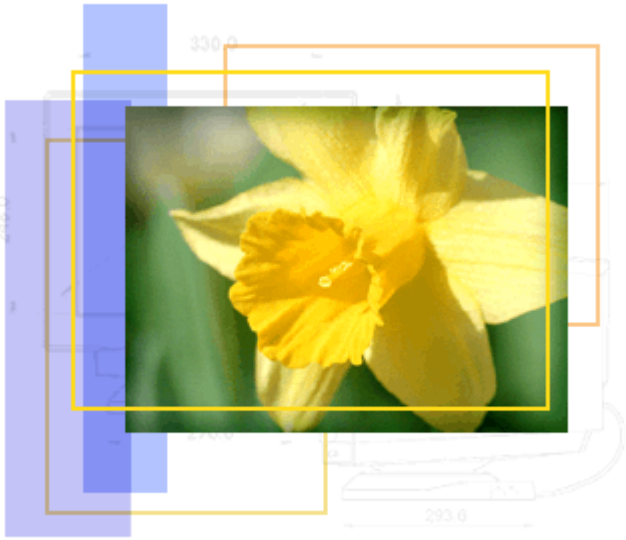
CTX

User's Manual

PR711FL



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Safety Instructions

FCC Statement

This equipment has been tested 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:

- Relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning:

If a shielded-type power cord is supplied with this monitor, it is required in order to meet FCC emission limits and to prevent interference with nearby radio and television reception. Only shielded cables should be used to connect I/O devices to this equipment. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

CE Statement

This device complies with the requirements of EMC (Electromagnetic Compatibility), and with Low Voltage directive.

Safety Precautions

Always observe these important safety instructions:

1. Allow adequate ventilation around the monitor so that heat can be dissipated properly. Do not block or cover ventilated openings. Do not place the monitor in an enclosure that will obstruct the free flow of air.

2. Do not place the monitor or other heavy objects on the power cord. A damaged power cord can cause fires or electrical shock.

3. Keep the monitor away from high-capacity transformers, electric motors and other strong magnetic fields.

4. Do not connect to any voltage or frequency beyond the range specified on the back of the monitor. Please follow all warnings and instructions marked on the product.

5. Unplug the monitor from the electrical power source before cleaning any part of the monitor. Do not use liquids, sprays or aerosol cleaners. Clean the surface of the screen with a lint-free, non-abrasive cloth and a non-alcohol, neutral and non-abrasive cleaning solution or glass cleaner. Use a slightly dampened cloth to clean the exterior of the plastic cabinet.

6. This product is equipped with a 3-wire grounding-type plug, an important safety feature. This plug will only fit into a grounding-type power outlet. If a grounding-type power outlet is not available, have one installed by a qualified electrician. Do not cut off the grounding pin in order to make the plug fit into an inappropriate power outlet.

7. For 230VAC operation, a power cord with tandem blade plug is required. Select your power cord in accordance with the safety regulations of your country. For example

North America	UL listed and CSA certified
Germany	VDE certified
Nordic Countries	SEMKO, NEMKO, DEMKO, or FIMKO certified

8. Do not attempt to service this product yourself! Opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.

9. The plug on the power cord is intended to serve as the disconnect device. The socket-outlet should be installed near the equipment and should be easily accessible.

Notice : Actual safety specifications please refer to the label on the back of monitor.

Recommendation for Optimum Performance

Your monitor will provide the best results if you follow these recommendations:

1. Do not use your monitor against a bright background or where sunlight or other light sources will shine directly on the screen.

2. Place the monitor just below eye level (10° -15°) for optimum viewing.

3. Set the monitor brightness level to match the ambient room light.

4. For optimum focus, the contrast control should not be set to the maximum unless the input signal level is extremely low. Also, the brightness control should be set to a point where the overall background area just begins to disappear.

CAUTION

- Do not scrap or knock the surface of CRT with a pen, a screwdriver and so on.
- Clean the CRT surface with a lint-free, nonabrasive, soft cloth, and should not use the solution or glass cleaner containing corpuscles like an abrasive, alcohol and an alkaline solution.

