SAMSUNG Interactive Display

User Manual

WA65C*, WA75C

The color and the appearance may differ depending on the product, and the content in the manual is subject to change without prior notice to improve the performance. Recommended hours of use per day of this product is under 16 hours. If the product is used for longer than 16 hours a day, the warranty may be void.

Contents

I.   Introduction

SAMSUNG Interactive Display that provides an engaging educational experience for the classroom of the future. As an Android OS-based product, it offers a familiar and intuitive user experience for teachers and students. Teachers can engage students and boost learning thanks to the display's excellent compatibility with Android devices and intelligent apps that can be added to the custom home screen bar for convenience. Content can be shared back and forth between the large display and individual Android devices for an interactive lesson that ensures every student is included.

1. Product Information

RS232C

LAN

SS⊷
SS⊷

TOUCH 1

HDMI 1

HDMI 2

HDMI

SERVICE

Speaker

HDMI 3   TOUCH   SS⊷   SS⊷

Power   Indicator   Light sensor

Part	Description
Speaker	Speaker output (12W x 2)
◁▭▭▭▯	The pen is magnetic. Keep it by attaching to the marked location.
Power button & indicator	Press the button to turn on the product and press and hold the button to turn off the product. ✎ The power indicator is off when the product is on. ✎ The power indicator is on when the product is off. In writing mode, shortly press the Power button to switch to the screen saver mode. In case the PIP screen is in Full Screen mode, press the Power button to display the adjustment menu. Press again to hide.
Light sensor	The light sensor is used to detect ambient light for the Brightness Optimization function. • You can turn on or off the Brightness Optimization function at [**Menu**]→[**Settings**]→[**System**]→[**Advanced Settings**]→[**Brightness Optimization**]
ⓒ⚡	You can connect a device using a USB-C cable. • USB-C connection allows video output and touch-based control of the device. ✎ You must use a USB-C cable that supports video transmission. Use a cable that supports DP ALT Mode (Video transmission). ✎ Use a USB-C cable that is 1 m or shorter in length. ✎ Charging is also supported up to 65 W. Charging with USB-C cable is only available when the product is on.
HDMI ⇄ 3	An HDMI port for displaying input from an external source.
TOUCH ↱	Allows touch-based control of the PC screen connected through the HDMI port. Use the supplied USB cable to connect between the TOUCH port on the rear of the product and the PC.
SS⇌	Connect to a USB memory device.

	✎ The USB ports on the product accept a maximum constant current of 1.0 A. If the maximum value is exceeded, USB ports may not work.
SS⇌	Connect to a USB memory device. ✎ The USB ports on the product accept a maximum constant current of 1.0 A. If the maximum value is exceeded, USB ports may not work.
RS232C	Serial interface, used for mutual transfer of data between devices.
LAN	Connects to a network using a LAN cable. (1000 Mbps) Below port: Connect RJ45 output terminal Above port: Connect RJ45 input terminal
SS⇌	Connect to a USB memory device. ✎ The USB ports on the product accept a maximum constant current of 1.0 A. If the maximum value is exceeded, USB ports may not work.
SS⇌	Connect to a USB memory device. ✎ The USB ports on the product accept a maximum constant current of 1.0 A. If the maximum value is exceeded, USB ports may not work.
TOUCH(↗)1	Allows touch-based control of the PC screen connected through the HDMI port. Use the supplied USB cable to connect between the TOUCH port on the rear of the product and the PC.
HDMI(↩)1	Connects to a source device using a HDMI cable.
HDMI(↩)2	Connects to a source device using a HDMI cable.
HDMI↗	Connects to a sink device using a HDMI cable.
SERVICE	Used for updating OS Firmware
◎↗	Carry multichannel sound via optical signals.
◀→	Audio output to the external speaker.
◀←	Microphone audio input.
PC	VGA input port.

2. Product Installation

OPS

Wi-Fi Module

Part	Description
OPS Slot	It provides an OPS slot to allow a customer to mount a device for additional computing (windows, android, etc.) if desired. OPS module is a separate sale. ⚠ Be sure that the device must be powered off before you plug-in OPS module ✎ OPS stands for Open Pluggable Specification. ✎ OPS cover needs to be removed before installing. ✎ OPS power supply: 16V/4.5 A
Wi-Fi Slot&Module (SI07B)	The Wi-Fi module only works when it is properly inserted into the designated slot in the product. Step ①: Remove Wi-Fi slot's cover. Step ②: Fully insert the Wi-Fi module into the slot. ✎ Warning: The device must be powered off while installing.

3. Wall mount kit specifications (VESA)

Samsung wall mount kits contain a detailed installation manual and all parts necessary for assembly are provided.

🖉 Do not use screws that are longer than the standard length or do not comply with the VESA standard screw specifications.

🖉 Screws that are too long may cause damage to the inside of the product. For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on the wall mount specifications.

🖉 Do not fasten the screws too firmly. This may damage the product or cause the product to fall, leading to personal injury.

🖉 Samsung is not liable for these kinds of accidents. Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.

🖉 Always have at least two people mount the product on a wall. Standard dimensions for wall mount kits are shown in the table below.
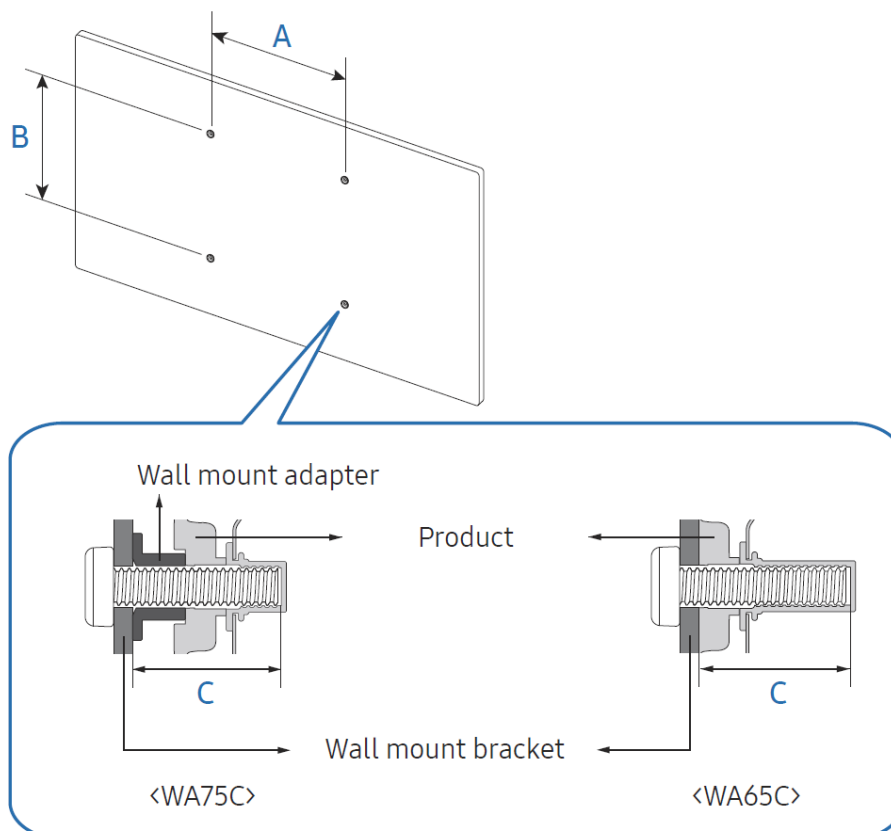
Model	VESA screw hole specs (AxB) in millimeters	C (mm)	Standard screw	Qty.
WA65C	600 x 400	28.3 - 30.3	M8	4
WA75C	800 x 400	28.3 - 30.3		

⚠ Do not install your Wall Mount Kit while your product is turned on. It may result in personal injury due to electric shock.

⚠ Install your wall mount on a solid wall perpendicular to the floor. To install the product on the other wall area, contact the nearest agency. If you install the product on a slanted wall, it may fall and result in severe personal injury.

4. Remote Control

✎ If there is other display device used in the same space as the remote control of this product, the different display device may be unintentionally controlled.

✎ Buttons that are not described in the image below are not supported by the product.

✎ The remote control button function may vary depending on the product.

Label (left)		Label (right)
Power On/Off		Mute
Same as [Windows] button		[Alt+F4] to terminate Window
Same as [Space bar]		[Alt+Tab] to manage
		[Numeric] key
Displaying Channel		
Input Source		[Menu] key
[Home] key for Android		
[Touch Lock] & Lock Power		[Freeze] key
Lock Power button		[Touch Lock] key
Panel On/Off		Back space
Up/Down/Left/Right		Enter key
Open [Note] app		[Back] key
Page Up/Down		
		[Volume] key
Windows function key		

5. Key S/W Features

Name	Icon	Description
Note		Basic whiteboard application with 20-points writing, dual pen and variety of tools - Export/Import files from local storage, external storage device (e.g. USB memory driver) and cloud storage services. - Handwriting recognition feature transforms handwriting to texts of designed fonts. When converted, texts can be utilize for search through embedded web browser. - Useful Tools like Rulers / Shapes / Sticky Notes are available.
Palette		Drawing application with many art various art tools.
Finder		Able to view files in local storage / USB / personal cloud
Browser		Web browser based on chromium web engine ✏ Currently, Chromium version 110 and subject to update when new version is available.
Screen Share		Bi-direction Screen Share app to (1) to display up to 9 devices' screen on the screen or (2) to broadcast its screen to connected devices. ✏ Apps available for Windows, Android, MacOS, iOS, and Chrome OS.
Visualizer		With webcam connected, Visualizer can be used to capture documents or objects to show on large display.
WPS Office		Document viewer supporting various document types (PPT,Doc,PDF, etc).
Settings		Device Setting Menu
Menu		Able to switch between input sources, including PC, Android, HDMI, VGA
Timer/ Stopwatch		Basic Timer & Stopwatch

Calculator		Calculator application
Airclass		Interactive application between the display and connected devices for voting, hand raising, student selection, and messaging.
Spotlight		Spotlight feature to highlight specific area of the screen.
Record		Screen recorder to record, save, and share activity on the screen.
Mark		Mark – Annotate on top of the captured screen
Crop		Crop – insert captured screen to whiteboard
Freeze		Freeze – Freezing screen and able to zoom in/out.
Screenlock		Able to quickly lock the screen. To unlock, need to enter the password which is set through setting menu
Guided		Provides touch lock / class mode. If class mode is set, it prohibits exiting the app

II. Android OS and Software User Guide

1. Getting Started
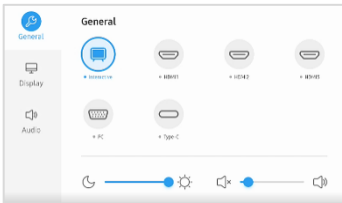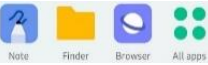
When device is powered on for the first time, basic settings including Language, Region, Network, Date & Time, Device Name are required. Users also need to agree on Privacy & Terms in order to use the device.
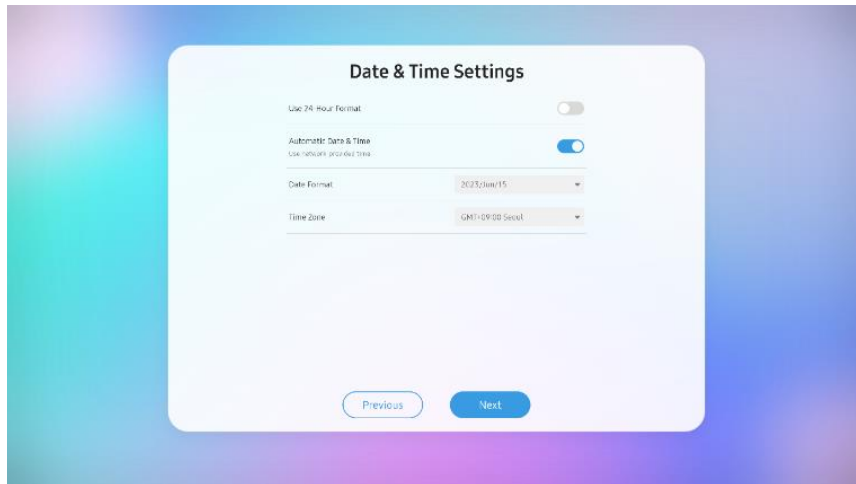
2. Home Screen and Widget

This is the Home screen that appears when the display is initiated, which provides access to the features and settings of the display.

