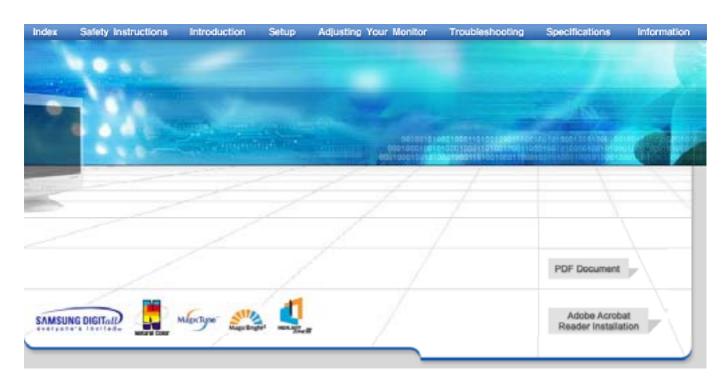
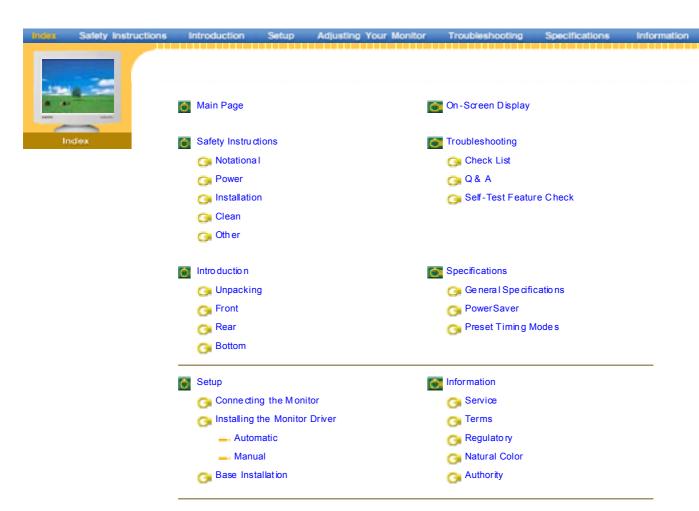
# SyncMaster 797MB/997MB





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And the second

Notational

► Power ► Installation

▶ Clean

▶ Oth er

Please read the following safety instructions as they are designed to prevent damage to property and harm to the user



## Warning / Gaution



Failure to follow directions noted by this symbol could result in bodily harm or damage to equipment.

#### **Notational Conventions**



Prohibited



Important to read and understand at all times



Do not disassemble



Disconnect the plug from the outlet



Do not touch



Grounding to prevent an electric shock



▶ Notational

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When not used for extended periods of time, set your computer to DPMS. If using a screen saver, set it to the active screen mode.

 If the size of your monitor is small, or if the same image is present for long periods of time, you may see afterimages due to damage to the fluorescent substance on the inside of the CDT.



📮 Do not use a damaged or loose plug.

• This may cause an electric shock or fire.



Do not pull the plug out by the wire nor touch the plug with wet hands.

• This may cause an electric shock or fire.



Use only a properly grounded plug and receptacle.

 An improper ground may cause electric shock or equipment damage.



- Do not excessively bend the plug and wire nor place heavy objects upon them, which could cause damage.
  - Failure to do so may cause an electric shock or fire.



- Disconnect the plug from the outlet during storms or lightening or if it is not used for a long period of time.
  - Failure to do so may cause an electric shock or fire.



- Do not connect too many extension cords or plugs to an outlet.
  - This may cause a fire.



- ► Notational
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- Do not cover the vents on the monitor cabinet.
  - Bad ventilation may cause a breakdown or fire.



- Put your monitor in a location with low humidity and a minimum of dust.
  - An electric shock or fire could result inside the monitor.



- Do not drop the monitor when moving it.
  - This may cause damage to the product or human body.



- Place the monitor on a flat and stable surface.
  - The monitor can cause injury by falling.



- Set down the monitor carefully.
  - It could be damaged or broken.



- Do not place the monitor face down.
  - The CDT surface may be damaged.



- Do not use the monitor without the monitor stand.
  - It could break down or cause a fire due to bad ventilation.
  - If the monitor must be used without the supplied stand, take steps to insure proper ventilation.



Notational

► Power

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Clean

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When cleaning the monitor case or the surface of the CDT, wipe with a slightly moistened, soft fabric.

Do not clean Flat monitor with water. Use a water-diluted mild detergent.

(Some detergents contain significant amounts of alcohol-based solvents, which can damage (color change) or crack the monitor case. The antiglare/anti-static surface coating on the CDT may also be affected.)

Dilute the detergent (1:10 ratio) with water before using.



Do not spray detergent directly on the monitor.



Use the recommended detergent with a smooth cloth.

- You can prevent the coated CDT from being damaged or the monitor cabinet from being dissolved, cracked or discolored.
- You can buy a recommended detergent at any Samsung Service Center.



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.



- If the connector between the plug and the pin is dusty or dirty, clean it properly with a dry cloth.
  - A dirty connector can cause an electric shock or fire.



- Do not set a glass of water, chemicals or any small metal objects on the monitor.
  - This may cause damage, electric shock or a fire.
  - If a foreign substance gets into the monitor, disconnect the plug and then contact a service center.



- Sofety Instruc
- Notational
- Power
- Installation
- Clean
- Other



- Do not remove cover(or back). No user serviceable parts inside.
  - This may cause an electric shock or a fire.
  - · Refer servicing to qualified service personnel.



- 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.
  - This may cause an electric shock or a fire.



- Do not place any heavy objects on the monitor.
  - This may cause an electric shock or a fire.



- For each hour of looking at the monitor, you should let your eyes rest for 5 minutes.
  - This will reduce eye fatigue.



- Do not use or store inflammable substances near the monitor.
  - This may cause an explosion or fire.



- Do not try to move the monitor by pulling on the wire or the signal cable.
  - This may cause a breakdown, electric shock or a fire due to damage to the cable.



- Do not move the monitor right or left by pulling only the wire or the signal cable.
  - This may cause a breakdown, electric shock or a fire due to damage to the cable.



- Never insert anything metallic into the monitor openings.
  - This may cause an electric shock, fire or injury.



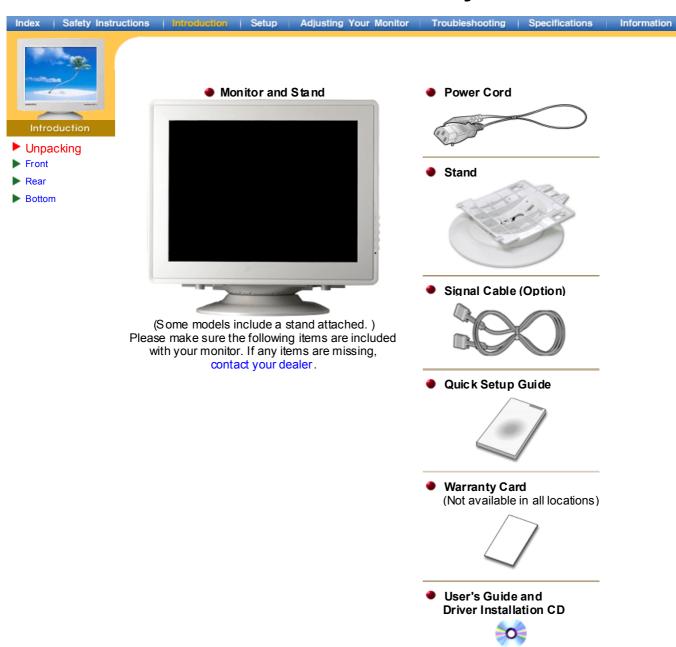
#### Keep the monitor away from any magnetic substances.

• This may cause discoloring or distortion of the image.

# SyncMaster 797MB



# SyncMaster 997MB





Menu button

 Opens the OSD menu. Also used to exit the OSD menu or return to the previous menu.

 Adjust buttons

 These buttons allow you to highlight and adjust items in the menu.

 Better button

 Used to select the OSD menu.
 Use this button for turn the monitor on and off.

 Power indicator

 This light glows green during normal operation, and blinks green once as the monitor saves your adjustments.

**Note:** See PowerSaver described in the manual for further information regarding power saving functions. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods.



Unpacking

General

► Front

► Rear

Bottom

# SyncMaster 797MB/997MB



(The configuration at the back of the monitor may vary from product to product.)

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

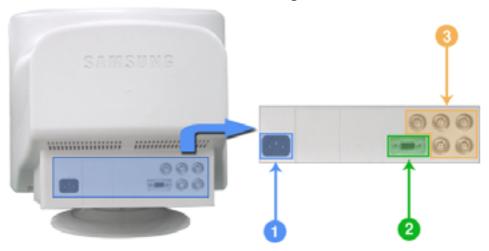
the monitor.

2. Signal Cable Connect the signal cable to the video port on your computer, video board,

video card, or graphics card.

#### **BNC Connectors (Option)**

# SyncMaster 997MB



(The configuration at the back of the monitor may vary from product to product.)

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

the monitor.

2. Signal port Connect the signal cable to the 15-pin D-sub connector on the back of

your monitor.

3. BNC Connectors Connect the signal cable to the BNC signal port on the back of your

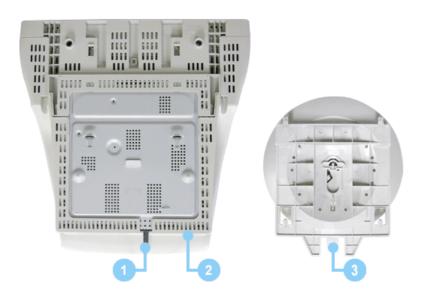
(Option) monitor.

