# **ViewSonic®**

# **VPW5500**



55" PLASMA DISPLAY

User Guide
Guide de l'utilisateur
Guía del usuario

### **IMPORTANT**

If you intend to mount the plasma display on a wall, be sure to write down the serial number (located on the back of the unit) to meet any future product support needs you may have.

For your convenience, you can write the serial number in this User Guide. See the "Serial Number" field of the **For Your Records** section of page 1.

# **Contents**

| For Your Records   |    |
|--|----|
| IMPORTANT SAFETY INSTRUCTIONS                                |    |
| FEATURES   |    |
| SAFETY INSTRUCTIONS  |    |
| IMAGE RETENTION PREVENTION                                   |    |
| COMPONENT NAMES  |    |
| Main Unit  |    |
| Remote control   |    |
| Loading Batteries  Handling the Remote Control               |    |
| INSTALLATION INSTRUCTIONS                                    |    |
| Installation   |    |
| Anti-tumble measures.  |    |
| Connecting to a PC   |    |
| Mounting the Speaker Unit                                    |    |
| Power Cord Connection  |    |
| OPERATING INSTRUCTIONS                                       |    |
| Turning Power On and Off                                     |    |
| Input Switching  |    |
| Volume Adjustment  |    |
| Audio Mute   |    |
| Size Switching   | 18 |
| Input Signal Screen Display                                  | 18 |
| Automatic Adjustment of Screen Position and the Clock        | 19 |
| Independent Operation of Multiple Monitors                   | 19 |
| Using the Menu Screen  | 19 |
| PICTURE MENU   |    |
| AUDIO MENU   | 21 |
| TIMER MENU   |    |
| FUNCTION MENU  |    |
| SETUP MENU   |    |
| LANGUAGE MENU  |    |
| OTHER FEATURES   | 24 |
| Automatic Store  |    |
| Signal Check   |    |
| Power Save Mode  |    |
| IMAGE RETENTION OF PLASMA DISPLAY                            |    |
| NOTES  |    |
| TROUBLESHOOTING  | 27 |
| Symptoms That Seemingly Appear to be Failures                |    |
| Actions to Correct Abnormal Displays  PRODUCT SPECIFICATIONS |    |
| Signal Input   |    |
| Recommended Signal List                                      |    |
| neconinended signal List                                     |    |
| SUPPLEMENT   | 33 |
| Optional Video Unit Function                                 | 34 |
| APPENDIX   | 46 |
| Customer Support   | 46 |
| Limited Warranty   | 47 |
| Power Cord Safety Guidelines                                 |    |
| Cleaning and Maintance                                       |    |
| ECC Information  | 50 |

#### **Notes about This Manual**

- The information in this manual is subject to change without notice.
- While meticulous care has been taken in the preparation of this manual, you are requested to notify your dealer or us should you have any comments, views or questions about our product.
- Fully understand the prerequisites to using the product, such as hardware and software specifications and constraints, in using the
- product. We are not held liable for damages caused by improper handling of the product.

  Reproduction of this manual in whole or in part without our prior written permission is prohibited.

  The product names mentioned in this manual may be trademarks or registered trademarks of their respective owners.

Copyright © ViewSonic Corporation, 2004. All rights reserved.

Macintosh, Mac and Power Macintosh are registered trademarks of Apple Computer, Inc.

Microsoft, Windows, Windows NT, and the Windows logo are registered trademarks of Microsoft Corporation in the United States and other countries.

ViewSonic, the three birds logo and OnView are registered trademarks of ViewSonic Corporation.

VESA and SVGA are registered trademarks of the Video Electronics Standards Association. DPMS and DDC are trademarks of VESA.

VGA and XGA are registered trademarks of the International Business Machines Corporation.

Disclaimer: ViewSonic Corporation shall not be liable for technical or editorial errors or omissions contained herein; nor for incidental or consequential damages resulting from furnishing this material, or the performance or use this product.

In the interest of continuing product improvement, ViewSonic Corporation reserves the right to change product specifications without notice. Information in this document may change without notice.

No part of this document may be copied, reproduced, or transmitted by any means, for any purpose without prior written permission from ViewSonic Corporation.

**TruBass** TruBass, SRS and (O) symbol are trademarks of SRS Labs, Inc. TruBass technology is incorporated under license from SRS Labs, Inc.

### **Electronic Warranty Registration**

To meet your future needs, and to receive any additional product information as it becomes available, please register your screen's warranty on the internet at:

### http://www.viewsonic.com

Image Optimization files are also available free of charge at our web site. Go to www.viewsonic.com and select "Support." If you do not have access to the Internet or if you require further assistance, contact Customer Support.

| For Your        | Records           |         |
|-----------------|-------------------|---------|
| Product Name:   | ViewSonic VPW5500 |         |
| Model Number:   | VS10183           |         |
| Document Number | A-CD-VPW5500      | 4-29-04 |
| Serial Number:  |                   |         |
| Purchase Date:  |                   |         |

### Product disposal at end of product life

ViewSonic is concerned about the preservation of our environment. Please dispose of this product properly at the end of its useful life. Your local waste disposal company may provide information about proper disposal.



### **IMPORTANT SAFETY INSTRUCTIONS**

## SAFETY POINTS YOU SHOULD KNOW ABOUT YOUR PLASMA MONITOR

Our reputation has been built on the quality, performance, and ease of service of ViewSonic Plasma monitor. Safety is also foremost in our minds in the design of these units. To help you operate these products properly, this section illustrates safety tips which will be of benefit to you. Please read it carefully and apply the knowledge you obtain from it to the proper operation of your ViewSonic Plasma monitor.

Please fill out your warranty card and mail it to ViewSonic. This will enable ViewSonic to notify you promptly in the improbable event that a safety problem should be discovered in your product model.

Follow all warnings and instructions marked on this monitor.

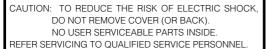


#### CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of a sufficient magnitude to constitute a risk of electric shock to persons.





The exclamation point within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

#### WARNING:

- TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS MONITOR TO RAIN OR MOISTURE.
- THE MONITOR SHOULD NOT BE EXPOSED TO DRIPPING OR SPLASHING AND NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THE MONITOR.

### NOTE:

- There are no user serviceable parts inside the monitor.
- Model and serial numbers are indicated on back side of the monitor.

#### CAUTION:

Adjust only those controls that are covered in the instructions, as improper changes or modifications not expressly approved by ViewSonic could void the user's authority to operate the monitor.

#### MODIFICATIONS:

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by ViewSonic. Home Electronics Division may void the user's authority to operate the equipment.

### POWER SOURCE

THIS MONITOR IS DESIGNED TO OPERATE ON 120 VOLTS 60Hz, AC CURRENT. INSERT THE POWER CORD INTO A 120 VOLT 60Hz OUTLET.

TO PREVENT ELECTRIC SHOCK, DO NOT USE THE MONITOR'S (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE, OR OTHER OUTLET UNLESS THE BLADES AND GROUND TERMINAL CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE

NEVER CONNECT THE MONITOR TO DIRECT CURRENT OR ANYTHING OTHER THAN THE SPECIFIED VOLTAGE.



### CAUTION:

Never remove the back cover of the monitor as this can expose you to very high voltages and other hazards. If the monitor does not operate properly, unplug the monitor and call your authorized dealer or service center.



### **IMPORTANT SAFETY INSTRUCTIONS**

#### Read before operating equipment

Follow all warnings and instructions marked on this monitor.

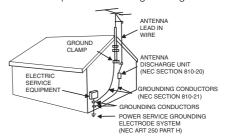
- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding- type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use the attachments/accessories specified by the manufacturer.
- 12.

Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Do not place any objects on the top of the monitor which may fall or cause a child to climb to retrieve the objects.

- Monitors are designed to comply with the recommended safety standards for tilt and stability.
  - Do not apply excessive pulling force to the front, or top, of the cabinet which could cause the product to overturn resulting in product damage and/or personal injury.
- 16. Follow instructions for wall, shelf or ceiling mounting as recommended by the manufacturer.
- An outdoor antenna should not be located in the vicinity of overhead power lines or other electrical circuits.
- 18. If an outside antenna is connected to the receiver be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding for the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode.



NEC NATIONAL ELECTRICAL CODE

Note to the CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Disposal of this product may require specific instructions pertaining to your resident state. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance: www.eiae.org.

#### PREVENTION OF SCREEN BURN

Continuous on-screen displays such as video games, stock market quotations, computer generated graphics, and other fixed (non-moving) patterns can cause permanent damage to the monitor. Such "SCREEN BURNS" constitute misuse and are **NOT COVERED** by your ViewSonic Warranty.

### PUBLIC VIEWING OF COPYRIGHTED MATERIAL

Public viewing of programs broadcast by TV stations and cable companies, as well as programs from other sources, may require prior authorization from the broadcaster or owner of the video program material.

#### **Important**

Please read this User's Manual thoroughly, especially the Important Safety Instructions on Page 2 to 3 and 5 to 9. Mis-use may cause damage to your plasma monitor, which could shorten its lifespan, or cause injury to yourself. Should you encounter any difficulty in the set-up or operation of your monitor, firstly refer to the Troubleshooting guide at the rear of this manual.

In the unlikely event of a problem occurring with your plasma monitor, switch off at the mains sockets, pull out the plugs, and contact your dealer immediately.

#### **CAUTION**

Under no circumstances remove the rear cover of your plasma monitor.

Never guess or take any chances with electrical equipment of any kind - it is better to be safe than sorry!

#### **Software Notice**

It is prohibited for the end user of this product to copy, reverse engineer or reverse compile the software included therein, save to the extent permitted by law.

#### **Plasma Monitor**

After the plasma monitor has been on for any length of time, you will notice that the screen becomes warm. Please note that this is normal. Sometimes the screen might have some tiny bright or dark spots. Please note that this is normal.

### **CAUTION**

To prevent scratches or damages to the plasma screen, do not knock or rub the surface with sharp or hard objects. Clean the screen with a soft cloth moistened with warm water and dry with a soft cloth. A mild soap may be used if the screen is extremely dirty. Do not use harsh or abrasive cleaners!

#### **CAUTION**

Use a soft cloth to clean the cabinet and control panel of the monitor. When excessively soiled dilute a neutral detergent in water, wet and wring out the soft cloth and afterward wipe with a dry soft cloth. Never use acid/alkaline detergent, alcoholic detergent, abrasive cleaner, powder soap, OA cleaner, car wax, glass cleaner, etc. especially because they would cause discoloration, scratches or cracks.

### **FEATURES**

# Large-screen, high-definition plasma display panel

The 55-inch color plasma display panel, with a resolution of 1366 (H) x 768(V) pixels, creates a high-definition, large-screen (aspect ratio: 16:9) and low-profile flat display. Free from electromagnetic interferences from geomagnetic sources and ambient power lines, color misconvergence and display distortion.

#### **High Performance Digital Processor**

A wide range of personal computer signals can be handled, from 640  $\times$  400, 640  $\times$  480 VGA to 1600  $\times$  1200 UXGA. (RGB Analog input only)

# Easy-to-use remote control and on screen display system

The remote control included eases the work of setting display controls. Further, the on-screen display system, displays the status of signal reception and display control settings in an easy-to-view fashion.

#### **Power saving system**

The International ENERGY STAR® power saver feature saves power consumption automatically when input signals are not available. When connected to a VESA DPMS-compliant PC, the monitor cuts its power consumption while it is idle.

### TruBass TruBass

TruBass, SRS and (O) symbol are trademarks of SRS Labs, Inc.
TruBass technology is incorporated under license from SRS Labs, Inc.

#### **About the Video Unit**

The following functions can be obtained by connecting the video unit.

- A composite/S terminal and two component terminals are included.
   A composite video output terminal is also provided as a monitor output.
- (2) A wide range of devices other than personal computers can also be connected.
- (3) A component input is possible to switch to RGB signals from the Menu screen.

#### **Options**

Ask your local retail dealer for further details.

Desktop stand: VS10343 Wall Mount: WMK-001

### SAFETY INSTRUCTIONS

This Plasma monitor has been designed and manufactured to meet international safety standards, but like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

Before using this product, please read and understand the Safety Instructions thoroughly to ensure correct usage, and follow all the instructions.

### About the Symbols

Various symbols are used in this manual, the user's manual and on the product itself to ensure correct usage, to prevent danger to the user and others, and to prevent property damage. The meanings of these symbols are described below. It is important that you read these descriptions thoroughly and fully understand the contents.



This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling



This symbol indicates information that, if ignored, could result possibly in personal injury or physical damage due to incorrect handling.

#### Typical Symbols



This symbol indicates an additional warning (including cautions). An illustration is provided to clarify the contents.



This symbol indicates a prohibited action. The contents will be clearly indicated in an illustration or nearby (the symbol to the left indicates that disassembly is prohibited)



This symbol indicates a compulsory action. The contents will be clearly indicated in an illustration or nearby (the symbol to the left indicates that the power plug should be disconnected from the power outlet).



#### Never use the monitor if a problem should occur.

Abnormal operations such as smoke, strange odor, no image, no sound, excessive sound, damaged casing, elements, cables, penetration of liquids or foreign matter, etc. can cause a fire or electrical shock.



In such case, immediately turn off the power switch and then disconnect the power plug from the power outlet. After making sure Disconnect the that the smoke or odor has stopped, contact your dealer. Never attempt to make repairs yourself because this could be

plug from the power outlet.

### Do not insert liquids or foreign objects.

Penetration of liquids or foreign objects could result in fire or electrical shock. Use special caution in households where children are present.

If liquids or foreign objects should enter the Display, immediately turn off the power switch, disconnect the power plug from the power outlet and contact your dealer.



- Do not place the monitor in a bathroom.
- Do not expose the monitor to rain or moisture.
- Do not place flower vases, pots, cups, cosmetics, liquids such as water, etc on or around the monitor.
- Do not place metals, combustibles, etc on or around the monitor.

#### Never disassemble or modify the monitor.

The monitor contains high voltage components. Modification could result in fire or electrical shock

• Never remove any fixed cover.



#### Do not give the monitor any shock or impact.

If the monitor should be shocked and/or broken, it could result in an injury, and continued use could result in fire or electrical shock If the glass panel is broken or damaged, immediately turn off the power switch, disconnect the power plug from the power outlet and contact your dealer.



#### Do not place the monitor on an unstable surface.

If the monitor should be dropped and/or broken, it could result in an injury, and continued use could result in fire or electrical shock. • Do not place the monitor on an unstable, slanted or vibrant surface such as a wobbly or inclined stand.



### Do not obstruct the ventilation of the monitor.

If the ventilation is obstructed during the operation of the monitor or just after switching off the power, it could result in damage and shorten the lifespan of your monitor due to overheating. Make sure there is ample ventilation.

• Keep a space of 100mm (10cm) or more between the sides, rear and top of the monitor and other objects such as walls.

- Do not place anything around ventilation openings of the monitor.
- Never block ventilation openings.
- Do not put the plasma screen side up
- · Do not cover the monitor with a tablecloth, etc.
- Do not place the monitor on a carpet or bedding, or near a curtain.

#### Use only the correct power outlet.

Incorrect power supply could result in fire or electrical shock. Use only the correct power outlet depending on the indication on the monitor and the safety standard.

• The enclosed power cord must be used depending on the power outlet to be used.





#### Be cautious of the power cord connection.

Incorrect connection of the power cord could result in fire or electrical shock • Do not touch the power cord with a wet hand.

- Check that the connecting portion of the power cord is clean (with no dust), before using. Use a soft and dry cloth to clean the power plug.
- Insert the power plug into a power outlet firmly. Avoid using a loose, unsound outlet or contact failure.
- Do not cut off the fitted power plug, the removal of which could lead to impaired performance. If you wish to extend the lead, obtain an appropriate extension lead or consult your dealer.

Should you require replacing the fuse in the molded plug with a new fuse, then please replace with new one of the same value, type and approval as the original. Ensure the fuse cover is returned to its original position.



