OWNER'S MANUAL

CinemaWall™

CW-42i

Flat Panel Plasma Display Monitor

RUNCO

THE WORLD'S FINEST HOME THEATER PRODUCTS™

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Introduction

Introduction to the Runco CinemaWall™ CW-42i Plasma Display Monitor

The CW-42i is a state-of-the-art DTV ready, flat-panel plasma display monitor. The 42-inch widescreen offers a resolution of 853 x 480 with a 16:9 aspect ratio.

The CW-42i is one of the few plasma display products capable of high altitude performance, being high altitude compliant to 9000 feet.

This new model boasts 20 percent more brightness than our previous model and features an anti-glare filter to diffuse direct light sources, making images easier to view under adverse lighting conditions.

Runco incorporates its acclaimed Vivix™ processing into the CW-42i. This standard processing includes 3D scan conversion with motion compensation and 3:2 pulldown for excellent video performance with both video-based and film-based material.

In addition, multiple aspect ratio control includes Runco's VirtualWide™ mode to fill the 16:9 screen with standard 4:3 images without loss of picture quality.

The CW-42i has been carefully engineered for superb video performance at a very competitive price. Its advanced design accommodates custom installation and every day operation with ease. At less than 4 inches thin it can be wall-mounted or used on a table top stand.

The features you'll enjoy include:

- 853 x 480 DTV resolution with 16:9 aspect ratio
- High altitude compliant to 9000 feet
- Designed for custom automation control with RS-232C and IR interface
- Accepts all DTV formats - HDTV compatible
- Multiple aspect ratio control
- Less than 4 inches thin
- Digital 480p input via DVI with HDCP

Contents of the package:

- CW-42i Plasma monitor
- Power cord
- Remote control with two AAA batteries
- User's manual
- Safety metal fittings*
- Screws for safety metal fittings*
- Ferrite core (small x 2. large x 2), bands
- Cable clamps

* These are fittings for fastening the unit to a wall to prevent tipping due to external shock when using the tablestand (optional). Fasten the safety fittings to the holes in the back of the plasma using the safety fitting mount screws.

Options:

- Wall mount unit
- Tilt mount unit
- Tablestand

Important Information

Precautions

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

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any part inside of this unit.

This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

WARNING

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE. ALSO DO NOT USE THIS UNIT'S POLARIZED PLUG WITH AN EXTENSION CORD 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.

Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Warnings and Safety Precaution

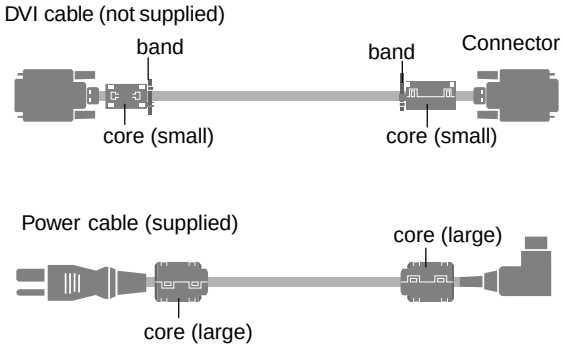
This plasma monitor is designed and manufactured to provide long, trouble-free service. No maintenance other than cleaning is required. Please see the section "Plasma monitor cleaning procedure" on the next page.

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.

NOTE:
When you connect a computer to this monitor, use an RGB cable including the ferrite core on both ends of the cable. And regarding DVI and power cable, attach the supplied ferrite cores. If you do not do this, this monitor will not conform to mandatory FCC standards.
Attaching the ferrite cores:
Set the ferrite cores on both ends of the DVI cable (not supplied), and both ends of the power cable (supplied). Close the lid tightly until the clamps click.
Use the band to fasten the ferrite core (supplied) to the DVI cable.



To avoid damage and prolong operating life:

1. Use only with 120V 50/60Hz AC power supply. Continued operation at line voltages greater than 120 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.

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.

ATTENTION

RISQUE D'ELECTROCUTION
NE PAS OUVRIR

MISE EN GARDE: AFIN DE REDUIRE LES RISQUES D'ELECTRO-CUTION, NE PAS DEPOSER LE COUVERCLE, IL N'Y A AUCUNE PIECE UTILISABLE A L'INTERIEUR DE CET APPAREIL. NE CONFIER LES TRAVAUX D'ENTRETIEN QU'A UN PERSONNEL QUALIFIE.

Ce symbole a pour but de prévenir l'utilisateur de la présence d'une tension dangereuse, non isolée se trouvant à l'intérieur de l'appareil. Elle est d'une intensité suffisante pour constituer un risque d'électrocution. Eviter le contact avec les pièces à l'intérieur de cet appareil.

Ce symbole a pour but de prévenir l'utilisateur de la présence d'importantes instructions concernant l'entretien et le fonctionnement de cet appareil. Par conséquent, elles doivent être lues attentivement afin d'éviter des problèmes.

AVERTISSEMENT

AFIN DE REDUIRE LES RISQUES D'INCENDIE OU D'ELECTROCUTION, NE PAS EXPOSER CET APPAREIL A LA PLUIE OU A L'HUMIDITE. AUSSI, NE PAS UTILISER LA FICHE POLARISEE AVEC UN PROLONGATEUR OU UNE AUTRE PRISE DE COURANT SAUF SI CES LAMES PEUVENT ETRE 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.

DOC avis de conformation

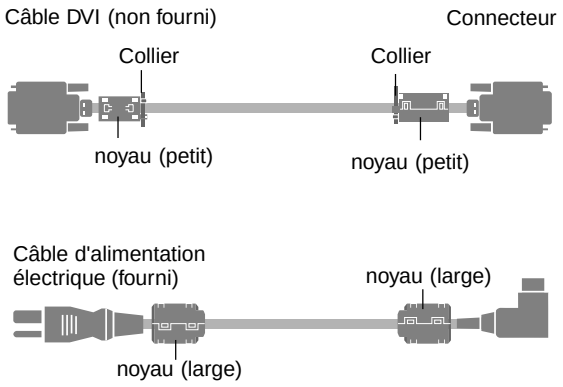
Cet appareil numérigue de la classe A respecte toutes les exigences du Réglement sur le Matériel Brouilleur du Canada.

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.
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.

REMARQUE:
Pour raccorder un ordinateur à ce moniteur, procéder à l'aide d'un câble RGB à âme de ferrite aux deux extrémités. Sur les câbles DVI et les câbles d'alimentation électrique, fixer les âmes de ferrite fournies aux extrémités. Si vous ne le faîtes, le moniteur ne sera pas en conformité avec les exigences des standards FCC.
Fixation des noyaux en ferrite.
Monter les tores en ferrite aux deux extrêmités du câble DVI (non fourni) et aux deux extrêmités du câble d'alimentation électrique (fourni).
Fermez doucement le couvercle jusqu'à ce que les crans se clipsent.
Fixer le tore en ferrite (fourni) au câble DVI à l'aide d'un collier.



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

1. N'utiliser qu'une source d'alimentation de 120 V 50/60 Hz CA. Le fait d'utiliser l'appareil en continu à des tensions de ligne supérieures à 120 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.

Méthode de nettoyage du moniteur à plasma:

1. 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.

THREE YEAR LIMITED WARRANTY

For Plasma Display Monitors

Congratulations on your purchase of a Runco video product and welcome to the Runco family! We believe Runco produces “The World’s Finest Home Theater Products”. With proper installation, setup and care, you should enjoy many years of unparalleled video performance.

This is a LIMITED WARRANTY as defined in the Magnuson-Moss Warranty Act. Please read it carefully and retain it with your other important documents.

WHAT IS COVERED UNDER THE TERMS OF THIS LIMITED WARRANTY:

SERVICE LABOR: Runco will pay for service labor by a Runco Authorized Service Center when needed as a result of a manufacturing defect for a period of three (3) years from the effective date of delivery to the end user (excluding the plasma glass panel).

PARTS: (Not including plasma glass panel) Runco will provide new or rebuilt replacement parts for the parts that fail due to defects in materials or workmanship for a period of three (3) years from the effective date of delivery to the end user. Such replacement parts are then subsequently warranted for the remaining portion (if any) of the original warranty period.

PLASMA GLASS PANEL: Runco will pay for service labor by a Runco Authorized Service Center when needed as a result of a manufacturing defect for a period of one (1) year from the effective date of delivery to the end user. In addition, Runco will provide new or rebuilt replacement parts for the parts that fail due to defects in materials or workmanship for a period of one (1) year from the effective date of delivery to the end user. Such replacement parts are then subsequently warranted for the remaining portion (if any) of the original warranty period.

WHAT IS NOT COVERED UNDER THE TERMS OF THIS LIMITED WARRANTY:

Image burn-in on plasma display panels are specifically excluded from coverage under this Limited Warranty. Image burn-in is the result of misuse of the product and therefore cannot be repaired under the terms of this Limited Warranty.

TO AVOID IMAGE BURN-IN:
Please ensure that still images are left on your plasma display panel for no more than a few minutes. Also ensure that images displayed in the 4:3 aspect ratio mode (black or gray stripes, but no picture information is present on the left and right edges of the screen) are used as infrequently as possible. This will prevent permanent image burns on your plasma display panel, which can be seen permanently under certain conditions once burn-in has occurred.

The types of images to avoid include video games, still images and computer screens with stationary tool bars and icons. (This is why computers are equipped with screen savers – to prevent still images from burning into the monitor’s phosphors after being displayed continuously for an extended period of time).

Normal viewing material such as television/satellite broadcasts, videotape or DVDs (not put into pause for extended periods of time) will not cause damage to your display under normal conditions. Many DVD players are also equipped with screen savers for this reason.

This Limited Warranty only covers failure due to defects in materials and workmanship that occur during normal use and does not cover normal maintenance. This Limited Warranty does not cover cabinets or any appearance items; failure resulting from accident, misuse, abuse, neglect, mishandling, misapplication, faulty or improper installation or setup adjustments; improper maintenance, alteration, improper use of any input signal; damage due to lightning or power line surges, spikes and brownouts; damage that occurs during shipping or transit; or damage that is attributed to acts of God. In the case of remote control units, damage resulting from leaking, old, damaged or improper batteries is also excluded from coverage under this Limited Warranty.

CAUTION: THIS LIMITED WARRANTY ONLY COVERS RUNCO PRODUCTS PURCHASED FROM AND INSTALLED BY RUNCO AUTHORIZED DEALERS. ALL OTHER PRODUCTS ARE SPECIFICALLY EXCLUDED FROM COVERAGE UNDER THIS LIMITED WARRANTY. MOREOVER, DAMAGE RESULTING DIRECTLY OR INDIRECTLY FROM IMPROPER INSTALLATION OR SETUP IS SPECIFICALLY EXCLUDED FROM COVERAGE UNDER THIS LIMITED WARRANTY.

RIGHTS, LIMITS AND EXCLUSIONS:

Runco limits its obligations under any implied warranties under state laws to a period not to exceed the warranty period. There are no express warranties. Runco also excludes any obligation on its part for incidental or consequential damages related to the failure of this product to function properly. Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages. So the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

EFFECTIVE WARRANTY DATE:

This warranty begins on the effective date of delivery to the end user. For your convenience, keep the original bill of sale as evidence of the purchase date.

IMPORTANT: WARRANTY REGISTRATION:

Please fill out and mail your warranty registration card. It is imperative that Runco knows how to reach you promptly if we should discover a safety problem or product update for which you must be notified.

CONTACT A RUNCO AUTHORIZED SERVICE CENTER TO OBTAIN SERVICE

Repairs made under the terms of this Limited Warranty covering your Runco video product will be performed at the location of the product, during usual working hours, providing location of product is within normal operating distance from a Runco Authorized Service Center. In some instances it may be necessary for the product to be returned to the Runco factory for repairs. If, solely in Runco's judgment, location of product to be repaired is beyond normal operating distance of the closest Runco Authorized Service Center, or the repair requires the unit be returned to the Runco factory, it is the owner's responsibility to arrange for shipment of the product for repair. These arrangements must be made through the selling Runco Dealer. If this is not possible, contact Runco directly and we will locate an authorized representative to assist in the return of your product to Runco. Runco will return product transportation prepaid in the United States, unless no product defect is discovered. In that instance, shipping costs will be the responsibility of the owner.

ADDITIONAL INFORMATION:
To locate the name and address of the nearest Runco Authorized Service Center, or for additional information about this Limited Warranty, please call or write:

RUNCO INTERNATIONAL
Attn: Customer Service Department
2900 Faber Street
Union City, CA 94587
Ph: (510) 324-7777
Fax: (510) 324-9300

How to Attach Options to the Plasma Monitor

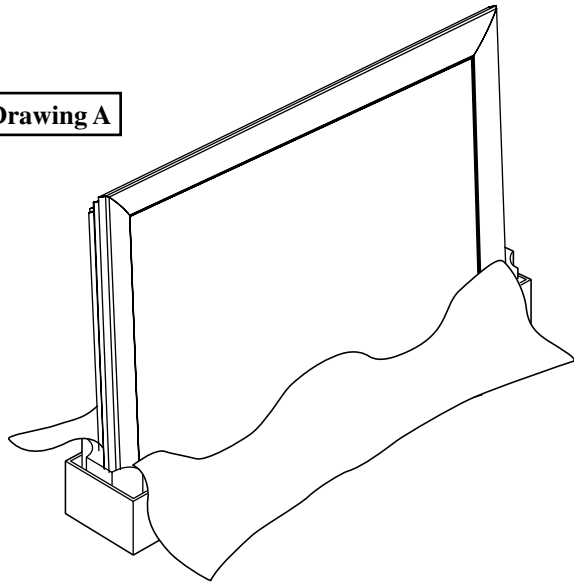
You can attach your optional mounts or stand to the plasma monitor in one of the following two ways:

1) While it is upright. (See drawing A)

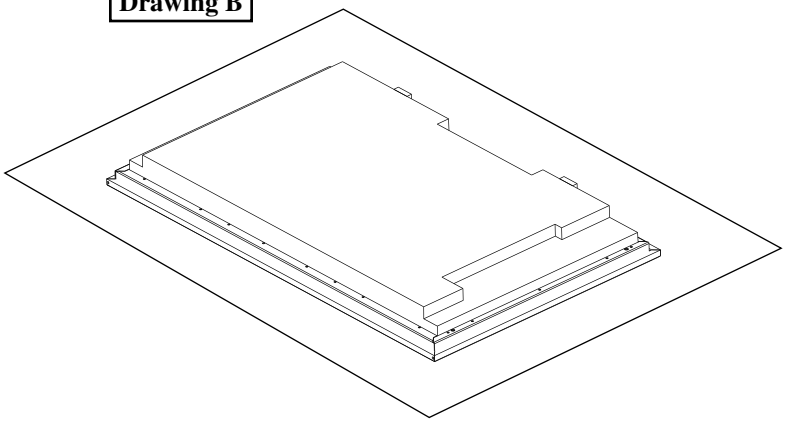
2) As it is laid down with the screen face down (See drawing B). Lay the protective sheet, which was wrapped around the plasma monitor when it was packaged, beneath the screen surface so it does not scratch the screen face.

