SAMTRON 56E/56V

SAMSUNG
ELECTRONICS

http://www.samsung-monitor.com
http://www.samsungusa.com/monitor

Contents

Safety Instructions

1. **Do not use a damaged or loose plug.**
2. **Do not pull the plug out by the wire nor touch the plug with wet hands.**
3. **Use only a properly grounded plug and recepticle.**
4. **Do not excessively bend the plug and wire nor place heavy objects upon them, which could cause damage.**
5. **Disconnect the plug from the outlet during storms or lightening or if it is not used for a long period of time.**
6. **Do not connect too many extension cords or plugs to an outlet.**
7. **Do not cover the vents on the monitor cabinet.**
8. **Put your monitor in a location with low humidity and a minimum of dust.**
9. **Do not drop the monitor when moving it.**
10. **Place the monitor on a flat and stable surface.**
11. **Set down the monitor carefully.**
12. **Do not place the monitor face down on the screen.**
13. **Do not use the monitor without the monitor stand.**
14. **Do not spray detergent directly on the monitor.**
15. **Use the recommended detergent with a smooth cloth.**
16. **If the connector between the plug and the pin is dusty or dirty, clean it properly with a dry cloth.**
17. **Do not set a glass of water, chemicals or any small metal objects on the monitor.**
18. **Do not remove cover(or back). No user serviceable parts inside.**
19. **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.**
20. **Do not place any heavy objects on the monitor.**
21. **For each hour of looking at the monitor, you should let your eyes rest for 5 minutes.**
22. **Do not use or store inflammable substances near the monitor.**
23. **Do not try to move the monitor by pulling on the wire or the signal cable.**
24. **Do not move the monitor right or left by pulling only the wire or the signal cable.**
25. **Never insert anything metallic into the monitor openings.**
26. **Keep the monitor away from any magnetic substances.**

> ⚠️ **Caution** : Use a recommended detergent only, as other surfactants containing large amounts of alcohol, solvent or other strong substances, can discolor or crack the monitor or damage the coated CDT
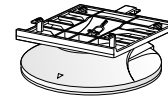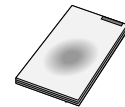
Unpacking Your Monitor

Monitor and Stand

(Some models include a stand attached.)
Please make sure the following items are
included with your monitor. If any items are
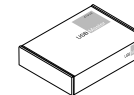missing, contact your dealer.
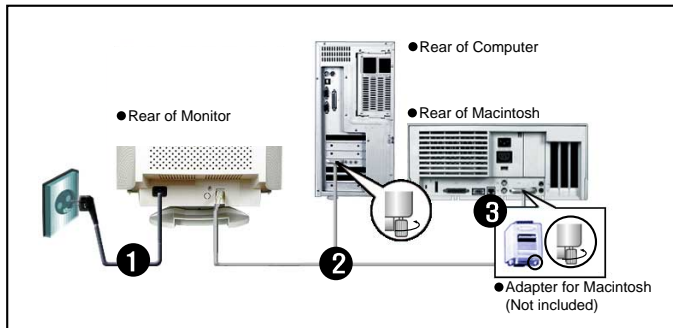

Power Cord   Stand   User Guide

Monitor Driver
(Not available in all locations)   USB (Option)

▶Connecting Your Monitor

- ●Rear of Computer
- ●Rear of Monitor
- ●Rear of Macintosh
- ❸
- ❶
- ❷
- ●Adapter for Macintosh (Not included)

1 Connect the power cord for your monitor to the power port on the back of the monitor.

Plug the power cord for the monitor into a nearby outlet.

2 Connect the end of the signal cable to your computer's video port

(video board, video card or graphics card).

3 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.

4 Turn on your computer and monitor. If your monitor displays an image, installation is complete.

▶Installing the Monitor Driver

Automatic

When prompted by the operating system for the monitor driver, insert the CD-ROM included with this monitor. Driver installation is slightly different from one operating system to another. Follow the directions as appropriate for the operating system you have.

Prepare a blank disk and download the driver program file at the Internet web site shown here.

- Internet web site : http://www.samsung-monitor.com/ (WorldWide)
  http://www.samsungusa.com/monitor/ (USA)
  http://www.sec.co.kr/monitor/ (Korea)
  http://www.samsungmonitor.com.cn/ (China)

● Windows ME / 98 / 95

1. Insert CD into the CD-ROM driver.
2. Click "Windows ME/98/95 Driver".
3. Choose your monitor model in the model list, then click the "OK" button.
4. Click the "Install" button in the "Warning" window.
5. Monitor driver installation is completed.

● Windows XP / 2000

1. Insert CD into the CD-ROM driver.
2. Click "Windows XP/2000 Driver".
3. Choose your monitor model in the model list, then click the "OK" button.
4. Click the "Install" button in the "Warning" window.
5. If you can see following "Message" window, then click the "Continue Anyway" button.
   Then click "OK" button.

