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## Warnings:

1. Read all of these instructions. Save these instructions for later use, Please
2. Follow all warning and instructions marked on the product.
3. Unplug this monitor from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use attachments not recommended by the monitor manufacturer as they may cause hazards.
5. Do not use this monitor near water. For example near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc...
6. Do not place this monitor on an unstable cart, stand, or table. The monitor may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart or stand recommended by the manufacturer or sold with monitor. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.
7. Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to insure reliable operation of the television receiver and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the monitor on a bed, sofa, rug, or other similar surface. This monitor should never be placed near or over a radiator or heat register. This monitor should not be placed in built-in installation such as a bookcase unless proper ventilation is provided.
8. This monitor should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied in your home, consult your monitor dealer or local power company.
9. This monitor is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
10. Do not allow anything to rest on the power cord. Do not locate this monitor where the cord will be abused by persons working on it.

## IMPORTANT SAFEGUARDS

- 11. For added protection for this monitor, when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the monitor due to power-line surges.*
- 12. Do not overload wall outlets and extension cords as this can result into fire or electric shock.*
- 13. Never push objects of any kind into this monitor through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the monitor.*
- 14. Do not attempt to service this monitor yourself since opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.*
- 15. Unplug this monitor from the wall outlet and refer servicing to qualified service personnel under the following conditions:*
- When the power cord or plug is damaged or frayed.*
  - If liquid has been spilled into the monitor.*
  - If the monitor has been exposed to rain or water.*
  - If the monitor does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls, may result in damage and will often require extensive work by a qualified technician to restore the monitor to normal operation.*
  - If the monitor has been dropped or the cabinet has been damaged.*
  - When the monitor exhibits a distinct change in performance thus indicated a need for service.*
- 16. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or other hazards.*
- 17. Upon completion of any service or repairs to this monitor, ask the service technician to perform routine safety checks to determine that the monitor is in safe operating condition.*
- 18. The socket outlet shall be near the equipment and shall be easily accessible.*
- 19. The power supply cord is used as the main disconnect device.*

## 1. Introduction

### 1.1. General Information

This monitor is a high-performance intelligent multi-scan color monitor. It is designed to be compatible with all display modes between the working frequency. You may use this color monitor with a computer which utilizes IBM VGA, XGA and all VESA non-interlaced SVGA and EVGA resolutions in the above mentioned frequencies ranges. The OSD control allows you to easily and simply make precise screen format adjustments, while user programmability provides cross platform compatibility. The visible image area (VIA), which is the actual viewing area of the screen, is 9.06 inches on the 10-inch monitor.

### 1.2 Features

- Scan frequency :  
Horizontal : 30KHz – 48KHz  
Vertical : 50Hz – 150Hz
- Microprocessor-based design with OSD (On Screen Display) control.
- Compatible with standard IBM VGA, EXTENDED VGA, super VGA, IBM XGA modes, as well as VESA resolution standards.
- Universal power supply.
- MPR II compliant. (optional)
- EPA Energy Star compliant power saving.
- VESA Display Power Management (DPMs) compatible.
- Microsoft Windows 95/Windows 98 compatible & VESA Display Data Channel (DDC) 1/2B compatible.
- 5 country language on OSD which you can choice. It includes English, Spanish, German, France, Chinese.

### 1.3 Check list

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

- Your monitor
- This user's manual

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

**NOTE:** Be sure to save original box and all packing material for future transport of the monitor.

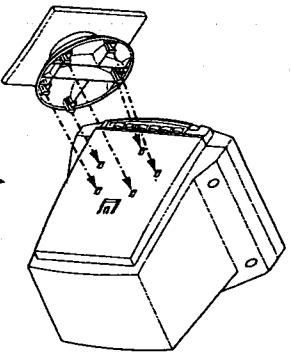
## **2. Installing the monitor**

To install the monitor, ensure that the power to the monitor computer system, and other attached devices is turned off, and follow these steps :

### **2.1. Installing and removing the swivel base**

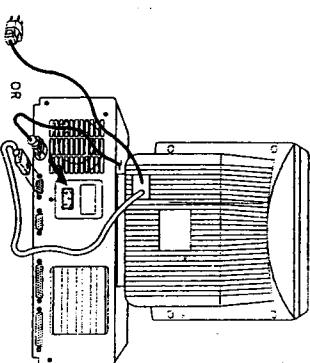
To attach the swivel base to the monitor, do the following :

