

Lenovo

ThinkVision

**T65 Smart Large Format Display
User Guide**

Think

Type/Model

62F2-KATC-WW

62F3-KATC-WW

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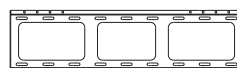
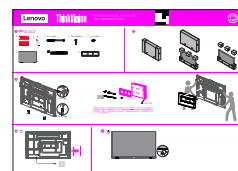
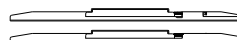
Chapter 1 Get Started with Your Smart Large Format Display (LFD)

This User's Guide contains detailed information on the ThinkVision® T65 Smart Large Format Display (LFD).

In The Box

The product package should include the following items:

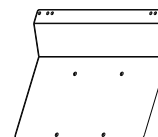
- Smart Large Format Display
- Wall hanger -2 vertical beams
- Wall hanger -1 beam
- Installation Guide QSG
- Power line
- USB Cable(A to B interface)
- HDMI Cable(3m)
- The Remote Control
- Touch pen (2 pcs)
- AAA battery (2 pcs)
- NUC bracket (adapter panel)



USB A-B



HDMI

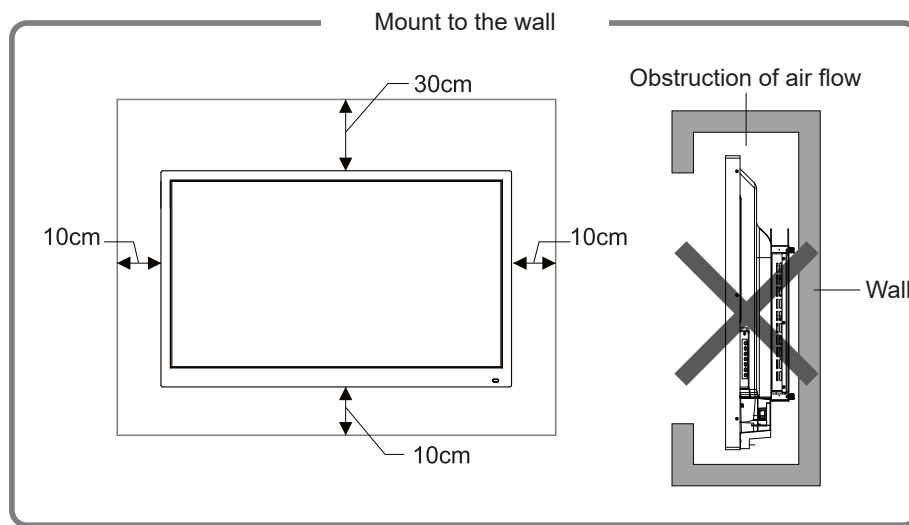


*: Depending on a variety of factors, such as peripheral processing power, file properties, and other factors related to system configuration and operating environment, having different USB connectors on this device can result in different actual transfer rates, often lower than the data transfer rates defined by the respective USB specifications:
-USB 3.2 Gen 1 Used for 5 Gbit/s; USB 3.2 Gen 2 for 10 Gbit/s, USB 3.2 for 2 Gbit/s.

Wall Mounting

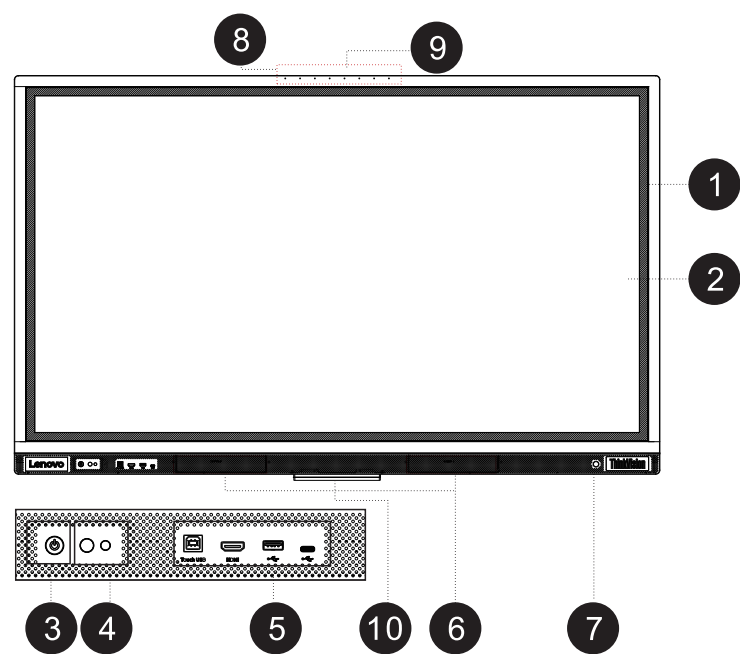
1. Installation notes

- When installing wall hanging, at least two or more professionals are required to carry out all the installation work of the machine at the same time. Users should not install themselves without authorization, so as to avoid harm caused by improper operation.
- Please install it in a position designated by professionals so that its strength can support the total weight of the machine and wall hanger for a long time, and take measures to ensure that it has enough strength to withstand external forces. The hanging point should be pressed directly against the wall, do not be installed on the wallpaper board with insufficient strength.
- The machine should be installed on a vertical plane, do not install it on an inclined plane or upward, otherwise, the machine may fall and personal injury may occur.
- In order to prevent accidental damage to the machine and personal accidents, please try to avoid children easily accessible places to install the hanger.
- During installation, please make sure that the screws and fasteners are tightly connected to avoid personal injury caused by falling down of the machine caused by loose screws.
- Installation as shown below, leave ventilation space around the unit:

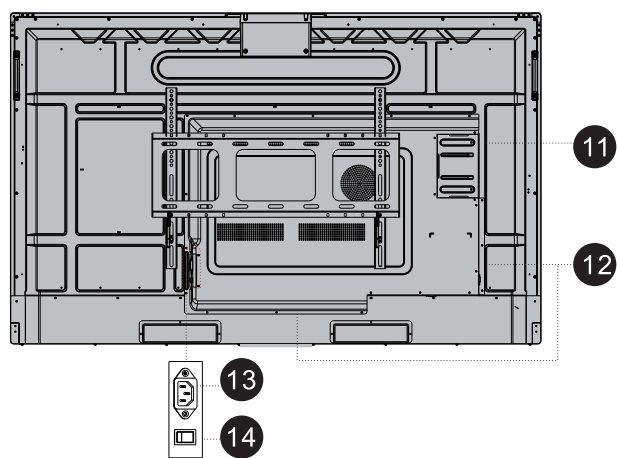


2. For detailed installation steps, see the wall mounting instructions

Appearance



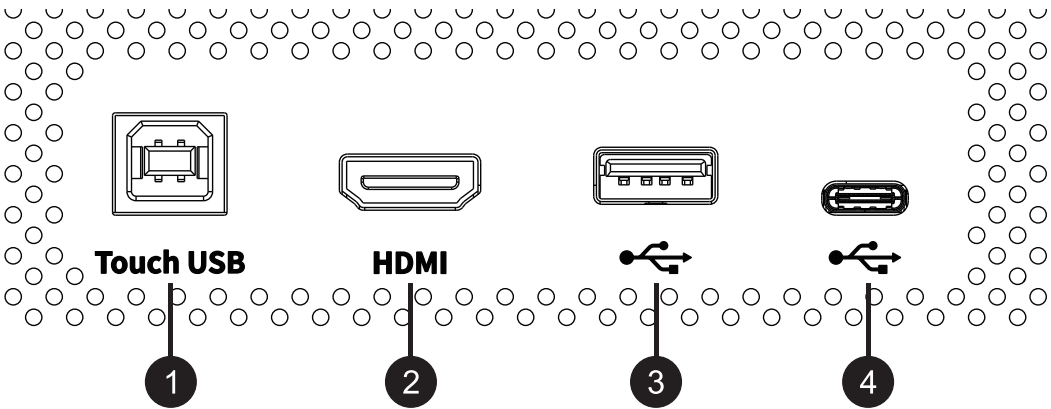
65 inch



1	Infrared touch screen	8	The microphone
2	Full physical toughened protective glass	9	USB-A external camera port
3	Power button	10	WIFI module
4	Remote receiving device/light sensing device	11	Built-in port on computer
5	The front interface	12	Rear I/O panel
6	Speaker	13	Power outlet
7	Infrared body sensor	14	Power switch

The I/O panel

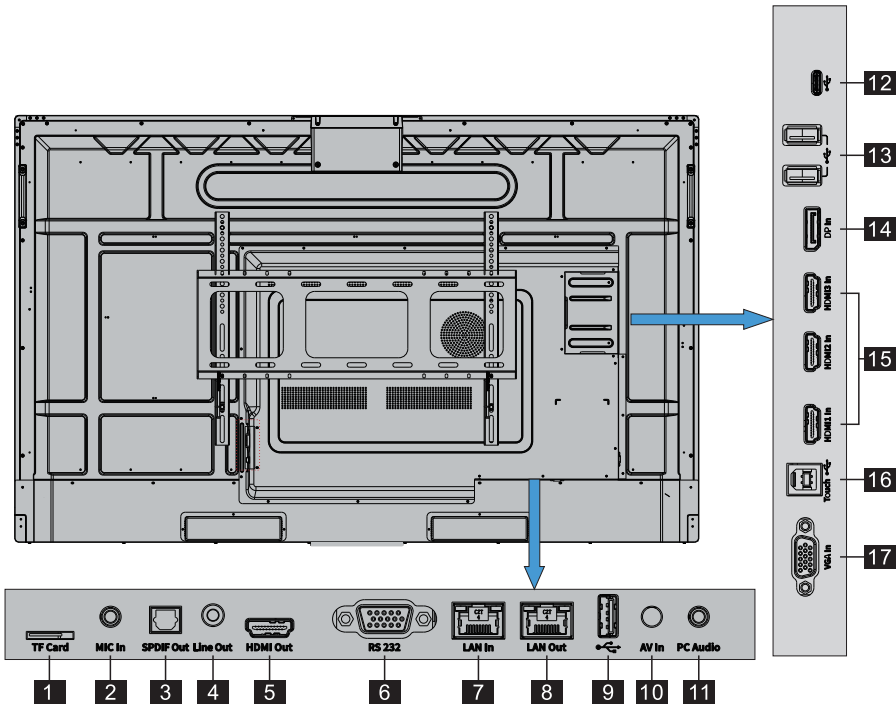
Front I/O panel



No.	Name	
1	Touch USB	When the touch USB port is combined with the front HDMI port, the PC can be operated in touch mode.
2	HDMI	When the HDMI input port is combined with the front Touch USB port to connect to the LFD, the PC can be operated in touch mode.
3	USB 3.0	It is used to connect USB devices, such as the removable hard disk, USB flash disk, USB keyboard, and mouse. When the display is in Android mode, USB devices can be accessed through Android. USB devices can be accessed by the built-in PC when the video source is switched to the built-in PC channel.
4	Type-C	It is used to connect host devices, such as the OTG USB flash disk, MAC, PC, mobile phone, and other devices with a Type-C port. It can transmit USB, video, and touch screen commands.

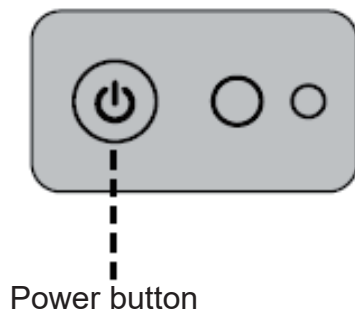
Rear I/O panel

65 inch



No.	Name	Functional description
1	TF Card	TF card slot port for externally expanded storage
2	MIC In	Microphone input port
3	SPDIF Out	Optical fiber output interface. Connect audio equipment with fiber optic input, such as power amplifier, stereo, speaker box
4	Line Out	It connects audio devices such as headphones and speakers.
5	HDMI Out	Connect electronic video devices with HDMI input.
6	RS232	Serial port signal input interface, through the specific serial port control equipment input serial port protocol to achieve the purpose of controlling intelligent large screen.
7	LAN In	The Ethernet port used to connect the network switch.
8	LAN Out	The network port used for connecting another LFD LAN.
9	USB 2.0	It is used to connect USB devices, such as removable hard disk, USB flash disk, USB keyboard and mouse that can be accessed through Android.
10	AV In	Connect to a DVD or set-top box.
11	PC Audio	Audio input port. It uses "VGA In" as audio input source.
12	Type-C	It is used to connect host devices, such as the OTG USB flash disk, MAC, PC, mobile phone, and other devices with a Type-C port. It can transmit USB, video, and touch screen commands.
13	USB 3.0	It is used to connect USB devices, such as the removable hard disk, USB flash disk, USB keyboard, and mouse. When the display is in Android mode, USB devices can be accessed through Android. USB devices can be accessed by the built-in PC when the video source is switched to the built-in PC channel.
14	DP In	DP port for computer connection. When it is combined with the rear Touch USB port to connect to the LFD, the PC can be operated in touch mode.
15	HDMI 1. 2. 3 In	HDMI input port. When it combined with the rear Touch USB port to connect to the LFD, the PC can be operated in touch mode.
16	Touch USB	When the Touch USB port is combined with the rear HDMI 1. 2. 3. In, DP, or VGA port, the PC can be operated in touch mode.
17	VGA In	VGA signal input port. Combined with "Touch USB", the PC can be operated in Touch mode.

