

Lenovo ThinkVision L2440x Wide flat panel LCD monitor -- An environmentally conscious choice

Table of contents

3	Planned availability date	8	Publications
3	Description	9	Technical information
7	Product positioning	13	Terms and conditions
8	Product number	15	Prices

At a glance



The new Lenovo® ThinkVision® L2440x Wide LCD monitor offers:

- Viewable image size: 24.0 in (610 mm)
- Brightness: 300 cd/m2 (typical)
- Contrast ratio: 1000:1 (typical)
- Viewing angles
 - Horizontal:
 - 170°; contrast ratio greater than 10
 - 178°; contrast ratio greater than 5
 - Vertical:
 - 160°; contrast ratio greater than 10
 - 178°; contrast ratio greater than 5
- Response time: 5 ms (typical)
- Cutting-edge slim white LED backlight panel
- Power consumption: Up to 60% less power consumption than conventional LCD monitors with the same size and resolution
- Environmentally responsible:
 - Mercury, arsenic, and PVC free
 - TCO'03 compliance
 - EPEAT Gold certified
 - GREENGUARD certified

- Pivot (graphics card dependent)
- Display native resolution of 1920 x 1200 (automatically scales lower resolution to fill the screen)
- Tilt, swivel, and height-adjustable stand
- Attached 2.2-m DVI-D cable
- Include 2.2-m VGA cable, 2.2-m DisplayPort cable, and 2.2-m USB cable
- Direct access for automatic image setup, brightness, and input select
- Analog and digital system attachment
- Internal power 29 watts power consumption (typical) color
- 100 mm Video Electronic Standards Association (VESA) standard for mounting
- Kensington lock slot
- Optional ThinkVision Soundbar slot
- Business black

Overview

The Lenovo ThinkVision L2440x Wide enables you to be environmentally conscious without compromising performance.

Pioneering new energy conservation and recycling technologies, the new L2440x Wide monitor is Lenovo's first low halogen¹ product that is also mercury-free and arsenic-free and uses up to 60% less power than conventional models. The Electronic Product Environmental Assessment Tool (EPEAT) rates the ThinkVision L2440x Wide in the Gold category, making it the most environmentally friendly monitor available today².

The L2440x Wide is the ideal choice for mobile users looking for an excellent screen display for increased productivity when working at the office. It offers users up to 225% additional work area over the ultra-portable notebook with easy access using DisplayPort and USB connectors.

The incorporated ThinkVantage® design enhances usability and makes the monitor easy to use. It complements the design of the ThinkPad® and ThinkCentre® systems and includes attachments for the ThinkVision Soundbar (sold separately³).

¹ 'Low Halogen' is defined in accordance with IPC-4101B and draft IPC-J-STD 709 Class 1 requirements.

² As rated by
<http://www.epeat.net>

³ The ThinkVision Soundbar may not be available at the same time as the L2440p Wide. Please refer to Hardware Announcement [108-709](#), dated September 16, 2008, for details on general availability and part numbers of the applicable ThinkVision Soundbar.

Features and benefits

- 24 in (610 mm) viewable image size
- Native resolution of 1920 x 1200
- Internal power with 29 watts / 45 watts power consumption (typical/ maximum)
- Up to 60% less power consumption than conventional monitors of the same size and resolution
- Mercury, arsenic, and PVC free
- Four high speed USB 2.0 connectors
- ThinkVantage design
 - Tilt, swivel, and height adjustable stand for optimum viewing comfort
 - Pivot for portrait or landscape viewing (graphics card dependent)