Item	Description		
①Status Bar	Displays the status of the device as shown below.		
	⇄ Input Source	Access to source settings to change input source, display and audio adjustments.	
	Brightness	Adjust system display brightness levels.	
	Volume	Adjust system volume levels.	
	USB	Direct access to the USB memory in the file manager.	
	Hotspot	Direct access to hotspot settings page	
	Lan	Direct access to wired network settings page	
	Wifi	Direct access to wireless network settings page	
② Widgets	It provides easy access to major apps, websites, and cloud storage from the home screen.		
	App Center	Provides access to basic applications such as [Note], [Screen share], and [Finder].	
	Browser	Bookmarked websites are listed for easy access.	
	Cloud Drive	By linking a personal cloud drive (Google Drive, One Drive) account, stored data can be easily accessed.	
	One Key Operation	Able to clean account linkage, browser connection history, etc. at once when device use is terminated.	
③④System Bar	Provides operation for running functions such as [Home], [Back], [Process], and access to Apps and various tools.		
	Navigation Bar	[**Back**]: Return to the previous interface [**Home**] : Go to Home Screen [**Process**] : Show all running apps in background	
	Application Center	Provides access to all available app on the display.	

		Provides access to all tools available.
	Tools	

2.1 Widgets

2.1.1 App center Widget

It provides basic application execution window widgets so that [**Note**], [**Screen share**], and [**Finder**] apps that are mainly used can be easily accessed from Home Screen.

.
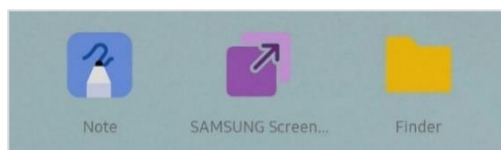
2.1.2 Browser Widget

Provides a browser widget that allows you to easily enter a custom website bookmark from a home screen. A bookmark may be set by clicking 🔲 icon while browsing the website.
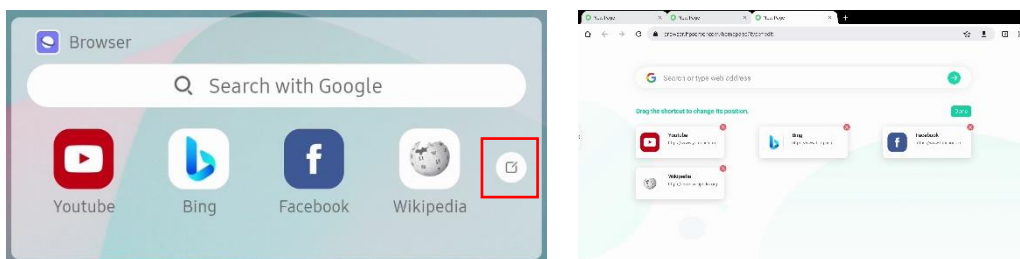
🖊 Up to 4 of Bookmark URLs in the Browser widget may be displayed and arranged according to the order of Bookmark URLs added in Bookmark editing mode.

2.1.3 Cloud Drive

It is a widget that allows easy entry of stored data by linking a personal cloud drive (Google Drive, One Drive) account.
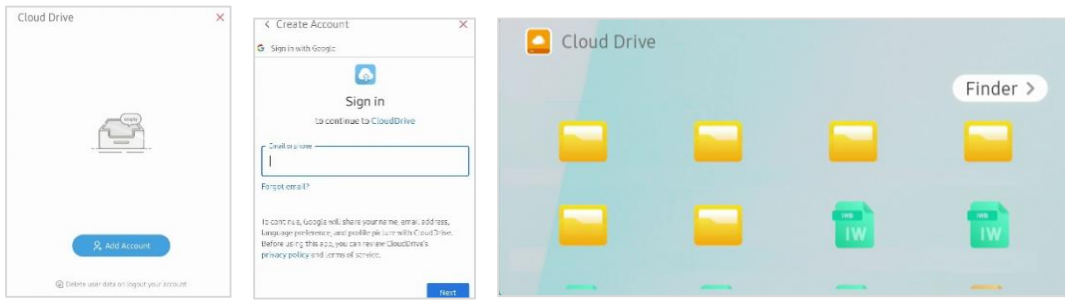
2.1.4 One Key Operation Widget

It automatically deletes program access records and account linkage records when the device is terminated, or provides a function that makes it easy to change the source to OPS and terminate the device in the form of a home screen widget.

🖊 The default settings are hidden on the home screen.

Item	Description
Privacy Clear	Delete program access history, account linkage history, etc.
Switch PC	Change source to OPS device
Shutdown	Device Power off

2.2 System bar

It provides operation for running functions such as [**Home**], [**Back**], [**Process**], etc., and access to Apps and various tools. Click the button on the left or right side of the Home Screen or scroll up the bottom to retrieve it.
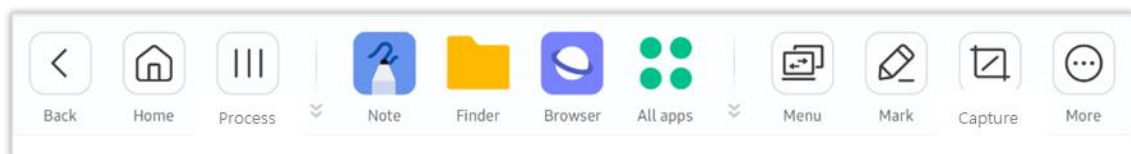
2.2.1 Navigation buttons

Through the [**Home**], [**Back**] button, you can move to the Home Screen or return to the previous screen. When clicking [**Process**], it provides process management fu

nctions such as running app list, movement, and termination, and multi-app placement functions.
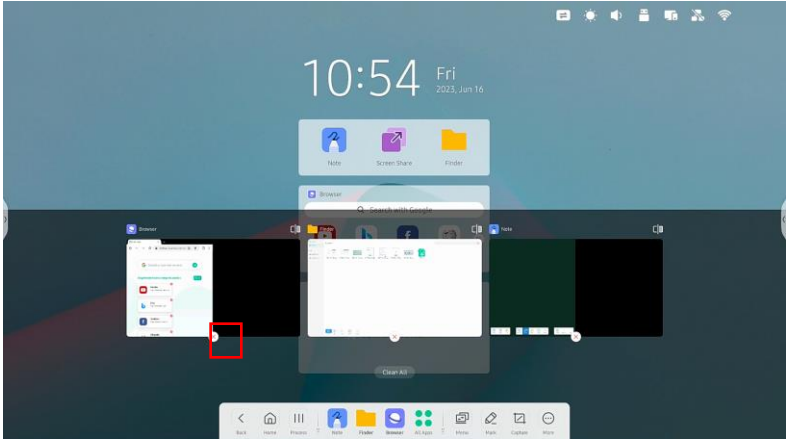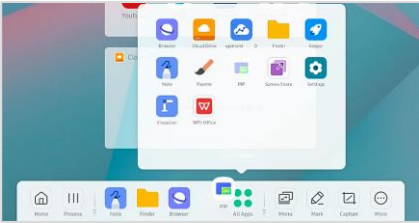
When you click ⊂|⊃ icon in the Process window, you can place the dual app screen as shown.
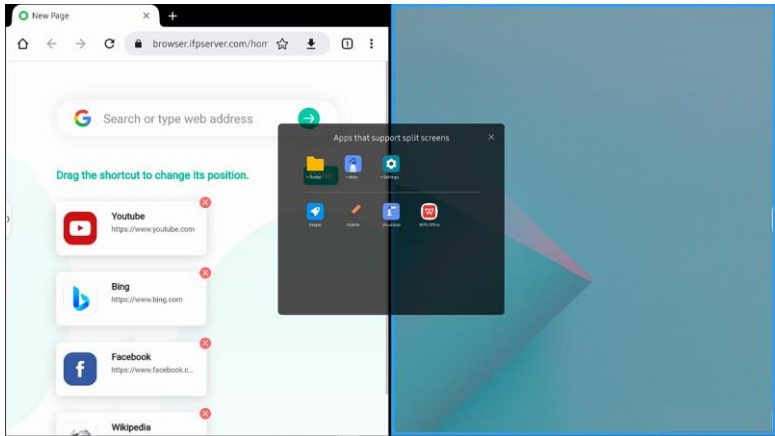
2.2.2 Apps buttons

Provides execution and management functions for the entire app list.

Item	Description
① Default Shortcut	Note, Finder, Browsers are displayed as default
② All apps	By clicking all apps, users can see all the installed applications

	Default Apps included: [**Browser**],[**Cloud Drive**],[**Finder**], [**Note**], [**Keeper**[,[**Palette**],[**PIP**],[**Settings**[,[**Visualizer**],[**WPS Office**], etc. 🖉 Apps additionally installed by users are also displayed as icons here and can be opened.
③ Customizing Apps icon	Through the steps below, frequently used apps can be placed in the system bar. Step1: Open [**All apps**], press and hold the required app icon. Step2: Drag and place the App shortcut icon to the desired location 🖉 Up to 3 app shortcuts can be placed in the system bar.

🖉 Apps running in the background are marked by the name of the app in Bold.

2.2.3 Useful tools

For the convenience of using the product, various and useful tools can be provided, and shortcut icons can be placed in the system bar for easy accessibility.

Item	Description
① Default Shortcut	Menu, Mark, Capture are displayed as default
② All apps	By clicking [More] , users can see all the tools provided.
③ Replace Shortcut	The frequently used tool can be placed in the system bar through the procedure below. Step 1: Long press any tool icon to enter into editing state Step 2: Click to remove the display in System bar Step 3: Click to add the display in System bar 🖉 Up to 4 tools can be placed.

3. Default Apps

Interactive Display provides a variety of Android basic apps, and in addition, users can install their own apps themselves. The default provided apps are: [**Note**], [**Palette**], [**Visualizer**], [**Finder**], [**Browser**], [**Settings**], [**Cloud Drive**], [**WPS Office**], [**Photo**], [**Music**], [**Video**], [**Keeper**], [**PIP**] by default.