The Front Button



Power ON

Step 1: After inserting the power cord, turn on the ship AC power switch (at the back of the screen, next to the power socket) to enter the standby state, and the power indicator is red.

Step 2: Press "⏻" on the smart screen. Press "🔴" on the smart screen to start the smart screen (the indicator is green).

Power OFF

Step 1: Press the "🔴" key on the remote control or long press the "⏻" key on the front button to enter the shutdown state, and the indicator light is red.

Step 2: If you want to completely turn off the smart large screen, please turn off the boat switch under the smart large screen (next to the power socket) and pull out the power plug.



Caution

- When the intelligent large screen enters the hibernation or shutdown state, the system checks whether the built-in computer is shut down first.
- If the built-in computer is not shut down, the system shuts down the built-in computer first and then enters the hibernation or shutdown state. The intelligent large screen needs to enter the shutdown state first and then disconnect the power supply, otherwise it may damage the machine; An unexpected power outage may damage the machine. Do not turn the power on/off repeatedly within a short period of time, as this may lead to failure.

Power Indicator Status

Indicator Status	LFD Status
Off	Turned off or powered off
Red indicator always on	Powered off
Red indicator always on, and green indicator flashes once in 3s interval	Sleeping/Hibernation
Green indicator always on	Normally working

Features and Specifications

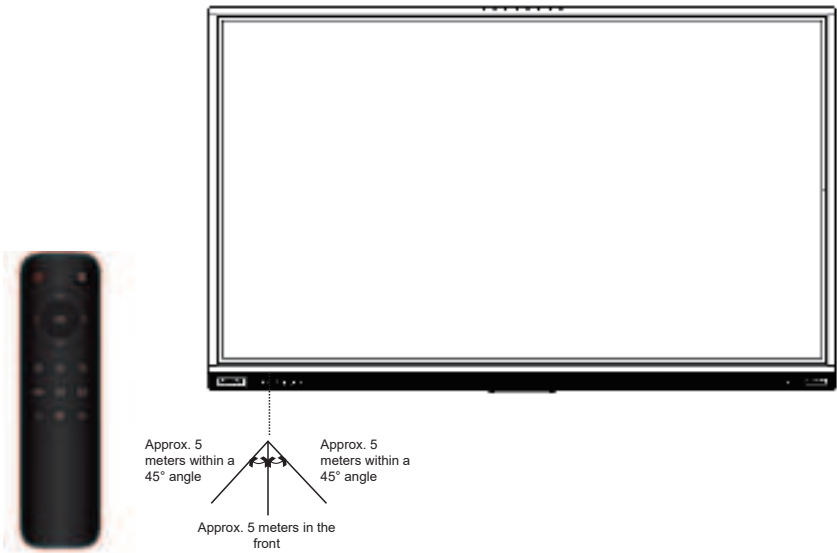
Screen Size	65"
Backlight Type	LED
Aspect Ratio	16:9
Viewing Angle	178°
Resolution	3840 x 2160 Pixel
Working Voltage	100 - 240 V, 50/60 Hz
Stand-by Power Consumption	< 0.5 W
Standard Power Consumption	≤293 W
Rated Current	Max 4.0 A
Speaker	15 W x 2
Cover glass	Tempered glass
Touch sensing technology	Infrared
Touch Points	20 points
Viewable image size (L × W)	1428.48 × 803.52 mm
The whole machine size L × W × T (bare)/T (with wall hanging support)	1525.7 × 952.01 × 87.7/119.3 mm
Packing size	1660 × 220 × 1045 mm
Storage Temperature/Humidity	-10°C~60°C/10% RH ~80% RH
Operating Temperature/Humidity	0°C~40°C/20% RH~80% RH
Installation Method	Wall hanging or floor stand support
Net weight	40.5 kg
Gross weight	52.5 kg

The Remote Control

Remote control buttons



Key	Function
Power button (⏻)	Power on/off
Signal source button (📶)	Turn on/off the source list
Cursor key (< > ^ v)	Up/down/Left/right select key
Confirm button (OK)	Confirm the current operation
Menu button (☰)	The main menu is displayed or hidden
Home button (🏠)	Return to the Android launcher
Return button (↩)	Return to the previous menu (can unlock in touch locked state)
OPS	Enter the OPS source
The Whiteboard (📝)	Open the Whiteboard app
Screen Off (📴)	Enter/exit the screen rest mode
Vol- (—)	Increase the volume
Mute (🔇)	Mute/unmute
Vol+ (+)	Decrease the volume



Instructions for remote Control



Caution

To avoid possible failures, read the following instructions and operate the remote control correctly.

- Do not drop or tap the remote control.
- Do not spill water or other liquids on the remote control.
- Do not place the remote control on damp objects.
- Do not let the remote control directly exposed to the sun or near the heat source of overheating.

Use the remote control 5 meters within a 45° angle on both sides or 5 meters in front of the product's remote control receiver.

Chapter 2 Explore Your Smart Large Format Display (LFD)


This section describes the basic operation functions of the display.








Home Screen

Follow the boot-up wizard to enter the system interface, as shown below.



Quick Access Controls

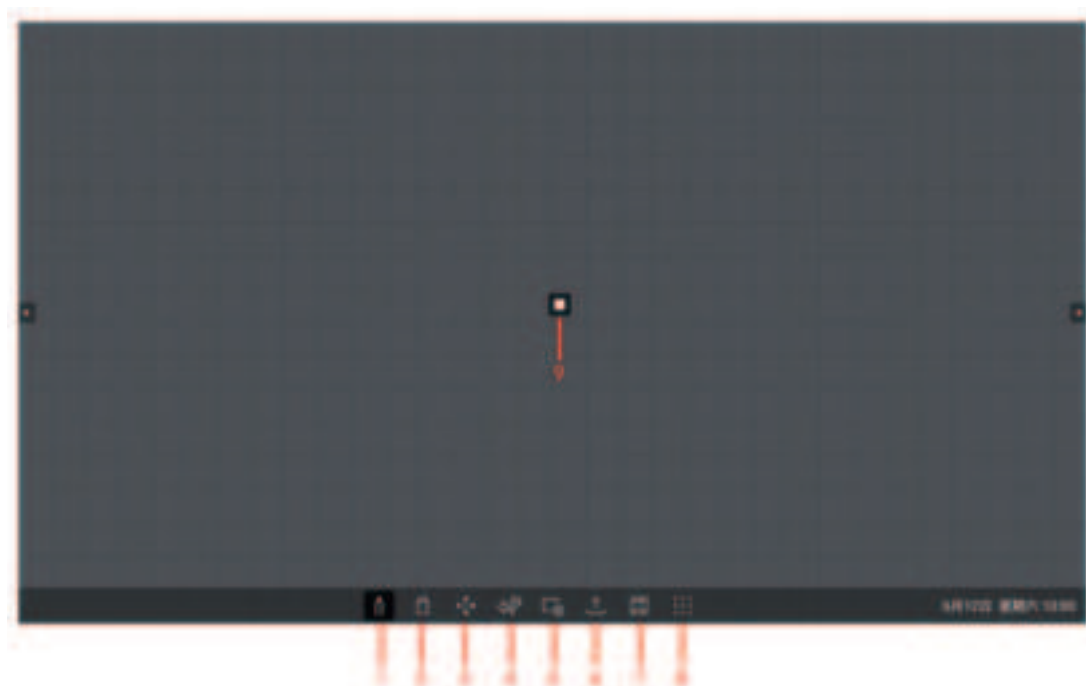
On the home screen, click the icon  to expand all the ICONS in the floating bar.

