

17"/19" TFT LCD MONITOR
User's Manual



TFT LCD MONITOR
YOU HAVE IT THEY DON'T

MA07220103



17"/19" TFT LCD MONITOR

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1. Initial Preparations

Safety Precautions

- 1 Before connecting the AC power cord to the DC adapter outlet, make sure the voltage designation of the DC adapter corresponds to the local electrical supply.
- 2 Never insert anything metallic into the openings in the cabinet of the Liquid Crystal Display (LCD) Monitor : doing so may create the danger of electric shock.
- 3 To avoid electric shock, never touch the inside of the LCD Monitor. Only a qualified technician should open the case of the LCD Monitor.
- 4 Never use your LCD Monitor if the power cord has been damaged. Do not allow anything to rest on the power cord, and keep the cord away from areas where people can trip over it.
- 5 Be sure to hold the plug, not the cord, when disconnecting the LCD Monitor from an electric socket.
- 6 Openings in the LCD Monitor cabinet are provided for ventilation. To prevent overheating, these opening should not be blocked or covered. Also, avoid using the LCD Monitor on a bed, sofa, rug, or other soft surface, doing so may block the ventilation openings in the bottom of the cabinet. If you put the LCD Monitor in a bookcase or some other enclosed space, be sure to provide adequate ventilation.
- 7 Put your LCD Monitor in a Location with Low humidity and a minimum of dust.
- 8 Do not expose the LCD Monitor to rain or use it near water (in kitchens, near swimming pools, etc.). If the LCD Monitor accidentally gets wet, unplug it and contact an authorized dealer immediately. You can clean the LCD Monitor with a damp cloth when necessary, but be sure to unplug the LCD Monitor first.
- 9 Place the LCD Monitor on a solid surface and treat it carefully. The screen is made of thin glass with a plastic front surface and can be damaged if dropped, hit or scratched. Do not clean the front panel with keton-type materials (e.g., acetone), ethyl alcohol, toluene, ethyl acid, methyl, or chloride- these may damage the panel.
- 10 Locate your LCD Monitor near an easily accessible AC outlet.
- 11 If your LCD Monitor does not operate normally-in particular, if there are any unusual sounds or smells coming from it-unplug it immediately and contact an authorized dealer or service center.
- 12 High temperature can cause problems. Don't use your LCD Monitor in direct sunlight, and keep it away from heaters, stoves, fireplaces, and other sources of heat.
- 13 Unplug the LCD Monitor when it is going to be left unused for an extended period of time.
- 14 Unplug your LCD Monitor from the AC outlet before any service.

17" / 19" TFT LCD Monitor

Contents of Package



TFT-LCD Monitor



Passive Speaker (Option)



AC/DC Adaptor



Power Cord



Audio Cable (Option)



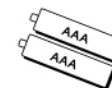
D-SUB Signal Cable (15 pin, Option)



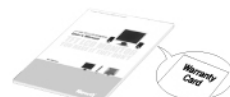
Remote Controller (Option)



DVI-D Cable (Option)



Batteries (for Remote control)



