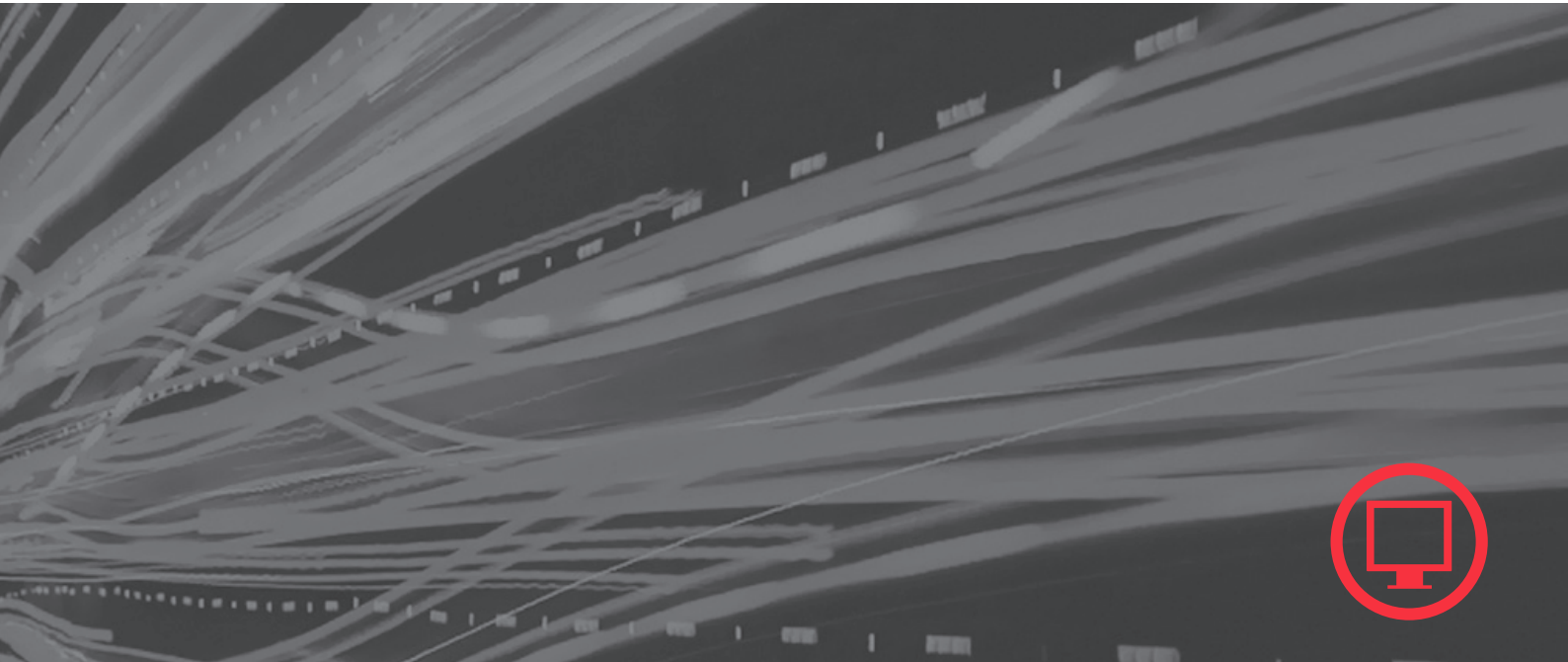


lenovo

LT1423pwC Wide Touch Monitor
User's Guide



Product numbers

60A3-UAR2-WW

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Safty 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.

مج، يجب قراءة دات السلامة

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

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

Prije instaliranja ovog proizvoda obavezno pročitajte sigurnosne upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

Ennen kuin asennatt ämän tuotteen, lue turvaohjeet kohdasta 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.

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.

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

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

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

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

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

Перед установкой продукта прочтите инструкции по технике безопасности.

Pred inštaláciou tohto produktu si prečítajte bezpečnostné informácie.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

សូមអានព័ត៌មានស្តីពីសុវត្ថិភាព មុនពេលចាប់ផ្តើមបញ្ចូលកម្មវិធី

安裝本產品之前，請先閱讀「安全資訊」。

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).

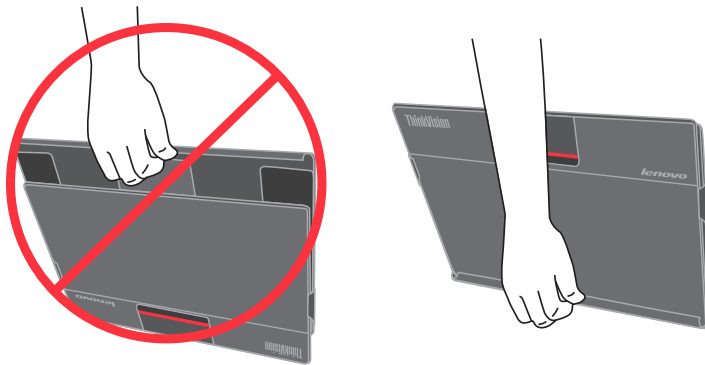
Not all power strips provide surge protection; the power strips must be specifically labeled as having this ability. Use a power strip whose manufacturer offers a damage replacement policy, so you can replace your equipment if surge protection fails.



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 H05VWH2-F2 3G 0.75mm²) shall be used. Alternative a flexible cord be of synthetic rubber.



CAUTION: To prevent the monitor sliding out of the cover always carry as shown below



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.

The monitor is intended to be powered by the PC/Laptop USB3.0 output, and the PC/Laptop will be IEC60950-1 approved, where the USB3.0 outputs comply with LPS requirement.

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.

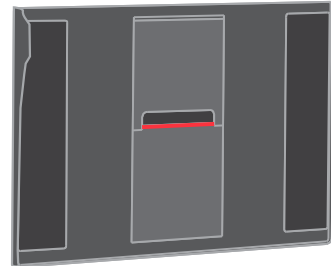
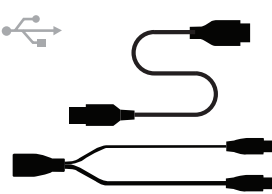
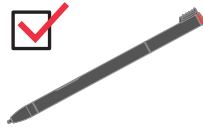
Chapter 1. Getting started

This User's Guide contains detailed information on the ThinkVision® LT1423pwC Wide Touch Monitor. For a quick overview, please see the Setup Poster that was shipped with your monitor.

