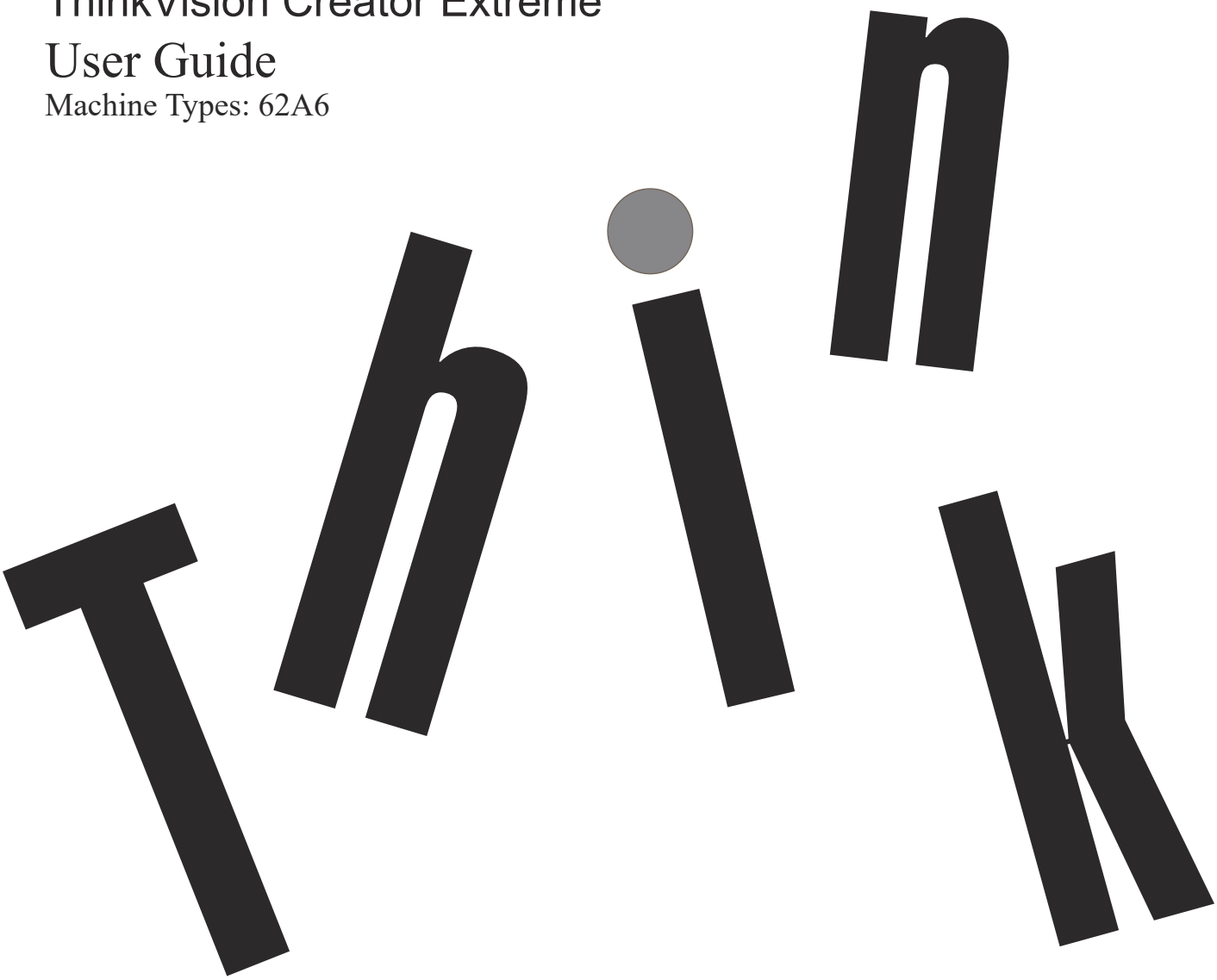
Lenovo

ThinkVision

ThinkVision Creator Extreme User Guide

Machine Types: 62A6



Product numbers

62A6-RAR3-WW

CE

First Edition (September 2020)

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Contents

Safety Information iii
General safety guidelines iii
Safety and Maintenance Guidelines iv

Chapter 1. Getting Started 1-1
Shipping contents 1-1
Notice for use 1-2
Product overview 1-2
Adjustment type 1-2
Tilt 1-2
Swivel 1-3
Height Adjustment 1-3
Monitor Pivot 1-3
Shading Hood installation 1-4
Monitor controls 1-4
Cable lock slot 1-4
Setting up your monitor 1-5
Connecting and turning on your monitor 1-5
Registering your option 1-10

Chapter 2. Adjusting and Using the Monitor 2-1
Comfort and accessibility 2-1
Arranging your work area 2-1
Positioning your monitor 2-1
Quick tips for healthy work habits 2-2
Accessibility information 2-2
Adjusting your monitor image 2-3
Using direct access controls 2-3
Using On-Screen Display (OSD) controls 2-4
USB Link: 2-8
Selecting a supported display mode 2-10
Understanding power management 2-11
Power Management Mode 2-11
Caring for your monitor 2-12
Detaching the monitor base and stand 2-12
Wall Mounting (Optional) 2-12

Chapter 3. Reference Information 3-1
Monitor specifications 3-1
Troubleshooting 3-3
Manually installing the monitor driver 3-5
Installing the monitor driver in Windows 7 3-5
Installing the monitor driver in Windows 10 3-6
Getting further help 3-6
Service information 3-7
Customer responsibilities 3-7
Service parts 3-7

Appendix A. Service and Support A-1
Registering your option A-1
Online technical support A-1
Telephone technical support A-1

Appendix B. Notices B-1
Recycling information B-2
Trademarks B-2
Power cords and power adapters B-2

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.

Avant d'installer ce produit, lisez les consignes de sécurité.

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

Πριν εγκαταστήσετε το προϊόν αυτό, διαβάστε τις πληροφορίες ασφάλειας (safety information).

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza

Antes de instalar este produto, leia as Informações de Segurança.

Läs säkerhetsinformationen innan du installerar den här produkten.

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Les sikkerhetsinformasjonen (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu, należy zapoznać się
z książką "Informacje dotyczące bezpieczeństwa" (Safety Information).

Пред да се инсталира овој продукт, прочитајте информацијата за безбедност.

Pred inštaláciou tohto zariadenia si peèítaje Bezpeènostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Ennen kuin asennat t m n tuotteen, lue turvaohjeet kohdasta Safety Information

Před instalac tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

在安装本产品之前，请仔细阅读 Safety Information(安全信息)。

安裝本產品之前，請先閱讀「安全資訊」。

مج، يجب قراءة دات السلامة

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

Antes de instalar este producto lea la información de seguridad.

Antes de instalar este produto, leia as Informações de Segurança.

Перед установкой продукта прочтите инструкции по технике безопасности.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

Safety and Maintenance Guidelines

Important Safety Information

The power cord is designed for use with your monitor. To use a different cord, use only a power source and connection compatible with this monitor.

WARNING: Always connect your monitor, the computer, and other equipment to a grounded (earthed) power outlet. To reduce the risk of electric shock or damage to your equipment, do not disable the power cord grounding feature. The grounding plug is an important safety feature.

WARNING: For your safety, be sure that the grounded power outlet you plug the power cord into is easily accessible to the operator and located as close to the equipment as possible. To disconnect power from the equipment, unplug the power cord from the power outlet by grasping the plug firmly. Never pull on the cord.

CAUTION: To protect your monitor, as well as your computer, connect all power cords for your computer and its peripheral devices (such as a monitor, printer, or scanner) to a surge protection device such as a power strip with surge protection or uninterruptible power supply (UPS). Not all power strips provide surge protection; the power strips must be specifically labelled as having this ability. Use a power strip whose manufacturer offers a damage replacement policy, so you can replace your equipment if surge protection fails.

CAUTION: A certified power supply cord has to be used with this equipment. The relevant national installation and/or equipment regulations shall be considered. A certified power supply cord not lighter than ordinary polyvinyl chloride flexible cord according to IEC 60227 (designation H05VV-F 3G 0.75mm² or H05VVH2-F2 3G 0.75mm²) shall be used. An alternative flexible cord is synthetic rubber.

Safety Precautions

- Use only a power source and connection compatible with this monitor, as indicated on the label/back plate of the monitor.
- Be sure the total ampere rating of the products connected to the outlet does not exceed the current rating of the electrical outlet, and the total ampere rating of the products connected to the power cord does not exceed the rating of the power cord. Look on the power label to determine the ampere rating (Amps or A) for each device.
- Install your monitor near a power outlet that you can easily reach. Disconnect the monitor by grasping the plug firmly and pulling it from the outlet. Never disconnect the monitor by pulling the cord.
- Do not allow anything to rest on the power cord. Do not walk on the cord.
- While using VESA mount application, the AC Inlet must face to down side. Do not face any other position.

