# **PlasmaSync Plasma Monitor**

# **Operation Manual** (Enhanced split screen Model)

For the specifications of your plasma monitor, refer to "Model Information".

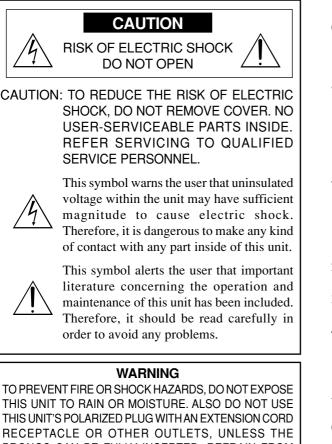


NEC Solutions (America), Inc.

# **Important Information**

### Precautions

Please read this manual carefully before using your plasma monitor and keep the manual handy for future reference.



RECEPTACLE OR OTHER OUTLETS, UNLESS THE PRONGS CAN BE FULLY INSERTED. REFRAIN FROM OPENING THE CABINET AS THERE ARE HIGH-VOLTAGE COMPONENTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

# Warnings and Safety Precaution

This plasma monitor is designed and manufactured to provide long, trouble-free service. No maintenance other than cleaning is required. Please see the section "Plasma monitor cleaning procedure" on the next page.

The plasma display panel consists of fine picture elements (cells) with more than 99.99 percent active cells. There may be some cells that do not produce light or remain lit.

For operating safety and to avoid damage to the unit, read carefully and observe the following instructions. To avoid shock and fire hazards:

1. Provide adequate space for ventilation to avoid internal heat build-up. Do not cover rear vents or install the unit in a closed cabinet or shelves.

If you install the unit in an enclosure, make sure there is adequate space at the top of the unit to allow hot air to rise and escape. If the monitor becomes too hot, the overheat protector will be activated and the monitor will be turned off. If this happens, turn off the power to the monitor and unplug the power cord. If the room where the monitor is installed is particularly hot, move the monitor to a cooler location, and wait for 60 minutes to cool the monitor. If the problem persists, contact your dealer for service.

2. Do not use this unit's polarized plug with extension cords or outlets unless the prongs can be completely inserted.

- 3. Do not expose the unit to water or moisture.
- 4. Avoid damage to the power cord, and do not attempt to modify the power cord.
- 5. Unplug the power cord during electrical storms or if the unit will not be used over a long period.
- 6. Do not open the cabinet which has potentially dangerous high voltage components inside. If the unit is damaged in this way the warranty will be void. Moreover, there is a serious risk of electric shock.
- 7. Do not attempt to service or repair the unit. The manufacturer is not liable for any bodily harm or damage caused if unqualified persons attempt service or open the back cover. Refer all service to authorized Service Centers.

### To avoid damage and prolong operating life:

- 1. Use only with 100-240V 50/60Hz AC power supply. Continued operation at line voltages greater than 100-240 Volts AC will shorten the life of the unit, and might even cause a fire hazard.
- 2. Handle the unit carefully when installing it and do not drop.
- 3. Set the unit away from heat, excessive dust, and direct sunlight.
- 4. Protect the inside of the unit from liquids and small metal objects. In case of accident, unplug the power cord and have it serviced by an authorized Service Center.
- 5. Do not hit or scratch the panel surface as this causes flaws on the surface of the screen.
- 6. For correct installation and mounting it is strongly recommended to use a trained, authorized dealer.
- 7. As is the case with any phosphor-based display (like a CRT monitor, for example) light output will gradually decrease over the life of a Plasma Display Panel.
- 8. To avoid sulfurization it is strongly recommended not to place the unit in a dressing room in a public bath or hot spring bath.
- 9. Do not use in a moving vehicle, as the unit could drop or topple over and cause injuries.
- 10. Do not place the unit on its side, upside-down or with the screen facing up or down, to avoid combustion or electric shock.

### Plasma monitor cleaning procedure:

- 1. Use a soft dry cloth to clean the front panel and bezel area. Never use solvents such as alcohol or thinner to clean these surfaces.
- 2. Clean plasma ventilation areas with a vacuum cleaner with a soft brush nozzle attachment.
- 3. To ensure proper ventilation, cleaning of the ventilation areas must be carried out monthly. More frequent cleaning may be necessary depending on the environment in which the plasma monitor is installed.

Recommendations to avoid or minimize phosphor burn-in: Like all phosphor-based display devices and all other gas plasma displays, plasma monitors can be susceptible to phosphor burn under certain circumstances. Certain operating conditions, such as the continuous display of a static image over a prolonged period of time, can result in phosphor burn if proper precautions are not taken. To protect your investment in this plasma monitor, please adhere to the following guidelines and recommendations for minimizing the occurrence of image burn:

- \* Always enable and use your computer's screen saver function during use with a computer input source.
- \* Display a moving image whenever possible.
- \* Change the position of the menu display from time to time.
- \* Always power down the monitor when you are finished using it.

If the plasma monitor is in long term use or continuous operation take the following measures to reduce the likelihood of phosphor burn:

\* Lower the Brightness and Contrast levels as much as possible without impairing image readability.

- \* Display an image with many colors and color gradations (i.e. photographic or photo-realistic images).
- \* Create image content with minimal contrast between light and dark areas, for example white characters on black backgrounds. Use complementary or pastel color whenever possible.
- \* Avoid displaying images with few colors and distinct, sharply defined borders between colors.

\* **Note:** Burn-in is not covered by the warranty.

Contact your dealer for other recommended procedures that will best suit your particular application needs.

# **Recommandations** importantes

### Précautions

Veuillez lire avec attention ce manuel avant d'utiliser le moniteur à plasma et le conserver accessible pour s'y référer ultérieurement.



INSEREES A FOND. NE PAS OUVRIR LE COFFRET,

DES COMPOSANTS HAUTE TENSION SE TROUVENT

A L'INTERIEUR. LAISSER A UN PERSONNEL

QUALIFIE LE SOIN DE REPARER CET APPAREIL.

Mises en garde et précautions de sécurité

Ce moniteur à plasma a été conçu et fabriqué pour une utilisation fiable et durable. Il ne nécessite aucun entretien en dehors du nettoyage. Voir la section "Méthode de nettoyage du moniteur à plasma" plus loin. Le panneau à affichage plasma est constitué de fines particules d'images (cellules) dont plus de 99,99% sont actives. Certaines d'entre elles ne produisent pas de lumière ou restent allumées.

Pour des raisons de sécurité et pour éviter d'endommager l'appareil, lire attentivement les instructions suivantes.

Pour éviter les risques d'éléctrocution et d'incendie:

1. Laisser suffisament d'espace autour de l'appareil pour la ventilation et éviter toute augmentation excessive de la température interne. Ne pas couvrir les évents ou l'installer dans un endroit trop exigu.

Si vous installez l'appareil dans un espace clos, assurezvous qu'il y ait suffisamment d'espace au dessus pour permettre à l'air chaud de s'élever et de s'évacuer. Si la température du moniteur devient excessive, la protection contre les surchauffes entrera en action et coupera l'alimentation. Dans ce cas, éteindre l'appareil et débrancher le câble d'alimentation. Si la température de la pièce dans laquelle se trouve le moniteur est particulièrement élevée, déplacer celui-ci dans un endroit plus frais et attendre environ 60 minutes qu'il refroidisse. Si le problème persiste, prendre contact avec votre revendeur.

- 2. Ne pas raccorder la prise d'alimentation polarisée de ce périphérique à une rallonge ou une prise murale si les fiches ne peuvent pas être complètement insérées.
- 3. Ne pas exposer à L'eau ou à l'humidité.
- 4. Eviter d'endommager le cordon d'alimentation, et ne pas modifier le cordon d'alimentation.
- 5. Débrancher le câble d'alimentation électrique pendant les orages ou les longues périodes d'inactivité.
- 6. Ne pas ouvrir le coffret. Des composants de haute tension se trouvent à l'intérieur. Si l'appareil est endommagé de cette manière, la garantie devient caduque. De plus, il y a risque d'électrocution.
- 3

7. Ne pas essayer d'intervenir ou de réparer l'appareil. Le fabricant décline toute responsabilité en cas de blessure corporelle ou de dégâts matériels résultant d'une opération d'entretien quelconque effectuée par des personnes non qualifiées ou résultant de l'ouverture du couvercle arrière. S'adresser aux services après-vente autorisés.

Pour éviter des dommages et prolonger la durée de service de l'appareil:

- N'utiliser qu'une source d'alimentation de 100-240 V 50/60 Hz CA. Le fait d'utiliser l'appareil en continu à des tensions de ligne supérieures à 100-240 Volts CA réduit sa durée de vie et risque de provoquer un incendie.
- 2. Manipuler l'appareil avec soin pendant son déplacement et ne pas le faire tomber.
- 3. Eloigner l'appareil des endroits chauds, très poussiéreux et exposés en plein soleil.
- 4. Eviter que des liquides et des petits objets métalliques pénètrent à l'intérieur de l'appareil. En cas d'incident de ce genre, débrancher le câble d'alimentation électrique et confier le moniteur à un service après-vente agréé.
- 5. Ne pas frapper ou rayer la surface de la écran plasma, car des défauts risquent de se produire sur la surface de la écran plasma.
- 6. Pour un montage et une installation correcte, il est fortement recommandé de faire appel à un revendeur agréé et qualifié.
- 7. Comme c'est le cas pour tout affichage à base de phosphore (comme un moniteur CRT, par exemple), la puissance de lumière baisse graduellement au cours de la vie du Panneau d'Affichage à Plasma.
- 8. Pour éviter tout risque de sulfuration, il est fortement conseillé de ne pas installer l'appareil dans un vestiaire, un bain public ou un bain de source thermale.
- 9. Ne pas utiliser dans un véhicule en marche car l'unité pourrait tomber ou glisser et provoquer des blessures.
- 10. Pour éviter l'inflammation ou les chocs électriques, ne pas placer l'unité sur la tranche, à l'envers ou avec l'écran vers le bas ou vers le haut.

#### Méthode de nettoyage du moniteur à plasma:

- Nettoyer le panneau avant et le cadre en procédant à l'aide d'un chiffon doux et sec. Ne jamais utiliser de solvents du type alcool ou diluant pour le nettoyage de ces surfaces.
- 2. Nettoyer les prises d'aération du plasma en procédant à l'aide d'une brosse à poils doux fixée à un aspirateur.
- 3. Pour garantir la bonne ventilation du moniteur, nettoyer les prises d'air tous les mois. Un nettoyage plus fréquent peut s'avérer nécessaire selon les conditions environnantes dans lesquelles le moniteur à plasma est utilisé.

Pour éviter les risques de brûlage du luminophore, les mesures suivantes sont recommandées:

Comme tous les périphériques d'affichage à base luminophore et tous les autres affichages gaz plasma, les moniteurs plasma peuvent être sujets au brûlage du luminophore dans certaines circonstances. Certaines conditions d'utilisation, telles que l'affichage continu d'une image statique pour une durée prolongée, peuvent causer le brûlage du luminophore si aucune précaution n'est prise. Pour protéger votre investissement dans ce moniteur à plasma, veuillez suivre les directives et les conseils suivantes pour minimiser l'occurence le marquage de l'écran:

- Assurez-vous de mettre en marche et d'utliser l'économisateur d'écran chaque fois que c'est possible lorsque vous l'utilisez avec une source d'entrée d'ordinateur.
- Affichez une image en mouvement aussi souvent que possible.
- Changer la position de l'affichage de menu de temps à autre.
- Coupez toujours l'alimentation lorsque vous avez terminé d'utiliser la moniteur.

Si le moniteur est en usage continu ou longue durée, prenez les mesures suivantes afin d'éviter l'occurence le brûlage du luminophore:

- Abaissez le niveau de l'image (contraste, luminosité) autant que possible, sans faire perdre la lisibilité de l'image.
- Affichez une image avec de nombreuses couleurs et graduations de couleur (par ex. des images photographiques ou photo-réalistes).
- Créez un contenu d'image avec un contraste minimal entre les zones sombres et les zones claires, par exemple, des caractères blancs sur un fond noir. Utilisez des couleurs complémentaires ou pastels le plus souvent possible.
- Évitez d'afficher des images avec peu de couleurs et des limites nettes et clairement définies entre les couleurs.

\* **Remarque:** Le brûlage de l'écran n'est pas couvert par la garantie.

Contactez un revendeur agréé ou un revendeur de marque pour d'autres procédures qui conviendront le mieux à vos besoins particuliers.

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Troubleshooting

# **Contents of the Package**

- Plasma monitor
  Power cord
  Remote control with two AAA Batteries
  Manuals (Model Information and Operation)
  Safety metal fittings\*
  Ferrite cores, bands
  Cable clamps
  \* Contents will differ according to the model.
- \* These are fittings for fastening the unit to a wall to prevent tipping due to external shock when using the stand (optional). Fasten the safety fittings to the holes in the back of the monitor using the safety fitting mount screws (see page 6).

## Options

- Wall mount unit
- Ceiling mount unit
- Tilt mount unit
- Stand

5

Attachable speakers

# Installation

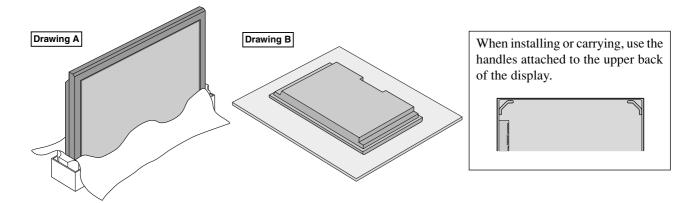
You can attach your optional mounts or stand to the plasma monitor in one of the following two ways:

- \* While it is upright. (See Drawing A)
- \* As it is laid down with the screen face down (See Drawing B). Lay the protective sheet, which was wrapped around the monitor when it was packaged, beneath the screen surface so as not to scratch the screen face.
- \* Do not touch or hold the screen face when carrying the unit.
  - This device cannot be installed on its own. Be sure to use a stand or original mounting unit. (Wall mount unit, Stand, etc.)
  - \* See the inside of the cover page.
  - For correct installation and mounting it is strongly recommended to use a trained, authorized dealer.

Failure to follow correct mounting procedures could result in damage to the equipment or injury to the installer.

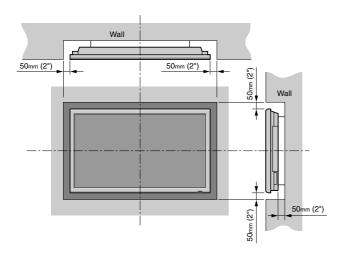
Product warranty does not cover damage caused by improper installation.

\* Use only the mounting kit or stand provided by manufacturer and listed under Options.



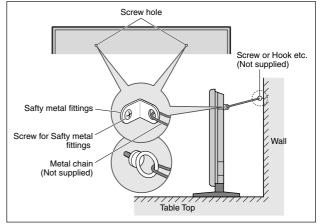
## Ventilation Requirements for enclosure mounting

To allow heat to disperse, leave space between surrounding objects as shown on the diagram below when installing.



## How to use the safety metal fittings and the screws for safety metal fittings

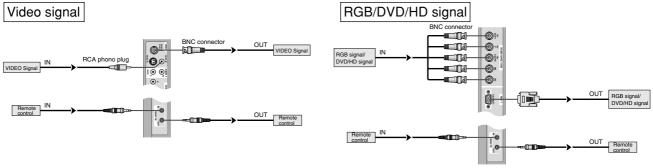
These are fittings for fastening the unit to a wall to prevent tipping due to external shock when using the stand (optional). Fasten the safety fittings to the holes in the back of the monitor using the safety fitting mount screws. \* Safety metal fittings will differ according to the model.



### **Creating a video wall**

With built-in matrix display capability, you can create a 4-25 video wall.

• Connect signal cables and remote cables as shown below.



#### Note:

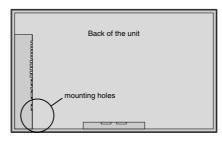
- 1. The VIDEO1 and RGB1 terminals can be used for either INPUT or OUTPUT.
- When LOOP OUT is ON, do not connect an OUTPUT signal from another unit, that will place an extraordinary load on the other unit and may damage it.
- 2. LOOP OUT can not be turned ON while signals are input to the RGB1 terminal.
- 3. LOOP OUT can be turned ON while signals are input to the RGB1 terminal if the POWER is switched ON.

#### Information

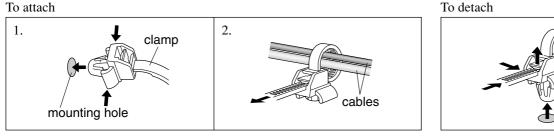
- To loop signals out to another plasma display, set the LOOP OUT to ON.
- To create a video wall, set the VIDEO WALL menu items properly.
- To connect monitors, please use a 1~2m (3.3~6.6 feet) BNC cable (any commercially available cable).
- If the image quality is poor, do not use the monitor's out terminal. Use a distribution amplifier (any commercially available distribution amplifier) to connect the split signals to the respective monitor INPUT terminals.
- Being used as a video wall function, maximaly 4-screen is rough-standard with lower than  $1024 \times 768$ , 60Hz signal.
- A distribution amplifier is particularly recommended when using 9-screen and over video wall.
- · From the second monitor onward, connections require a BNC-RCA conversion cable or connector, a mini D-Sub 15 pin cable-BNC ( $\times$ 5) cable or a conversion connector.

