

↪ **15" (13.8" viewable)**

↪ **Ultra High Resolution**

↪ **Plug & Play Ready**

↪ **Multi-Frequency**

↪ **FS Color Monitor**

↪ **OSD Control**

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American federation communication committee (FCC) standard explanation

Based on FCC standard 15th, This machine process test, Conforms to the B level digital equipment limit and the stipulation. These limits are for prevent the home use installment the harmful radio-frequency interference but to stipulate. This machine when use can produce the electromagnetic wave, If not according to instruction booklet installment and use, Possibly can have the disturbance to the radio wave. This machine cannot guarantee in the special installment does not have the disturbance, This may by open and close this machine knew. If this machine creates the disturbance to the television and the wireless apparatus, The user may through below one or several methods interference protection.

Reinstalls the receiving antenna the position

Increases this machine and the receiver distance

This machine power source forked connection in and on receiver different line plug

Please consult the experienced wireless apparatus/The television technical personnel obtains the help

In order to conform to FCC about the radiation limit to stipulate as well as to prevent to the neighbor television and the wireless apparatus disturbance, Needs to use the appendix which stochastically allocates and dispatches. Without authorization confirmed or the merchant, Cannot to this machine carry on the change or the modification at will.

Safety Precautions

- 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.
- Do not place this product on an unstable surface to prevent it from falling.
- To protect this monitor from overheating, slots and openings on the top and bottom of this unit (use for ventilation) should never be blocked.
- Never place the monitor 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 pass by.
- 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.
- Keep 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 have been made
- The product has been dropped or damaged
- The product does not achieve maximum performance

1. Introduction

1.1 General Information

Thank you for purchasing our monitor. This monitor is a high performance, multi frequency color monitor. With state-of-the-art electronics, this monitor is capable of resolutions up to non-interlacing 1024 x 768. The intelligent microprocessor-based design enables the monitor to automatically synchronize and adjust to most common video modes.

The OSD Control allows you to easily and simply make precise screen format adjustments, while user-programmability provides cross-platform compatibility.

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

We truly believe you will enjoy using the monitor. Thank you for choosing our monitor.

1.2 Features of the Monitor

- Multi-scanning at horizontal frequency of 30KHz to 54KHz and vertical frequency of 50Hz to 120Hz
- 15-inch (13.8" viewable).
- Normal flat square tube: 0.28mm dot pitch.
- Microprocessor-based design with digital controls.
- Plug and play ready
- Unlimited colors
- As well as VESA® resolution standards
- Universal power supply
- Tilt & swivel base
- MPR II compliant
- VESA® Display Power Management (DPMS™) compatible

- Microsoft Windows® 95/98/NT/2000/ME compatible
- VESA® Display Data Channel (DDC) 1/2B compatible

2. Installation

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 Check List

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

- Monitor
- Tilt & Swivel base
- Power cord
- User's guide

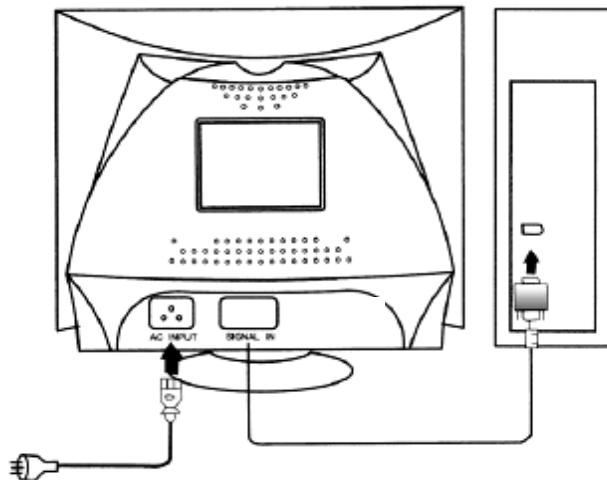
If any of these items is missing, please contact your dealer for technical support and customer service.

2.2 Install The Monitor Base

Turn the monitor upside down. Align the eight holders on the swivel base to the holes on the bottom of the monitor. Press it firmly downward and push it forward (toward the monitor front) until the two latches match.

2.3 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.



