



Interactive Flat Panel Display

User Manual



Please keep this manual for further reference. This is the general user manual for all **TRUTOUCH** interactive displays. Therefore, it may differ from the actual product.

Welcome:

Thank you for purchasing this product. Please read the instructions carefully before using this product.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The symbol of the crossed out wheeled bin indicates this product should not be placed in municipal waste. Instead, you need to dispose of the waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment.



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Safety Instructions

For your safety, please read the following instructions before you use the product. Serious injury or property loss may be caused by improper use. Do not try to repair the product on your own.

 WARNING	
	Disconnect the product from power supply immediately if a major failure occurs. Major failures include the following: • Smoke, a peculiar smell, or an abnormal sound is discharged from the product. • No image or sound is displayed, or an error message appears on the screen. • When the mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable. In the preceding scenarios, do not continue to use the product. Disconnect the power supply immediately and contact professional staff for troubleshooting.
	The socket/outlet should be installed near the equipment and should be easily accessible.
	Do not drop liquid, metal, or combustible material onto the product. • If any liquid or metal is dropped onto the product, power the product off and disconnect the power supply. Then contact professional staff for solutions. • Pay attention to children when they are close to the product.
	Do not damage the power cable. • Do not damage, change, bend, heat up, or forcibly drag the power cable. • Do not put weight (such as the weight of the product itself) on the power cable. • Do not forcibly drag the cable when you pull out the power plug. If the power cable is damaged, please contact the local distributor to repair or replace it. • The power cable in the accessory box is for this product only. Do not use it with other devices.
	Put the product on a stable surface. An unstable surface, which includes but is not limited to, an inclined plane, a shaky stand, desk, or platform, may result in the device falling over.
	Use the remote control battery correctly. • Galvanic corrosion, electric shock, and even fire may be caused by improper battery usage. • It is recommended to use the designated type of battery and install the battery on the correct electrodes (positive and negative electrodes). • Do not install and use a new battery together with the used one. • Take out the battery if the remote control is not used for an extended period. • Do not expose the battery to high temperature environments such as direct sunlight or fire. • Dispose of the used battery based on local regulations.
	Disconnect the power plug during thunderstorms. • Do not touch the product during a lightning storm to avoid electric shock. • Install or place high voltage components out of the reach of children.

⚠ **WARNING**

	Do not open the cover or change the product on your own. High voltage components are installed in the product. When you open the cover, high voltage, electric shock, or other dangerous situations may occur. If inspection, adjustments, or maintenance is required, contact the local distributor for help.
	Use the specified power supply. • Do not use any types of power cables other than the one provided with the product to prevent the product from being damaged. • Use a three-pronged socket and ensure that it is properly grounded. • Pull out the power plug from the socket if the product is not used for an extended period.
	Before you move the product, disconnect all external connections and remove all mounting devices. Move the product carefully to prevent it from being damaged, especially the screen, which may cause injury if broken.
	Clean the power plug regularly. • When you are cleaning, fire or electric shock may be caused if the product is powered on. • Keep in mind to pull out the power plug before cleaning it.
	Do not put items on the top of the product. • Do not put items, such as a container for liquid (like a vase, flowerpot, cosmetics, or liquid medicine) on top of the product. • If any water or liquid is spilled on the product, a short circuit may occur and cause fire or electric shock • Do not step on the product or hang any items on the product.
	Do not install the product in an improper place. • Do not install the product in humid places, such as in a bathroom, near windows, or in outdoor environments where there might be rain, snow, or other harsh weather. The preceding environments may cause faults or electric shock under their extreme conditions. • Do not put an exposed fire source, such as an ignited candle, on the product.
	Do not cover or block any vents on the product. • Any overheated components may cause fire, damage the product, and shorten the service life. • Do not put the venting surface of the product face down. • Do not install the product on carpet or cloth. • Do not use a cloth, such as a table cloth, to cover the product.
	Do not touch the power cable with wet hands to avoid electric shock.

⚠ CAUTION

	Do not install the product in high temperature environments. • Do not install the product near a heat source, such as a radiator, a heat reservoir, a stove, or any other heating devices. • Do not expose the product to direct sunlight, which may cause higher internal temperatures and subsequent faults in the product.
	When transporting the product: • Pack the product for transport or maintenance by using the cartons and cushioning material provided with the product. • Keep the product vertical during transport. The screen or other components are easily broken if the product is moved in an improper way.
	Keep away from the product when using a radio. The product complies with the international EMI standard to prevent radio interference. However, interference still exists and can cause noise in the radio. • If radio noise occurs, try the following solutions: • Adjust the direction of the radio antenna to avoid interference from the product. • Keep the radio away from the product. Advice for using the product: • Use the product in an environment with comfortable lighting. It is harmful to your eyes to use the product in an environment that is too bright or too dark. • Relax your eyes after a period of time for watching. • When you are watching, keep a distance that is 3 to 7 times of the display height. This is the best distance to protect your eyes. • Adjust the volume to an appropriate level. • Use amplifier equipment as the audio input source with caution. If you must use amplifier equipment, the input power should not exceed the maximum of speaker power. Otherwise, problems can occur, such as the speaker becoming overpowered and damaged.

Installation Requirements

● Mounting

You can choose the mounting method that best fits your needs.

If you choose to mount on a mobile stand, use the mounting rack for support. The weight capacity of the mounting rack should be at least four times the display weight. The weight capacity of the mounting support must be four times the actual weight of the display to ensure the interactive display remains steady.

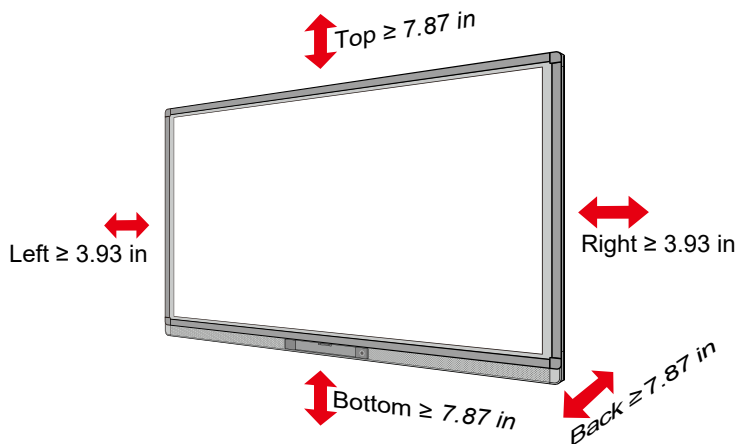
When you to mount the display on a wall, the weight capacity of the mounting surface must be at least four times of the weight of the display. When the mounting surface is a wall or ceiling of a building, the wall must be built with solid bricks, concrete, or materials of equal intensity. If you need to mount the display on a looser surface, such as a wall with a thick layer of wallpaper, take necessary measures to ensure that the display is steadily mounted.

● Ventilation

Ventilation requirements	Distance to the surface for installation (in)			
Nominal power	Left and right sides	Top	Bottom	Back
Greater than 100 W	3.93	7.87	7.87	3.93

WARNING

If the product is mounted inside a wall or a cabinet, in addition to the preceding requirements, the area around the ventilation holes at the bottom, top, and two sides must be at least 50% of the sealing surface to ensure proper ventilation.



NOTE:

- When you install using a wall-mount, make sure you insert the screws deeper than 0.39 in into the wall.
- Do not block any ventilation vents.
- Reference to the CAS 132-2006.
- The 4 bracket mounting holes in the back panel are VESA MIS-F compliant (400 x 400 mm). Please use the metric M8 screws with length of 10 to 15 mm to secure the display with the mounting system.
- It is best to have a professional installer to install the display unit.

Introduction

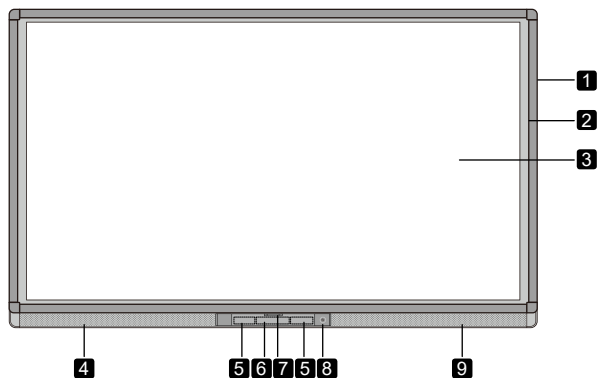
Thank you for choosing our interactive display. As our latest collaborative interactive product, the **TRUTOUCH** interactive display is a multi-functional display for interactive teaching, digital demonstrations, multi-media presentations, touch operations, and annotations. The **TRUTOUCH** is designed and produced to meet the needs of education and corporate applications and provides a user-friendly experience, making the **TRUTOUCH** an ideal equipment for any organization. You can use your fingers or opaque objects to write, edit, and delete anything on the screen.

