

SyncMaster 180T

Dual Interface(Analog/Digital)

TFT-LCD Monitor



Owner's Instructions

Information in this document is subject to change without notice. © 2000 Samsung Electronics Co., Ltd. All rights reserved.

Reproduction in any manner whatsoever without the written permission of Samsung Electronics Co., Ltd. is strictly forbidden.

Samsung Electronics Co., Ltd. shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

The Samsung logo and SyncMaster are registered trademarks of Samsung Electronics Co., Ltd.; Microsoft, Windows and Windows NT are registered trademarks of Microsoft Corporation; VESA, DPMS and DDC are registered trademarks of Video Electronics Standard Association; the ENERGY STAR name and logo are registered trademarks of the U.S. Environmental Protection Agency (EPA). As an ENERGY STAR Partner, Samsung Electronics Co., Ltd. has determined that this product meets the ENERGY STAR guidelines for energy efficiency. All other product names mentioned herein may be the trademarks or registered trademarks of their respective owners.

Table of Contents

Safety Instructions	2
Unpacking Your LCD Monitor	3
Setting up your LCD Monitor	4
Setting up an Ergonomic Workstation	4
Monitor location	4
Workstation height	4
Viewing angle	4
Kensington Security Slot	4
Connecting Your LCD Monitor	5
Getting Help	7
Plug and Play	7
Auto Adjustment	
Self-Test Feature Check (STFC)	8
Adjusting Your LCD Monitor	9
User Controls	
Automatic Save	. 10
Direct-Access Features	. 10
Brightness	. 10
Auto Adjustment	. 11
OSD Lock/Unlock	. 11
On Screen Display (OSD)	. 12
Accessing the Menu System	. 12
Appendix	
PowerSaver	. 16
Troubleshooting	. 17
Specifications	. 19
Pin Assignments	. 20
Display Modes	. 21
Changing the Stand	
Removing the Stand	
Attaching an Arm-Type Stand or Wall Mount Hanger	
Maintenance of Your LCD Monitor	
Regulatory Informationinside backc	

Safety Instructions

- 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.
- 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.
- To avoid electric shock, never touch the inside of the LCD Monitor. Only a qualified technician should open the case of the LCD Monitor.
- A 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.
- Be sure to hold the plug, not the cord, when disconnecting the LCD Monitor from an electric socket.
- Openings in the LCD Monitor cabinet are provided for ventilation. To prevent overheating, these openings 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.
- 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.
- 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.
- 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.



CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



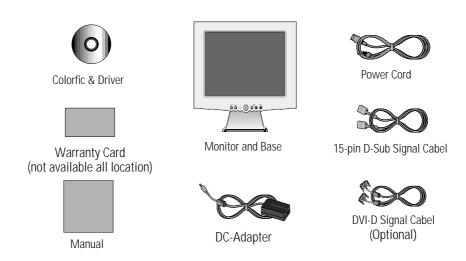
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).

NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Unpacking Your LCD Monitor

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

.



Setting up an Ergonomic Workstation

Consider the advice given below before you install your monitor.

Monitor location

Choose a position that exposes you monitor to the least reflection from lights or windows, usually at a right angle to any window.

Workstation height

Place your LCD Monitor so that the top of the screen is slightly below your eye level when you are comfortably seated.

Viewing angle

Tilt the screen backward or forward to a comfortable viewing position.



Figure 1. Tilt the screen

Kensington Security Slot

This monitor offers you the opportunity to secure your monitor using a Kensington-type security device. Kensington lock not included. Refer to your locking device documentation for installation instructions.

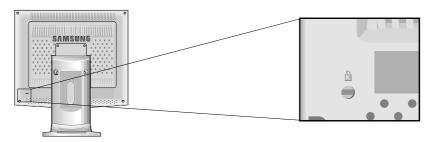


Figure 2. Kensington-type security slot location

English 4

Connecting Your LCD Monitor

This monitor offers a method for connection to 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.

