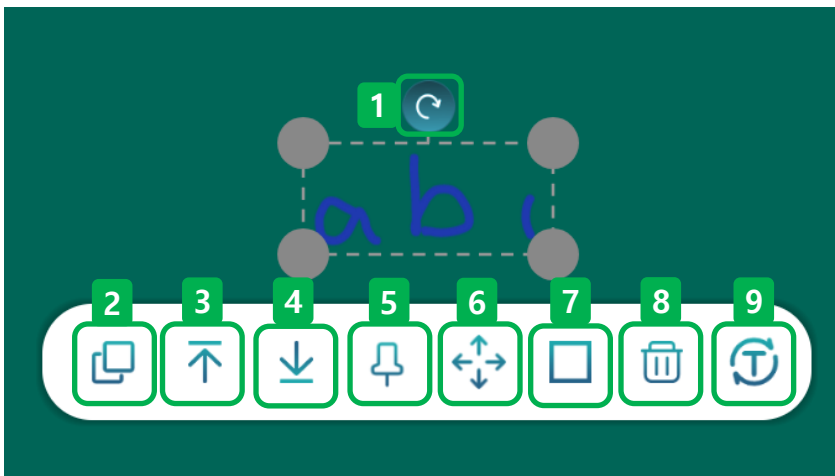
- Select: You can erase objects by selecting them, and you may also specify a color so that only objects of that color are erased.
- Gesture: Recognizes the palm or a large object and functions as an eraser, even when other tools are selected.

② Eraser Size Adjustment

- The eraser size can be adjusted within the range of 100 to 350.
(This function works only with the Basic Eraser.)

③ Eraser Color Selection

- Allows the user to specify the color of objects to be erased so that the eraser only affects that color.
- 🌈 This option can also be set to erase all colors.
(This function works only with the Select Eraser.)



❖ Select

- Objects can be modified by copying, deleting, or rotating them.

① Object Rotation

- Rotates the selected object.

② Object Copy

- Copies the selected object.

③ Bring to Front

- Moves the selected object to the front.

④ Send to Back

- Moves the selected object to the back.

⑤ Lock

- Locks the selected object.

7.6 Whiteboard

⑥ **Vertical Move**

- Moves the position of the selected object vertically.

⑦ **Object Color**

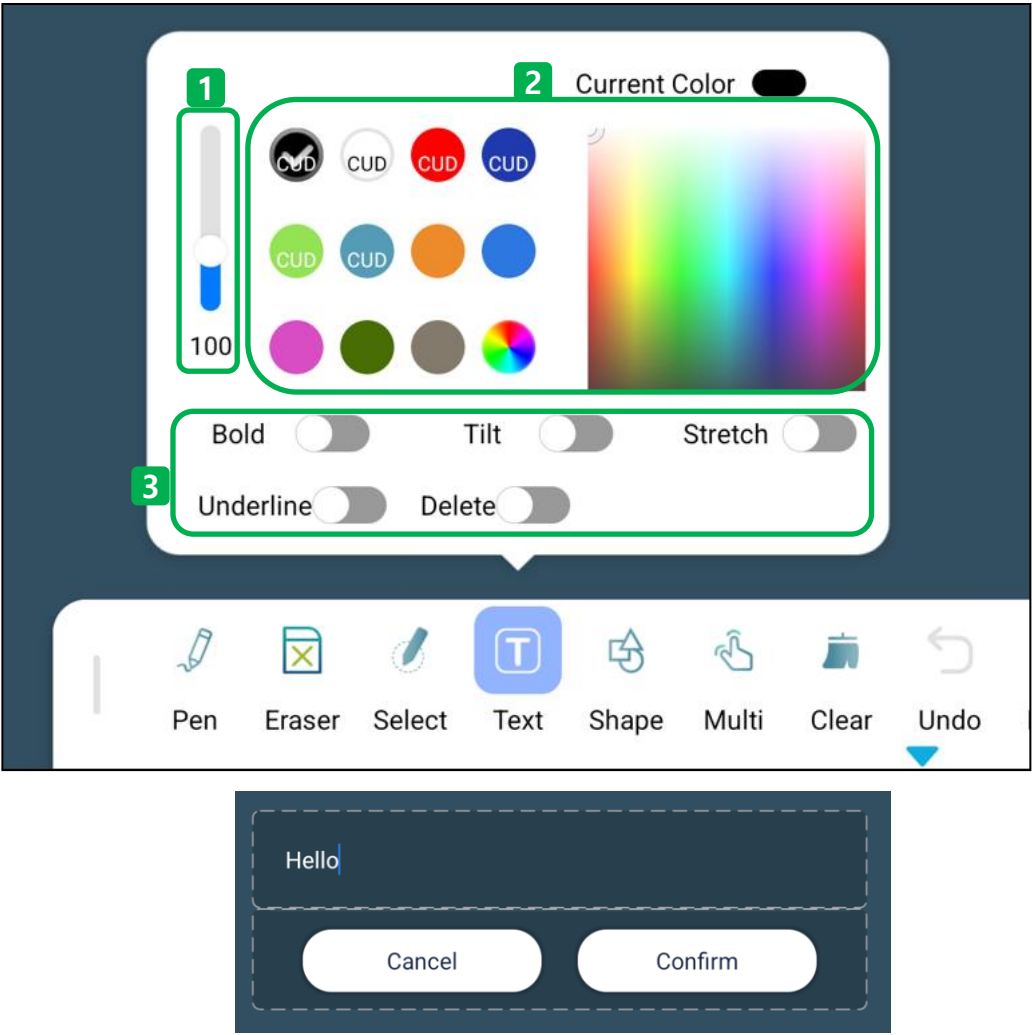
- Changes the color of the selected object.

⑧ **Delete Object**

- Deletes the selected object.

⑨ **Text Conversion**

- Converts the selected object into text.



❖ **Text**

- You can freely change the size, font, and color of text.

① **Text Size Adjustment**

- The text size can be adjusted within the range of 60 to 200.

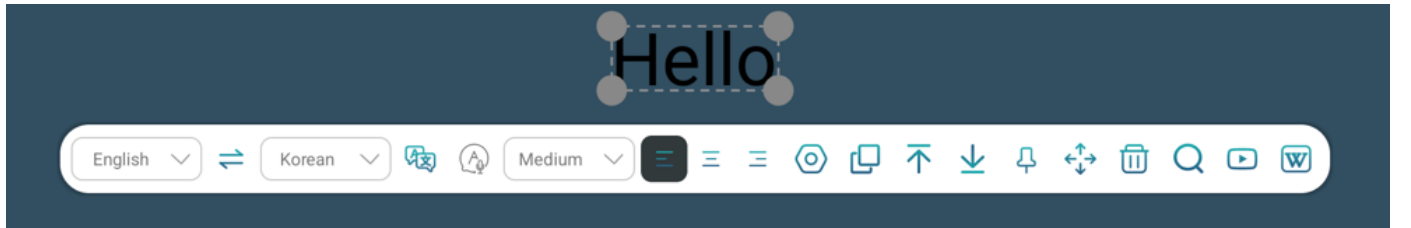
② **Text Color Adjustment**

- Text color can be freely selected from the Color Board.

③ **Text Font Adjustment**

- The font of the text can be adjusted.

7.6 Whiteboard

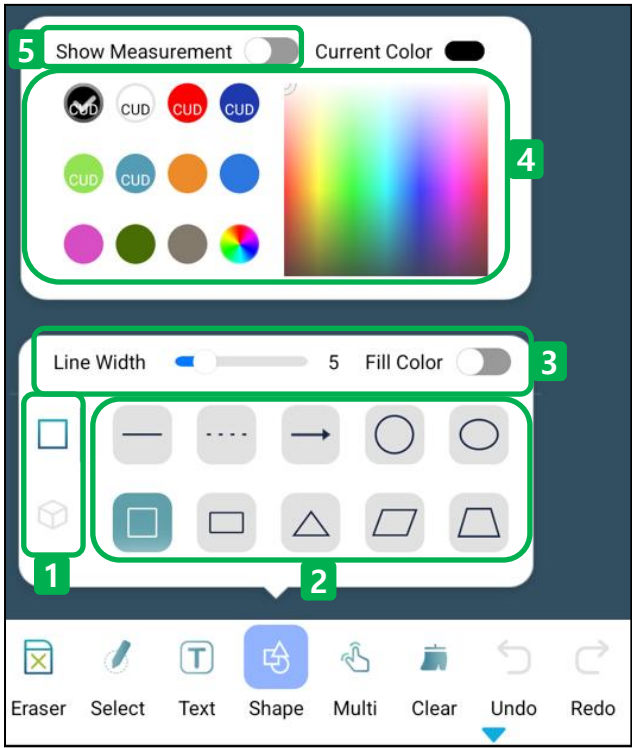


④ Other Text Editing

- After loading text, you can select it to use additional functions such as translation, alignment, resizing, color adjustment, repositioning, and search.

❖ Shapes

- You can freely change the type, color, and size of shapes.



① Shape Types

- There are two types of shapes: 2D and 3D.

② Shape Selection

- Users can freely select desired shapes from the Shape Board.
(You must select either 2D or 3D before use.)

③ Shape Thickness Adjustment

- Line Thickness: The thickness of the shape can be adjusted from 0 to 25.
- Fill Color: Choose whether or not to fill the inside of the shape.
(This function is available only for 2D shapes.)

④ Shape Color Adjustment

- The shape color can be freely selected from the Color Board.

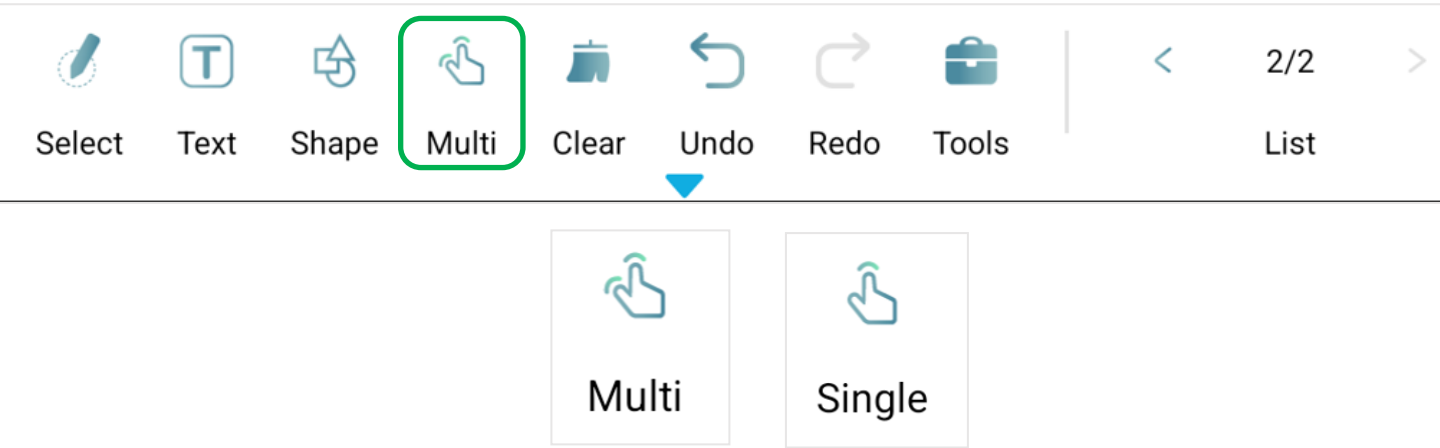
⑤ Annotation Information Display

- Displays length and angle information of the selected shape.

7.6 Whiteboard

❖ Multi & Single Touch

- Adjust the number of touch points available when using the whiteboard.



① Multi-Touch

- Allows adjustment of touch points from 1 to 50.

② Single-Touch

- Limits touch input to a single point.
- 2 Points: Adjusts the scale of the whiteboard.
- 3 Points or more: Moves all content on the whiteboard.

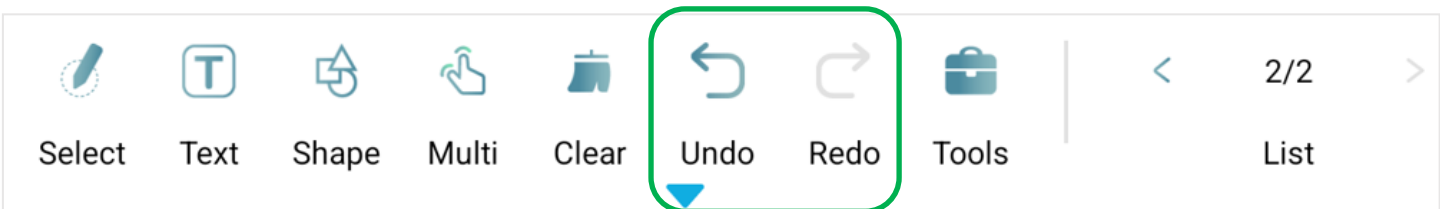
❖ Clear



- Clears all content on the whiteboard at once.

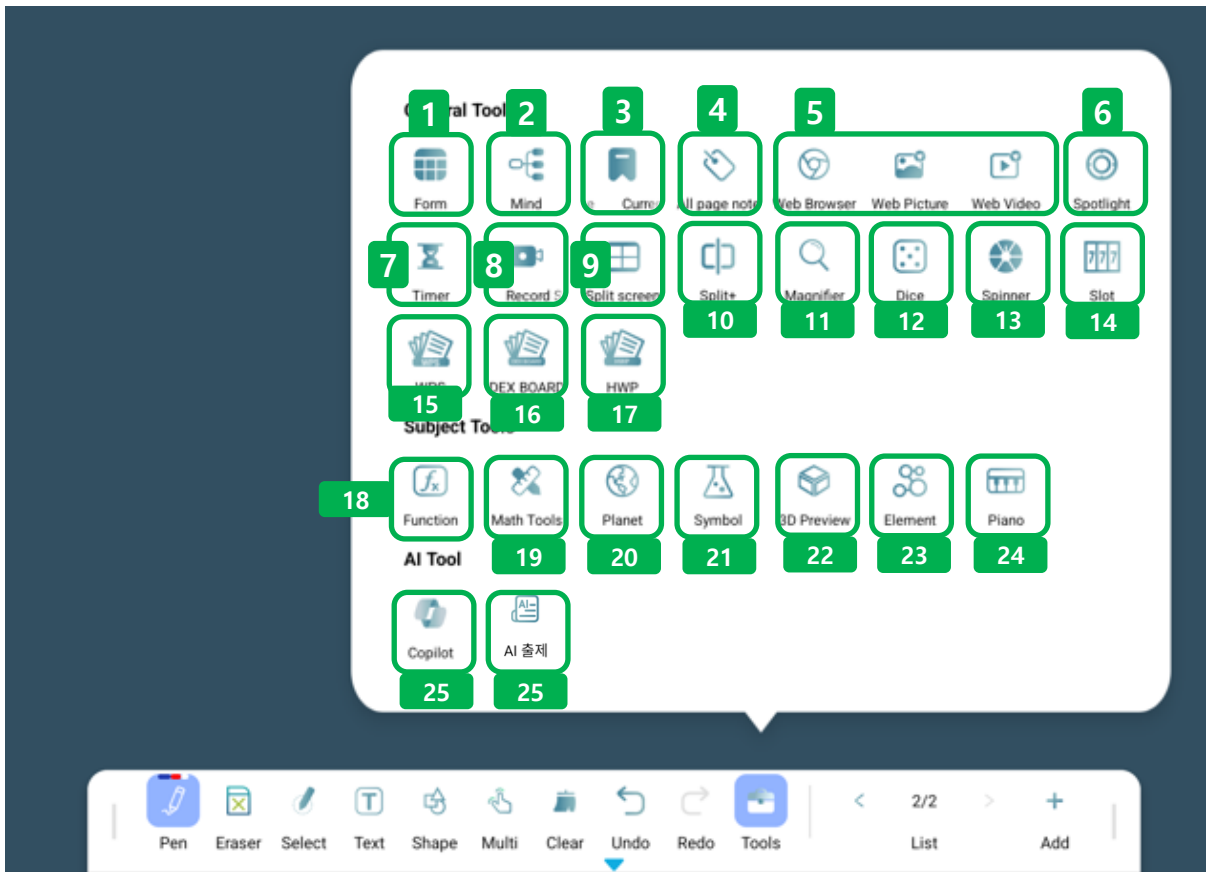
7.6 Whiteboard

❖ Undo & Redo



- Undo: Cancels the most recent touch input.
- Redo: Restores the most recent touch input.

❖ Tools

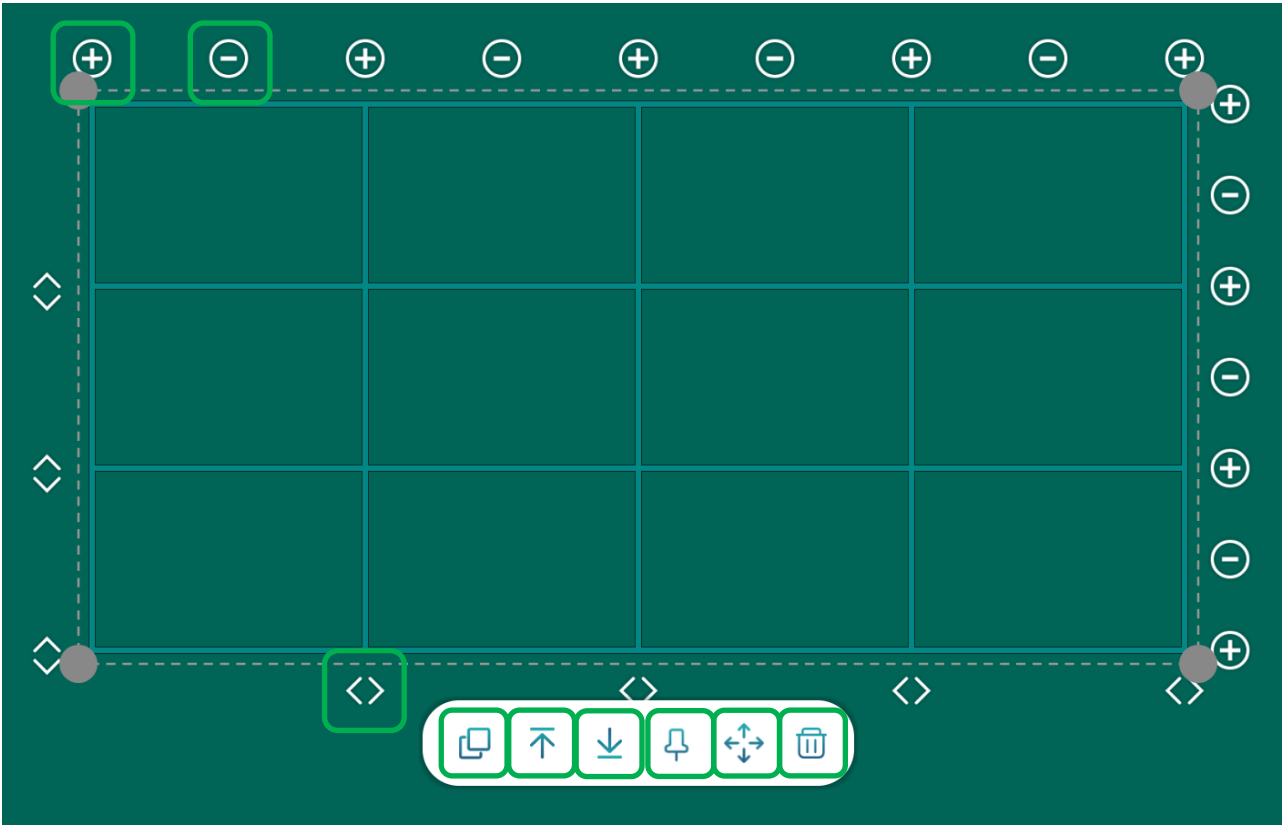


- Various tools required for meetings and education can be freely selected and used.










1. Tools – Form

- Creates a table.
- The table size can be set from 1 to 10, with the default set to 3 rows and 4 columns.
- Auto Adjustment and Binding: Handwriting made outside the created table is automatically recognized and organized inside the table.

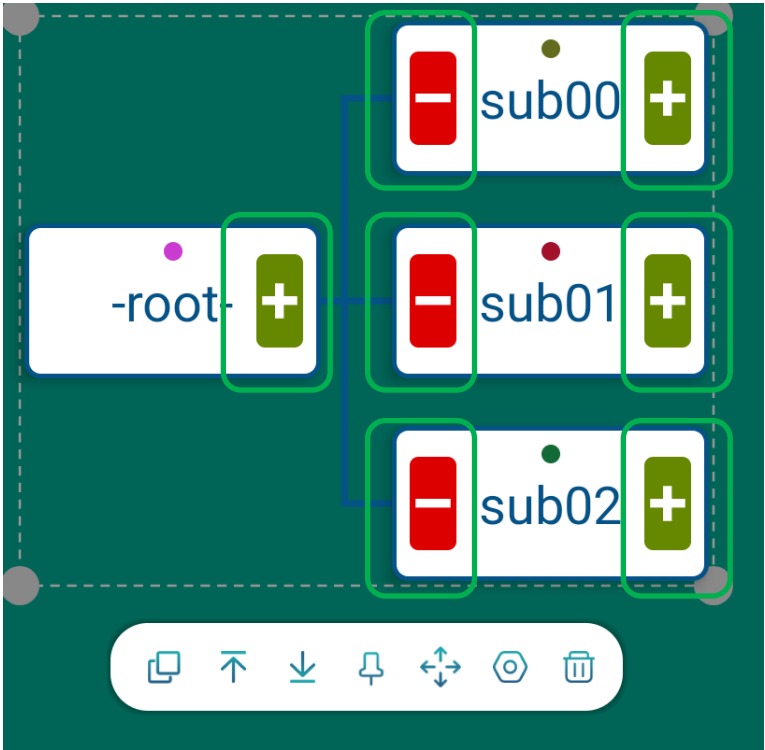
7.6 Whiteboard



- You can edit the table.

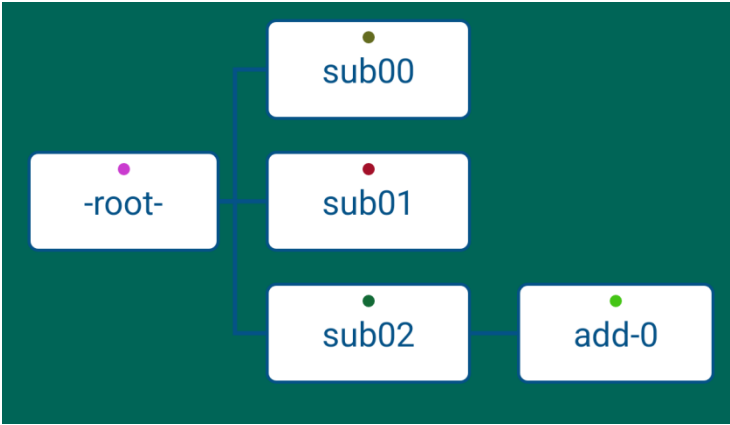
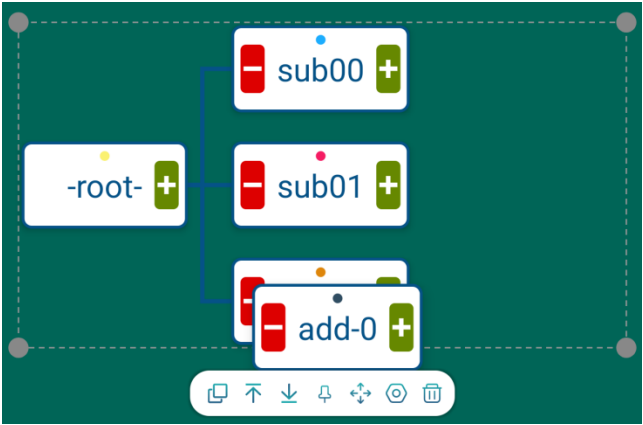
	Copy	* Copies the created table.
	Bring to Front	* Moves the created table to the front.
	Send to Back	* Moves the created table to the back.
	Lock	* Locks the position of the created table.
	Move	* Moves the created table diagonally.
	Delete	* Deletes the created table.
	Delete Column	* Deletes a column in the created table.
	Add Column	* Adds a column to the created table.
	Resize	* Adjusts the size of the created table.

7.6 Whiteboard



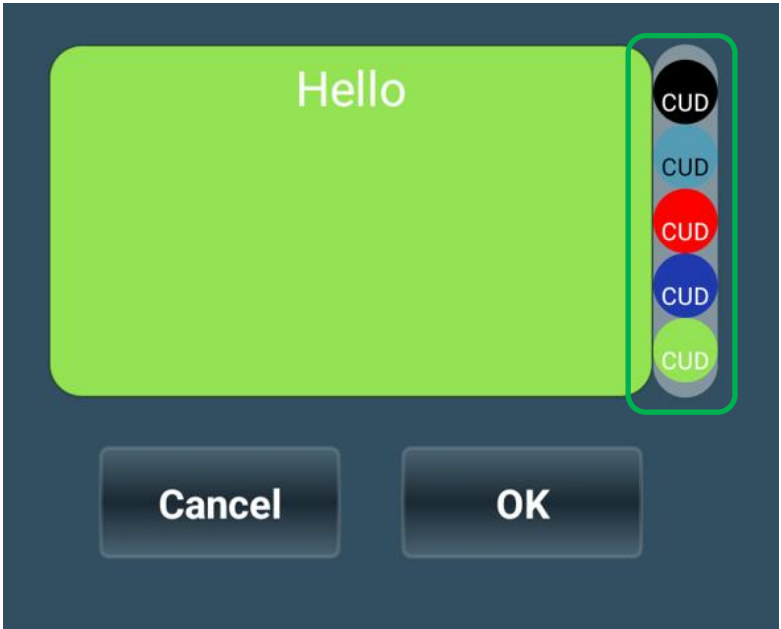
2. Tools – Mind Map

- Creates a mind map.
- The default is Main 1, Sub 3.
- Tap a map node to edit its content.
- Use + or – to increase or decrease the number of nodes.
- Tap the central circle to change the layout of the map.



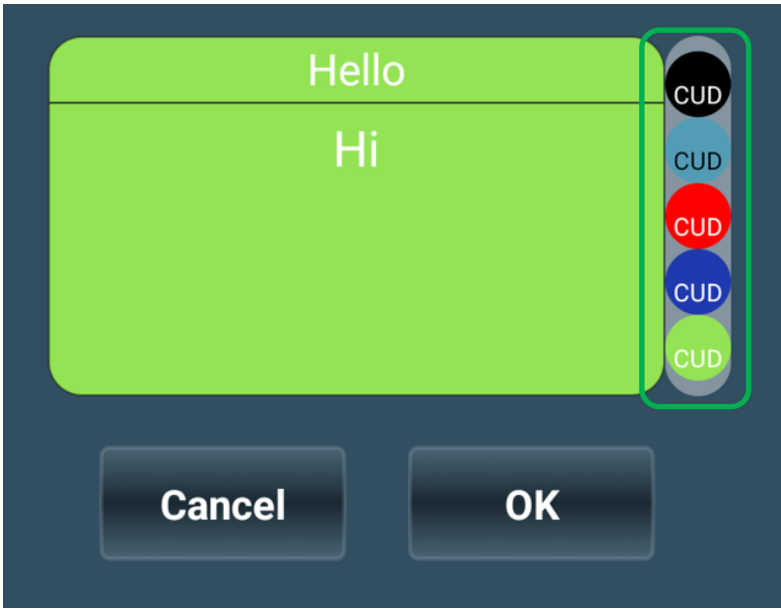
- Drag a map node over another to rearrange the map layout.

7.6 Whiteboard



3. Tools – Current Page Memo

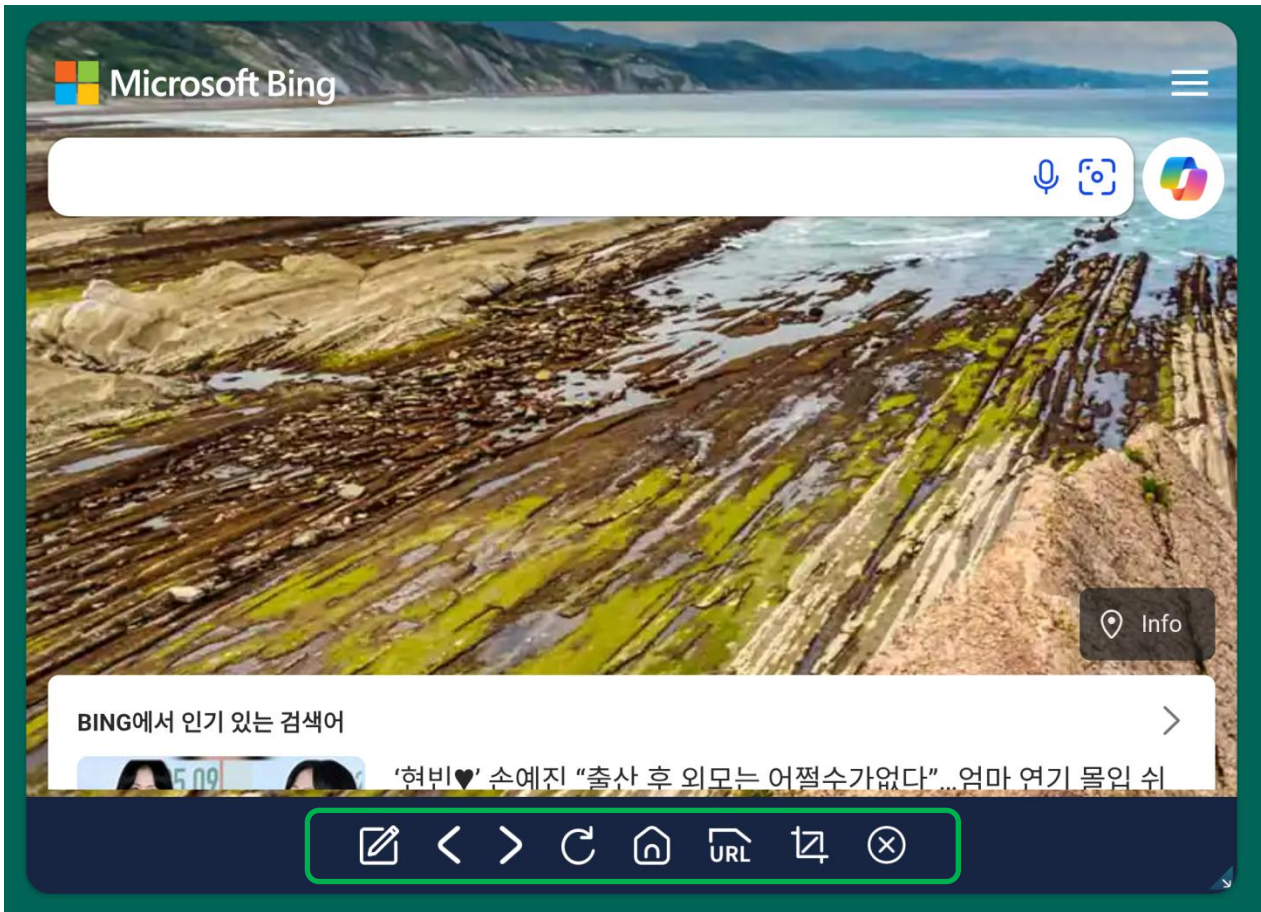
- Create reference notes within the whiteboard.
- Enter memo content using the keyboard at the bottom of the memo.
- Select the designated color on the side of the memo to set its background color.
- This memo applies only to the current page and will disappear when the page is changed.