1. Carefully turn the monitor on its side or upside-down.
2. Locate the cavities at the bottom front of the monitor.
3. Insert the pegs "3a" on the swivel base into these cavities. Push firmly toward (CRT direction) the main unit until the latch "3b" at the bottom of the monitor clicks shut. This locks the swivel base to its place.
4. To remove the swivel base, use thumb to push the "3b" swivel base and pull down the latch properly. The base removes from the attached position.
5. The socket-outlet shall be installed near the equipment and shall be easily accessible section.



### **2.3. Signal cable connection**

The monitor has an built-in signal cable with a male 15-pin mini D-sub connection. Attach this connector to the female 15-pin receptacle of your video adapter and lock the two screws to ensure firm grounding



### **2.4 Power ON**

Switch ON the power to both the monitor and your computer. After the monitor is power ON, the LED lights up green. If the LED become to flash, check the video cable connection.

### **2.5 Adjust the picture**

Adjusting the picture is necessary to obtain the best visual display. A complete description of the control function is covered in the next section.

**"OPERATION"**

## **2.2 Power cable connection**

Plug power cord into the power supply of PC or into the wall outlet of the power. A three-wire cord is provided as a safety precaution to ensure proper electrical grounding

### 3. Operation

The front control panel is shown in the following illustration.

**Step 6 :** To make adjustment, press **▲** key to increase or press **▼** key to decrease the setting.

**Step 7 :** Press **MENU** key again to store the change, the scroll bar will change to green. You can select other function to make adjustments. Also you can select **EXIT** icon and press **MENU** key to go back main menu.

#### 3.4 OSD menus

##### 1. Main menu

OSD main menu of controls give you an overview of the selection of controls available.



#### 3.1 Power on/off switch

This button is used to turn the monitor on and off.

#### 3.2 Power (DPMS) indicator

This indicator lights up green when the monitor operates normally. If the monitor is energy saving (stand-by / suspend), this LED become to flash.

#### 3.3 Using the OSD control

This OSD control knob is a multi-function controller. Please following the procedure of selection and adjusting an item using the OSD system as below steps for main functions adjustment.

Step 1 : Press **MENU** key to activate the OSD menu.

Step 2 : Press **▲** or **▼** to scroll the highlight around the main-functions list.

Step 3 : When the desired function is highlight, press **MENU** key the highlight will stay at first icon of sub-menu which is at bottom of menu.

Step 4 : Press **▲** or **▼** key to scroll the highlight through the sub-menu.

Step 5 : Press **MENU** key again, the scroll bar will change the color from green to blue.

**EXIT (☒)** : Exit the OSD controls. (Turning off the OSD window.)

There are addition information in the top and bottom of main menu. The descriptions as below :

a. Function explanation

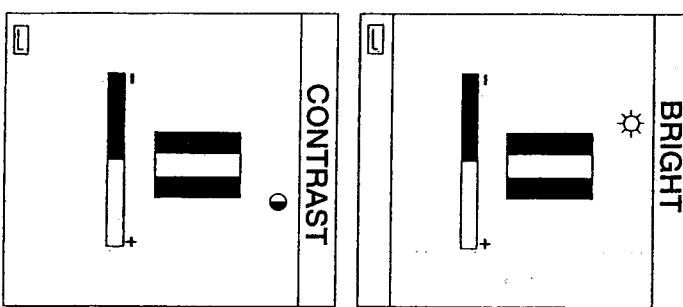
At top of menu. Give the highlight icon a function explanation in five language.

b. There is sub-menu at bottom of main menu.

2. Sub-menu

You can choose the function you need according to 3.3 each function detail are described as following.

A. BRIGHTNESS AND CONTRAST



You can adjust brightness and contrast after press knob.

**CONTRAST** : Adjust the image brightness in relation to the background.

**BRIGHTNESS** : Adjust the overall image and background screen bright.

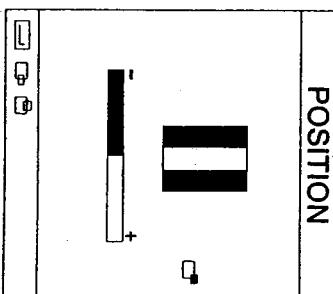
B. SIZE



**H-SIZE** : To increase or decrease the horizontal size of the image.  
**V-SIZE** : To increase or decrease the vertical size of the image.

