

English

COLOR MONITOR

Model No : 519B

USER'S GUIDE



IMPORTANT SAFEGUARDS

1. Read all of these instructions.

2. Save these instructions for later use.



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.



7. Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to ensure reliable operation of the monitor 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 should never be placed near or over a radiator or heat register. This monitor should not be placed in a 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 power supplied to your home, consult your monitor dealer or local power company.



9. This monitor is equipped with a 3-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 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 walking on it.



11. Follow all warnings and instructions marked on the monitor.



12. For added protection for this monitor during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the set due to lightning and powerline surges.

13. Do not overload wall outlets and extension cords as this can result in fire or electric shock.

14. 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.

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



16. Unplug this monitor from the wall outlet and refer servicing to qualified service personnel under the following conditions:

a. When the power cord or plug is damaged or frayed.

b. If liquid has been spilled into the monitor.

c. If the monitor has been exposed to rain or water.

d. 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 normal operation.

e. If the monitor has been dropped or the cabinet has been damaged.

f. When the monitor exhibits a distinct change in performance this indicates a need for service.

17. 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 part. Unauthorized substitutions may result in fire, electric shock, or other hazards.



18. 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.

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

NOTE : 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 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 to 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.

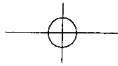
CAUTION: Any changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

CANADIAN DEPARTMENT OF COMMUNICATIONS COMPLIANCE STATEMENT

This digital apparatus does not exceed the Class A/Class B (whichever is applicable) limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Avis de conformité aux normes du Ministère des Communications du Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Class A/de Class B (selon le cas) prescrites dans le règlement sur le brouillage radioélectrique édicté par le ministère des communications du Canada.



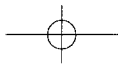
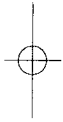
WICHTIGE INFORMATIONEN

Bitte lesen Sie alle diese Informationen, bevor Sie das Gerät in Betrieb nehmen! Lesen Sie sich außerdem die Bedienungsanleitung komplett und sorgfältig durch, da nur in diesem Fall eine problemlose Inbetriebnahme erwartet werden kann.

- Achten Sie darauf, daß das Gerät nur in eine 230V Schuko-Steckdose eingesteckt wird.
- Die Steckdose sollte jederzeit frei zugänglich sein um bei einem evtl. auftretenden Notfall das Gerät schnell vom Netz zu trennen.
- Achten Sie desweiteren darauf, daß die Netzanschlußleitung nicht mechanisch beansprucht oder sonstwie beschädigt wird.
- Öffnen Sie das Gerät niemals! Im Inneren befinden sich Teile mit gefährlicher Spannung.
- Bevor Sie das Gerät reinigen, ziehen Sie bitte den Netzstecker aus der Steckdose. Säubern Sie dann das Gerät mit einem feuchten (keinesfalls tropfnassen) Lappen.
- Die in diesem Gerät entstehende Röntgenstrahlung ist ausreichend abgeschirmt (Ortsdosisleistung in 0.1m Abstand weniger als 1.0 μ Sv/h). Beschleunigungsspannung maximal 25Kv.
- Stellen Sie das Gerät an einem ergonomisch günstigen Ort auf und sorgen Sie dafür, daß der Monitor mit nach ZH1/618/10.80 geprüfter Peripherie betrieben wird, da nur unter diesen Umständen ein optimaler ergonomischer Betrieb des Gerätes sichergestellt ist.

Falls Sie dennoch Fragen haben, auf die die Bedienungsanleitung keine hinreichende Antwort geben kann, so kontaktieren Sie bitte den nächsten Fachhändler.

Maschinenlärminformationsverordnung 3. GSGV, 18.01 1991:
Der arbeitsplatzbezogene Schalldruckpegel beträgt 70 dB (A) oder wenigergemäß ISO 7779.