4. Tools – All Pages Memo

- Create reference notes within the whiteboard.
- Enter memo content using the keyboard at the bottom of the memo.
- Select the designated color on the side of the memo to set its background color.
- This memo applies to all pages and will remain when switching pages.

7.6 Whiteboard

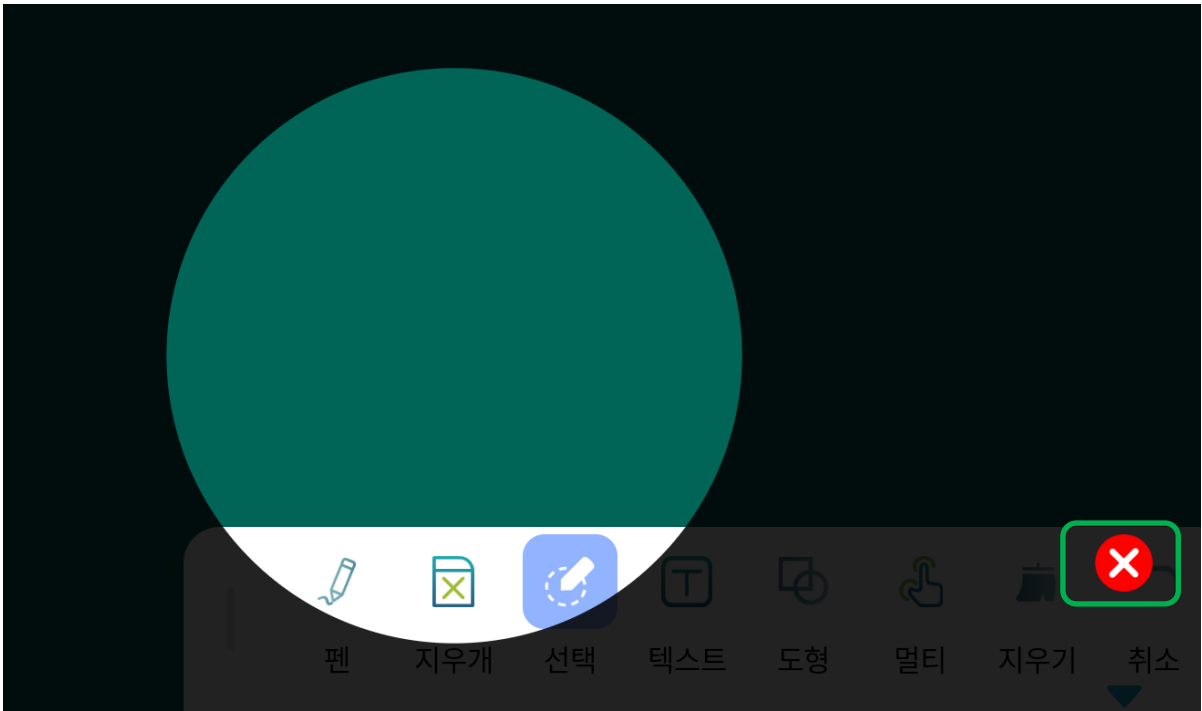


5. Tools – Web Browser, Web Images, Web Videos


- Use the web browser search function within the whiteboard.
- Use the web images function within the whiteboard to search for photos.
- Use the web videos function within the whiteboard to search for videos.

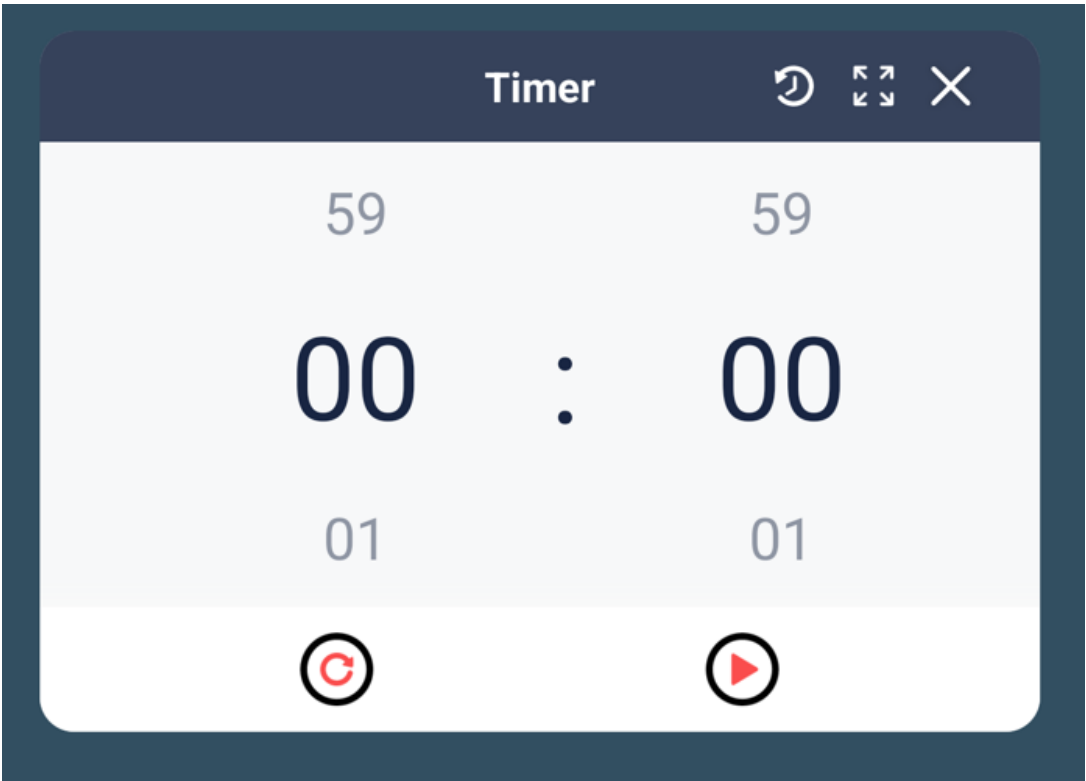
	Web Annotation	* Allows writing on top of web content.
	Back	* Loads the previous page.
	Forward	* Loads the next page.
	Refresh	* Reloads the current page to display the latest content.
	Home	* Loads the home page.
	URL Search	* Opens the URL search window.
	Screen Capture	* Captures the browser screen and displays it.
	Exit	* Closes the web browser window.

7.6 Whiteboard



6. Tools – Spotlight

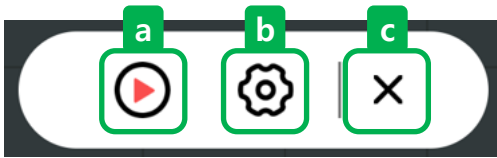
- Touch and drag on the screen to designate the spotlight area.
-  Press to exit the function.



7. Tools – Timer

- Provides a stopwatch function.

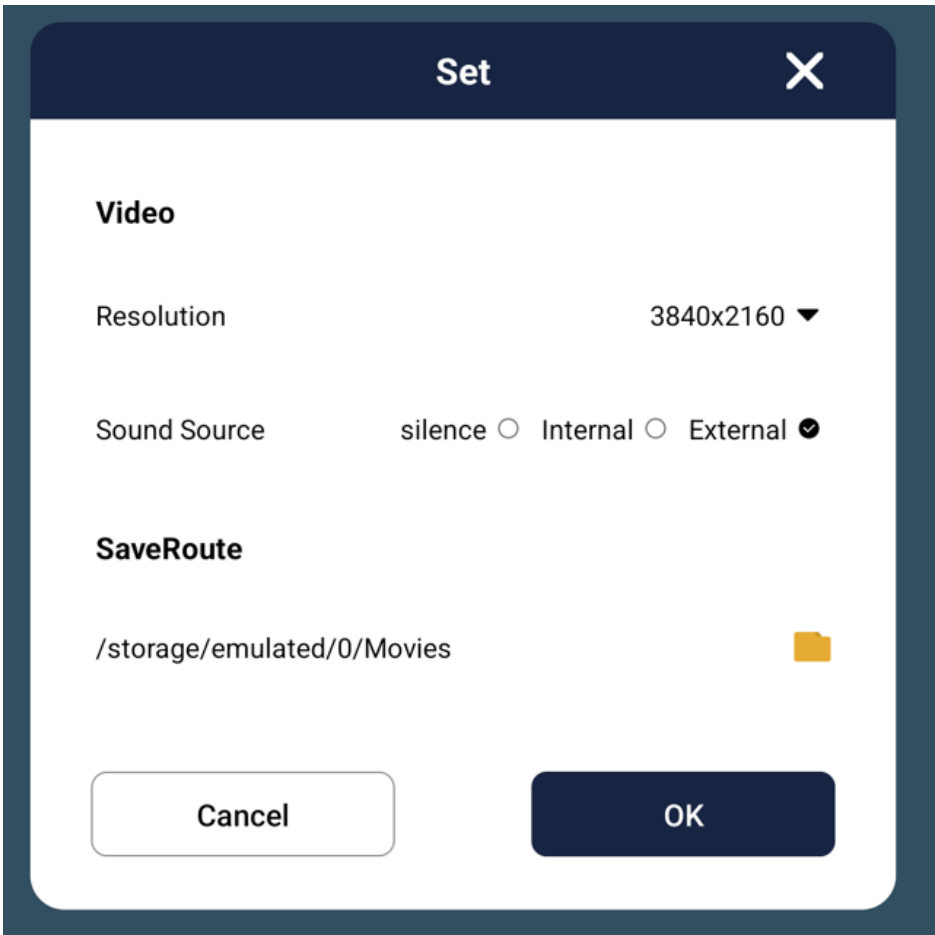
7.6 Whiteboard



8. Tools – Screen Recording

- Record the whiteboard screen.

a. Press the Play button to start recording.

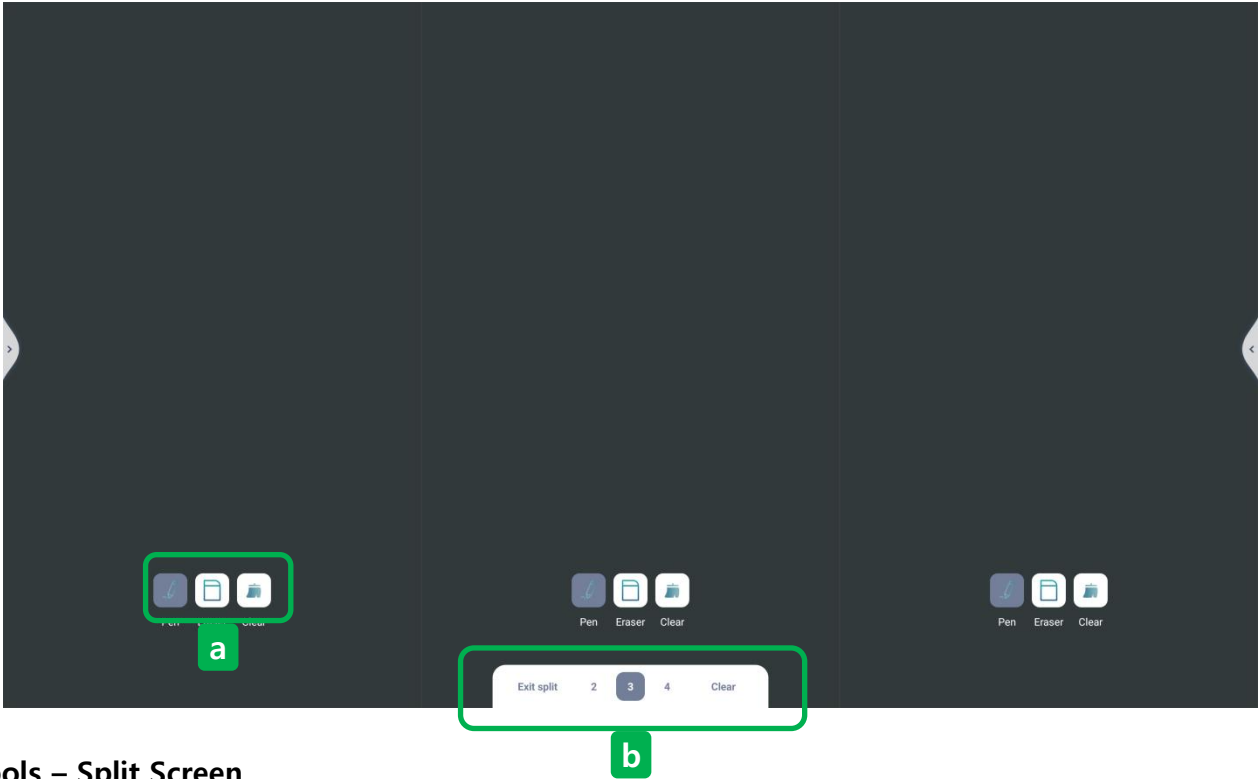


b. Change video settings:

- _ Resolution: Change the resolution.
- _ Sound Source: Change the audio source.
- _ Save Route: Change the storage path for the video.

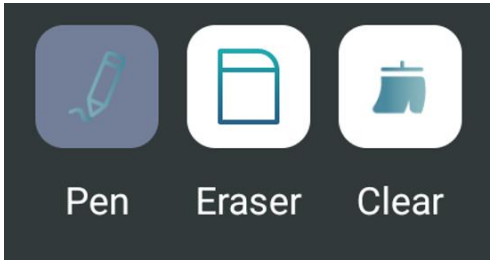
c. Exit the screen recording function.

7.6 Whiteboard



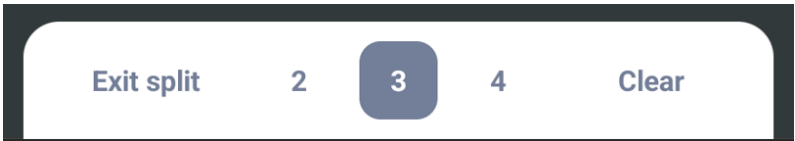
9. Tools – Split Screen

- The screen can be divided into sections, with up to 2–4 divisions available.



a. Split Screen Individual Functions

- _ Pen, Eraser, and Clear functions can be used independently in each split screen.
- _ Each function cannot be modified, unlike in the standard screen mode.



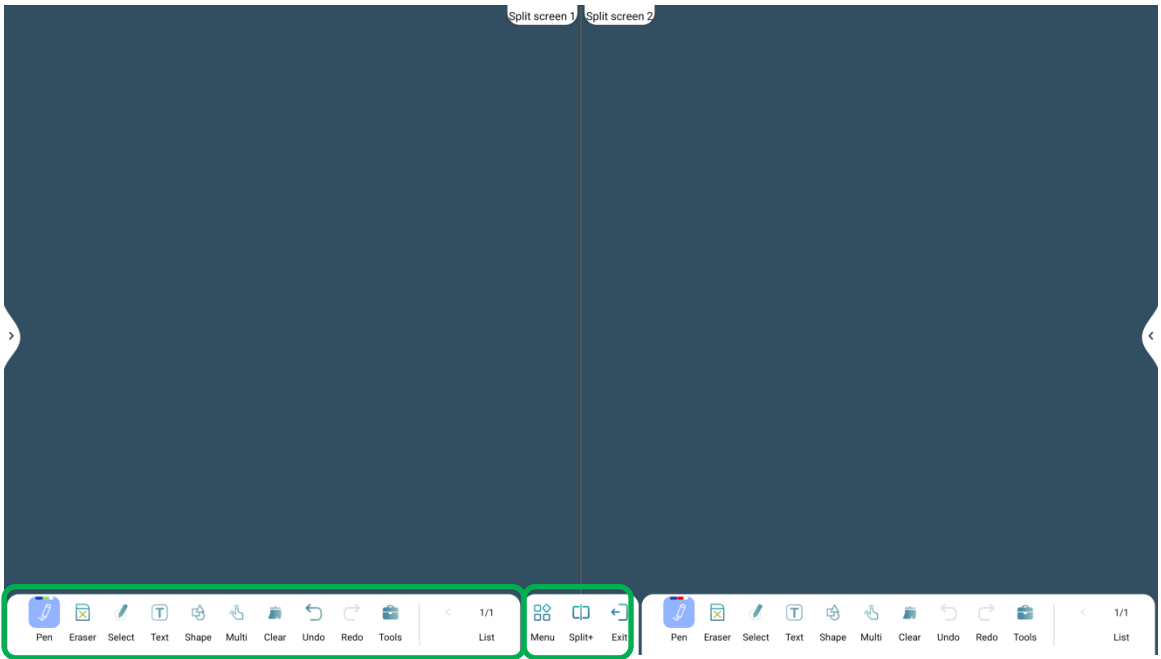
b. Full Screen Functions

- _ Exit Split: Ends split screen mode and returns to the standard screen.
- _ Number of Divisions: Adjust the split count from 2 to 4.
- _ Clear: Erases all content from every split screen.

7.6 Whiteboard

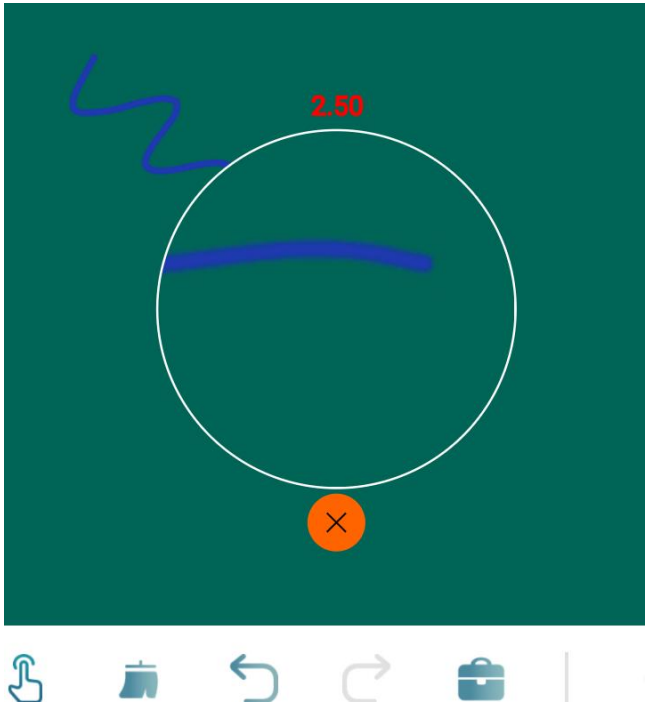
10. Tools – Split+

- Unlike the standard split screen function, after splitting the screen you can continue to use all functions of the main screen.



11. Tools – Magnifier

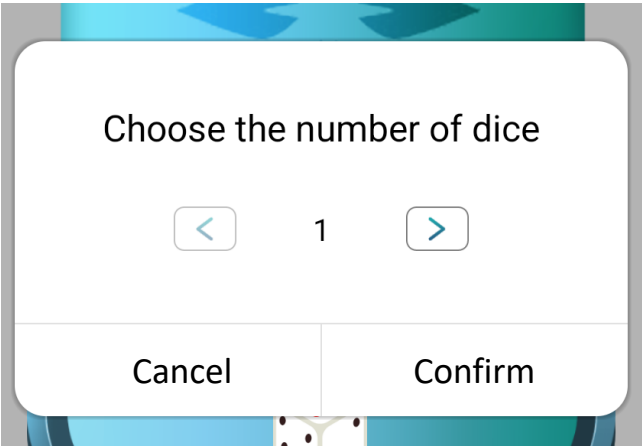
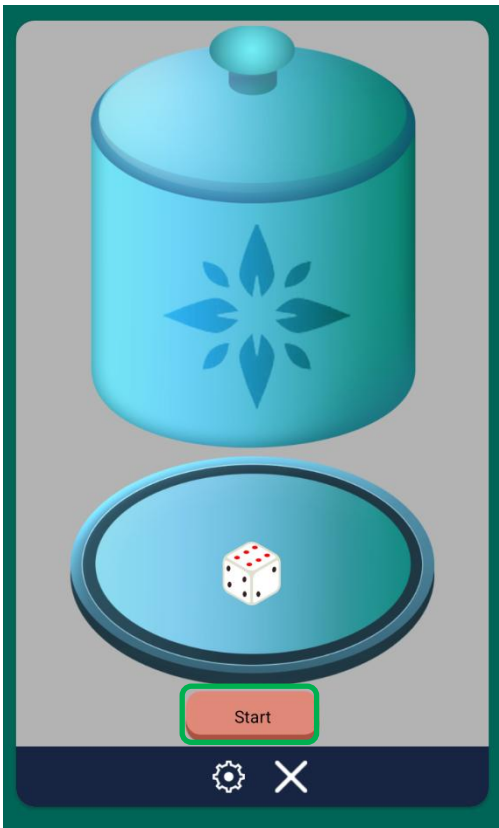
- Magnify whiteboard content using the magnifier.
- When the magnifier is active, writing is disabled and only magnifier functions are available.



7.6 Whiteboard

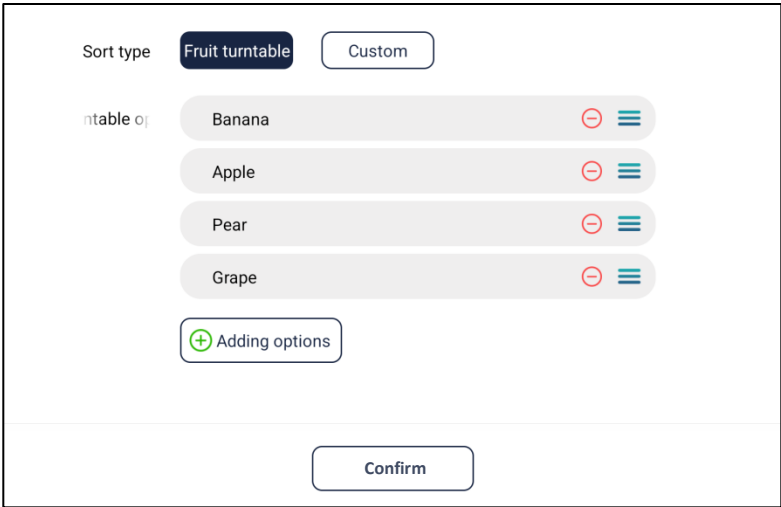
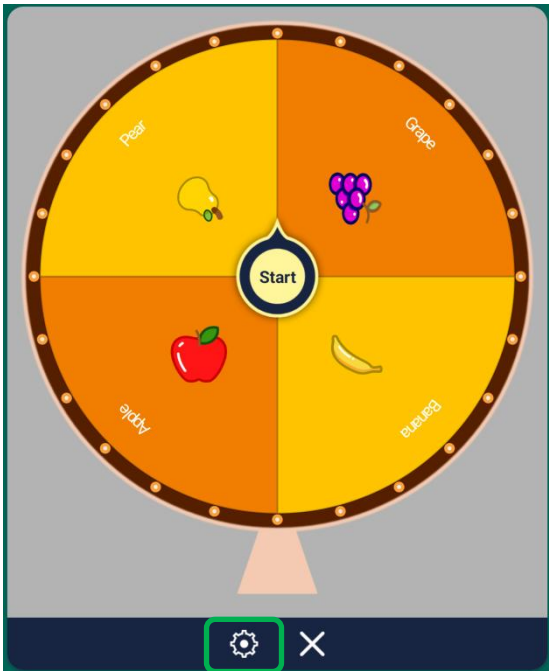
12. Tools – Dice

- The number of dice can be set from 1 up to a maximum of 6. ⚙️




13. Tools – Spinning Wheel

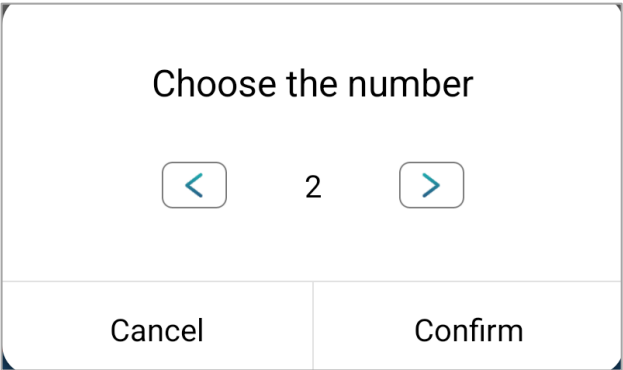
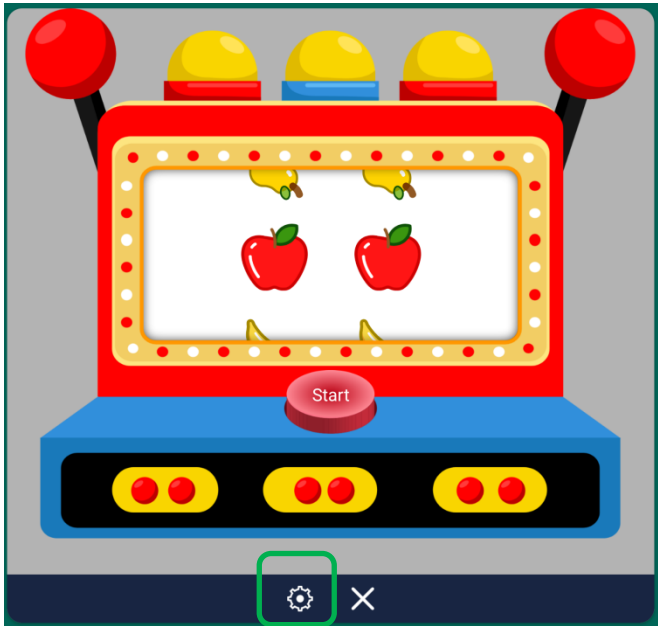
- ⚙️ Options for the wheel can be set in the menu.
- You can add or remove options and also change their order.



7.6 Whiteboard

14. Tools – Fruit Roulette

- The number of fruits can be set from a minimum of 1 to a maximum of 3. 



15. Tools – DEX

- Use the DEX app function within the Whiteboard app

16. Tools – HWP

- Use the HWP app function within the Whiteboard app.

17. Tools – WPS

- Use the WPS app function within the Whiteboard app.

7.6 Whiteboard

18. Tools – Key Features

- Enter equations and generate graphs to insert into the whiteboard.

Common function

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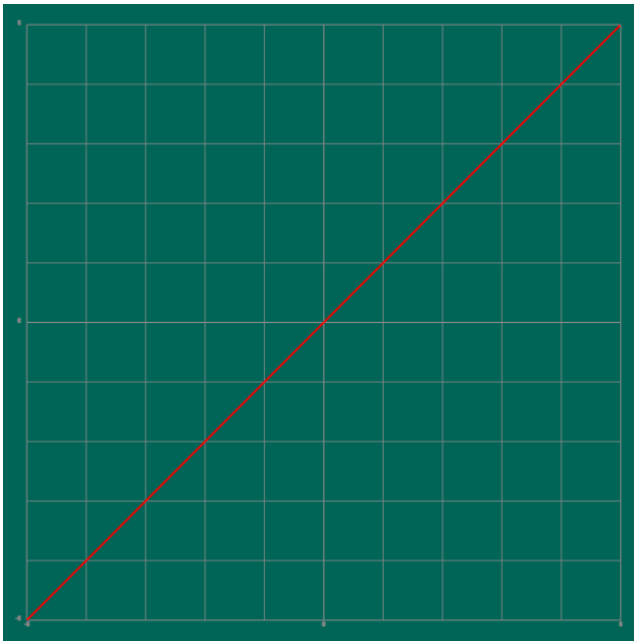
delete

Two-Finger Scalable Function

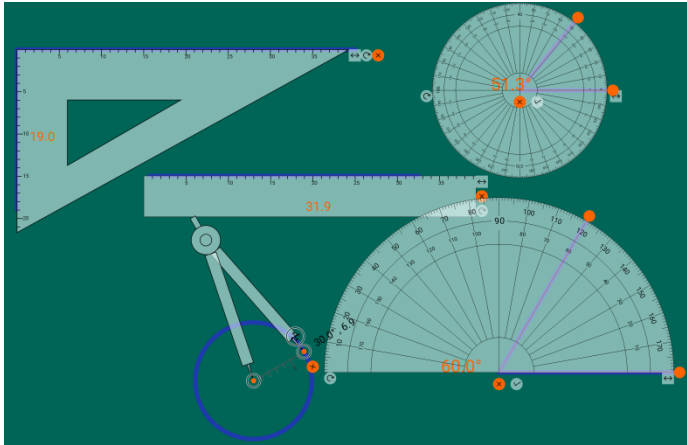
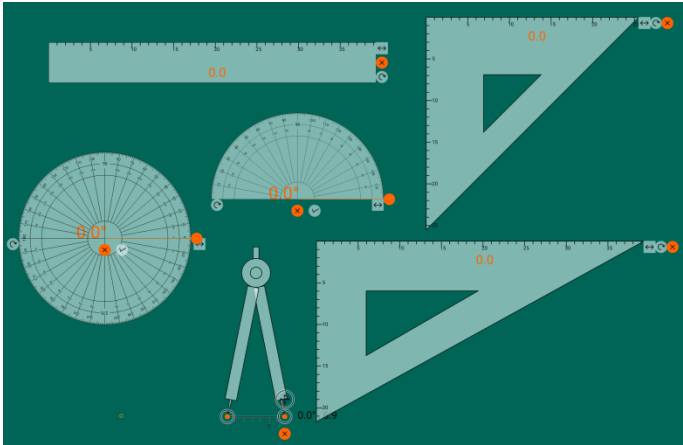
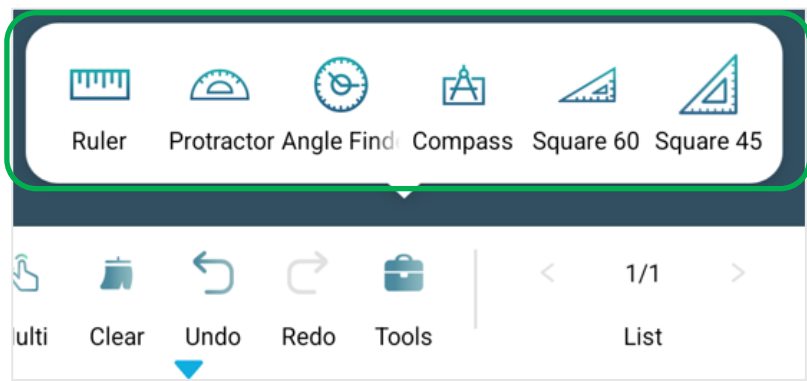
Insert coordinate axes

☒

Insert

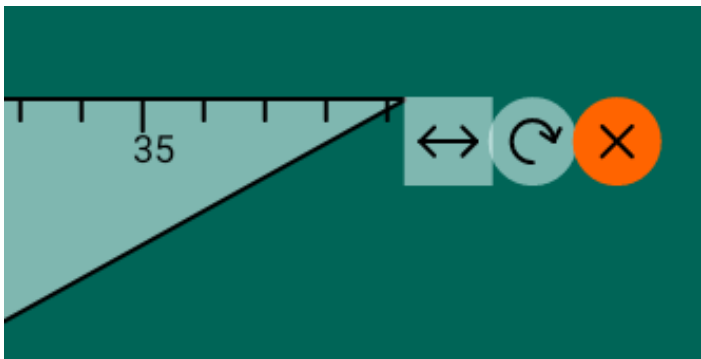





7.6 Whiteboard



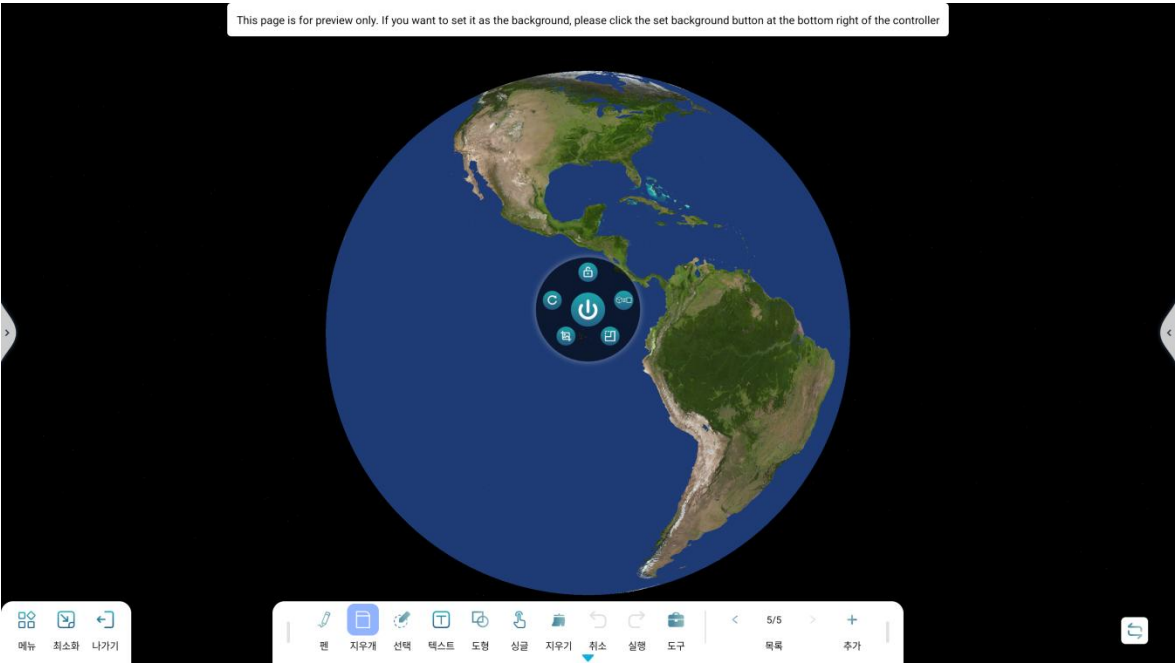
19. Tools – Math Tools

- Various math tools can be freely selected and used.



