

APPENDIX C:

USER'S MANUAL



E7006

USER'S MANUAL





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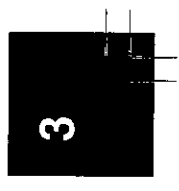
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User's Manual

Model No.: E7006





SAFETY INSTRUCTIONS

Please read all of the following instructions before use.

- Follow all warnings and instructions marked on this product.
- When cleaning this monitor, first unplug it from the wall outlet. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- Do not use this product where water spills may occur.
- Prevention from falling, do not place this product on an unstable surface.
- To protect this monitor from overheating, slots and openings on the back and bottom of this unit (use for ventilation) should never be blocked.
- Never be placed near a radiator or heating element.
- Only operate this monitor from the power source indicated on the marking label. If you are not sure of the type of power source available in your area, consult your dealer or your local power company.
- This product is equipped with a 3-wire grounding type plug. For safety this device is meant to be used with a grounding-type power outlet. If you do not have one, contact your electrician to replace your obsolete outlet.

Do not use a 3-to-2 prong adapter.

- Do not allow anything to rest on the power cord or leave any cords hanging where people frequently walk.
- If an extension cord is used with this product, make sure that the total amperage ratings do not exceed the extension cord's amperage or 10 amperes.
- Never puncture any objects through the walls of the monitor. High voltage points could result in electric shock, fire hazard or cause a short circuit.
- Never attempt to service this product yourself. Opening this unit may expose you to dangerously high voltages. Refer all servicing to a qualified service personnel.
- Save this instruction manual for later use.

Note: Unplug this product and contact qualified service personnel if:

- The power cord or plug is damaged or frayed
- The product has been exposed to rain or water
- The product does not operate normally when used properly
- Improper adjustments has been made
- The product has been dropped or damaged
- The product does not achieve maximum performance





Bitte lesen Sie die folgenden Hinweise vor der Inbetriebnahme sorgfältig durch.

- Beachten Sie alle am Gerät angebrachten Warnungen und Hinweise.
- Trennen Sie das Gerät vor dem Reinigen zunächst vom Stromnetz. Verwenden Sie weder Reinigungsflüssigkeiten noch Sprays. Reinigen Sie das Gerät mit einem leicht angefeuchteten Tuch.
- Betreiben Sie dieses Gerät nicht in einer Umgebung, in der Wasserspritzer auftreten könnten.
- Stellen Sie das Gerät nur an einem sicheren, stabilen Ort auf, um es vor dem Herunterfallen zu schützen.
- Achten Sie darauf, daß die Belüftungsschlitze und -öffnungen auf der Rückseite und Unterseite des Gerätes frei zugänglich sind, damit eine Beschädigung des Monitors durch Überhitzung vermieden wird.
- Vermeiden Sie es, das Gerät in unmittelbarer Nähe einer Heizung aufzustellen.
- Betreiben Sie dieses Gerät ausschließlich mit der auf dem Etikett angegebenen Netzspannung. Falls Sie nicht sicher sind, welche Netzspannung in Ihrer Umgebung verwendet wird, erkundigen Sie sich bei Ihrem Fachhändler oder bei Ihrem Stromversorgungsunternehmen.
- Dieses Gerät ist mit einem dreipoligen, geerdeten Netzstecker ausgerüstet. Es sollte aus Sicherheitsgründen an eine geerdete Steckdose angeschlossen werden. Beauftragen Sie gegebenenfalls Ihren Elektriker, nicht geerdete Steckdosen durch geerdete zu ersetzen. **Verwenden Sie keinesfalls ein 3-poliges Adapter.**

SICHERHEITSHINWEISE

- Stellen Sie keine schweren Gegenstände auf das Netzkabel, und lassen Sie an stark frequentierten Orten keine Kabel im Weg herumliegen.
- Falls Sie dieses Gerät mit einem Verlängerungskabel betreiben, achten Sie darauf, daß die gesamte Stromlast der angeschlossenen Geräte nicht über der maximal zulässigen Strombelastung des Verlängerungskabels und nicht über 10 Ampere liegt.
- Stecken Sie keinesfalls irgendwelche Gegenstände durch die Gehäuseöffnungen des Monitors. Dies kann zu Stromstößen, Brand oder Kurzschlüssen führen.
- Versuchen Sie keinesfalls, dieses Gerät selbst zu warten oder zu reparieren. Beim Öffnen des Gerätes besteht die Gefahr, daß Sie in Kontakt mit Hochspannung geraten. Überlassen Sie alle Wartungs- und Reparaturarbeiten dem dafür ausgebildeten Fachpersonal.
- Heben Sie diese Anleitung zum späteren Gebrauch auf.