Note: See Connecting the Monitor for further information regarding cable connections.

Adjusting Your Monitor Troubleshooting



- Unpacking
- Front
- Rear
- Bottom



Connect the signal cable to the video port on your computer, video board, video card, or graphics card. 1. Signal Cable

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

the monitor.

3. Tilt/Swivel Base You can separate the base from the monitor.

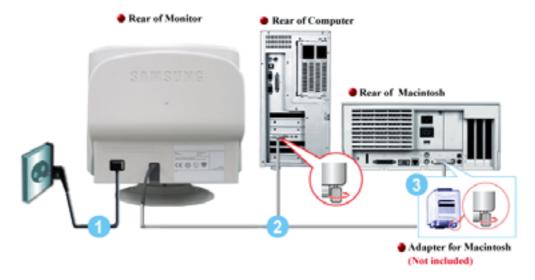


Connecting
the Monitor
Installing the
Monitor Driver

► Base Installation

#### General

# SyncMaster 797MB/997MB



- 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.
- Connect the signal cable to the video port on your computer, video board, video card, or graphics card.
- 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.

# SyncMaster 997MB Rear of Monitor Rear of Macintosh Rear of Macintosh

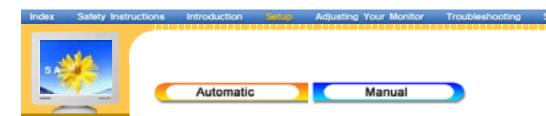
- Connect the power cord for your monitor to the power port on the back of the monitor. Plug the power cord for the monitor into a nearby outlet.
- 2. Connect the end of the signal cable to your computer's video port(video board, video card or graphics card).

Adapter for Macintosh

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. When you use a BNC connector.
  Connect the signal cable to the BNC signal port on the back of your monitor/computer.
  5. Turn on your computer and monitor. If your monitor displays an image, installation is complete.



Connecting Your Monitor

- Installing the Monitor Driver
- ► Base Installation

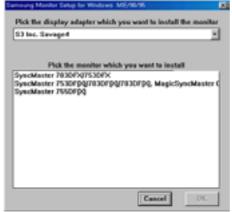
When prompted by the operating system for the monitor driver, insert the CD-ROM included with this monitor. Driver installation is slightly different from one operating system to another. Follow the directions as appropriate for the operating system you have.

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/ (World Wide)
 http://www.samsungusa.com/monitor/ (USA)
 http://www.sec.co.kr/monitor/ (Korea)
 http://www.samsungmonitor.com.cn/ (China)

#### Windows ME

- 1. Insert CD into the CD-ROM drive.
- 2. Click "Windows ME Driver".
- 3. Choose your monitor model in the model list, then click the "OK" button.



4. Click the "Install" button in the "Warning" window.



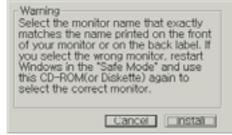
5. Monitor driver installation is completed.



- 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.

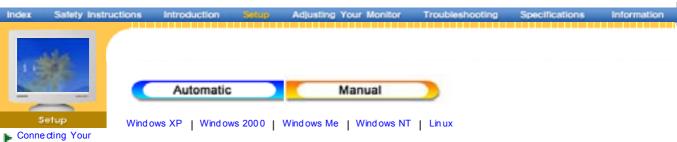


If you can see following "Message" window, then click the "Continue Anyway" button.
 Then click "OK" button.



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 <a href="http://www.samsung-monitor.com/">http://www.samsung-monitor.com/</a>.

6. Monitor driver installation is completed.



- Monitor
- Installing the Monitor Driver
- Base Installation

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.

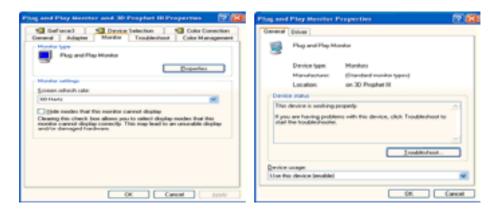
- Internet web site: http://www.samsung-monitor.com/ (World Wide) http://www.samsungusa.com/monitor/ (USA) http://www.sec.co.kr/monitor/ (Korea) http://www.samsungmonitor.com.cn/ (China)
- Microsoft<sup>®</sup> Windows<sup>®</sup> XP Operating System

1. Insert CD into the CD-ROM driver.

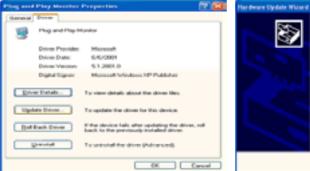


Click "Display" icon and choose the "Settings" tab then click "Advanced...

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.

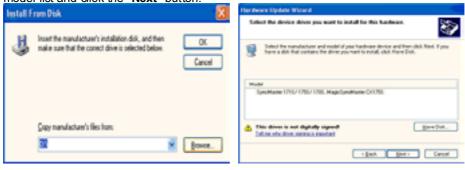




6. Select "Don't search, I will.." then click "Next" and then click "Have disk".



7. Click the "**Browse**" button then choose A:(D:\Driver) and choose your monitor model in the model list and click the "**Next**" button.



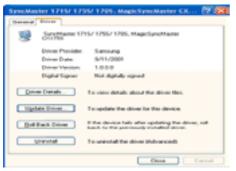
8. If you can see following "Message" window, then click the "Continue Anyway" button. Then click "OK" button.



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/.

Click the "Close" button then click "OK" button continually.







10. Monitor driver installation is completed.

## Microsoft<sup>®</sup> Windows<sup>®</sup> 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 dick the "Open" button and then dick "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 dick "Next" and then dick "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<sup>®</sup> Windows<sup>®</sup> Millennium Operating System

- Click "Start", "Setting", "Control Panel".
   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

(You can get some other screen for warning message or others, then click the appreciate option for your monitor.)

## Mic rosoft<sup>®</sup> Windows<sup>®</sup> NT Ope rating 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 Display 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.



- Connecting Your Monitor
- Installing the Monitor Driver
- Base Installation

Tilt/Swivel Base

With the built-in pedestal, you can tilt and/or swivel the monitor for the most comfortable viewing angle.



Note: The base is detachable.

Attaching and Removing the Base

If your monitor was supplied with the base detached, attach the base as follows.



Remove the twist-tie before attaching the base to the monitor.



#### Attaching the Base

- 1. Place the monitor upside-down on a flat work surface.
- 2. Align the tabs on the base with the corresponding slots on the bottom of the monitor.
- 3. Press the base onto the monitor until the tabs are fully engaged in the slots.
- 4. Push the base toward the front of the monitor until the release latch clicks into the locked position.
  \* Do not bend the snap.

#### Removing the Base

- 5. Squeeze and pull up on the release latch on the base.
- 6. Push the base toward the back of the monitor and lift up to remove the base.

Note: The base will align with the monitor slots in only one position.

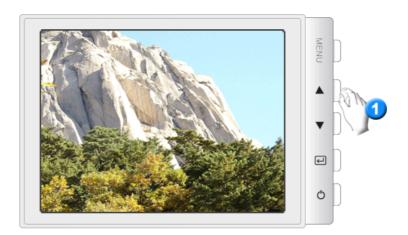
# SyncMaster 797MB





- 1. Opens the OSD menu. Also used to exit the OSD menu or return to the previous menu.
- 2. These buttons allow you to highlight and adjust items in the menu.
- 3. Used to select the OSD menu.
- a. MagicBright2 ™ is a new feature providing optimum viewing environment depending on the contents of the image you are watching.
- b. The Highlight Zone ensures dear images on TVs, video conferencing systems or photos by emphasizing a certain area on the screen.

Direct -Acces s Fe atures



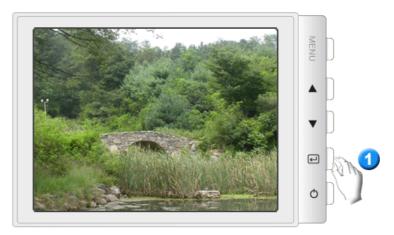
#### | MagicBright2™ |



MagicBright2™

Then push the MagicBright2  $^{\intercal\!M}$  button again to circle through available preconfigured modes.

## | Highlight III |



Highlight III

The Highlight Zone ensures the clear and sharp display of animated multimedia or photo images by enhancing the brightness of a certain area on the screen.

