

Edition 1

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Packing List

The product package should include the following items:

1. Monitor
2. Owner's Manual
3. Power Cord
4. Diskette
5. Audio Cable
6. Mic Cable

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Introduction

Thank you for purchasing a high resolution monitor. It will give you high resolution performance and convenient reliable operation in a variety of video operating modes.

Features

The monitor is a 17 inches (15.9 inches viewable) intelligent, microprocessor based monitor compatible with most analog RGB (Red, Green, Blue) display standards, including IBM PC®, PS/2®, Centris®, Quadra®.

The monitor provides crisp text and vivid color graphics with VGA, SVGA, XGA, and VESA Ergo modes (non-interlaced). The monitor's wide compatibility makes it possible to upgrade video cards or software without purchasing a new monitor.

Digitally controlled auto-scanning is done with the microprocessor for horizontal scan frequencies between 30 and 70kHz, and vertical scan frequencies between 50 and 160Hz. The microprocessor-based intelligence allows the monitor to operate in each frequency mode with the precision of a fixed frequency monitor.

The microprocessor-based digital controls allow you to adjust conveniently a variety of image controls by using the OSD (On Screen Display).

The monitor has 20 memory locations for display modes, 10 of which are factory preset to popular video modes.

This monitor is capable of producing a maximum horizontal resolution of 1280 dots and a maximum vertical resolution of 1024 lines. It is well suited for CAD work and sophisticated windowing environments.

For greater user health and safety, this monitor complies with the stringent Swedish MPR II requirements for low radiation emissions.

For low cost of monitor operation, this monitor is certified as meeting the EPA Energy Star requirements, and utilizes the VESA Display Power Management Signalling (DPMS) protocol for power saving during non-use periods.

Precautions



Danger

To avoid shock hazard:

- Do not remove the covers.
- Do not operate this product unless the stand is attached.
- Do not connect or disconnect this product during an electrical storm.
- The power cord plug must be connected to a properly wired and grounded power outlet.
- Any equipment to which this product will be attached must also be connected to properly wired and grounded power outlets.
- To isolate the monitor from the electrical supply, you must remove the plug from the power outlet. The power outlet should be easily accessible.

Handling:

- Your color monitor is heavy, so handle it with care.

Workplace preparation

Positioning the Monitor

Choose a suitable place to position the monitor where it is not near fluorescent desk lighting or any equipment that produces magnetic fields that could cause interference. Ensure that the furniture or equipment can support the weight of the monitor. Allow at least 2 inches (50mm) ventilation space around the monitor.

Height

The monitor should be positioned so that the top of the screen is slightly below your eye level when you sit at your workstation.

Orientation

Choose a position that gives the least reflection from lights and windows, usually at a right angle to any windows. The monitor should be positioned directly in front of you so that you do not have to twist your body. Tilt the monitor to a comfortable viewing angle.

Working Practices

Rest

Take regular breaks. Vary your posture, and stand up and stretch occasionally as prolonged use of computer workstations can be tiring.

Back

You should sit back in the chair and use the back rest.

Hands

Use a light touch on the keyboard, keeping your hands and fingers relaxed. Allow a space in front of the keyboard to rest your wrists when not typing. Consider using a wristpad.

Eyesight

Working with monitors, in common with any prolonged close work, can be visually demanding. Look away from the screen periodically and have your eyesight checked regularly.

Screen settings

Set the screen brightness and contrast to a comfortable level. You may have to adjust this as the lighting changes during the day. Many application programs let you select color combinations which can help you to view in comfort.

Power Source:

1. Make sure the power cord is the correct type that required in your area.
2. This monitor has a universal power supply that allows operation in either 100/120V AC or 220/240V AC voltage area (No user adjustment is required.)
3. Connect the power cord into your monitor's power input socket, and then plug the other end into a 3-pin AC power outlet. The power cord may be connected to either a wall power outlet or the power outlet socket on your PC, depending on the type of power cord supplied with your monitor.

Power cord:

For safe operation, use the power cord supplied with the unit.

Notes

- Do not install the monitor in a location near heat sources such as radiators or air ducts , or in a place subject to direct sunlight , or excessive dust or mechanical vibration or shock.
- Save the original shipping carton and packing materials, as they will come in handy if you ever have to ship your monitor.
- To keep the monitor looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents such as thinner, benzene, or abrasive cleaners, since these will damage the cabinet. As a safety precaution, always unplug the monitor before cleaning it.

Connecting the Monitor

Figure 1 shows the signal cable connections from the monitor to the Video Graphics Array (VGA) port typical in an IBM PC or PC compatible. This also applies to any graphics video card for PC-CAD or workstation that has a 15 pin high density (3 row) D-Sub connector.

Power off both the monitor and PC.

Connect the 15 pin VGA connector of the attached signal cable to the output VGA video connector on the PC and the matching input connector on the rear of the monitor. The connectors will mate only one way. If you cannot attach the cable easily, turn the connector upside down and try again. When mated, tighten the thumbscrews to secure the connection.

Connect the connector of the supplied MIC cable and Audio cable to the jacks of PC sound card (if available) and the matching connectors on rear of the monitor.

One end of the AC power cord is connected into the AC power connector on the back of the monitor. The other end is plugged into a properly grounded three-prong AC outlet.

Power ON the PC, then the monitor.

If you see the **NO SIGNAL** message, check the signal cable and connectors.

After using the system, power OFF the monitor, then the PC.