2.4 Signal Cable Connection

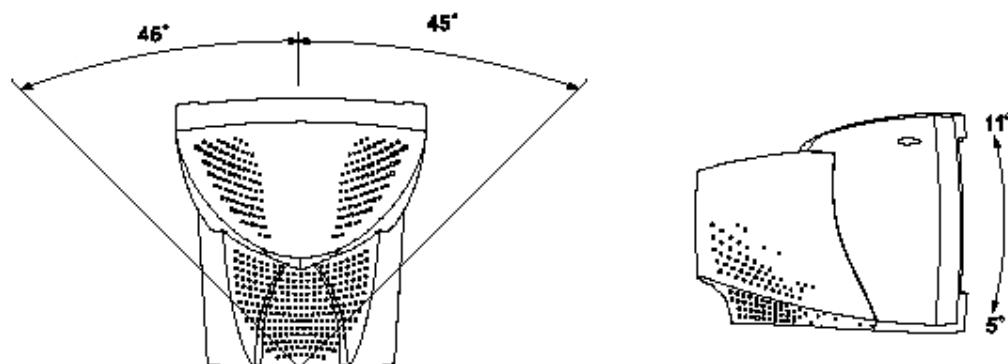
The monitor has an built-in signal cable with a male 15-pin mini D-sub connector. Attach this connector to the female 15-pin receptacle of your video adapter. Be cautious when inserting the cable properly into the graphics card adapter. If the cable does not seem to fit, it may be facing the wrong direction.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

2.5 Power On

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

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.



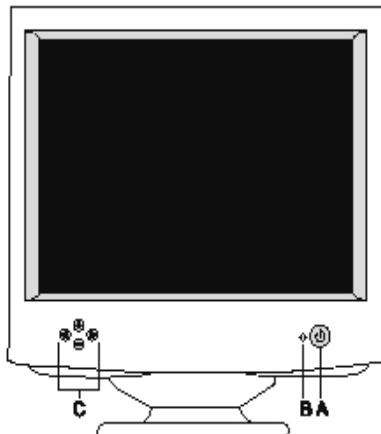
Note: To minimize eye fatigue, we suggest you allow a minimum viewing distance of 18 inches.

3. Operation

Make sure you carefully follow the “Safety” and “Installation” instructions before operating your monitor. You may also want to familiarize yourself with the “Image Adjustment” section of this manual before making any operational adjustments.

3.1 To operate the monitor

1. Turn on the monitor by pressing the power button once. The power LED lights up and the monitor demagnetizes itself for about 4 seconds.
2. Power up the system.
3. Once the system is completely powered up, the LED power indicator on the monitor should be green. If not, check the connections.
4. Use On-Screen Display to adjust the controls needed to get the best picture. Experiment with the display settings to choose the optimized image size and position for you (refer to the Image Adjustment section of this manual for Instructions).



A. Power button

B. LED power indicator

C. Function key

Note: If you need to disconnect the power cord from the wall socket or monitor for any reason, be sure to wait at least 30 seconds after you turn off the monitor before you unplug it. This allows the monitor to discharge any static electricity from the screen surface.

3.2 Image Adjustment

The four control keys are designed to provide full user-friendly programming capabilities in one simple-to-use location. This allows you to choose either of the control keys and make necessary adjustments.

To adjust visual settings:

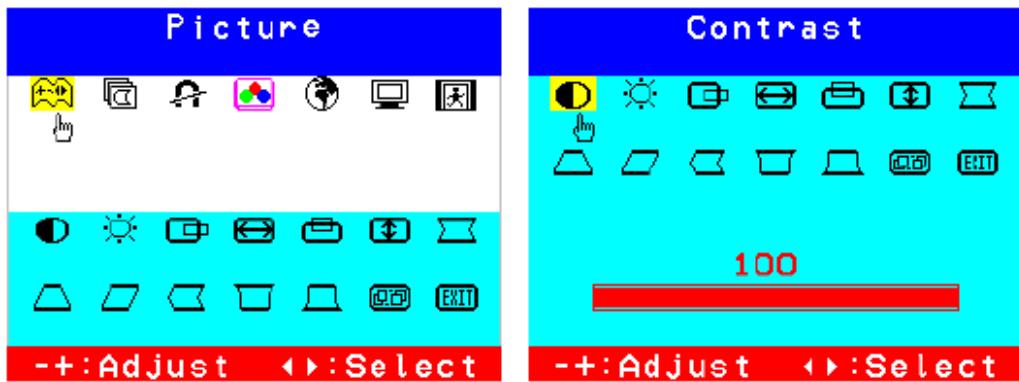
1. Press “ - ” or “ + ” or “ < ” or “ > ” and then OSD menu will appear.
2. Press “ < ” or “ > ” to locate the cursor where you want to access.
3. Press “ - ” or “ + ” to confirm your selection.
4. Press “ - ” or “ + ” to adjust the value you want.
5. Press “ < ” or “ > ” to EXIT icon and press “ - ” or “ + ” and then OSD menu will be closed or keep the key free for at least 12 seconds and then OSD menu will be closed automatically.