**Be sure to keep safety ground connection.**Connect the ground terminal of AC inlet of this monitor with the ground terminal provided at the power outlet using the enclosed power cord. If the provided plug does not fit your outlet, consult an electrician for replacement of the obsolete outlet.



**Be careful in handling the power cord and external connection cables.**If you keep using a damaged the power cord or cables, it can cause a fire or electrical shock. Do not apply too much heat, pressure or tension to the power cord and cables.

- If the power cord or cables are damaged (exposed or broken core wires, etc.), contact your dealer.

   Do not place the monitor or heavy objects on the power cord and cables. Also, do not place a spread, cover, etc, over them because this could result in the inadvertent placing of heavy objects on the concealed power cord or cables.
- Do not pull the power cord and cables. When connecting and disconnecting the power cord or cables, do it with your hand holding the plug or connector.
- Do not place the cord near the heater.
- Do not touch the power plug just after disconnecting it from the power outlet to prevent electric shock.
- Do not touch the power plug when lightening is close to you.
- Avoid coiling the power cord and bending it sharply.
  Protect the power cord from being walked on, pinched particularly at plugs, conveniences receptacles, and the point where they exit from the apparatus.
- Do not modify the power cord.

#### Be careful in handling the battery of the remote control.

Incorrect handling of the battery could result in fire or personal injury. The battery may explode if not handled properly.

• Keep the battery away from children and pets. If swallowed consult a physician immediately for emergency treatment.

- Do not allow the battery to be exposed to fire or water.
- Avoid fire or high-temperature environment.
  Do not hold the battery with metallic tweezers
- Keep the battery in a dark, cool and dry place.
- Do not short circuit the battery.
- Do not recharge, disassemble or solder the battery.
  Do not physically impact the battery.
- Use only the battery specified in the manual of this monitor.
- Make sure the plus and minus terminals are correctly aligned when loading the battery.
  If you observe a leakage of the battery, wipe out the liquid and then replace the battery. If the liquid adheres your body or clothes, rinse well with water.
- Obey the local laws on disposing the battery.







### Be careful in moving the monitor.

Neglect could result in an injury or damage.

- Do not move the monitor during use. Before moving, disconnect the power plug and all external connections.
- You are advised to move the monitor with two persons
- Avoid any impact or shock to the monitor; particularly take care of glass screen.

### Do not put anything on top of the monitor.

Placing anything on the monitor could result in loss of balance or falling, and cause an injury or damage. Use special caution in households where children are present.



#### Avoid a humid or dusty place.

Placing the monitor in a smoke, a highly humid, dusty place, oily soot or corrosive gas could result in fire or electrical shock.

• Do not place near the kitchen, a humidifier or other place where there is oil, smoke or humidity.



### Avoid a high temperature environment.

The heat could have adverse influence on the monitor and other parts, and could result in transformation, melting or fire.

- Do not place the monitor, the remote control and other parts in direct sunlight or near a hot object such as heater, etc.
- Do not put the monitor in a place where the temperature is widely changing.



### Remove the power cord for complete separation.

- For safety purposes, disconnect the power cord if the monitor is not to be used for prolonged periods of time.
- Before cleaning, turn off and unplug the monitor. Neglect could result in fire or electrical shock.



### **PRECAUTIONS**

#### Installation environment

Do not obstruct a ventilation hole.

Do not put the monitor on carpet or blanket, or near a curtain which has a possibility of obstructing a ventilation hole of the monitor.

Do not put the monitor in the following places.

- Hot places such as near heaters or places exposed to the direct rays of the sun.
- A place where the temperature is widely changing
- Places with soot, dust or high humidity
- Poor air ventilation place.
- Places near fire.
- A wet place such as bathroom, or shower room.
- Place where you can trip over it.
- · Always vibrating or strongly vibrating places.
- Unstable places.

### How to view the monitor

If you use the monitor in a dark room, your eyes may become tired.

Please use it in a reasonably bright room.

Avoid direct rays of the sun to the screen in order to prevent eye fatigue.

Your eyes will get fatigued after viewing the monitor for long period of time.

Relax your eyes by viewing away from the monitor from time to time.

### Note on image retention

The plasma monitor illuminates phosphor to display images. The phosphor has a finite illumination life. After extended periods of illumination, the brightness of the phosphor will be degraded to such extent that stationary images would burn-in that part of the screen as grayed-out images. Tips to prevent such image retention are:

- Do not display images having sharp brightness differences or high-contrast images, such as monochrome characters and graphic patterns,
- Do not leave stationary images on-screen for long. Try to refresh them at appropriate intervals of time, or try to move them using the screen saver function.
- Turn down the contrast and brightness controls

#### How to clean the plasma screen panel of the monitor

Before cleaning the monitor, turn off the monitor and disconnect the power plug from the power outlet.

To prevent scratching or damaging the plasma screen face, do not knock or rub the surface with sharp or hard objects. Clean the screen with a soft cloth moistened with warm water and dry with a soft cloth. If it is not enough, then use a cloth with mild detergent. Do not use harsh or

#### How to clean the cabinet of the monitor

Use a soft cloth to clean the cabinet and control panel of the monitor. When excessively soiled dilute a neutral detergent in water, wet and wring out the soft cloth and afterward wipe with a dry soft cloth.

Never use acid/alkaline detergent, alcoholic detergent, abrasive cleaner, powder soap, OA cleaner, car wax, glass cleaner, etc. especially because they would cause discoloration, scratches or cracks.

#### Avoiding radio interference

This monitor has been designed according to the international EMI standards. This is to prevent a problem to radio receivers.

- Keep the monitor away from a radio.
- Adjust radio antennas so the monitor does not receive interference.
- The antenna cable of radio should be kept away from the monitor.
- Use a coaxial cable for antenna
- You can check if this monitor influences radio receivers by turning off all equipment other than the monitor.
- If you find a problem with a radio when using the monitor, check the instructions mentioned above.

#### Precautions for the cable connection

- Ensure that all connections including the power plug, extension leads and interconnections between the pieces of equipment are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the power plug before making or changing
- Confirm the connector is fixed tightly when the signal cable is connected. Also confirm the screws on the connector are tightened.
- Plug the power cord of the monitor into a different socket than a socket used for equipment like radios, etc.
- Use a plug with ground terminal and make sure that it connects to the ground

#### Precaution during transportation

- Use the original carton box and its packaging materials when the monitor is transported.
- Failure to transport the monitor in any carton except the original carton may result in damage to the monitor.
- Save the original carton box and all packing material.

#### · Do not physically impact the remote control.

- A physical impact could cause damage or malfunction of the remote control.
- Take care not to drop the remote control
- Do not place heavy objects on the remote control.

Avoid strong rays.
 Any strong rays (such as direct sun rays or room lighting) onto the remote control sensors could deactivate the remote control.

#### · Avoid radio interference.

- Any interfering radiation could cause distorted images or "noises."
- Avoid radio generators such as a mobile telephone, transceiver, etc. around the monitor.

### Precautions for the installation

- Do not use makeshift stands and NEVER fix legs with wood screws to ensure complete safety, always fit the manufacturers approved stand or legs with the parts provided according to the instructions.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tipping it over.
- This product is designed to comply with the recommended safety standards for tilt and stability. Do not apply excessive pulling force to the front, or top, of the cabinet that could cause the product to overturn resulting in product damage and/or personal injury.
- Follow instructions for wall, shelf or ceiling mounting as recommended by the manufacturer.
- Only use the attachments/accessories specified by the manufacturer.
- Consult your dealer if you are in any doubt about installation, operation or safety of your equipment.

#### Other precautions

- Do not leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a stand-by mode. Switch off using the switch on the equipment.
- Disposal of this product may require specific instructions pertaining to your resident region.
- Never guess or take any chances with electrical equipment of any kind it is better to be safe than sorry!

### • FCC (Federal Communications Commission) STATEMENT WARNING

For model **VPW5500** 

**WARNING:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a paricular installation. If this equipment does cause harmful inerference to radio or television reception, 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 receving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from where the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

**Instructions to Users:** This equipment complies with the requirements of FCC (Federal Communication Commission) regulations, provided that following conditions are met.

Video inputs: The input signal amplitude must not exceed the specified level.

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

### **IMAGE RETENTION PREVENTION**

### **Image Retention**

Image Retention can be an issue for all plasma displays. However if you follow the simple guidelines listed below you can enjoy many years of viewing. ViewSonic has included a number of features in our range of plasma Televisions and Monitors which help to reduce image retention and temporary image. Please refer to the user manual for this model for instruction on how to use these features.

### Rétention d'image

La rétention peut être un problème pour les écrans plasma. Néanmoins si vous suivez les simples instructions suivantes, vous pourrez profiter de votre écrans pendant de longues années.

ViewSonic a pourvu ses écrans Plasma TV et moniteurs de fonctions permettant de réduire la rétention d'image et les images temporaires. Veuillez s'il vous plaît vérifier dans le mode d'emploi de ce modèle comment utiliser ces fonctions.

### Retención de Imagen

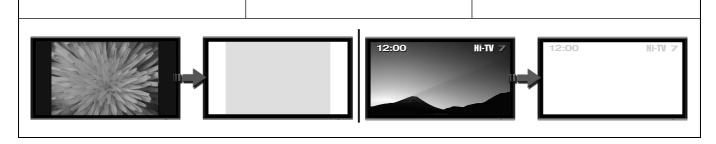
La Retención de Imagen puede ser un inconveniente para todas las pantallas de plasma. Sin embargo si sigue estas recomendaciones que aparecen debajo, podrá disfrutar durante más años de una correcta visualización.

ViewSonic ha incluido una serie de caracteristicas en su gama de plasma Television y Monitor que pueden ayudar a reducir la retención de imagen y la imagen temporal. Por fovor consulte el manual del usuario de este modelo concreto para instrucciones de cómo utilizar estas caraterísticas.

#### **Examples of Image Retention**

Exemples de Rétention d'Image

Ejemplos de Retención de Imagen

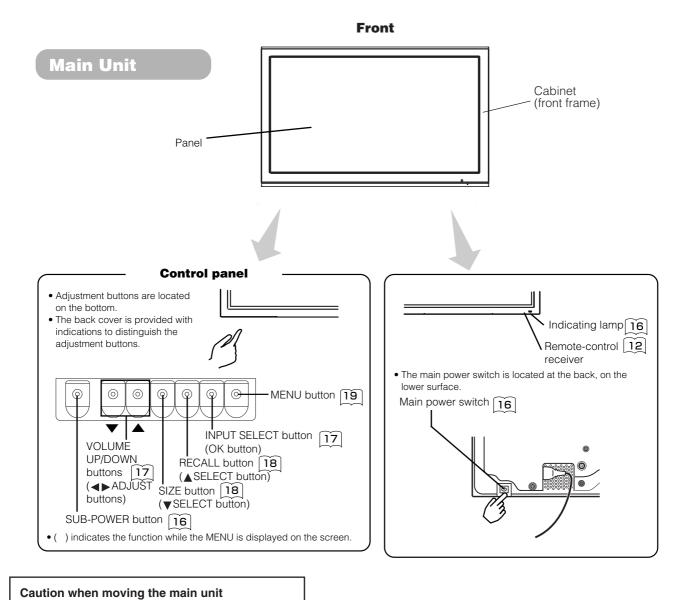


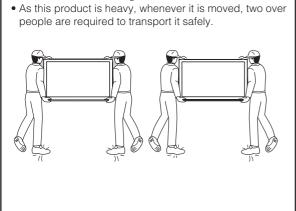
- \* Ensure screen save mode is activated
- \* Always display the image in a mode that fills the screen.
- \* Avoid using split screen modes for long periods of time.
- \* Do not allow the "On Screen Display" to stay on for long periods of time.
- \* Do not display still images, such as menus from game consoles, Teletext, and PCs for a long period of time.
- \* Reduce the "Contrast" and "Brightness"level as much as possible.

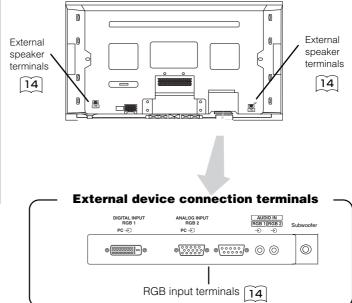
- \* Assurez vous que l'économiseur d'écran est bien activé.
- \* Vérifiez toujours que le format d'image que vous utilisez est constamment adapté à l'écran.
- \* Evitez d'utiliser le mode de séparation d'écran sur une longue période.
- \* Ne pas laisser le menu à l'écran affiché pendant de longues périodes.
- \* Ne pas afficher des images fixes, comme les menus des jeux vidéo, télétexte, ordinateurs ou Logos sur l'écran pendant de longues périodes.
- \* Nous vous recommandons également de régler le contraste et la luminosité à un niveau le plus faible possible.

- \* Asegúrese que el modo "salva pantalla" esté activo.
- \* Visualize la imagen en un mode que llene toda la pantalla.
- \* Evite el uso de los modos de pantalla partida durante largos periodos de tiempo.
- \* No permita que el Menú en Pantalla (OSD) permanezca durante periodos de tiempo prolongados.
- \* No muestre imágenes fijas como menús de videoconsolas, Teletexto, PC o logos en el panel durante largos periodos de tiempo.
- \* Recomendamos que el nivel de "Contraste" y "Brillo" se reduzca tanto como sea posible.

### **COMPONENT NAMES**

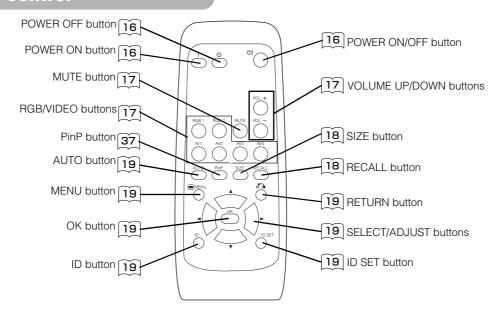






### **COMPONENT NAMES (continued)**

### Remote control



### **Loading Batteries**

#### 1. Open the battery cover.

 Slide back and remove the battery cover in the direction of the arrow.



### 2. Load batteries.

 Load two Size AA batteries included observing the correct polarities.



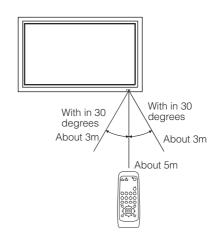
### 3. Close the battery cover.

 Replace the battery cover in the direction of the arrow and snap it back into place.



### **Handling the Remote Control**

Use the remote control within about 5m from the front of the unit's remote-control sensor and within 30 degrees on both sides.



### **A** CAUTION

- Do not use new and old batteries together. The batteries could explode or leak, resulting in fires, physical injury, or stains.
- When loading batteries, observe their correct polarities as marked on the product. If loaded in the wrong direction, the batteries could explode or leak, resulting in fires, physical injury, or stains.

#### **ATTENTION**

- Do not drop or impact the remote control.
- Do not splash the remote control with water or put it on a wet object.
- Before leaving the remote control out of use for an extended period of time, remove the batteries from it.
- If the remote control begins to lack responsiveness, replace the batteries.
- Strong light, such as direct sunlight, shining on the photoreceptor of the remote control can cause operational failure.
   Position this unit to avoid direct contact with such light.

### **INSTALLATION INSTRUCTIONS**

### Installation

• If you have purchased the model without the stand attached:

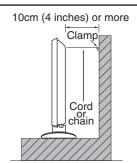
When installing the monitor, use the optional Desktop Stand. The Desktop Stand has been used for the illustrations in this manual.

### • WARNING

Use one of the special mount units to install this product. A mount of insufficient strength or inadequate design can cause overturning or dropping and result in fire, electrical shock or injury. Please note that our company assumes absolutely no responsibility for personal injuries or property damage caused by use of other mount units or improper installation.