User's Manual



Installation Diskette

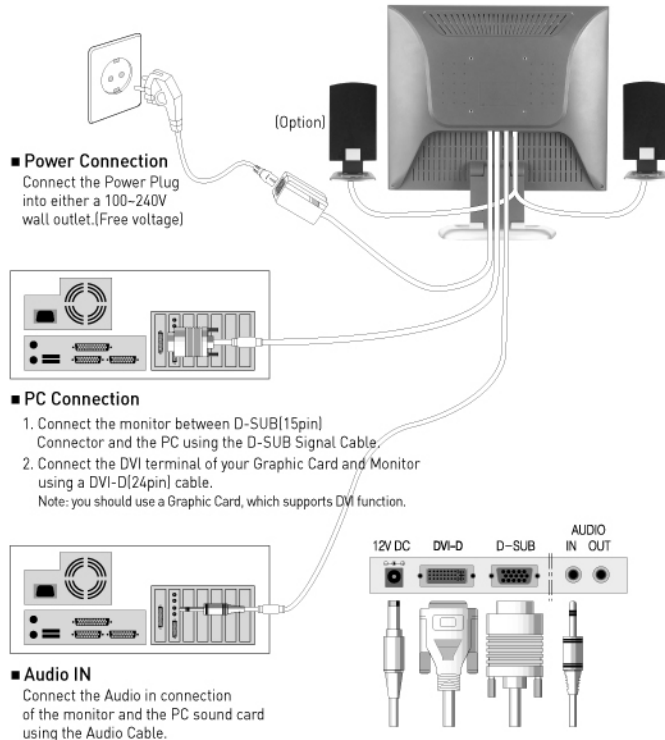
Please make sure the following items are included with your monitor. If any items are missing, contact your dealer.

2. Connection

17" / 19" TFT LCD Monitor

Connecting to the PC

This monitor offers a method for both a PC and a workstation. One or both types of signal cables can be connected to the monitor simultaneously. Determine which connection method(s) you need and refer to the instructions below.



■ Power Connection

Connect the Power Plug into either a 100-240V wall outlet. (Free voltage)

■ PC Connection

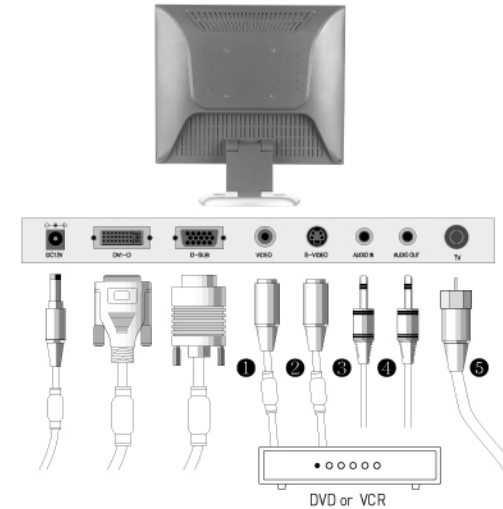
1. Connect the monitor between D-SUB[15pin] Connector and the PC using the D-SUB Signal Cable.
2. Connect the DVI terminal of your Graphic Card and Monitor using a DVI-D[24pin] cable.
Note: you should use a Graphic Card, which supports DVI function.

■ Audio IN

Connect the Audio in connection of the monitor and the PC sound card using the Audio Cable.

● Attention : Power off both the monitor and PC before making any connections the PC.

Connecting to the VCR



1. **Video In :** Connect the Video connection of the monitor and the VCR player using the Video Cable.
2. **S-Video In :** Connect the S-Video connection of the monitor and the VCR player using the S-Video Cable.
3. **Audio In :** Connect the Audio In connection of the monitor and the PC sound card using the Audio Cable.
4. **Audio Out :** Connect the Audio out connection of the monitor and the external speaker.
5. **TV Antenna In :** Connect the TV antenna of the monitor and the VCR player using the TV antenna cable.

3. Installing your Monitor

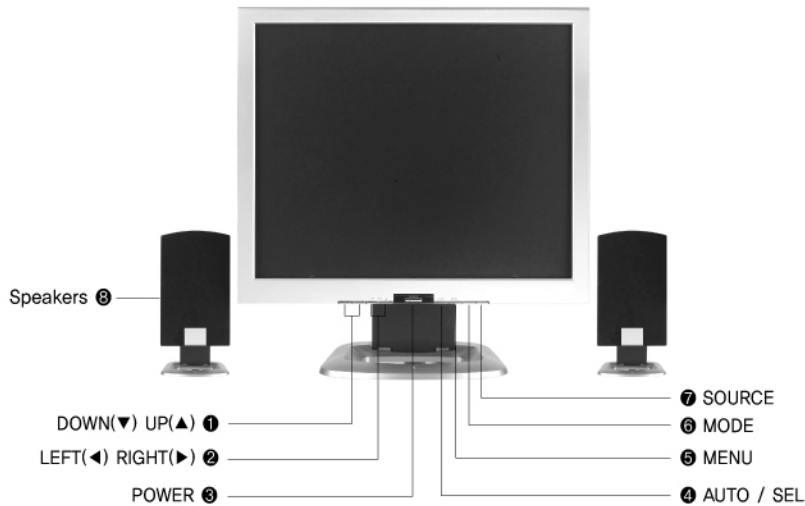
Please insert the Installation disk into the floppy drive and then, Double Click on "install.exe".