The product contains the following features:

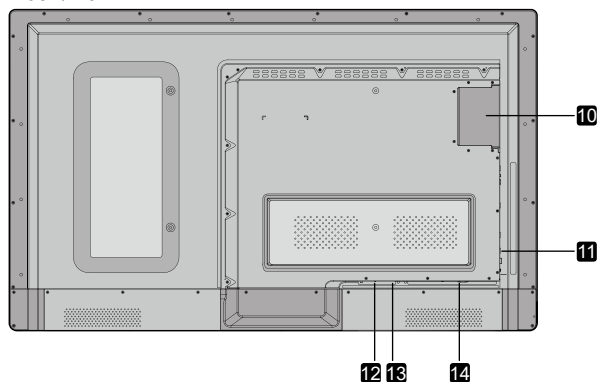
- Exclusively designed for more effective meetings.
- Advanced infrared array scanning and sensing technology that is HID driver-free, letting the product be activated right after it is powered on.
- Multiple signal sources can be previewed in the window and switched to just by touching the screen.
- Adjust the brightness automatically with no impact on performance and save energy.
- Front-facing high-powered speakers for clearer sound.
- When the screen display function is disabled, the product can still play audio to save energy.
- Automatically adjust the screen so that the most comfortable screen brightness can be displayed, no matter the lighting in the room.
- Built-in IdeaMax whiteboarding software provides a large number of tools for teachers to improve student engagement and for companies to have more effective and productive meetings.

● Outer Appearance

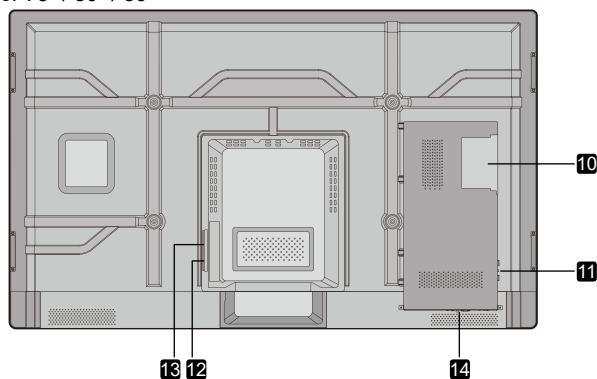
The front view and back view of the product are displayed as follows.



For 65" / 70"



For 75" / 80" / 86"



- 1** Enclosure
- 2** Infrared Frame
- 3** Screen
- 4** Left Loudspeaker
- 5** Connection Panel 1
- 6** Control Panel
- 7** Front Cover Plate*
- 8** Power on/off
- 9** Right Loudspeaker
- 10** OPS Port
- 11** Connection Panel 2
- 12** Rocker Switch
- 13** Power Outlet
- 14** Connection Panel 3



NOTE:

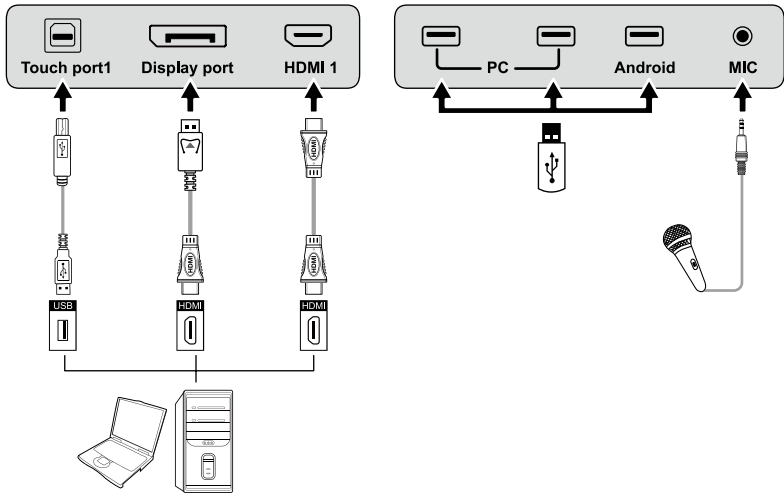
"*" indicates an optional feature.

● Control Panel



Name	Function Description
Home	Enter/Exit Android home page.
Return	Return to previous menu.
Menu	Enter the functions menu.
ECO	Switch among three modes: energy-saving, automatic, and standard.
Source	Enter the menu to select the signal source.
Vol-	Decrease volume.
Vol+	Increase volume.
PC Power	Power the OPS on or off.

● Connection Panel 1



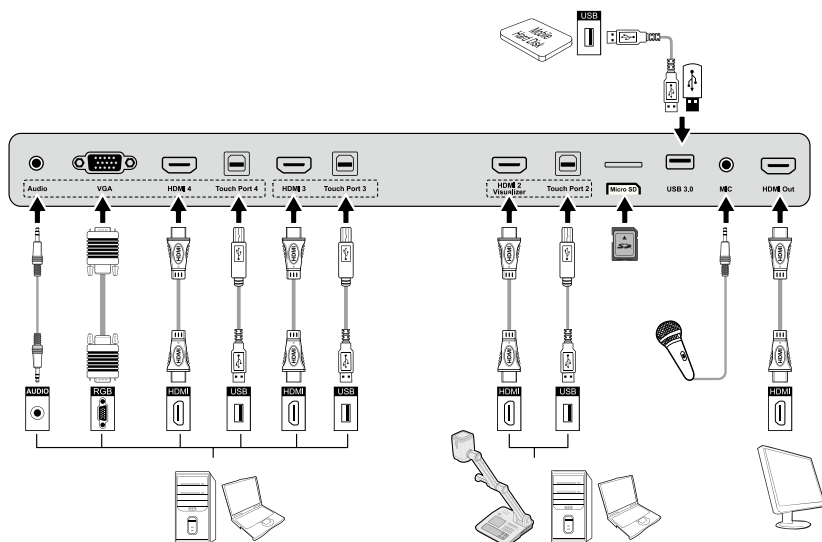
Name	Function Description
Touch port 1	USB port to connect an external PC with touch control.
Display port	HD digital display port.
HDMI 1	HDMI 1 corresponds with Touch port 1 to operate touch when connected to an external PC.
PC	USB 2.0 (Rated output: 5V/0.5A) and USB 3.0 (Rated output: 5V/0.9A) ports for the OPS.
Android	Android mode USB port.
MIC	External microphone port.



NOTE:

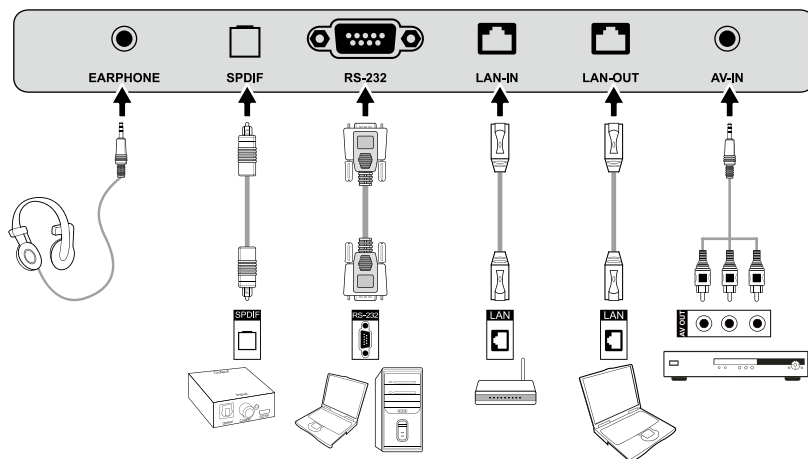
- Touch Port 1** corresponds with **HDMI 1**
- Touch Port 2** corresponds with **HDMI 2**
- Touch Port 3** corresponds with **HDMI 3**
- Touch Port 4** corresponds with **HDMI 4** and **VGA**.

● Connection Panel 2



Name	Function Description
Audio	Audio input port.
VGA	TVGA port for an external PC, which corresponds with Touch Port 4 to operate external PC with touch control.
HDMI4	Input terminal 4 for high definition signal, which corresponds with Touch Port 4 to operate PC through touch control.
Touch Port 4	Terminal 4 for touch control.
HDMI 3	Input terminal 3 for high definition signal, which corresponds with Touch Port 3 to operate external PC with touch control.
Touch Port 3	Terminal 3 for touch control.
HDMI 2 Visualizer	Input terminal 2 for high definition signal, which corresponds with Touch Port 2 to operate PC or Visualizer through touch control. Note: Connect a visualizer for touch display control function and HD display mode; please use the HDMI 2 Visualizer port.
Touch Port 2	USB terminal 2 for touch control.
Micro SD	External port for a micro SD card.
USB 3.0	USB 3.0 port
MIC	External microphone port.
HDMI Out	Output terminal for high definition signal, which can transmit the signal to other display equipment with high definition resolution.

● Connection Panel 3



Name	Function Description
HEADPHONE	Headphone port
SPDIF	Audio digital output port.
RS-232	The input port for RS-232 signals, which is used by specific control devices to input serial port protocol in order to control the panel.
LAN-IN	Input port for local area network.
LAN-OUT	Output port for local area network.
AV-IN	Audio and video signal input port.



NOTE:

- Please use the cables provided with the product to connect to device.
- HDMI 1, HDMI 2, HDMI 3, and HDMI 4 are high-definition multimedia ports, which are used to provide home theatre experience with the best quality for consumers by transmitting high-definition, all-digital audio and video. If there is an HDMI port on the external device, you are advised to connect it with the product by using an HDMI cable to produce the best picture and sound quality.