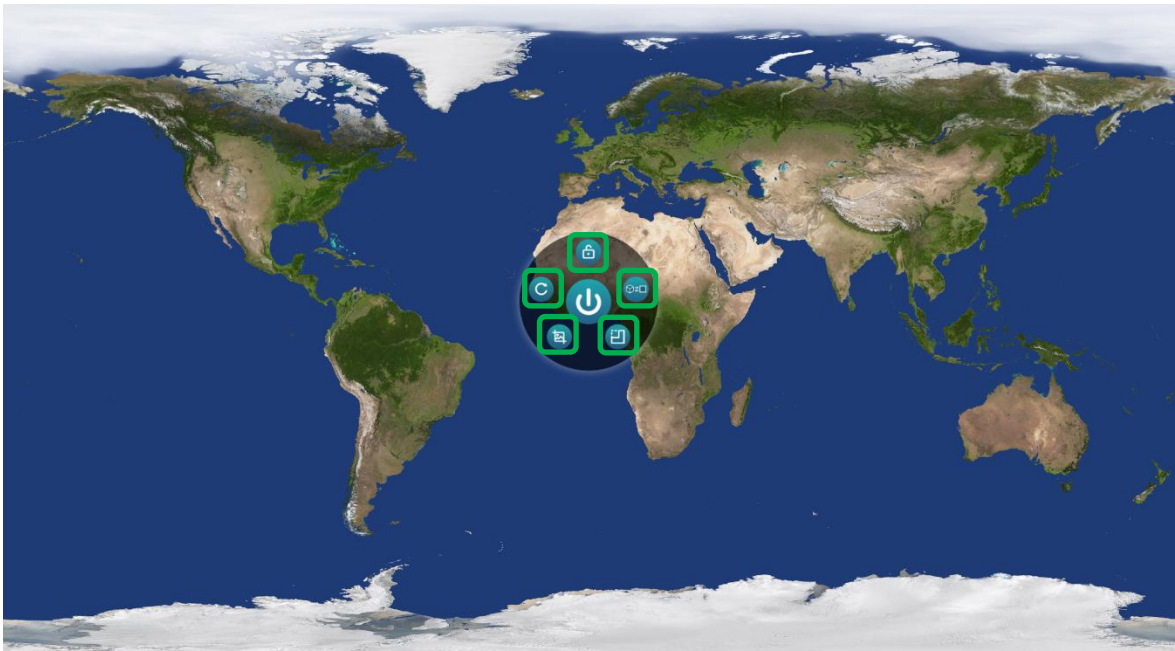
- Resize:  Press the button to adjust the size of the tool.
- Rotate:  Press the button to rotate the tool.
- Delete:  Press the button to delete the tool.





7.6 Whiteboard



20. Tools – Planet

- Planets can be viewed in both 3D and 2D.

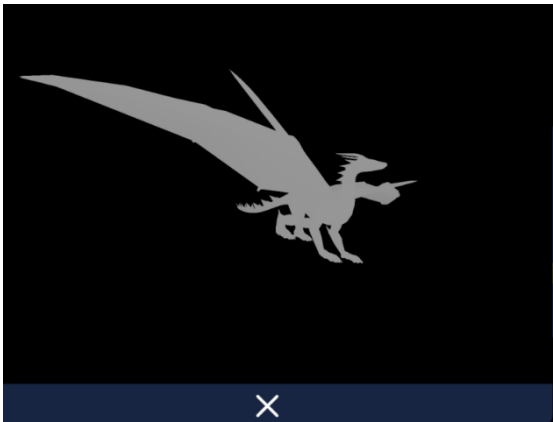


-  Press to display the planet in a flat (2D) view.
-  Press to set the current planet view as the whiteboard background.
-  Press to insert the planet into the whiteboard.
-  Press to reset the planet to its initial state.

7.6 Whiteboard

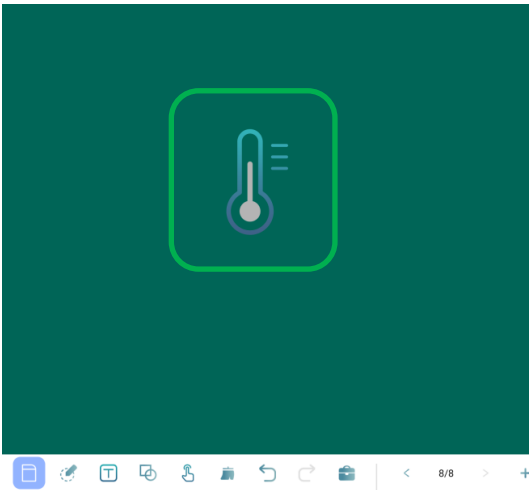
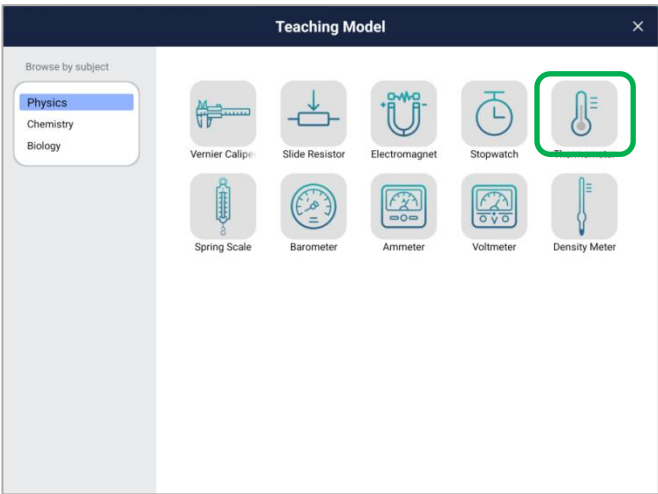
21. Tools – 3D Preview

- Rotate 3D files 360° within the whiteboard.
- Supported file formats: .dae / .obj / .stl



22. Tools – Symbol

- You can insert symbols used in Physics, Chemistry, and Biology on the whiteboard.



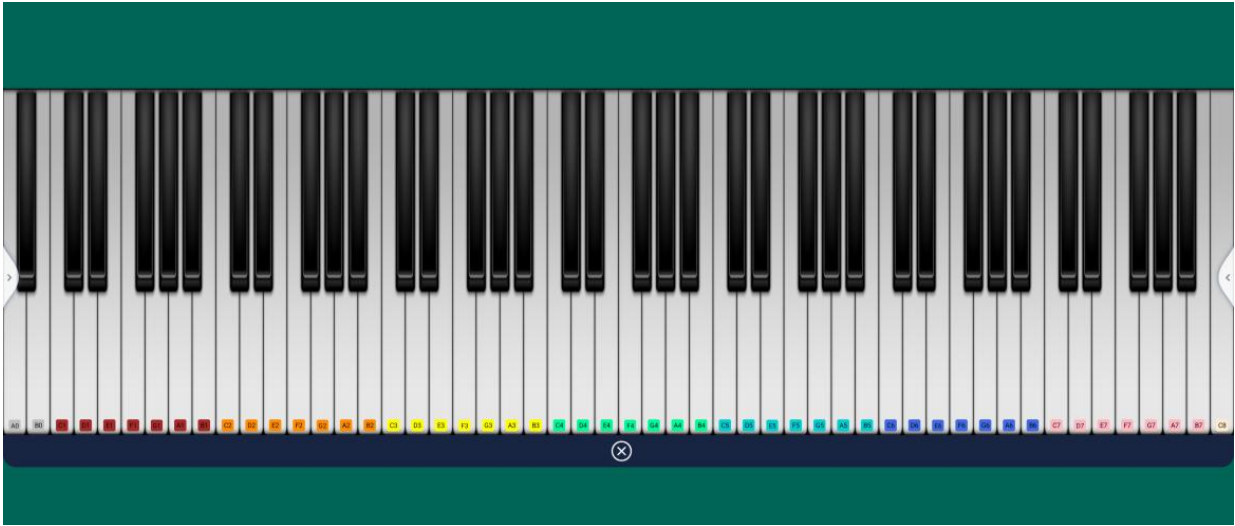
22. Tools – Periodic Table

- Shows Periodic Table of Elements

The Periodic Table of Elements

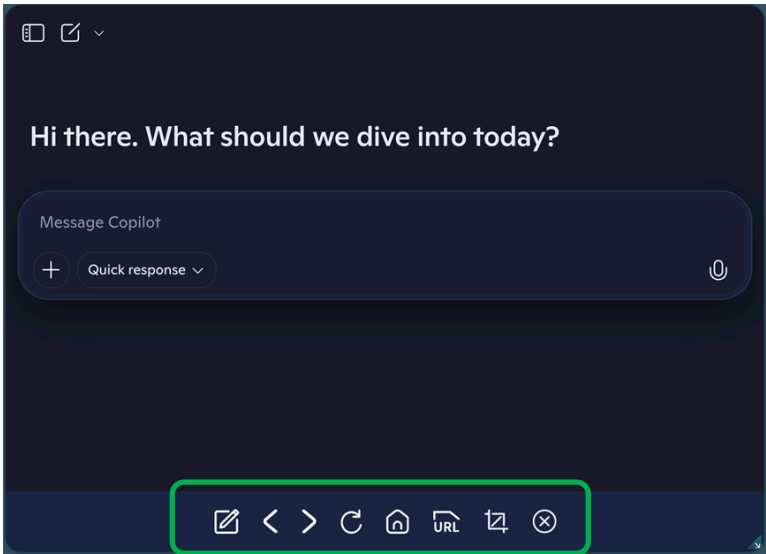
1 IA 1A	2 IIA 2A	3 IIIB 3A	4 IVB 4A	5 VB 5A	6 VIB 6A	7 VIIB 7A	8 VIII 8A	9 VIII 8A	10 VIII 8A	11 IB 1A	12 IIB 2A	13 IIIA 3A	14 IVA 4A	15 VA 5A	16 VIA 6A	17 VIIA 7A	18 VIIIA 8A
1 H	2 He	3 Li	4 Be	5 B	6 C	7 N	8 O	9 F	10 Ne	11 Na	12 Mg	13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
55 Cs	56 Ba	57 La	58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu	72 Hf
73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn	87 Fr	88 Ra	89 Ac	90 Th
91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No	103 Lr	104 Rf	105 Db	106 Sg	107 Bh	108 Hs
109 Mt	110 Ds	111 Rg	112 Cn	113 Nh	114 Fl	115 Mc	116 Lv	117 Ts	118 Og	119 Uut	120 Uuq	121 Uub	122 Uut	123 Uuq	124 Uub	125 Uut	126 Uuq
127 Uub	128 Uut	129 Uuq	130 Uub	131 Uut	132 Uuq	133 Uub	134 Uut	135 Uuq	136 Uub	137 Uut	138 Uuq	139 Uub	140 Uut	141 Uuq	142 Uub	143 Uut	144 Uuq

7.6 Whiteboard











23. Tools – Piano

- Play the piano keyboard and perform directly within the whiteboard.



24. Tools – Copilot

- Use the Copilot app function within the whiteboard.

	Web Annotation	* Allows writing on top of web content.
	Back	* Loads the previous page.
	Forward	* Loads the next page.
	Refresh	* Reloads the current page to show the latest content.
	Home	* Loads the home page.
	URL Search	* Opens the URL search window.
	Screen Capture	* Captures and displays the browser screen.
	Exit	* Closes the web browser window.

7.6 Whiteboard

AI Question

Keywords (comma-separated)

Grade: Grade 6

Subject: Math

Question Type: Multiple Choice

Quantity: 2

Difficulty

5

Generate Questions

AI Question

←

Question Content:

If a right - angled triangle has one non - right angle of 30°, and the length of the hypotenuse is 10 units, what is the length of the side opposite the 30° angle?

Hide Analysis

Correct Answer:5


Analysis:In a right - angled triangle, the side opposite the 30° angle is half of the hypotenuse. Given the hypotenuse is 10 units, so the side opposite the 30° angle is $10/2 = 5$ units.

Content is generated by AI and does not represent the views of our company. Accuracy is not guaranteed.

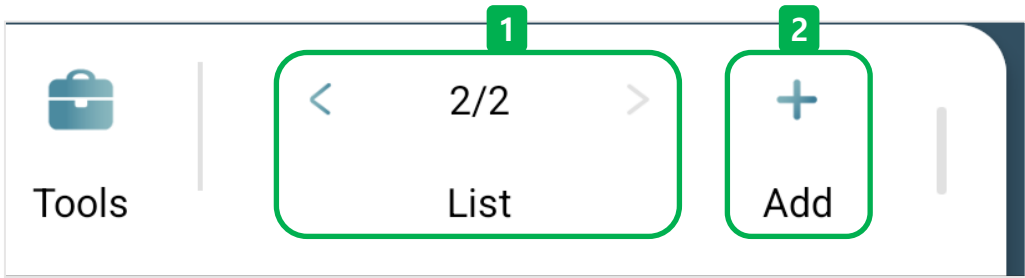
1

2

25. Tools – AI Question Generator

- Automatically generates questions using AI and inserts them into the whiteboard.
- Options such as grade level, subject, question type, number of questions, and difficulty can be selected.
-  Press the button to insert the generated questions into the whiteboard.

7.6 Whiteboard



❖ Page Management

- You can manage whiteboard pages.



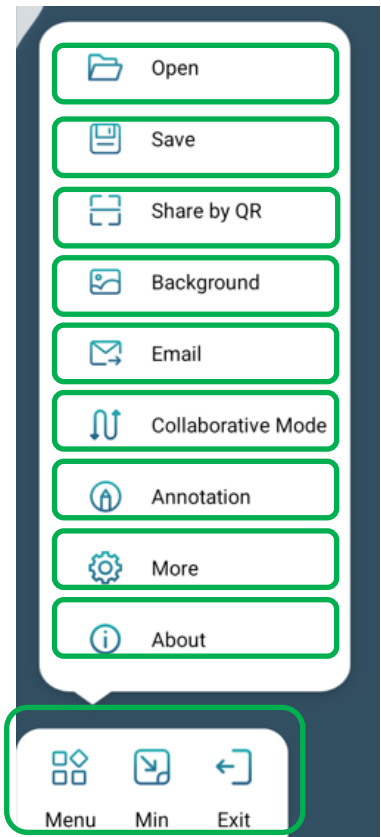
① Page Navigation

- < Press to go to the previous page.
- > Press to go to the next page.
- Tap Add, then select the desired page from the list to open it directly.

② Add Page

- Add additional pages as needed.
- The default number of pages is 1/1 page.

7.6 Whiteboard

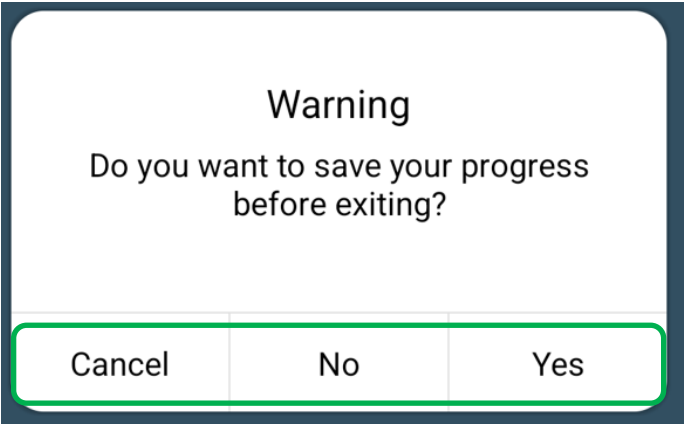


7.6.3 Side Menu

- You can manage whiteboard pages.

❖ Menu & Exit

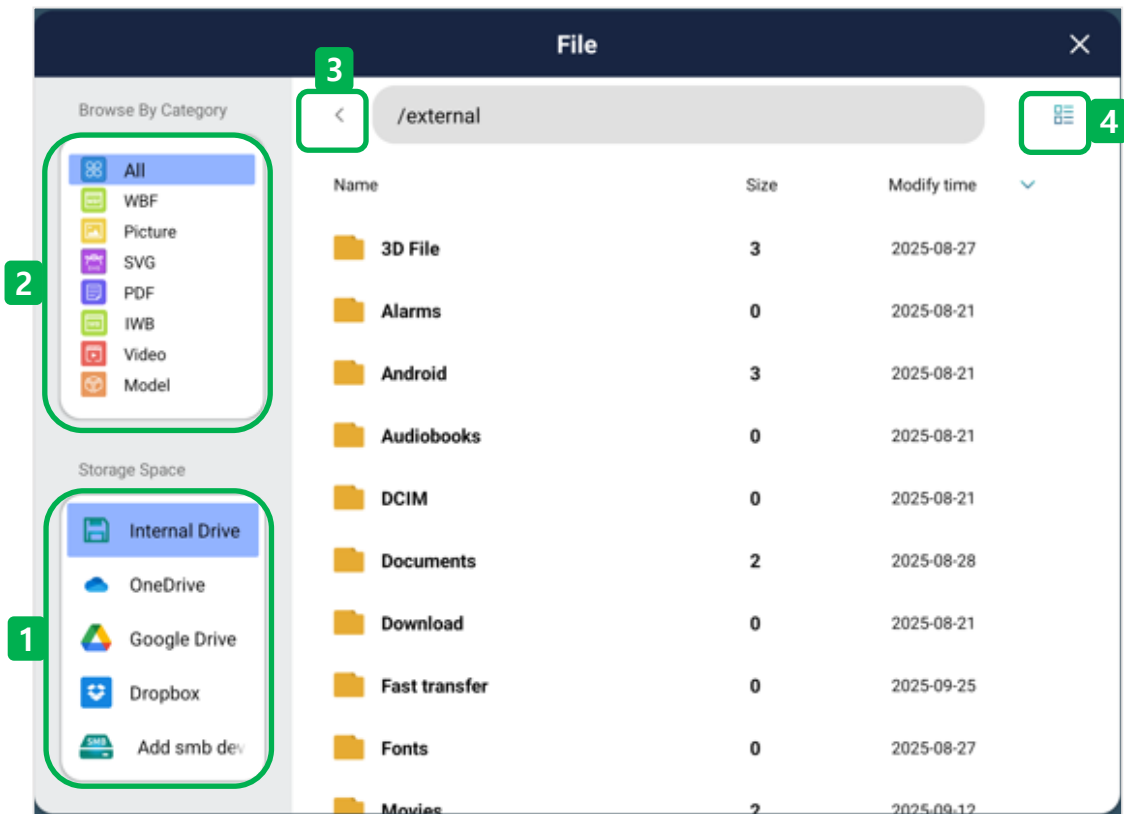
① Menu: Opens the menu window where you can select and use the desired functions.



- ② Exit: Closes the whiteboard app.
- Cancel: Cancels closing the whiteboard app.
 - No: Closes the whiteboard app without saving the contents.
 - Yes: Saves the contents of the whiteboard and then closes the app.

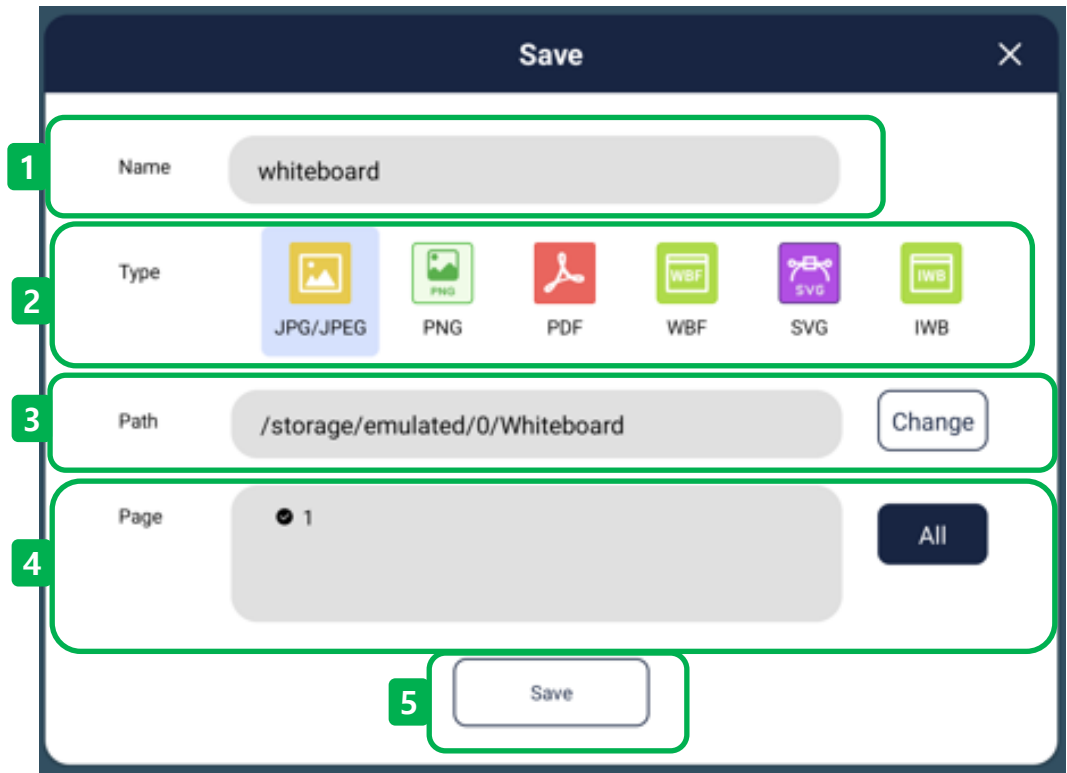
③ Min: Minimizes the whiteboard app.

7.6 Whiteboard



❖ Open

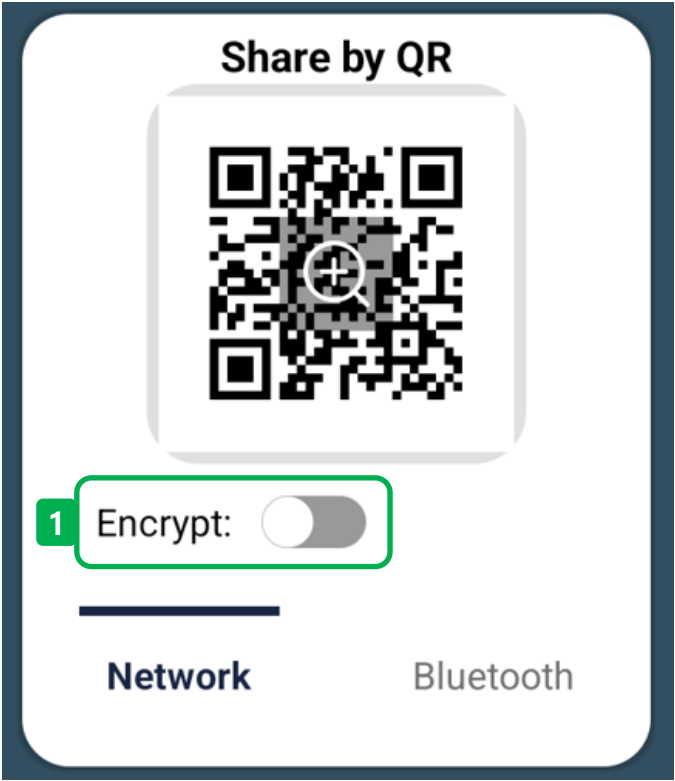
- ① File Storage List: Select an available storage to use.
- ② File Extension Filter: Displays only the selected file extension.
- ③ Back: Moves back to the previous page.
- ④ View Mode: Changes the display format of the file list.



❖ Save

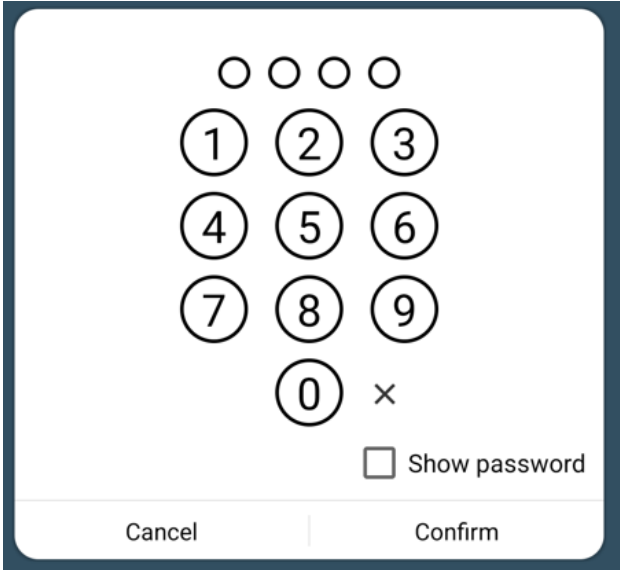
- ① Name: Displays the file name.
- ② Type: Selects the file extension for saving.
- ③ Path: Selects the storage location for the file.
- ④ Page: Selects the whiteboard page to be saved.
- ⑤ Save: Saves the file by pressing the save button.

7.6 Whiteboard



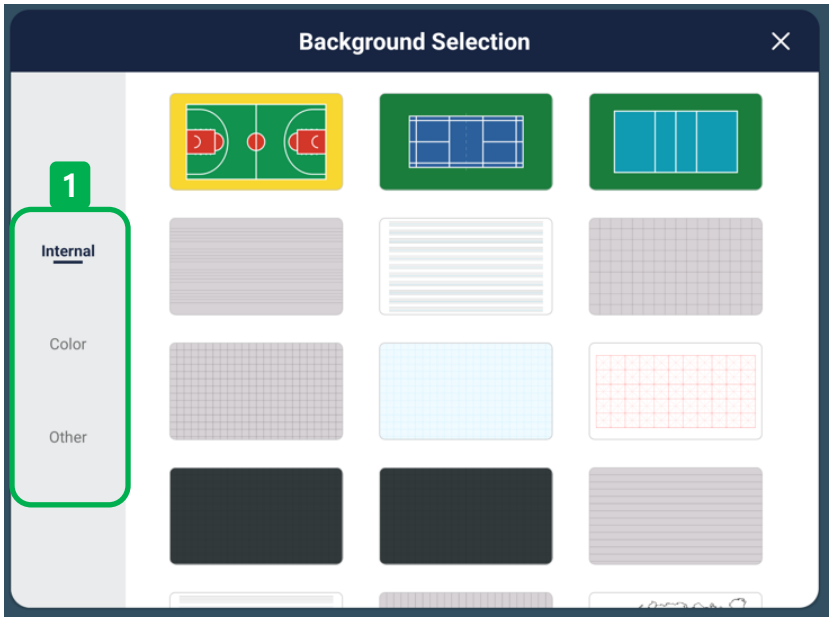
❖ QR Share

- Share data by scanning the QR code. This function works only when the devices are connected to the same network.



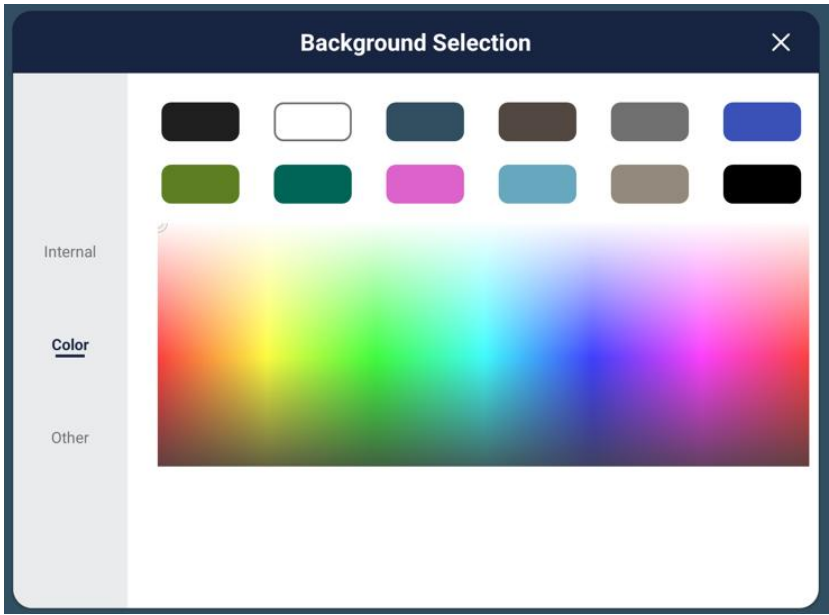
- ① Encrypt : Set a 4-digit numeric password for the QR code.

7.6 Whiteboard



❖ Background

① Default: Change the background by selecting from 15 default options.



② Color: Change the background by freely selecting a solid color from the Color Board.