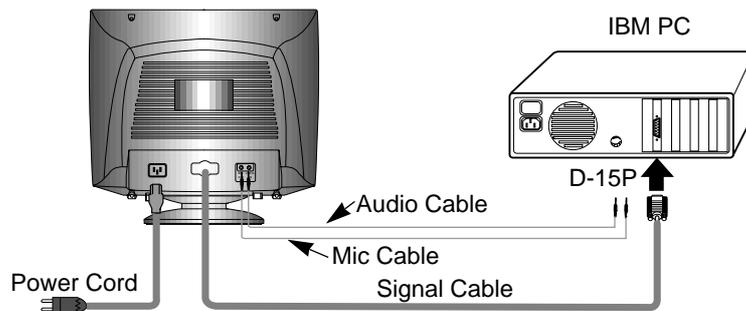
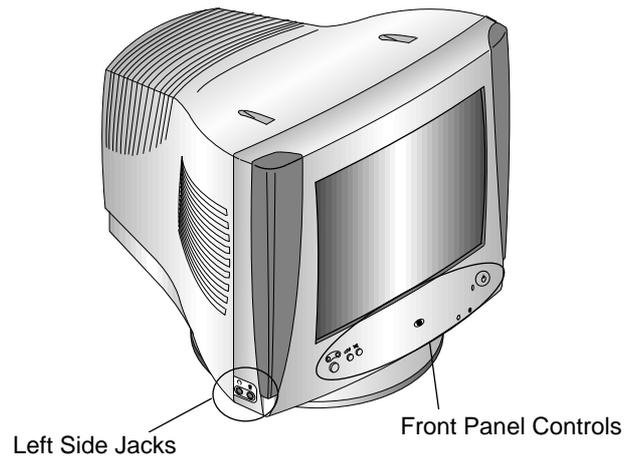


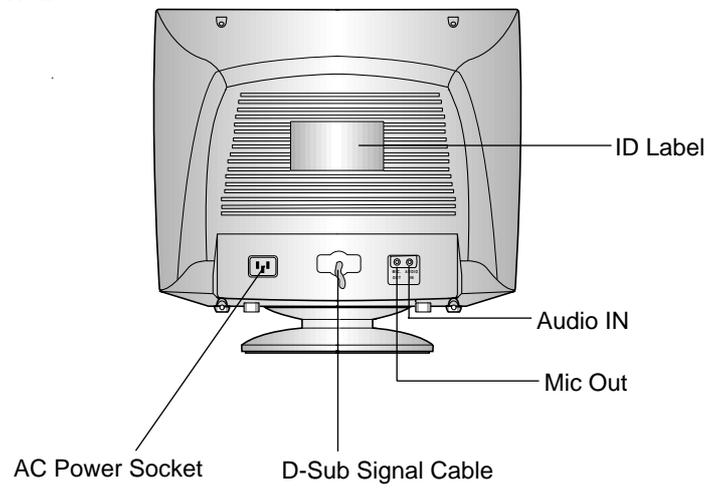
Figure 1.

Location and Function of Controls

Front View

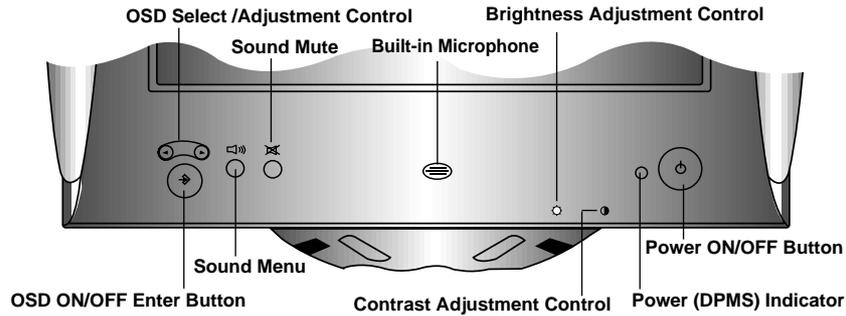


Rear View



Control Panel Function

Front Panel Controls



Control	Function
 OSD Select/Adjustment Control	Use this buttons selecting (highlighting) an OSD icon to be adjusted. It is also used for selecting the level of the selected item to be adjusted.
 OSD ON/OFF Enter Button	Use this button to start/enter and exit from the On Screen Display.
 Sound Menu	To adjust sound menu.
 Sound Mute	Used to select mute on (means sound off) and mute off (means sound on).
 Built-in Microphone	Built-in Microphone.
 Brightness Adjustment Control	Used to adjust the brightness of the screen.
 Contrast Adjustment Control	Adjust the display to the contrast desired.
 Power (DPMS) Indicator	This Indicator lights up green when the monitor operates normally. If the monitor is in DPM (Energy Saving) mode (stand-by/suspend/power off), this indicator color changes to amber.
 Power ON/OFF Button	Use this button to turn the monitor on or off.

Left Side Jacks

	Headphone Jack 	Headphone Jack that automatically mutes the speaker volume when headphone is attached.
	Microphone Jack 	An external microphone can be used instead of the built-in microphone.

Rear Panel Jacks

	Mic. Out	Connects microphone sound to PC via cable.
	Audio In	Connects speaker sound to PC via cable attachment.

Microphone Operation

On the left side there is a MIC (Microphone) jack. By plugging a microphone in here, it may reduce the long length of cable needed to reach the PC's sound card. In order to use this MIC jack, you need to use a cable (supplied) to plug into the rear of the monitor (MIC OUT) and into the MIC input jack of your sound card (if available).

Audio Features

A major feature of this monitor is its built-in audio system. This conveniently integrates a stereo audio amplifier and speakers without taking up any more space. Because the monitor is designed like this, you can easily upgrade to audio capable multimedia applications by attaching your PC with sound card to the back of this monitor. It will result in significantly less cabling and space requirements.

On Screen Display (OSD) Control Adjustment

Making adjustments to the image size, position, and operating parameters of the monitor is quick and easy with the On Screen Display Control system, using only the ENTER button and Adjustment Control buttons. A quick example is given below to familiarize you with the use of the controls. Following this section is an outline of the available adjustments and selections you can make using the OSD.

Note : (Monitor and PC should be ON, with an image or prompt on the screen). A single press of the ENTER button will present you with the Main Menu of the on screen display system with the first () highlighted.