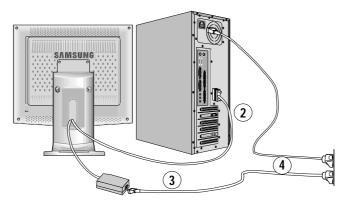


Figure 3. Cable connections (Analog)

- 1 Turn off your system and unplug its power cord.
- **2** Attach the blue signal cable connector to the video port on the back of your computer.
- 3 Connect the power cord for your monitor to the power port on the power adapter.
- ⚠ Plug the power cords of your computer and your monitor into a nearby outlet.
- Turn on your computer and monitor. If your monitor displays an image, installation is complete.
- **6** Perform the auto adjustment procedure as described in "Auto Adjustment" on page 7.

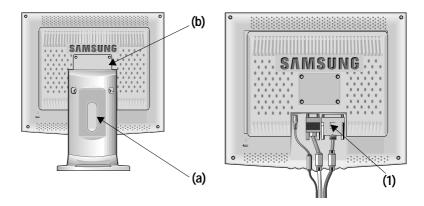


Figure 4. Cable connections (Digital)

- **1** Turn off your computer and unplug its power cord.
- 2 Connect the signal cable to the DVI-D connector (1) on the back of your monitor.
 Connect the other end of the cable to the video port on the back of your workstation.
- 3 Connect the power cord for your monitor to the power port on the power adapter.
- **4** Secure the power adapter cord and the signal cable(s) under the metal prong.
- Insert the tab on each side of the hinge cover (b) then attach the stand of the monitor.
- 6 Plug the power cords of your computer and your monitor into a nearby outlet.
- 7 Turn on your computer and monitor. If your monitor displays an image, installation is complete.
- **R** Perform the auto adjustment procedure as described in "Auto Adjustment" on page 7.

Getting Help

If your monitor does not display an image, check your cable connections and refer to "Troubleshooting" on page 17. If you experience difficulties with the quality of the displayed image, run auto adjustment again and refer to "Adjusting Your LCD Monitor" on page 9 or "Troubleshooting" on page 17.

Plug and Play

Our adoption of the new VESA® Plug and Play solution eliminates complicated and time consuming setup. It allows you to install your monitor in a Plug and Play compatible system without the usual hassles and confusion. Your PC system can easily identify and configure itself for use with your display. This monitor automatically tells the PC system its Extended Display Identification (EDID) data using Display Data Channel (DDC) protocols so the PC system can automatically configure itself to use the LCD Monitor.

Auto Adjustment

Even though your computer system can recognize your new LCD Monitor system, the auto adjustment function will optimize the display settings for use with your computer. Auto Adjustment can be accessed through the OSD, see "Image Lock" on page 13 or use the direct access instructions below:

- Turn on your computer and monitor.
- **2** Push the **AUTO** button to open the Auto Adjustment OSD.
- **3** The screen will dim and you may notice small changes to the screen image.

Self-Test Feature Check (STFC)

Your monitor provides a self test feature that allows you to check whether your monitor is functioning properly. If your monitor and computer are properly connected but the monitor screen remains dark and the power indicator is blinking, run the monitor self-test by performing the following steps:

- Turn off both your computer and the monitor.
- **1** Unplug the video cable from the back of the computer.
- **3** Turn on the monitor.

If the monitor is functioning properly, you will see a white box with a red border and black text inside as shown in the following illustration:

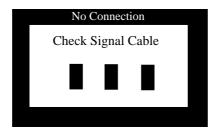


Figure 5. Monitor self test screen

The three boxes inside the border are red, green and blue. Failure of any of the boxes to appear indicates a problem with your monitor. This box also appears during normal operation if the video cable becomes disconnected or damaged.

Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

If your monitor screen remains blank after using the previous procedure, check your video controller and computer system; your monitor is functioning properly.