● Functions of the Remote Control

	Power on or Standby
	Mute
0 – 9	Select TV channel or enter number
	Open the Android home page
	Go back or return to the parent menu
	Show or hide menu
	Show or exit from the list of signal sources
	Enable audio only mode
	Freeze
	Confirm
	Up directional button
	Down directional button
	Left directional button
	Right directional button
	Capture screen shots
	Show the current signal source. Will not show in Android mode
	Adjust current screen
	Open WIFI on the computer
	Change to Eco mode
	Switch to the previous page in IdeaMax and PowerPoint

	Switch to the next page IdeaMax and PowerPoint
	Open whiteboard software
	Switch to VGA signal source
	Switch to HDMI signal source
	Switch to OPS signal source
	Zoom in or out

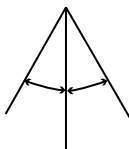


● Using the Remote Control

The remote control works up to 16 feet in front of the product, and in the area within 30 degrees to the left or the right.



The effective receiving area is about 10 feet, with 30° angle from vertical point to the left.



The effective receiving area is about 10 feet, with 30° angle from vertical point to the right.



The effective receiving distance is about 16 feet from the front of device.

WARNING

Please read the following instructions to use the remote control properly.

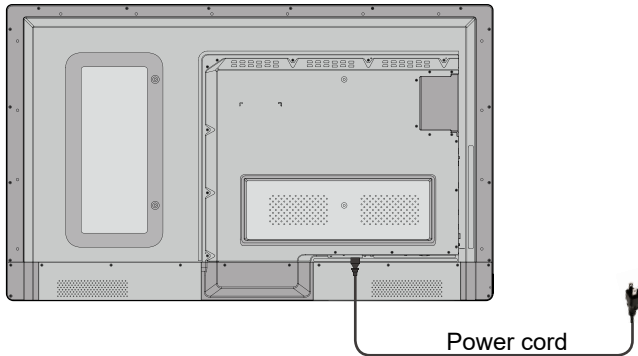
- Do not drop or damage the remote control.
 - Do not spill liquid on the remote control.
 - Do not put the remote control on wet surfaces.
 - Do not expose the remote control under sunlight.
-

Basic Operation

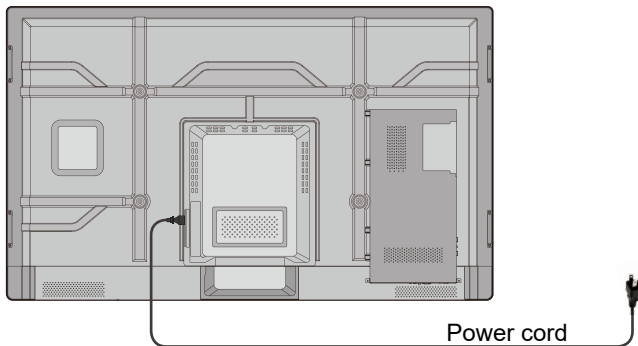
● Power on

Step 1: Plug in the 100V - 240V 50Hz/60Hz AC power into a grounded power outlet. Insert the power connector into the back of the display.

For 65" / 70"

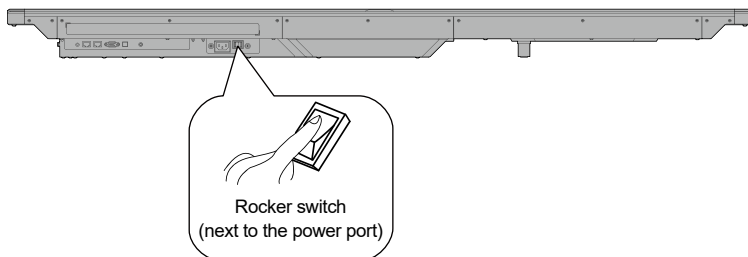


For 75" / 80" / 86"

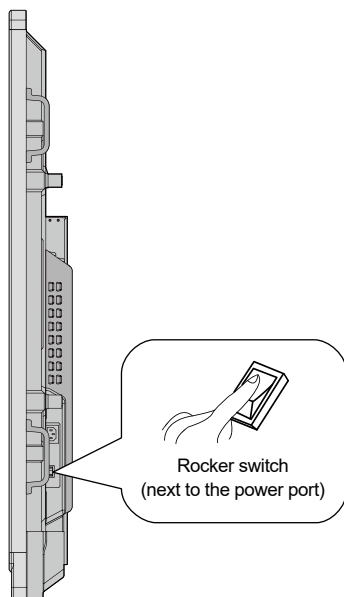


Step 2: Connect the display to the power supply. Switch on the rocker switch (on the right bottom of the rear of the display, next to the power port) to enter the standby mode. The power indicator will turn red once in standby mode.

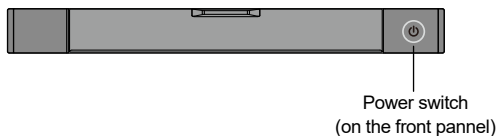
For 65" / 70"



For 75" / 80" / 86"

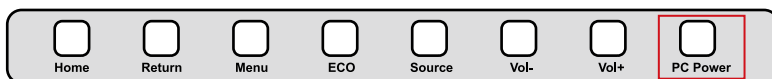


Step 3: Press the power switch on the control panel, or **Power** on the remote control, to turn on the interactive display. The OPS will also turn on. Once the display is on, the power indicator will turn green.

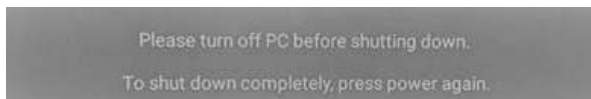


● Power off

Step 1: Press **PC Power** to turn off the OPS (for all-in-one models only).



Step 2: Press **Power** on the control panel or on the remote control to enter the standby mode. The screen will show the following information:



Step 3: Press **Power** on the control panel or on the remote control to confirm and switch the display into the standby mode. The power indicator will turn red.

Step 4: In the standby mode, flip the power rocker switch to "off" to turn off the display.

WARNING

- Please turn off the OPS before you turn off the interactive display. Otherwise, the computer may be damaged.
 - Disconnect the interactive display from power after the display enters standby mode. Otherwise, the display may be damaged. A sudden power failure may damage the interactive display.
 - Frequently powering on and off in a short time may cause faults.
-

Status of the power indicator is as follows:

Power Indicator	Status
No light	Powered off
Red	Standby
Green	Powered on

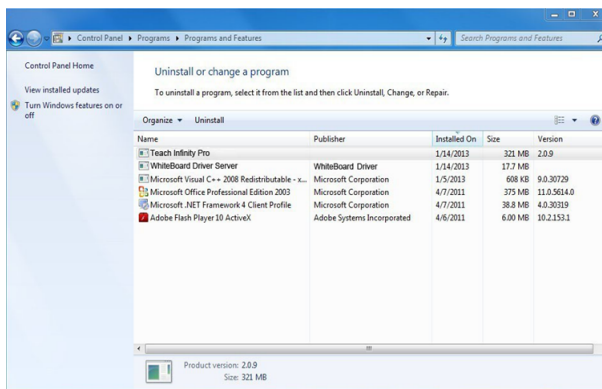
● Software Installation

- Recommended configuration:
 - CPU: Inter (R) Core i3 2.27GHz or AMD CPU with equivalent performance and above-
 - Memory: 1GB
 - Hard drive: 1GB
 - Graphics card: supports DirectX 9 or above
- If the latest version of IdeaMax software was installed on the PC before delivery, please skip this step.
- HID driver-free multi-touch functions only applies for Vista, Windows 7 or higher versions. The touch LED display with Windows XP version should install/run the software for normal use.

- Step 1: Insert the correct USB cable into the USB ports of the computer and the interactive display.
- Step 2: Insert the official IdeaMax software installation disk into the computer.
- Step 3: Double click the  Application.exe , follow the instructions and complete the installation of the touch LED display software.
- Step 4: The computer will need to be restarted to activate the software after the installation is completed. Save all the files on the computer and restart.

● Software Uninstall

If you want to uninstall the IdeaMax from your computer, select **Control Panel > Add or Remove Programs > IdeaMax > Uninstall** to uninstall the program, as shown in the following figure:



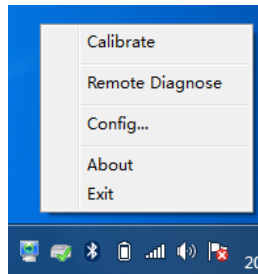
● Software Calibration

To work normally, the actions and annotations of the projected image on the display should coincide with the actual touch motions. The following situations will normally require a calibration:

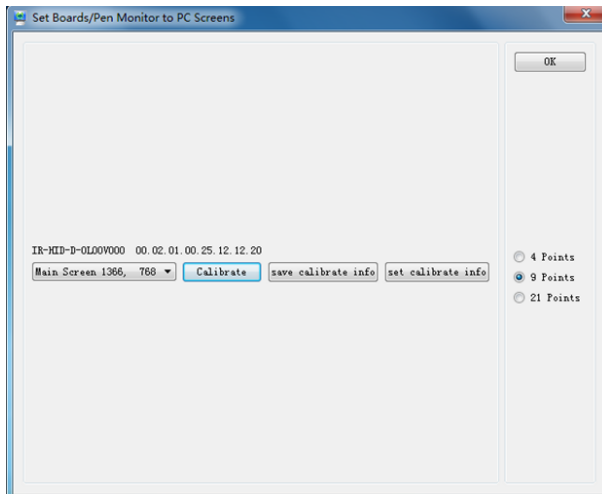
- The first time you use touch on the display.
- Re-installing the touch drivers.
- Connecting to another PC.

