Table of Contents

17A580BQ
19A580BQ

Other language versions

Appendix

Because of continuous product improvements,
the information mentioned in this document is subject to change without notice.

Introduction

The Philips Brilliance 107MP/109MP color monitor displays sharp and brilliant images of text and graphics with a maximum resolution of 1600x1200 (for 107MP); 1800x1350 (for 109MP) pixels. It is optimal for Windows, CAD / CAM / CAE, desktop publishing, spread sheets, multi-media, and any other application that demands a large screen size and high resolutions.

The monitor automatically scans horizontal frequencies from 30KHz to 95KHz (107KHz for 109MP), and vertical frequencies from 50Hz to 160Hz. With microprocessor-based digital-controlled circuitry and On-Screen Display (OSD) controls, the monitor can automatically adjust itself to the video card's scanning frequency and displays an image with the precise parameters you desire.

Features

• An anti-glare, anti-static, and anti-reflection super high-contrast screen coating eliminates any bad effects caused by room light reflecting on and dust attracted to the screen's surface.

• With the Color Adjustment feature, you can easily choose different preset color temperatures or set your own customized white point for different application.

• The Image Tilt Adjustment feature corrects a rotated image. This correction minimizes the distortions caused by elements such as the Earth's magnetic field.

• The zoom feature allows you to adjust the image on your screen, both enlarging and reducing its overall size.

• USB Bay at back of monitor is prepared for the Universal Serial Bus hub. You can easily and flexibly connect USB-designed devices – such as a mouse or keyboard – to the monitor for true Plug-and-Play function. USB hub shipped separately.

• Green Design – including automatic power saving function (NUTEK) and low-emission compliance (TCO '99) – shows your commitment to the environment.

• DDC1/DDC2B allows communication between the monitor and the PC for optimal video configuration.

•New CrystalClear II technology delivering sharper, brighter and higher contrast images across the entire screen.

• Moire Cancellation eliminates diffraction, a fringe pattern in the picture.

Note: Your monitor operates according to the VESA DDC level 1/2B. Only computers that support the same guidelines and operate at the same or a higher level can make use of this feature. If your computer does not support the relevant guidelines, you can still use your monitor and computer. However, you may need to manually specify the appropriate resolution in the computer.

As an ENERGY STAR® Partner, PHILIPS has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

Contact us at our web site: http://www.monitors.philips.com

Safety precautions and maintenance

• Unplug the monitor, if you are not going to use it for an extended period of time.

• Unplug the monitor, if you need to clean it with a slightly damp cloth. Wiping the screen with a dry cloth is okay when the power is off. However, never use alcohol or ammonia-based liquids.

• Consult a service technician if the monitor does not operate normally when following the instructions in this manual.

• The back cover should be removed only by qualified service personnel.

• Keep the monitor out of direct sunlight and away from stoves or any other heat source.

• The top of the monitor is not a shelf. Remove any object that could fall into the vents or prevent proper cooling of the monitor's electronics.

• Keep the monitor dry. To avoid electric shock, do not expose it to rain or excessive moisture.

• Keep the monitor away from magnetic objects, such as speakers, electric motors, transformers, etc.

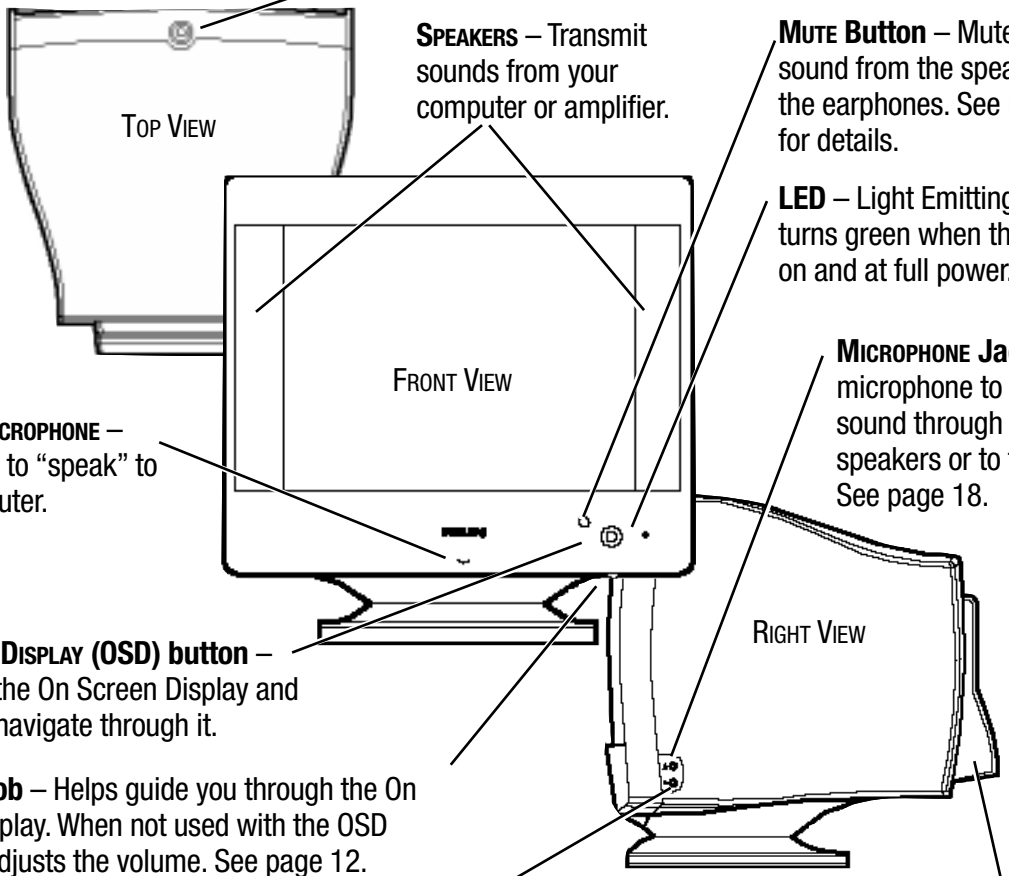
• When positioning the monitor, make sure the power plug and outlet are easily accessible.

End-of-life disposal

Your new monitor contains materials that can be recycled and reused. Specialized companies can recycle your product to increase the amount of reusable materials and to minimize the amount to be disposed of.

Please find out about the local regulations on how to dispose of your old monitor.

Description of Controls



Power Button – Turns the electricity On and Off.

Speakers – Transmit sounds from your computer or amplifier.

Mute Button – Mutes the sound from the speakers and the earphones. See next page for details.

LED – Light Emitting Diode turns green when the monitor is on and at full power.

Microphone Jack – Plug in a microphone to transmit sound through the front speakers or to the computer. See page 18.

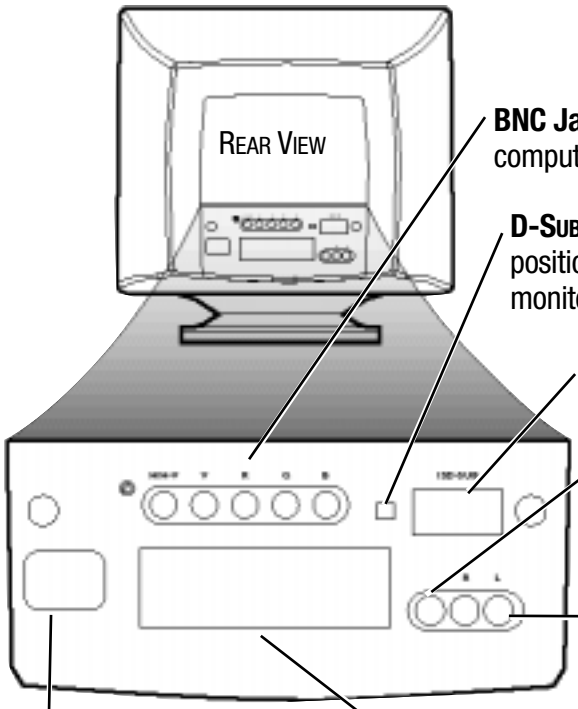
Built-in Microphone – Allows you to "speak" to your computer.

On Screen Display (OSD) button – Brings up the On Screen Display and helps you navigate through it.

Rotary Knob – Helps guide you through the On Screen Display. When not used with the OSD button, it adjusts the volume. See page 12.

Earphones Jack – Plug in earphones here. This mutes the sound from the front speakers.

Cable Cover – Snaps onto the back of the monitor to conceal cable connections. (Cable connections shown in the manual are without the cover on.)



BNC Jacks – Another way of hooking video from the computer to the monitor. See page 17 for details.

D-Sub / BNC Switch – This switch should be in the D-Sub position when using the monitor cable included with the monitor. See page 17 and the foldout for details.

Monitor Cable Plug – Connect one end of the monitor cable here. See foldout for details.

Microphone Jack – Connect the supplied microphone cable to transmit sound from the monitor to a computer or amplifier.

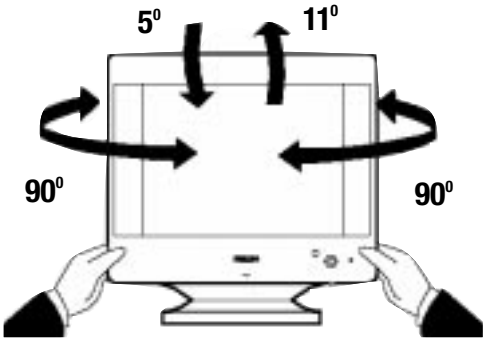
Right & Left Audio-in Jacks – Connect the supplied audio cable to send sound from a computer or amplifier to the monitor's speakers.

Power Plug – Plug the power cord in here. See foldout for details.

USB Bay – Slot for plugging in USB Hub. Optional hardware that allows true Plug-and-Play. See page 17 for details.