Shipping contents

The product package should include the following items:

- Information Flyer
- Stylus Pen
- USB Cable
- Simple Cover
- Touch Monitor



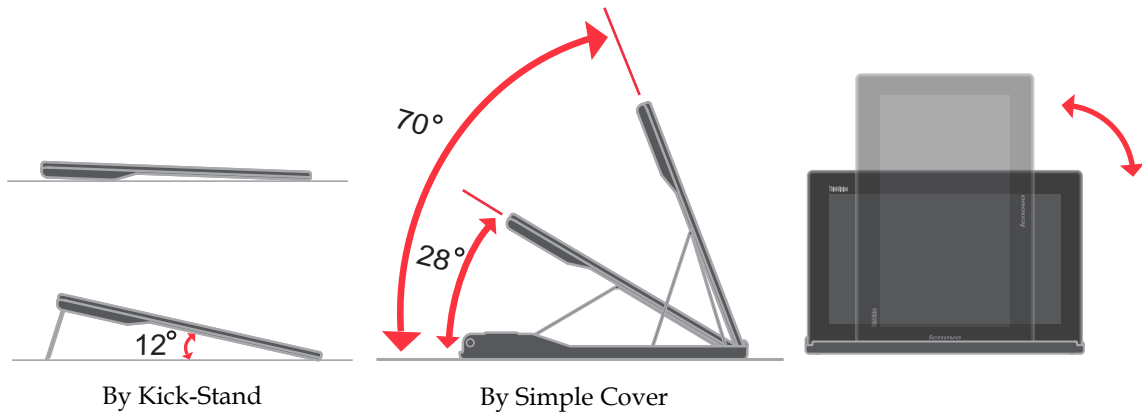
Product overview

This section will provide information on adjusting monitor positions, setting user controls, and using the cable lock slot.

Types of adjustments

Tilt

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



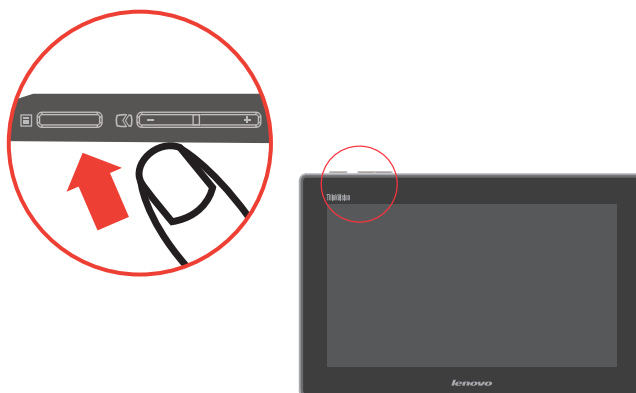
User controls

Your monitor has OSD control on the top which is used to adjust the display.

Menu Key: 1. To display the OSD menu on the screen.
2. To select the OSD sub-Menu.

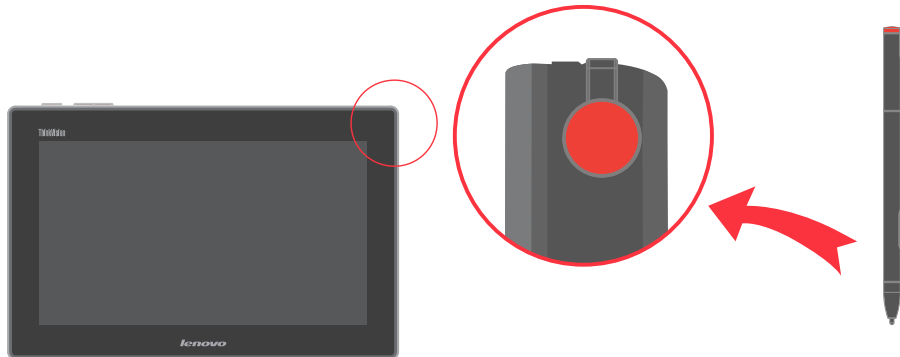
Minus Key: 1. Back-Forward selection of the OSD menu.
2. Decrease the value of sub-menu selection.
3. Auto config hot key.

Plus Key: 1. Forward selection of the OSD menu.
2. Increase the value of sub-menu selection.



Monitor Stylus Pen storage

A storage slot is available on the monitor to store the Stylus Pen.



Using the Multi-touch screen

Your Monitor support multi-touch function on Win7/Win8 32/64bits OS, can support maximum ten point multi-touch function on Win 8 32/64bits OS.

Tap the screen to use the controls on the screen including icons, menu items, and the on-screen keyboard.

Following provides instructions on how to use the multi-touch screen.

Tap

Tap gently on the screen with your fingertip to launch an application, select an item, open a menu, or input text using the onscreen keyboard.

Press and hold

Press and hold an object or a blank area on the screen until an action occurs.

Drag

To move an item such as an image and an icon on the screen, tap and hold your finger on the item, move your finger to the desired location, and then take your finger off the screen.

Swipe or slide

Move your finger in a vertical or horizontal direction on the screen to scroll through the Start screen, Webpages, lists, picture thumbnails, and so on.

Zoom

- Zoom out: Move two fingers close together on the screen as if you are picking something up to reduce the view of an image or a Web page.
- Zoom in: Move two fingers apart on the screen to enlarge the view of an image or a Web page.

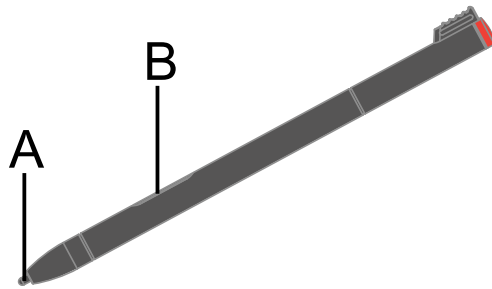
Double-tap

For some applications, quickly tap twice on the screen to zoom in. Double-tap again to zoom out.

Using the Monitor Stylus Pen

Your Monitor support touch pen function on Win7/Win8 32/64bits OS. the touch pen is attached in your monitor. You can use it to input text or draw graphics in a natural manner and perform other operations without tapping the screen.

The Monitor Stylus Pen enables you to input text in a natural manner, as well as taking notes, annotating PDF files, and drawing graphics together with applications capable of editing and sketching.



The Monitor Stylus Pen consists of a tip A and a click button B. Hold the pen and point the tip at the display to move the cursor. To make a selection (single click), tap the display once with the pen. To double-click, tap twice without pausing. To do a right-click, tap the display once and then hold the tip of the pen on the display; the right-click icon appears. Pressing the click button to take a screen capture and snip the captured image.

Cable lock slot

Your monitor is equipped with a cable lock slot located on the side of your monitor



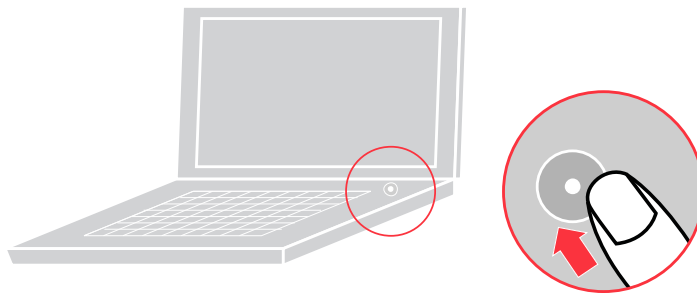
Setting up your monitor

This section provides information to help you set up your monitor.

Connecting and turning on your monitor

Note: Be sure to read the Safety Information located in the Quick Start Guide before carrying out this procedure.