The display uses a nine-point calibration method. The calibration process is as follows:

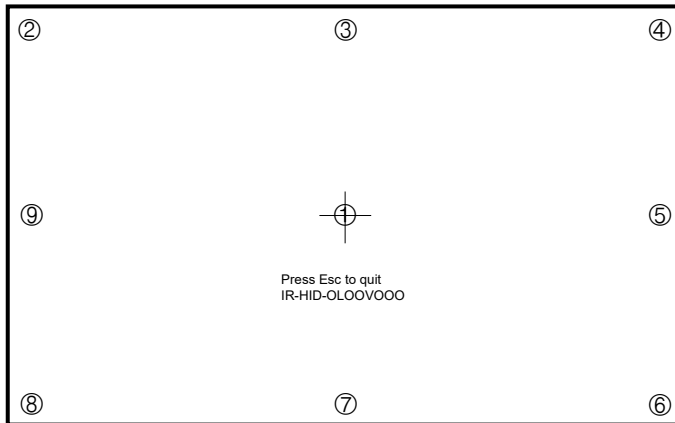
- Step 1: Connect the display and run the driver program.
- Step 2: Click the handwriting driver icon on the right bottom of the screen. The following figure is displayed.



Step 3: Select **nine Points**, click **Calibrate** and the following figure is displayed:



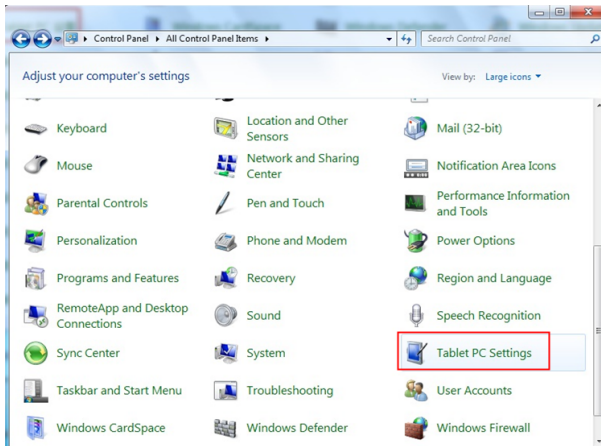
Step 4: Use the pen or your finger to click and hold the center of the flickering cross. Do not release it until the flickering cross moves to the next point. Repeat and complete the calibration process according to the instructions on the interface. The software interface returns to the desktop automatically after the calibration is completed successfully.



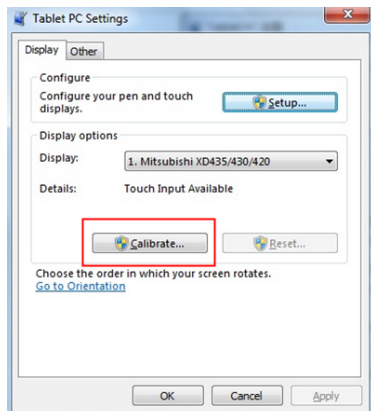
● Calibration Method for Windows 10

Step 1: Connect the interactive display to PC using the USB cable via the USB interface on the panel.

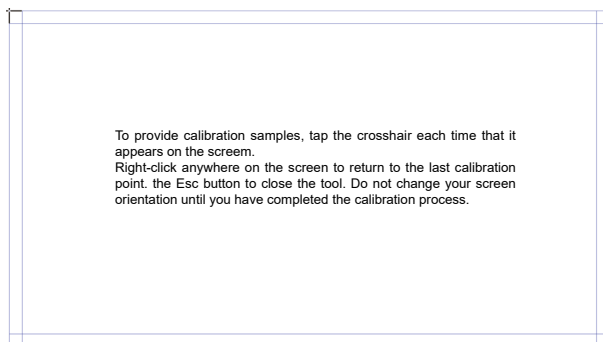
Step 2: Choose **Control Panel > Tablet PC Settings**.



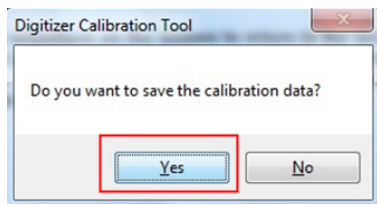
Step 3: Click **Calibrate** in **Tablet PC Settings** window.



Step 4: Use the pen to click and hold the center of the flickering target. Do not release it until the target moves to the next point. Repeat and complete the calibration process according to instructions on the interface.



Step 5: Click **Yes** after the calibration is completed.



TIP

- To ensure touch accuracy, use the pen provided with the interactive display rather than a finger to perform calibration.
- Calibration errors may cause touch function failure on the interactive display. In this case, you need to perform calibration one more time.
- During the calibration process, you can press **ESC** on the keyboard to exit.
- The calibration interface varies between different software versions. Please follow the actual instructions provided on the interface.

● OPS Installation

WARNING

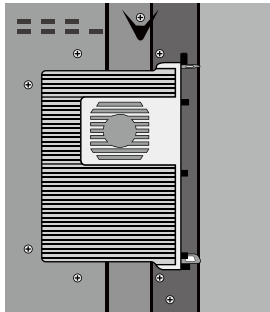
Please insert the OPS when the interactive display is disconnected from the power.

Install the OPS by the following steps:

Step 1: Insert the OPS into the special slot on the rear of the interactive display.

Step 2: Tighten the screws.

Step 3: Confirm the OPS installed correctly.



Toolbar Introduction

The toolbar has three modes: Home Page, Task Manager, and Whiteboard.

Under any of the three modes, you can click ← on the toolbar to go back to the previous page and click 🏠 to exit from other programs or go back to the home page from other signal sources.

- On the home page, the toolbar is on the bottom of the screen and shows icons for the task manager, signal source, whiteboard, input signal, file manager, system settings, browser, and search. You can click an icon to open the corresponding program.



- After the whiteboard program is started, the toolbar enters the whiteboard mode, in which you can choose a pen, pen weight, and color to write on the whiteboard.

- If you want to use the whiteboard function in Android, click ⚙️ on the displayed menu, where the New Page, Overview, Delete All, and Settings functions will be listed.

- If you want to use whiteboard function while using a signal source, please click the ⚙️ icon to enter the menu setting interface.

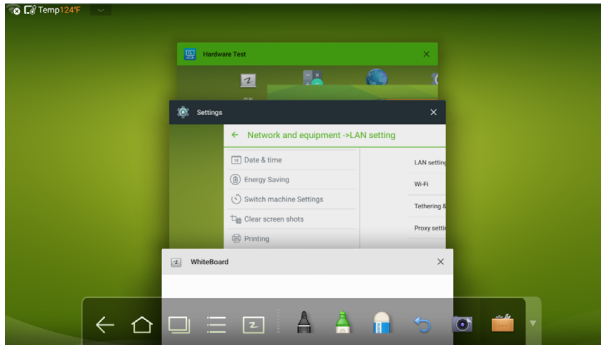


- In modes other than the whiteboard, the toolbar is in Annotation mode. You can select a pen, pen weight, and color to write and add remarks on the screen (including image, PPT and PDF). Click on the right to hide the toolbar. Scroll up from the bottom of the screen with your finger to display the toolbar.



● Task Manager

In the task manager, you can view the current open applications, switch, and close applications. Click  to enter the task manager as shown in the following figure:



View Open Applications

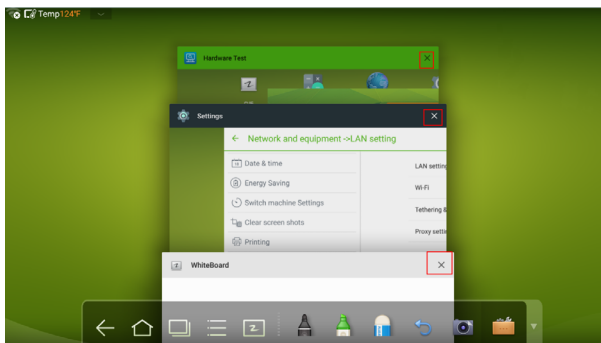
In the task manager, scroll up and down to view the current open programs.

Switch Applications

In the task manager, click an application's icon to switch applications. For example, click **Settings** to switch to the system setting application, or click **Browser** to switch to the browser application.

Close Applications

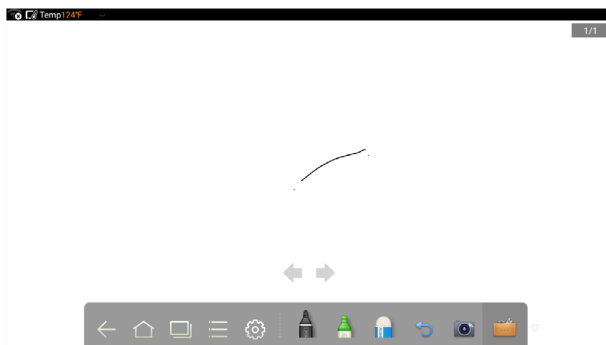
In the task manager, select a program, click the  icon of top right corner or scroll right or left to close the application.