User Controls

Your LCD Monitor allows you to easily adjust the characteristics of the image being displayed. All of these adjustments are made using the control buttons on the front of the monitor. While you use these buttons to adjust the controls, an OSD shows you their numeric values as the change.

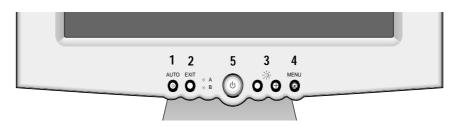


Figure 6. User controls

No.	Name	Description			
1	AUTO	■ Activates the Auto Adjustment function			
2	EXIT	Exits from the OSD while the OSD is displayedSelects the Video signal (A or B) while the OSD is off			
3	- / + Brightness	 Moves the selector between menus and sub-menus on the OSD Decreases or increases values of the selected function Directly adjusts the brightness level if pressed while the OSD is off (See the section on "Direct-Access Features" on page 10.) 			
4	MENU	Opens the OSD and sub-menusSelects the highlighted function			
5	Power button and indicator light	 Turns the monitor on and off Glows green during normal operation Glows amber, blinks amber, or blinks green / amber while the monitor is in a power saving mode. (See "Power-saving modes" on page 16.) 			

Automatic Save

Whenever you open the OSD and allow an adjustment window to remain active for about 3 seconds without pressing another button, the monitor automatically saves any adjustments you have made. These changes are saved into a user area in the monitor. User areas are reserved according to the signal frequency from your computer. The monitor can save adjustments for up to 5 user modes. It has 11 factory preset or preload modes, one for each signal frequency as listed in "Display Modes" on page 21

If you have made no adjustments, the OSD disappears and the monitor does not save anything. To exit without saving the changes you have made, press the **EXIT** button before the 2 seconds elapse.

Direct-Access Features

The features described in this section can be accessed quickly, at the touch of one button. Once you finish making adjustments to a feature, push the **EXIT** button to turn off the menu or allow the OSD to time-out and disappear automatically.

Brightness



Follow these instructions to adjust the brightness of the monitor's display.

- 1 With the menu off, push the "-" or "+" button. The brightness display appears.
- Push the "+" button to increase the brightness; push the "-" button to decrease the brightness.

Auto Adjustment



Follow these instructions to enable or disable the automatic screen adjustments for your monitor.

- With the menu off, push the **EXIT** button. The automatic adjustment display appears.
- **2** Follow the directions previously given on page 7.

OSD Lock/Unlock

Use this function to secure the current settings, while allowing you to adjust the Brightness and Contrast, so that they cannot be inadvertently changed. You can unlock the OSD controls at any time by using the same procedure.

Push and hold the **MENU** button for 5 seconds to Lock or Unlock the controls. When locked, a "LOCKED" message displays.

On Screen Display (OSD)

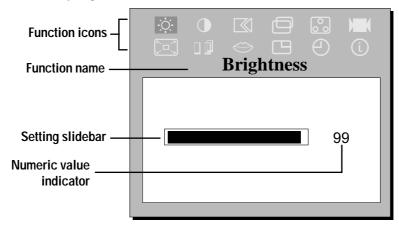


Figure 7. On Screen Display (OSD)

Accessing the Menu System

- With the menu off, push the **MENU** button to open the menu system and display the main function menu.
- Push the "-" and "+" buttons to move between the function icons. As you move from one icon to another, the function name changes to reflect the function or group of functions represented by that icon. See the Menu adjustments table to view a complete list of all the functions available for the monitor.
- Push the **MENU** button once to activate the highlighted function then use the "-" and "+" buttons, according to the indicators on the menu, to make your changes.
- Push the **EXIT** button once to return to the main menu to select another function or push the **EXIT** button 1 or 2 times to exit from the OSD.