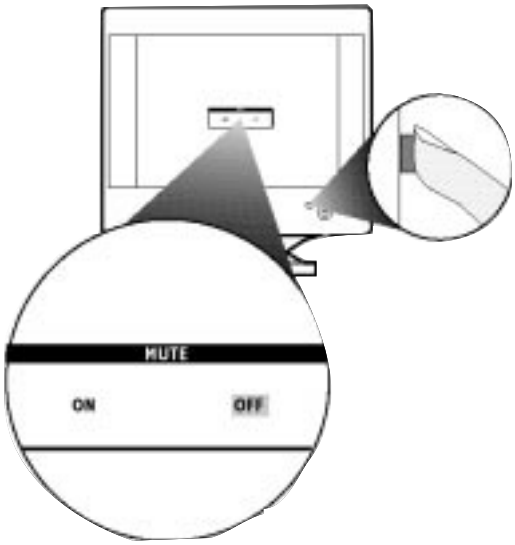
Description of Controls

PEDESTAL



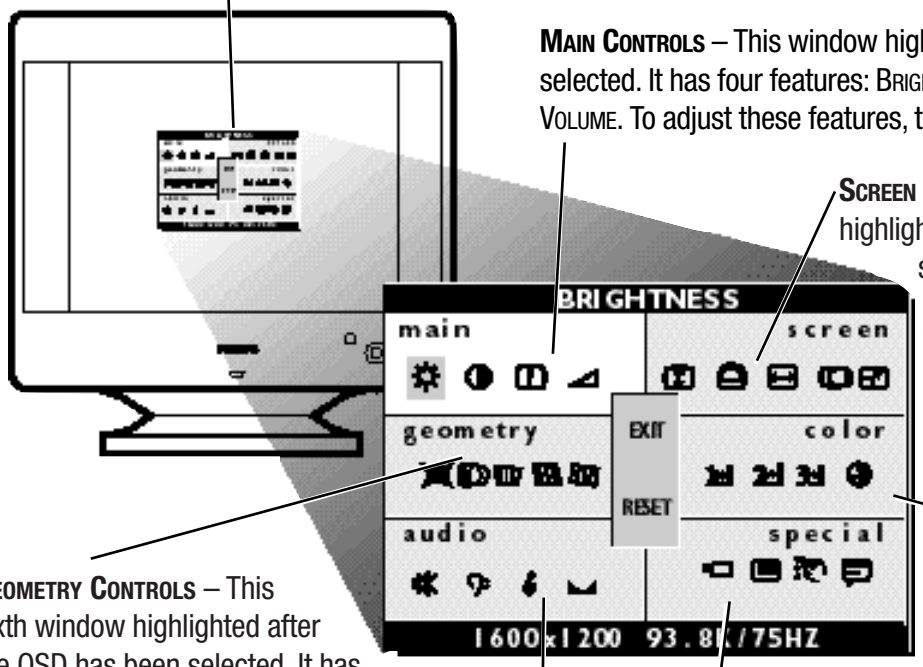
Pedestal – With the built-in pedestal, you can tilt and swivel the monitor to the most comfortable viewing angle. To best use your monitor, always place it at eye level.

FRONT-PANEL MUTE BUTTON



Using the front-panel mute button – To turn the mute On and Off, press the Mute button to highlight either On or Off. *For another way to mute the sound, see page 14.*

On Screen Display – Your monitor is preset at the factory. However, you can adjust it using the On Screen Display button and the Rotary knob described on page 2. The way to do so is through the On Screen Display (OSD). Below is a brief description of the six On Screen Display windows.



Main Controls – This window highlighted after the OSD has been selected. It has four features: Brightness, Contrast, Degauss, and Volume. To adjust these features, turn to pages 4 - 5.

Screen Size & Position – This window highlighted after the OSD has been selected. It has five features: Zoom, Horizontal Position, Horizontal Size, Vertical Position, and Vertical Size. To adjust these features, turn to pages 6 - 8.

Color Temperature – This window highlighted after the OSD has been selected. It has four features: Cad/Cam, DTP, Photo Retouch, and User Presets. To adjust these features, turn to pages 8 - 9.

Geometry Controls – This sixth window highlighted after the OSD has been selected. It has five features: Pincushion, Balanced Pincushion, Trapezoid, Parallelogram, and Rotation. To adjust these features, turn to page 15.

Audio Controls – This fifth window highlighted after the OSD has been selected. It has four features: Mute, Bass, Treble, and Balance. To adjust these features, turn to page 14.

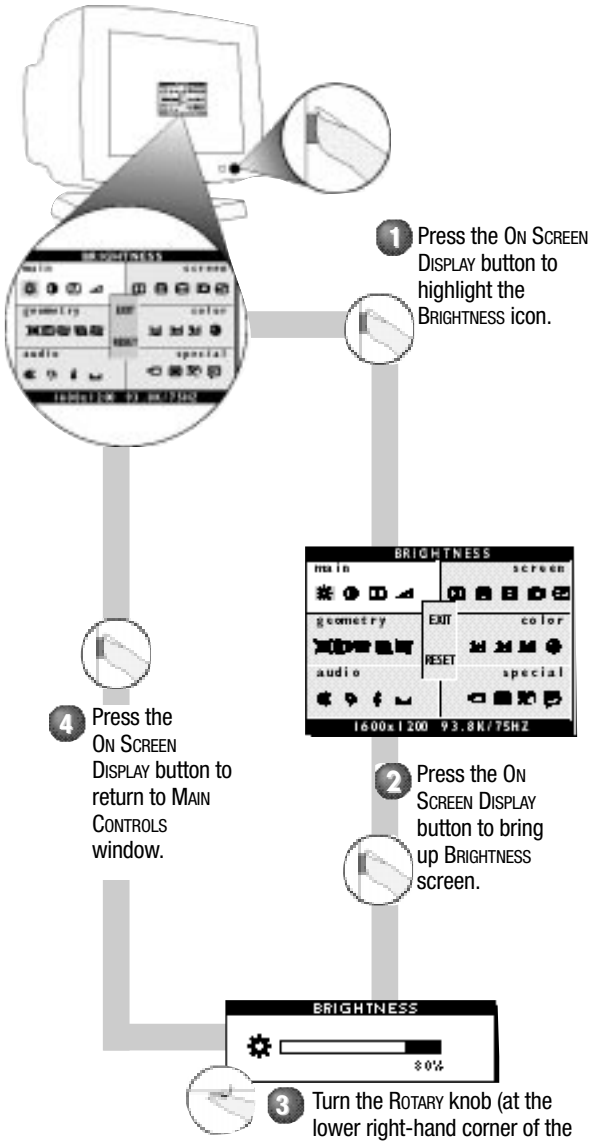
Special Controls – This window highlighted after the OSD has been selected. It has four features: Language, Advanced Controls, OSD Controls, and Video Input. To adjust these features, turn to pages 10 - 13.
Note: Language allows you to change the On Screen Display from English to French, Spanish, German, or Italian. See page 10 for details.

How to Use the On Screen Display (OSD)

Main Controls window

Brightness

To adjust your screen's brightness, follow the steps below. Brightness is the overall intensity of the light coming from the screen. A 50% brightness level is recommended.



Smart Help

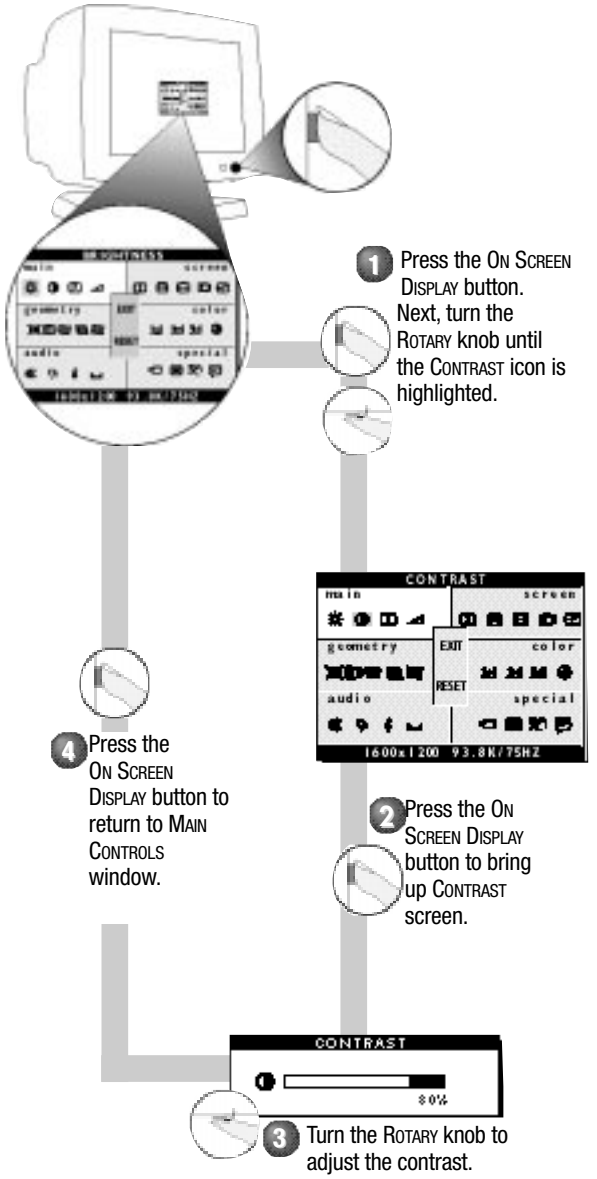
After returning to Main Controls . . .

. . .to continue to Contrast, turn the Rotary knob until the Contrast icon is highlighted. Next, follow steps 3 - 5 under Contrast.

. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

Contrast

To adjust your screen's contrast, follow the steps below. Contrast is the difference between the light and dark areas on the screen. A 100% contrast level is recommended.



Smart Help

After returning to Main Controls . . .

. . . to continue to Degauss, turn the Rotary knob until the Degauss icon is highlighted. Next, follow steps 3 - 4 under Degauss

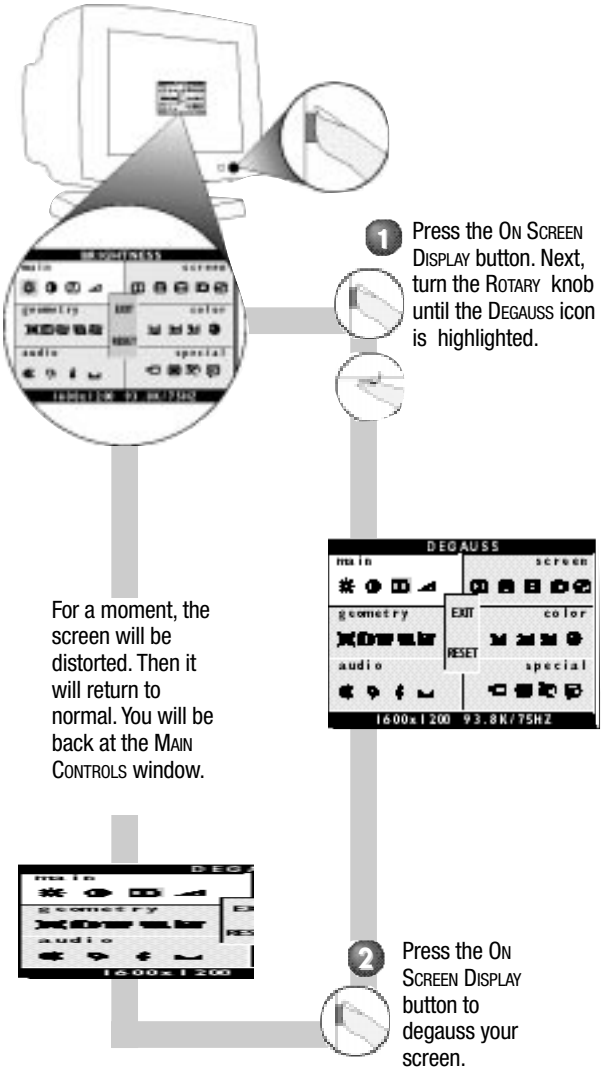
. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options).

How to Use the On Screen Display (OSD)

Main Controls window

Degauss

To degauss your screen, follow the steps below. Degaussing removes electromagnetic build up that may distort the color on your screen.