DECLARATION OF CONFORMITY

We, Manufacturer / Importer

DAEWOO ELECTRONICS CO., Ltd
541, 5-Ga, Namdaemoon-Ro, Jung-Gu
Seoul, Korea

declare under our sole responsibility that the product,

Color Display monitor
519B

to which this declaration relates is in conformity with
the following standard(s) or other normative document(s)

Safety : EN60950/1992/A1:1993/A2:1993
EMC : EN 55022/8.1994, EN 50082-1/1992
EN 61000 Part 3/1995

following the provisions of 89/336 EEC-EMC Directive
and the provisions of 73/23 EEC-Low Voltage Directive.

Handed over by : S.R. Yu, Managing Director.
Display Business Division

May. 30, 1998 Seoul Signature:

A handwritten signature in black ink, appearing to read "S.R. Yu", written over a horizontal line.

S.R.YU, Managing Director.
Display Business Division.
DAEWOO ELECTRONICS Co., Ltd



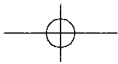
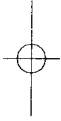
Emission Characteristics Tested by SEMKO (Optional)

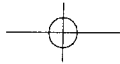
A sample of this type has been tested and has shown compliance with the guidelines in the Swedish document TCO' 95.

This product is also designed for IT power system with phase to phase voltage of 230V.

The power cord is used as a main disconnect device. Disconnect the power cord before servicing.
The outlet must be installed near the monitor and must be easily accessible.

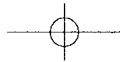
As an ENERGY STAR Partner, Daewoo Electronics Co., Ltd. has determined that this product meets the Energy Star guidelines for energy efficiency.

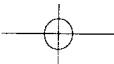




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INTRODUCTION

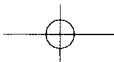
This manual explains how to correctly install, operate and get the best performance from your monitor. Please read this user's manual carefully before installing your monitor, then keep it near your monitor for quick reference.

First, please check that the contents of the carton box corresponds with the following checklist :

- Color monitor
- Power cord
- Tilt/swivel stand
- Speakers
- User's manual
- Warranty Card (Optional)

If there is any item missing or damaged, please contact your dealer. Please keep the carton box and packing materials so that you may properly store or transport your monitor.

English



PRODUCT FEATURES

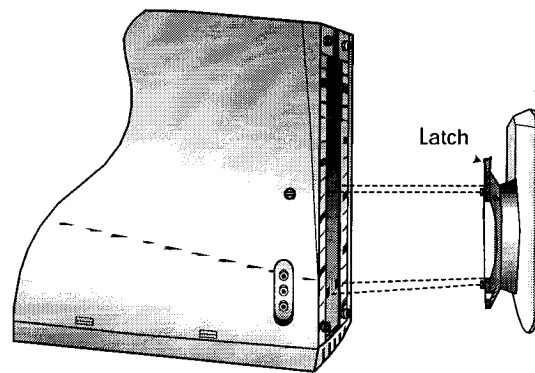
- The multimedia monitor features a pair of high-quality powered stereo speakers delivering a full 5W per channel.
- The convenient and user-friendly on-screen display allows for easy and accurate adjustments of horizontal and vertical screen size and position, geometry and screen color.
- The monitor supports a safe working environment in strict compliance with the MPR II standard for low emissions(TCO 1995 is optional).
- The monitor complies with the VESA Display Data Channel (DDC) specification for "Plug & Play" compatibility. Advanced microcircuitry makes set-up and configuration fast and effortless.
- The monitor features Advanced Color Controls for fine-tuning to meet your own personal tastes or application requirements. Use the on-screen controls to adjust the color temperature, RGB gain value or RGB bias parameter for the best possible screen color and intensity.
- Just activate the higher refresh rates of the monitor to stabilize the screen and eliminate the annoying flicker that contributes to eye-strain and headaches.
- The "borderless" full-screen display capability works under all graphic modes and provides a larger viewing area than conventional monitors, giving you a better picture with more workspace.