Table 1. Menu Adjustments

Icon	Settings and Sub-menus	Description
	Image Lock ■ Fine ■ Coarse	Image Lock controls adjust for and limit the amount of noise in the video signal which causes horizontal lines or areas on the screen where the image appears to be unstable and jitters or shimmers.
		The Fine and Coarse adjustments allow you to more closely adjust your monitor to your preference. Use the "-, +" buttons to adjust away interference. If satisfactory results are not obtained using the Fine adjustment, use the Coarse adjustment and then use Fine again. This function may change the width of the display image. Use the Horizontal function on the Position menu to center the display image on the screen.
₽	Position Horizontal Vertical	Position moves the viewing area around on the monitor screen.
000	Color Control R(ed) G(reen) B(lue)	Color Controls adjust the color hue and saturation. The color hue is most noticeable in areas of white.

Table 1. Menu Adjustments (Continued)

Icon	Settings and Sub-menus	Description
▶ □◀	Reset ■ Geometry ■ Color	Reset controls return the settings to the factory preset values for the selected group of functions. Geometry changes the Position settings, Image Lock settings and changes the Image Size to Expand 2. Color changes the RGB settings back to their original factory settings.
⇔	Language ■ English ■ Deutsch ■ Español ■ Français ■ Italiano ■ Svenska	Language sets the OSD to display in one of six languages (English, Français, Deutsch, Español, Italiano, or Svenska). The language chosen affects only the language of the OSD. It has no effect on any software running on the computer.
①	Menu Display Time 5 Seconds 10 Seconds 20 Seconds 200 Seconds	The OSD stays active for as long as it is in use. Menu Display Time sets the length of time the OSD will remain active after the last time you pushed a button.
<u> </u>	Menu Position ■ Horizontal ■ Vertical	Each time the OSD opens it displays in the same location on the screen. Menu Position controls that location.

Table 1. Menu Adjustments (Continued)

Icon	Settings and Sub-menus	Description
■ Normal ■ Expanded 1 ■ Expanded 2 Monitor provides a scaling proce the addressability up to 1280 x 1 Select the Normal setting to use viewing area for the current sign expands the viewing area to the monitor screen. Expanded 2 external setting to use viewing area to the monitor screen.		If your computer or video board supplies a signal rate and addressability lower than 1280 x 1024, this LCD Monitor provides a scaling processor that can expand the addressability up to 1280 x 1024. Select the Normal setting to use the normal size viewing area for the current signal. Expanded 1 expands the viewing area to the full width of the monitor screen. Expanded 2 extends the viewing area both horizontally and vertically to the full size of the monitor screen.
00	Image Effect ■ Scaling ■ Filtering	Image Effect optimizes the display for the type of software you are using. Scaling smooths an image which may help the eye to see more detail. Filtering sharpens text by adding a fine, contrasting line around each character so that it is easier to recognize.

PowerSaver

This monitor has a built-in power management system called PowerSaver. This system saves energy by switching your monitor into a low-power mode when it has not been used for a certain amount of time. The available modes are "On", "Standby", "Sleep", and "Deep Sleep".

PowerSaver operates with a VESA DPMS compliant video card installed in your computer. You use a software utility installed on your computer to set up this feature. See Table 2 below for details.

Table 2. Power-saving modes

	Normal	Power-Saving Function mode (EPA/NUTEK)			
State	Operation	Standby Mode	Sleep Mode Position A1	Deep Sleep Mode Position A2	
Horizontal Sync Vertical Sync Video	Active Active Active	Inactive Active Blanked	Active Inactive Blanked	Inactive Inactive Blanked	
Power Indicator	Green	Amber	Green/Amber Blinking (0.5 sec. interval)	Amber Blinking (1 sec. interval)	
Power Consumption	45 W (Max.) 42 W (Nom.)	Less than 5 W	Less than 5 W	Less than 5 W	

NOTE: This monitor automatically returns to normal operation when horizontal and vertical sync return. This occurs when you move the computer's mouse or press a key on the keyboard.