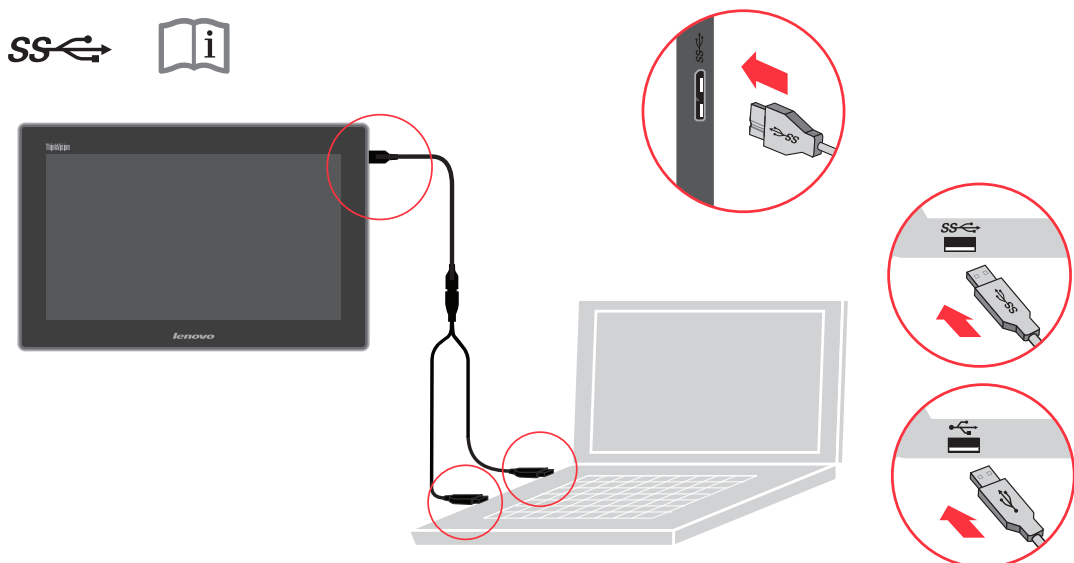
1. Power on the computer.



2. To install the monitor driver, follow the on-screen instructions.
 - a. Connect the USB cable to the USB port of the side of the monitor and the other two ends to the appropriate USB ports on your computer.
 - b. To install the monitor driver, you can find the driver setup file in the monitor mass storage USB disk. For detailed Setup steps, please see " Chapter 4".

Remark:

To ensure optimal display performance, connect the monitor to your PC using a USB 3.0 and a USB 2.0 port at the same time. Using only one USB 2.0 port may decrease the brightness level of the display.

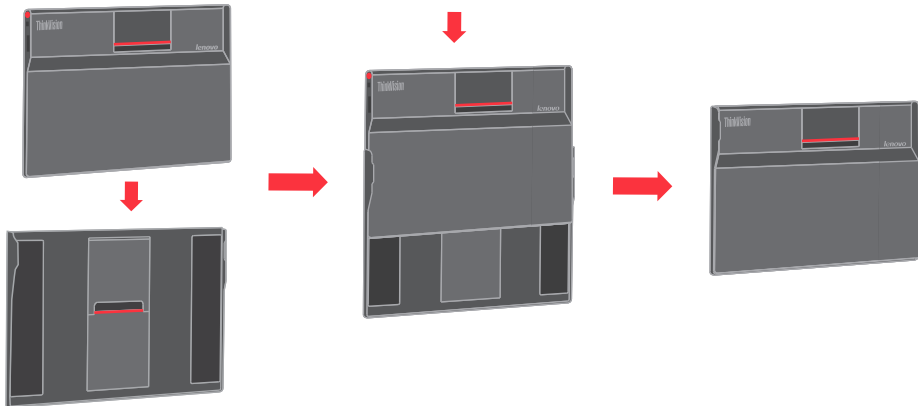


3. Using the convertible simple cover.

A simple cover ships with the monitor for added protection when storing and carrying. The case can also be used as a monitor stand as illustrated below.

If simple cover is attached:

1) Simple cover for storing.

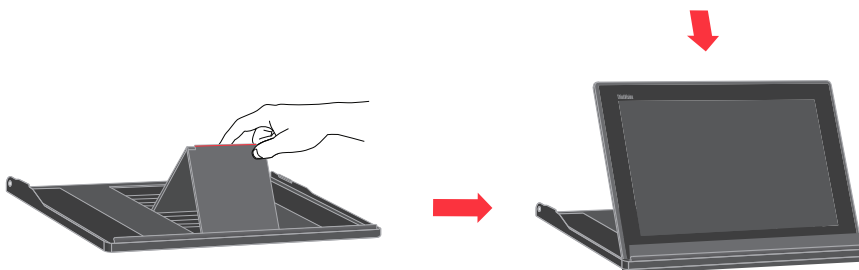


2) Simple cover as stand.

a. Take out monitor from simple cover and raise stand leg.



b. Put monitor in front of stand leg .



Chapter 2. Adjusting and using your monitor

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

Comfort and accessibility

Good ergonomic practice 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 Web site at: <http://www.lenovo.com/healthycomputing>

Arranging your work area

Use a work surface of appropriate height and available 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 and viewing your monitor

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

- **Viewing distance:** Optimal viewing distances for monitors range from approximately 510mm to 760mm (20 in to 30 in) and can vary depending on ambient light and time of day. You can achieve different viewing distances by repositioning your monitor or by modifying your posture or chair position. Use a viewing distance that is most comfortable for you.
- **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, and image adjustment 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 in front of 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.
- **Short, periodic breaks help ensure healthy computing:** Because computing is primarily a static activity, it is particularly important to take short breaks from your work. Periodically, stand up from your work area, stretch, walk for a drink of water, or otherwise 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 you do work.

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.ssbartgroup.com/lenovo/request_vpat.php

Adjusting your monitor image

This section describes the user control features used to adjust your monitor image.

Using the On-Screen Display (OSD) controls

The display settings can be viewed through the on-screen-display (OSD), as shown below



To use the controls:

1. Press to open the main OSD menu.
2. Use **-** or **+** to move across the icons. Select an icon and press to access that function. Then use **-** or **+** to make adjustments, when you're satisfied with the settings, press to exit the current adjustment.
3. Press to exit from the OSD.
4. " **-** " is hot key for adjust the image.

Table 2-2. OSD functions

OSD Icon on Main Menu	Description
Brightness	Adjusts overall brightness.
Contrast	Adjusts difference between light and dark areas.
Automatic	Automatically optimizes the image.
Option	Go to the options menu.
Exit	Exit from the OSD.

OSD Icon on Option Menu	Description
Language	This section lists the languages supported by your monitor. Note: The language chosen only affects the language of the OSD. It has no effect on any software running on the computer.
Button Repeat Rate	Change button repeat rate
Menu time out	Change menu time out setting.
Reset	OSD setting reset.
Return	Return to the main menu.

Understanding power management

Power management is invoked when the computer goes to stand-by mode. The monitor states are described below.