- Direct access button for automatic image setup and brightness to allow quick and easy monitor setup
- Analog, DVI-D, and DisplayPort video signal connectors
- Audio out connector
- Supports High Definition Content Protection (HDCP)
- Carrying handle for easy transport of monitor
- Compliance with ENERGY STAR 4.1 requirements
- Kensington Lock slot for security
- TCO'03 compliance
- EPEAT Gold certified
- GREENGUARD certified
- Offers attachment points for optional ThinkVision Soundbar
- Direct access for input selection allows easy movement between applications when attached to three systems simultaneously (via VGA, DVI, and DisplayPort respectively)
- Matching design to ThinkPad, ThinkCentre, and ThinkStation® systems
- Analog and digital connectors allow attachment flexibility
- Wide viewing angles enlarge the workspace for comfortable viewing
- Triple input connectors allow attachment to three systems simultaneously
- Meets 100 mm VESA standard for mounting
- Detachable base for wall- or arm-mounting (sold separately)
- Available in business black

Planned availability date

- October 31, 2008

Description

VESA high refresh video signal timings

The Lenovo ThinkVision L2440x Wide LCD monitor supports a wide range of display modes, including a selection of the VESA timings of incoming video signals at up to 75 Hz (non-interlaced) for the following screen resolutions:

- 640 x 480
- 800 x 600
- 1024 x 768
- 1280 x 1024
- 1440 x 900
- 1600 x 1200
- 1680 x 1050

Appropriate video-adaptor hardware and software must be installed in the attaching system unit.

Monitors are compatible with popular PC system units.

VESA Display Data Channel (DDC)

The Lenovo ThinkVision L2440x Wide LCD monitor supports the DDC protocol to level Command Interface (CI).

Basic configuration information can be passed to a system unit from its attached monitor. Often referred to as Plug and Play, the protocol enables a DDC-enabled system unit to automatically configure the video adapter to drive the attached monitor at its optimum display mode without

end user intervention. For best use, the attaching system unit must also be hardware- and software-enabled for DDC operation.

The capabilities of the monitor are held in nonvolatile monitor memory in an encoded format. The data is received from the monitor by the system unit during boot-up and system configuration.

The Extended display identification data (EDID) sent by the monitor to the attached system unit also includes the monitor's serial number and other identification information. This can be held in the system unit until requested; for example, by a department local area network (LAN) administrator needing to assess the location of all equipment connected to the LAN.

Date information transmitted in the monitor EDID data conforms to VESA EDID standard V2. This requires the year of manufacture (YOM) to be stored in a one-byte field as an offset from 1990, as derived from the following equation:

An international industrial standard by the name of DDC/CI was developed by VESA to expand upon an existing DDC standard. This new standard adds control functionality without the need for additional connections.

The main advantage of DDC/CI is its bi-directional communication structure between PC and monitor, which does not require a separate cable. All data are transmitted in both directions via the video graphics card and the standard VGA or DVI signal cable. This capability allows for functions like monitor control, adjustments, and diagnostics to be conducted via software using the mouse and keyboard. In an enterprise or firm, this capability also allows the potential of remote diagnostics and asset management by a technician via the LAN. Customer-supplied software is needed to implement these functions.

International Organization for Standardization (ISO)/DIS 13406 Part 2

ISO/DIS 13406 Part 2 ensures ergonomic requirements are met when the ThinkVision L2440x Wide LCD monitor forms part of an ISO-compliant system. ISO/DIS 13406 Part 2 is an international standard addressing ergonomic factors for flat-panel displays.

ISO-capable elements do not necessarily make an ISO-compliant system when put together. To satisfy the requirements of ISO 13406 Part 2, a complete platform must be tested and must comply with all applicable elements of ISO 13406 Part 2. The platform includes:

- System unit
- Operating system
- Fonts
- Video subsystem
- Monitor
- Keyboard
- Mouse

When all contributing platform components satisfy their portion of the requirements, as verified by the required total system testing, the platform is ISO 13406 Part 2-compliant.

Low frequency electromagnetic emissions

The Lenovo ThinkVision L2440x Wide LCD monitor meets the Swedish Board for Technical Accreditation (SWEDAC) MPR-2 requirements and those of MPR-3.

MPR-2 is a guideline developed by the SWEDAC to limit the electromagnetic emissions and electrostatic fields generated by workstations. MPR-3 is the colloquial name for the Swedish Standard SS 43614 90:1995.