Smart Help

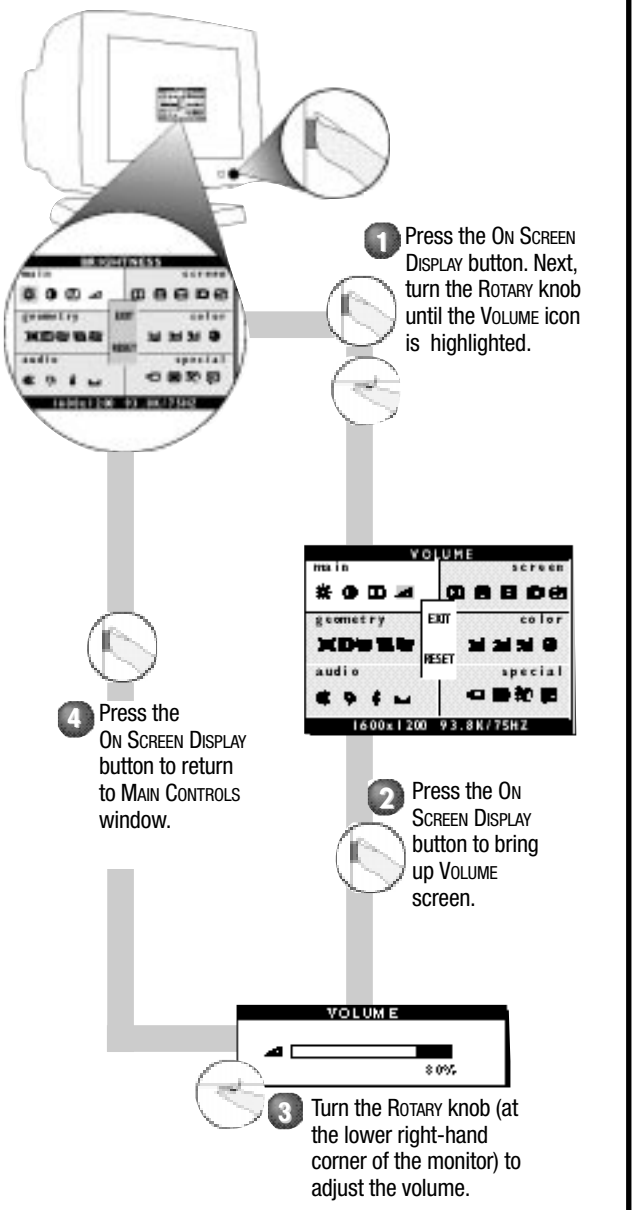
After returning to Main Controls . . .

. . . to continue to Volume, turn the Rotary knob until the Volume icon is highlighted. Next, follow steps 3 - 5 under Volume.

. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

Volume

To adjust your monitor's volume, follow the steps below. The volume control adjusts the sound from the two front-mounted speakers or the earphones jack.



Smart Help

After returning to Main Controls . . .

. . . to continue to the Screen Size & Position window, turn the Rotary knob until Vertical Size is highlighted. Next, press the OSD button.

then follow steps 2 - 5 *Screen Size & Position window* on the next page.

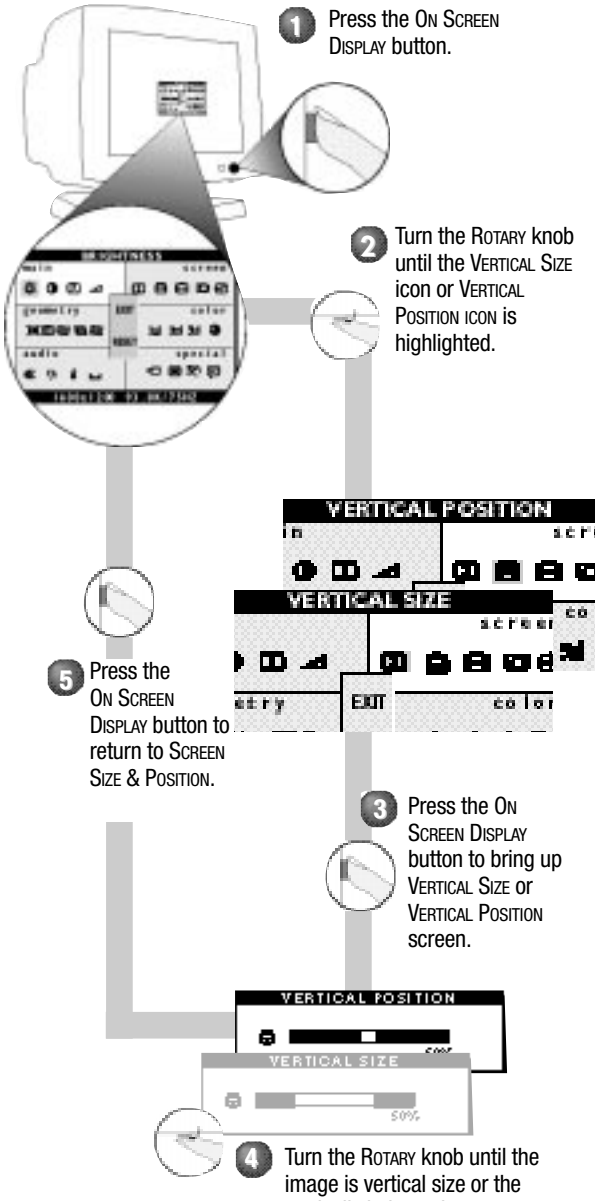
. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

How to Use the On Screen Display (OSD)

Screen Size & Position window

Vertical Size
Vertical Position

Vertical Size expands or contracts the image on your screen, pushing it out toward the top and bottom sides or pulling it in toward the center. Vertical Position adjusts the image on your screen either up or down. Use this feature if your image does not appear centered.



Smart Help

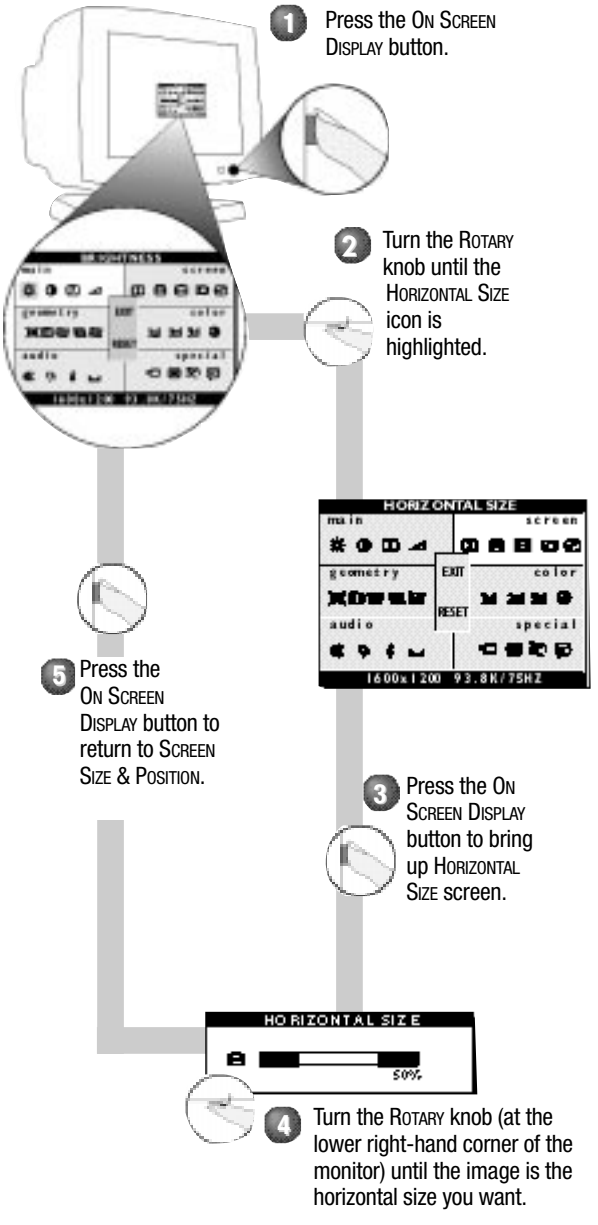
After returning to Screen Size & Position . . .

. . . to continue to Horizontal Size, turn the Rotary knob until Horizontal Size is highlighted. Next, follow steps 3 - 5 under Horizontal Size .

. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

Horizontal Size

Horizontal Size expands or contracts the image on your screen, pushing it out toward the left and right sides or pulling it in toward the center.



Smart Help

After returning to Screen Size & Position . . .

. . . to continue to Horizontal Position, turn the Rotary knob until Vertical Position is highlighted. Next, follow steps 3 - 5 under *Horizontal* Position.

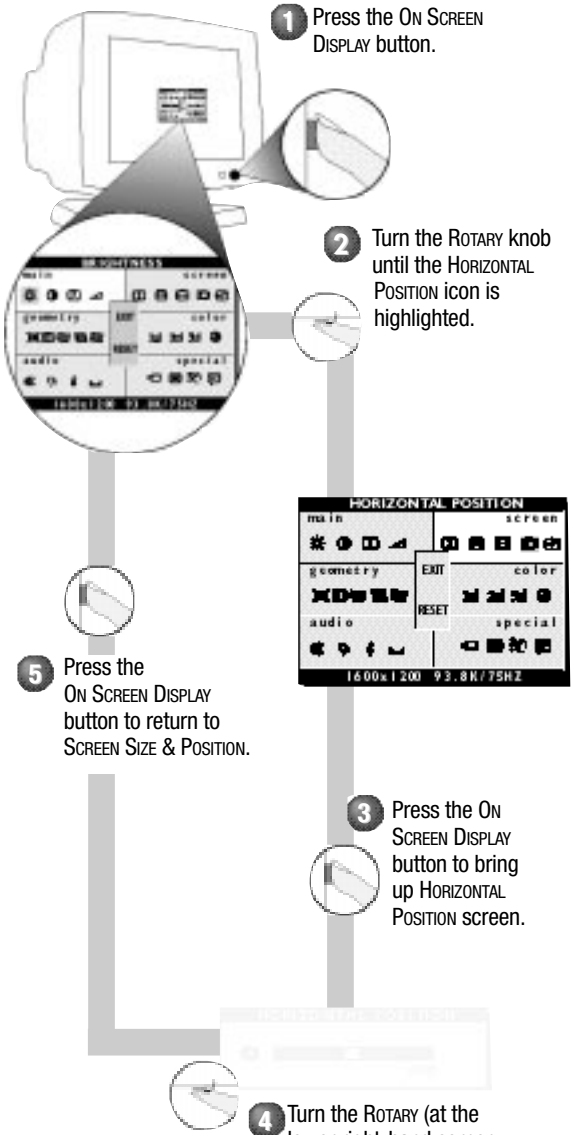
. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

How to Use the On Screen Display (OSD)

Screen Size & Position window

Horizontal Position

Horizontal Position shifts the image on your screen either to the left or right. Use this feature if your image does not appear centered.