Maintenance Guidelines

To enhance the performance and extend the life of your monitor:

- Do not open your monitor cabinet or attempt to service this product yourself. If your monitor is not operating properly or has been dropped or damaged, contact your Lenovo authorized dealer, reseller, or service provider.
- Adjust only those controls that are described in the operating instructions.
- Turn your monitor off when not in use. You can substantially increase the life expectancy of the monitor by using a screen saver program and turning off the monitor when not in use.
- Keep your monitor in a well-ventilated area, away from excessive light, heat, or moisture.
- Slots and openings in the cabinet are provided for ventilation. These openings must not be blocked or covered. Never push objects of any kind into cabinet slots or other openings.
- Unplug the monitor from the power outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.
- Do not drop the monitor or place it on an unstable surface.
- When removing the monitor base, you must lay the monitor face down on a soft area to prevent it from getting scratched, defaced, or broken.

Cleaning the Monitor

The monitor is a high-quality optical device that requires special care when cleaning. To clean the monitor, follow these steps:

1. Turn off the computer and the monitor.
2. Unplug your monitor from the power outlet before cleaning.

CAUTION: Do not use benzene, thinner, ammonia, or any volatile substance to clean the monitor screen or cabinet. These chemicals may damage the monitor. Do not use liquid or aerosol cleaners. Never use water to clean an LCD screen.

3. Wipe the screen with a dry, soft, clean cloth. If the screen requires additional cleaning, use an antistatic screen cleaner.
4. Dust the monitor housing. Use a damp cloth to clean the cabinet. If the cabinet requires additional cleaning, use a clean cloth dampened with isopropyl alcohol.
5. Plug in the monitor.
6. Turn on the monitor and the computer.

Chapter 1. Getting Started

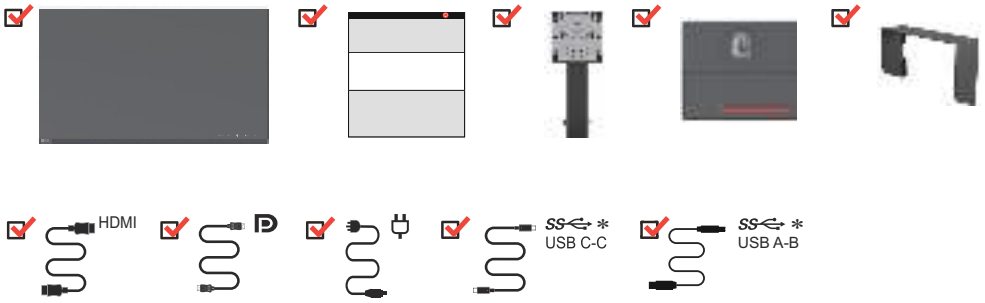
This User Guide provides detailed operation instructions for the user. For quick instruction overview, please see the Setup Poster for brief information.

ThinkVision Creator Extreme supports “Lenovo Display Control Center”- ThinkColor.

Shipping contents

The product package should include the following items:

- Information Flyer
- Flat Panel Monitor
- Power Cord
- DP Cable
- HDMI Cable
- USB Type C-C Cable
- USB Type A-B Cable
- Base
- Stand
- Shading hood

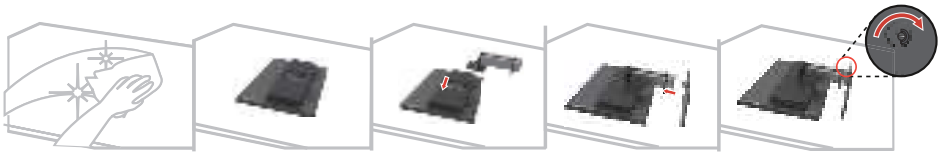


*: Depending on many factors such as the processing capability of peripheral devices, file attributes, and other factors related to system configuration and operating environments, the actual transfer rate using the various USB connectors on this device will vary and is typically slower than the data rates as defined by the respective USB specifications: - 5 Gbit/s for USB 3.1 Gen 1; 10 Gbit/s for USB 3.1 Gen 2 & 20 Gbit/s for USB 3.2.

Notice for use

To set up your monitor, please see the illustrations below.

Note: Do not touch the screen of the monitor. The screen is made of glass and can be damaged by rough handling or excessive pressure.



1. Carefully lay the monitor on a flat surface.
2. Align the stand assembly bracket to the monitor.
3. Insert the bracket towards the monitor until it locks in place.

Note: To connect VESA mounting accessories, refer to “Wall Mounting (Optional)” on page 2-12.

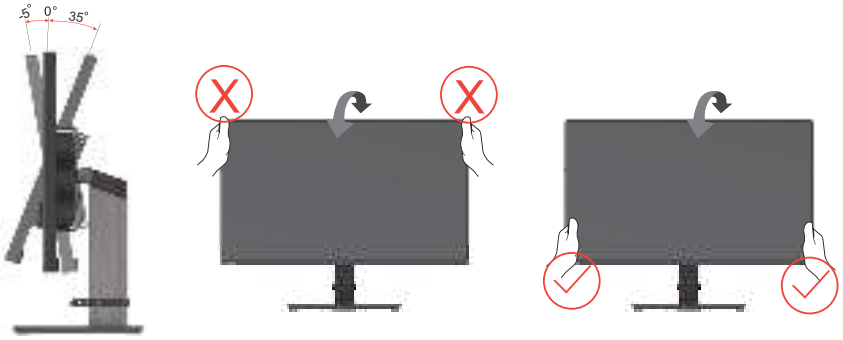
Product overview

In this section, we will describe how to adjust the position of the monitor; how to set user controls; how to use the cable lock slot and install the shading hood.

Adjustment type

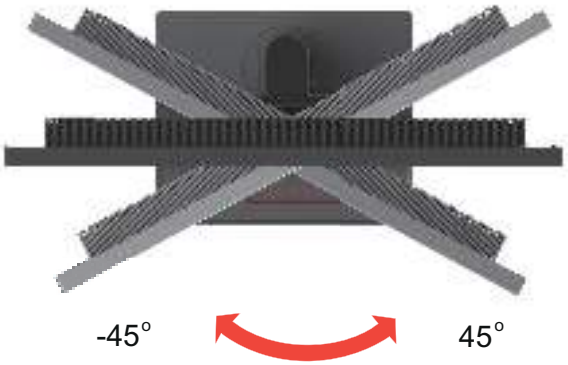
Tilt

Please see the illustration below for an example of the tilt range.



Swivel

With the built-in base, you can tilt and rotate the monitor to get the best viewing angle.



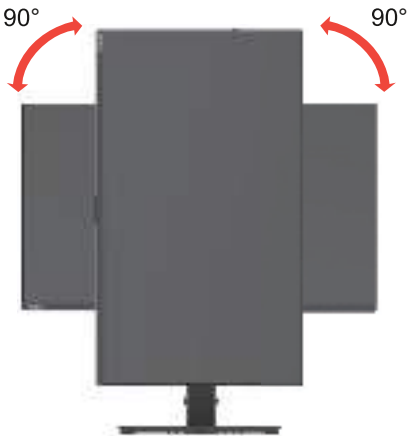
Height Adjustment

To adjust the height, the user needs to press or lift the monitor.

Monitor Pivot

- Adjust the screen position before rotating the monitor screen.
(Make sure the monitor screen rises to its highest point and tilts back 35°.)
- Then rotate clockwise until the monitor stops at 90°.

Note: This equipment is not suitable for use in places where children may appear, so as not to hurt your children when the machine falls.



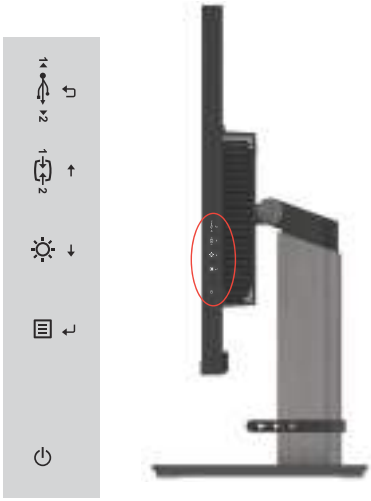
Shading Hood installation

By installing a special shading hood, the surrounding stray light and reflection can be shielded, so that the display content is clearer and the color accuracy is better.

1. Unfold the shading hood body and place its middle part on the top of the monitor.
2. Place the bars on the left and right sides and the top side of the shading hood against the front sides and top edges of the monitor.
3. Attach the bezel on the rear of the shading hood to the back of the monitor.

Monitor controls

The keypad controls on the panel frame are accesses to various functions.



For information on how to utilize these keypad controls, please see “Adjusting your monitor image” on page 2-3.

Cable lock slot

Your monitor is equipped with a cable lock slot located on the rear of your monitor (in the lower position).

