

SAMSUNG

SyncMaster 450Nb
SyncMaster 450b
SyncMaster 550s



Color Monior



**Owner's
Instructions**

Safety Instructions

- 1** Before connecting the AC power cord to an outlet, make sure the voltage designation on your monitor corresponds to the local electrical supply.
- 2** Never insert anything metallic into the monitor openings. Doing so may create the danger of electric shock.
- 3** To avoid electric shock, never touch the inside of the monitor. Only a qualified technician should open the monitor's case.
- 4** Never use your 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 monitor from an electric socket.
- 6** Openings in the monitor cabinet are provided for ventilation. To prevent overheating, these openings should not be blocked or covered. Also, avoid using the 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 monitor in a bookcase or some other enclosed space, be sure to provide adequate ventilation.
- 7** Put your monitor in a location with low humidity and a minimum of dust.
- 8** Do not expose the monitor to rain or use it near water (in kitchens, near swimming pools, etc.). If the monitor accidentally gets wet, unplug it and contact an authorized dealer immediately. You can clean the monitor with a damp cloth when necessary, but be sure to unplug the monitor first.
- 9** Place the monitor on a solid surface and treat it carefully. The screen is made of glass and can be damaged if dropped, hit or scratched.
- 10** Locate your monitor near an easily accessible AC outlet.
- 11** If your 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 temperatures can cause problems. Don't use your monitor in direct sunlight, and keep it away from heaters, stoves, fireplaces, and other sources of heat.
- 13** Unplug the monitor when it is going to be left unused for an extended period of time.
- 14** Unplug your monitor from the AC outlet before any service.

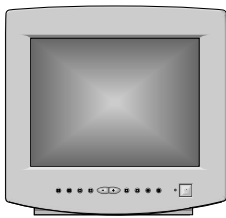
	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO-USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		

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Your New Monitor

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



Monitor



This manual



Warranty card
(not available in all locations)



Display Driver Diskette
(not available in all locations)



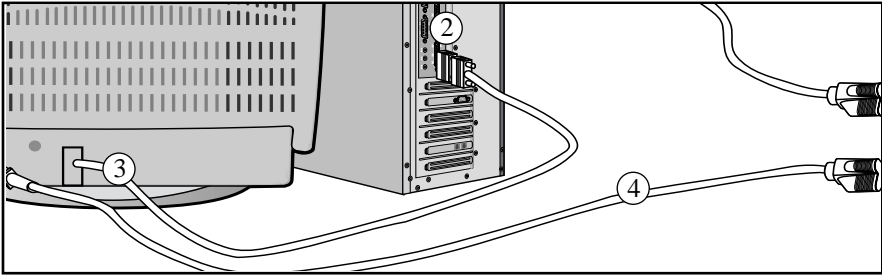
Stand



Power cord

Operation

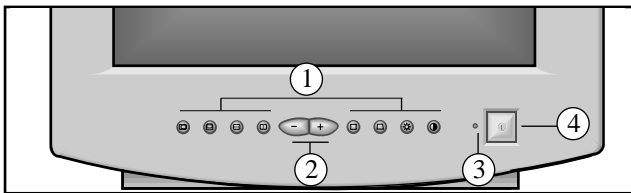
Connecting Your Monitor



- 1** Turn off your computer and unplug the power cord.
- 2 Signal cable**
Connect the end of the signal cable to your computer's video port. If you are using a Macintosh computer, connect the cable to a Macintosh adapter, and set the pins on your adapter (adapter not included). A PC-compatible computer does not need an adapter.
- 3 Power port**
Connect the power cord for your monitor to the power port on the back of the monitor.

- 4 Power cords**
Plug the power cord for the monitor and the power cord for your computer into a nearby outlet.
- 5** Turn on your computer and monitor. If your monitor displays an image, installation is complete.
- 6 Install the monitor driver**
 - Insert the provided diskette into the A drive.
 - Double click the "install.exe" file.