Smart Help

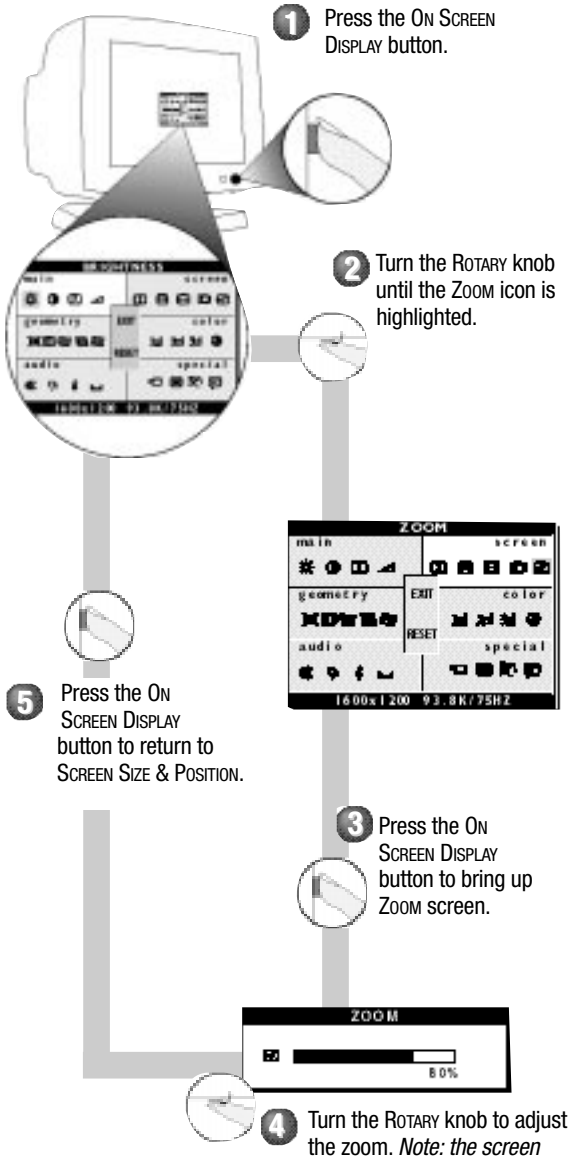
To make other changes in the Size & Position window . . .

. . . after returning to the Size & Position window [but before press the On Screen Display (OSD) button in step 6], turn the Rotary knob until another feature – for example, Horizontal Position – is highlighted. Next, follow steps 2 - 6 under Horizontal Position.

. . . after you have exited completely, press the OSD button and follow the steps under that feature, for example, Horizontal Position.

Zoom

Zoom allows you to adjust the image on your screen, both enlarging it and reducing its overall size. To zoom your screen in or out, follow the steps below.



Smart Help

After returning to Screen Size & Position . . .

. . . to continue to Geometry window, turn the Rotary knob until Pincushion is highlighted. Next, press the OSD button. Then follow steps 2a - 2c under Geometry window on the next page.

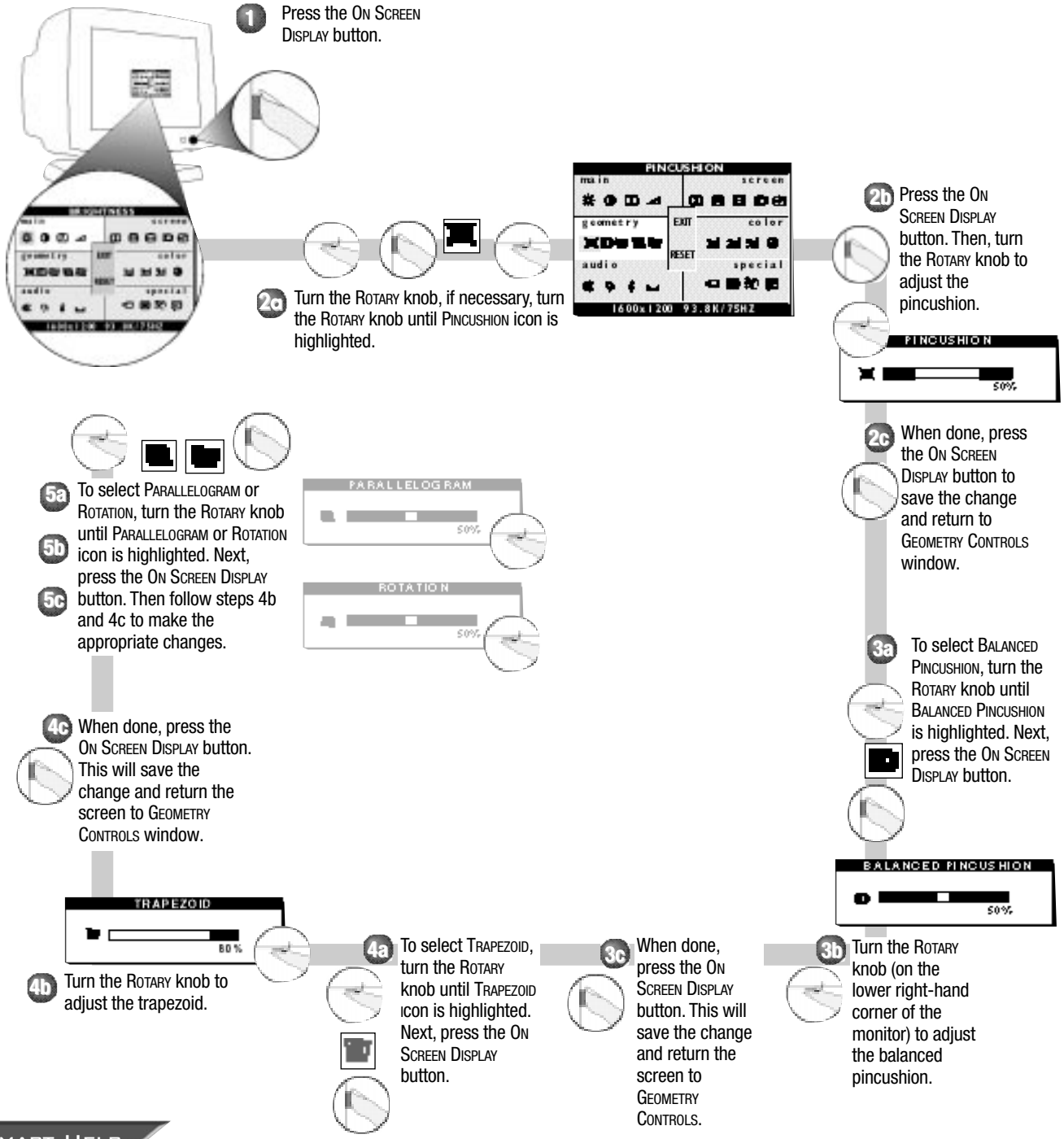
. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

How to Use the On Screen Display (OSD)

Geometry Controls window

Pincushion, Balanced Pincushion, Trapezoid, Parallelogram, Rotation

Follow the steps below to adjust any of the five preset options (Pincushion, Balanced Pincushion, Trapezoid, Parallelogram, or Rotation). You can make individual adjustments to each of the preset options. *Note: use these features only when the picture is not square.*



Smart Help

To exit Geometry Controls . . .

. . . but continue to another window, turn the Rotary knob until required function is highlighted. Now, press the On Screen Display button and follow the instructions for that window.

. . . TO exit completely, press the On Screen Display button and hold for 1.5 seconds. The On Screen Display will disappear. All changes will be saved.

To make changes to one item, follow the steps for that item. Then, follow **"To exit Geometry Controls . . ."**

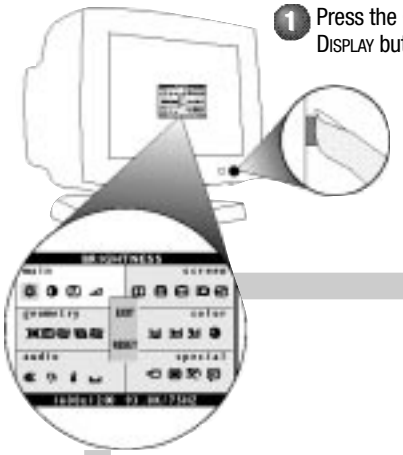
To return to factory presets, see "To Reset an Individual Window" on page 16.

How to Use the On Screen Display (OSD)

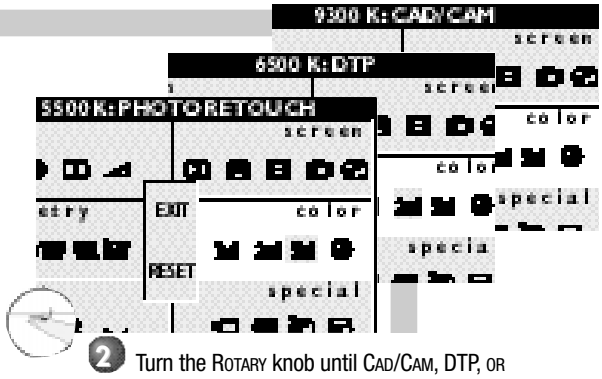
Color Temperature window

9300 K CAD/CAM / 6500 K DTP / 5500 K Photo Retouch

Your monitor has three preset options you can choose from. One for Computer Aided Design (CAD) work. Two for Desktop Publishing (DTP). And three for Photo Retouch. When you select an option, the computer automatically adjusts itself for that selection.

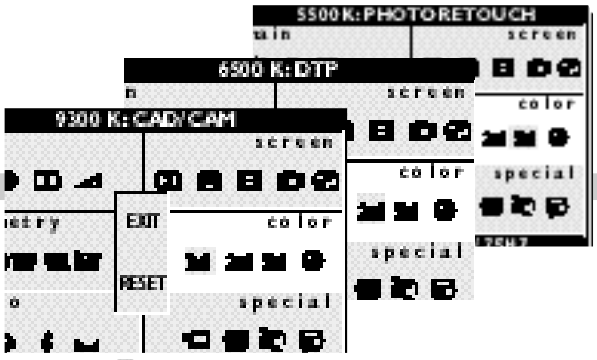


1 Press the On Screen Display button.



2 Turn the Rotary knob until CAD/CAM, DTP, or Photo Retouch is highlighted.

After each preset setting is saved, the on screen display automatically returns to the Color Temperature window. To save the next present setting, simply repeat the steps listed here.



3 Press the On Screen Display button to bring up and save the preset settings for 9300 K CAD/CAM, 6500 K DTP, or 5500 K Photo Retouch.

Smart Help

After returning to Color Temperature . . .

. . . to continue to Advanced Color Control, turn the Rotary knob until *Advanced Color Control* is highlighted. Next, follow steps 3 - 9 under *Advanced Color Control* on the next page.

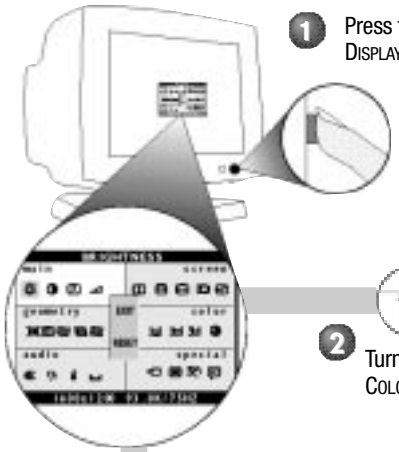
. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

to Use the On Screen Display (OSD)

Color Temperature window

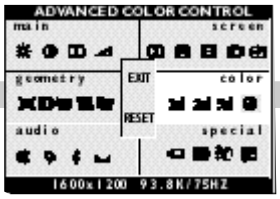
Advanced Color Control

If you need to adjust any of the three preset options (CAD/CAM, DTP, or Photo Retouch), follow the steps below to modify the colors that appear on your screen. You can make individual adjustments to each of the preset options.



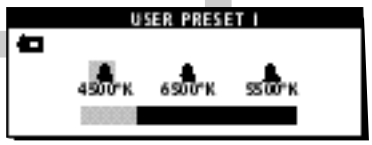
1. Press the On Screen Display button.