Setting up your monitor

This section provides information on how to set up your monitor.

Connecting and turning on your monitor

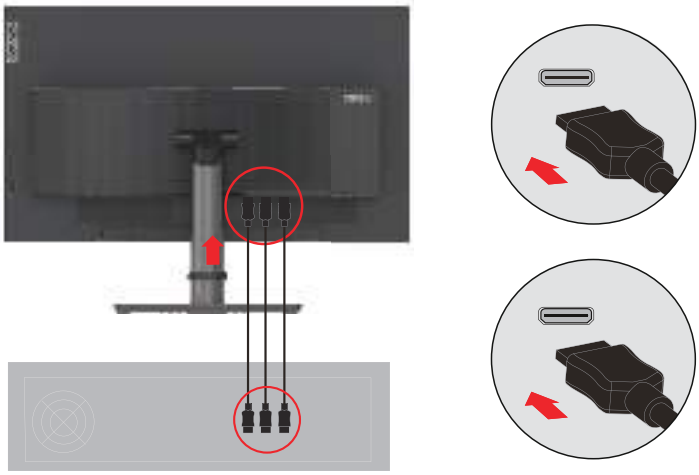
Note: Before performing this procedure, be sure to read “Safety Information” on page iii.

1. Power off your computer and all attached devices, then unplug the computer power cord.

2. Connect the cables as shown below.

3. Connect one end of the HDMI cable to the monitor HDMI connector and the other end to the computer.

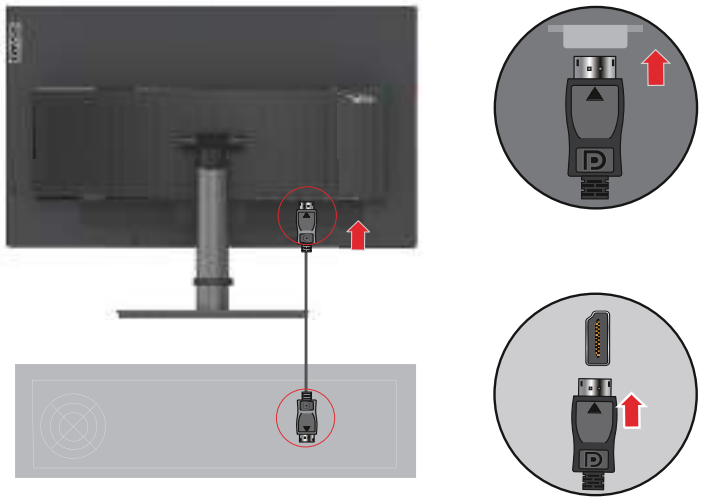
HDMI



Note: Lenovo recommends that customers who require to use the HDMI input on their monitors purchase the “Lenovo HDMI to HDMI Cable OB47070” website: www.lenovo.com/support/monitoraccessories.

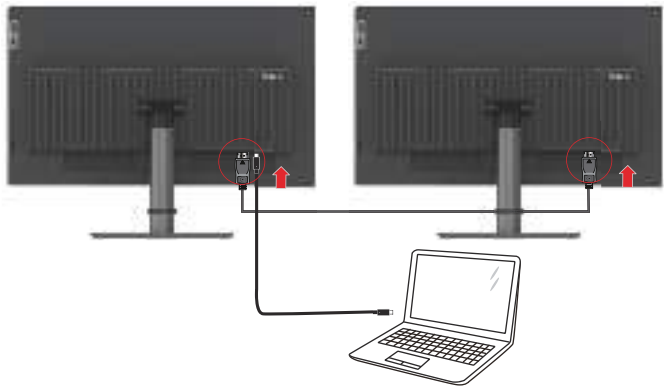
4. Connect one end of the DP cable to the DP input port of the monitor and the other end of the DP cable to the computer.

DP



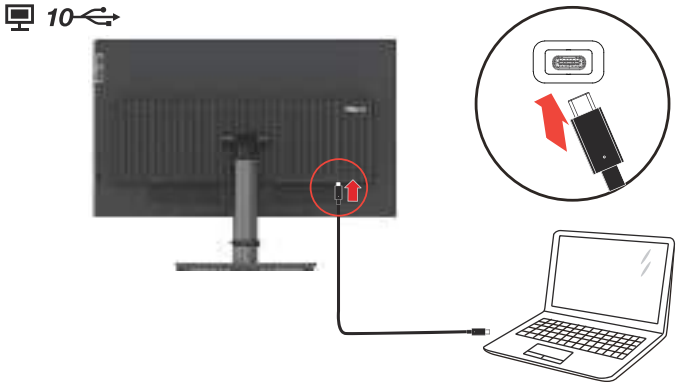
Note: Lenovo recommends users who need to use the DP cable on their monitors to purchase the "Lenovo DisplayPort to DisplayPort cable 0A36537" website: www.lenovo.com/support/monitoraccessories.

5. Connect one end of the DP cable to the DP output port of the monitor (see the left figure) and the other end to the DP input point of another monitor (see the right figure). Connect one end of the Type C-C cable to the Type-C port of the monitor (see the left figure) and the other end to the computer.



Note: Lenovo recommends users who need to use the DP cable on their monitors to purchase the "Lenovo DisplayPort to DisplayPort cable 0A36537" website: www.lenovo.com/support/monitoraccessories.

6. Connect one end of the USB Type-C cable to the USB Type-C port of the monitor and the other end to the USB Type-C port of the computer.

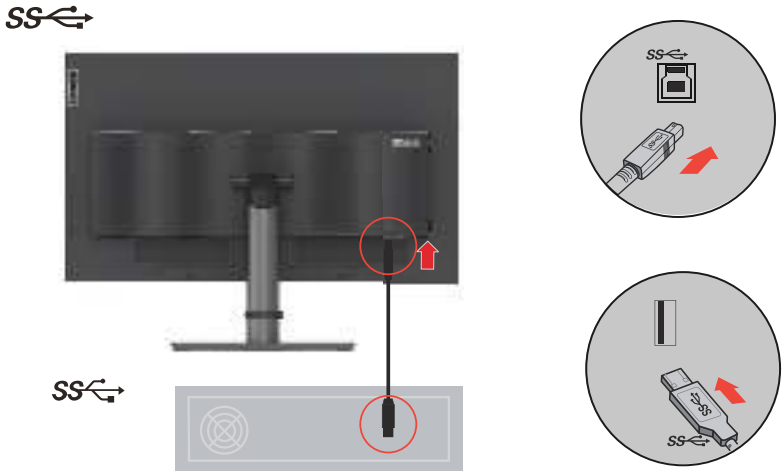


Note: The USB Type-C port of this monitor provides data, video and power transmission.

The host device must support DisplayPort Alt mode (video, charging and USB 3.1) via the USB Type-C interface.

Power supplies 5VDC/3A, 9VDC/3A, 12VDC/3A,15VDC/3A, 20VDC/4.8A.

7. Connect one end of the USB 3.0 cable to the USB 3.0 port of the monitor and the other end to the USB port of the computer.



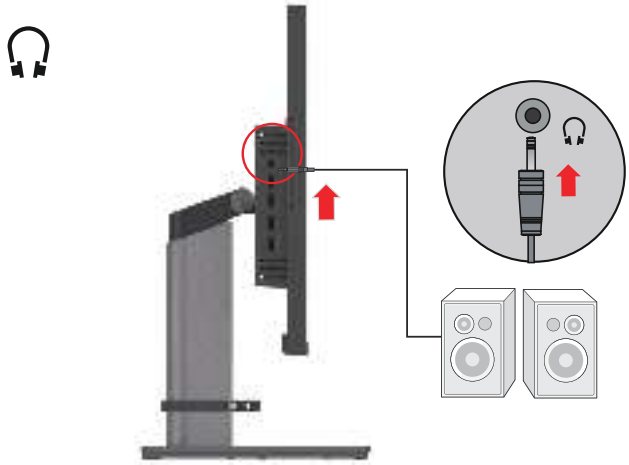
Note: In some cases, when using a USB 3.0 device (hard disk or flash drive) and a 2.4GHz USB wireless device (for example, a wireless mouse, keyboard or headset) at the same time, the radio frequency interference of the USB 3.0 device may affect the 2.4GHz USB wireless device, as a result causing wireless transmission speed to slow down. Users may experience delays in response to mouse or keyboard input, loss of keyboard characters or mouse commands, and the operating distance between the 2.4 GHz USB wireless device and its receiver is shortened. Please refer to the following methods to help reduce this radio frequency interference.

1. Keep the wireless Dongle away from the USB 3.0 device as much as possible.
2. If the USB wireless receiver and USB 3.0 device must be connected on the same side, please place the USB wireless receiver as close as possible to the wireless peripherals (mouse, keyboard, headset, etc.), or use a standard USB extension cable or hub to make the USB wireless receiver as far away from the USB 3.0 port as possible.

