

LT2252p Wide Flat Panel Monitor User's Guide



# **Product numbers**

2572-MB1

# $\epsilon$

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## 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 instalací tohoto produktu si pročtěte Bezpečnostní informace.

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.

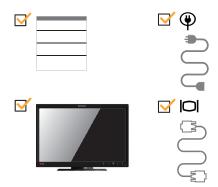
# Chapter 1. Getting started

This User's Guide contains detailed information on the your Flat Panel 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:

- Setup Poster
- Flat Panel Monitor
- Power Cord
- DVI Cable
- Analog Interface Cable



#### **Notice for use**

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

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



- 1. Carefully lay the monitor on a flat surface.
- 2. Put the clip to the monitor.

**Note**: To attach a VESA mount, please see "Wall Mounting (Optional)" on page 2-10.

# **Product overview**

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

# Types of adjustments

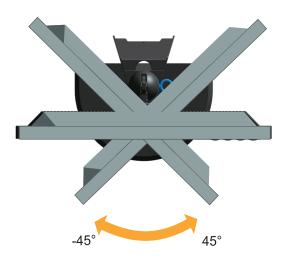
#### Tilt

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



#### **Swivel**

With the built-in pedestal, you can tilt and swivel the monitor for the most comfortable viewing angle.



# **Height Adjustment**

After pressing the top of the monitor, remove the fixed pin and adjust the height of the monitor.



#### **Monitor Pivot**

- Adjust height to the top position before rotation the monitor.
- Rotate clockwise until the monitor stops at 90°.



#### **Monitor controls**

Your monitor has controls on the front which are used to adjust the display.



For information on how to use these 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.

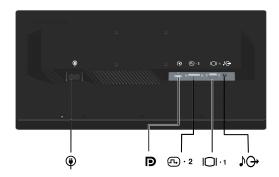
#### Connecting and turning on your monitor

**Note:** Be sure to read the Safety information located on page iii before carrying out this procedure.

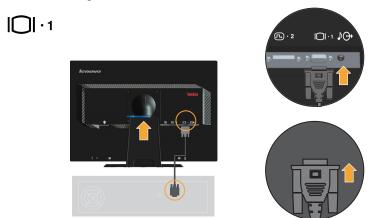
1. Power off your computer and all attached devices, and unplug the computer power cord.



2. Connect the cables according to below icon indication.



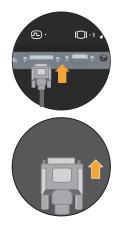
3. Connect one end of the analog signal cable to the monitor VGA connector and the other end to the computer.



4. Connect the digital cable to the DVI connector of the monitor and the other end on the back of the computer.







5. Connect one end of the DP cable to the DP connector on the back of the computer, and the other end to the DP connector on the monitor. Display Port\* \* This port does not support being connected to any AV equipment. Lenovo recommends that customers who require to use the Display Port input on their monitor purchase the "Lenovo Display Port to Display Port cable 0A36537". For more information, go to one of the following:

www.lenovo.com/support/accessories

www.lenovo.com/support/displayport-cables

www.lenovo.com/accessoriesguide









6. Connect the audio cable to audio jack of the monitor and the other end on the external speaker audio in jack.

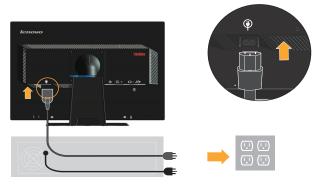


Note: The audio output only for DP mode.

7. Insert the power cord into the monitor, then plug the monitor power cord and the computer cord into grounded electrical outlets.

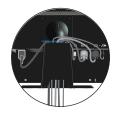
**Note:** A certified power supply cord has to be used with this equipment. The relevant national installation and or equipment regulations shall be considered. A certified power supply cord not lighter than ordinary polyvinyl chloride flexible cord according to IEC 60227 (designation H05VV-F 3G 0.75mm2 or H05VVH2-F2 3G0.75mm2) shall be used. Alternative a flexible cord be of synthetic rubber according to IEC 60245 (designation H05RR-F 3G 0.75mm2) shall be used.