This monitor is EPA Energy ${\sf STAR}^{@}$ compliant and NUTEK compliant when used with a computer equipped with VESA DPMS functionality.

For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods.

Troubleshooting

Before calling for service, check the information in this section to see if you can remedy any problems yourself

Table 3. Troubleshooting problems

Symptom	Corrective Actions
No Picture	■ Check to see that both the LCD Monitor and the computer are plugged in and turned on.
"No Connection, Check Signal Cable" appears	■ Check the signal cable connection between the computer and the LCD Monitor
	■ Use the LCD Monitor self test described on page 8.
"Video mode not supported"	■ Check the maximum resolution and the frequency on the video port of your computer.
	Compare these values with the data in the preset timing modes, page 21.
Picture is scrambled	■ Check the signal cable connection between the computer and LCD Monitor.
	■ Perform Auto Adjustment (see page 7).
Picture is not clear	Adjust Fine and Coarse adjustments as needed (see page 13).
Picture is fuzzy	■ Perform LCD Monitor reset.
	■ Eliminate accessories (i.e., video extension cables).
Picture bounces or has wavy oscillations	■ Check the signal cable connection between the computer and LCD Monitor
Picture appears to be ghosting	■ Check the signal cable connection between the computer and LCD Monitor.
The image is too light or too dark	■ Adjust the Brightness and Contrast settings.
Color is not uniform	Adjust the color settings using the OSD COLOR menu.
The colors are distorted with dark or shadowed areas	■ Adjust the color settings using the OSD COLOR menu.

Table 3. Troubleshooting problems (Continued)

Symptom	Corrective Actions
White does not look white	■ Adjust the color settings using the OSD COLOR menu.
Screen image is not centered or sized properly	Adjust the Horizontal and Vertical position settings using the OSD.
	■ Check the image size selection (see page 15).
	Run Auto Adjustment (see page 7).
The power indicator blinks amber once	■ The LCD Monitor is saving your changes to the OSD.
Screen is blank and power indicator light is steady amber or blinks every 0.5 or 1 seconds	■ The LCD Monitor is using its power management system. Check the power management utility on your computer.
Cannot adjust LCD Monitor with the buttons on the front panel	■ Please contact Samsung customer service.
You need the monitor driver software	■ You can download the driver from the internet at http://www.samsung-monitor.com http://www.samsungmonitor.com (USA only)

Specifications

Table 4. Specifications

		Analog		Digital	
LCD Panel	46 cm (18.1") Diagonal true active area 0.28 mm Pixel pitch Viewing Angle: 80/80/80/80 (U/D/L/R) (Degrees)				
* Synchronization	Horizontal: Vertical:	30 kHz to 81 kHz 56 Hz to 85 Hz (~XGA) 60 Hz to 76 Hz (SXGA)	Horizontal: Vertical:	30 kHz to 64 kHz 56 Hz to 85 Hz (~XGA) 60 Hz (SXGA)	
Display Colors	16.7 Million C	Colors	1		
Maximum Resolution	Horizontal: Vertical:	1280 Dots @ 81 kHz 1024 Lines @ 76 Hz	Horizontal: Vertical:	1280 Dots @ 64 kHz 1024 Lines @ 60 Hz	
Active Display	Horizontal: 359.0 ± 3 mm (14.13" ± 0.12 ") Vertical: 287.2 ± 3 mm (11.36" ± 0.12 ") (Active display size is dependent upon signal timing and image size selection			and image size selection)	
Input Signal, Terminated		0.7 Vpp positive at 75 Ω c, composite, and sync-	2 TMDS		
Maximum Pixel Clock	135 MHz		108 MHz		
Power Adapter	AC 90-264 Vo	It, 60 Hz/50 Hz ± 3 Hz			
Power Consumption	45 W (Maxim	um), 42 W (Nominal)			
Dimensions/Weight (W x D x H)	Unit: 449.4 x 461.2 x 182.0 mm; 9.15 kg 17.7 x 18.2 x 7.2 in; 20.17 lb Carton: 570 x 295 x 580 mm; 12.6 kg 22.4 x 11.6 x 22.8 in; 27.7 lb (All measurements approximate.)				
VESA Mounting Interface	100 mm x 100 mm (For use with Specialty (Arm) Mounting hardware.)				
Environmental Considerations	Operating Temperature:50°F to 104°F (10°C to 40°C) Humidity: 10% to 80% Storage Temperature: -68°F to 113°F (-20°C to 45°C) Humidity: 5% to 95%			,	