* DO NOT touch or hold the screen face when carrying the unit.

Drawing A



Drawing B



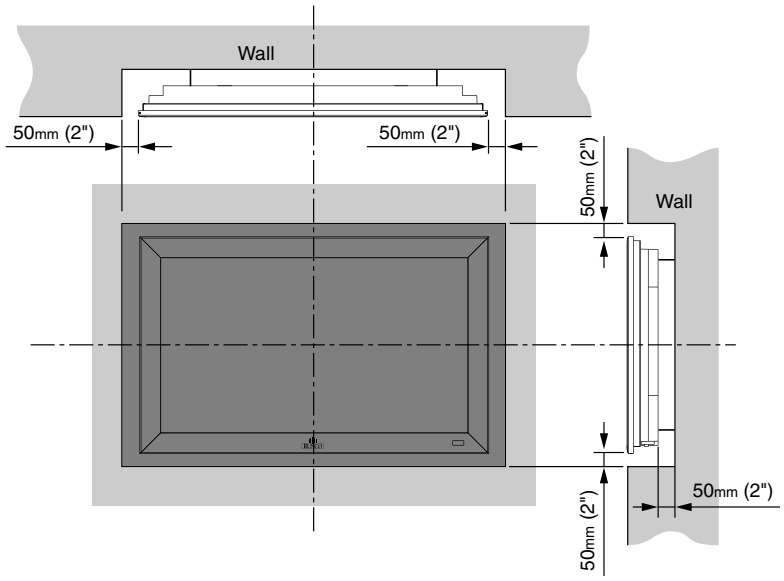
• This device cannot be installed on its own. Be sure to use a stand or original mounting unit. (Wall mount unit, stand, etc.)

• For correct installation and mounting it is required to use a trained, Runco 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 maufacturer and listed under options.

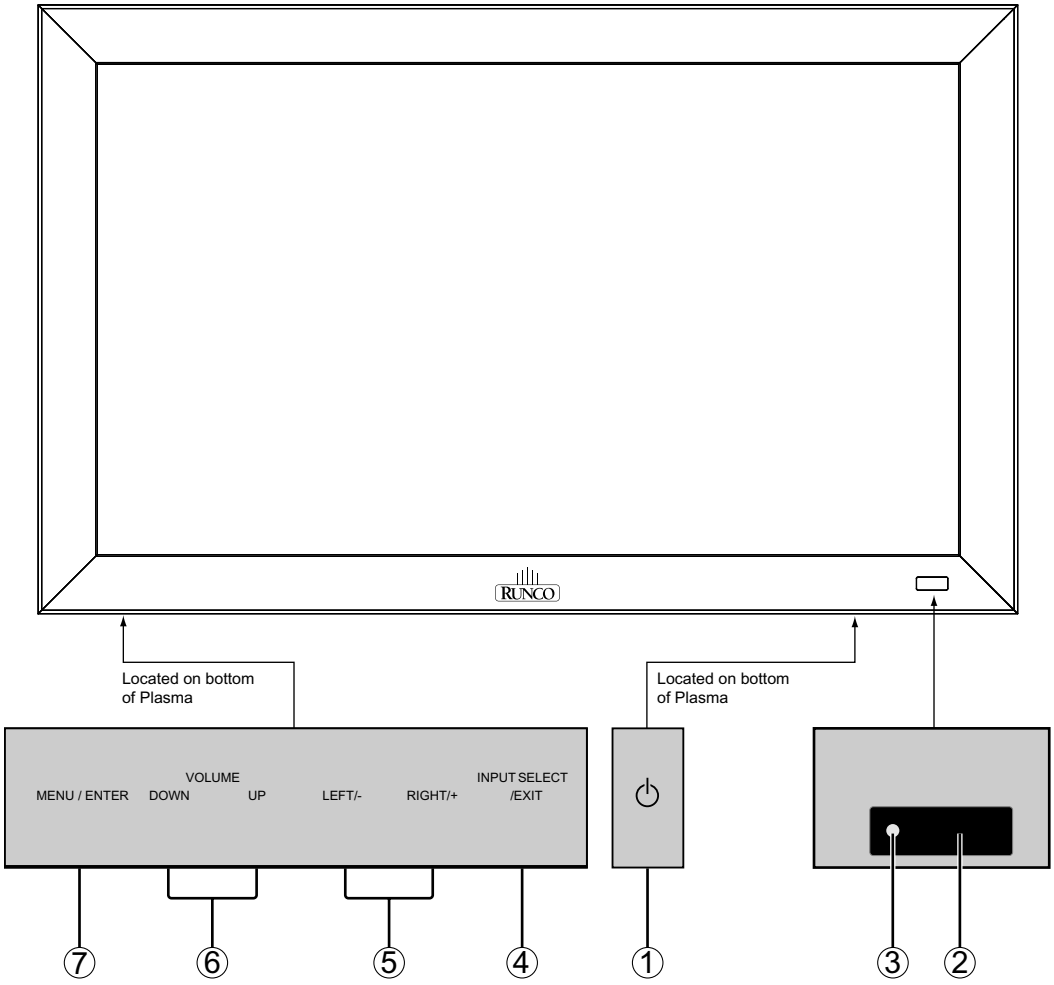
Ventilation Requirements for enclosure mounting

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



Part Names and Function

Front View



1 POWER
Turns the plasma 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 it will light GREEN.
When the power is in the standby mode, it will light RED.

4 INPUT SELECT / EXIT
Switches the input, in the following order.
The available inputs depend on the setting of "BNC INPUT".

RGB: VIDEO1 → VIDEO2 → VIDEO3 → HD/DVD/DTV → RGB/PC1 → RGB/PC2 → RGB/PC3 → VIDEO1

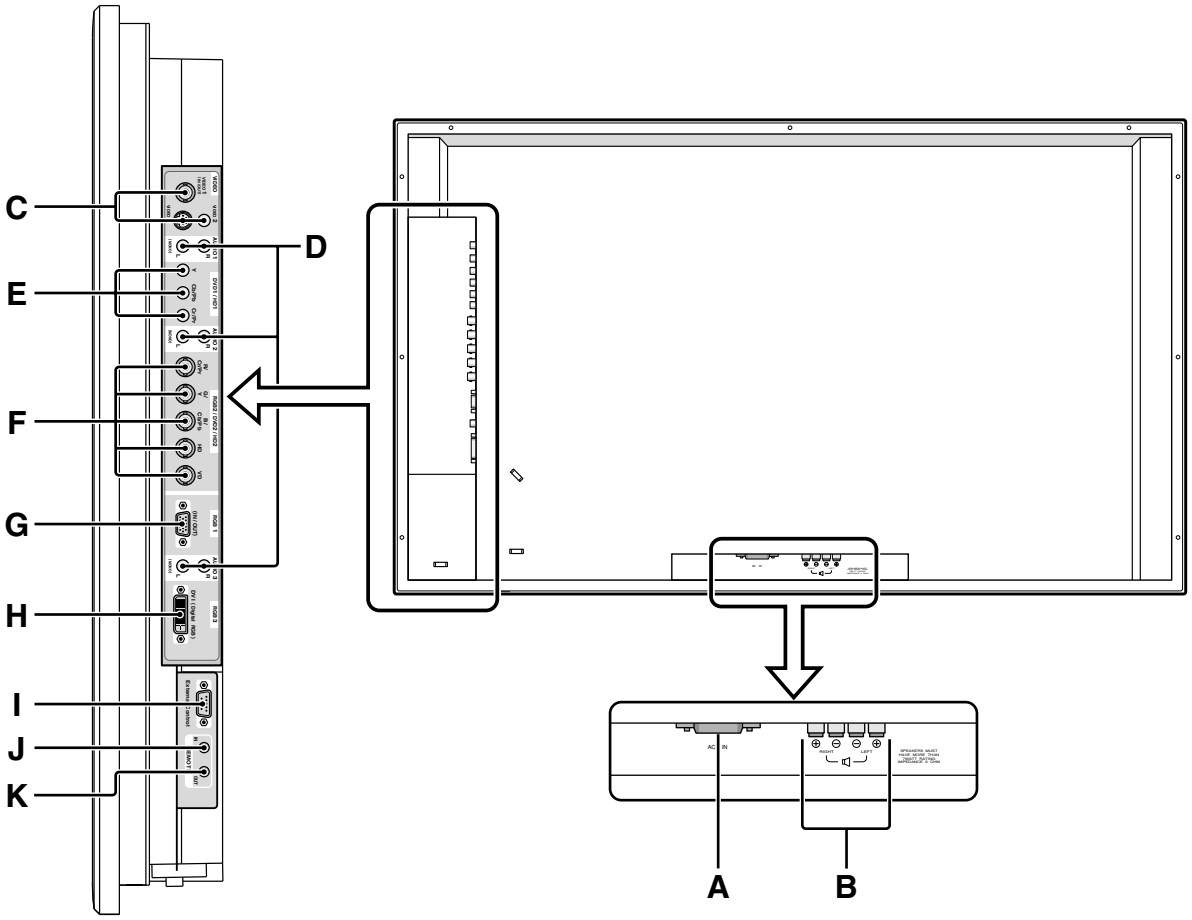
COMP: VIDEO1 → VIDEO2 → VIDEO3 → HD1/DVD1/DTV1 → HD2/DVD2/DTV2 → RGB/PC1 → RGB/PC2 → VIDEO1

5 LEFT/- and RIGHT/+
Enlarges or reduces the image. Functions as the CURSOR (◀ / ▶) 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 mode.

7 MENU/ENTER
Sets the On-Screen Menu mode and displays the main menu.

Rear View / Terminal Board



A AC IN
Connect the included power cord here.

B Connect speakers (optional) here. Maintain the correct polarity. Please refer to your speaker's owner's manual.

C VIDEO 1,2,3 (BNC, RCA, S-Video)
Connect VCR's, DVD's or VIdeo Cameras, etc here. VIDEO1 can be used for INPUT or OUTPUT.

D AUDIO1, AUDIO2, AUDIO3
These are audio input terminals. The input is selectable. Set which video image to distribute them from the audio menu screen.

E DVD1 / HD1
Connect DVD's, High Definition or Laser Discs, etc here.

F RGB2 / DVD2 / HD2
RGB2: Connect an analog RGB signal and the synchronization signal.
DVD2 / HD2: Connect DVD's, High Definition sources, Laser Discs, etc. here. This input can be set for use with an RGB or Component source.

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.

H RGB3 (DVI 24pin)
Connect a digital signal (TMDS) from a source with a DVI output.

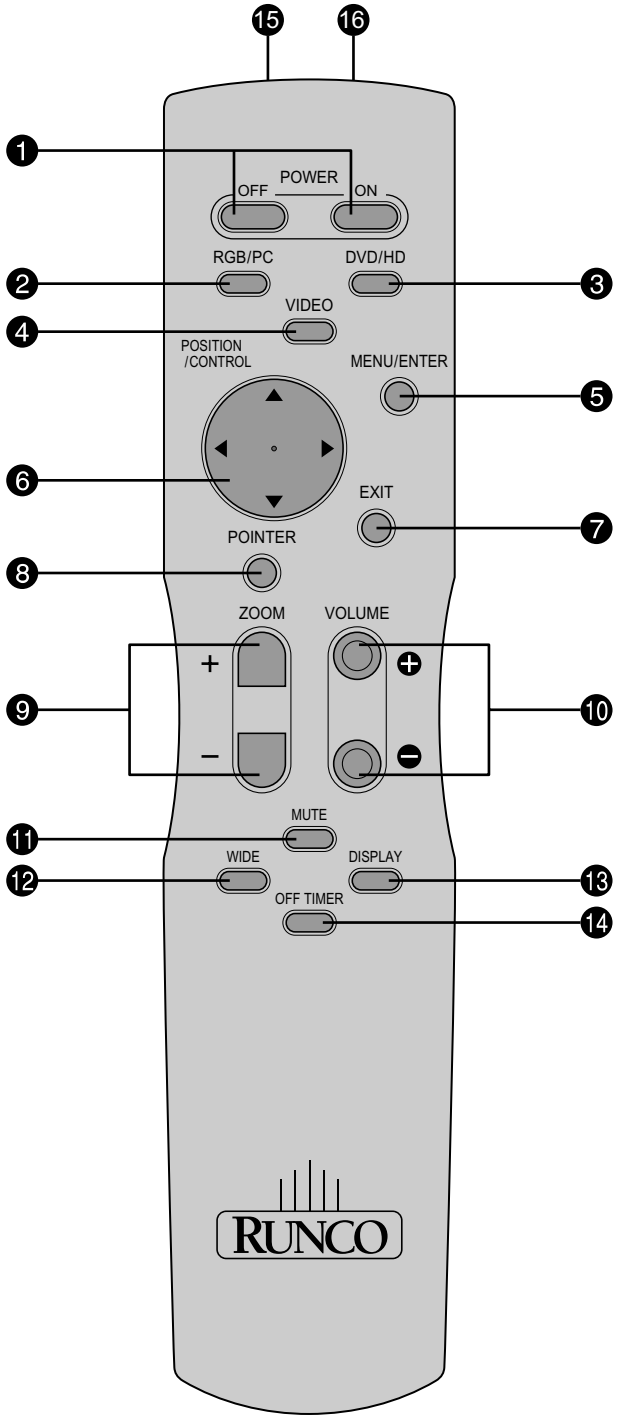
I EXTERNAL CONTROL
This terminal is used when operating and controlling the monitor externally by RS-232.