3.1 Note

Basic whiteboard application with 20-points writing, dual pen recognition, and access to various tools.
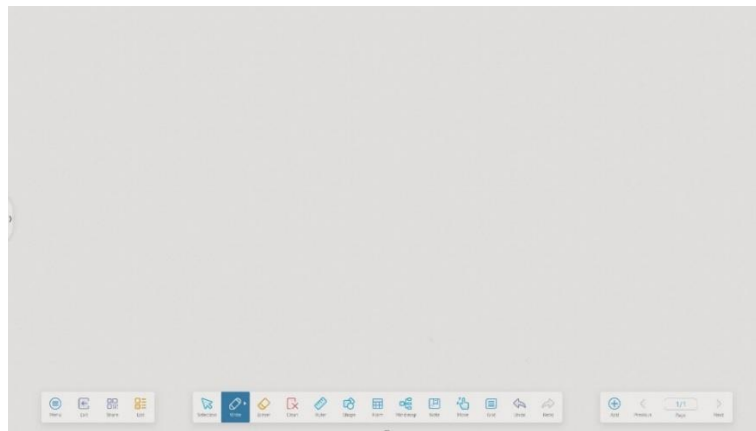
Button		Description
Menu	New	Create new blank Note file
	Open	Open the saved Note file
	Save	Save the current Note file

	Save as	Save the current Note into other formats
	Import	Import resources (Support format : IMG, PDF, SVG, IWB
	Export	Export the current Note to other format such as Imaage, PDF, SVG, IWB format.
	Cloud storage	Upload the current note to the Personal Cloud storage
	Theme	Set the Note background style.
	Send Email	Send the current Note via email
	Settings	Able to change settings of below criteria in the note application ✎ Erase mode: Choose the eraser interface between palm eraser or selecting certain range to be erased. ✎ Multi-finger writing: Mult-touch writing is allowed. ✎ Automatic brightness: Automatically adjust the brightness when writing.
Exit		Close the application.
Share		Share the annotation file in image format via QR code.
List		Provides thumbnails of note files saved, able import the file directly from list.
Selection		By selecting certain area of contents, users can change the color / flip the image or even recognize the text and provide smart features like changing fonts or searching it on the browser. ※ To use handwriting recognition, you must download it from Menu > settings inside the Note application.
Write		Able to write on the canvas and adjust the pen type, thickness, and color.
Eraser		Erase what's written on the canvas and adjust the size of the eraser.
Clean		Clear everything on the canvas.
Ruler		Provide multiple types of rulers into the canvas.
Shape		Insert variety of 2D / 3D shapes into the canvas

Form	Insert a table into the canvas. The size of the cells will be automatically resized as you write contents inside the table. ※To add or row or column afterwards, click the plus icon at the edge of the table.
Mind map	Insert a mind map into the canvas. Users can freely add / delete / change position of each node
Sticky Note	Insert a sticky note on to canvas. You can use a soft keyboard to enter text into the note. After confirmation, the note will be displayed in the upper right corner of the canvas.
Move	Using two fingers, users can enlarge or downscale the canvas, or move the position of canvas
Grid	Supports creating grids with the handwriting function
Undo	Cancel the current work and return to the previous state.
Redo	Redo canceled work
Add	Add a new page on the canvas
Previous	Go to the previous page.
Page	Click to display all canvas pages to remove unwanted pages.
Next	Go to the next page.

3.1.1 Pen

Note supports dual-pen writing, and provides a variety of colors and multiple pen styles, allowing users to write with different colors or pen styles at the same time.
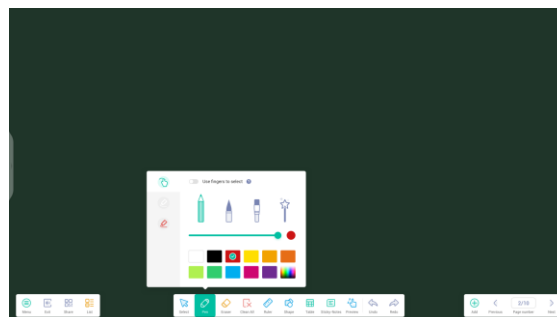
3.1.2 Shape

Note has many built-in shapes, including two-dimensional plane shapes and three-dimensional geometric shapes, which are convenient for teachers to quickly show the shapes to students.
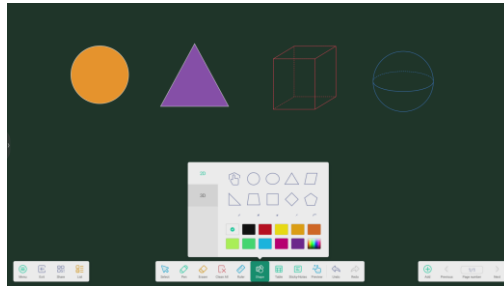
3.1.3 Ruler

Ruler tool can be used to measure or drawing lines, circles, or shapes without use of physical ruler.
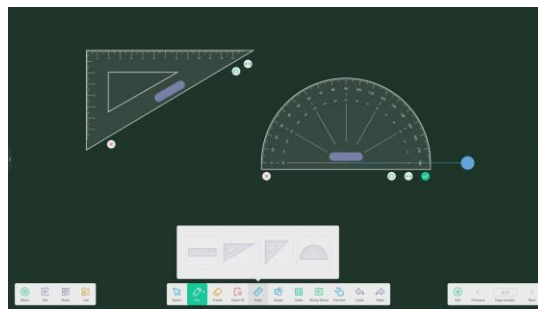
3.1.4 Sticky notes

The Sticky Notes tools can be used to pin important information to the canvas; which can also be used as a brainstorming tool.

3.1.5 Table

Note supports creating multiple tables and displaying them simultaneously.
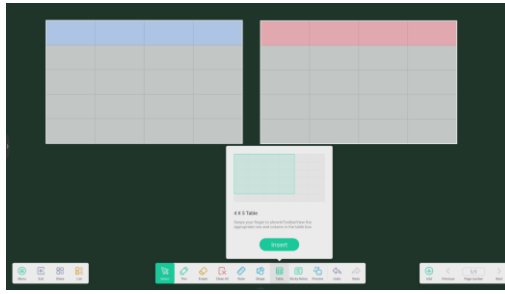
3.1.6 Settings
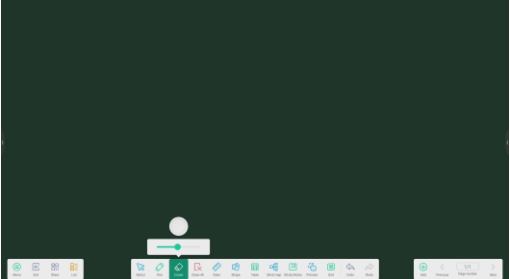
Access to configurable setting menus for the Note application.
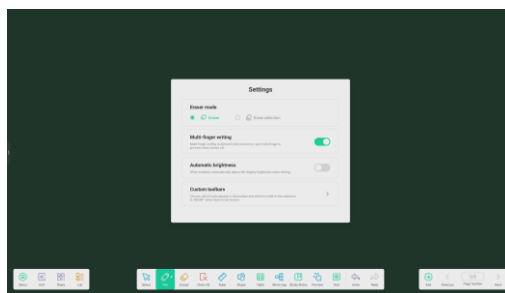
3.1.6.1 Eraser mode

Eraser tool is used to erase any elements on the canvas. Click to adjust the size of the eraser.
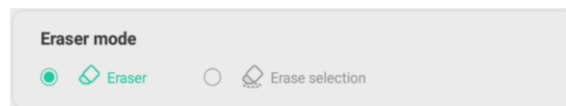
Option	Description
Eraser	After select the "Eraser" option, When you select the Eraser button in toolbar, it will show a window that can adjust size of eraser and you can erase any elements as a eraser.

Erase selection	After select the "Erase selection" option, you can erase elements by select them or erase elements in the selected range.
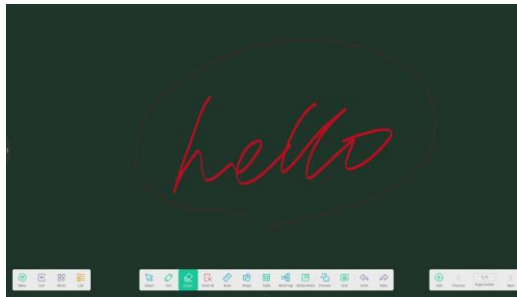
3.1.6.2   Multi-finger writing

When enabled,, you can use mulitple fingers concurrently for drawing. When it is disabled, only one finger will be used for drawing and multi-finger will be used for scaling and dragging.

3.1.6.3   Automatic brightness

It is a function that operates through a built-in ambient light sensor. The brightness of screen will be automatically reduced when start drawing, and it will return to normal gradually after stop drawing.

3.1.6.4   Custom toolbar

When Note is full screen, you can select which tools appear in the toolbar and which to hide in the submenu in [**MORE**].
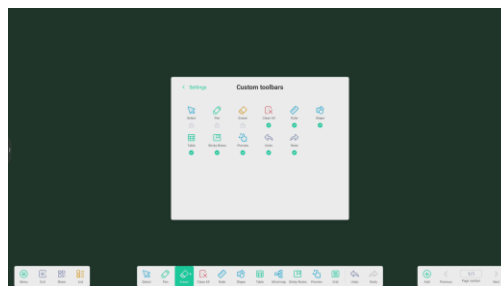
3.1.6.5　Handwriting recognition language

To enable handwritten recognition feature, language module must be downloaded for the Internet. Without downloading the module, the automatic handwriting conversion will be not working.
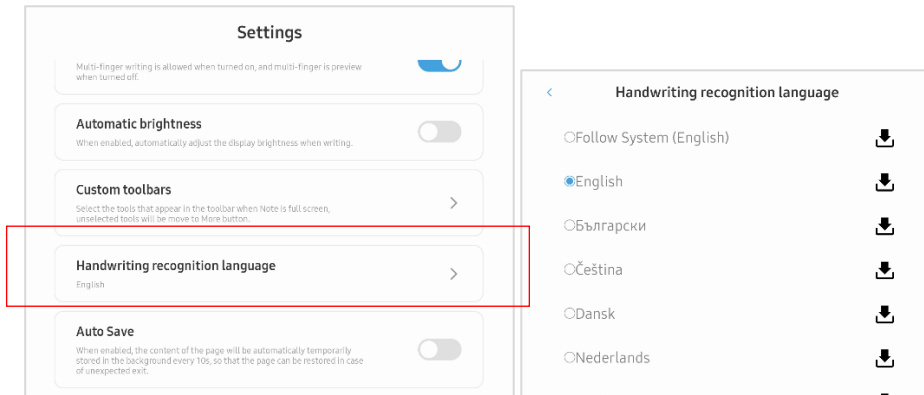
3.1.6.6　Auto Save

If enabled, the content of page will be saved automatically to temporal file in every 10s. It is helpful to restore the content when in case of unexpected exit, but it may add load to the system performance. The default setting is OFF.

3.1.7　The extension function of the pen

After selecting the handwriting, the handwriting can be intelligently recognized as the beautified font, and the handwriting can be searched and mirrored.
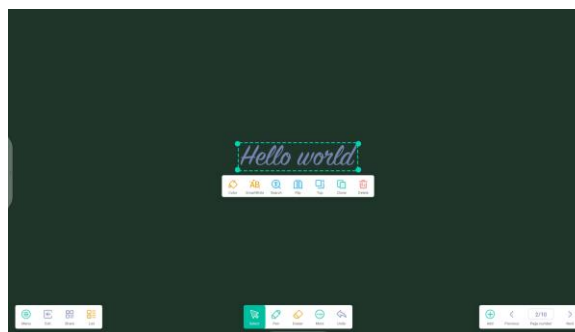
✎ If the automatic recognition language is not installed, you must download the corresponding automatic recognition language from the [**Menu**] → [**Settings**] → [**Handwriting Recognition Language**] window. (Refer to 4.1.6.5)

3.1.8 Image expansion function

After selecting the image, the image can be transformed into vector image, and the image can be mirrored.

3.1.9 Import and Export files in multiple Formats

Note supports importing multiple file formats and exporting files into multiple formats.
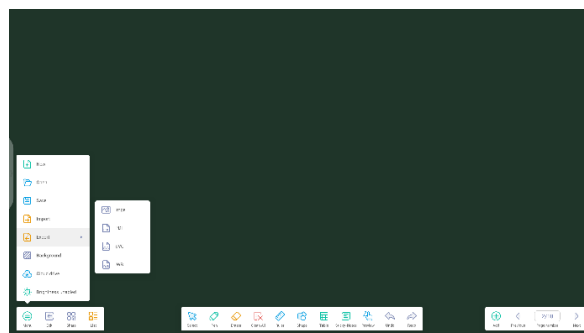
3.1.10 Multiple ways to save files

In addition to saving files to the local system and USB memory, Note also supports sharing files with mobile phones for saving or sending files to emails.
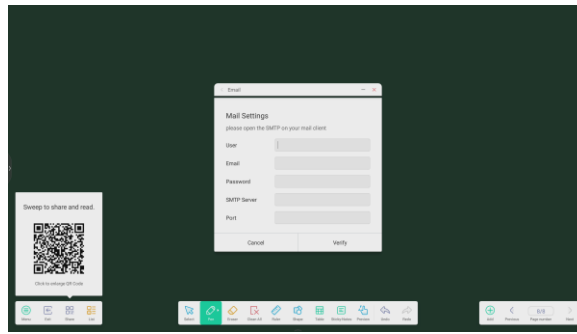
3.2 Palette

Provides drawing board which contains variety of brush tools and color mix feature so that users can freely create art contents.