### **CAUTION**

- Installation of the wall mount unit and ceiling mount unit can be dangerous, so do not attempt this work yourself. Ask your dealer to provide the name of a qualified installer.
- In order to prevent an internal temperature increase, maintain a space of 10cm (4 inches: For a desktop setup) or more between the sides and other objects such as walls, etc., so that the ventilation holes are not blocked.(\*)



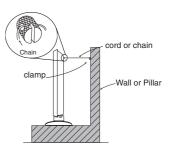
### **Anti-tumble measures**



Have this unit mounted in a stable place. Take measures to prevent it from tumbling down to avoid possible physical injury.

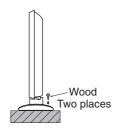
#### Securing to a wall or pillar

Using a commercially available cord, chain and clamp, secure the set to a firm wall or pillar.



#### **Securing desktop**

- 1) Using wood screws (two), fasten the set to the clamping screw holes on the rear of the stand as shown.
- 2) Using commercially available wood screws, secure the set firmly in position.



### **INSTALLATION INSTRUCTIONS (continued)**

# Read SAFETY INSTRUCTIONS ( 5 to 9 ) carefully to ensure maximum safety before proceeding to these steps:

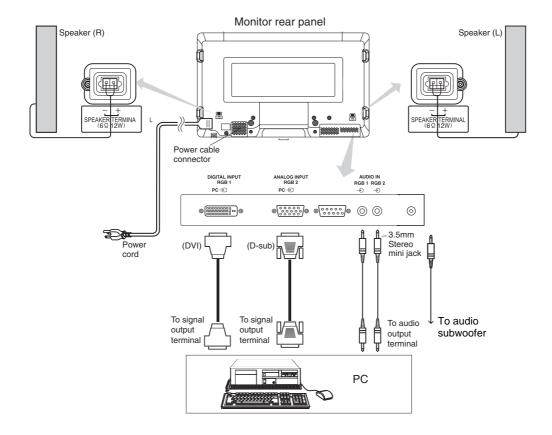
- Choose an appropriate site and install the product on a level table where the stand is secure.
- Install the monitor to have ready access to a power socket available.
- Make sure that the power switch of this device is turned off.

### **Connecting to a PC**

- (1) Please refer to the ViewSonic website for appropriate PC drivers to run the display at its optimal condition. www.ViewSonic.com
- (2) Make sure that the dislay signal of the personal computer to be used is compatible wih the specifications of this device.

See "Product Specifications" concerning the specifications of this device.  $\boxed{30} \sim \boxed{32}$ 

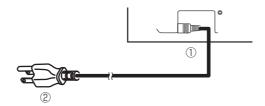
- (3 Make sure that the power switch of the personal computer is turned off.
- (4) Connect the signal input terminal (RGB 1 or RGB 2) on the rear panel of this device to the display signal output terminal of the personal computer.
  - Use a cable that fits the input terminal of this device and the output terminal of the personal computer.
  - Depending on the type of personal computer being connected, the use of an optional conversion adapter or the adapter provided with the personal computer may be necessary. For details, refer to the instruction manual of the personal computer or ask the personal computer manufacturer or your local retail dealer.



## **INSTALLATION INSTRUCTIONS (continued)**

# **Power Cord Connection**

Connect the power cord, after completing all other connections.



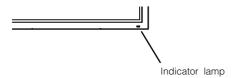
- ① Connect the power cord to this device.
- ② Connect the power cord plug to the power outlet.

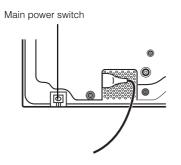
  (The type of plug is different from this drawing for some countries.)

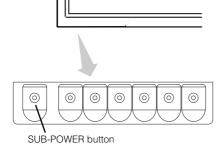


- Use only the power cord provided.
- Do not use a power supply voltage other than that indicated (AC100-240V, 50/60Hz) as this may cause fire or electric shock.

### **OPERATING INSTRUCTIONS**





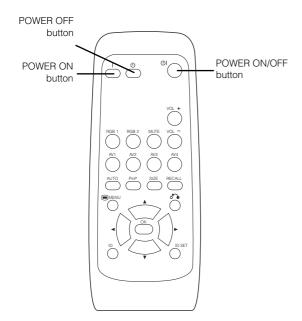


### **Turning Power On and Off**

- To turn the monitor power ON, press the main power switch on the back of the unit to ON, and then press the SUB POWER button or the ON/OFF or ON button on the remote control.
- To turn the monitor power OFF, press the SUB POWER, or the ON/OFF, or OFF button on the remote control, and then press the main power switch to OFF.
  - During normal use, the main power switch is set in the ON position, and the monitor can then be turned ON/OFF using the SUB POWER button or the ON/OFF button on the remote control.

#### **Indicator lamp**

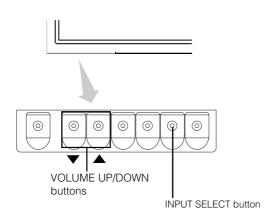
| Indicator<br>lamp | Power status        | Operating  |
|-------------------|---------------------|--|
| Off               | Off                 | When the main power switch is set to OFF.  |
| Red               | Off<br>(standby)    | When the main power switch is ON, and SUB POWER is OFF.                                |
| Green             | On                  | When the main power switch is ON, and SUB POWER is ON.                                 |
| Orange            | Off<br>(Power Save) | When the main power switch is ON, and SUB POWER is ON. The unit is in Power Save mode. |

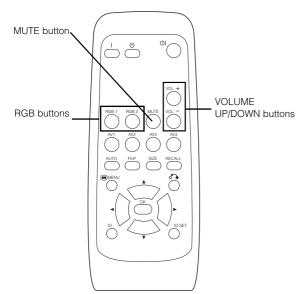


When the indicating lamp lights orange or the message "No Sync. Signal", "Power Save" or "Invalid Scan Freq." appears on the screen, there is something unusual about the status of reception. See "Power Save Mode" or "Symptoms That Seemingly Appear to be Failures."  $\fbox{25}$   $\fbox{27}$ 

### **ATTENTION**

- Avoid repeatedly turning the monitor on and off at short time intervals. Failures might result from such operation.
- Turn off the main power switch before leaving the monitor out of use for an extended period of time.
- If a power failure occurs while the main unit is running, it will be powered on upon recovery from the failure. Turn off the unit's main power switch to avoid power surges upon recovery.





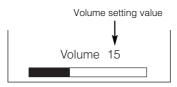
### **Input Switching**

- Input can be switched by pressing the RGB1, RGB2, buttons of the remote control.
- Input can be switched in the sequence of RGB1 → RGB2 by pressing the INPUT SELECT button of the monitor.



### **Volume Adjustment**

The volume can be adjusted by pressing the VOL+ and VOL- buttons of the remote control (or the ▲ and ▼ volume buttons of the monitor unit).

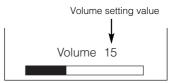


Adjustment status guide display

- When a button is pressed, the volume adjustment status guide will be displayed.
  - The volume will increase when the VOL+ (or ▲) button is pressed while the guide is being displayed.
  - The volume will decrease when the VOL- (or ▼) button is pressed while the guide is being displayed.

### **Audio Mute**

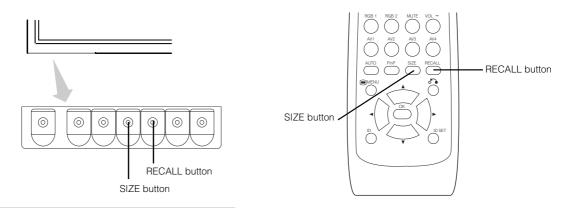
The audio volume can be temporarily muted by pressing the MUTE button of the remote control.



Adjustment status guide display (The display color will change to magenta.)

- When a button is pressed, the volume adjustment status guide (magenta) will be displayed.
  - The volume setting can be lowered by pressing the VOL- button while the audio is mute.
  - The muting can be cancelled by pressing the VOL+ button or MUTE button while the audio is mute.

When the MUTE button of the remote control is pressed again, the audio will be restored and the volume display (green) will appear.



### **Size Switching**

Each time the SIZE button of the remote control or the monitor is pressed, the screen display area will change in sequence and the status will be displayed at the bottom of the screen.

### Display area selection diagram (RGB input)

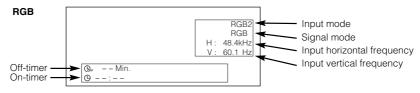
| Resolution            | Full display |        |              | Circular display |       |       |
|-----------------------|--------------|--------|--------------|------------------|-------|-------|
| Display               | Full         | Normal | Real         | Zoom1            | Zoom2 | Zoom3 |
| 640 X 480<br>(VGA)    |              |        |              |                  |       |       |
| 800 X 600<br>(SVGA)   |              |        |              |                  |       |       |
| 1024 X 768<br>(XGA)   |              |        |              |                  |       |       |
| 1280 X 1024<br>(SXGA) | -            |        | can't select |                  |       |       |
| 1600 X 1200<br>(UXGA) |              |        | Carri Select |                  |       |       |
| 1366 X 768<br>(WXGA)  |              |        | can't select |                  |       |       |

Processes such as compression (thinning) and expansion are performed for the above signal display. Because of this, there is a possibility that flicker may become noticeable on Zoom (1 ~ 3) depending on the display contents. If this occurs, turning the Vertical Filter On (23) can reduce the flicker.

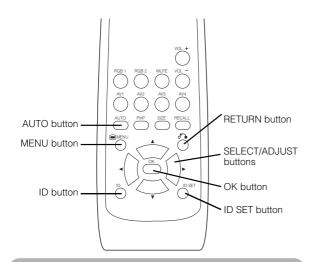
### **Input Signal Screen Display**

The input signal status can be displayed on the screen by pressing the RECALL button of the remote control or the monitor.

• The display will go out in approximately 6 seconds.



<sup>\*</sup>This mode is only available for VGA (640 X 480), WVGA (864 X 480), XGA (1024 X 768) and WXGA (1280 X 768) (1366 X 768).



# Automatic Adjustment of Screen Position and the Clock

Adjustment of the screen to a position suitable for the PC signal and the clock adjustment can be performed automatically by pressing the AUTO button of the remote control.

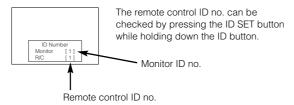
#### **IMPORTANT**

Select the Automatic Adjustment of Screen Position for each input (RGB1 or RGB2) and for each signal.

\* Depending on the signal, satisfactory adjustment may not be possible. In such a case, adjust by referring to the Setup Menu item.

# Independent Operation of Multiple Monitors (ID No)

Setting the ID No. of the remote control allows separate control of up to a maximum of seven monitors. Remote control ID No. 2 (initially ID no. 1) can be set by pressing the ID SET button for 2 sec. or more while holding down the ID button. The number will be incremented  $(2\cdots6\rightarrow7\rightarrow1\rightarrow2)$  when this button is pressed continuously.



The ID remote control is operated by pressing the various buttons while holding down the ID button; Operation is possible only when the remote control and monitor ID nos. are the same.

- The remote control can be operated normally by pressing the various remote control buttons without holding down the ID button.
- Set the monitor using the ID No. of Function MENU. 22

# Using the Menu Screen (On-screen display system)

When the MENU button is pressed, the adjustment menu screen will be displayed; from there, PC signal adjustment and setting is possible by using the SELECT button, ADJUST button and OK button.

Refer to 20 - 24 concerning the adjustment items and the settings.

**Example: Selecting the Picture screen** 

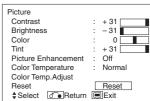
Press the MENU button to display the Main Menu screen.



Picture
Audio
Timer
Function
Setup
Language
\$Select
OK Set

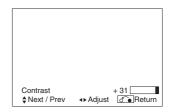
2. Press the OK button to display the Picture Menu screen. (Use the ▲ and ▼ SELECT buttons to select other items.)





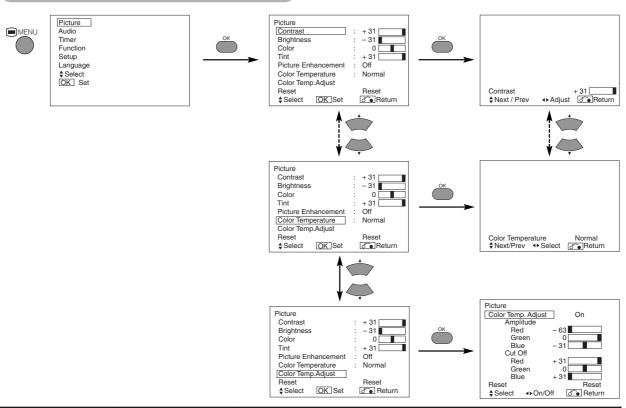
3. Use the ▲ and ▼ SELECT buttons to select the item to be adjusted and then use the ◀ and ► ADJUST buttons to adjust (example: Contrast).





- Press the RETURN button to return to the previous screen.
- If there is no operation for a period of one minute, the Adjustment Menu screen will be closed automatically.

### **PICTURE MENU**



| Selected c   | haracters  | •  | <b>&gt;</b>  | Setup hint   |
|--------------|------------|--|--|--|
| Contrast     |            | Narrows the gap between                          | Broadens the gap between                           | Adjust for maximum visibility to suit the ambient brightness.  This can adjust further till [+40] by pressing and holding ▶ cursor button at [+31]. The color for [+32] to [+40] numbers will change from white to magenta. This special mode is better for dark scenes. |
| oom act      |            | brightness and darkness.                         | brightness and darkness.                           | For brighter scenes some parts of the picture might not be clear. [+31] is the maximum recommended setting. "Panel Life" in the Function Menu should be set to Normal when Contrast setting is adjusted.   |
| Brightness   |            | Black is subdued for increased overall darkness. | Black is set off for increased overall brightness. | Adjust to taste.   |
| Color        |            | Darkens colors.                                  | Lightens colors.                                   | Adjust to taste.   |
| Tint         |            | Enhances red and weakens green.                  | Enhances green and weakens red.                    | This is not available to adjust when receiving PAL/SECAM signals. In this case the character will be grayed out. Adjust for most realistic skin color.   |
| Picture Enha | ancement   | Off ← Low ← ►                                    | Middle 	→ High                                     | Sets the clarity of small details to the desired level.  |
| Color Temp   | erature    | Cool ← Normal ← '                                | Warm ←→ Black / White                              | Normally set to Normal.  |
| Color Temp.  | Adjustment | Off ◆  | → On <del>←</del>                                  | Turn On when you wish to change color temperature depending on the user's preference.  |
| Amplitude    | Red        | Brighter scene is decreased in reddish color.    | Brighter scene is increased in reddish color.      |  |
|              | Green      | Brighter scene is decreased in greenish color.   | Brighter scene is increased in greenish color.     |  |
|              | Blue       | Brighter scene is decreased in bluish color.     | Brighter scene is increased in bluish color.       | Adjust color temperature depending on the user's preference. These settings are independently stored in each of the 4 Color Temperature  |
| Cut Off      | Red        | Dark scene is decreased in reddish color.        | Dark scene is increased in reddish color.          | modes.   |
|              | Green      | Dark scene is decreased in greenish color.       | Dark scene is increased in greenish color.         |  |
|              | Blue       | Dark scene is decreased in bluish color.         | Dark scene is increased in bluish color.           |  |
| Reset        |            | (off the function)                               | (waiting to reset)                                 | The original factory settings for the items of this Menu page can be restored by pressing the OK button.   |