To get more detailed information for your OS (Operating System), Please see the readme. text on Installation Diskette.

4. Basic Explanation

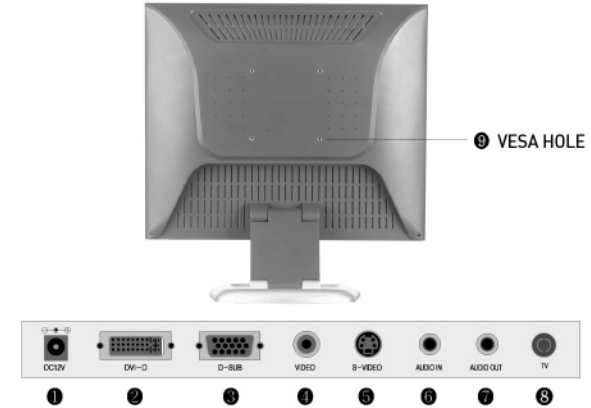
17"/19" TFT LCD Monitor

Front View

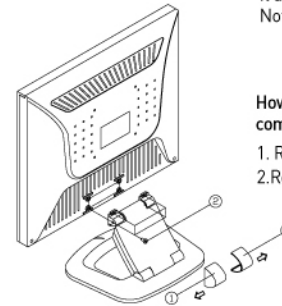


- ① DOWN (▼) UP(▲) : Move to Up/Down on OSD Main Menu
- ② LEFT (◀) RIGHT(▶) : Move to the Left/Right on OSD SUB Menu
Adjust the Volume.
- ③ POWER : Turns ON/OFF the LCD Monitor.
- ④ AUTO / SEL : This button is for adjusting the SCREEN Setting automatically on VGA Source and is for Selecting Left(Sub) Items on the OSD (OnScreen Display).
(Note : "AUTO" function doesn't work on the DVI Source)
- ⑤ MENU : Appear or disappear the OSD Menu.
- ⑥ MODE : This button is only for ANALOG and DVI Source.
The screen changes to PC-GAME-MOVIE, when pressing it.
- ⑦ SOURCE : The input source changes to ANALOG, DVI, VIDEO, S-VIDEO, TV
- ⑧ Speakers (Option) : External Speaker (Totally 6W output).

Rear View



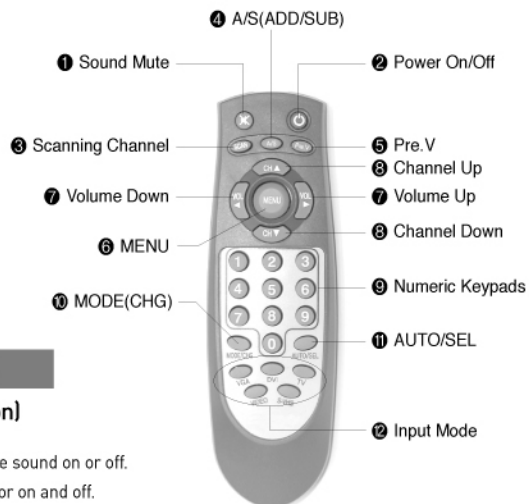
- ① POWER : Connect the Power cord of your monitor.
- ② DVI-D : Connect the supplied DVI-D cable to your computer.
Please note your Graphic Card should support DVI function.
- ③ D-SUB : Connect your Monitor to your computer using the D-SUB cable.
- ④ AUDIO IN : Connect a Audio cable between this input and the speaker output on your soundcard.
- ⑤ AUDIO OUT : If you connect a separate speaker to this output, you can hear all sounds through your separate speaker system.
- ⑥ VIDEO ⑦ S-VIDEO : Connect your Video or S-Video input cable to Video or S-Video input for enjoying a VCR.
- ⑧ TV (Option) : Connect your TV Antenna (AIR/CABLE).
- ⑨ VESA HOLE for fixing on the wall : Supports VESA mounting standard for use with VESA mounting devices.
It adopted 100X100mm VESA Standard.
Note: You can buy a wall-mount tool at your nearby electronic shops.