Introduction

The monitor is a multiple frequency high-resolution color monitor for IBM compatible PC's or Macintosh and workstation systems. The monitor is equipped with microprocessor based intelligence and multiple frequency scanning capability, allowing it to provide maximum compatibility for various system platforms.

The monitor uses the latest screen technology including a 0.24mm AG FD Trinitron® CRT to display crisp text and vivid color graphics. The full-function digital control and On-Screen Display (OSD) system provides easy adjustment of image geometry and color settings for different display modes with the precision of a fixed frequency monitor.

The monitor also has full ergonomic features. In addition to the friendly controls and user comfort features, the emission level of the electric and magnetic field is kept low to meet the Swedish MPR II or TCO standards.

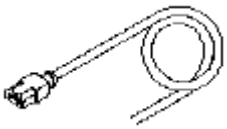
The monitor is also equipped with energy saving functions; it is compatible with the VESA power saving standards.

Installation

Unpacking

Your color monitor package should contain the following items:

Color monitor with tilt/swivel base
(with Signal cable)



Power cord

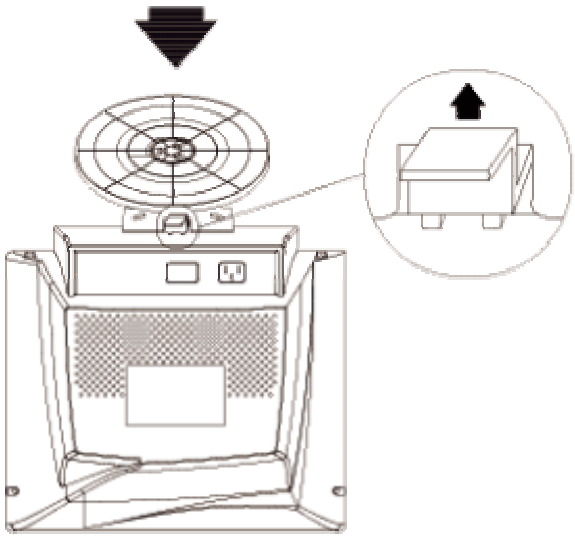
User's Guide / Driver CD

System Setup

1. Turn off the system and all attached peripherals.
2. Carefully turn the monitor upside down.

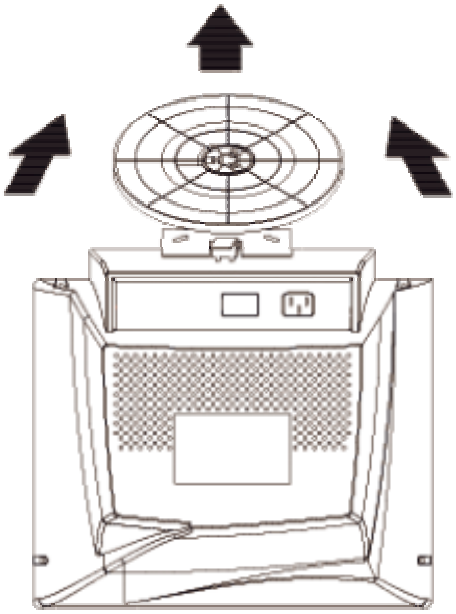
Remove the Tilt/Swivel Base

1. Squeeze and hold the latches.
2. Pull the tilt/swivel base to the rear of the monitor and lift to remove the base.



Installing the Tilt/Swivel Base

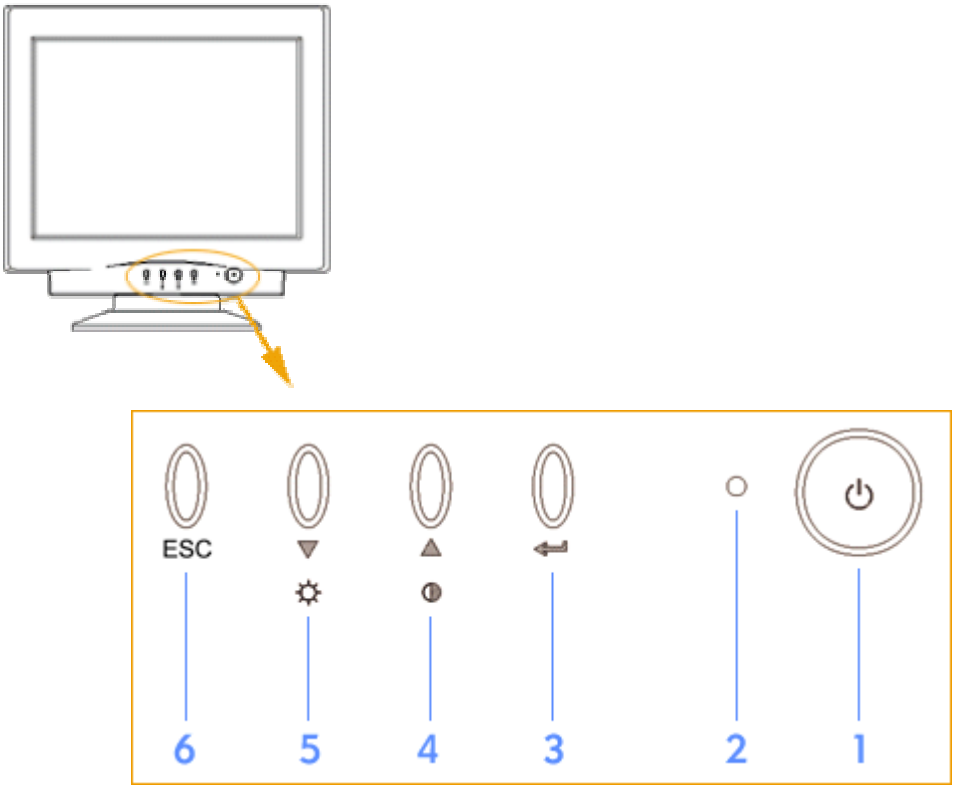
1. Align the base with the slots on the bottom of the monitor and insert the tilt/swivel base into the slots.