8. Assembled Line Cleaner as showed below..

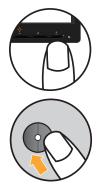




9. Power on the monitor and the computer.







10. When you install the monitor driver, download the driver that corresponds to your monitor model from the Lenovo website http://support.lenovo.com/LT2252pwA. Refer to the "Manually Install Monitor Driver" section to install the driver.





11. To optimize your monitor image, press the Automatic Image Setup key. Automatic image setup requires that the monitor is warmed up for at least 15 minutes. This is not required for normal operation.



Note: If automatic image setup does not establish the image that you prefer, perform manual image setup. See "Manual image setup"on page 3-4.

## **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 product and services that are important to you, as well as in developing better ways to communicate with you. Register your option on the following Web site:

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 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 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 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.
- 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:

http://www-03.ibm.com/research/accessibility/requests/accvpat.nsf/lenovo-bidx?OpenForm

# Adjusting your monitor image

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

#### Using the direct access controls

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

Table 2-1. Direct access controls

Icon	Control	Description	
1 2	Input Change	Switches the video input source	
$\hookrightarrow$	DDC-CI	Press and hold for 10 seconds to enable or disable the DDC-CI function	
	Exit	Exit from menu	
$\square$ 0	Image Setup	Activates automatic image adjustment	
- <del> </del> \$ <del>-</del>	Brightness	Direct access to Brightness adjustment	
$\leftarrow$	Menu	Enter menu	

# Using the On-Screen Display (OSD) controls

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



To use the controls:

- 2. Use ← or → to move among the icons. Select an icon and press ← to access that function. If there is a sub-menu, you can move between options using ← or →, then press ← to select that function. Use ← or → to make adjustments. 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. Enables DDC/CI by default. Use OSD Exit Key, Press and hold → for 10 seconds to disable / enable DDC/CI function. The words "DDC/CI disable" shows on the screen.

*Table 2-2.* OSD functions

OSD Icon on Main Menu	Submenu	Description	Adjus	ols and tments alog)	Controls and Adjustments (DVI/DP)
- <b>j</b> -	☆ Brightness	Adjusts overall screen brightness	❖	<b>\</b>	Same as Analog
Brightness/ Contrast	Contrast	Adjusts difference between light and dark areas	0	•	
Image Position	Horizontal Position	Moves image left or right.			Controls Locked - not required for DVI/DP input
Ü	Vertical Position	Moves image up or down.			
C/O	<b>◯</b> (0 Automatic	Optimizes image (size, position, p	hase and cl	ock).	
Image Setup	Manual	Manually optimizes image. See setup"on page 3-4.  Clock Phase Save	e "Manual :	image	
Image Properties	Color  12-62  Input video signal	Adjusts intensity of red, green, and blue.  Preset mode  Neutral  RedB  Reddish  Bluish  Custom  Red: Increases or decreases the saturation of 'red' in the image.  Green: Increases or decreases the saturation of 'green' in the image.  Blue: Increases or decreases the saturation of 'blue' in the image.  Save: Saves the custom color choices.  This monitor can accept video signals through three different connectors. Most desktop computers use a D-SUB connector. Select digital among OSD Controls when you use DVI&DP connector.		Same as Analog	
		- Selects D-SUB (Analog) - Selects DVI (Digital) - Selects DP			

*Table* 2-2. OSD functions

OSD Icon on Main Menu	Submenu	Description	Controls and Adjustments (Analog)	Controls and Adjustments (DVI/DP)
	_	Selects type of scaled imag		Same as Analog
	© Scaling	Original AR:Same Aspect I signal.		
		Full Screen: Expand image	to full screen	
<b>→:</b>	(i)	Shows resolution, refresh rate,	and product details.	Same as Analog
Options	Information	<b>Note:</b> This screen does not allo the settings.	w any changes to	
	Q	Changes languages of menu.		
	Menu Language	<b>Note:</b> The language chosen onl language of the OSD. It has no software running on the compu	effect on any	
	(+ <del>++</del> +	Adjusts menu location.		Same as Analog
	Menu Position	Default Default returns the menu posit settings.	ion to the default	
		Custom		
		Horizontal: Changes the hothe OSD.	orizontal position of	
		Vertical: Changes the verti OSD.	cal position of the	
		Save		
		Save the custom position cho	ices.	
	R	• Cancel		
	Factory default	• Reset		
		Reset monitor to the original setting	ıgs.	
	<u>ن</u>	Changes button repeat rate and me	enu time-out setting.	
	Accessibility	<b>Ü</b> Button repeat rate:		
		Select ← or → to change.		
		• Off		
		• Default		
		• Slow		
		Menu time out: Sets the le OSD will remain active after th is pressed.		
$\hookrightarrow$		Exit from menu.		
Exit		DAR HORI MCMU.		