7.6 Whiteboard

The screenshot shows an 'Email' form with the following fields and callouts:

- 1: From (Email Address)
- 2: Nickname (Name)
- 3: Authorization code (Password)
- 4: Save sender/recipient account information
- 5: Select sender/recipient account
- 6: To (Email Address)
- 7: Subject (Email Subject)
- 8: Content (Email Content)
- 9: Attach (Sent date)
- 10: Confirm (Send email)

❖ Email

- ① From – Email Address
- ② Nickname – Name
- ③ Authorization code – Password
- ④ Save sender/recipient account information
- ⑤ Select sender/recipient account
- ⑥ Recipient – Email Address
- ⑦ Edit email subject
- ⑧ Edit email content
- ⑨ Sent date
- ⑩ Send email

The screenshot shows a 'Collaborative Mode' form with the following fields and callouts:

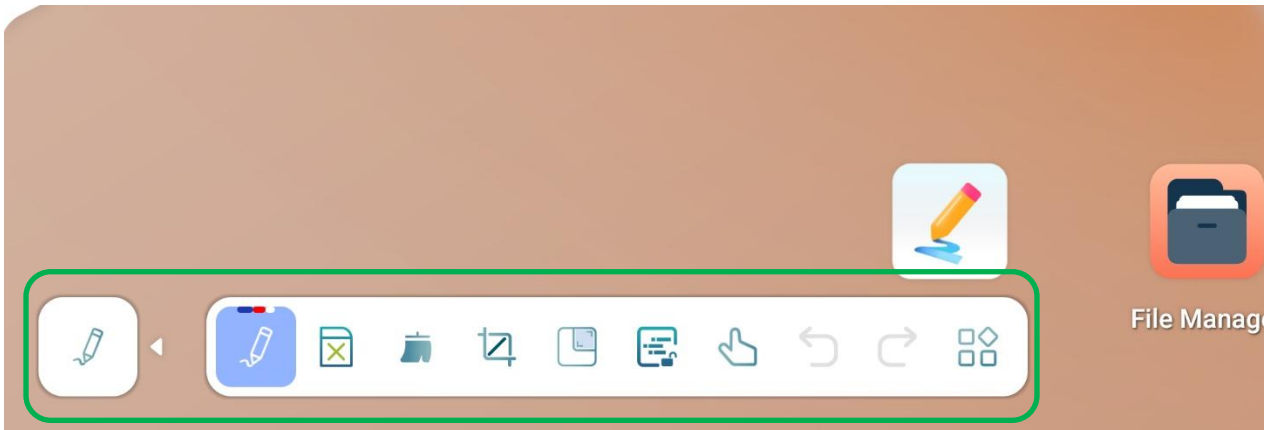
- 1: Connect as remote (Toggle switch)
- 2: Local IP address: 192.168.0.8
- 3: Remote IP address: 192.168.1.101
- 4: Connect (Button)

Below the fields, there is a section for 'Connected devices:' and an 'Exit' button.

7.3.7 Connection

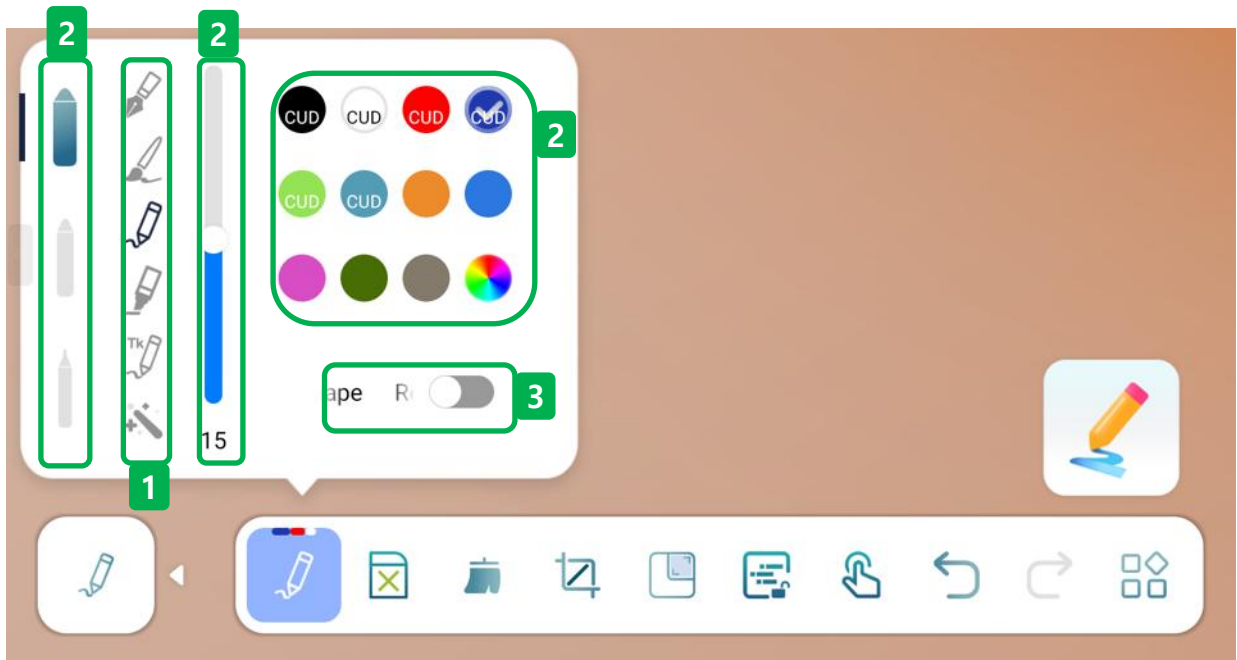
- ① Receive Whiteboard Screen Share: Share the whiteboard screen by connecting two devices under the same network environment.
- ② Local IP Address: Displays the current product's network IP address.
- ③ Remote IP Address: Displays the network address of the whiteboard to connect to.
- ④ Connect: Connects the two whiteboards.

7.6 Whiteboard



❖ Annotation Mode

- Tap the main icon on the left to hide or expand the toolbar.
- Drag the main icon on the left to change its position.



1. Pen Annotation Mode

- Freely change and use the pen type, thickness, and color.

① Pen Types

- There are three types of pens: Fountain Pen, Brush Pen, and Marker Pen.

7.6 Whiteboard

① Pen Types

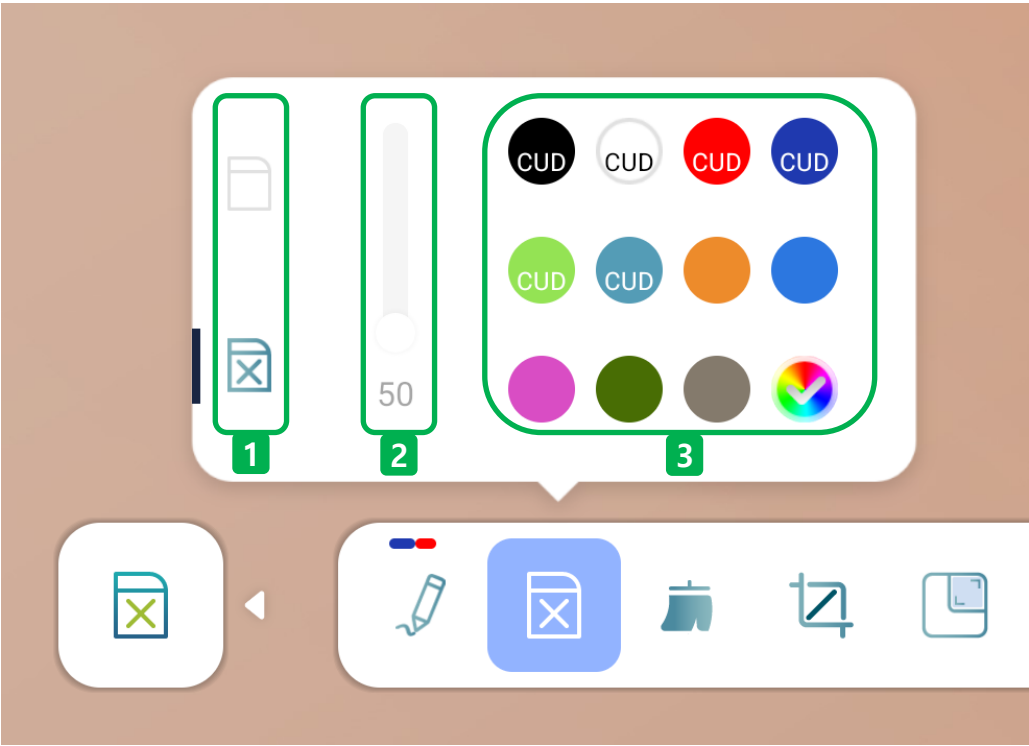
- There are three types of pens: Fountain Pen, Brush Pen, and Marker Pen.

② Pen Thickness Recognition Settings

- Up to three pens can be used simultaneously depending on touch thickness recognition.
- S (Small Finger): 2.8 mm, B (Big Finger): 6.5 mm, F (Stylish Big Finger): 10 mm
- Adjust the thickness for each recognition type, ranging from 1 to 30.
- Assign colors freely for each recognition type from the Color Board.

③ Recognition Function

- Automatically recognizes handwriting with a pen and converts it into shapes or text.
(Choose either Shape Recognition or Handwriting Recognition.)



2. Eraser Annotation Mode

- Freely change the eraser type, size, and color options.

① Eraser Types



<Basic>



<Selection>



<Gesture>

- There are three types of erasers: Basic, Selection, and Gesture.
- Basic: Adjustable-size eraser (from 100 to 350).

7.6 Whiteboard

② Eraser Size Adjustment

- Adjust the eraser size from 100 to 350.
(This function works only with the Basic Eraser.)

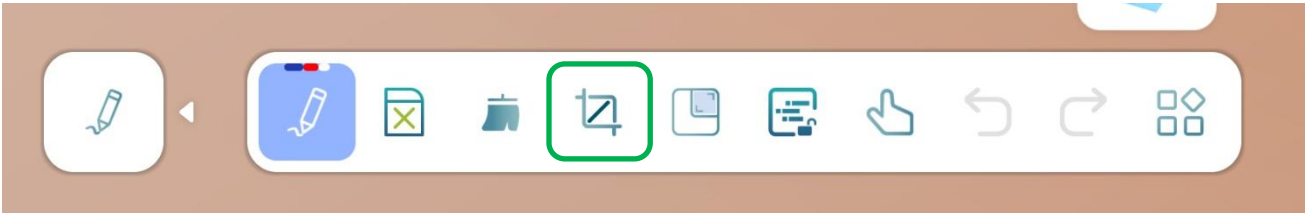
③ Eraser Color Selection

- Specify the color of the object you want to erase so that the eraser works only on that color.
- This setting allows the eraser to work across all colors.
(This function works only with the Selection Eraser.)



3. Clear Annotation Mode

- Erases all content on the screen at once.



4. Insert Whiteboard Annotation Mode

- Inserts a captured screen into the whiteboard.



5. Capture Annotation Mode

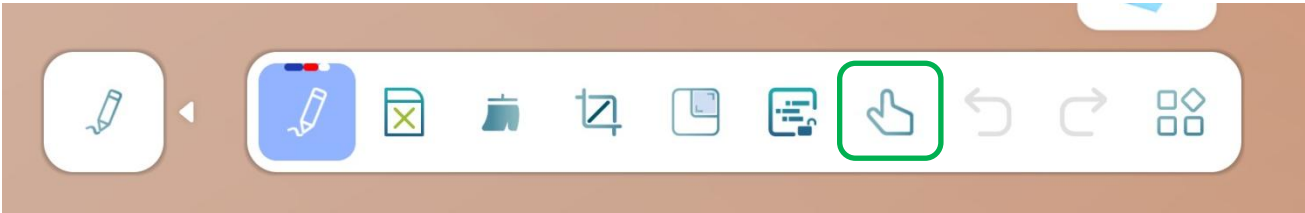
- Captures the desired area from the current screen.



6 Pause Annotation Mode

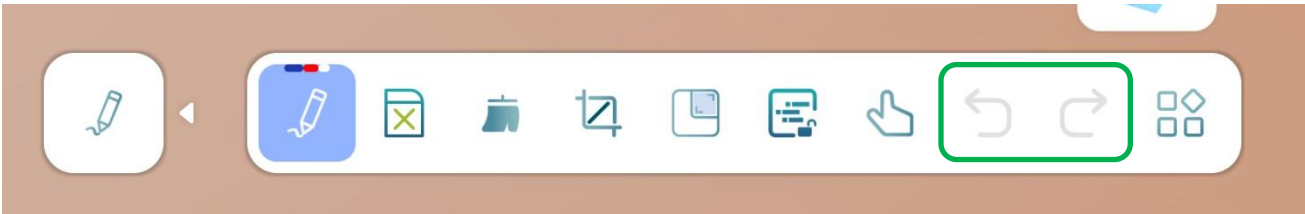
- Pauses the screen.

7.6 Whiteboard



7. Touch-Through Annotation Mode

- Recognizes hand touch.



8. Undo & Redo

- Undo: Cancels the most recent touch action.
- Redo: Restores the most recent touch action.

Save

Name

annotation

a

Type

JPG/JPEG

PNG

PDF

WBF

SVG

IWB

b

Path

/storage/emulated/0/Whiteboard

Change

c

Page

1

All

d

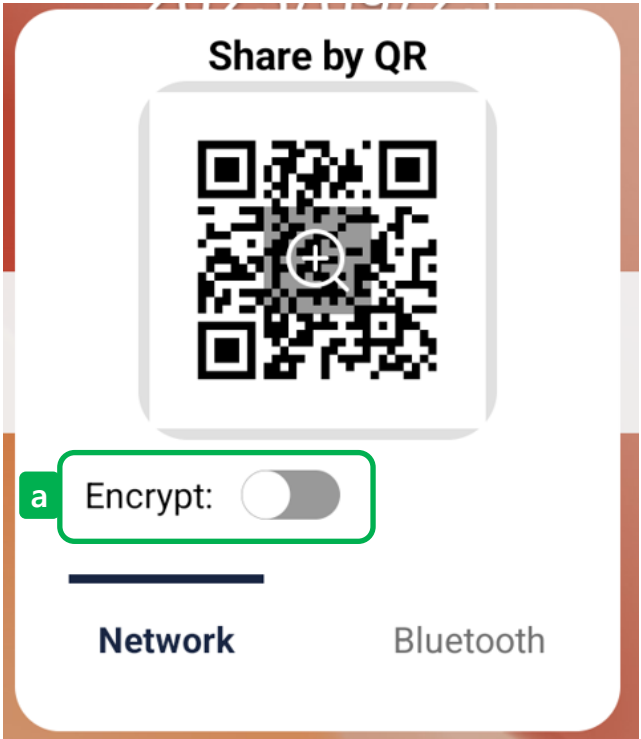
Save

e

① Save Annotation Mode

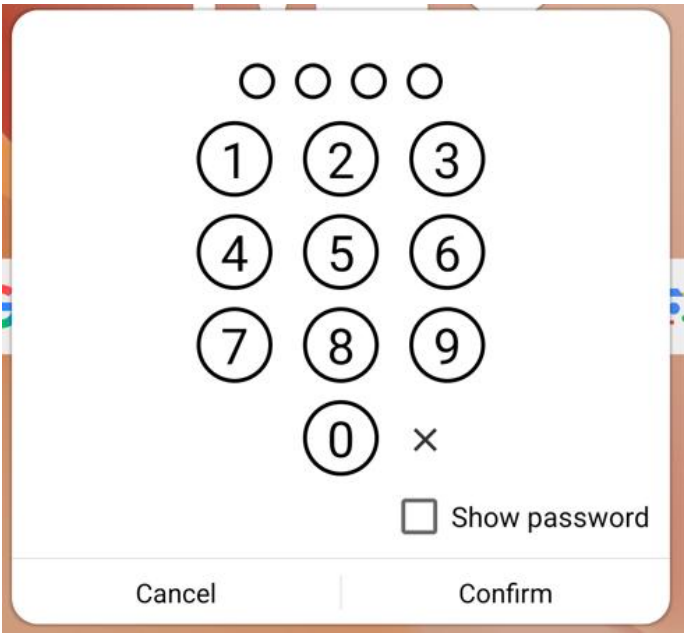
- a. Name: Displays the file name.
- b. Type: Selects the file extension for saving.
- c. Path: Selects the storage location for the file.
- d. Page: Selects the annotation content to be saved.
- e. Save: Saves the file by pressing the save button.

7.6 Whiteboard



② QR Share Annotation Mode

- Share data by scanning the QR code. This function works only when the devices are connected to the same network.



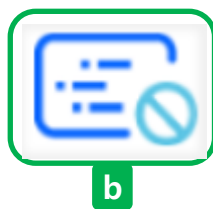
a. Encrypt: Set a 4-digit numeric password for the QR code.

7.6 Whiteboard

The image shows a screenshot of an 'Email' form interface. The form is titled 'Email' in a dark blue header bar. Below the header, there are several input fields and buttons. Annotations are placed as follows: 'a' is on the 'From' label; 'b' is on the 'Nickname' input field; 'c' is on the 'Authorization...' input field; 'd' is on the 'Save' icon; 'e' is on the 'Select' icon; 'f' is on the 'To' label; 'g' is on the 'Subject' label; 'h' is on the 'Content' label; 'i' is on the 'Attach' label; and 'j' is on the 'Confirm' button. The form includes fields for 'From' (with a 'Nickname' sub-field), 'To', 'Subject' (containing 'Annotation record'), 'Content' (containing 'Written content from the Annotation.'), and 'Attach' (containing 'file-2025-09-25.pdf'). There are also 'Save' and 'Select' icons, and a 'Confirm' button at the bottom.

③ Email Annotation Mode

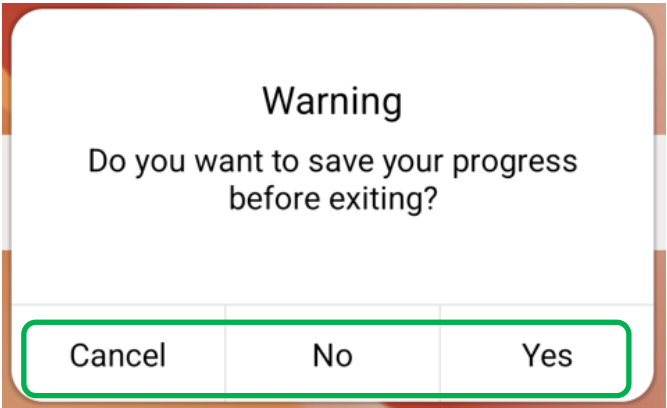
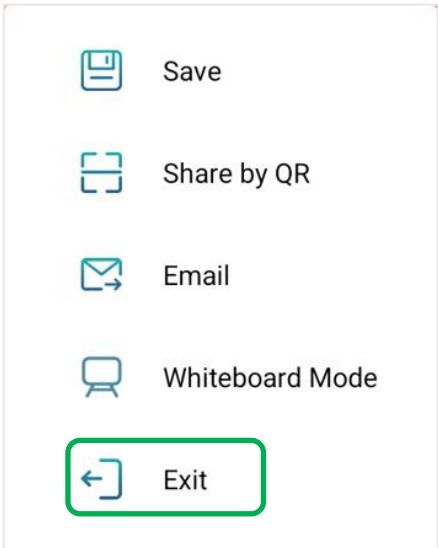
- a. Sender – Email Address
- b. Sender – Name
- c. Sender – Password
- d. Save sender/recipient account information
- e. Select sender/recipient account
- f. Recipient – Email Address
- g. Edit email subject
- h. Edit email content
- i. Sent date
- j. Send email



④ Background Stop Annotation Mode

- a. Static State: The background screen is static; clicking the button changes it to dynamic state.
- b. Dynamic State: The background screen is dynamic; clicking the button changes it to static state.

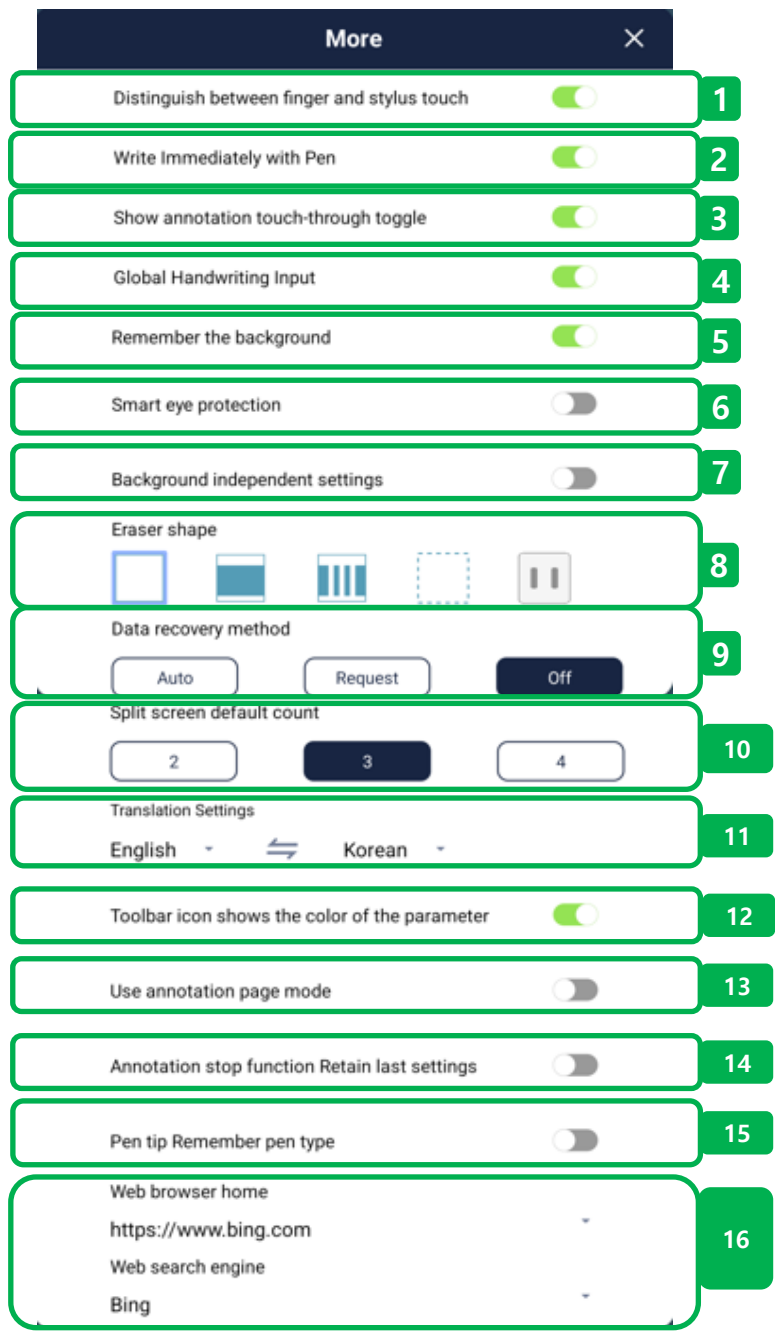
7.6 Whiteboard



⑤ Exit Annotation Mode

- Cancel: Cancels closing the whiteboard app.
- No: Closes the whiteboard app without saving the contents.
- Yes: Saves the contents of the whiteboard and then closes the app.

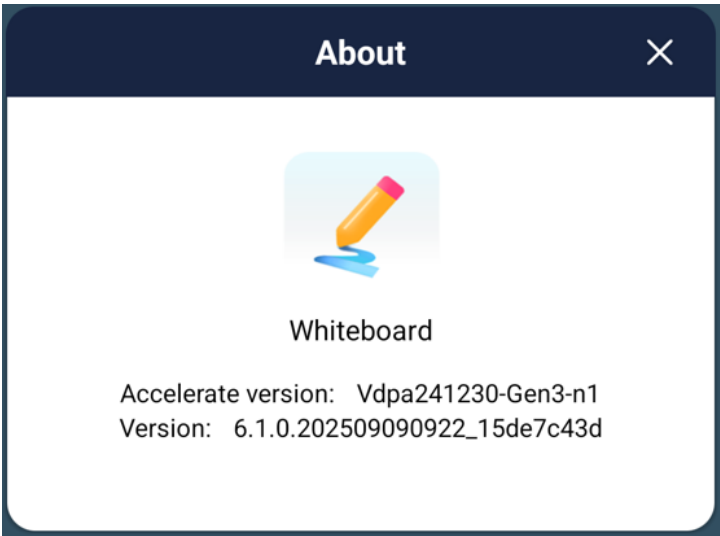
7.6 Whiteboard



❖ Option

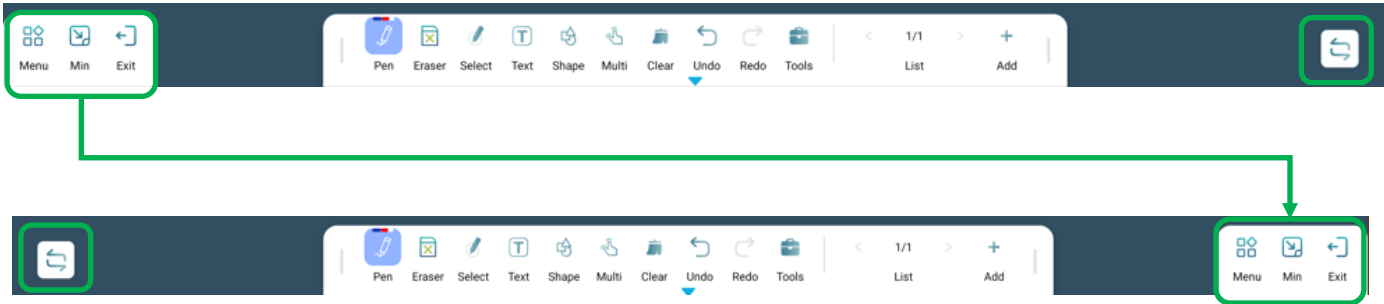
- ① Turns On/Off the function that distinguishes pen types based on pen thickness recognition.
- ② Turns On/Off the function that detects the pen when writing outside the whiteboard and activates annotation.
- ③ Turns On/Off the function that allows hand touch during annotation.
- ④ Turns On/Off the function that supports multiple languages for handwriting annotation.
- ⑤ Turns On/Off the function that keeps the background the same as before when restarting the whiteboard app after exit.
- ⑥ Turns On/Off the eye protection function.
- ⑦ Turns On/Off the function that allows different backgrounds for each page.
- ⑧ Changes the eraser shape by specifying a different style.
- ⑨ Turns On/Off the function that restores the contents if the whiteboard app is forced to close.
- ⑩ Sets the number of split screens from 2 (default) up to 4.
- ⑪ Sets the default translation language when using the text translation function.
- ⑫ Turns On/Off the function that shows the current color status of the toolbar icons.
- ⑬ Turns On/Off the page mode function in annotation mode.
- ⑭ Turns On/Off the function that keeps the last pause setting in annotation mode.
- ⑮ Turns On/Off the function that remembers the pen type on the pen tip.
- ⑯ Sets the default homepage of the web browser.

7.6 Whiteboard



❖ Info

- Check the latest version information of the whiteboard app.



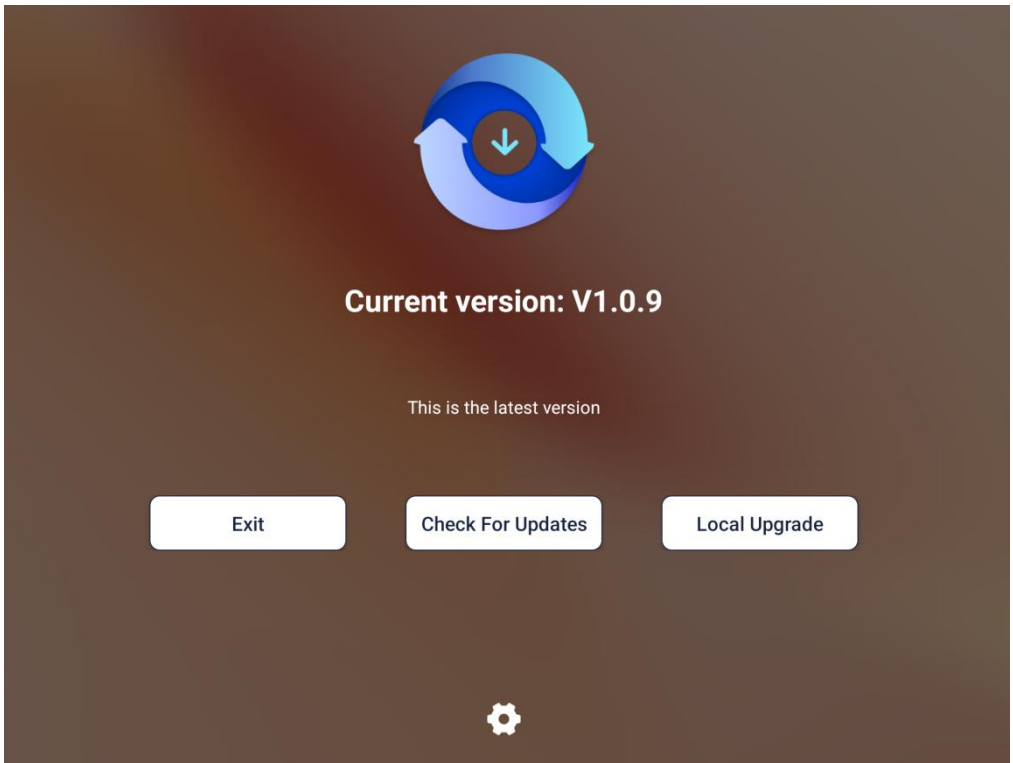
7.6.4 Change Side Menu Bar Position

- Change the position of the side menu bar by pressing the position change button.

7.7 Apps

7.7.1 OTA Service

- Allows the user to perform firmware upgrades directly.



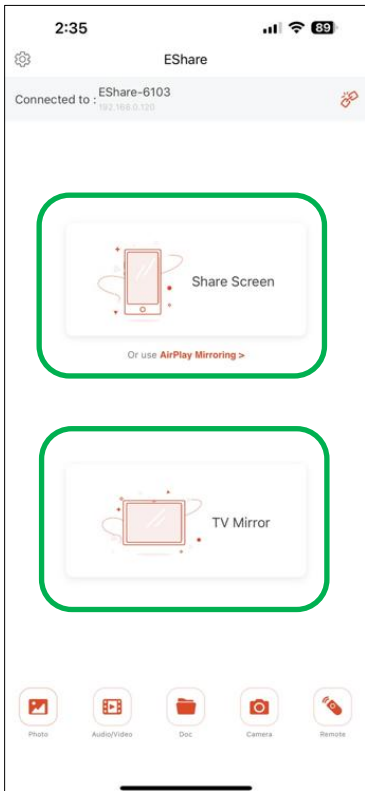
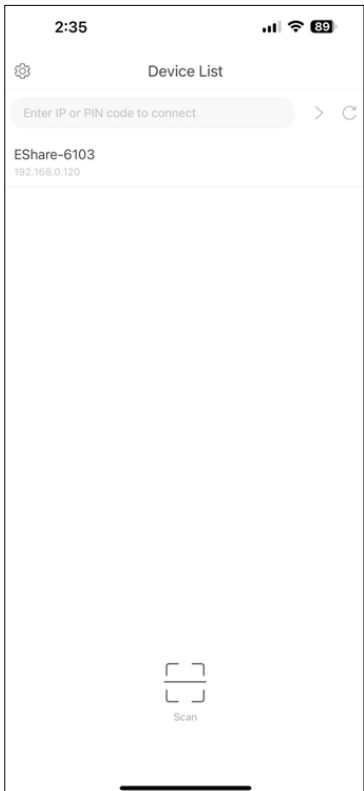
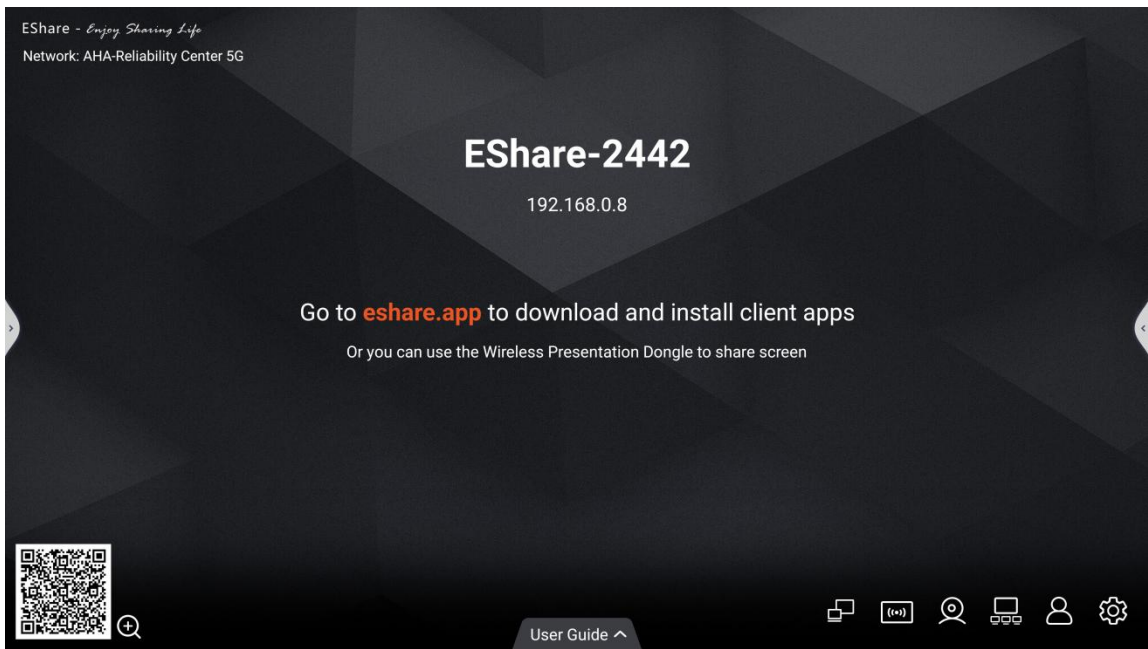
❖ Manual Upgrade

- Check For Update: Checks if a higher version of the firmware is available.
- Local Update: Performs the upgrade manually using a USB firmware file.