SETUP

INSTALLING THE TILT/SWIVEL STAND

1. Ensure that the power to the monitor is off.
2. Set the monitor face down with the underside facing you. Please be careful so as not to scratch the monitor screen.
3. Align the four hooks on the stand with the guide holes of bottom chassis of the monitor.
4. Insert the hooks into the guide holes.
5. Slide the tilt/swivel stand toward the front of the monitor until the latch locks in position.
6. Turn the monitor and the stand upright.

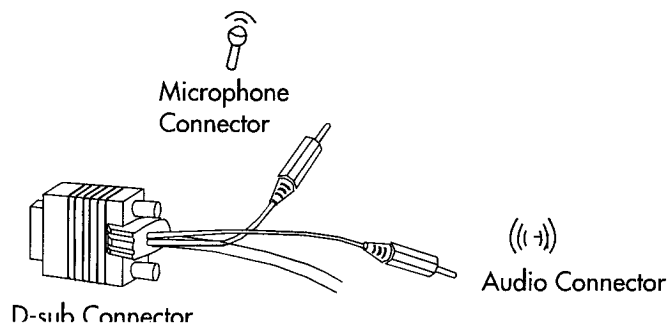
English



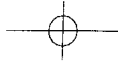
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CONNECTING THE SIGNAL CABLE AND POWER CORD

1. Turn off the computer and monitor.
2. Connect the 15 pin D-sub connector to the output port of the video card in your computer.
3. Tighten the screws of the connector.
4. Plug the purple audio connector into the audio port on your computer.
5. Plug the orange microphone connector into the microphone port on your computer.
6. Plug the power cord into the AC receptacle located at the back of the monitor.
7. Plug the other end of the power cord into the AC outlet.



If your computer doesn't adopt the sound card, never plug the audio connector and microphone connector into the ports on your computer.



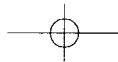
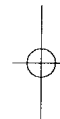
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Handed over by : S.R. Yu, Managing Director.
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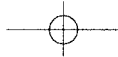
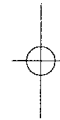
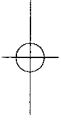
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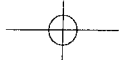
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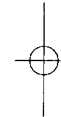
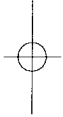
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INTRODUCTION

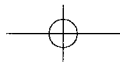
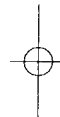
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English



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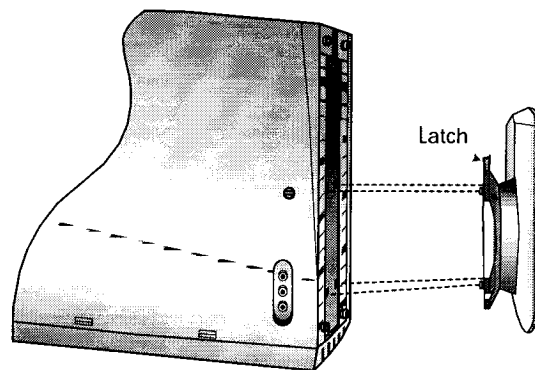
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4. Insert the hooks into the guide holes.
5. Slide the tilt/swivel stand toward the front of the monitor until the latch locks in position.
6. Turn the monitor and the stand upright.

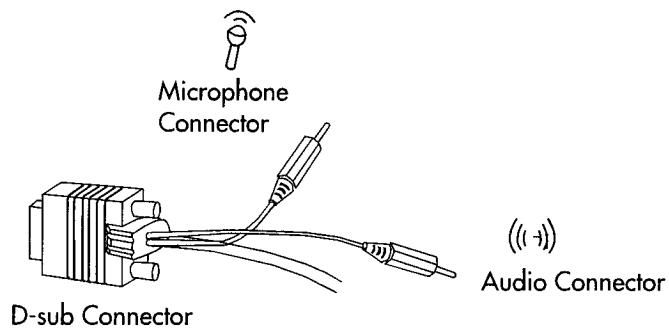
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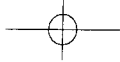
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CONNECTING THE SIGNAL CABLE AND POWER CORD