How to remove the Monitor Stand for installing VESA compliant mounting device.

1. Remove the cover of Screw Holes to the Left/Right.
2. Remove Screws and then remove the Monitor stand.

4. Basic Explanation



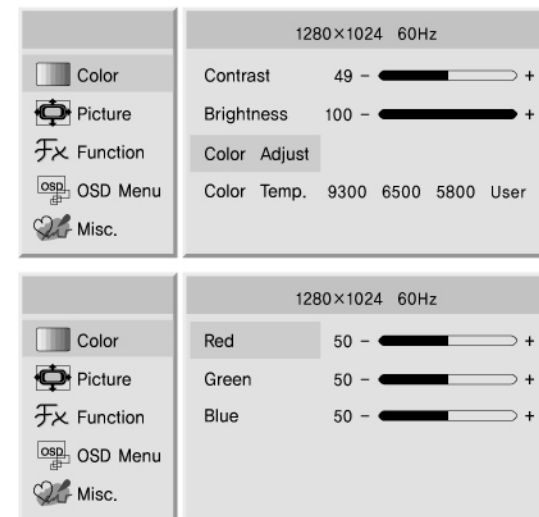
Remote Control

for TV Model only(Optional)

- ❶ **Sound Mute button** : Switchs the sound on or off.
- ❷ **Power button** : Turns the Monitor on and off.
- ❸ **SCAN button** : Scans TV channel automatically.
- ❹ **A/S(ADD/SUB) button** : Adding or Subtracting TV Channels on TV mode.
To use this function, press the desired channel number and just press this button.
You can see it through displaying ADD or SUB(Delete) on Monitor Screen.
- ❺ **Pre.V button** : Move to the previous TV channel number Automatically.
- ❻ **Menu button** : Display or exit from the OSD(On Screen Display) window.
To adjust any function or setting on your Monitor, you have to select this button.
- ❼ **VOL(◀/▶) button** : Increase or decrease the Volume.
- ❽ **Channel(▲/▼) button** : Move to the Channel for TV mode.
- ❾ **Numeric Keypads** : Select Channel numbers directly.
- ❿ **MODE(CHG) button** : It changes modes(PC-GAME-MOVIE) in orderly on VGA mode.
And also, it changes Channel numbers for TV Mode.
If you want to do Changing of any TV channels on your Remote Control,
just the desired and current channel numbers and press this button.
Both channels would be swapped automatically.
- Note : CHG function is workable for TV mode (PAL/SECAM only) .
- ⓫ **AUTO/SEL button** : For VGA mode, it adjusts the setting your screen.
And also, it selects the menu on OSD (Left/Down) on TV mode.
- ⓬ **Input Mode** : Select input modes. (VGA-DVI-VIDEO-S/VIDEO-TV)

5. OSD Controls

OSD Controls



Color

- **Contrast** : Adjust the white level of the picture.
- **Brightness** : Adjust to brighten or darken the picture.
- **Color Adjust** : Adjust to increase or decrease the Color intensity.
- **Color Temp** : Select Color Temperature or set Color Level(9300K, 6500K, 5800K, USER).