	Expand/hide the floating bar
	Return to the Android launcher
	Return to the previous menu
	Display the task management window
	Enter annotation mode
	Bring up the signal source selection window
	Bring up the task management sidebar

The Whiteboard

The whiteboard is designed to quickly and conveniently display the written content of a meeting to participants. Users can annotate, draw, or insert flowcharts and pictures on the whiteboard.

- Users can access the writing pad in the following two ways:
- On the home screen, click Whiteboard on the toolbar to go to the writing pad.
 - Click Whiteboard on the All Application page to go to the writing pad page.



1	Pen	Supports preset 6 colors + universal color palette, and adjustable brightness supports whiteboard pen +Mark pen to choose two pen types: fine, medium and thick.
2	The eraser	Support small, medium and thick eraser options for partial erasing Support one-click screen clearing to clear all content gesture: support for erasing the back of the hand.
3	Thumbnail navigation	Support thumbnail display, navigation to find the desired content, support displayHeart, actual size, display all three display modes.
4	Time to go back	Unlimited step rollback is supported. All meeting contents are recorded, and single-step undo and recovery is supported.
5	Page management	Implement canvas paging 1-6 pages, can add or delete the pages.
6	A key to share	Support meeting minutes, writing notes and other content, one key scan code to view the share save, and support sharing the current window.
7	Save the source file	Supports saving whiteboard source files, you can open next time to continue editing. Support default name + manual name.
8	More	<p>Image insertion: PNG and JPG images can be inserted, the image can be adsorbed at 45 degrees, the image can be erased by eraser, and up to 4 images can be added.</p> <p>Insert documents: open third-party documents, which can be used together with large-screen comments;</p> <p>Web page insertion: support window insertion of web pages, can switch between writing mode and operation mode, and full-screen, screenshot, support insertion of a maximum of one web page;</p> <p>Open whiteboard: Open whiteboard source files for re-editing and operation.</p> <p>Whiteboard setting: set toolbar following, suspension menu, simulated brush stroke, background setting, network setting;</p> <p>About whiteboard: display the current version of whiteboard, software license agreement, open source component license, privacy statement, and support software check and update;</p> <p>Exit: Allows you to exit a meeting without trace. After a meeting, you can delete whiteboard files, system screenshots, and screen recordings with one click.</p>

9	Hover toolbar	Hold the finger on the screen for more than 2 seconds and release it to call out the floating toolbar, which is convenient for users to use the whiteboard quickly. Common tools: If no operation is performed for more than 2 seconds, the floating toolbar will be automatically hidden.
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Notation

Users can use the annotation function to annotate or modify pictures or documents on the smart large screen. In annotation mode, the system generates a transparent layer at the top of the screen. Users can add annotations to the transparent layer, save the screenshot of annotations after annotation, and repeat the operation until the annotation mode exits.

Users can enter the annotation mode in either of the following ways:

1. Click the floating bar "" icon;



1	Choose	Click this icon to return to the current interface operation state from annotation mode.
2	The brush	Click the icon to enter the writing state. Click again to set the brush colour and thickness.
3	The eraser	Click the icon to enter the eraser function, click the icon again to set the eraser diameter.
4	Clear the screen	Clear all content of the current page.
5	Undo	Return to the previous step.
6	Screenshots	Capture the current comment page, images can be selected to import whiteboard and file sharing.
7	Exit	Click the icon to exit annotation mode.
8	Pack up	Click the icon to hide the toolbar, click the hide arrow again to show the toolbar.

All Files

The file management page displays local files in the current system. If an external storage device (such as a USB storage device or a removable hard disk) is connected, the file content of the storage device is also displayed. Users can preview, filter, search, comment, and share files on the file management page. You can access the file management page in any of the following ways:

- On the home screen, click the file icon "📁".
- On the All Application screen, click the file icon "📁".



All Application

The Calculator

Click the calculator APP to enter, you can realize the following functions of add, subtract, multiply and divide as shown in the picture below.



Screenshots

You can access the screen capture screen in any of the following ways:

- Click the "Screenshot" icon of the "All Application" interface;
- Click the "Screenshot" icon in the task Management sidebar;

After entering the screenshot mode, the capture box can change the capture position by dragging the gesture, and the capture box will follow the gesture to the position where the screenshot is needed. Hold your finger on the right Angle of the capture frame and slide to narrow or enlarge the screen shot.

The "📐" icon is used to select the screenshot range, the "✅" icon is used to confirm capturing of the current page, and the "❌" icon is used to exit the screenshot.



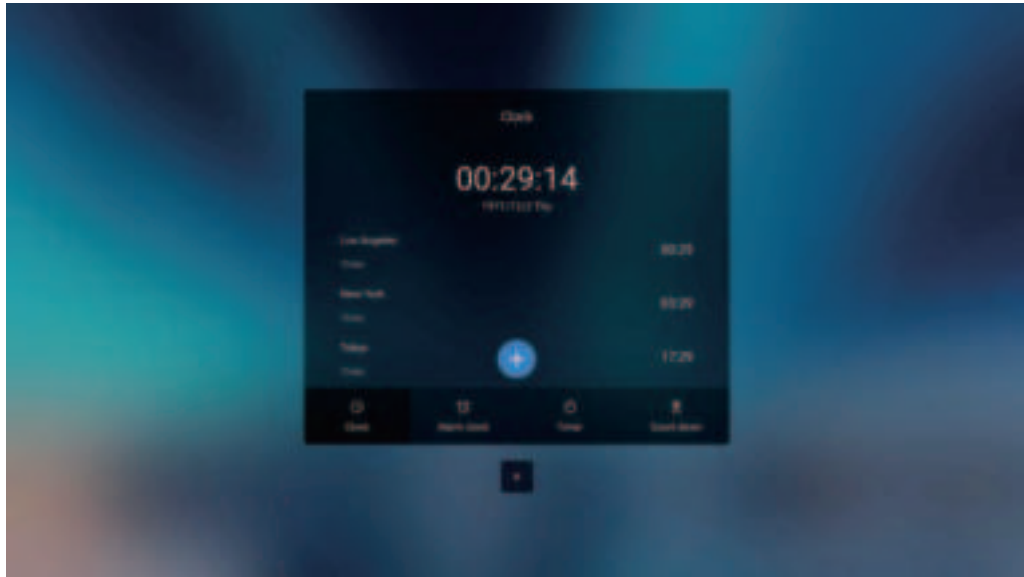
The Calendar

Click the "Calendar" icon to enter the calendar setting interface, as shown below:



The Clock

Click the clock APP to enter, you can adjust the following functions: "clock", "alarm clock", "timer" and countdown.



Lenovo Projection

Click the "Lenovo Projection" icon to enter the screen projector pairing display interface. Users can use the screen projector to display according to the instructions, as shown below:

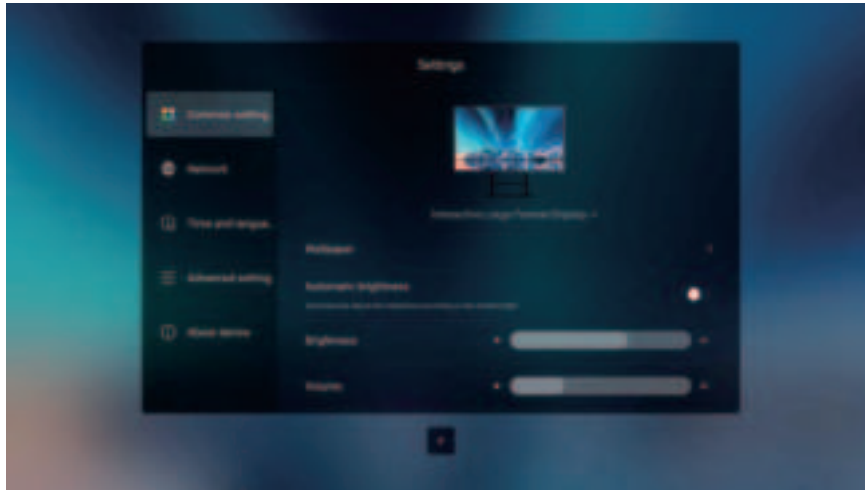


System Settings

Click the "Settings" icon in the "All Application" interface to enter the setting interface, including common functions, network Settings, time and language, advanced Settings, about devices and other information.

Common Settings

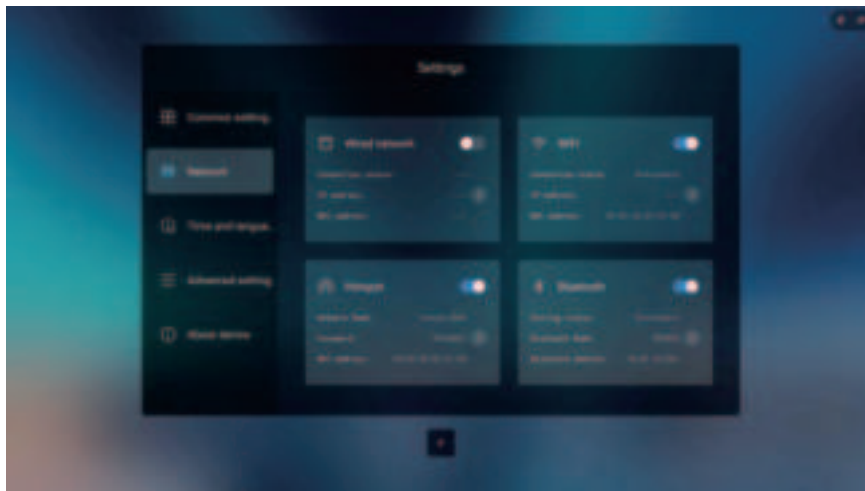
Enter the "Common Settings" sub-menu, you can set wallpaper, auto brightness, brightness volume, speaker, microphone, camera functions.



Network

The Network sub-menu is displayed, allowing you to set the wireless network, wired network, hotspot information, and Bluetooth functions.

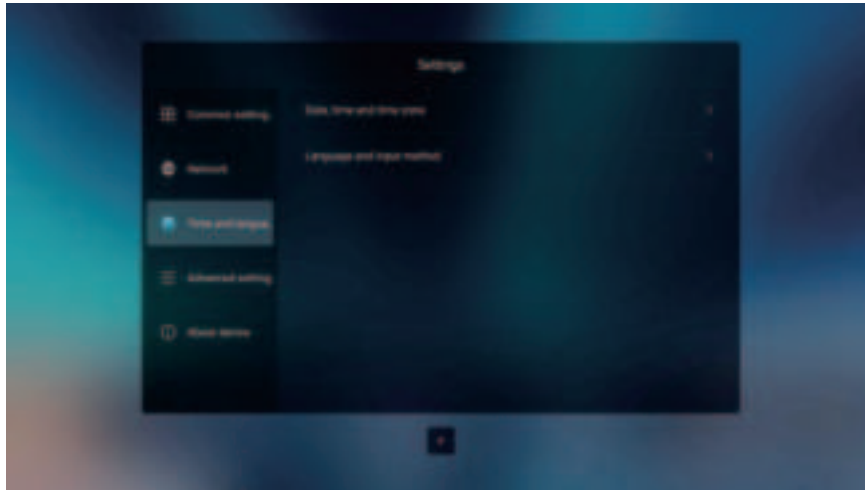
- Wireless network: View the MAC address of the device and enable or disable Wi-Fi.
- On wired networks: View the MAC address, IP address, gateway, subnet mask, and DNS information. It can automatically obtain LAN IP or LAN IP as required.
- Hotspot: You can set items related to portable Wi-Fi hotspots.
- Bluetooth: Can be connected to enable bluetooth function.