   This monitor driver is under certifying MS logo,and this installation don't damage your system.
   The certified driver will be posted on SAMSUNG Monitor Homepage
   http://www.samsung-monitor.com
6. Monitor driver installation is completed.

Manual

When prompted by the operating system for the monitor driver, insert the CD-ROM included with this monitor. Driver installation is slightly different from one operating system to another. Follow the directions as appropriate for the operating system you have.

Prepare a blank disk and download the driver program file at the Internet web site shown here.

• Internet web site : http://www.samsung-monitor.com/ (WorldWide)
http://www.samsungusa.com/monitor/ (USA)
http://www.sec.co.kr/monitor/ (Korea)
http://www.samsungmonitor.com.cn/ (China)

● **Microsoft $^®$ Windows $^®$ XP Operating System**

1. Insert CD into the CD-ROM driver.
2. Click "Start" —> "Control Panel" then click the "Appearance and Themes" Icon.
3. Click "Display" icon and choose the "Settings" tab then click "Advance..".
4. Click the "Properties" button on the "Monitor" tab and select "Driver" tab.
5. Click "Update Driver.." and select "Install from a list or.." then click "Next" button.
6. Select "Don't search ,I will.." then click "Next" and then click "Have disk".
7. Click the "Browse" button then choose A:(D:\Driver) and choose your monitor model in the model list and click the "Next" button.
8. If you can see following "Message" window, then click the "Continue Anyway" button.
   Then click "OK" button.
   This monitor driver is under certifying MS logo,and this installation don't damage your system.
   The certified driver will be posted on SAMSUNG Monitor Homepage
   http://www.samsung-monitor.com
9. Click the "Close" button then click "OK" button continually.
10. Monitor driver installation is completed.

● **Microsoft $^®$ Windows $^®$ 2000 Operating System**

- When you can see "Digital Signature Not Found" on your monitor, follow these steps.

1. Choose "OK" button on the "Insert disk" window.
2. Click the "Browse" button on the "File Needed" window.
3. Choose A:(D:\Driver) then click the "Open" button and then click "OK" button.

- How to install

1. Click "Start" , "Setting" , "Control Panel".
2. Double click the "Display" Icon.
3. Choose the "Settings" tab and then click "Advanced..".
4. Choose "Monitor".
   Case1: If the "Properties" button is inactive, it means your monitor is properly configured.
       Please stop installation
   Case2: If the "Properties" button is active, click the "Properties" button then follow next
       steps continually.
5. Click "Driver" and then click on "Update Driver.." then click on the "Next" button.
6. Choose "Display a list of the known drivers for this device so that I can choose a specific driver" then click "Next" and then click "Have disk".
7. Click the "Browse" button then choose A:(D:\Driver).
8. Click the "Open" button, then click "OK" button.
9. Choose your monitor model and click the "Next" button then click "Next" button.
10. Click the "Finish" button then the "Close" button.
    If you can see the "Digital Signature Not Found" window then click the "Yes" button.
    And click the "Finish" button then the "Close" button.

● **Microsoft ® Windows ® Millennium Operating System**

1. Click "Start" , "Setting" , "Control Panel".
2. Double click "Display" icon.
3. Select the "Settings" tab and click "Advanced Properties" button.
4. Select the "Monitor" tab.
5. Click the "Change" button in the "Monitor Type" area.
6. Choose "Specify the location of the driver".
7. Choose "Display a list of all the driver in a specific location.." then click "Next" button.
8. Click the "Have Disk" button.
9. Specify A:\(D:\driver) then click "OK" button.
10. Select "Show all devices" and choose the monitor that corresponds to the one you connected to your computer and click "OK".
11. Continue choosing "Close" button and "OK" button until you close the Display Properties dialogue box.
     (You can get some other screen for warning message or others, then click the appreciate option for your monitor.)

● **Microsoft ® Windows ® 98 Operating System**

1. Click "Start" , "Setting" , "Control Panel".
2. Double click "Display" icon.
3. Select the "Settings" tab and click "Advanced Properties" button.
4. Select the "Monitor" tab.
5. Click the "Change" button in the "Monitor Type" area then click "Next" button.
6. Choose "Display a list of all the driver.." then click "Next" button.
7. Click the "Have Disk" button, then click "browse.." button.
8. Specify A:\(D:\driver) then click "OK" button.
9. The "Select Device" dialogue box will appear. Select "Show all devices" then choose the monitor that corresponds to the one you connected to your computer and click OK.
10. Continue choosing "Close" button and "OK" button until you close the Display Properties dialogue box.

● **Microsoft ® Windows ® 95 Operating System**

First determine the Windows 95 version installed on your computer by right-clicking the My Computer icon on PC and selecting Properties. The version number is listed under System. Perform the steps for the appropriate version.