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



❶ POWER ON/OFF
Switches Power ON/OFF.
(This does not operate when POWER/STANDBY indicator of the main unit is off.)

❷ RGB/PC
Press this button to select RGB/PC as the source.
The available sources depend on the setting of "BNC INPUT".
RGB: → RGB/PC1 → RGB/PC2 → RGB/PC3
COMP. : → RGB/PC1 → RGB/PC3
RGB/PC can also be selected using the INPUT SELECT button on the monitor.

❸ DVD / HD
Press this button to select DVD/HD as the source.
The available sources depend on the setting of "BNC INPUT".
RGB: HD/DVD/DTV
COMP.: → HD1/DVD1/DTV1 → HD2/DVD2/DTV2
DVD/HD can also be selected using the INPUT SELECT button on the monitor.

❹ VIDEO
Press this button to select VIDEO as the source.
→ VIDEO1 → VIDEO2 → VIDEO3
VIDEO can also be selected using the INPUT SELECT button on the monitor.

❺ 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.

❻ CURSOR (▲ / ▼ / ◀ / ▶)
Use these buttons to select items or settings and to adjust settings or switch the display patterns.

❼ 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.

❽ POINTER
Press this button to display the pointer.

❾ ZOOM (+ /–)
Enlarges or reduces the image.

❿ VOLUME (+ /–)
Adjusts the audio volume.

⓫ MUTE
Mutes the sound.

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

⓭ DISPLAY
Displays the source settings on the screen.

⓮ OFF TIMER
Activates the off timer for the unit.

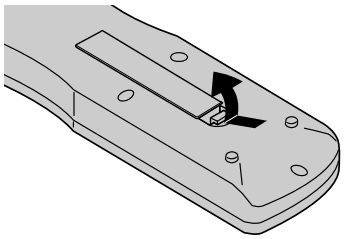
⓯ REMOTE CONTROL SIGNAL TRANSMITTER
Transmits the remote control signals.

⓰ 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.

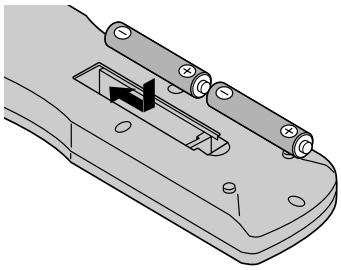
Battery Installation and Replacement

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

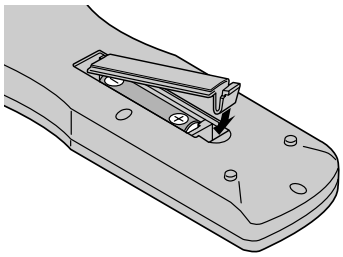
1. Press and open the cover.



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

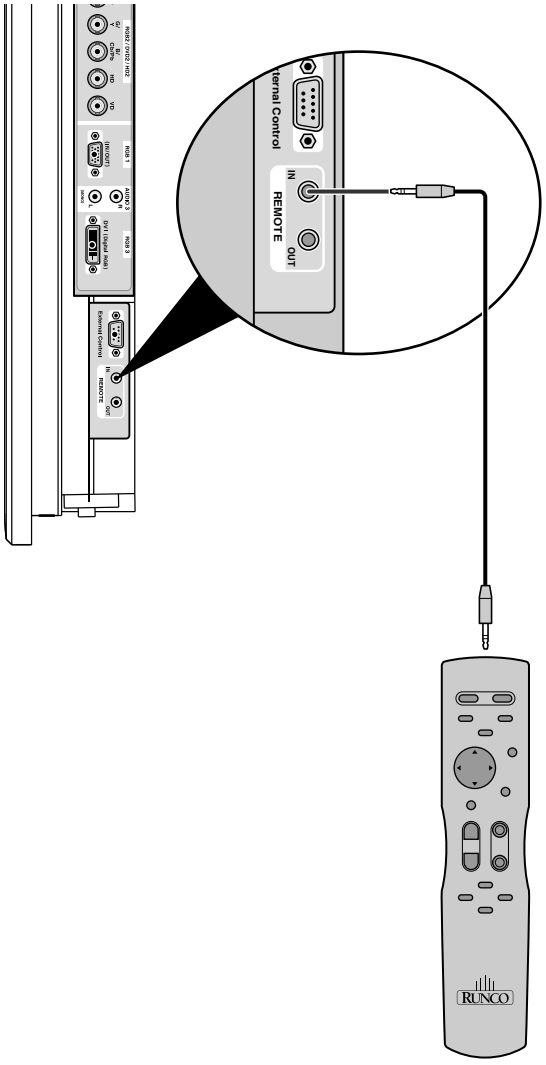


3. Replace the cover.



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 is used, the remote control can be operated even if no batteries are loaded.

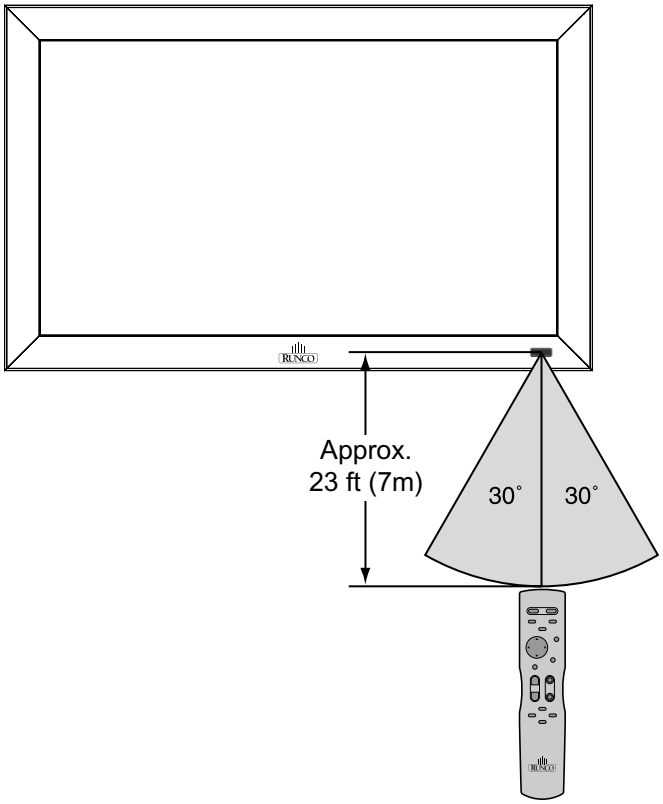


*The 1/8 Stereo Mini cable must be purchased separeately.

Operating Range

* Use the remote control within a distance of about 23 ft. (7m) from the front of the monitor's remote control sensor and at horizontal an vertical angles of up to approximately 30°.

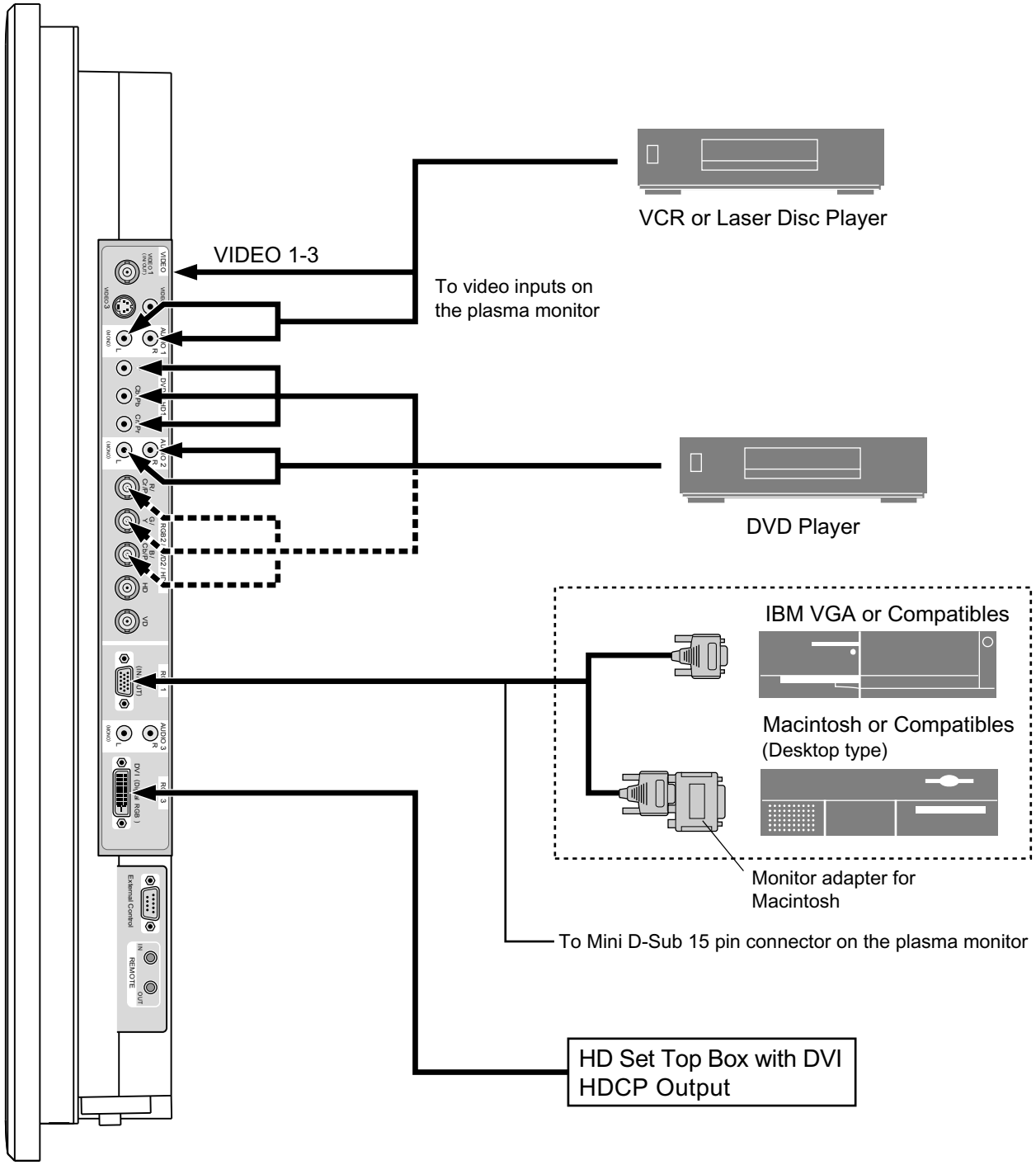
* The remote control operation may not function if the monitor's remote control sensor is exposed to direct sunlight or strong artificial light, or if there is an obstacle between the sensor and the remote control.



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.

Installation



Connecting Your PC or Macintosh Computer

Connecting your PC or Macintosh computer to your plasma monitor will enable you to display your computer's screen image for an impressive presentation. The plasma monitor supports the signals described on page 53.

To connect a PC, Macintosh or compatible graphics adapter, simply:

1. Turn off the power to your plasma monitor and computer.

2. If your PC does not support SXGA/XGA/SVGA/VGA you will need to install an SXGA/XGA/SVGA/VGA graphics board. Consult your computer's owner's manual for your SXGA/XGA/SVGA/VGA configuration. If you need to install a new board, see the manual that comes with your new graphics board for installation instructions.

3. This plasma monitor provides signal compatibility up to VESA 160031200 (UXGA). However, it is not recommended to use this resolution due to image readability on the monitor's native pixel resolution panel.

4. Use the signal cable to connect your PC or Macintosh computer to the plasma monitor. For Macintosh, use the monitor adapter to connect to your computer's video port, if necessary.

5. Turn on the plasma monitor and the computer.

6. If the plasma monitor goes blank after a period of inactivity, it may be caused by a screen saver installed on the computer you've connected to the plasma monitor.

When using a Macintosh with the plasma monitor, the following four display standards are supported using the Macintosh adapter:

13" fixed mode
16" fixed mode
19" fixed mode
21" fixed mode

The 13" fixed mode is recommended for your 42Wide VGA.

Connecting Your VCR or Laser Disc Player:

Use common RCA cables (not provided) to connect your VCR or laser disc player to your plasma monitor. To make these connections, simply:

1. Turn off the power to your plasma monitor and VCR or laser disc player.

2. Connect one end of your RCA cable to the video output connector on the back of your VCR or laser disc player, connect the other end to the Video input on your plasma monitor. Use standard RCA audio patch cords to connect the audio from your VCR or laser disc player to your plasma monitor (if your VCR or laser disc player has this capability). Be careful to keep your right and left channel connections correct for stereo sound.

3. Turn on the plasma monitor and the VCR or laser disc player.

Note: Refer to your VCR or laser disc player owner's manual for more information about your equipment's video output requirements.

Connecting Your DVD Player:

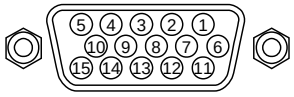
You can connect your plasma monitor to a DVD player. To do so, simply:

1. Turn off the power to your plasma monitor and DVD player.

2. Use a component video cable to connect your DVD player to the Y, Cb, and Cr inputs on your plasma monitor. Or use the DVD-player's S-Video output. Use a standard S-Video cable to connect to the S-Video input on the plasma monitor.

3. Turn on the plasma monitor and the DVD player.

Pin Assignments and Signal Levels for 15 pin RGB (Analog)

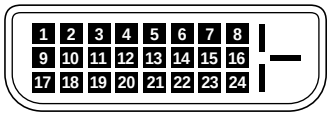


Pin No.	Signal (Analog)
1	Red
2	Green or sync-on-green
3	Blue
4	No connection
5	Ground
6	Red ground
7	Green ground
8	Blue ground
9	No connection
10	Sync signal ground
11	No connection
12	Bi-directional DATA (SDA)
13	Horizontal sync or Composite sync
14	Vertical sync
15	Data clock

Pin Configuration and Signal of the RGB 3 Connector (DVI Connector)

The unit is equipped with a type of connector commonly used for digital.
(This cannot be used for an analog input.)