## **Cable Management**

Using the cable clamps provided with the plasma display, bundle at the back of the unit the signal and audio cables connected to the display.



To detach



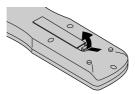
### Caution on when the plasma monitor is installed vertically

- Use the optional unit. Contact your store of purchase when installing.
- Rotate 90° clockwise as seen from the front when installing.
- After installing, check with the NEC logo mark as seen from the front.
- Be sure to set "OSM ANGLE" to "V" when using.
- \* Failure to heed the above cautions may lead to malfunction.

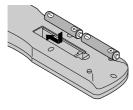
#### How to use the remote control Battery Installation and Replacement

Insert the 2 "AAA" batteries, making sure to set them in with the proper polarity.

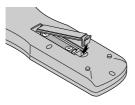
1. Press and open the cover.



2. Align the batteries according to the (+) and (-) indication inside the case.

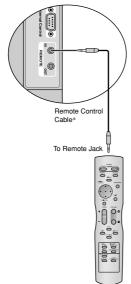


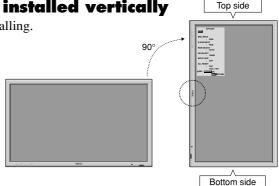
3.Replace the cover.



#### Using the wired remote control mode

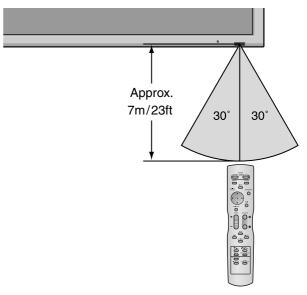
Connect the remote cable\* to the remote control's remote jack and the "REMOTE IN" terminal on the monitor. When the cable is connected, the mode automatically switches to wired remote control. When the wired remote control mode is used, the remote control can be operated even if no batteries are loaded.





#### **Operating Range**

- \* Use the remote control within a distance of about 7 m/ 23ft. from the front of the monitor's remote control sensor and at horizontal and vertical angles of up to approximately 30°.
- \* The remote control operation may not function if the monitor's remote control sensor is exposed to direct sunlight or strong artificial light, or if there is an obstacle between the sensor and the remote control.



#### Handling the remote control

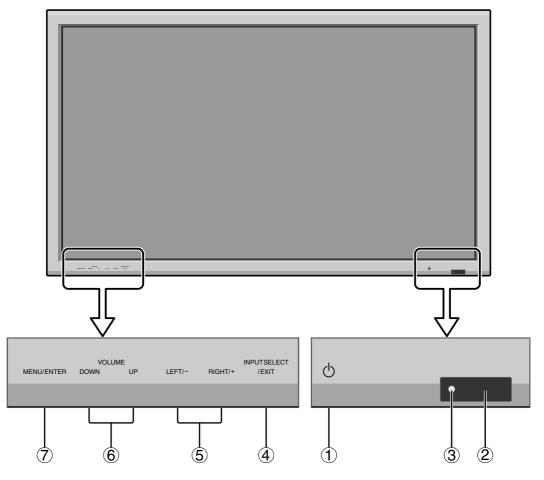
- Do not drop or mishandle the remote control.
- Do not get the remote control wet. If the remote control gets wet, wipe it dry immediately.
- Avoid heat and humidity.
- When not using the remote control for a long period, remove the batteries.
- Do not use new and old batteries together, or use different types together.
- Do not take apart the batteries, heat them, or throw them into a fire.
- When using the remote control in the wireless condition, be sure to unplug the remote cable from the REMOTE IN terminal on the monitor.

\* The 1/8 Stereo Mini cable must be purchased separately.

8

# **Part Names and Function**

### **Front View**



#### 1 Power

Turns the monitor's power on and off.

#### 2 Remote sensor window

Receives the signals from the remote control.

#### **③ POWER/STANDBY indicator**

When the power is on ..... Lights green. When the power is in the standby mode ... Lights red.

#### (4) INPUT SELECT / EXIT

Switches the input. The available inputs depend on the setting of "BNC INPUT", "RGB SELECT" and "DVI SET UP". Functions as the EXIT buttons in the On-Screen Menu (OSM) mode.

#### **(5)** LEFT/- and RIGHT/+

Enlarges or reduces the image. Functions as the CURSOR  $(\blacktriangleleft/\blacktriangleright)$  buttons in the On-Screen Menu (OSM) mode.

#### **6 VOLUME DOWN and UP**

Adjusts the volume. Functions as the CURSOR (▲/ ▼) buttons in the On-Screen Menu (OSM) mode.

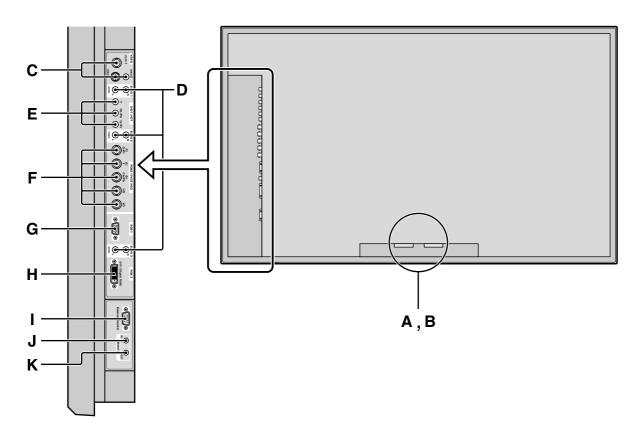
#### **7** MENU/ENTER

Sets the On-Screen Menu (OSM) mode and displays the main menu.

#### WARNING

The Power on/off switch does not disconnect the plasma display completely from the supply mains.

### **Rear View/ Terminal Board**



#### A AC IN

Connect the included power cord here.

#### **B** EXT SPEAKER L and R

Connect speakers (optional) here. Maintain the correct polarity. Connect the  $\bigoplus$  (positive) speaker wire to the  $\bigoplus$  EXT SPEAKER terminal and the  $\bigoplus$  (negative) speaker wire to the  $\bigoplus$  EXT SPEAKER terminal on both LEFT and RIGHT channels.

Please refer to your speaker's owner's manual.

#### C VIDEO1, 2, 3 (BNC, RCA, S-Video)

Connect VCR's, DVD's or Video Cameras, etc. here. VIDEO1 can be used for Input or Output (see page 7).

#### **D** AUDIO1, AUDIO2, AUDIO3

These are audio input terminals.

The input is selectable. Set which video image to allot them from the audio menu screen.

#### E DVD1/HD1

Connect DVD's, High Definition or Laser Discs, etc. here.

#### F RGB2/ DVD2/ HD2

RGB2: You can connect an analog RGB signal and the syncronization signal.

DVD2/ HD2: You can connect DVDs, High Definition sources, Laser Discs, etc. here.

This input can be set for use with an RGB or component source (see page 23).

#### G RGB1 (mini D-Sub 15pin)

Connect an analog RGB signal from a computer, etc. here. This input can be used for Input or Output. (see page 7)

#### H RGB3 (DVI 24pin)

Connect a digital signal (TMDS) from a source with a DVI output.

This input can be set for use with an RGB/PC3 (see page 28).

#### I EXTERNAL CONTROL

This terminal is used when operating and controlling the monitor externally (by external control).

#### **J** REMOTE IN

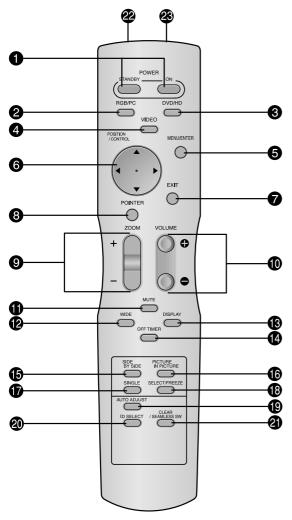
Connect the remote cable\* to the remote control's remote jack to obtain wired remote control.

#### K REMOTE OUT

Connect the remote cable\* to the REMOTE IN jack of the other display monitor to obtain wired remote control.

\* The 1/8 Stereo Mini cable must be purchased separately.

#### **Remote Control**



#### **1** POWER ON/STANDBY

Switches the power on/standby. (This does not operate when POWER/STANDBY indicator of the main unit is off.)

#### **2** RGB/PC

Press this button to select RGB/PC as the source. RGB/PC can also be selected using the INPUT SELECT button on the monitor.

#### 3 DVD/HD

Press this button to select DVD/HD as the source. DVD/HD can also be selected using the INPUT SELECT button on the monitor.

#### **4** VIDEO

Press this button to select VIDEO as the source.

VIDEO can also be selected using the INPUT SELECT button on the monitor.

#### **5** MENU/ENTER

Press this button to access the OSM controls. Press this button during the display of the main menu to go to the sub menu.

#### **6** CURSOR $(\blacktriangle / \blacktriangledown / \blacklozenge / \leftthreetimes)$

Use these buttons to select items or settings and to adjust settings or switch the display patterns.

#### **7** EXIT

Press this button to exit the OSM controls in the main menu. Press this button during the display of the sub menu to return to the previous menu.

### **8** POINTER

Press this button to display the pointer.

#### **9** ZOOM (+ /-)

Enlarges or reduces the image.

**WOLUME** (+ /-)

Adjusts the audio volume.

#### **1** MUTE

Mutes the audio.

#### **WIDE**

Automatically detects the signal and sets the aspect ratio. Wide button is not active for all signals.

#### **B** DISPLAY

Displays the source settings on the screen.

#### **()** OFF TIMER

Activates the off timer for the unit.

#### **(b** SIDE BY SIDE

Press this button to show a couple of pictures in the side-by-side mode.

#### **() PICTURE IN PICTURE**

Press this button to show a couple of pictures in the picture-in-picture mode.

#### **()** SINGLE

Cancels the split screen mode.

#### SELECT/FRREZE

Press this button to select the active picture in a split screen mode.

When the PIC FREEZE function is operating, this button can be used to display still images on the sub screen.

#### AUTO ADJUST

Press this button to adjust Fine Picture, Picture ADJ, Position, and Contrast automatically, or to switch the screen size to ZOOM mode automatically with the superimposed caption displayed fully only when the picture contains dark areas above and below the picture.

#### **1** ID SELECT

Set the ID number in the remote control. The remote control can then be used only for a display with the same ID number. When several displays are used together they can be controlled individually.

#### **2)** CLEAR/SEAMLESS SW

Clears the number set by the ID SELECT button. When the SEAMLESS SW function is operating, this button can be used to switch the input source quickly.

# Remote control signal transmitter

Transmits the remote control signals.

#### Remote Jack

Insert the plug of the remote cable (The 1/8 Stereo Mini cable) here when using the supplied remote control in the wired condition.

# **Basic Operations**

# POWER

### To turn the unit ON and OFF:

- 1. Plug the power cord into an active AC power outlet.
- 2. Press the Power button (on the unit). The monitor's POWER/STANDBY indicator turns red and the standby mode is set.
- 3. Press the POWER ON button (on the remote control) to turn on the unit.

The monitor's POWER/STANDBY indicator will light up (green) when the unit is on.

4. Press the POWER STANDBY button (on the remote control) or the Power button (on the unit) to turn off the unit. The monitor's POWER/STANDBY indicator turns red and the standby mode is set (only when turning off the unit with the remote control).

# VOLUME

## To adjust the sound volume:

- 1. Press and hold the VOLUME (+) button (on the remote control or the unit) to increase to the desired level.
- 2. Press and hold the VOLUME  $\bigcirc$  button (on the remote control or the unit) to decrease to the desired level.

# MUTE

### To mute the audio:

Press the MUTE button on the remote control to cancel the sound; press again to restore.

# DISPLAY

#### To check the settings:

- 1. The screen changes each time the DISPLAY button is pressed.
- 2. If the button is not pressed for approximately three seconds, the menu turns off.

## DIGITAL ZOOM

Digital zoom specifies the picture position and enlarges the picture.

1. (Be sure ZOOM NAV is off.)

```
Press the POINTER button to display the pointer. ( )
To change the size of the picture:
```

Press the ZOOM+ button and enlarge the picture.

The pointer will change to resemble a magnifying glass.  $(\mathbb{Q})$ 

A press of the ZOOM- button will reduce the picture and return it to its original size.

#### To change the picture position:

Select the position with the  $\blacktriangle \lor \blacklozenge \lor$  buttons.

2. Press the POINTER button to delete the pointer.

### **AUTO ADJUST**

#### To adjust the size or quality of the picture automatically:

Press the AUTO ADJUST button.

# Information

#### AUTO ADJUST ON setting

When RGB (still picture) input is selected: Fine Picture, Picture ADJ, Position, and Contrast will be adjusted automatically.

When RGB (motion picture), VIDEO, or Y/Pb/Pr (component) input is selected:

The screen size switches to ZOOM mode automatically with the superimposed caption displayed fully only when the picture contains dark areas above and below the picture.

#### **OFF TIMER** To set the off timer:

The off timer can be set to turn the power off after 30, 60, 90 or 120 minutes.

- 1. Press the OFF TIMER button to start the timer at 30 minutes.
- 2. Press the OFF TIMER button to the desired time.
- 3. The timer starts when the menu turns off.

$\textbf{30} \rightarrow \textbf{60} \rightarrow \textbf{90} \rightarrow \textbf{120} \rightarrow \textbf{0} \\ \neg$							
	OFF TIMER 30						

### To check the remaining time:

- 1. Once the off timer has been set, press the OFF TIMER button once.
- 2. The remaining time is displayed, then turns off after a few seconds.
- 3. When five minutes remain the remaining time appears until it reaches zero.

OFF TIMER 28

## To cancel the off timer:

- 1. Press the OFF TIMER button twice in a row.
- 2. The off timer is canceled.

OFF TIMER 0

#### Note:

After the power is turned off with the off timer ... A slight current is still supplied to the monitor. When you are leaving the room or do not plan to use the system for a long period of time, turn off the power of the monitor.

# **WIDE Operations**

### Wide Screen Operation (manual)

With this function, you can select one of six screen sizes.

### When viewing videos or digital video discs

- 1. Press the WIDE button on the remote control.
- 2. Within 3 seconds ...

Press the WIDE button again.

The screen size switches as follows:

 $\rightarrow$  Normal  $\rightarrow$  Full  $\rightarrow$  Stadium  $\rightarrow$  Zoom  $\rightarrow$  2.35:1  $\rightarrow$  14:9  $_{\frown}$ 

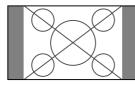
When a 720P or 1080I signal is input:

 $\mathsf{FULL}\leftrightarrow$  2.35:1

When displaying enhanced split screen:

 $\mathsf{NORMAL} \leftrightarrow \mathsf{FULL}$ 

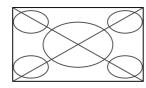
#### NORMAL size screen (4:3)



The normal size screen is displayed.

\* The picture has the same size as video pictures with a 4 : 3 aspect ratio.

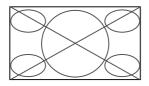
#### FULL size screen



The image is expanded in the horizontal direction.

\* Images compressed in the horizontal direction ("squeezed images") are expanded in the horizontal direction and displayed on the entire screen with correct linearity. (Normal images are expanded in the horizontal direction.)

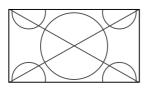
#### STADIUM size screen



The picture is expanded in the horizontal and vertical directions at different ratios.

\* Use this for watching normal video programs (4:3) with a wide screen.

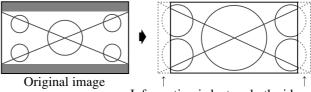
ZOOM size screen



The picture is expanded in the horizontal and vertical direction, maintaining the original proportions.

\* Use this for theater size (wide) movies, etc.

#### 2.35:1 size screen

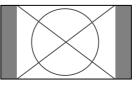


Information is lost on both sides.

The squeezed film image is expanded to fulfill the entire screen at a ratio of 2.35:1. Black bands do not appear at the top and bottom but information is lost on the left and right margins.

- This feature is available when the input signal is video, component (480I, 480P, 576I, 576P, 720P, 1080I) or RGB (525P or 625P signal from a scan converter).
- \* If black bands appear on the top and bottom in the full size screen, select the 2.35:1 size screen to avoid phosphor burnin.

#### 14:9 size screen



The image is displayed at a 14:9 aspect ratio.

\* This feature is available when the input signal is video, component (480I, 480P, 576I, 576P) or RGB (525P or 625P signal from a scan converter).

#### Note:

Do not allow the displayed in 4:3 mode for an extended period. This can cause a phosphor burn-in.

### Wide Screen Operation with Computer Signals

# Switch to the wide screen mode to expand the 4 : 3 image to fill the entire screen.

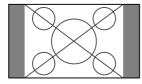
- 1. Press the WIDE button on the remote control.
- 2. Within 3 seconds ...

Press the WIDE button again. The screen size switches as follows:  $\rightarrow$  NORMAL  $\rightarrow$  FULL  $\rightarrow$  ZOOM  $\neg$ 

When displaying enhanced split screen:

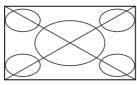
 $\mathsf{NORMAL} \leftrightarrow \mathsf{FULL}$ 

#### NORMAL size screen (4:3 or SXGA 5:4)



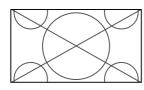
The picture has the same size as the normal computer image.

#### FULL size screen



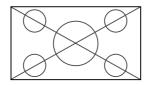
The image is expanded in the horizontal direction.

#### ZOOM size screen



When wide signals are input.