8. Connect the audio cable of the sound box and the audio jack of the monitor to transmit audio sources from DP, Type C and HDMI.

Note: The audio outputs in DP, Type-C, HDMI modes.

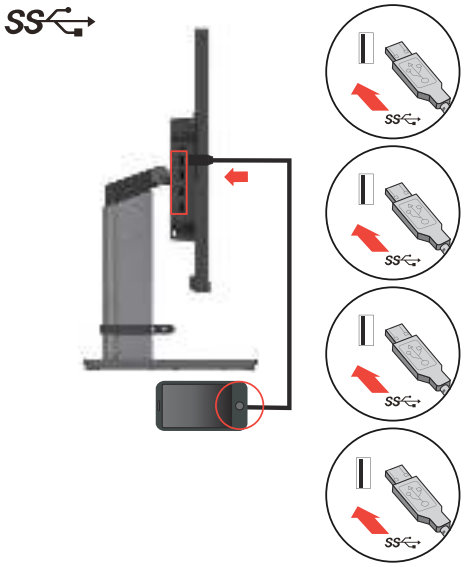
Please be aware that excessive and/or extreme volume might damage your hearing ability.



9. Connect one end of the USB cable to the USB downstream terminal of the monitor, and connect the other end of the USB cable to the corresponding USB port on your device.

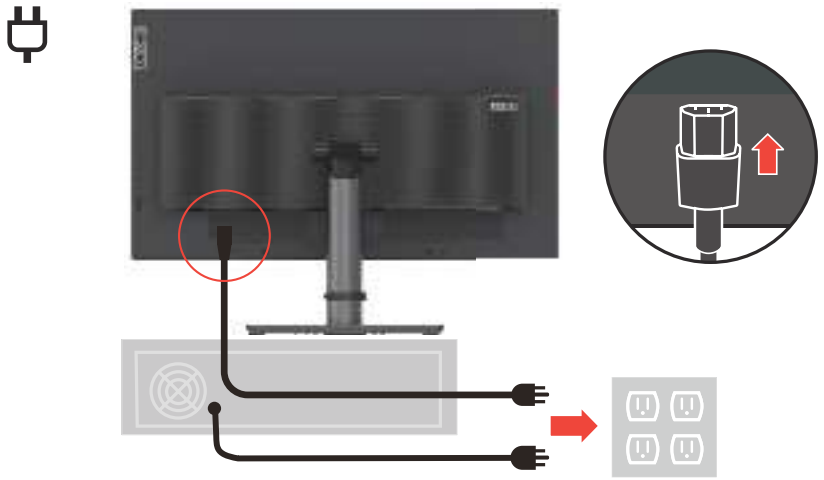
Note: When the monitor power switch is off, the USB downstream port does not provide power.

When DP out support reaches 4K 60Hz, USB3.0 will automatically slow down to 2.0

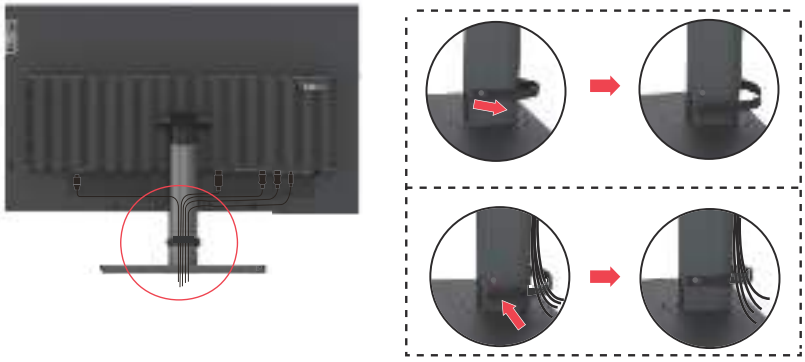


10. Plug the power cord into the monitor, and then plug the monitor power cord and computer cord into a grounded power outlet.

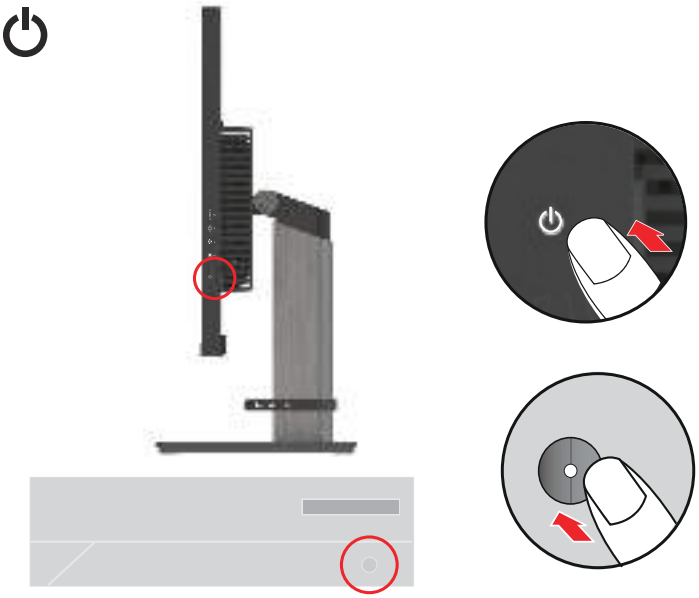
Note: A certified power supply cord has to be used with this equipment. The relevant national (regional) installation and/or equipment regulations shall be considered. The certified power cord used should not be lighter than the ordinary PVC flexible cord specified by IEC 60227 (marking H05VV-F 3G 0.75mm2 or H05VVH2-F2 3G 0.75mm2). According to IEC 60245 (marking H05RR-F 3G 0.75mm2), synthetic rubber cord should be used.



11. Use cable clamps when connecting cables.



12. Power on the monitor and the computer.



Note: For Creator Extreme startup time, different notebook computers are different, and the screen will display “Starting, please wait …” etc.

13. When you install the monitor driver, download the driver that corresponds to your monitor model from the Lenovo website http://support.lenovo.com/docs/Creator Extreme. Refer to the “Manually installing the monitor driver” on page 3-5 section to install the driver.

Registering your option

Thank you for purchasing this Lenovo™ product. Please take a few moments to register your Product and provide us with information that will help Lenovo to better serve you in the future. Your feedback is valuable to us in developing products and services, as well as in developing better ways to communicate with you. Register your option on the following Website:
http://www.lenovo.com/register.
Lenovo will send you information and updates on your registered product unless you indicate on the Web site questionnaire that you do not want to receive further information.

Chapter 2. Adjusting and Using the Monitor

This section will give you information on adjusting and using your monitor.

Comfort and accessibility

Good ergonomic design is important to get the most from your personal computer and to avoid discomfort. Arrange your workplace and the equipment you use to suit your individual needs and the kind of work that you perform. In addition, use healthy work habits to maximize your performance and comfort while using your computer. For more detailed information on any of these topics, visit the Healthy Computing Website at: http://www.lenovo.com/healthycomputing/.

Arranging your work area

Use a work surface of appropriate height and sufficient working area to allow you to work in comfort. Organize your work area to match the way you use materials and equipment. Keep your work area clean and clear for the materials that you typically use and place the items that you use most frequently, such as the computer mouse or telephone, within the easiest reach.
Equipment layout and setup play a large role in your working posture. The following topics describe how to optimize equipment setup to achieve and maintain good working posture.

Positioning your monitor

Position and adjust your computer monitor for comfortable viewing by considering the following items:

- **Viewing distance:** Recommended viewing distance between the eye and the monitor screen is 1.5 x the diagonal of the screen. Solutions in meeting this required distance in cramped office situations include pulling the desk away from the wall or divider to make room for the monitor,using flat panel or compact displays to place the monitor in the desk corner,or placing the keyboard in an adjustable drawer to create a deeper working surface.

  1.5 times of screen diagonal

- **Monitor height:** Position the monitor so your head and neck are in a comfortable and neutral (vertical, or upright) position. If your monitor does not have height adjustments, you might have to place books or other sturdy objects under the base of the monitor to achieve the desired height. A general guideline is to position the monitor such that the top of the screen is at or slightly below your eye-height when you are comfortably seated. However, be sure to optimize your monitor height so the line of site between your eyes and the center the monitor suits your preferences for visual distance and comfortable viewing when your eye muscles are in a relaxed state.
- **Tilt:** Adjust the tilt of your monitor to optimize the appearance of the screen content and to accommodate your preferred head and neck posture.
- **General location:** Position your monitor to avoid glare or reflections on the screen from overhead lighting or nearby windows.

The following are some other tips for comfortable viewing of your monitor:

- Use adequate lighting for the type of work you are performing.
- Use the monitor brightness, contrast controls (if equipped) to optimize the image on your screen to meet your visual preferences.
- Keep your monitor screen clean so you can focus on the screen's contents.