7.7 Apps

7.7.2 E-Share Pro

- Share screen and audio with external devices via mirroring using the E-Share app.



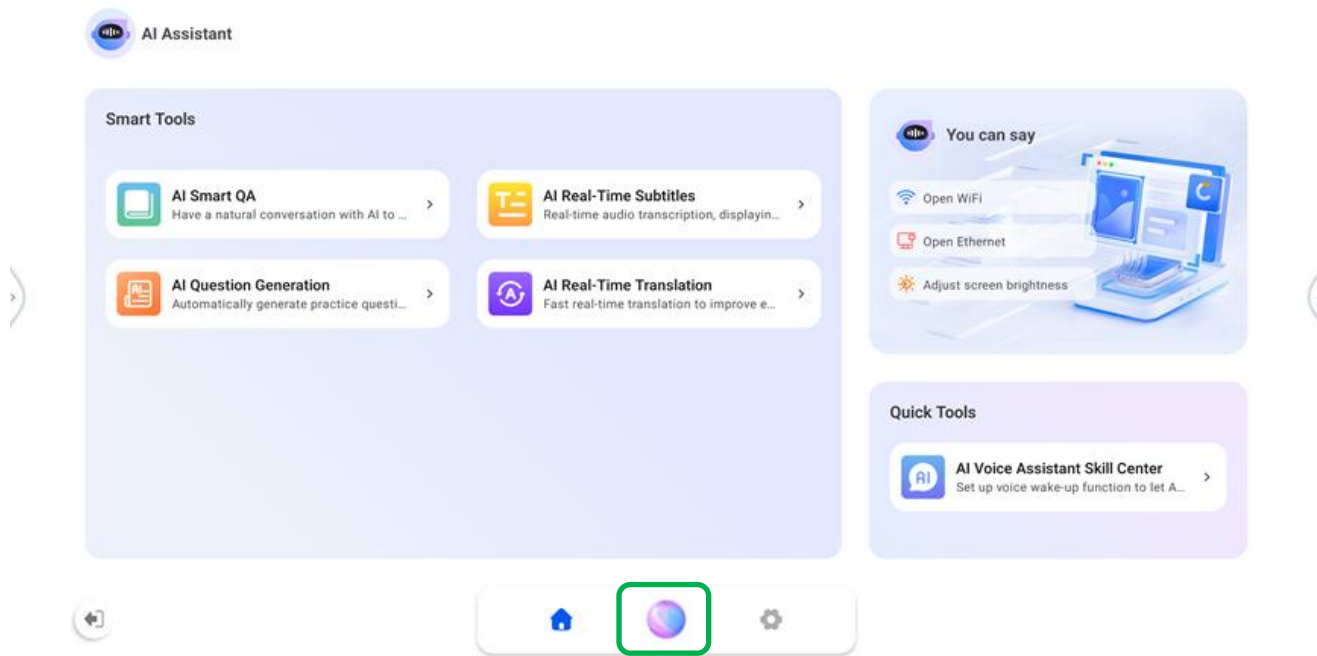
❖ Connection Method

- Connect this device and the external device to the same network.
(The external device must also have the E-Share app running.)
- Share Screen: Displays the external device's screen on this device.
- TV Mirror: Displays this device's screen on the external device.


7.7 Apps

7.7.3 AI Assistant

- Provides AI-powered Q&A and quiz generation functions.

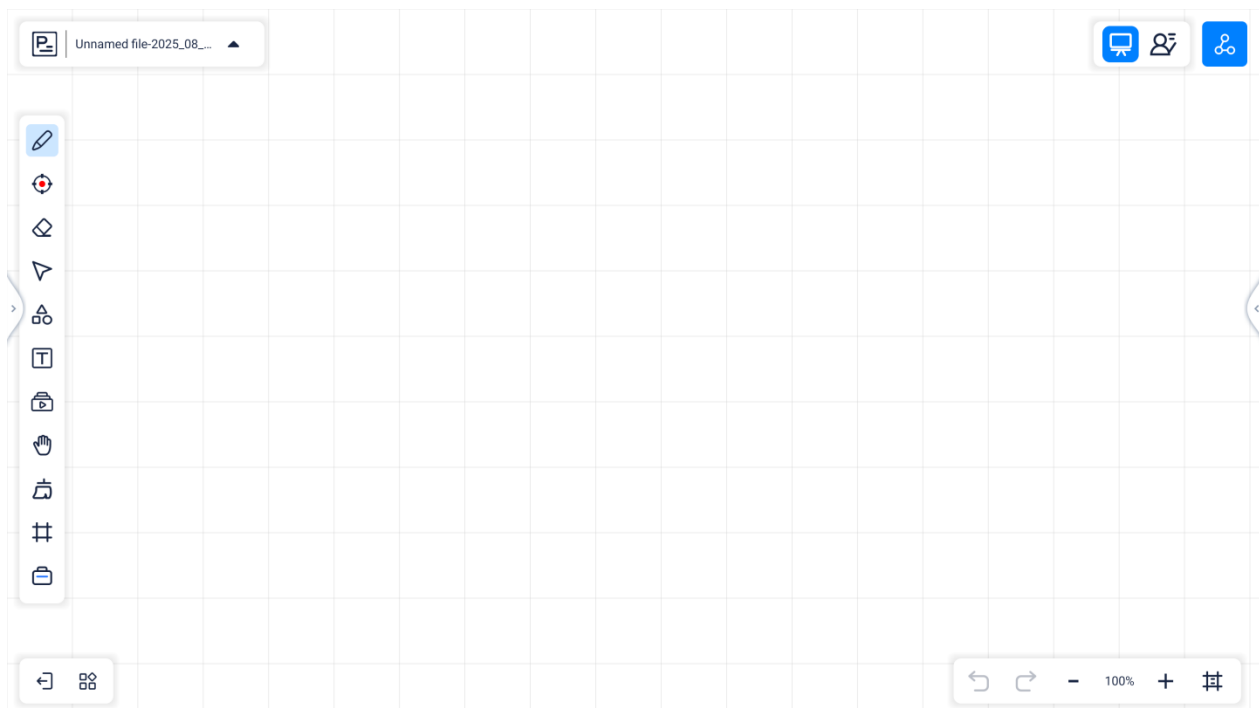


❖ How to Use

- Press the  button at the bottom center to give voice commands for the desired function.

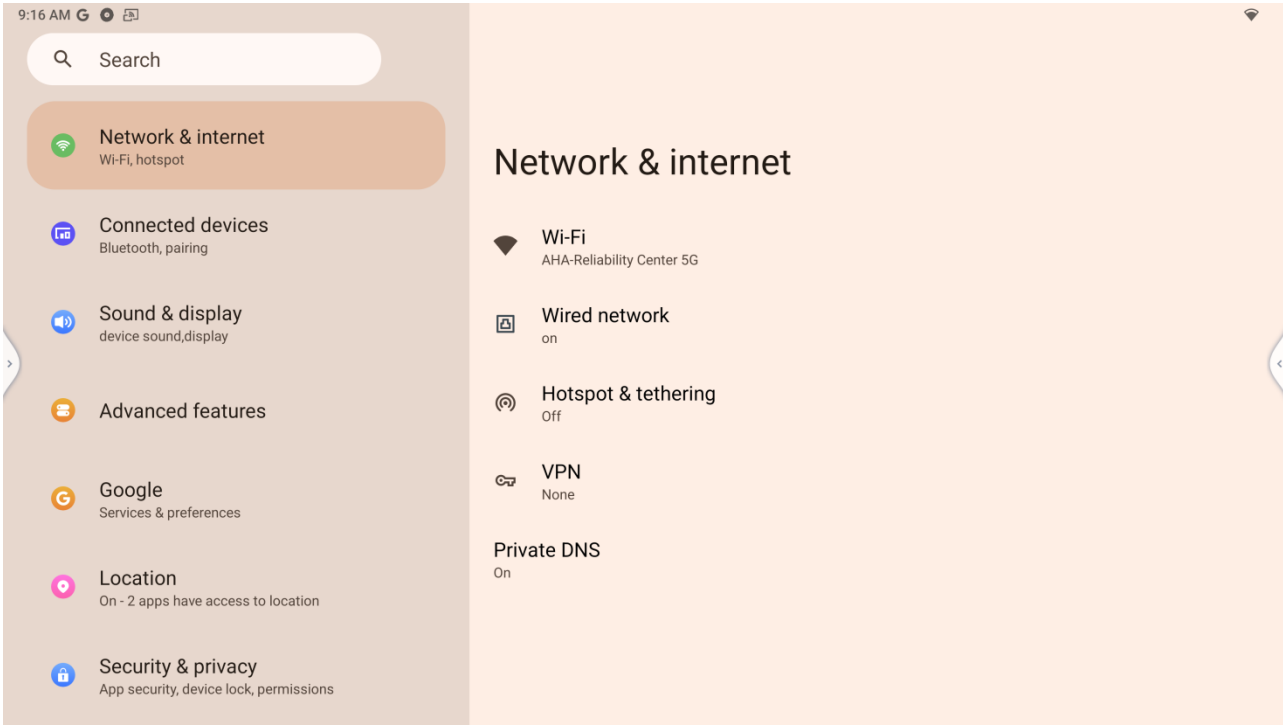
7.7.4 APEX

- Allows you to draw or write directly on the screen.



7. Settings Menu and Description

7.1 Network & Internet



❖ Wireless Network (Wi-Fi)

- The electronic whiteboard is equipped with a high-performance dual-band Wi-Fi module that supports both 2.4 GHz and 5 GHz frequency bands, compliant with the IEEE 802.11 a/b/g/n/ac/ax (Wi-Fi 6) standard. It provides a maximum wireless transmission speed of 2402 Mbps and supports stable simultaneous connections with multiple devices through OFDMA and MU-MIMO technologies. In addition, it supports Bluetooth 5.2 or higher systems, compatible with both BLE (Long Range) and EDR modes, enabling smooth connectivity with various wireless peripheral devices

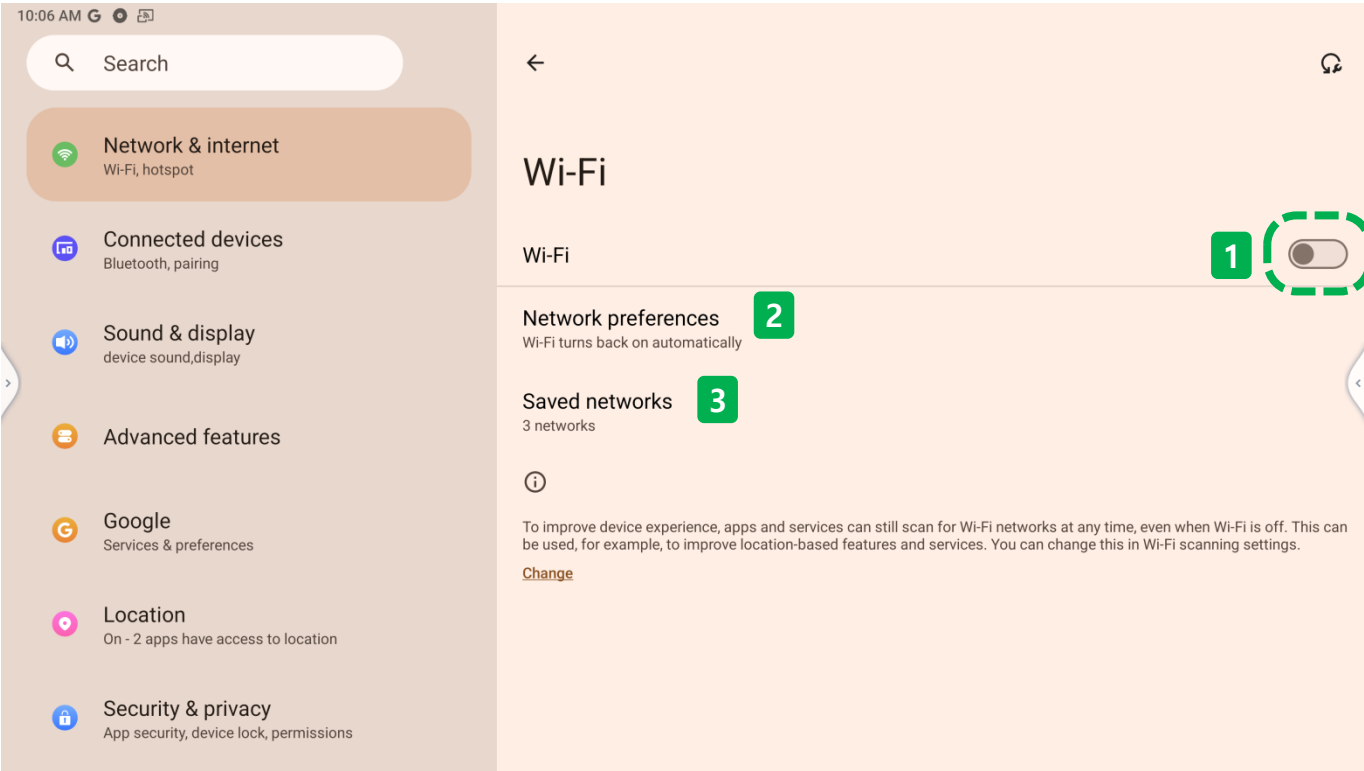
❖ Wired Network (Ethernet)

The interactive whiteboard has two Ethernet ports, but only one network input is supported.

- The maximum speed is 1000 Mbps.
 1. If one of the two Ethernet ports is connected to a network and the other port is connected to an external PC, the external PC can share the network.
(The maximum network speed of the connected external PC is 1000 Mbps.)
 2. If one of the two Ethernet ports is connected to a network and the installed OPS is accessed, the OPS can share the network.
(The maximum network speed of the installed OPS is 1000 Mbps.)
 3. If one of the two Ethernet ports is connected to a network, the front USB-C port can also share the network at a maximum speed of 100 Mbps.

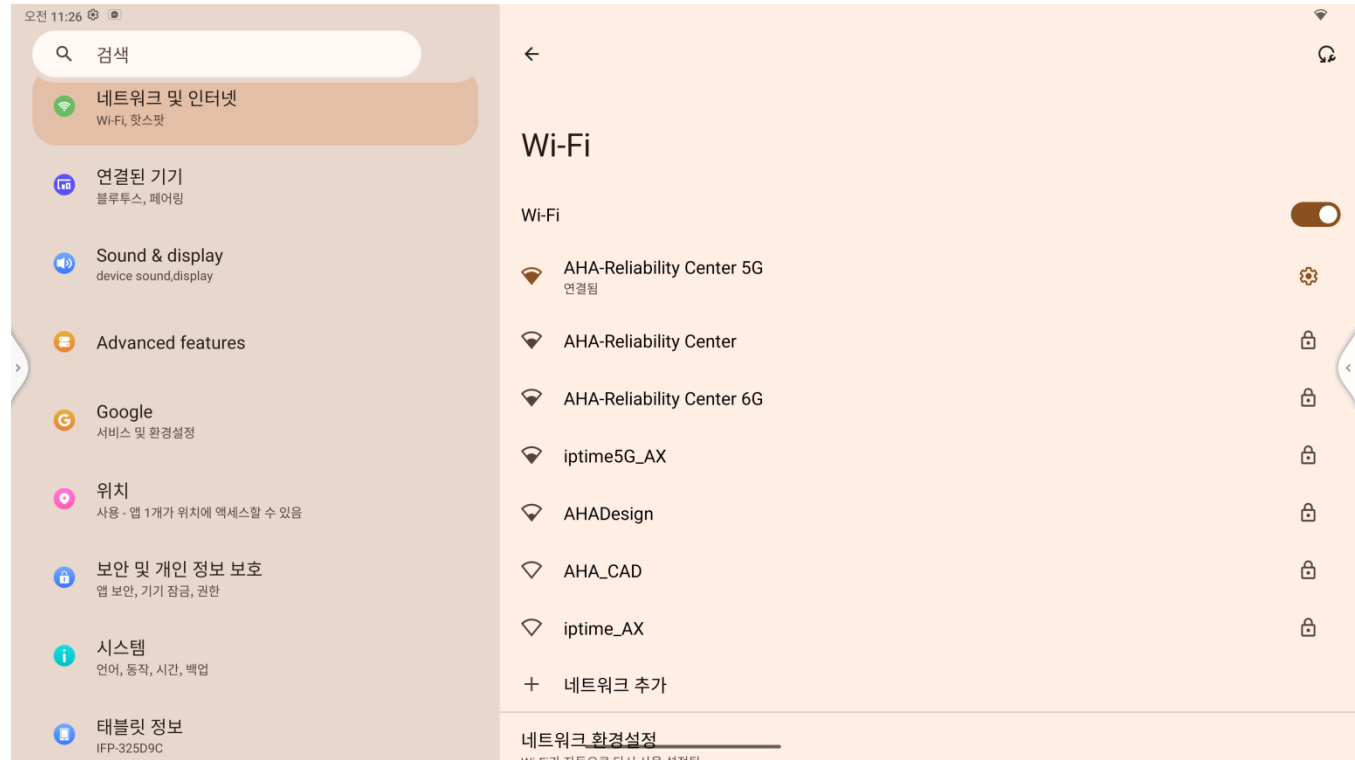
7.1 Network & Internet

7.1.1 Internet

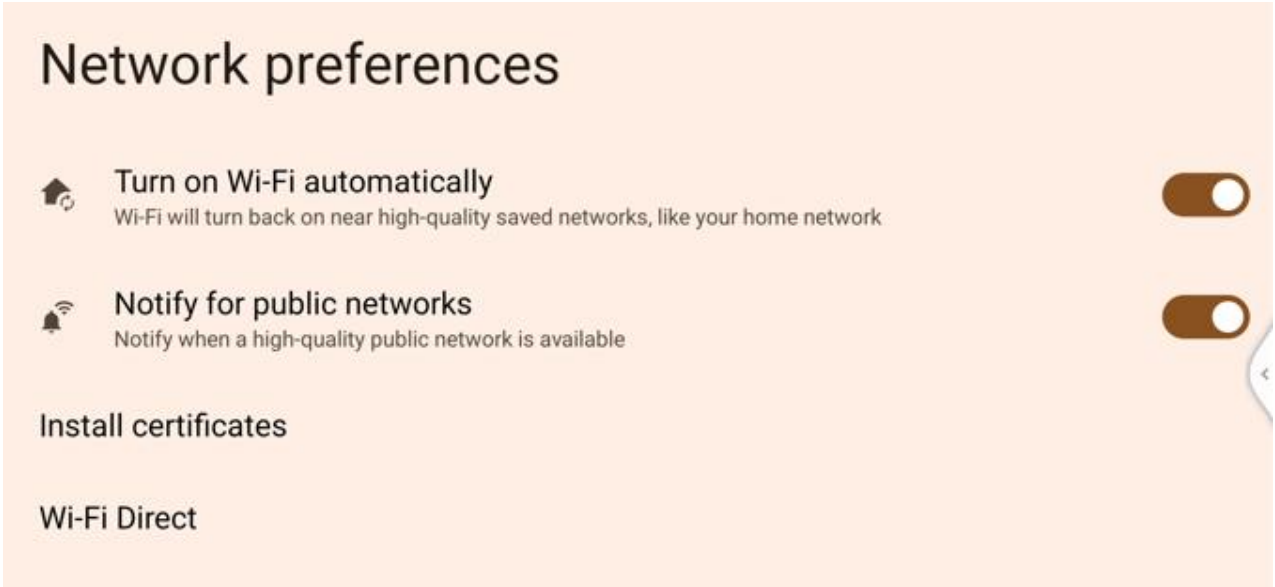


① Wi-Fi (Wireless Network)

- Press the Wi-Fi ON/OFF button to detect nearby Wi-Fi signals. (2.4 GHz ~ 5 GHz)

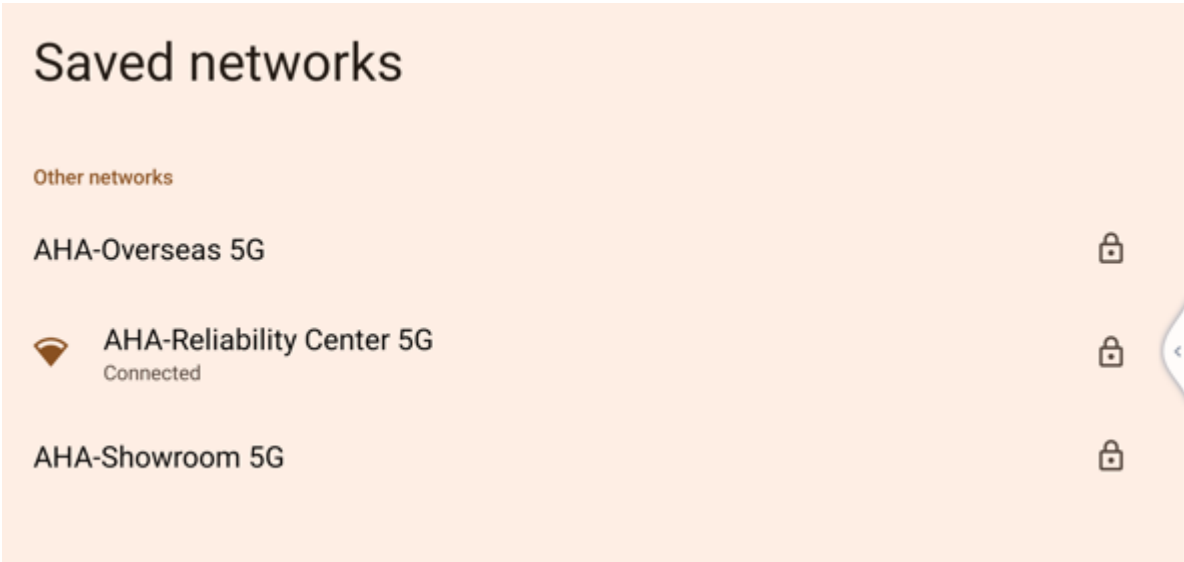


7.1 Network & Internet



② Network Preferences

- **Turn on Wi-Fi automatically:** Wi-Fi will be re-enabled when a saved high-quality network, such as a home network, is nearby.
- **Public Network Notification:** A notification appears when a high-quality public network is available.
- **Install Certificates:** If the network you want to connect to requires certificates, install the required certificates manually.
- **Wi-Fi Direct:** Share files with devices that support Wi-Fi Direct without using cables or a network connection.



③ Saved Networks

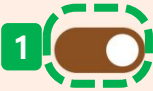
- Displays the list of Wi-Fi networks previously connected to from the interactive whiteboard.
- Once connected, the Wi-Fi is saved in this list and will reconnect automatically without requiring a password.

7.1 Network & Internet

7.1.2 Wired Network

Wired network

Ethernet State

1

2

☒ Obtain IP address automatically

☐ Set the IP address manually

IP Address	<div>192 . 168 . 0 . 31</div>
Gateway	<div>192 . 168 . 0 . 244</div>
Subnet mask	<div>255 . 255 . 255 . 0</div>
DNS1	<div>168 . 126 . 63 . 1</div>
DNS2	<div>8 . 8 . 8 . 8</div>

Save

① Ethernet Status

- Turns Ethernet connection ON/OFF.
- When Ethernet is connected, the Wi-Fi connection is automatically disconnected.

② Obtain IP Address Automatically

- Automatically assigns an IP address and other communication parameters to the interactive whiteboard connected to the network.
- After setup, you can access the internet using DHCP for the wired network.

7.1 Network & Internet

7.1.2 Wired Network

Wired network

Ethernet State

3

Obtain IP address automatically

Set the IP address manually

IP Address

192 . 168 . 0 . 31

Gateway

192 . 168 . 0 . 244

Subnet mask

255 . 255 . 255 . 0

DNS1

168 . 126 . 63 . 1

DNS2

8 . 8 . 8 . 8

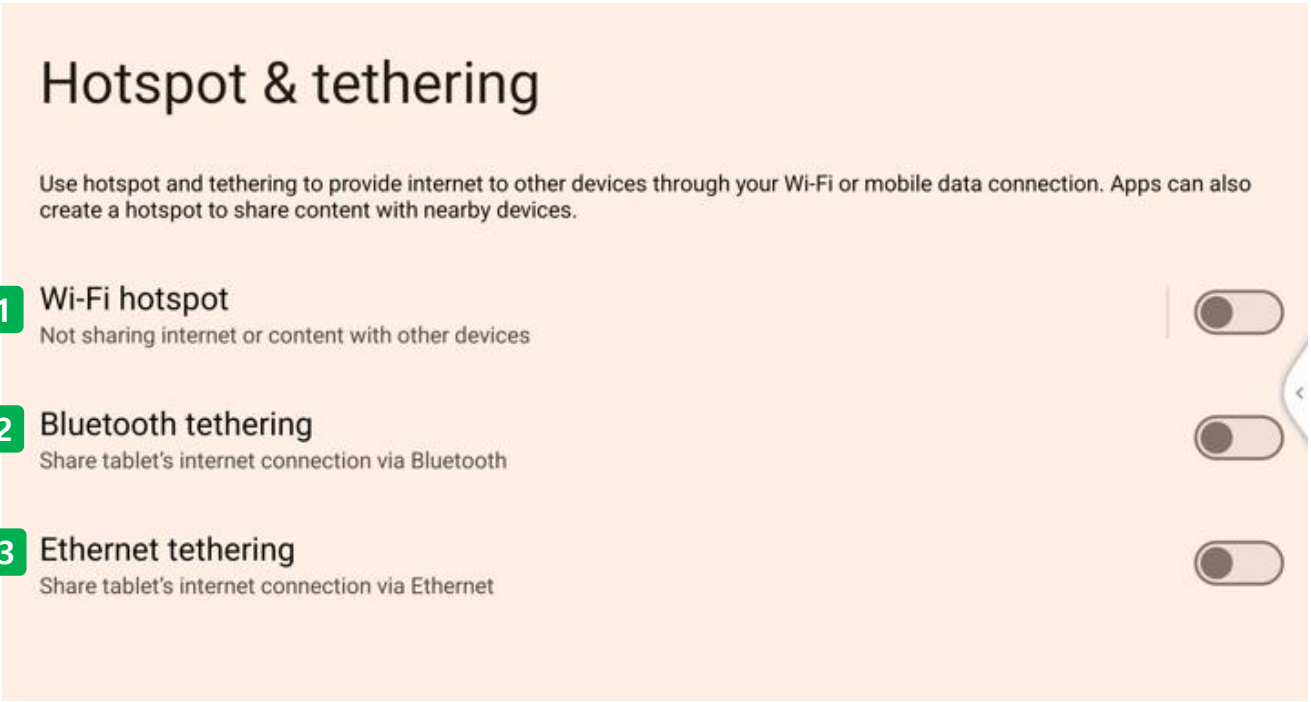
Save

③ Set IP Address Manually

- Enter the IP address, Gateway, Subnet Mask, and DNS address manually.
- After setup, you can access the internet using a fixed IP for the wired network.

7.1 Network & Internet

7.1.3 Hotspot & Tethering



❖ Hotspot & Tethering

- Allows other devices to access the internet through your Wi-Fi or mobile data connection.
- You can also create a hotspot in the app to share content with nearby devices.

① Wi-Fi Hotspot

- Select this option to enter detailed hotspot settings.

② Bluetooth Tethering

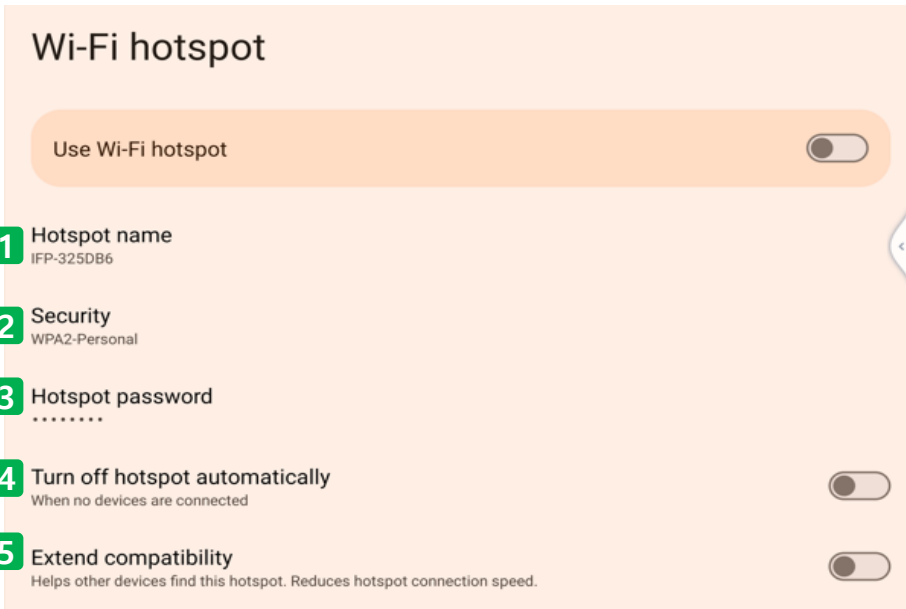
- Share the internet connection between your mobile phone and the interactive whiteboard via Bluetooth.