The main picture area will also show the select icon () and next icon ().

1. The OSD system should look like:



2. To adjust H Position (), Press the enter button once.
The display will look like:



When you are done, Press the main button () once to return to main menu to make another selection.

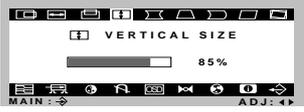
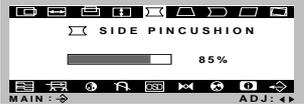
3. You want to move the next icon, Adjust the next button () control.
The display will look like:

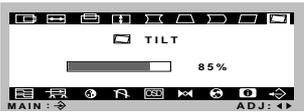
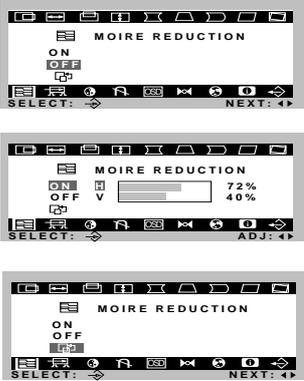


On Screen Display(OSD) Selection and Adjustment

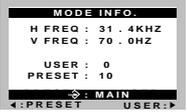
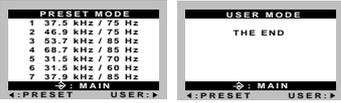
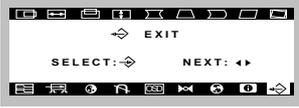
You were introduced to the procedure of selection and adjusting an item using the OSD system.

Listed below are the icons, icon names, and icon descriptions of the items that are shown on the Menu.

OSD Adjust	Description
 Horizontal Position 	To move picture image left and right. Moves the screen image left. Moves the screen image right.
 Horizontal Size 	To adjust image width. Decreases the size of the screen image. Increases the size of the screen image.
 Vertical Position 	To move image up and down. Moves the screen image up. Moves the screen image down.
 Vertical Size 	To adjust image height. Decreases the size of the screen image. Increases the size of the screen image.
 Side Pincushion 	To correct the bowing in and out of the image. Curves the image's edges inwards. Curves the image's edges outwards.
 Trapezoid 	To correct geometric distortion. Makes the screen image narrower at the top. Moves the screen image wider at the top.

OSD Adjust	Description
<p> Pincushion Balance</p> 	<p>To correct the balance of both sides bowling. Curvature of the sides to the right. Curvature of the sides to the left.</p>
<p> Parallelogram</p> 	<p>This control adjusts for a skewing of the screen image. Tilts the screen image rightward. Tilts the screen image leftward.</p>
<p> Tilt</p> 	<p>To correct image rotation. Tilts the screen image left. Tilts the screen image right.</p>
<p> Moire Reduction</p> 	<p>This item allows you to reduce the moire. It is normally OFF. If you want to adjust it, select ON using the adjustment control and push the Enter Button. When you are done, Press the Enter button once to return to More Reduction menu to make another selection. If you have finished using the OSD after you have returned to Moire Reduction menu, you can use the Enter button to EXIT the OSD.</p> <p>NOTE : The screen image may shake slightly while the moire reduction function is ON. Switching the OFF will improve image stability and clarity at the expense of slightly greater moire.</p>
<p> Video Input Level</p> 	<p>This item is used to select the monitor's input signal level. The normal level used for most PC's is 0.7V.</p>

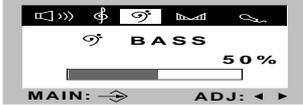
OSD Adjust	Description
<p> Color Select</p>   	<p>To select color temperature 9300K/ 6550K/ USER and CURVE. Select the desired color temperature or select user to set your own color levels.</p> <p>Allow for specific adjustments to Red, Green and Blue(R/G/B). Decreases the amount of color in the image. Increases the amount of color in the image.</p> <p>Curve color setting is adjusters at the factory to the display's color temperature. Temperature range is from 6000K to 9950K. So, user easily color set whitout adjustments Red, Green and Blue(R/G/B).</p>
<p> Degauss</p> 	<p>Used to demagnetize the picture to give a move accurate image and color.</p>
<p>OSD OSD Control</p>  	<p>To correct OSD image's Horizontal position and Vertical position.</p> <p>Horizontal position : To move image right and left. Vertical position : To move image up and down.</p>

OSD Adjust	Description
<p>▶◀ Recall</p> 	<p>If the monitor is operating in a factory preset mode, this control will reset the image to the factory preset mode. If the monitor is operating in a user mode, this control has no effect.</p>
<p>🌐 Language Select</p> 	<p>To choose the language in which the control names are displayed. OSD Menus are available in five language : English, German, French, Spanish and Italian.</p>
<p>📄 Mode Information</p>    	<p>This item gives access to 2 elements : Mode, DDC function. The message does not disappear until you click the select key again.</p> <p>MODE To inform users of preset and user mode data.</p> <p>DDC To select the DDC function(ON/OFF).</p>
<p>↔ Exit</p> 	<p>To disappear of the OSD on the screen.</p>

Sound Selection and Adjustment ()

You were introduced to the procedure of selection and adjusting an item using the OSD system.

Listed below are the icons, icon names, and icon descriptions of the items that are shown on the main Menu.

OSD Adjust	Description
 Volume 	Raises or lowers audio level.
 Treble 	Raises or lowers treble level.
 Bass 	Raises or lowers Bass level.
 Balance 	Changes balance of left/right speaker level.
 Microphone 	Enables or disables microphone usage.

Video Memory Modes

The monitor has 20 memory locations for display modes, 10 of which are factory preset to popular video modes.