**EXIT** : Exit to the main menu.

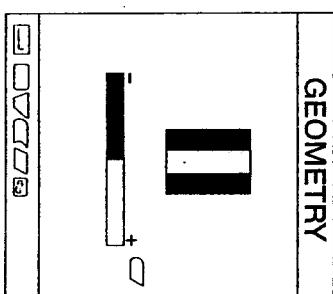
C. POSITION



**H-POSITION** : To move the picture image horizontal left and right.

**V-POSITION** : To move the picture image horizontal left and right.

D. GEOMETRY



**PINCUSHION** : To increase or decrease the curvature of the sides either inward or outward.

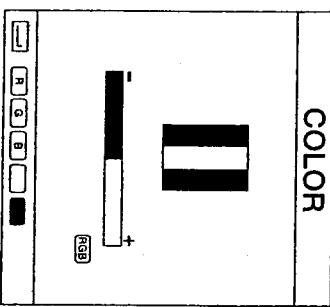
**TRAPEZOIDAL** : To increase or decrease the bottom of the screen to be the same as the top.

**PARALLELOGRAM** : To increase or decrease the tilt of the sides either to the left or right.

**UNBALANCE** : To increase or decrease the curvature of the sides either to the left or right.

**ROTATION** : Rotates the entire display clockwise or counterclockwise.

#### E. COLOR



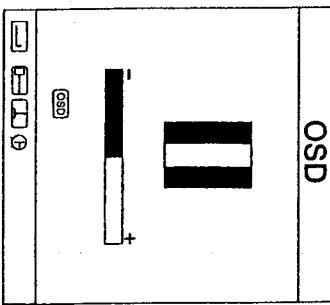
This control adjusts the color temperature of the screen image. 9300°K and 6500°K are preset by factory. You can not to adjustment.

**RED/GREEN/BLUE** : User color.

9300°K: Which is bluer and brighter.  
6500°K: Which is redder and closer to paper white.

You can adjust the individual color gun intensity by yourself. Increase or decrease red, green, blue depending upon which is selected.

#### F. OSD

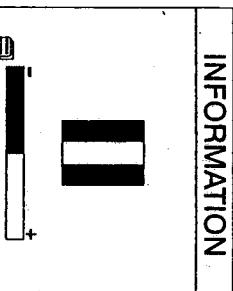


**H-POSITION** : To move the picture image horizontally left or right.

**H-POSITION** : To move the picture image vertically up or down.

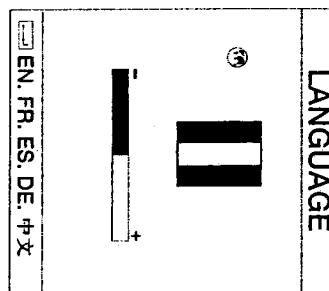
**OSD-TIME** : If don't press any key, after this time, the adjustment set will be saved and OSD will disappear.

#### G. INFORMATION



**INFORMATION** : Display present mode resolution and vertical frequency.

#### H. LANGUAGE



This control allows the user to choose the language to explain the function that you adjust.

### 3.5 Timing Guide

This multi-scanning monitor can automatically detect and display several video modes. This monitor offers 7 factory preset modes 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.

Mode	Resolution (dots x hns)	Horizontal Freq. (kHz)	Vertical Freq. (Hz)	Remark
IBM/VGA	720 x 400	31.47	70	Non-interlaced
IBM/VGA	640 x 480	31.47	60	Non-interlaced
VESA/75	640 x 480	37.50	75	Non-interlaced
VESA/60	800 x 600	37.88	60	Non-interlaced
VESA/SVGA	800 x 600	48.08	72	Non-interlaced
VESA/75	800 x 600	46.88	75	Non-interlaced
IBM/XGA	1024 x 768	48.39	60	Non-interlaced

### 3.7 Power management

This monitor meets VESA DPMS (Display Power Management Signaling) standards, and complies with both the EPA's energy star requirements and Europe's TCO NUTEK'S power management requirement. The following is the description of the power indicator for the power saving modes.