③ Ethernet Tethering

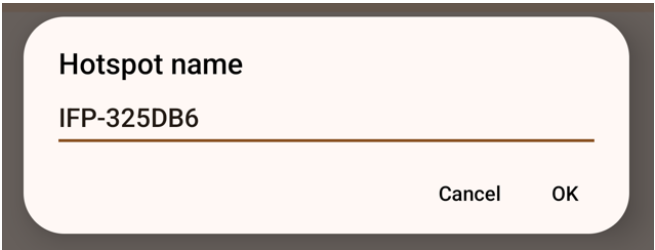
- Share the mobile phone's internet connection through Ethernet.
- Works when the interactive whiteboard and the mobile phone are connected via Ethernet.

7.1 Network & Internet

7.1.3 Hotspot & Tethering



① Hotspot name



- When selecting the Hotspot Name field: You can change the hotspot name..

② Security

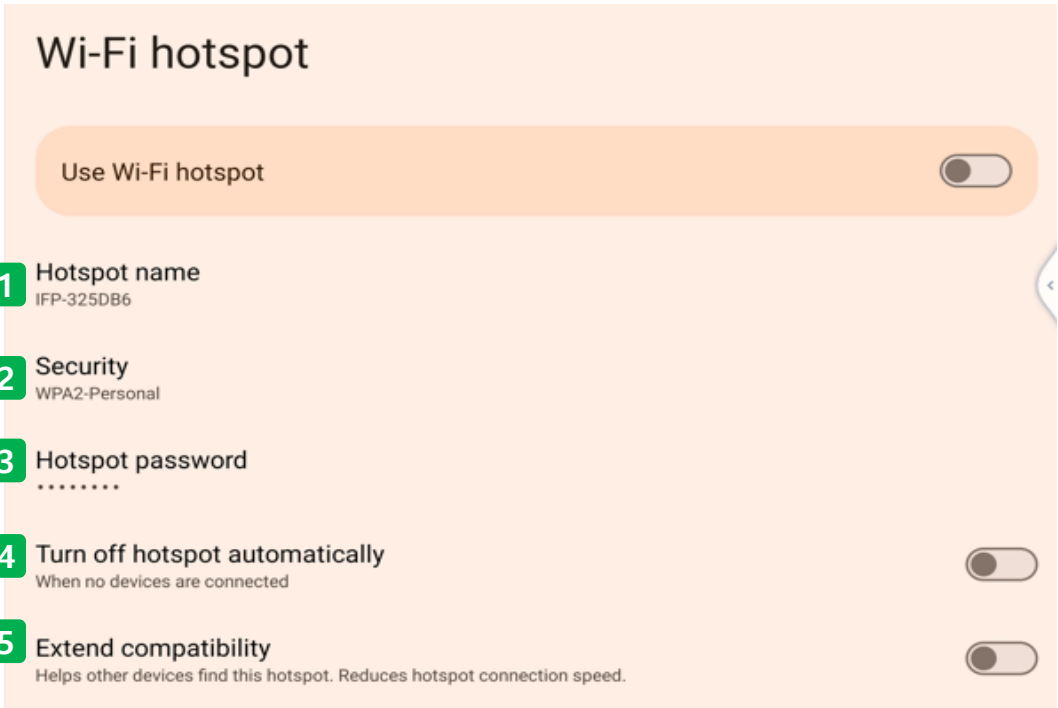


- When selecting the Security field: You can change the hotspot security protocol.

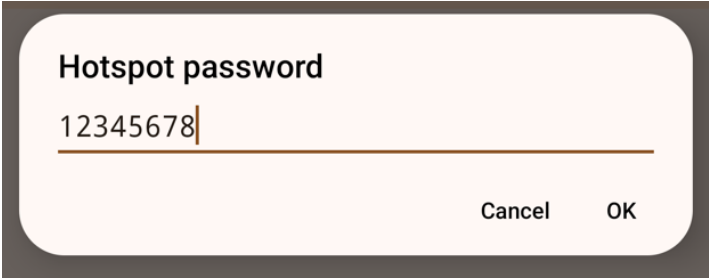
- 1. WPA3-Personal: The latest and strongest security protocol, providing robust encryption to protect the wireless network.
- 2. WPA2/WPA3-Personal: A compatibility mode that supports both WPA3 and WPA2, allowing connections from both newer and older devices.
- 3. WPA2-Personal: The most widely used protocol prior to WPA3; less robust than WPA3 but still considered secure.
- 4. None: No security encryption; the network is open and vulnerable as anyone can connect.

7.1 Network & Internet

7.1.3 Hotspot & Tethering



③ Hotspot password



- Set the hotspot password. (Default password: 12345678)

④ Turn Off Hotspot Automatically

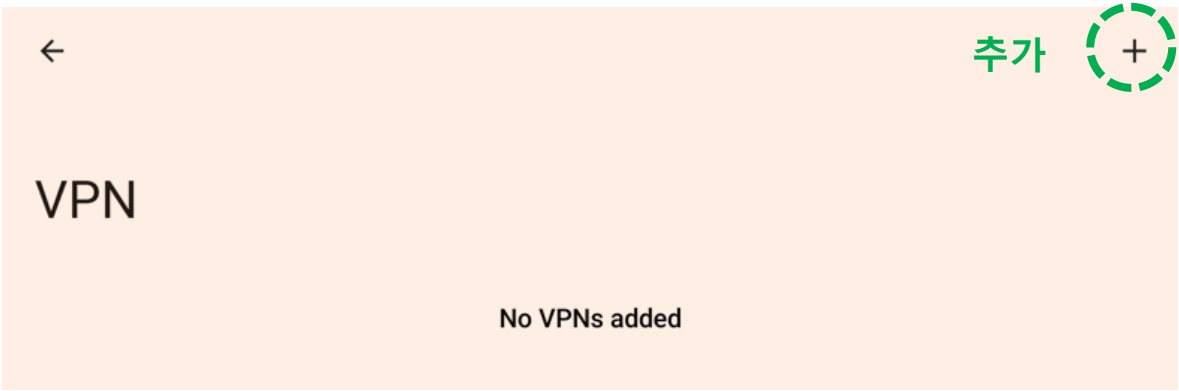
- Automatically disables the hotspot when no devices are connected to the whiteboard's hotspot.

⑤ Extend Compatibility

- Helps other devices detect the product's hotspot, reducing the connection time.

7.1 Network & Internet

7.1.4 VPN



❖ VPN

- Click the “+” icon to add a VPN configuration.

Edit VPN profile

Name

Type

IKEv2/IPSec MSCHAPv2

Server address

IPSec identifier

(not used)

IPSec CA certificate

(don't verify server)

IPSec server certificate

(received from server)

☐ Show advanced options

Username

Password

☐ Always-on VPN

The information entered doesn't support always-on VPN

Cancel

Save

Name

- Set the name. (Any name can be assigned)

Type

- Select the connection type.
- IKEv2/IPSec MSCHAPv2
- IKEv2/IPSec PSK or RSA (2 types)

Server Address

- Enter the IP address or full server host name.

IPSec Identifier

- Leave this field blank.

IPSec CA Certificate

- Used only for user certificate connections and EAP connections.

IPSec Server Certificate

- Used only for user certificate connections.

Proxy

- Enter the proxy address of the router to connect.

Username

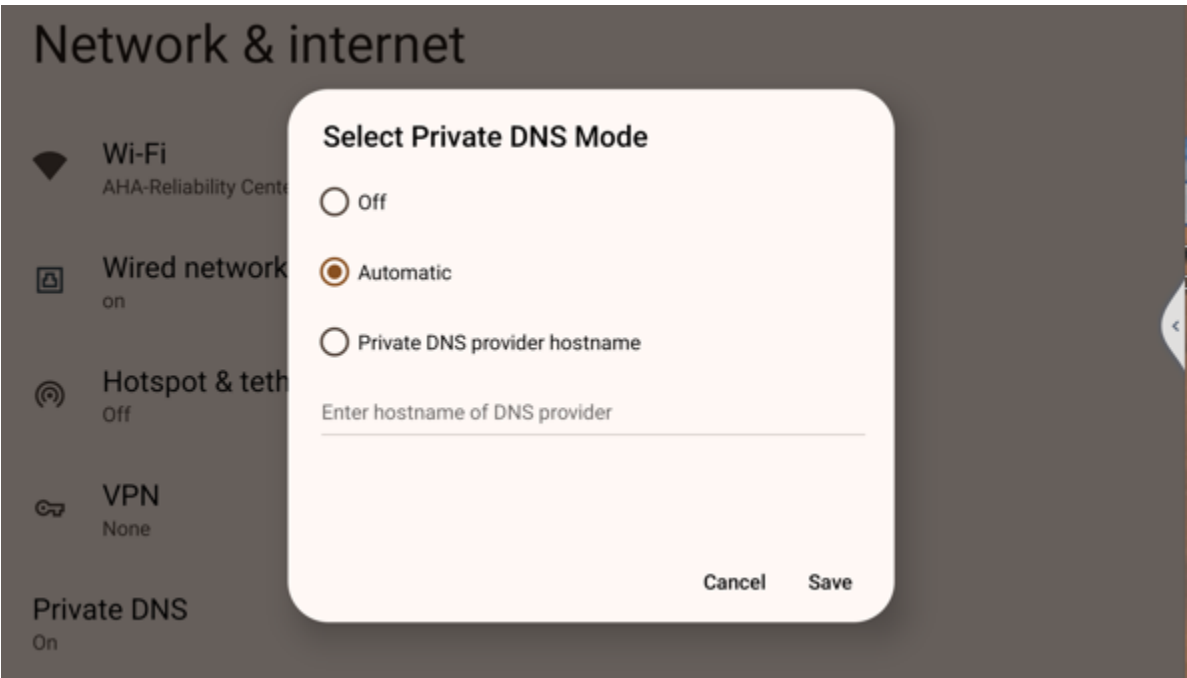
- Specify the ID used for the VPN connection.

Password

- Specify the password used for the VPN connection.

7.1 Network & Internet

7.1.5 Private DNS



❖ Private DNS

- Provides the ability to specify a user-defined DNS server instead of using the ISP default server.
- Using a custom DNS server can improve network security and user experience compared to the default DNS provided by the ISP.

❖ Example: Android Private DNS Hostname Settings

Google DNS (dns.google)

- Google Public DNS that protects users from various types of phishing attacks.

AdGuard DNS (dns.adgaurd.com)

- Free DNS that blocks ads, trackers, and phishing sites.

OpenDNS (dns.opendns.com)

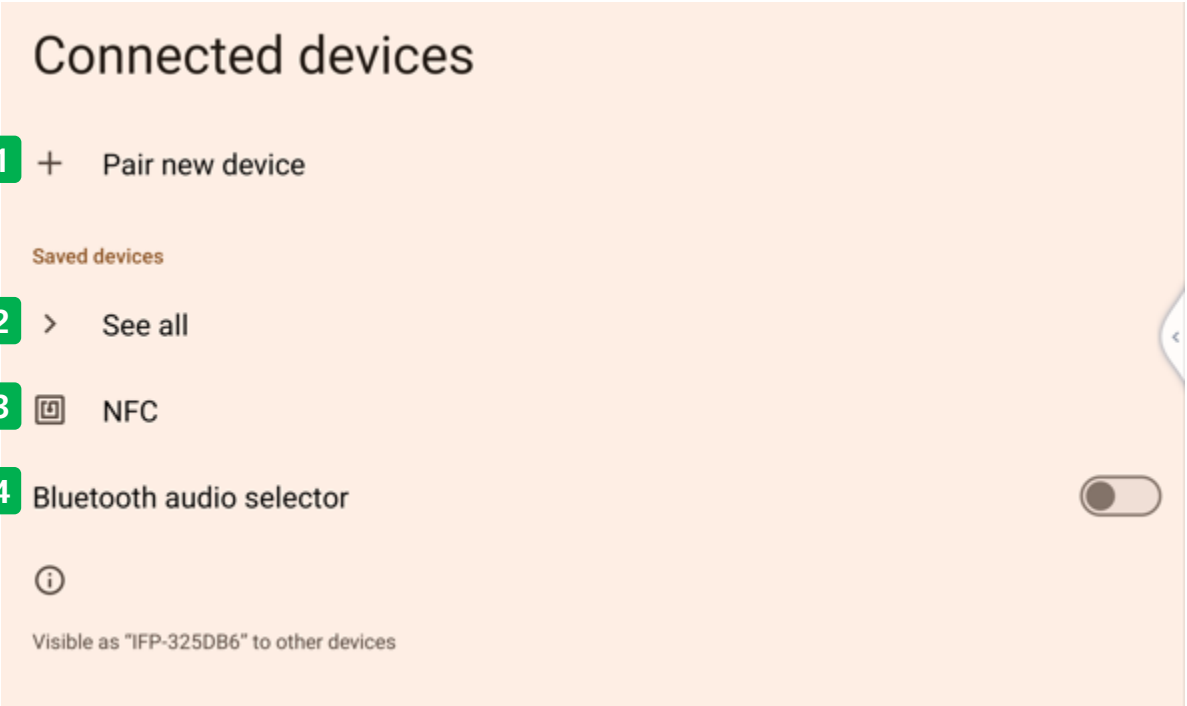
- Cloud-based DNS that provides malware protection and content filtering.

NextDNS (dns.nextdns.io)

- Cloud-based DNS that provides ad blocking, malware protection, and parental controls.

7. Settings Menu and Description

7.2 Connected Devices



❖ Connect External Devices

- The interactive whiteboard can connect with external devices via Bluetooth, Wi-Fi, etc.

① Pair New Device

- Search for and add Bluetooth-enabled devices near the interactive whiteboard.

② Saved Devices

- Displays the list of devices previously connected and saved via Bluetooth.

③ NFC

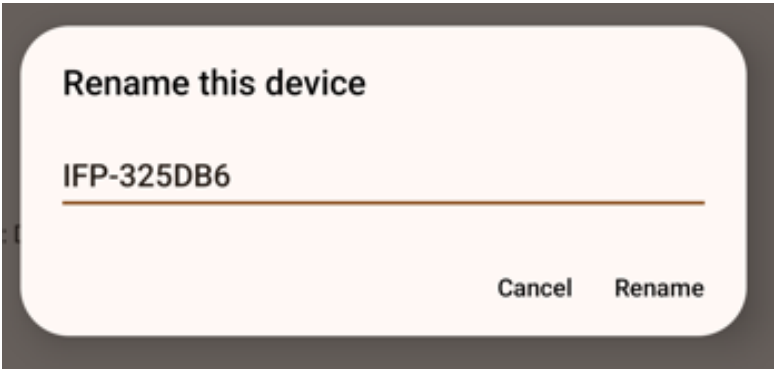
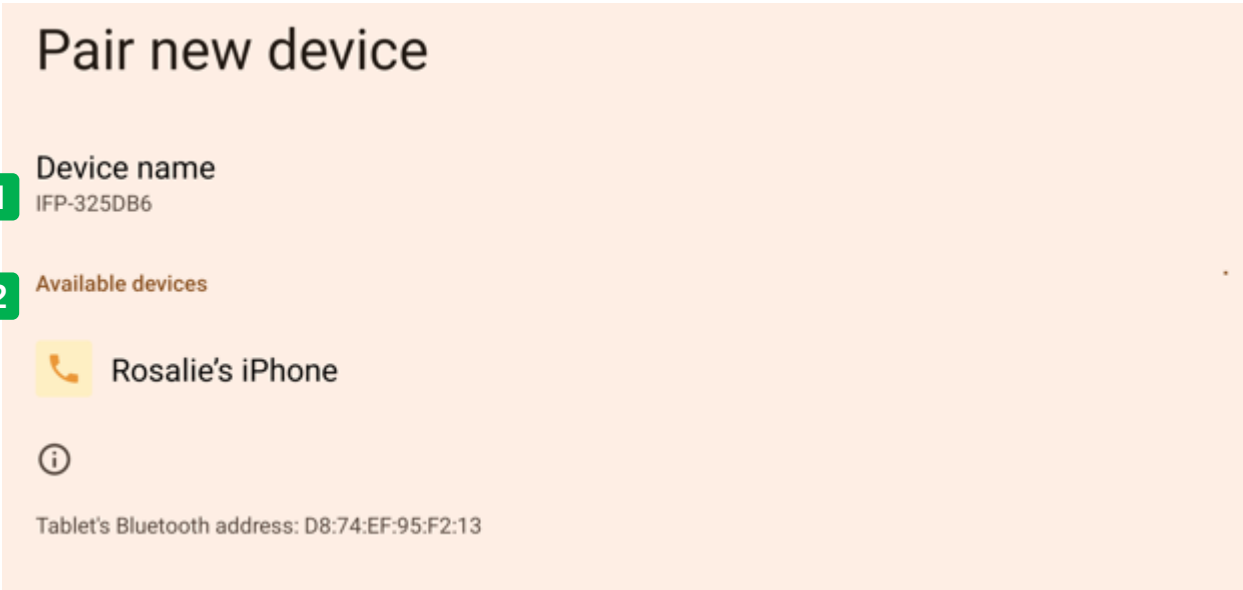
- Register an NFC card to the interactive whiteboard.

④ Bluetooth Audio Selector

- OFF: File transfer and media operation with the connected device.
- ON: Connect to an external Bluetooth speaker.

7.2 Connected Devices

7.2.1 Pair new device



① Rename Device

- Displays the current Bluetooth name of the interactive whiteboard.
Select this field to change the Bluetooth name.

② Available Devices

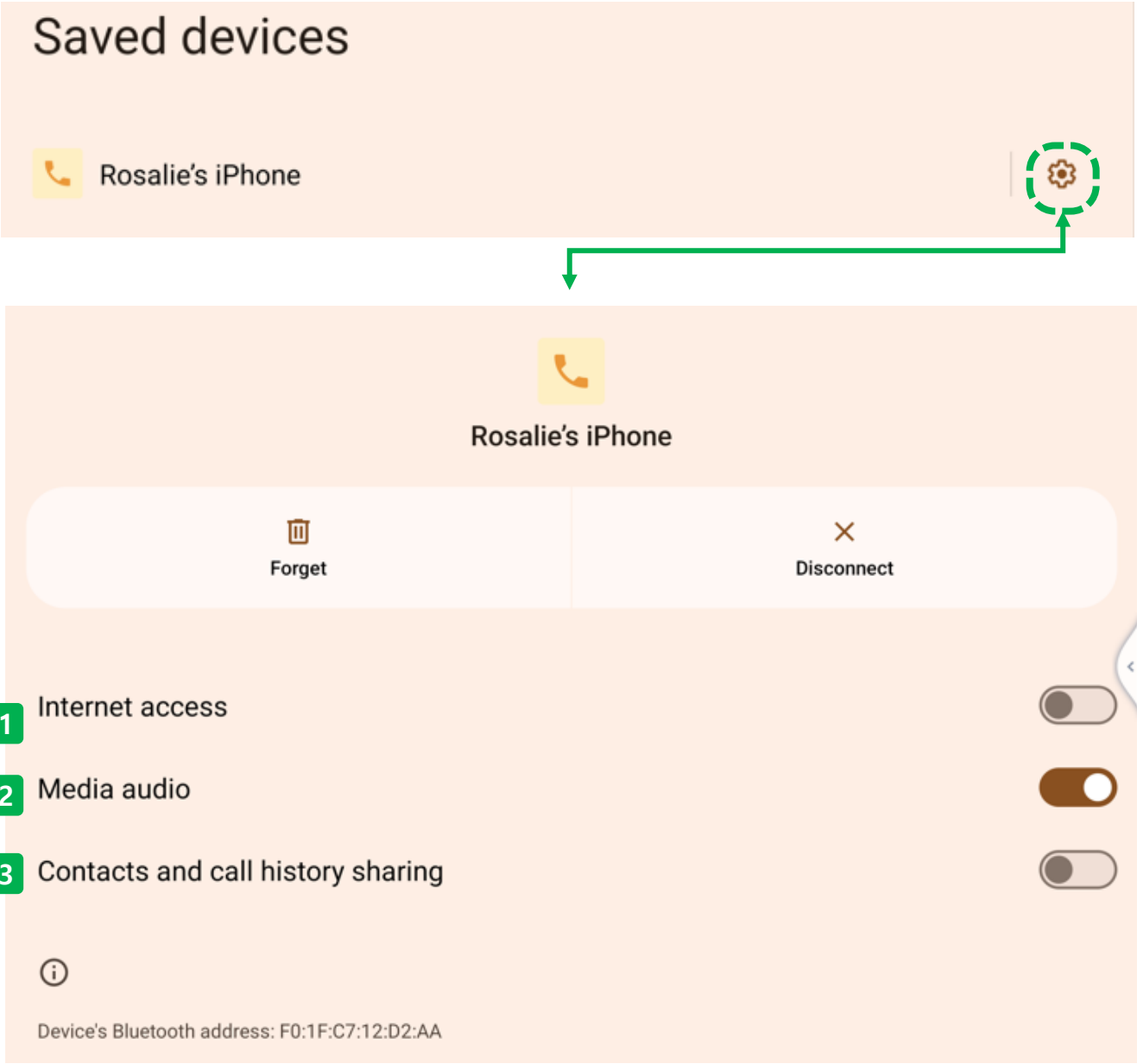
- Automatically searches for nearby Bluetooth devices that can be connected to the interactive whiteboard.
- Select a Bluetooth device to pair with.

① Bluetooth Address

- Displays the unique Bluetooth address of the product.

7.2 Connected Devices

7.2.2 Saved devices



① **Internet Access**

- Share the network using the Bluetooth tethering function.

② **Media Audio**

- Turn on or off the audio of a device connected via Bluetooth.

③ **Contact Sharing**

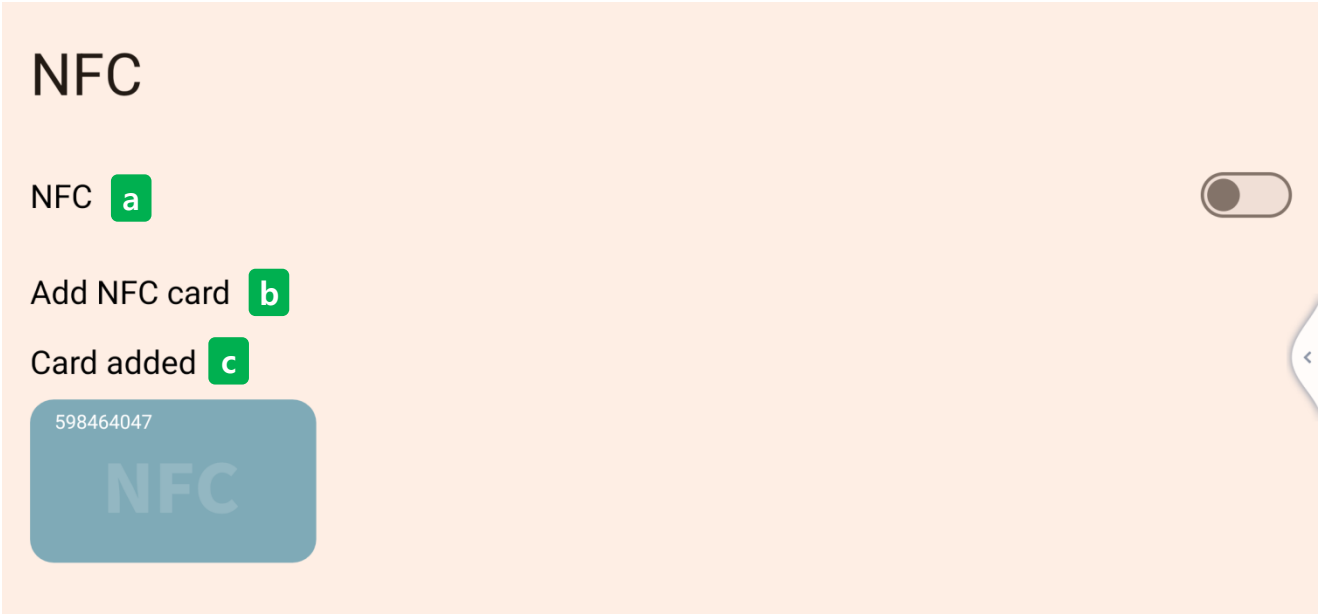
- Share the contacts from the user's mobile phone and store them on the interactive whiteboard.

① **Bluetooth Address**

- Displays the unique Bluetooth address of the connected device.

7.2 Connected Devices

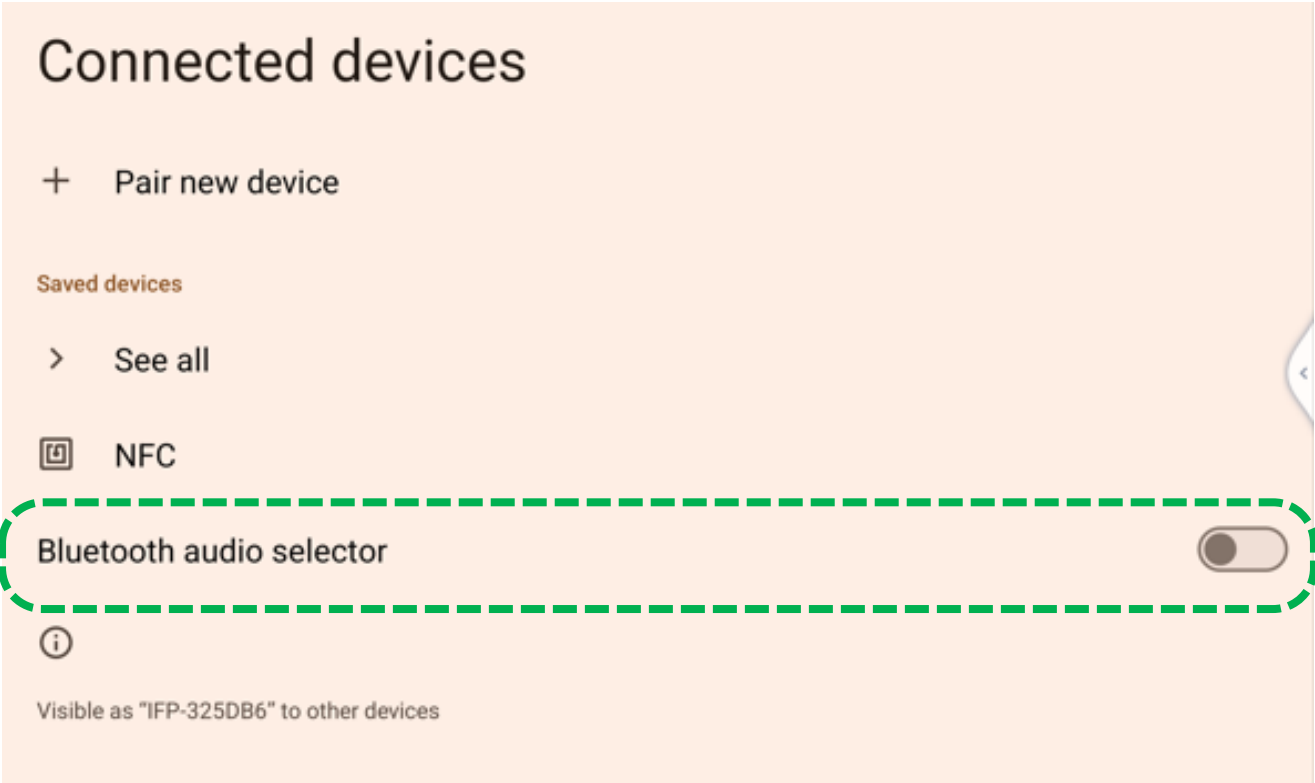
7.2.3 NFC



- Add an NFC card to the interactive whiteboard to power it on.
 - When the NFC function is enabled, the whiteboard can only be powered on using a registered NFC card.
(The methods for turning off the device remain unchanged: Power button, Remote control, Shutdown function, or NFC card.)
- Ⓐ Toggle the NFC function On/Off.
- Ⓑ Add a user-specific card in addition to the provided NFC card.
- Ⓒ Display the added user-specific cards.

7.2 Connected Devices

7.2.4 Bluetooth Role



- OFF State: Audio played from a device connected via Bluetooth is output through the interactive whiteboard.
- ON State: The audio of the interactive whiteboard is output to an external Bluetooth speaker.

7.3 Sound & Display



① Sound & Vibration

- Adjust functions related to the sound of the interactive whiteboard.

② Display

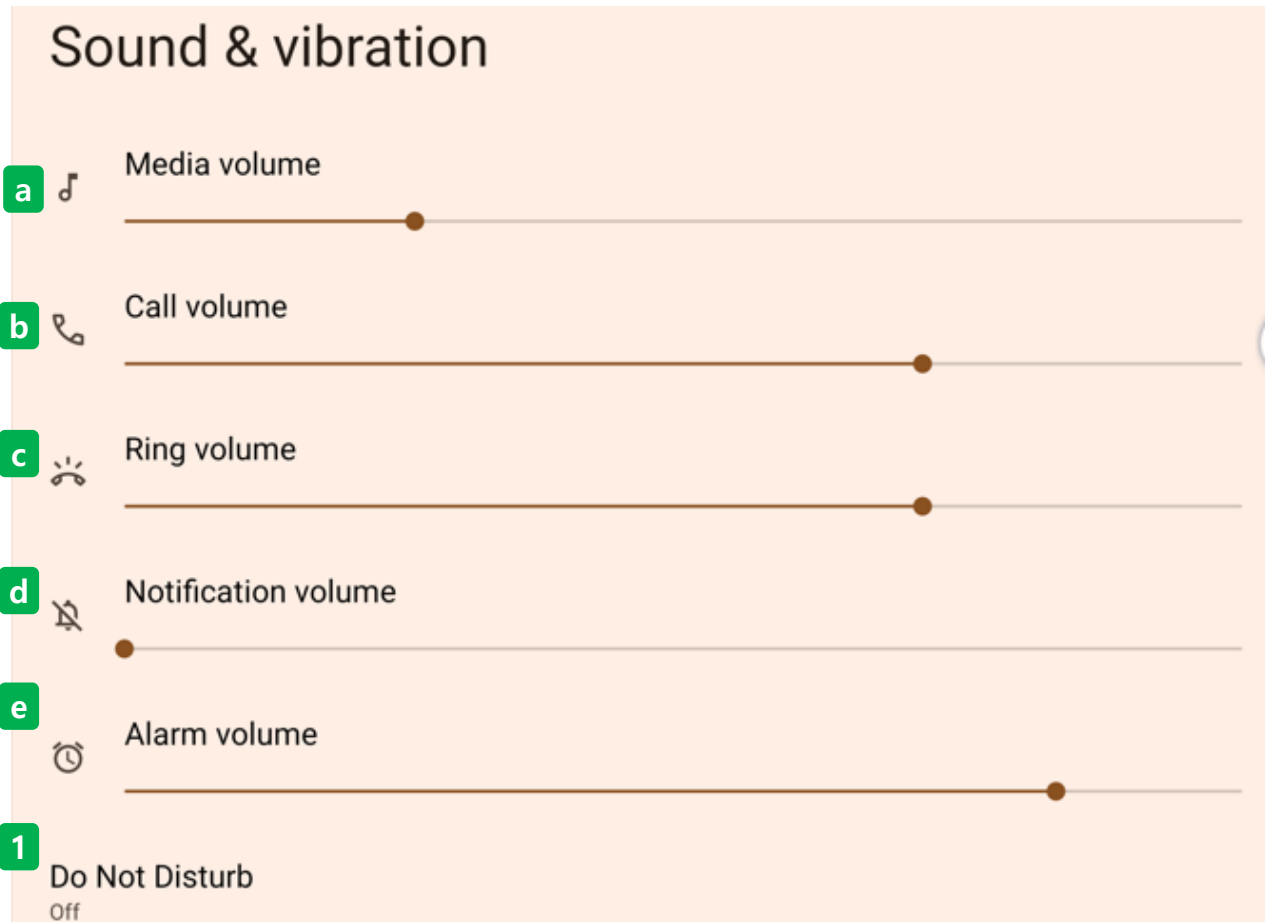
- In Display settings, you can adjust screen brightness, lock screen, Android UI color and font, HDMI OUT resolution, side menu, and product temperature settings.