Any concentrated and sustained visual activity can be tiring for your eyes. Be sure to periodically look away from your monitor screen and focus on a far object to allow your eye muscles to relax. If you have questions on eye fatigue or visual discomfort, consult a vision care specialist for advice.

Quick tips for healthy work habits

The following information is a summary of some important factors to consider to help you remain comfortable and productive while you use your computer.

- **Good posture starts with equipment setup:** The layout of your work area and the setup of your computer equipment have a large effect on your posture while using your computer. Be sure to optimize the position and orientation of your equipment by following the tips outlined in "Arranging your work area" on page 2-1 so you can maintain a comfortable and productive posture. Also, be sure to use the adjustment capabilities of your computer components and office furniture to best suit your preferences now and as your preferences change over time.
- **Minor changes in posture can help avoid discomfort:** The longer you sit and work with your computer, the more important it is to observe your working posture. Avoid assuming any one posture for an extended period of time. Periodically make minor modifications in your posture to help deter any discomforts that might arise. Make use of any adjustments that your office furniture or equipment provide to accommodate changes in posture.
- **Regular short breaks help ensure healthy computing:** Because computing work is mainly static activity, short breaks during work are especially important. Periodically, stand up from your work area, stretch, walk around or have a drink etc,. to take a short break from using your computer. A short break from work gives your body a welcome change in posture and helps to ensure you remain comfortable and productive while working.

Accessibility information

Lenovo is committed to providing greater access to information and technology to people with disabilities. With assistive technologies, users can access information in the way most appropriate to their disability. Some of these technologies are already provided in your operating system; others can be purchased through vendors or accessed at:
https://lenovo.ssbbartgroup.com/lenovo/request_vpat.php

Adjusting your monitor image

This section describes the control features to adjust your monitor images.

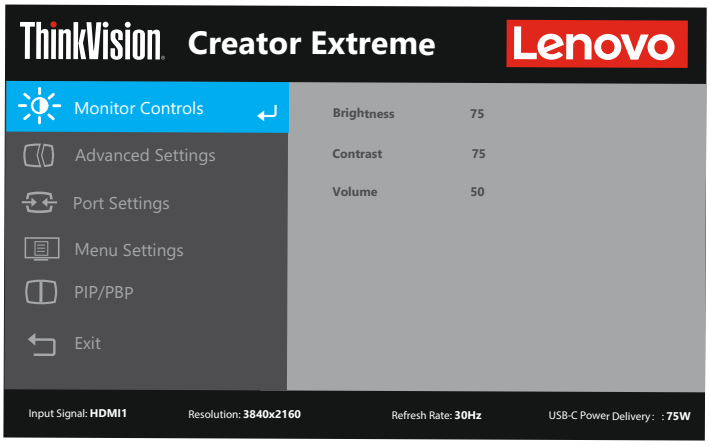
Using direct access controls

Direct access controls can be used when the On-Screen Display (OSD) is not displayed.

	Icon	Name	Description
1	1 2	USB UFP switch	Switch the USB upstream facing port.
		DDC-CI	Press and hold for 10 seconds to enable or disable the DDC-CI function.
		Exit	Exit and return to the previous level.
2	1 2	Input Source	Switch the video input source. Shift back to the previous level when in OSD mode.
		Increase/Up	Press to move the main menu cursor up from the active item to the last one. Press to increase current values on the adjustment bar.
3		Decrease/Down	Press to move the main menu cursor down from the active item to the next one. Press to decrease current values on the adjustment bar.
4		Menu	Access the OSD menu. Press to confirm selection. Press and hold for 10 seconds will lock/un-lock the menu.
		Enter	Press to enter the next level on the main menu/sub menu status or enter the previous level on the adjustment bar.

Using On-Screen Display (OSD) controls

To adjust the settings, the user controls can be viewed through the OSD.



Using controls:

1. Press to open the main OSD menu.
2. Use ↑ or ↓ to move among the icons. Select an icon and press ↵ to access the selected function. If there is a sub-menu, you can move among options using ↑ or ↓, then press ↵ to select that function. Use ↑ or ↓ to make adjustments then press ↵ to save.
3. Press to move backwards through the sub-menus and exit from the OSD.
4. Press and hold ↵ for 10 seconds to lock the OSD. This will prevent accidental adjustments to the OSD. Press and hold ↵ for 10 seconds to unlock the OSD and allow adjustments to the OSD.
5. Enable DDC/CI by default. Use OSD Exit Key, press and hold for 10 seconds to disable/enable DDC/CI function. A message “DDC/CI disable” is shown on the screen.

Notes: Using Low Blue Light

1. Press to open the main OSD menu.
2. Use ↑ or ↓ to move among the icons. Select and press ↵ to access Advanced Settings.
3. Use ↑ or ↓ to move among the icons. Choose Scenario Modes and press ↵. Use ↑ or ↓ to move among the icons and select Low Blue Light.

Table 2-1. OSD function

OSD Icon on Main Menu	Submenu	Description	Controls and Adjustments
Monitor Controls	Brightness	Adjusts overall brightness	↕
	Contrast	Adjusts difference between light and dark areas	↕
	Volume	Adjust headphone output volume	↕
Advanced Settings	Dynamic Contrast	• Off • On	↕
	Over Drive	Response time enhancement. • Off • Normal • Extreme	↕
	Color Mode	Adjust the intensity of red, green, and blue. Preset mode • sRGB • DCI-P3 • BT.709 • BT.2020 • DICOM • Neutral • Reddish • Bluish Custom • Red: Increase or decrease the saturation of "**red**" in the image. • Green: Increase or decrease the saturation of "**green**" in the image. • Blue: Increase or decrease the saturation of "**blue**" in the image.	↕
	Scenario Modes	• Panel Native • Image Creation • Digital Cinema • Video Creation • Low Blue Light	↕
	Aspect Ratio	• Full Screen • Original AR	↕

Table 2-1. OSD function

OSD Icon on Main Menu	Submenu	Description	Controls and Adjustments
 Advanced Settings	HDR*	It can make high dynamic range (HDR) get better color matching presentation. • Auto • HDR 1000 • HDR10 • HLG • Dolby Vision Bright • Dolby Vision Dark • Off Note: 1. Only DP 1.2 support Dolby Vision 2. When the signal source is “Dolby Vision”, the “Dolby Vision” logo will pop up in the center of the screen, and other items will be not optional. 3. When the signal source is “HDR”, the other items will be not optional. 4. When the signal source is “HLG”, the other items will be not optional.	
	Local Dimming	• Off • On Note: 1. You can choose Local Dimming when HDR is not available. 2. Local Dimming effect is also available when HDR is inaccessible (There is no HDR signal in Source, or HDR is turned off on OSD).	
	Gamma	Allow you to adjust the brightness hue. • 2.2 • 2.4 • 2.6 Note: The default value is 2.2 (the standard value for Windows.) The adjustment range is 2.2, 2.4 or 2.6.	
 Port Settings	Input Signal	• USB-C • DisplayPort • HDMI1 • HDMI2 • HDMI3	
	USB Charging	• Off • On	
	USB Speed	• USB 2.0 • USB 3.0 Note: 1. When you select USB2.0 in OSD, the Type-C will be switched to 4 Lane DP mode and transfer the USB2.0 data 2. When you select USB3.0 in OSD, the Type-C will be switched to 2 Lane DP mode and transfer the USB3.0 or USB2.0 data	
	Smart Power	• Off • On	
	Super USB-C Charging	• Off • On	
	DP Select	Select DP1.2 or 1.4 • DP1.2 • DP1.4	

Table 2-1. OSD function

OSD Icon on Main Menu	Submenu	Description	Controls and Adjustments
Menu Settings	Language	Change the language of the menu. **Note:** The selected language only affects the language of the OSD. It has no effect on any software running on the computer.	↕
	Menu Time Out	Automatically turn off OSD after a preset period of time.	↕
	Menu Horizontal	Adjust menu location. Change the horizontal position of the OSD.	↕
	Menu Vertical	Adjust menu location. Changes the vertical position of the OSD.	↕
	Transparency	Adjust menu transparency	↕
	Factory Reset	Reset all settings to the default settings.	↕
PIP/PBP	Swap	Sources can be switched between two windows	↕
	PBP Left-Right	• Left Source • Right Source	↕
	PIP	• PIP Source • POS: You can select top left/bottom left/top right/bottom right. • SIZE: Select Large/Small.	↕
	Audio Input	Main Sub	↕
	OFF	Turn off PIP/PBP function	↕
Exit		Exit the OSD menu.	↕

* Creator Extreme supports HDR mode information

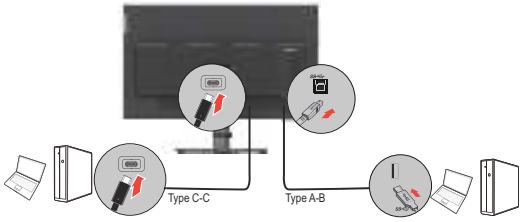
Item	HDR1000	HLG	HDR10	Dolby Vision
DP 1.4 Port	Yes	Yes	Yes	Yes (Supports DP1.2, and does not support DP1.4)
HDMI 2.0 port	Yes	Yes	Yes	Yes
USB-C Port	Yes	Yes	Yes	No

USB Link:

With USB Link, you can share both mouse and keyboard between two computers and transfer data quickly.