Display Modes (Resolution)

Display Modes (Resolution)	Horizontal Frequency (kHz)	Vertical Frequency (kHz)
VESA 640 x 480	37.50	75
VESA 800 x 600	46.88	75
VESA 800 x 600	53.68	85
VESA 1024 x 768	68.677	85
VGA 720 X 400	31.47	70
VGA 640 X 480	31.47	60
VESA 720 X 400	37.93	85
VESA 640 X 480	43.27	85
MFI2 960 X 529	41.775	75
VESA 1024 X 768	60.02	75

User Modes

Modes 11-20 are empty and can accept new video data. If the monitor detects a new video mode that has not been present before or is not one of the preset modes, it stores the new mode automatically in one of the empty modes starting with mode 11.

If you use up the 10 blank modes and still have more new video modes, the monitor replaces the information in the user modes starting with mode 11.

Recalling Display Modes

When your monitor detects a mode it has seen before, it automatically recalls the image settings you may have made the last time you used that mode.

You may, however, manually force a recall of each of the 10 preset modes by pressing the Recall button. All preset modes are automatically recalled as the monitor senses the incoming signal.

The ability to recall the preset modes is dependent on the signal coming from your PC's video card or system. If this signal does not match any of the factory modes, the monitor automatically sets itself to display the image.

Energy Saving Design

This monitor complies with the EPA's Energy Star program, which is a program designed to have manufacturers of computer equipment build circuitry into their products to reduce power consumption during time of non-use.

This monitor also goes into its energy saving mode if you exceed the monitor's operating limits, such as the maximum resolution of 1280x1024 or the frequency refresh rates of 30-70kHz horizontal or 50-160Hz vertical. When this monitor is used with a Green or EPA Energy Star PC, or a PC with a screen blanking software following the VESA Display Power Management Signalling (DPMS) protocol, this monitor can conserve significant energy by reducing power consumption during periods of non-use. When the PC goes into the energy saving mode, the monitor will go into a suspended operation state, indicated by the Power LED light changing from a green color to an amber color. After an extended period in the suspended mode, the monitor will then enter a semi-OFF mode to conserve more energy. In the semi-OFF mode or DPMS OFF mode as we call it in our specifications, the Power LED will still show an amber color. When you awaken your PC by hitting a key or moving the mouse, the monitor will also awaken to its normal operating mode, indicated by the green Power LED light. By following these conventions, the power consumption can be reduced to the following levels:

Power Consumption

Mode	Hori. Sync	Verti. Sync	Video	Power Consumption	LED Color
Normal(Max.)	On	On	Normal	120W	Green
Stand-by	Off	On	Off	15W	Amber
Suspend	On	Off	Off	15W	Amber
Off	Off	Off	Off	8W	Amber

Low Radiation Compliance (MPR II)

This monitor meets one of the strictest guidelines available today for low radiation emissions, offering the user extra shielding and an AGAR. These guidelines, set forth by a government agency in Sweden, limit the amount of emission allowed in the Extremely Low Frequency (ELF) and Very Low Frequency (VLF) electromagnetic range.

Self Diagnostics



This monitor can sense when there is a possible problem present, and informs you of this condition by presenting you with a **SELF DIAGNOSTICS** OSD. This OSD may pop up when it is **On** but no signal is detected. In this case the message **CHECK SIGNAL CABLE** will be high lighted, alerting you to check the signal cable connections.

DDC (Display Data Channel)

DDC is a communication channel over which the monitor automatically informs the host system (PC) about its capabilities. This monitor has DDC function; DDC2B. DDC2B carry out uni-directional communication between the PC and the monitor. Under these situations, the PC sends display data to the monitor but not commands to control the monitor settings.

Note : PC must support DDC functions to do this.

If your monitor is displaying a monochrome image or the wrong resolution, select the DDC OFF function.

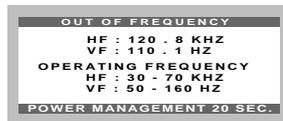
Troubleshooting

Self diagnostics message.

The signal cable is not connected, or is loose. Check and secure the connection.

OUT OF FREQUENCY message appears.

The frequency of the signal from the video card is outside the operating range of the monitor.



***Horizontal Frequency: 30-70kHz**

***Vertical Frequency: 50-160Hz**

Use the graphics board's utility software to change the frequency setting (Refer to the manual for graphics board).

The power LED is illuminated amber.

Display power management mode.
There is no active signal coming from the PC.
The signal cable is not fastened securely.
Check the computer power and graphics adapter configuration.

The image on the SCREEN is not centered, or too small, or not a rectangle shape.

Image adjustment not been done yet in the current operating mode. Use the SELECT and buttons to set the image to your liking.

The monitor doesn't enter the power saving off mode (Amber).

Computer video signal is not VESA DPMS standard. Either the PC or the video controller card is not using the VESA DPMS power management function.

An abnormal picture is displayed on the screen. For example, the upper part of the picture may be missing or dark.

If using certain non-VESA Standard video card, an abnormal picture may be displayed. Try setting it to one of the factory preset modes, or selecting to a resolution and refresh rate within the specification limits of the monitor.

Note : If the power indicator(LED) light is blinking amber, may result in abnormal condition of the monitor.

Then press a power ON/OFF button on the front panel control and call your service technician for more information.

Further help

If you are unable to correct the problem yourself, you may seek further help as follows:

Call IBM HELPCENTER.
In the USA call 1-800-772-2227
In Canada call 1-800-565-3344

In other countries, contact your dealer, retailer, or other IBM authorized servicer.

Before calling, please have available as much of the following information as possible:

1. Type, model and serial number from the label on the back of your monitor.
2. Purchase receipt.
3. Description of problem.
4. Computer type and model.
5. System configuration(hardware fitted etc.).
6. System BIOS version number.
7. Operating System and version number.
8. Display driver version number.

If possible, stay by your computer system. Your technical support representative might want to go through the problem with you during the call.

Service

Unplug the monitor from the wall outlet and refer servicing to qualified service personnel when :

The power cord or plug is damaged or frayed.

Liquid has been spilled into the monitor.

The monitor has been exposed to rain or water.