Time and Language

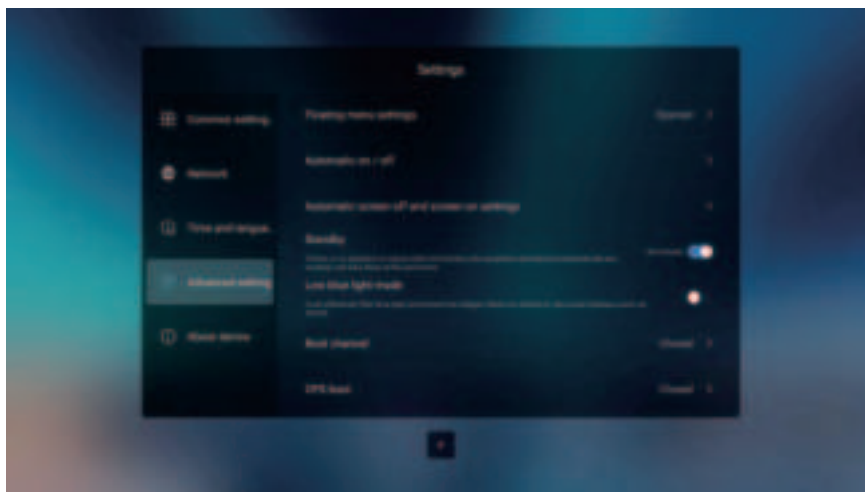
Select "Time language" sub-menu, you can enter "Date and time, time zone", language input method

- Period and time, time zone: you can set the date, time, time, and time zone
- Language and input method: You can select a language and set different input methods



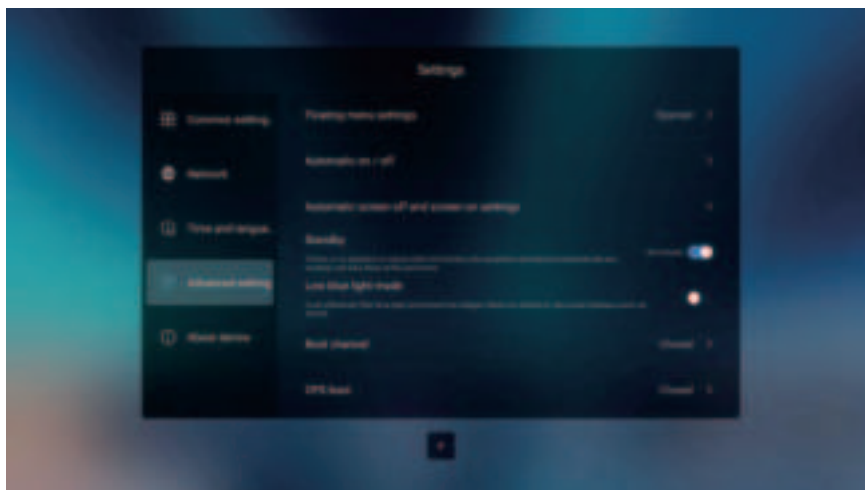
Advanced Settings

Enter the "Advanced Settings" sub-menu, you can choose "Hover menu Settings", "Auto On/off", "Auto Sleep and Wake up Settings", "Standby", "Low Blue light mode", "Startup channel", "OPS startup".



Low Blue Light Mode

Enter the low Blue light mode: Click the "Settings" button in the sidebar and select "Advanced Settings" to enter the page. Then select the "Low Blue Light Mode" button and click to enter the low blue light mode.



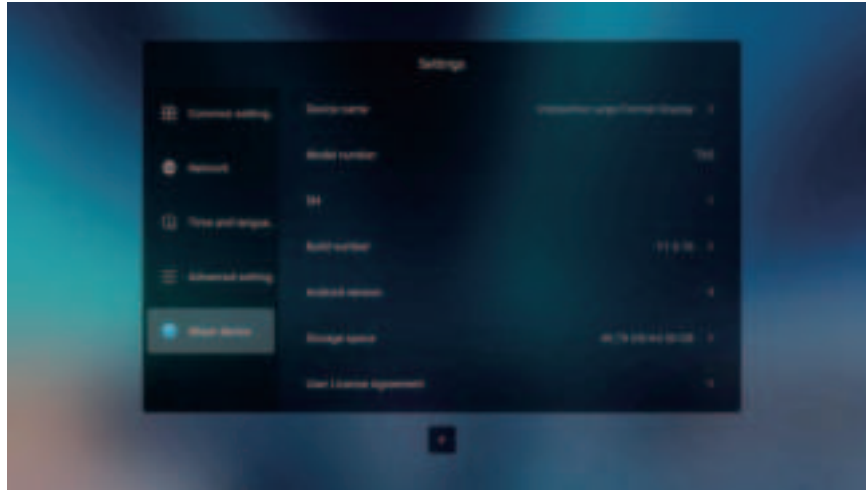
The product's "Low Blue light mode" is certified by TUV RHINeland for low blue light. The incidence of blue light problems affecting eye health has increased in recent years. Low blue light technology can reduce blue light levels. It is recommended to use low blue light mode to protect your eyes.

No Stroboscopic:

The device has no visible or invisible flicker in the range of 0-3000Hz.

About the Equipment

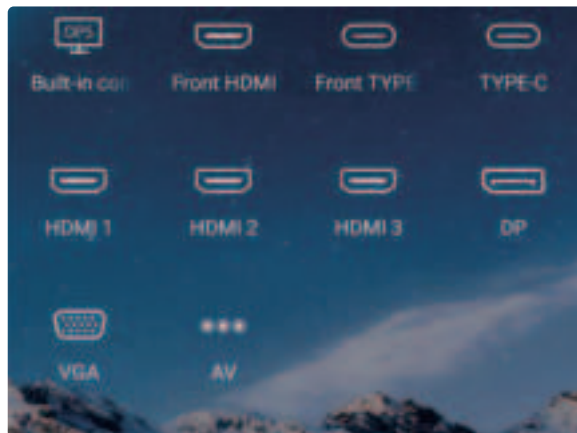
The About Device submenu is displayed. You can select system Upgrade, Android Version, Storage Space, User License Agreement, Privacy Policy, Legal Notice, factory Default.



External Signal Source

Click the signal source icon "L" in the floating bar of the home page, and the system pops up the external signal port tool window (display Built-in computer, Front HDMI, Front Type-C. Type-C HDMI 1, HDMI 2 , HDMI 3 , DP ,VGA ,AV). Click the "L" icon again to close the port window.

As shown below:



Wired signal sources include Front HDMI, front Type-C, Type-C, HDMI 1, HDMI 2, HDMI 3, DP, VGA, AV. Click the icon of signal source port, and the intelligent large screen will display the signal source screen in full screen.



Screen Off

In response to the policy of energy conservation and environmental protection, the screen function is specially added in the design of intelligent large screen. You can set the screen rest state when you only answer the voice without viewing the screen. In this case, audio or video plays normally, the screen is off, and the power indicator is steady green.

Users can access the screen in the following two ways:

- Under the startup state, press the "rest screen" button of the remote control.
- Under the startup state, long press the screen with 5 fingers for more than 2 seconds.