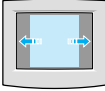








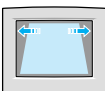






The Front Panel






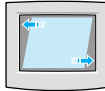
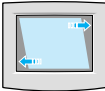


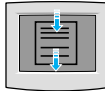
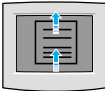


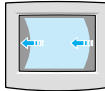
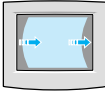








- 1 Monitor control buttons**
All adjustments to the image display are made using these control buttons, including control of the screen display area shape and the display image.
- 2 Adjustment buttons**
The decrease (-) button lowers the value of the selected function. The increase (+) button raises the value of the selected function.
- 3 Power indicator**
This light glows green during normal operation. It also blinks when a function button is pressed, or while a function setting is being automatically saved.
- 4 Power button**
Turns the monitor on and off.

Monitor Control Buttons

- 1** Press the desired control button once. (Some controls require that two buttons be pressed simultaneously.) See the following tables for descriptions of button functions.
- 2** Use the adjustment buttons (+, -) to increase or decrease the adjustment. The power indicator light blinks rapidly when a maximum setting is reached.

Button	Control	Adjustment Effect	
		-	+
	Press Once		
	Horizontal Position Horizontal screen position. - moves screen left + moves screen right		
	Vertical Position Vertical screen position. - moves screen down + moves screen up		
	Horizontal Size Horizontal screen size. - decreases size of screen image + increases size of screen image		
	Vertical Size Vertical screen size - decrease size of screen image + increases size of screen image		
	Pincushion Straightness of vertical edges. - curves image inward + curves image outward		
	Trapezoid Width of top & bottom of screen. - widens bottom of screen image + widens top of screen image		
	Brightness Background brightness of screen. - decreases brightness of screen + increases brightness of screen		
	Contrast Contrast of screen image. - decreases contrast of screen image + increases contrast of screen image		

Operation

Buttons	Control	Adjustment Effect	
		-	+
	Press both & Hold for 3 seconds		
 AND 	Parallelogram Skews screen image. - skews to left + skews to right		
 AND 	V-linearity Compression of image on screen. - compresses bottom of screen + compresses top of screen		
 AND 	Pinbalance Curves of vertical lines. - curves lines to left + curves lines to right		
 AND 	V-moiré Corrects for moiré pattern on screen. - Vertical moiré correction off + Vertical moiré correction on		
 AND 	Degauss Removes color distortion caused by magnetic fields. Press brightness and contrast buttons once. Do not use more than once in 30 minutes.		
 AND 	Recall Returns monitor controls to original settings. Press and hold trapezoid and contrast buttons for 3 seconds.		
 AND 	User Delete Resets data in monitor's memory. Press and hold pincushion and contrast buttons for at least 5 seconds.		

Note: When you are finished adjusting your monitor using the control buttons, the power indicator light will blink once as the monitor automatically saves your changes.

Troubleshooting

Before calling for service, check the information in this section to see if you can solve the problem yourself. If you do need assistance, please call the phone number on the warranty card, the phone number on the back cover of this manual, or contact your dealer.

There is no screen image.

- Check to see that both the monitor and the computer are plugged in and turned on (page 2).

Screen image area is lightened but no image appears.

- Check the signal cable connection between the computer and the monitor (page 2).

The screen image is too light or too dark.

- Adjust the brightness or contrast settings (page 3).

The screen image is too large or too small.

- Adjust the size settings (page 3).

The colors are distorted with dark or shadowed areas.

- Activate the degauss feature (page 4).

The power indicator light blinks every 0.5 or 1 seconds.

- The monitor is using its power management system (see "PowerSaver" on page 5).

There is no screen image and the power indicator light blinks every 0.25 seconds.

- The input signal frequency is over or under the synchronization range of the monitor, see "Specifications" on page 6.

You need the monitor driver software.