Hinweis: In den folgenden Fällen müssen Sie das Gerät vom Stromnetz trennen und sich mit Ihrer Service-Werkstatt in Verbindung setzen:

- Das Netzkabel ist beschädigt bzw. durchgescheuert
- Das Gerät wurde Regen bzw. anderweitiger Feuchtigkeit ausgesetzt
- Das Gerät funktioniert im normalen Betrieb nicht erwartungsgemäß
- Es wurden falsche Einstellungen vorgenommen
- Das Gerät ist heruntergefallen oder wurde anderweitig beschädigt
- Das Gerät funktioniert nur eingeschränkt



1. INTRODUCTION

1.2 FEATURES OF THE E7006

- Multi-scanning at horizontal frequencies of 30KHz to 70KHz and vertical frequencies of 50Hz to 120Hz
- 1280 X 1024 maximum resolution
- 17-inch (16" Viewable) Flat square tube, anti-glare, anti-static
- 0.28mm dot pitch
- Microprocessor-based design with digital controls
- JAG OSD Control
- Unlimited colors
- Compatible with standard IBM® VGA, extended VGA, Super VGA, IBM® XGA modes, as well as VESA® resolution standards
- Universal power supply
- Tilt & swivel base
- MPR-II compliant
- TCO-1992 / TCO-1995 Optional
- VESA® Display Power Management (DPMS™) compatible
- Microsoft® Windows® 95 compatible & VESA® Display Data Channel (DDC) 1/2B compatible
- EPA Energy Star™ compliant power saving

1.3 CHECK LIST

Before operating this monitor, please make sure that all of the following items are included:

- E7006 Monitor
- Tilt & swivel base
- Power cord
- This user's manual

If any of these items are missing, please contact your dealer or call your local MAG office for technical support and customer service.





2.4 SELF TEST PATTERN

The monitor may display a blue, green and red test pattern. This is to indicate that the monitor is functioning properly, but the computer's video signal is not reaching the monitor. In this case, please make sure the video cable is properly connected. The test pattern will disappear when the monitor is able to receive the video signal. However, if the test pattern does not display all three colors (blue, green and red), the monitor is not functioning properly. Please contact your local MAG office (see page 21) for assistance.

2.5 TIMING MODE

If your video timing mode is not one of the factory preset timing modes, a screen will appear instructing you to save your timing mode to the User Mode (please refer to "Controls and Functions").

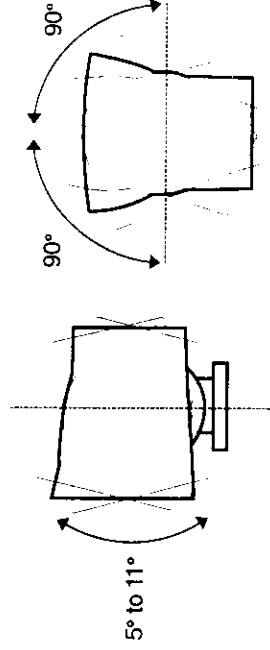
2.6 ADJUST THE PICTURE

Adjusting the picture is necessary to obtain the best visual display. A complete description of the control functions is covered in the next section, "Controls and Functions".

2. SETUP

2.7 ADJUST THE TILT & SWIVEL BASE

Adjust the tilt and swivel base for your maximum viewing comfort.



NOTE: To minimize eye fatigue, we suggest you allow a minimum viewing distance of 18 inches.

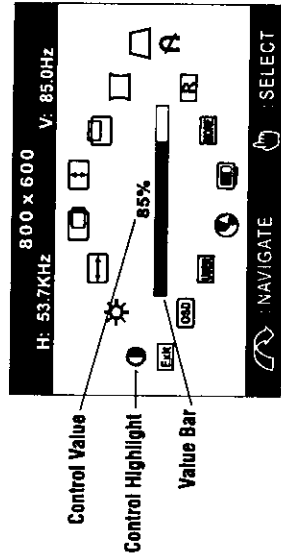


3. CONTROLS & FUNCTIONS

3.5 OSD MENU ADJUSTMENTS

The following procedure is to help guide you through the process of selecting and adjusting a display control:

Step 1: Press and release the JAG to activate the OSD Menu.