2. Push the tilt/swivel base firmly toward the front of the monitor until the latches click into the locked position.



Controls and Adjustments

Once installation is complete, refer to this section for useful tips on how to use your monitor controls and make adjustments to match your personal preferences. The following indicators, controls and adjustments, including On-Screen Displays (OSD), are accessible from the front of your monitor:

Front Panel Controls



1. Power Switch

To turn the monitor on or off.

2. Power LED Indicator

As long as the monitor is powered, this indicator is lit. In normal operation, it lights green. While in power saving mode, the indicator will turn to amber.

3. Enter "↵" button

To display the OSD manual and selected function.

4. Up "▲" button

To adjust the selected OSD function or the contrast directly.

5. Down "▼" button

To adjust the selected OSD function or the brightness directly.

6. "ESC" button

To close the OSD manual and to escape function.

How to Make On-Screen Display (OSD) Adjustments

On-Screen Displays are called up from the front panel controls as noted above. Adjustments are made with "↵" , "▲" , "▼" and "**ESC**" control switches.

Power Saving Note:

This monitor is equipped with an automatic power-saving circuitry design that will work with any computer, which meets the VESA DPMS standard. It meets the ENERGY STAR low power state definition.

OSD (On-Screen Display) Controls

(1) Press "↵" to open the On-Screen menu function. Seven adjustment functions will appear on the On-Screen menu.

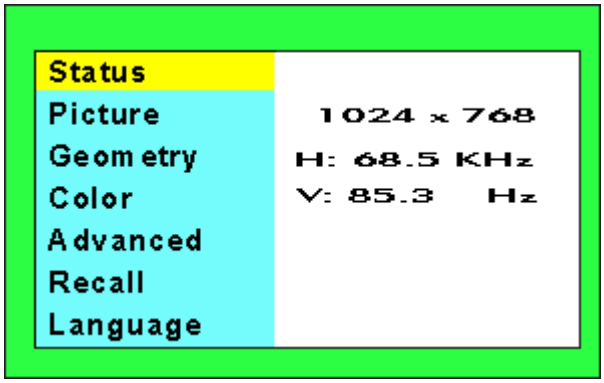
Press "▲" or "▼" button to scroll selections from top-down sequence as below.