- Download the driver from the internet at <http://www.samsungelectronics.com/support/downloads/monitor/index.html>

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 monitor automatically returns to normal operation when you move the computer's mouse or press a key on the keyboard. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods. The PowerSaver system operates with a VESA DPMS compliant video card installed in your computer. Use a software utility installed on your computer to set up this feature.

State	Normal operation	Power saving function modes EPA/NUTEK		
		Standby mode	Suspend mode Position A1	Power-off mode Position A2
Power Indicator	Green	Green Blinking (0.5 sec. interval)	Green Blinking (0.5 sec. interval)	Green Blinking (1 sec. interval)
Power Consumption	75W (maximum) 65W (nominal)	50W (nominal)	Less than 15W	Less than 3W

Note: This monitor is EPA ENERGY STAR® compliant and NUTEK compliant when used with a computer equipped with VESA DPMS functionality.

Specifications

Specification	Models: SyncMaster 450Nb / 450b / 550s
Picture Tube	<ul style="list-style-type: none"> ■ 450Nb / 450b : 14" (36 cm), 33.5 cm viewable ■ 550s :15" (38 cm) Full square type (35 cm viewable) ■ 90° deflection ■ Dot pitch : 0.24 mm (H) / 0.14 mm (V) ■ Silica-coated with anti-electrostatic properties ■ Medium-short persistence phosphor
Synchronization	<ul style="list-style-type: none"> ■ Horizontal: 450Nb / 450b: 30 - 55 kHz 550s: 30 - 61 kHz ■ Vertical: 450Nb / 450b: 50 - 120 Hz 550s: 50 - 120 Hz
Display Colors	■ Unlimited
Maximum Resolution	■ 1024 dots ■ 768 lines
Active Display	<ul style="list-style-type: none"> ■ Horizontal: 450Nb / 450b: 550s: 10.5 ± 0.16 in (267 ± 4 mm) 10.0 ± 0.16 in (255 ± 4 mm) ■ Vertical: 450Nb / 450b: 550s: 7.9 ± 0.16 in (200 ± 4 mm) 7.5 ± 0.16 in (191 ± 4 mm)
Input Signal, Terminated	<ul style="list-style-type: none"> ■ Video: Analog 0.7 Vpp positive at 75 ohms ■ Sync.: Separate sync, TTL level, positive or negative
Maximum Pixel Clock	■ 450Nb / 450b : 65 MHz ■ 550s : 80 MHz
Power Supply	■ AC 100 - 240 V ± 10%, 60 Hz / 50 Hz ± 3 Hz
Power Consumption	■ 75 W maximum (65W Nominal)
Dimensions / Weight (WxDxH)	<ul style="list-style-type: none"> ■ Unit: 450Nb / 450b : 13.70 x 14.65 x 14.49 in / 23.4 lbs (348 x 372 x 368 mm /10.6 kg) 550s : 14.25 x 15.12 x 15.12 in / 26.5 lbs (362 x 384 x 384 mm /12.0 kg) ■ Carton: 450Nb / 450b : 16.61 x 18.11 x 15.35 in / 26.9 lbs (422 x 460 x 390 mm /12.2 kg) 550s : 17.87 x 19.57 x 17.52 in /31.5 lbs (454 x 497 x 445 mm /14.3 kg)
Environmental Considerations	<ul style="list-style-type: none"> ■ Operating Temperature: 32°F - 104°F (0°C - 40°C) Humidity:10% - 80% ■ Storage temperature: -4°F - 113°F (-20°C - 45°C) Humidity:5% - 95%

Design and specifications are subject to change without notice.

Display Modes

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
IBM, VGA2, 720 x 400	31.469	70.087	28.322	-/+
IBM, VGA2, 640 x 480	31.469	59.940	25.175	-/-
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 640 x 480	43.269	85.008	36.000	-/-
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 800 x 600	53.674	85.061	56.250	+/+
VESA, 1024 x 768 (450Nb/450b)	48.363	60.004	65.000	-/-
VESA, 1024 x 768 (550s)	60.023	75.029	78.750	+/+