Step 2: Turn the JAG dial to rotate the highlight around the menu.

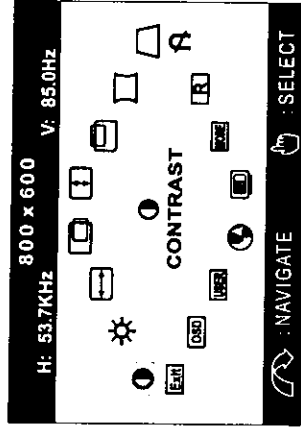
Step 3: When the desired control is highlighted, press and release the JAG a second time to make your selection. The highlight will change color.

Step 4: Turn the dial clockwise to increase or counterclockwise to decrease the value of the selected control setting.

Step 5: Press and release the dial a third time to store the change.

Step 6: Repeat Steps 2 through 5 to make additional adjustments or exit the OSD menu.

3.6 MAIN MENU DESCRIPTIONS



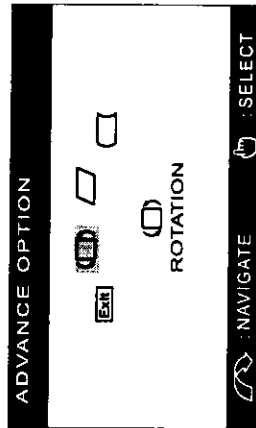
- a. **Contrast** Adjusts the contrast level (black level) in the display
- b. **Brightness** Adjusts the brightness level (white level) in the display
- c. **H-Size** Increases and decreases the display width.
- d. **H-Position** Shifts the display to the right or left.





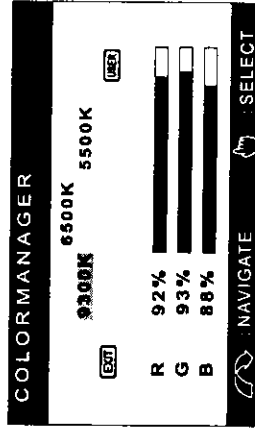
3. CONTROLS & FUNCTIONS

3.7 ADVANCE OPTION DESCRIPTIONS



- a. **Exit** Returns to the Main Menu.
- b. **Rotation** Adjusts the tilt of the display.
- c. **Parallelogram** Adjusts the tilt of the display sides to the left or right.
- d. **Bow** Bends the sides of the display in the same direction.

3.8 COLOR MODE SUBMENU DESCRIPTIONS



- a. **Color Temperature**
Select 9300 K, 6500 K or 5500 K for the setting that is most comfortable for viewing in the current lighting and surroundings.
- b. **R (red adjust)**
Adjusts the intensity of the red video output or color strength.
- c. **G (green adjust)**
Adjusts the intensity of the green video output or color strength.
- d. **B (blue adjust)**
Adjusts the intensity of the blue video output or color strength.
- e. **Recall Color**
Resets the color setting back to the original factory settings.
- f. **Exit**
Returns to the Main Menu.



4. TIMING GUIDE

4.1 TIMING GUIDE

This multifrequency monitor operates at horizontal frequencies of 30 to 70KHz and vertical frequencies of 50 to 120Hz. The microprocessor-based design offers auto-synchronization.

This monitor offers 9 preprogrammed settings (listed in the table to the right) that cover most of the common video modes supported by popular graphics adapters. If the monitor recognizes one of the preset timing signals, it will recall that mode and any stored display adjustments you have made. However, the monitor is multi-scanning, thus, it can accept any signal within its frequency range.

If your video timing mode is not one of the preset timing modes, a screen will appear instructing you to save your timing mode to the User Mode (please refer to Section 3, "Controls and Functions").

If, however, you would like to use one of the preset timing modes, please refer to your video card manufacturer's installation guide for instructions on how to make these changes.

4.2 DDC PLUG & PLAY

With VESA® DDC1/2B, when the monitor is powered up, it will automatically notify a Windows® 95 host computer of its scanning frequencies, capabilities and characteristics. Windows® 95 will automatically recognize the connection of the monitor and select the appropriate display resolution.