3.3 OSD main menu

1. Picture: Screen main adjustment.
 - A. **Contrast** : Adjust the contrast level on the display.
 - B. **Brightness** : Adjust the brightness level on the display.
 - C. **H-Position** : Shift the display to the right or left.
 - D. **H-Size** : Increase and decrease the display width.
 - E. **V-Position** : Shift the display up or down.
 - F. **V-Size** : Increase and decrease the display height.
 - G. **Pincushion** : Bend the screen display inward or outward on the fringe.
 - H. **Trapezoid** : Adjust the top and bottom display to even width.
 - I. **Parallel** : Adjust the tilt of the display to the left or right.
 - J. **Bow** : Bend the sides of the display in the same direction.
 - K. **Top Corner** : Square off the display's top corners.
 - L. **Bottom Corner** : Square off the display's bottom corners.
 - M. **Recall** : While in a preset video mode, press the “ - ” or “ + ” key to reset all customized display settings to factory default setting.

Note: Press “ < ” or “ > ” key to locate the cursor where you want to access.

Press “ - ” or “ + ” key to adjust the value you want.



2. Geometry : Screen secondary adjustment.

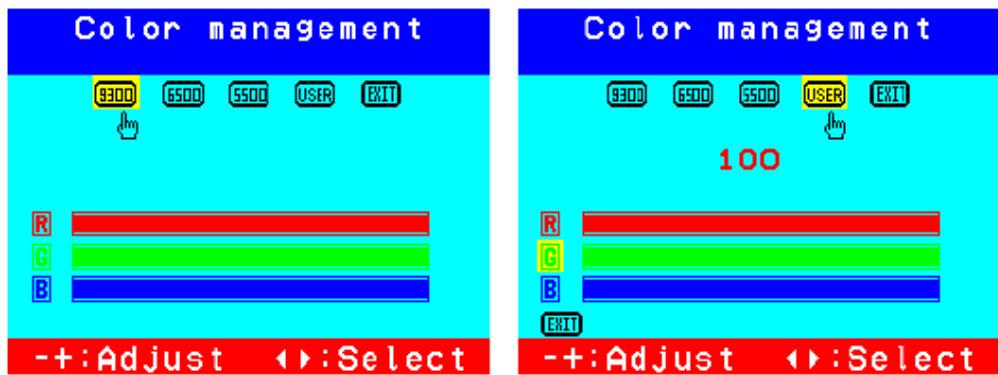
- a. Rotation : Adjust the tilt of the display.
- b. V-Moire : Reduce the optical effect of wavy lines or ripples on the display image in the horizontal direction. (Over adjustment the moire will cause the effect of the shaking and poor focus on the screen .)
- c. H-Moire : Reduce the optical effect of wavy lines or ripples on the display image in the vertical direction. (Over adjustment the moire will cause the effect of the shaking and poor focus on the screen .)
- d. V-Focus : Adjust the focus of the display image.

3. Degauss : Press the “ - ” or “ + ” key to remove any discoloration from the display image due to electromagnetic field buildup.

4. Color management :

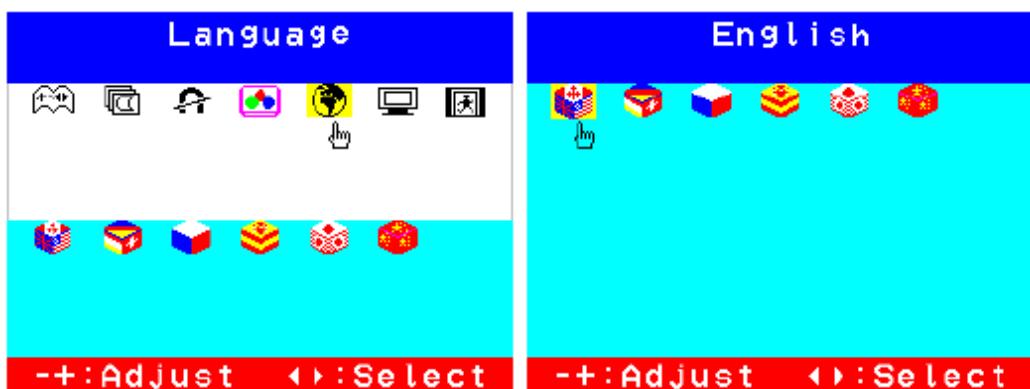
- (a) Adjust color temperature in three different preset modes
- (b) Adjust user's customized R,G,B color level