#### OSD Functions





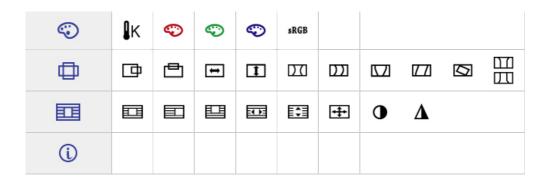


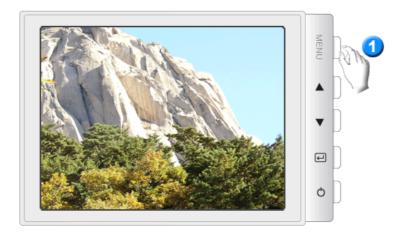






⊗

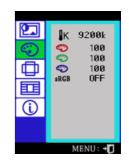




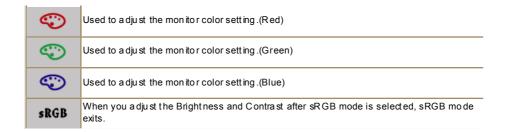


osd	Description
<b>*</b>	Adjust the Brightness.
0	Adjust the Contrast.
(( ))	A "Moiré" pattern can appear on your screen, looking like a series of concentric circles or arcs. To eliminate this pattern, use the horizontal moire adjustments.
D Q	A "Moirë" pattern can appear on your screen, looking like a series of concentric circles or arcs. To eliminate this pattern, use the vertical moire a djustments.
⊗	The Degauss feature will remove color impurities caused by magnetic fields.
Ð	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.  Note: If you have selected "Yes", all settings listed above will be reset. All other settings will remain the same.





osd	Description
	Color temperature is a measure of the 'warm th' of the image colors. The available range is between 5000 to 9300K.





osd	Description
	Follow these in structions to change the horizontal position of the monitor's entire display.
	Follow these in structions to change the vetical position of the monitor's entire display.
<b>+</b>	Follow these in structions to change the horizontal size of the monitor's entire display.
1	Follow these in structions to change the vertical size of the monitor's entire display.
DI	Adjust the pincushion setting when the sides of the display are bowed in or bowed out.
$\square$	Adjust the pinbalance setting when the sides of the display are bowed towards the left or right.
	Adjust the trapezoid setting when the top or bottom of the display is too large or small.
	Adjust the parallelogram setting when the display is leaning left or right.
	Adjust the rotation setting when the entire display is tilted left or right.
	Adjust the side pin comer correction when the top or bottom of the display is too large or small.





OSD	Description
	Used to turn the Highlight Zone features on or off.  Note: When "OFF" is selected, the user cannot choose any other Highlight Zone features.
	This function is to move the Highlight Zone horizontally.
	This function is to move the Highlight Zone vertically.
<u> 305</u>	This function is to adjust the horizontal size of the Highlight Zone.
	This function is to adjust the vertical size of the Highlight Zone.
+++	This function is to execute the Highlight Zone.
•	This function is to use the contrast of the Highlight Zone.
<b>1</b>	This function is to adjust the sharpness of the Highlight Zone.



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.

Note: These screens do not allow any changes to the settings, they are for information only.

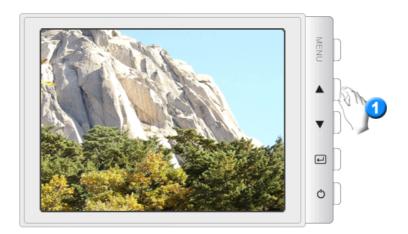
# SyncMaster 997MB





- 1. Opens the OSD menu. Also used to exit the OSD menu or return to the previous menu.
- 2. These buttons allow you to highlight and adjust items in the menu.
- 3. Used to select the OSD menu.
- a. MagicBright ™ is a new feature providing optimum viewing environment depending on the contents of the image you are watching.
- b. The Highlight Zone ensures dear images on TVs, video conferencing systems or photos by emphasizing a certain area on the screen.

Direct -Acces s Fe atures



## | MagicBright ™ |



MagicBright™

Then push the MagicBright  $^{\rm TM}\,$  button again to circle through a vailable preconfigured modes.

## | Highlight III |



Highlight III

The Highlight Zone ensures the clear and sharp display of animated multimedia or photo images by enhancing the brightness of a certain area on the screen.

#### OSD Functions





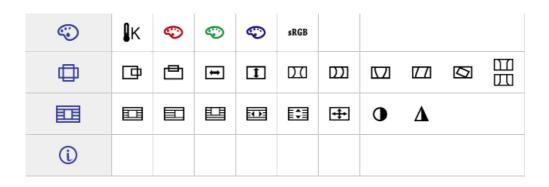


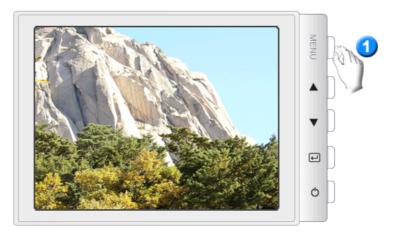














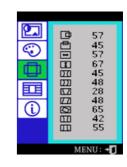
OSD	Description
<b>\( \)</b>	Adjust the Brightness.
•	Adjust the Contrast.
(())	A "Moiré" pattern can appear on your screen, looking like a series of concentric circles or arcs. To eliminate this pattern, use the horizontal moire adjustments.
D Q	A "Moirë" pattern can appear on your screen, looking like a series of concentric circles or arcs. To eliminate this pattern, use the vertical moire adjustments.
⊗	The Degauss feature will remove color impurities caused by magnetic fields.
Ð	Use the recall feature to reset these monitor settings to their original levels: Position, Size, Pincushion, Trapezoid, Parallelogram, Pinbalan œ, Rotation, H-Moire, and V-Moire.  Note: If you have selected "Yes", all settings listed above will be reset. All other settings will remain the same.
	(Option) Use this menu to choose between the signal source connected to the BNC connector input and the signal source connected to the D-SUB connector input.  Note: When you are finished, wait for a few seconds and the screen will blank then display the image from the new signal source (other computer). A cable must be connected to both inputs to use this function.





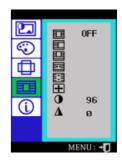
OSD	Description
1 <sub>K</sub>	Color temperature is a measure of the 'warmth' of the image colors. The available range is between 5 000 to 9300K.
<b>©</b>	Used to a djust the monitor color setting.(Red)
<b>©</b>	Used to a djust the monitor color setting.(Green)
<b>©</b>	Used to a djust the monitor color setting.(Blue)
sRGB	When you adjust the Brightness and Contrast after sRGB mode is selected, sRGB mode exits.





OSD	Description
	Follow these in structions to change the horizontal position of the monitor's entire display.
	Follow these instructions to change the vetical position of the monitor's entire display.
↔	Follow these instructions to change the horizontal size of the monitor's entire display.
1	Follow these instructions to change the vertical size of the monitor's entire display.
DI	Adjust the pincushion setting when the sides of the display are bowed in or bowed out.
$\square$	Adjust the pinbalance setting when the sides of the display are bowed towards the left or right.
	Adjust the trapezoid setting when the top or bottom of the display is too large or small.
	Adjust the parallelogram setting when the display is leaning left or right.
$\Box$	Adjust the rotation setting when the entire display is tilted left or right.
	Adjust the side pin comer correction when the top or bottom of the display is too large or small.





OSD	Description
	Used to tum the Highlight Zone features on or off.  Note: When "OFF" is selected, the user cannot choose any other Highlight Zone features.
	This function is to move the Highlight Zone horizontally.
	This function is to move the Highlight Zone vertically.
<b>3DE</b>	This function is to adjust the horizontal size of the Highlight Zone.
	This function is to adjust the vertical size of the Highlight Zone.
+++	This function is to execute the Highlight Zone.
•	This function is to use the contrast of the Highlight Zone.
<b>1</b>	This function is to adjust the sharpness of the Highlight Zone.





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.

Note: These screens do not allow any changes to the settings, they are for information only.



Overview

Installation

OSD Mode

Uninstall

Troubleshooting



#### What is MagicTune™?

Monitor performance can vary due to the graphics card, host computer lighting conditions and other environmental factors. In order to get the best image on a monitor requires you to adjust it for your unique setting. Unfortunately, the manual controls available to tune the image often prove to be challenging. Proper adjustment (tuning) requires an easy to use program that goes through a step-by-step process to obtain the best overall picture quality.

In most cases even simple adjustments to Brightness, or Contrast require navigation of the multi-level, on-screen display (OSD) menus that are not easy to understand. Furthermore, there is no feedback to assist in correctly setting the controls of the monitor. MagicTune is a software utility that guides you through the tuning process with easy to understand instructions and back ground patterns designed for each monitor control.



#### Basic Functionality

MagicTune is a software utility that allows monitor adjustment and color tuning using the Display Data Channel Command Interface (DDC/CI) protocol. All adjustments to the display are controlled via software to eliminate the need to use the monitor on-screen display (OSD). MagicTune supports Windows 98SE, Me, 2000, NT, XP Home, and XP Professional.

MagicTune allows for quick accurate tuning of the display with the ability to easily save and use monitor configurations that are best suited for you.



#### **□OSD Mode**

The OSD mode allows easy adjustment of monitor settings without taking pre-defined steps. You can access the desired menu item to set with ease.

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## **Installation**

- 1. Insert the installation CD into the CD-ROM drive.
- 2. Click the MagicTune™ installation file.
- 3. Select installation Language, Click "Next".



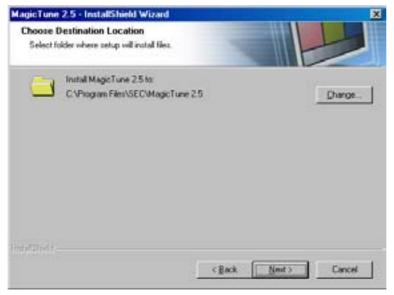
4. When the InstallationShield Wizard window appears, click "Next."



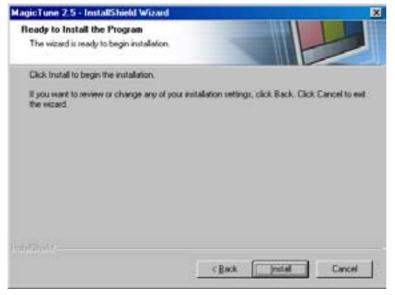
5. Select "I agree to the terms of the license agreement" to accept the terms of use.