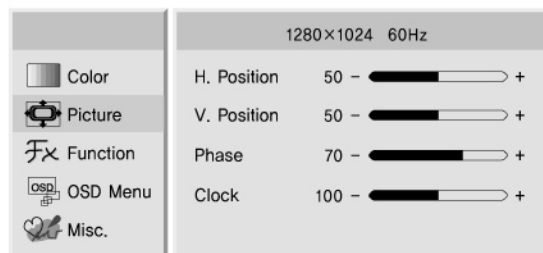
How to use

- Opens OSD Menu by Pressing Menu button.
- Move to the right menu by SEL button.
- Exit this OSD menu by pressing Menu button one or twice.

5. OSD Controls

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OSD Controls



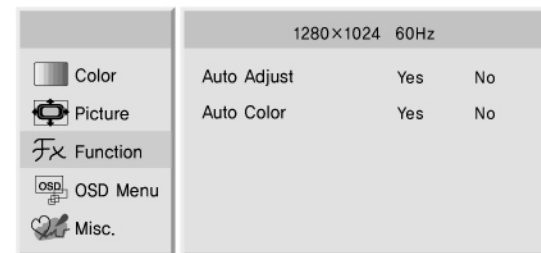
Picture

- **H.Position** : Move the entire screen to the left or right.
- **V.Position** : Move the entire screen to the below or upper.
- **Sharpness** : Adjust to sharpen or soften the picture.
- **Phase** : Fine tuning of the screen even though it is not easily.
- **Clock** : Adjust the horizontal-size of the entire screen.

■How to use

- Opens OSD Menu by Pressing Menu button.
- Move to the right menu by SEL button.
- Exit this OSD menu by pressing Menu button one or twice.

OSD Controls



Function

- **Auto Adjust** : Reset to the optimal state automatically.
- **Auto Color** : Reset the Color intensity automatically.

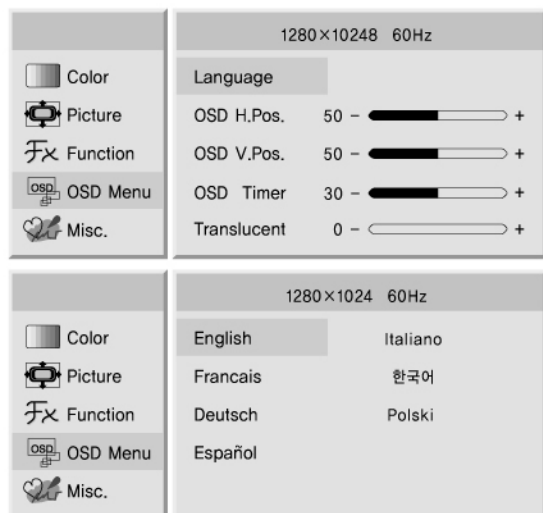
■How to use

- Opens OSD Menu by Pressing Menu button.
- Move to the right menu by SEL button.
- Exit this OSD menu by pressing Menu button one or twice.

5. OSD Controls

17"/19" TFT LCD Monitor

OSD Controls



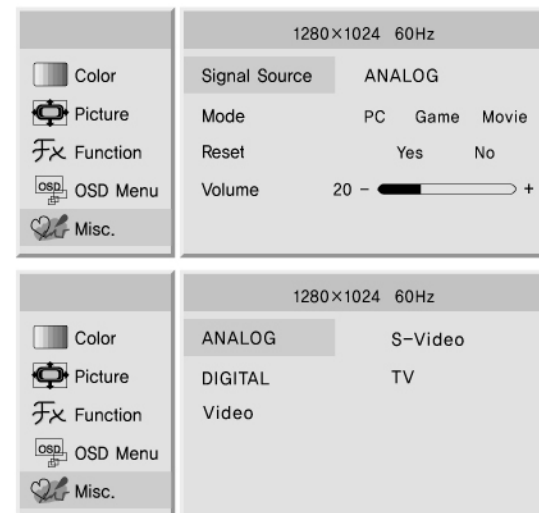
OSD Menu

- **Language** : Select the OSD language.
(English, French, German, Spanish, Italian, Korean, Polski)
- **OSD H.Pos.** : Move the OSD screen to the left or right.
- **OSD V.Pos.** : Move the OSD screen to the below or upper.
- **OSD Timer** : Time is for disappearing OSD, when there is no menu selection after predefined time. Mximum is 100 sec.
- **Translucent** : Change the transparent or opaque status of the background of the OSD.