Preset Modes	Resolution		Frequency	
	H (Pixels)	V (Lines)	H (KHz)	V (Hz)*
1	720	400	31.5	70
2	640	480	31.5	60
3	640	480	43.3	85
4	800	600	37.9	60
5	800	600	53.76	85
6	1024	768	48.4	60
7	1024	768	60	75
8	1024	768	68.7	85
9	1280	1024	63.9	60

* Refresh rate.





APPENDIX A: SPECIFICATIONS

Picture Tube	17-inch (16" viewable) FST, 0.28mm dot pitch, 90° deflection, anti-glare, anti-static	Recommended Ambience	32°F to 104°F (0°C to 40°C) 10 to 90 % -4°F to 140°F (-20°C to +60°C)
Max. Resolution	1280 X 1024 (Non-interlaced)	Operating Temperature	16.7" x 16.7" x 18.1" (425mm x 425mm x 460mm)
Display Colors	Unlimited	Storage Humidity	
Scanning Frequency		Dimensions W x H x D	
Horizontal	30KHz to 70KHz	Weight	
Vertical	50Hz to 120Hz	Net	35.3 lbs. (16kg)
Display Area W x H	12.2" x 9.1" (310mm x 230mm) typical	Gross	41.9 lbs. (19kg)
Video Bandwidth	100 MHz (-3db) typical	Certifications	UL, CSA, TUV/GS, (S), (N), (D), (E), (F) FCC Class B, VCCI MPRI II, CE EPA Energy Star™, VESA® DPMS™
Input Signal		Safety/Ergonomics	
Video	Analog, 0.7Vp-p, 75ohm	EMI Standard	
Sync	Separate TTL level	Emissions Standard	
Power Supply	100-240Vac, 50/60Hz, Universal	Power Management	
Power Consumption			
	Normal: 110 Watts		
	Suspend: < 15 Watts		
	Active Off: < 5 Watts		

Please direct inquiries regarding warranty coverage to your Authorized Ultimate Reseller, Authorized Distributor, or Worldwide service centers listed below:

APPENDIX C: CUSTOM SERVICE

United States and Canada:
MAG INNOVISION CO., INC.
2801 South Yale Street Santa Ana, CA 92704
Tel: 1-800-827-3998 (outside California)
1-714-751-2008 (inside California and Canada)
Fax: 1-714-751-5522
Internet: <http://www.maginnovation.com>

Taiwan:
MAG TECHNOLOGY CO., LTD.
9F, No. 245, Sec. 1, Tunhwa S. Rd, Taipei, Taiwan
Tel: 886-2-2775-3577
Fax: 886-2-2751-5911
Internet: <http://www.mag.com.tw>

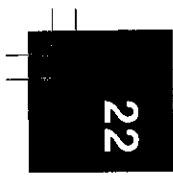
Japan:
MAGVIEW CO., LTD.
Taisei Bldg. 1-3-4 Osaki, Shinagawa-Ku Tokyo 141
Tel: 81-3-3493-3588
Fax: 81-3-3493-3525

Europe:
EUROMAG TECHNOLOGY B.V.
Valkenierstraat 10b Donkersloot-Noord 2984 AZ
Ridderkerk, The Netherlands
Tel: +31 (0) 180-461211
Fax: +31 (0) 180-410648
E-mail: service@euromag.nl

Australia:
MAGTRON MONITORS (Australia) PTY. LTD.
Unit B2, 1-3 Rodborough Road, Frenchs Forest, NSW 2086
Tel: 61-2-9975-3727
Fax: 61-2-9975-4809



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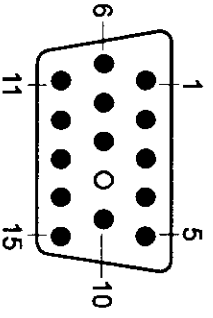


APPENDIX B: PIN ASSIGNMENT

The pin assignment of the connectors is listed below for professional use only. Please do not attempt to alter the connections as this may seriously damage the monitor.

VGA CONNECTOR

Red
Green
Blue
No Connection
Ground
Red Ground
Green Ground
Blue Ground
No Connection
Ground
Ground
SDA
Horizontal Sync
Vertical Sync
SCL





5. POWER MANAGEMENT

5.1 DEFINITION

The power management feature enables this monitor to recognize VESA® DPMS™ (Display Power Management Signaling) signals from a VESA® DPMS™ video adapter and power down to less than 15 watts of power consumption.