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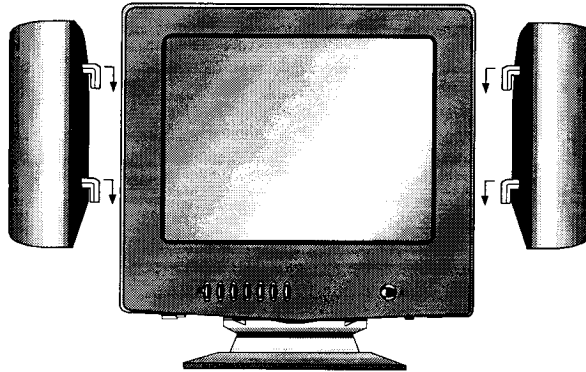
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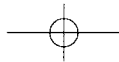
CONNECTING THE SPEAKERS

1. Set the monitor facing you.
2. Align the two hooks on the speaker with the holes of the monitor.
3. Insert the hooks into the holes.
4. Slide the speaker toward the bottom of the monitor.
5. Plug the speaker connector into the speaker socket on the right and left side of your monitor.

English

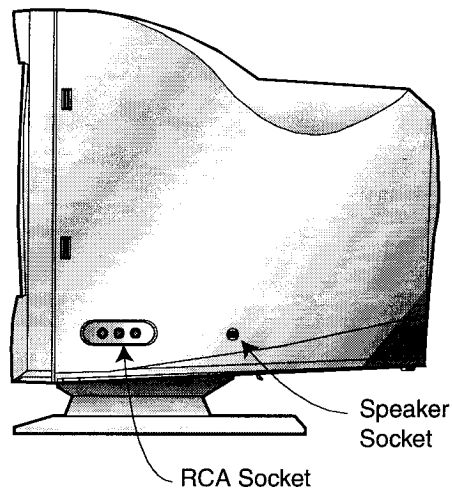


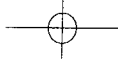
If you want to remove the speakers on the monitor, pull the speakers toward the top of the monitor.



CONNECTING TO THE GAME MACHINE & VCR

1. Turn off the game machine (or VCR) and the monitor.
2. Plug the RCA connector of the game machine (or VCR) into the RCA socket on the right side of your monitor.
3. Turn on the monitor and the game machine.
4. Press the game mode button on the front panel of the monitor to select the game mode.

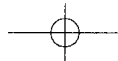
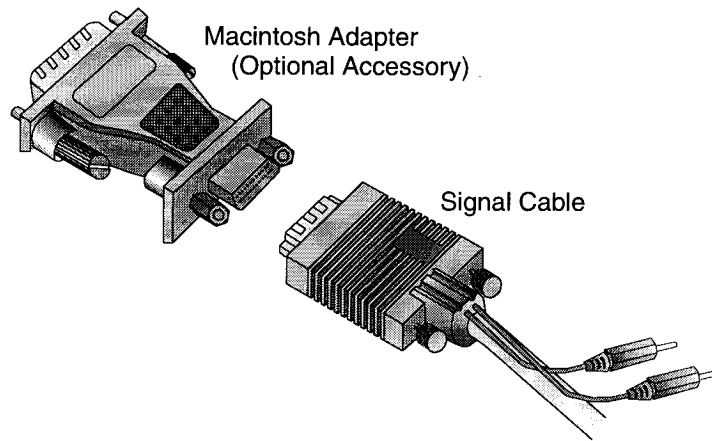




CONNECTING TO THE MACINTOSH COMPUTER

1. Turn off the computer and monitor.
2. Attach the Macintosh cable adapter to the Macintosh video card.
3. Tighten the screws on the cable adapter.
4. Connect the signal cable provided with your monitor to the other end of the Macintosh cable adapter.
5. Tighten the screws between the Macintosh cable adapter and the signal cable.