Button	Descript
Menu	General menu containing save / import / share / exit options.
Save	Save the current drawing files
Import	Import saved contents
Share	Share the drawing file via QR code
Exit	Exit current Palette
Clear	Clean everything on the canvas
Undo	Undo the previous operation
Redo	Recover the canceled operation
Toolbox	Provide variety of pen tools with easy depth control
Palette	Customize color by mixing different colors Step1: Choose 2 different colors in the colorbox

	Step2: Drag the roller on the pallet by clockwise
Colorbox	Provide basic color set which users can directly use or mix on the palette
Sample	Able to copy the color which is on the canvas
Fill	Able to fill the certain area with the selected color

3.3 Visualizer

When connected to webcam, it can capture off-line content on the display.
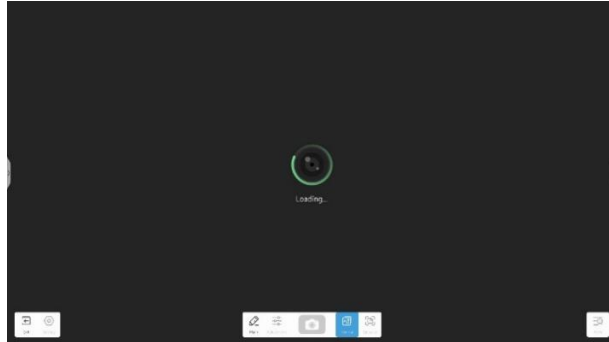
3.4 Screen Share

3.4.1 Key Features

- **Screen Casting**
  - · Up to 9 devices casting at the same time (Client App)
    Miracast can support up to one screens.
  - · Screens could be rearranged or shown in a floating window at the receiver
  - · Support Miracast for Android/Windows devices (Win8.1+)
  - · (Client App) supports Windows/macOS/Android/iOS/Chrome OS
  - · (Client App) support both primary and extended screen casting (Windows/macOS)
  - · (Client App) Support application/window Casting (Windows/macOS)
- **Photo/Video Sharing**
  - · Casting photos/videos from album (iOS/Android)
  - · Corresponding control for picture/video/audio/slides from both mobile and Interactive Display
- **Desktop sync**

- Sync desktop of Interactive Display to 30+ devices
- Touchback control
- **Screen Copy**
  - Copy one Interactive Display screen to others
  - One to multi-screen casting
- **Remote Control**
  - Touchpad control
  - Air-Mouse (Gravity Accelerometer) control
- **Remote Camera**
  - Show camera of mobile device on IFP
- **Device Management**
  - Mobile management – Authorize one mobile device as admin to control away from the Interactive Display
  - Moderator mode – Ask for permission for any incoming request
  - Invite to share – Invite screencast from admin
  - Touchback control – Authorize any device in desk sync mode to control the panel
  - File sharing – Share file to connected devices
  - Disconnect all devices

3.4.2 Screen Share App

Due to security consideration, Miracast support is disabled by default, it could be enabled by sever settings. For Miracast, you need to make the client device is nearby the display device;
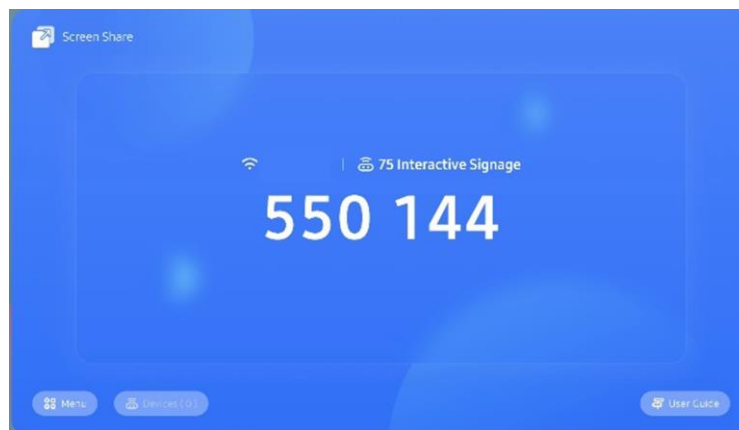
Button	Description

Menu	Settings regarding screen share & Miracast are provided inside this application
Devices	Show list of devices connected to the display, able to share screen, send files or unconnected devices
User guide	Provide user manual for screen share function

- **Android Device**:

  Run "Smart View" in Android smart phone menu or settings, then choose the target device.

- **Windows Device**:

  Press Win+P, click "Connect to a wireless display", choose the target device.
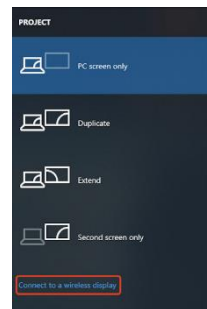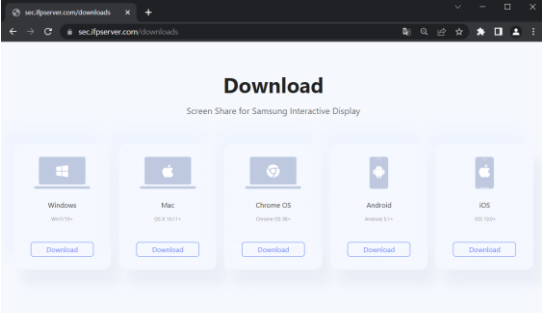
- **Chrome OS/Browser:** Choose "Cast..." from the menu
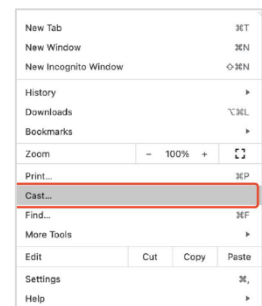
3.4.3 PC/Mobile App

Bidirectional screen share app, which can show up to 9 personal devices on screen, and even broadcast its screen to personal devices.

How to connect	Description
Step 1	Download the "Screen share" app in the store (playstore, applestore, etc) or through https://sec.ifpserver.com/downloads

| Step 2 | When in the same network, by entering the paring code on the personal device, users can share their screen to the display |

※ Screen Sharing iOS app is not available yet. It will be ready soon or later.

3.4.3.1   Connect

A connection code is displayed on the Interactive Display.

Floating window	Main of Screen Share
7H4 G63	75 Interactive Signage 550 144

✎ To show above floating window, you need to set [**Floating windows size**] as either [**Normal**] or [**Small**] in settings of [**Screen Share**] App in Interactive Display. The default value is [**Minimize**] which is for hiding.
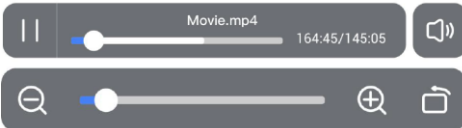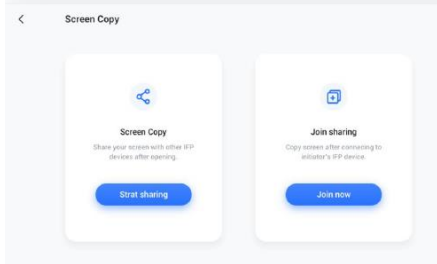
Enter connection code in Screen Share client app.
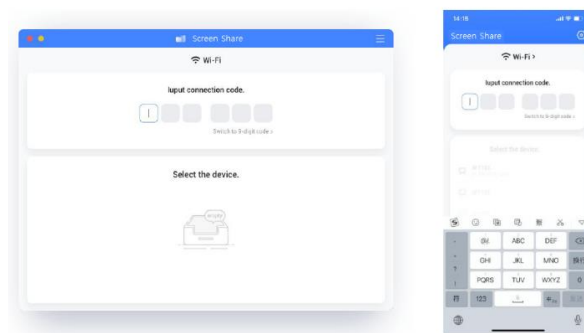
3.4.3.2   Screen Share App

Screen Share main page shows up as following

Button	Description
Start	Settings regarding screen share & miracast is provided inside this application ✎ For Windows/macOS, you can share one application or window instead of entire desktop, or you can choose to share primary or extended screen.
Media/Photo Sharing	Able to share videos or photos from album. Zoom in/out, playback menu are also provided
Camera	Able to share camera view of personal device
Remote Control	Android/iOS mobile phone could be used as a touchpad to control the display
Desktop sync	Broadcasting display screen to personal device, Mobile device could sync the desktop of the server. ✎ Annotation could be made by enter the annotation mode from the icon besides the connection code. ✎ Touchback is disabled by default for safety consideration,

	could be enabled from the device management page.
Screen copy	Make a group of displays, copy one screen to others to make them show the same content. The content may from a sender device or it can be anything on the display.
Remote Control	Android phone or iPhone could be used as a touchpad or air-mouse to control the Interactive Display.
Remote Camera	Android phone or iPhone could share the camera view to the Interactive Display.

✎ Touchback control is only available when casting entire desktop and needs to be authorized from the server-side in device management page.

✎ When multi-screen sharing at the same time, touchback only available on the maximized screen.

✎ Touchback could not be used on mobile systems (Android, iOS) due to system limitation.

✎ For the Interactive Display that supports free-form mode, the sharing content could be shown as a window by sliding down from the top of the screen.

3.4.3.3 Device Management

Device management page shows all connected device status, and do several quick controls.
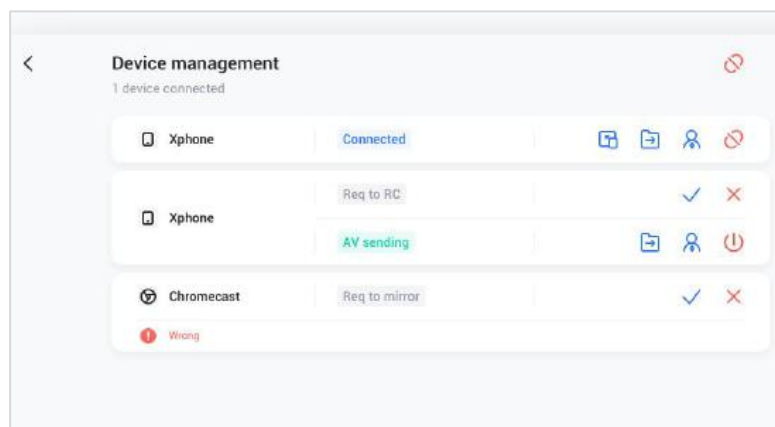
Button	Description

Invite to share	One could invite connected device to casting their desktop from the server.
File sharing	File on the server could be send to any connected device.
Admin authorizes	Set one device to administrator to accept or reject further casting requests.
Stop sharing Disconnect one or all	Stop sharing or disconnect from admin.
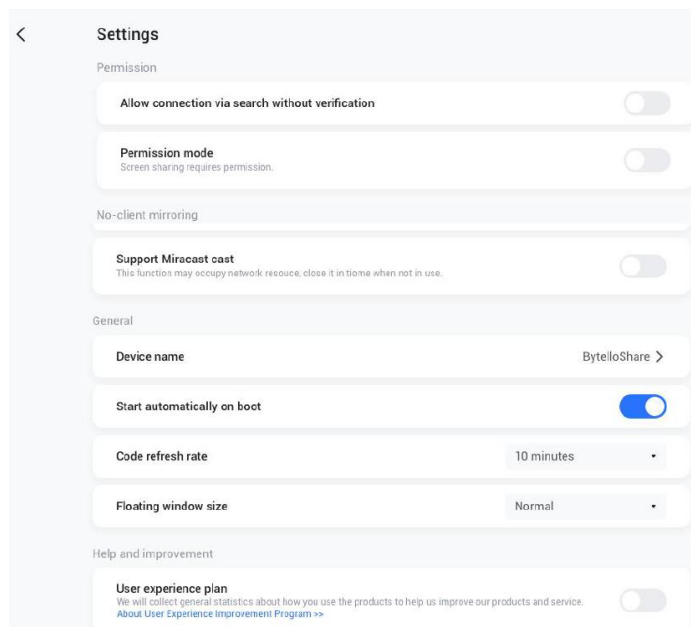
3.4.4 Settings

- **Device name**

  Change the device name of the server, for any clients to identify.