### **AUDIO MENU**



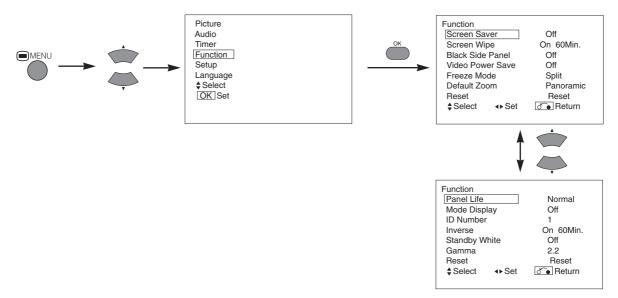
| Selected characters | 4                            | <b>&gt;</b>                 | Setup hint  |
|---------------------|------------------------------|-----------------------------|---|
| Audio Mode          | Movie → Music ←              | Speech ← Favorite ←         | Movie: This selects audio suitable for Movie.  Music: This selects audio suitable for Music.  Speech: This selects audio suitable for News, Talk show etc.  Favorite: This mode can be adjusted depending on user's preference.                       |
| Treble              | Suppresses treble.           | Enhances treble.            | Adjust to taste.  |
| Bass                | Suppresses bass.             | Enhances bass.              | Adjust to taste.  |
| Balance             | Suppresses right-side sound. | Suppresses left-side sound. | Adjust to taste.  |
| SRS TruBass         | Off Low                      | Middle → High →             | SRS TruBass takes advantage of the ability for the human ear to to distinguish between two different tones. By using this feature, TruBass gives enhanced bass sound that otherwise would not be heard. Adjust it depending on the user's preference. |
| Matrix Surround     | → Off ◆                      | → On <del>←</del>           | This features the spacious sound effects of a stadium.  |
| Perfect Volume      | _→ Off ◆                     | → On <del>←</del>           | This will automatically adjust volume so each channel and input has the same average volume level.  |
| Reset               | (off the function)           | (waiting to reset)          | The original factory settings for the items of this Menu page can be restored by pressing the OK button.  |

# TIMER MENU



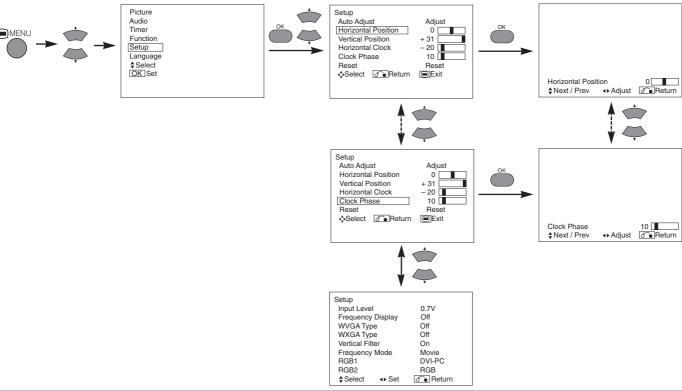
| Selected characters | •                          | <b>&gt;</b>                  | Setup hint  |
|---------------------|----------------------------|------------------------------|---|
| Off Timer           | Min. ←→ 30N<br>L→120Min. ← | fin. ←→ 60Min.<br>→ 90Min. ← | This function sets the power to standby status when the indicated time period has elapsed.  |
| On Timer            | (:)<br>hours               | ( : )<br>minutes             | This sets the power from standby to ON when the indicated time period has elapsed. The settable time is 00:00~11:59. Input the required time by ▼ ▲ SELECT buttons on the remote control. |

# **FUNCTION MENU**



| Selected characters | •                             | <b>•</b>  |        | Setup hint  |
|---------------------|-------------------------------|---|--------|---|
| Screen Saver        | Off → 5Mir<br>→ 60Min. → 40   | n. → 10Min. → 10Min. → 20Min. |        | This moves the picture around the screen in small amounts, at set intervals, to reduce the panel image retention. This is where stationary objects, such as screen logos, leave a slight image visible after they should have disappeared.  |
| Screen Wipe         | On                            | 60Min.  |        | This is used to reduce the panel image retention that can occur with stationary pictures by the white field signal. Select On (continuous operation) or 60 Min. (time limit operation) and press the OK button. Press the MENU or RETURN button on the remote control to return to normal viewing.  |
| Black Side Panel    | → Off ◆                       | → On ←  |        | This turns the gray sidebars On/Off when watching normal mode screen size area. It is always set to Off when the monitor powered On. It is recommended to set to Off to reduce the panel image retention.   |
| Video Power Save    |                               | C   | Option | al (grayed out)   |
| Freeze Mode         |                               | C   | ption  | al (grayed out)   |
| Default Zoom        |                               | C   | ption  | al (grayed out)   |
| Reset               | (off the function)            | (waiting to reset)  |        | The original factory settings for the items of this Menu page can be restored by pressing the OK button.  |
| Panel Life          | Normal <del>&lt; → Exte</del> | nd 1 ←→ Extend 2  |        | This function is to suppress the contrast of the screen regardless of the Contrast setting in the Picture Menu. By this control, power consumption can be reduced or degradation of a panel can be mitigated. The order of power consumption is Extend 2 < Extend 1 < Normal.  If the Contrast setting is changed when this item is set to Extend 1 or 2, it will be changed to Normal automatically. |
| Mode Display        | → Off ◆                       | → On ←  |        | This can display the Input Signal Screen Display every time the input mode and signal mode are changed.  Set to OFF if the Input Signal Screen Display is not needed when switching signals.  |
| ID Number           | 1 - 2 -                       | →3 <b>←→</b> 4<br>6 <b>←→</b> 5 <b>←</b>  |        | Assigns ID nos. to the monitors so that they can be controlled individually (up to 7 monitors can be controlled).   |
| Inverse             | On                            | 60Min.  |        | This function can change each level of RGB signal invert to reduce the panel image retention. When this function is required to use, select On (continuous operation) or 60Min. (time limit operation) and press the OK button. And press the Menu or Return button to exit.  |
| Standby White       |                               | n. ←→30Min. ←<br>→60Min. ←  |        | This function is also provided against the image retention. If time is set for this item, the screen changes into the white pattern when the monitor enters power save mode, and it will continue for the period of setting time.   |
| Gamma               | ▶2.2 ◀                        | ▶2.8◀   |        | Normally set to 2.2.  |

### **SETUP MENU**



| Selected characters | 4   | <b>&gt;</b>  | Setup hint   |
|---------------------|---|--|--|
| Auto Adjust*        | (Menu)  | Adjust Pressing the OK button here, Automatic regulation is started. | Horizontal Position, Vertical Position, Horizontal Clock and Clock Phase are adjusted automatically.   |
| Horizontal Position | Moves the horizontal position to left.                    | Moves the horizontal position to right.                              | Adjust the left-side display position. (This function is only for RGB2. It's not available (grayed out) for RGB1.)                             |
| Vertical Position   | Moves down the vertical position.                         | Moves up the vertical position.                                      | Adjust the vertical display position. (This function is only for RGB2. It's not available (grayed out) for RGB1.)                              |
| Horizontal Clock    | Reduces the dot clock frequency (shrinks the right side). | Increases the dot clock frequency (expands the right side).          | Adjust for maximum character clarity. (This function is only for RGB2. It's not available (grayed out) for RGB1.)                              |
| Clock Phase         | Slows the dot clock phase (shifts slightly to left).      | Advances the dot clock phase (shifts slightly to right).             | Adjust for clear character visibility. (This function is only for RGB2. It's not available (grayed out) for RGB1.)                             |
| Reset               | (off the function)  | (waiting to reset)   | The original factory settings for the items of this Menu page can be restored by pressing the OK button. (This is effective only for RGB2.)    |
| Input Level         | <b>→</b> 0.7V <b>←</b>                                    | →1.0V ←  | Normally set to 0.7 V. If white is found to spread across the screen, set to 1.0 V. (This is effective only for RGB2.)                         |
| Frequency Display   | → Off ◆   | → On <del>←</del>  | Set this to Off if the frequency information of the Input Signal Screen Display is not required.   |
| WVGA Type           | → Off ◆   | → On ←   | This is only available for W-VGA signal. When it is set to On, the display area mode can be selected Full or Real. (RGB2 (ANALOG) INPUT only)  |
| WXGA Mode           | → Off ←→ 1280x76  | 68 <b>→</b> 1366x768 <b>←</b>  | This is only available for W-XGA signal.  When it is set to On, the display area mode can be selected Full or Real. (RGB2 (ANALOG) INPUT only) |
| Vertical Filter     | → Off ◆   | → On <del>←</del>  | Turn On when concerned about screen flicker.   |
| Frequency Mode      | → Movie →   | → PC ←   | Set to Movie when viewing moving images on a personal computer.  |
| RGB1                |   | Option   | ral (grayed out)   |
| RGB2                |   | Option   | al (grayed out)  |

<sup>\*</sup> Depending on the type of signal displayed, displays may not be optimized through automatic adjustment. Adjust manually to optimize them.

### **LANGUAGE MENU**



Select a language by ▼ ▲ SELECT buttons and press the OK button.

## OTHER FEATURES

### **Automatic Store**

Approximately 1 sec. after adjustment is completed, the adjustments will be recorded as shown in the table below.

| Menu    | Display             | Registration condition                         |  |
|---------|---------------------|--|--|
| Picture | Contrast            | For every input function, 1 setting            |  |
|         | Brightness          | is registered.                                 |  |
|         | Color               |  |  |
|         | Tint                |  |  |
|         | Picture Enhancement |  |  |
|         | Color temperature   |  |  |
|         | Color Temp. Adjust  |  |  |
|         | R Amplitude         | For every Color Temperature, 1                 |  |
|         | G Amplitude         | setting is registered.                         |  |
|         | B Amplitude         |  |  |
|         | R Cut Off           |  |  |
|         | G Cut Off           |  |  |
|         | B Cut Off           |  |  |
| Audio   | Audio Mode          | 1 setting is registered.                       |  |
|         | Treble              | For every Audio Mode, 1 setting is             |  |
|         | Bass                | registered.                                    |  |
|         | Balance             | 1 setting is registered.                       |  |
|         | SRS TruBass         |  |  |
|         | Matrix Surround     | For every Audio Mode, 1 setting is registered. |  |
|         | Perfect Volume      | irogistorou.                                   |  |

| Menu     | Display             | Registration condition   |
|----------|---------------------|--------------------------|
| Function | Screen Saver        | 1 setting is registered. |
|          | Screen Wipe         | (not registered)         |
|          | Black Side Panel    | (not registered)         |
|          | Panel Life          | 1 setting is registered. |
|          | Mode Display        |                          |
|          | ID Number           |                          |
|          | Inverse             |                          |
|          | Standby White       |                          |
|          | Gamma               |                          |
| Setup    | Auto Adjust         | (not registered)         |
|          | Horizontal Position | For RGB1, 1 setting is   |
|          | Vertical Position   | registered.              |
|          | Horizontal Clock    |                          |
|          | Clock Phase         |                          |
|          | Input Level         | 1 setting is registered. |
|          | Frequency Display   |                          |
|          | WVGA Type           |                          |
|          | Vertical Filter     |                          |
|          | Frequency Mode      |                          |
| Language |                     | 1 setting is registered. |

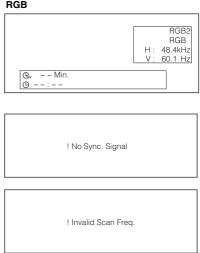
- The previously recorded items will be lost.
- The signal mode can be identified by the horizontal/vertical sync frequency and the sync signal polarity. Different signals where all the elements are the same or similar will be handled as the same signal.

### **OTHER FEATURES (continued)**

# Signal Check

### Changes in the signal status are displayed on the screen.

| Status   | Display   | Action   |
|--|---|--|
| When Mode Display is set to ON, the input signal is switched or when the RECALL button is pressed. | A guide is displayed for the input terminal and the horizontal and vertical sync frequency.   |  |
| When the sync signal is no longer detected.  | A guide displays No Sync. Signal, and Power Save (for approx. 5 sec.) When the condition continues where the sync signal cannot be detected, indicator lamp of power source changes to orange and the mode switches to power save mode. | Recheck the personal computer power switch status and the connection status. |
| When the input signal does not match the monitor specifications or is in an unstable status.       | A guide displays Invalid Scan<br>Freq.  | Recheck the input signal specifications.                                     |



# Power Save Mode

### When the RGB1, RGB2 input is selected

• When this unit is connected to a VESA DPMS computer, the Power Save (Off) mode can be set to be activated automatically when the computer is not being used to reduce power consumption by this unit.

| RGB sync signal   | Horizontal | Yes                     | No  | Yes | No |
|-------------------|------------|-------------------------|---|-----|----|
| TIGB Sylic signal | Vertical   | Yes                     | Yes No  |     | No |
| PC signal         |            | Active (normal display) | Blank (no display)  |     |    |
| Operation mode    |            | On                      | Off   |     |    |
| Indicating lamp   |            | Lights green            | Lights orange   |     |    |
| Power consumption |            | 365W                    | 3W or less (RGB1)<br>1W or less (RGB2 ; 100V≦AC≦120<br>3W or less (RGB2 ; 120V <ac≦240< td=""><td></td></ac≦240<> |     |    |

### **Returning to operating status**

• Operate the personal computer, or press either the INPUT SELECT button of the main unit or the RGB1/RGB2 buttons of the remote control.

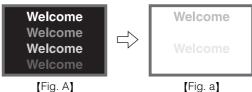
### **IMAGE RETENTION OF PLASMA DISPLAY**

There are different characteristics that result in panel image retention depending on how the plasma display is used. Situations and effective usage methods related to ghosting are provided below.

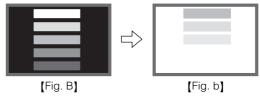
#### Image retention characteristics of a plasma display

The image retention phenomenon of a plasma panel occurs because of partial phosphor degradation arising from partial character and figure display.

For example, when the character image as shown in Fig. A at the right is continuously displayed for a long period of time, the only part of the phosphor (Red,Green, Blue) that will degrade will be the color of the applicable character display portion. Consequently, when a white image is displayed on the entire screen as shown in Fig. a, the character marks displayed up to that time will become a color difference visible to the eye, but the phosphor will never burn.



- The degree of image retention is proportional to the brightness of the characters and figures displayed as well as the displaytime.
  - The tendency of the phosphor is to degrade more the brighter the characters
    and figures are displayed. When images of figures with different levels of
    brightness, as shown in Fig. B, are continuously displayed for a long period of
    time, it becomes easier to see image marks at locations when the brighter
    figures are displayed to see.



\* The image retention images in this document are exaggerated for the purpose of explanation. The actual manner in which the image retention is seen differs depending on the operation time and brightness.

#### Methods to Reduce the Occurrence of Image Retention

- Lower the Contrast and Brightness settings of the plasma display as much as possible.

  A function is provided in the display that controls the brightness of the screen to reduce degradation of the panel. Using this function makes it possible to reduce image retention.

  (Refer to Panel Life (Extend 1.or Extend 2 shown on 22)
- Set the plasma monitor to an "Screen Wipe" or "Inverse" display.

  The occurrence of image retention when displaying images of identical patterns, such as static images, for long periods of time can be reduced by displaying a reversed color or completely white screen for about 1 ~ 2 hours after terminating the display.

  (Settings can be made using Screen Wipe and Inverse of Function MENU shown on 22)
- Using in combination with moving images

Since the degradation of the fluorescent material progresses comparatively uniformly for moving images, the occurrence of partial image retention can be minimized by usage in combination with moving images such as DVDs.

- \* Please be careful since image retention will occur if display is left in a two screen display state for a long period of time
- \* Television broadcasts include images displayed for long periods of time in which the left and right or top and bottom of the image are cut and broadcast station name or time are displayed in the same portion of the screen. Image retention in these portions can be expected to occur, so please be aware.

### **NOTES**

#### About screen defects

• High precision technology is used in the making of plasma panels but there may be dark spots (points that do not illuminate) and bright spots (points that are too bright) in some cases. These do not indicate a malfunction.

#### About residual images

• In some cases, residual images may remain after the short-term display of still images, but these will disappear and return to normalcy. This is not a malfunction.

#### About the panel screen

Plasma displays create images by means of electrical discharges inside the panel. Because of this, the temperature of the panel surface may
rise in some cases. Also, plasma displays are made of finely processed glass. A reinforced glass filter is installed over the panel surface but
avoid strong impact because there is still danger of glass breakage.