■How to use

- Opens OSD Menu by Pressing Menu button.
- Move to the right menu by SEL button.
- Exit this OSD menu by pressing Menu button one or twice.

OSD Controls



Misc.

- **Signal Source** : Setting Analog, Video, S-Video, TV.
- **Mode** : Select PC, Game or Movie for your screen status.
- **Reset** : Returns back all setting values to original factory values.
- **Volume** : Adjust the Speaker Volume

■How to use

- Opens OSD Menu by Pressing Menu button.
- Move to the right menu by SEL button.
- Exit this OSD menu by pressing Menu button one or twice.

5. OSD Controls

OSD Controls

PAL	660×232 60Hz		
Color	Contrast	44	
Video ADJ	Bright	5	
Function	Hue	0	
OSD Menu	Saturation	50	
Misc.	Sharpness	28	

Video ADJ

- **Contrast** : Adjust the whigte level of the picture.
- **Bright** : Adjust to brighten or darken the picture.
- **Hue** : Adjust to the Color tone of picture.
- **Saturation** : Adjust Saturation of the picture.
- **Sharpness** : Adjust to sharpen or soften the picture.

PAL	660×232 60Hz		
Color	Channel Add	YES	NO
Video ADJ	Channel Del	YES	NO
TV	Channel Tune	- 1 8 1 . 2 5 MHz +	
OSD Menu	Channel Scan	YES	NO
Misc.	TV System	AIR	CATV

TV

- **Channel Add** : Add the select channel.
- **Channel Del** : Delete the select channel.
- **Channel Tune** : Tune in each channel precisely.
- **Channel Scan** : Scan TV channel automatically.
- **TV System** : Select your proper broadcasting system(PAL BG//DK, SECAM L/LP) in case of SECAM DK, select SECAM instead and then do a Channel Scan.

6. Others

Troubleshooting

In case of trouble, check these items before calling the service center.

Trouble	Suggested	Remedy
Screen is blank and power indicator is off.	<ul style="list-style-type: none"> ▶ Check power cable connection. ▶ Check power button. 	<ul style="list-style-type: none"> ▶ Secure the connection. ▶ Push the power button.
Screen is blank but power indicator is in green mode.	<ul style="list-style-type: none"> ▶ Check the monitor signal cable (D-SUB) connection. 	<ul style="list-style-type: none"> ▶ Secure the connection of monitor signal cable (D-SUB)
Display position and size is incorrect.	<ul style="list-style-type: none"> ▶ Check for correct adjustment of display position and size. 	<ul style="list-style-type: none"> ▶ Start Auto adjustment in mainmenu.
Screen color isn't uniform and stable.	<ul style="list-style-type: none"> ▶ Check video card resolution. 	<ul style="list-style-type: none"> ▶ Change the video card settings or resolution. ▶ Adjust color in SUB menu.
Display is too bright or too dark.	<ul style="list-style-type: none"> ▶ Check monitor brightness. 	<ul style="list-style-type: none"> ▶ Adjust the brightness and contrast in SUB menu.
Any noise appearing in images or characters are not clearly portrayed.	<ul style="list-style-type: none"> ▶ Check PHASE icon. 	<ul style="list-style-type: none"> ▶ Decrease the noise using the PHASE icon in main menu.
Picture is OK but No Sound.	<ul style="list-style-type: none"> ▶ Check that the AUDIO Cable connected between Audio in terminal of Monitor and Line Out terminal of your Computer. ▶ Check the Volume level. 	<ul style="list-style-type: none"> ▶ Make sure that MUTE is not on and the volume level.
Sound is too small.	<ul style="list-style-type: none"> ▶ Check the Volume Level of monitor and Audio Level on your OS(Operating System). 	<ul style="list-style-type: none"> ▶ Volume up your Monitor with OS(Operating System).
No appear DVI Mode.	<ul style="list-style-type: none"> ▶ Check a DVI cable. 	<ul style="list-style-type: none"> ▶ Secure the DVI Cable connection.