- Version 4.00.950A

1. Click Start, Settings, Control Panel, and then double-click "Display" icon.
2. In the "Display Properties" window, click the "Settings" tab and click "Change Display Type".
3. In the "Change Display Type" window, click "Change" and then click "Have Disk".
4. Click "browse.." button and specify A:\(D:\driver) and click "OK".
5. In the Select Device window, click the appropriate monitor model and then click OK.
6. Continue choosing "Close" button and "OK" button until you close the "Display Properties" dialogue box.

- Version 4.00.950B

1. Click Start, Settings, Control Panel, and then double-click "Display" icon.
2. In the "Display Properties" window, click the Settings tab and then click "Advanced Properties" button.
3. In the "Advanced Display Properties" window, click the "Monitor" tab and then click "Change" button.
4. In the "Select Device" window, click "Have Disk" button.
5. Click "browse.." button and specify A:\(D:\driver) and click "OK".
6. In the "Select Device" window, click the appropriate monitor model and then click "OK".
7. Continue choosing "Close" button and "OK" button until you close the "Display Properties" dialogue box.

● **Microsoft ® Windows ® NT Operating System**

1. Click Start, Settings, Control Panel, and then double-click Display icon.
2. In Display Registration Information window, click Settings Tab and then click All Display Modes.
3. Select a mode that you wish to use (Resolution, Number of colors and Vertical frequency) and then click OK.
4. Click Apply button if you see the screen working normally after clicking Test. If the screen is not normal, change to a different mode (lower mode of resolution, colors or frequency).

Note If there is no Mode at All Display Modes, select the level of resolution and vertical frequency by referring to the Preset Timing Modes in the user guide.

● **Linux Operating System**

To execute X-Window, you need to make the X86Config file, which is a type of system setting file.

1. Press Enter at the first and the second screen after executing the X86Config file.
2. The third screen is for setting your mouse.
3. Set a mouse for your computer.
4. The next screen is for selecting a keyboard.
5. Set a Keyboard for your computer.
6. The next screen is for setting your monitor.
7. First of all, set a horizontal frequency for your monitor. (You can enter the frequency directly.)
8. Set a vertical frequency for your monitor. (You can enter the frequency directly.)
9. Enter the model name of your monitor.
   This information will not affect the actual execution of X-Window.
10. You have finished setting up your monitor.
    Execute X-Window after setting other requested hardware.

▶**Self-Test Feature Check**

Your monitor provides a self test feature that allows you to check whether your monitor is functioning properly.

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

If your monitor works normally, the following screen appears.

No Connection

Check Signal Cable
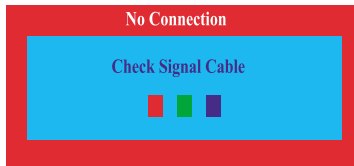
Failure of any of the boxes to appear indicates a problem with your monitor. This box also appears during normal operation if the video cable becomes disconnected or damaged.

4. 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.

● **Werning Messages**

If there is something wrong with the input signal, a message appears on the screen or the screen goes blank although the power indicator LED is still on. The message may indicate that the monitor is out of scan range or that you need to check the signal cable.

Sync.Out of Range

● **Environment**

The location and the position of the monitor may influence the quality and other features of the monitor.

1. If there are any woofer speakers near the monitor, unplug and relocate the woofer to another room.
2. Remove all electronic devices such as radios, fans, clocks and telephones that are within 3 feet (one meter) of the monitor.
3. Degauss the monitor if any devices were removed from the area.

● **Useful Tips**

• A monitor recreates visual signals received from the PC. Therefore, if there is trouble with the PC or the video card, this can cause the monitor to become blank, have poor coloring, noise, Sync. Out of Range, etc. In this case, first check the source of the problem, and then contact a service center or your dealer.
• **Judging the monitor's working condition**
  If there is no image on the screen or an "Sync. Out of Range" message comes up, disconnect the cable from the computer while the monitor is still powered on.
  · If there is a message coming up on the screen or if the screen goes white, this means the monitor is in working condition.
  · In this case, check the computer for trouble.
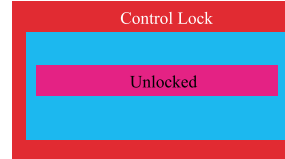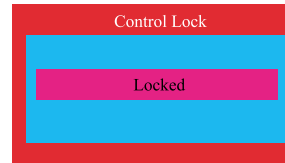
▶User Controls

1 Exit button: Use this button to Exit the active menu or the OSD.

2,3 Adjust buttons: These buttons allow you to highlight and adjust
                          items in the menu.

4 Menu button: Use this button to open the OSD and activate
                         a highlighted menu item.

OSD lock/unlock

1 Push and hold in the Menu (⏎) button for 10 seconds or
   more to Lock the OSD. (In this case, even if you click the
   Menu button (⏎), the control screen will not be printed.)

2 Push and hold in the Menu (⏎) button for 10 seconds
   or more to UnLock the OSD.

Brightness

Adjust the Brightness.