A VESA® DPMS™ compatible video adapter achieves the signaling by setting horizontal, or vertical, or both synchronization signals to inactive. The monitor recognizes all three types of signals and enters into the appropriate mode. In Standby/Suspend mode, this monitor still maintains a detection and CRT heater circuitry to ensure fast recovery time when both synchronization signals are active again.

5.2 POWER CONSUMPTION

MODE	POWER CONSUMPTION
On	110W
Standby/Suspend	< 15W
Active Off	< 5W

5.3 LED INDICATOR













There are three stages to power management: On, Standby/Suspend, and Active Off. In the On mode the monitor and computer are in operation and the LED is green. When the power management feature is activated, the screen will be blank and the Power LED will turn orange, indicating that the monitor has been powered down to Standby/Suspend mode. The high voltage function of the monitor shuts down while the heater circuitry remains active. In the Active Off mode, all circuitry in the monitor is shut down, except for a low power detection circuit. This circuit allows the monitor to turn on when the computer system "Wakes up" when you move the mouse.

MODE	INDICATOR COLOR
On	Green
Standby/Suspend	Orange
Active Off	Flashing Orange





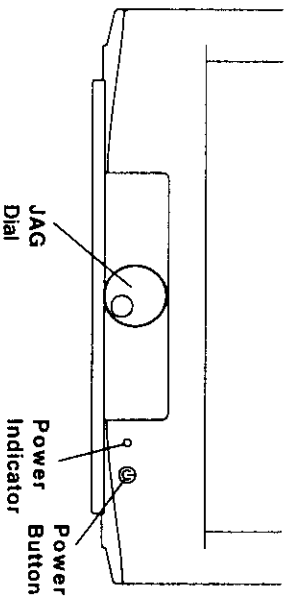
3. CONTROLS & FUNCTIONS

- e. **V-Size** 
Increases and decreases the display height.
- f. **V-Position** 
Shifts the display up or down.
- g. **Pincushion** 
Bends the sides of the screen display inward or outward.
- h. **Trapezoid** 
Adjusts the top and bottom display widths to be even.
- i. **Degauss** 
Removes any discoloration from the display image due to electromagnetic field buildup. It is not usually necessary to degauss your monitor, unless it has been moved.
- j. **Recall** 
While in a preset video mode, press the JAG™ dial to reset all customer display setting to the factory default settings.
- k. **Advance Option** 
Activates the advance Option submenu. See Section 3.7 for more detailed information and instructions.
- l. **Color Manager** 
Activates the Color Manager submenu. See Section 3.8 for more detailed information and instructions.
- m. **Language Manager** 
Activates the Language Manager submenu. Allows you to choose the OSD language from English, French, German and Japanese.
- n. **User Mode** 
Activates the User Mode submenu. See Section 3.9 for more detailed information and instructions.
- o. **OSD Manager** 
Activates the OSD Manager submenu. See Section 3.10 for more detailed information and instructions.
- p. **Exit** 
Press the JAG™ dial to exit the OSD.





3. CONTROLS & FUNCTIONS



3.1 JAG™

The JAG is designed to provide full user programming capabilities in one simple-to-use location for a more ergonomically-friendly design. This allows you to choose a control function and make necessary display adjustments with just one dial. **Note:** The OSD disappears after 10 seconds without adjustment.

3.2 POWER SWITCH

Press the power switch located at the lower right corner of the monitor (see illustration above) to turn the monitor ON and OFF. There will be a short delay (approximately 2 seconds), while the monitor starts up, before the display appears.

3.3 POWER LED

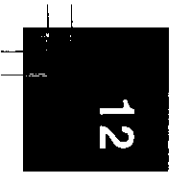
When the monitor power ON, the LED turns green if the power and video cables are properly attached. If the LED flashes orange, make sure the video cable is securely connected. The LED turns solid orange in the Power Management modes (see Section 6).

3.4 BASIC ON-SCREEN-DISPLAY ADJUSTMENT

The OSD help you make precise adjustments to the screen display for your viewing preference. By turning the JAG dial (without pressing) the value bar appears and contrast can be adjusted.



