

USER'S GUIDE

TFT LCD-MONITOR

Model No : L520BAV



DAEWOO

<http://www.dwe.co.kr>

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 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 :

- 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 or TV technician for help.

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

CANADIAN NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS CANADIEN

Cet appareil numérique de la Class B respecte toutes les exigences du Règlement sur le matériel brouilleur 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.
- Stellen Sie das Gerät an einem ergonomisch günstigen Ort auf und sorgen Sie dafür, daß der Monitor mit nach ISO 9241 -3, -7, -8 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 weniger gemäß 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,

TFT LCD monitor
L520BAV

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
A3:1995/A4:1997
EMC : EN 55022/8.1994/A1:1995/A2:1997
EN 55024/1998
EN 61000 -3-2,3/1995

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

Handed over by : Jong K. Choi, Director.
Display Business Division.

Dec, 2001 Seoul

Signature :

J.K.Choi Director.
Display Business Division.
DAEWOO ELECTRONICS CO., LTD.

Emission Characteristics Tested by SEMKO

A sample of this type has been tested and has shown compliance with the guidelines in the Swedish document TCO 99.

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.

The appliance is not intended for use by young children or infirm persons without supervision ;
Young children should be supervised to ensure that they do not play with the appliance.

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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 guide carefully before installing your monitor, then keep it near your monitor for quick reference.

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

- ◆ TFT LCD monitor
- ◆ Power cord
- ◆ 15 pin signal cable
- ◆ Audio cable (mini-jack)
- ◆ Speaker
- ◆ User's guide
- ◆ Warranty card (Optional)

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

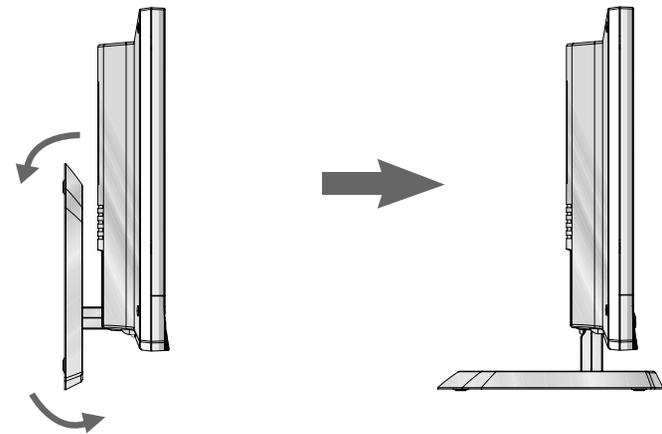
SETUP

PRODUCT FEATURES

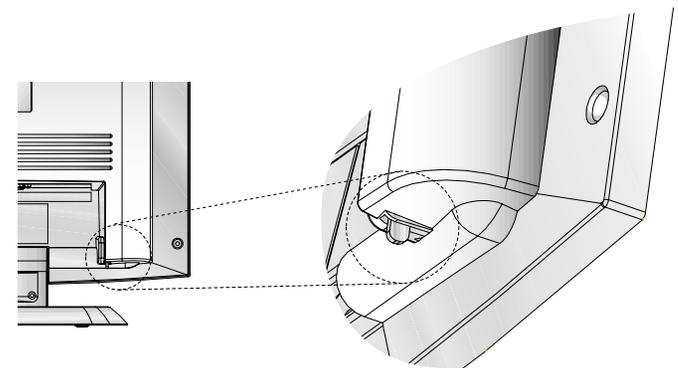
- ◆ The monitor is designed for use in a small work area or for those who need more work space on the desk.
- ◆ The convenient and user-friendly on-screen display allows for easy and accurate adjustments of screen size, position and screen color.
- ◆ The monitor supports a safe working environment in strict compliance with the TCO 99 standard for low emissions .
- ◆ The monitor complies with the VESA Display Data Channel (DDC) specification for Plug and Play compatibility. Advanced microcircuitry makes setup 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 for the best possible screen color and intensity.
- ◆ Press the menu button and activate the Self-Diagnosis menu to determine whether your monitor is functioning normally, not receiving a signal or is receiving a signal that is out of scanning range.
- ◆ 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.
- ◆ The monitor supports the optimal display performance with 1024x768 at 75Hz.
- ◆ The monitor can be connected to various types of video devices with supporting video input signals like Composite video(CVBS), Seperate video(S-Video).
- ◆ The detachable stereo speakers make the end user enjoy powerful audio sound and use them on a location which he or she wants to place after separating them from the monitor with ease.