The monitor does not operate normally following the operating instructions. Adjust only those controls that are covered in the operating instructions. An improper adjustment of other controls may result in damage and often requires extensive work by a qualified technician to restore the monitor to normal operation.

The monitor has been dropped or the cabinet has been damaged.

The monitor exhibits a distinct change in performance.

Snapping or popping from the monitor is continuous or frequent while the monitor is operating. It is normal for some monitors to make occasional sounds when being turned on or off, or when changing video modes.

Do not attempt to service the monitor yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

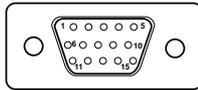
Specifications

Sync Signal Types

Type	H. Sync	V. Sync
Separate Sync	H. Sync	V. Sync

(N.C : No Connection)

Signal Connector Pin Assignment



Pin	Signal(D-Sub)
1	Red
2	Green
3	Blue
4	Ground
5	Self-Test
6	Red Ground
7	Green Ground
8	Blue Ground
9	NC
10	Ground
11	Ground
12	SDA
13	Hori.Sync
14	Vert.Sync
15	SCL

Note :No. 5 Pin have to ground on the PC side.

Specifications

Picture tube

17 inches (15.9 inches viewable) FST
90 degree deflection
0.27 mm dot pitch, Non-glare, AGAR

Sync Input

Horizontal Frequency : 30 - 70kHz (Automatic)
Vertical Frequency : 50 - 160Hz (Automatic)
Input Form : Separate, TTL, Positive/Negative
Signal input : 15 pin D-Sub Connector

Video Input

Display Area : 12.2 x 9.06 inches / 310 x 230mm (H x V)
Input Form : Separate, RGB Analog, 0.7 Vp-p/75 ohm,
Positive
Resolution
Horizontal : max. 1280 dots
Vertical : max. 1024 lines

Audio

RMS Audio Output : 2 W (R+L)
Input Sensitivity : 0.7 Vrms
Built-in MIC : E.C.M type
(Electret Condenser Microphone)
Speaker Impedance : 4Ω

Power input

AC100-240V 50/60Hz 2.0A

Dimensions (with tilt/swivel stand)

Width : 465mm/18.3inches
Height : 435.5 mm/17.1 inches
Depth : 442 mm/17.4 inches

Weight

Net : 17.4kg (38.36lbs)

Information in this document is subject to change without notice.

Statement of Warranty

Part 1 - General Terms

This Statement of Warranty includes Part 1 - General Terms and Part 2 - Country-unique Terms. The terms of Part 2 may replace or modify those of Part 1. The warranties provided by IBM in this Statement of Warranty apply only to Machines you purchase for your use, and not for resale, from IBM or your reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. The term "Machine" does not include any software programs, whether pre-loaded with the Machine, installed subsequently or otherwise. Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. Nothing in this Statement of Warranty affects any statutory rights of consumers that cannot be waived or limited by contract. If you have any questions, contact IBM or your reseller.

Machine -E74M

Warranty Period* - Three (3) years

**Contact your place of purchase for warranty service information. Some IBM Machines are eligible for On-site warranty service depending on the country where service is performed.*

The IBM Warranty for Machines

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications. The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your sales receipt is the Date of Installation, unless IBM or your reseller informs you otherwise.

During the warranty period IBM or your reseller, if approved by IBM to provide warranty service, will provide repair and exchange service for the Machine, without charge, under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

If a Machine does not function as warranted during the warranty period, and IBM or your reseller are unable to either 1) make it do so or 2) replace it with one that is at least functionally equivalent, you may return it to your place of purchase and your money will be refunded. The replacement may not be new, but will be in good working order.

Extent of Warranty

The warranty does not cover the repair or exchange of a Machine resulting from misuse, accident, modification, unsuitable physical or operating environment, improper maintenance by you, or failure caused by a product for which IBM is not responsible. The warranty is voided by removal or alteration of Machine or parts identification labels.

THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD.

Items Not Covered by Warranty

IBM does not warrant uninterrupted or error-free operation of a Machine.

Unless specified otherwise, IBM provides non-IBM machines WITHOUT WARRANTIES OF ANY KIND.

Any technical or other support provided for a Machine under warranty, such as assistance via telephone with “how-to” questions and those regarding Machine set-up and installation, will be provided WITHOUT WARRANTIES OF ANY KIND.

Warranty Service

To obtain warranty service for the Machine, contact your reseller or IBM. You may be required to present proof of purchase.

IBM or your reseller provides certain types of repair and exchange service, either at your location or at a service center, to keep Machines in, or restore them to, conformance with their Specifications. IBM or your reseller will inform you of the available types of service for a Machine based on its country of installation. IBM may repair the failing Machine or exchange it at its discretion.

When warranty service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item.

Any feature, conversion, or upgrade IBM or your reseller services must be installed on a Machine which is 1) for certain Machines, the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade. Many features, conversions, or upgrades involve the removal of parts and their return to IBM. A part that replaces a removed part will assume the warranty service status of the removed part.

Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service.

You also agree to

1. ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;
2. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
3. where applicable, before service is provided
 - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provides,
 - b. secure all programs, data, and funds contained in a Machine,
 - c. provide IBM or your reseller with sufficient, free, and safe access to your facilities to permit them to fulfill their obligations, and
 - d. inform IBM or your reseller of changes in a Machine’s location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM’s possession or 2) in transit in those cases where IBM is responsible for the transportation charges. Neither IBM nor your reseller is responsible for any of your confidential, proprietary or personal information contained in a Machine which you return to IBM or your reseller for any reason. You should remove all such information from the Machine prior to its return.

Production Status

Each IBM Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine’s production status, IBM’s appropriate warranty terms apply.