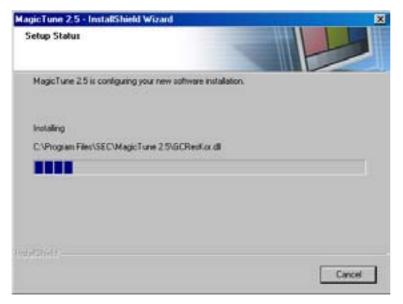
6. Choose a folder to install the MagicTune program.



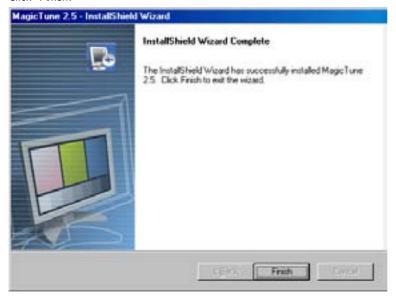
7. Click "Install."



8. The "Installationation Status" window appears.



9. Click "Finish."



10. When the installation is complete, the MagicTune 2.5 executable icon appears on your desktop.



Magic Tune

Double -click the icon to start the program.



Magictune execution icon may not appear depending on specification of computer system or monitor. If that happens, press F5 Key.

11. The following window appears if the installation is successful.



12. The following error message indicates that the system is using a video card that is not supported by MagicT une.





# Installationation Problems

The installation of MagicTune  $^{\text{TM}}$  2.5 can be affected by such factors as the video card, motherboard and the network environment.

See "Troubleshooting" if you have trouble during installation.

# System Requirements

#### os

- Windows 98 SE
- Windows Me
- Windows NT
- Windows 2000
- Windows XP Home Edition
- Windows XP Professional

#### Hardware

- 32MB Memory above
- 25MB Hard disk space above
- \* For more information, visit the MagicTune website.

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Overview

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MagicTune allows for quick accurate tuning of the display with the ability to easily save and use monitor configurations that are best suited for you.



 OSD mode may appear inconsistent with the explanation in guidance book depending on specification of each monitor.

# **OSD Mode**



The OSD mode makes ers the adjustment of settings on all monitors easy. When selected , each tab on top of the control window displays the general descriptions of the sub-menu items for adjustment. When selected, each tab displays a list of menus. For quick adjustment of the monitor settings, the OSD mode allows easy and convenient access to all tabs and sub-menu items.

## ■ Button Tab Definition

**OK** Applies any changes made and exits MagicTune.

Reset Restores the monitor values displayed on the active control window to the manufacturer-recommended values .



## □ Picture Tab Definition

Allows the user to adjust the screen settings to the desired values.



● Brightness ○ Contrast ○ MagicBright





# **Brightness**

Makes the entire screen brighter or darker. The detailed data of the images in the dark areas can be lost if the brightness is not adjusted to the proper level. Adjust the brightness for best viewing conditions.

# Contrast

Adjusts the difference in brightness between the bright and dark areas on screen. Determines the crispness of the images.

MagicBright<sup>TM</sup> is a new feature providing the optimum viewing environment depending on the contents of the image you are watching. Currently four different modes are available. Each mode has its own pre-configured brightness value. You can easily select one of four settings by simply pressing the MagicBright<sup>TM</sup> control button.

#### • 19" or above

- 1. Text: For documentations or works involving heavy text.
- 2. Internet: For working with a mixture of images such as text

and graphics.

- 3. Game: For watching motion pictures such as a Game.
- 4. Entertain: For watching motion pictures such as a DVD or VCD.

# MagicBright™

- Less than 19"
- 1. Text: For documentations or works involving heavy text.
- 2. Internet: For working with a mixture of images such as text and graphics.
- 3. Entertain: For watching motion pictures such as a DVD or VCD.



# Color Tab Definition

Adjusts the "warmth" of the monitor background or image color.



Color Tone Color Control





The tone of the color can be changed.

#### **Color Tone**

- Warm Normal Cool
- Custom

Adjusts of the monitor image color.

# **Color Control**

You can change the monitor color to your desired color.

- R-G-B
- sRGB

# ■Image Tab Definition

Adjusts the Position, Size and Rotation values.



## **Geometry 1**

RotationSizePosition

# **Geometry 2**

© Pincushion © Pinbalance © Trapezoid © Parallelogram





# Other

- O Moire O Degauss O Sidepin Corner Top
- Sidepin Corner Bottom Pinbalance Corner Top
- Pinbalance Corner Bottom

Adjusts the Position, Size and Rotation values.

## **Geometry 1**

- Position
- Size
- Rotation

Adjusts the Pincushion, Pinbalance, Trapezoid and Parallelogram values.

# Geometry 2

- Pincushion
- Pinbalance
- Trapezoid
- Parallelogram

Adjusts the Moire, Degauss, Sidepin Corner, and Pinbalance Corner values.

# Other

- Moire
- Degauss
- Sidepin Corner Top
- Sidepin Corner Bottom

- Pinbalance Corner Top
- Pinbalance Corner Bottom



# Option Tab Definition

You can configure MagicTune using the following options.



Loads the Preferences Dialog Box. Preferences in use will have an "V" in the check box. To turn on or off any Preference, position the cursor over the box and click.

#### Preferences

- Enable task tray menu .

The menus are not displayed if the [Enable System Tray] is deselected in [Options] ' [Preferences].

• Select Language - The language chosen affects only the language of the OSD.



# ■Support Tab Definition

Shows the Asset ID and the version number of the program, and allows you to use the Help feature.



Help

Visit the MagicTune website or click to open the Help files (User Manual) if you need any help installing or running MagicTune.

The User Manual opens within a basic browser window.

Asset ID

Opens a monitor info window showing the manufacturing date of the monitor.

Version

Displays the version number of MagicTune.

Specifications subsect to change without notice.

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# **Uninstall**

The MagicTune program can be removed only by using the "Add or Remove Programs" option of the Windows Control Panel.

Perform the following steps remove MagicTune.

- 1. Go to [Task Tray] '[Start] '[Settings] and select [Control Panel] in the menu. If the program runs on Windows XP, go to [Control Panel] in the [Start] menu.
- 2. Click the "Add or Remove Programs" icon in Control Panel.
- 3. In the "Add or Remove Programs" screen, scroll down to find "MagicTune." Click on it to highlight it.
- 4. Click the "Change/Remove" button to remove the program.
- 5. Click "Yes" to begin the uninstall process.
- 6. Wait until the "Uninstall Complete" dialog box appears.

Visit the MagicTune website for technical support for MagicTune, FAQs (questions and answers) and software upgrades.

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Overview

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Uninstall

**Troubleshooting** 

# **Troubleshooting**

MagicTune may not work in case monitor is replaced or driver of graphic card is updated while MagicTune is operating. If so, please restart the system.

- Check when MagicTune does not function properly.
- \* MagicTune feature is found only on PC (VGA) with Window OS that supports Plug and Play.
  - \* To check whether your PC is available for MagicTune feature, follow the steps below (When Windows is XP);

Control Panel -> Performance and Maintenance -> System -> Hardware -> Device Manager -> Monitors -> After deleting Plug and Play monitor, find 'Plug and Play monitor' by searching new Hardware.

\* MagicTune function is not available when BNC is used for a signal input. Use D-sub to activate MagicTune function. (BNC is optional - 19" Model Only)

Visit the MagicTune website for technical support for MagicTune, FAQs (questions and answers) and software upgrades.





Exit Program
Auto Detect
Picture Setting
Full Screen
Highlight Off

**Other Features** 

The Highlight Zoneensures the clear and sharp display

of animated multimedia or photo images by enhancing the brightness of a certain area on the screen.

Highlight Zone III features a combination of the circuitry and the program built on the proprietary technology of SEC.

This offers an easy-to-use in terface that high lights the video-playing portion of your multimedia program by automatically detecting and high light the desired area by dragging.

The Highlight Zone provides optimal display of moving pictures. So, text may appear blurry in the Highlight Zone.

# SyncMaster 797MB



Exit Program
Auto Detect
Picture Setting
Full Screen
Highlight Off
Other Features

The Highlight Zone ensures the clear and sharp display of animated multimedia or photo images by enhancing the brightness of a certain area on the screen.

Highlight Zone III features a combination of the circuitry and the program built on the proprietary technology of SEC.

This offers an easy-to-use interface that highlights the video-playing portion of your multimedia program by automatically detecting and highlight the desired area by dragging.

The Highlight Zone provides optimal display of moving pictures. So, text may appear blurry in the Highlight Zone.

When BNC is used for signal input, Highlight Zone can be adjusted by OSD, not by software system. To adjust Highlight Zone using software system, use D-sub for signal input. (BNC is optional)

# SyncMaster 997MB



Exit Program
Auto Detect
Picture Setting
Full Screen
Highlight Off

**Other Features** 

#### Automatic detect

1. When the Highlight program is running, the monitor automatically detects the video-playing portion of your multimedia program and activates the Highlight Zone feature. No selection is necessary.

Major multimedia programs: Windows Media Player, RealPlayer 8.0, video players on the broadcasters; websites, etc.
However, Automatic Detect may not work with a DVD player. (In this case, change the setting to Manual Detect mode to create a Highlight Zone.)
Select 'Off' in Auto Detect menu when you wish to deactivate the Automatic Detect feature.
Since this disables the Auto Detect capability of the monitor, the monitor does not automatically create a Highlight Zone.

Since this disables the Auto Detect capability of the monitor, the monitor does not automatically create a Highlight Zone (When you first install the program, Automatic Detect is set to 'On'.)