#### 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 reattach the CRT monitor temporarily until you have re-configured the system; preferably to  $1680 \times 1050$  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

Timing	Refresh rate(Hz)
PAL	50Hz
640x350	70Hz
640x480	60,66,72,75Hz
720x400	70 Hz
800x600	60,72,75Hz
1024x768	60,70,75Hz
1152x864	75Hz
1280×1024	60,72,75Hz
1360x768	60Hz
1440x900	60,75Hz
1680x1050	60Hz
480p(640x480)	60 Hz
480p(720x480)	60 Hz
576p	50 Hz
720p	50,60 Hz

#### Image rotation

Before rotating the monitor, you should set-up your computer to rotate the image. Rotating the image may require special rotation software or you may find that your computer is preloaded with video graphic drivers that allows image rotation. Check the Graphic Properties setting on your computer to see if this feature is available. Try these steps to check if image rotation is available on your computer.

- 1. Right-click on the desktop and click Properties.
- 2. Select the Settings tab and click Advanced.
- 3. If you have ATI, select the Rotation tab and set the preferred rotation. If you have nVidia, click the nVidia tab, in the left-hand column select NV Rotate, and then select the preferred rotation. If you have Intel, select the Intel graphics tab, click Graphic Properties, select the Rotation tab, and then set the preferred rotation. Check with the manufacturer of your computer to see if graphic drivers with image rotation can be downloaded from their support website

# **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 2-4. Power indicator

State	Power Indicator	Screen	Restoring Operation	Compliance
On	Green	Normal		
Standby/Suspend	Amber	Blank	Press a key or move the mouse	ENERGY STAR
			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.	ENERGY STAR

#### **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 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.

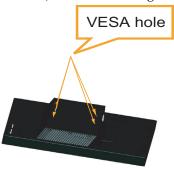
Step 2: Lay the LCD display face down on a towel or blanket.



Step 3: Remove the base from the monitor, refer to "Detaching the monitor base and stand".



Step 4: Attach the mounting bracket from the VESA compatible wall mounting kit (100mm x100mm distance), VESA Mounting Screw M4 x 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: 8kg

# **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. Monitor specifications for type-model LT2252pwA

Dimensions	Depth	187.9 mm (7.40 in.)
	Height	367.1 mm (14.45 in.)
	Width	506.0 mm (19.92 in.)
Pannel	Size	22 in
	Backlight	LED
	Aspectratio	16:10
Stand	Tilt	Range: 0° ~ 30°
VESA mount	Supported	100 mm x 100 mm (3.94 in. x 3.94 in.)
Image	Viewable image size	559.0 mm (22 in.)
	Maximum height	296.1 mm (11.66 in.)
	Maximum width	473.76 mm (18.65 in.)
	Pixel pitch	0.282 mm (0.01 in.)
Power input	Supply voltage	90-264VAC (100~240VAC+/-10%)
	Max supply current	1.5 A
Power consumption	Normal operation	<26W
Note: Power	Standby/Suspend	<0.5W (Analog), <0.5W (DVI),<0.5W (DP)
consumption figures are for the monitor and the	Off	<0.5W at 100Vac & 240Vac
power supply combined	Note: without USB/ Webcam/external speaker	
Video input (Analog)	Input signal	Analog Direct Drive, 75 ohm 0.7V
	Horizontal addressability	1680 pixels (max)
	,	1050 lines (max)
	Vertical addressability	205 MHz
	Clock frequency	