# TROUBLESHOOTING

# Symptoms That Appear to be Failures

Make the checks suggested below depending on the symptoms observed. If the symptoms remain, contact your dealer.

| WARNING Customer servicing can be hazardous. |
|--|
|--|

| Symptom   |                      | Point to check  | See page             |  |
|---|----------------------|---|----------------------|--|
| No picture with the power-indicator lamp off.   |                      | Check to ensure the power cable is connected.     Press the power switch.   | 15<br>16             |  |
| The message "No Sync. Signal" or "Power Save" is displayed.  No picture with the power indicator lamp light orange.   | ! No Sync. Signal    | No sync signal is detected.  Check to ensure the signal cable is connected.  Make sure that the switch of the computer, imaging equipment, etc., is turned on.  Make sure the computer is not in the power-save mode.  Check to see if the input selection matches the connection terminal. | 14                   |  |
| The message "Invalid Scan Freq." is<br>displayed.   | ! Invalid Scan Freq. | An input signal is not being received normally.  Check to see if the input signal matches the monitor specifications.  Check to ensure the signal cable is connected.   | 14<br>31<br>32<br>32 |  |
| The power indicator lamp is normally lit but<br>no picture .  |                      | Check the contrast and brightness settings (adjust them for higher contrast and brightness).      Check to ensure the signal cable is connected.  | 14<br>20             |  |
| The display image appears to be flowing slantwise. Text displayed across the screen appears vertically streaked, with the characters in vertical columns blurred. |                      | Adjust the dot clock frequency and phase. (Adjust the dot clock frequency first, then the dot clock phase) (RGB input)  | 23<br>29             |  |
| Text displayed across the screen appears blurred. A fine pattern flickers when displayed on the screen.   | A<br>***             | Adjust the dot clock phase for the clearest viewing. (RGB input)  | 23 29                |  |
| The remote control does not work.   |                      | Check to see if the batteries are loaded in the remote control correctly.      Try loading new batteries in the remote control.   | 12                   |  |

# TROUBLESHOOTING (continued)

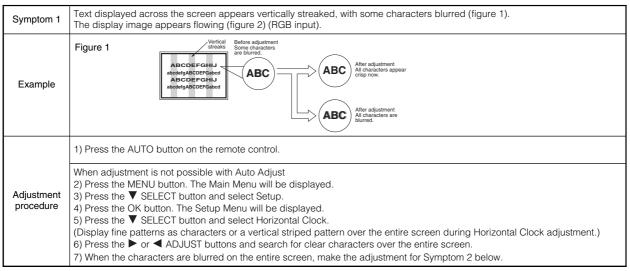
# Symptoms That Appear to be Failures (continued)

| Symptom  | Point to check   | See page |
|--|--|----------|
| The temperature of the display panel surface is high.  | The plasma display panel is lighting the phosphors by the discharge of internal energy. In some cases, this may cause the temperature of the panel surface to increase. Please note that this is not a malfunction.  | -        |
| There are locations on the screen that are different from the periphery (*).  *Points that do not light, points with brightness different from that of the periphery, points with color different from that of the periphery, etc. | High-precision technology is used to manufacture the plasma<br>display panel. However in some cases, there are minor defects in<br>some parts of the screen. Please note that this is not a<br>malfunction.  | -        |
| Vertical stripes appear, depending on the screen contents.   | The plasma display panel is lighting the phosphors by the discharge of internal energy. Depending on the screen contents, in rare cases, this may cause vertical stripes to appear because the phospors fail to light. Please note that this is not a malfunction. | -        |
| Coarse horizontal stripes appear in FULL display.  | Adjusting the Clock Phase will reduce the horizontal stripes.     (RGB input)  | 23       |
| Flickering in the form of horizontal lines oscillating up and down.     (PC INPUT MODE only)   | If the direct frequency from the computer is below 85Hz, try a higher frequency (upper limit 85Hz). There may be a slight attenuation of the current image.     Try turning the Vertical Filter On. For this case however, the vertical resolution will drop.      | 23       |
| The fan motor is noisy. (Only for models with fan.)  | The fan lowers the temperature of this unit. If the ambient air temperature increases, the fan RPMs increase and motor noise increases. This is not a malfunction.   | -        |
| The top of the monitor heats up.   | When used for long periods of time, the top of the monitor may heat up. This is not a malfunction.   | -        |
| Text characters are displayed with varying thicknesses.  | The thicknesses of characters and lines may vary if images with a vertical resolution greater than 512 lines are displayed.  This is not a malfunction.  | -        |

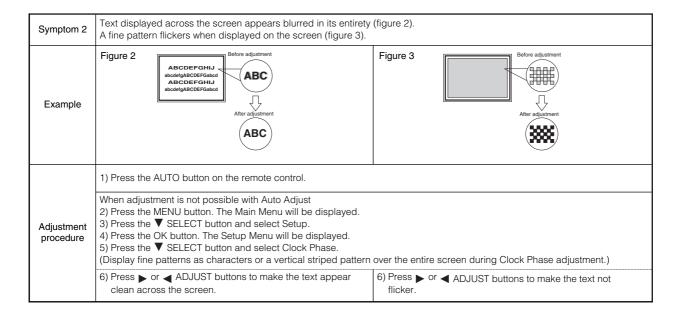
### **TROUBLESHOOTING (continued)**

### **Actions to Correct Abnormal Images**

Depending on the kind of system equipment used, images may not be displayed normally. In this case, make the adjustments suggested below. (only for RGB2)



• The display image may be momentarily disturbed during clock adjustment but this is not a failure.



### **PRODUCT SPECIFICATIONS**

#### Product specifications and designs are subject to change without notice.

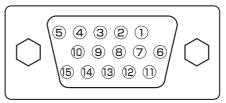
| Panel                         | Display<br>dimensions | Approx. 55 inches (1229 (H) x 691 (V) mm, diagonal 1410mm)  |  |  |  |
|-------------------------------|-----------------------|---|--|--|--|
|                               | Resolution            | 1366 (H) x 768 (V) pixels   |  |  |  |
| Net dimensio<br>(excluding Sp | ns<br>peakers/Stand)  | 1394 (W) x 857 (H) x 105 (D) mm   |  |  |  |
| Net weight<br>(excluding Sp   | peakers/Stand)        | 63.5kg  |  |  |  |
| Ambient                       | Temperature           | Operating: 5°C to 35°C, Storage: 0°C to 40°C  |  |  |  |
| conditions                    | Relative humidity     | Operating: 20% to 80%, Storage: 20% to 90% (non-condensing)   |  |  |  |
| Power supply                  | 1                     | AC100 - 240V, 50/60Hz   |  |  |  |
| Power consu                   | mption/at standby     | 530W / <3W  |  |  |  |
| Audio output                  |                       | speaker (12W + 12W (6 $\Omega$ )) , sub woofer (RCA)  |  |  |  |
| (RGB input)                   |                       |   |  |  |  |
|                               | Input terminals       | RGB1 DVI input terminal (DVI-D) RGB1 audio input terminal (3.5mm Stereo Mini Jack) RGB2 analog RGB input terminal (D-sub 15-pin) RGB2 audio input terminal (3.5mm Stereo Mini Jack) |  |  |  |
| Input signals                 | Video signals         | 0.7 V/1.0 Vp-p, analog RGB (Recommended Signal)   |  |  |  |
|                               | Sync signals          | H/V separate, TTL level [2K $\Omega$ ] H/V composite, TTL level [2K $\Omega$ ] Sync on green, 0.3 Vp-p [75 $\Omega$ ]   |  |  |  |
| Recommende                    | d signal              | 44 modes 31 32  |  |  |  |

<sup>•</sup> The monitor takes at least 30 minutes to attain the status of optimal picture quality.

## Signal Input

### **RGB** terminal (D-sub 15-pin connector)

| Pin | Input signal                  |
|-----|-------------------------------|
| 1   | R                             |
| 2   | G or sync on green            |
| 3   | В                             |
| 4   | No connection                 |
| 5   | No connection                 |
| 6   | R.GND                         |
| 7   | G.GND                         |
| 8   | B.GND                         |
| 9   | No connection                 |
| 10  | GND                           |
| 11  | No connection                 |
| 12  | [SDA]                         |
| 13  | H. sync or H/V composite sync |
| 14  | V.sync. [V.CLK]               |
| 15  | [SCL]                         |



 When different kinds of input signals are simultaneously input to the monitor via a graphics board or the like, the monitor will automatically select the signals in the following priority order:

| Sync signal type    | Priority |
|---------------------|----------|
| H/V separate sync.  | 1        |
| H/V composite sync. | 2        |
| sync.on Green *     | 3        |

<sup>\*</sup>Even in the case of the recommended signals shown on the following page, there may be instances when correct display is not possible. In this case, use H/V separate sync, H/V composite sync.

# **PRODUCT SPECIFICATIONS (continued)**

# Signal Input (continued)

### **DVI terminal (DVI-D)**

| Pin | Input signal            | Pin   | Input signal            |
|-----|-------------------------|-------|-------------------------|
| 1   | T.M.D.S. Data2-         | 14    | +5V Power               |
| 2   | T.M.D.S. Data2+         | 15    | Ground (for+5V)         |
| 3   | T.M.D.S. Data2/4 Shield | 16    | Hot Plug Detect         |
| 4   | T.M.D.S. Data4-         | 17    | T.M.D.S. Data0-         |
| 5   | T.M.D.S. Data4+         | 18    | T.M.D.S. Data0+         |
| 6   | DDC Clock               | 19    | T.M.D.S. Data0/5 Shield |
| 7   | DDC Data                | 20    | T.M.D.S. Data5-         |
| 8   | No Connect              | 21    | T.M.D.S. Data5+         |
| 9   | T.M.D.S. Data1-         | 22    | T.M.D.S. Clock Shield   |
| 10  | T.M.D.S. Data1+         | 23    | T.M.D.S. Clock+         |
| 11  | T.M.D.S. Data1/3 Shield | 24    | T.M.D.S. Clock-         |
| 12  | T.M.D.S. Data3-         | Frame | GND                     |
| 13  | T.M.D.S. Data3+         |       |                         |

| 7 | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  |     | / |
|---|----|----|----|----|----|----|----|----|-----|---|
| 1 | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |     | / |
| ١ | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | ] / |   |

# **Recommended Signal List**

### With Digital RGB signal input (RGB1 input)

|     |             | Signal mod | е                          | Horizontal      | Dot clock       |                |
|-----|-------------|------------|----------------------------|-----------------|-----------------|----------------|
| No. | Signal Name | Resolution | Vertical frequency<br>(Hz) | frequency (kHz) | frequency (MHz) | Remarks        |
| 1   | VGA         | 640 X 400  | 70.08                      | 31.47           | 25.18           |                |
| 2   | VGA         | 640 X 480  | 59.94                      | 31.47           | 25.18           |                |
| 3   | W-VGA       | 864 X 480  | 59.94                      | 31.47           | 34.24           | WVGA type : On |
| 4   |             | 640 X 480  | 72.81                      | 37.86           | 31.50           |                |
| 5   |             | 640 X 480  | 75.00                      | 37.50           | 31.50           |                |
| 6   |             | 640 X 480  | 85.01                      | 43.27           | 36.00           |                |
| 7   |             | 800 X 600  | 56.25                      | 35.16           | 36.00           |                |
| 8   |             | 800 X 600  | 60.32                      | 37.88           | 40.00           |                |
| 9   | VESA        | 800 X 600  | 72.19                      | 48.08           | 50.00           |                |
| 10  |             | 800 X 600  | 75.00                      | 46.88           | 49.50           |                |
| 11  |             | 800 X 600  | 85.06                      | 53.67           | 56.25           |                |
| 12  |             | 1024 X 768 | 60.00                      | 48.36           | 65.00           |                |
| 13  |             | 1024 X 768 | 70.07                      | 56.48           | 75.00           |                |
| 14  |             | 1024 X 768 | 75.03                      | 60.02           | 78.75           |                |
|     |             |            |                            |                 |                 |                |

<sup>•</sup> Make sure that the signal of the equipment to be connected is compatible with the specifications of this list.

### **PRODUCT SPECIFICATIONS (continued)**

## **Recommended Signal List (continued)**

### With Analog RGB signal input (RGB2 input)

|     |             | Signal mod  | le                         | Horizontal      | Dot clock       |                         |
|-----|-------------|-------------|----------------------------|-----------------|-----------------|-------------------------|
| No. | Signal Name | Resolution  | Vertical frequency<br>(Hz) | frequency (kHz) | frequency (MHz) | Remarks                 |
| 1   | VGA         | 640 X 400   | 70.08                      | 31.47           | 25.18           |                         |
| 2   | VGA         | 640 X 480   | 59.94                      | 31.47           | 25.18           |                         |
| 3   | W-VGA       | 864 X 480   | 59.94                      | 31.47           | 34.24           | WVGA type : On          |
| 4   |             | 640 X 480   | 72.81                      | 37.86           | 31.50           |                         |
| 5   |             | 640 X 480   | 75.00                      | 37.50           | 31.50           |                         |
| 6   |             | 640 X 480   | 85.01                      | 43.27           | 36.00           |                         |
| 7   |             | 800 X 600   | 56.25                      | 35.16           | 36.00           |                         |
| 8   |             | 800 X 600   | 60.32                      | 37.88           | 40.00           |                         |
| 9   |             | 800 X 600   | 72.19                      | 48.08           | 50.00           |                         |
| 10  |             | 800 X 600   | 75.00                      | 46.88           | 49.50           |                         |
| 11  |             | 800 X 600   | 85.06                      | 53.67           | 56.25           |                         |
| 12  |             | 1024 X 768  | 60.00                      | 48.36           | 65.00           |                         |
| 13  | VESA        | 1024 X 768  | 70.07                      | 56.48           | 75.00           |                         |
| 14  |             | 1024 X 768  | 75.03                      | 60.02           | 78.75           |                         |
| 15  |             | 1024 X 768  | 85.00                      | 68.68           | 94.50           |                         |
| 16  |             | 1152 X 864  | 75.00                      | 67.50           | 108.00          |                         |
| 17  |             | 1280 X 1024 | 60.02                      | 63.98           | 108.00          |                         |
| 18  |             | 1280 X 1024 | 75.03                      | 79.98           | 135.00          |                         |
| 19  |             | 1280 X 1024 | 85.02                      | 91.15           | 157.50          |                         |
| 20  |             | 1600 X 1200 | 60.00                      | 75.00           | 162.00          |                         |
| 21  |             | 1600 X 1200 | 75.00                      | 93.75           | 202.50          |                         |
| 22  |             | 1600 X 1200 | 85.00                      | 106.25          | 229.50          |                         |
| 23  |             | 640 X 480   | 66.67                      | 35.00           | 30.24           |                         |
| 24  | Macintosh   | 832 X 624   | 74.55                      | 49.72           | 57.28           |                         |
| 25  | Macintosii  | 1024 X 768  | 74.93                      | 60.24           | 80.00           |                         |
| 26  |             | 1152 X 870  | 75.06                      | 68.68           | 100.00          |                         |
| 27  | W-XGA       | 1280 X 768  | 59.833                     | 47.986          | 81.00           |                         |
| 28  | W XOA       | 1280 X 768  | 69.997                     | 56.137          | 94.760          |                         |
| 29  | W-XGA       | 1280 X 768  | 59.876                     | 47.776          | 79.50           | WXGA Mode: (1280 x768)  |
| 30  | W-AGA       | 1366 X 768  | 60.015                     | 47.712          | 85.50           | WXGA Mode : (1366 x768) |

<sup>•</sup> The type of video board or connecting cable used may not allow for correct displays adjustment of Horizontal Position, Vertical Position, Horizontal Clock and Clock Phase.

<sup>•</sup> The monitor may fail to display an animation image correctly when a signal having a vertical frequency of 85Hz or higher is input to it.

<sup>•</sup> The monitor differentiates the signal modes according to the horizontal and vertical frequencies and the horizontal and vertical sync signal polarities. Note that different signals having all these elements alike may be handled as the same signal.

<sup>•</sup> Displaying images with more than 768 lines of vertical resolution at Full diplay (compressed display) can result in the interpolation of stripes.