Limitation of Liability

Circumstances may arise where, because of a default on IBM's part or other liability, you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), IBM is liable for no more than

1. damages for bodily injury (including death) and damage to real property and tangible personal property; and
2. the amount of any other actual direct damages, up to the greater of U.S. \$100,000 (or equivalent in local currency) or the charges (if recurring, 12 months' charges apply) for the Machine that is the subject of the claim.

This limit also applies to IBM's suppliers and your reseller. It is the maximum for which IBM, its suppliers, and your reseller are collectively responsible.

UNDER NO CIRCUMSTANCES IS IBM LIABLE FOR ANY OF THE FOLLOWING:

1) THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES (OTHER THAN THOSE UNDER THE FIRST ITEM LISTED ABOVE); 2) LOSS OF, OR DAMAGE TO, YOUR RECORDS OR DATA; OR 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS OR SAVINGS), EVEN IF IBM, ITS SUPPLIERS OR YOUR RESELLER IS INFORMED OF THEIR POSSIBILITY. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Part 2 - Country-unique Terms**ASIA PACIFIC**

AUSTRALIA: The IBM Warranty for Machines: The following paragraph is added to this Section:

The warranties specified in this Section are in addition to any rights you may have under the Trade Practices Act 1974 or other legislation and are only limited to the extent permitted by the applicable legislation.

Extent of Warranty: The following replaces the first and second sentences of this Section:

The warranty does not cover the repair or exchange of a Machine resulting from misuse, accident, modification, unsuitable physical or operating environment, operation in other than the Specified Operating Environment, improper maintenance by you, or failure caused by a product for which IBM is not responsible.

Limitation of Liability: The following is added to this Section:

Where IBM is in breach of a condition or warranty implied by the Trade Practices Act 1974, IBM's liability is limited to the repair or replacement of the goods or the supply of equivalent goods. Where that condition or warranty relates to right to sell, quiet possession or clear title, or the goods are of a kind ordinarily acquired for personal, domestic or household use or consumption, then none of the limitations in this paragraph apply.

PEOPLE'S REPUBLIC OF CHINA: Governing Law: The following is added to this Statement:

The laws of the State of New York govern this Statement.

INDIA: Limitation of Liability: The following replaces items 1 and 2 of this Section:

1. liability for bodily injury (including death) or damage to real property and tangible personal property will be limited to that caused by IBM's negligence;
2. as to any other actual damage arising in any situation involving nonperformance by IBM pursuant to, or in any way related to the subject of this Statement of Warranty, IBM's liability will be limited to the charge paid by you for the individual Machine that is the subject of the claim.

NEW ZEALAND: The IBM Warranty for Machines: The following paragraph is added to this Section:

The warranties specified in this Section are in addition to any rights you may have under the Consumer Guarantees Act 1993 or other legislation which cannot be excluded or limited. The Consumer Guarantees Act 1993 will not apply in respect of any goods which IBM provides, if you require the goods for the purposes of a business as defined in that Act.

Limitation of Liability: The following is added to this Section:

Where Machines are not acquired for the purposes of a business as defined in the Consumer Guarantees Act 1993, the limitations in this Section are subject to the limitations in that Act.

EUROPE, MIDDLE EAST, AFRICA (EMEA)

The following terms apply to all EMEA countries.

The terms of this Statement of Warranty apply to Machines purchased from an IBM reseller. If you purchased this Machine from IBM, the terms and conditions of the applicable IBM agreement prevail over this warranty statement.

Warranty Service

If you purchased an IBM Machine in Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland or United Kingdom, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM.

If you purchased an IBM Personal Computer Machine in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Hungary, Kazakhstan, Kirghizia, Federal Republic of Yugoslavia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, or Ukraine, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM.

The applicable laws, Country-unique terms and competent court for this Statement are those of the country in which the warranty service is being provided. However, the laws of Austria govern this Statement if the warranty service is provided in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Federal Republic of Yugoslavia, Georgia, Hungary, Kazakhstan, Kirghizia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, and Ukraine.

The following terms apply to the country specified:

EGYPT: Limitation of Liability: The following replaces item 2 in this Section:

2. as to any other actual direct damages, IBM's liability will be limited to the total amount you paid for the Machine that is the subject of the claim.

Applicability of suppliers and resellers (unchanged).

FRANCE: Limitation of Liability: The following replaces the second sentence of the first paragraph of this Section:

In such instances, regardless of the basis on which you are entitled to claim damages from IBM, IBM is liable for no more than: (items 1 and 2 unchanged).

GERMANY: The IBM Warranty for Machines: The following replaces the first sentence of the first paragraph of this Section:

The warranty for an IBM Machine covers the functionality of the Machine for its normal use and the Machine's conformity to its Specifications.

The following paragraphs are added to this Section:

The minimum warranty period for Machines is six months.

In case IBM or your reseller are unable to repair an IBM Machine, you can alternatively ask for a partial refund as far as justified by the reduced value of the unrepaired Machine or ask for a cancellation of the respective agreement for such Machine and get your money refunded.

Extent of Warranty: The second paragraph does not apply.

Warranty Service: The following is added to this Section:

During the warranty period, transportation for delivery of the failing Machine to IBM will be at IBM's expense.

Production Status: The following paragraph replaces this Section:

Each Machine is newly manufactured. It may incorporate in addition to new parts, re-used parts as well.

Limitation of Liability: The following is added to this Section:

The limitations and exclusions specified in the Statement of Warranty will not apply to damages caused by IBM with fraud or gross negligence and for express warranty.

In item 2, replace "U.S. \$100,000" with "1.000.000 DEM."

The following sentence is added to the end of the first paragraph of item 2:

IBM's liability under this item is limited to the violation of essential contractual terms in cases of ordinary negligence.

IRELAND: Extent of Warranty: The following is added to this Section:

Except as expressly provided in these terms and conditions, all statutory conditions, including all warranties implied, but without prejudice to the generality of the foregoing all warranties implied by the Sale of Goods Act 1893 or the Sale of Goods and Supply of Services Act 1980 are hereby excluded.