English



POWER MANAGEMENT SYSTEM

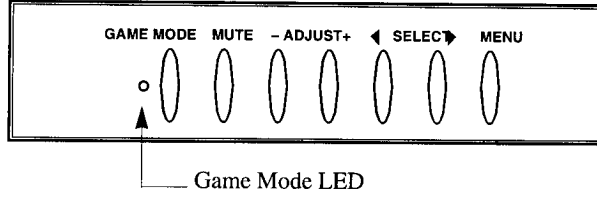
If you use the monitor with a computer which complies with the power saving program, you can set the monitor to go blank when the system has remained unused for a period of time. To specify the period or to disable this feature, set the system timeout field of the computer's system setup program or use special software for power saving. See the computer user's manual for the details of using the system setup. While the monitor is in power saving mode (blank screen), it consumes less power than normal state; the color of the power LED will indicate the state. To restore the screen image, press any key of your keyboard or move your mouse. If the signal cable is connected loosely or disconnected, the power saving feature will operate.









DISPLAY DATA CHANNEL (DDC) FOR PLUG & PLAY

If you use the monitor with a computer which complies with DDC1/2B/2BI of VESA, the Host-Video Card automatically configures itself without your intervention in a way that best fits the attached monitor. The Display Data Channel, DDC, allows the monitor to inform the host system about configuration information for optimum use of the monitor. Use of the Video Card utility is not required to match the resolutions and refresh rates of the monitor and video card.

OPERATION & ADJUSTMENT

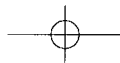
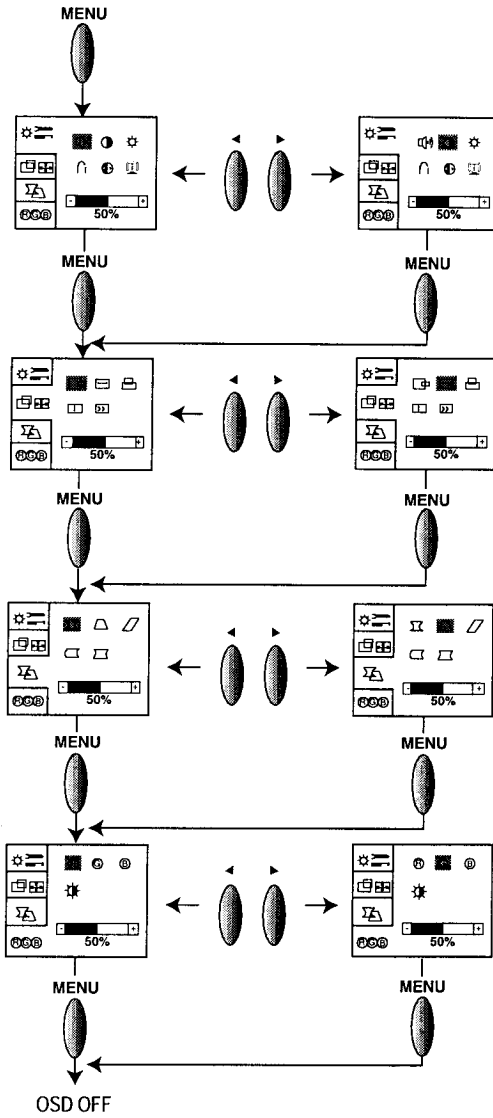
ADJUSTMENT KEY

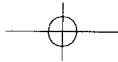


MENU 	Launch OSD(On-Screen Display) menus & Exit OSD menus
SELECT 	Select the next function
SELECT 	Select the previous function
ADJUST+ 	Increase the value of any selected function
ADJUST- 	Decrease the value of any selected function
MUTE 	Sound mute
GAME MODE 	Select the game mode (toggle between game and PC mode)
GAME MODE LED 	Change to orange on the game mode