2. Turn the Rotary knob until Advanced Color Control icon is highlighted.



3. Press the On Screen Display button to bring up the Advanced Color Control window.

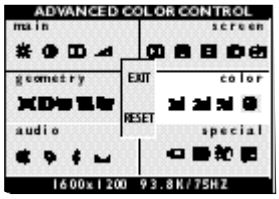
4. If necessary, turn the Rotary knob until ▟ of the Advanced Color Control is highlighted. Next, press the On Screen Display button.



5. Turn ROTARY knob to your required white point, press On Screen Display button to store the specified value in user mode.

6. To exit Advanced Color Control 1 ▟, press the On Screen Display button.

7. You will now be back at the Advanced Color Control window. See Smart Help below for options.



Smart Help

To exit User Presets (step 3 above), turn the Rotary knob until the Go Back icon is highlighted Go Back appears by the icon when highlighted. Next, press the On Screen Display button. You will be back at the Color Temperature window.

After returning to Color Temperature . . .

. . . to continue to User Preset 2 or 3, repeat steps 3 through 8, selecting either User Preset 2 or User Preset 3.

. . . to continue to Audio Controls window, turn the Rotary knob until the *Mute* icon is highlighted. Next, press the On Screen Display button. Then, follow steps 2 - 5 under Audio Control window on the next page.

. . .to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

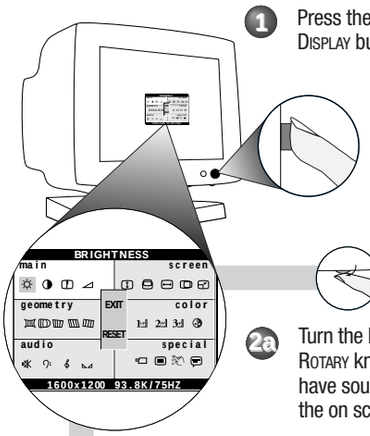
How to Use the On Screen Display (OSD)

Audio Controls window

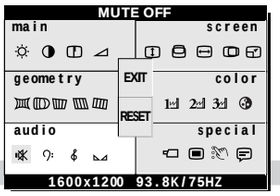
Mute, Bass, Treble, Balance

Follow the steps below to modify the sound that comes from your speakers. You can make individual adjustments to each of the preset options (MUTE, BASS, TREBLE, or BALANCE).

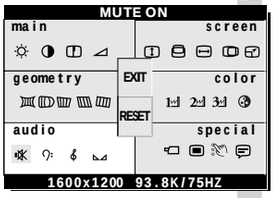
1 Press the ON SCREEN DISPLAY button.



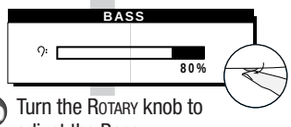
2a Turn the ROTARY knob, if necessary, turn the ROTARY knob until MUTE icon is highlighted. If you have sound, MUTE OFF appears at the top of the on screen display.



2b Press the ON SCREEN DISPLAY button to mute the sound from your speakers and to return to AUDIO CONTROLS window. MUTE ON appears at the top of the on screen display.



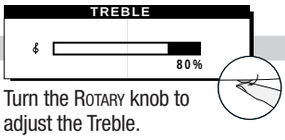
3a To select BASS, turn the ROTARY knob until BASS icon is highlighted. Next, press the ON SCREEN DISPLAY button.



3b Turn the ROTARY knob to adjust the Bass.

3c When done, press the ON SCREEN DISPLAY button to save the change and return the screen to AUDIO CONTROLS.

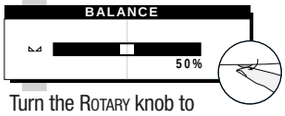
4a To select TREBLE, turn the ROTARY knob until TREBLE icon is highlighted. Next, press the ON SCREEN DISPLAY button.



4b Turn the ROTARY knob to adjust the Treble.

4c When done, press the ON SCREEN DISPLAY button to save the change and return the screen to AUDIO CONTROLS.

5a To select BALANCE, turn the ROTARY knob until BALANCE icon is highlighted. Then, press the ON SCREEN DISPLAY button.



5b Turn the ROTARY knob to adjust the Balance.

5c When done, press the ON SCREEN DISPLAY button to save the change and return the screen to AUDIO CONTROLS.

Smart Help

To exit AUDIO CONTROLS . . .

. . . but continue on to SPECIAL CONTROLS, turn the ROTARY knob until required function is highlighted. Next, press the ON SCREEN DISPLAY button. Then go to step 2a on page 15.

. . . to exit completely, press the ON SCREEN DISPLAY button and hold for 1.5 seconds. The On Screen Display will disappear. All changes will be saved.

To cancel MUTE, repeat step 2b, or press the MUTE button on the front of the monitor.

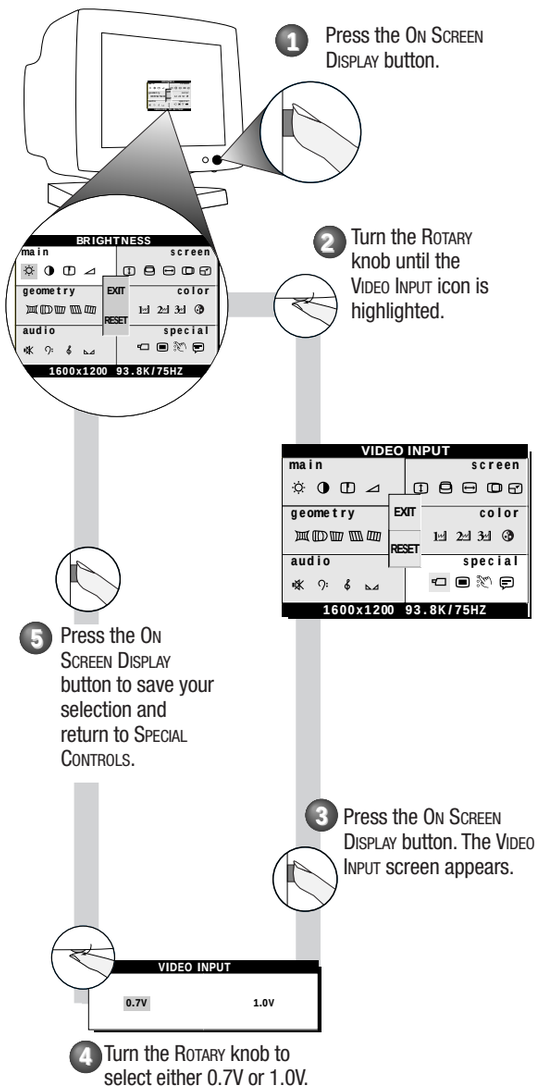
To make changes to one item, follow the steps for that item. Then follow the instructions **To exit AUDIO CONTROLS . . . .**

How to Use the On Screen Display (OSD)

Special Controls window

Video Input

VIDEO INPUT helps determine what you see on the screen. It is set at 0.7V(olts), but if the video input signal is different than the output signal, you may want to change it to 1.0V.



Smart Help

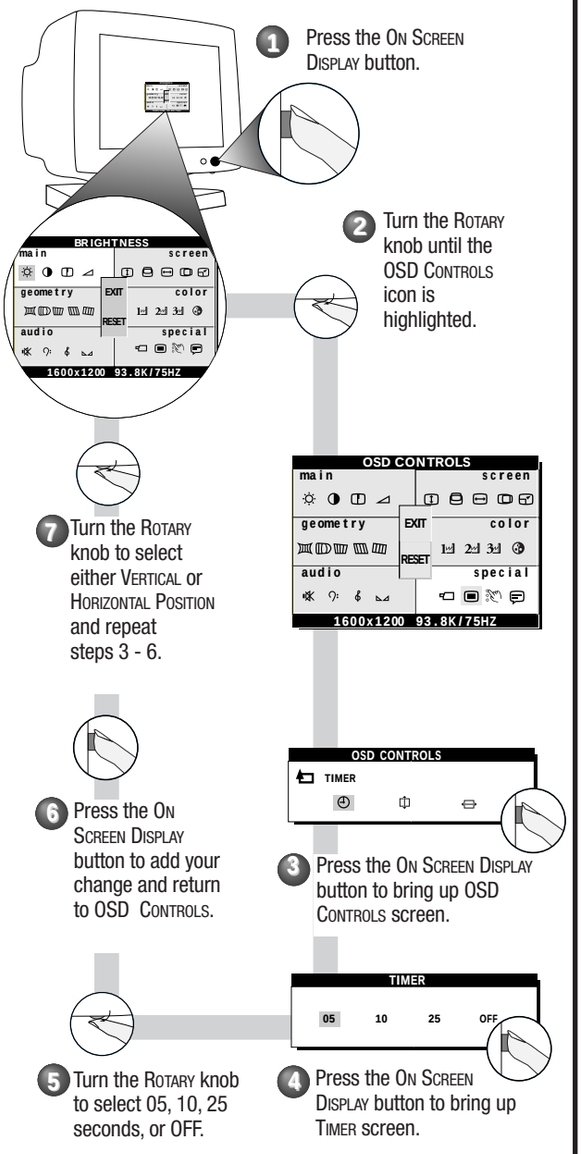
After returning to SPECIAL CONTROLS . . .

. . . to continue to OSD CONTROLS, turn the ROTARY knob until OSD CONTROLS icon is highlighted. The, follow steps 3 - 6 under OSD CONTROLS.

. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

OSD Controls

WITH OSD CONTROLS, you can set the time for the On Screen Display to time out, and change the vertical and horizontal position of the OSD on the monitor screen.



Smart Help

After returning to OSD CONTROLS . . .

. . . to continue to SPECIAL CONTROLS, turn the ROTARY knob until GO BACK is highlighted. Next, press the ON SCREEN DISPLAY button. Then, turn the ROTARY knob to SPECIAL CONTROLS window and go to the next page.

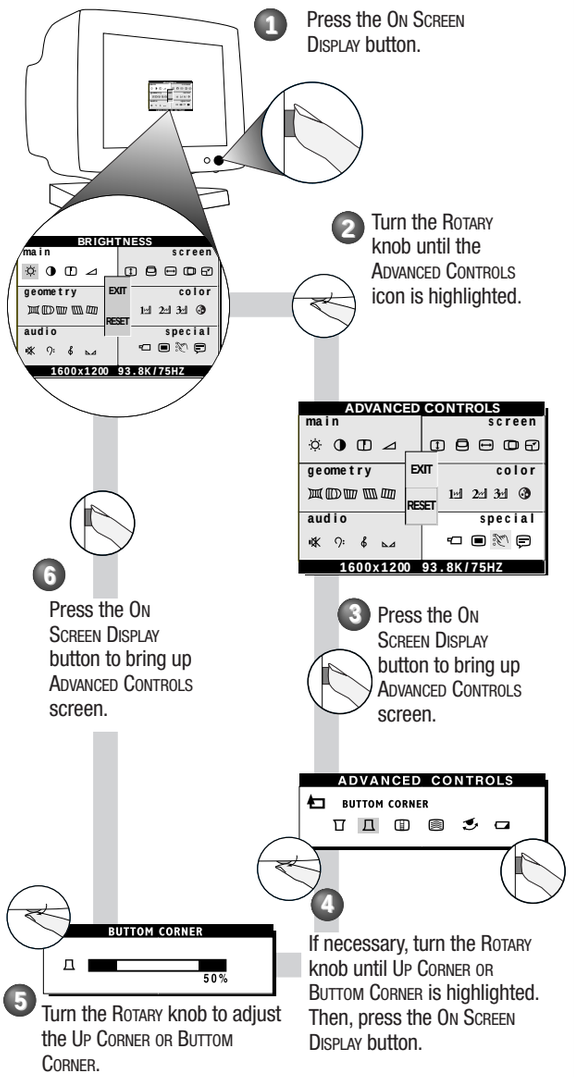
. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

How to Use the On Screen Display (OSD)

Special Controls window

Advanced Controls
UP & BUTTOM CORNER

ADVANCED CONTROLS is a set of Six adjustments. They include UP CORNER, BUTTOM CORNER, VERTICAL LINEARITY, MOIRE, ROTARY DEFAULT, and POWER SAVING. CORNER CORRECTION "squares up" the corners of an image on the screen To adjust your CORNER CORRECTION, follow the steps below.