- **Allow this device to be discovered**

  The server can be searched by the sender device.

- **Permission mode**

  When enable "Screen share requires permission" option in settings, any casting request will ask for permission.

- **Support Miracast device**

Make the server discoverable for Miracast supported device.

- **Start automatically on boot**

The server application will run as the system start.

- **Code refresh rate**

The connection code will change every several minutes to prevent user from remembering.

- **Floating windows size**

Normal (connection code with icon), small (only icon), minimize (disabled)

3.5 Finder

Able to browse and execute files in local & USB storage, and even able to connect personal cloud drive
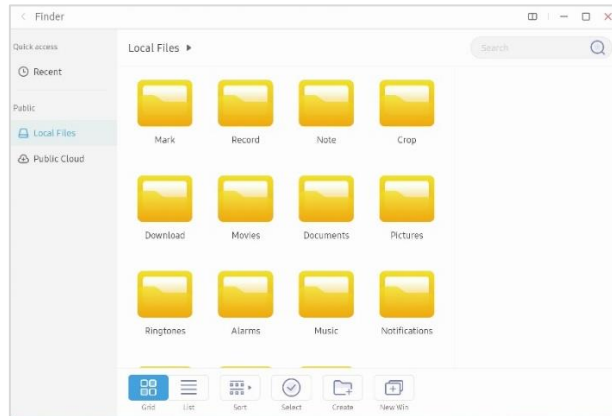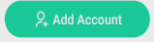
Button	Description
Search	Search by entering name of the file.
Grid	To display the resources in the form of icon.
List	To switch to display the resources in the form of detailed information
Sort	To change the order of resources. Name, type, size, and time is provided as a criteria.
Select	To select resources in order to do the following actions
Copy	Copy the currently selected resource.
Paste	Users can paste the copied/cut resources to the specified location as required.

	Cut	Cut the currently selected resource.
	Delete	Delete the selected resource
Cancel		Click to cancel the resource selection

3.6 Cloud Drive

3.6.1 Add Account

Click [Add Account] to add account, then you can choose the Drive Type.
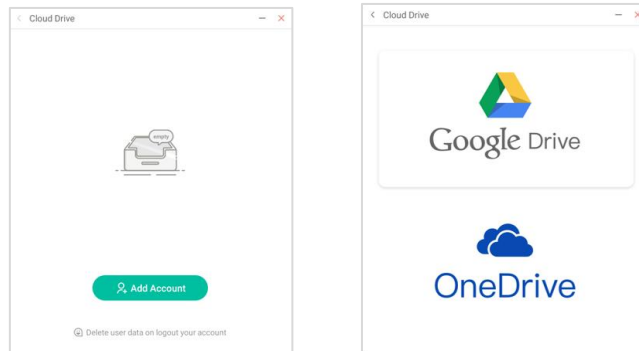
3.6.2 Use Default Account

Click the "Set as default" button to set the default account.
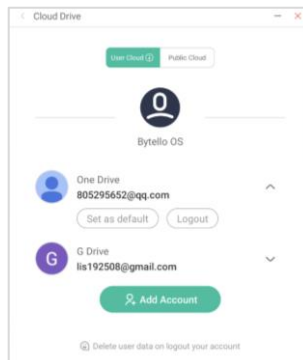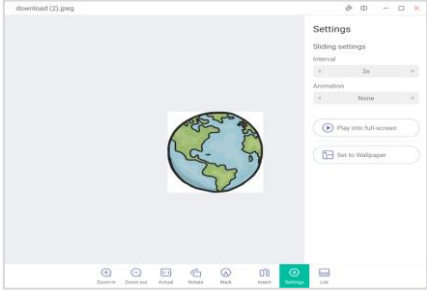
3.6.3 Logout Account

Click the "logout" button to log out of your account, it would delete the cache file of your account by default.

3.7 Photo

Click a picture to open the Photo App.

Item	Description
Zoom in	To zoom in the picture
Zoom out	To zoom out the picture
Actual	To show the picture with original image size
Rotate	To change the picture direction
Mark	To open Mark to draw on top of picture opened.
Insert	To insert the picture to Note
List	To view all pictures
Settings	To open the Settings menu ✏ Click the "Play into full-screen" button to play pictures in full screen by slideshow, you can change the slideshow interval and Animation in the Settings menu ✏ Click the "Set to Wallpaper" button to set system wallpaper

3.8 Music

Click a music file to open the Music App
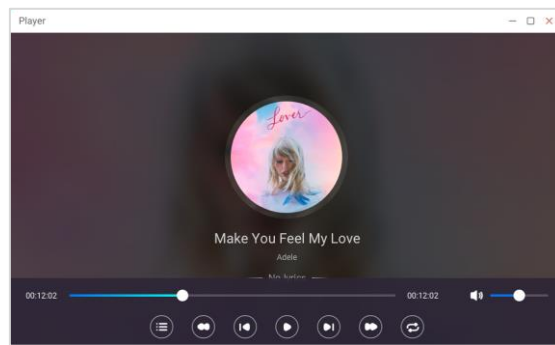
3.9 Video

Click a video file to open the Video App
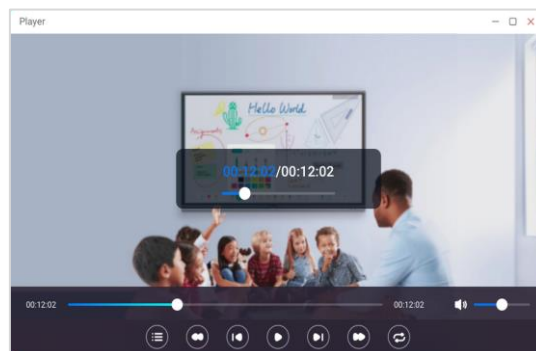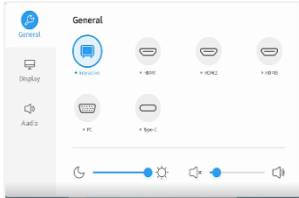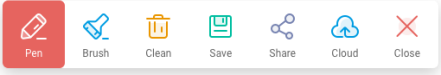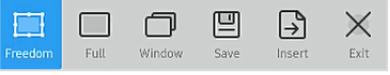
4. More tools
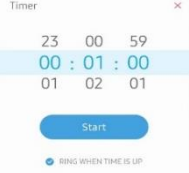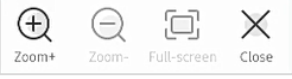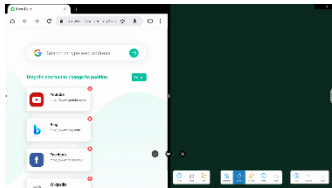
You can see all other tools in the tool list window. Click the [Edit] icon to replace the tool icon on the side bar.
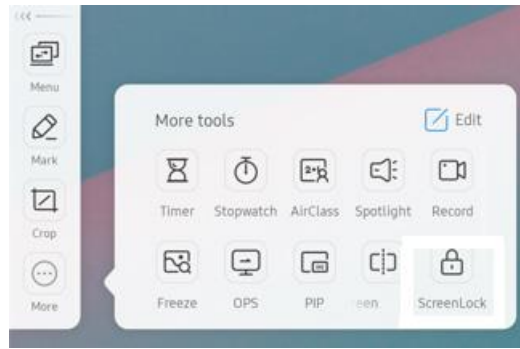
4.1 Tool list

Apps start and manager in System bar, you can find all apps here:

Item	Description
Menu	① Show all input sources, include PC, Android, HDMI, VGA. ② Show more advanced settings, including Audio, Screen, Display, and change the input source.
Mark	Annotation tool, you can use this tool to make annotations on any screen. ① Empowers teachers to write on top of any app, video, website, document, or image. ② Whether using other input sources, or Android, teacher can take notes on top of any onscreen content. ③ Support sharing via QR code and saving to cloud disk.
Capture	To capture Screen and save as image file. ① Teachers can capture screen shots of anything on the screen, including content from apps, websites, and videos. ② Teacher can select Freedom, Full and Window mode. ③ Support to insert whiteboard for editing.

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⏳	Timer	Count down from the specified time interval.	
⏱	Stopwatch	Counts upwards from zero for measuring time	
2+R	AirClass	A tool for collecting and displaying answers to questions. ① Teachers can invite students to join the interactive activities through QR code or IP address. ② It include voter, responder, selector, message and other rich activities.	
🔦	Spotlight	Focus on specific areas of the screen. Teachers can use this function to focus on specific areas of the screen.	
🎥	Record	It will record all screen picture and sound of this set, output mp4 file.	
🔍	Freeze	Freeze and zoom the current content on the screen	
➡	OPS	Shortcut to switch to ops channel	
PIP	PIP	It can also show other source signal even you work on Android.	
⊡	Split-screen	Make full screen into two part, you can choose two apps running in same time and let them run in left and right screen.	

🔒 ScreenLock	Lock the screen to prevent others from using. If there is no lock screen password, you will prompt that you need to set the lock screen password first.	
🛡 Guided	It is a lock function to stop the use of the screen.	
➕ Calculator	A quick calculator tool.	

4.2 Tools Customize

Supports to create 4 commonly used small tools in System-bar. Teachers can add other tools from 'More' to replace.

Step 1: Click ✏ Edit or long press the tools icon into editing state.

Step 2: Click '-' to remove the display in System bar.

Step 3: Click '+' to add the display in System bar.
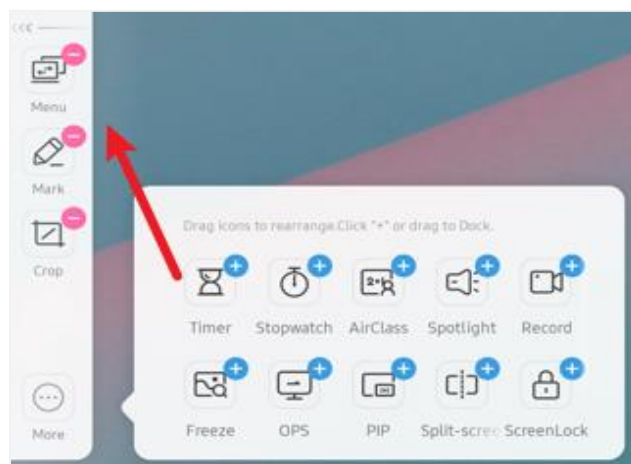
5. System Settings

System settings contain all the related settings used by the system and can be adjusted to suit your preferences and usages.

- ✎ Click on the status bar icon in the upper-right corner of the system home page to access the settings of the corresponding functions.
- ✎ Access to system settings through side bar-all apps [**Settings**] icon

Item	Description
🛜 Wireless & Network	Settings related to network connection.
☆ Personal	Personalization related function setting.
⇄ Input & Output	Setting functions related to voice video input/output.
⬡ Application	View and manage installed apps in the management system.
🖵 System	Set the system related configuration items.
⚇ Administrator	Administrator settings are mainly related to device control.
ⓘ About	Information about this device.

5.1 Wireless & Network

5.1.1 Wi-Fi

Find all available Wi-Fi, select a network connection, or add hidden networks or install Wi-Fi certificates. Click the connected Wi-Fi to see the details.

5.1.2 Ethernet

You can select a manual IP setting or IP address automatically. You can set up a proxy network and is divided into manual and automatic settings.

5.1.3 Hotspot

Setting to Enable/disable and customize Hotspot feature. Other devices can connect to the Interactive Display through connecting to Hotspot through WiFi.