NOTE: Design and specifications are subject to change without prior notice.

^{*} Referring to Preset timing modes, see page 21.

Pin Assignments

Table 5. 15-Pin D-SUB connector

Pin No. 15-Pin Side of the Signal Cable		Pin No.	15-Pin Side of the Signal Cable
1	Red	9	NC
2	Green	10	GND-Sync/Self test
3	Blue	11	GND
4	GND	12	DDC Data
5	GND (DDC Return)	13	H-Sync
6	GND-R	14	V-Sync
7	GND-G	15	DDC Clock
8	GND-B		

Table 6. DVI-D Connector

Pin	Signal Assignment	Pin	Signal Assignment	
1	T.M.D.S. Data2-	13	No Connect	
2	T.M.D.S. Data2+	14	+5V Power	
3	T.M.D.S. Data2 Shield	15	Ground(for +5V)	
4	No Connect	16	Hot Plug Detect	
5	No Connect	17	T.M.D.S. Data0-	
6	DDC Clock	18	T.M.D.S. Data0+	
7	DDC Data	19	T.M.D.S. Data0 Shield	
8	No Connect	20	No Connect	
9	T.M.D.S. Data1-	21	No Connect	
10	T.M.D.S. Data1+	22	T.M.D.S. Clock Shield	
11	T.M.D.S. Data1 Shield	23	T.M.D.S. Clock+	
12	No Connect	24	T.M.D.S. Clock-	

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.

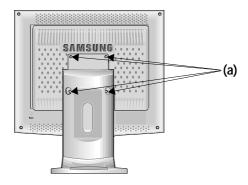
Table 7. Preset timing modes

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
720 x 400	31.469	70.087	28.322	-/ +
640 x 480	31.469	59.940	25.175	-/-
640 x 480	37.500	75.000	31.500	-/-
640 x 480	43.269	85.008	36.000	-/-
800 x 600	46.875	75.000	49.500	+/+
800 x 600 (A)	53.674	85.061	56.250	+/+
1024 x 768	48.363	60.004	65.000	-/-
1024 x 768	60.023	75.029	78.750	+/+
1024 x 768 (A)	68.677	84.997	94.500	+/+
1280 x 1024 (A)	79.976	75.025	135.000	+/+
1280 x 1024	63.300	60.000	108.000	-/-

^{*} Display modes marked (A) will be blocked during "Digital Input."

Changing the Stand

Removing the Stand

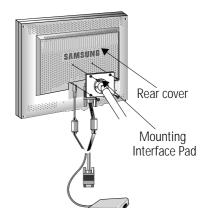


- **1** Turn off your monitor and unplug its power cord.
- 2 Lay the LCD Monitor face-down on a flat surface with a cushion beneath it to protect the screen.
- Remove the 4 screws (a) and then remove the Stand from the LCD Monitor.

Attaching an Arm-Type Stand or Wall Mount Hanger

NOTE: This monitor accepts a 100mm x 100mm VESA-compliant mounting interface pad.





1 Align the Mounting Interface Pad with the holes in the Rear Cover and secure it with the four screws that came with the Arm-type Stand or Wall Mount Hanger.

Maintenance of Your LCD Monitor

WARNING: To avoid risk of electric shock, do not disassemble the monitor cabinet (except gaining access to the cable connectors as described on page 6). Users cannot service the monitor. User maintenance is restricted to cleaning as explained below:

Unplug the monitor from the power outlet before cleaning.