Smart Help

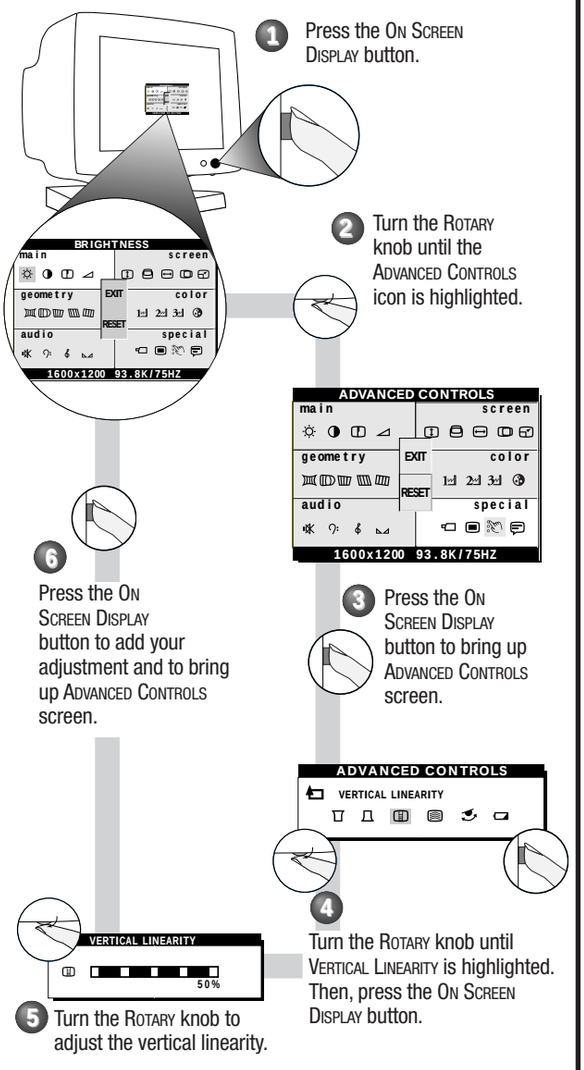
After returning to ADVANCED CONTROLS . . .

. . . to continue to VERTICAL LINEARITY, turn the ROTARY knob until VERTICAL LINEARITY icon is highlighted. Next, follow steps 4 - 6 under VERTICAL LINEARITY (on the next page).

. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

Advanced Controls
VERTICAL LINEARITY

ADVANCED CONTROLS is a set of five adjustments, including VERTICAL LINEARITY. Linearity is the degree with which the actual location of a pixel on the screen corresponds with its intended location. To adjust your VERTICAL LINEARITY, follow the steps below.



Smart Help

After returning to ADVANCED CONTROLS . . .

. . . to continue to MOIRE, turn the ROTARY knob until MOIRE icon is highlighted. Next, follow steps 4 - 7 under MOIRE.

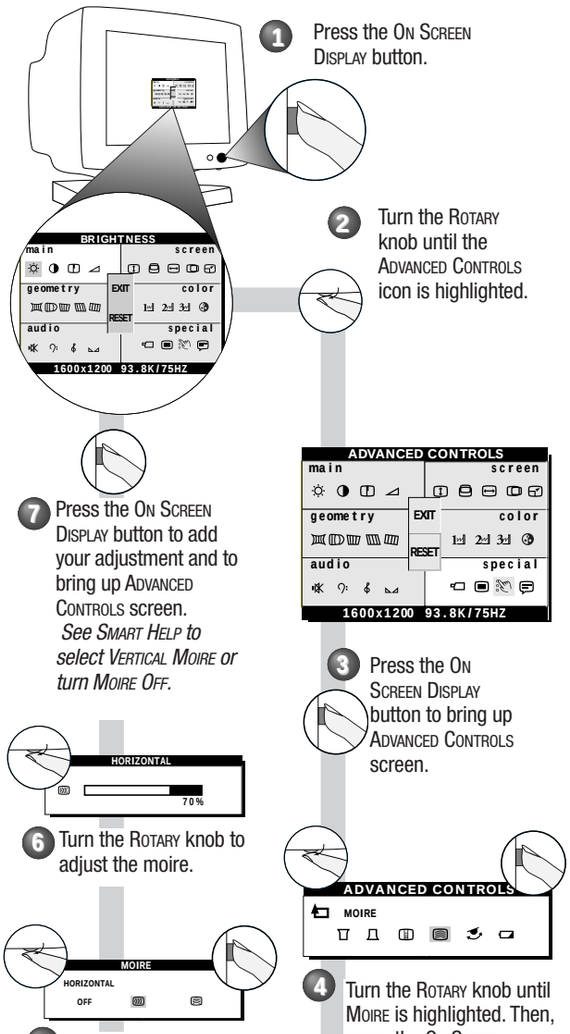
. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

How to Use the On Screen Display (OSD)

Special Controls window

Advanced Controls
MOIRE

ADVANCED CONTROLS is a set of five adjustments, including MOIRE. MOIRE is a fringe pattern arising from the interference between two superimposed line patterns. To adjust your MOIRE, follow the steps below. *Note: Use only if necessary. By activating MOIRE, sharpness can be affected.*



Smart Help

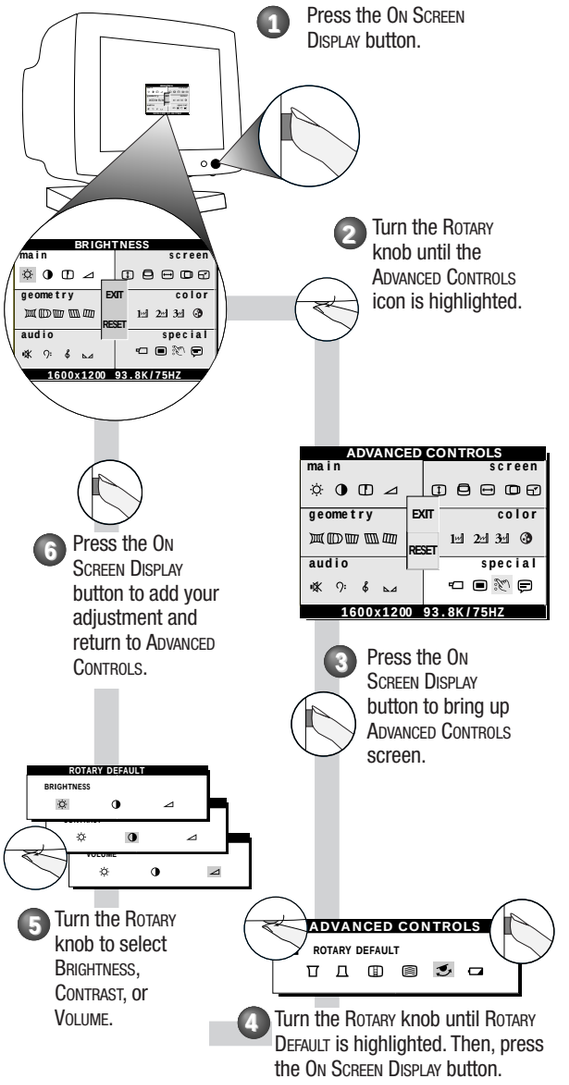
To select VERTICAL MOIRE or to turn Moire OFF, follow the steps above, selecting VERTICAL MOIRE or Moire OFF in step 5.

After returning to ADVANCED CONTROLS . . .

. . . to continue to ROTARY DEFAULT, turn the ROTARY knob until ROTARY DEFAULT icon is highlighted. Next, follow steps 4 - 6 under ROTARY DEFAULT. *. . . to exit completely,* press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

Advanced Controls
Rotary Default

ROTARY DEFAULT allows you to pick the feature your ROTARY knob will default to when not used in adjusting your ON SCREEN DISPLAY. The normal default is volume. To select your ROTARY DEFAULT, follow the steps below.



Smart Help

After returning to ADVANCED CONTROLS . . .

. . . to continue to POWER SAVING, turn the ROTARY knob until POWER SAVING is highlighted. Next, follow steps 3 - 6 under POWER SAVING.

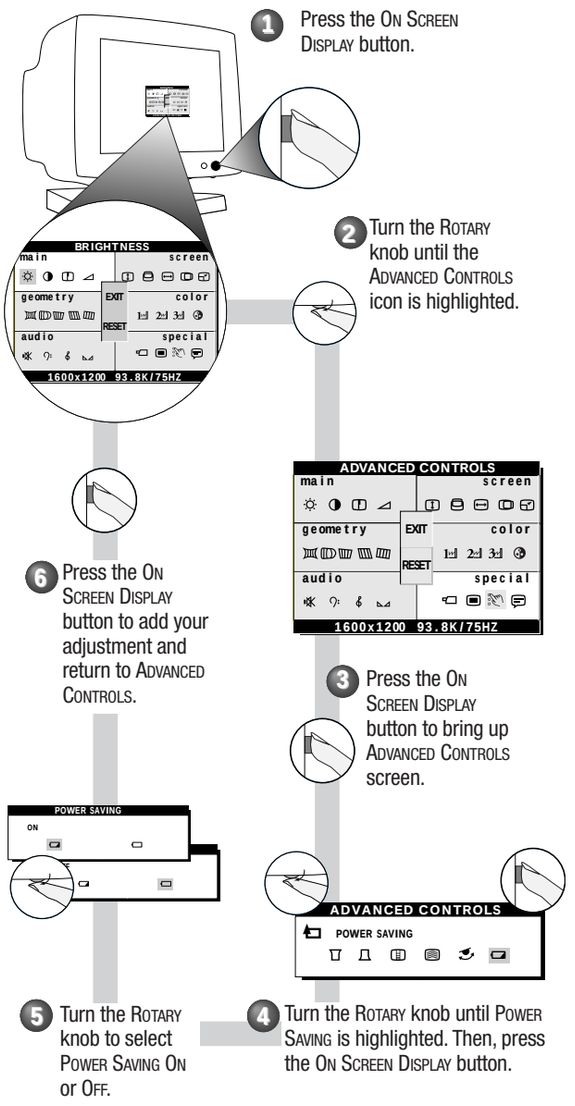
. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

How to Use the On Screen Display (OSD)

Special Controls window

Advanced Controls
Power Saving

Power Saving helps save energy when the monitor is on but not being used. After a preset time, the monitor will go blank if not being used. To select Power Saving, follow the steps below.