INSTALLING THE STAND

Unfolding the stand



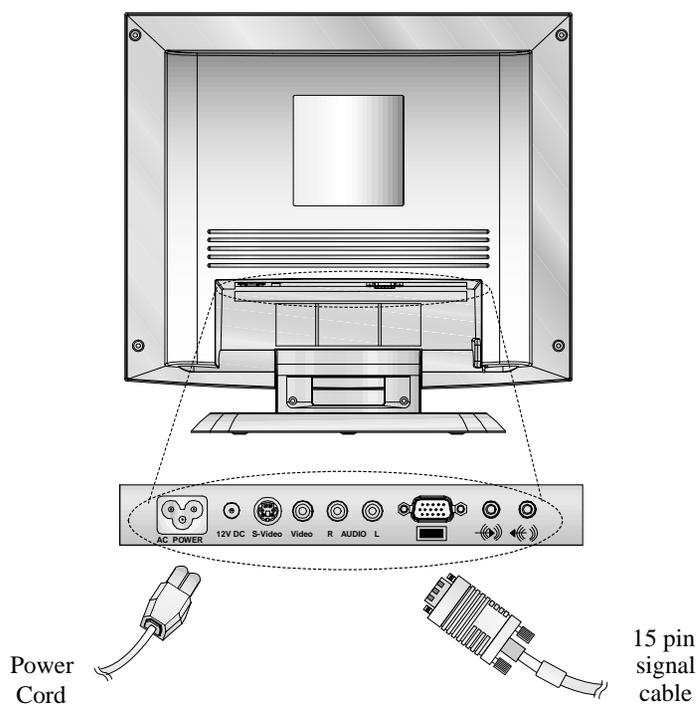
Folding the stand



Fold the stand with pressing this lever.

CONNECTING THE 15 PIN SIGNAL CABLE AND POWER CORD

1. Turn off the computer and monitor.
2. Connect the 15 pin signal cable to the output port of the video card in your computer and monitor.
3. Tighten the screws of the 15 pin signal cable.
4. Plug the power cord into the AC receptacle located on the back of the monitor.
5. Plug the other end of the power cord into the AC outlet.

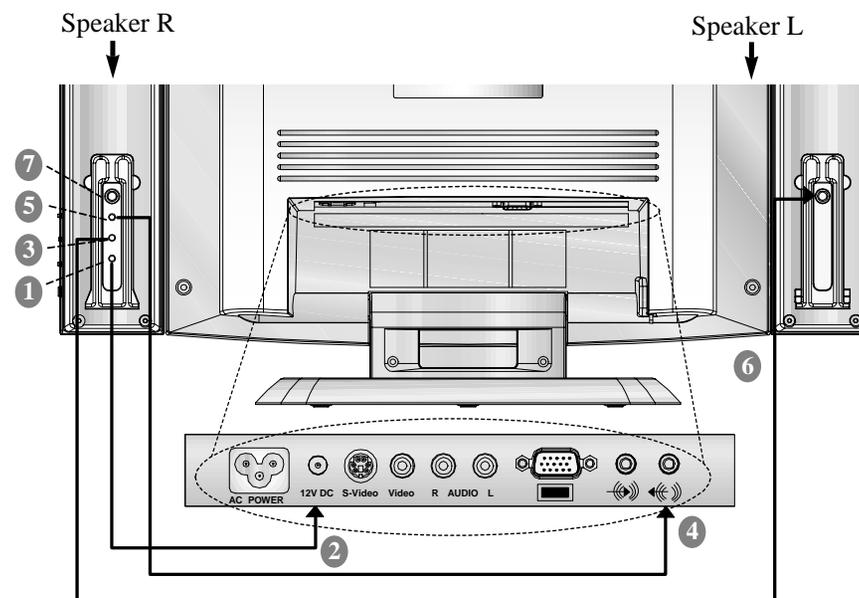


English - 4

CONNECTING THE SPEAKERS

1. Align the two hooks on each speaker with the holes on the right and left side of the monitor and insert the hooks into the holes.
2. Plug the connector of the POWER (DC IN 12V) Jack ① of the speaker R into the 12V DC(AUDIO POWER) port ② on the rear of the monitor.
3. Plug the connector of the MONO Jack ③ of the speaker R into the input port ⑥ of the speaker L.
4. Plug the connector of the STEREO (AUDIO INPUT) Jack ⑤ of the speaker R into the SPEAKER port ④ on the rear of the monitor.
5. After setting up the speakers, switch the power on and adjust the volume to the proper level.