Power Management Definition					
VESA DPMS			POWER SAVING STATES		
MODE	VIDEO	H-SYNC	V-SYNC	POWER USED	POWER SAVING(%)
ON	ACTIVE	YES	YES	NORMAL	0%
STAND-BY	BLANKED	NO	YES	<15 watts	85% ORANGE
SUSPEND	BLANKED	YES	NO	<15 watts	85% ORANGE
OFF	BLANKED	NO	NO	<5 watts	93% ORANGE

NOTE : 1. This monitor is Energy Star compliant when used with a computer equipped with DPMS.

2. The monitor automatically goes through the power management step when it is idle. To release the monitor from the power saving condition, press any key on the keyboard or mouse.

This monitor features the VESA DDC (Display Data Channel) standard which, when used with a DDC compatible video card, will simplify the monitor's set up. With VESA DDC 1/2B, when the monitor is powered up, it will automatically notify a Windows 95/Windows 98 host computer of its scanning frequencies, capabilities. Windows 95/Windows 98 will automatically recognize the connection of the monitor and select the appropriate display resolution

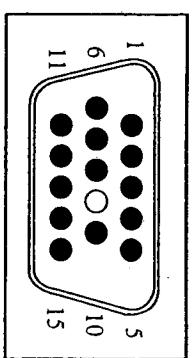
## 4. Technical information

### 4.1 Products specifications

Picture tube	10-inch (25.40cm) diagonal
Size:	0.26mm
Dot pitch:	Tinted screen glass non-glare, black matrix
Surface/transmission:	9.06 (23cm) diagonal
Maximum viewable area	170mm(H)x125mm(V)(Adjustable)
Display size(factory setting)	6.69 inch(H)x4.92 inch(V)(Adjustable)
Synchronization range	
Horizontal frequency:	30-48KHz
Vertical frequency:	50-150Hz
Max. Resolution	1024x 768
Max. Video Bandwidth	75MHz
Power supply (universal)	AC(100-240V,50/60Hz
Input Voltage:	70 watts maximum
Consumption:	
Input signal	
Display Analog Input	Sync : Separate sync. TTL level Unlimited Number of colors (depends upon video card)
Weight	9.01kg (19.8LB) 7.01kg (15.4LB)
Gross	315x 256 x 255 (mm) 12.40 x 10.08 x 10.04 (inch)
Unit dimension (L x W x H)	
Operating condition	
Temperature:	0°C - 40°C (32°F to 104°F)
Humidity:	20% - 80%
Storage condition	
Temperature:	-20° ~ 55°C (-4°F to 131°F)
Humidity:	10% ~ 90%
DDC1/DDC2B	VESA standard

**NOTE :** All technical specifications are subject to change without notice.

### 4.2 Signal connector pin assignment



Pin	Assignment
1	Red Video
2	Green Video
3	Blue Video
4	Ground
5	Ground
6	Red Ground
7	Green Ground
8	Blue Ground
9	No connection
10	Ground
11	Ground
12	SDA (For DDC)
13	H. Sync.
14	V. Sync.
15	SCL (For DDC)

#### 4.3 Troubleshooting

If your monitor is not performing properly, use the following troubleshooting for quick solutions to common problems. If the problem persists, call the dealer. Where you purchased the monitor.

##### No Picture:

Please check these items

- Power cord and signal cable are securely connected.
- Monitor in power save mode?
- Adjust the brightness and contrast controls.

##### Display image is too large or small:

- Use the function keys to adjust the image.

##### Picture is scrolling or unstable:

- Signal cable should be completely attached to the computer.
- Check the signal cable pin assignments incorrect?

##### Color is abnormal:

- Magnetic object nearby?
- Signal cable pin assignments incorrect?
- Signal cable properly connected?

##### Image is not correctly shaped:

- A new video mode is selected
- User control has not yet been adjusted. Use the function keys to adjust image.

##### CAUTION:

Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** The use of a non-shielded interface cable with this equipment is prohibited.