Smart Help

After returning to Advanced Controls . . .

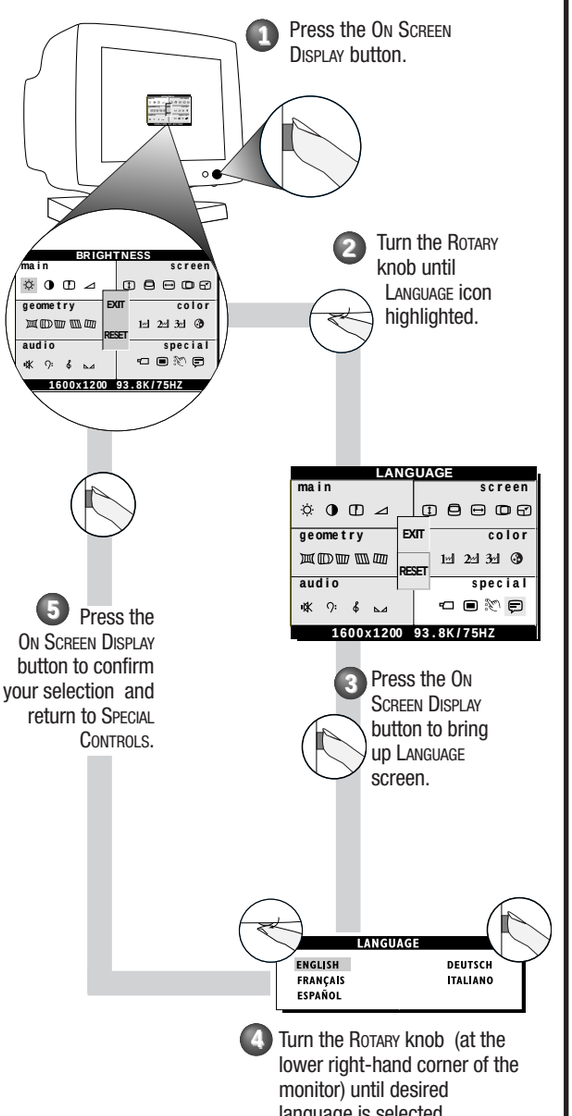
. . . to continue to OSD Controls, turn the Rotary knob until Go Back is highlighted. Next, press the On Screen Display button. Then, turn the Rotary knob to OSD Controls and go to the next page.

ADVANCED CONTROLS
GO BACK

. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

Language

The On Screen Display shows its settings in one of five languages. The default is English, but you can select French, Spanish, German, or Italian.



Smart Help

After returning to Special Controls . . .

. . . to continue to Advanced Controls, turn the Rotary knob until Advanced Controls icon is highlighted. Next, follow steps 3 - 6 under Advanced Controls.

. . . to exit completely, press the OSD button and hold for 1.5 seconds. (See page 16 for other exit options.)

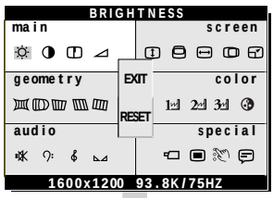
How to Use the On Screen Display (OSD)

Exit and Reset

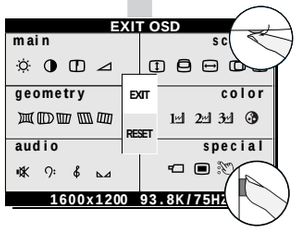
Exit & Reset from the On Screen Display

Exiting from the On Screen Display removes the On Screen Display from the monitor screen. Resetting from the On Screen Display returns everything in all the windows to factory presets.

To Exit an entire On Screen Display

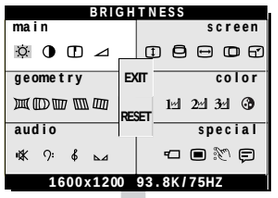


1. Make sure you have exited from all icons in a window. (See To Exit from an individual window.) For example, Main Controls will be highlighted.

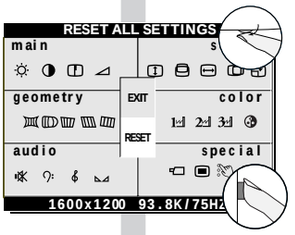


2. Turn the Rotary knob until Exit is highlighted. Next, press the On Screen Display button. The On Screen Display will disappear.

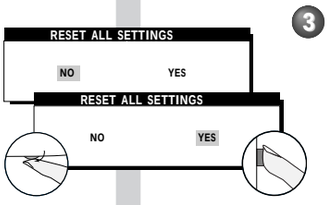
Reset Entire On Screen Display



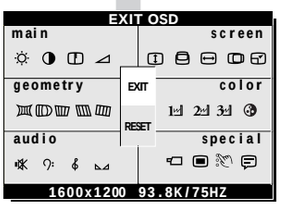
1. Make sure you have exited from all icons in a window. (See To Exit from an individual window.) For example, Main Controls will be highlighted.



2. Turn the Rotary knob until Reset is highlighted. Next, press the On Screen Display button.



3. Turn the Rotary knob to select No or Yes. Then press the On Screen Display button.



4. If Yes or No is selected, the Exit OSD screen appears.

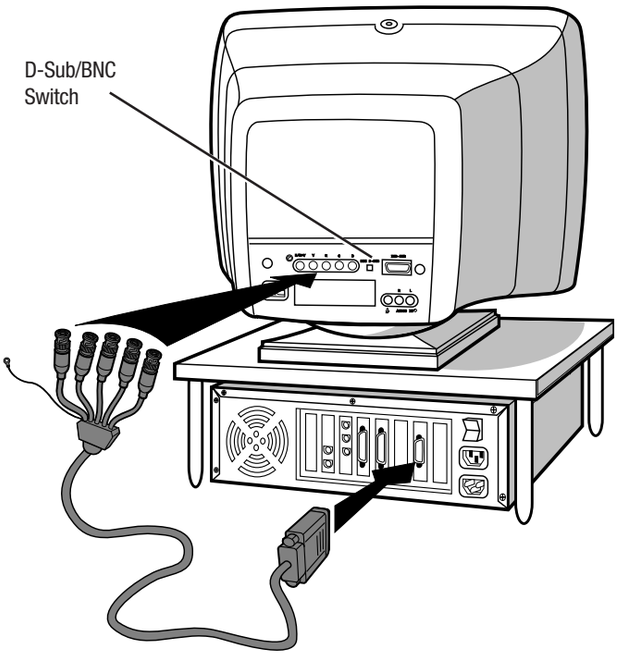
Additional Hook Up Options

BNC and USB Set Ups

BNC Connections

BNC is another way to connect the monitor to the computer. This connection requires an optional BNC cable. It can be connected to either a Macintosh- or IBM-compatible computer. For those who work with graphics or designs, this option may be better.

Note: Be sure to flip the D-Sub/BNC switch to BNC when using this connection.



For an IBM-compatible computer:

1. Turn off the computer.

2. Connect the (optional) BNC monitor cable and set D-Sub/BNC switch to BNC.

3. Connect the power cable.

4. Turn on the monitor. Then turn on the computer.

5. If you have Windows '95, follow the "If you have Windows '95" steps on the Setting Up foldout sheet.

For a Macintosh-type computer:

1. Connect the Mac adapter to one end of the monitor cable.

2. Turn off the computer.

3. Connect the (optional) BNC monitor cable and set D-Sub/BNC switch to BNC.

4. Connect the power cable.

5. Turn on the monitor. Then turn on the computer.

Refer to the "Setting Up your Philips monitor" foldout for a more detailed guide to setting up your monitor.

USB Connections

USB (Universal Serial Bus) is an innovation in connecting your IBM-compatible computer to your monitor. By using the USB, you will be able to connect your keyboard, mouse, printer, and other peripherals to your monitor instead of having to connect them to your computer. This will give you greater flexibility in setting up your system. Plus, you will have true plug-and-play capability. While the software is still being developed, Philips has included the hardware so you will be ready to take advantage of this next generation in computer development.

For an IBM-compatible Computer:

1. Turn off the computer.

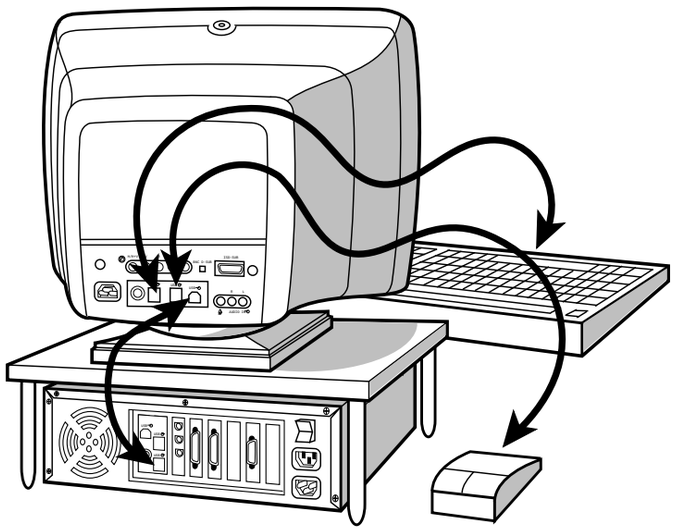
2. Connect the (optional) USB Hub and cable to the computer and to the monitor. (Computer must have USB port.)

3. Connect the power cable.

4. Turn on the monitor. Then turn on the computer.

5. With the installation of the correct software, you will be able to connect specially-made peripherals to the monitor.

Note: USB Hub and cables sold separately. USB Bay exists in back of monitor.



Refer to the "Setting Up your Philips monitor" foldout for a more detailed guide to setting up your monitor.

Additional information

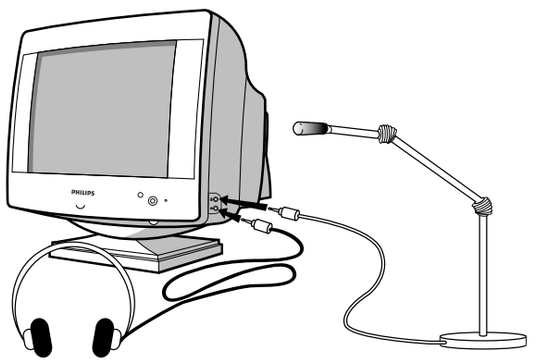
Audio hook ups and Power saving feature

Microphone and Earphones jacks

In addition to built-in speakers and microphone, you can connect this monitor to optional earphones and a microphone. The jacks are on the right side of the monitor.

To use the microphone with your computer or an amplifier, make the connections shown below.

Note: When the earphones are plugged in, there will be no sound from the built-in speakers.

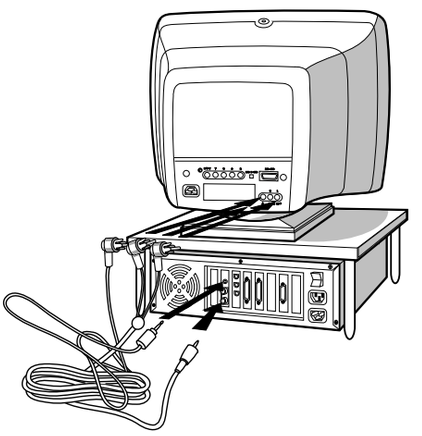


Microphone and Audio-in jacks

A microphone jack is on the back of the monitor. Use it and the supplied cable to connect your monitor to your computer or an amplifier (if either has the right type of jack).