⑦ : Headphone Jack



English - 5

ABOUT SPEAKER BUTTONS

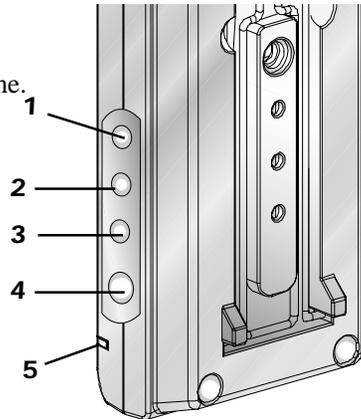
1/2 VOLUME (UP/DOWN)
adjusts audio volume.

▲ (up) : increases speaker volume.
▼ (down) : decreases speaker volume.

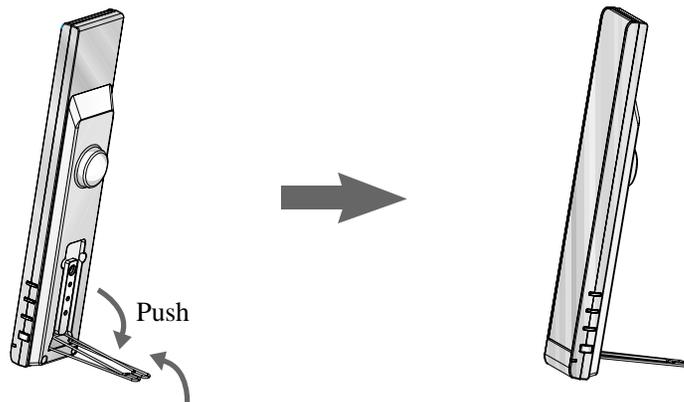
3 MUTE
turns mute function on and off.

4 POWER
turns audio on and off.

5 POWER Indicator
shows power on and off status with power indicator light.



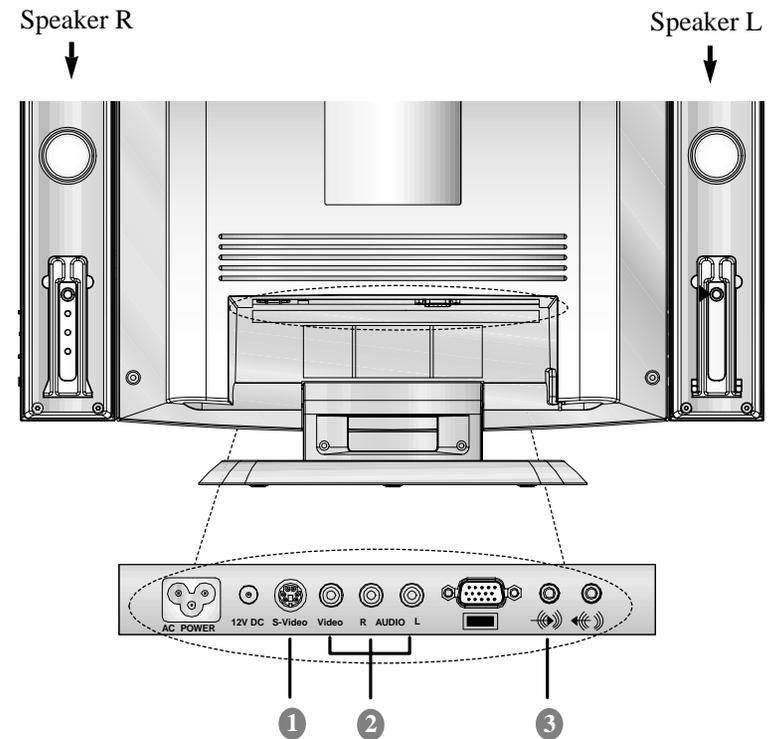
SPEAKER STAND-ALONE



Use the speakers as shown in the illustration after pressing down the supporter located on the rear of the speaker if you don't attach the speakers to the monitor.

CONNECTING THE OTHERS

1. Plug the connector to the S-Video port ① on the rear of the monitor (ex : VCR, DVD , ---).
2. Plug the connector to the RCA port ② on the rear of the monitor (ex : Camcorder, VCR, DVD, ---).
3. Plug the connector to AUDIO INPUT port ③ on the rear of the monitor (ex : Computer, CD Player, ---).