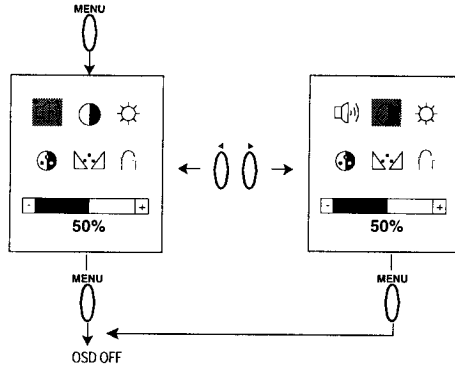


KEY PROCESS FOR OSD MENU



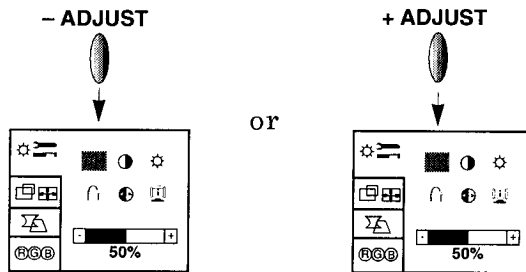


KEY PROCESS FOR GAME MODE MENU



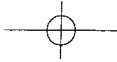
If the monitor is not connected to the game machine, it can't activate the game screen although being on the game mode.

DIRECT VOLUME CONTROL

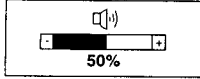
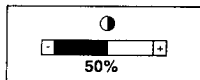
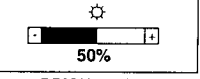


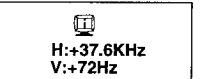


OSD screen disappears after 15 seconds if no adjustment is performed.

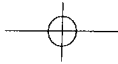




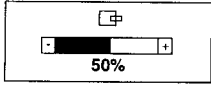
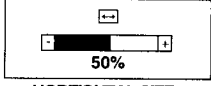
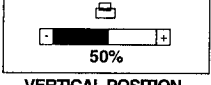
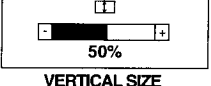
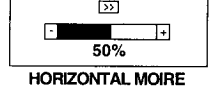


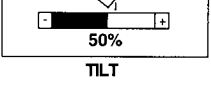


1. OSD(On-Screen Display) Menu 1

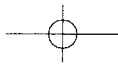
 <p>VOLUME</p>	<p>If you press a volume key during a mute sound, the monitor will sound automatically. * The background of the icon becomes to magenta during a mute sound.</p>
 <p>CONTRAST</p>	<p>Adjust the contrast of image, the difference between light and dark areas on the screen. Range : 0 -100 %</p>
 <p>BRIGHTNESS</p>	<p>Adjust the brightness of the entire display.</p>
 <p>DEGAUSS</p>	<p>Degauss the display and restore image quality.</p>
 <p>RECALL</p>	<p>Reset the screen to the Factory Preset Display Settings.</p>
 <p>STATUS</p>	<p>Display horizontal & vertical frequency and polarity.</p>

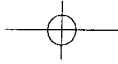




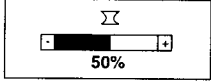


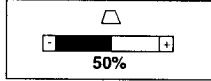


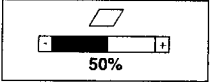


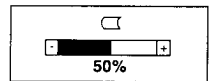


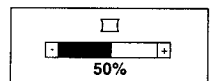


2. OSD (On-Screen Display) Menu 2

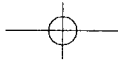
 <p>HORIZONTAL POSITION</p>	<p>Adjust the position of the display horizontally (left or right).</p>
 <p>HORIZONTAL SIZE</p>	<p>Adjust the display width (horizontal size).</p>
 <p>VERTICAL POSITION</p>	<p>Adjust the position of the display vertically (up or down).</p>
 <p>VERTICAL SIZE</p>	<p>Adjust the display height (vertical size).</p>
 <p>HORIZONTAL MOIRE</p>	<p>Eliminate a moire pattern looking like a series of concentric circles or arcs.</p> <ul style="list-style-type: none"> • Image turns to  by +. • Image turns to  by -.
 <p>TILT</p>	<p>Adjust the rotation when the screen is tilted left or right (Optional).</p> <ul style="list-style-type: none"> • Image turns to  by +. • Image turns to  by -.