1 With the menu off, push the menu (⏎) button.

2 Push the - button or + button until the
   Brightness screen is displayed.

3 Push the menu (⏎) button to open the
   Brightness adjustment screen.

4 Use the + button to increase the brightness or
    - button to decrease the brightness.

Contrast

Adjust the Contrast.

1 With the menu off, push the menu (⏎) button.

2 Push the - button or + button until the
   Contrast screen is displayed.

3 Push the menu (⏎) button to open the
   Contrast adjustment screen.

4 Use the + button to increase the brightness or
    - button to decrease the Contrast.
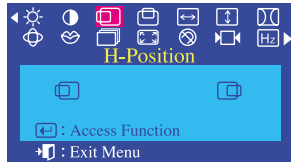
H-Position

H-Position

: Access Function
: Exit Menu

H-Position

50
− +

: Previous Menu

Follow these instructions to change the Position of the monitor's entire display.

1 With the menu off, push the menu ( ) button.

2 Push the - button or + button until the H-Position screen is displayed.

3 Push the menu ( ) button to open the H-Position adjustment screen.

4 Use the - and + buttons to change the Horizontal position of the monitor's viewing area.
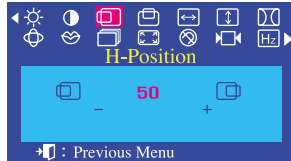
V-Position
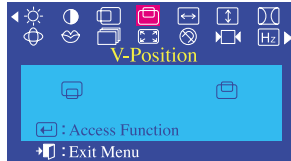
V-Position

: Access Function
: Exit Menu

V-Position

50
− +

: Previous Menu

Follow these instructions to change the Position of the monitor's entire display.

1 With the menu off, push the menu ( ) button.

2 Push the - button or + button until the V-Position screen is displayed.

3 Push the menu ( ) button to open the V-Position adjustment screen.

4 Use the - and + buttons to change the vertical position of the monitor's viewing area.
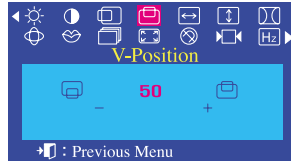
H-Size
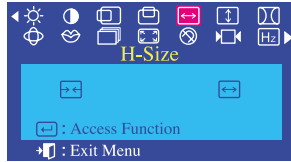
H-Size

: Access Function
: Exit Menu

H-Size

50
− +

: Previous Menu

Follow these instructions to change the Position of the monitor's entire display.

1 With the menu off, push the menu ( ) button.

2 Push the - button or + button until the H-Size screen is displayed.

3 Push the menu ( ) button to open the H-Size adjustment screen.

4 Use the - and + buttons to change the Horizontal Size of the monitor's viewing area.

V-Size

V-Size

: Access Function
: Exit Menu

V-Size

50
− +

: Previous Menu
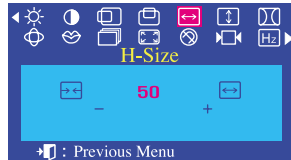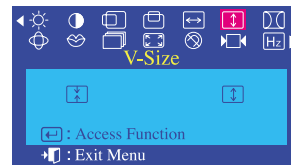
Follow these instructions to change the Size of the monitor's entire display.

1 With the menu off, push the menu ( ) button.

2 Push the - button or + button until the V-Size screen is displayed.

3 Push the menu ( ) button to open the V-Size adjustment screen.

4 Use the - and + buttons to change the vertical size of the monitor's viewing area.

Pincushion

Pincushion

: Access Function
: Exit Menu

Pincushion

50
− +

: Previous Menu
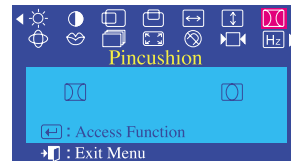
Adjust the pincushion setting when the sides of the display are bowed in or bowed out.

1 With the menu off, push the menu ( ) button.

2 Push the - button or + button until the Pincushion screen is displayed.

3 Push the menu ( ) button to open the Pincushion adjustment screen.

4 Use the - button or + button to adjust the pincushion setting.
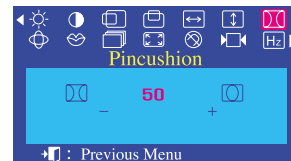
Adjusting Your Monitor

Trapezoid
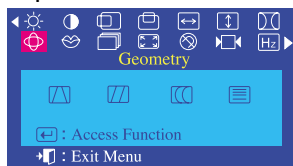
Adjust the trapezoid setting when the top or bottom of the display is too large or small.

1   With the menu off, push the menu (⏎) button.

2   Push the - button or + button until the Geometry screen is displayed.

3   Push the menu (⏎) button again and then press the - or + button until the Trapezoid screen appears. Push the menu (⏎) button to open the Trapezoid adjustment screen.