Item	Description
AP Name	Set the hot spot name
Security	Set the hotspot encryption method.
Password	Set the hotspot password.
Frequency	Set the hotspot frequency, optional 2.4GHz/5GHz.
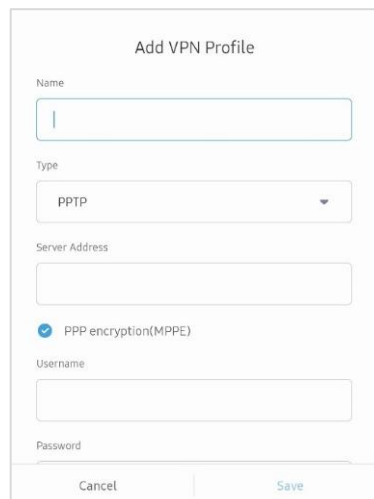
✏ **Hotspot**: a physical location where people can obtain Internet access, typically using Wi-Fi technology, via a wireless local-area network (WLAN) using a router connected to an Internet service provider.

5.1.4 Bluetooth

Connect and manage Bluetooth equipment, and view files received through Bluetooth.

5.1.5 VPN

You can add your VPN connection to the VPN setup, where you can manage all of the VPN configuration and status.

5.1.6 SAMBA Service

Personal devices can be connected to this device through the Samba service for file transmission

5.2 Personal

5.2.1 Wallpaper

Wallpaper Settings support both static and dynamic wallpapers. You can choose one of wallpapers which you like to set to the background of home screen.
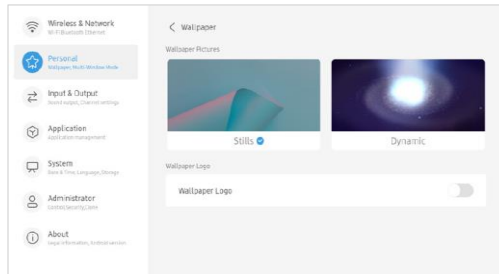
In addition, another image file can be set as a wallpaper in the image viewer.
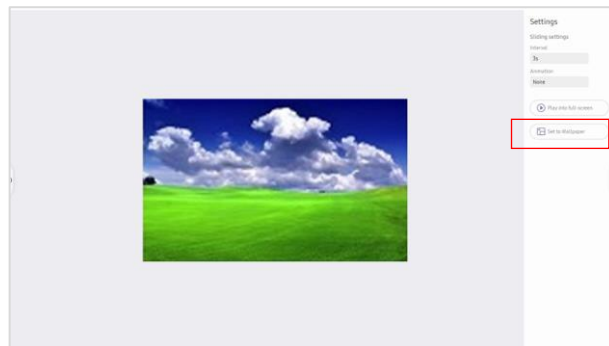
5.2.2 Customize wallpaper logo

It may be set so that a user-specified logo may be displayed on the upper left corner of the desktop.

🖉 Logo file format: Height 60pt, Length ≤ 1800pt, Png type, Size 1MB
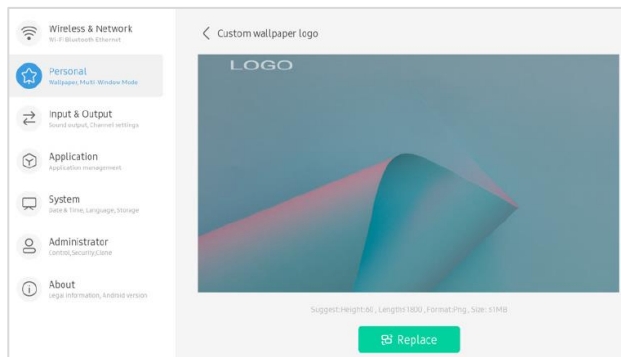
5.2.3 Screen Saver

You can set the screen saver to [**Clock**], [**Colors**], or [**Landscape**] and specify the time to start it. You can also preview the screen saver.
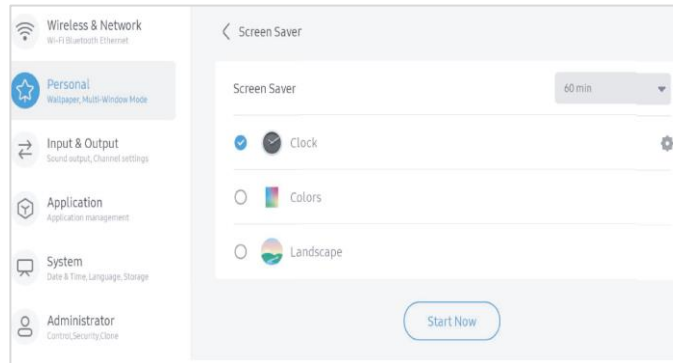
5.2.4 Swipe up options at the bottom

You can use this configuration item to set whether swipe up at the bottom of the screen evokes System bar or Source menu window.

- ✏ Bottom Sidebar
- ✏ Source Menu

5.2.5 Multi-Window Mode

Multi-Window Mode allows you to switch the system's window mode to full-screen mode or multi-window mode to allows you to open multiple apps on the foreground at the same time depending on your preferences. This setting requires the system restart.

✏ If set to Mulit-window mode, multiple windows can operate at the same time, which can further increase system load and consume more energy.
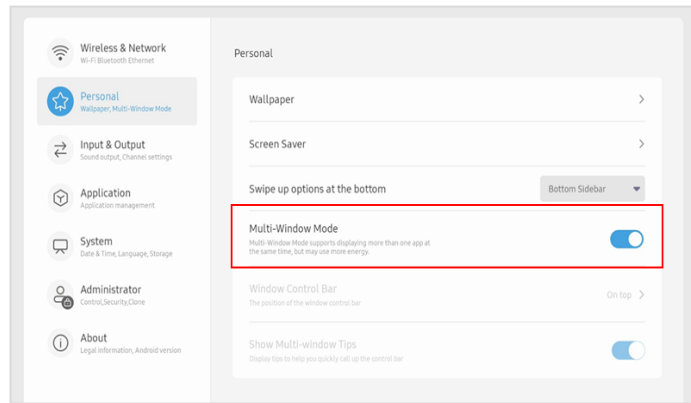
5.2.6 Window Control Bar

You can set Position in the windows on [**Window Control Bar**] to on top, Left side or Right side.

✎ [**Windows Control Bar**] configuration is valid only in Multi-window mode.
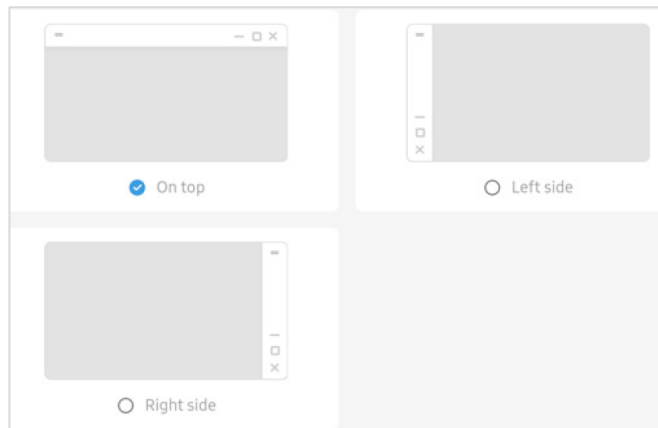
5.2.7 Show Multi-window Tips

If a specific window operates as a full window in Multi-window mode, it provides Tips to guide the window control bar.

5.3   Input & Output

5.3.1 Touch Sound

You can use this configuration to set whether or not to enable touch sounds on your device.

5.3.2 Sound Out Settings

This allows you to switch the sound output source of the device, such as headphone and speaker. It can automatically switch the appropriate sound output source when you connect or unplug the headset.

Item	Description
Speaker	The output is from the speaker of this device.
Lineout	The output is from the device that is connected to the rear AUDIO OUT interface.
Mixed	The output is from mixed sources.

5.3.3 Input Naming Settings

This setting allows you to enable channel aliases, you can customize your channel name and apply it to the OSD menu and channel display.

5.3.4 HDMI OUT Format

A display format output through the HDMI OUT port may be set.

🖉 The supported display format is either 3840×2160_60Hz or 1080P_60Hz.

5.4 Application

Here you can view and manage all the applications installed on your device. By default, third-party apps and desktop apps are displayed. You can control whether the rest of the system is displayed or not. In addition, you can restore the default preferences of all applications here.

Option	Description

Disable	Disable/Enable the app.
Force Stop	Forcing running app to stop.

For each application, we list specific information about the application, including memory usage, permission requests, notifications, etc. You can also uninstall, disable, and stop an application.

5.4.1 App Notification

You can modify App's message notification configuration.

Option	Description
Allow notification dot	While a specific app is running, '·' is attached to the name of the app or the name font is displayed in Bold.

5.4.2 Permission

You can modify the permission request of the application
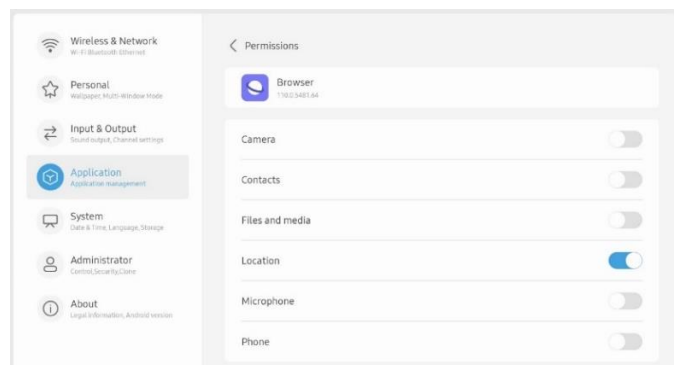
5.4.3 Storage

You can see how the application's storage controls are being used, including user data, caching, and application package size. You can also clear the application's user usage data and the application cache.

5.4.4 Open by default

You can set the app's open prompt or clear the app's default settings.

5.4.5 Memory

You can look at your application's memory usage, including average memory usage, frequency of usage, and maximum usage.

5.5 System

In the system module, you can set and view the system information of the whole machine, set the screen lock password, log in to the mailbox, connect to the remote and update the system.

5.5.1 Date & Time

You can set whether the system uses 24-hour format and whether to automatically obtain network time

Option	Description
Hour Format	Changed to 24 -hour format.
Automatic Date & Time	The switch of the automatic acquisition date and time of the network
Date Format	You can specify the date in one of the following formats: ・○ YYYY/MM/DD ・○ DD/MM/YYYY ・○ MM/DD/YYYY
Time Zone	Specify the time zone. The time zone is the basis for the automatic adjustment of the date and time.

✎   When the use of network time is turned off, the date, time, time format and time zone can be set. When the use of network time is turned on, you can only set the date and time format.

5.5.2 Language & Keyboard

You can configure the system language and keyboard. After setting the language successfully, the language of the whole system will be changed.

Option	Description
Languages	English, French, German, Italian, Polish, Portuguese, Russian, Spanish, Swedish, Greek, Cheskey, Slovak, Hungarian, Finnish, Turkish, South Arabic Language, Hebrew, Chinese (Traditional/Simplified), Japanese, Korean, Romania, Croatia, Lithuania, Serbian Latin, Norway, Denmark, Vietnam, Indonesia, Thailand, Kazakh (Cyrillic), Ukrainian, Bulgarian, Slovenian, Dutch, Latvia, Estonia, Hindi
Virtual Keyboard	·○ Android Keyboard (ASOP) ·○ Google Pinyin Keyboard ·○ Japanese IME ·○ Korean IME
Physical Keyboard	·○ Android Keyboard (ASOP) – English US ·○ Google Pinyin Keyboard - Chinese ·○ Japanese IME - Japanese ·○ Korean IME - Korean

✎ Because it needs to be adapted to the RTL language, setting the RTL language may result in changing the layout of some applications.

✎ In the virtual keyboard, you can view the input methods currently supported by the whole machine. Support Android native input method and Google Pinyin input method. The switch button on the right can be used to control the closing and opening of the input method.

5.5.3 Region

You can specify the region. The system automatically limits the Wi-Fi band based on the restriction according to GDPR requirements.

5.5.4 Storage

The memory module lists the memory areas that exist on the whole machine, including internal storage space and portable storage devices. To free space up, you can clear unnecessary app data in **[Clean Up App Data]** page.