OPERATION & ADJUSTMENT

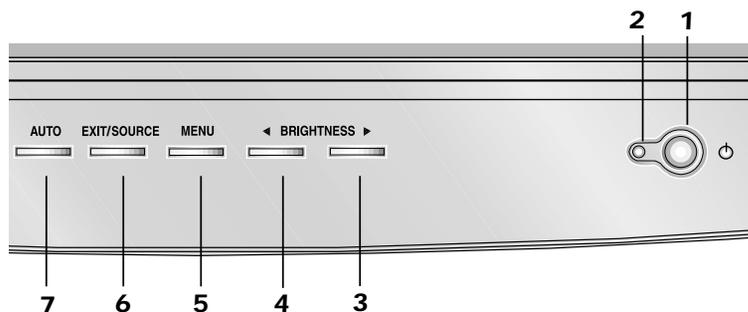
CONTROL PANEL

1 POWER

switches the monitor on and off.

2 POWER Indicator

shows both normal operation and power management status with power indicator light.



3 ► (*)

moves cursor to the right or low window in the OSD window and increases the value of any selected function.

4 ◀ (*)

moves cursor to the left or high window in the OSD window and decreases value of any selected function.

5 MENU

turns the OSD window on and moves from top menu to sub menu in the OSD window.

6 EXIT

turns the OSD (On-Screen Display) window off and moves from sub menu to top menu in the OSD window.

7 AUTO (*)

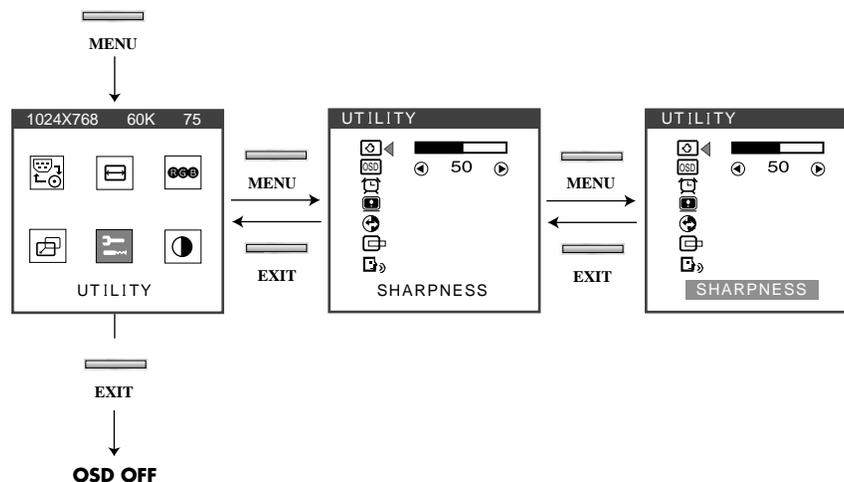
launches the AUTO TRACKING function directly.

SOURCE

selects input signal (PC/SVIDEO/VIDEO/SOUND).