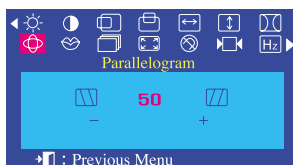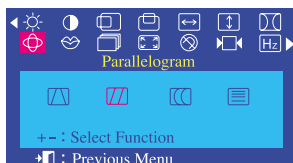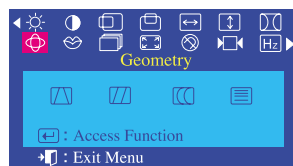4   Use the - button or + button to adjust the trapezoid setting.
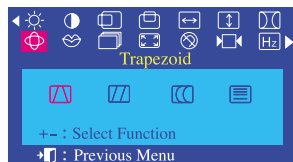
Parallelogram
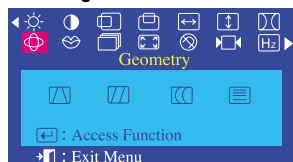
Adjust the parallelogram setting when the display is leaning left or right.

1   With the menu off, push the menu (⏎) button.

2   Push the - button or + button until the Geometry screen is displayed.

3   Push the menu (⏎) button again and then press the - or + button until the Parallelogram screen appears. Push the menu (⏎) button to open the Parallelogram adjustment screen.

4   Use the - button or + button to adjust the Parallelogram setting.

Adjusting Your Monitor

Pinbalance

Adjust the pinbalance setting when the sides of the display are bowed towards the left or right.

1   With the menu off, push the menu (⏎) button.

2   Push the - button or + button until the Geometry screen is displayed.

3   Push the menu (⏎) button again and then press the - or + button until the Pinbalance screen appears. Push the (⏎) menu button to open the Pinbalance adjustment screen.

4   Use the - button or + button to adjust the pinbalance setting.
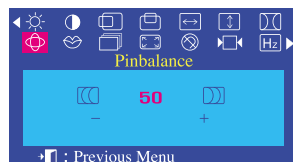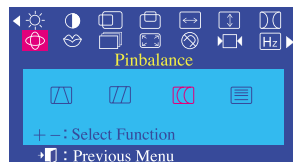
V-Linearity
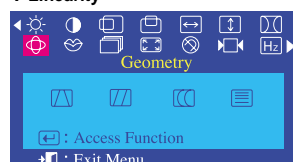
Adjust the linearity setting when the display image is compressed at the left, right or top, bottom.

1   With the menu off, push the menu (⏎) button.

2   Push the - button or + button until the Geometry screen is displayed.

3   Push the menu (⏎) button. Push the - button or + button until the V-Linearity screen is displayed. Push the menu (⏎) button to open the V-Linearity adjustment screen.

4   Use the - button or + button to adjust the V-Linearity setting.
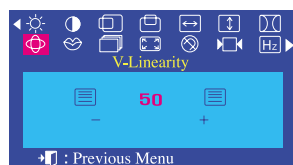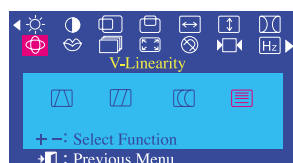
Adjusting Your Monitor

Language
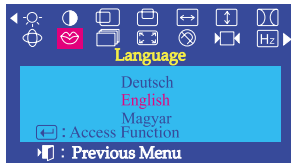
**Follow these steps to change the language used in the menu.
You can choose one of ten languages.
English,German,French, Italian, Portuguese, Spanish, Swedish,
Russian, Polish, or Magyar.
(Some OSD languages may not appear in some areas.)**

1 With the menu off, push the menu (↵) button.

2 Push the - button or + button until the
   Language screen is displayed.

3 Push the menu (↵) button to open the
   Language selection screen.

4 Use the - button or + button to select the language
   you would like to use.

Note The language chosen affects only the language of the
   OSD. It has no effect on any software running on the
   computer.

H-Moire

**A "Moiré" pattern can appear on your screen, looking like a
series of concentric circles or arcs. To eliminate this pattern,
use the clear moiré adjustments.**

1 With the menu off, push the menu (↵) button.

2 Push the - button or + button until the
   Advanced screen is displayed.

3 Push the menu (↵) button again and then press the
   - or + button until the H-Moire screen appears.
   Push the menu (↵) button to open the H-Moire
   adjustment screen.

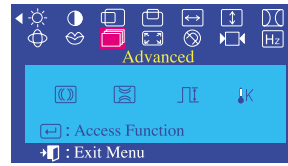4 Use the - button or + button to adjust horizontal moiré.
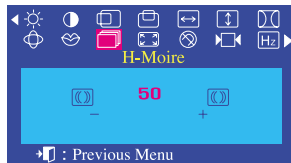
V-Moire

**A "Moiré" pattern can appear on your screen, looking like a
series of concentric circles or arcs. To eliminate this pattern,
use the clear moiré adjustments.**

1 With the menu off, push the menu (↵) button.

2 Push the - button or + button until the
   Advanced screen is displayed.

3 Push the menu (↵) button again and then press the
   - or + button until the V-Moire screen appears.
   Push the menu (↵) button to open the V-Moire
   adjustment screen.