Press "↵" to enter the item which is selected or to activate the preferred adjustments.

Press "**ESC**" to exit the On-Screen Menu or up level.

A. Status

To display existing timing data of resolution and frequency.

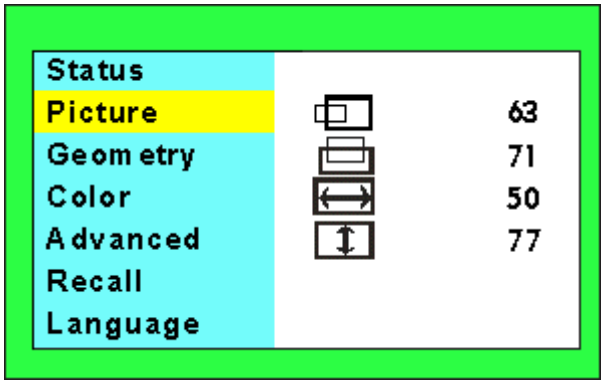


B. Picture

a. Press "▼" or "▲" to select Vertical and Horizontal position, Vertical and Horizontal size.

b. Press "↵" to process.

c. Press "▲" or "▼" to preferred picture.

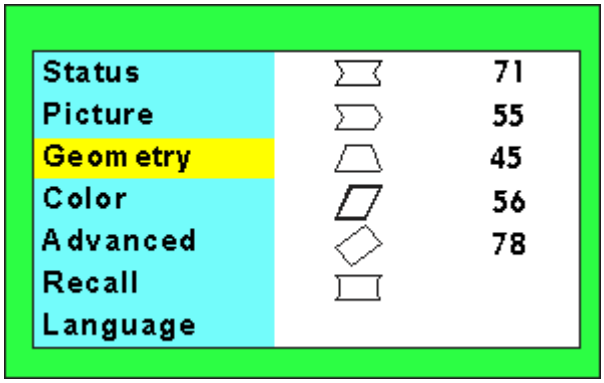


C. Geometry

a. Press "▼" or "▲" to select Side-pin, Balance, Keystone, Parallel, Rotate and Corner.

b. Press "↵" to process.

c. Press "▲" or "▼" to preferred picture.



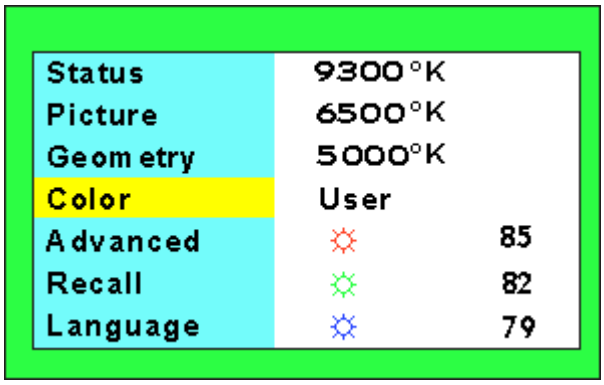
D. Color

a. Press "▼" or "▲" to select various white color temperature standard.

b. In User item, presses "↵" to confirm action color adjustment.

c. Press "▲" or "▼" to select Red, Green and Blue then press "Enter" to process.

d. Press "▲" or "▼" increase or decrease density.

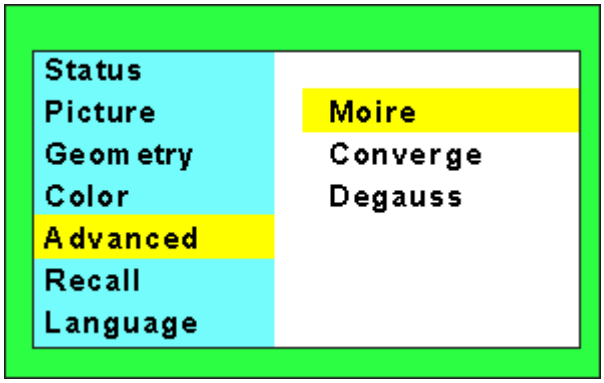


E. Advanced

a. Press "▼" or "▲" to select Moire, Converge or Degauss.