# **SUPPLEMENT**

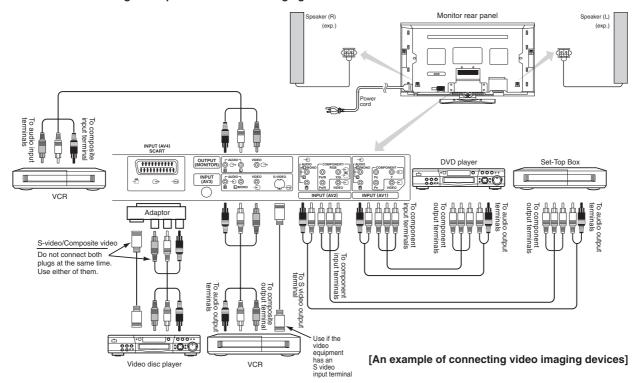
### **Optional Video Unit Function**

Additional functions when the optional video unit is installed are as follows: ( $34 \sim 45$ )

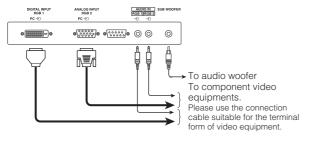
### **INSTALLATION INSTRUCTIONS**

### **Connecting to a Video Imaging Device**

- (1) Make sure that the power switch of the monitor is turned off.
- (2) Make sure that the power switch of the imaging device is turned off.
- (3) Use a commercially available cable and connector to connect the signal input terminal on the rear panel of this device and the signal output terminal of the imaging device.



#### With DVI-STB and RGB component setup



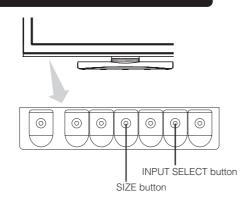
- If video equipment with an S video output terminal is used, cabling by the S video cable is recommended to provide finer video quality. (If the S video input terminal and the video input terminal of AV3 connect to the monitor at the same time, S video input would govern.)
- If the OUTPUT (MONITOR) terminal is connected to an external monitor with a 75 Ohm terminal, it is possible to view the same image as on the main unit. But it is possible to monitor only the composite video signal from AV1, AV2, AV3 or AV4 input that is displayed on the screen at the time.
- If the adaptor is applied to AV4 input as shown in the drawing, it is impossible to receive RGB signal.

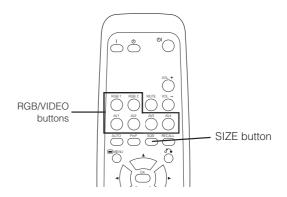
#### Applicable video signals for each input terminal (See PRODUCT SPECIFICATIONS for details. 43)

| • •      |      | •       |           | •   |    | `   |     |           | ~ ·                     |
|----------|------|---------|-----------|-----|----|-----|-----|-----------|-------------------------|
| Terminal |      | RC/     | A/SCART   |     | D  | VI  | I   | D-sub     | Remarks                 |
| Signal   | CVBS | S-video | Component | RGB | PC | STB | RGB | Component |                         |
| AV1      | 0    |         | 0         |     |    |     |     |           |                         |
| AV2      | 0    |         | 0         | 0   |    |     |     |           | Refer to Setup Menu. 41 |
| AV3      | 0    | 0       |           |     |    |     |     |           |                         |
| AV4      | 0    | 0       |           | 0   |    |     |     |           | Refer to Setup Menu. 41 |
| RGB1     |      |         |           |     | 0  | 0   |     |           | Refer to Setup Menu. 42 |
| RGB2     |      |         |           |     |    |     | 0   |           | Refer to Setup Menu. 42 |

(○: Available)

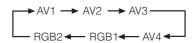
#### **OPERATING INSTRUCTIONS**





### **Input Switching**

- Input can be switched by pressing the AV1, AV2, AV3, AV4, RGB1 or RGB2 buttons of the remote control.
- Input can be switched in the sequence of AV1 → AV2 →
   AV3 → AV4 → RGB1 → RGB2 by pressing the INPUT
   SELECT button of the monitor.



### Size Switching

Each time the SIZE button of the remote control or the monitor is pressed, the screen display size will change in sequence and the status will be displayed at the bottom of the screen.

 During VIDEO signal input (AV1, AV2, AV3, AV4, RGB1 (set to [DVI-STB]) and RGB2 (set to [Component]))

• The size will fix as Full mode and not change when receiving the component signal of 1080i/50, 1080i/60 or 720p/60.



#### Display size selection diagram

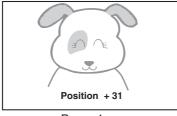
| When you want to  | Set the display size | Input signal | Display screen | Remarks  |
|---|----------------------|--------------|----------------|--|
| Play a 4:3 image in a 16:9 screen faithfully.   | 4:3                  |              | 0 0            | Blanking occurs on both sides.   |
| Play a 4:3 image in a 16:9 screen with the height and width of the middle of the screen enlarged on equal scales and with both sides appearing somewhat enlarged. | Panoramic            | (4:3 signal) | 000            |  |
| Play a 16:9 VISTA size image in the 4:3 image faithfully reproduced on the 16:9 screen.   | Zoom                 | (Vista)      | 000            | The 4:3 image is called a letterbox image. In some cases, some slight blanking may remain at the top and bottom. |
| Play a 21:9 Cinema size image in the 4:3 image expanded vertically on the 16:9 screen.  | Cinema               | (Cinema)     | 000            | In some cases, some slight blanking may remain at the top and bottom.  |
| Play a 4:3 image faithfully in a 16:9 screen in the standard vertical size and horizontally squeezed.*  | Full                 | (Squeeze)    | 000            | * An image with an aspect ratio of 16:9 shrunk horizontally to 4:3 to display in a 4:3 screen                    |

Vertical picture position can be adjusted for [Panoramic], [Zoom] and [Cinema] mode as follows.

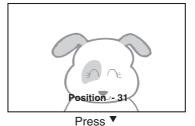
- 1. Press SIZE button and ▲ ▼ SELECT buttons during picture size display.
- 2. Position display will appear.
- 3. Adjustment range of each picture size are as shown below.

[Panoramic] - 12 to + 12 [Zoom] and [Cinema] - 31 to + 31

4. When 1080i/50 or 1080i/60 component signal is received, vertical position can be adjusted only one step up. (The range: 0 to +1)



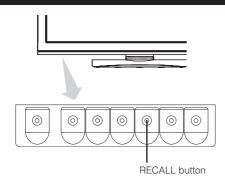


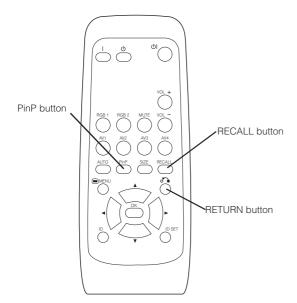


### ATTENTION

#### Using a wide-screen monitor

- This monitor has a screen mode selection feature. If an incompatible screen mode is selected to play certain software, such as a TV program, the image would appear different from the original. Take this into consideration when making screen mode choices.
- Use of this monitor in its enlarged display mode with the wide feature enabled in coffee shops, hotels and other establishments for commercial or pubic viewing purposes could infringe on the copyright holder's right protected by Copyright Law.
- When a normal 4:3 image is displayed over the entire screen in the Panoramic mode, parts of the periphery of the image may disappear and/or appear distorted in some cases. Use the 4:3 mode to view images, which were created in 4:3 mode. This mode allows 4:3 content to be viewed without picture distortion.





### **Displaying MULTI PICTURE**

If the PinP button on the remote control is pressed MULTI PICTURE will display.

Activating the P-in-P mode from the RGB input screen

#### Pressing the PinP button one time will display 2 pictures.

- This mode can be available from RGB1(DVI-PC) and RGB2(RGB) input.
- The speaker icon can be shifted left and right by pressing the 
   and ► SELECT buttons; the audio of the video will be output from
   the side on which the speaker icon is located.
- The sub-screen position can be selected up and down by pressing
   A SELECT buttons.
- The sub-screen can be selected with the AV1, AV2, AV3, and AV4 buttons from the status that the speaker icon appears on the left side of AV\* as shown in the diagram to the right.



- Pressing the PinP button again or the RETURN button will cancel the 2 pictures display.
- "Frequency Mode" in the Setup Menu should be set to Movie when sub-screen is the component signal of 1080i/50 or 1080i/60.

AV1: Displays the VIDEO input signal of the sub-screen.

4) AV1

AV2

#### Activating the Split mode from the video input screen

#### Pressing the PinP button one time will display 2 pictures.

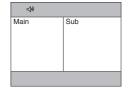
- The speaker icon can be shifted left and right by pressing the 

  and 

  SELECT buttons; the audio of the video will be output from the side on which the speaker icon is located.
- The same video input mode cannot be selected for both screens at the same time.
- Pressing the PinP button again or the RETURN button will cancel the 2 pictures display.
- When the Video input is set to RGB Video, this Split mode is not possible.
- Refer to the table for 2 pictures (Split) mode.

### 2 Pictures (Split)

| Input terminal | Input terminal |       | AV1~AV4         |              | AV1, AV2     |          |          |         | RGB1 | RGB2      |
|----------------|----------------|-------|-----------------|--------------|--------------|----------|----------|---------|------|-----------|
|                | Main Sub       | PAL-N | NTSC-M<br>PAL-M | 576i<br>576p | 480i<br>480p | 1080i/50 | 1080i/60 | 720p/60 | STB  | Component |
| AV1            | PAL-N          | 0     | 0               | 0            | 0            | 0        | 0        | 0       |      |           |
| ~AV4           | NTSC-M, PAL-M  | 0     | 0               | 0            | 0            | 0        | 0        | 0       |      |           |
|                | 576i, 576p     | 0     | 0               |              |              |          |          |         |      |           |
| AV1            | 480i, 480p     | 0     | 0               |              |              |          |          |         |      |           |
| AV1<br>AV2     | 1080i/50       | 0     | 0               |              |              |          |          |         |      |           |
| / / / /        | 1080i/60       | 0     | 0               |              |              |          |          |         |      |           |
|                | 720p/60        | 0     | 0               |              |              |          |          |         |      |           |
| RGB1           | STB            |       |                 |              |              |          |          |         |      |           |
| RGB2           | Component      | 0     | 0               | 0            | 0            | 0        | 0        | 0       |      |           |



(O: Available)

#### NOTE

- Even if the input of the horizontal / vertical synchronizing signal (or video signal) stops in the MULTI PICTURE display, the mode will not change to power save mode.
- Please be careful since image retention will occur if display is left in a MULTI PICTURE display state for a long period of time

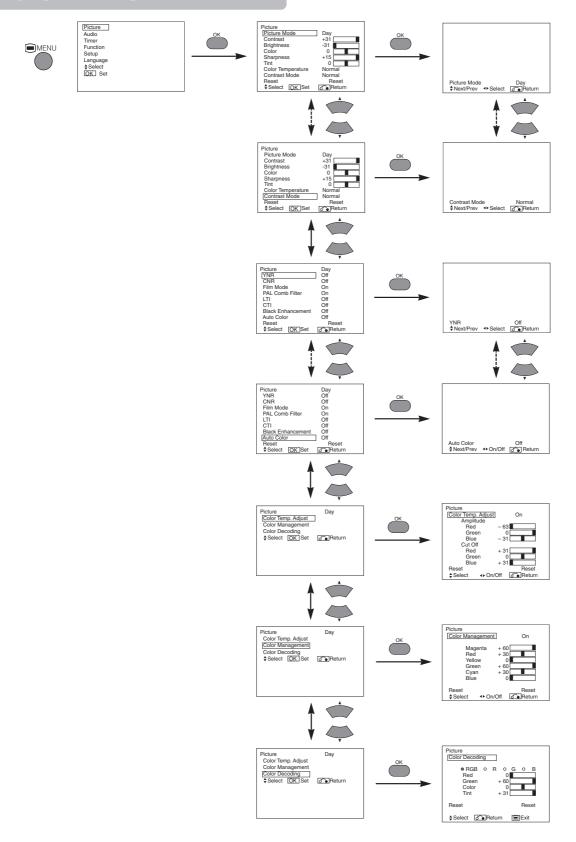
### **Input Signal Screen Display**

The input signal status can be displayed on the screen by pressing the RECALL button of the remote control or the monitor.

• The display will go out in approximately 6 seconds.



## PICTURE MENU



## PICTURE MENU (continued)

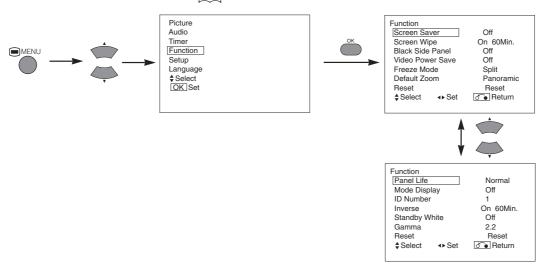
| Selected c             | haracters | 4  | <b>&gt;</b>  | Setup hint   |  |
|------------------------|-----------|--|--|--|--|
| Picture Mod            | le        | Day←   | →Night <del></del>                                 | Day: This setting is best for very bright ambient lighting. Night: This setting is for normal lighting conditions.   |  |
| Contrast               |           | Narrows the gap between brightness and darkness. | Broadens the gap between brightness and darkness.  | Adjust for maximum visibility to suit the ambient brightness. This can adjust further till [+40] by pressing and holding ▶ cursor button at [+31]. The color for [+32] to [+40] numbers will change from white to magenta. This special mode is better for dark scenes. For normal viewing we recommend that the Contrast is set to [+29]. "Panel Life" in the Function Menu should be set to Normal when this Contrast setting is adjusted. |  |
| Brightness             |           | Black is subdued for increased overall darkness. | Black is set off for increased overall brightness. | Adjust to taste.   |  |
| Color                  |           | Darkens colors.                                  | Lightens colors.                                   | Adjust to taste.   |  |
| Sharpness              |           | Soft   | Sharp  | Normally set to Centre position Shift to the minus (-) side for a softer effect and plus (+) for sharper picture.  |  |
| Tint                   |           | Enhances red and weakens green.                  | Enhances green and weakens red.                    | This is not available to adjust when receiving PAL/SECAM signal. Then the character will be grayed out. Adjust for most realistic skin color.  |  |
| Color Tempo            | erature   | Cool ← Normal ← V                                | Warm ←→ Black / White                              | Adjust to taste.   |  |
| Contrast Mode          |           | Normal <del>← →</del> Au                         | to <b>←→</b> Dynamic                               | Dynamic:Emphasizes the differences between video shadings to improve the feeling of contrast.  Normal : The gradation of an image is reproduced as faithfully as possible.  Auto:Detects image brightness and automatically adjusts for natural brightness.  |  |
| Reset                  |           | (off the function)                               | (waiting to reset)                                 | The original factory settings for the items of this Menu page can be restored by pressing the OK button.   |  |
| YNR                    |           | Off ←→ Lo  | w <b>←→</b> High                                   | Performs picture signal noise reduction. Turn up to reduce noise.  |  |
| CNR                    |           | t  |  | Performs color signal noise reduction. Turn up to reduce noise. And it will be fixed as Off only when selecting DVI-STB mode.  |  |
| Film Mode              |           | _→ Off ←   | → On <del>←</del>                                  | On:Automatically detects the movie film material and faithfully reproduces the original film image.  Off:Set to OFF when switching between images does not appear natural.   |  |
| PAL Comb F             | Filter    | → Off ◆  | → On ←   | This is available only when receiving a PAL composite signal. Turn On to reduce the discolorations in fine picture detail and provides purer color.  |  |
| LTI                    |           | Off ←→ Low ←→ Middle ←→ High                     |  | Adjusts the sharpness of the picture signal.   |  |
| СТІ                    |           |  |  | Adjusts the sharpness of the color signal.   |  |
| Black Enhar            | ncement   |  |  | Adjusts the black level compensation.  |  |
| Auto Color             |           | Off 	On  |  | This is available only when receiving an NTSC composite/S Video signal. This monitors and adjusts the color to maintain constant color levels. It also maintains natural flesh tones while preserving fidelity of background colors.   |  |
| Color Temp. Adjustment |           | → Off ◆  | → On <del>←</del>                                  | Turn On when you wish to change color temperature depending on the user's preference.  |  |
|                        | Red       | Brighter scene is decreased in reddish color.    | Brighter scene is increased in reddish color.      |  |  |
| Amplitude              | Green     | Brighter scene is decreased in greenish color.   | Brighter scene is increased in greenish color.     |  |  |
|                        | Blue      | Brighter scene is decreased in bluish color.     | Brighter scene is increased in bluish color.       | Adjust color temperature depending on the user's preference. These settings are independently stored in each of the 4 Color Temperature  |  |
|                        | Red       | Dark scene is decreased in reddish color.        | Dark scene is increased in reddish color.          | settings are independently stored in each of the 4 Color Temperature modes.  |  |
| Cut Off                | Green     | Dark scene is decreased in greenish color.       | Dark scene is increased in greenish color.         |  |  |
|                        | Blue      | Dark scene is decreased in bluish color.         | Dark scene is increased in bluish color.           |  |  |