Note 1: When OSD is selected while the Auto Detect is running, Highlight Zone turns off temporarily not to disturb adjustment of display conditions such as brightness and color.



Exit Program Auto Detect Picture Setting Full Screen Highlight Off

**Other Features** 

#### Manual detect

In Manual Detect mode, you can either select a window or use the Drag function to create a Highlight Zone.

- 1. Selecting a window: Click the Highlight icon( 📕) on the Windows taskbar once to activate( 🛂) the cursor. Move the cursor onto the window of your choice and click once to Highlight the window.
- 2. Drag: Click the Highlight icon( )on the Windows taskbar once to activate( ) the cursor.

  Click and hold the left mouse button, then drag the cursor to create a rectangle that covers the desired area. This rectangle becomes the Highlight Zone.

Note 1: When the mouse cursor is activated ( ) and it is necessary to de-activate it to use it for other tasks, right click your mouse,

or put the activated cursor (🛂) on the taskbar and click. When de-activated, the icon on the screen changes back to the one shown before activation.

Note 2: You can determine whether the Highlight feature is on/off by the appearance of the icon on the taskbar. On( ), Off( )

Note 3: When OSD is selected while the Manual Detect is running, Highlight Zone turns off temporarily, as it does when Auto detect is running.



Exit Program
Auto Detect
Picture Setting
Full Screen
Highlight Off
Other Features

## Exit Program

1. Exits the Highlight program.



Exit Program
Auto Detect
Picture Setting
Full Screen
Highlight Off

Other Features

#### Auto Detect

Allows user to disable Auto Detect when necessary.
 Once selected, this function saves the selection and keeps it in the memory regardless of exiting or restarting the program.
 When selected, a check mark (V) appears.



Exit Program Auto Detect Picture Setting Full Screen Highlight Off

Other Features

#### Picture Setting

Can be selected only when the Highlight Zone function is on. When selected, a menu window appears which can be used to adjust Contrast and Sharpness within the Highlight Zone.
 After changing the setting, select OK to save the changes, or Cancel to return to the previous setting.



Exit Program
Auto Detect
Picture Setting
Full Screen
Highlight Off

Other Features

#### Full Screen

1. Full Screen: Place the cursor on the Highlight icon( •) on the Windows taskbar and right click your mouse once. Then select Full Screen from the menu.



Exit Program
Auto Detect
Picture Setting
Full Screen
Highlight Off

Other Features

## Highlight Off

1. Cancels the selection of a Highlight Zone and reverts to the original screen.



Exit Program
Auto Detect
Picture Setting
Full Screen
Highlight Off

# Other Features

#### Other Features

The Highlight Zone function remembers the variables of the selected areas in Automatic and Manual Detect modes, respectively.

- 1. If the window selected as a Highlight Zone is moved or its size changed, the Highlight Zone changes accordingly.
- If an un-selected window overlaps the window selected as a Highlight Zone, the Highlight Zone of the selected window turns off.
  However, it does not turn off the Zone completely and only makes the window shift to standby mode while the settings are saved. When the window is reactivated, the Highlight Zone turns on again with the settings unchanged.
- If another un-overlapped window beside one with a Highlight Zone is selected as a Highlight Zone, Highlight Zone function is activated for the two
  separate windows simultaneously. (Up to two windows can be selected as a Highlight Zone and if another window is selected as a Highlight Zone, the
  Highlight Zone of the previous windows turns off.)
  - When the Highlight Zone is created using the Drag function, the Zone functions independently of the above since it uses a random portion of the screen instead of a particular window.
- Note 1: How to cancel the saved variables of a selected window.
  - 1) When a window selected in Automatic Detect mode is replaced with another window also selected in Automatic Detect mode, only the last selection is saved, and the Highlight Zone function is de-activated for the previous windows.
  - 2) In Manual Detect mode, only the window (or the frame window) created last is saved, and the Highlight Zone function is de-activated for the previous windows.
  - The Highlight Zone is de-selected when the program used to create the selected window is closed. The variables of the Highlight Zone created using the Drag function are not saved
- the Drag function are not saved.

  Note 2: The changes saved under Picture Setting of the Highlight Zone menu remain effective even after the program is closed using Exit Program.

  (The next time you start the Highlight Zone program, the settings are shown as previously saved.)



► Check List

▶ Q & A

Self-Test Feature Check



Before calling for service, check the information in this section to see if you can remedy any problems yourself. If you do need assistance, please call, the phone number on the Information section or contact your dealer.

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 " ?" 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 ME/XP/2000) and then change the frequency of the video card.  (Refer to the Preset Timing Modes)  Note: If the initial screen (the login screen) does not appear, contact a service center or your dealer.
	Can you see " 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.
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.	
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	Have you changed the video card or the driver?	Adjust screen image position and size using the OSD.
unbalanced.	Have you adjusted the resolution or frequency to the monitor?	Adjust the resolution and frequency at the video card. (Refer to the Preset Timing Modes).
	The screen can be unbalanced or signals. Readjust Position by re	due to the cycle of the video card ferring 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 Timing 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 Timing Modes.  (The maximum frequency per
		re solution may differ from product to product.)
There are only 16 colors shown on the screen. The screen colors have	Have the Windows colors been set properly?	For Windows ME/XP/2000: Set the colors properly at the Control Panel, Display, Settings.
changed after changing the video card.	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	Have you installed the monitor driver?	Install the monitor driver according to the Driver Installation Instructions.
monitor, Plug & Play (VESA DDC) monitor found".	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.

# Check the following items if there is trouble with the monitor.

- 1. Check if the power cord and the video cables are properly connected to the computer.
- Check if the computer beeps more than 3 times when booting. (If it does, request an after-service for the main board of the computer.)
- 3. If you installed a new video card or if you assembled the PC, check if the installed the adapter (video) driver and the monitor driver.
- 4. Check if the scanning ratio of the video screen is set at 75Hz or 85Hz. (Do not exceed 60Hz when using the maximum resolution.)
- 5. If you have problems in installing the adapter (video) driver, boot the computer in Safe Mode, remove the Display Adapter at the "Control Panel, System, Device Administrator" and then reboot the computer to reinstall the adapter (video) driver.

## Tips for Highlight Zone

1. To protect CDT against the screen brightness, the Highlight Zone function persists for three hours and then automatically stops. So please reset it to continue.

- 2. Once the Highlight Zone has been switched off, you can't select any of the other menus within
- the Hightlight Zone.

  3. When the Highlight Zone function is operated, the surrounding brightness of screen may become dark.
- 4. Depending on the video card you use, a color saturation phenomenon may occur in the Highlight Zone. In this case, slightly lower the contrast of the Highlight Zone and the color saturation will be reduced.

**Note:** If problems repeatedly occur, contact an authorized service center.



► Check List

▶ Q & A

➤ Self-Test Feature Check

# General Q & A | Highlight Zone III Q & A

## 1. General Q & A

Question	Answer
How can I change the frequency?	Frequency can be changed by reconfiguring the video card.
	Note that video card support can vary, depending on the version of the driver used. (Refer to the computer or the video card manual for details.)
How can I adjust the resolution?	Windows ME/XP/2000: Set the resolution at the <b>Control Panel</b> , <b>Display</b> , <b>Settings</b> .
	* Contact the video card manufacturer for details.
How can I set the Power Saving function?	Windows ME/XP/2000: Set the function at BIOS-SETUP of the computer or the screen saver. (Refer to Windows/Computer Manual).
The monitor makes a sound when it is turned on.	This is normal as some sound may be generated when the metal case and the electromagnet, which are installed to block any electromagnetic waves, interact with each other.
How can I clean the outer case/Picture tube?	Disconnect the power cord and then clean the monitor with a soft cloth, using either a cleaning solution or plain water.
	Do not leave any remains of the detergent nor scratch the case. Do not allow any water to go inside the monitor.

# 2. Highlight Zone III Q & A

Question	Answer
The program does not function properly.	Highlight Zone III features a combination of circuitry and software built on proprietary technology of SEC. Therefore, the Highlight Zone III feature is found only on SEC monitors that support the feature. Check if your monitor supports the Highlight Zone III feature.
	If not, the Highlight Zone III icon will show a message saying, "No Connection" ( )Connect the monitor properly before using it. Neither Automatic Detect or nor Manual Detect function while the icon shows the message, "No Connection". You can only exit the program.
Started a multimedia program but the Highlight Zone function does not	Check the Highlight Zone III menu and see if Disable Auto Detect is selected.

automatically activate.	When selected, the Highlight Zone function is not automatically activated.
	The function may not be activated automatically for some multimedia programs. In this case, use Manual Detect instead. See Manual Detect under (Highlight Zone III)
	Check the color settings and see if sRGB is selected. When sRGB is selected, the Highlight Zone III function remains de-activated in order to maintain the sRGB color attributes.
Changed the setting to Highlight Zone in Manual Detect mode but the Highlight Zone feature has not been activated	Check the color setting of the monitor and see if sRGB is selected. When sRGB is selected, the Highlight Zone function remains de-activated in order to maintain the sRGB color attributes. Some of the windows may not be selected when Highlight Zone function is on.
Want to turn the Auto Detect function off.	Set Disable Auto Detect to off from the Highlight Zone III menu. See (Highlight Zone III functions)
Don; t know whether the Highlight program is running.	Check the icon on the taskbar.  (□) indicates the function is activated and (□)shows it has been deactivated.
When a Highlight Zone is on, the rest of the screen dims.	Monitors with the Highlight Zone feature are equipped with an Automatic Beam Control function. When activated, this may cause slight dimming of the surrounding screen. However, this does not indicate a malfunction of any kind, and it is safe to continue to use the product.
The Highlight Zone appears too dark.	Check the Contrast value in Picture Setting and adjust it for your ideal viewing.
Want to adjust the position and size of the Highlight Zone.	You can change the position and/or the size of the Highlight Zone easily using the Manual Detect function. See (Highlight Zone III functions)
Cannot select Picture Setting.	The Picture Setting feature can be selected only when the Highlight Zone function is on. Turn the Highlight Zone function on before selecting Picture Setting.