For optimal performance, unplug the USB cable to 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 2-1. Power indicator

State	Power Indicator	Screen
On	Green	Normal
Saving	Green	Black
Off	Off	Black

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.

Selecting a supported display mode

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

The image size, position and shape might change when the display mode changes. This is normal and the image can be readjusted using automatic image setup and the 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 re-attach the CRT monitor temporarily until you have re-configured the system; preferably to 1600 x 900 at 60 Hz, which is the Native Resolution Display mode.

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

Table 2-3. Factory set display modes

Addressability	Refresh rate
800 x 600	60 Hz
1280 x 720	60 Hz
1280 x 800	60 Hz
1024 x 768	60 Hz
1366 x 768	60 Hz
1440 x 900	60 Hz
1600 x 900	60 Hz

Chapter 3. Reference information

This section contains monitor specifications, troubleshooting information, and service information.

Monitor specifications

Table 3-1. Monitor specifications

Dimensions	Height	225.44 mm (8.87 in)
	Depth	12.70 mm (0.50 in)
	With	347.96 mm (13.70 in)
Stand	Tilt range	Range: 0°~95°
Image	Viewable image size	337.82 mm (13.3 in)
	Maximum height	165.24 mm (6.51 in)
	Maximum width	293.76mm (11.57 in)
	Pixel pitch	0.1836 mm (0.0072 in) (V)
Power input	Supply voltage	5V DC
	Max supply current	1.4A
Power consumption Note: Power consumption figures are for the monitor and the power supply combined.	Max Consumption	7W
	Typical Consumption	6W
	Sleep Consumption	1.5W
Video input	Input signal	USB 3.0
	Data rates	5G bps(max)
Supported Display Modes	Native Resolution	1600 x 900 at 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%
	Storage	5% to 95%
	Shipping	5% to 95%

Troubleshooting

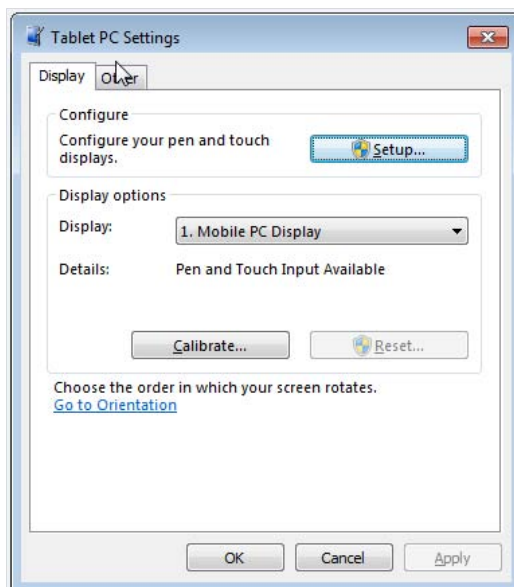
If you have a problem setting up or using your monitor, you might be able to solve it yourself. Before calling your dealer or Lenovo, try the suggested actions that are appropriate to your problem.

If touch / Stylus function not working on LT1423pwC when in extended mode, please set your notebook via following steps:

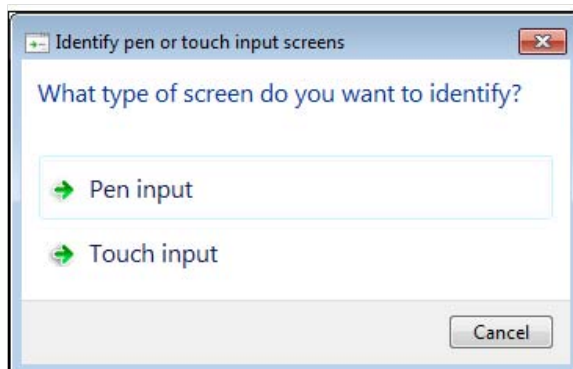
1. Open "Control panel", then find the "Tablet PC Setting".



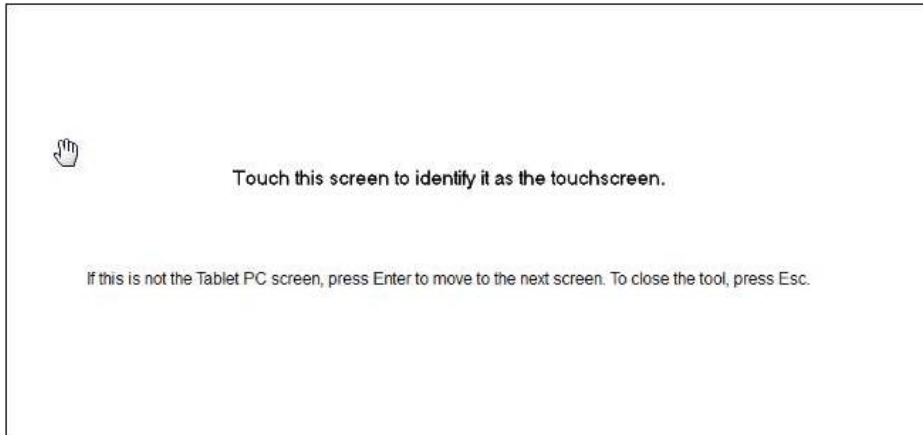
2. Click "Tablet PC Setting" and Windows will show below picture.



3. Please click "Setting" button, you will find below window on your notebook screen.



4. 2 options to set up the stylus pen and the touch function. Click “stylus pen input”, your notebook screen will show below picture. Then click “Enter” button of your keyboard, the picture will also be displayed on your monitor screen.



5. Touch function setting is similar with the previous one. > Finally, the stylus pen and the touch function will be effective both on your monitor and your notebook screen

Table3-2. Troubleshooting

Problem	Possible cause	Suggested action	Reference
The LED indicator is green but the screen has no display.	The driver is not installed correctly.	Please uninstall the driver then restart PC and install the driver again.	“Driver Installation” on page 4-1
The image quality is unacceptable.	The USB cable is not connected with the monitor or system completely.	Be sure the USB cable is firmly plugged into the system and monitor.	“Connecting and turning on your monitor” on page 1-3
The power indicator is not lit and there is no image.	The USB cable is loose or disconnected with the monitor or system.	Be sure the USB cable is connected properly.	“Connecting and turning on your monitor” on page 1-3
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 Customer Support Center.	Appendix A, “Service and Support,” on page A-1
Screen skewing, picture not in the middle.	The desktop background have no clearly boundary when monitor do auto adjust.	Make sure the desktop have clear boundary or open a file and maximize it, then press left button or select Automatic item in the OSD, monitor will do adjust again.	Na

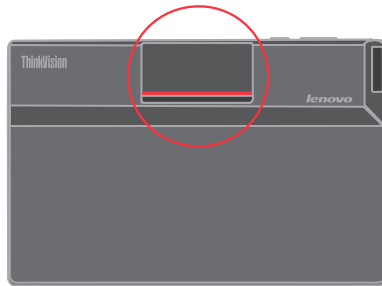
Getting further help

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

Service information

Product numbers

The product number for your monitor is located on the back of the Keyboard tilt foot as shown below.