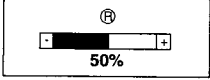
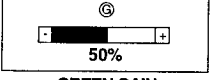
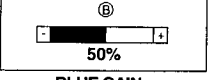



3. OSD (On-Screen Display) Menu 3

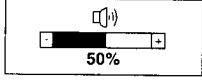
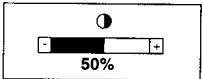
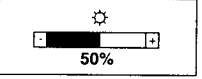
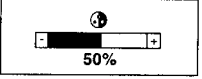
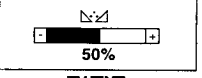
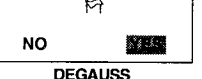
 <p>PINCUSHION</p>	<p>Adjust the left and right margins for more convex or more concave margins.</p> <ul style="list-style-type: none"> • Image turns to  by +. • Image turns to  by -.
 <p>TRAPEZOID</p>	<p>Adjust the trapezoid of the screen by moving the lines inward or outward.</p> <ul style="list-style-type: none"> • Image turns to  by +. • Image turns to  by -.
 <p>PARALLELOGRAM</p>	<p>Adjust parallelogram when the screen is leaning left or right.</p> <ul style="list-style-type: none"> • Image turns to  by +. • Image turns to  by -.
 <p>PIN BALANCE</p>	<p>Adjust the side balance when the sides of the screen are bowed towards left or right.</p> <ul style="list-style-type: none"> • Image turns to  by +. • Image turns to  by -.
 <p>PIN CORNER</p>	<p>Adjust the left and right margins of the each corner.</p> <ul style="list-style-type: none"> • Image turns to  by +. • Image turns to  by -.



4. OSD (On-Screen Display) Menu 4

 <p>Ⓟ 50% RED GAIN</p>	Adjust the red gain.
 <p>Ⓢ 50% GREEN GAIN</p>	Adjust the green gain.
 <p>Ⓛ 50% BLUE GAIN</p>	Adjust the blue gain.
 <p>☀ 9300 6550 COLOR TEMPERATURE</p>	Choose different, preset color temperatures or set your own customized color parameters.

5. OSD Menu for Game Mode

 <p>VOLUME</p>	<p>If you press a volume key during a mute sound, the monitor will sound automatically.</p>
 <p>CONTRAST</p>	<p>Adjust the contrast of image, the difference between light and dark areas on the screen.</p>
 <p>BRIGHTNESS</p>	<p>Adjust the brightness of the entire display.</p>
 <p>TV COLOR</p>	<p>Increasing this control increases the amplitude of the color difference components of the video signal. The result is an increase in the amount of pure color relative to white in the video. This control does not effect the RGB input, only the TV video inputs.</p>
 <p>TV TINT</p>	<p>Increasing this control increases the wavelength of the color component of the video signal. The result is a shift towards red in the hue of all colors. This control does not effect the RGB input, only the TV video inputs.</p>
 <p>DEGAUSS</p>	<p>Degauss the display and restore image quality.</p>

SPECIFICATIONS

Picture Tube Type : 15-inch, Flat Square Tube type
(14-inch, viewing area)
Dot Pitch : 0.28mm, MPR II
Face Treatment : Non-glare / Anti-static

Video Input Signal : R.G.B. Analog
Amp. Bandwidth : 85 MHz
Input Sync : TTL, separate negative / positive

Scan Frequency Horizontal : 30 - 69 KHz,
(15.5 KHz on game mode)
Vertical : 50 - 120 Hz