 $\it Table~3-1.~Monitor~specifications~for~type-model~LT2252pwA$ 

Video input (DVI)	Interface	DVI
	Input signal	VESA TMDS (Panel Link™)
	Horizontal	1680 pixels (max)
	addressability	1050 lines (max)
	Vertical addressability	165 MHz
	Clock frequency	
Video input (DP)	Input Signal	DP
	Horizontal	1680 pixels (max)
	addressability	1050 lines (max)
	Vertical addressability	205 MHz
	Clock frequency	
Communications	VESA DDC	CI
Supported Display Modes	Horizontal	30 kHz - 83 kHz
Wiodes	frequency	50 Hz - 75 Hz
	Vertical frequency	
	Native Resolution	1680 x 1050 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% 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

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	"Selecting a supported display mode"on page 2-7
	new monitor.	
	system, restart the system in safe mode, then select a supported display mode for your computer.	
	work, contact the Support Center.	
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 monitor's power switch is not switched on.	Be sure the power cord is connected properly.	"Connecting and turning on your monitor"on page 1-5
• The power cord is loose or disconnected.	Be sure the outlet has power.	
• There is no power at the outlet.	monitor.	
	<ul><li>power cord.</li><li>Try using another</li></ul>	
The monitor is in Standby/Suspend mode.	<ul> <li>Press any key on the keyboard or move the mouse to restore operation.</li> <li>Check the Power Options settings on</li> </ul>	"Understanding power management"on page 2-9
	is not connected with the monitor or system completely.  The color settings may be incorrect.  The automatic image setup function was not performed.  The monitor's power switch is not switched on.  The power cord is loose or disconnected.  There is no power at the outlet.	in safe mode, then select a supported display mode for your computer.  If these options do not work, contact the Support Center.  Be sure the signal cable is firmly plugged into the system and monitor.  Select another color setting from the OSD menu.  The automatic image setup function was not performed.  The monitor's power switch is not switched on.  The power cord is loose or disconnected.  There is no power at the outlet.  The monitor is in Standby/Suspend mode.  The mouse to restore operation.  The video signal cable is firmly plugged into the system and monitor.  Select another color setting from the OSD menu.  Perform automatic image setup.  Be sure the power cord is connected properly.  Be sure the power cord is power.  Try using another electrical outlet.  The monitor is in Standby/Suspend mode.  The power or the mouse to restore operation.  Check the Power

*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
<ul> <li>Fuzzy lines in text or a blurry image.</li> <li>Horizontal or vertical</li> </ul>	<ul> <li>Image setup has not been optimized.</li> <li>Your system Display Properties setting</li> </ul>	Adjust the resolution settings on your system to match the native resolution for this monitor: 1680 x 1050 at 60 Hz.	"Adjusting your monitor image"on page 2-3
lines through the image.	have not been optimized.	Perform automatic image setup. If automatic image setup does not help, perform manual image setup.	"Selecting a supported display mode"on page 2-7
		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.

## Manual image setup

If automatic image setup does not establish the image that you prefer, perform manual image setup.

**Note:** Have your monitor powered on for about 15 minutes, until the monitor warms up.

- 1. Press ← at the bottom of the monitor to open the OSD menu.
- 2. Use ← or → to select ௭ and press ← to access.
- 3. Use  $\leftarrow$  or  $\rightarrow$  to select manual and press  $\leftarrow$  to access.
- 4. Use ← or → to select **Clock** and **Phase** adjustment.
  - **Clock** (pixel frequency) adjusts the number of pixels scanned by one horizontal sweep. If the frequency is not correct, the screen shows vertical stripes and the picture does not have the correct width.
  - **Phase** adjusts the phase of the pixel clock signal. With a wrong phase adjustment, the picture has horizontal disturbances in light picture.
- 5. When the image no longer looks distorted, save the Clock and Phase adjustments.
- 6. Press → to leave the OSD menu.

#### Manually installing the monitor driver

Below are steps for manually installing the monitor driver in Microsoft Windows Vista, Microsoft Windows 7, Microsoft Windows 8/8. 1.