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.

Service parts

The following parts are for use by Lenovo service, or Lenovo authorized dealers, to support the customer warranty. Parts are for service use only. The table below shows information for model 60A3-UAR2-WW

Table 3-3. List of service parts

FRU (Field Replaceable Unit) Part number	Description	Color	Machine Type Model(MTM)
03T8721	Monitor_ LT1423pwC	Raven Black	60A3-UAR2-WW
03T8474	USB3.0 cable	Raven Black	60A3-UAR2-WW
03T8476	Simple Cover	Raven Black	60A3-UAR2-WW
04Y1470	Stylus Pen	Raven Black	60A3-UAR2-WW

Chapter 4. Working with LT1423pwC Wide USB monitor

This section contains instructions to install the monitor driver and display information settings.

Driver Installation

PC Requirements

Lenovo USB Monitor software can be used on PCs, from Netbooks, Notebooks/Laptops to Desktops. The driver will run on processors ranging from Atom N270 based PCs, basic single Core CPUs, and of course the latest Dual, Quad Core and Core i3/i5/i7 CPUs.

The performance of the software is dependent upon the processing power available, as well as the operating system in use. More capable systems offer higher performance.

Lenovo USB Monitor software is available for PCs running one of the following Windows operating systems:

- Windows 7 (32-bit or 64-bit)
- Windows 8 (32-bit or 64-bit)

Note: No Windows Server editions are supported.

Mac OS X support can be found at <http://www.displaylink.com/mac>

Recommended typical system requirements are:

Windows 7

For Windows 7, the Windows Experience Index (WEI) is a useful measure of hardware level. The WEI is accessible from Computer > Properties, or from Control Panel > System.

The recommended typical hardware requirements for the PC are:

- WEI score of at least 3 in the 'Graphics; Desktop performance for Windows Aero' category.
- Overall WEI score of at least 3 as recommended by Microsoft.
- At least one USB 3.0 port.
- 30 megabytes (MB) of free disk space.
- Computer screen for use with the Lenovo USB Monitor device, if it is not integrated.
- Network access for software downloads, or access to a CD-ROM drive.

Windows 8

- For 1-2 monitors, business usage, productivity target. This may not provide full frame rate DVD playback at full screen.
- 1.2GHz Single Core CPU
- 512MB memory
- For 3 monitors where 1 could run DVD video while also targeting productivity and business apps. Will support only 1 video of DVD resolution at full screen:
- 1.6GHz CPU

- 1GB memory
- For 6 screens where 1 screen can run full screen DVD video:
- 1.8GHz Core Duo
- 1GB memory
- At least one USB 3.0 port.
- 30 megabytes (MB) of free disk space.
- Computer screen for use with the Lenovo USB Monitor device, if it is not integrated.
- Network access for software downloads, or access to a CD-ROM drive.

Graphics Card Support (Windows 7)

On Windows 7, Lenovo USB Monitor software interacts closely with the primary graphics card. Lenovo USB Monitor support and test a single graphics card (GPU) installed in a PC from all major GPU vendors (Intel, ATI, NVidia and Via)

The following GPU configurations may exhibit compatibility issues on Windows 7 in certain circumstances:

- Switchable Graphics (ATI/Intel)
- Switchable Graphics (ATI/ATI)
- Switchable Graphics (NVIDIA/Intel)
- NVIDIA SLI in SLI mode

Other GPU configurations, including the following, are currently unsupported and will not function on Windows 7:

- Hybrid Graphics
- Hybrid SLI
- Hybrid Crossfire
- Crossfire
- SLI not in SLI mode
- Multiple WDDM 1.1 graphics drivers active at once

Graphics Card Support (Windows 8)

All graphics cards are supported on Windows 8.

Installing the Lenovo USB Monitor USB Graphics Software

The following section shows you how to install the USB Monitor USB Graphics software on different operating systems.

Note: If you have v3.x, R4.1 or R4.2 USB Monitor software installed you must uninstall it, using the Windows Add/Remove Programs feature, before installing this release. Devices will continue working after this release is installed.

To Install the Lenovo USB Monitor USB Graphics on Windows 7 / 8

1. Connect your Lenovo USB Monitor via the USB cable to your PC/Notebook.
2. The Lenovo USB Monitor will appear to your PC's operating system as an external disk. Open it, then double click Setup.exe to install the monitor software.

3. Click **Yes**.

The USB Monitor end user licence agreement window opens.

4. Click I accept.

The USB Monitor software and Lenovo Display Adapter installs.

Note: The screen may flash or go black during the install. It will take 2~5 minutes to finish install, please keep USB cable connected during install. After finish install, it will remand you to restart PC

5. Unfix the USB cable, then restart PC.

6. When PC working well, connect your USB Monitor via the USB cable to your PC. Installing device driver message.

7. The screen should flash and the USB Monitor should start to extend the windows desktop.

Note: On some machines you may need to reboot before you can use your USB Monitor enabled device.

USB Monitor Display Information settings

The language shown in pictures below is decided by your operating system : (Unsupported languages default to English)

Using the USB Monitor Software


This section describes how to use USB Monitor's Software. The section is divided into sub-sections relating to your operating system.

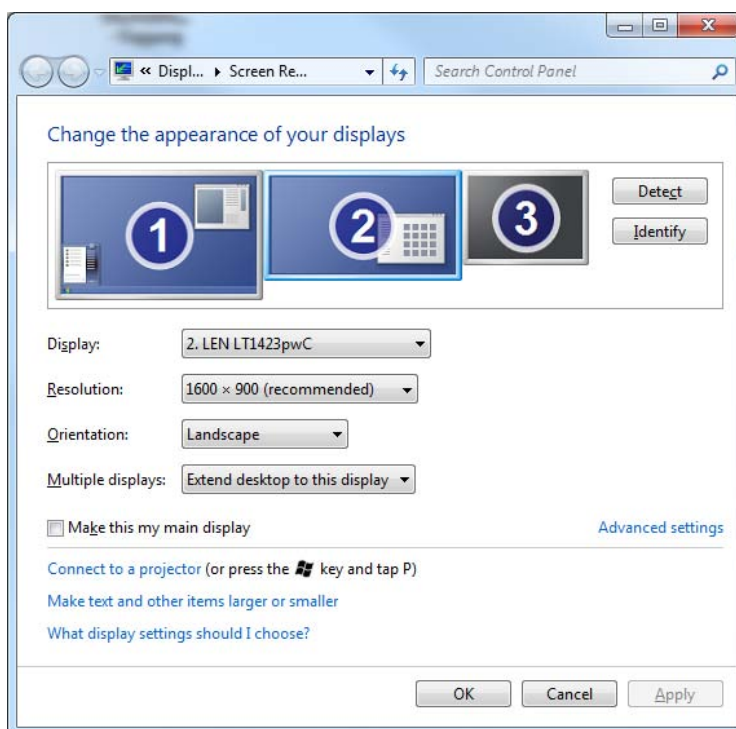
Note: The terminology for mirror mode, can vary between operating systems and the USB Monitor GUI. The terms "Clone", "Mirror" and "Duplicate" essentially all provide the same function of cloning the pixels from one display to another.