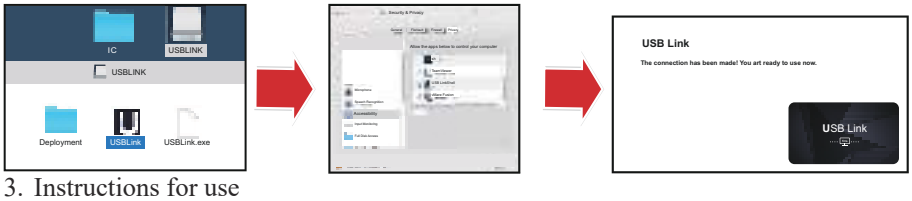
- Switch Mouse and Keyboard
  You can control two PCs by moving your mouse across two sources.
- File transfer
  You can transfer data between two computers quickly simply through drag, copy, paste and other operations.

1. To use this function, please connect as shown below.

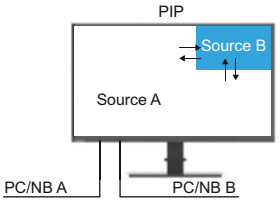


2. Installation Procedure:
   - On Windows
     After the PCs are connected successfully according to Step 1, normally, your PC/Note Book will automatically pop up USB Link installer. If it cannot be installed automatically, please open “My Computer” in your PC/Note Book, and double-click on “USBLink.exe” for manual installation.

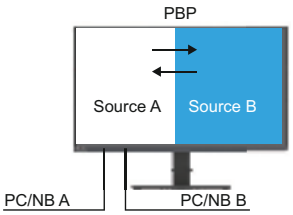
   - On Mac
     After the PCs are connected successfully according to Step 1, please open “Finder” in your PC/Note Book, and double-click on USBLink for manual installation. Click “System Preferences → Security & Privacy → Privacy → Accessibility”, check “USB LinkShell” among “Allow the apps below to control your computer” to install USB Link.



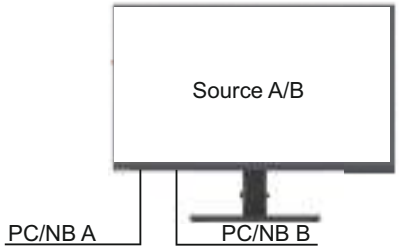
3. Instructions for use
   - In PIP mode, according to the user's visual experience, move the cursor to the junction of the sub-screen and the main screen to control another PC and transfer files.



   - In PBP mode, according to the user's visual experience, move the mouse to the left or right to control another PC and transfer files.

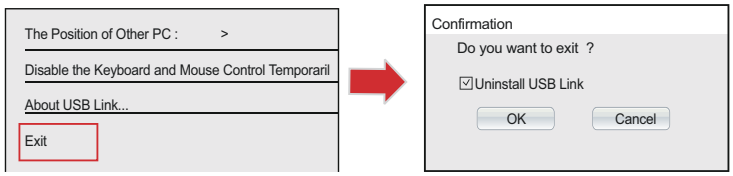


- In single screen mode, you can click on the USB LINK in the lower right corner to open the “Location of Another Computer” to input settings for the other computer. You can set four directions - up, down, left, and right - to control the direction of the other PC when the cursor moves out of the screens.



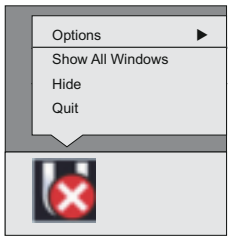
4. Methods to Remove the APP
   - On Windows

     Right click on the USB LINK Icon in the lower right corner of the desktop, select “Exit” in the popped-up window, and click “Uninstall USB Link”.



   - On Mac

     Right click on the USB LINK Icon in the lower right corner of the desktop, select “Quit” in the popped-up window.



Note:
*The USB Link function also works with Mac O/S (Mac11.1/10.14/10.15), but may not be with ease under some occasions. If users don’t want to use with Mac O/S, refer to User guide to remove USB Link.

5. Meanings of Icons

	Connected successfully
	Waiting to receive data
	Data received
	Control current computer
	Off-line

Selecting a supported display mode

The display mode that the monitor uses is controlled by the computer. Therefore, refer to your computer documentation on how to change display modes.

The image size, position and shape might be changed when the display mode changes. This is normal and the image can be re-adjusted using automatic image setup and image controls.

Unlike CRT monitors, which require a high refresh rate to minimize flicker, LCD or Flat Panel technology is inherently flicker-free.

Note: If your system has previously been used with a CRT monitor and is currently configured to a display mode outside the range of this monitor, you may need to reattach the CRT monitor temporarily until you have re-configured the system; preferably to 3840*2160 at 60 Hz, which is a common display mode.

The display modes shown below have been optimized at the factory.

Table 2-2. Display mode set by the manufacturer

Address ability	**Refresh rate**
640 × 480	60 Hz
800 × 600	60 Hz
1024 × 768	60 Hz
1280 × 1024	60 Hz
1440 × 900	60 Hz
1600 × 900	60 Hz
1920 × 1080	60 Hz
1920 × 1200	60 Hz
3840 × 2160	60 Hz

HDMI video timing chart

640 × 480p
720 × 480p
1280 × 720p
1920 × 1080i
1920 × 1080p
720 × 576p
1920 × 2160p
3840 × 2160p

Understanding power management

Power management is invoked when the computer recognizes that you have not used your mouse or keyboard for a user-definable period. There are several states as described in the table below.

For optimal performance, switch off your monitor at the end of each working day, or whenever you expect to leave it unused for long periods during the day.

Table 2-3. Power indicator

State	Power indicator	Screen	Restoring Operation
On	White	Normal	
Standby/Suspend	Orange	Blank	Press a key or move the mouse. There may be a slight delay before the image reappears. **Note:** Standby also occurs if there is no image output to the monitor.
Off	Off	Blank	Press the power button There may be a slight delay before the image reappears.

Power Management Mode

VESA Mode	Horizontal Synchronization	Vertical Synchronization	Video	Power indicator	Power consumption
Normal operation	Active	Active	Active	White	270 W (max) * 70 W (Typical No smart PD)
Active shutdown mode	Inactive	Inactive	Off	Orange	<0.5 W**
Off	-	-	-	Off	<0.3 W

* Maximum energy consumption at maximum brightness.

This document is for reference only and reflects laboratory performance. Depending on the software, components and peripherals you ordered, your product performance will vary, and we bear no responsibility to update such information. Accordingly, customers should not rely on this information to make decisions on electronic fault tolerance or similar projects. There is no express or implied warranty of accuracy or completeness.

Caring for your monitor

Be sure to turn off the power before you perform any maintenance on the monitor.

Do not:

- Apply water or liquid directly to your monitor.
- Use solvents or abrasives.
- Use flammable cleaning materials to clean your monitor or any other electrical equipment.
- Touch the screen area of your monitor with sharp or abrasive items. This type of contact may cause permanent damage to your screen.
- Use any cleaner which contains an anti-static solution or similar additives. This may harm the coating of the screen area.

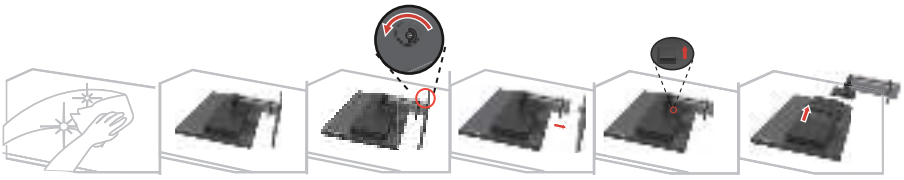
Do:

- Lightly dampen a soft cloth with water and use this to gently wipe the covers and the screen.
- Remove grease or finger marks with a damp cloth and a little mild detergent.

Detaching the monitor base and stand

Step 1: Place the monitor on a soft and flat surface.

Step 2: Remove the screws from the base before detaching the base and stand from the monitor.



Wall Mounting (Optional)

Refer to the instructions that come with the base mounting kit. To convert your LCD display from a desk-mounted to a wall-mounted display, do the following:

Step 1: Verify that the Power button is turned Off, then disconnect the power cord.

Step 2: Lay the LCD display face down on a towel or blanket.

Step 3: Remove the base and stand from the monitor,referring to “Detaching the monitor base and stand”.