● Whiteboard

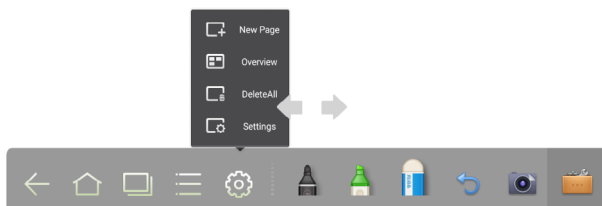
The whiteboard provides a writing function. In the whiteboard program, you can select a pen, pen weight, and color to write with and use an eraser to erase content on the whiteboard. You can also easily print, save, and clear the content on the screen.

Click **z** on the toolbar or press **Whiteboard** on the remote control to enter whiteboard mode.

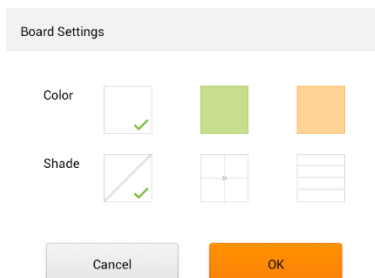


New Whiteboard and Settings

Click **⚙** in the displayed menu to use the **New Page**, **Overview**, **Delete All** or **Settings** functions.

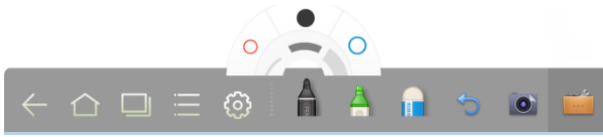


Click **Settings** to set the color and shade of the whiteboard, as shown in the following figure:

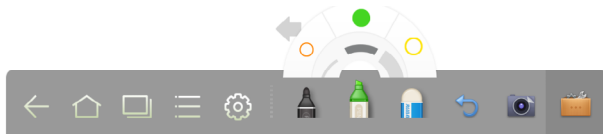


Pen, Pen Weight, and Color

If the marker is selected, click and hold  for two seconds to set its weight and color.



If the highlighter is selected, click and hold  for two seconds to set its weight and color.



Eraser

Two methods are available to erase written content or errors as follows:

- Click  to select the eraser. Then you can use it to erase the content on the whiteboard.
- Use five fingers to touch the screen and a circle is displayed, indicating the space to be used as the eraser. Move the circle to erase the content you wrote.



Cancel

Click  to cancel operations.

Screen Capture

The following two methods can be used to capture a screenshot:

- Click  to capture current content on the whiteboard and save it as an image file in the **Screenshots** directory. (The toolbar is not captured in the image.)
- Press **CAPTURE** on the remote control to save current content on the whiteboard as an image in the **Pictures > Screenshot** directory in the file manager.

You can open the directory in two ways:

- Go back to the home page and click  on the toolbar to enter the file manager. In the system file, find and click the **Screenshots** folder to check.
- Click  in Applications to enter the image browsing interface. In the system file, find and click the **Screenshots** folder.

Print, Clear and Freeze Screen

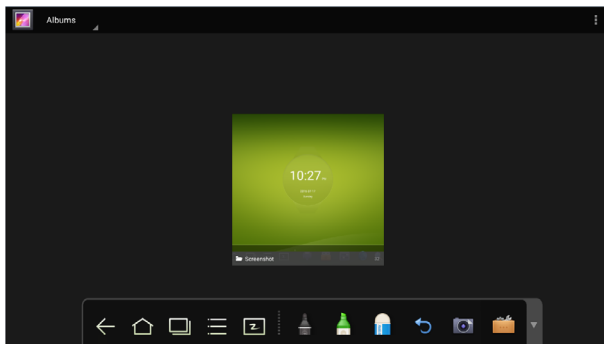
Click  to see the **Print**, **Clear** and **Freeze Screen** options. Click **Print** to print current content on the whiteboard. Click **Clear** to clear all current content on the whiteboard. Click **Freeze screen** to capture the current screen and then zoom in, zoom out, and annotate on the frozen screen.



● Gallery

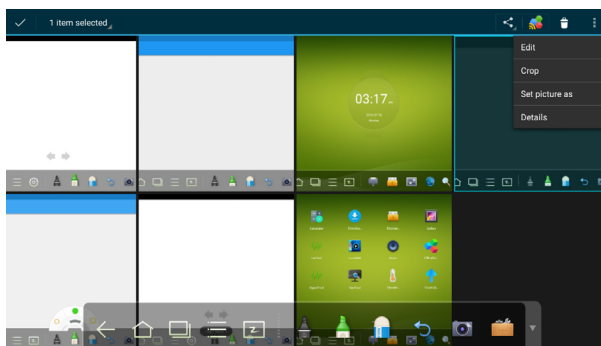
You can enter the gallery to view images one by one or play them as slides.

Click  in Applications to enter the gallery. All folders containing images will be displayed.



- Full screen preview

On full screen mode, you can view a maximum of eight images. You can preview other group images by sliding your finger left or right, using long press on the screen to select multiple images, and then you can click  icon on the upper right corner to print, share, delete, edit, set as wallpaper, and view details of the selected images.

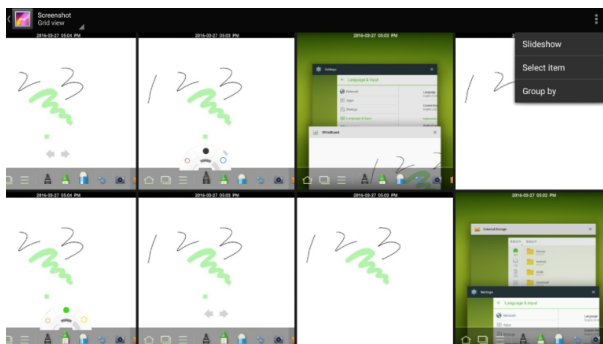


- View images one by one

Click one image in a folder. Scroll left to show the previous image and scroll right to show the next image.

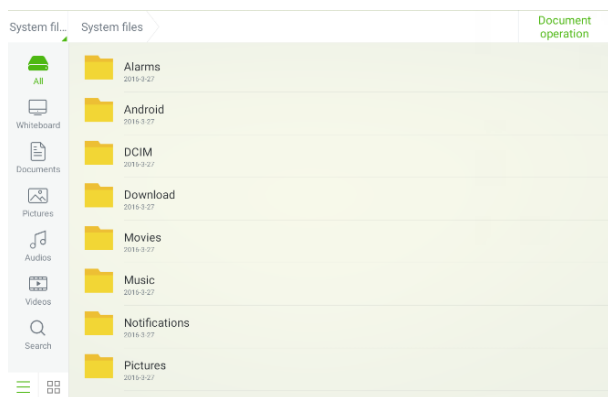
- Play slides

Click  on the upper right corner of the folder and select **Slideshow** to play all images as slides.



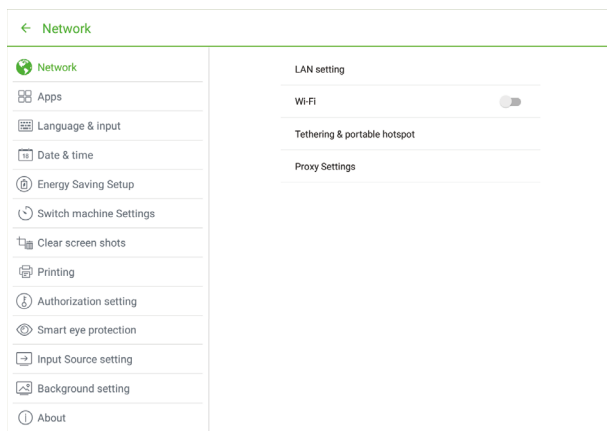
● File Manager

Click  on the toolbar to enter the file manager. Current system files will be displayed. External device files will also be displayed, such as the files in the SD card and USB drive. The file manager provides various functions, such as preview, filter, search, select, copy, and delete files.



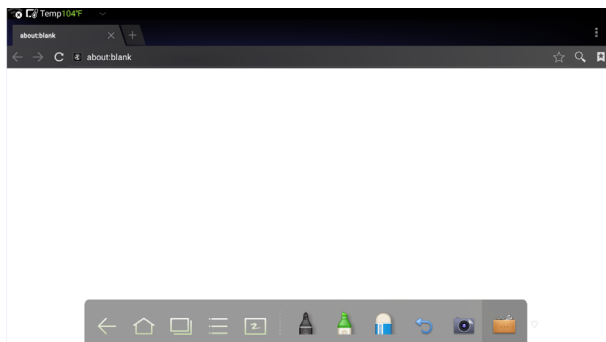
● System Settings

Click  on the toolbar to enter the system settings interface. The **Network**, **Apps**, **Language & Input**, **Date & Time**, **Energy Saving Setup**, **Power On/Off Settings**, **Clear Screen Shots**, **Printing**, **Authorization Setting**, **Smart Eye Protection**, **Input Source Setting**, **Background Setting** and **About** are displayed on the screen. You can click through the menu to have your preferred system settings. Click the area outside of the system settings interface to exit.