5.5.5 System Update

You can check the current system FW version to check and perform the system FW update through the network. Also you can upgrade the system firmware from USB memory.

Option	Description
Current Version	It shows the current system FW version information.
Check Update	Check the system FW update through the network and perform updates if necessary. ✎ If a new system is released on the update server, the [**Check Update**] button can be used to detect the update and download the new system for update operation. After the download is completed, you will be asked the confirmation whether to proceed the update or not.
USB Update	Update your system FW using a USB disk. ✎ Copy firmware file in USB root folder, plug-in USB port and start upgrading

5.5.6 Eye Protection Mode and Automatic Backlight

Option	Description

Eye Protection Mode	The system shows warm colors on the screen for eye protection.
Automatic Backlight	The system automatically adjusts the screen backlight value based on the ambient brightness for energy saving and eye protection.

5.5.7 Pixel Shift

The pixel shift function is used to refresh the screen display through screen pixel jitter and shift when the device is on but idle for a long time. This prevents screen burn-in. You can specify the pixel shift interval based on your requirements. We recommend that you specify a proper interval that is not too short to avoid affecting your operations.

5.5.8 Lock Screen Password

5.5.8.1 Set Password

You can set the screen lock password, modify the screen lock password and clear the screen lock password. The lock screen password is used to prevent unauthorized operations when the device is idle.

The screen lock password is 4 digits, you need to enter the password and confirm the password to set the screen lock password
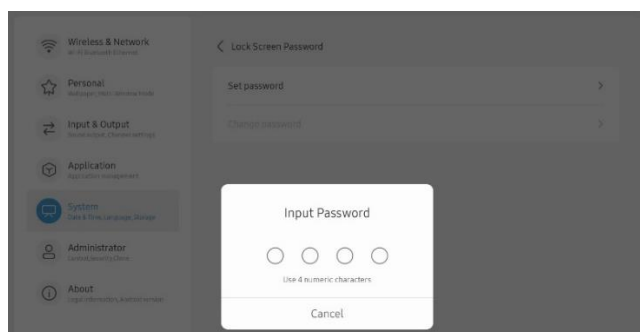
🖉 After setting up the lock screen password, you can tap [ScreenLock] on the sidebar to lock the screen. When the screen lock password is not set, only the operation of setting the screen lock password can be performed.
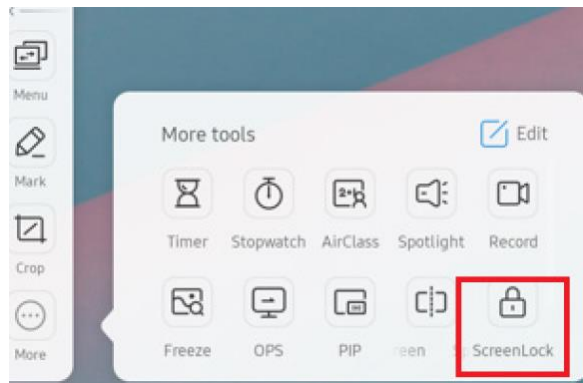
When the screen lock password is set, you can clear the screen lock password and change the screen lock password. To change the screen lock password, you need to enter the original screen lock password first, and you can reset the screen lock password after verification. To clear the screen lock password, you only need to enter the original screen lock password to clear it.

5.5.9 Email

In the mailbox module, users can add their own mailbox accounts, and automatically delete the user's information when logging out of the account.
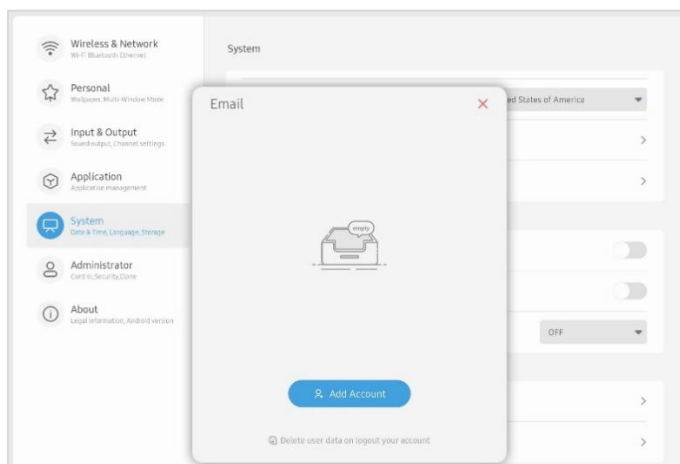
You can enter in the SMTP protocol for the Email account.
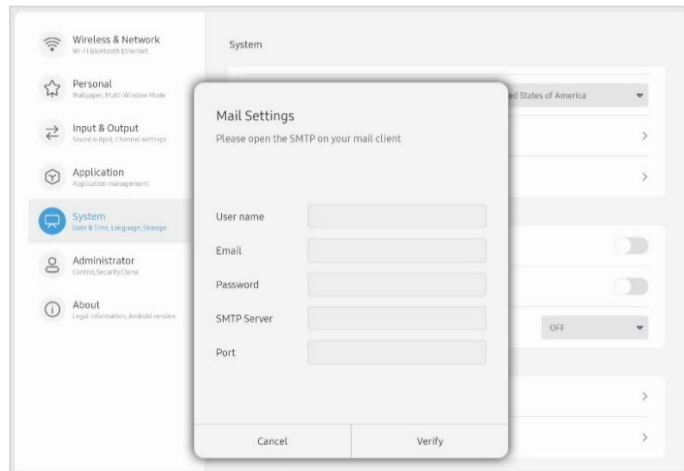
5.5.10 Startup & Shutdown

In the startup and shutdown module, there are the settings of the startup channel and the startup plan. You can set default source when turned on, such as last source before powered off, the Android channel, HDMI1, HDMI2, HDMI3, and VGA channels supported by the whole machine. You can also set whether to enter standby (turn off the backlight) after booting.

Option	Description
Startup Channel	Set the default boot input source, optional Android, or other external input source (HDMI/PC/USB-C). Runs as the default input source set after system boot.
Standby After Startup (Black Screen)	The screen automatically turns black screen when every time the interactive display is started and enters the home screen. ✏ For Android source, the screen is automatically turned display off after startup
Boot Logo and Video	You can customize the boot logo and video to be displayed while booting.
Auto Standby	If no operations are performed within a specified time, the system automatically enters standby mode.
Auto Power off	If no operations are performed within a specified time, the system automatically powers off.

Power Off Reminder	To displays a confirmation message window pop-up when performing system shutdown. ✎ The default setting is enabled.
Add Boot Task	You can specify the date and time for a boot task.
Add Off Task	You can specify the date and time for an off task.
Startup Channel	Set the default boot input source, optional Android, or other external input source (HDMI/PC/USB-C). Runs as the default input source set after system boot.

5.5.11 Boot task setting

You can configure whether to pop up a shutdown reminder for shutdown, which is used to pop up a reminder after the scheduled shutdown reaches the time and perform a countdown. Users can add scheduled startup tasks and scheduled shutdown tasks for the whole machine. For the startup task and shutdown task, the user can also configure whether this task takes effect.
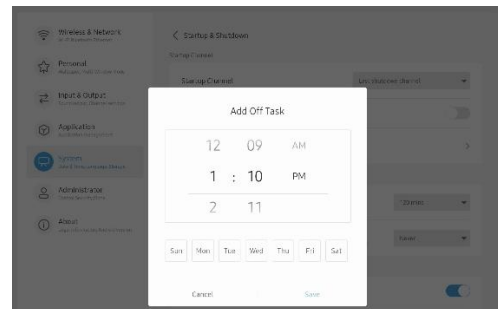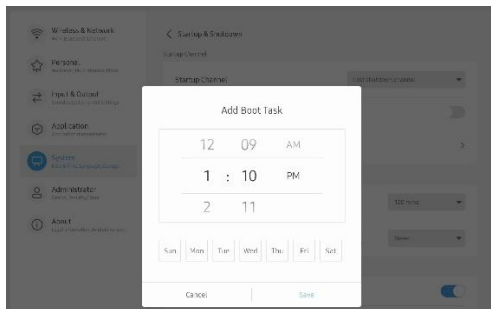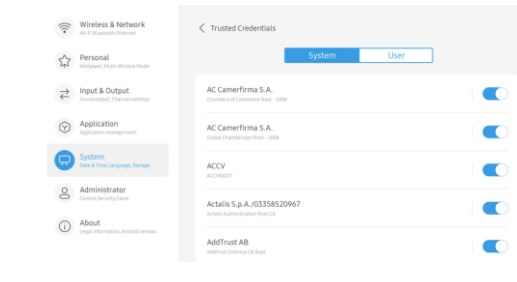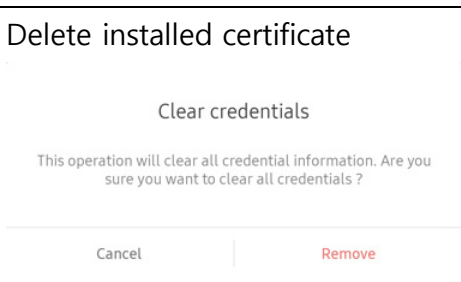
✎ [**Off' task**] setting is same procedure.

5.5.12 Security

You can view the configured credentials in the system, including trusted and user credentials. Connecting to specific encrypted networks, such as TLS or PEAP requires a specific credential for validation.

Item	Description

Trusted Credentials	Certificates of trust
User Credentials	User-installed certificate
Install From Storage	Installation certificate from system storage space
Clear Credentials	Delete installed certificate

5.6 Administrator

The administrator settings are usually used by device administrators to provide device control functions at a higher level. To modify these settings, you need to specify an administrator password. Otherwise, all administrator settings become unavailable. Specifying an administrator password prevents ordinary users from modifying the options on this page without permissions.

🖋 If the administrator password is lost, press '**Input**'>'**Up**'>'**Down**'>'**Back**' on the remote control to clear the administrator password.

5.6.1 Administrator password

In Administrator Settings, it is recommended that all settings on this page be configured by the organization's IT manager only.

Item	Description
Set Administrator password	You need to set the administrator password before modifying the administrator settings.

Clear password	Clear the administrator password that has been set.
Change Password	Modify the set administrator password.

5.6.2 Wake On Lan

When you turn on this switch, you can remotely boot the device by sending a boot command through a wired network while connecting a network cable.

5.6.3 HDMI CEC

All device connected by HDMI can be controlled through the remote controller of the display or connected device, if HDMI-CEC is supported and enabled.

5.6.4 USB Clone

Quick setting synchronization is possible by exporting default settings through USB clones or importing settings from other devices. You can synchronize settings values for system settings or touch menus.
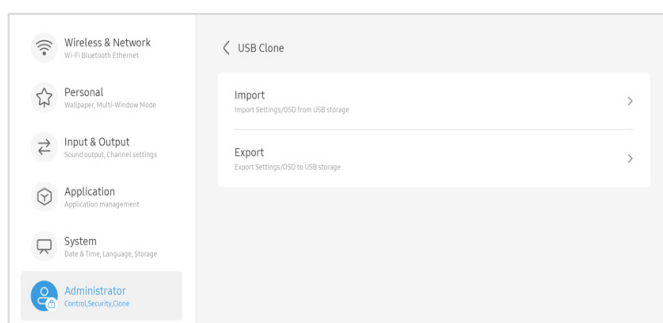
5.6.5 Default Startup Item

If the default startup item is specified, the corresponding App / Webpage / Document can be automatically displayed after startup.

 ✎ The supporting Apps are [**Browser**], [**Note**], and [**Palette**].

5.6.6 Kiosk Mode

Set the default boot display item to a web page or photo. After the system starts up, the system displays specified app or content only, so other apps or contents cannot be operated. If Kiosk mode is started, the specified content only will run and no way to exit or not to be terminated without system off.

✎ The kiosk mode can be terminated by sequentially pressing **'Menu'**→**'Up'** →**'Down'**→**'Left'**→**'Right'** of the remote controller.