Electric and magnetic fields with frequencies between 5Hz and 2kHz are called extremely low frequency (ELF) fields. Those with frequencies between 2 kHz and 400 kHz are called very low frequency (VLF) fields.

The Swedish MPR-3 Standard is intended to limit these fields. Sources of these fields include the power cord supplying 50 or 60 Hz power to the monitor.

TCO'03 compliance

- Environment
- Ergonomics
- Usability
- Reduction of electric and magnetic fields
- Energy consumption
- Electrical safety
- The Electronic Product Environmental Assessment Tool (EPEAT) Gold certified
- Low Halogen requirement compliance

VESA Display Power Management Signaling

The Lenovo ThinkVision L2440x Wide LCD monitor meets ENERGY STAR power consumption requirements through implementation of the DPMS protocol. For effective power management, the attaching system unit must also be hardware- and software-enabled for DPMS operation.

HelpWare

HelpWare® is a comprehensive set of service and support offerings for a more productive and enjoyable computing experience. Many HelpWare services are included with the purchase of your Lenovo system, and additional services are available from the HelpWare support family.

Technical characteristics

Feature	Lenovo ThinkVision L2440x Wide LCD monitor
LCD size and type	24.0-inch (610 mm) LCD
Viewable image size	24.0-inch / 610 mm
Maximum viewable area	518.4 x 324.0 mm
Brightness (typical)	300 cd/m ²
Contrast (typical)	1000 : 1
Colors	>
16.7 million	
Horizontal Viewing Angle	170 degrees (@ 10:1 contrast ratio)
Vertical Viewing Angle	160 degrees (@ 10:1 contrast ratio)
Cell response time (typical)	5 ms (typical)
RGB vertical stripe pixel pitch	0.270 mm
Video input	15-pin D, DVI-D, Display Port
Signal cable - 15-pin D	2.2 m
Signal cable - DVI-D	2.2 m
Signal cable - DisplayPort	2.2 m
USB cable	2.2 m
SYNC Type	Composite/Separate TTL
SYNC on Green	No
Bezel width (Side)	19.9 mm
Tilt	0 degrees forward 30 degrees backward
Swivel	+/- 45 degrees
Height adjustment	110 mm
Pivot	Yes (graphic card dependent)
Soundbar Attachment	Thinkvision Soundbar
Kensington Lock slot	Yes
User controls	Digital
Lockable controls	Yes
OSD	Yes
OSD languages	8
Factory-preset display modes	27

User defined display modes	20es
VESA DDC capable	2B/CI
ISO 13406-Part 2 capable	Yes
Power management capable	Yes - VESA DPMS
Power supply	Universal Voltage (100 to 240 vac)
Power cord	1.8 m (detachable)
JEIDA compliance	Yes
FCC B compliance	Yes
MPR-2 Emission compliance	Yes
MPR-3 Emission compliance	Yes
TCO'03 Environmental Label	Yes
EU Directive 2002/95/EC (RoHS)	Yes
EU Directive 2002/96/EC (WEEE)	Yes

On-screen display controls

Digital user controls are located on the front bezel, to the left of the power on/off pushbutton. Adjustments are made in conjunction with the on-screen displays. After adjustments are made, with exception of brightness, contrast, and auto adjust, the controls can be locked to prevent further changes. User setup values are stored automatically. For ease of use, there is direct access for auto setup and brightness.

Monitor controls and features include:

- Brightness/contrast
- Image position
 - Horizontal position
 - Vertical position
- Image setup
 - Automatic
 - Manual
- Image properties
 - Color
 - Input signal
 - Scaling
- Options
 - Information
 - Menu language
 - Menu position
 - Factory default
 - Accessibility
 - Exit

Indicators

The power indicator LED indicates the operational state of the monitor:

LED Indicator	Lenovo ThinkVision L2440x wide operating state
Steady Green LED	Normal operation
Amber	Active off
Flashing Green	Frequency out of range

A 'No Connection Check signal cable' message appears on the screen whenever the monitor detects no incoming video signal.