● Browser

Click  on the toolbar to open the web browser. Enter a website in the address bar or enter keywords in the search box by using the soft keyboard or the remote control.



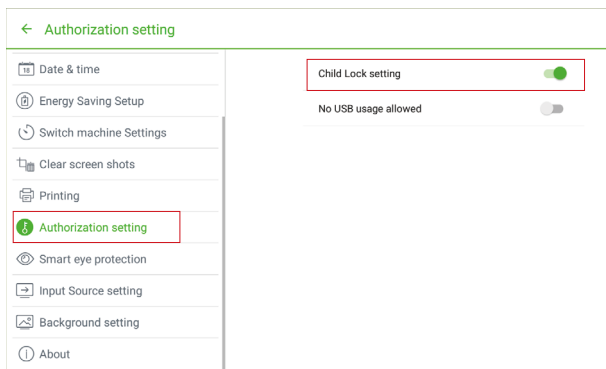
● Audio Only

Press **AUDIO ONLY** on the remote controller to turn off the screen but keep audio on. To turn the screen on again, touch any place on screen or click **AUDIO ONLY** again to return to normal operation mode.

● Child Lock Setting

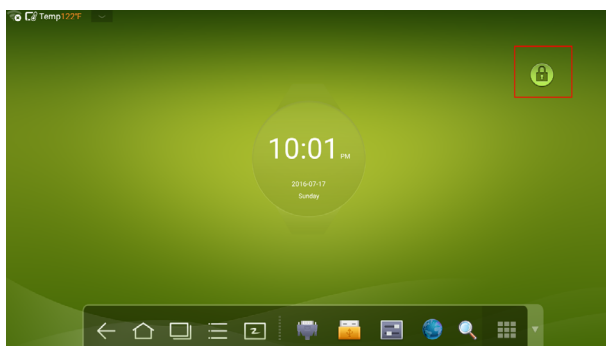
You can turn the **Child Lock Setting** function on/off using the three methods below:

- Click  on the toolbar to enter the System Settings interface. You can click the **Authorization setting** item to turn on the Child Lock function.



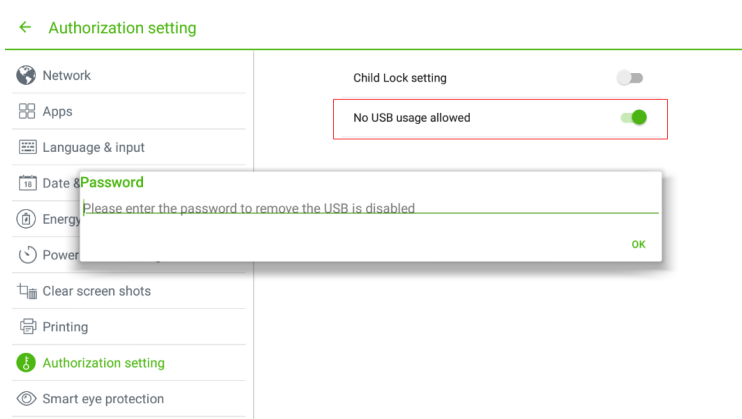
- Press **ECO** button on the front panel for more than 5 seconds to enter Child Lock mode. Under Child Lock mode, press **ECO** for more than 5 seconds again to unlock.
- Press **ECO** button on the remote control for more than 5 seconds to enter Child Lock mode. Under Child Lock mode, press **ECO** for more than 5 seconds again to unlock.

An icon will show on the top-right corner of the touch display, as seen in the following figure, if the device is in Child Lock mode.



● Disable Android USB Port

- Click  on the toolbar to enter the system settings interface. You can click the **Authorization setting** item to turn on **No USB usage allowed**.
- Once you turn on this function, all the Android USB ports will be disabled.
- To turn off this function, enter pin code "888888"



● Temperature Status and Thermal Shutdown

Temperature Status

The real-time temperature of the interactive display is displayed in the upper left corner of the home page. Click the temperature display area in the top-left corner of screen to switch between Celsius and Fahrenheit.

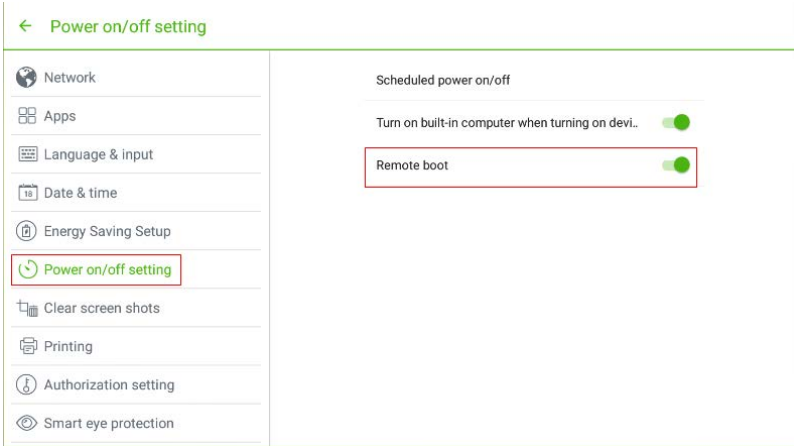
Thermal Shutdown

The overall temperature of the display will increase if there is unfavorable ventilation or the display is on and in use for an extended period of time.

When the system detects that the actual temperature is higher than the optimal temperature, the display will automatically switch into standby mode. You shouldn't reboot the display for two minutes after this switch.

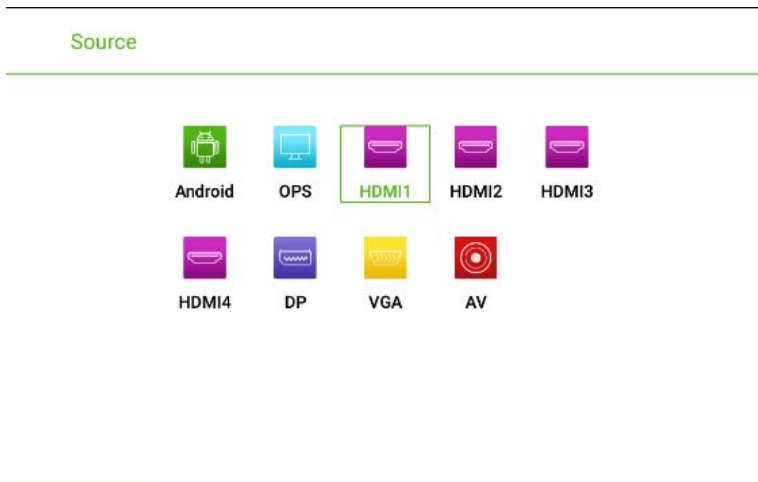
● Remote Boot the Display

- Click  on the toolbar to enter the system settings interface. You can click the **Power On/Off Setting** item to turn on the remote boot function. The administrator can send requests via LAN using the display's MAC address to power on remotely.
- To use this function successfully, the display should be powered off and connected to the control center by a LAN Cable into the same network.

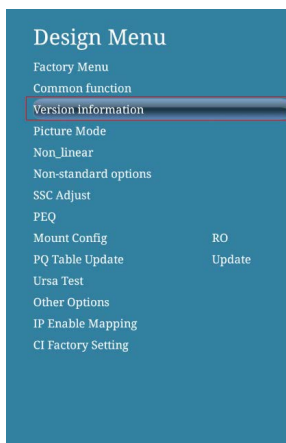


To obtain the MAC address of the display:

- Enter the **Source** page, either by using "SOURCE" on the remote control, or "Source" on the front control panel.



- Using the remote control, enter "2580" on the input signal page to enter the Design Menu.

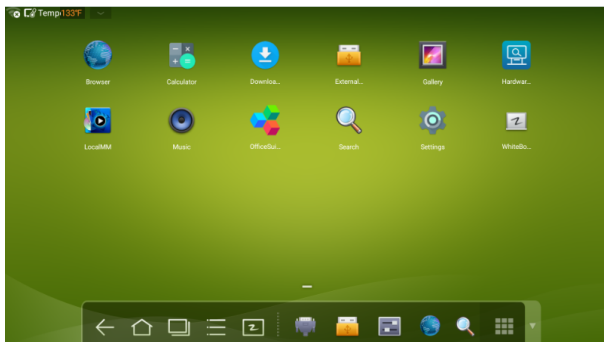


- Click "Version Information" on the Design Menu page to enter the "Version Information" page.
- The information listed next to "WOL_MAC" is the MAC address that you will need.



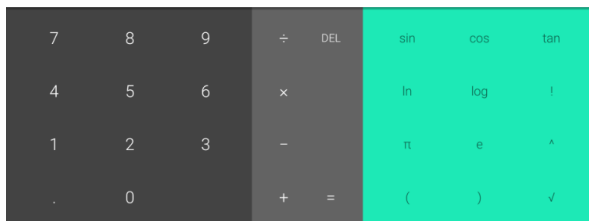
● Applications

Tap  on the toolbar to enter the Applications page. All applications in the system will be displayed. Scroll right or left to turn the page.