#### FULL size screen

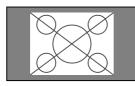


#### When "PICTURE SIZE" is set to "OFF"

\* This cannot be set in some models. "TRUE size" will not be displayed in such cases.

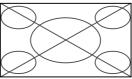
The screen size switches as follows:

TRUE size screen (VGA, SVGA 4:3)



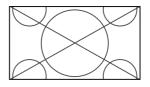
The image is true resolution.

# FULL size screen



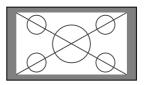
The image is expanded in the horizontal and vertical direction.

#### ZOOM size screen



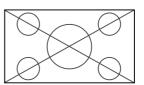
When wide signals are input.

TRUE



The image is true resolution.

FULL



# Information Supported resolution

See page 7 of Model Information for details on the display output of the various VESA signal standards supported by the monitor.

#### "PICTURE SIZE" setting

When the setting of "PICTURE SIZE" is OFF, the size of RGB-input pictures will be TRUE in place of NORMAL.

■ When 852 (848) dot  $\times$  480 line wide VGA\* signals with a vertical frequency of 60 Hz and horizontal frequency of 31.7 (31.0) kHz are input

Select an appropriate setting for RGB SELECT mode referring to the "Table of Signals Supported" on page 7 of Model Information.

\* "VGA", "SVGA" and "SXGA" are registered trademarks of IBM, Inc. of the United States.

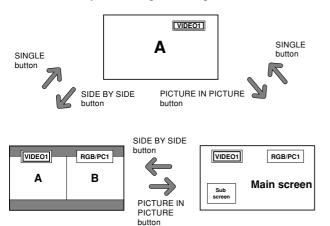
#### Note:

Do not allow the displayed in 4:3 mode for an extended period. This can cause a phosphor burn-in.

# **SPLIT SCREEN Operations**

# Showing a couple of pictures on the screen at the same time

- \* An RGB-input picture may not be displayed in these modes, depending on the input signal specifications.
- 1. Press the button to select a screen mode from among single mode, side-by-side, and picture-in-picture.



#### Note:

Picture A and B on the above screen are not always of the same height.

#### Information

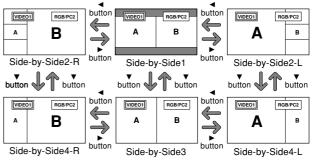
Split screen operations may not function depending on the combination of input signals. In the table below, " $\bigcirc$ " means Yes, " $\times$ " means No.

			Pictures displayed on the right/main screen (Select1)						
		VIDE01	VIDE02	VIDE03	HD/DVD1	HD/DVD2 RGB2	RGB/PC1	RGB3	
Pictures	VIDE01	×	×	×	0	0	0	0	
displayed on	VIDE02	×	×	×	0	0	0	0	
the left/sub	VIDE03	×	×	×	0	0	0	0	
screen	HD/DVD1	0	0	0	×	0	0	0	
(Select2)	HD/DVD2 RGB2	0	0	0	0	×	0	0	
	RGB/PC1	0	0	0	0	0	×	0	
	RGB3	0	0	0	0	0	0	×	

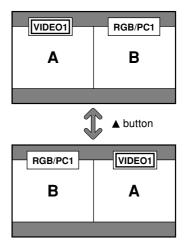
■ Split screen operations may not function depending on the type of the RGB signals.

## Operations in the Side-by-side mode

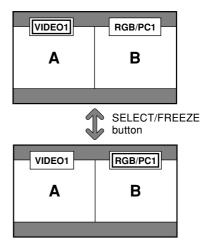
To change the picture size, press the cursor  $\blacktriangleleft \triangleright$  or  $\blacktriangledown$  button.



To swap the picture on the right and the left, press the cursor  $\blacktriangle$  button.

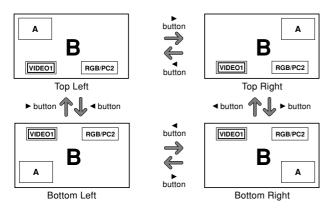


To make the desired picture active, press the SELECT/ FREEZE button.

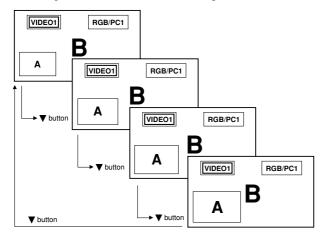


#### **Operations in the Picture-in-picture mode**

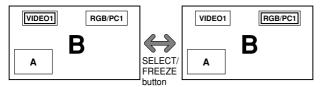
To move the position of the sub screen, press the cursor  $\blacktriangleleft$  or  $\triangleright$  button.



To change the size of the sub screen, press the  $\mathbf{\nabla}$  button.



To make the desired picture active, press the SELECT/ FREEZE button.



#### Selecting the input signals to be displayed

- 1. Press the SELECT/FREEZE button to make the desired picture active.
- Press the RGB/PC, VIDEO, or DVD/HD button. Each press of the button changes the selection of the input signal. The INPUT SELECT button on the monitor can also be

The INPUT SELECT button on the monitor can also be used to change the selection.

#### Zooming up pictures

- 1. Press the SELECT/FREEZE button to make the desired picture active.
- Use the POINTER button and the ZOOM+/- button to enlage the picture.
   For details, see "DIGITAL ZOOM" on page 12.

#### Adjusting the OSM controls

- 1. Press the SELECT/FREEZE button to make the desired picture active.
- 2. Press the MENU/ENTER button to display the MAIN MENU.
- Adjust the setting to your preference. For details, see "OSM (On Screen Menu) Controls" on page 17.

#### Note:

During enhanced split screen, some functions of OSM controls are not available.

# OSM (On Screen Menu) Controls

### **Menu Operations**

The OSM window is displayed with respect to the screen as shown on the diagram.

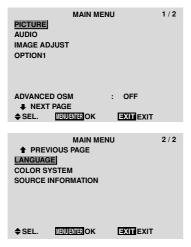
\* Depending on the screen's mode, the OSM may be displayed differently.

In the explanation, the OSM section is shown close up.

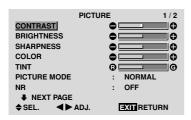


The following describes how to use the menus and the selected items.

1. Press the MENU/ENTER button on the remote control to display the MAIN MENU.



- 2. Press the cursor buttons ▲ ▼ on the remote control to highlight the menu you wish to enter.
- 3. Press the MENU/ENTER button on the remote control to select a sub menu or item.



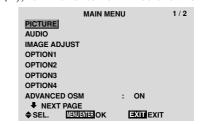
- 4. Adjust the level or change the setting of the selected item by using the cursor buttons ◀ ► on the remote control.
- 5. The adjustments or the settings that are stored in memory. The change is stored until you change it again.
- 6. Repeat steps 2-5 to adjust an additional item, or press the EXIT button on the remote control to return to the main menu.
- \* When adjusting using the bar at the bottom of the screen, press the ◀ or ► button within 5 seconds. If not, the current setting is set and the previous screen appears.

**Note:** The main menu disappears by pressing the EXIT button.

# Information

### Advanced menu mode

When "ADVANCED OSM" is set to "ON" in the main menu (1/2), full menu items will be shown.



# **Menu Tree**

:Shaded areas indicate the default value.

 $-\leftrightarrow +$ : Press the  $\blacktriangleleft$  or  $\blacktriangleright$  button to adjust. The default value is at the center.

:Menu items in a ruled box are available when the ADVANCED OSM is set to ON.

Main menu	Sub menu	Sub menu 2	Sub menu 3	Sub menu 4	RESET	REFERENCE
PICTURE	CONTRAST	-←→+ (0 <del>-</del> 72	)		YES	20
	BRIGHTNESS	$- \leftarrow \rightarrow + (0-64)$	.)		YES	20
	SHARPNESS	$- \leftarrow \rightarrow + (0-32)$			YES	20
	COLOR	$-\leftrightarrow +$ (0-64	, .)		YES	20
	TINT	R←→G (0–64)	,		YES	20
	PICTURE MODE	. ,	L/THEAT.1/THEAT.2/	DEFAULT	YES	20
	NR	OFF/NR-1/NR-2/			YES	20
	COLOR TEMP	LOW/MID LOW/			YES	20
	WHITE BALANCE	GAIN RED	$- \leftarrow \rightarrow + (0-70)$		YES	21
		GAIN GREEN	$- \leftarrow \rightarrow + (0-70)$		YES	21
		GAIN BLUE	$- \leftarrow \rightarrow + (0-70)$ $- \leftarrow \rightarrow + (0-70)$		YES	21
			· · · · ·			
		BIAS RED	$- \leftrightarrow + (0-70)$		YES	21
		BIAS GREEN	$- \leftrightarrow + (0-70)$		YES	21
		BIAS BLUE	$- \leftarrow \rightarrow + (0-70)$		YES	21
		RESET	OFF←→ON		YES	21
	GAMMA	1←→2←…→4			YES	21
	LOW TONE	$AUTO \leftarrow \rightarrow 1 \leftarrow \cdots$	·→3		YES	21
	COLOR TUNE	RED	Y←→M (0–64)		YES	21
		GREEN	C←→Y (0–64)		YES	21
		BLUE	M←→C (0–64)		YES	21
		YELLOW	$G \leftarrow \rightarrow R (0-64)$		YES	21
		MAGENTA	$R \leftarrow \rightarrow B (0-64)$		YES	21
		CYAN	B←→G (0–64)		YES	21
		RESET	OFF←→ON		YES	21
		NEOL 1				21
Main menu	Sub menu	Sub menu 2	Sub menu 3	Sub menu 4	RESET	REFERENCE
AUDIO	BASS	-←→+ (0-26	i)		YES	22
NODIO	TREBLE	$- \leftarrow \rightarrow + (0-26)$			YES	22
	BALANCE	L←→R (-22–+2	,		YES	22
	AUDIO INPUT1	`	<u>~)</u>			~~~
		VIDEO 1-3 / HD/	D\/D 1-2 / RGB 1-3		VES	22
			DVD 1-2 / RGB 1-3		YES	22
	AUDIO INPUT2	VIDEO 1-3 / HD/	DVD 1-2 / RGB 1-3		YES	22
		VIDEO 1-3 / HD/				
Main menu	AUDIO INPUT2	VIDEO 1-3 / HD/	DVD 1-2 / RGB 1-3	Sub menu 4	YES	22
	AUDIO INPUT2 AUDIO INPUT3 Sub menu	VIDEO 1-3 / HD/ VIDEO 1-3 / HD/ Sub menu 2	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3		YES YES	22 22 REFERENCE
<b>Main menu</b> IMAGE ADJUST	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE	VIDEO 1-3 / HD/ VIDEO 1-3 / HD/ Sub menu 2 NORMAL/FULL/S	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3		YES YES RESET	22 22 REFERENCE 22
	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION	VIDEO 1-3 / HD/ VIDEO 1-3 / HD/ Sub menu 2 NORMAL/FULL/S $-\leftarrow \rightarrow + (-64-$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64)		YES YES RESET — YES	22 22 <b>REFERENCE</b> 22 22
	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION	VIDEO 1-3 / HD/ VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128))$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127)		YES YES RESET — YES YES	22 22 REFERENCE 22 22 22 22
	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT	VIDEO 1-3 / HD/ VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (0-64 \leftarrow \rightarrow + (0-64 \leftarrow - + (0-64 + (0-64 + (0-64 + (0-64 + (0-64 + (0-64 + (0-64 + (0-64 + + + + (0-64 + + + (0-64 + + + + + + + +$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) )		YES YES RESET — YES YES YES	22 22 <b>REFERENCE</b> 22 22 22 22 22
	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH	VIDEO 1-3 / HD/VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (0-64 - \leftarrow + (0-64 - \leftarrow + (0-64 - \leftarrow + + (0-64 - \leftarrow + + (0-64 - + (0-64 - \leftarrow + (0-64 - \leftarrow + + (0-64 - \leftarrow + + (0-64 - \leftarrow + (0-64 - + (0-64 - + (0-64 - + (0-64 - + (0-64 - + (0-64 - + (0-64 - + (0-64 - + (0-64 - + (0-64 - + (0-64 - + (0-64 - + (0-64 - + (0-64 - + (0$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) )		YES YES RESET  YES YES YES YES YES	22 22 <b>REFERENCE</b> 22 22 22 22 22 22 22
	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE	VIDEO 1-3 / HD/VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128))$ $- \leftarrow \rightarrow + (-128)$ $- \leftarrow \rightarrow + (0-64)$ $- \leftarrow \rightarrow$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) )		YES YES RESET  YES YES YES YES YES NO	22 22 <b>REFERENCE</b> 22 22 22 22 22 22 22 22 22
	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE FINE PICTURE*1	VIDEO 1-3 / HD/VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (0-64 - \leftarrow + (0-64 - \leftarrow + (0-64 - \leftarrow + + (0-64 - \leftarrow + + (0-64 - \leftarrow + + (0-64 - + (0-64 - \leftarrow + + (0-64 - + + + (0-64 - + + + (0-64 - + + + + + (0-64 - + + + + + + + + + + + + + + + + + + $	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) ) 64)		YES YES RESET YES YES YES YES YES NO YES	22 22 <b>REFERENCE</b> 22 22 22 22 22 22 22 22 22 22 22 22 22
	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE	VIDEO 1-3 / HD/VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128))$ $- \leftarrow \rightarrow + (-128)$ $- \leftarrow \rightarrow + (0-64)$ $- \leftarrow \rightarrow$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) ) 64)		YES YES RESET  YES YES YES YES YES NO	22 22 <b>REFERENCE</b> 22 22 22 22 22 22 22 22 22
	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE FINE PICTURE*1	VIDEO 1-3 / HD/VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (0-64 - \leftarrow + (0-64 - \leftarrow + (0-64 - \leftarrow + + (0-64 - \leftarrow + + (0-64 - \leftarrow + + (0-64 - + (0-64 - \leftarrow + + (0-64 - + + + (0-64 - + + + (0-64 - + + + + + (0-64 - + + + + + + + + + + + + + + + + + + $	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) ) 64)		YES YES RESET YES YES YES YES YES NO YES	22 22 <b>REFERENCE</b> 22 22 22 22 22 22 22 22 22 22 22 22 22
IMAGE ADJUST	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE FINE PICTURE*1 PICTURE ADJ.*1	VIDEO 1-3 / HD/ VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 - \leftarrow \rightarrow + (-128)$ $- \leftarrow \rightarrow + (0-64)$ $- \leftarrow \rightarrow + (0-64)$ $- \leftarrow \rightarrow + (0-64)$ OFF ← $\rightarrow 0N^{*2}$ $- \leftarrow \rightarrow + *^2 (0-64)$ $- \leftarrow \rightarrow + *^2 (0-64)$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) 64) 128)	5:1/14:9	YES YES RESET  YES YES YES YES NO YES YES	22 22 <b>REFERENCE</b> 22 22 22 22 22 22 22 22 22 22 22 22 22
IMAGE ADJUST Main menu	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE FINE PICTURE*1 PICTURE ADJ.*1 Sub menu	VIDEO 1-3 / HD/           VIDEO 1-3 / HD/           Sub menu 2           NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128 \rightarrow + (-128 \leftarrow \rightarrow + (-128 \leftarrow \rightarrow + (-128 \leftarrow \rightarrow + (-128 \rightarrow + (-128 \leftarrow \rightarrow + (-128 \leftarrow \rightarrow + (-128 \rightarrow +$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) 64) 128) Sub menu 3	5:1/14:9	YES YES RESET YES YES YES YES NO YES YES YES RESET	22 22 <b>REFERENCE</b> 22 22 22 22 22 22 22 22 22 22 22 22 22
IMAGE ADJUST Main menu	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE FINE PICTURE*1 PICTURE ADJ.*1 Sub menu	VIDEO 1-3 / HD/           VIDEO 1-3 / HD/           Sub menu 2           NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128 \rightarrow + (-128 \leftarrow \rightarrow + (-128 \rightarrow + \rightarrow + (-128 \rightarrow + (-128 \rightarrow + \rightarrow + (-128 - \rightarrow$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) 64) 128) Sub menu 3 OFF←→ON 1←···→6	5:1/14:9	YES YES RESET YES YES YES NO YES YES YES YES YES	22 22 <b>REFERENCE</b> 22 22 22 22 22 22 22 22 22 22 22 22 22
IMAGE ADJUST Main menu	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE FINE PICTURE*1 PICTURE ADJ.*1 Sub menu	VIDEO 1-3 / HD/           VIDEO 1-3 / HD/           Sub menu 2           NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128 \leftarrow \rightarrow + (-128 \leftarrow \rightarrow + (-128 \leftarrow \rightarrow + (0-64 \leftarrow \rightarrow + (0-64 \leftarrow \rightarrow + (0-64 \leftarrow \rightarrow + (0-64 \leftarrow \rightarrow + *2 (0-64 \leftarrow \rightarrow + + + + + + - \leftarrow \rightarrow + + + + + + \rightarrow + + + + + + + +$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) 64) 128) Sub menu 3 OFF $\leftarrow \rightarrow ON$ 1 $\leftarrow \rightarrow \lor$	5:1/14:9	YES YES <b>RESET</b>  YES YES YES NO YES YES YES YES YES YES	22 22 22 22 22 22 22 22 22 22 22 22 22
IMAGE ADJUST Main menu	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE FINE PICTURE*1 PICTURE ADJ.*1 Sub menu	VIDEO 1-3 / HD/           VIDEO 1-3 / HD/           VIDEO 1-3 / HD/           Sub menu 2           NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128 \leftarrow \rightarrow + (-128 \leftarrow \rightarrow + (0-64 \leftarrow \rightarrow + (0-64 \leftarrow \rightarrow + (0-64 \leftarrow \rightarrow + (0-64 \leftarrow \rightarrow + *2 (0-64 \leftarrow \rightarrow + + *2 (0-64 \leftarrow \rightarrow + + + + + + + + + + + + + + + + + +$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) 64) 128) Sub menu 3 OFF $\leftarrow \rightarrow ON$ 1 $\leftarrow \rightarrow \lor$ OFF $\leftarrow \rightarrow ON$ 1 $\leftarrow \rightarrow \lor$ OFF $\leftarrow \rightarrow ON$	5:1/14:9 Sub menu 4	YES YES RESET YES YES YES YES YES YES YES YES YES YES	22 22 22 22 22 22 22 22 22 22 22 22 22
IMAGE ADJUST Main menu	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE FINE PICTURE*1 PICTURE ADJ.*1 Sub menu OSM	VIDEO 1-3 / HD/VIDEO 1-3 / HD/VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (0-64 - \leftarrow \rightarrow + *2 (0-64 - \leftarrow \rightarrow + + *2 (0-64 - \leftarrow \rightarrow + + *2 (0-64 - \leftarrow \rightarrow + + + + + + + + + + + + + + + + + +$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) 64) 128) Sub menu 3 OFF $\leftarrow \rightarrow ON$ 1 $\leftarrow \rightarrow \lor ON$ H $\leftarrow \rightarrow \lor ON$ LOW $\leftarrow \rightarrow NORM/$	5:1/14:9 Sub menu 4	YES YES RESET YES YES YES YES NO YES YES YES YES YES YES YES YES YES	22 22 22 22 22 22 22 22 22 22 22 22 22
IMAGE ADJUST Main menu	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE FINE PICTURE*1 PICTURE ADJ.*1 Sub menu OSM BNC INPUT	VIDEO 1-3 / HD/VIDEO 1-3 / HD/VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 - \leftarrow \rightarrow + (-128)$ $- \leftarrow \rightarrow + (0-64)$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (2, 0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + *^2$ (0-64)OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + *^2$ (0-64)OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + *^2$ (0-64)OFF $\leftarrow \rightarrow 0N^{+2}$ OSM MELLOSM ANGLEOSM ORBITEROSM CONTRASTRGB $\leftarrow \rightarrow COMP$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) 64) 128) Sub menu 3 OFF $\leftarrow \rightarrow ON$ 1 $\leftarrow \rightarrow \lor ON$ H $\leftarrow \rightarrow \lor ON$ LOW $\leftarrow \rightarrow NORM/$	5:1/14:9 Sub menu 4	YES YES RESET YES YES YES YES YES YES YES YES YES YES	22 22 22 22 22 22 22 22 22 22 22 22 22
IMAGE ADJUST Main menu	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE FINE PICTURE*1 PICTURE ADJ.*1 Sub menu OSM BNC INPUT D-SUB INPUT	VIDEO 1-3 / HD/VIDEO 1-3 / HD/VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 - \leftarrow \rightarrow + (-128)$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ OSM MELEOSM ANGLEOSM ORBITEROSM CONTRASTRGB $\leftarrow \rightarrow COMP$ RGB	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) 64) 128) Sub menu 3 OFF $\leftarrow \rightarrow ON$ 1 $\leftarrow \rightarrow \lor ON$ H $\leftarrow \rightarrow \lor V$ OFF $\leftarrow \rightarrow ON$ LOW $\leftarrow \rightarrow NORM/$	5:1/14:9 Sub menu 4	YES YES YES YES YES YES YES NO YES YES YES YES YES YES YES YES YES YES	22 22 22 22 22 22 22 22 22 22 22 22 22
IMAGE ADJUST Main menu	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE FINE PICTURE*1 PICTURE ADJ.*1 Sub menu OSM BNC INPUT D-SUB INPUT RGB SELECT	VIDEO 1-3 / HD/VIDEO 1-3 / HD/VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (0-64 - \leftarrow \rightarrow + *^2 (0-64 - \leftarrow \rightarrow + + *^2 (0-64 - \leftarrow \rightarrow + + *^2 (0-64 - \leftarrow \rightarrow + + + + + + + + + + + + + + + + + +$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) 64) 128) Sub menu 3 OFF $\leftarrow \rightarrow ON$ 1 $\leftarrow \rightarrow \lor ON$ 1 $\leftarrow \rightarrow \lor ON$ TION/WIDE1/WIDE2	5:1/14:9 Sub menu 4	YES YES YES YES YES YES YES NO YES YES YES YES YES YES YES YES YES YES	22 22 22 22 22 22 22 22 22 22 22 22 22
IMAGE ADJUST Main menu	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE FINE PICTURE*1 PICTURE ADJ.*1 Sub menu OSM BNC INPUT D-SUB INPUT RGB SELECT HD SELECT	VIDEO 1-3 / HD/VIDEO 1-3 / HD/VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 - \leftarrow \rightarrow + (-128)$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ $- \leftarrow \rightarrow + (0-64)$ OFF $\leftarrow \rightarrow 0N^{+2}$ OSM ADJ.OSM ADJ.OSM ANGLEOSM ORBITEROSM CONTRASTRGBAUTO/STILL/MO1080B/10351/10	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) 64) 128) Sub menu 3 OFF $\leftarrow \rightarrow ON$ 1 $\leftarrow \rightarrow \lor ON$ 1 $\leftarrow \rightarrow \lor ON$ TION/WIDE1/WIDE2	5:1/14:9 Sub menu 4	YES YES YES YES YES YES YES YES YES YE	22 22 22 22 22 22 22 22 22 22 22 22 22
IMAGE ADJUST Main menu	AUDIO INPUT2 AUDIO INPUT3 Sub menu ASPECT MODE V-POSITION H-POSITION V-HEIGHT H-WIDTH AUTO PICTURE FINE PICTURE*1 PICTURE ADJ.*1 Sub menu OSM BNC INPUT D-SUB INPUT RGB SELECT	VIDEO 1-3 / HD/VIDEO 1-3 / HD/VIDEO 1-3 / HD/Sub menu 2NORMAL/FULL/S $- \leftarrow \rightarrow + (-64 \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (-128 - \leftarrow \rightarrow + (0-64 - \leftarrow \rightarrow + *^2 (0-64 - \leftarrow \rightarrow + + *^2 (0-64 - \leftarrow \rightarrow + + *^2 (0-64 - \leftarrow \rightarrow + + + + + + + + + + + + + + + + + +$	DVD 1-2 / RGB 1-3 DVD 1-2 / RGB 1-3 Sub menu 3 STADIUM/ZOOM/2.3 +64) -+127) ) 64) 128) Sub menu 3 OFF $\leftarrow \rightarrow ON$ 1 $\leftarrow \rightarrow \lor ON$ 1 $\leftarrow \rightarrow \lor ON$ TION/WIDE1/WIDE2	5:1/14:9 Sub menu 4	YES YES YES YES YES YES YES NO YES YES YES YES YES YES YES YES YES YES	22 22 22 22 22 22 22 22 22 22 22 22 22