Step 4: Install the mounting bracket of the VESA compatible wall mount (100 mm × 100 mm distance), VESA mounting screw M4 × 10 mm.

Step 5: Attach the LCD display to the wall, following the instructions in the wall-mounting kit.

For use only with UL Listed Wall Mount Bracket with minimum weight/load: 8 kg

Chapter 3. Reference Information

This section contains monitor specifications, instructions to manually install the monitor driver, troubleshooting information, and service information.

Monitor specifications

Table 3-1. 62A6-RAR3-WW model monitor specifications

Size	Depth	234.08 mm (9.22 inches)
	Height	593.4~458.8 mm (23.36~18.06 inches)
	Width	613.08 mm (24.14 inches)
Stand	Tilt	Range: -5°~35°
	Swivel	Range: -45°~45°
	Height adjustment	135 mm
Image	Viewable image size	685.535 mm (27 inches)
	Maximum height	335.664 mm (13.2 inches)
	Maximum width	597.736 mm (23.5 inches)
	Pixel pitch	0.1554 mm × 0.1554 mm (0.006 inches)
AC/DC adapter	Model	100-240 V AC
	Maximum	2.7 A
Power consumption **Note:** Power consumption figures are for the monitor and the power supply combined	Normal operation	<270 W (max) <70 W (Typical No smart PD)
	Standby/Suspend	<0.5 W
	Off	<0.3 W
Video input (HDMI)	Interface	HDMI
	Input signal	VESA TMDS (Panel Link™)
	Horizontal addressability	3840 pixels (maximum)
	Vertical addressability	2160 lines (maximum)
	Clock frequency	300 MHz
Video input (DP)	Interface	DP
	Input signal	VESA TMDS (Panel Link™)
	Horizontal addressability	3840 pixels (maximum)
	Vertical addressability	2160 lines (maximum)
	Clock frequency	300 MHz

Table 3-1. 62A6-RAR3-WW model monitor specifications

Video input (Type-C)	Interface	Type-C
	Input signal	VESA TMDS (Panel Link™)
	Horizontal addressability	3840 pixels (maximum)
	Vertical addressability	2160 lines (maximum)
	Clock frequency	300 MHz
Communications	VESA DDC	CI
Supported Display Modes	Horizontal frequency	27 kHz - 136 kHz
	Vertical frequency	24 Hz - 60 Hz
	Native Resolution	3840 × 2160 @ 60 Hz
Temperature	Operating	0° to 40°C (32° to 104°F)
	Storage	-20° to 60°C (-4° to 140°F)
	Shipping	-20° to 60°C (-4° to 140°F)
Humidity	Operating	10% to 80% non-condensing
	Storage	5% to 95% non-condensing
	Shipping	5% to 95% non-condensing

Troubleshooting

If you have a problem setting up or using your monitor, you might be able to solve it yourself. Before calling your dealer or Lenovo, try the suggested actions that are appropriate to your problem.

Table 3-2. Troubleshooting

Problem	Possible cause	Suggested action	Reference
The words “Out of Range” are shown on the screen, and the power indicator is flashing white.	The system is set to a display mode which is not supported by the monitor.	If you are replacing an old monitor, reconnect it and adjust the display mode to within the specified range for your new monitor. If using a Windows system, restart the system in safe mode, then select a supported display mode for your computer. If these options do not work, contact the Support Center.	“Selecting a supported display mode” on page 2-10
The image quality is unacceptable.	The video signal cable is not connected with the monitor or system completely.	Be sure the signal cable is firmly plugged into the system and monitor.	“Connecting and turning on your monitor” on page 1-5
	The color settings may be incorrect.	Select another color setting from the OSD menu.	“Adjusting your monitor image” on page 2-3
	The automatic image setup function was not performed.	Perform automatic image setup.	“Adjusting your monitor image” on page 2-3
The power indicator is not lit and there is no image.	• The monitor’s power switch is not switched on. • The power cord is loose or disconnected. • There is no power at the outlet.	• Be sure the power cord is connected properly. • Be sure the outlet has power. • Power on the monitor. • Try using another power cord. • Try using another electrical outlet.	“Connecting and turning on your monitor” on page 1-5
Screen is blank and power indicator is amber.	The monitor is in Standby/Suspend mode.	• Press any key on the keyboard or move the mouse to restore operation. • Check the Power Options settings on your computer.	“Understanding power management” on page 2-11

Table 3-2. Troubleshooting

Problem	Possible cause	Suggested action	Reference
The power indicator is amber, but there is no image.	The video signal cable is loose or disconnected from the system or monitor.	Be sure the video cable is connected with the system properly.	“Connecting and turning on your monitor” on page 1-5
	The monitor brightness and contrast are at the lowest setting.	Adjust the brightness and contrast setting on the OSD menu.	“Adjusting your monitor image” on page 2-3
One or more of the pixels appear discolored.	This is a characteristic of the LCD technology and is not an LCD defect.	If there are more than five pixels missing, contact the Support Center.	“Appendix A. Service and Support” on page A-1
• Lines or images are blurred in the text. • There are horizontal or vertical lines in images.	• Image setup has not been optimized. • The “Display Properties” settings of your system have not been optimized.	According to the resolution of the monitor itself, adjust the resolution setting of the system: 3840 × 2160 @ 60 Hz.	“Adjusting your monitor image” on page 2-3
		Perform automatic image setup. If automatic image setup does not help, perform manual image setup.	“Selecting a supported display mode” on page 2-10
		When working in the native resolution, you may find additional improvements by adjusting the Dots Per Inch (DPI) setting on your system.	See the Advanced section of your system’s display properties.
Horizontal streaks will appear when taking pictures on mobile phones	The phone camera is not set up correspondingly	Set fast frequency S to 1/80s or 1/60s	
Halo Phenomenon	Halo results from limitations of current mini LED technology.	Select HDR Off in the OSD menu to reduce halo phenomenon.	
Super USB C charging: up to 100w	Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration.		

Manually installing the monitor driver

Below are steps for manually installing the monitor driver in Microsoft Windows 7, Microsoft Windows 10.

Installing the monitor driver in Windows 7

To use the Plug and Play feature in Microsoft Windows 7, do the following:

1. Turn off the computer and all attached devices.
2. Ensure that the monitor is connected correctly.
3. Turn on the monitor and then the system unit. Allow your computer to start the Windows 7 operating system.
4. From the Lenovo website http://support.lenovo.com/docs/Creator Extreme, find the corresponding monitor driver and download it to a PC to which this monitor is connected (such as a desktop).
5. Open the **Display Properties** window by clicking **Start, Control Panel** and **Hardware and Sound** icon. and then clicking the **Display** icon.
6. Click the **Change the display settings** tab.
7. Click the **Advanced Settings** icon.
8. Click the **Monitor** tab.
9. Click the **Properties** button.
10. Click the **Driver** tab.
11. Click **Update Driver**, then click **Browse the computer to find the driver program**.
12. Select **Pick from the list of device driver program on the computer**.
13. Click the **Hard Disk** button. By clicking the **Browse** button, browse and open the following path:

    X:\Monitor Drivers\Windows 7

    (where X indicates “the folder in which the downloaded driver is located” (such as a desktop)).
14. Select the “**Creator Extreme.inf**” file and click the **Open** button. Click the **OK** button.
15. In the new window, select **Creator Extreme**, and click **Next**.
16. After the installation is completed, delete all downloaded files and close all windows.
17. Restart the system. The system will automatically select the maximum refresh rate and corresponding Color Matching Profiles.

Note: On LCD monitors, unlike CRTs, a faster refresh rate does not improve display quality. Lenovo recommends using either 3840 × 2160 at a refresh rate of 60 Hz, or 1920 × 1080 at a refresh rate of 60 Hz.

Installing the monitor driver in Windows 10

To use the Plug and Play feature in Microsoft Windows 10, do the following:

1. Turn off the computer and all attached devices.
2. Ensure that the monitor is connected correctly.
3. Turn on the monitor and then the system unit. Allow your computer to start the Windows 10 operating system.
4. From the Lenovo website http://support.lenovo.com/docs/Creator Extreme, find the corresponding monitor driver and download it to a PC to which this monitor is connected (such as a desktop).
5. On the Desktop, move the mouse to the bottom-right corner of the screen, choose **Setting**, double click **Control Panel**, then double click the icon of **Hardware and Sound**, and then click **Display**.
6. Click the **Change the display settings** tab.
7. Click the **Advanced Settings** icon.
8. Click the **Monitor** tab.
9. Click the **Properties** button.
10. Click the **Driver** tab.
11. Click **Update Driver**, then click **Browse the computer to find the driver program**.
12. Select **Pick from the list of device driver program on the computer**.
13. Click the **Hard Disk** button. By clicking the **Browse** button and navigate to the directory that you put your download drivers in.
14. Select the "**Creator Extreme.inf**" file and click the **Open** button. Click the **OK** button.
15. In the new window, select **Creator Extreme**, and click **Next**.
16. After the installation is completed, delete all downloaded files and close all windows.
17. Restart the system. The system will automatically select the maximum refresh rate and navigate to the following directory corresponding Color Matching Profiles.