To return to the status before the screen break, users can exit the screen break in the following three ways:

- Press any key of remote control;
- Tap the screen to return to the previous state.
- Short press the power button;

Chapter 3 Reference Information

Resolution Specification

VGA Display Mode

No.	Resolution	Refresh Rate (Hz)
1	800×600	60 Hz
2	1280×720	60 Hz
3	1360×768	60 Hz
4	1600×900	60 Hz
4	1920×1080	60 Hz

HDMI Display Mode

No.	Resolution	Refresh Rate (Hz)
1	1280×720	60 Hz
2	1920×1080	30 Hz
3	1920×1080	60 Hz
4	3840×2160	30 Hz
4	3840×2160	60 Hz

Type-C Display Mode

No.	Resolution	Refresh Rate (Hz)
1	1280×720	60 Hz
2	1920×1080	30 Hz
3	1920×1080	60 Hz
4	3840×2160	30 Hz
4	3840×2160	60 Hz

HDMI Out Video Output Mode

No.	Resolution	Refresh Rate (Hz)
1	1920×1080	60 Hz
2	3840×2160	30 Hz
3	3840×2160	60 Hz

Common Faults and Solutions

Before contacting technical support, please perform troubleshooting according to the following table. If the issue still cannot be solved, please contact your local distributor. For your safety, do not repair the product by yourself.

Troubleshooting

Symptom	Possible Factor	Solution
There's nothing on the screen, no sound, no light	The power plug is loose and the power supply is not connected	Check whether the power cable is properly connected.
LCD whiteboard image with dotted lines or stripes	Signal interference, such as cars, neon lights, hair dryers, etc.	Find interfering electrical equipment nearby and move it away from the machine; or insert the power plug into the other socket
Computer display image offset, unsatisfactory screen, over screen, fuzzy display	1. Improper adjustment 2. Wrong display mode	1. Use the automatic adjustment function. 2. Enter "PC Screen Adjustment" to adjust the horizontal or vertical position. 3. Use recommendation mode.
System halted, unable to operate the machine	1. The device's remote control signal receptor is blocked 2. The remote control's battery is exhausted	1. Remove the obstructing object to avoid obstructing the device's remote control's receptor 2. Replace the battery
The device is freezing, crashing, or cannot be operated	1. Running too many programs 2. The normal operation of the machine is disturbed by the external environment (such as lightning, static electricity, etc.)	Disconnect the power supply of the machine, wait 1 to 2 minutes and then switch on the power again.
Touch is slow and malfunctioning	The machine runs too many programs	runs too many programs Clearing accounts for a larger operation of the program or restart the machine.
OPS cannot be started normally, and there is no display, no touch	OPS is not fixed	Reinstall the OPS computer.
Touch offset	Caused by computer system coordinates, corrective treatment is required.	Enter the control panel and select the correction process.
External computer touch is invalid	1. The ports of the signal source and the touch USB cable are inconsistent. 2. Touch USB cable is too long or poor quality.	1. Check and replace the interface corresponding to the touch USB cable. 2. Replace a shorter or better quality touch USB cable.

Appendix A Important Safety Information

Safety Information

General Safety Guidelines

For tips to help you use your computer safely, go to:

<http://www.lenovo.com/safety>

Before installing this product, read the Safety Information.

This equipment is not suitable for use in locations where children are likely to be present, avoid hurting your child when machine falling down.



Maintenance

Important Safety Information

The power cable is dedicated to the smart screen. If you want to use a different power cable, only use the power cable that matches the smart screen.



To prevent the machine from being damaged, do not use any cables other than the one provided with the machine.
Please do not overload the power sockets and make sure that the sockets you use are certified by the state for safety.



The power cable in the attachment is a three-socket power cable (with grounding protection). Ensure that the ground terminal of the wall socket is properly grounded.
When wiring power cables, avoid channels to avoid trampling. You should also avoid areas that are squeezed by other objects.



In case of a thunderstorm, pull out the power plug and cable plug and disconnect the device from the antenna to avoid damage to the device.



If the product is not used for a long time, please turn off the power and unplug the power plug.
If there is any abnormal sound or smell, please immediately turn off the power and unplug the power plug. If it is confirmed as abnormal, do not continue to use it. Contact the product maintenance personnel for repair as soon as possible.



Do not place inflammable and explosive objects on the machine, such as candles, electric stoves and light bulbs should not be placed on or near the machine to avoid accidents.



Be careful of liquid and metal foreign matter falling into the machine. If any liquid or metal foreign matter falling into the machine, please do not turn on the machine and contact professional personnel to deal with it as soon as possible.



After the machine is moved from a low temperature environment to a warm area, dew may occur inside the machine. In order to make the dew fully distributed and dry, it should be placed for 24 hours before powering on and starting up.



When moving the machine, it should be completed by two or more people, and the impact should be avoided during the moving process, and the display screen should be specially protected.



In order to prevent accidental injury, the machine must be installed on a flat and stable ground according to the installation instructions; or according to the wall mounting bracket installation instructions to firmly fix the machine on the wall



Do not install the machine in an improper place, such as:

- Environments that are exposed to direct light, humid, excessively hot, cold, or dusty.
- Poor ventilation or closure.
- Storage or use of flammable and explosive materials environment.
- An environment with flammable or corrosive gases.



Do not expose the battery to excessive heat, such as sunlight or fire. Otherwise, it may explode.

Appendix B Usage Precautions

- Please do not disassemble or assemble this product by yourself in any way. Opening or removing the cover without authorization may expose you to dangerous voltage or other hazards. If you have any maintenance matters, please contact professional maintenance personnel for handling.
- If the unit is dirty, please unplug the unit and wipe it with a soft semi-dry cloth dipped in a small amount of water, do not repeatedly wipe the display to avoid scratches. Do not use alcohol, gasoline, acid, alkali, detergent, volatile oil, thinner and other solvents to wipe the machine. These solvents may cause material deterioration or damage the paint surface.
- Under the environment of high humidity, there may be water mist inside the screen, which is normal. This is due to the reason of weather humidity and temperature caused by the difference in temperature between the outer glass and the inner glass surface to produce condensation in the glass inner surface of the small water droplets. It will disappear automatically after 24 hours of normal use. Please feel free to use it.
- Do not put any sharp objects or metal objects into the cooling hole or touch the signal connector to avoid damage or electric shock caused by short circuit.
- The main material of the LCD screen is glass, which is fragile. Do not apply pressure to the LCD screen to avoid damage.
- Do not place the machine on an unstable trolley, shelf or table, which may cause the machine to tip over. The machine should be moved with care when placed on a cart. A quick and sudden stop, too much force or uneven ground can cause carts and machines to tip over.
- The openings on the machine are designed for ventilation and heat dissipation to ensure the reliable operation of the components in the machine and prevent overheating. Ventilation should not be impeded by covering such items as newspapers, tablecloths and curtains.
- Do not let the machine for a long time to display the same picture or the active picture contains a long time fixed text, icons, etc., this will leave "residual shadow" on the screen, and does not disappear in a long period of time after shut down the machine.
- Staring at the LCD screen for a long time will not only bring visual fatigue, but also may cause eye diseases and harm the eyesight. For the sake of health, we advise you to take a 10-minute break after 30 minutes of use to prevent eye fatigue. You can relax your eyes by watching distant scenery or do eye movements. Infants under 2 years old should not stare at the LCD screen.