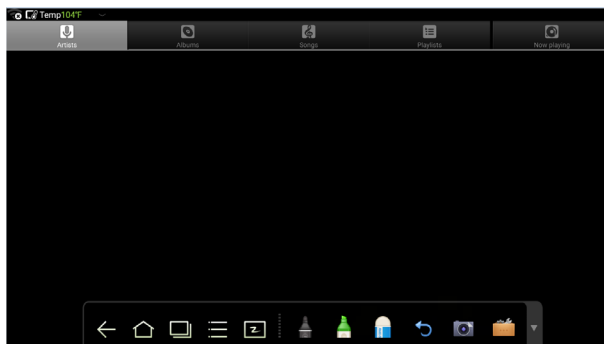
Calculator

Click  to enter the calculator application. Click digits and operations on the keyboard to perform calculations.



Music

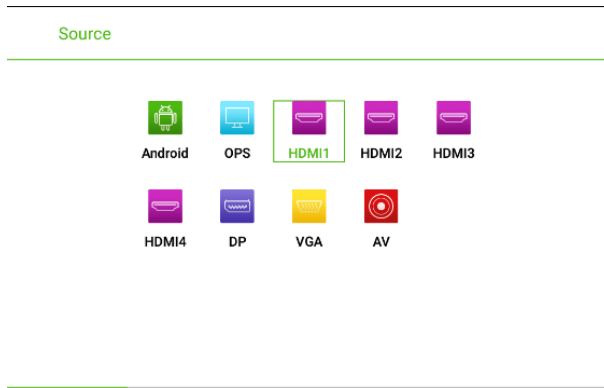
Click  to start the music program. The music in the local disk is displayed by artists, albums, songs, playlist, or playing status.



Signal Source Selection

The following ways can be used to select a signal source:

- Press **SOURCE** on the remote control.
- Press **Source** on the control panel of the interactive display.
- On the Home page or in Whiteboard mode, click  for the input **Source** selection screen.
- On the signal source screen, press ▲, ▼, ◀, or ▶ to select a channel and press **OK**.
- You can also select directly by clicking an icon, as shown in the following figure:



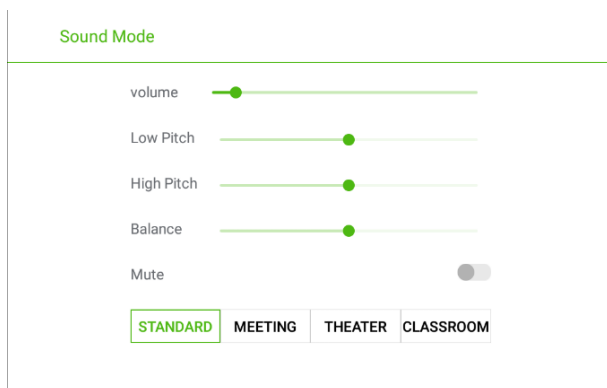
Menu

After switching to selected signal source, press **MENU** on the remote control. A menu is displayed, including **Sound Mode**, **Screen Setting**, and **Display Setting**. Scroll left and right on the screen or press ◀ or ▶ to switch between entries.

● Sound Settings

The **Sound Mode** page displays the following options: **STANDARD**, **MEETING**, **THEATER**, and **CLASSROOM**.

- Drag the **volume** key bar directly or press the ◀ or ▶ button to change volume.
- Press **Mute** to silence the speakers.
- Press **RETURN** to exit the menu.



● Screen Setting

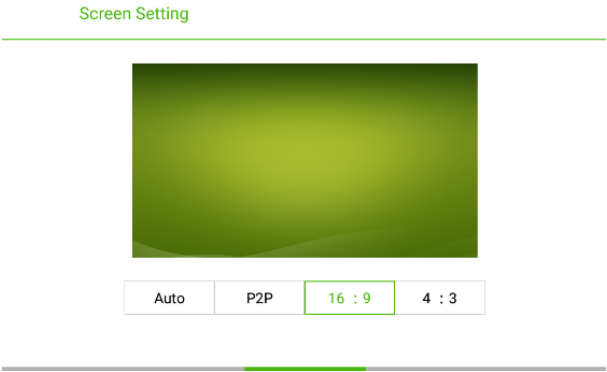
The **Screen Setting** page displays options including **Auto**, **P2P**, **16:9** and **4:3**.

You can change these options in two ways:

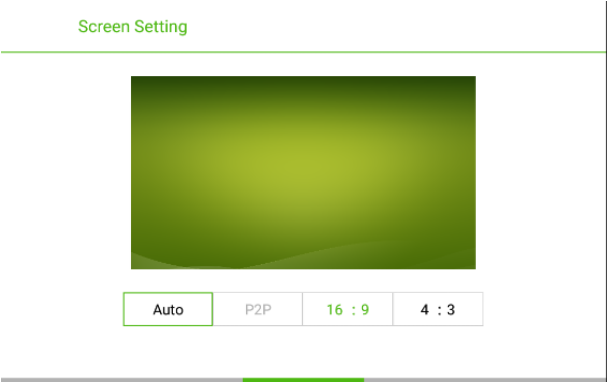
- Click an icon and set the option.
- Press ◀ or ▶ and press **OK** to modify the option. Press **RETURN** to exit out of the menu.

Under different input sources, the screen settings could be different.

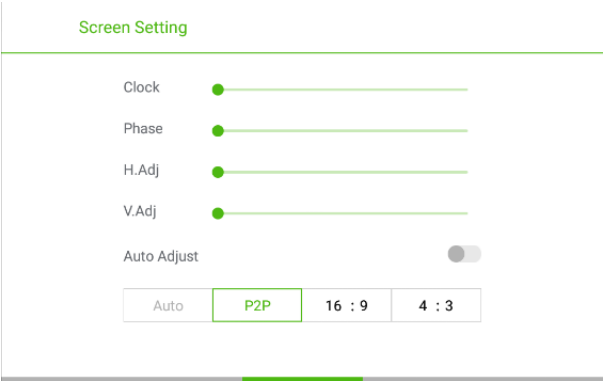
- Under **OPS**, **HDMI 1-HDMI 4** and **DP** signal source.



- Under **AV** signal source, the **P2P** mode cannot be used.



- Under **VGA** signal source, **Auto** mode cannot be used.

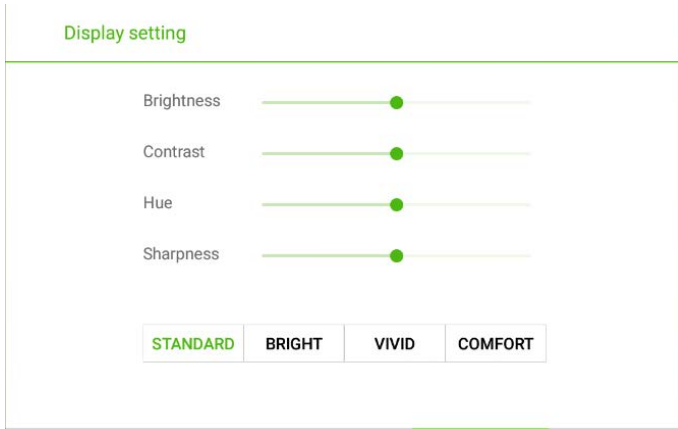


● Display Setting

The **Display Setting** page displays options including **STANDARD**, **BRIGHT**, **VIVID** and **COMFORT**.

Two ways can be used to set the options:

- Click an icon and set the option.
- Press ◀ or ▶ and press **OK** to modify the option. Press **RETURN** to exit the menu.



ECO Mode

CAUTION

- Please switch off the display when it is not in use, and enable the Audio Only function when you do not need to watch the display. This will help to reduce power consumption and save energy.
 - Energy consumption can be reduced by lowering display brightness.
 - To better save energy, the automatic power-off function is configured for the display with the default duration set for 10 minutes. If no operation is performed in 10 minutes, the display is switched automatically to sleep mode (the same as power off) to reduce energy consumption.
-

Press **ECO** on the remote control to enter the backlight mode page. Press **ECO** to switch among **ECO**, **Auto** and **Standard**.

- In the **ECO** mode, the power output is reduced by 50%.
- In the **Auto** mode, the display automatically adjusts the screen brightness according to the light in the environment. When the lighting in the room is strong, the screen brightens. When the lighting in the room is weak, the screen darkens.
- In the **Standard** mode, the screen brightness stays the same.

VGA Signal Input

VGA (Video Graphics Array) is the computer display standard for analog signal. A VGA port is the special port on the computer which uses the VGA standard for data input. The following table lists the specifications of various VGA signal inputs:



NOTE:

The VGA signal input is available only when the display is in PC mode.