Note: On LCD monitors, unlike CRTs, a faster refresh rate does not improve display quality. Lenovo recommends using either 3840 × 2160 at a refresh rate of 60 Hz, or 1920 × 1080 at a refresh rate of 60 Hz.

Getting further help

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

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 onto 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.

Service parts

The following parts are for use by Lenovo service, or Lenovo aurthorized dealers, to supprot the customer warranty. Parts are for service use only. The table below shows information for model 62A6-RAR3-WW.

Table 3-3. Repair parts list

FRU (FIELD REPLACEABLE UNIT) PART NUMBER	Description	Machine Type/ Model (MTM)	Color
5D11B32987	Creator Extreme - 27 inch FRU monitor	62A6	Raven Black
5C11B32982	Creator Extreme - Type-C Gen2 (1.5 m, RoHS) Follow P44w-10	62A6	Raven Black
5C11B32986	Creator Extreme - DP1.4 cable (1.8 m, RoHS)	62A6	Raven Black
5C11B32985	Creator Extreme - USB3.0 (USB A to B) cable (1.8 m, RoHS)	62A6	Raven Black
5C11B32984	Creator Extreme - HDMI2.0 cable (1.8 m, RoHS)	62A6	Raven Black
5SE1B32988	Creator Extreme - FRU base and stand	62A6	Raven Black

Appendix A. 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 your product. Refer to the Lenovo Limited Warranty for a full explanation of Lenovo warranty terms.

Registering your option

Register to receive product service and support updates, as well as free and discounted computer accessories and content. Go to:
http://www.lenovo.com/register

Online technical support

Online technical support is available during the lifetime of a product at:
http://www.lenovo.com/support

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

Telephone technical support

Installation and configuration support through the Customer Support Center will be available until 90 days after the option has been withdrawn from marketing. After that time, the support is cancelled, or made available for a fee, at Lenovo's discretion. Additional support is also available for a nominal fee.

Before contacting a Lenovo technical support representative, please have the following information available: option name and number, proof of purchase, computer manufacturer, model, serial number and manual, the exact wording of any error message, description of the problem, and the hardware and software configuration information for your system.

Your technical support representative might want to walk you through the problem while you are at your computer during the call.

Telephone numbers are subject to change without notice. The most up-to-date telephone list for Lenovo Support is always available at: http://www.lenovo.com/support/phone

Country or Region	Telephone Number
Argentina	0800-666-0011 (Spanish, English)
Australia	1-800-041-267 (English)
Austria	0810-100-654 (For local rate) (German)
Belgium	Warranty service and support: 02-339-36-11 (Dutch, French)

Country or Region	Telephone Number
Bolivia	0800-10-0189 (Spanish)
Brazil	Calls made from within the Sao Paulo region: 11-3889-8986 Calls made from outside the Sao Paulo region: 0800-701-4815 (Portuguese)
Brunei Darussalam	Dial 800-1111 (English)
Canada	1-800-565-3344 (English, French)
Chile	800-361-213 (Spanish)
China	Technical Support Line: 400-100-6000 (Mandarin)
China (Hong Kong S.A.R.)	(852) 3516-8977 (Cantonese, English, Mandarin)
China (Macau S.A.R.)	0800-807/(852) 3071-3559 (Cantonese, English, Mandarin)
Colombia	1-800-912-3021 (Spanish)
Costa Rica	0-800-011-1029 (Spanish)
Croatia	385-1-3033-120 (Croatian)
Cyprus	800-92537 (Greek)
Czech Republic	800-353-637 (Czech)
Denmark	Warranty service and support: 7010-5150 (Danish)
Dominican Republic	1-866-434-2080 (Spanish)
Ecuador	1-800-426911-OPCION 4 (Spanish)
Egypt	Primary: 0800-0000-850 Secondary: 0800-0000-744 (Arabic, English)
El Salvador	800-6264 (Spanish)
Estonia	372-66-0-800 (Estonian, Russian, English)
Finland	Warranty service and support: +358-800-1-4260 (Finnish)
France	Warranty service and support: 0810-631-213 (hardware) (French)

Country or Region	Telephone Number
Germany	Warranty service and support: 0800-500-4618 (toll-free) (German)
Greece	Lenovo Business Partner (Greek)
Guatemala	Dial 999-9190, wait for operator, and request to reach 877-404-9661 (Spanish)
Honduras	Dial 800-0123 (Spanish)
Hungary	+36-13-825-716 (English, Hungarian)
India	Primary: 1800-419-4666 (Tata) Secondary: 1800-3000-8465 (Reliance) Email: commercialts@lenovo.com (English and Hindi)
Indonesia	1-803-442-425 62 213-002-1090 (Standard Charges Apply) (English, Bahasa Indonesia)
Ireland	Warranty service and support: 01-881-1444 (English)
Israel	Givat Shmuel Service Center: +972-3-531-3900 (Hebrew, English)
Italy	Warranty service and support: +39-800-820094 (Italian)
Japan	0120-000-817 (Japanese, English)
Kazakhstan	77-273-231-427 (Standard Charges Apply) (Russian, English)
Korea	080-513-0880 (Collect call) 02-3483-2829 (Toll Call) (Korean)
Latvia	371-6707-360 (Latvian, Russian, English)
Lithuania	370 5278 6602 (Italian, Russian, English)
Luxembourg	ThinkServer and ThinkStation: 352-360-385-343 ThinkCentre and ThinkPad: 352-360-385-222 (French)
Malaysia	1-800-88-0013 03-7724-8023 (Standard Charges Apply) (English)
Malta	356-21-445-566 (English, Italian, Maltese Arabic)
Mexico	001-866-434-2080 (Spanish)

Country or Region	Telephone Number
Netherlands	020-513-3939 (Dutch)
New Zealand	0508-770-506 (English)
Nicaragua	001-800-220-2282 (Spanish)
Norway	8152-1550 (Norwegian)
Panama	Lenovo Customer Support Center: 001-866-434 (toll-free) (Spanish)
Peru	0-800-50-866 OPCION 2 (Spanish)
Philippines	1-800-8908-6454 (GLOBE subscribers) 1-800-1441-0719 (PLDT subscribers) (Tagalog, English)
Poland	Laptops and tablets branded with logo Think: 48-22-273-9777 ThinkStation and ThinkServer: 48-22-878-6999 (Polish, English)
Portugal	808-225-115 (Standard Charges Apply) (Portuguese)
Romania	4-021-224-4015 (Romanian)
Russia	+7-499-705-6204 +7-495-240-8558 (Standard Charges Apply) (Russian)
Singapore	1-800-415-5529 6818-5315 (Standard Charges Apply) (English, Mandarin, Bahasa Malaysia)
Slovakia	ThinkStation and ThinkServer: 421-2-4954-5555
Slovenia	386-1-2005-60 (Slovenian)
Spain	34-917-147-833 (Spanish)
Sri Lanka	9477-7357-123 (Sumathi Information systems) (English)
Sweden	Warranty service and support: 077-117-1040 (Swedish)
Switzerland	Warranty service and support: 0800-55-54-54 (German, French, Italian)
Taiwan	0800-000-702 (Mandarin)
Thailand	001-800-4415-734 (+662) 787-3067 (Standard Charges Apply) (Thai, English)

Country or Region	Telephone Number
Turkey	444-04-26 (Turkish)
United Kingdom	Standard warranty support: 03705-500-900 (local toll calls) Standard warranty support: 08705-500-900 (English)
US	1-800-426-7378 (English)
Uruguay	000-411-005-6649 (Spanish)
Venezuela	0-800-100-2011 (Spanish)
Vietnam	120-11072 (Toll Free) 84-8-4458-1042 (Standard Charges Apply) (Vietnamese, English)

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The performance data contained in this document is measured in a controlled environment. Therefore, the results obtained in other operating environments may be very different. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Recycling information

Lenovo encourages 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:

http://www.lenovo.com/lenovo/environment/recycling

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、
http://www.ibm.com/jp/pc/service/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、
http://www.ibm.com/jp/pc/service/recycle/pcrecycle/ 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 wasteand 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 more information, please visit Lenovo website 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 on October 1, 2003. This service is provided free of charge for home-used computers sold after October 1, 2003. For more information, please visit Lenovo website https://www.lenovo.com/jp/ja/services_warranty/recycle/pcrecycle/.

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.

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- ThinkPad
- ThinkVision

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Use only the power cords and power adapters supplied by the product manufacturer.
Do not use the ac power cord for other devices.