Accessibility by people with disabilities

A U.S. Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at

Section 508 of the U.S. Rehabilitation Act

The new Lenovo ThinkVision L2440x Wide LCD monitor is capable, when used in accordance with associated Lenovo documentation, of satisfying the applicable requirements of Section 508 of the Rehabilitation Act, provided that any assistive technology used with the product properly interoperates with it.

Product positioning

The Lenovo ThinkVision L2440x Wide LCD monitor is a member of the ThinkVision Performance series flat-panel LCD monitor family. The flat-panel LCD family includes Essential and Performance monitors. The Essential series offers quality monitors at affordable prices. The Performance series monitors include P and X models. P models offer a wide range of adjustability, while X models add other specialized features like USB connectivity, wider viewing angles, and automatic pivot adjustment.

Essential

Monitor	Machine type	Monitor size	Viewable image size	Addressability (horizontal by vertical)
L151	9165	15.0-inch	15.0-inch (381 mm)	1024 x 768
D154	4415	15.6-inch	15.6-inch (396 mm)	1366 x 768
D156 wide	4415	15.6-inch	15.6-inch (396 mm)	1366 x 768
L172	4428	17.0-inch	17.0-inch (432 mm)	1280 x 1024
D173	4427	17.0-inch	17.0-inch (432 mm)	1280 x 1024
L174	9227	17.0-inch	17.0-inch (432 mm)	1280 x 1024
L1940 wide	4434	19.0-inch	19.0-inch (481 mm)	1440 x 900
L197 wide	4434	19.0-inch	19.0-inch (481 mm)	1440 x 900
L191	6135	19.0-inch	19.0-inch (483 mm)	1280 x 1024
L1900	6135	19.0-inch	19.0-inch (483 mm)	1280 x 1024

Performance

Monitor	Machine type	Monitor size	Viewable image size	Addressability (horizontal by vertical)
L1700p	9417	17.0-inch	17.0-inch (432 mm)	1280 x 1024
L1940p wide	4424	19.0-inch	19.0-inch (481 mm)	1440 x 900
L193p	4431	19.0-inch	19.0-inch (483 mm)	1280 x 1024
L1900p	4431	19.0-inch	19.0-inch (483 mm)	1280 x 1024
L190x	4439	19.0-inch	19.0-inch (483 mm)	1280 x 1024
L200p wide	4438	20.1-inch	20.1-inch (511 mm)	1680 x 1050
L2240p wide	4422	22.0-inch	22.0-inch (569 mm)	1680 x 1050
L220x wide	4433	22.0-inch	22.0-inch (569 mm)	1920 x 1200
L2440p wide	4420	24.0-inch	22.0-inch (610 mm)	1920 x 1200
L2440x wide	4421	24.0-inch	22.0-inch (610 mm)	1920 x 1200

ThinkVision flat-panel monitors by application:

Application/Usage	Size	Resolution	Product
General Purpose	15"	(1024 x 768)	L151
Rugged, back office or infrequent usage	15" wide	(1366 x 768)	D154 wide D156 wide
	17"	(1280 x 1024)	L174 L172, D173
	19" wide	(1440 x 900)	L197 wide L1940 wide

Advanced Business:			
Business & mobile users with office	17"	(1280 x 1024)	L1700p
	19"	(1280 x 1024)	L191, L193p
	19" wide	(1440 x 900)	L1940p wide
	20" wide	(1680 x 1024)	L200p wide
	22" wide	(1680 x 1050)	L2240p wide
	24" wide	(1920 x 1200)	L2440p wide

Specialized Usage:			
Narrow/slim head or bezel,			
most environmentally responsible offerings with	19"	(1280 x 1024)	L190x
	22" wide	(1920 x 1200)	L220x wide
bright vivid images	24" wide	(1920 x 1200)	L2440x wide