RGB 3



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 -

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 ON button (on the remote control or control panel) to turn on the unit.

   The monitor's POWER/STANDBY indicator will light up (green) when the unit is on.
3. Press the POWER OFF button (on the remote control or control panel) 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 ⊖ button (on the remote control or the unit) to decrease to the desired level.

MUTE

To cancel the sound:

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. 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. ()
   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 ▲▼◀ ▶ buttons.
2. Press the POINTER button to delete the pointer.

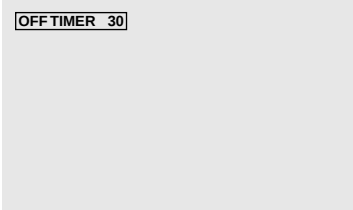
OFF TIMER

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.

→ **30** → **60** → **90** → **120** → **0**

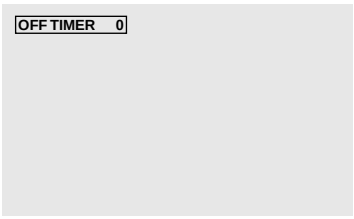


To check the remaining time:

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.

To cancel the off timer:

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



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.

Aspect Ratio Control

Wide Screen Operations (Manual)

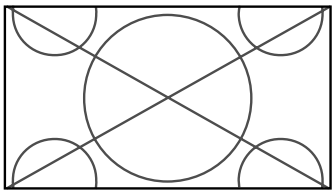
With this function, you can select one of five sizes.

When viewing videos or DVDs:

1. Press the WIDE button on the remote control.
2. Within 3 seconds...
   Press the WIDE button again.
   The screen size switches as follows:

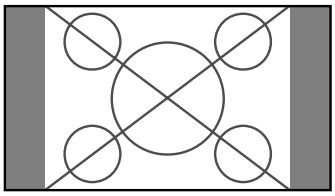
ZOOM → NORMAL → FULL → STADIUM → 14:9

ZOOM size screen



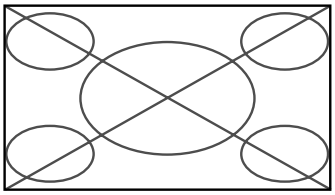
The picture is expanded in the horizontal and vertical direction, maintaining the original proportions.
* Use this for theater size (wide) movies, etc.

NORMAL size screen (4:3)



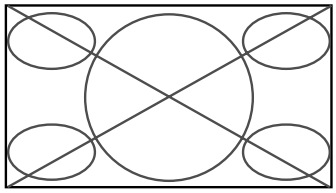
The normal size screen is displayed.
* The picture has the same size as video pictures with a 4:3 aspect ratio.

FULL size screen



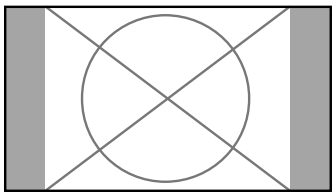
The image is expanded in the horizontal direction.
* Images compressed in the horizontal direction ("squeezed images") are expanded in the horizontal direction and displayed on the entire screen with correct linearity. (Normal images are expanded in the horizontal direction.)

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.

14:9 size screen

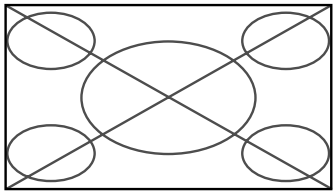


The image is displayed at a 14:9 aspect ratio.
* This feature is available when the input signal is video, component or RGB (525P or 625P signal from a scan converter).

When viewing a high definition video source:

1. Press the WIDE button on the remote control.

FULL size screen (16:9)



The full size screen is displayed.
* The picture has the same size as video pictures (16:9).

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

Wide Screen Operation with Computer Signals

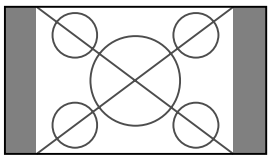
Switch to the wide screen mode to expand the 4 : 3 image to fill the entire screen.

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

   Press the WIDE button again.
   The screen size switches as follows:

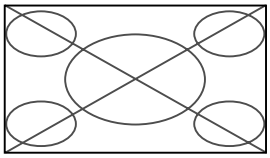
   → **NORMAL** → **FULL** → **ZOOM**

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



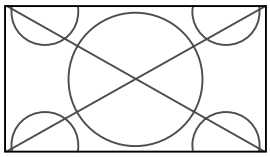
The picture has the same size as the normal computer image.

FULL size screen



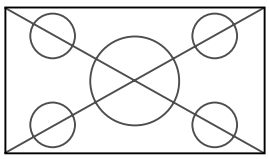
The image is expanded in the horizontal direction.

ZOOM size screen



When wide signals are input.

FULL size screen



Information

■ Supported resolution

See page 41 for details on the display output of the various VESA signal standards supported by the monitor.

■ When 853 (848) dot × 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 41.

* “ IBM PC/AT” and “VGA” are registered trademarks of IBM, Inc. of the United States.

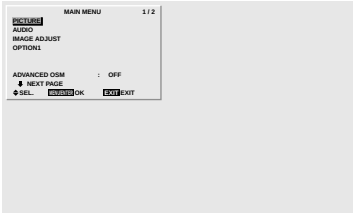
Note: *Do not allow the displayed in 4:3 mode for an extended period. This can cause a phosphor burn-in.*

OSM(On Screen Menu) Controls

Menu Operations

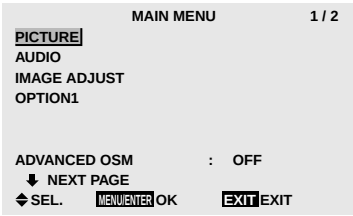
The OSM window is displayed with respect to the screen as shown on the diagram.

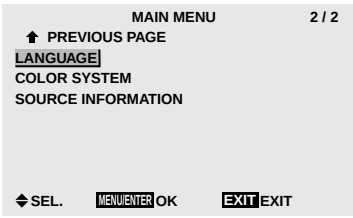
* Depending on the screen's mode, the OSM may be displayed differently.
  In the explanation, the OSM section is shown close up.



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

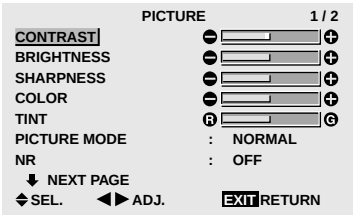
1. Press the MENU/ENTER button on the remote control to display the MAIN MENU.





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 submenu 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.

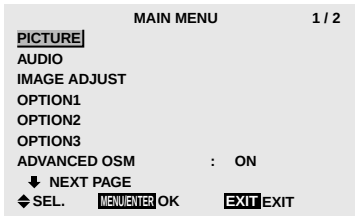
6. Repeat steps 2 – 5 to adjust an additional item, or press the EXIT button on the remote control to return to the main menu.

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.



Main menu	Sub menu		Functions	Default	Reset
PICTURE	CONTRAST		Adjusts the contrast.	Center	Yes
	BRIGHTNESS		Adjusts the brightness.	Center	Yes
	SHARPNESS		Adjusts the sharpness.	Center	Yes
	COLOR		Adjusts the color.	Center	Yes
	TINT		Adjusts the tint.	Center	Yes
	PICTURE MODE		Sets the picture mode according to the VIDEO environment and image software.	NORMAL	Yes
	NR		Reduces noise visible in image.	OFF	Yes
	COLOR TEMP		Adjusts the color temperature and white balance.	Mid	Yes
	WHITE BALANCE	GAIN RED	Adjusts the red content (signal level).	Center	Yes
		GAIN GREEN	Adjusts the green content (signal level).	Center	Yes
		GAIN BLUE	Adjusts the blue content (signal level).	Center	Yes
		BIAS RED	Adjusts the red content (black level).	Center	Yes
		BIAS GREEN	Adjusts the green content (black level).	Center	Yes
		BIAS BLUE	Adjusts the blue content (black level).	Center	Yes
		RESET	Resets WHITE BALANCE settings to the factory default values.	OFF	Yes
	GAMMA		Adjusts the brightness of midtone areas.	2	Yes
	LOW TONE		Enables high-quality dark area reproduction.	AUTO	Yes
	COLOR TUNE	RED	Adjusts hue and color density of red.	Center	Yes
		GREEN	Adjusts hue and color density of green.	Center	Yes
		BLUE	Adjusts hue and color density of blue.	Center	Yes
		YELLOW	Adjusts hue and color density of yellow.	Center	Yes
		MAGENTA	Adjusts hue and color density of magenta.	Center	Yes
		CYAN	Adjusts hue and color density of cyan.	Center	Yes
		RESET	Resets COLOR TUNE settings to the factory default values.	OFF	Yes

Main menu	Sub menu	Functions	Default	Reset
AUDIO	BASS	Sets the bass.	Center	Yes
	TREBLE	Sets the treble.	Center	Yes
	BALANCE	Sets the left/right balance.	Center	Yes
	AUDIO INPUT1-3	Sets the allocation of the audio connectors.	*1	Yes

Main menu	Sub menu	Functions	Default	Reset
IMAGE ADJUST	ASPECT MODE	Selects between the different aspect ratio modes.	—	—
	V-POSITION	Adjusts the vertical position.	Center	Yes
	H-POSITION	Adjusts the horizontal position.	Center	Yes
	V-HEIGHT	Adjusts the vertical size.	Min	Yes
	H-WIDTH	Adjusts the horizontal size.	Min	Yes
	AUTO PICTURE	Turn this on to have the monitor automatically adjust “FINE PICTURE” and “PICTURE ADJ”.	OFF*2	No
	FINE PICTURE	Adjusts for flickering on the computer image.	Min*2	Yes
	PICTURE ADJ.	Adjusts for striped patterns on the computer image.	Center*2	Yes

Main menu	Sub menu		Functions	Default	Reset
OPTION1	OSM	DISPLAY OSM	When set to OFF, the on-screen menu is not displayed.	ON	Yes
		OSM ADJ.	Sets the position of the menu.	1	Yes
		OSM ANGLE	Sets the display format as a horizontal or vertical screen.	H	Yes
		OSM ORBITER	Sets the OSM not to be displayed at the same position.	OFF	Yes
	BNC INPUT		Sets the BNC connectors.	RGB	Yes
	D-SUB INPUT		Checks the signal being transmitted to RGB1 terminal.	RGB	—
	RGB SELECT		Sets the appropriate mode for the computer image. RGB (VGA signals), VIDEO (Moving picture), WIDE (Wide VGA), DTV.	AUTO	Yes
	HD SELECT		Sets the digital broadcasting (1080A,1080B, 1080C) or the High Vision (1035I).	1080B	No
	INPUT SKIP		Skips over signals which are not present.	OFF	Yes
	ALL RESET		Resets all the settings (PICTURE, AUDIO, IMAGE ADJUST, OPTION1~3, etc.) to the factory default values.	—	—

Main menu	Sub menu		Functions	Default	Reset
OPTION2	PWR. MGT.		Sets the monitor for use as an energy-saving display when used with a computer.	OFF	Yes
	CINEMA MODE		Sets the picture to suit the movie.	ON	Yes
	LONG LIFE	PLE	Limits screen brightness to reduce burn-in of the display.	AUTO	Yes
		ORBITER	Moves the picture intermittently.	OFF	Yes
		INVERSE	Displays a negative/positive inverse image or an all-white screen.	OFF	Yes
		SCREEN WIPER	Wipes the screen with a white vertical bar.	OFF	Yes
	GRAY LEVEL		In case of 4 : 3, sets the luminance of both sides.	3	Yes

Main menu	Sub menu		Functions	Default	Reset
OPTION3	TIMER	PRESENT TIME	Sets the day of the week and the time.	—	No
		PROGRAM	Sets the ON/OFF time for switching on the power and the input mode.	OFF	Yes
	PWR. ON MODE		Sets the input mode at the time the power is switched on.	LAST	Yes
	CONTROL LOCK		Disables the function of the front panel buttons.	OFF	Yes
	IR REMOTE		Disables the transmission of the remote control.	ON	Yes
	LOOP OUT		When set to ON, the received signal will be looped out.	OFF	Yes
	ID NUMBER		Sets ID number for the display.	ALL	Yes
	VIDEO WALL	DIVIDER	Creates a 2×2 or 3×3 video wall.	OFF	Yes
		POSITION	Sets the position.	—	—
		DISP. MODE	Selects the screen mode from between Splitting and Blanking.	SPLIT	Yes
		AUTO ID	Automatically sets the ID number of multiple displays.	OFF	Yes
		IMAGE ADJUST	Adjusts the position of the image, etc.	—	—
		P. ON DELAY	When set to ON, each display turns on after a delay time.	OFF	Yes
		PLE LINK	Sets a uniform brightness for each display.	OFF	Yes
		REPEAT TIMER	Sets two programmable timers.	OFF	Yes

Main menu	Sub menu	Functions	Default	Reset
ADVANCED OSM		Turn this ON to access full menu.	OFF	Yes
LANGUAGE		Sets the language of the menus (English, German, French, Swedish, Italian, Spanish or Chinese).	English	No
COLOR SYSTEM		Sets the VIDEO format (AUTO, PAL, PAL-M, PAL-N, PAL60, SECAM, 4.43 NTSC or 3.58 NTSC).	AUTO	No
SOURCE INFORMATION		Used to check the frequency and synchronizing polarities of the active signal being input.	—	—

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

*1 AUDIO INPUT 1: VIDEO1 AUDIO INPUT 2: HD/DVD1 AUDIO INPUT 3: RGB1

*2 RGB/PC only

Picture Settings Menu

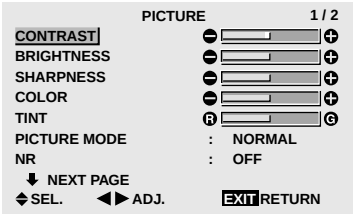
Adjusting the picture

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

Example: Adjusting the contrast

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “PICTURE”, then press the MENU/ENTER button.
   The “PICTURE” screen appears.
2. Use the ▲ and ▼ buttons to select “CONTRAST”.