③ Wallpaper

- Set the wallpaper for the Android Home screen and the lock screen.

7.3 Sound & Display

7.3.1 Sound & Vibration

❖ **Sound Bar**

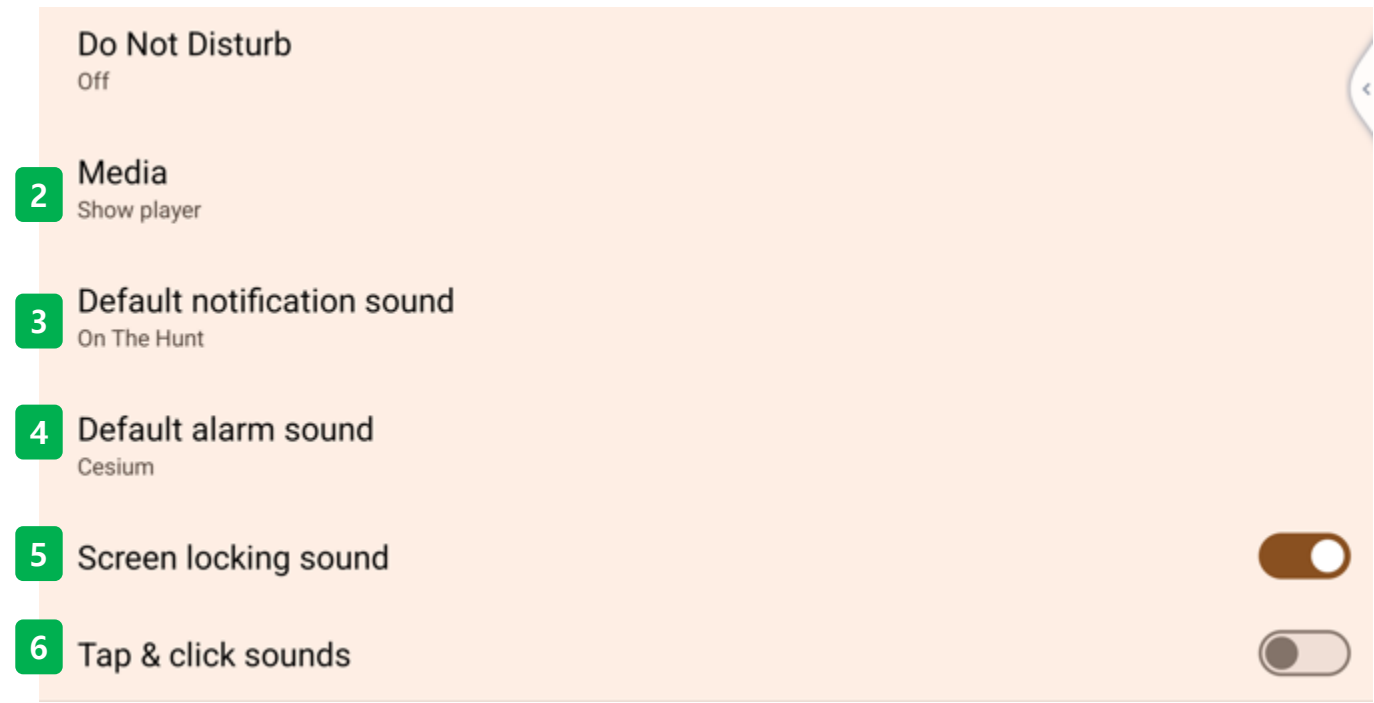
- Ⓐ Adjusts the master volume of the interactive whiteboard.
- Ⓑ Adjusts the call volume received through the interactive whiteboard.
- Ⓒ Adjusts the ringtone volume received through the interactive whiteboard.
- Ⓓ Adjusts the alarm volume of the interactive whiteboard.
- Ⓔ Adjusts the notification volume of the interactive whiteboard.

① Do Not Disturb Mode

- Click to turn the Do Not Disturb mode On or Off.

7.3 Sound & Display

7.3.1 Sound & Vibration



② Media

❖ **Keep Media Player in Quick Settings**

- Keeps the media player open in Quick Settings to quickly resume playback.

❖ **Show Media on Lock Screen**

- Keeps the media player open on the lock screen to quickly resume playback.

❖ **Show Media Recommendations**

- Receive media recommendations based on activity.

③ , ④ Default Notification & Alarm Sound

- Change the notification and alarm sounds to the user’s preferred sound.

⑤ Screen locking sound

- Set whether sound is enabled when the screen lock is activated.

⑥ Tap & click sound

- Set whether sound is enabled when touching the Android screen.

7.3 Sound & Display

7.3.2 Display



❖ Display

- In Display settings, you can adjust screen brightness, lock screen, Android UI color and font, HDMI OUT resolution, side menu, and product temperature settings.

① Brightness Level

- Tap this option to open a window that allows you to adjust the brightness at the top of the screen.
- Brightness can be adjusted between 0 ~ 100%. (The default setting is 80%.)

② Adaptive Brightness

- When enabled, the brightness of the interactive whiteboard automatically adjusts to the surrounding light.

③ Lock Screen

- Configure how images, text, clock, and other items are displayed on the lock screen.

④ Screen Timeout

- If the interactive whiteboard is not used for the set time, it automatically switches to the lock screen. (Only the screen turns off.)

⑤ Dark Theme

- When enabled, the Android UI of the interactive whiteboard switches to a dark color scheme.

7.3 Sound & Display

7.3.2 Display



⑥ **Display Size & Text**

- Adjust the overall UI and font size, weight, etc. displayed on the Android screen.

⑦ **Colors**

- Check the color level of the interactive whiteboard screen.

⑧ **Screen saver**

- Displayed on the screen when the interactive whiteboard is not in use.

⑨ **HDMI**

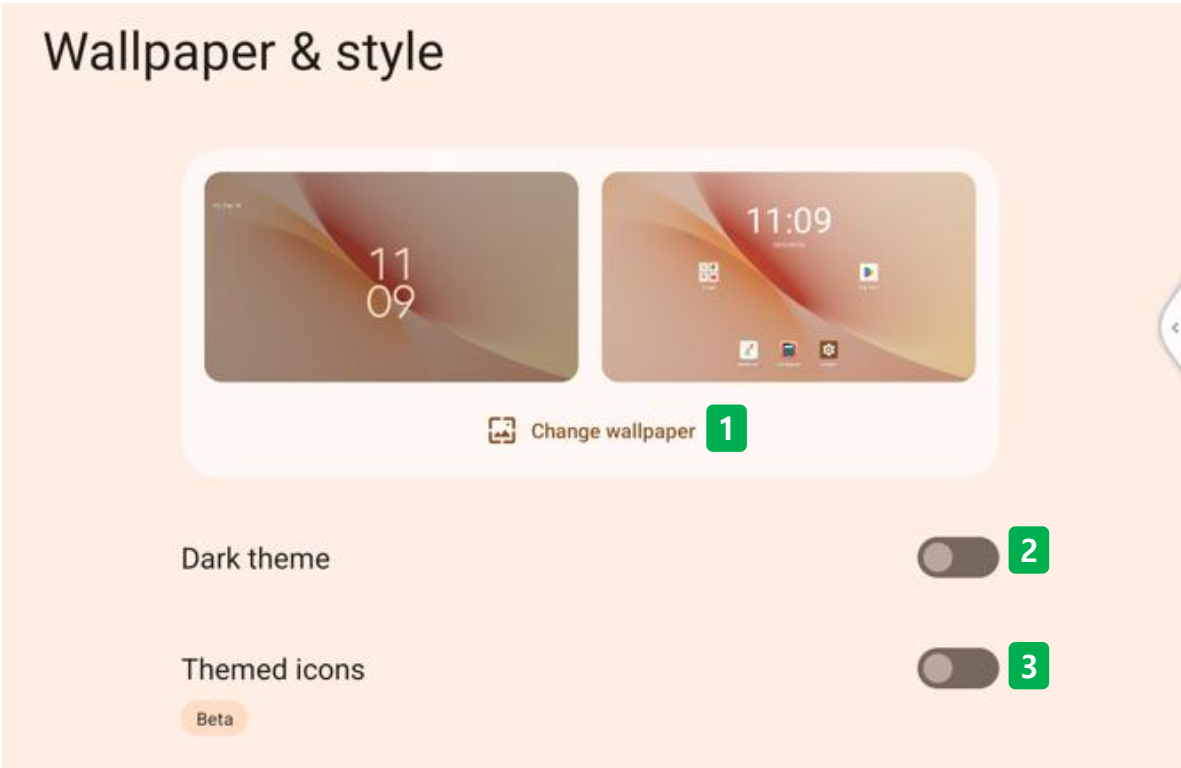
- Resolution: Set the output resolution for the HDMI and TYPE-C OUT ports.
- Screen Zoom: Enlarge or reduce the screen displayed through HDMI or TYPE-C OUT connection.

⑩ **Gallery Mode**

- Changes the device's screen to preset photos at scheduled times.

7.3 Sound & Display

7.3.3 Wallpaper



❖ Wallpaper

- Set the wallpaper for the Android Home screen and the lock screen.

① Change Wallpaper

- When selecting the Change Wallpaper option, you can choose from the default images supported by the system.
- Categories include On-device wallpapers, Cityscapes, Life, Textures, Landscapes, Art, Earth, Solid Colors, Geometric Shapes, and Seascapes. Each image supports 3840*2160 resolution.

② Dark theme

- When enabled, the Android UI switches to a dark color scheme.

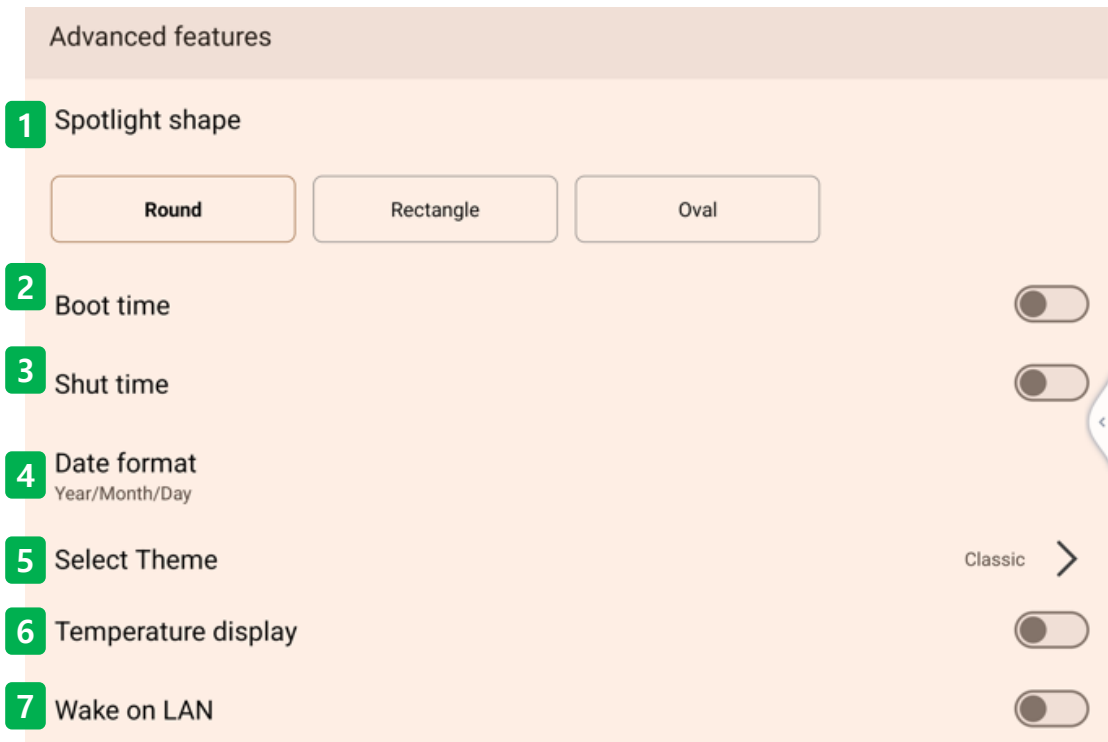
③ Themed icons

- When enabled, app icons in Android change their colors according to the theme.
- This function is currently in Beta and may change in future updates.

7.4 Advanced Features

❖ Advanced Features

- Control the power and external input functions of the interactive whiteboard.



① Spotlight shape

- Requires entering the preset password to switch the screen when changing external input signals.

② Boot time

- Automatically powers on the device at the set time.

③ Shut time

- Automatically powers off the device at the set time.

④ Data format

- Set the date display format.

⑤ Select Theme

- Select between Classic and Education themes.

⑥ Temperature display

- Displays the temperature of the interactive whiteboard on the top bar.

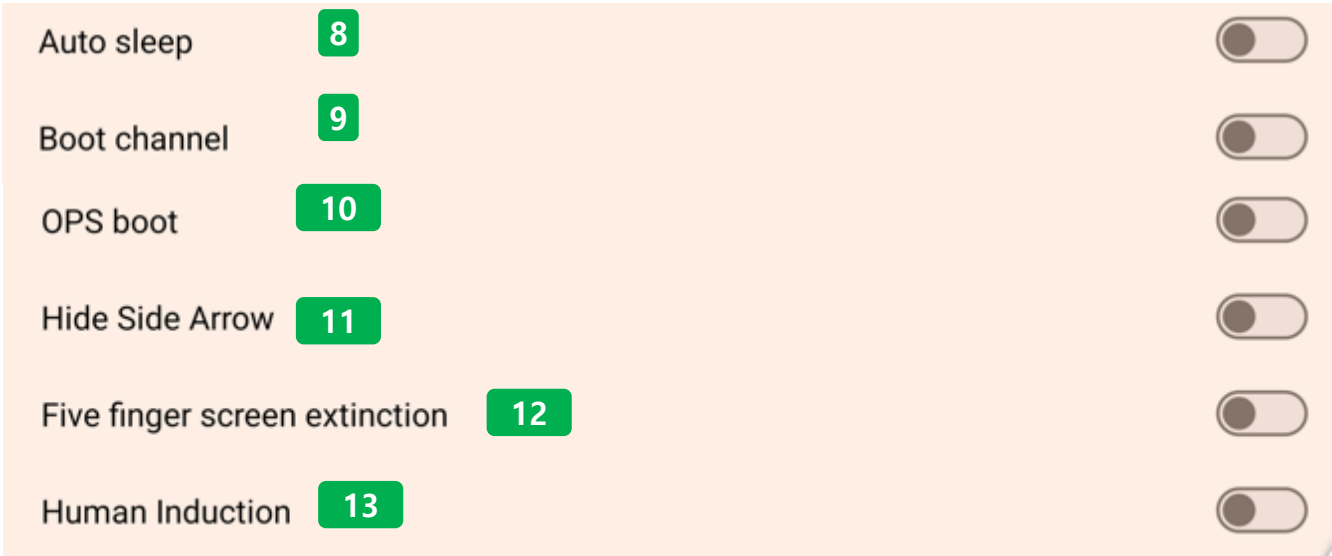
⑦ Wake on LAN (WOL)

- Control the power of the interactive whiteboard through another device on the same network by connecting a router.
- For detailed connection methods, refer to the product manual of your router manufacturer.

7.4 Advanced Features

❖ Advanced Features

- Control the power and external input functions of the interactive whiteboard.



⑧ Auto sleep

- If there is no signal on the external input screen, the interactive whiteboard will automatically power off after the specified time.

⑨ Boot channel

- Select the initial screen displayed when the interactive whiteboard is powered on.

⑩ OPS boot

- Control the power of the OPS.
- OPS Screen Only: The OPS automatically powers on when switching to the OPS screen.
- All Screens: The OPS automatically powers on when the interactive whiteboard is powered on.

⑪ Hide Side Arroww

- Hides the side menu. Swipe from the edge to display the side menu again.

⑫ Five finger screen extinction

- Wake the screen by touching the interactive whiteboard with five fingers simultaneously.

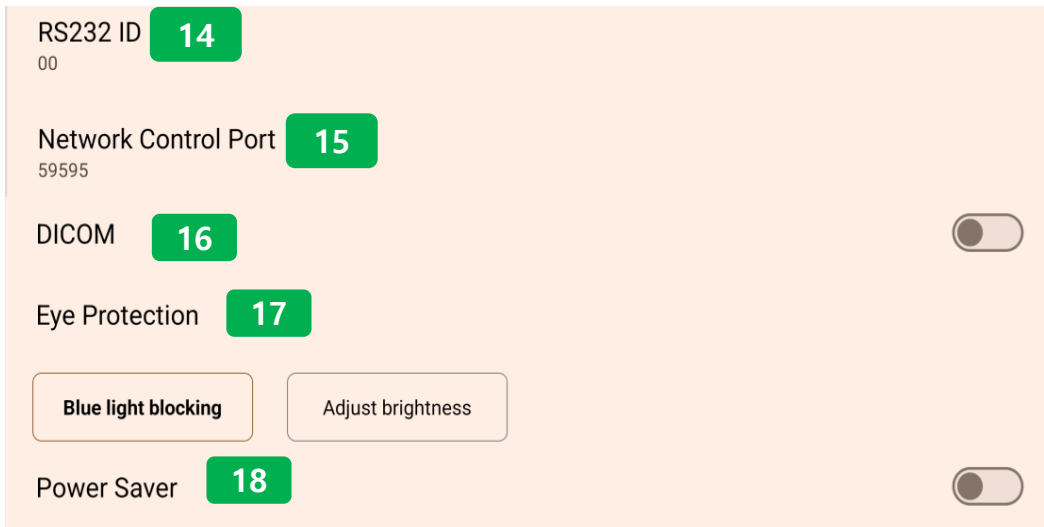
⑬ Human Induction

- The built-in sensor detects when a person approaches and turns on the screen.

7.4 Advanced Features

❖ Advanced Features

- Control the power and external input functions of the interactive whiteboard.



⑭ RS232ID

- Configure the RS232 ID.

⑮ Network Control Prot

- Configure the network control port.

⑯ DICOM

- Turn DICOM mode On/Off.
- Sets the external source screen to black and white.

⑰ Eye Protection

- Turn the eye protection function On/Off.
- Choose between Blue Light Filter or Brightness Adjustment while in eye protection mode.

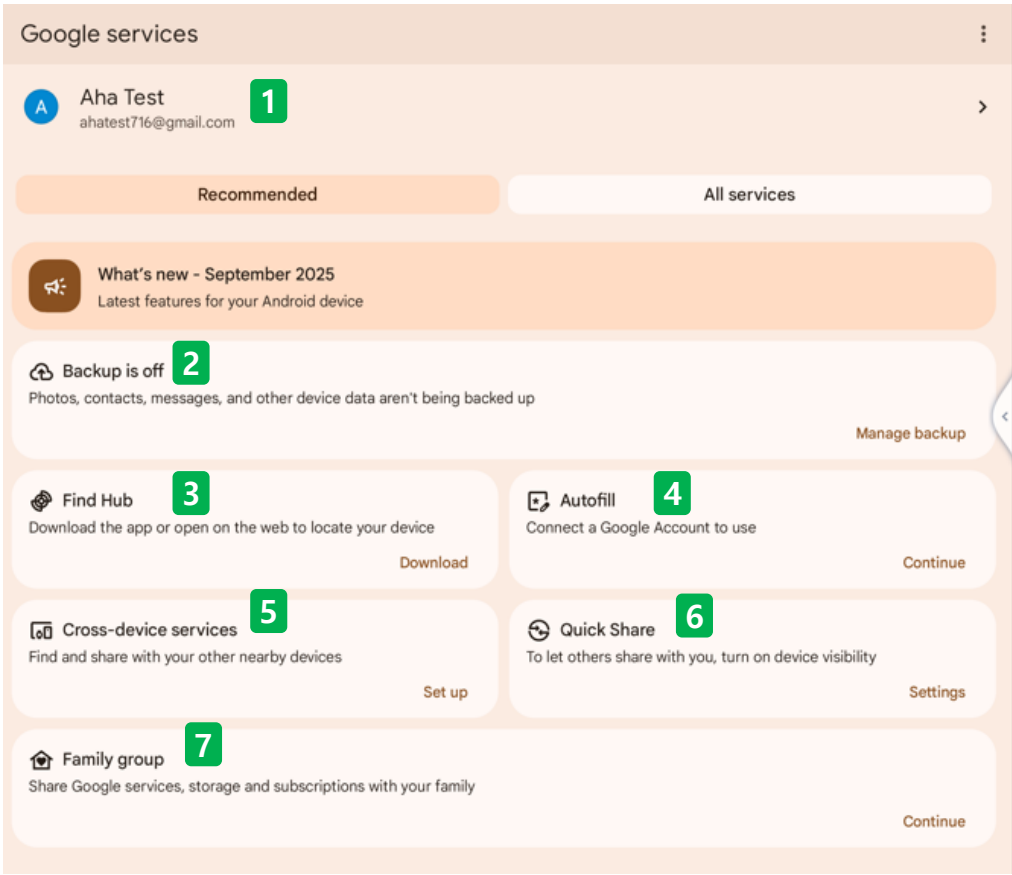
⑱ Power Saver

- Set the backlight off time and system power off time to enable the power saving function.
- The time can be set from 1 minute to 90 minutes.

7.5 Google Service

❖ Google

- Manage various related functions such as Google account, apps, and backup.



① Google Account

- Check the currently logged-in Google account.

② Backup

- Function to back up files to the cloud.

③ Find Hub

- Locate your nearby devices linked with your Google account via the app or website.

④ Autofill

- Manage the Google Autofill function.

⑤ Cross-device services

- Find and share with your other nearby devices.

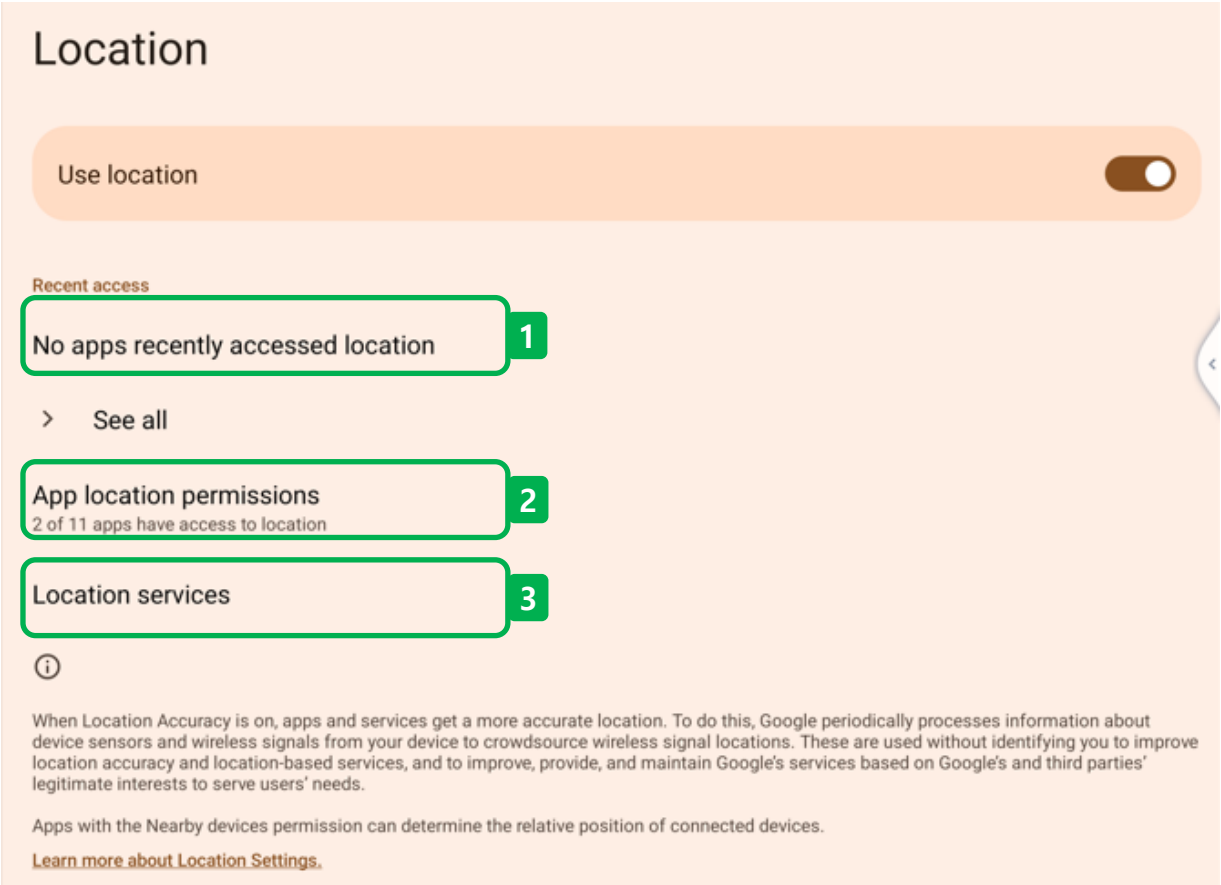
⑥ Quick Share

- Use Quick Share to share data within your Google account with nearby connected devices.

⑦ Family group

- Share Google services, storage, and subscriptions with your family.

7.6 Location



① **No apps recently accessed location**

- Check the apps that have recently requested access to your location information.

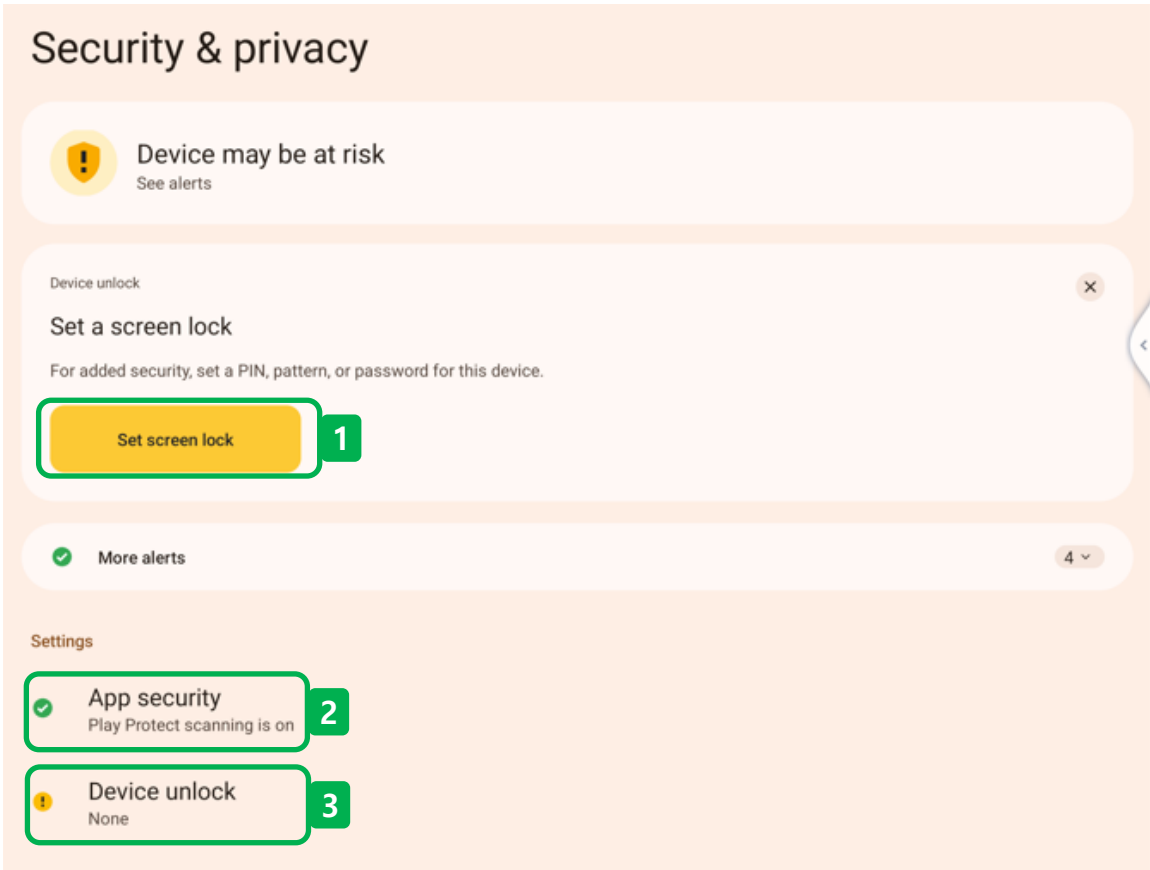
② **App location permissions**

- Manage the apps that have permission to access your location information.

③ **Location Services**

- View the list of location services currently used by the device.

7.7 Security & privacy



❖ Security

- Check or upgrade the internal Android security system of the device.

① Set screen lock

- Use the lock screen function.
 - a. None: No lock function is used.
 - b. Swipe: Unlock by swiping with your finger.
 - c. Pattern: Unlock by drawing a designated pattern.
 - d. PIN: Unlock by entering a designated PIN number.
 - e. Password: Unlock by entering a designated password.

② App security

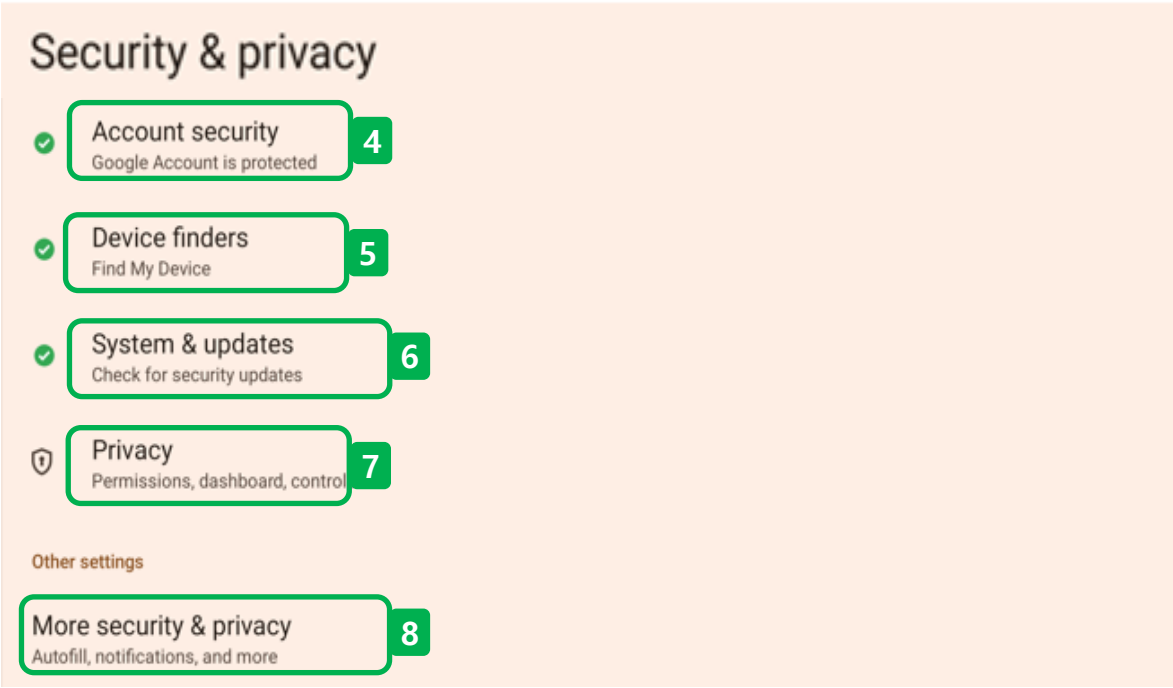
❖ Google Play Protect

- Scans Android apps inside the device for harmful behavior to enhance system stability.