#### Installing the monitor driver in Windows Vista

To use the Plug and Play feature in Microsoft Windows Vista, 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 Vista operating system.
- 4. From the Lenovo website http://support.lenovo.com/LT2252pwA, find the corresponding monitor driver and download it to a PC to which this monitor is connected (such as a desktop).
- 5. Click **Start**, **Control Panel** and then click the **Hardware and Sound** icon.
- 6. Click the **Personalization** icon.
- 7. Click the **Display settings** icon.
- 8. Click the **Advanced Settings** button.
- 9. Click the **Monitor** tab.
- 10. Click the **Properties** button.
- 11. Click the **Driver** tab.
- 12. Click **Update Driver**, then click **Browse the computer to find the driver program.**
- 13. Select Pick from the list of device driver program on the computer.
- 14. Click the **Hard Disk** button. By clicking the Browse button, browse and point to the following path:
  - X:\Monitor Drivers\Windows Vista (where X indicates "the folder in which the downloaded driver is located" (such as a desktop)).
- 15. Select the "lenlt2252pwa.inf" file and click the Open button. Click the OK button.
- 16. In the new window, select **LEN LT2252pwA** and click **Next**.
- 17. After the installation is complete, delete all downloaded files and close all windows.
- 18. 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  $1680 \times 1050$  at a refresh rate of 60 Hz, or  $640 \times 480$  at a refresh rate of 60 Hz.

#### 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, 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/LT2252pwA, 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 click 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 point to 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 "lenlt2252pwa.inf" file and click the Open button. Click the OK button.
- 15. In the new window, select LEN LT2252pwA and click Next.
- 16. After the installation is complete, 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  $1680 \times 1050$  at a refresh rate of 60 Hz, or  $640 \times 480$  at a refresh rate of 60 Hz.

#### Installing the monitor driver in Windows 8/8.1

To use the Plug and Play feature in Microsoft Windows 8/8.1, do the following:

- 1. Turn off the computer, 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 8/8.1 operating system.
- 4. From the Lenovo website http://support.lenovo.com/LT2252pwA, find the corresponding monitor driver and download it to a PC to which this monitor is connected (such as a desktop).
- On the Desktop, move mouse to bottom-right corner of 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, browse and point to the following path:
  - X\ Monitor Drivers \Windows 8&8.1
  - (where **X** indicates "the folder in which the downloaded driver is located" (such as a desktop)).
- 14. Select the "lenlt2252pwa.inf" file and click the Open button. Click the OK button.
- 15. In the new window, select LEN LT2252pwA and click Next.
- 16. After the installation is complete, 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  $1680 \times 1050$  at a refresh rate of 60 Hz, or  $640 \times 480$  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 2572-M\*1.

Table 3-3. List of service parts

FRU (FIELD REPLACEABLE UNIT) PART NUMBER	DESCRIPTION	Machine Type/Model(MTM)	COLOR
03X7982	LT2252p Wide-FRU Monitor	2572-MB1	RB
03X7983	LT2252p Wide- Analog cable (1.8m, RoHS)	2572-MB1	RB
03X7984	LT2252p Wide - DVI cable	2572-MB1	RB
03X7985	LT2252p Wide-FRU Stand and Base	2572-MB1	RB

## 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://consumersupport.lenovo.com

Country or Region	Telephone Number
Africa	Africa: +44 (0)1475-555-055 South Africa: +27-11-3028888 and 0800110756 Central Africa: Contact the nearest Lenovo Business Partner
Argentina	0800-666-0011 (Spanish)
Australia	131-426 (English)
Austria	Warranty service and support: 01-211-454-610 (German)