## FEDERAL COMMUNICATIONS COMMISSION(F.C.C)STATEMENT

This equipment has been tested and found to comply with the limits of 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:

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

## **WICHTIGE SICHERHEITSHINWEISE**

1. Bitte lesen Sie sich diese Hinweise sorgfältig durch.
2. Heben Sie diese Anleitung für den späteren Gebrauch auf.
3. Vor jedem Reinigen ist das Gerät vom Stromnetz zu trennen. Verwenden Sie Keine Flüssigoder Aerosolreiniger. Am besten dient ein angefeuchtetes Tuch zur Reinigung.
4. Um eine Beschädigung des Gerätes zu vermeiden sollten Sie nur Zubehörteile verwenden, die vom Hersteller zugelassen sind.
5. Das Gerät ist vor Feuchtigkeit zu schützen.
6. Bei der Aufstellung des Gerätes ist auf sicheren Stand zu achten. Ein Kippen oder Fallen könnte Verletzungen hervorrufen. Verwenden Sie nur sichere Standorte und beachten Sie die Aufstellhinweise des Herstellers.
7. Die Belüftungsöffnungen dienen zur Lufzirkulation die das Gerät vor Überhitzung schützt. Sorgen Sie dafür, daß diese Öffnungen nicht abgedeckt werden.
8. Beachten Sie beim Anschluß an das Stromnetz die Anschlußwert.
9. Die Netzanschlußsteckdose muß aus Gründen der elektrischen Sicherheit einen Schutzeleiterkontakt haben.
10. Verlegen Sie die Netzanschlußleitung so, daß niemand darüber fallen kann. Es sollte auch nichts auf der Leitung abgestellt werden.
11. Alle Hinweise und Warnungen die sich am Geräten befinden sind zu beachten.
12. Wird das Gerät über einen längeren Zeitraum nicht benutzt, sollten Sie es vom Stromnetz trennen. Somit wird im Falle einer Überspannung eine Beschädigung vermieden.
13. Durch sie Lüftungsöffnungen dürfen niemals Gegenstände oder Flüssigkeiten in das Gerät gelangen. Dies könnte einen Brand bzw.elektrischen Schlag auslösen.
14. Öffnen Sie niemals das Gerät. Das Gerät darf aus Gründen der elektrischen Sicherheit nur von autorisiertem Servicepersonal geöffnet werden.
15. Wenn folgende Situationen auftreten, ist das Gerät von Stromnetz zu trennen und von einer qualifizierten Servicestelle zu überprüfen:
  - a-Netzkable oder Netzstecker sind beschädigt.
  - b-Flüssigkeit ist in das Gerät eingedrungen.
  - c-Das Gerät war Feuchtigkeit ausgesetzt.
  - d-Wenn das Gerät nicht der Bedienungsanleitung entsprechend funktioniert oder Sie mit Hilfe dieser Anleitung keine Verbesserung erzielen.
  - e-Das Gerät ist gefallen und/oder das Gehäuse ist beschädigt.
  - f-Wenn das Gerät deutliche Anzeichen eines Defektes aufweist.
  16. Bei Reparaturen dürfen nur Originalersatzteile bzw. den Originalteilen entsprechende Teile verwendet werden. Der Einsatz von ungeeigneten Ersatzteilen kann eine weitere Beschädigung hervorrufen.
  17. Wenden Sie sich mit allen Fragen, die Service und Reparatur betreffen, an Ihren Servicepartner. Somit stellen Sie die Betriebssicherheit des Ihres Gerätes sicher.
  18. Der Arbeitsplatzbezogene Schalldruckpegel nach DIN 45 635 betrgt 70dB (A) oder weniger.
  19. Die Steckdose muß nahe dem Gerät angebracht und leicht zugänglich sein.
  20. Es wird aus ergonomischen Gründen empfohlen, die Grundfarbe blau nicht auf dunklem Untergrund zu verwenden (schlechte Lesbarkeit und erhöhte Augenbelastung bei zu geringem Achromatikkontrast wäre die Folge).
  21. ISO9241-3/18 for ergonomics.
  22. Zum Netzanschluß dieses Gerätes ist eine geprüfte Leitung zu verwenden. Für einen Neustrom bis 6A und einem Gerätengewicht größer 3Kg ist eine Leitung nicht leichter als H05VV-F mit einem Leitungsquerschnitt von 0.75 mm<sup>2</sup> einzusetzen.