Windows 7 - Controlling the Display

On Windows 7, you can configure a USB Monitor device through the use of Windows Display Properties (WDP). WDP provides a simple method to attach, rotate, duplicate or extend screens as well as modify screen resolution.

To open WDP

1. Right click on the USB Monitor icon  .
2. Click *Advanced Configuration*.
3. WDP opens.



Setting the Display

Follow this procedure to set the display.

To set the display

1. Open *Screen Resolution*.
2. Set the display options. Refer to the table below for details on each option.

Table 4-1. WDP Options

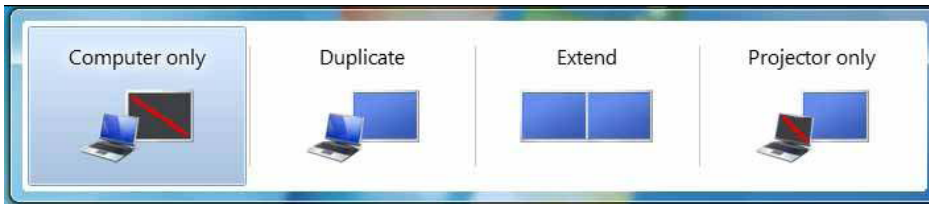
Menu	Sub-Menu	Description
Display		Use the drop down list to select a display to be configured.
Resolution		Use the drop down list and use the slider to choose a resolution.
Orientation	Landscape	Sets the display to landscape view.
	Portrait	Sets the display to portrait mode.
	Landscape (flipped)	Sets the display to upside down landscape mode.
	Portrait (flipped)	Sets the display to upside down portrait mode.
Multiple displays	Duplicates these displays	Reproduces the main display on the second display.
	Extend these displays	Extends the main display onto the secondary display.
	Show Desktop only on 1	The desktop appears on the display marked 1. The display marked 2 becomes blank.
	Shows Desktop only on 2	The desktop appears on the display marked 2. The display marked 1 becomes blank.

To control the behaviour of an attached USB Monitor display, it is also possible to use Windows Key+P to display a menu (and cycle through it) to switch mode.

To control the Display

1. Select the Windows Key+P.

The following menu appears.



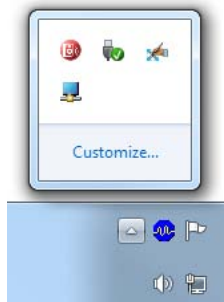
2. Click on one of the options.
The display updates to reflect your choice.

The USB Monitor Icon Application

You can configure the behaviour of the USB Monitor USB Graphics through the USB Monitor icon application on the taskbar, where present.

To show the USB Monitor Manager menu

1. From the taskbar, click the *Show hidden icons* arrow to show all available icons.




2. Click the USB Monitor icon  .
A menu appears with several options, as described in the following table.


Table 4-2 USB Monitor menu

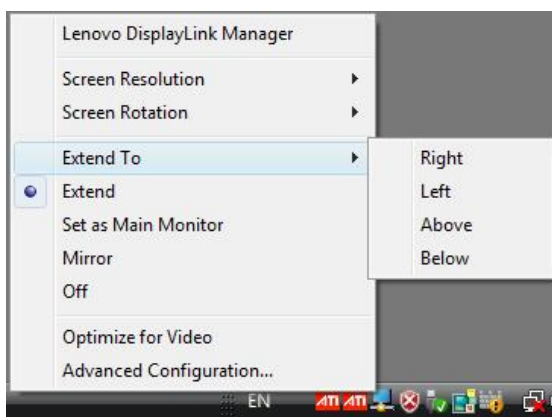
Menu	Description
Check for updates	Connects to the Windows Update and checks for newer versions and downloads them, if available.
Optimize for Video	Select this option for better movie playback performance on the USB Monitor enabled displays. Only select this option when playing back video content. Note: Text may appear less clear when enabled.
Advanced	Configuration Opens the Windows Display Properties (WDP)

Windows and Windows 8 – Controlling the Display

When devices are attached, an icon appears in the taskbar. This gives you access to the USB Monitor manager menu.

To use the USB Monitor Manager Menu

1. Click the USB Monitor icon  on the taskbar.
The menu appears as shown below.



2. Select an option from the menu, using the following table for the options available.

Table 4-3 USB Monitor menu

Menu Option	Sub-menu Option	Description
Screen Resolution		Displays a list of available resolutions. Some resolutions may be enclosed by []. Please see, Inferred Modes.
Screen Rotation	Normal	No rotation is applied to the USB Monitor display
	Rotated Left	Rotates the extended or mirrored display by 270 degrees.
	Rotated Right	Rotates the extended or mirrored display by 90 degrees.
	Upside-Down	Rotates the extended or mirrored display by 180 degrees.
Extend To	Right	Extends the display to the right of the main display.
	Left	Extends the display to the left of the main display.
	Above	Extends the display above of the main display.
	Below	Extends the display below the main display.
Extend		Extends your desktop onto the secondary display.
Set as Main Monitor		Sets the secondary display as the main display.
Notebook Monitor Off		Switches off the display of an attached notebook and makes the USB Monitor display primary.
Mirror		Copies what is on the main display and reproduces it on the secondary display.
Off		Switches off the secondary display.
Optimize for Video (Windows 7 Only)		Configures the secondary display for optimum full screen video performance output. Note: Text may appear less clear.
Advanced Configuration		Opens the Display Settings window.

Additional Information

The following section provides additional information on the use of the USB Monitor USB Graphics software.

Monitor Calibration

DDC/CI is not supported on displays with integrated USB Monitor technology.

Media Playback

On Windows 7 and Windows 8 (in extend modes), the USB Monitor USB Graphics device can display media files and DVDs using the following media players:

- Windows Media Player 11 (<http://www.microsoft.com/windows/windowsmedia/default.mspx>)
- WinDVD 8 (www.intervideo.com)
- PowerDVD 7 (www.cyberlink.com)
- RealPlayer 11 (www.real.com)

The USB Monitor USB Graphics device can display media files and DVDs using most media players. Media playback in mirror mode (Windows 8) or in Basic mode (Windows 7) is not recommended.

Using Multiple USB Monitor USB Graphics devices

The software supports up to six simultaneously USB attached screens. It is also possible that different sets of screens are being used at different times, for example two in the office and two at home. The software saves each screen's display profile separately. This allows for different physical positioning, or different resolutions, of connected monitors in the office and the home.

Standby and Hibernate, Shut down and Restart

If the PC that the USB Monitor USB Graphics device is connected to is placed into standby or hibernate mode, the display goes blank. When the PC is again powered up (and unlocked if necessary) the connected monitor returns to the same mode as it was before stand by or hibernation.

If the PC is shut down, restarted and logged in, again the connected display returns to the same mode as it was before shutdown.