Check List

⊫ Q& A

Self-Test
Feature Check

Self-Test Feature Check | Warning Messages | Environment | Useful Tips

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.



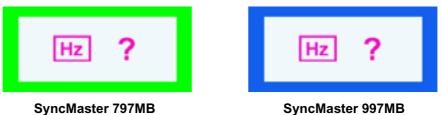
Failure of any of the boxes to appear indicates a problem with your monitor. This box also appears during normal operation if the video cable becomes disconnected or damaged.

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.

# Warning 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.



Environment

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

- If there are any sub 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 computer. Therefore, if there is trouble with the computer 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 a "Sync. Out of Range" message comes up, disconnect the cable from the computer while the monitor is still powered on.

o If there is a message coming up on the screen or if the screen goes white, this means

- the monitor is in working condition.
- o In this case, check the computer for trouble.

Index Safety Instructions Introduction Setup Adjusting Your Monitor Troubleshooting Specifications Information



2,000,000

General

PowerSaverPreset Timin

Preset Timin g Modes

General	
Model Name	SyncMaster 797MB
Picture Tube	
Туре	17"(43cm) DynaFlat (40.6cm viewable)
Deflection angle	90 °
Dot Pitch	0.20mm (Horizontal)
Screen type	Aluminized tri-color phosphor dot trio with black matrix. Anti-doming invar shadow mask. Multi-layer coated with anti-static.

# Maximum Resolution

1600 x 1200@76Hz

Active Display		
Horizontal	312 ± 4 mm	
Vertical	234 ± 4 mm	
Synchronization		
Horizontal	30 ~ 06 kHz	

Horizontal	$30 \sim 96 \text{ kHz}$
Vertical	50 ~ 160 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**

250 MHz

# Power Supply

AC 90 ~ 264 VAC rms, 60/50 Hz ± 3Hz

# **Power Consumption**

Less than 90W

# Dimensions (WxDxH)

401 x 410 x 378mm (After installation of Stand)

#### Weight

14.3kg

#### **Environmental considerations**

Operating Temperature  $32^{\circ}F \sim 104^{\circ}F(0^{\circ}C \sim 40^{\circ}C)$ Humidity  $10\% \sim 80\%$ , non-condensing Storage Temperature  $-4^{\circ}F \sim 113^{\circ}F(-20^{\circ}C \sim 45^{\circ}C)$ Humidity  $5\% \sim 95\%$ , 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.

Index Safety Instructions Introduction Setup Adjusting Your Monitor Troubleshooting Specifications Information



General

► PowerSaver

Preset Timin g Modes

General	
Model Name	SyncMaster 997MB
Picture Tube	
Туре	19"(48cm) DynaFlat (45.8cm viewable)
Deflection angle	90 °
Dot Pitch	0.20mm (Horizontal)
Screen type	Aluminized tri-color phosphor dot trio with black matrix. Anti-doming invar shadow mask. Multi-layer coated with anti-static.

## **Maximum Resolution**

1600 X 1200@ 76Hz

1600 X 1200@ 76Hz		
Active Display		
Horizontal	352 ± 3 mm	
Vertical	264 ± 3 mm	
Synchronization		
Horizontal	30 ~ 96 kHz	
Vertical	50 ~ 160 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**

250 MHz

# **Power Supply**

AC 90 ~ 264 VAC rms, 60/50 Hz ± 3Hz

# **Power Consumption**

Less than 110W

# Dimensions (WxDxH)

445 x 457.5 x 416mm (After installation of Stand)

#### Weight

18.2 kg

#### **Environmental considerations**

Operating Temperature  $32^{\circ}F \sim 104^{\circ}F(0^{\circ}C \sim 40^{\circ}C)$ Humidity  $10\% \sim 80\%$ , non-condensing Storage Temperature  $-4^{\circ}F \sim 113^{\circ}F(-20^{\circ}C \sim 45^{\circ}C)$ Humidity  $5\% \sim 95\%$ , 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.

# SyncMaster 797MB

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■ Ge nera

Preset Timin a

Preset Timing
Modes

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 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-off Mode EPA/ENERGY 2000
Power Indicator	Green	Green, Blinking
Power Consumption	Less than 90W	Less than 2W



This monitor is EPA E<sup>NERGY</sup> S<sup>TAR®</sup> compliant and ENERGY2000 compliant when used with a computer equipped with VESA DPMS functionality. As an E<sup>NERGY</sup> S<sup>TAR®</sup> Partner, SAMSUNG has determined that this product meets the E<sup>NERGY</sup> S<sup>TAR®</sup> guidelines for energy efficiency.

# SyncMaster 997MB



**PowerSaver** 

Preset Timing Modes

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 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-off Mode EPA/ENERGY 2000
Power Indicator	Gre en	Green, Blinking
Power Consumption	Less than 110W	Less than 2W



This monitor is EPA E<sup>NERGY</sup> S<sup>TAR®</sup> compliant and ENERGY2000 compliant when used with a computer equipped with VESA DPMS functionality. As an E<sup>NERGY</sup> S<sup>TAR®</sup> Partner, SAMSUNG has determined that this product meets the E<sup>NERGY</sup> S<sup>TAR®</sup> guidelines for energy efficiency.



- ► Ge nera I
- ▶ PowerSaver
- Preset Timing 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.

**Table 1. Preset Timing Modes** 

Display Mode	Horizontal Frequency (k Hz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 1024 x 768	68.677	84.997	94.500	+/+
VESA, 1280 x 1024	91.146	85.024	157.50	+/+



## **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



#### Service

- ▶ Terms
- Regulatory
- Natural Color
- Authority

#### AUSTRALIA:

Samsung Electronics Australia Pty Ltd. Customer Response Centre 7 Parkview Drive, Homebush Bay NSW 2127 Tel: 1300 362 603

http://www.samsung.com.au/

#### **BRAZIL:**

Samsung Eletronica da Amazonia Ltda. R. Prof. Manoelito de Ornellas, 303, Terro B Chacara Sto. Antonio, CEP: 04719-040 Sao Paulo, SP

SAC: 0800 124 421

http://www.samsung.com.br/

#### CANADA:

Samsung Electronics Canada Inc. Samsung Customer Care 7037 Financial Drive Mississauga, Ontario L5N 6R3 1-800-SAMSUNG (1-800-726-7864) http://www.samsung.ca/

#### CHILE:

SONDA S.A.

Teatinos 550, Santiago Centro, Santiago, Chile Fono: 56-2-5605000 Fax: 56-2-5605353 56-2-800200211 http://www.sonda.com/ http://www.samsung.cl/

#### COLOMBIA :

Samsung Electronics Colombia Cra 9 No 99A-02 Of. 106 Bogota, Colombia

Tel.: 9-800-112-112 Fax: (571) 618 - 2068

http://www.samsung-latin.com/ e-mail: soporte@samsung-latin.com

#### **ESPAÑA:**

Samsung Electronics Comercial Iberica, S.A. Ciencies, 55-65 (Poligono Pedrosa) 08908 Hospitalet de Llobregat (Barcelona)

Tel.: (93) 261 67 00 Fax.: (93) 261 67 50 http://samsung.es/

#### FRANCE:

SAMSUNG ELECTRONICS FRANCE Service Paris Nord 2 66 rue des Vanesses BP 50116 Villepinte 95950 Roissy CDG Cedex

Tel: 08 25 08 65 65 Fax: 01 48 63 06 38

http://www.samsungservices.com/

#### **GERMANY:**

TELEPLAN Rhein-Main GmbH Feldstr. 16 64331 Weiterstadt T. 06151/957-1306 F. 06151/957-1732 \* EURO 0.12/Min http://www.samsung.de/

# **HUNGARY:**

Samsung Electronics Magyar Rt.

1039, Budapest, Lehel u. 15-17.

Tel: 36 1 453 1100 Fax: 36 1 453 1101 http://www.samsung.hu/

#### ITALY :

Samsung Electronics Italia S.p.a.

Via C. Donat Cattin, 5

20063 Cernusco s/Naviglio (MI) Servizio Clienti: 199.153.153 http://www.samsung-italia.com/

#### MEXICO :

SAMSUNG ELECTRONICS MEXICO. S.A. DE C.V.

Saturno NO.44, Col. Nueva Industrial Vallejo

Gustavo A.Madero C.P.07700, Mexico D.F. Mexico

TEL. 52-55-5747-5100 Fax. 52-55-47 52 02 RFC: SEM950215S98 http://www.samsung.com.mx/

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

Saturno NO.44, Col. Nueva Industrial Vallejo Gustavo A.Madero C.P.07700, Mexico D.F. Mexico

TEL. 52-55-5747-5100

EXPORTADO POR: Samsung Electronics CO.,LTD.

416, Mae tan-3dong, Yeongtong-gu, Suwon City, Kyoungki-Do Korea

#### NETHERLANDS/BELGIUM/LUXEMBOURG :

Samsung Electronics Benelux B. V.