## PICTURE MENU (continued)

| Selected of      | haracters | 4  | <b>•</b>                        | Setup hint   |  |
|------------------|-----------|--|---------------------------------|--|--|
| Color Management |           | <b>O</b> ff ◀  | <b>→</b> On <b>←</b>            | Turn On when the original balance of each color is required to adjust depending on the user's preference.  |  |
|                  | Magenta   | Magenta is weakened.   | Magenta is strengthened.        |  |  |
|                  | Red       | Red is weakened.   | Red is strengthened.            |  |  |
|                  | Yellow    | Yellow is weakened.  | Yellow is strengthened.         | This adjusts listed colors individually to make them either deeper or  |  |
|                  | Green     | Green is weakened.   | Green is strengthened.          | more pure. These settings are independently stored in each of the 4 Color Temperature modes.   |  |
|                  | Cyan      | Cyan is weakened.  | Cyan is strengthened.           |  |  |
| Blue             |           | Blue is weakened.  | Blue is strengthened.           |  |  |
| Color Deco       | ding      | ightharpoonupRGB $ ightharpoonup$ R $ ightharpoonup$ RGB $ ighth$ |                                 | Select the single color screen when that is required to adjust R/G/B level individually depending on the user's preference. And set it back to RGB mode that indicates all color after adjusting. Press the OK button every time the setting is changed. |  |
|                  | Red       | Darkens red only.  | Lightens red only.              |  |  |
|                  | Green     | Darkens green only.  | Lightens green only.            | This adjusts R/G/B level or tint to make the color appear natural for  |  |
|                  | Color     | Darkens colors.  | Lightens colors.                | the user's preference. These settings are independently stored in each of the 4 Color Temperature modes.   |  |
|                  | Tint      | Enhances red and weakens green.  | Enhances green and weakens red. | 1  |  |

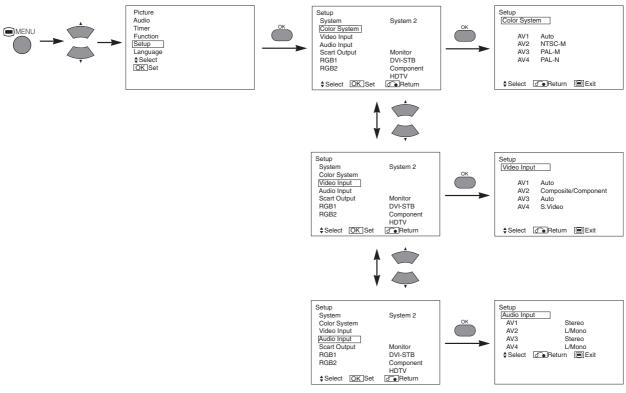
## **FUNCTION MENU**

1 item is added to the Menu shown in the page 22.



| Selected characters | •       | <b>&gt;</b>       | Setup hint   |
|---------------------|---------|-------------------|--|
| Video Power Save    | → Off ← | → On <del>←</del> | This is used to reduce power consumption for video input when there is no video signal. Setting it On will leads the monitor to the standby mode when the AV input with no signal is selected. |

## SETUP MENU



| Selected characters | <b>→</b>  | Setup hint   |
|---------------------|---|--|
| System              | System1 ← System2 ←   | System1 : Europe/Asia, System2 : North America   |
| Color System        |   |  |
| AV1                 | System1  Auto PAL SECAM  NTSC3.58 NTSC4.43  System2  Auto NTSC-M  PAL-N PAL-M | This should correspond to the color system of the signal from the equipment that is connected to AV1 video input terminal.  Normally, set this to Auto. The system of the input signal will be automatically recognized.  If the input signal contains much noise or has a low level at Auto and the operation is found erratic, set this to match the input signal.  When the component signal is received, this would be not available (grayed out). |
| AV2                 |   |  |
| AV3                 |   | (Same to AV1)  |
| AV4                 |   |  |
| Video Input         |   |  |
| AV1                 | Auto → HDTV → SDTV/DVD →  | This should correspond to the signal mode of the signal from the equipment that is connected to AV1 video input terminal.  Normally, set this to Auto. The signal mode of the input signal will be automatically recognized.  If the input signal contains much noise or has a low level at Auto and the operation is found erratic, set this to match the input signal.   |
| AV2 (1st step)      | RGB ← Composite/Component ←   | This should correspond to the signal mode of the signal from the equipment that is connected to AV2 video input terminal.  |
| AV2 (2nd step)      | → Auto ←→ HDTV ←→ SDTV/DVD ←  | This step should be set only when [Composite/Component] is selected on the 1st step. And the procedure is same to AV1.   |
| AV4                 | S.Video ← Composite ←   | If the signal from the equipment that is connected to AV4 Scart input terminal is S.Video or Composite, set this to correspond to that signal.     If the signal is RGB, it will be automatically recognized and this setting will have no effect.   |

## SETUP MENU (continued)

| Selected characters | ◀                          | <b>•</b>             | Setup hint  |  |
|---------------------|----------------------------|----------------------|---|--|
| Audio Input         |                            |                      |   |  |
| AV1                 | → Stereo ←                 | →L/Mono <del>←</del> | This should correspond to the audio signal from the equipment that is connected to AV1 audio input terminal. If it is monaural audio, set this to L/Mono.   |  |
| AV2                 |                            |                      |   |  |
| AV3                 |                            |                      | (Same to AV1)   |  |
| AV4                 |                            |                      |   |  |
| Scart Output        | Not Available (grayed out) |                      |   |  |
| RGB1                | DVI-PC ←                   | →DVI-STB ←           | This should correspond to the signal mode of the signal from the equipment that is connected to RGB1 DVI terminal.  |  |
| RGB2 (1st step)     | →RGB                       | Component -          | This should correspond to the signal mode of the signal from the equipment that is connected to RGB2 D-sub terminal.  |  |
| RGB2 (2nd step)     | → Auto → HDTV              | SDTV/DVD ←           | This step should be set only when [Component] is selected on the 1st step.  This should correspond to the signal mode of the signal from the equipment that is connected to RGB2 D-sub terminal.  Normally, set this to Auto. The signal mode of the input signal will be automatically recognized.  If the input signal contains much noise or has a low level at Auto and the operation is found erratic, set this to match the input signal. |  |

## OTHER FEATURES

## **Automatic Store**

Approximately 1 sec. after adjustment is completed, the adjustments will be recorded as shown in the table below.

| Menu    | Display            | Registration condition  |  |
|---------|--------------------|---|--|
| Picture | Picture Mode       | 1 setting is registered.  |  |
|         | Contrast           | For every input function and every  |  |
|         | Brightness         | Picture Mode, 1 setting is  |  |
|         | Color              | registered.   |  |
|         | Sharpness          |   |  |
|         | Tint               |   |  |
|         | Color Temperature  |   |  |
|         | Contrast Mode      |   |  |
|         | YNR                |   |  |
|         | CNR                |   |  |
|         | Film Mode          |   |  |
|         | PAL Comb Filter    |   |  |
|         | LTI                |   |  |
|         | CTI                |   |  |
|         | Black Enhancement  |   |  |
|         | Auto Color         |   |  |
|         | Color Temp. Adjust |   |  |
|         | R Amplitude        | For every Color Temperature, 1  |  |
|         | G Amplitude        | setting is registered.  |  |
|         | B Amplitude        |   |  |
|         | R Cut Off          |   |  |
|         | G Cut Off          |   |  |
|         | B Cut Off          |   |  |
|         | Color Management   | For every input function and every Picture Mode, 1 setting is registered. |  |
|         | Magenta<br>Red     | 1 setting is registered.  |  |

| Menu     | Display          | Registration condition             |
|----------|------------------|------------------------------------|
| Picture  | Yellow           | 1 setting is registered.           |
|          | Green            |                                    |
|          | Cyan             |                                    |
|          | Blue             |                                    |
|          | Color Decoding   | -                                  |
|          | Red              | For every Color Temperature, 1     |
|          | Green            | setting is registered.             |
|          | Color            | For every input function and every |
|          | Tint             | Picture Mode, 1 setting is         |
| Function | Video Power Save | registered.                        |
|          |                  | 1 setting is registered.           |
| Setup    | System           | 1 setting is registered.           |
|          | Color System     | 1 setting is registered.           |
|          | AV1              |                                    |
|          | AV2              |                                    |
|          | AV3              |                                    |
|          | AV4              |                                    |
|          | Video Input      | -                                  |
|          | AV1              | 1 setting is registered.           |
|          | AV2              |                                    |
|          | AV4              |                                    |
|          | Audio Input      | -                                  |
|          | AV1              | 1 setting is registered.           |
|          | AV2              |                                    |
|          | AV3              |                                    |
|          | AV4              | 1                                  |
|          | RGB1             | 1                                  |
|          | RGB2             | 1                                  |

<sup>•</sup> The previously recorded items will be lost.

### **TROUBLESHOOTING**

## Symptoms That Seemingly Appear to be Failures

Make the checks suggested below depending on the symptoms observed. If the symptoms remain uncorrected, contact your dealer.

**⚠** WARNING

Customer servicing can be hazardous.

| Symptom  | Point to check  | See page |
|--|---|----------|
| The screen becomes dark and the images cannot be seen<br>during VCR special playback (fast forward, rewind). | This sometimes occurs when a component output VCR such as the 480i is connected.     This is not a malfunction; therefore, please take note that this may occur. When it does occur, change to composite output, or S.video output. | _        |

### **PRODUCT SPECIFICATIONS**

This table shows the specifications when the optional video unit has been inserted.

| Panel                          | Display dimensions  | Approx. 55 inches (1229 (H) x 691 (V) mm, diagonal 1410mm)  |
|--------------------------------|---------------------|---|
|                                | Resolution          | 1366 (H) x 768 (V) pixels   |
| Net dimensior<br>(excluding Sp | ns<br>eakers/Stand) | 1394 (W) x 857 (H) x 105 (D) mm   |
| Net weight<br>(excluding Sta   | and)                | 63.5kg  |
| Ambient                        | Temperature         | Operating: 5°C to 35°C, Storage: 0°C to 40°C  |
| conditions                     | Relative humidity   | Operating: 20% to 80%, Storage: 20% to 90% (non-condensing)   |
| Power supply                   |                     | AC100 - 240V, 50/60Hz   |
| Power consur                   | nption/at standby   | 530W / <3W  |
| Audio output                   |                     | speaker (12W + 12W (6Ω)) , sub woofer (RCA)   |
| (RGB input)                    |                     |   |
|                                | Input terminals     | RGB1 DVI input terminal (DVI-D) RGB1 audio input terminal (3.5mm Stereo Mini Jack) RGB2 analog RGB input terminal (D-sub 15-pin) RGB2 audio input terminal (3.5mm Stereo Mini Jack)   |
| Input signals                  | Video signals       | 0.7 V/1.0 Vp-p, analog RGB (Recommended Signal)<br>480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60  |
|                                | Sync signals        | H/V separate, TTL level [ $2K\Omega$ ]<br>H/V composite, TTL level [ $2K\Omega$ ]<br>Sync on green, $0.3$ Vp-p [ $75\Omega$ ]   |
| Recommende                     | d signal            | 47 modes 32 45  |
| (Video input)                  |                     |   |
| Input signals                  | Input terminals     | AV1: composite video input terminal (RCA) AV1: Y PB PR video input terminal (RCA) AV1: L/R audio input terminal (RCA) AV2: composite video input terminal (RCA) AV2: Y/G PB/B PR/R video input terminal (RCA) AV2: L/R audio input terminal (RCA) AV3: composite video input terminal (RCA) AV3: S video input terminal (RCA) AV3: S video input terminal (RCA) AV3: L/R audio input terminal (RCA) AV4: composite video / S video / RGB / L/R audio input terminal (Scart) |
|                                | Video signals       | AV1: NTSC-M, PAL-M, PAL-N<br>AV1: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60<br>AV2: NTSC-M, PAL-M, PAL-N<br>AV2: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60, RGB<br>AV3: NTSC-M, PAL-M, PAL-N<br>AV4: NTSC-M, PAL-M, PAL-N<br>AV4: RGB   |
| Video output 9                 | Signal              | OUTPUT (MONITOR): composite video monitor-output terminal (RCA) OUTPUT (MONITOR): L/R audio monitor- output terminal (RCA) AV4: composite video / L/R audio monitor-output terminal (SCART)   |
| Recommende                     | d signal            | 13 modes 45   |

<sup>•</sup> The monitor takes at least 30 minutes to attain the status of optimal picture quality.

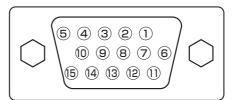
### **PRODUCT SPECIFICATIONS (continued)**

## Signal Input

#### **RGB** terminal (D-sub 15-pin connector)

| Pin | Input signal                                 |
|-----|--|
| 1   | R (Pa/Ca)                                    |
| 2   | G or sync on green (Y)                       |
| 3   | B (P <sub>B</sub> /C <sub>B</sub> )          |
| 4   | No connection                                |
| 5   | No connection                                |
| 6   | R.GND (Pr/Cr, GND)                           |
| 7   | G.GND (Y, GND)                               |
| 8   | B.GND (P <sub>B</sub> /C <sub>B</sub> , GND) |
| 9   | No connection                                |
| 10  | GND  |
| 11  | No connection                                |
| 12  | [SDA]  |
| 13  | H. sync or H/V composite sync                |
| 14  | V.sync. [V.CLK]                              |
| 15  | [SCL]  |

( ): With component input



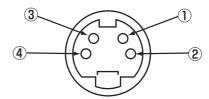
 When different kinds of input signals are simultaneously input to the monitor via a graphics board or the like, the monitor will automatically select the signals in the following priority order:

| Sync signal type    | Priority |
|---------------------|----------|
| H/V separate sync.  | 1        |
| H/V composite sync. | 2        |
| sync.on Green *     | 3        |

\*Even in the case of the recommended signals shown on the following page, there may be instances when correct display is not possible. In this case, use H/V separate sync, H/V composite sync.