4 Use the - button or + button to adjust vertical moiré.
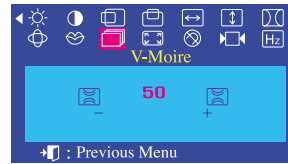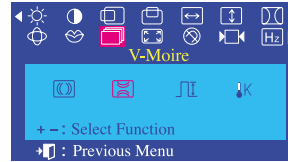
Video Input Level

**Some video cards use video signals higher than 1.0V which
causes the display to be very bright. For those video cards,
use this feature to select the 1.0V Level.**

1 With the menu off, push the menu (↵) button.

2 Push the - button or + button until the
   Advanced screen is displayed.

3 Push the menu (↵) button again and then press the
   - or + button until the Video Input Level screen appears.
   Push the menu (↵) button to open the Video Input Level
   adjustment screen.

4 Use the - button or + button to select 0.7 V or 1.0 V.
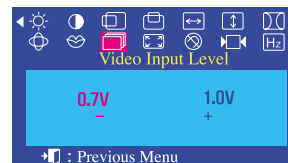
Color Temperature

Color temperature is a measure of the "warmth" of the image colors. The available range is between 6500 to 9300K.

Advanced

⏎ : Access Function
→⏻ : Exit Menu

1 With the menu off, push the menu (⏎) button.

2 Push the - button or + button until the Advanced screen is displayed.

Color Temperature

+ − : Select Function
→⏻ : Previous Menu

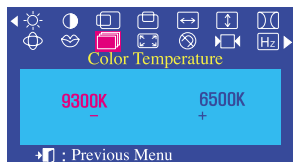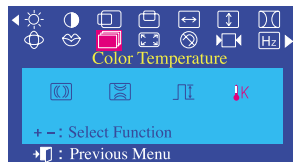3 Push the menu (⏎) button again and then press the - or + button until the Color Temperature screen appears. Push the menu (⏎) button to open the Color Temperature adjustment screen.

Color Temperature

9300K   6500K
−   +

→⏻ : Previous Menu

4 Press the - or + button to select 9300K(Bluish colors) or 6500K(Reddish colors).

Zoom

Zoom

⏎ : Access Function
→⏻ : Exit Menu

Follow these instructions to get a close-up or a longshot view of the monitor's viewing area.

1 With the menu off, push the menu (⏎) button.

2 Push the - button or + button until the Zoom screen is displayed.

Zoom

Out   In
−   +

→⏻ : Previous Menu

3 Push the menu (⏎) button to open the Zoom adjustment screen.

4 Use the - button to decrease the screen viewing area. Use the + button to enlarge the screen viewing area.

Degauss

Degauss

⏎ : Access Function
→⏻ : Exit Menu
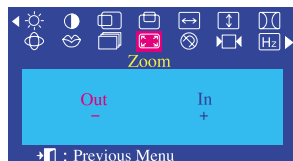
The Degauss feature will remove color impurities caused by magnetic fields.
You can use this function to turn on the power of the monitor or change the power saving mode to the normal mode.
Do not use the Degauss feature more than once within a 30-minute period.

1 With the menu off, push the menu (⏎) button.

2 Push the - button or + button until the Degauss screen is displayed.

Degaussing...

⏎ : Access Function
→⏻ : Exit Menu

3 Push the menu (⏎) button to execute the degauss function. The degaussing screen will appear.

Note The monitor may buzz momentarily, the image colors may change and the image will jiggle for a few seconds. These effects are normal.

Recall

Recall

⏎ : Access Function
→⏻ : Exit Menu

Use the recall feature to reset these monitor settings to their original levels: Position, Size, Pincushion, Trapezoid, Parallelogram, Pinbalance, Rotation, H-Moire and V-Moire.

1 With the menu off, push the menu (⏎) button.

2 Push the - button or + button until the Recall screen is displayed.

Recall

No   Yes
−   +

→⏻ : Previous Menu

3 Push the menu (⏎) button to open the Recall adjustment screen.

4 Push the + button to select Yes. If you don't want to reset the monitor, use the - button to select No.
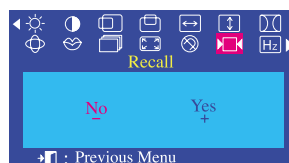
Note If you have selected "Yes", all settings listed above will be reset. All other settings will remain the same.

CAUTION This operation resets all of the data in the user memory area for the current timing signal.

Adjusting Your Monitor

Display Timing

Display Timing

48.3KHz 60Hz NN

↵ : User Mode
→◻ : Exit Menu

User Timing

48.3KHz 60Hz NN
35.6KHz 87Hz PP
.
.