(*) : Hot Key

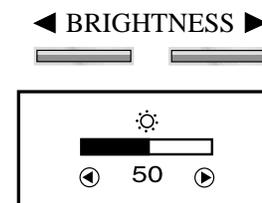
KEY PROCESS



HOT KEY

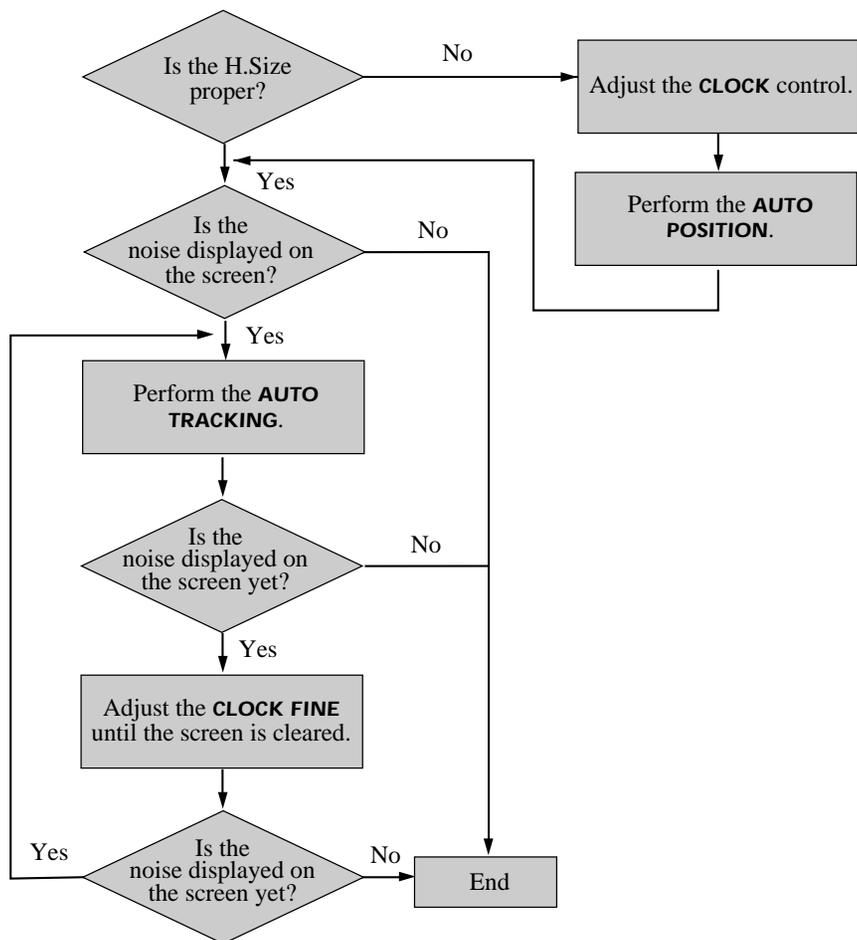


- When there is no OSD, if you press this AUTO button, you can use the best display performance fit for a current mode.



- When there is no OSD, if you press this BRIGHTNESS button, you can adjust the brightness directly.
 - ◀ : decreases brightness
 - ▶ : increases brightness

ADJUSTMENT PROCEDURE



OSD FUNCTIONS WITH USING PC

INPUT	
PC	Select PC mode.
SVIDEO	Select S-Video mode.
VIDEO	Select Video(CVBS) mode.
SOUND	Adjust sound.
	VOLUME Increase or decrease audio volume.
	BALANCE Balance audio sound.
	TREBLE Adjust high frequency response.
	BASS Adjust low frequency response.
CLOCK	
	CLOCK Adjust the width (horizontal size) of the screen image.
	CLOCK FINE Sharpen the focus by aligning the illuminated pixels and adjust until the screen image looks focused, crisp and sharp. Adjusting the CLOCK FINE after the CLOCK adjustment will produce a clear screen.

	AUTO TRACKING	Adjust the horizontal & vertical picture image quality and size.
COLOR 		
	RED CONTROL	Adjust the red color.
	GREEN CONTROL	Adjust the green color.
	BLUE CONTROL	Adjust the blue color.
	COLOR TEMPERATURE	Choose different preset color temperatures or set your own customized color parameters.
CENTER 		
	H. CENTER & V. CENTER	Adjust the position of the display horizontally (left or right) and vertically (up or down).
UTILITY 		
	SHARPNESS	Adjust the display image quality (if the screen proceed to scaling up).
	OSD POSITION	Adjust the OSD position horizontally (left or right) and vertically (up or down).
	OSD TIME OUT	Adjust the display OSD Menu.

	STATUS	Display horizontal & vertical frequency and polarity.
	RECALL	Reset the screen to the Factory Preset Display Settings.
	AUTO POSITION	Choose automatically the proper horizontal position and vertical position & size of the screen image.
	LANGUAGE	Select language for OSD (6 languages).
CONTRAST 		
	CONTRAST	Adjust the contrast of image, the difference between light and dark areas on the screen.

OSD FUNCTIONS WITH USING VIDEO

VOLUME	Increase or decrease audio volume.
BRIGHTNESS	Adjust the brightness of image.
CONTRAST	Adjust the contrast of image.
COLOR	
SATURATION	Adjust saturation of image.

HUE	Adjust the hues of image.
SHARPNESS	Adjust the display image quality (if the screen proceed to scaling up).
SOUND	
BALANCE	Balance audio sound.
TREBLE	Adjust high frequency response.
BASS	Adjust low frequency response.