Fleminglaan 12 2289 CP Rijiswijk, NEDERLANDS

Service and informatielijn;

Belgium :0800-95214, http://www.samsung.be/ Netherlands : 0800-2295214, http://www.samsung.nl/

#### PANAMA:

Samsung Electronics Latinoamerica (Z.L.) S.A. Calle 50 Edificio Plaza Credicorp, Planta Baja

Panama

Tel.: (507) 210-1122, 210-1133

Tel: 800-3278(FAST)

http://www.samsung-latin.com/

#### PERU

Servicio Integral Samsung Av. Argentina 1790 Lima1. Peru

Tel: 51-1-336-8686 Fax: 51-1-336-8551

http://www.samsungperu.com/

## PORTUGAL:

SAMSUNG ELECTRONICA PORTUGUESA S.A.

Rua Mário Dioniso, Nº2 - 1º Drt. 2795-140 LINDA-A-VELHA

Tel. 214 148 114/100 Fax. 214 148 133/128

Free Line 800 220 120 http://www.samsung.pt/

## SOUTH AFRICA :

Samsung Electronics, 5 Libertas Road, Somerset Office Park, Bryanston Ext 16. Po Box 70006, Bryanston, 2021, South Africa

Tel: 0027-11-549-1621 Fax: 0027-11-549-1629 http://www.samsung.co.za/

#### SWEDEN/DENMARK/NORWAY/FINLAND:

Samsung Electronics AB

Box 713

S-194 27 UPPLANDS VÄSBY

**SVERIGE** 

Besöksadress: Johanneslundsvägen 4 Samsung support Sverige: 020-46 46 46 Samsung support Danmark: 8088-4646 Samsung support Norge: 8001-1800 Samsung support Finland: 0800-118001

Tel +46 8 590 966 00 Fax +46 8 590 966 50 http://www.samsung.se/

## THAILAND:

HAI SAMSUNG SERVICE CENTER MPA COMPLEX BUILDING,1st-2nd Floor 175 SOI SUEKSA VIDHAYA SATHON SOI 12 SILOM ROAD ,SILOM,BANGRAK BANGKOK 10500

TEL: 0-2635-2567 FAX: 0-2635-2556

#### UKRAINE

SAMSUNG ELECTRONICS REPRESENTATIVE OFFICE IN UKRAINE 4 Glybochitska str.

Kiev, Ukraine Tel. 8-044-4906878 Fax 8-044-4906887 Toll-free 8-800-502-0000 http://www.samsung.com.ua/

# United Kingdom:

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

Surbiton, Surrey KT6 7LD Tel.: (0208) 391 0168 Fax.: (0208) 397 9949

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

Tel.: (0870) 242 0303 Fax.: (01952) 292 033 http://samsungservice.co.uk/

#### U.S.A.

Samsung Electronics America Service Division 400 Valley Road, Suite 201 Mount Arlington, NJ 07856 1-800-SAMSUNG (1-800-726-7864) http://samsungusa.com Index Safety Instructions Introduction Setup Adjusting Your Monitor Troubleshooting Specifications information



- Service
- Terms
- ▶ Regulatory
- ► Natural Color
- Authority

#### Dot Pitch

The image on a monitor is composed of red, green and blue dots. The closer the dots, the higher the resolution. The distance between two dots of the same color is called the 'Dot Pitch'. Unit: mm

#### Vertical Frequency

The screen must be redrawn several times per second in order to create and display an image for the user. The frequency of this repetition per second is called Vertical Frequency or Refresh Rate. Unit: Hz

Example: If the same light repeats itself 60 times per second, this is regarded as 60 Hz.

#### Horizontal Frequency

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

#### Interlace and Non-Interlace Methods

Showing the horizontal lines of the screen from the top to the bottom in order is called the Non-Interlace method while showing odd lines and then even lines in turn is called the Interlace method. The Non-Interlace method is used for the majority of monitors to ensure a clear image. The Interlace method is the same as that used in TVs.

## Plug & Play

This is a function that provides the best quality screen for the user by allowing the computer and the monitor to exchange information automatically. This monitor follows the international standard VESA DDC for the Plug & Play function.

#### Resolution

The number of horizontal and vertical dots used to compose the screen image is called 'resolution'. This number shows the accuracy of the display. High resolution is good for performing multiple tasks as more image information can be shown on the screen.

Example: If the resolution is 1024 X 768, this means the screen is composed of 1024 horizontal dots (horizontal resolution) and 768 vertical lines (vertical resolution).

#### Highlight Zone III

The Highlight Zone ensures the clear and sharp display of animated multimedia or photo images by enhancing the brightness of a certain area on the screen.

Highlight Zone III features a combination of the circuitry and the program built on the proprietary technology of SEC.

This offers an easy-to-use interface that highlights the video-playing portion of your multimedia program by automatically detecting and highlight the desired area by dragging.

#### MagicBright™

MagicBright™ is a new feature providing the optimum viewing environment depending on the contents of the image you are watching. Currently four different modes are available. Each mode has its own pre-configured brightness value. You can easily select one of four settings by simply pressing the MagicBright™ control button.

ndex Safety Instructions Introduction Setup Adjusting Your Monitor Troubleshooting Specifications Information



#### Intern

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- Authority

#### Regulatory

FCC Information | IC Compliance Notice | MPR II Compliance |
European Notice (Europe only) | PCT Notice | VCCI | CCC Notice
TCO'95-Ecological requirements for personal computers (TCO'95 applied model only)
TCO'99-Ecological requirements for personal computers (TCO'99 applied model only)
TCO'03-Ecological requirements for personal computers (TCO'03 applied model only)
TCO'03 Recycling Information (TCO'03 applied model only)

You must right-click the link for a portable document format (PDF) file and save the file to your hard-disk drive. Attempting to link directly to large PDF files causes your system to freeze.

#### Regulatory (PDF Document)

- To save PDF files (files with an extension of .pdf) to your hard-disk drive, right-click the document title, click Save Target As in Microsoft® Internet Explorer or Save Link As in Netscape Navigator, and specify a location on your hard-disk drive. To view a PDF file, launch Adobe ™ Acrobat Reader. Click File → Open and select the PDF file. -

Note: You need to run Adobe Acrobat Reader to View PDF Documents.



#### 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 hamful 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/telev is on 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.

The party responsible for product compliance: SAMSUNG ELECTRONICS CO., LTD America QA Lab of Samsung 3351 Michelson Drive, Suite #290, Irvine, CA92612 USA Tel) 949-975-7310 Fax) 949-922-8301

#### Warning

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

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 NMB-03 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 (Europe only)

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+A1:2000 Radio Frequency Interference
- EN55024:1998 Electromagnetic Immunity
- EN61000 -3-2:1995+A1/A2:1998 Power Line Harmonics
- EN61000-3-3:1995 Voltage Fluctuations

#### PCT Notice



# VCCI

This is a Class B product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

#### CCC Notice

# CCC合格声明

此产品根据GB4943-1995, GB9254-1998, GB17625.1-1998, 标准获得CCC认证。

#### TCO'95 -Ecological requirements for personal computers (TCO'95 applied model only)



#### AB general requirements

#### AB2 Written Eco-document acompanying the products

Congratulations! You have just purchased a TCO 95 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and to the further development of environmentally-adapted electronic products.

#### Why do we have environmentally-labelled monitors?

In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment. The main problem as far as monitors and other electronic equipment are concerned is that environmentally harmful substances are used both in the products and during their manufacture. Since it has not been possible so far for the majority of electronic equipment to be recycled in a satisfactory way, most of these potentially damaging substances sooner or later enter Nature.

There are also other characteristics of a monitor, such as energy consumption levels, that are important from both the working and natural environment viewpoints. Since all types of conventional electricity generation have a negative effect on the environment (acidic and climate-influencing emissions, radioactive waste, etc.) it is vital to conserve energy. Electronic equipment in offices consumes an enormous amount of energy, since it is often routinely left running continuously.

#### What does labelling involve?

This product meets the requirements for the TCO'95 scheme, which provides for international environmental labelling of monitors. The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Naturskyddsforeningen (The Swedish Society for Nature Conservation) and NUTEK (The National Board for Industrial and Technical Development in Sweden).

The requirements cover a wide range of issues: environment, ergonomics, usability, emission of electrical and magnetic fields, energy consumption and electrical and fire safety.

The environmental demands concern among other things restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons), and chlorinated solvents. The product must be prepared for recycling and the manufacturer is obliged to have an environmental plan, which must be adhered to in each country where the company conducts its operations policy. The energy requirements include a demand that the monitor after a certain period of inactivity shall reduce its power consumption to a lower level, in one or more stages. The length of time to reactivate the monitor shall be reasonable for the user.

Labelled products must meet strict environmental demands, for example in respect of the reduction of electric and magnetic fields, along with physical and visual ergonomics and good usability.

TCO Development Unit 1996-11-29

On the page this folder you will find a brief summary of the environmental requirements met by this product

The complere environmental criteria document may be ordered from:

TCO Development Unit

S-11494 Stockholm

Sweden

Fax: +46 8 782 92 07

E-mail (Internet): development@tco.se

Current information regarding TCO'95 -approved and labelled products may also

be obtained via the Internet, using the address:

http://www.tco-info.com/

TCO 95 is a co-operative project between (3 logos)

# **Environmental Requirements**

Brominated flame retardants are present in printed circuit boards, cables, wires, casings and housings. In turn, they delay the spread of fire. Up to thirty percent of the plastic in a computer casing can consist of flame retardant substances. These are related to another group of environmental toxins, PCBs, which are suspected to give rise to similar harm, including reproductive damage in fish eating birds and mammals, due to the bioaccumulative processes. Flame retardants have been found in human blood and researchers fear that disturbances in foetus development may occur.