USB Monitor USB Graphics with Multiple Users

USB Monitor USB Graphics work with multiple users on the PC. The mode settings are saved for each user so each can use their own desktop configuration.

Disconnecting the USB Monitor USB Graphics

If the USB Monitor USB Graphics device is powered off or the USB cable is removed from the computer, the display blanks. All windows and icons move to the primary screen.

On reconnection or powering up of the USB Monitor USB Graphics device, the display returns to the same mode as it was before disconnection. However, windows and icons that were previously on the screen will not be moved back.

Error Messages

USB Monitor USB Graphics software occasionally displays user messages in a bubble in the notification area. The table below lists the user messages and their description.

Table 4-4 USB Monitor menu

Message	Description
Insufficient system resources exist to complete the requested service	This can occur when entering extend mode with low system resources. The PC does not have enough memory to start an extend display. Close down any unused applications. The situation may also be improved by rebooting the PC.
The requested allocation size was too large	This can occur if trying to mirror a primary display with a resolution above 1600x900 (16:9).
Incompatible Display Driver	This message will appear if the primary graphics card drivers installed are not WDDM compatible. Windows 7 is not designed to operate without WDDM drivers. Download and install the latest Windows 7 (WDDM) drivers for your primary graphics card.
The system cannot write to the specified device	This warning may be displayed in Windows 8 after changing the display mode several times (e.g. Extend/Dock mode) from the USB Monitor GUI. If this happens, detach and reattach the device to restore normal operation.

Troubleshooting

This section provides tips for correcting problems, should any occur. It also describes how to contact Lenovo should you encounter problems that you cannot resolve.

Before you call Lenovo, please read the troubleshooting advice in this manual and in your computer *User's Manual*. You may also want to consult with your system administrator or company technical support staff.

Precautions for Microsoft® Windows®

- This product does not support 3D programs or Blue-Ray Disk.
- Due to the configurations of computers and Windows® operating systems available, functionality may differ slightly than stated in the user manual. This may be due to the computer manufacturer's BIOS and other custom configurations of the hardware, pre-installed software or operating system installed at time of production. If you have specific problems, you may need to contact the computer manufacturer to inquire about BIOS, hardware driver or operating system updates.
- The Fn + F5 functionality detailed in the electronic User's Guide for your Lenovo computer only controls the internal video controller of your computer.
- The Lenovo LT1423pwC Wide USB Monitor utilizes an advanced video graphics controller to display the video. However, due to USB 3.0 transfer speed limitations, some or all portions of DVD playback may appear slow or choppy. This is not a malfunction of the Lenovo LT1423pwC Wide USB monitor. Move the video playback from the Lenovo LT1423pwC Wide USB monitor to your computer display for optimal video performance when viewing DVDs.
- On Windows® 8 systems, DVDs may not display correctly on the Lenovo LT1423pwC Wide USB monitor. Use your computer's built-in monitor to view DVDs.

- In some software application programs that utilize certain direct draw commands such as some 2D-Games, the display on the Lenovo LT1423pwC Wide USB monitor will not be supported. If you want to play these games in full screen, we suggest you disconnect the Lenovo LT1423pwC Wide USB monitor.
- This product is unable to enter full screen DOS mode when using the Lenovo LT1423pwC Wide USB monitor.

Problem show

<i>Problem</i>	<i>Solution(s)</i>
The monitor does not turn on	Check the connections. Make sure the USB cable is firmly connected to the monitor. Disconnect and reconnect the USB cable. Check the condition of the USB cable. If the cable is frayed or damaged, replace the cable. If the connectors are soiled, wipe them with a clean cloth.
The screen is blank, although the power is on	Make sure the USB cable is properly connected to the computer. Make sure the computer is on and working. The computer may be in sleep or power-saving mode, or displaying a blank screen saver. Move the mouse to "wake up" the computer.
The picture "bounces" or moves in a wave-like pattern	Move electrical devices that may cause electrical interference away from the monitor.

Minor issues can generally be resolved by:

- unplugging and re-plugging the USB Monitor device,
- changing the display mode via the USB Monitor GUI, or,
- changing the display mode via Windows Display Properties.

On Windows 7 WDDM (Aero and Basic)

USB Monitor software works closely with the graphics card and there may be interoperability issues with some graphics cards. If this happens:

1. Try to upgrade to the latest graphics drivers.
2. Try to upgrade to latest USB Monitor software.
3. Report the issue via your support channel.
4. If necessary, boot into Safe Mode and use Windows' Backup and Restore Center to recover.

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>

Date and time Update to be Visible on the Website	Country or Regions	Language	Old Telephone Number(s)	New Telephone Number(s)	Hours of Operation	Applicable to IWS
17-May-2012 1000 GMT +4:00	RUSSIA	Russian,	8 800 100 7888	8-800-555-0317	10 am - 7 pm Monday - Saturday	Yes
30-Jul-2012 0900 GMT +9:00	JAPAN	Japanese, English	0120-20-5550, 0570-064-600 For International: +81-46-266-4716	0120-000-817	9AM - 6PM Monday - Sunday (Exception : Third Sunday of the month (due to maintenance activities) and December 30th and 31st and January 1st, 2nd, and 3rd)	
12-Sep-12 0900 GMT +9:00	SOUTH KOREA	Korean, English	1588-6782	080-513-0880 (Toll Free) 0234834817 (Standard Charges Apply)	9AM - 6PM Monday - Friday 9AM - 1PM Saturday	
30-Nov-12 0700 GMT -6:00	Costa Rica	Spanish, English	0-800-011-1029	Dial 0-800-011-4114, then dial 877-404-9661	7 am - 9 pm Monday - Sunday	
30-Nov-12 0900 GMT -4:00	Dominican Republic		1-866-434-2080	877-396-6150	9 am - 11 pm Monday - Sunday	
30-Nov-12 0700 GMT -6:00	El Salvador		800-6264	800-6037	7 am - 9 pm Monday - Sunday	
30-Nov-12 0700 GMT -6:00	Guatemala		1800-624-0051	Dial 999-9190, then dial	7 am - 9 pm Monday - Sunday	
30-Nov-12 0700 GMT -6:00	Honduras		Tegucigalpa: 232-4222 San Pedro Sula: 552-2234	Dial 800-0123, then dial 877-404-9661	7 am - 9 pm Monday - Sunday	
30-Nov-12 0800 GMT -5:00	Panama		206-6047 001-866-434-2080 (Lenovo Customer Support Center- toll free)	001-800-507-2694	8 AM - 10 PM Monday - Sunday	
3-Dec-12 0800 GMT -5:00	ECUADOR		1-800-426911 OPCION 4	(Andinatel) Dial 1-999-119; then dial 877-404-9661 (Pacifictel) 1-800-225-528; then dial 877-404-9661 (Pacifictel Spanish) 1-800-999-119; then dial 877-404-9661	8 AM - 10 PM Monday - Sunday	
3-Dec-12 0800 GMT -6:00	MEXICO		001-866-434-2080	01800 0834916	8 AM - 10 PM Monday - Sunday	