#### S-input connector pin specifications

| Pin   | Input signal |
|-------|--------------|
| 1     | Y            |
| 2     | Y-GND        |
| 3     | С            |
| 4     | C-GND        |
| Frame | GND          |



#### **Scart connector pin specifications**

| Pin | Signal                  | Pin | Signal                               |
|-----|-------------------------|-----|--------------------------------------|
| 1   | AUDIO OUT (RIGHT)       | 12  | Not Used                             |
| 2   | AUDIO IN (RIGHT)        | 13  | RGB-R GND                            |
| 3   | AUDIO OUT (LEFT/MONO)   | 14  | GND                                  |
| 4   | AUDIO GND               | 15  | RGB-R / S.VHS CHROMINANCE IN         |
| 5   | RGB-B GND               | 16  | BLANKING SIGNAL                      |
| 6   | AUDIO IN (LEFT/MONO)    | 17  | COMPOSITE VIDEO GND                  |
| 7   | RGB-B IN                | 18  | BLANKING SIGNAL GND                  |
| 8   | AUDIO/RGB SWITCH / 16:9 | 19  | COMPOSITE VIDEO OUT                  |
| 9   | RGB-G GND               | 20  | COMPOSITE VIDEO / S.VHS LUMINANCE IN |
| 10  | Not Used                | 21  | GND / SHIELD (CHASSIS)               |
| 11  | RGB-G IN                |     |                                      |



### **PRODUCT SPECIFICATIONS (continued)**

## **Recommended Signal List**

#### With Digital RGB signal input (RGB1 input)

|     |             | Signal mode |                            |                    | Horizontal Dot clock |        | u Condition |                |
|-----|-------------|-------------|----------------------------|--------------------|----------------------|--------|-------------|----------------|
| No. | Signal Name | Resolution  | Vertical frequency<br>(Hz) | frequency<br>(kHz) | frequency<br>(MHz)   | DVI-PC | DVI-STB     | Remarks        |
| 1   | VGA         | 640 X 400   | 70.08                      | 31.47              | 25.18                | 0      |             |                |
| 2   | VGA         | 640 X 480   | 59.94                      | 31.47              | 25.18                | 0      | 0           |                |
| 3   | W-VGA       | 864 X 480   | 59.94                      | 31.47              | 34.24                | 0      |             | WVGA type : On |
| 4   |             | 640 X 480   | 72.81                      | 37.86              | 31.50                | 0      |             |                |
| 5   | ] [         | 640 X 480   | 75.00                      | 37.50              | 31.50                | 0      |             |                |
| 6   | ] [         | 640 X 480   | 85.01                      | 43.27              | 36.00                | 0      |             |                |
| 7   |             | 800 X 600   | 56.25                      | 35.16              | 36.00                | 0      |             |                |
| 8   | ] [         | 800 X 600   | 60.32                      | 37.88              | 40.00                | 0      |             |                |
| 9   | VESA        | 800 X 600   | 72.19                      | 48.08              | 50.00                | 0      |             |                |
| 10  |             | 800 X 600   | 75.00                      | 46.88              | 49.50                | 0      |             |                |
| 11  |             | 800 X 600   | 85.06                      | 53.67              | 56.25                | 0      |             |                |
| 12  | ] [         | 1024 X 768  | 60.00                      | 48.36              | 65.00                | 0      |             |                |
| 13  |             | 1024 X 768  | 70.07                      | 56.48              | 75.00                | 0      |             |                |
| 14  | ]           | 1024 X 768  | 75.03                      | 60.02              | 78.75                | 0      |             |                |
| 15  | 480p        | 720 X 480   | 59.94                      | 31.47              | 27.00                |        | 0           | EIA-861        |
| 16  | 720p/60     | 1280 X 720  | 60.00                      | 45.00              | 74.25                |        | 0           | EIA-861        |
| 17  | 1080i/60    | 1920 X 1080 | 60.00                      | 33.75              | 74.25                |        | 0           | EIA-861        |

(○: acceptable)

#### With Composite Input(AV1~AV4 input) and S-video Input (AV3 input).

|     |                 | Signal mode |                         |                 | Signal mode Horizontal |         | Horizontal | Dot clock |  |
|-----|-----------------|-------------|-------------------------|-----------------|------------------------|---------|------------|-----------|--|
| No. | Signal Name     | Resolution  | Vertical frequency (Hz) | frequency (kHz) | frequency (MHz)        | Remarks |            |           |  |
| 1   | NTSC-M<br>PAL-M | 525         | 59.94                   | 15.73           | _                      |         |            |           |  |
| 2   | PAL-N           | 625         | 50.00                   | 15.63           | _                      |         |            |           |  |

#### With R, G, B Video input (AV2 and AV4 input).

|     | Signal mode               |            |                            | Horizontal     | Dot clock       |         |
|-----|---------------------------|------------|----------------------------|----------------|-----------------|---------|
| No. | Signal Name               | Resolution | Vertical frequency<br>(Hz) |                | frequency (MHz) | Remarks |
| 1   | (NTSC-M,PAL-M)<br>(PAL-N) | 525<br>625 | 59.94<br>50.00             | 15.73<br>15.63 | _               |         |

#### With component input (AV1, AV2 and RGB2-component input).

|     | Signal mode |            |                            | Horizontal      | Dot clock       |         |
|-----|-------------|------------|----------------------------|-----------------|-----------------|---------|
| No. | Signal Name | Resolution | Vertical frequency<br>(Hz) | frequency (kHz) | frequency (MHz) | Remarks |
| 1   | 576i        | 576        | 50.00                      | 15.63           | _               |         |
| 2   | 480i        | 480        | 59.94                      | 15.73           | _               |         |
| 3   | 576p        | 576        | 50.00                      | 31.26           | _               |         |
| 4   | 480p        | 480        | 59.94                      | 31.47           | _               |         |
| 5   | 1080i/50    | 1080       | 50.00                      | 28.13           | _               |         |
| 6   | 1080i/60    | 1080       | 60.00                      | 33.75           | _               |         |
| 7   | 720p/60     | 720        | 60.00                      | 45.00           | _               |         |

<sup>•</sup> The monitor differentiates the signal modes according to the horizontal and vertical frequencies and the horizontal and vertical sync signal polarities. Note that different signals having all these elements alike may be handled as the same signal.

<sup>•</sup> Displaying images with more than 768 lines of vertical resolution at Full diplay (compressed display) can result in the interpolation of stripes.

# **Customer Support**

For technical support or product service, see the table below or contact your reseller.

**NOTE:** You will need the product serial number.

| Country/<br>Region   | Web site                      | T = Telephone<br>F = FAX                            | Email                              |
|--|-------------------------------|---|------------------------------------|
| United States  | www.viewsonic.com/<br>support | <b>T</b> : (800) 688-6688 <b>F</b> : (909) 468-1202 | service.us@<br>viewsonic.com       |
| Canada   | www.viewsonic.com/<br>support | <b>T:</b> (800) 688-6688 <b>F:</b> (909) 468-1202   | service.ca@<br>viewsonic.com       |
| United Kingdom   | www.viewsoniceurope.com       | T: 0800 833 648<br>F: (01293) 643910                | service.eu@<br>viewsoniceurope.com |
| Europe, Middle<br>East, Baltic<br>countries, and<br>North Africa | www.viewsoniceurope.com       | Contact your reseller                               | service.eu@<br>viewsoniceurope.com |
| Australia and New<br>Zealand                                     | www.viewsonic.com.au          | <b>T:</b> +61 2 9906 6277 <b>F:</b> +61 2 9906 6377 | service@au.<br>viewsonic.com       |
| Singapore/<br>Malaysia/Thailand                                  | www.viewsonic.com.sg          | <b>T:</b> 65 273 4018 <b>F:</b> 65 273 1566         | service@sg.<br>viewsonic.com       |
| South Africa/<br>Other countries                                 | www.viewsonic.com             | T: 886 2 2246 3456<br>F: 886 2 8242 3668            | service@sd.<br>viewsonic.com       |
| Hong Kong  | www.hk.viewsonic.com          | T: 886 2 2246 3456<br>F: 886 2 8242 3668            | service@hk.<br>viewsonic.com       |

## LIMITED WARRANTY

### **VIEWSONIC Plasma Display**

#### What the warranty covers:

ViewSonic® warrants its products to be free from defects in material and workmanship during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, ViewSonic will at its sole option repair or replace the product with a like product. Replacement product or parts may include remanufactured or refurbished parts or components.

How long the warranty is effective:

ViewSonic Plasma Display's are warranted for twelve(12) months for all parts, twelve(12) months for all labor.

#### Who the warranty protects:

This warranty is valid only for the first consumer purchaser.

#### What the warranty does not cover:

- 1. Any product on which the serial number has been defaced, modified or removed.
- 2. Damage, deterioration or malfunction resulting from:
  - a. Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - b. Repair or attempted repair by anyone not authorized by ViewSonic.
  - c. Any damage of the product due to shipment.
  - d. Removal or installation of the product.
  - e. Causes external to the product, such as electric power fluctuations or failure.
  - f. Use of supplies or parts not meeting ViewSonic's specifications.
  - g. Normal wear and tear.
  - h. Any other cause which does not relate to a product defect.
- 3. Removal, installation, and set-up service charges.

#### How to get service:

- 1. For information about receiving service under warranty, contact ViewSonic Customer Support at 800-888-8583. You will need to provide your product's serial number.
- 2. To obtain warranted service, you will be required to provide (a) the original dated sales slip, (b) your name, (c) your address, (d) a description of the problem, and (e) the serial number of the product.
- 3. Take or ship the product freight prepaid in the original container to an authorized ViewSonic service center or ViewSonic.
- 4. For additional information or the name of the nearest ViewSonic service center, contact ViewSonic.

#### Limitation of implied warranties:

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION CONTAINED HEREIN INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

#### **Exclusion of damages:**

VIEWSONIC'S LIABILITY IS LIMITED TO THE COST OF REPAIR OR REPLACEMENT OF THE PRODUCT. VIEWSONIC SHALL NOT BE LIABLE FOR:

- 1. DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THE PRODUCT, DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, LOSS OF PROFITS, LOSS OF BUSINESS OPPORTUNITY, LOSS OF GOODWILL, INTERFERENCE WITH BUSINESS RELATIONSHIPS, OR OTHER COMMERCIAL LOSS, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
- 2. ANY OTHER DAMAGES, WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE.
- 3. ANY CLAIM AGAINST THE CUSTOMER BY ANY OTHER PARTY.

#### Effect of state law:

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on implied warranties and/or do not allow the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

#### Sales outside the U.S.A. and Canada:

For warranty information and service on ViewSonic products sold outside of the U.S.A. and Canada, contact ViewSonic or your local ViewSonic dealer.

Plasma Warranty (V2.1) Release Date: 04-18-2001

## **Power Cord Safety Guidelines**

**Caution:** Use a power cable that is properly grounded. Always use an AC power cord that meets your country's safety standard.

 USA.......UL
 Switzerland.....SEV

 Canada......BASE/BS

#### AC PLUG CORD PRECAUTIONS FOR THE UNITED KINGDOM

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET THEN THE PLUG SHOULD BE CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO AN APPROPRIATE SOCKET.

If a new plug is to be fitted, please observe the wiring code as shown below.

If in any doubt, please consult a qualified electrician.

**WARNING:** THIS APPLIANCE MUST BE EARTHED.

IMPORTANT: The wires in this mains lead are coloured in accordance with the following code:

Green-and-Yellow: Earth Blue: Neutral Brown: Live

If the coloured wires of the mains lead of this appliance do not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the Earth symbol or coloured GREEN or GREEN-AND-YELLOW.

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

#### IMPORTANT NOTICE CONCERNING POWER CORD SELECTION

The power cord set for this unit has been enclosed and has been selected according to the country of destination and must be used to prevent electric shock. Use the following guidelines if it is necessary to replace the original cord set, or if the cord set is not enclosed.

The female receptacle of the cord set must meet CEE-22 requirements and may look like (Figure A1 below):

Figure A1

#### For the United States and Canada

In the United States and Canada the male plug is a NEMA5-15 style (Figure A2), UL Listed, and CSA Labeled. For units which are mounted on a desk or table, type SVT or SJT cord sets may be used. For units which sit on the floor, only SJT type cord sets may be used. The cord set must be selected according to the current rating for your unit. Please consult the table below for the selection criteria for power cords used in the United States and Canada.



#### For the customer in Canada

Notice: This Class B digital apparatus complies with Canadian ICES-003.

| Cord Type | Size of Conductors in Cord | Maximum Current Rating of Unit |
|-----------|----------------------------|--------------------------------|
| SJT       | 18 AWG<br>16 AWG<br>14 AWG | 10 Amps<br>12 Amps<br>12 Amps  |
| SVT       | 18 AWG<br>17 AWG           | 10 Amps<br>12 Amps             |

#### For European Countries

In Europe you must use a cord set which is appropriate for the receptacles in your country. The cord set is HAR-Certified, and a special mark that will appear on the outer sheath, or on the insulation of one of the inner conductors. If you have any questions concerning which proper power cord to use, please consult with the dealer from whom you have purchased the product.

## **CLEANING AND MAINTENANCE**

#### **Cautions When Using the Plasma Display**

■ Do not bring your hands, face or objects close to the ventilation holes of the plasma display. The top of plasma display is usually very hot due to the high temperature of exhaust air being released through the ventilation holes. Burns or personal injuries may occur if any body parts are brought too close. Placing any object near the top of the display could also result in heat related damages to the object as well as the display itself.



- Be sure to disconnect all cables before moving the plasma display. Moving the display with its cables attached may damage the cables and thus case fire or electric shock danger.
- Disconnect the power plug from the wall outlet as a safety precaution before carrying out any type of cleaning or maintenance procedure.

#### **Front Panel Cleaning Instructions**

- The front of the display has been specially treated. Wipe the surface gently using only a cleaning cloth or a soft, lint-free cloth.
- If the surface is particular dirty, soak a soft, lint-free cloth in a mild detergent solution. Wring the cloth to remove excess liquid. Wipe the surface of the display to remove dirt. Then use a dry cloth of the same type to dry.
- Do not scratch or hit the surface of the panel with fingers or hard objects of any kind.
- Do not use volatile substances such as insect sprays, solvents and thinners.

#### **Cabinet Cleaning Instructions**

- If the cabinet becomes dirty, wipe the cabinet with a soft, dry cloth.
- If the cabinet is extremely dirty, soak a lint-free cloth in a mild detergent solution. Wring the cloth to remove as much moisture possible. Wipe the cabinet. Use another dry cloth to wipe over until the surface is dry.



- Do not allow any water or detergent to come into contact with the surface of the display. If water or moisture gets inside the unit, operating problems, electrical and shock hazards may result.
- Do not scratch or hit the cabinet with fingers or hard objects of any kind.
- Do not use volatile substances such as insect sprays, solvents and thinners on the cabinet.
- Do not place articles made from rubber or PVC near the cabinet for any extended periods of time.

#### **Avoid Still Images**

■ Do not allow a still picture to be displayed for extended periods of time. This can cause a permanent image to remain on the plasma display. Examples of still images may include: still computer images, still video game images, still logos or pictures, text and images displayed in 4:3 Normal mode.



#### Contents of this manual is subject to change without notice.

#### **Trademark Credits**

- VGA is a trademark of IBM Corporation.
- Macintosh is a registered trademark of Apple Computer Corporation.
- SVGA is a registered trademark of the Video Electronics Standard Association.
- BBE is a registered trademark of BBE Sound Inc.
- SRS and symbol are trademarks of SRS Labs Inc.
  SRS technology is incorporated under license from SRS Labs, Inc.
- All other trademarks are the properties of theri respective owners.

### **FCC Information**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, 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.

#### **FCC Warning**

To assure continued FCC compliance, the user must use grounded power supply cord and the provided shielded video interface cable with bonded ferrite cores. If a BNC cable is going to be used, use only a shielded BNC(5) cable. Also, any unauthorized changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

#### Instructions to Users

This equipment complies with the requirements of FCC (Federal Communication Commission) equipment provided that the following condition is met. Use the cables which are included with the projector or specified.

### **Compliance Information for Canada**

Notice: This class A digital apparatus complies with Canadian ICES-003.

AVIS: Cet appeil numerique de la Classe A conforme a la norme NMB-003 du Canada.

## **Compliance Information for European Countries**

#### **CE Conformity**



The device complies with the requirements of the EEC directive 89/336/EEC as amended by 93/68/EEC Art.5 with regard to "Electromagnetic compatibility," and 73/23/EEC as amended by 93/68/EEC Art.13 with regard to "Safety."

### **User Information for All Countries**

NOTICE: Use the cables which are included with the Plasma Display or specified.