 TCO 95 demand requires that plastic components weighing more than 25 grams must not contain organically bound chlorine and bromine.

#### Lead

Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning.

• TCO'95 requirement Permits the inclusion of lead since no replacement has yet been developed.

#### Cadmium

Cadmium is present in rechargeable batteries and in the colour generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses.

• TCO'95 requirement states that batteries may not contain more than 25 ppm (parts per million) of cadmium. The colour-generating layers of display screens must not contain any cadmium.

#### Mercury

Mercury is sometimes found in batteries, relays and switches. Mercury damages the nervous system and is toxic in high doses.

• TCO'95 requirement states that batteries may not contain more than 25 ppm (parts per million) of mercury. It also demands that no mercury is present in any of the electrical or electronics components concerned with the display unit.

#### CFCs (freons)

CFCs (freons) are sometimes used for washing printed circuit boards and in the manufacturing of expanded foam for packaging. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on Earth of ultraviolet light with consequent increased risks of skin cancer (malignant melanoma).

• The relevant TCO'95 requirement: Neither CFCs nor HCFCs may be used during the manufacturing of the product or its packaging.

#### ■ TCO'99 -Ecological requirements for personal computers (TCO'99 applied model only)



#### Con gratulations!

You have just purchased a TCO'99 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and also to the further development of environmentally adapted electronics products.

This product meets the requirements for the TCO'99 scheme which provides for an international environmental and quality labelling labelling of personal computers. The labelling scheme was developed as a joint effort by the TCO(The Swedish Confederation of Professional Employees), Svenska Naturskyddsforeningen(The Swedish Society for Nature Conservation), Statens Energimyndighet(The Swedish National Energy Administration) and SEMKO AB.

The requirements cover a wide range of issuse: environment, ergonomics, usability, reduction of electric and magnetic fields, energy consumption and electrical safety.

## Why do we have environmentally labelled computers?

In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment. The main problem, as far as computers and other electronics equipment are concerned, is that environmentally harmful substances are used both in the products and during their manufacture. Since it is not so far possible to satisfactorily recycle the majority of electronics equipment, most of these potentially damaging substances sooner or later enter nature.

There are also other characteristics of a computer, such as energy consumption levels, that are important from the viewpoints of both the work (internal) and natural (external) environments. Since all methods of electricity generation have a negative effect on the environment (e.g. acidic and climate-influencing emissions, radioactive waste), it is vital to save energy. Electronics equipment in offices is often left running continuously and thereby consumes a lot of energy.

## What does labelling involve?

The environmental demands has been developed by Svenska Naturskyddsforeningen (The Swedish Society for Nature Conservation). These demands impose restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs(freons) and chlorinated solvents, among other things. The product must be prepared for recycling and the manufacturer is obliged to have an environmental policy which must be adhered to in each country where the company implements its operational policy.

The energy requirements include a demand that the computer and/or display, after a certain period of inactivity, shall reduce its power consumption to a lower level in one or more stages. The length of time to reactivate the computer shall be reasonable for the user.

Below you will find a brief summary of the environmental requirements met by this product. The complete environmental criteria document may be ordered from:

TCO Development

SE-114 94 Stockholm, Sweden

Fax: +46 8 782 92 07

Email (Internet): development@tco.se

Current information regarding TCO'99 approved and labelled products may also be obtained via the Internet, using the address: http://www.tco-info.com/

# Environmental requirements

#### Flame retardants

Flame retardants are present in printed circuit boards, cables, wires, casings and housings. Their purpose is to prevent, or at least to delay the spread of fire. Up to 30% of the plastic in a computer casing can consist of flame retardant substances. Most flame retardants contain bromine or chloride, and those flame retardants are chemically related to another group of environmental toxins, PCBs. Both the flame retardants containing bromine or chloride and the PCBs are suspected of giving rise to severe health effects, including reproductive damage in fish-eating birds and mammals, due to the bio-accumulative\* processes. Flame retardants have been found in human blood and researchers fear that disturbances in foetus development may occur.

The relevant TCO'99 demand requires that plastic components weighing more than 25 grams must not contain flame retardants with organically bound bromine or chlorine. Flame retardants are allowed in the printed circuit boards since no substitutes are available.

#### Cadmium\*\*

Cadmium is present in rechargeable batteries and in the colour-generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries, the colour-generating layers of display screens and the electrical or electronics components must not contain any cadmium.

#### Mercury\*\*

Mercury is sometimes found in batteries, relays and switches. It damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries may not contain any mercury. It also demands that mercury is not present in any of the electrical or electronics components associated with the labelled unit. There is however one exception. Mercury is, for the time being, permitted in the back light system of flat panel monitors as today there is no commercially available alternative. TCO aims on removing this exception when a Mercury free alternative is available.

#### CFCs (freons)

The relevant TCO'99 requirement states that neither CFCs nor HCFCs may be used during the manufacture and assembly of the product. CFCs (freons) are sometimes used for washing printed circuit boards. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on earth of ultraviolet light with e.g. increased risks of skin cancer (malignant melanoma) as a consequence.

#### Lead\*\*

Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning. The relevant TCO'99 requirement permits the inclusion of lead since no replacement has yet been developed.

- \* Bio-accumulative is defined as substances which accumulate within living organisms.
- \*\* Lead, Cadmium and Mercury are heavy metals which are Bio-accumulative.

#### ■ TCO'03 -Ecological requirements for personal computers (TCO'03 applied model only)



#### Con gratulations!

The display you have just purchased carries the TCO'03 Displays label. This means that your display is designed, manufactured and tested according to some of the strictest quality and environmental requirements in the world. This makes for a high performance product, designed with the user in focus that also minimizes the impact on our natural environment.

Some of the features of the TCO'03 Display requirements:

#### Ergonomics

Good visual ergonomics and image quality in order to improve the working environment for the user and to

reduce sight and strain problems. Important parameters are luminance, contrast, resolution, reflectance, colour rendition and image stability.

#### Energy

- Energy-saving mode after a certain time-beneficial both for the user and the environment
- Electrical safety

#### **Emissions**

- Electromagnetic fields
- Noise emissions

#### **Ecology**

- The product must be prepared for recycling and the manufacturer must have a certified environmental management system such as EMAS or ISO 14 000
- · Restrictions on
  - o chlorinated and brominated flame retardants and polymers
  - o heavy metals such as cadmium, mercury and lead.

The requirements included in this label have been developed by TCO Development in cooperation with scientists, experts, users as well as manufacturers all over the world. Since the end of the 1980s TCO has been involved in influencing the development of IT equipment in a more user-friendly direction. Our labelling system started with displays in 1992 and is now requested by users and IT-manufacturers all over the world.

For more information, Please visit www.tcodevelopment.com

#### TCO'03 Recycling Information (TCO'03 applied model only)

#### [European Residents Only]

For recycling information for TCO'03 certified monitors, for the residents in the following countries, please contact the company corresponding to your region of residence. For those who reside in other countries, please contact a nearest local Samsung dealer for recycling information for the products to be treated in environmentally acceptable way.

	[U.S.A. Residents Only]	[European Residents Only]		
	U.S.A.	SWEDEN	NORWAY	GERMANY
COMPANY	Solid Waste Transfer & Recycling Inc	ELKRETSEN	Elek tronikkretur AS	vfw AG
ADDRESS	442 Frelinghuysen Ave Newark, NJ 07114	ELKRETSEN Box 1357, 111 83 Sto ckho lm Bam husgatan 3, 4 tr.	6454 Etterstad 0 602 Oslo Fyrstikkalln 3 B	Max Plank Strasse 42 50858 Collogne Germany
TELEPHONE	973-565-0181	08-545 212 90	23 06 07 40	49 0 2234 9587 - 0
FAX	Fax: 973 - 565 - 9485	08-545 212 99	23 06 07 41	
E- MAIL	none	info@el-kretsen.se	adm@elektronikkretur.no	vfw.info@vfw-ag.de
HOME PAGE	http://www.bcua.org/Solid Waste_Disposal6.htm	http://www.el- kretsen.se/	http://www.elretur.no/	

ndex Safety Instructions Introduction Setup Adjusting Your Monitor Troubleshooting Specifications information



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## Natural Color Software Program



One of the recent problems in using a computer is that the color of the images printed out by a printer or other images scanned by a scanner or a digital camera are not the same as those shown on the monitor.

The Natural Color S/W is the very solution for this problem. It is a color administration system developed by Samsung Electronics in association with Korea Electronics & Telecommunications Research Institute (ETRI). This system is available only for Samsung monitors and makes the color of the images on the monitor the same as the printed or scanned images. For more information, refer to Help (F1) in the software program.

#### How to install the Natural Color software

Insert the CD included with the Samsung monitor into the CD-ROM Drive. Then, the initial screen of the program installation will be executed. Click Natural Color on the initial screen to install the Natural Color software. To install the program manually, insert the CD included with the Samsung monitor into the CD-ROM Drive, click the [Start] button of Windows and then select [Execute].

Enter D:\color\eng\setup.exe and then press the [Enter] key. (If the drive where the CD is inserted is not D:\, enter the applicable drive.)

## How to delete the Natural Color software program

Select [Setting]/[Control Panel] on the [Start] menu and then double-click [add/Delete a program].

Select Natural Color from the list and then click the [add/Delete] button.



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