- a. Press “ < ” or “ > ” to color temperature.
Press “ - ” or “ + ” to select user's preferred color temperature mode which remains active unless the alternation is made next time.
- b. Press “ - ” or “ + ” to USER icon to define color temperature.
Press “ < ” or “ > ” to choose R and/or G and/or B for adjustment.
Press “ - ” or “ + ” key to adjust the values of RGB color level.



5. Language : Allow user to select OSD menu in preferred languages.

Press “ - ” or “ + ” to make the selection.



6. Others : Other function selections.

- OSD H-Location : Allow user to adjust the horizontal position of OSD menu on the display.
- OSD V-Location : Allow user to adjust the vertical position of OSD menu on the display.
- Information : Current display resolution, Hsync frequency, Vsync Frequency and polarity.
- Smart setting : Remind user to take a break from starting at the screen after preset time period.



Press “ - ” or “ + ” to set the timer. The message box will appear on the lower right hand side of the screen at the preset time. To avoid the interference of the message box, simply press any key (except power key). It will appear again at the preset time in later sessions.



7. Exit : Terminate OSD menu on the screen.

When the monitor detects an excessive signal input, the warning message box (illustrated below) will appear on the screen to refrain user from further usage and advise user to adjust the signal input in compliance to the stated safe range.



When the monitor does not have the signal input, Warned the news frame (the under illustration) will be able on the screen to appear in order to avoid the user will make the further movement, 8 seconds will meet the monitor to be able from now on to enter the standby model.



4. Specifications

CRT	15-inch (13.8" viewable) diagonal
Dot pitch	0.28mm
Max Resolution	1024 x 768 / 60 Hz
Display color	Unlimited
Scanning frequency	Horizontal: 30K – 54 KHz Vertical: 50 – 120 Hz
Display area	Factory presetting: 270 x 202 mm (W x H)
Video bandwidth	72 MHz (3dB)
Input signal	Video: Analog, 0.7±0.1Vp-p, 75ohm ±5% Sync: Separate TTL level
Power supply	100 - 240 Vac, 50/60 Hz
Power consumption	Normal: < 65 W Standby: < 5 W
Recommended ambience	Operating temperature: 41°F~104°F (5°C~40°C) Operating humidity: 10~90 % Storage temperature: -4°F~140°F (-20°C~60°C)
Dimensions	357 x 362 x 373 mm (W x H x D)
Weight	Net: 13 Kg (28.6 lbs) Gross: 15 Kg (33 lbs)
Power Management	EPA Energy Star®, VESA DPMS™

5. Power Management

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 5 watts of power consumption.

There are three status to power management: On, Standby, 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 LED will flash in orange, indicating that the monitor has been powered down to Standby mode. In the Standby 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.

Model	Signal			Power	
	H-signal	V-signal	Video signal	LED Lamp	Consumption
Normal	Activated	Activated	Activated	Green	<65W
Stand by	Blanked	Activated	Blanked	Orange	<5W
Suspend	Activated	Blanked	Blanked	Orange	<5W
OFF	NIL	NIL	NIL	Orange	<5W

6. Timing Guide

This multifrequency monitor operates at horizontal frequency of 30K to 54KHz and vertical frequency of 50 to 120 Hz. The microprocessor-based design offers auto-synchronization.

This monitor offers 12 preprogrammed settings 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, and can accept any signal within its frequency range.

Preset Modes	Resolution		Frequency	
	H(Pixel)	V(Pixel)	H(KHz)	V(Hz)*
1	640	480	31.5	60
2	640	480	37.5	75
3	720	400	31.5	70
4	800	600	46.9	75
5	800	600	53.7	85
6	1024	768	48.4	60

*Refresh rate.

7. Pin Assignment

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

Pin No.	Assignment
1	Red Video input
2	Green video input
3	Blue video input
4	Ground
5	NC
6	Red video ground
7	Green video ground
8	Blue video ground
9	NC
10	Ground
11	Ground
12	DDC SDA
13	Horizontal sync
14	Vertical sync
15	DDC SCL