Note: The OSD disappears after 10 seconds with no adjustment.



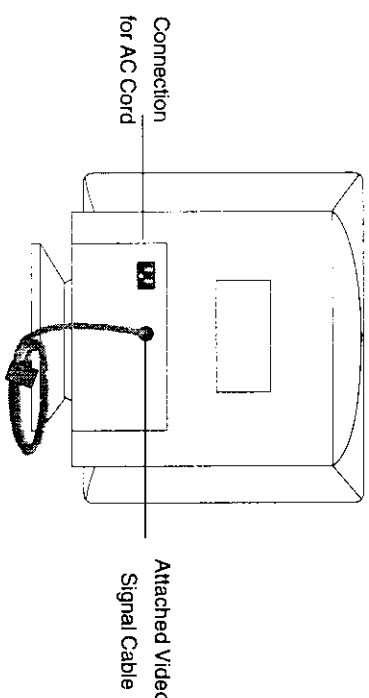


2. SETUP

Setting up your monitor is very easy. Just make a few simple connections and adjustments. The following procedure is to guide you to the proper usage of this product:

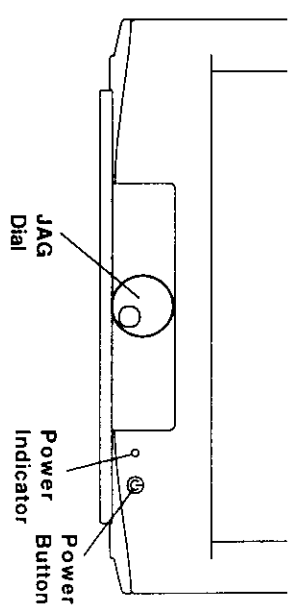
2.1 POWER CABLE CONNECTION

Connect the female end of the power cable to the Power Input receptacle on the back panel of your monitor and plug the male end into the power outlet.



2.2 SIGNAL CABLE CONNECTION

The monitor has an built-in signal cable with a male 15-pin mini D-sub connector. Attach this connector to the female 15-pin receptacle of your video adapter. Be cautious inserting the cable properly into the graphics card adapter. If the cable does not seem to fit it may be facing the wrong direction. Turn the cable over and try to match the shape of the connector with that of the graphics adapter. Secure the connection with the screws on the connector.



2.3 POWER ON

Switch ON the power to both the monitor and your computer. There will be a short delay (approximately 2 seconds) before the display appears. After the monitor is powered ON, the LED lights up green. If the LED flashes orange, check the video cable connection.





1. INTRODUCTION

1.1 GENERAL INFORMATION

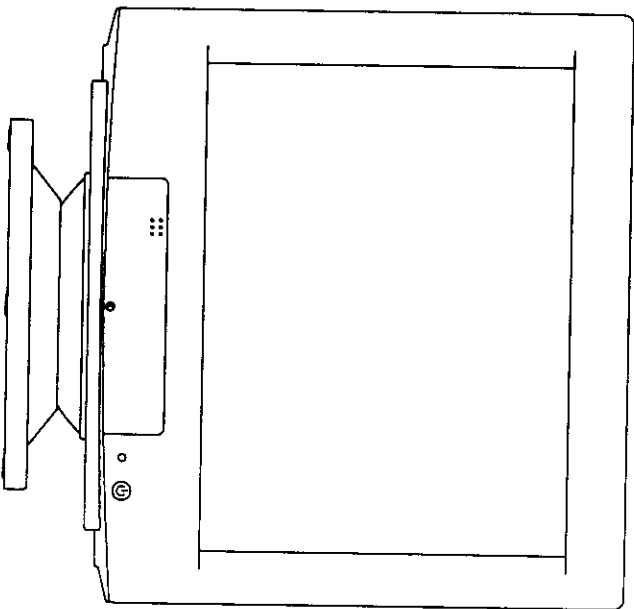
Congratulations on your purchase of a MAG E7006 monitor, featuring some of the latest technology like our exclusive JAG™ dial and On-Screen Display (OSD) for a more ergonomically-friendly design.

The E7006 monitor is an EPA Energy Star™ compliant, multi-frequency color monitor with a 17-inch (16" Viewable) Flat square tube. With state-of-the-art electronics, this monitor is capable of resolutions up to non-interlaced 1280 X 1024 (addressable). The intelligent microprocessor-based design enables the monitor to automatically synchronize and adjust to most common video modes.