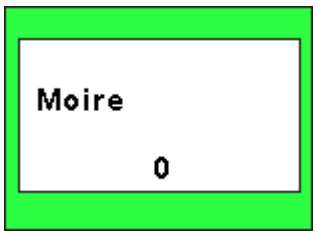
b. Press "↵" to proceed.

c. Press "▲" or "▼" to preferred picture.



E-1. Moire

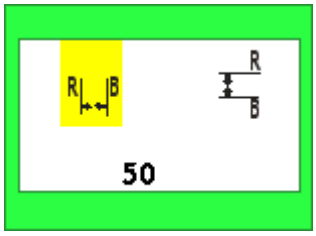
Press "▲" or "▼" to reduce Moire.



E-2. Converage

a. Press "▲" or "▼" to select Horizontal or Vertical convergence adjustment.

b. Press "↵" to proceed.

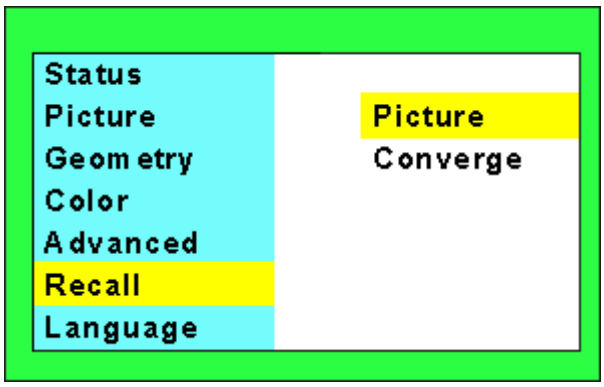


Caution:

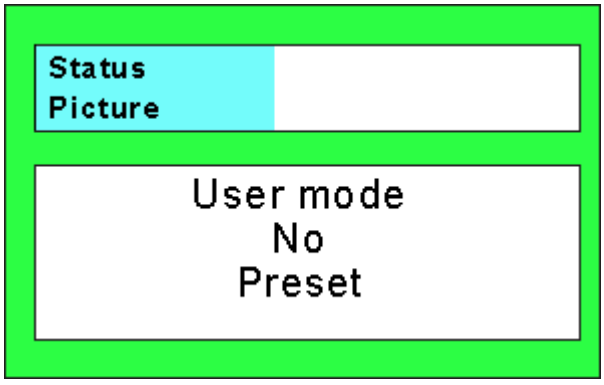
1. If moire reduction is overdone, picture quality, i.e. focus and vertical line stability will both be effected.
2. Proper adjustment is recommended for not effecting picture performance.

F. Recall

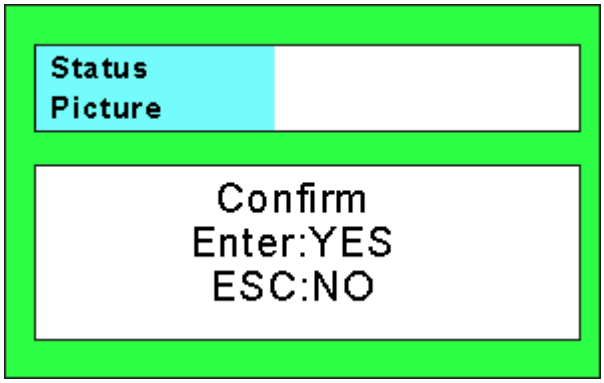
Press "↵" to confirm window.