✎ When the kiosk mode is enabled, the following window message pops up to show the button combinations to exit the mode.

Enter kiosk mode

Use remote control combination button(MENU UP DOWN LEFT RIGHT)to unlock

| Cancel | Confirm |
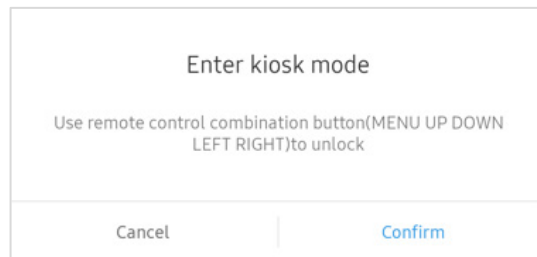
5.6.7 Auto Remove Files

You can set up files to be removed automatically to prevent system storage space from being over occupied. The specified types of file can be set to be removed (no / 1-day / 7-days / 30-days) automatically.
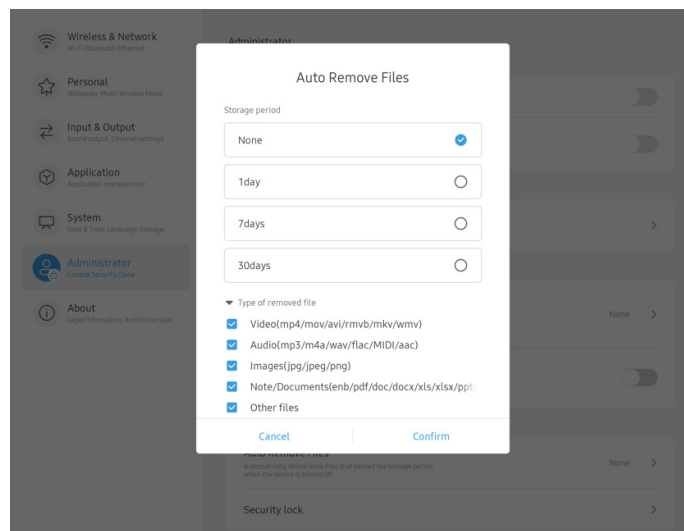
✎ The removable file types are: 'Video', 'Audio', 'Image', 'Document', etc.

5.6.8 Security lock

You can enable/disable system-level function locks.

Item	Description
Settings Lock	Lock the system settings to prohibit to change setting by unauthorized user. The system settings can be unlocked only by using the administrator password.
Network Lock	Lock the network settings to prevent network setting change. The network settings can be unlocked only by using the administrator password.
USB Lock	After USB Lock is enabled, USB-based connections cannot be recognized.
Unknown Source	After this option is enabled, you can install apps from unknown sources. The default is on. ⚠ Your device and personal data could be more vulnerable to attack by unknown apps. It is your responsibility for any damage to your device or data loss that may result by installing unknown apps.

5.7 About

You can view the version information of the device.
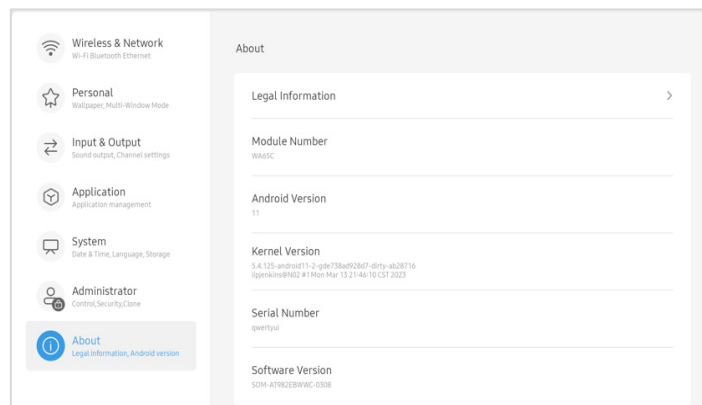
Item	Description
Information	Third-party licenses Open source licenses 2

	System Webview licenses
Model Number	Displays the model number of the device.
Android Version	Displays Android OS version.
Kernel Version	Displays the system kernel version.
Serial Number	Displays the serial number of the device.
Software Version	Displays the software version of the device.

6. References

6.1 F&Q

6.1.1 Input Source Change

You can switch the input source by clicking the Status bar ⇌ at the top

of the home screen or through the System bar 🗗 .
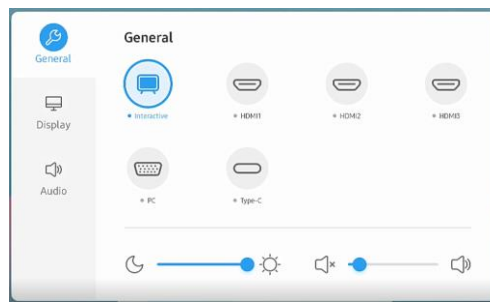
✐ For sound quality settings, provide in the Input Source Switch menu window.

6.1.2 Wi-Fi setting

The Wi-Fi setting menu is activated when the Wi-Fi module (included separately) is connected to the slot at the bottom of the product

6.1.3 F/W Update

The system firmware can be upgraded through [**Settings**]→[**System**]→
[**System Update**] menu

🖉 To add new features and stabilize products, we recommend continuous
Firmware updates.

6.2 Supported Video Codec

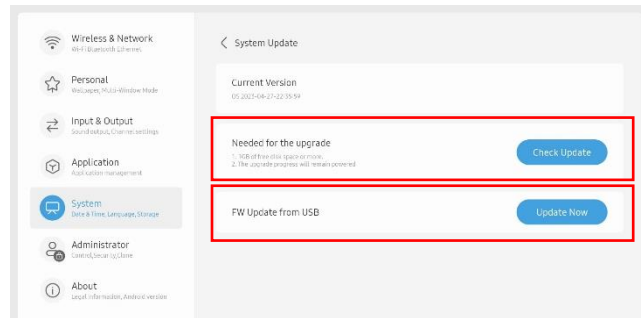| T982 MultiMediaChecklist v1.0			
1.1.1 Movie			
File	**Codec**		
Extensions	**Video**	**Audio**	**Maximum transmit ratio**
.3gp/3GP2	Mpeg1/2	Mpeg1/2 Layer1/2/3, AAC-LC, HE-AAC, PCM	Spec: Max Solution: 1920*1080 60 Fps
	Mpeg-4		Spec: Max Solution: 1920*1080 60 Fps
	H.263		Spec: Max Solution: 352*288 30 Fps
.avi	Mpeg1/2	Mpeg1/2 Layer1/2/3, AAC-LC, PCM	Spec: Max Solution: 1920*1080 60 Fps
	Mpeg-4		Spec: Max Solution: 1920*1080 60 Fps
	H.263		Spec: Max Solution: 352*288 30 Fps
	H.264		Spec: Max Solution: 3840*2160 30 Fps 100Mbps
	Mjpeg		Spec: Max Solution: 1920*1080 30 Fps
.dat	Mpeg1/2	Mpeg1/2 Layer1/2/3	Spec: Max Solution: 1920*1080 60 Fps
.flv、f4v	Mpeg-4	Mpeg1/2 Layer1/2/3, AAC-LC, HE-AAC, PCM	Spec: Max Solution: 1920*1080 60 Fps
	H.263		Spec: Max Solution: 352*288 30 Fps
	H.264		Spec: Max Solution: 3840*2160 30 Fps 100Mbps
.mkv	Mpeg1/2	Mpeg1/2 Layer1/2/3, AAC-LC, PCM	Spec: Max Solution: 1920*1080 60 Fps
	Mpeg-4		Spec: Max Solution: 1920*1080 60 Fps
	H.264		Spec: Max Solution: 3840*2160 30 Fps 100Mbps
	vp8		Spec: Max Solution: 1920*1080 30 Fps
	vp9		Spec: Max Solution: 3840*2160 60 Fps 60Mbps Spec: Max Solution: 7680*4320 30 Fps 22.3Mbps
	H.265		Spec: Max Solution: 3840*2160 60 Fps 97.7Mbps Spec: Max Solution: 7680*4320 30 Fps 100Mbps
.mov	Mpeg1/2	Mpeg1/2 Layer1/2/3, AAC-LC, PCM, vorbis, PCM	Spec: Max Solution: 1920*1080 60 Fps
	Mpeg-4		Spec: Max Solution: 352*288 30 Fps
	H.263		Spec: Max Solution: 3840*2160 30 Fps
	H.264		Spec: Max Solution: 3840*2160 30 Fps 100Mbps
	Mjpeg		Spec: Max Solution: 1920*1080 30 Fps
.mp4	H.265	Mpeg1/2 Layer1/2/3, AAC-LC, HE-AAC, PCM, vorbis, PCM	Spec: Max Solution: 3840*2160 60 Fps 97.7Mbps Spec: Max Solution: 7680*4320 30 Fps 100Mbps
	Mpeg1/2		Spec: Max Solution: 1920*1080 60 Fps
	Mpeg-4		Spec: Max Solution: 352*288 30 Fps
	H.263		Spec: Max Solution: 3840*2160 30 Fps
	H.264		Spec: Max Solution: 3840*2160 30 Fps 100Mbps
	Mjpeg		Spec: Max Solution: 1920*1080 30 Fps
.VOB	Mpeg1/2	Mpeg1/2 Layer1/2/3, AAC-LC, PCM	Spec: Max Solution: 1920*1080 60 Fps
.mpg/.mpeg	Mpeg1/2	Mpeg1/2 Layer1/2/3, AAC-LC, PCM	Spec: Max Solution: 1920*1080 60 Fps
	Mpeg-4		Spec: Max Solution: 352*288 30 Fps
	H.264		Spec: Max Solution: 3840*2160 30 Fps
.webm	vp9	Mpeg1/2 Layer1/2/3, AAC-LC, PCM	Spec: Max Solution: 1920*1080 30 Fps 100Mbps
	VP8		Spec: Max Solution: 3840*2160 60 Fps 60Mbps Spec: Max Solution: 7680*4320 30 Fps 22.3Mbps
.ts	H.265	Mpeg1/2 Layer1/2/3, AAC-LC, HE-AAC, PCM	Spec: Max Solution: 3840*2160 60 Fps 97.7Mbps Spec: Max Solution: 7680*4320 30 Fps 100Mbps
	Mpeg1/2		Spec: Max Solution: 1920*1080 60 Fps
	Mpeg-4		Spec: Max Solution: 352*288 30 Fps
	H.264		Spec: Max Solution: 3840*2160 30 Fps 100Mbps
1.1.2 Audio			
File	**Format**	**Audio Codec**	**Supported range**
.aac	AAC	AAC/HE-AAC	Sample Rate: 8K~96KHz Bit Rate: VBR
.ape	Monkey's Audio	Monkey's Audio	Sample Rate: 8KHz-48KHz Bit Rate: VBR
.flac	FLAC	FLAC	Sample Rate: 8K~96KHz Bit Rate: VBR
.pcm	PCM	PCM	Sample Rate: 8KHz-48KHz

File	Format	Supported range	Remark
.alac	ALAC	ALAC	Sample Rate: 8KHz-48KHz
.mp3	MPEG Audio Layer3	MPEG1/2 layer3	Sample Rate: 8K~48KHz
			Bit Rate: 8~320Kbps
.ogg	Vorbis	Vorbis	Sample Rate: 8K~96KHz
.wav	WAV	PCM	Sample Rate: 8K~48KHz
			Bit Rate: Up to 1.5Mbps

1.1.3 Photo

File	Format	Supported range	Remark
.bmp	BMP	8000x8000	Memory limitation, 8000x8000 pixels tested
.gif	GIF	6000x4500	Memory limitation, 6000x4500 pixels tested
.jpeg/jpg	JPEG	Base-line 8000x8000	Memory limitation, 8000x8000 pixels tested
		Progressive 8000x8000	
.png	PNG	8000x8000	Memory limitation, 8000x8000 pixels tested

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