Country or Region	Telephone Number
Belgium	Warranty service and support: 02-225-3611 (Dutch, French)
Bolivia	0800-10-0189 (Spanish)
Brazil	Sao Paulo region: (11) 3889-8986 Outside Sao Paulo region: 0800-701-4815 (Brazilian Portuguese)
Brunei	801-1041 (English, Bahasa Melayu)
Canada	Toronto: 416-383-3344 Outside Toronto: 1-800-565-3344 (English, French)
Chile	Toll Free: 188-800-442-488 800-361-213 (Spanish)
China	86-10-58851110 800-990-8888 (Mandarin)
China (Hong Kong S.A.R.)	(852) 3071-3561 (Cantonese, English, Mandarin)
China (Macau S.A.R.)	ThinkCentre Commercial PC: 795-9892 Multimedia Home PC: 0800-336 (Cantonese, English, Mandarin)
Colombia	1-800-912-3021 (Spanish)
Costa Rica	0-800-011-1029 (Spanish)
Croatia	0800-0426
Cyprus	+357-22-841100
Czech Republic	+420-2-7213-1316
Denmark	Warranty service and support: 7010-5150 (Danish)
Dominican Republic	1-866-434-2080 (Spanish)
Ecuador	1-800-426911 (Spanish)
Egypt	+202-35362525
El Salvador	800-6264 (Spanish)
Estonia	+372 6776793 +372 66 00 800
Finland	Warranty service and support: +358-800-1-4260 (Finnish)
France	Warranty service and support (hardware): 0810-631-213 Warranty service and support (software): 0810-631-020 (French)
Germany	Warrantyserviceandsupport:01805 004618 (German)
Greece	+30-210-680-1700
Guatemala	1800-624-0051 (Spanish)
Honduras	Tegucigalpa: 232-4222 San Pedro Sula: 552-2234 (Spanish)

Country or Region	Telephone Number
Hungary	+36-1-382-5716 +36-1-382-5720 (Facility Hymography)
T., J.	(English, Hungarian)
India	1800-425-2666 +91-80-2535-9182 (English)
Indonesia	021 5238 823 Local number only: 001-803-606-282 DID (Direct Inward Dialing): +603 8315 6859 (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	Toll Free: 0120-20-5550 International: +81-46-266-4716
	The above numbers will be answered with a Japanese language voice prompt. For telephone support in English, please wait for the Japanese voice prompt to end, and an operator will answer. Please say "English support please," and your call will be transferred to an English-speaking operator.
	PC software: 0120-558-695 Overseas calls: +81-44-200-8666 (Japanese)
Korea	1588-6782 (Korean)
Latvia	+371 7070360
Lithuania	+370 5 278 66 00
Luxembourg	+352-360-385-343 (French)
Malaysia	Local number only: 1800-88-1889 DID: +603 8315 6855 (English, Bahasa Melayu)
Malta	+35621445566
Mexico	001-866-434-2080 (Spanish)
Middle East	+44 (0)1475-555-055
Netherlands	+31-20-514-5770 (Dutch)
New Zealand	0800-733-222 (English)
Nicaragua	001-800-220-1830 (Spanish)
Norway	Warranty service and support: 8152-1550 (Norwegian)
Panama	Lenovo Customer Support Center: 001-866-434-2080 (Toll Free) 206-6047 (Spanish)
Peru	0-800-50-866 (Spanish)
Philippines	1800-1601-0033 (English, Filipino)
Poland	+48-22-878-6999 (Polski)
Portugal	+351-21-892-7046 (Portuguese)

Country or Region	Telephone Number
Romania	+4-021-224-4015
Russia	Moscow: +7-(495)-258-6300 Toll Free: +8-800-200-6300 (Russian)
Singapore	Local number only: 800-6011-343 DID: +603 8315 6859 (English)
Slovakia	+421-2-4954-5555
Slovenia	+386-1-200-50-60 (Slovenian)
Spain	91-714-7983 0901-100-000 (Spanish)
Sri Lanka	+9411 2493547 +9411 2493548 (English)
Sweden	Warranty service and support: 077-117-1040 (Swedish)
Switzerland	Warranty service and support: 0800-55-54-54 (German, French, Italian)
Taiwan	886-2-8723-9799 0800-000-702 (Mandarin)
Thailand	Local number only: 1-800-060-066 66 2273 4088 DID: +603 8315 6857 (Thai, English)
Turkey	0212 336 03 66 , 00800 448 825 165(Türkçe)
United Kingdom	Standard warranty support: 08705-500-900 (English)
United States	1-800-426-7378 (English)
Uruguay	000-411-005-6649 (Spanish)
Venezuela	0-800-100-2011 (Spanish)
Vietnam	For Northern Area and Hanoi City: 844 3 946 2000 or 844 3 942 6457 For Southern Area and Ho Chi Minh City: 848 3 829 5160 or 844 3 942 6457 (Vietnamese, English)

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

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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/.

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