Date and time Update to be Visible on the Website	Country or Regions	Language	Old Telephone Number(s)	New Telephone Number(s)	Hours of Operation	Applicable to IWS
3-Dec-12 0900 GMT -3:00	PARAGUAY	Spanish, English	009-800-52-10026	0098004410084 or 009-800-	9 am - 11 pm Monday - Sunday	Yes
3-Dec-12 1000 GMT -2:00	URUGUAY		000-411-005-6649	000 411 0026332	10 am - 12 pm Monday - Sunday	
5-Dec-12 0900 GMT +8:00	HONG KONG	Cantonese, Mandarin, English		(852) 3071-3561	9 AM - 8 PM Monday - Friday 9AM - 1 PM Saturday	
5-Dec-12 0900 GMT +8:00	Macau		ThinkPad (Technical enquiry hotline): 0800-839 (Macau) ThinkPad Service Center: 2871-5399 (Macau) ThinkCentre, ThinkStation and ThinkServer: 0800-336 (Macau)	0800 807	9 AM - 8 PM Monday - Friday 9AM - 1 PM Saturday	
5-Dec-12 0800 GMT -3:00	CHILE		800-361-213	1230 020 0173 or 800530008	8 AM - 10 PM Monday - Sunday	
5-Dec-12 0800 GMT -5:00	PERU	Spanish, English	0-800-50-866 OPCION 2	0800-77-503	8 AM - 10 PM Monday - Sunday	
5-Dec-12 0830 GMT -4:30	VENEZUELA		0-800-100-2011	08001101111	8:30 am - 10:30 pm Monday - Sunday	
10-Dec-12 0900 GMT -4:00	BOLIVIA		0800-10-0189	800-10-0982	9 am - 11 pm Monday - Sunday	
10-Dec-12 0800 GMT -5:00	COLOMBIA		1-800-912-3021	01800 5182433 (Toll Free) 3207635 (Standard Charges Apply)	8 AM - 10 PM Monday - Sunday	
12-Dec-12 1000 GMT -3:00	ARGENTINA		0800-666-0011	0800 2660570	10 am - 12 pm Monday - Sunday	

Date and time Update to be Visible on the Website	Country or Regions	Language	Old Telephone Number(s)	New Telephone Number(s)	Hours of Operation	Applicable to IWS
01-Sep-12 0000 GMT +10:00	Australia	English	131-426 Think Branded Products 1300-880-917 ThinkServer	1800041267	24 hours/day 7 days/week	Yes
01-Sep-12 0000 GMT +10:00	New Zealand		0800-733-222 Think Branded	0508 770 506	24 hours/day 7 days/week	
14-Sep-12 0830 GMT +7:00	VIETNAM	Vietnamese, English	For Northern Area and Hanoi City: +84-4-3 7367625/+84-4-3 7367626 For Southern Area and Ho Chi Minh City: +84 8 3 8243504/ +84 8 3 8243503	12011072	8:30 AM - 5:30 PM Monday - Friday	
28-Sep-12 0830 GMT +8:00	PHILIPPINES	Tagalog, English	1800-1601-0033 (Local number only) +603 8315 6858 (DID)	180089086454 (Domestic Toll Free) 180014410719 (International Toll Free)	8:30 AM - 5 PM Monday - Friday	
12-Oct-12 0800 GMT +8:00	SINGAPORE	English, Mandarin, Bahasa Malaysia	800 6011 343 (Local number only) +603 8315 6856 (DID)	18004155529	8AM - 6:30PM Monday - Friday	
26-Oct-12 0900 GMT +7:00	THAILAND	Thai, English	1-800-060-066(Local number only) 66 2273 4088+603 8315 6857 (DID)	0018004415734	9 AM -6 PM Monday - Friday	
9-Nov-12 0900 GMT +7:00	INDONESIA	Bahasa Indonesia, English	+6221 2992 5823 001-803-606-282 (Local number only) +603 8315 6859 (DID)	001803442425	9 AM -6 PM Monday - Friday	
14-Nov-12 0900 GMT +8:00	BRUNEI	Bahasa Malaysian, English	801-1041	Dial 800-1111, then dial 8662735446	9 AM -6 PM Monday - Friday	
14-Nov-12 0900 GMT +8:00	MALAYSIA	Bahasa Malaysia, English	1800-88-1889 (Local number only) +603 8315 6855 (DID)	1800880013	9 AM -6 PM Monday - Friday	
30-Nov-12 0000 GMT -4:00	Antigua	English	New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -4:00	Aruba		New	855-882-4402	24 hours a day 7 days a week	

Date and time Update to be Visible on the Website	Country or Regions	Language	Old Telephone Number(s)	New Telephone Number(s)	Hours of Operation	Applicable to IWS
30-Nov-12 0000 GMT -5:00	Bahamas	English	New	855-882-4402	24 hours a day 7 days a week	Yes
30-Nov-12 0000 GMT -4:00	Barbados		New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -4:00	Bermuda		1-800 426 7378	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -4:00	British Virgin Islands		New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -5:00	Cayman Islands		New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -4:00	Curacao		New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -4:00	Grenada		New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -4:00	Guyana		New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -5:00	Jamaica		1-800 426 7378	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -4:00	Montserrat		New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0700 GMT -6:00	Nicaragua	Spanish, English	001-800-220-1830	001-800226-0334	7 am - 9 pm Monday - Sunday	
30-Nov-12 0000 GMT -4:00	Puerto Rico	English	New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -4:00	St Kitts		New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -4:00	St Lucia		New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -4:00	ST MAARTEN		New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -4:00	St Vincent		New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -3:00	Suriname		New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -4:00	Trinidad and Tobago		New	1-8666269587	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -4:00	US Virgin Islands		New	855-882-4402	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -5:00	CANADA	English, French	1-800-565-3344	8882523099	24 hours a day 7 days a week	
30-Nov-12 0000 GMT -5:00	UNITED STATES	English	1-800-426-7378	855-882-4402	24 hours a day 7 days a week	
17-Dec-12 0800 GMT -2:00	BRAZIL	Portuguese	Calls made from within the Sao Paulo region (11) 3889-8986 Calls made from outside the Sao Paulo region 0800-701-4815	0800 885 0500 (Toll Free) (11) 3140-0500 (Standard Charges Apply)	8 AM - 8 PM Monday - Friday 8 AM - 5 PM Saturday	

Appendix B. Notices

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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Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. 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 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 www.ibm.com/jp/pc/service/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 details, visit the Lenovo Web site at www.ibm.com/jp/pc/service/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.

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Turkish statement of compliance

The Lenovo product meets the requirements of the Republic of Turkey Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (EEE).

Türkiye EEE Yönetmeliğine Uygunluk Beyanı

Bu Lenovo ürünü, T.C. Çevre ve Orman Bakanlığı'nın "Elektrik ve Elektronik Eşyalarda Bazı Zararlı Maddelerin Kullanımının Sınırlandırılmasına Dair Yönetmelik (EEE)" direktiflerine uygundur.

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