Max. Resolution 1280 dots × 1024 lines (at 60 Hz)

Power Source Free Voltage (100-240 Vac, 50/60 Hz)

Display Area Standard Display Area : 264mm(H) × 198mm(V)
Full Screen Size : 284mm(H) × 212mm(V)

Power Consumption Max. 120 W

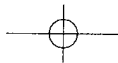
State	Recovery Time	Power LED
On	None	Green
Stand-by Suspend	3seconds	Green:0.5 second Amber:0.5 second
Sleep	-	Amber
Off	-	Off

Regulatory Approvals

VLF/ELF : MPR II
Safety : UL, CSA, TUV-GS(ZH1/618/10.80)
EMKO (S,N,D,FI), DHHS
EMI : FCC-B, CISPR 22, CE
Ergonomics : ISO 9241.3



Tilt/Swivel Range	Tilt : 5° forward, 10° backward Swivel : ± 45° leftward, rightward
Dimension	365(W) × 395(D) × 388(H)mm (set with stand)
Weight(net/gross)	13 / 16.5 Kg 28.7 / 36.4 lbs
Audio	Speaker impedance : 4 ohm ± 15% at 180 Hz 1V Input audio signal : 300mVrms(Design center) 1Vrms(Maximum: nodefect) Input impedandce : 5K ohm Signal to noise ratio : 60 dB Sound output : 5 Wrms per channel @ 10% T.H.D at 1KHz Frequency rsonpce of amplifier and speaker : 120 Hz to 17.5 KHz
Built in microphone	Operating voltage : 10Vmax/1.5V Impedance : 680 ohm Directivity : Unidirectional Sensitivity : -43 ± 5dB (0 dB = 1V/Pa, 1KHz)
Game mode	Signal type : NTSC-M (15 KHz Interace) Input impedance : 1.0Vp-p, 75 ohm Connection : Phono pin type
Operating Environment	Temperature : 10~40° C/50~104° F Relative Humidity : 8~80%
Storage Environment	Temperature : -20~45° C/-68~113° F Relative Humidity : 5~90%



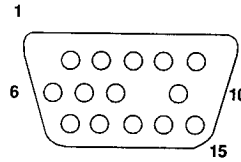
TROUBLESHOOTING

Symptom	Check
No picture.	Check if POWER SWITCH and COMPUTER POWER SWITCH are in the on position. ↓ Check if the signal cable is correctly connected to the video card. ↓ Check if the pins of D-sub connector are not bent. ↓ Check if the computer is in the power saving mode.
POWER LED is not lit.	Check if POWER SWITCH is in the on position. ↓ Check if the power cord is correctly connected.
Image is unstable.	Check if the signal cable is suitable to the video card.
Image is not centered, too small or too large.	Adjust H & V SIZE or H & V POSITION to get the proper image.
Picture bounces or a wave pattern is present in the picture.	Keep the devices that may cause electrical interference away from the monitor. ↓ See the FCC information at the front cover of the manual.
Color looks blotchy.	Operate DEGAUSS once.
Picture is blurred.	Adjust CONTRAST and BRIGHTNESS. ↓ Operate DEGAUSS once.
Edges of available area on the screen are not straight.	Adjust PINCUSHION/TRAPEZOID.

DESCRIPTION FOR CONNECTOR

Description For D-sub Connector

Pin	Signal
1	Red
2	Green
3	Blue
4	GND
5	GND(Self-Test)
6	GND-Red
7	GND-Green
8	GND-Blue
9	No Pin
10	GND-H.Sync
11	GND-V.Sync
12	Bi-directional Data(SDA)
13	Horizontal Sync
14	Vertical Sync(VCLK)
15	Data Clock(SCL)



* GND=Ground

Description For RCA Connector

Socket	Signal
Red	Sound left
White	Sound right
Yellow	NTSC-M (Composite Signal)

Red White Yellow