SELF DIAGNOSIS

If there is no image, the Self Diagnosis screen will be displayed. Self Diagnosis function checks if the status of the monitor screen is “No Signal”, “Out of range” or “Check Cable”.

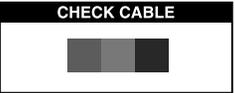


“No Signal” screen is displayed when the D-Sub signal connector is connected and the status of the monitor is on DPMS mode.



“Out of Range” screen is displayed when the applied frequency is under or over normal range.

- Normal range
(Non-interlaced mode only)
- H : 30 - 62 KHz
- V : 50 - 75 Hz



“Check Cable” screen is displayed when the D-Sub signal connector is not connected.

SPECIFICATIONS

Panel	Size	15-inch (38 cm) diagonal
	Pixel Pitch	0.297 x 0.297 mm
	Viewing Angle	60°(Right/Left)
		40°(up), 60°(down)
	Contrast Ratio	350:1 contrast ratio (typ)
	Brightness	250cd/m ² brightness(typ)
Color Filter	RGB vertical stripe	
Synchronization	Horizontal	30 - 62 KHz
	Vertical	50 - 75 Hz
Video Bandwidth		80 MHz
Max Resolution(Optimal)		1024 x 768 @75Hz
Colors		6 bit (16.7M Colors)
Display Area		304.1mm x 228.1mm
PC Input Signal	Sync	H/V separate(TTL)
	Video	15 pin mini D-sub(Analog RGB)
		DVI-D(Option)
AV Input Signal	Video	CVBS(RCA), S-Video(Mini-DIN)
	Audio	RCA Left+Right Input
		Stereo Mini Jack Input & Output
TV Receiving Signal (Option)	TV Tuner	NTSC, PAL
External Speaker	Max. Output	6W(Left 3W+Right 3W)
Plug and Play		VESA DDC Compatible
Power Source		100-240 Vac, 50/60 Hz(Free Voltage)
Power Consumption		26 W(without speaker)
Dimension-W x H x D (without speaker)		370 x 352 x 205 mm(with stand)
		370 x 312 x 60 mm(without stand)

Weight-net/gross	4.2/5.5 Kg(9.2/12.1 lbs)
Power Saving	EPA, VESA DPMS, Nutek Compliant
Tilt Range	5° forward, 30° backward
Operating Temperature	10 ~ 40°C /50 ~ 104°F

- The specification can be changed without any prior notice to improve the quality of the product.
- The LCD panel may have some defective pixels (e.g. slightly light or dark) due to a characteristic of the LCD panel. But there is no defect in your LCD product itself.

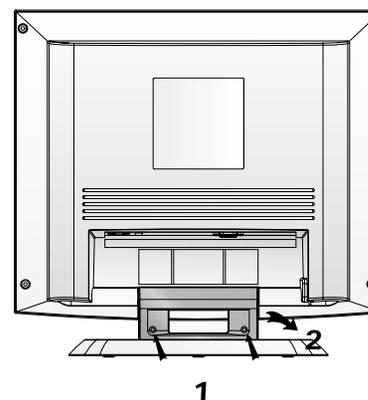
FACTORY PRESET TIMINGS

VESA MODES				
Mode	Resolution (dots X lines)	HFreq(KHz)	VFreq(Hz)	Remark
VGA	640 X 480 @ 60Hz	31.5	60	Non-interlaced
VGA	640 X 480 @ 72Hz	37.9	72	Non-interlaced
VGA	640 X 480 @ 75Hz	37.5	75	Non-interlaced
SVGA	800 X 600 @ 56Hz	35.2	56	Non-interlaced
SVGA	800 X 600 @ 60Hz	37.9	60	Non-interlaced
SVGA	800 X 600 @ 72Hz	48.1	72	Non-interlaced
SVGA	800 X 600 @ 75Hz	46.9	75	Non-interlaced
XGA	1024 X 768 @ 60Hz	48.4	60	Non-interlaced
XGA	1024 X 768 @ 70Hz	56.5	70	Non-interlaced
XGA	1024 X 768 @ 75Hz	60.0	75	Non-interlaced
IBM MODES				
Mode	Resolution (dots X lines)	HFreq(KHz)	VFreq(Hz)	Remark
EGA	640 X 350 @ 70Hz	31.5	70	Non-interlaced
DOS	720 X 400 @ 70Hz	31.3	70	Non-interlaced
MAC MODES				
Mode	Resolution (dots X lines)	HFreq(KHz)	VFreq(Hz)	Remark
VGA	640 X 480 @ 67Hz	35.0	67	Non-interlaced
SVGA	832 X 624 @ 75Hz	49.7	75	Non-interlaced