Main menu	Sub menu	Sub menu 2	Sub menu 3	Sub menu 4	RESET	REFERENCE
OPTION2	PWR. MGT.	OFF←→ON			YES	25
	CINEMA MODE	OFF←→ON			YES	25
	LONG LIFE	PLE	AUTO/LOCK 1/LO	DCK 2/LOCK 3	YES	25
		ORBITER	AUTO 1		YES	26
			AUTO 2		YES	26
			MANUAL	H-DOT/V-LINE/TIME	YES	26
			OFF		YES	26
		INVERSE	OFF		YES	20
		INVERSE				
			ON	WORKING TIME/WAITING TIME	YES	26
			WHITE		YES	26
		SCREEN WIPER	OFF		YES	27
			ON	WORKING TIME/WAITING TIME/SPEED	YES	27
		SOFT FOCUS	OFF/1/2/3/4		YES	27
	GRAY LEVEL	0←…→3←…→	15		YES	27
	S1/S2	$AUTO \leftarrow \rightarrow OFF$			YES	28
	PICTURE SIZE	OFF←→ON			YES	28
	DVI SET UP	PLUG/PLAY	PC←→STB/DVD		NO	28
	DVIOLIOI	BLACK LEVEL	LOW←→HIGH		NO	28
		OFF←→CC1~4←			YES	28
	CLOSECAPTION					
	CAPTION CONT	LOW←→NORMA	4L		YES	28
Main menu	Sub menu	Sub menu 2	Sub menu 3	Sub menu 4	RESET	REFERENCE
OPTION3	TIMER	PRESENT TIME	DAYLIGHT SAIVING TIN	IE OFF←→ON	NO	29
			DAY/HOUR/MINU		NO	29
		PROGRAM	OFF		YES	29
		THOUHAM	ON	DATE/ON/OFF(HOUR, MINUTE)/INPUT/FUNCTION	YES	29
			OFF			29 30
		MULTI REPEAT			YES	
			ON	MULTI MODE/WORK TIME/INPUT MODE	YES	30
	PWR. ON MODE		DEO 1-3 / HD/DVD ·	1-2 / RGB 1-3	YES	30
	CONTROL LOCK	OFF←→ON			YES	30
	IR REMOTE	OFF←→ON			YES	31
	LOOP OUT	$OFF \leftarrow \rightarrow ON$			YES	31
	ID NUMBER	ALL←→1←···÷	256		YES	31
	VIDEO WALL	DIVIDER	OFF/1/4/9		YES	32
		POSITION		lo.7←···→No.15/No.16←···→No.31/No.32←···→No.56	_	32
		DISP. MODE	SPLIT←→BLAN		YES	32
		AUTO ID	OFF←→ON		YES	32
		IMAGE ADJUST		NORMAL/FULL/STADIUM/ZOOM/2.35:1/14:9		
		IIVIAGE ADJUST	ASPECT MODE			33
			V-POSITION	$- \leftarrow \rightarrow + (-64 - + 64)$	YES	33
			H-POSITION	$- \leftarrow \rightarrow + (-128 - +127)$	YES	33
			V-HEIGHT	$- \leftarrow \rightarrow + (0-64)$	YES	33
			H-WIDTH	$- \leftarrow \rightarrow + (0-64)$	YES	33
			AUTO PICTURE	$OFF \leftarrow \rightarrow ON^{*2}$	NO	33
			FINE PICTURE*1	$- \leftarrow \rightarrow + 2$ (0-64)	YES	33
			PICTURE ADJ.*1	$- \leftarrow \rightarrow + 2$ (0–128)	YES	33
		P. ON DELAY	OFF/ON/MODE1/	MODE2	YES	33
		PLE LINK	OFF←→ON		YES	33
		REPEAT TIMER	OFF		YES	34
			ON	DIVIDER/SOURCE/WORK TIME	YES	34
Main menu	Sub menu	Sub menu 2	Sub menu 3	Sub menu 4	RESET	REFERENCE
OPTION4	SUB. P DETECT	OFF←→AUTO			YES	34
	ZOOM NAV		-→BTM LFT←→B	TM RGT $\leftarrow \rightarrow$ TOP RGT $\leftarrow \rightarrow$ TOP LFT	YES	34
	PIC FREEZE			TM LFT $\leftarrow \rightarrow$ BTM RGT $\leftarrow \rightarrow$ TOP RGT $\leftarrow \rightarrow$ TOP LFT	YES	35
	SEAMLESS SW	OFF			YES	35
	OLAWILLOO OW	ON	SELECT1/SELEC	<b>F</b> 2	YES	35
			JLLLUI I/JELEU	12	IEO	30
Main menu	Sub menu	Sub menu 2	Sub menu 3	Sub menu 4	RESET	REFERENCE
mann monu	ous menu		oun menu o	ous monu 4	ILJEI	<b>NELLENENGE</b>

Main menu	Sub menu	Sub menu 2	Sub menu 3	Sub menu 4	RESET	REFERENCE
ADVANCED OSM	OFF←→ON				YES	36
LANGUAGE	ENGLISH/DEUTSCI	H/FRANÇAIS/ESPAÑC	L/ITALIANO/SVEN	SKA/中文/РУССКИЙ	NO	36
COLOR SYSTEM	AUTO/3.58NTSC/4	43 NTSC/PAL/PAL 60	)/PAL-N/PAL-M/SE	CAM	NO	36
SOURCE INFORMATION	—				—	36

\*1 Only when AUTO PICTURE is OFF\*2 RGB/PC only

#### Information Restoring the factory default settings

Select "ALL RESET" under the OPTION1 menu. Note that this also restores other settings to the factory defaults.

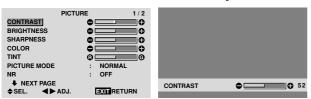
# **Picture Settings Menu**

#### Adjusting the picture

The contrast, brightness, sharpness, color and tint can be adjusted as desired.

Example: Adjusting the contrast

On "CONTRAST" of "PICTURE" menu, adjust the contrast.



**Note:** If "CAN NOT ADJUST" appears ... When trying to enter the PICTURE submenu, make sure PICTURE MODE is not set to DEFAULT.

#### Information

#### Picture adjustment screen

CONTRAST: Changes the picture's white level. BRIGHTNESS: Changes the picture's black level. SHARPNESS: Changes the picture's sharpness. Adjusts picture detail of VIDEO display.

COLOR: Changes the color density.

TINT: Changes the picture's tint. Adjust for natural colored skin, background, etc.

#### Adjusting the computer image

Only the contrast and brightness can be adjusted when a computer signal is connected.

#### Restoring the factory default settings

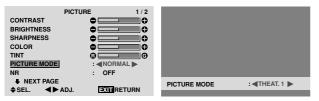
Select "DEFAULT" under the "PICTURE MODE" settings.

# Setting the picture mode according to the brightness of the room

There are four picture modes that can be used effectively according to the environment in which you are viewing the display.

Example: Setting the "THEAT. 1" mode

On "PICTURE MODE" of "PICTURE" menu, select "THEAT. 1".



#### Information

#### Types of picture modes

THEAT. 1, 2: Set this mode when watching video in a dark room.

This mode provides darker, finer pictures, like the screen in movie theaters.

For a darker image, select THEAT. 2.

NORMAL: Set this mode when watching video in a bright room.

This mode provides dynamic pictures with distinct differences between light and dark sections.

BRIGHT: This mode provides brighter pictures than NORMAL.

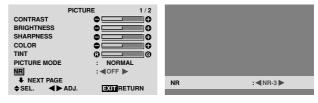
**DEFAULT**: Use this to reset the picture to the factory default settings.

#### Reducing noise in the picture

Use these settings if the picture has noise due to poor reception or when playing video tapes on which the picture quality is poor.

Example: Setting "NR-3"

On "NR" of "PICTURE" menu, select "NR-3".



#### Information

#### NR

- \* "NR" stands for Noise Reduction.
- \* This function reduces noise in the picture.

#### ■ Types of noise reduction

There are three types of noise reduction. Each has a different level of noise reduction.

The effect becomes stronger as the number increases (in the order NR-1  $\rightarrow$  NR-2  $\rightarrow$  NR-3).

OFF: Turns the noise reduction function off.

#### Setting the color temperature

Use this procedure to set color tone produced by the plasma display.

Example: Setting "HIGH"

On "COLOR TEMP." of "PICTURE" menu, select "HIGH".



#### Information

#### Setting the color temperature

LOW: Redder MID LOW: Slightly red MID: Standard (slightly bluer) HIGH: Bluer

#### Adjusting the color to the desired level

Use this procedure to adjust the white balance for each color temperature to achieve the desired color quality.

Example: Adjusting the "GAIN RED" of "HIGH" color temperature

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "COLOR TEMP." of "PICTURE" menu, select "HIGH", then press the MENU/ENTER button.

The "WHITE BALANCE" screen appears.

On "GAIN RED", adjust the white balance.

WHITE BALANCE COLOR TEMP. HIGH	
GAIN RED GAIN GREEN	
BIAS RED DESCRIPTION OF THE DESC	
BIAS BLUE	
RESET : OFF	GAIN RED • 70
♦SEL. ◀►ADJ. EXITRETURN	

#### Information

#### Adjusting the white balance

GAIN R/G/B: White balance adjustment for white level BIAS R/G/B: White balance adjustment for black level RESET: Resets settings to the factory default values. Use ◀ and ► buttons to select "ON", then press the MENU/ENTER button.

#### Restoring the factory default settings

Select "RESET" under the WHITE BALANCE menu.

#### Changing the Gamma Curve

This feature adjusts the brightness of the midtone areas while keeping shadows and highlights unchanged.

#### Example: Setting "3"

Set "ADVANCED OSM" to "ON" in the MAIN MENU (1/2), then perform the following operations. On "GAMMA" of "PICTURE" menu, select "3".

on GAMIMA of FICTORE menu, select 5.



# Information GAMMA settings

The picture becomes darker as the number increases (in the sequence of 1, 2, 3, 4).

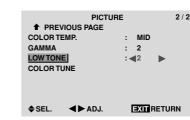
#### Making the Low Tone adjustments

This feature allows more detailed tone to be reproduced especially in the dark area.

Example: Setting "2"

Set "ADVANCED OSM" to "ON" in the MAIN MENU (1/2), then perform the following operations.

On "LOW TONE" of "PICTURE" menu, select "2".