Product number

Description	Machine type/model	Part number	Code (UPC/EAN/JAN)
Lenovo ThinkVision L2440x wide	4421-HB2	4421HB2	884343-07328-6

Publications

The following publications are shipped with each monitor (4421HB2):

Title	Part number	Language
User's Guide on CD	45J7699	U.S. English French Spanish Italian German Russian Polish Japanese Traditional Chinese Simplified Chinese
Brazilian/Portuguese		Bulgarian Croatian Czech Hungarian Romanian Korean Slovakian Slovenian Arabic Serbian Cambodia
Setup Poster	45J8753	
Safety, Troubleshooting and Warranty Guide (3yr)	41U5172	

Specified operating environment

Physical specifications

Dimensions (landscape orientation) and weight of the monitor and stand:

Parameter	Unpacked	Packed
width	22.03-inch (559.6 mm)	25.83-inch (656 mm)
Depth	10.13-inch (257.3 mm)	18.50-inch (470 mm)
Height	15.54-inch (394.8 mm)	10.39-inch (264 mm)
weight	17.16 lb (7.78 kg)	24.10 lb (10.93 kg)

To ensure installability and serviceability, review the installation planning information for any product specific installation requirements.

Operating environment

Conservation: Energy can be saved by switching monitors off overnight and whenever they are not in use for extended periods during the day.

Power requirements

- Input voltage: 100 to 240 V ac +/- 10%
- Frequency: 50/60 Hz +/-3 Hz
- Power consumption:
 - Maximum: <45 watts
 - Typical: <29 watts typical⁴
 - Standby: <1 watts
 - Suspend: <1 watts
 - Off: <0.5 watt

⁴ Typical power consumption is tested under normal EPA 4.1 standard.

- Maximum earth leakage current:
 - <3.5 mA at 264 V
 - <0.25 mA at 100 V

Ambient temperature and relative humidity

Parameter	Temperature	Relative humidity	Altitude
Operating	0 to 45 deg C	10 to 80 %	0 to 3,657 m
Shipping	-20 to 60 deg C	5 to 95 %	0 to 10,668 m
Storage	-20 to 60 deg C	5 to 95 %	0 to 3,657 m

The higher level of humidity for shipping allows for condensation but not direct contact with moisture.

Altitude: Locations with atmospheric pressure between 700 and 1100 millibars.

Acoustics: Declared acoustical noise emissions LWAU = 4.5 bels or less. The noise emission level stated is the declared (upper limit) A-weighted sound power level, in bels, for a random sample of monitors. All measurements are made in accordance with ANSI S12.10 and reported in conformance with ISO/DIS 7779.

Emissions: The model meets emission category A requirements of Swedish Standard SS-436-14-90 (MPR-3) in addition to those of MPR-2.

The model meets the Swedish Board for Technical Accreditation (SWEDAC) emission guidelines contained in MPR 1990:1 when tested using the MPR 1990:08 test method.

The model meets the TCO'03 Environmental Label from the Swedish Confederation of Professional Employees (TCO), and the emission, power management, and electrical safety requirements of the power management, and electrical safety requirements of the TCO'03 Environmental Label.

Ergonomics

Compliance to the ISO standard ISO/DIS 13406 Part 2 ensures ergonomic requirements are met when the monitor forms part of an ISO-compliant system.