Limitation of Liability: The following replaces items one and two of the first paragraph of this Section:

1. death or personal injury or physical damage to your real property solely caused by IBM's negligence; and 2. the amount of any other actual direct damages, up to the greater of Irish Pounds 75,000 or 125 percent of the charges (if recurring, the 12 months' charges apply) for the Machine that is the subject of the claim or which otherwise gives rise to the claim.

Applicability of suppliers and resellers (unchanged).

The following paragraph is added at the end of this Section:

IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default shall be limited to damages.

ITALY: Limitation of Liability: The following replaces the second sentence in the first paragraph:

In each such instance unless otherwise provided by mandatory law, IBM is liable for no more than:

(item 1 unchanged) 2) as to any other actual damage arising in all situations involving non-performance by IBM pursuant to, or in any way related to the subject matter of this Statement of Warranty, IBM's liability, will be limited to the total amount you paid for the Machine that is the subject of the claim.

Applicability of suppliers and resellers (unchanged).

The following replaces the second paragraph of this Section:

Unless otherwise provided by mandatory law, IBM and your reseller are not liable for any of the following:

(items 1 and 2 unchanged) 3) indirect damages, even if IBM or your reseller is informed of their possibility.

SOUTH AFRICA, NAMIBIA, BOTSWANA, LESOTHO AND SWAZILAND: Limitation of Liability:

The following is added to this Section:

IBM's entire liability to you for actual damages arising in all situations involving nonperformance by IBM in respect of the subject matter of this Statement of Warranty will be limited to the charge paid by you for the individual Machine that is the subject of your claim from IBM.

TURKIYE: Production Status: The following replaces this Section:

IBM fulfills customer orders for IBM Machines as newly manufactured in accordance with IBM's production standards.

UNITED KINGDOM: Limitation of Liability: The following replaces items 1 and 2 of the first paragraph of this Section:

1. death or personal injury or physical damage to your real property solely caused by IBM's negligence;
2. the amount of any other actual direct damages or loss, up to the greater of Pounds Sterling 150,000 or 125 percent of the charges (if recurring, the 12 months' charges apply) for the Machine that is the subject of the claim or which otherwise gives rise to the claim.

The following item is added to this paragraph:

3. breach of IBM's obligations implied by Section 12 of the Sale of Goods Act 1979 or Section 2 of the Supply of Goods and Services Act 1982.

Applicability of suppliers and resellers (unchanged).

The following is added to the end of this Section:

IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default will be limited to damages.

NORTH AMERICA

CANADA: Warranty Service: The following is added to this Section:

To obtain warranty service from IBM, call **1-800-565-3344**.

UNITED STATES OF AMERICA: Warranty Service: The following is added to this Section:

To obtain warranty service from IBM, call **1-800-772-2227**.

Your IBM Monitor Installation Diskette includes translations of IBM's Statement of Warranty in the following languages.

Worldwide Statement of Warranty (Except Turkiye, U.S, Puerto Rico and Canada.	
Arabic	Z1255697.ara.html
Brazilian Portuguese	Z1255697.bra.html
Bulgarian	Z1255697.bul.html
Chinese	Z1255697.chi.html
Croatian	Z1255697.cro.html
Czech	Z1255697.cze.html
Danish	Z1255697.dan.html
Dutch	Z1255697.dut.html
English	Z1255697.eng.html
Finnish	Z1255697.fin.html
French	Z1255697.fre.html
German	Z1255697.ger.html
Greek	Z1255697.gre.html
Hebrew	Z1255697.heb.html
Hungarian	Z1255697.hun.html
Italian	Z1255697.ita.html
Japanese	Z1255697.jap.html
Korean	Z1255697.kor.html
Norwegian	Z1255697.nor.html
Polish	Z1255697.pol.html
Portuguese	Z1255697.por.html
Russian	Z1255697.rus.html
Slovakian	Z1255697.sla.html
Slovenian	Z1255697.sle.html
Spanish	Z1255697.spa.html
Swedish	Z1255697.swe.html
Taiwanese	Z1255697.tai.html
Turkiye Statement of Warranty	
Turkish	Z1255698.tur.html
English	Z1255698.eng.html
United States, Puerto Rico and Canada Statement of Limited Warranty	
English	Z1254753.eng.html
French Canadian	Z1254753.fca.html

Compliances

Federal Communications Commission(FCC) Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an IBM authorized dealer or service representative for help.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Proper cables and connectors are available from IBM authorized dealers. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Compliance Statement

This Class B digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Power Cord:

For your safety, IBM provides a power cord with a grounded attachment plug to use with this IBM product. To avoid electrical shock, always use the power cord and plug with a properly grounded power outlet.

IBM power cords used in the United States and Canada are listed by the Underwriters Laboratories (UL) and certified by the Canadian Standards Association (CSA).

For units intended to be operated at 115 volts: Use a UL listed and CSA certified cord set consisting of a minimum 18 AWG, type SVT or SJT, three conductor cord, a maximum of 4.5 metres (15 feet) in length and a parallel blade, grounding type attachment plug rated 15 amperes, 125 volts.

For units intended to be operated at 230 volts (U.S. use): Use a UL listed and CSA certified cord set consisting of a minimum 18 AWG, type SVT or SJT, three conductor cord, a maximum of 4.5 metres (15 feet) in length and a tandem blade, grounding type attachment plug rated 15 amperes 250 volts.

For units intended to be operated at 230 volts (outside the U.S.): Use a cord set with a grounding type attachment plug rated 13 amperes (minimum), 250 volts. The cord set should be marked <HAR> and have the appropriate safety approvals for the country in which the equipment will be installed.



As an ENERGY STAR® Partner IBM Corporation has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

MPR II

This product complies with Swedish National Council for Metrology (MPR) standards issued in December 1990 (MPR II) for very low frequency (VLF) and extremely low frequency (ELF).