3. Use the ◀ and ▶ buttons to adjust the contrast.

* If neither the ◀ or ▶ button is pressed within 5 seconds, the current setting is set and the previous screen reappears.

4. *Once the adjustment is completed ...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

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.

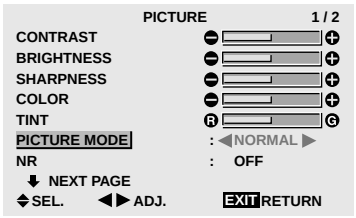
Setting the picture mode according to the brightness of the room

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

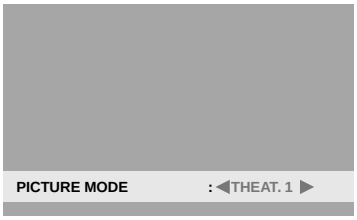
Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “PICTURE”, then press the MENU/ENTER button.
   The “PICTURE” screen appears.
2. Use the ▲ and ▼ buttons to select “PICTURE MODE”.



3. *To set to “THEAT. 1” ...*
   Use the ◀ and ▶ buttons to select “THEAT. 1”.
   The mode switches as follows when the ◀ and ▶ buttons are pressed:

→ **NORMAL** ↔ **THEAT. 1** ↔ **THEAT. 2** ↔ **DEFAULT** ←



* If neither the ◀ or ▶ button is pressed within 5 seconds, the current selection is set and the previous screen reappears.

4. *Once the adjustment is completed ...*
   Press the EXIT button to return to the main menu. To delete the main menu, press the EXIT button once more.

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.

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

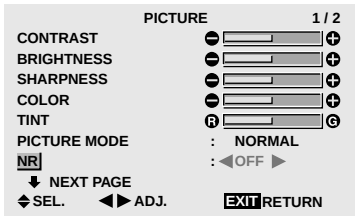
Reducing noise in the picture

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”

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “PICTURE”, then press the MENU/ENTER button.
   The “PICTURE” screen appears.
2. Use the ▲ and ▼ buttons to select “NR”.



3. Use the ◀ and ▶ buttons to select “NR-3”.
   The mode switches as follows when the ◀ and ▶ buttons are pressed:

   → **OFF** ↔ **NR-1** ↔ **NR-2** ↔ **NR-3** ←

   * If neither the ◀ or ▶ button is pressed within 5 seconds, the current selection is set and the previous screen reappears.

4. *Once the setting is completed ...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

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 → NR-2 → 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.

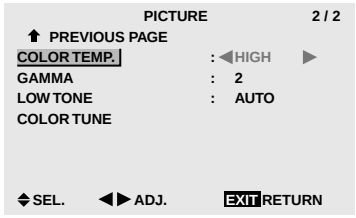
Example: Setting “HIGH”

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “PICTURE”, then press the MENU/ENTER button.
   The “PICTURE” screen appears.
2. Use the ▲ and ▼ buttons to select “COLOR TEMP.”.
3. Use the ◀ and ▶ buttons to select “HIGH”.
   The mode switches as follows when the ◀ and ▶ buttons are pressed:

   → **LOW** ↔ **MID LOW** ↔ **MID** ↔ **HIGH** ←

* See below to set “WHITE BALANCE”.



* If neither the ◀ or ▶ button is pressed within 5 seconds, the current selection is set and the previous screen reappears.

4. *Once the setting is completed...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

Information

■ Setting the color temperature

LOW ..... Redder
MID LOW ..... Slightly redder
MID ..... Standard (slightly bluer)
HIGH ..... Bluer

■ Restoring the factory default settings

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

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

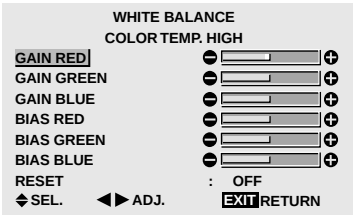
Set “ADVANCED OSM” to “ON” in the main menu (1/2), then perform the following operations.

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

Perform Steps 1-3 of COLOR TEMP., then...

4. Press the MENU/ENTER button.
   The “WHITE BALANCE” screen appears.

5. Use the ▲ and ▼ buttons to select “GAIN RED”.



6. Adjust the white balance using the ◀ and ▶ buttons.

* If neither the ◀ or ▶ button is pressed within 5 seconds, the current setting is set and the previous screen reappears.

7. *Once the adjustment is completed...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

Information

■ Adjusting the white balance

GAIN R/G/B ..... White balance adjustment for signal 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.

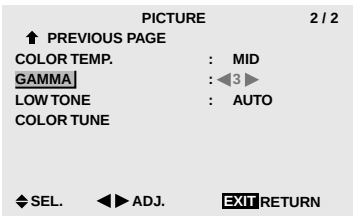
Example: Setting “3”

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “PICTURE”, then press the MENU/ENTER button.
   The “PICTURE” screen appears.
2. Use the ▲ and ▼ buttons to select “GAMMA”.
3. Use the ◀ and ▶ buttons to select “3”.
   The mode switches as follows each time the ◀ or ▶ button is pressed:

   → **1** ↔ **2** ↔ **3** ↔ **4** ←



4. *Once the setting is completed...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

Information

■ GAMMA settings

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

■ Restoring the factory default settings

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

Making the Low Tone adjustments

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

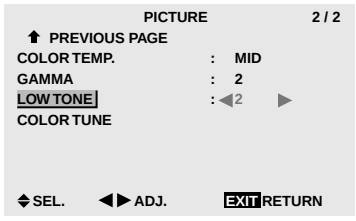
Example: Setting “2”

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “PICTURE”, then press the MENU/ENTER button.
   The “PICTURE” screen appears.
2. Use the ▲ and ▼ buttons to select “LOW TONE”.
3. Use the ◀ and ▶ buttons to select “2”.
   The mode switches as follows each time the ◀ or ▶ button is pressed:

   → **AUTO** ↔ **1** ↔ **2** ↔ **3** ←



4. *Once the setting is completed...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

Information

■ LOW TONE settings

AUTO ..... Will automatically appraise the picture and make adjustments.

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

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

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

■ Restoring the factory default settings

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

Adjusting the colors

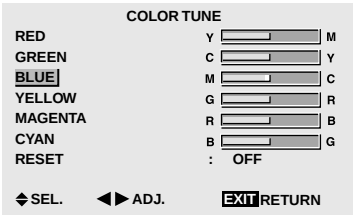
Use this procedure to adjust hue and color density for red, green, blue, yellow, magenta and cyan.
Such adjustments will not affect the other colors.
You can accentuate the green color of trees, the blue of the sky, etc.

Example: Adjusting the color tune for blue

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "PICTURE", then press the MENU/ENTER button.
   The "PICTURE" screen appears.
2. Use the ▲ and ▼ buttons to select "COLOR TUNE", then press the MENU/ENTER button.
   The "COLOR TUNE" screen appears.
3. Use the ▲ and ▼ buttons to select "BLUE".
4. Adjust using the ◀ and ▶ buttons.



* If neither the ◀ or ▶ button is pressed within 5 seconds, the current selection is set and the previous screen reappears.

To continue making other adjustments...
Repeat from step 3.

5. *Once the setting is completed...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

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.

■ Restoring the factory default settings

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

Audio Settings Menu

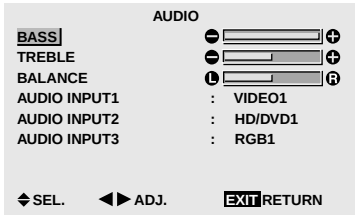
Adjusting the treble, bass and left/right balance and audio input select

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

Example: Adjusting the bass

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "AUDIO", then press the MENU/ENTER button.
   The "AUDIO" screen appears.
2. *To adjust the bass ...*
   Use the ▲ and ▼ buttons to select "BASS".
3. Adjust the bass using the ◀ and ▶ buttons.



To continue adjusting the audio ...
Repeat from step 2.

4. *Once the adjustment is completed ...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

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.

■ Restoring the factory default settings

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

Setting the allocation of the audio connectors

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

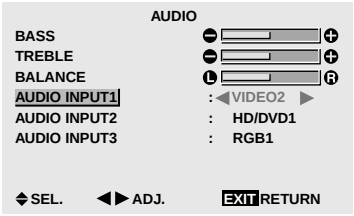
Example: Setting “AUDIO INPUT1” to “VIDEO 2”

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “AUDIO”, then press the MENU/ENTER button.
   The “AUDIO” screen appears.
2. Use the ▲ and ▼ buttons to select “AUDIO INPUT1”.
3. *To set the AUDIO INPUT1 to “VIDEO2”...*
   Use the ◀ and ▶ buttons to select “VIDEO2”.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   The available sources depend on the setting of “BNC INPUT”.

RGB: → VIDEO1 ↔ VIDEO2 ↔ VIDEO3 ↔ HD/DVD1 ←
→ RGB3 ↔ RGB2 ↔ RGB1 ←

COMP.: → VIDEO1 ↔ VIDEO2 ↔ VIDEO3 ↔ HD/DVD1 ←
→ RGB3 ↔ RGB1 ↔ HD/DVD2 ←



4. *Once the setting is completed...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

Information

■ AUDIO INPUT

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

■ Restoring the factory default settings

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

Image Adjust Settings Menu

Adjusting the Position, Size, Fine Picture, Picture Adj

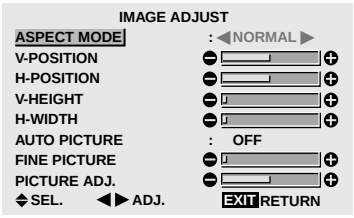
The position of the image can be adjusted and flickering of the image can be corrected.

Example: Adjusting the vertical position in the normal mode

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “IMAGE ADJUST”, then press the MENU/ENTER button. The “IMAGE ADJUST” menu appears.

Default settings (when RGB/PC is selected)



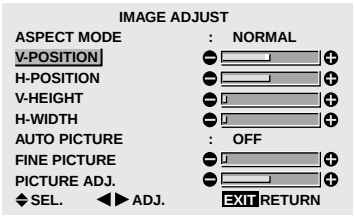
* The settings on the IMAGE ADJUST menu are not preset at the factory.

To select a mode ...
Use the ◀ and ▶ buttons to select a mode.
The mode switches as follows when the ◀ and ▶ buttons are pressed:

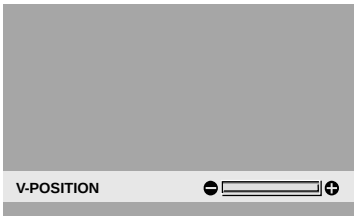
NORMAL ↔ FULL

* The mode can also be switched by pressing the “WIDE” button on the remote control.

2. *To adjust the vertical position ...*
   Use the ▲ and ▼ buttons to select “V-POSITION”.



3. Adjust using the ◀ and ▶ buttons.



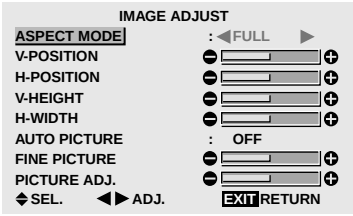
* If neither the ◀ or ▶ button is pressed within 5 seconds, the current setting is set and the previous screen reappears.

To continue making other computer image adjustments ...
Repeat from step 2.

4. *Once all adjustments are completed ...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

Information

■ When "AUTO PICTURE" is "OFF"



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 won'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.

■ Restoring the factory default settings

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

Option1 Settings Menu

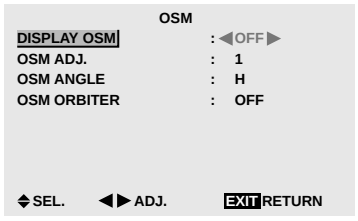
Setting the on-screen menu

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

Example: Turning the DISPLAY OSM off

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "OPTION1", then press the MENU/ENTER button. The "OPTION1" menu appears.
2. Use the ▲ and ▼ buttons to select "OSM", then press the MENU/ENTER button. The "OSM" menu appears.
3. Use the ▲ and ▼ buttons to select "DISPLAY OSM".
4. *To set the DISPLAY OSM to "OFF"...*
   Use the ◀ and ▶ buttons to select "OFF".
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   ON ↔ OFF



5. *Once the setting is completed...*
   Press the EXIT button to return to the OPTION1 menu. To return to the main menu, press the EXIT button once more.

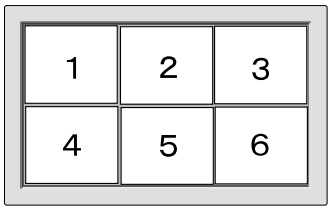
Information

■ 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).

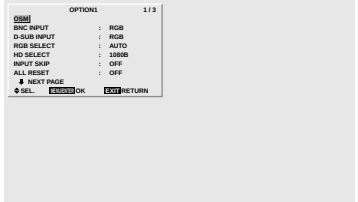
■ OSM ADJUST settings

Adjusts the position of the menu when it appears on the screen.
The position can be set between 1 to 6.

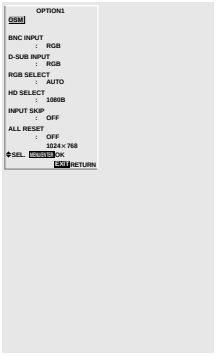


■ OSM ANGLE settings

Sets the display format (landscape "H" or portrait "V").
"H"



"V"



Only effective when Advanced OSM is OFF.

■ OSM ORBITER settings

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.

■ Restoring the factory default settings

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

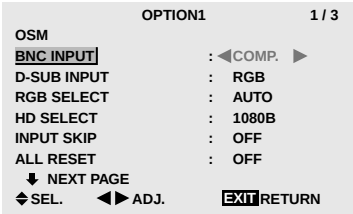
Setting the BNC connectors

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

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "OPTION1", then press the MENU/ENTER button.
   The "OPTION1" screen appears.
2. Use the ▲ and ▼ buttons to select "BNC INPUT".
3. *To set the BNC INPUT mode to "COMP."...*
   Use the ◀ and ▶ buttons to select "COMP.".
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   RGB ↔ COMP.