Regulatory agency approvals

- EMI/Safety:
 - UL (U.S.)
 - CSA/cJUL (Canada)
 - IEC950 CB Report
 - NEMKO (Norway)
 - TUV
 - CCC (China)
 - NOM
 - SASO
 - GOST
 - PSB (Singapore)
 - BSMI
 - JEITA (Japan)
 - Green Mark (Taiwan)
 - Australia
 - UL-S (Argentina)
 - FCC B (U.S.)
 - IC (Canada)
 - CE (Europe)
 - MIC (Korea)
 - VCCI Class B (Japan)
 - New Zealand
 - South Africa
 - KVALITET(Serbia)
 - Cambodia

Environmental/energy/ergonomic/compatibility approvals

- TCO'03
- MPR-2
- ISO 13406 Part 2
- ENERGY STAR 4.1 (U.S.)
- GREENGUARD
- EPEAT Gold
- Microsoft® Logo - Windows® Vista Premium
- RoHS
- WEEE
- Low Halogen

ENERGY STAR is a U.S. registered trademark. As an ENERGY STAR Partner, Lenovo has determined that this product meets guidelines for energy efficiency.

Hardware requirements

The Lenovo ThinkVision L2440x Wide LCD monitor is intended to operate with system units or video adapters that generate a video output signal falling within the Lenovo ThinkVision L2440x Wide specification:

Parameter	Lenovo ThinkVision L2440x wide
Maximum addressability (pixels)	1920 x 1200
Maximum pixel rate (MHz)	205

The Lenovo ThinkVision L2440x Wide supports VESA Standard Timings as detailed in *Display Monitor Timing Specification*, Version 1.0, Revision 0.8, dated September 17, 1998, for the following modes:

- VGA: 640 x 480 at 60, 66, 72 and 75 Hz
- SVGA: 800 x 600 at 60, 72 and 75 Hz
- XGA: 1024 x 768 at 60, 70, 75Hz
- SXGA: 1280 x 1024 at 60, 72, and 75 Hz
- 1440 x 900 at 60 and 75 Hz
- 1600 x 1200 at 60, 70, and 75 Hz
- WUXGA: 1920 x 1200 at 60 Hz

The Lenovo ThinkVision L2440x Wide also supports the following modes:

- 640 x 350 at 70 Hz
- 720 x 400 at 70 Hz
- 1152 x 864 at 75 Hz
- 1360 x 768 at 60 Hz
- 1680 x 1050 at 60 Hz
- 1920 x 1080 at 60 Hz

Software requirements

The Lenovo ThinkVision L2440x Wide monitor features factory-preset display modes. The actual display modes used depend on the attaching system unit, the operating system, and application software.

- Windows 2000
- Windows XP
- Windows Vista Basic
- Windows Vista Premium

Factory-preset PC display modes

Addressability (H x V Pixels)	Incoming Video Refresh Rate
640 x 350	70 Hz
640 x 480	60 HZ
640 x 480	66 HZ (mac)
640 x 480	72 HZ
640 x 480	75 HZ
720 x 400	70 Hz
800 x 600	60 HZ
800 x 600	72 HZ
800 x 600	75 HZ
1024 x 768	60 HZ
1024 x 768	70 HZ

1024 x 768	75 Hz
1152 x 864	75 Hz
1280 x 1024	60 Hz
1280 x 1024	72 Hz
1280 x 1024	75 Hz
1360 x 768	60 Hz
1440 x 900	60 Hz
1440 x 900	75 Hz
1600 x 1200	60 Hz
1600 x 1200	70 Hz
1600 x 1200	75 Hz
1680 x 1050	60 Hz
1920 x 1080	60 Hz
1920 x 1200	60 Hz (Reduced blanking)

- User modes: 20

The factory-preset modes cannot be overwritten, but can be adjusted to personal choice. The new settings are stored automatically in one of the user locations and are recalled each time that mode is used. The factory settings for the mode in use, if any, can be restored by operating the reset control.

Information about the current incoming display mode is shown in the on-screen displays. However, it is displayed at the LCD panel's optimum refresh rate of 60 Hz.

It may be necessary to make some adjustments to the displayed image to compensate for variations in video signal timings. The user controls can be used to make these adjustments.

Compatibility

The Lenovo ThinkVision L2440x Wide monitor is supplied with detachable 2.2-meter (7.2-foot) video (15-pin D) and 2.2-meter USB cables, and 2.2-meter attached digital cable (DVI-D to DVI-D).