→◻ : Previous Menu

Factory Timing

640 X 480 60Hz
720 X 400 70Hz
800 X 600 85Hz
640 X 480 85Hz

→◻ : Previous Menu
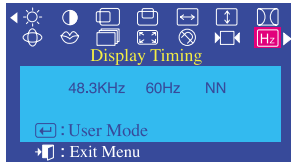
The information on this screen shows Display Timing , User Timing and Factory Timing.

1 With the menu off, push the menu (↵) button.

2 Push the - button or + button until the Display Timing screen is displayed.

3 Push the menu (↵) button to open the Display Timing adjustment screen.

4 Use the - button to see user control mode and thedefault mode.
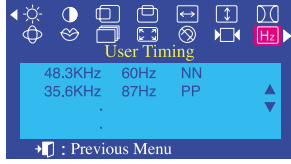
Note You can see the frequency(user control mode) used by the user, the polarity of the operational signals, the default frequency(default mode) set when you buy the monitor and the resolution level.
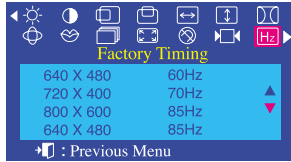
Power Saver

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.

SAMTRON 56E / 56V

State	Normal Operation	Power- off mode EPA/ ENERGY 2000
Power Indicator	Green	Green, Blinking
Power Consumption	65W (Nominal) 70W (Maximum)	Less than 2W

This monitor is EPA ENERGY STAR$^{®}$ compliant and ENERGY2000 compliant when used with a computer equipped with VESA DPMS functionality.
As an ENERGY STAR$^{®}$ Partner, SAMSUNG has determined that this product meets the ENERGY STAR$^{®}$ guidelines for energy efficiency.

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 Information section or contact your dealer.

Check List

Symptom	Check List	Solutions
No images on the screen. I cannot turn on the monitor.	Is the power cord connected properly?	Check the power cord connection and supply.
	Can you see "No Connection, Check Signal Cable" on the screen?	Check the signal cable connection.
	If the power is on, reboot the computer to see the initial screen(the login screen), which can be seen.	If the initial screen (the login screen) appears, boot the computer in the applicable mode (the safe mode for Windows 98/95) and then change the frequency of the video card. (Refer to the Preset Display Modes) Note: If the initial screen (the login screen) does not appear, contact a service center or your dealer.
	Can you see "Sync. Out of Range" on the screen?	You can see this message when the signal from the video card exceeds the maximum resolution and frequency that the monitor can properly handle. Adjust the maximum resolution and frequency that the monitor can properly handle.
	There is no image on the screen. Is the power indicator on the monitor blinking at 1 second intervals?	The monitor is in PowerSaver mode. Press a key on the keyboard or move the mouse to activate the monitor and restore the image on the screen.
I cannot see the On Screen Display.	Have you locked the On Screen Display (OSD) Menu to prevent changes?	Unlock the OSD by pressing the MENU button for at least 10 seconds.
The image on the screen is shaking.	Check the monitor configuration to see if it is in Interlace Mode. (Interlace Mode: Vertical frequency 43Hz, 87Hz(i), etc)	The signal from the video card exceeds the maximum resolution and frequency of the monitor.
	Are there any magnetic products such as a power adapter, speaker or a high voltage wire near by?	Move the monitor away from anything that can create a strong magnetic field.
	Is the voltage stable?	The screen image can appear to shake or vibrate at a particular time of day due to low supply voltage.
	The screen image can also appear to shake or vibrate if there is a problem with the video card or the computer's main board.	

Check List

Symptom	Check List	Solutions
The screen shows strange colors or just black and white.	Is the screen displaying only one color as if looking at the screen through a cellophane paper?	Check the signal cable connection. Make sure the video card is fully inserted in it's slot.
	Have the screen colors become strange after running a program or due to a crash between applications?	Reboot the computer.
	Has the video card been set properly?	Set the video card by referring to the video card manual.
The screen suddenly has become unbalanced.	Have you changed the video card or the driver?	Adjust screen image position and size using the OSD.
	Have you adjusted the resolution or frequency to the monitor?	Adjust the resolution and frequency at the video card. (Refer to the Preset Display Modes).
	The screen can be unbalanced due to the cycle of the video card signals. Readjust Position by referring to the OSD.	
The screen is out of focus or OSD cannot be adjusted.	Have you adjusted the resolution or frequency on the monitor?	Adjust the resolution and frequency of the video card. (Refer to the Preset Display Modes).
The screen is partially distorted.	Are there any magnetic products such as an adapter, speaker or a high voltage wire near the monitor?	Enter the OSD and perform a "Degauss". Keep the monitor away from any magnetic products.
LED is blinking but no images on the screen.	Is the frequency properly adjusted when checking the Display Timing on the menu?	Adjust the frequency properly by referring to the video card manual and the Preset Display Modes. (The maximum frequency per resolution may differ from product to product.)
There are only 16 colors shown on the screen. The screen colors have changed after changing the video card.	Have the Windows colors been set properly?	For Windows 98(95): Set the colors properly at the Control Panel, Display, Settings.
	Has the video card been set properly?	Set the video card by referring to the video card manual.
There is a message that reads "Unrecognized monitor, Plug & Play (VESA DDC) monitor found".	Have you installed the monitor driver?	Install the monitor driver according to the Driver Installation Instructions.
	See the video card manual to see if the Plug & Play (VESA DDC) function can be supported.	Install the monitor driver according to the Driver Installation Instructions.