4. *Once the setting is completed...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

Information

■ BNC INPUT Settings

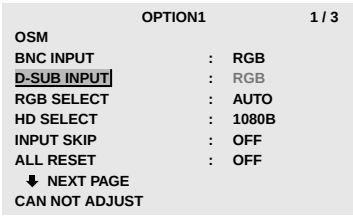
RGB ..... Use the 5BNC terminals for RGB input.
COMP. ..... Use the 3BNC terminals for component input.

■ Restoring the factory default settings

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

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.



Setting a computer image to the correct RGB select screen

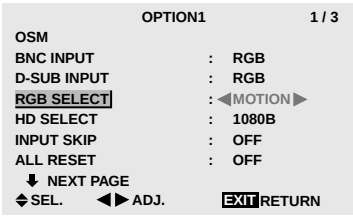
With the computer image, select the RGB Select mode for a moving image such as (video) mode, wide mode or digital broadcast.

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "OPTION1", then press the MENU/ENTER button.
   The "OPTION1" screen appears.
2. Use the ▲ and ▼ buttons to select "RGB SELECT".
3. *To set the RGB select mode to "MOTION" ...*
   Use the ◀ and ▶ buttons to select "MOTION".
   The mode switches as follows each time the ◀ or ▶ button is pressed:

   → **AUTO** ↔ **STILL** ↔ **MOTION** ↔ **WIDE1** ↔ **WIDE2** ↔ **DTV** ←



4. *Once the setting is completed ...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

Information

■ RGB 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 41.

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 × 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 × 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.

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

See page 41 for the details of the above settings.

■ Restoring the factory default settings

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

Setting high definition images to the suitable screen size

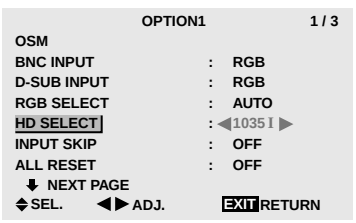
Use this procedure to set whether the number of vertical lines of the input high definition image is 1035 or 1080.

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "OPTION1", then press the MENU/ENTER button.
   The "OPTION1" screen appears.
2. Use the ▲ and ▼ buttons to select "HD SELECT".
3. *To set the HD SELECT mode to "1035I" ...*
   Use the ◀ and ▶ buttons to select "1035I".
   The mode switches as follows each time the ◀ or ▶ button is pressed:

   →1080B ↔ 1035I ↔ 1080A ←



4. *Once the setting is completed ...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

Information

■ HD SELECT modes

These 3 modes are not displayed in correct image automatically.

1080B ..... Standard digital broadcasts

1035I ..... Japanese "High Vision" signal format

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

Setting the Input Skip

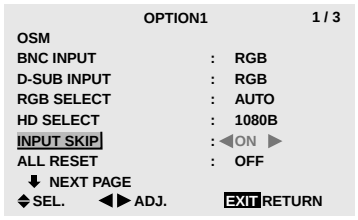
When this is ON, signals which are not present will be skipped over and only pictures whose signals are being transmitted will be displayed.
This setting is valid only for the INPUT SELECT button on the unit.

Example: Set to "ON"

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "OPTION1", then press the MENU/ENTER button.
   The "OPTION1" screen appears.
2. Use the ▲ and ▼ buttons to select "INPUT SKIP".
3. *To set the INPUT SKIP mode to "ON"...*
   Use the ◀ and ▶ buttons to select "ON".
   The mode switches as follows each time the ◀ or ▶ button is pressed:

   OFF ↔ ON



4. *Once the setting is completed...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

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.

■ Restoring the factory default settings

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

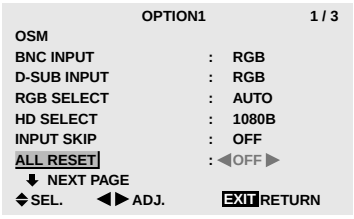
Resetting to the default values

Use these operations to restore all the settings (PICTURE, AUDIO, IMAGE ADJUST, OPTION1~3, etc) to the factory default values.

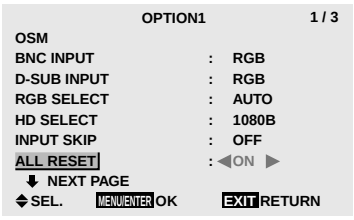
Refer to page 16 for items to be reset.

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “OPTION1”, then press the MENU/ENTER button.
   The “OPTION1” screen appears.
2. Use the ▲ and ▼ buttons to select “ALL RESET”.



3. Use the ◀ and ▶ buttons to select “ON”, then press the MENU/ENTER button.



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

4. *Once the setting is completed ...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

Option2 Settings Menu

Setting the power management for computer images

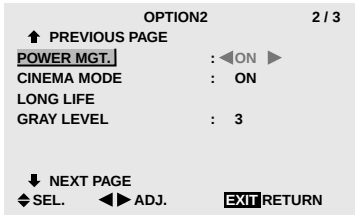
This energy-saving (power management) function automatically reduces the monitor’s power consumption if no operation is performed for a certain amount of time.

Example: Turning the power management function on

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “OPTION2”, then press the MENU/ENTER button.
   The “OPTION2” screen appears.
2. Use the ▲ and ▼ buttons to select “PWR. MGT.”.
3. *To turn the power management function on ...*
   Use the ◀ and ▶ buttons to select “ON”.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   ON ↔ OFF



4. *Once the setting is completed ...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

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 page 27 for indicator status and description.

■ Restoring the factory default settings

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

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

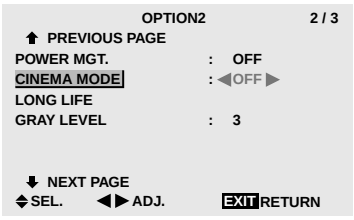
The film image is automatically discriminated and projected in an image mode suited to the picture.
[NTSC, PAL, PAL60, 480I (60Hz), 525I (60Hz), 576I (50Hz), 625I (50Hz), 1035I (60Hz), 1080I (60Hz) only]

Example: Setting the “CINEMA MODE” to “OFF”

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “OPTION2”, then press the MENU/ENTER button.
   The “OPTION2” screen appears.
2. Use the ▲ and ▼ buttons to select “CINEMA MODE”.
3. *To set the CINEMA MODE to “OFF” ...*
   Use the ◀ and ▶ buttons to select “OFF”.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   ON ↔ OFF



4. *Once the setting is completed ...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

Information

■ CINEMA MODE

ON ..... Automatic discrimination of the image and projection in cinema mode.
OFF ..... Cinema mode does not function.

■ Restoring the factory default settings

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

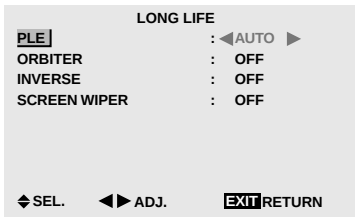
Reducing burn-in of the screen

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.

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “OPTION2”, then press the MENU/ENTER button.
   The “OPTION2” screen appears.
2. Use the ▲ and ▼ buttons to select “LONG LIFE”, then press the MENU/ENTER button.
   The “LONG LIFE” screen appears.



3. Set the LONG LIFE mode using ▲▼◀ and ▶ buttons.
   See page 27 to set PLE.
   See page 28 to set ORBITER.
   See page 28 to set INVERSE.
   See page 29 to set SCREEN WIPER.
4. *Once the setting is completed...*
   Press the EXIT button to return to the OPTION2 screen.
   To return to the main menu, press the EXIT button once more.

Information

■ Restoring the factory default settings

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

PLE (Peak Luminance Enhancement)

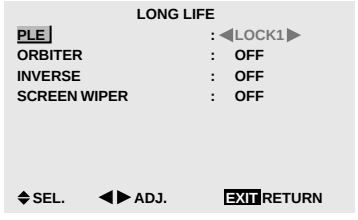
Use this to activate the brightness limiter.

Example: Setting “PLE” to “LOCK1”

Perform Steps 1-2 of LONG LIFE, then...

3. Use the ▲ and ▼ buttons to select “PLE”.
4. Use the ◀ and ▶ buttons to select “LOCK1”.
   The mode switches as follows each time the ◀ or ▶ button is pressed:

→AUTO ↔ LOCK1 ↔ LOCK2 ↔ LOCK3←



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

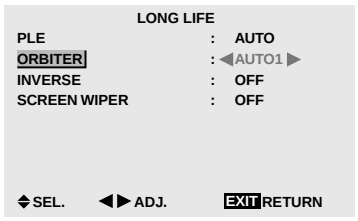
Use this to set the picture shift.

Example: Setting “ORBITER” to “AUTO1”

Perform Steps 1-2 of LONG LIFE, then...

3. Use the ▲ and ▼ buttons to select “ORBITER”.
4. Use the ◀ and ▶ buttons to select “AUTO1”.
   The mode switches as follows each time the ◀ or ▶ button is pressed:

   →**OFF** ↔ **AUTO1** ↔ **AUTO2** ↔ **MANUAL**←



Information

■ ORBITER settings

OFF ..... Orbiter mode does not function.

AUTO1 ..... The picture moves around the screen intermittently, making the picture smaller.

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.

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.

Perform Steps 1-3 of ORBITER, then...

4. Use the ◀ and ▶ buttons to select “MANUAL”, then press the MENU/ENTER button.
   THE “ORBITER” screen appears.
5. Adjust the items using the ▲▼◀ and ▶ buttons.
   The mode switches as follows each time the ◀ or ▶ button is pressed:

• H-DOT

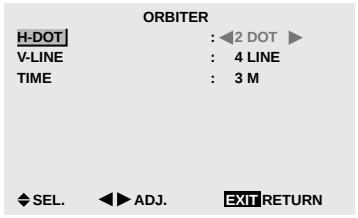
→**1 DOT** ↔ **2 DOT** ↔ **.....** ↔ **19 DOT** ↔ **20 DOT**←

• V-LINE

→**1 LINE** ↔ **2 LINE** ↔ **.....** ↔ **19 LINE** ↔ **20 LINE**←

• TIME

→**1 M** ↔ **2 M** ↔ **3 M** ↔ **4 M** ↔ **5 M**←



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.

INVERSE

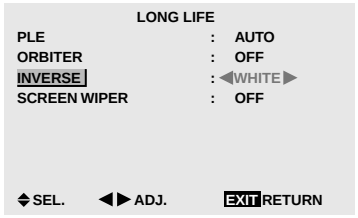
Use this to set the inverse mode or to display a white screen.

Example: Setting “INVERSE” to “WHITE”

Perform Steps 1-2 of LONG LIFE, then...

3. Use the ▲ and ▼ buttons to select “INVERSE”.
4. Use the ◀ and ▶ buttons to select “WHITE”.
   The mode switches as follows each time the ◀ or ▶ button is pressed:

   →**OFF** ↔ **ON** ↔ **WHITE**←



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.

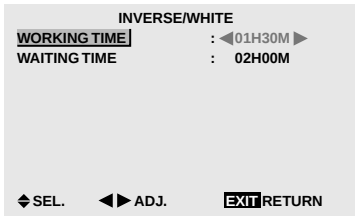
Perform Steps 1-3 of INVERSE, then...

4. Use the ◀ and ▶ buttons to select "ON", then press the MENU/ENTER button.
   THE "INVERSE/WHITE" screen appears.
5. Adjust the time using the ▲▼◀ and ▶ buttons.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   • WORKING TIME

   →**ON** ↔ **00H03M** ↔ **00H06M** ↔ **.....** ↔ **12H42M** ↔ **12H45M**←

   • WAITING TIME

   →**00H03M** ↔ **00H06M** ↔ **00H09M** ↔ **...** ↔ **12H42M** ↔ **12H45M**←



6. *Once the setting is completed...*
   Press the EXIT button to return to the LONG LIFE screen.

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.

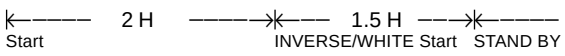
WAITING TIME ..... Set the standby time until the "INVERSE/WHITE" mode starts.

* 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]
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

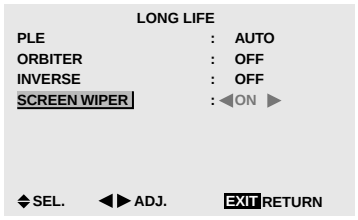
When this is set to ON, a white vertical bar moves repeatedly from the left and of the screen to the right end at a constant speed.

Example: Setting "SCREEN WIPER" to "ON"

Perform Steps 1-2 of LONG LIFE, then...

3. Use the ▲ and ▼ buttons to select "SCREEN WIPER".
4. Use the ◀ and ▶ buttons to select "ON".
   The mode switches as follows each time the ◀ or ▶ button is pressed:

   OFF ↔ **ON**



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 to that the SCREEN WIPER mode starts in 30 minutes and proceeds for one hour and a half.

Perform Steps 1-3 of SCREEN WIPER, then...

4. Use the ◀ and ▶ buttons to select "ON", then press the MENU/ENTER button.
   THE "SCREEN WIPER" screen appears.
5. Adjust the time and speed using the ▲▼◀ and ▶ buttons.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   • WORKING TIME

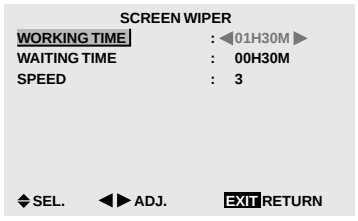
   →**ON** ↔ **00H03M** ↔ **00H06M** ↔ **.....** ↔ **12H42M** ↔ **12H45M**←

   • WAITING TIME

   →**00H03M** ↔ **00H06M** ↔ **00H09M** ↔ **...** ↔ **12H42M** ↔ **12H45M**←

   • SPEED

   →**1** ↔ **2** ↔ **3** ↔ **4** ↔ **5**←



6. *Once the setting is completed...*
   Press the EXIT button to return to the LONG LIFE screen.