This monitor has been tested with ThinkCentre and ThinkPad systems and is compatible with systems and graphics adapters that comply with the relevant parts of "VESA and industry standards and guidelines for computer display monitor timing" Version 1.0 Revision 0.8, adopted September 17, 1998. Supported display modes and number of colors are a function of the attaching system unit. The full range of display modes, refresh rates, and number of colors available with this monitor may not be available or supported with all combinations of system units, their operating systems, and application software. Implementation of monitor Plug and Play follows the VESA DDC standard. This standard must also be implemented in the attaching system unit hardware and software to be effective.

Limitations

- Supported display modes are a function of the attaching system unit and video subsystem. The full range of display modes available with these monitors may not be available or supported with all combinations of system units, their operating systems, video adapter cards, and application software.
- Horizontal- and vertical-synchronization signal timings are critical in order to achieve acceptable screen images. As a consequence, support for all possible variations in H- and V-sync timings for any display mode cannot be assumed.
- Adjustment of the user controls to enlarge the image to its maximum size requires that the signal timings of the display mode being used fall within the monitor-timing specifications.
- The number of colors shown in any display mode will exceed 16 million and dependent on the capabilities of the video adapter in the system unit.
- The Lenovo ThinkVision L2440x Wide provides FCC class B - residential installation - compliance in all display modes.
- Implementation of monitor power management follows the VESA DPMS standard. This standard must also be implemented in the attaching system unit hardware and software for monitor power management to be effective. The system implementation must provide user-adjustable, power-down delay periods. The monitor power management function is invoked only after appropriate signals are received from an attached system unit or video adapter.

- Implementation of monitor Plug and Play follows the VESA DDC standard. This standard must also be implemented in the attaching system unit hardware and software for monitor Plug and Play to be effective.
- Certain functions require the system unit to be similarly configured, so all monitor functions may not be enabled when attached to a particular system unit.
- The Lenovo ThinkVision L2440x Wide meets the ISO 13406-2 Class 2 Pixel Defect Standard.
- Use of 50% gray background is not recommended since some users may experience undesirable FOS effects.

Planning information

Customer responsibilities

The monitor is designated as customer setup. Instructions are provided in the *User's Guide*.

Cable orders

No additional cables are required. A 1.8-m power cord appropriate to the country will be supplied by Lenovo.

Shipment group

- One monitor
- Attached lift, tilt, swivel, pivot, and height adjustable stand
- Detached 2.2-meter (7.2-feet) analog video signal cable (15-pin D to 15-pin D)
- Attached 2.2 meter (7.2-feet) digital (DVI-D to DVI-D) cable
- Attached 2.2 meter (7.2-feet) DisplayPort cable
- Detached 2.2-meter (7.2-feet) USB cable
- Power cord
- CD containing multilingual user's guide, setup test pattern, and .INF file
- Setup poster
- Safety, troubleshooting, and warranty guide

With the exception of the models for U.S., Canada, and Japan, the power cords (based on the country order code) are supplied by distribution centers.

Security, auditability, and control

These products use the security and auditability features of the system unit to which they are attached.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

Terms and conditions

IBM Global Financing

No

To obtain copies of the Lenovo Statement of Limited Warranty, contact your reseller or Lenovo.

In the United States, call 800-426-7378 or write to:

Warranty Information
P.O. Box 12195
Research Triangle Park, NC 27709
Attn: Dept ZPYA/B676

Warranty period

Three years

Warranty service

Customer Carry-in or Mail-in using Rapid Replacement Service

If warranty service is required, call the Customer Support Center. The Customer Support Center will assist with problem determination and initiate shipment of a replacement unit, if needed, to the customer's location by express delivery. For calls received by 5:00 p.m. customer's time, in most cases, the replacement unit will arrive within two business days (excluding holidays). The replacement unit becomes the property of the customer in exchange for the failed unit, which becomes the property of Lenovo. Pack the failed unit into the shipping carton that contained the replacement unit and return to Lenovo.