Hinweise

Gemäß der Amtsblätter des BMPT Nm. 61/1991 und 6/1992 wird der Betreiber darauf aufmerksam gemacht, daß die von ihm mit diesem Gerät zusammengestellte Anlage auch den technischen Bestimmungen dieser Amtsblätter genügen muß.

Aus ergonomischen Gründen wird empfohlen, die Grundfarbe Blau nicht auf dunklem Untergrund zu verwenden (schlechte Erkennbarkeit, Augenbelastung bei zu geringem Zeichenkontrast).

Aus ergonomischen Gründen sollten nur Darstellungen auf dunklem Hintergrund bei Vertikalfrequenzen ab 60 Hz (ohne Zeilensprung) benutzt werden.

Die Konvergenz des Bildes kann sich auf Grund des Magnetfeldes am Ort der Aufstellung aus der korrekten Grundeinstellung verändern. Zur Korrektur empfiehlt es sich deshalb, die Regler an der Frontseite für H STAT und V STAT so einzustellen, daß die getrennt sichtbaren Farblinien für Rot, Grün und Blau bei z.B. der Darstellung eines Buchstabens zur Deckung (Konvergenz) gelangen. Siehe hierzu auch die Erklärungen zu H STAT und V STAT.

European Union (EU) Statement

This product has been tested and found to comply with the limits for Class B Information Technology Equipment according to CISPR 22/ European Standard EN 55022. The limits for Class B equipment were derived for typical residential environments to provide reasonable protection against interference with licensed communication devices. Properly shielded and grounded cables and connectors must be used in order to reduce the potential for causing interference to radio and TV communications and to other electrical or electronic equipment. Such cables and connectors are available from IBM authorized dealers. In accordance with EN 50082-1 1992, Performance Criterion A, it should be noted that in the presence of certain electromagnetic fields, some screen jitter may be observed.

Hinweis für die Europäische Union (EU)

Dieses Gerät hat in Tests die Grenzwerte eingehalten, die gemäß CISPR 22/Europäische Norm EN 55022 für informationstechnische Geräte der Klasse B festgeschrieben sind. Diese Grenzwerte für Geräte der Klasse B sehen für die normale Installation im privaten Bereich einen ausreichenden Schutz vor Störungen von zugelassenen Kommunikationsgeräten vor.

Um die Gefahr von Störungen des Betriebs von Radio- und Fernsehgeräten sowie anderer elektrischer oder elektronischer Geräte möglichst gering zu halten, müssen ordnungsgemäß abgeschirmte und geerdete Kabel und Steckverbinder verwendet werden. Diese Kabel und Steckverbinder erhalten Sie bei IBM Fachhändlern.

Gemäß EN 50082-1 1992, Leistungskriterium A, wird darauf hingewiesen, daß bei Vorhandensein bestimmter elektromagnetischer Felder ein Flackern der Bildschirmanzeige auftreten kann.

Déclaration de l'Union européenne (UE)

Ce produit a été testé et respecte les restrictions relatives au matériel informatique de la classe B, conformément à CISPR 22 / Norme européenne EN 55022. Les restrictions relatives au matériel de la classe B ont été adaptées pour des environnements résidentiels types afin d'assurer une protection correcte contre les parasites avec des appareils de communication sous licence.

Des câbles et connecteurs correctement blindés et reliés à la terre doivent être utilisés afin de réduire le risque de parasitage des communications radio et TV ainsi que d'autres appareils électriques ou électroniques. Ces câbles et connecteurs sont disponibles auprès des distributeurs agréés IBM.

Conformément à la norme EN 50082-1 1992, Critère de performance A :, il convient de signaler qu'en présence de certains champs électromagnétiques, un scintillement de l'écran peut se produire.

Dichiarazione della Comunità Europea (EU)

La presente apparecchiatura è stata collaudata ed è stata riscontrata conforme ai limiti dei dispositivi informatici di Classe B, in base a CISPR 22 / Norma Europea EN 55022. I limiti per le apparecchiature di classe B sono stabiliti per gli ambienti tipicamente residenziali al fine di garantire una protezione adeguata contro le interferenze con i dispositivi di comunicazione brevettati.

Per ridurre la possibilità di causare interferenza alle comunicazioni radio e televisive ed ad altre apparecchiature elettriche o elettroniche, occorre usare cavi e connettori opportunamente schermati e messi a terra. Tali cavi e connettori sono disponibili presso i rivenditori autorizzati IBM.

In conformità a EN 50082-1 1992, Criteri di prestazioni A:, occorre notare che in presenza di determinati campi elettromagnetici, possono presentarsi alcuni disturbi sullo schermo.

Declaración de la (EU) Unión Europea

Este producto se ha probado y se ha comprobado que cumple los límites para equipos de tecnologías de la información de Clase B, tal como se define en el CISPR 22 / Estándar europeo EN 55022. Dichos límites están calculados para proporcionar una protección razonable contra las interferencias en entornos residenciales equipados con dispositivos de comunicación con licencia.

Para reducir la generación de interferencias en las comunicaciones de radio y TV y en otros equipos eléctricos o electrónicos, utilice cables y conectores con conexión a tierra y debidamente blindados. Estos cables y conectores están disponibles a través de los distribuidores IBM autorizados.

De acuerdo con el estándar EN 50082-1 1992, Criterios de rendimiento A:, debe tenerse en cuenta que ante la presencia de determinados campos electromagnéticos, pueden observarse fluctuaciones en la imagen que aparece en la pantalla.

Service Information

The following parts are for use by IBM service, or IBM authorized dealers, to support customer warranty. Parts are for service use only.

	Model Type E74M	
04N9014	6517-07N	Monitor – Pearl White
04N9015	6517-47N	Monitor – Stealth Black
04N9016		Stand – Pearl White
04N9056		Stand – Stealth Black
04N9017		Audio Cable