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.

Setting the gray level for the sides of the screen

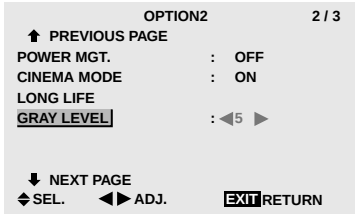
Use this procedure to set the gray level for the parts on the screen on which nothing is displayed when the screen is set to the 4:3 size.

Example: Adjusting the "GRAY LEVEL"

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "OPTION2", then press the MENU/ENTER button.
   The "OPTION2" screen appears.
2. Use the ▲ and ▼ buttons to select "GRAY LEVEL".
3. *To adjust the "GRAY LEVEL"...*
   Use the ◀ and ▶ buttons to adjust the GRAY LEVEL.



4. *Once the setting is completed ...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

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).

■ Restoring the factory default settings

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

Option3 Settings Menu

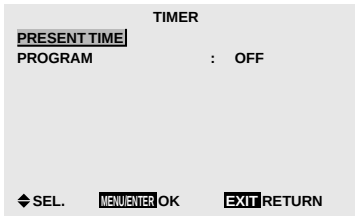
Using the timer

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.

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "OPTION3", then press the MENU/ENTER button.
   The "OPTION3" screen appears.
2. Use the ▲ and ▼ buttons to select "TIMER", then press the MENU/ENTER button.
   The "TIMER" screen appears.



3. Set the TIMER using ▲▼◀ and ▶ buttons.
   See page 31 to set PRESENT TIME.
   See page 32 to set PROGRAM.
4. *Once the setting is completed ...*
   Press the EXIT button to return to the OPTION3 screen. To return to the main menu, press the EXIT button once more.

Information

■ Restoring the factory default settings

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

PRESENT TIME

This sets the day of the week and present time.

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

Perform Steps 1-2 of TIMER, then...

3. Use the ▲ and ▼ buttons to select "PRESENT TIME", then press the MENU/ENTER button.
   The "PRESENT TIME" screen appears.

4. Use the ▲ and ▼ buttons to select the item, then adjust using the ◀ and ▶ buttons.

   The mode switches as follows each time the ◀ or ▶ button is pressed:
   • DAYLIGHT SAVING TIME
   ON ↔ OFF
   • Day
   →SUNDAY ↔ MONDAY ↔ ..... ↔ FRIDAY ↔ SATURDAY←
   • Hour/Minutes
   → 00:00 ↔ 00:01 ↔ 00:02 ↔ ..... ↔ 23:58 ↔ 23:59←

5. *Once the setting is completed...*
   Use the ▲ and ▼ buttons to select "SET", then press the MENU/ENTER button.
   The adjustments are stored and return to the TIMER menu.

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).

* If you press the EXIT button instead of the MENU/ENTER button in step 5, the settings can not be mode.

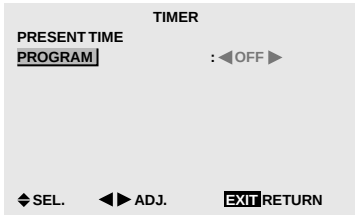
PROGRAM TIMER

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.

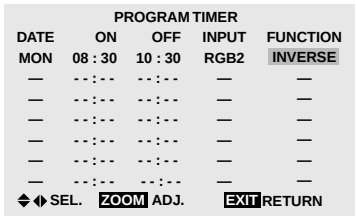
Perform Steps 1-2 of TIMER, then...

3. Use the ▲ and ▼ buttons to select “PROGRAM”.



4. Use the ◀ and ▶ buttons to select “ON”, then press the MENU/ENTER button.
   The “PROGRAM TIMER” screen appears.

5. Adjust using the ▲▼◀ and ▶ buttons and ZOOM + / − button.



   The mode switches as follows each time the ZOOM + / − button is pressed:

   • Date

   → — ↔ SUN ↔ MON ↔ ... ↔ SAT ↔ * ↔ *SUN ↔ *MON ↔ ... ↔ *SAT ←

   • ON/OFF Hour

   → 00 ↔ 01 ↔ 02 ↔ ..... ↔ 21 ↔ 22 ↔ 23 ←

   • Minute

   → 00 ↔ 01 ↔ 02 ↔ ..... ↔ 57 ↔ 58 ↔ 59 ←

   • INPUT

   → — ↔ LAST ↔ VIDEO1 ↔ VIDEO2 ↔ VIDEO3 ↔ HD/DVD1 ←
   → RGB3 ↔ RGB2 ↔ RGB1 ↔ HD/DVD2 ←

   • FUNCTION

   → — ↔ ORBITER ↔ INVERSE ↔ WHITE ↔ WIPER ←

6. *Once the setting is completed...*
   Press the EXIT button.
   The programs are stored, and return to the TIMER screen.

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.

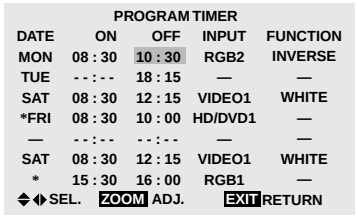
■ To reset the program

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

■ To reset the data

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

■ Special characters in the PROGRAM TIMER screen



• 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).

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.

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then ...

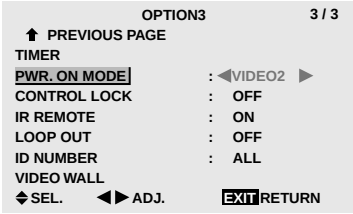
1. Use the ▲ and ▼ buttons to select “OPTION3”, then press the MENU/ENTER button.
   The “OPTION3” screen appears.

2. Use the ▲ and ▼ buttons to select “PWR. ON MODE”.

3. *To set the PWR. ON MODE to “VIDEO2”...*
   Use the ◀ and ▶ buttons to select “VIDEO2”.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   The available inputs depend on the setting of “BNC INPUT”.

   RGB: → LAST ↔ VIDEO1 ↔ VIDEO2 ↔ VIDEO3 ←
   → RGB3 ↔ RGB2 ↔ RGB1 ↔ HD/DVD1 ←

   COMP: → LAST ↔ VIDEO1 ↔ VIDEO2 ↔ VIDEO3 ←
   → RGB3 ↔ RGB1 ↔ HD/DVD2 ↔ HD/DVD1 ←



4. *Once the setting is completed...*
   Press the EXIT button return to the main menu.
   To delete the main menu, press the EXIT button once more.

Information

■ PWR. ON MODE settings

LAST ..... Last mode (the mode 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.

■ Restoring the factory default settings

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

Enabling/disabling the front panel controls

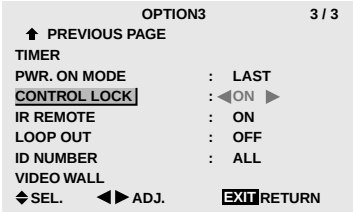
This function enables/disables the front panel controls.

Example: Setting "ON"

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "OPTION3", then press the MENU/ENTER button.
   The "OPTION3" screen appears.
2. Use the ▲ and ▼ buttons to select "CONTROL LOCK".
3. *To set the CONTROL LOCK to "ON"...*
   Use the ◀ and ▶ buttons to select "ON", then press the MENU/ENTER button.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   OFF ↔ ON



4. *Once the setting is completed...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

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.

■ Restoring the factory default settings

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

Enabling/disabling remote control wireless transmission

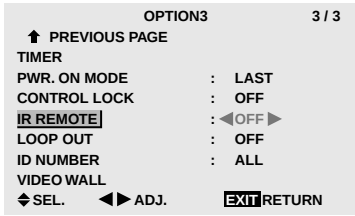
This function enables/disables remote control wireless transmission.

Example: Setting "OFF"

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "OPTION3", then press the MENU/ENTER button.
   The "OPTION3" screen appears.
2. Use the ▲ and ▼ buttons to select "IR REMOTE".
3. *To set the IR REMOTE to "OFF"...*
   Use the ◀ and ▶ buttons to select "OFF", then press the MENU/ENTER button.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   OFF ↔ ON



4. *Once the setting is completed...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

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.

■ Restoring the factory default settings

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

Loop Out setting

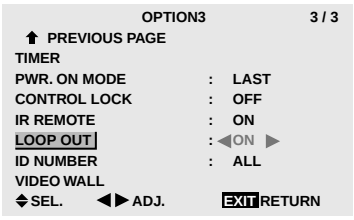
When this feature is set to ON, the received signal will be looped out.

Example: Setting “ON”

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “OPTION3”, then press the MENU/ENTER button.
   The “OPTION3” screen appears.
2. Use the ▲ and ▼ buttons to select “LOOP OUT”.
3. *To set the LOOP OUT to “ON”...*
   Use the ◀ and ▶ buttons to select “ON”.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   OFF ↔ ON



4. *Once the setting is completed...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

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 10.

■ 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.

■ Restoring the factory default settings

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

ID number setting

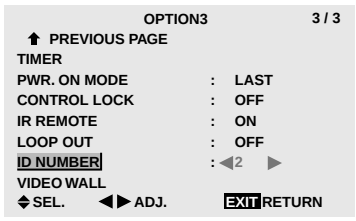
When using more than one of these displays, this function sets ID numbers so that operation of the remote control does not cause multiple monitors to operate at the same time.

Example: Setting “2”

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select “OPTION3”, then press the MENU/ENTER button.
   The “OPTION3” screen appears.
2. Use the ▲ and ▼ buttons to select “ID NUMBER”.
3. *To set the ID NUMBER to “2”...*
   Use the ◀ and ▶ buttons to select “2”.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   →ALL ↔ 1 ↔ 2 ↔ ..... ↔ 255 ↔ 256←



* **To reset back to ALL**
Press the CLEAR button.

4. *Once the setting is completed...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

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.

■ Restoring the factory default settings

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

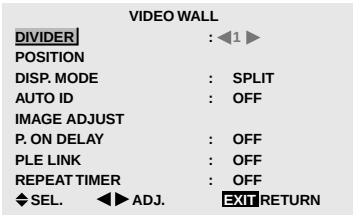
Video Wall setting

Use this feature to configure a 2×2 or 3×3 video wall.

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

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "OPTION3", then press the MENU/ENTER button.
   The "OPTION3" screen appears.
2. Use the ▲ and ▼ buttons to select "VIDEO WALL", then press the MENU/ENTER button.
   The "VIDEO WALL" screen appears.



3. Set the VIDEO WALL using ▲▼ ◀ and ▶ buttons.
   See page 35 to set DIVIDER.
   See page 35 to set POSITION.
   See page 36 to set DISP. MODE.
   See page 36 to set AUTO ID.
   See page 36 to set IMAGINE ADJUST.
   See page 37 to set P. ON DELAY.
   See page 37 to set PLE LINK.
   See page 38 to set REPEAT TIMER.
4. *Once the setting is completed...*
   Press the EXIT button to return to the OPTION3 menu.
5. Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

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

Information

■ Restoring the factory default settings

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

DIVIDER

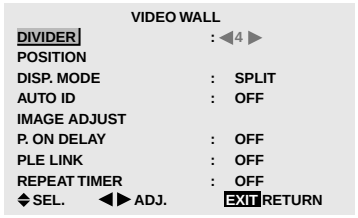
Set the 2×2 or 3×3 video wall.

Example: Setting "4"

Perform Steps 1-2 of VIDEO WALL, then...

3. Use the ▲ and ▼ buttons to select "DIVIDER".
4. Use the ◀ and ▶ buttons to select "4".
   The mode switches as follows each time the ◀ or ▶ button is pressed:

→ **OFF** ↔ **1** ↔ **4** ↔ **9** ←



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)

* When you select "4" or "9", set the VIDEO WALL POSITION.

VIDEO WALL POSITION

Set the position of each display.

Example: Setting "4"

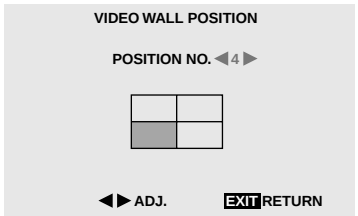
Perform Steps 1-2 of VIDEO WALL, then...

3. Use the ▲ and ▼ buttons to select "POSITION", then press the MENU/ENTER button.
   The "VIDEO WALL POSITION" screen appears.
4. Use the ◀ and ▶ buttons to select "NO. 4".
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   • 4 Screens

→ **NO. 1** ↔ **NO. 2** ↔ **NO. 3** ↔ **NO. 4** ←

   • 9 Screens

→ **NO. 7** ↔ **NO. 8** ↔ **.....** ↔ **NO. 14** ↔ **NO. 15** ←



5. Press the EXIT button to return to the VIDEO WALL screen.

Information

■ VIDEO WALL POSITION settings

1 Screen ..... There is no need to set POSITION.

4 Screens

NO. 1	NO. 2
NO. 4	NO. 3

9 Screens

NO. 7	NO. 8	NO. 9
NO. 10	NO. 11	NO. 12
NO. 13	NO. 14	NO. 15

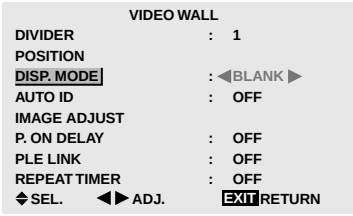
DISP. MODE

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

Example: Setting “BLANK”

Perform Steps 1-2 of VIDEO WALL, then...

3. Use the ▲ and ▼ buttons to select “DISP. MODE”.
4. Use the ◀ and ▶ buttons to select “BLANK”.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   SPLIT ↔ BLANK



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

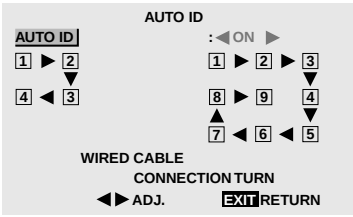
This feature automatically sets the ID numbers of multiple displays connected to each other.

Example: Setting “ON”

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

Perform Steps 1-2 of VIDEO WALL, then...