Transportation charges, both ways, are paid by Lenovo.

Failure to use the carton in which the replacement unit was received could result in charges incurred by the customer for damage to the failed unit during shipment.

International Warranty Service (IWS)

IWS is available during the warranty period to customers who travel or relocate to countries where their computer is sold and serviced by a Service Provider authorized to perform warranty service. Eligible Lenovo computers are identified by their four-digit machine type.

You can obtain IWS through the method of service, such as CRU, depot, carry-in or on-site, provided in the servicing country. Service methods and procedures vary by country, and some service or parts may not be available in all countries. Service centers in certain countries may not be able to service all models of a particular machine type. In addition, some countries may have fees and restrictions that apply at the time of service.

Note: Due to the earth's magnetic field, CRT monitors are manufactured to work in northern, southern, and equatorial regions of the earth and may not produce a satisfactory image when moved between them. Any required adjustment (if possible) is not covered under IWS and may be subject to a chargeable action. The magnetic field does not affect flat-panel LCD monitors and ThinkPad LCD displays.

Licensing

Programs included with this product are licensed under the terms and conditions of the license agreements that are shipped with the system.

ThinkPlus and Lenovo Care maintenance services

Warranty and maintenance options

The announced products may be eligible for ThinkPlus® and Lenovo Care Maintenance Services, convenient prepackaged offerings for warranty service upgrades and maintenance services.

Refer to the Prices section for information on the availability of ThinkPlus and Lenovo Care Maintenance Services.

Field-installable features

No

Model conversions

No

Machine installation

Customer setup. Customers are responsible for installation according to the instructions Lenovo provides with the machine.

Graduated program license charges apply

No

Licensed internal code and licensed machine code

This product does not contain Licensed Internal Code or Licensed Machine Code.

Prices

Description	Order number	List price ⁵
Lenovo ThinkVision L2440x Wide Monitor	4421HB2	\$749.99

⁵ List price does not include tax or shipping and is subject to change without notice. Reseller prices may vary.

ThinkPlus Services for warranty and maintenance

The following offerings apply to model HB2 of machine type 4421.

Description	ThinkPlus part number
3-year IOE 9 x 5	41C9209
3-year IOE 24 x 7 4-hour average response	41C9212
4-year IOE 9 x 5	41C9233
4-year IOE 24x7 4-hour average response	41C9234

ThinkPlus MA for post warranty

Description	ThinkPlus part number
1-year IOE 9 x 5 NBD	41C9310
1-year IOE 24 x 7	41C9311
2-year IOE 9 x 5 NBD	41C9330
2-year IOE 24 x 7	41C9331

Lenovo Global Services is the preferred, authorized warranty service, warranty service upgrade, and post-warranty service provider for Lenovo products (excluding mainland China).

For ServiceElect (ESA) maintenance service charges, contact IBM Global Services at 888-426-4343.

Trademarks

Lenovo, ThinkVision, ThinkVantage, ThinkPad, ThinkCentre, ThinkStation and ThinkPlus are registered trademarks of Lenovo Corporation in the United States, other countries, or both.

HelpWare is a registered trademark of IBM Corporation in the United States, other countries, or both.

Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company, product, and service names may be trademarks or service marks of others.

Terms of use

Information may be changed or updated without notice. Lenovo may also make improvements and/or changes in the products and/or the programs described in this information at any time without notice. Lenovo assumes no responsibility regarding the accuracy of the information that is provided by Lenovo and use of such information is at the recipient's own risk. Information Lenovo publishes on the World Wide Web may contain references or cross references to Lenovo products, programs and services that are not announced or available in your country. Such references do not imply that Lenovo intends to announce such products, programs or services in your country. Consult your local Lenovo business contact for information regarding the products, programs and services which may be available to you. Lenovo's obligations with respect to its products and services are governed solely by the agreements under which they are provided. Additional terms of use are located at:

<http://www.lenovo.com/legal/us/en/>