# Information LOW TONE settings

AUTO: Will automatically appraise the picture and make adjustments.

Will apply the dither method suitable for still pictures.
 Will apply the dither method suitable for motion

pictures.

**3**: Will apply the error diffusion method.

#### Adjusting the colors

Use this procedure to adjust hue and color density for red, green, blue, yellow, magenta and cyan.

You can accentuate the green color of trees, the blue of the sky, etc.

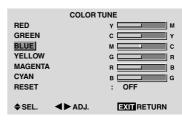
Example: Adjusting the color tune for blue

Set "ADVANCED OSM" to "ON" in the MAIN MENU (1/2), then perform the following operations.

On "PICTURE" menu, select "COLOR TUNE", then press the MENU/ENTER button.

The "COLOR TUNE" screen appears.

On "BLUE" of "COLOR TUNE", adjust the color tune.



# Information COLOR TUNE settings

RED: Makes red's adjustment GREEN: Makes green's adjustment BLUE: Makes blue's adjustment YELLOW: Makes yellow's adjustment MAGENTA: Makes magenta's adjustment CYAN: Makes cyan's adjustment RESET: Resets settings to the factory default value. Use ◀ and ▶ buttons to select "ON", then press the MENU/ENTER button.

#### Audio Settings Menu Adjusting the treble, bass and left/right balance and audio input select

The treble, bass and left/right balance can be adjusted to suit your tastes.

Example: Adjusting the bass

On "BASS" of "AUDIO" menu, adjust the bass.



**Note :** If "CAN NOT ADJUST" appears... Set "AUDIO INPUT" on the AUDIO menu correctly.

#### Information

#### Audio settings menu

BASS: Controls the level of low frequency sound. TREBLE: Controls the level of high frequency sound. BALANCE: Controls the balance of the left and right channels.

#### Setting the allocation of the audio connectors

Setting the AUDIO 1, 2, and 3 connectors to the desired input.

Example: Setting "AUDIO INPUT1" to "VIDEO 2"

On "AUDIO INPUT1" of "AUDIO" menu, select "VIDEO2".

The available sources depend on the settings of input.



# Information

#### AUDIO INPUT

A single audio input cannot be selected as the audio channel for more than one input terminal.

## Image Adjust Settings Menu

#### Adjusting the Position, Size, Fine Picture, Picture Adj

The position of the image can be adjusted and flickering of the image can be corrected.

Example: Adjusting the vertical position in the normal mode

On "V-POSITION" of "IMAGE ADJUST" menu, adjust the position.

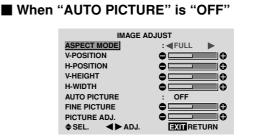
The mode switches as follows each time the  $\blacktriangleleft$  or  $\triangleright$  button is pressed:

#### $\textbf{NORMAL} \leftrightarrow \textbf{FULL}$

- \* The mode can also be switched by pressing the WIDE button on the remote control.
- \* The settings on the IMAGE ADJUST menu are not preset at the factory.

IMAGE A	DJUST		
ASPECT MODE	: NORMAL		
V-POSITION	•		
H-POSITION	•		
V-HEIGHT	•		
H-WIDTH	•		
AUTO PICTURE	: OFF		
FINE PICTURE	0		
PICTURE ADJ.	•	V-POSITION	<b>0 0</b> +64
♦SEL. ◀►ADJ.	EXITRETURN	TT COMINGI	•

#### Information



When Auto Picture is off, the Fine Picture and the Picture ADJ. items are displayed so that you can adjust them.

#### Adjusting the Auto Picture

ON: The Picture ADJ., Fine Picture and Position adjustments are made automatically.

Not available for digital ZOOM.

OFF: The Picture ADJ., Fine Picture and Position adjustments are made manually.

\* If FINE PICTURE can't be adjusted, set Auto Picture to OFF and adjust manually.

#### Adjusting the position of the image

V-POSITION: Adjusts the vertical position of the image.

H-POSITION: Adjusts the horizontal position of the image.

V-HEIGHT: Adjusts the vertical size of the image. (Except for STADIUM mode)

H-WIDTH: Adjusts the horizontal size of the image. (Except for STADIUM mode)

FINE PICTURE\*: Adjusts for flickering.

PICTURE ADJ.\*: Adjusts for striped patterns on the image.

- \* The Picture ADJ. and Fine Picture features are available only when the "Auto Picture" is off.
- \* The AUTO PICTURE, FINE PICTURE and PICTURE ADJ. are available only for RGB signals. But, these features are not available for moving pictures on VIDEO, HD/DVD or RGB.

#### Option 1 Settings Menu Setting the on-screen menu

This sets the position of the menu, the display format (horizontal or vertical) etc.

Example: Turning the DISPLAY OSM off

On "OPTION1" menu, select "OSM", then press the MENU/ ENTER button.

The "OSM" menu appears.

On "DISPLAY OSM" of "OSM" menu, select "OFF".



#### Information

#### DISPLAY OSM settings

ON: The on-screen menu appears.

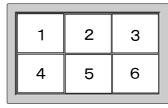
OFF: The on-screen menu does not appear.

If you press the DISPLAY button on the remote control for more than 3 seconds the main menu will appear and can be set (although it is not ON).

#### OSM ADJUST settings

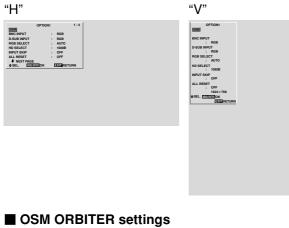
Adjusts the position of the menu when it appears on the screen.

The position can be set between 1 to 6.



#### OSM ANGLE settings

Sets the display format (landscape "H" or portrait "V"). When the unit is installed vertically set the OSM ANGLE at "V".



ON: The position of the menu will be shifted by eight dots each time OSM is displayed.

OFF: OSM will be displayed at the same position.

#### OSM CONTRAST settings

NORMAL: OSM brightness is set to normal.

LOW: OSM brightness is set to lower.

#### Setting the BNC connectors

Select whether to set the input of the 5 BNC connectors to RGB and component.

Example: Set the BNC INPUT mode to "COMP."

On "BNC INPUT" of "OPTION1" menu, select "COMP.".

OPTIO	N1 1/4
OSM	
BNC INPUT	: COMP.
D-SUB INPUT	: RGB
RGB SELECT	: AUTO
HD SELECT	: 1080B
INPUT SKIP	: OFF
ALL RESET	: OFF
NEXT PAGE	
♦SEL. ◀►ADJ.	EXIT RETURN

# Information BNC INPUT Settings

RGB: Use the 5BNC terminals for RGB input. COMP: Use the 3BNC terminals for component input.

# Checking the signal being transmitted to RGB1 terminal

Use this to confirm the signal being transmitted to the RGB1 terminal.

It is set to RGB and can not be adjusted.

0	PTION1		1/4
OSM			
BNC INPUT	:	RGB	
D-SUB INPUT	:	RGB	
RGB SELECT	:	AUTO	
HD SELECT	:	1080B	
INPUT SKIP	:	OFF	
ALL RESET	:	OFF	
NEXT PAGE			
CAN NOT ADJUST			

# Setting a computer image to the correct RGB select screen

With the computer image, select the RGB Select mode for a moving image such as (video) mode, wide mode or digital broadcast.

Example: Setting the "RGB SELECT" mode to "MOTION"

On "RGB SELECT" of "OPTION1" menu, select "MOTION".

OPTI	ON1	1/4
OSM		
BNC INPUT	: RGB	
D-SUB INPUT	: RGB	
RGB SELECT	: <b></b> MOTIO	N
HD SELECT	: 1080B	
INPUT SKIP	: OFF	
ALL RESET	: OFF	
NEXT PAGE		
♦SEL. ◀►ADJ.	EXIT RE	TURN

# Information IRGB SELECT modes

One of these 6 modes must be selected in order to display the following signals correctly.

AUTO: Select the suitable mode for the specifications of input signals as listed in the table "Computer input signals supported by this system" on page 7 of Model Information.

STILL: To display VESA standard signals. (Use this mode for a still image from a computer.)

MOTION: The video signal (from a scan converter) will be converted to RGB signals to make the picture more easily viewable. (Use this mode for a motion image from a computer.)

WIDE1: When an 852 dot  $\times$  480 line signal with a horizontal frequency of 31.7kHz is input, the image may be compressed horizontally. To prevent this, set RGB SELECT to WIDE1.

WIDE2: When an 848 dot  $\times$  480 line signal with a horizontal frequency of 31.0 kHz is input, the image may be compressed horizontally. To prevent this, set RGB SELECT to WIDE2.

WIDE3: When an 1920 dot  $\times$  1200 line signal with a horizontal frequency of 74.0 kHz is input, the image may be compressed horizontally. To prevent this, set RGB SELECT to WIDE3.

DTV: Set this mode when watching digital broadcasting (480P).

See page 7 of Model Information for the details of the above settings.

# Setting high definition images to the suitable screen size

Use this procedure to set whether the number of vertical lines of the input high definition image is 1035 or 1080.

Example: Setting the "1080B" mode to "1035I"

On "HD SELECT" of "OPTION1" menu, select "1035I".

OPTIO	N1 1/4
OSM	
BNC INPUT	: RGB
D-SUB INPUT	: RGB
RGB SELECT	: AUTO
HD SELECT	: <b>4</b> 1035 I 🕨
INPUT SKIP	: OFF
ALL RESET	: OFF
NEXT PAGE	
♦SEL. ◀►ADJ.	EXIT RETURN

#### Information

#### HD SELECT modes

These 3 modes are not displayed in correct image automatically.

1080B: Standard digital broadcasts

10351: Japanese "High Vision" signal format

1080A: Special Digital broadcasts (for example : DTC100)

#### Setting the Input Skip

When this is ON, signals which are not present will be skipped over and only pictures whose signals are being transmitted will be displayed.

This setting is valid only for the INPUT SELECT button on the unit.

Example: Set to "ON"

On "INPUT SKIP" of "OPTION1" menu, select "ON".

4 / /
1/4
N

# Information INPUT SKIP settings

OFF: Regardless of the presence of the signal, scan and display all signals.

ON: If no input signal is present, skip that signal.

\* "SETTING NOW" will appear during the input search.

#### Resetting to the default values

Use these operations to restore all the settings (PICTURE, AUDIO, IMAGE ADJUST, OPTION1~4, etc) to the factory default values.

Refer to page 18 for items to be reset.

On "ALL RESET" of "OPTION1" menu, select "ON", then press the MENU/ENTER button.

OPTIO	<b>1</b> 1 1	1/4	ALL RESET
OSM			
BNC INPUT	: RGB		
D-SUB INPUT	: RGB		
RGB SELECT	: AUTO		SETTING NOW
HD SELECT	: 1080B		
INPUT SKIP	: OFF		
ALL RESET	: <b>(</b> 0N)		
NEXT PAGE			
SEL.	EXIT	N I	

When the "SETTING NOW" screen disappears, then all the settings are restored to the default values.

#### **Option2 Settings Menu** Setting the power management for computer images

This energy-saving (power management) function automatically reduces the monitor's power consumption if no operation is performed for a certain amount of time.

Example: Turning the power management function on

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "PWR. MGT." of "OPTION2" menu, select "ON".

OPTIC	DN2	2/
PREVIOUS PAGE		
PWR. MGT.	: <	ON 🕨
CINEMA MODE	:	ON
LONG LIFE		
GRAY LEVEL	:	3
S1/S2	:	OFF
PICTURE SIZE	:	ON
DVI SETUP		
CLOSECAPTION	:	OFF
CAPTION CONT	:	LOW
NEXT PAGE		
♦SEL. ◀►ADJ.		EXIT RETURN

#### Information

#### Power management function

- \* The power management function automatically reduces the monitor's power consumption if the computer's keyboard or mouse is not operated for a certain amount of time. This function can be used when using the monitor with a computer.
- \* If the computer's power is not turned on or if the computer and selector tuner are not properly connected, the system is set to the off state.
- \* For instructions on using the computer's power management function, refer to the computer's operating instructions.

#### Power management settings

ON: In this mode the power management function is turned on.

OFF: In this mode the power management function is turned off.

#### Power management function and POWER/ STANDBY indicator

The POWER/STANDBY indicator indicates the status of the power management function. See below for indicator status and description.

#### **POWER/STANDBY** indicator

Power management mode	POWER/ STANDBY indicator	Power management operating status	Description	Turning the picture back on
On	Green	Not activated.	Horizontal and vertical synchronizing signals are present from the computer.	Picture already on.
Off	Red	Activated.	Horizontal and/or vertical synchronizing signals are not sent from the computer.	Operate the keyboard or mouse. The picture reappears.

#### Setting the picture to suit the movie

The film image is automatically discriminated and projected in an image mode suited to the picture.

[NTSC, PAL, PAL60, 480I (60Hz), 525I (60Hz), 576I (50Hz), 625I (50Hz), 1035I (60Hz), 1080I (60Hz) only]

#### Example: Setting the "CINEMA MODE" to "OFF"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "CINEMA MODE" of "OPTION2" menu, select "OFF".

OPTIO	N2	2/
PREVIOUS PAGE		
PWR. MGT.	:	OFF
CINEMA MODE	: •	OFF
LONG LIFE		
GRAY LEVEL	:	3
S1/S2	:	OFF
PICTURE SIZE	:	ON
DVI SETUP		
CLOSECAPTION	:	OFF
CAPTION CONT	:	LOW
NEXT PAGE		
♦SEL. ◀►ADJ.		EXITRETURN

# Information CINEMA MODE

ON: Automatic discrimination of the image and projection in cinema mode.

OFF: Cinema mode does not function.

#### Reducing burn-in of the screen

The brightness of the screen, the position of the picture, positive/negative mode and screen wiper are adjusted to reduce burn-in of the screen.

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "OPTION2" menu, select "LONG LIFE", then press the MENU/ENTER button.

The "LONG LIFE" screen appears.

	LONG L	IFE		
PLE ORBITER INVERSE SCREEN W			(AUTO OFF OFF OFF	•
SOFT FOC	US	:	OFF	
♦SEL.	<b>∢</b> ► ADJ.	۵	XITRE	TURN

PLE (Peak Luminance Enhancement)

Use this to activate the brightness limiter.

Example: Setting "PLE" to "LOCK1"

On "PLE" of "LONG LIFE" menu, select "LOCK1".

	LONG I	IFE	
PLE		: <lock1< th=""><th>•</th></lock1<>	•
ORBITER	1	: OFF	
INVERSE		: OFF	
SCREEN	WIPER	: OFF	
SOFT FO	CUS	: OFF	
♦ SEL.	▲► ADJ.	EXIT BET	URN

# Information

### PLE settings

AUTO: The brightness of the screen is adjusted automatically to suit the picture quality. LOCK1, 2, 3: Sets maximum brightness.

The brightness level decreases in the order of LOCK

1, 2, 3. LOCK 3 provides minimum brightness.

#### ORBITER

Use this to set the picture shift.

Example: Setting "ORBITER" to "AUTO1"

On "ORBITER" of "LONG LIFE" menu, select "AUTO1".

LONG	LIFE
PLE	: AUTO
ORBITER	: <b></b> AUTO1
INVERSE	: OFF
SCREEN WIPER	: OFF
SOFT FOCUS	: OFF
♦SEL. ◀►ADJ.	EXIT RETURN

# Information ORBITER settings

OFF: Orbiter mode does not function.

This is the default setting when RGB is input.

AUTO1: The picture moves around the screen intermittently, making the picture smaller. This is the default setting when a Video or a DVD/HD/DTV signal is input. Set to "OFF" when these signals are not used. AUTO2: The picture moves around the screen intermittently, making the picture bigger.

MANUAL: User can adjust the orbiter function (Horizontal Dot, Vertical Line and Time) manually. See the following explanation.

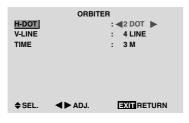
\* When a Video or a DVD/HD/DTV signal is input, the AUTO1 and 2 functions will affect only the moving picture and will not make the screen smaller or bigger.

#### Adjust the ORBITER function manually

Set the amount of shift and the time between movement. Example: Setting so that the picture moves 2 dots horizontally and 3 lines vertically every 3 minutes.

On "ORBITER" of "LONG LIFE" menu, select "MANUAL", then press the MENU/ENTER button. THE "ORBITER" screen appears.

Adjust the items.



#### Information

#### ORBITER Function settings

H-DOT: Moves from 1 to 20 dots in the horizontal direction.

V-LINE: Moves from 1 to 20 lines in the vertical direction.

TIME: Interval of 1~5 minutes (1 horizontal dot or 1 vertical line per interval).

#### INVERSE

Use this to set the inverse mode or to display a white screen.

#### Example: Setting "INVERSE" to "WHITE"

On "INVERSE" of "LONG LIFE" menu, select "WHITE".

PLE ORBITER INVERSE SCREEN SOFT FO	] WIPER	LIFE : AUTO : OFF : <	
♦ SEL.	<b>∢</b> ► ADJ.		J

# Information INVERSE Settings

ON: The picture is displayed alternately between positive image and negative image.

You can set the time by pressing the MENU/ENTER button while "ON" is set.

OFF: Inverse mode does not function.

WHITE: The entire screen turns white.

You can set the time by pressing the MENU/ENTER button while "ON" is set.

#### Setting the time for INVERSE/WHITE

Set a time duration.

Example: Setting to that the INVERSE mode starts in 2 hours and proceeds for one hour and a half.