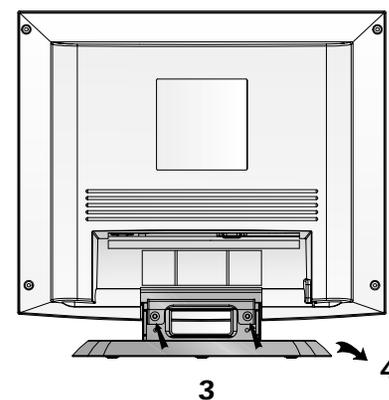
■ The LCD Monitor has only Non-interlaced modes without flicker.

CHANGING THE STAND

REMOVING THE STAND



1. Remove 2 screws.
2. Remove the Stand Rear.



3. Remove 2 screws.
4. Remove the Stand Base.

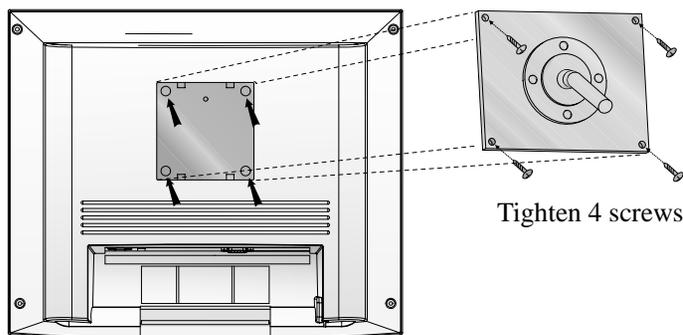
TROUBLESHOOTING

REMOVING THE COVER



Remove the Cover.

ATTACHING THE MONITOR WITH THE ARM-STAND(OPTION)



Tighten 4 screws.

- Use the VESA approved arm-stand.
(75x75 mm hole spacing)

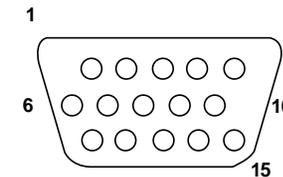
Symptom	Check
Picture is jitterd.	Adjust Clock to set the screen position and adjust Clock fine until a noise isn't displayed.
No picture.	<p>Check if power switch and computer power switch are in the on position.</p> <p style="text-align: center;">↓</p> <p>Check if the signal cable is correctly connected to the video card.</p> <p style="text-align: center;">↓</p> <p>Check if the pins of D subconnector are not bent.</p> <p style="text-align: center;">↓</p> <p>Check if the computer is in the power- saving mode.</p>
POWER LED is not lit.	<p>Check if power switch is in the on position.</p> <p style="text-align: center;">↓</p> <p>Check if the power cord is correctly connected.</p>
Image is unstable.	Check if the signal cable is suitable to the video card.
Image is not centered, too small or too large.	Adjust Clock or H&V Center to get the proper image.
Picture bounces or a wave pattern is present in the picture.	<p>Keep the devices that may cause electrical interference away from the monitor.</p> <p style="text-align: center;">↓</p> <p>See the FCC information at the front cover of the manual.</p>
Picture is blurred.	Adjust Contrast and Brightness.

APPENDIX

DESCRIPTION FOR D-SUB CONNECTOR

Symptom	Check
No sound.	<p>Check if the speaker power switch and the audio cable are correctly connected to the computer.</p> <p style="text-align: center;">↓</p> <p>Adjust the volume after checking the sound is muted.</p> <p style="text-align: center;">↓</p> <p>Check the audio system in the computer.</p>
Low sound.	<p>Adjust the volume on the OSD Menu and the speaker.</p> <p style="text-align: center;">↓</p> <p>Adjust the volume of the sound card in the computer.</p>
Dull sound.	Adjust Bass and Treble on the OSD Menu.
No video.	Check if the video cable is correctly connected to the computer and set to the video mode.
Poor color in the video.	Adjust the Saturation or Hue on the OSD Menu in the video mode.
Grainy picture in the video.	Adjust the Sharpness on the OSD Menu in the video mode.

Pin	Signal
1	Red
2	Green
3	Blue
4	GND
5	GND
6	GND-Red
7	GND-Green
8	GND-Blue
9	+5Vdc
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