SAMTRON 56E

General	
Model Name	SAMTRON 56E
Picture Tube	
Type	15"(38cm) Full square type (35cm viewable)
Deflection angle	90°
Dot Pitch	0.24mm (Horizontal)
Screen type	Aluminized tri-color phosphor dot trio with black matrix. Anti-doming invar shadow mask.
Maximum Flicker-Free Resolution	
1024 Dots, 768 Lines	
Active Display	
Horizontal	267 ± 4 mm
Verti cal	200 ± 4 mm
Synchronization	
Horizontal	30 ~ 55 kHz
Vertical	50 ~ 120 Hz
Input Signal Definition	
Video Signal	RGB, Analog 0.7 Vpp positive at 75 ohms
Sync Signal	separate H/V sync, TTL level, positive or negative
Display Color	
Unlimited	
Maximum Pixel Clock	
65 MHz	
Power Supply	
90 ~ 264 VAC rms, 60/50 Hz ± 3 Hz	
Power Consumption	
70W (Maximum), 65W (Nominal)	
Dimensions (WxDxH)	
356 x 380 x 369.5mm (with Stand)	
Weight	
11.5 kg	
Environmental considerations	
Operating	Temperature 32°F ~ 104°F(0°C ~ 40°C) Humidity 10% ~ 80%, non-condensing
Storage	Temperature -4°F ~113°F (-20°C ~ 45°C) Humidity 5% ~ 95%, non-condensing
Plug and Play Capability	

This monitor can be installed on any Plug & Play compatible system. Interaction of the monitor and computer systems will provide the best operating conditions and monitor settings. In most cases, monitor installation will proceed automatically, unless the user wishes to select alternate settings.

Note Design and specifications are subject to change without prior notice.

SAMTRON 56V

General	
Model Name	SAMTRON 56V
Picture Tube	
Type	15"(38cm) Full square type (35cm viewable)
Deflection angle	90°
Dot Pitch	0.24mm (Horizontal)
Screen type	Aluminized tri-color phosphor dot trio with black matrix. Anti-doming invar shadow mask/Glare.
Maximum Flicker-Free Resolution	
1024 Dots, 768 Lines	
Active Display	
Horizontal	267 ± 4 mm
Verti cal	200 ± 4 mm
Synchronization	
Horizontal	30 ~ 55 kHz
Vertical	50 ~ 120 Hz
Input Signal Definition	
Video Signal	RGB, Analog 0.7 Vpp positive at 75 ohms
Sync Signal	separate H/V sync, TTL level, positive or negative
Display Color	
Unlimited	
Maximum Pixel Clock	
65 MHz	
Power Supply	
90 ~ 264 VAC rms, 60/50 Hz ± 3 Hz	
Power Consumption	
70W (Maximum), 65W (Nominal)	
Dimensions (WxDxH)	
356 x 380 x 369.5mm (with Stand)	
Weight	
11.5 kg	
Environmental considerations	
Operating	Temperature 32°F ~ 104°F(0°C ~ 40°C) Humidity 10% ~ 80%, non-condensing
Storage	Temperature -4°F ~113°F (-20°C ~ 45°C) Humidity 5% ~ 95%, non-condensing
Plug and Play Capability	

This monitor can be installed on any Plug & Play compatible system. Interaction of the monitor and computer systems will provide the best operating conditions and monitor settings. In most cases, monitor installation will proceed automatically, unless the user wishes to select alternate settings.

Note Design and specifications are subject to change without prior notice.

Display Modes

If the signal transferred from the computer is the same as the following Preset Timing Modes, the screen will be adjusted automatically. However, if the signal differs, the screen may go blank while the power LED is on. Refer to the video card manual and adjust the screen as follows.

SAMTRON 56E / 56V

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
IBM, 640 x 480	31.469	59.940	25.175	-/-
IBM, 720 x 400	31.469	70.087	28.322	-/+
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 640 x 480	43.269	85.008	36.000	-/-
VESA, 800 x 600	53.674	85.061	56.250	+/+

Horizontal Frequency
The time to scan one line connecting the right edge to the left edge of the screen horizontally is called Horizontal Cycle and the inverse number of the Horizontal Cycle is called Horizontal Frequency.
Unit: kHz

Vertical Frequency
Like a fluorescent lamp, the screen has to repeat the same image many times per second to display an image to the user. The frequency of this repetition is called Vertical Frequency or Refresh Rate.
Unit: Hz