On "INVERSE" of "LONG LIFE" menu, select "ON", then press the MENU/ENTER button.

THE "INVERSE/WHITE" screen appears.

Adjust the times.



#### Information

#### Setting the time

WORKING TIME: Set the time duration for "INVERSE/WHITE".

When the WORKING TIME is set to "ON" the mode will stay on.

WAITING TIME: Set the standby time until the "INVERSE/WHITE" mode starts.

- \* The "WAITING TIME" can not be set when the "WORKING TIME" is ON.
- \* THE "WORKING TIME" and "WAITING TIME" can be set for up to 12 hours and 45 minutes in units of 3 minutes.
- \* Ending a WORKING TIME function, the monitor will be STAND BY.

#### [Example]

26

WORKING TIME: 01H30M WAITING TIME: 02H00M

#### ■ To select "ON" for the "WORKING TIME"...

Set the hours of the working time to 0H and the minutes to 0M. "ON" will be displayed.

#### SCREEN WIPER

When this is set to ON, a white vertical bar moves repeatedly from the left and of the screen to the right end at a constant speed.

#### Example: Setting "SCREEN WIPER" to "ON"

On "SCREEN WIPER" of "LONG LIFE" menu, select "ON".

	LONG LIFE	
PLE	:	AUTO
ORBITER	:	OFF
INVERSE	:	OFF
SCREEN WI	PER :	
SOFT FOCU	s :	OFF
♦SEL. •	▲ ► ADJ.	EXIT RETURN

# Information SCREEN WIPER

ON: The white vertical bar appears. You can set the time by pressing the MENU/ENTER button while "ON" is set. OFF: Screen wiper mode does not function.

Setting the time for SCREEN WIPER

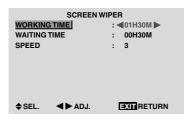
Set a time duration and the speed.

Example: Setting so that the SCREEN WIPER mode starts in 30 minutes and proceeds for one and a half hours.

On "SCREEN WIPER" of "LONG LIFE" menu, select "ON", then press the MENU/ENTER button.

THE "SCREEN WIPER" screen appears.

Adjust the times and speed.



#### Information

#### Setting the time

WORKING TIME: Set the time duration for "SCREEN WIPER".

When the WORKING TIME is set to "ON" the mode will stay on.

WAITING TIME: Set the standby time until the "SCREEN WIPER" mode starts.

SPEED: Set the moving speed for the "SCREEN WIPER". The speed decreases as the number increases.

- \* The "WAITING TIME" can not be set when the "WORKING TIME" is ON.
- \* THE "WORKING TIME" and "WAITING TIME" can be set for up to 12 hours and 45 minutes in units of 3 minutes.

#### ■ To select "ON" for the "WORKING TIME"...

Set the hours of the working time to 0H and the minutes to 0M. "ON" will be displayed.

#### SOFT FOCUS

Reduces edges and softens the image. Example: Setting "SOFT FOCUS" to "2"

On "SOFT FOCUS" of "LONG LIFE" menu, select "2".

	LC	DNG LIFE		
PLE		:	AUTO	
ORBITER		:	OFF	
INVERSE		:	OFF	
SCREEN	WIPER	:	OFF	
SOFT FO	CUS	: •	2	
♦ SEL.	<b>∢</b> ► AD	J.	EXIT RETU	RN

# Information SOFT FOCUS settings

OFF: Turns the SOFT FOCUS function off.

1, 2, 3, 4: Activates the SOFT FOCUS setting. The higher numbers create a softer image.

"SHARPNESS" can not be adjusted in the "PICTURE"

menu.

# Setting the gray level for the sides of the screen

Use this procedure to set the gray level for the parts on the screen on which nothing is displayed when the screen is set to the 4:3 size.

#### Example: Setting "GRAY LEVEL" to "5"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "GRAY LEVEL" of "OPTION2" menu, select "5".

OPTIC	N2	2/
PREVIOUS PAGE		
PWR. MGT.	: OFF	
CINEMA MODE	: ON	
LONG LIFE		
GRAY LEVEL	: ◀5 🕨	
S1/S2	: OFF	
PICTURE SIZE	: ON	
DVI SETUP		
CLOSECAPTION	: OFF	
CAPTION CONT	: LOW	
NEXT PAGE		
♦SEL. ◀►ADJ.	EXIT RETU	JRN

# Information

#### GRAY LEVEL settings

This adjusts the brightness of the black (the gray level) for the sides of the screen.

The standard is 0 (black). The level can be adjusted from 0 to 15. The factory setting is 3 (dark gray).

#### Setting the screen size for S1/S2 video input

If the S-video signal contains screen size information, the image will be automatically adjusted to fit the screen when this S1/S2 is set to AUTO.

This feature is available only when an S-video signal is input via the VIDEO3 terminal.

Example: Setting "S1/S2" to "AUTO"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "S1/S2" of "OPTION2" menu, select "AUTO".

OPTI	ON2	2/4
PREVIOUS PAGE		
PWR. MGT.	: OFF	
CINEMA MODE	: ON	
LONG LIFE		
GRAY LEVEL	: 3	
S1/S2	: AUTO	•
PICTURE SIZE	: ON	
DVI SETUP		
CLOSECAPTION	: OFF	
CAPTION CONT	: LOW	
NEXT PAGE		
♦SEL. ◀►ADJ.	EXIT RE	TURN

#### Information

#### ■ S1/S2 settings

AUTO: Adjusts the screen size automatically according to the S1/S2 video signal.

OFF: Turns the S1/S2 function off.

#### Setting the picture size for RGB input signals

Use this procedure to switch the setting to "ON" or "OFF". Example: Setting the "PICTURE SIZE" mode to "OFF"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "PICTURE SIZE" of "OPTION2" menu, select "OFF".

OPTIO	N2	2/4
PREVIOUS PAGE		
PWR. MGT.	: OFF	
CINEMA MODE	: ON	
LONG LIFE		
GRAY LEVEL	: 3	
S1/S2	: OFF	
PICTURE SIZE	: <0FF >	
DVI SETUP		
CLOSECAPTION	: OFF	
CAPTION CONT	: LOW	
NEXT PAGE		
♦SEL. ◀►ADJ.		RN

# Setting the signal and black level for DVI signal

Choose the signal for the DVI connector (PC or STB/ DVD) and set the black level.

Example: Setting the "PLUG/PLAY" mode to "STB/ DVD"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "OPTION2" menu, select "DVI SET UP", then press the MENU/ENTER button.

The "DVI SET UP" screen appears.

On "PLUG/PLAY" of "DVI SET UP" menu, select "STB/ DVD".



# Information PLUG/PLAY settings

PC: When connected to the PC signal.

BLACK LEVEL is set to "LOW" automatically. STB/DVD: When connected to the SET TOP BOX, DVD etc. BLACK LEVEL is set to "HIGH" automatically.

#### BLACK LEVEL settings

LOW: When connected to the PC signal. HIGH: When connected to the SET TOP BOX, DVD etc. Change "HIGH" into "LOW" if the black level appears gray.

#### Setting CloseCaption

Choose the closed caption mode that allows text to be superimposed on display.

Example: Setting "CLOSECAPTION" to "CC2"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "CLOSECAPTION" of "OPTION2" menu, select "CC2". OPTION2 2/4

OPTIO	N2	2/
PREVIOUS PAGE		
PWR. MGT.	:	OFF
CINEMA MODE	:	ON
LONG LIFE		
GRAY LEVEL	:	3
S1/S2	:	OFF
PICTURE SIZE	:	ON
DVI SETUP		
CLOSECAPTION	: •	CC2
CAPTION CONT	:	LOW
NEXT PAGE		
♦SEL. ◀►ADJ.		EXIT RETURN

## Information

### CLOSECAPTION settings

OFF: This exits the closed caption mode. CC1~4: Text is superimposed.

TEXT1~4: Text is displayed in full screen.

A closed caption signal may not be decoded in the following signature;

- 1. when a video tape has been dubbed.
- 2. when the signal reception is weak.
- 3. when the signal reception is nonstandard.

When using closed captioned channel or the text mode, the text screen always appears.

When there is no signal, however, the text screen will not display text characters.

Setting the contrast of CloseCaption

Choose the brightness of the closed caption.

Example: Setting "CAPTION CONT" to "NORMAL"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "CAPTION CONT" of "OPTION2" menu, select "NORMAL" OPTION2 2/4

PREVIOUS PAGE		
PWR. MGT.	: 0	FF
CINEMA MODE	: 0	N
LONG LIFE		
GRAY LEVEL	: 3	
S1/S2	: 0	FF
PICTURE SIZE	: 0	N
DVI SETUP		
CLOSECAPTION	: 0	FF
CAPTION CONT	: <b>《</b> N	ORMAL
NEXT PAGE		
♦SEL. ◀►ADJ.	EX	I RETURN

Information
CAPTION CONT settings
NORMAL: Closed Caption brightness is set to normal.
LOW: Closed Caption brightness is set to lower.

#### **Option3 Settings Menu** Using the timer

This function sets the monitor to turn ON/OFF automatically at a set time.

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "OPTION3" menu, select "TIMER", then press the MENU/ENTER button.

The "TIMER" screen appears.



#### PRESENT TIME

This sets the day of the week and present time.

Example: Setting "WEDNESDAY", "22:05"

On "TIMER" menu, select "PRESENT TIME", then press the MENU/ENTER button.

The "PRESENT TIME" screen appears.

Adjust the items.

	PRESENT	ТІМЕ			
RETURN					
DAYLIGHT					
SAVING TI	ME	:	OFF		
	WEDNESDAY				
	22:05:	00			
A 051	45.451				
♦ SEL.	◀► ADJ.		RETURN		

Select "SET", then press the MENU/ENTER button.

The adjustments are stored and return to the TIMER menu. \* If you press the EXIT button instead of the MENU/ENTER

button, the settings can not be made.



### Information

#### PRESENT TIME settings

DAYLIGHT SAVING TIME: Use to set DAYLIGHT SAVING TIME.

ON: The present time + 1 hour.

OFF: Cancelled

Day: Set the day of the week (e.g. Sunday).

Hour: Set the hour in the 24-hour format (range 00 to 23).

Minutes: Set the minutes (range 00 to 59).

#### **PROGRAM TIMER**

This sets the day and time at which the power will be switched ON/OFF as well as the input mode.

Example: Setting so that the power will be switched on at 8:30 A.M., Monday, displaying RGB2 source, and switched off at 10:30 A.M.

On "PROGRAM" of "TIMER" menu, select "ON", then press the MENU/ENTER button.

The "PROGRAM TIMER" screen appears.

Adjust the items.

Each mode switches each time the ZOOM +/- button is pressed.

PROGRAM TIMER						
DATE	ON	OFF	INPUT	FUNCTION		
MON	08:30	10:30	RGB2	INVERSE		
—	:	:	-	_		
_	:	:	-	_		
_	:	:	-	_		
—	:	:	-	_		
—	:	:	-	—		
—	:	:		_		
SEL. ZOOM ADJ.				RETURN		

# Information PROGRAM TIMER settings

### DATE: Set the day of the week (e.g. Sunday).

ON (hour, minutes): Set the time at which the power will be turned on in the 24-hour format.

OFF (hour, minutes): Set the time at which the power will be turned off in the 24-hour format.

**INPUT**: Set the input mode that will be displayed when the timer is on.

FUNCTION: Set the LONG LIFE function.

#### To reset the program

Align the cursor with the DATE field that you wish to reset, then press the CLEAR/SEAMLESS SW button.

#### To reset the data

Align the cursor with the field (ON/OFF/INPUT/ FUNCTION) that you wish to reset, then press the CLEAR/SEAMLESS SW button.

# Special characters in the PROGRAM TIMER screen

PROGRAM TIMER							
DATE	ON	OFF	INPUT	FUNCTION			
MON	08:30	10:30	RGB2	INVERSE			
TUE	:	18 : 15	_	_			
SAT	08:30	12 : 15	VIDEO1	WHITE			
*FRI	08:30	10:00	HD/DVD1	_			
_	:	:	_	_			
SAT	08:30	12 : 15	VIDEO1	WHITE			
٠	15:30	16:00	RGB1	_			
♦♦SEL. ZOOM ADJ.			EXIT	RETURN			

• An asterisk "\*" in the DATE field An asterisk "\*" means "every". For example, "\*FRI"

means every Friday and "\*" means everyday.

• A hyphen "-" in the ON field or OFF field If any hyphen remains in the ON field or OFF field, the FUNCTION can not be set.

• A hyphen "-" in the FUNCTION field

A hyphen "-" means last mode (the mode that was last selected at the time the power was switched off).

#### To set MULTI INPUT

• Set the INPUT button to "MULTI", then press the MENU/ENTER button. The "MULTI SCREEN SETTING" will appear on the screen.

- Use the ▲ and ▼ buttons to select "MULTI MODE", then use the ◀ and ▶ buttons to choose from "SINGLE", "SIDE BY SIDE1~3" and "PICTURE IN PICTURE (BOTTOM LEFT~TOP LEFT)".
- Use the ▲ and ▼ buttons to select "MAIN"/ "SUB" and "LEFT"/"RIGHT", then use the ◀ and ▶ buttons to choose from "VIDEO1~3", "HD/DVD1~2" and "RGB1~3".

	PROGRAM TIMER				
	DATE	ON	OFF	INPUT	FUNCTION
	MON	08:30	10:30	MULTI	INVERSE
	TUE	:	18:15	_	—
	SAT	08:30	12 : 15	VIDEO1	WHITE
	*FRI	08:30	10:00	HD/DVD1	—
	_	:	:	—	—
	SAT	08:30	12 : 15	VIDEO1	WHITE
	*	15:30	16:00	RGB1	—
	<b>\$</b> ♦ SI	EL. ZO(	DM ADJ.	EXIT	RETURN
PICTURE	IN F	PICTU	IRE	S	IDE BY
	GRAM TIMI CREEN SE			N	PROGRAM TII NULTI SCREEN S
MULTI MODE : BOTTOM LEFT INPUT MODE				MULTI MOD : SIDE BY S INPUT MOD	SIDE1 DE
BOTTOM LEFT NPUT MODE MAIN	: RGB			: SIDE BY S INPUT MOD LEFT	SIDE1 DE : RG
: BOTTOM LEFT	: RGB/ : VIDE			: SIDE BY S INPUT MOD LEFT	SIDE1 DE

#### MULTI REPEAT

Two repeat timers are available.

Each timer has MULTI MODE, WORK TIME and INPUT MODE functions.

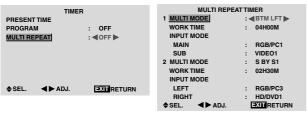
#### Example:

TIMER1 is set to display RGB1 (MAIN) and VIDEO1 (SUB) for 4 hours in picute-in-picture mode. TIMER2 is set to display RGB3 (LEFT) and HD/DVD1 (RIGHT) for 2.5 hours in side-by-side mode.

On "MULTI REPEAT" of "TIMER", select "ON", then press the MENU/ENTER button.

The "MULTI REPEAT TIMER" screen appears.

#### Adjust the items.



## Information

#### MULTI REPEAT settings

MULTI MODE: Set the input mode to be displayed while the timer is on.

WORK TIME: Set the time duration of the display. Time range is from 1 minutes to 4 hours and 15 minutes. INPUT MODE: Set the signal that will be displayed within the selected screen.

Select "MAIN" or "SUB" for "PICTURE IN PICTURE (BTM LFT~TOP LFT)" and "LEFT" or "RIGHT" for "S BY S1~3". Only one signal is selected for "SINGLE".

- \* The two repeat timers run consecutively, i.e., Timer1– Timer2–Timer1–Timer2.
- \* When both PROGRAM TIMER and MULTI REPEAT TIMER are set, priority is given to PROGRAM TIMER.

#### Setting the power on mode

This function sets the input mode at the time the power is switched on.

Example: Setting "VIDEO2"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "PWR. ON MODE" of "OPTION3" menu, select "VIDEO2".

The available inputs depend on the setting of input.

OPTIC	DN3 3/4
PREVIOUS PAGE	
TIMER	
PWR. ON MODE	: VIDEO2
CONTROL LOCK	: OFF
IR REMOTE	: ON
LOOP OUT	: OFF
ID NUMBER	: ALL
VIDEO WALL	
NEXT PAGE	
♦SEL. ◀►ADJ.	EXIT RETURN

#### Information

#### PWR. ON MODE settings

LAST: Last mode (the input that was last selected at the time the power was switched off). VIDEO1, 2, 3: VIDEO input mode. RGB1, 2, 3: RGB input mode. HD/DVD1, 2: HD/DVD input mode. MULTI: Multi screen mode. Follow the procedure used for PROGRAM TIMER. See page 29.

#### Enabling/disabling the front panel controls

This function enables/disables the front panel controls. Example: Setting "ON"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "CONTROL LOCK" of "OPTION3" menu, select "ON", then press the MENU/ENTER button.

OPTI	ON3 3/
PREVIOUS PAGE	0110 07
TIMER	
PWR. ON MODE	: LAST
CONTROL LOCK	: <b>(</b> 0N )
IR REMOTE	: ON
LOOP OUT	: OFF
ID NUMBER	: ALL
VIDEO WALL	
NEXT PAGE	
♦SEL. ◀►ADJ.	EXIT RETURN

#### Information

#### CONTROL LOCK settings

ON: Disables the buttons on the front panel. OFF: Enables the buttons on the front panel.