- To clean your LCD Monitor screen, lightly dampen a soft, clean cloth with water or mild detergent. If possible, use a special screen cleaning tissue or solution suitable for the antistatic coating.
- To clean the monitor cabinet, use a cloth lightly dampened with a mild detergent.
- Never use flammable cleaning material to clean your LCD Monitor or any other electrical apparatus.

Index

A Auto adjustment , 12 B Blue , 12 C Coarse , 12 Color , 13 Color control , 12 B , 12 G , 12 R , 12	Expanded 1 , 13 Expanded 2 , 13 Normal , 13 Italiano , 13 K Kensington security slots , 4 L Language , 13 Deutsch , 13 English , 13 Español , 13
D	Français , 13
Deep sleep mode , 15 Deutsch , 13 Display Modes , 20 E English , 13 Español , 13	Italiano , 13 M Menu display time , 13 Menu position , 13 Horizontal , 13 Vertical , 13
Expanded 1 , 13 Expanded 2 , 13	No Connection Check Signal Cable , 16 Normal , 13
Filtering , 14 Français , 13 G Geometry , 13 Green , 12	R Red , 12 Reset , 13 Color , 13 Geometry , 13
Image effect , 14 Filtering , 14 Scaling , 14 Image lock , 12 Auto adjustment , 12 Coarse , 12 Fine , 12 Image size , 13	Safety instructions , 2 Scaling , 14 Sleep mode , 15 Standby mode , 15 Svenska , 13 T Troubleshooting , 16

Regulatory Information

FCC Information

User Instructions

The Federal Communications Commission Radio Frequency Interference Statement includes the following warning:

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 receptions, 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 into 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.

User Information

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

If necessary, consult your dealer or an experienced radio/television technician for additional suggestions. You may find the booklet called How to Identify and Resolve Radio/TV Interference Problems helpful. This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4.

Warning

User must use shielded signal interface cables to maintain FCC compliance for the product.

Declaration of conformity for products Marked with FCC Logo

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 interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The party responsible for product compliance: SAMSUNG ELECTRONICS CO., LTD.

America QA Lab of samsung 85 West Tasman Drive San Jose, CA 95134 USA

Tel.: 408 - 544 - 5124 Fax: 408 - 544 - 5191

Provided with this monitor is a detachable power supply cord with IEC320 style terminations. It may be suitable for connection to any UL Listed personal computer with similar configuration. Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal to or exceeds the monitor voltage rating.

For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type (parallel blades) plug cap. For 240 Volt applications use only UL Listed Detachable power supply cord with NEMA configuration 6-15P type (tandem blades) plug cap.

IC Compliance Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations of ICES-003.

Cet appareil Numérique de classe B respecte toutes les exigences du Règlemont ICES-003 sur les équipements produisant des interférences au Canada.

MPR II Compliance

This monitor complies with SWEDAC(MPR II) recommendations for reduced electric and magnetic fields.

European Notice

Products with the CE Marking comply with both the EMC Directive (89/336/EEC), (92/31/EEC), (93/68/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms:

- EN55022:1998 Radio Frequency Interference
- EN55024:1998 Electromagnetic Immunity
- EN61000-3-2:1995 + A1 + A2 Power Line Harmonics
- EN61000-3-3:1995 Voltage Fluctuations
- EN60950 Product Safety.

U.S.A.:

Samsung Electronics America (SEA) One Samsung Place

Ledgewood, NJ 07852

Tel.: 1-800-SAMSUNG (1-800-726-7864)

CANADA:

Samsung Electronics Canada Inc. 7037 Financial Drive

Mississauga, Ontario L5N 6R3

Tel.: 1-800-SAMSUNG (1-800-726-7864)

Fax.: (905) 542-1199

GERMANY:

Samsung Electronics GmbH
Samsung-Haus, Am Kronberger Hang 6
65824 Schwalbach/Ts.
Tel. 49 (0180) 5121213 *
Fax. 49 (0180) 5121214 *

*DM 0,24/Min.