Appendix C. Service and Support

The following information describes the technical support that is available for your product, during the warranty period or throughout the life of the product. Refer to your Lenovo Statement of Limited Warranty for a fully Lenovo warranty terms explanation of

Online Technical Support

Online technical support is available during the life of your product through the Lenovo Support Website at <http://www.lenovo.com/support>

Product replacement assistance or exchange of defective components also is available during the warranty period, assistance for replacement or exchange of defective components is available. In addition, if your option is installed in a Lenovo computer, you might be entitled to service at your location. Your technical support representative can help you determine the best alternative

Telephone Technical Support

Installation and configuration support through the Customer Support Center will be withdrawn or made available for a fee, at Lenovo's discretion, 90 days after the option has been withdrawn from marketing. Additional support offerings, including step-by-step installation assistance, are available for a nominal fee. To assist the technical support representative, have available as much of the following information as possible:

- Option name
- Option number
- Proof of purchase
- Computer manufacturer, model, serial number, and manual
- Exact wording of the error message (if any)
- Description of the problem
- Hardware and software configuration information for your system

If possible, be at your computer. Your technical support representative might want to walk you through the problem during the call.

Worldwide Telephone List

For the current phone numbers,
Go to link <https://pcsupport.lenovo.com/sk/en/premiersupport>

Service Information

Customer responsibilities

The warranty does not apply to a product which has been damaged due to accident, misuse, abuse, improper installation, usage not in accordance with product specifications and instructions, natural or personal disaster, or unauthorized alterations, repairs or modifications.

The following are examples of misuse or abuse and not covered by warranty: Images burned on to the screen of a CRT monitor. Burned image is preventable by utilizing a moving screen saver or power management.

Physical damage to covers, bezel, base and cables. Scratches or punctures on monitor screens.

Getting further help

If you still can't solve your problem, please contact the Customer Support Centre. For more information on contacting the Customer Support Centre, please see Appendix C, "Service and support" on page C-1.

Service parts

Refer to Lenovo service eSupport.

Appendix D Compliance Information

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The following terms are trademarks of Lenovo in the United States and/or other countries.

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ThinkCentre

ThinkPad

ThinkVision

Microsoft, Windows, and Windows NT are trademarks of Microsoft Corp.

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Reminder regarding the “Regulation on the Administration of the Recovery and Disposal of Waste Electrical and Electronic Products”

Lenovo encourages users of Lenovo products to comply with national laws and regulations on the recycling and disposal of waste electrical and electronic products and hand the waste products over to a local institute with nationally recognized qualifications for recycling and disposal. For more information on the recycling service, please go to <http://support.lenovo.com/cn/activity/551.htm>.

Power line

Use only the power line provided by the product manufacturer. Do not use AC power lines for other equipment.

Recycling Information

Lenovo encourage owners of information technology (IT) equipment to responsibly recycle their equipment when it is no longer needed. Lenovo offers a variety of programs and services to assist equipment owners in recycling their IT products. For information on recycling Lenovo products, go to:

環境配慮に関して

本機器またはモニターの回収リサイクルについて

企業のお客様が、本機器が使用済みとなり廃棄される場合は、資源有効利用促進法の規定により、産業廃棄物として、地域を管轄する県知事あるいは、政令市長の許可を持った産業廃棄物処理業者に適正処理を委託する必要があります。また、弊社では資源有効利用促進法に基づき使用済みパソコンの回収および再利用・再資源化を行う「PC 回収リサイクル・サービス」を提供しています。詳細は、

https://www.lenovo.com/jp/ja/services_warranty/recycle/pcrecycle/をご参照ください。

また、同法により、家庭で使用済みとなったパソコンのメーカー等による回収再資源化が 2003 年 10 月 1 日よりスタートしました。詳細は、https://www.lenovo.com/jp/ja/services_warranty/recycle/personal/をご参照ください。

重金属を含む内部部品の廃棄処理について

本機器のプリント基板等には微量の重金属（鉛など）が使用されています。使用後は適切な処理を行うため、上記「本機器またはモニターの回収リサイクルについて」に従って廃棄してください。

Collecting And Recycling A Disused Lenovo Computer Or Monitor

If you are a company employee and need to dispose of a Lenovo computer or monitor that is the property of the company, you must do so in accordance with the Law for Promotion of Effective Utilization of Resources. Computers and monitors are categorized as industrial waste and should be properly disposed of by an industrial waste disposal contractor certified by a local government. In accordance with the Law for Promotion of Effective Utilization of Resources, Lenovo Japan provides, through its PC Collecting and Recycling Services, for the collecting, reuse, and recycling of disused computers and monitors. For details, visit the Lenovo Web site at

https://www.lenovo.com/jp/ja/services_warranty/recycle/pcrecycle/. Pursuant to the Law for Promotion of Effective Utilization of Resources, the collecting and recycling of home-used computers and monitors by the manufacturer was begun in October 1, 2003. This service is provided free of charge for home-used computers sold after October 1, 2003. For details, visit the Lenovo Web site at https://www.lenovo.com/jp/ja/services_warranty/recycle/personal/.

Disposing Of Lenovo Computer Components

Some Lenovo computer products sold in Japan may have components that contain heavy metals or other environmental sensitive substances. To properly dispose of disused components, such as a printed circuit board or drive, use the methods described above for collecting and recycling a disused computer or monitor. Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area. Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service.

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ThinkVision

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HDMI Trademarks

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.



Signage Display



As an ENERGY STAR Partner, Lenovo Group Limited has followed the EPA's enhanced product qualification and certification process to ensure that the products marked with the ENERGY STAR logo are ENERGY STAR qualified per the applicable ENERGY STAR guidelines for energy efficiency. The logo appears on the boot screen on all ENERGY STAR qualified Signage Displays.

In the event that brightness settings or power mode settings are changed by the user, energy consumption of the panel may increase beyond the limits required for ENERGY STAR certification.

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

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