- \* Even when the CONTROL LOCK is set, the POWER switch will not be locked.
- \* This becomes effective when the on-screen menu goes out.

# Enabling/disabling remote control wireless transmission

This function enables/disables remote control wireless transmission.

Example: Setting "OFF"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "IR REMOTE" of "OPTION3" menu, select "OFF", then press the MENU/ENTER button.

OPTIO	N3 3/4
PREVIOUS PAGE	
TIMER	
PWR. ON MODE	: LAST
CONTROL LOCK	: OFF
IR REMOTE	: <b>4</b> 0FF <b>&gt;</b>
LOOP OUT	: OFF
ID NUMBER	: ALL
VIDEO WALL	
NEXT PAGE	
♦ SEL. ◀► ADJ.	<b>EXIT</b> RETURN

#### Information

#### ■ IR REMOTE settings

ON: Enables remote control wireless transmission. OFF: Disables remote control wireless transmission. Set "OFF" to avoid unwanted control from other remote controls.

#### Loop Out setting

When this feature is set to ON, the received signal will be looped out.

Example: Setting "ON"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "LOOP OUT" of "OPTION3" menu, select "ON".

OPTIO	N3 3/4
PREVIOUS PAGE	
TIMER	
PWR. ON MODE	: LAST
CONTROL LOCK	: OFF
IR REMOTE	: ON
LOOP OUT	: <b>(</b> 0N )
ID NUMBER	: ALL
VIDEO WALL	
NEXT PAGE	
♦SEL. ◀►ADJ.	EXIT RETURN

### Information

#### ■ LOOP OUT settings

ON: The received signal will be looped out via PC1 terminal or VIDEO1 terminal.

OFF: The received signal will not loop out.

\* Even if LOOP OUT is ON, signals won't be sent out if POWER is being turned off.

## To connect another display...

See page 7.

# ■ If the RGB/PC1 signal is present at the time the power switched on...

The RGB/PC1 input will be displayed regardless of the setting of LOOP OUT.

#### ID number setting

When using more than one of these displays, this function sets ID numbers so that operation of the remote control does not cause multiple monitors to operate at the same time.

Example: Setting "2"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "ID NUMBER" of "OPTION3" menu, select "2".

OPTIC	ON3 3/4
PREVIOUS PAGE	
TIMER	
PWR. ON MODE	: LAST
CONTROL LOCK	: OFF
IR REMOTE	: ON
LOOP OUT	: OFF
ID NUMBER	: <2
VIDEO WALL	
NEXT PAGE	
♦SEL. ◀►ADJ.	EXIT RETURN

\* To reset back to ALL

Press the CLEAR/SEAMLESS SW button.

# Information ID NUMBER settings

ALL: ID NUMBER will not be set. 1 to 256: ID NUMBER will be set.

#### ■ When the ID NUMBER have been set

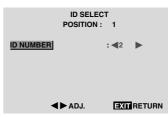
You can also set ID NUMBER for each remote control to operate the plasma display individually. To do so, see below.

#### To set the ID number for the remote control

#### Example: Setting "2"

Press the ID SELECT button on the remote control. The "ID SELECT" screen appears.

On "ID NUMBER" of "ID SELECT" menu, select "2".



\* To reset back to ALL

Press the CLEAR/SEAMLESS SW button.

#### Video Wall setting

When creating a video wall, use a distribution amplifier (any commercially available distribution amplifier) to connect the split signals to the respective monitor INPUT terminals.

Use this feature to configure a 4-25 video wall.

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "OPTION3" menu, select "VIDEO WALL", then press the MENU/ENTER button.

The "VIDEO WALL" screen appears.

VIDEO WALL		
DIVIDER	: ৰ1 🕨	
POSITION		
DISP. MODE	: SPLIT	
AUTO ID	: OFF	
IMAGE ADJUST		
P. ON DELAY	: OFF	
PLE LINK	: OFF	
REPEAT TIMER	: OFF	
♦SEL. ◀►ADJ.	EXIT RETURN	

**Note:** A contingency method of shutting off the electric power should be used in cases of emergency during video wall setup.

#### DIVIDER

Set the 4-25 video wall.

Example: Setting "4"

On "DIVIDER" of "VIDEO WALL" menu, select "4".

VIDEO WALL		
DIVIDER	: ◀4 ▶	
POSITION		
DISP. MODE	: SPLIT	
AUTO ID	: OFF	
IMAGE ADJUST		
P. ON DELAY	: OFF	
PLE LINK	: OFF	
REPEAT TIMER	: OFF	
♦SEL. ◀►ADJ.	EXIT RETURN	

# Information

#### DIVIDER settings

OFF, 1:1 Screen (Matrix display function does not work)

4: 4 Screens (2×2 video wall)

- 9: 9 Screens (3×3 video wall)
- 16: 16 Screens (4×4 video wall)

25: 25 Screens (5×5 video wall)

\* When you select 4-25, set the VIDEO WALL POSITION.

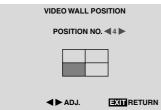
#### VIDEO WALL POSITION

Set the position of each display.

#### Example: Setting "4"

On "VIDEO WALL" menu, select "POSITION", then press the MENU/ENTER button. The "VIDEO WALL POSITION" screen appears.

Select "NO. 4" of "POSITION NO.".



### Information

#### VIDEO WALL POSITION settings

1 Screen: There is no need to set POSITION.

4 Screens 9 Screens NO. 7 NO. 8 NO 9 NO. 1 NO. 2 NO. 10 NO. 11 NO. 12 NO. 4 NO. 3 NO. 13 NO. 14 NO. 15 16 Screens 25 Screens NO. 32 NO. 33 NO. 34 NO. 35 NO. 36 NO. 16 NO. 17 NO. 18 NO. 19 NO. 37 NO. 38 NO. 39 NO. 40 NO. 41 NO. 20 NO. 21 NO. 22 NO. 23 NO. 42 NO. 43 NO. 44 NO. 45 NO.46 NO. 24 NO. 25 NO. 26 NO. 27 NO. 47 NO. 48 NO. 49 NO. 50 NO. 51 NO. 28 NO. 29 NO. 30 NO. 31 NO. 52 NO. 53 NO. 54 NO. 55 NO. 56

#### DISP. MODE

Select the screen mode from between two options (Splitting, Blanking).

#### Example: Setting "BLANK"

On "DISP. MODE" of "VIDEO WALL" menu, select "BLANK".

VIDEO WALL		
DIVIDER	: 1	
POSITION		
DISP. MODE	: <blank< th=""></blank<>	
AUTO ID	: OFF	
IMAGE ADJUST		
P. ON DELAY	: OFF	
PLE LINK	: OFF	
REPEAT TIMER	: OFF	
♦SEL. ◀►ADJ.	EXIT RETURN	

# Information DISP. MODE settings

SPLIT: Combines enlarged screens and creates multiple screens.

BLANK: Corrects misalignment of combined screen portions and creates multiple screens

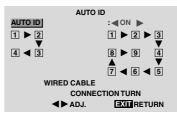
#### AUTO ID

This feature automatically sets the ID numbers of multiple displays connected to each other.

#### Example: Setting "ON"

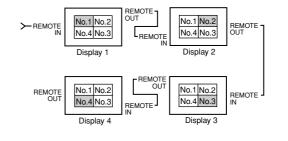
Set the ID number for the No. 1 display on ID NUMBER menu.

On "AUTO ID" of "VIDEO WALL" menu, select "ON", then press the MENU/ENTER button.



## Information ■ AUTO ID settings

ON: Enables Auto ID function. In the case shown below, display 1 will be set as ID 1, display 2 as ID2, etc. This can be set only when a  $2\times 2$  or  $3\times 3$  video wall is selected.



OFF: Disables Auto ID function.

#### IMAGE ADJUST

The position of the image can be adjusted and flickering of the image can be corrected.

Example: Adjusting the vertical position

On "VIDEO WALL" menu, select "IMAGE ADJUST", then press the MENU/ENTER button.

The "IMAGE ADJUST" screen appears.

On "V-POSITION" of "IMAGE ADJUST" menu, adjust the position.

IMAGE A	DJUST		
ASPECT MODE	: NORMAL		
V-POSITION	•		
H-POSITION	•		
V-HEIGHT	<b>•</b>		
H-WIDTH	•		
AUTO PICTURE	: OFF		
FINE PICTURE	•		
PICTURE ADJ.	•	V-POSITION	<b>O O</b> +64
♦SEL. ◀►ADJ.	EXIT RETURN	TT OGINION	•

#### Information

#### IMAGE ADJUST settings

These are the same functions as the IMAGE ADJUST menu on page 22.

#### P. ON DELAY (Power on delay)

Use this function to activate power-on delay. Turn on the AUTO ID before the following operations.

Example: Setting "ON"

On "P. ON DELAY" of "VIDEO WALL" menu, select "ON".

VIDEO WALL		
DIVIDER	: 1	
POSITION		
DISP. MODE	: SPLIT	
AUTO ID	: OFF	
IMAGE ADJUST		
P. ON DELAY	: <b>(</b> 0N)	
PLE LINK	: OFF	
REPEAT TIMER	: OFF	
♦SEL. ◀►ADJ.	EXIT RETURN	

### Information

#### P. ON DELAY settings

ON: Turns on the main power of each display after a delay time.

OFF: Turns on the main power of all displays at the same time.

(Only for 16 and 25 screens)

MODE1: Turns on the main power of each display delayed.

MODE2: Turns on the main power of each display more delayed.

\* Once this function has been set to "ON", the POWER ON/OFF button on the remote control does not function except for the No.1 monitor.

By pressing the POWER ON button on the remote control the No.1 monitor will turn on and the others will be turned on one by one automatically.

\* From the second monitor onward, neither the POWER button on the unit nor the POWER ON button on the remote control works. However, by pressing and holding the POWER ON button for more than 3 seconds, the monitor will be turned on.

#### PLE LINK

Use this function to set a uniform brightness for each display.

Turn on the AUTO ID and set the DIVIDER (at 1, 4 or 9) before the following operations.

Example: Setting "ON"

On "PLE LINK" of "VIDEO WALL" menu, select "ON", then press the MENU/ENTER button.

VIDEO WALL		
DIVIDER	: 1	
POSITION		
DISP. MODE	: SPLIT	
AUTO ID	: OFF	
IMAGE ADJUST		
P. ON DELAY	: OFF	
PLE LINK	:∢ON ▶	
REPEAT TIMER	: OFF	
♦SEL. ◀►ADJ.	EXIT RETURN	

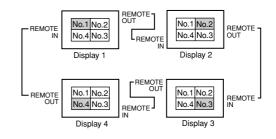
# Information

#### PLE LINK settings

ON: Sets a uniform brightness for each screen in a video wall. This can be set only when a  $2\times 2$  or  $3\times 3$  video wall is selected.

OFF: Sets the individual screen brightness for each screen in a video wall.

- \* When this function is set "ON", connect your plasma displays with the remote cable (optional) in the order of the position numbers for the 2×2 video wall. See the drawing below.
- \* If there are changes in the DIVIDER or POSITION, the PLE LINK will automatically turn OFF.



\* With the 3×3 video wall, connect the final display to the first display the same way as with 2×2 video wall.

**Note:** The remote control can be operated unless the *IR REMOTE is set to "OFF"*.

#### **REPEAT TIMER**

Use this to set two timers. Each timer can use the DIVIDER, SOURCE and WORK TIME functions. Turn on the AUTO ID and set the DIVIDER (at 1, 4 or 9) before the following operations.

#### Example:

TIMER1...VIDEO1 will be displayed for 3 minutes.

TIMER2...RGB1 will be displayed for 6 minutes in a 2×2 video wall.

On "REPEAT TIMER" of "VIDEO WALL" menu, select "ON", then press the MENU/ENTER button.

The "REPEAT TIMER" screen appears.

Adjust the items.

REPEAT TIMER		
1 DIVIDER	: 1	
SOURCE	: VIDEO1	
WORK TIME	: 00H03M	
2 DIVIDER	: 4	
SOURCE	: RGB1	
WORK TIME	: <b>4</b> 00H06M	
♦SEL. ◀►ADJ.		

## Information

#### REPEAT TIMER settings

DIVIDER: Divide the screen into 1, 4 or 9 sections. SOURCE: Set the input mode to be displayed.

WORK TIME: Can be set to up to 4 hours 15 minutes in units of 1 minute.

If you set both timers, Timer 1 and Timer 2 run consecutively.

In the case of the Video wall, timer No.1 can be used to control all the displays simultaneously.

\* This becomes effective when the on-screen menu goes out.

## **Option4 Settings Menu**

# Erasing the sub screen image when there is no input signal

This function automatically erases the black frame of the sub screen when there is no sub screen input signal.

This feature is available only when the picuture-in-picuture mode is selected.

#### Example: Set to "OFF"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "SUB. P DETECT" of "OPTION4" menu, select "OFF".

	OPTION4		4/4	
PREVIOU	S PAGE			
SUB. P DETEC	Т	: <	OFF	
ZOOM NAV		:	BTM LFT	
PIC FREEZE		:	S BY S	
SEAMLESS S	N	:	OFF	
SELECT1		:	-	
SELECT2		:	-	
♦SEL. ◀	ADJ.		EXIT RETU	RN

#### Information

#### SUB. P DETECT Function

- \* The sub screen disappears when the input signal is lost.
- \* Loss of the input signal means a condition in which the video signal and the sync signal are not present.
- \* Under conditions in which the sub screen has disappeared, the ZOOM NAV, PIC FREEZE, and SEAMLESS SW functions will not work. The WIDE button will not function either.

#### SUB. P DETECT settings

AUTO: The black frame disappears 3 seconds after the input signal is lost.

OFF: Turns off the SUB. P DETECT function.

# Displaying the entire image during DIGITAL ZOOM operations

Use this function to display the entire image within the sub screen together with an enlarged image on the main screen.

#### Example: Setting "ZOOM NAV" to "S BY S"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "ZOOM NAV" of "OPTION4" menu, select "S BY S".

	OPTION4		4/4
🕇 PRE	VIOUS PAGE		
SUB. P D	ETECT	: AUTC	)
ZOOM NA	AV.	: <b>《</b> S BY	S 🕨
PIC FREE	ZE	: S BY	S
SEAMLE	SS SW	: OFF	
SELECT	1	: -	
SELECT	2	: -	
≜ SEL	AD.L	EXITE	FTURN

#### Information

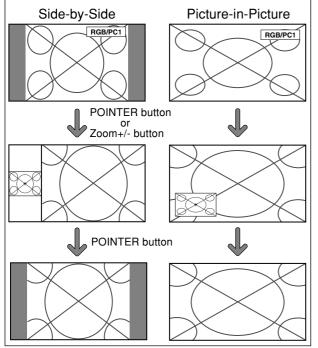
#### ZOOM NAV Function

- \* This feature is available only for RGB1 or RGB2 input signals.
- \* This feature does not function during multi screen mode.
- \* This feature does not function while PIC FREEZE is operating.
- \* Providing a 2-screen display will cancel this function.

#### ZOOM NAV settings

OFF: Will not show the entire image on the sub screen. S BY S: Will show the entire image on the sub screen of side-by-side mode.

BTM LFT~TOP LFT: Will show the entire image on the sub screen of picture-in-picture mode.



#### Displaying still images in the sub screen

This feature enables display in the sub screen of still images captured by pressing the SELECT/FREEZE button.

Example: Setting "PIC FREEZE" to "BTM LFT"

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "PIC FREEZE" of "OPTION4" menu, select "BTM LFT".

OPTIC	ON4 4/4
PREVIOUS PAGE	
SUB. P DETECT	: AUTO
ZOOM NAV	: BTM LFT
PIC FREEZE	: <btm lft="" td="" 🕨<=""></btm>
SEAMLESS SW	: OFF
SELECT1	: -
SELECT2	: -
♦SEL. ◀►ADJ.	

### Information

#### PIC FREEZE Function

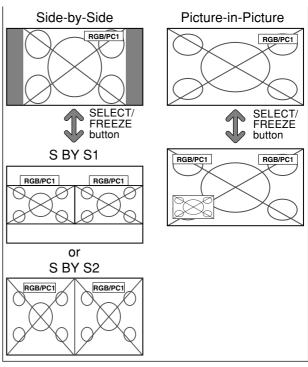
- \* This feature is available only for RGB1 or RGB2 input signals.
- \* This feature does not function during split screen mode.
- \* Digital zoom is not available while this function is operating.
- \* A further press of the SELECT/FREEZE button while this function is operating will cancel this function.
- \* Providing a 2-screen display will cancel this function.

#### PIC FREEZE settings

OFF: Will not show the still image.

S BY S1, 2: The still images captured by pressing the SELECT/FREEZE button will be shown on the sub screen of side-by-side mode.

BTM LFT~TOP LFT: The still images captured by pressing the SELECT/FREEZE button will be shown on the sub screen of picture-in-picture mode.



#### Switching the input source quickly

This feature enables quick input selection. After setting ON, press the CLEAR/SEAMLESS SW button for quick switching between the two selected input signals.

Example: Set to switch quickly between RGB1 and RGB2.

Set "ADVANCED OSM" to "ON" in the main menu (1/2), then perform the following operations.

On "SEAMLESS SW" of "OPTION4" menu, select "ON". Select "RGB1" and "RGB2".