SN	Standard	Resolution	Refresh Rate (Hz)	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Horizontal/ Vertical Sync Polarity (TTL)
1	VESA	640 x 480	60	31.5	60	N/N
2	VESA	640 x 480	72	37.9	72	N/N
3	VESA	640 x 480	75	37.5	75	N/N
4	VESA	800 x 600	56	35.1	56	P/P
5	VESA	800 x 600	60	37.9	60	P/P
6	VESA	800 x 600	72	48.1	72	P/P
7	VESA	800 x 600	75	46.9	75	P/P
8	VESA	1024 x 768	60	48.4	60	N/N
9	VESA	1024 x 768	70	56.5	70	N/N
10	VESA	1024 x 768	75	60	75	N/N
11	VESA	1280 x 960	60	60	60	N/N
12	VESA	1280 x 960	75	75.159	75	N/N
13	VESA	1280 x 1024	60	64	60	P/P
14	VESA	1280 x 1024	75	80	75	P/P
15	VESA	1600 x 1200	60	75	60	P/P
16	VESA	1920 x 1080	60	66.547	59.988	P/P

Multimedia Format Support

Media Type	File Format	File Extension
Image	JPEG, BMP, PNG	.jpg, .bmp, .png
Movie	MPEG1, MPEG2, MPEG4, H.264, H.265, RM, RMVB, MOV, MJPEG, VC1, DivX, FLV (Support 1080P, 4K HD Decoding)	.avi, mpg, .dat, .vob, .div, .mov, .mkv, .rm, .rmvb, .mp4, .ts, .trp, .asf, .fl
Music	MP3, M4A, (AAC)	.mp3, .m4a
Text	TXT	.txt

RS-232 Signal Input Codes

For the RS-232 control codes, please visit our Technical Support Site:
<https://newlineinteractive.freshdesk.com/support/solutions>

Common Faults and Solutions

Symptom	Possible Cause	Solution
An application fails to be load.	The application is not correctly installed.	Install the application correctly.
	The USB port is not connected or is faulty.	Change the USB lead or check if the USB port is faulty.
	The infrared sensor is blocked.	Ensure that the surrounding infrared sensors are not blocked.
Recalibration is required every time the display is switched on.	The computer is equipped with a recovery card.	Disable computer protection and recalibrate again.
Calibration is inaccurate.	The calibration is not setup properly.	Press AUTO on the remote control to show the full screen, and use the pen provided with the display to recalibrate again.
The cursor of the pen is unstable when the pen is used.	The writing method is incorrect.	You are advised to use the pen rather than a finger to write. Hold the pen as far from the nib as possible. The angle between the pen and display needs to be greater than 60 degrees. Do not touch the display with your sleeve or wrist.
	Strong light or infrared interference exists.	Remove the interference source or change the room environment.
Handwriting is discontinuous. (Part of the handwriting cannot be displayed.)	The writing method is incorrect.	You are advised to use the pen rather than a finger to write. Hold the pen as far from the nib as possible. The angle between the pen and display needs to be greater than 60 degrees. Do not touch the display with your sleeve or wrist.
	The covering area of the nib does not meet requirements or the nib is too small.	Change the nib or use a pen with a larger covering area.
	The infrared sensor is blocked.	Check if infrared sensors are blocked.
	Strong light or infrared interference exists.	Remove the interference source or change the using environment.

Symptom	Possible Cause	Solution
Handwriting cannot be shown or no touch signal is detected.	The color of the pen is the same as or similar to the background color.	Change the color of the pen.
	Your hand or other objects are on the display when you are writing.	You are advised to use the pen rather than a finger to write. Hold the pen as far from the nib as possible. The angle between the pen and display needs to be greater than 60 degrees. Do not touch the display with your sleeve or wrist.
	Strong light or infrared interference	Remove the interference source or change the room environment.
	The writing method is incorrect.	You are advised to use the pen rather than a finger to write. Hold the pen as far from the nib as possible. The angle between the pen and display needs to be greater than 60 degrees. Do not touch the display with your sleeve or wrist.
No sound is played and no image is displayed.	• Check whether the power plug is inserted into the power outlet and whether the display is powered on. • Check whether the rocker switch on the interactive display is switched on. • Check whether the Standby button on the remote control was pressed. • Check whether the video and audio input cables are connected correctly. • Check whether the display is switched to the right signal source. • Check the display's brightness and contrast settings.	
Image is displayed properly, but no sound is played.	• Check the volume. • Check whether the Mute button on the remote controller is pressed. • Check whether the audio cable between the PC and interactive display is connected correctly.	
No image is displayed or the image is black and white.	• Modify the color settings. • Check the display system.	
The image or sound is interrupted.	• Find the device causing the interference and move it away from the interactive display. • Do not share the power socket of the display with an electric appliance that causes interference.	

Symptom	Possible Cause	Solution
The remote control buttons fail to cause a response.	• Change the batteries. • Clean the signal emitter at the top of the remote control. (Check whether it is blocked.) • Check contact points for the batteries.	
The PC cannot be started. (This scenario is applicable only to displays operating with a PC in the OPS slot.)	• Check whether the PC adapter is correctly connected and whether the PC is powered on. • Check whether the PC is connected correctly to the interactive display.	

The following symptoms are not faults:

- A few constantly bright or dark pixels, such as tiny red, blue, green or dark points, may exist on the LED. This symptom is not a fault and does not affect operation of the display.
- The product may produce a slight sound due to the backlight adjustment or ventilation. This is a normal symptom.
- The image and sound are normal, but you can sense static electricity when you touch the LED and metal back cover. This is a normal symptom.

Care and Maintenance

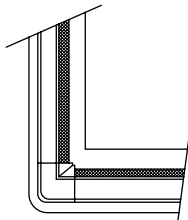
● Maintenance Tips

- Do not put or install the product near a heat source, under direct sunlight, in dusty or humid places, or somewhere the product may be hit or damaged by mechanical vibration. To maximize performance, it needs to be put away from equipment such as grid, large metal objects and radar stations as far as possible.
- Do not wipe the display with any chemical agent. Solvents may damage the enclosure or paint. If the display is stained by dust, cut off the power and then clean the display using a dried cloth with a little warm water. Use a clean, soft cloth to clean the LED of the display.
- Do not frequently switch the product on and off. It may shorten the product service life. After the display is switched off, wait three minutes before switching it on again. If the product is not to be used for an extended period of time, please power off the product and pull out the power plug.
- Do not maximize the brightness and contrast of the LED for an extended period of time. It may shorten the LED service life.
- Do not use a hard object to write on the display, which may scratch the LED.

● Clean the Infrared Sensor

The interactive display uses the horizontal and vertical infrared matrix to detect and locate the user's touch. The screen is surrounded by an infrared sensor (including the infrared acceptor and emitter), which forms an infrared net covering on the screen surface. When a user touches the screen, fingers or other opaque objects block the infrared rays that cross the touch point, which helps the sensors detect the coordinate position of the touch point.

Dust is easily retained on the screen surface due to its long-term exposure in the air and causes ineffective touch or inaccurate positioning. Therefore, you need to clean the infrared sensors around the screen regularly.



Technical Parameters

Specification	Parameter
Backlight Type	LED
Aspect Ratio	16 : 9
Physical Resolution	3840 x 2160 Pixel (4K) / 1920 x 1080 (2K)
Viewing Angle	178°
Display Colors	10bit
LCD Brightness	370cd/m²
Contrast Ratio (Typical)	4000 : 1
Response Time (Typical)	8ms
Viewing Angle	178°
Life Time (working hours)	30,000 hours
Power Consumption	65, 70 inch: Maximum < 220W 75 inch: < 350W 80, 86 inch: < 450W Standby Mode: ≤ 0.5W
Working Voltage	AC 100V - 240V, 50Hz/60Hz
Input Current	65, 70 inch: Max 2.5A 75 inch: Max 4.0A 80, 86 inch: Max 4.5A
Touch Screen Material	Tempered glass
Touch Surface Technology	Anti-Glare glass (optional)
Transparency	> 90%
Sensing Method	Infrared Touch
Touch Point	10 Points in Windows/ 5 Points in Android
Writing Method	Finger or pen
Cursor Speed	100Point/s
Positioning Accuracy	5mm
Communication Interface	USB-B
Front Interface Input Ports	Microphone (3.5mm) x 1, USB (Touch) x 1, USB (OPS) x 2, HDMI x 1, Display Port x 1, USB (Android) x 1

Specification	Parameter
Rear Side Ports	HDMI (MHL*1) x 3, HDMI out x 1, USB (Touch) x 3, Microphone (3.5mm) x 1, VGA x 1, VGA Audio x 1, USB3.0 x 1, Mini SD Reader x 1
Bottom Ports	AV in x 1, LAN in x 1, LAN out x 1, RS232 x 1, SPDIF, Earphone x 1
I/O Ports	The rear side port : HDMI 2, HDMI 3 support 4K, 60Hz The front side port: HDMI 1, Display port and Rear side HDMI 4 support 4K, 30Hz
Multimedia File Formats Support	Image: JPEG, BMP, PNG Video: MPEG1, MPEG2, MPEG4, H.264, H.265, RM, RMVB, MOV, MJPEG, VC1, DivX, FLV (Support 1080P, 4K HD Decoding) Audio: MP3, M4A, (AAC)
Speaker Position	Forward
Speaker Rated Impedance	8Ω
Speaker Freq. Response	90Hz (± 20%) - 18kHz
Speaker Max. Power Output	15W*2
Transmission Range	5m
Storage Temperature/Humidity	-10°C - 50°C, 10% - 90%
Working Temperature/Humidity	0°C - 40°C, 10% - 90%
Installation Method	Wall-mounted / Floor Stand

Source Menu Icon	Supported HDMI HDCP Format
HDMI 1 (Front)	1.4
HDMI 2 (support MHL)	1.4 & 2.2
HDMI 3	1.4 & 2.2
HDMI 4	1.4 & 2.2
HDMI 4	1.4 & 2.2

* We may modify the user manual without prior notice.