If this window appears, that means it cannot be preset.(factory mode only)

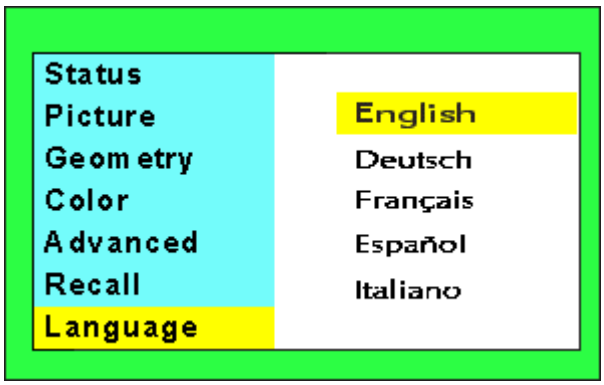


Confirm the Recall action by pressing the "↵" or cancel the action by pressing the "**ESC**".



G. Language

Press "▲" or "▼" to select the Language for OSD only.



(2) Contrast/Brightness:

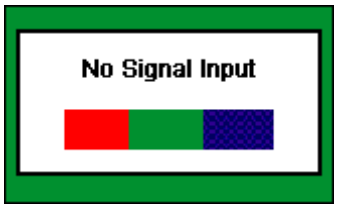
When OSD is off, "▲" or "▼" will be adjust contrast or brightness.

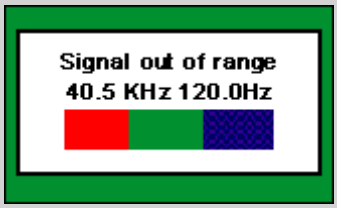
Trouble Shooting

Notify your supervisor or contact your service personal when:

- Power cords are frayed or damaged.
- Liquid is spilled into the monitor.
- The monitor does not operate normally when operating instructions are observed.
- The monitor has been dropped or the cabinet has been damaged.

Review this list of trouble-shooting tips before contacting an authorized service center.

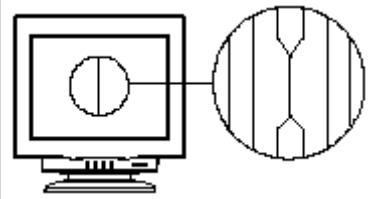
Problem	What to do
Power Indicator (LED) is not lit.	Make sure Power control is in the ON position. Check the power cable. It must be plugged in completely.
No Picture.	If the Power Indicator is amber-colored your computer has sent the monitor into its Power Save mode (See "Energy Declaration.")
No Signal Input. 	The video card may not be seated properly. Make sure it is fully seated in its slot. Make sure the signal cable is connected securely to the video card or computer. Enable "Power Save" function.

Signal Out of range. 	Readjust the signal based on spec. Reference "Scan Frequency".
Display image is not centered or is too small or too large.	Refer to "Controls & Adjustments." You need to adjust "Size" and "Position" of the image.
Image is scrolling or is unstable	Make sure the signal cable is connected securely to the video card or computer.
Picture is fuzzy or color looks blotchy.	Adjust Contrast and Brightness controls. On all Models select the Degauss function in the OSD control menu. *(**CAUTION:** Allow a minimum of 20 minutes to elapse before depressing Degauss button again when not switching between modes. DO NOT HOLD THE BUTTON DOWN CONTINUOUSLY.)*
Picture bounces or a wave pattern is present.	Move devices that might be causing electrical interference away from the monitor. (See "FCC Information.")

Edges of display are curved inward or outward.	Refer to "Controls and Adjustments." You need to adjust the "Side Pincushion."
No Plug & Play.	Verify that the host system is Plug & Play compatible. Check to see if Windows is installed, and the software key for the Data Display Channel (DDC) function is enabled. Determine if original manufacturer's detachable signal cable is being used (D-Sub-15 pin only).

Our monitor is build-in FD Trinitron® CRT. This CRT is sensitive to shocks and vibrations that may occur during transportation. Following are some adjustment tips when below mentioned symptoms occur.

Symptom	Tip
Two horizontal lines are visible on the screen 	This is normal characteristic of FD Trinitron® CRT. These are damper wires, which are attached to the aperture grille and are designed to dampen and prevent shock and vibrate to the aperture grille.