The JAG™ and On-Screen Display combination allows you to make precise screen format adjustments easily and simply, while user-programmability allows you to change and save custom display characteristics and timing modes.

The E7006 features EPA Energy Star™ compliant, VESA® DPMS™ (Display Power Management Signaling) compatible power management. The E7006 monitor has been designed to meet TCO(optional) and Swedish MPR II guidelines for electromagnetic and static emissions.

We truly believe you will enjoy using the E7006 monitor. Thank you for making our product your choice.





TÜV

ALLGEMEINE SICHERHEIT SHINWEISE

Folgende Schritte sollten für die richtige Verbindung des **E7006**-Bildschirmgerätes mit dem Computer befolgt werden. Die folgenden Hinweise sollten vor der Installation des **E7006** sorgfältig beachtet werden

Diese Anleitung für späteren Gebrauch sorgfältig aufbewahren

- Das Bildschirmgerät nicht direkter Sonneneinstrahlung aussetzen.
- Das Bildschirmgerät nicht in der Nähe von Wärmequellen aufstellen, z.B. Heizgeräten, Heizungen.
- Das Bildschirmgerät nicht Regen oder übermäßiger Feuchtigkeit aussetzen.
- Nicht die Belüftungsoffnungen blockieren oder abdecken. Diese Öffnungen und Schlitze im Gehäuse sorgen für die notwendige Ventilation. Das Bildschirmgerät sollte niemals mit einer Verkleidung umgeben oder in einem Regal eingebaut werden, falls nicht für eine ausreichende Belüftung gesorgt ist.
- Niemals versuchen, das Gehäuse zu entfernen oder das Bildschirmgerät selbst zu warten. Alle Wartungsarbeiten sollten nur vom autorisierten Kundendienst durchgeführt werden.
- Niemals versuchen, dieses Gerät selbst zu warten, da beim Öffnen oder Abnehmen des Gehäuses die Gefahr eines elektrischen Schlages besteht.
- Zum Netzanschluß dieses Gerätes ist eine geprüfte Leitung zu verwenden. Für einen Nennstrom bis 6A ist eine Leitung nicht leichter als H05VV-F 3G 0,75mm² einzusetzen.
- Die Steckdose muß nahe dem Gerät angebracht und leicht zugänglich sein.
- Zur Vermeidung von Feuer oder Stromschlag niemals Gegenstände durch die Öffnung des Bildschirmgerätes stecken oder fallen lassen. Keine Flüssigkeiten über dem Gerät verschütten.
- Vor Anschluß des Netzkabels an die Steckdose sollte die Stromversorgung überprüft und sichergestellt werden, daß sie der Netzspannung des Bildschirmgerätes entspricht. Die vorgeschriebene Netzspannung ist auf der Rückseite des Bildschirmgerätes angegeben.
- Nicht die Steckdosen überlasten, da dies zu Feuer oder Stromschlag führen kann.
- Für den Anschluß an den Versorgungsstromkreis muß eine TÜV- oder VDE-geprüfte Anschlußleitung nicht leichter als H05VV-F verwendet werden.





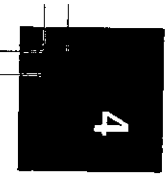
FCC COMPLIANCE STATEMENT

This monitor has been tested to comply with the limits for a Class B digital device, Part 15 of the FCC Rules. These limits are designed to provide protection against harmful interference within a residential area. This equipment is able to radiate radio frequency energy therefore using in nonaccordance with the instructions, may cause harmful interference to radio communications. There is no guarantee that interference will be present in a particular installation. If there is interference, which can be determined by turning this equipment off and on, the user is encouraged to try to correct the interference by the following measures:

- Increase the separation between your monitor and your computer.
- Connect the monitor into an outlet different from that to which the computer is connected.
- Consult the dealer, our customer service hotline, or an experienced computer hardware technician for help.

Warning: A shielded-type power cord is required in order to meet FCC emission limits to prevent interference to nearby radio and television. It is essential that only the supplied power cord is to be used.

Use only shielded cables to connect I/O devices to this equipment. You are cautioned that any changes or modifications not expressly approved by the party responsible with compliance could void your authority to operate the equipment.





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