On the back of this monitor there is also one set of left and right audio-in jacks. Use them and the supplied cable to connect your monitor to your computer or an amplifier (if either has the right type of jacks).

See page 2 for more detailed illustrations of the jacks' locations.



Refer to the owner's manuals included with your earphones and microphone for a detailed guide to setting up these items.

Automatic Power Savings & Preset Resolution Modes

If you have VESA's DPMS compliance display card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. If input from a keyboard, mouse, or other device is detected, the monitor automatically "wakes up." The table at left shows the power consumption and signalling of this automatic power-saving feature. To turn this feature on and off, see page 12. The table at right shows the 12 factory preset resolution modes. The maximum number of modes is 16. This leaves room for additions.

Power Management Definition

VESA's mode	Video	H-sync	V-sync	Power used	Power saving(%)	LED color
ON	Active	Yes	Yes	< 110W	0%	Green
Stand-by	Blanked	No	Yes	< 15W	86.3%	Yellow
Suspend	Blanked	Yes	No	< 15W	86.3%	Yellow
OFF	Blanked	No	No	< 3W	97.2%	Amber

This monitor is ENERGY STAR® compliant.

As an ENERGY STAR® Partner, PHILIPS has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

The proper operation of the function requires a computer with VESA DPMS power management capabilities. When used with a computer equipped with VESA DPMS, the monitor is ENERGY STAR® compliant.

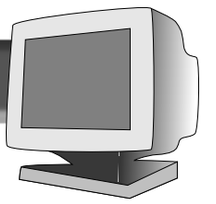
Factory Preset Resolution Modes

Mode	Resolution	H. Freq. (KHz)	V. Freq. (Hz)	Standard
1	640 x 400	31.5	70	VGA
2	640 x 480	31.5	60	VGA
3	640 x 480	37.5	75	VESA/75
4	800 x 600	46.9	75	VESA/75
5	800 x 600	53.7	85	VESA/85
6	1024 x 768	60	75	VESA/75
7	1024 x 768	68.6	85	VESA/85
8	1152 x 870	69.0	75	MAC
9	1152 x 900	71.8	76	SUN SPARC
9*	1600 x 1280	101.8	76	SUN SPARC
10	1280 x 1024	80.0	75	VESA/75
11	1280 x 1024	91.0	85	VESA/85
12	1600 x 1200	93.8	75	VESA/75
13*	1600 x 1200	106.2	85	VESA/85

* only for 109MP

Additional Information

Coming to Terms with this Book



Specifications (107MP)

General

CRT	
Screen size	:17" (43.2 cm) flat & square
Viewable Image Size (VIS)	:16.0"
Focusing method	:Dynamic focus
Dot pitch	:0.22 mm (horizontal)
Phosphor	:P22 or equivalent, medium short persistence
Screen treatment	:ARASC Super High Contrast
Display area	
Factory preset	:300 mm (H) x 225 mm (V)
Maximum usable	:326.5 mm (H) x 242 mm (V)
Scanning frequency	
Horizontal (line)	:30-95kHz (AutoScan)
Vertical (frame)	:50-160 Hz (AutoScan)
Input power	:100-240 V AC, 50-60 Hz
Power consumption	:< 125 W (w/ USB, audio)
	< 110 W (w/o USB, audio)
Thermal dissipation	:375.4 BTU normal (w/o USB)
	426.6 BTU maximum (w/USB)
Input signal	
Video	:0.7 or 1.0 Vpp, 75 Ohm impedance
Sync	:Separate sync. TTL level Composite sync. TTL level
Pedestal	
Tilt	:5° forward, 11° backward
Swivel	:90° left, 90° right
Physical	
Unit dimension (WxHxD)	:442 x 433 x 500 mm (17.4" x 17" x 19.7")
Net weight	:20.5 kg (45.2 lbs.)
Operating conditions	
Temperature	:0° C - 40° C
Humidity	:10% - 90%
Storage conditions	
Temperature	:-40° C - 60° C
Humidity	:5% - 95%

Specifications (109MP)

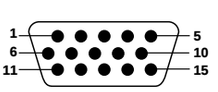
General

CRT	
Screen size	:19" (48.2 cm) flat & square
Viewable Image Size (VIS)	:18.0"
Focusing method	:Dynamic focus
Dot pitch	:0.22 mm (horizontal)
Phosphor	:P22 or equivalent, medium short persistence
Screen treatment	:ARASC Super High Contrast
Display area	
Factory preset	:340 mm (H) x 255 mm (V)
Maximum usable	:365.5 mm (H) x 273 mm (V)
Scanning frequency	
Horizontal (line)	:30-107kHz (AutoScan)
Vertical (frame)	:50-160 Hz (AutoScan)
Input power	:100-240 V AC, 50-60 Hz
Power consumption	:< 135 W (w/ USB, audio)
	< 110 W (w/o USB, audio)
Thermal dissipation	:375.4 BTU normal (w/o USB)
	426.6 BTU maximum (w/USB)
Input signal	
Video	:0.7 or 1.0 Vpp, 75 Ohm impedance
Sync	:Separate sync. TTL level Composite sync. TTL level
Pedestal	
Tilt	:5° forward, 11° backward
Swivel	:90° left, 90° right
Physical	
Unit dimension (WxHxD)	:485 x 490 x 515 mm (19.1" x 19.3" x 20.3")
Net weight	:24.5 kg (53.9 lbs.)
Operating conditions	
Temperature	:0° C - 40° C
Humidity	:10% - 90%
Storage conditions	
Temperature	:-40° C - 60° C
Humidity	:5% - 95%

Pin Assignment

The 15-pin D-sub connector (male) of the signal cable:

Pin No.	Assignment
1	Red video input
2	Green video input
3	Blue video input
4	Identical output - connected to pin 10
5	Ground
6	Red video ground
7	Green video ground
8	Blue video ground
9	No pin
10	Logic ground
11	Identical output - connected to pin 10
12	Serial data line (SDA)
13	H. Sync / H+V
14	V. Sync (VCLK for DDC)
15	Data clock line (SCL)



Glossary

Here are a few definitions that may help you.

Degauss	The process by which metal parts of the monitor are demagnetized in order to reduce screen distortion and color impurity.
D-Sub/ BNC	Two ways of connecting your monitor to your computer. Your monitor comes with a D-Sub cable. For work with a heavy emphasis on graphics, a BNC cable is recommended.
Geometry	A set of controls that allows you to adjust the alignment of the picture on the monitor screen. The goal is to “square up” the picture. This is done by adjusting such items as balanced pincushion, pincushion, parallelogram, rotation, and trapezoid.
Moire	A fringe pattern caused by the interference between two superimposed line patterns.
USB	Universal Serial Bus. A way to connect your computer, monitor, and peripherals for true Plug-and-Play functions.

Additional Information

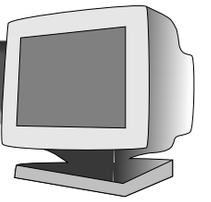
What to Do if Something isn't Working

Troubleshooting

Having trouble? Something not working? Before calling for help, try these suggestions.

HAVING THIS PROBLEM?	CHECK THESE ITEMS
No Picture (Power LED not lit)	Make sure the Power cable is plugged in the wall and back of the monitor. Power button on top of the monitor should be in the ON position. Disconnect the monitor from the power outlet for about one minute.
No Picture (Power LED is Amber or Yellow in color)	Make sure the computer is turned on. Make sure the D-Sub/BNC switch on the rear of the monitor is in the correct position. See pages 2 and 17. Make sure the monitor cable is properly connected to your computer. Check to see if the monitor cable has bent pins. The Energy Saving Feature may be activated. See pages 12 and 18 for more detail.
No Picture (Power LED is Green in color)	Make the Brightness and Contrast controls are set correctly. See page 4 for details Make sure the D-Sub/BNC switch on the rear of the monitor is in the correct position. See pages 2 and 17. Make sure the monitor cable is properly connected to your computer. Check to see if the monitor cable has bent pins. Make sure the computer Power button is on.
Screen says  when you turn on the monitor.	Make sure the D-Sub/BNC switch on the rear of the monitor is in the correct position. See pages 2 and 17. Make sure the monitor cable is properly connected to your computer. See Setting Up foldout. Check to see if the monitor cable has bent pins. Make sure the computer is turned on
No Color	If you are using a non-VESA-DDC standard video card, consult your local Philips dealer or service organization to obtain an adapter.
Color appears blotchy	The picture may need degaussing. See page 5 for details. Remove any nearby magnetic objects. Face the monitor East for best picture quality.
Missing one or more colors	Check user settings of Color Temperature. See pages 8 and 9 for details. Make sure the monitor cable is properly connected to your computer. Check to see if the monitor cable has bent pins.
Dim Picture	Adjust the Brightness and Contrast controls. See page 4 for details. Check the Video Input selection and switch from 0.7 volts to 1.0 volts or 1.0 volts to 0.7 volts. See page 13. Check your video card and the manual instructions for it. It may be a non-VESA-DDC Standard card.
Picture is too large or too small	Adjust the Horizontal and/or Vertical Size. See pages 7 and 8 for details.
Edges of the picture are not square	The geometry controls require adjusting. See page 15 for details.
Picture has a double image	Eliminate the use of a video extension cable and/or video switch box. Face the monitor East for best picture quality.
Picture is not sharp	Check to make sure Moire is switched off. See page 11.
No Audio	Make sure mute is not activated. See pages 2 and 14 for details. Rotary Default may be set to Brightness or Contrast. See page 12 for details. Make sure the Right & Left Audio in cable is securely plugged into the monitor and the audio source. See pages 2 and 18 for details.
Unstable Picture	Increase your refresh rate. Consult your computer manual for details.
Windows '95 cannot find your video card	Select "Super VGA" under STANDARD DISPLAY TYPES, or contact your video card manufacturer for the right drivers.

Additional Information



FIRST LEVEL	SECOND LEVEL	THIRD LEVEL
Main / Brightness		
/ Contrast		
/ Degaussing		
/ Volume		
Screen / Vertical size		
/ Vertical position		
/ Horizontal size		
/ Horizontal position		
/ Zoom		
Geometry / Pincushion		
/ Balance Pincushion		
/ Trapezoid		
/ Parallelogram		
/ Rotation		
Color / 9300K		
/ 6500K		
/ 5500K		
**/ Advanced color control	3 User modes	
Audio / Mute		
/ Bass		
/ Treble		
/ Balance		
Special / Video input	0.7V	
	1.0V	
/ OSD control	Timer	5
		10
		25
		Off
	H position	
	V position	
/ Advanced control	Up control	
	Bottom control	
	Vertical linearity	
	Moire	H moire
		V moire
		Off
	Rotary default	Brightness
		Contrast
		Volume
	Power saving	On
		Off
/ Language	ENGLISH	
	DEUTSCH	
	FRANÇAIS	
	ITALIANO	
	ESPÃNOL	
Exit	Save	
Reset	Reset all setting	