6. Others

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Model Specification

MODEL		17 Inch Series	19 Inch Series
Panel	Viewable Size	17 Inch	19 Inch
	Pixel pitch (H×V)	0.264×0.264mm	0.294×0.294mm
	Brightness	300cd/m ²	250~400cd/m ²
	Contrast Ratio	400 : 1	500 : 1
	View Angle (L/R/U/D)	75~80°/75~80°/65~70°/60~70°	85~88°/85~88°/85~88°/85~88°
Input Signal	Response Time (R/F)	13 ms	16 ms
	Horizontal Frequency	30~81KHz	30~81KHz
	Vertical Frequency	56~75Hz	56~75Hz
Resolution		1280×1024(60Hz)	1280×1024(60Hz)
Display Color		16.7M(dithering)	16.7M(dithering)
Signal input		Analog RGB/DVI-D/VIDEO/S-Video/TV	Analog RGB/DVI-D/VIDEO/S-Video/TV
Wall-Mount		VESA 100mm	VESA 100mm
Plug & Play		DDC 1/2B	DDC 1/2B
Power	AC	100~240V, 50/60Hz	100~240V, 50/60Hz
	DC	12V, 4.16A	12V, 4.16A
	Consumption	50W(Max.)	50W(Max.)
	Management	3W below	3W below
Speaker		3W×2 Stereo type Passive(option)	3W×2 Stereo type Passive(option)
On Screen Display (OSD)		Color	Color
		Picture	Picture
		Function	Function
		OSD Menu	OSD Menu
		Misc.	Misc.
		Video ADJ	Video ADJ
		TV	TV
7 Language Support		7 Language Support	7 Language Support
Angle	Tilt Angle(U/D)	0° / 90°	0° / 90°
	High(L-H)	45mm(MAX)	45mm(MAX)
Set Size (W×L×H)		370×190×390mm	420×190×420mm
Box Size (W×L×H)		490×195×435mm	490×195×435mm
Weight (Without Box)		5.2Kg	6.2Kg
Remote Control		Distant(3m), Angle(±30°)	Distant(3m), Angle(±30°)

The specification and designs contained herein may be subject to change without notice.

Display Modes

If the signal from the system equals to the standard signal mode, the screen is adjusted automatically. If the signal from the system doesn't equal to the standard signal mode, adjust the mode with referring to the Videocard user guide because the screen might not display or only the power LED might be on. For the display modes listed below, the screen image has been optimized during manufacture.

MODE	Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
NEC	640x400(DosMode)	24.8	56.00
	VESA compatible		
VGA	640x350	31.47	70.00
	640x350	37.86	85.00
	720x400	31.47	70.00
	720x400	37.93	85.00
	640x480	31.47	60.00
	640x480	35.00	66.70
	640x480	37.86	72.80
SVGA	640x480	37.50	75.00
	640x480	43.27	85.00
	800x600	35.16	56.30
	800x600	37.88	60.30
	800x600	48.08	72.20
	800x600	46.87	75.00
XGA	800x600	53.67	85.10
	1024x768	48.36	60.00
	1024x768	56.40	70.10
	1024x768	60.02	75.00
	1024x768	68.67	85.00
SXGA	1280x1024	64.00	60.00
	1280x1024	79.98	75.00

FCC Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This Device may not cause harmful interface, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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 correct the interference by one or more of the following measures:

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

WARNING

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