③ Device unlock

- Configure the same functions as in Screen Lock Options.

7.7 Security & privacy



④ Account security

- Diagnose whether the Google account is protected.

⑤ Device finders

- Locate nearby devices logged in with the same Google account as this product.

⑥ System & updates

- Check the current status of Google Play system updates.
- Press the Check for Update button to update to the latest version.
- Check the current status of security updates.
- Press the Check for Update button to update to the latest version.

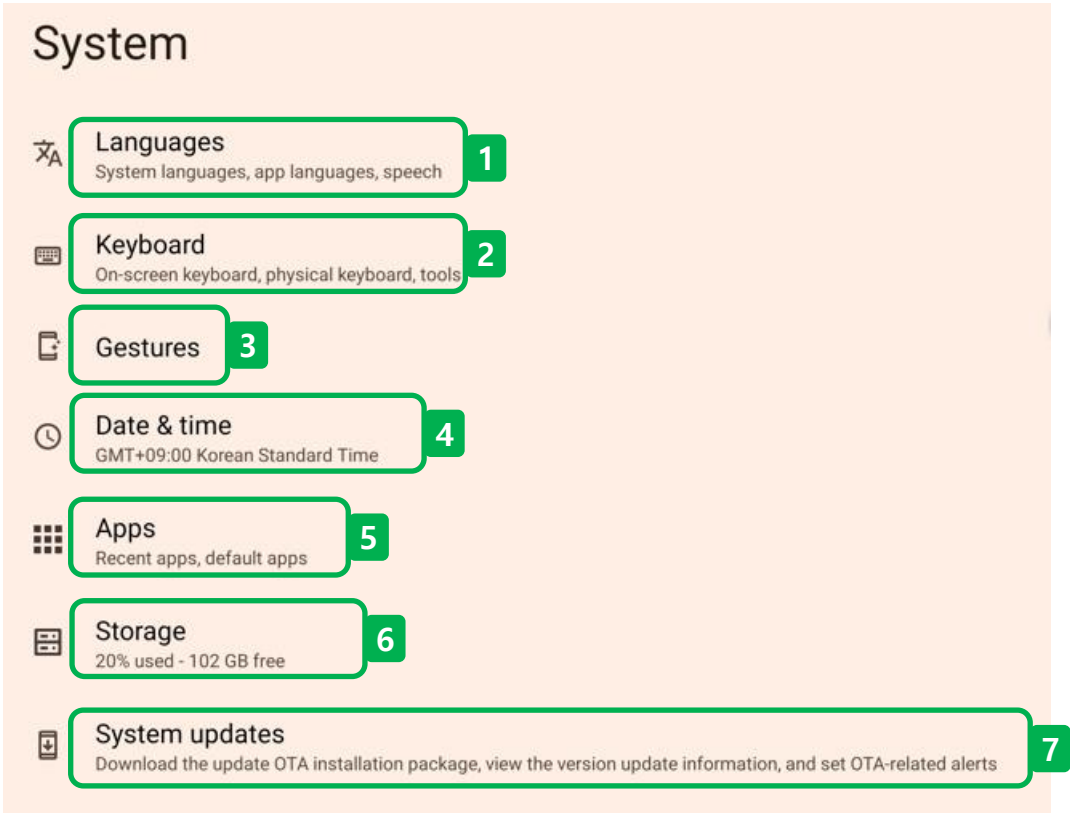
⑦ Privacy

- Manage personal information, permissions, lock settings, and more.

⑧ More security & privacy

- Manage settings related to Autofill, notifications, and others.

7.8 Ststem



① Language

- Language: Users can freely change the UI language of the device.

② Keyboard

- On-screen Keyboard: Manage settings such as language and layout of the touch keyboard.
- Physical Keyboard: Manage settings such as language and layout of the physical keyboard.

③ Gestures

❖ System Navigation

- Choose between gesture navigation or 3-button navigation for functions such as Home and Back.

④ Date & Time

❖ Date & Time Settings

- Set the date and time automatically or manually.
- Internet connection is required when using the automatic function.

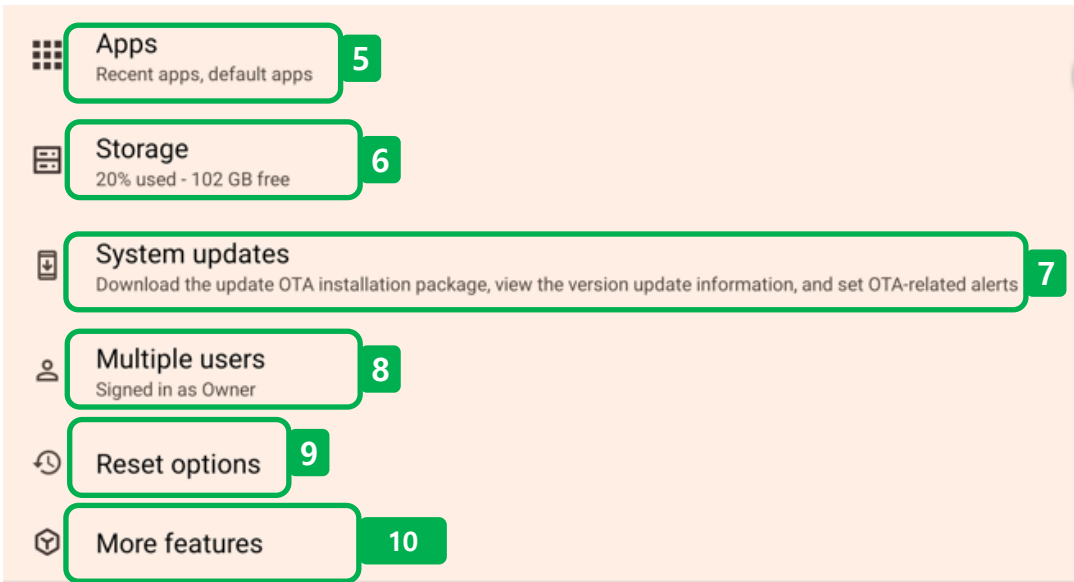
❖ Time Zone

- Set the global standard time zone automatically or manually.
- Internet connection is required when using the automatic function.

❖ Time Format

- Set the time display format to AM/PM or 24-hour format.

7.8 System



⑤ Apps

- In the Apps menu, you can view information about all installed apps on the interactive whiteboard, check usage time, manage cache settings, and configure permissions.

❖ Recently Used Apps

- Displays the list of recently used apps and all installed apps on the interactive whiteboard.
- Select an app icon to view data such as notifications, permissions, storage and cache, and data usage for that app.

❖ Default Apps

- Displays the list of default apps on the interactive whiteboard. (Default apps cannot be deleted.)

⑥ Storage

- View the internal Android storage capacity and file list of the interactive whiteboard, categorized by type.

⑦ System updates

- Check the current Android version, update date, and upgrade to the latest version.

⑧ Multiple users

- View the users of the device and add additional users by enabling multi-user support.

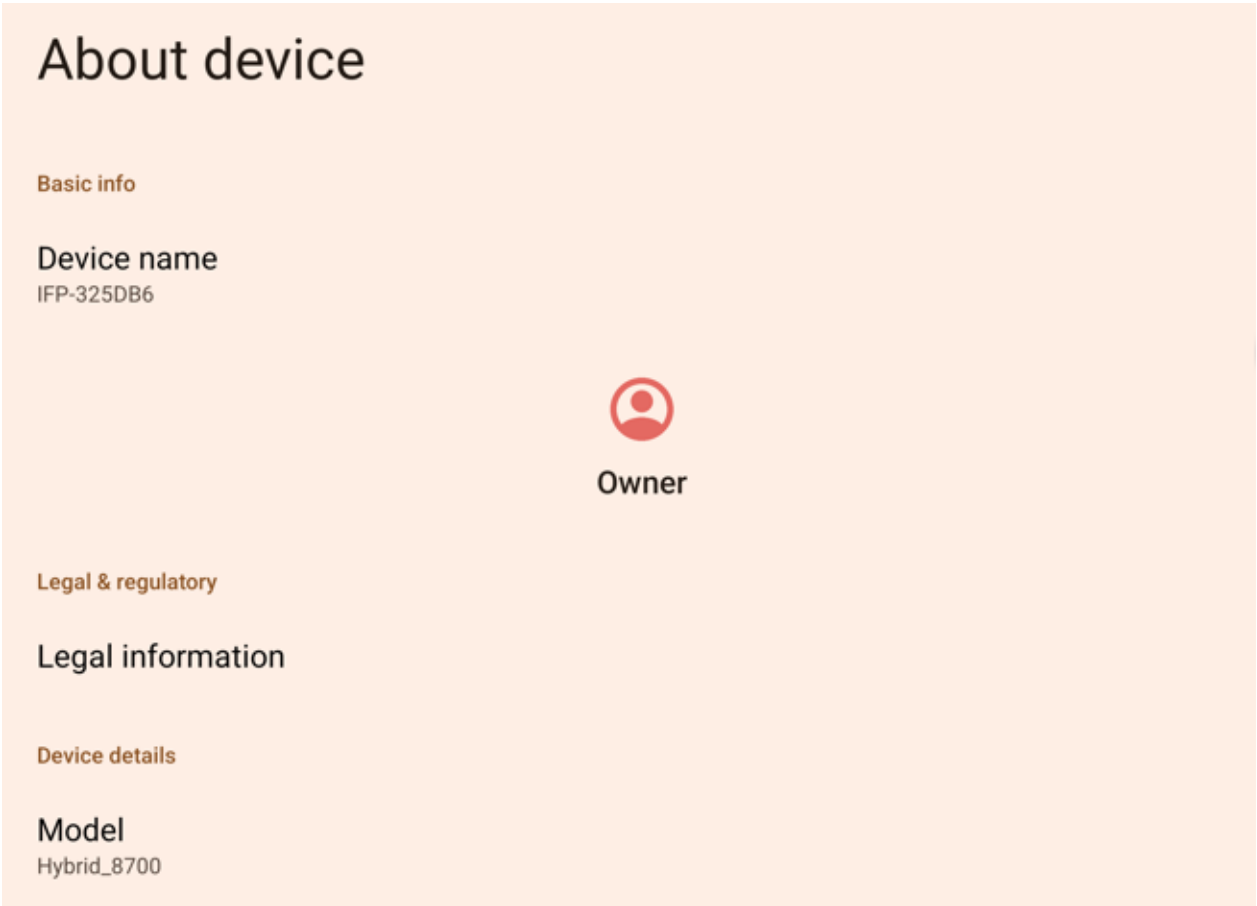
⑨ Reset options

- Reset the device settings and other data to their initial state.

⑩ More features

- Includes Notifications, Passwords & Accounts, Accessibility, Backup, Digital Wellbeing, and Parental Controls.

7.9 About device



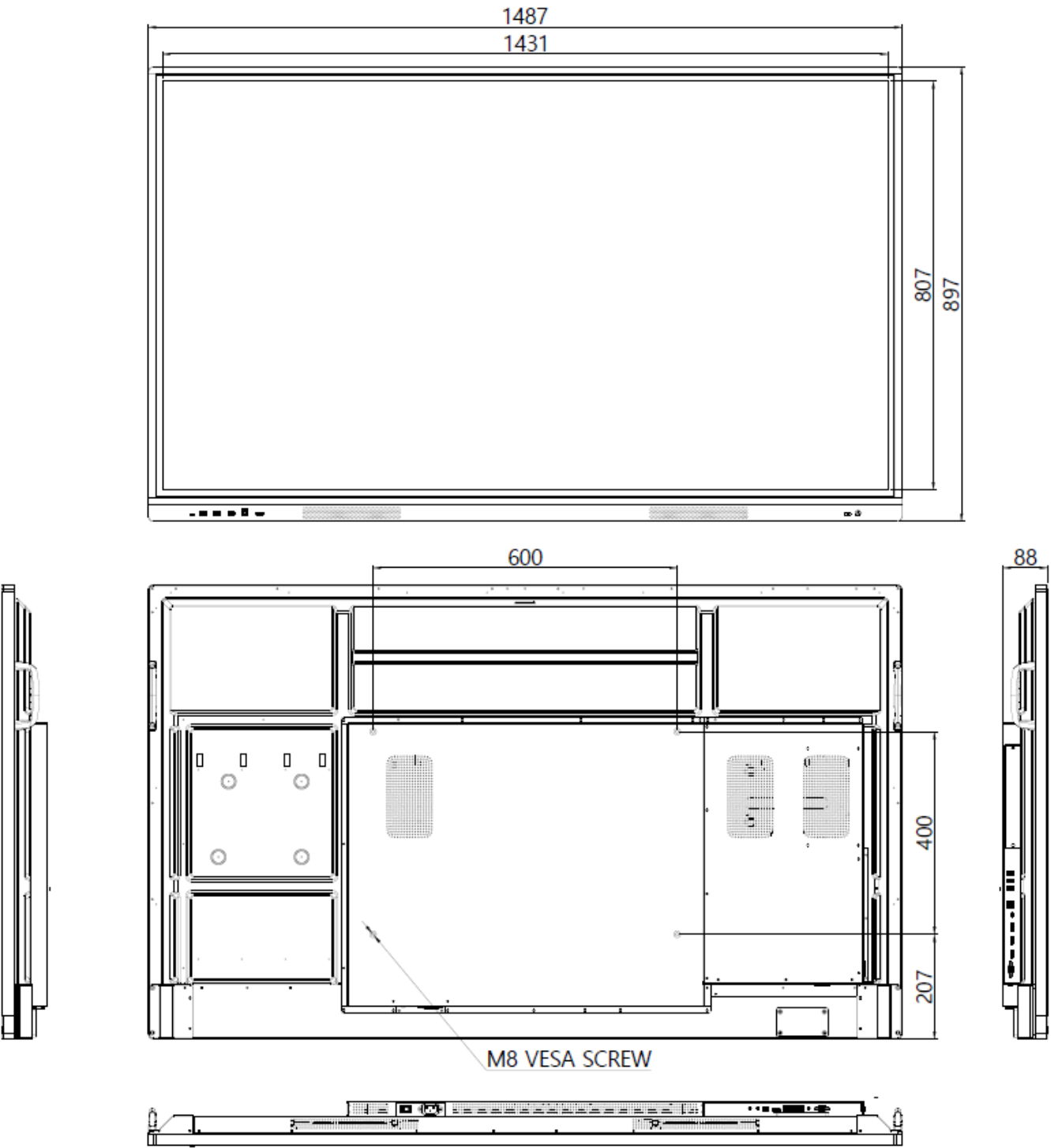
❖ **About device**

- Check the device name, Android version, and various addresses.
- Check the firmware version and perform upgrades.

8. Product Diagram (Economy Type)

8.13 65 inch

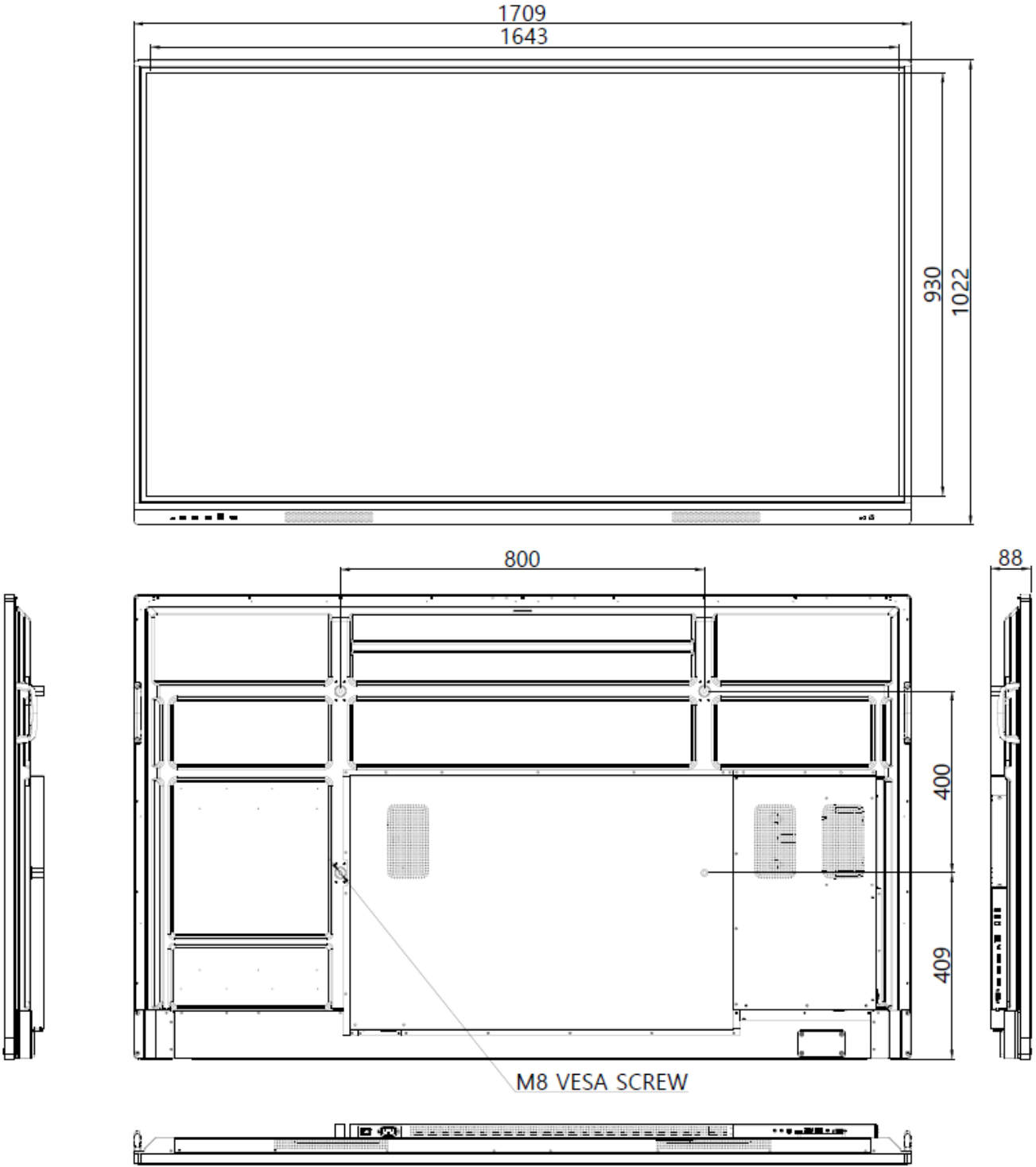
Model Number: AHA-HD50-65 (measurements in mm)



8. Product Diagram (Economy Type)

8.14 75 inch

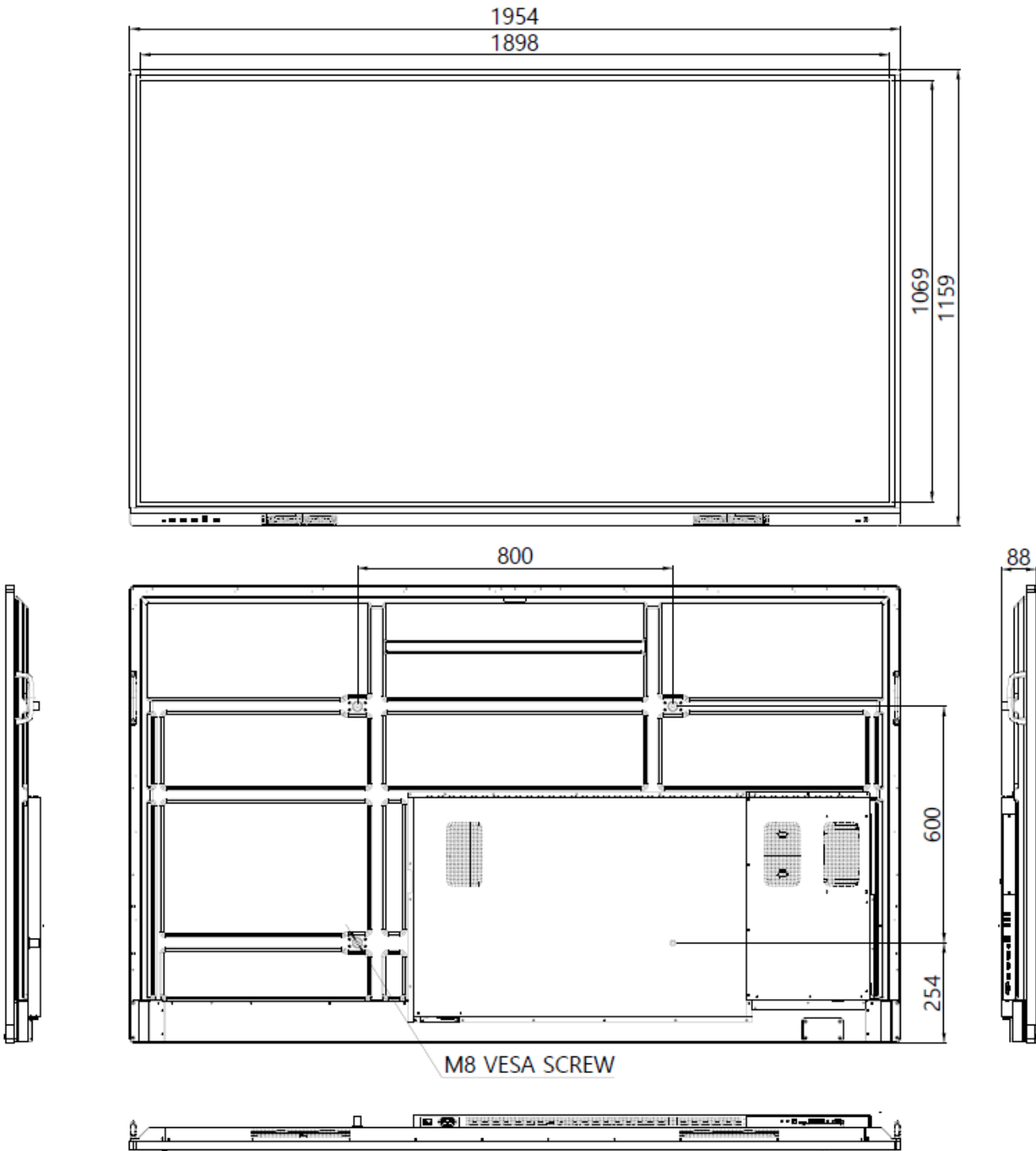
Model Number: AHA-HD50-75 (measurements in mm)



8. Product Diagram (Economy Type)

8.15 86 inch

Model Number: AHA-HD50-86 (measurements in mm)



9. Product Specifications

9.13 65-inch (Economy Type) Model Number: AHA-HD50-65

Panel	
Display	65 inch
Resolution	3840×2160
Brightness	350 cd/m² (Typ.)
Contrast	5000:1 (Typ.)
Glass	4T/ AG+AF / Zero Air Gap Bonding

Touch System	
Touch Sensor	IR (infrared)
Touch Point	Max 40 Point (Windows), Max 32 Point (Android)
	1 Point (Mac, Linux, Chrome OS Single point support)
Response time	< 5.0 ms (1 Based on 1 point)
Accuracy	± 1 mm
OS System	Windows 10 ↑ / Android / Mac / Linux / Chrome

Android System	
Android Version	14.0
CPU	Octa Core (A76 x 4 + A55 x 4)
RAM	16GB (Based on Max Value)
ROM	256GB (Based on Max Value)

I/O Port	
Front Terminal	USB-B(3.0) x 1, HDMI 2.0 x 1, USB-C x 1, USB-A(3.0) x 3 (USB-C : Only Data Support)
Side Terminal	USB-A(3.0) x 1(Only Android), USB-A(3.0) x 1, USB-A(2.0) x 1, DP(1.2) x 1, HDMI(2.0) x 2, USB-B(3.0) x 1(For Touch), USB-C(DP Alt Mode) x 1
Rear Terminal	VGA In x 1, VGA Audio(3.5mm) In x1, HDMI(2.0) OUT x 1, S/PDIF x 1, LINE OUT(3.5mm) x 1, MIC IN(3.5mm) x 1
Communication Port	LAN IN/OUT(1G) x 2, RS232C(D-SUB9) x 1

Power	
Speaker	20W x 2
Power Consumption	≤ 280W
Standby Power	≤ 0.5W

Etc	
Dimensions	58.54 in × 35.32 in × 3.46 in (± 0.20 in) / 1487 x 897 x 88 mm (± 5mm)
VESA Mount	23.62 in × 15.75 in / 600 x 400 (mm), M8 Screw
Product Weight	70.55 lbs (32 kg)
Package Weight	92.59 lbs (42 kg)

9. Product Specifications

9.14 75-inch (Economy Type) Model Number: AHA-HD50-75

Panel	
Display	75 inch
Resolution	3840×2160
Brightness	350 cd/m² (Typ.)
Contrast	5000:1 (Typ.)
Glass	4T/ AG+AF / Zero Air Gap Bonding

Touch System	
Touch Sensor	IR (infrared)
Touch Point	Max 40 Point (Windows), Max 32 Point (Android)
	1 Point (Mac, Linux, Chrome OS Single point support)
Response time	< 5.0 ms (1 Based on 1 point)
Accuracy	± 1 mm
OS System	Windows 10 ↑ / Android / Mac / Linux / Chrome

Android System	
Android Version	14.0
CPU	Octa Core (A76 x 4 + A55 x 4)
RAM	16GB (Based on Max Value)
ROM	256GB (Based on Max Value)

I/O Port	
Front Terminal	USB-B(3.0) x 1, HDMI 2.0 x 1, USB-C x 1, USB-A(3.0) x 3 (USB-C : Only Data Support)
Side Terminal	USB-A(3.0) x 1(Only Android), USB-A(3.0) x 1, USB-A(2.0) x 1, DP(1.2) x 1, HDMI(2.0) x 2, USB-B(3.0) x 1(For Touch), USB-C(DP Alt Mode) x 1
Rear Terminal	VGA In x 1, VGA Audio(3.5mm) In x1, HDMI(2.0) OUT x 1, S/PDIF x 1, LINE OUT(3.5mm) x 1, MIC IN(3.5mm) x 1
Communication Port	LAN IN/OUT(1G) x 2, RS232C(D-SUB9) x 1

Power	
Speaker	20W × 2
Power Consumption	≤ 330W
Standby Power	≤ 0.5W

Etc	
Dimensions	67.28 in × 40.24 in × 3.46 in (± 0.20 in) / 1709 x 1022 x 88 mm (± 5mm)
VESA Mount	31.50 in × 15.75 in / 800 x 400 (mm), M8 Screw
Product Weight	94.8 lbs (43 kg)
Package Weight	123.46 lbs (56 kg)

9. Product Specifications

9.15 86-inch (Economy Type) Model Number: AHA-HD50-86

Panel	
Display	86 inch
Resolution	3840×2160
Brightness	350 cd/m² (Typ.)
Contrast	5000:1 (Typ.)
Glass	4T/ AG+AF / Zero Air Gap Bonding
Touch System	
Touch Sensor	IR (infrared)
Touch Point	Max 40 Point (Windows), Max 32 Point (Android)
	1 Point (Mac, Linux, Chrome OS Single point support)
Response time	< 5.0 ms (1 Based on 1 point)
Accuracy	± 1 mm
OS System	Windows 10 ↑ / Android / Mac / Linux / Chrome
Android System	
Android Version	14.0
CPU	Octa Core (A76 x 4 + A55 x 4)
RAM	16GB (Based on Max Value)
ROM	256GB (Based on Max Value)
I/O Port	
Front Terminal	USB-B(3.0) x 1, HDMI 2.0 x 1, USB-C x 1, USB-A(3.0) x 3 (USB-C : Only Data Support)
Side Terminal	USB-A(3.0) x 1(Only Android), USB-A(3.0) x 1, USB-A(2.0) x 1, DP(1.2) x 1, HDMI(2.0) x 2, USB-B(3.0) x 1(For Touch), USB-C(DP Alt Mode) x 1
Rear Terminal	VGA In x 1, VGA Audio(3.5mm) In x1, HDMI(2.0) OUT x 1, S/PDIF x 1, LINE OUT(3.5mm) x 1, MIC IN(3.5mm) x 1
Communication Port	LAN IN/OUT(1G) x 2, RS232C(D-SUB9) x 1
Power	
Speaker	20W x 2
Power Consumption	≤ 440W
Standby Power	≤ 0.5W
Etc	
Dimensions	76.93 in × 45.63 in × 3.46 in (± 0.20 in) / 1954 x 1159 x 88 mm (± 5mm)
VESA Mount	31.50 in × 23.62 in / 800 x 600 (mm), M8 Screw
Product Weight	123.46 lbs (56 kg)
Package Weight	154.32 lbs (70 kg)

10. Troubleshooting

10.1 Product self-diagnosis

- You can check if the product is working properly using the self-diagnosis function.
 - If a blank screen is displayed and the Power LED blinks even if the product and the PC are properly connected, perform the self-diagnosis function according to the procedures below.
- ① Turn the product and the PC off.
 - ② Remove the cable from the product.
 - ③ Turn the product on.
 - ④ If the product is working properly, the <Check Signal Cable> message appears.
In this case, if a blank screen is displayed again, make sure that there is no problem with the PC and the connector.

10.2 Before requesting service

- Please check the following before customer service.

10.2.1 Problems related to screen

- ① Screen is blank and power indicator is off.
 - Ensure that the power cord is firmly connected and the monitor is on.
- ② <Video media error format unsupported> Message.
 - Check the maximum resolution and the frequency of the video adapter.
 - Compare these values with the data in the Standard Signal Mode Table.
- ③ Picture rolls vertically.
 - Check if the signal cable is securely connected. Connect it again securely.
- ④ Image is not clear. Picture is blurred.
 - Run frequency <Coarse> and <Fine> tuning.
 - Turn on again after removing all accessories (video extension cable, etc.)
 - Set resolution and frequency to the recommended ranges.
- ⑤ The image is too light or too dark.
 - Adjust the <Brightness> and <Contrast>.

10.2.2 Problems related to audio

- ① No sound
 - Ensure that the audio cable is firmly connected to both the audio-in port on your monitor and the audio-out port on your sound card.
- ② The sound level is too low.
 - Check the volume level. If the volume is still too low after turning the control to its maximum. Check the volume control on the computer sound card or software program.

10.2.3 Problems related to remote controller

- ① The remote controller buttons do not respond.
 - Check the battery polarities (+/-).
 - Check if the batteries have been exhausted.
 - Check if the power is blackout.
 - Check if the power cord is securely connected.
 - Check if a special fluorescent or neon lamp is on in the vicinity.

11. Customer support guide

11.1 Before requesting customer support

- ① If the product is not operating normally, refer to the diagnostic trouble listed in the front.

11.2 Warranty

- Our warranty period is one year.
- Even within the warranty period, if there is a mistake in use, shipping and after-sales fees will be charged.

11.3 Customer Support Contact

- Hitrons Solutions Inc.
- 1-866-760-3003 (9:00am - 5:00pm EST)
- info@hitronsinc.com