Black fine vertical lines are visible on the screen. Shock and vibration may cause the aperture grille misaligned, which results few fine black vertical lines across the screen 	Degaussing the screen. Tap lightly (do not hit) the side of the monitor. *If above mentioned remedies do not work, please do the following:* *1.Display full white window or wallpaper background over the area where the black lines appears.* *2.Set Contrast and Brightness to the maximum, wait for a moment until the problem is corrected. You may try to tap lightly the side of the monitor.*

Energy Declaration

This monitor is equipped with a function for saving energy, which supports the VESA Display Power Management Signaling (DPMS) standard. This means that the monitor must be connected to a computer, which also supports the VESA DPMS standard to fulfill the requirements of the NUTEK specification 803299/94/96. The time settings for switching to a power saving mode are adjusted from the system unit by software. From the first indication of inactivity to power saving position A2 the total time must not be set to more than 70 minutes.

1. VESA Power-Management Proposal

H. sync	V. sync	Video	State
Off	On	Blank	Stand-by
On	Off	Blank	Suspend
Off	Off	Blank	Off

2. Power Consumption (120/230 Vac)

NUTEK	VESA state	LED indicator	Power Consumption
Normal operation	On	Green	< 100W
Power Saving Position A1	Suspend	Amber	≤ 15W
Power Saving Position A2	Off	Amber	≤ 5W

** Recovery Time ≤ 3 Sec.*

Specification

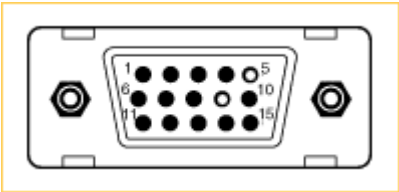
Color Picture Tube	43.1 cm / 17" (16" viewable screen size) diagonal measurement, 90 degree deflection, FD Trinitron® CRT, anti-glare, anti-reflection, anti-static, medium short persistence phosphor, dark bulb
AG Pitch	0.24 mm, (at center)
Input Signal	Analog 0.7V peak to peak separate TTL Positive or Negative
Scan Frequency	Horizontal: 30 to 97 kHz automatically Vertical: 50 to 160 Hz automatically
Max. Resolution	1600 x 1200 pixel, non-interlaced
Display Colors	Analog input, unlimited colors
Pixel Rate	202 MHz
Plug & Play	DDC 1 / DDC 2B
Power Supply	100-240 VAC, 50/60 Hz (automatically)
Power Consumption	100W max.
Dimensions	412(W) x 415(H) x 430.5(D) mm
Weight	20.1 kgs(G.W.), 17.6kgs(N.W.)
Environment Consideration	Operating Temperature: 0°C to 35°C Humidity: 20% to 80% Storage Temperature: 0°C to 60°C Humidity: 10% to 90%

Note: Specifications are subject to change without notice.

Reference Information

This color monitor supports multiple operating platforms such as IBM compatible and Macintosh family computers. This section provides you with detailed information on pin assignment of the D-Sub connector and the preset timing chart of the prevailing video standards.

Connector Pin Assignments



Male Mini D-15 Connector

Signal	15 Pin Mini D-Sub
Red Video	1
Green Video	2
Blue Video	3
Horizontal Sync	13
Vertical Sync	14
Ground	4,6,7,8,10,11
No Connection	5,9
SDA (DDC)	12
SCL (DDC)	15

Preset Timing Chart

Note: *This monitor is equipped with a microprocessor which allows the user to set his own preferred mode(s) beyond those standard mode listed below.*

To reduce visual tiredness and eyestrain, it is recommended to choose the highest refresh modes available.

Resolution	Format	Horizontal Frequency (KHz)	Refresh Rate (Hz)
640x480@60Hz	VGA	31.5	60
720x400@70Hz	VGA	31.5	70
800x600@75Hz	VESA	46.9	75
800x600@85Hz	VESA	53.7	85
832x624@75Hz	MAC	49.7	75
1024x768@75Hz	VESA	60	75
1024x768@85Hz	VESA	68.7	85
1152x864@75Hz	MAC	67.5	75
1280x1024@75Hz	VESA	80	75
1280x1024@85Hz	VESA	91.1	85