OPTIO	N4 4/4
PREVIOUS PAGE	
SUB. P DETECT	: AUTO
ZOOM NAV	: BTM LFT
PIC FREEZE	: SBYS
SEAMLESS SW	: ON
SELECT1	: RGB1
SELECT2	: <rgb2< td=""></rgb2<>
♦SEL. ◀►ADJ.	EXIT RETURN

\* The available sources depend on the setting of input.

# Information SEAMLESS SW Function

- \* This feature will not function for certain input combinations. See the table on page 15.
- \* After switching to the selected input, please operate this function.
- \* This feature will not function during split screen mode.
- \* When SEAMLESS SW is first turned on, or when signals being transmitted are changed, there may be a slight delay due to signal analysis.

#### SEAMLESS SW settings

OFF: Turns off the SEAMLESS SW function.

ON: When the CLEAR/SEAMLESS SW button is pressed, input signals will switch quickly according to the setting of SELECT1 and SELECT2.

#### Advanced OSM Settings Menu Setting the menu mode

This allows you to access full menu items. When P. ON DELAY or PLE LINK is ON, this won't be turned OFF.

Example: Setting "ON"

On "ADVANCED OSM" of "MAIN MENU", select "ON".

MAIN MENU PICTURE AUDIO IMAGE ADJUST OPTION1	I / 2 PICTURE AUDIO IMAGE ADJUST OPTION1 OPTION2	U 1/
ADVANCED OSM : ≪OFF ► ↓ NEXT PAGE ♦ SEL. < ► ADJ. EXTREXIT	OPTION3 OPTION4 ADVANCED OSM ↓ NEXT PAGE ♦ SEL. ◀▶ ADJ.	:⊲ON ►

# 

#### ADVANCED OSM settings

ON: All of the main menu items are available for advanced users.

OFF: Some of the main menu items are not available (e.g. OPTION2, OPTION3 and OPTION4).

#### Language Settings Menu Setting the language for the menus

The menu display can be set to one of eight languages.

Example: Setting the menu display to "DEUTSCH"

On "MAIN MENU", select "LANGUAGE", then press the MENU/ENTER button.

The "LANGUAGE" screen appears.

On "LANGUAGE", select " DEUTSCH", then press the MENU/ENTER button.



The "LANGUAGE" is set to "DEUTSCH" and return to the main menu.

Information					
Language settings					
ENGLISH English	ITALIANO Italian				
DEUTSCH German	SVENSKA Swedish				
FRANÇAIS French	中文 Chinese				
ESPAÑOL Spanish	РУССКИЙ Russian				

#### Color System Settings Menu Setting the video signal format

Use these operations to set the color systems of composite video signals or Y/C input signals.

Example: Setting the color system to "3.58 NTSC"

On the MAIN MENU, select "COLOR SYSTEM", then press the MENU/ENTER button. The "COLOR SYSTEM" screen appears.

On "COLOR SYSTEM", select " 3.58NTSC ".

COLOR SYSTEM				
COLOR SYSTEM	: <b>⊲</b> 3.58NTSC ►			
▲► ADJ.	EXIT			

#### Information

#### Video signal formats

Different countries use different formats for video signals. Set to the color system used in your current country.

AUTO: The color systems are automatically identified and the format is set accordingly.

PAL: This is the standard format used mainly in the United Kingdom and Germany.

SECAM: This is the standard format used mainly in France and Russia.

4.43 NTSC, PAL60: This format is used for videos in countries using PAL and SECAM video signals.

**3.58 NTSC:** This is the standard format used mainly in the United States and Japan.

PAL-M: This is the standard format used mainly in Brazil.

PAL-N: This is the standard format used mainly in Argentina.

### **Source Information Menu**

# Checking the frequencies, polarities of input signals, and resolution

Use this function to check the frequencies and polarities of the signals currently being input from a computer, etc. On "MAIN MENU", select "SOURCE INFORMATION", then press the MENU/ENTER button.

The "SOURCE INFORMATION" is displayed.

5	SOURCE INFOR	RMA	TION
H. FREQ		:	48.4KHZ
V. FREQ		:	60.0HZ
H. POLARIT	Υ	:	NEG.
V. POLARIT	Y	:	NEG.
- MEMORY		:	24
RESOLUTIO	DN	:	1024×768
			EXIT RETURN
- PC·	MEMOR	٩Y	will be disp
· • •	1111101	· T	min oc uisp

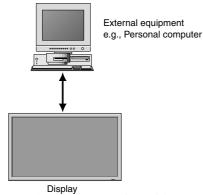
# **External Control** Pin Assignments

# Application

These specifications cover the communications control of the plasma monitor by external equipment.

### Connections

Connections are made as described below.



Connector on the plasma monitor side: EXTERNAL CONTROL connector.

Use a crossed (reverse) cable.

#### Type of connector: D-Sub 9-pin male

Pin No.	Pin Name	Pin No.	Pin Name
1	No Connection	6	DSR (DCE side ready)
2	RXD (Receive data)	7	RTS (Ready to send)
3	TXD (Transmit data)	8	CTS (Clear to send)
4	DTR (DTE side ready)	9	No connection
5	GND		



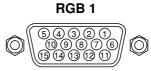
### **Communication Parameters**

(1) Communication system	Asynchronous
(2) Interface	RS-232C
(3) Baud rate	9600 bps
(4) Data length	8 bits
(5) Parity	Odd
(6) Stop bit	1 bit
(7) Communication code	Hex

## **External Control Codes (Reference)**

						-				•
FUNCTION Power ON OFF		CODE 9FH 9FH	E DATA 80H 80H	60H 60H	4EH 4FH	00H 00H	CDH CEH			
Input Switch	Video1 (BNC) Video2 (RCA) Video3 (S-Video) DVD1/HD1 (RCA) DVD2/HD2 (BNC) RGB1 (mini D-sub 15-pin) RGB2 (5BNC) RGB2 (DVI)	DFH DFH DFH DFH DFH DFH DFH DFH	80H 80H 80H 80H 80H 80H 80H 80H	60H 60H 60H 60H 60H 60H 60H	47H 47H 47H 47H 47H 47H 47H 47H 47H	01H 01H 01H 01H 01H 01H 01H 01H	01H 02H 03H 05H 06H 07H 08H 0CH	08H 09H 0AH 0CH 0DH 0EH 0FH 13H		
Audio Mute	ON OFF	9FH 9FH	80H 80H	60H 60H	3EH 3FH	00H 00H	BDH BEH			
Picture Mode	NORMAL THEAT. 1 THEAT. 2 DEFAULT BRIGHT	DFH DFH DFH DFH DFH	80H 80H 80H 80H 80H	60H 60H 60H 60H 60H	OAH OAH OAH OAH OAH	01H 01H 01H 01H 01H 01H	01H 02H 03H 04H 05H	CBH CCH CDH CEH CFH		
Screen Mode	STADIUM ZOOM NORMAL FULL 14 : 9 2.35 : 1	DFH DFH DFH DFH DFH DFH	80H 80H 80H 80H 80H 80H	60H 60H 60H 60H 60H 60H	51H 51H 51H 51H 51H 51H 51H	01H 01H 01H 01H 01H 01H 01H	02H 03H 04H 05H 09H 0AH	13H 14H 15H 16H 1AH 1BH		
Auto Picture	ON OFF	DFH DFH	80H 80H	60H 60H	7FH 7FH	03H 03H	03H 03H	09H 09H	00H 01H	4DH 4EH
Cinema Mode	ON OFF	DFH DFH	80H 80H	60H 60H	C1H C1H	01H 01H	01H 02H	82H 83H		

# mini D-Sub 15-pin connector (Analog)



Pin No.	Signal (Analog)
1	Red
2	Green or sync-on-green
3	Blue
4	No connection
5	Ground
6	Red ground
7	Green ground
8	Blue ground
9	No connection
10	Sync signal ground
11	No connection
12	Bi-directional DATA (SDA)
13	Horizontal sync or Composite sync
14	Vertical sync
15	Data clock

## DVI-D 24-pin connector (Digital)

The unit is equipped with a type of connector commonly used for digital.

(This cannot be used for an analog input.) (TMDS can be used for one link only.)

#### RGB 3

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		2	ა	4	э	0	1	8		
	9	10	11	12	13	14	15	16	-	_
1/	17	18	19	20	21	22	23	24		
11	_									

Pin No.	Signal (Digital)
1	T.M.D.S Data 2 -
2	T.M.D.S Data 2 +
3	T.M.D.S Data 2 Shield
4	No connection
5	No connection
6	DDC Clock
7	DDC Data
8	No connection
9	T.M.D.S Data 1 -
10	T.M.D.S Data 1 +
11	T.M.D.S Data 1 Shield
12	No connection
13	No connection
14	+5V Power
15	Ground
16	Hot Plug Detect
17	T.M.D.S Data 0 -
18	T.M.D.S Data 0 +
19	T.M.D.S Data 0 Shield
20	No connection
21	No connection
22	T.M.D.S Clock Shield
23	T.M.D.S Clock +
24	T.M.D.S Clock -

**Note:** Contact your local dealer for a full list of the *External Control Codes if needed.* 

# Troubleshooting

If the picture quality is poor or there is some other problem, check the adjustments, operations, etc., before requesting service.

Symptom	Checks	Remedy
Mechanical sound is heard.	Maybe the sound from the cooling fans used to prev	/ent over heating.
The unit emits a crackling sound.	Are the image and sound normal?	<ul> <li>If there are no abnormalities in the image and sound, the noise is caused by the cabinet reacting to changes in temperature. This will not affect performance.</li> </ul>
Picture is disturbed. Sound is noisy. Remote control operates erroneously.	Is a connected component set directly in front or at the side of the display?	Leave some space between the display and the connected components.
The remote control does not work.	Are the remote control's batteries worn out?	Replace both batteries with new ones.
	Is IR REMOTE set to ON?	Set IR REMOTE OFF on OPTION3 menu.
	Has an ID number been set for the main unit?	• Set an ID number with the ID SELECT button, or set the ID number to ALL.
Monitor's power does not turn on when the remote control's power button is pressed.	<ul> <li>Is the monitor's power cord plugged into a power outlet?</li> </ul>	Plug the monitor's power cord into a power outlet.
	Are all the monitor's indicators off?	Press the power button on the monitor to turn on the power.
	Are the remote control's batteries worn out?	Replace both batteries with new ones.
	Is IR REMOTE set to OFF?	Set IR REMOTE ON.
	Has an ID number been set for the main unit?	Set an ID number with the ID SELECT button, or set the ID number to ALL.
Monitor does not operate when the remote control's buttons are pressed.	<ul> <li>Is the remote control pointed at the monitor, or is there an obstacle between the remote control and the monitor?</li> </ul>	<ul> <li>Point the remote control at the monitor's remote control sensor when pressing buttons, or remove the obstacle.</li> </ul>
	• Is direct sunlight or strong artificial light shining on the monitor's remote control sensor?	Eliminate the light by closing curtains, pointing the light in a different direction, etc.
	Are the remote control's batteries worn out?	Replace both batteries with new ones.
	The remote cable is plugged into the REMOTE IN terminal (Wired).	Unplug the remote cable from the monitor.
The front panel buttons of the main unit do not function.	<ul> <li>The front panel buttons do not function during Control Lock.</li> </ul>	Set the Control Lock to OFF.
No sound or picture is produced.	<ul> <li>Is the monitor's power cord plugged into a power outlet?</li> </ul>	Plug the monitor's power cord into a power outlet.
Picture appears but no sound is produced.	Is the volume set at the minimum?	Increase the volume.
	Is the mute mode set?	Press the remote control's MUTE button.
	Are the speakers properly connected?	Connect the speakers properly.
	Is AUDIO INPUT set correctly?	Set AUDIO INPUT on the AUDIO menu correctly.
Poor picture with VIDEO signal input.	Improper control setting. Local interference. Cable interconnections. Input impedance is not correct level.	<ul> <li>Adjust picture control as needed. Try another location for the monitor. Be sure all connections are secure.</li> </ul>
Poor picture with RGB signal input.	Improper control setting. Incorrect 15 PIN connector pin connections.	Adjust picture controls as needed. Check pin assignments and connections.
Tint is poor or colors are weak.	Are the tint and colors properly adjusted?	Adjust the tint and color (under PICTURE).
Nothing appears on screen.	Is the computer's power turned on?	Turn on the computer's power.
	<ul> <li>Is a source connected?</li> <li>Is the power management function in the standby</li> </ul>	Connect source to the monitor.     Operate the computer (move the mouse, etc.).
	or off mode?	
	Is LOOP OUT set to ON?	Set LOOP OUT OFF.
Part of picture is cut off or picture is not centered.	Is the position adjustment appropriate?	Adjust the IMAGE ADJUST properly.
Image is too large or too small.	Is the screen size adjustment appropriate?	Press the WIDE button on the remote control and adjust properly.
Picture is unstable.	Is the computer's resolution setting appropriate?	Set to the proper resolution.
POWER/STANDBY indicator is lighted in red.	<ul> <li>Horizontal and / or vertical sync signal is not present when the Intelligent Power Manager control is on.</li> </ul>	Check the input signal.
POWER/STANDBY indicator is blinking in red.	• The temperature inside the main unit has become too high and has activated the protector.	<ul> <li>Promptly switch off the power of the main unit and wait until the internal temperature drops. See*1.</li> </ul>
POWER/STANDBY indicator is blinking in green and red, or green.		Prompty switch off the power of the main unit. See     *2.

\*1 Overheat protector

If the monitor becomes too hot, the overheat protector will be activated and the monitor will be turned off. If this happens, turn off the power to the monitor and unplug the power cord. If the room where the monitor is installed is particularly hot, move the monitor to a cooler location and wait for the monitor to cool for 60 minutes. If the problem persists, contact your dealer.

\*2 In the following case, power off the monitor immediately and contact your dealer or authorized Service Center.

The monitor turns off 5 seconds after powering on and then the POWER/STANDBY indicator blinks. It indicates that the power supply circuit, plasma display panel, temperature sensor, or one or more fans have been damaged.

# Limited Warranty Plasma Monitors

NEC Solutions, Inc. (hereinafter NEC Solutions) warrants this product to be free from defects in material and workmanship under the following terms and, subject to the conditions set forth below, agrees to repair or replace (at NEC Solutions' sole option) any part of the enclosed unit which proves defective. Replacement parts or products may be new or refurbished and will meet specifications of the original parts or products.

#### HOW LONG IS THE WARRANTY?

Parts and labor are warranted for (1) one year from the date of the first customer purchase.

#### WHO IS PROTECTED?

This warranty may be enforced only by the first purchaser.

#### WHAT IS COVERED AND WHAT IS NOT COVERED

Except as specified below, this warranty covers all defects in material or workmanship in this product. The following are not covered by the warranty:

- 1. Any product which is not distributed in the U.S.A. or Canada by NEC Solutions or which is not purchased in the U.S.A. or Canada from an authorized NEC Solutions dealer.
- 2. Any product of which the serial number has been defaced, modified or removed.
- 3. Damage, deterioration or malfunction resulting from:
  - a. Accident, misuse, abuse, 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 NEC Solutions.
  - c. Any shipment of the product (claims must be presented to the carrier).
  - d. Removal or installation of the product.
  - e. Any other cause which does not relate to a product defect.
  - f. Burns or residual images upon the phosphor of the panel.
- 4. Cartons, carrying cases, batteries, external cabinets, magnetic tapes, or any accessories used in connection with the product.
- 5. Service outside of the U.S.A. and Canada.

# WHAT WE WILL PAY FOR AND WHAT WE WILL NOT PAY FOR

We will pay labor and material expenses for covered items, but we will not pay for the following:

- 1. Removal or installation charges.
- 2. Costs of initial technical adjustments (set-up), including adjustment of user controls. These costs are the responsibility of the NEC Solutions dealer from whom the product was purchased.
- 3. Shipping charges.

#### HOW YOU CAN GET WARRANTY SERVICE

- 1. To obtain service on your product, consult the dealer from whom you purchased the product.
- 2. Whenever warranty service is required, the original dated invoice (or a copy) must be presented as proof of warranty coverage. Please also include in any mailing your name, address and a description of the problem(s).
- 3. For the name of the nearest NEC Solutions authorized service center, call NEC Solutions at 800-836-0655.

#### LIMITATIONS OF LIABILITY

Except for the obligations specifically set forth in this warranty statement, we will not be liable for any direct, indirect, special, incidental, consequential, or other types of damages, whether based on contract, tort, or any other legal theory, whether or not we have been advised of the possibility of such damages. This warranty is in lieu of all other warranties expressed or implied, including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose.

#### **EXCLUSION OF DAMAGES**

NEC Solutions' liability for any defective product is limited to the repair or replacement of the product at our option. NEC Solutions shall not be liable for:

- 1. Damage to other property caused by any defects in this product, damages based upon inconvenience, loss of use of the product, loss of time, commercial loss; or
- 2. Any other damages whether incidental, consequential or otherwise. Some states do not allow limitation on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

#### HOW STATE LAW RELATES TO THE WARRANTY

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

FOR MORE INFORMATION, TELEPHONE 800-836-0655 NEC SOLUTIONS (AMERICA), INC. 1250 N. Arlington Heights Road, Suite 400 Itasca, Illinois 60143-1248

**Note:** All products returned to NEC Solutions (America), Inc. for service MUST have prior approval. To get approval, call NEC Solutions (America), Inc. at 800-836-0655.



NEC Solutions (America), Inc. 1250 N. Arlington Heights Road, Suite 400 Itasca, Illinois 60143-1248

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