AUSTRALIA:

Samsung Electronics Australia Pty Ltd. Unit G, 10-16 South Street,

Rydalmere, N.S.W. 2116

P.O. BOX 368 Tel.: (02) 638-5200

ITALIA:

Samsung Electronics Italia SpA

Via C. Donat Cattin,

5-20063 Cernusco sul Naviglio (Mi)

Tel.: 167-010740 **PANAMA:**

Servicios Samsung (Zona Libre), S.A. 50 and 61 Streets Sta, Cecilia Bdl. Don Camilo, Panama City

Tel. : (507) 264-0195 or 269-5571

Fax: (507) 269-5568

MEXICO

Samsung Electronics Mexico S.A. de C.V. Saturno 44 Col. Nva. Industrial Vallejo Del. Gustavo A. Madero C.P. 07700

Mexico D.F. Tel. 5747-5100

RFC: SEM950215S98

ESPAÑA:

Samsung Electrónics Comercial Ibérica, S.A. Ciencies, 55-65 (Polígono Pedrosa) 08908 Hospitalet de Llobregat (Barcelona)

Tel.: (93) 261 67 00 Fax.: (93) 261 67 50

UK:

Samsung Electronics (UK) Ltd. Samsung House, 225 Hook Rise South

Surbiton, Surrey KT6 7LD Tel.: (0181) 391 0168 Fax.: (0181) 397 9949

<European Service Center & National Service> Stafford Park 12 Telford, Shropshire, TF3 3BJ

Tel.: (01952) 292 262 Fax.: (01952) 292 033

THAILAND:

Samsung Service Center

729-729/1 JSP Tower Rachadapisek RD., Bangpongpang, Yannawa, Bangkok 10120

Tel: (662) 2954508-14 Fax: (662) 2954267

SOUTH AFRICA:

Samsung Electronics South Africa Somerset Office Park 5 Libertas Road

Bryanston, South Africa Tel: (27)-11-463-5678 Fax: (27)-11-463-5215

BRASIL:

Samsung Eletrônica da Amazonia Ltda. R. Prof. Manoelito de Ornellas, 303-2º Andar Chácara Sto. Antônio • cep : 04719-040

São Paulo • SP Tel. : (011) 541-8500

Fax: (011) 523-3995, 522-0726

SWEDEN:

Samsung Electronics Svenska, AB Box 713, S-194 27 Upplands Vasby

Tel.: (468) 590-966-00 Fax: (468) 590-966-50

IMPORTADO POR:SAMSUNG ELECTRONICS MEXICO S.A. DE C.V.

SATURNO 44 COL. NVA. INDUSTRIAL VALLEJO DEL. GUSTAVO A. MADERO C.P. 07700

MEXICO D.F. TEL. 5747-5100

RFC: SEM950215S98

EXPORTADO POR: SAMSUNG ELECTRONICS CO.,LTD.

JOONG-ANG DAILY NEWS BLDG.
7 SOON-WHA-DONG CHUNG-KU,
C.P.O BOX 2775, 1144 SEOUL, KOREA





"As an ENERGYSTAR® Partner, SAMSUNG has determined that this product meets the ENERGYSTAR® guidelines for energy efficiency."

P/N: BN68-00159B-00



Printed on recyclable paper

Free Manuals Download Website

http://myh66.com

http://usermanuals.us

http://www.somanuals.com

http://www.4manuals.cc

http://www.manual-lib.com

http://www.404manual.com

http://www.luxmanual.com

http://aubethermostatmanual.com

Golf course search by state

http://golfingnear.com

Email search by domain

http://emailbydomain.com

Auto manuals search

http://auto.somanuals.com

TV manuals search

http://tv.somanuals.com