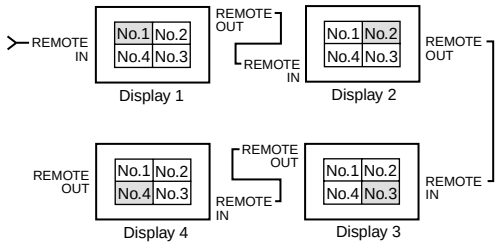
3. Use the ▲ and ▼ buttons to select “AUTO ID”.
4. Use the ◀ and ▶ buttons to select “ON”, then press the MENU/ENTER button.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   OFF ↔ ON



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.



OFF .... Disables Auto ID function.

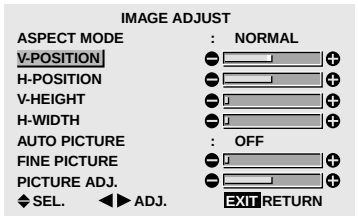
IMAGE ADJUST

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

Example: Adjusting the vertical position

Perform Steps 1-2 of VIDEO WALL, then...

3. Use the ▲ and ▼ buttons to select “IMAGE ADJUST”, then press the MENU/ENTER button.
   The “IMAGE ADJUST” screen appears.
4. Use the ▲ and ▼ buttons to select “V-POSITION”.



5. Adust using the ◀ and ▶ buttons.

* If neither the ◀ or ▶ button is pressed within 5 seconds, the current setting is set and the previous screen reappears.

6. *Once the setting is completed...*
   Press the EXIT button to return to the VIDEO WALL screen.

Information

■ IMAGE ADJUST settings

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

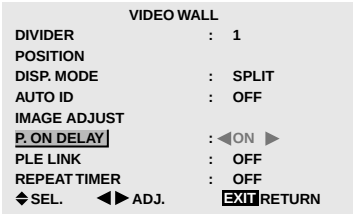
P. ON DELAY (Power on delay)

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

Example: Setting “ON”

Perform Steps 1-2 of VIDEO WALL, then...

3. Use the ▲ and ▼ buttons to select “P. ON DELAY”.
4. Use the ◀ and ▶ buttons to select “ON”.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   OFF ↔ ON



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.

* Once this function has been set to “ON”, 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 does function. However, by pressing and holding the POWER ON button for more than 3 seconds, the monitor will be turned on.

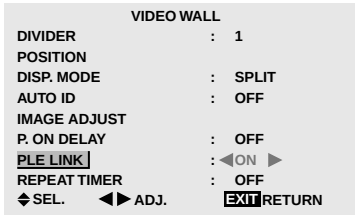
PLE LINK

Use this function to set a uniform brightness for each display.
Turn on the AUTO ID before the following operations.

Example: Setting “ON”

Perform Steps 1-2 of VIDEO WALL, then...

3. Use the ▲ and ▼ buttons to select “PLE LINK”.
4. Use the ◀ and ▶ buttons to select “ON”, then press the MENU/ENTER button.
   The mode switches as follows each time the ◀ or ▶ button is pressed:
   OFF ↔ ON



Information

■ PLE LINK settings

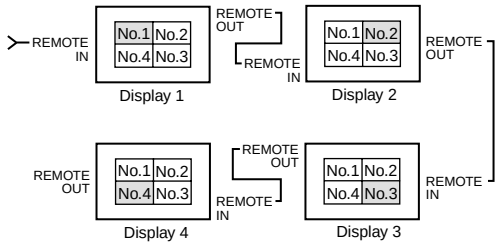
ON ..... Sets a uniform brightness for each screen in a 2×2 video wall.

OFF .... Sets the individual screen brightness for each screen in a 2×2 video wall.

* Set “OFF” in a 3×3 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.



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

REPEAT TIMER

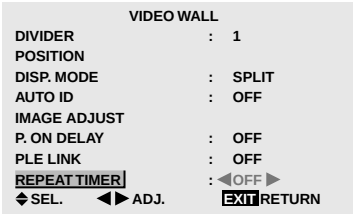
Use this to set two timers. Each timer can use the DIVIDER, SOURCE and WORK TIME functions.
Turn on the AUTO ID before the following operations.

Example:

TIMER1...VIDEO1 will be displayed for 3 minutes.
TIMER2...RGB1 will be displayed for 6 minutes in a 2×2 video wall.

Perform Steps 1-2 of VIDEO WALL, then...

3. Use the ▲ and ▼ buttons to select "REPEAT TIMER".



4. Use the ◀ and ▶ buttons to select "ON", then press the MENU/ENTER button.
   The "REPEAT TIMER" screen appears.
5. Adust using the ▲▼ ◀ and ▶ buttons.
   The mode switches as follows each time the ◀ or ▶ button is pressed:

• DIVIDER

→ 1 ↔ 4 ↔ 9 ←

• SOURCE
The available sources depend on the setting of "BNC INPUT".

→ VIDEO1 ↔ VIDEO2 ↔ VIDEO3 ↔ HD/DVD1 ←
→ RGB3 ↔ RGB2 ↔ RGB1 ↔ HD/DVD2 ←

• WORK TIME

→ 00H01M ↔ 00H02M ↔ 00H03M ↔ ..... ↔ 04H14M ↔ 04H15M ←

6. *Once the setting is completed...*
   Press the EXIT button to return to the VIDEO WALL screen.

Information

■ REPEAT TIMER settings

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.

Advanced OSM Settings Menu

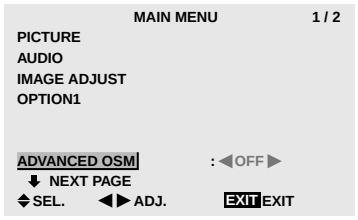
Setting the menu mode

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"

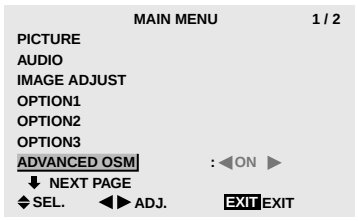
Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then ...

1. Use the ▲ and ▼ buttons to select "ADVANCED OSM".



2. *To set the ADVANCED OSM to "ON"...*
   Use the ◀ and ▶ buttons to select "ON".
   The mode switches as follows each time the ◀ or ▶ button is pressed:

OFF ↔ ON



3. *Once the setting is completed...*
   Press the Exit button to delete the main menu.

Information

■ 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).

■ Restoring the factory default settings

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

Language Settings Menu

Setting the language for the menus

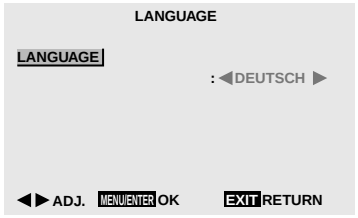
The menu display can be set to one of seven languages: English, German, French, Swedish, Italian, Spanish or Chinese.

Example: Setting the menu display to "DEUTSCH"

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "LANGUAGE", then press the MENU/ENTER button.
   The "LANGUAGE" screen appears.
2. *To select "DEUTSCH" ...*
   Use the ◀ and ▶ buttons to select " DEUTSCH".
   The mode switches as follows when the ◀ and ▶ buttons are pressed:

→ ENGLISH ↔ DEUTSCH ↔ FRANÇAIS ←
→ 中文 ↔ SVENSKA ↔ ITALIANO ↔ ESPAÑOL ←



3. *Once the setting is completed ...*
   Press the MENU/ENTER button to store the setting and return to the main menu.
   To delete the main menu, press the EXIT button.

Information

■ Language settings

ENGLISH ..... English
DEUTSCH..... German
FRANÇAIS ..... French
ESPAÑOL ..... Spanish
ITALIANO ..... Italian
SVENSKA ..... Swedish
中文 ..... Chinese

Color System Settings Menu

Setting the video signal format

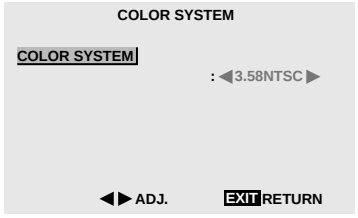
Use these operations to set the color systems of composite video signals or Y/C input signals.

Example: Setting the color system to "3.58 NTSC"

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "COLOR SYSTEM", then press the MENU/ENTER button.
   The "COLOR SYSTEM" screen appears.
2. *To select " 3.58NTSC " ...*
   Use the ◀ and ▶ buttons to select " 3.58NTSC ".
   The mode switches as follows when the ◀ and ▶ buttons are pressed:

→ AUTO ↔ 3.58NTSC ↔ 4.43NTSC ←
→ SECAM ↔ PAL-M ↔ PAL-N ↔ PAL60 ↔ PAL ←



3. *Once the setting is completed ...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

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.

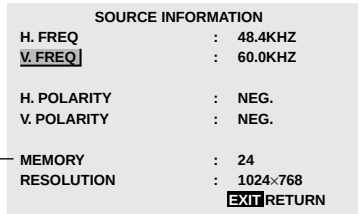
Source Information Menu

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.

Press the MENU/ENTER button on the remote control to display the MAIN MENU on the screen, then...

1. Use the ▲ and ▼ buttons to select "SOURCE INFORMATION", then press the MENU/ENTER button.
2. The "SOURCE INFORMATION" is displayed.



PC: MEMORY will be displayed.
Others: MODE will be displayed.

3. *Once you have checked the frequency ...*
   Press the EXIT button to return to the main menu.
   To delete the main menu, press the EXIT button once more.

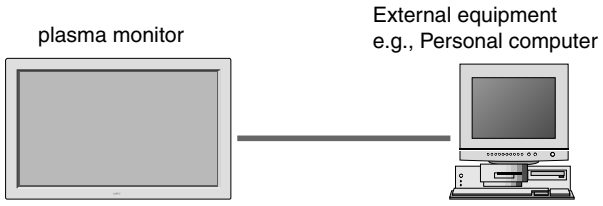
External Control

Application

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

Connections

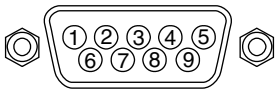
Connections are made as described below.



1) Connector on the plasma monitor side: EXTERNAL CONTROL connector.

Type of connector: D-Sub 9-pin male

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



2) Connector on the external equipment side: Serial port (RS-232C) connector.
See the specifications of the equipment that is to be connected for the type of connector and the pin assignment.

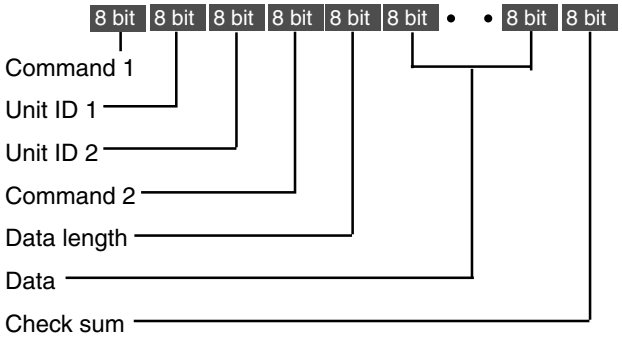
3) Wiring
Use a crossed (reverse) cable.
Wire the cable so that each pair of data lines cross between the two devices. These data line pairs are RXD (Receive data) and TXD (Transmit data), DTR (DTE side ready) and DSR (DCE side ready), and RTS (Ready to send) and CTS (Clear to send).

If DTR (4) and DSR (6) are not available, these 2 pins can be ignored. If RTS (7) and CTS (8) are not available, these 2 pins can be tied together.

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

Communication Format



Command 1

Command 1, along with command 2, is a number used to distinguish each command.
In the case of ACK, when the lower order 4 bits is FH (as in 3FH and 7FH), this indicates that the commands and data of the supported equipment have been received. When the lower order 4 bits is BH (as in 3BH and 7BH), this indicates that unsupported commands and data have been received.

Unit ID 1 and Unit ID 2

Unit ID 1 and unit ID 2 are numbers used to identify the equipment that is to be connected.
60H is used for the plasma monitor and 80H is used for external control equipment such as a personal computer.

1) Unit ID 1: Indicates the equipment sending the signal
2) Unit ID 2: Indicates the equipment receiving the signal

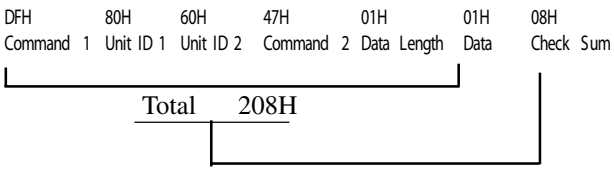
Command 2

Command 2, along with command 1, is a number used to distinguish each command.

Check Sum (CKS), Error Processing, and ACK

1) The check sum described below and RS-232C odd parity are used together for a check of the received data. The check sum is the lower order 8 bits of one frame of sent or received data comprising the sum total of Command 1, Unit ID 1 and 2, Command 2, Data Length, and Data.

Check Sum Example



2) Error Processing
* When the communication interval is vacant for more than 4 ms, thereafter a received Command 1 will be recognized. If, at this time, meaningful data cannot be recognized, that data will not be recognized (as valid data).
* An ACK will not be returned unless the receive data error, the check sum error, and the receive data are all taken in.

Command Reference List

	CMD1	CMD2	LEN
01. Power ON	9FH	4EH	00H
02. Power OFF	9FH	4FH	00H
03. Input Switch Change	DFH	47H	01H
04. VOLUME Gain Data	DFH	7FH	03H
05. AUDIO Mute On	9FH	3EH	00H
06. AUDIO Mute Off	9FH	3FH	00H
07. CONTRAST Gain Data	DFH	7FH	03H
08. BRIGHT Gain Data	DFH	7FH	03H
09. SHARPNESS Gain Data	DFH	7FH	03H
10. Color Gain Data	DFH	7FH	03H
11. TINT Gain Data	DFH	7FH	03H
12. PICTURE MODE Select	DFH	0AH	01H
13. COLOR TEMP SELECT	DFH	00H	01H
14. RED Gain Data	DFH	7FH	04H
15. GREEN Gain Data	DFH	7FH	04H
16. BLUE Gain Data	DFH	7FH	04H
17. NR MODE Set	DFH	C0H	01H
18. BASS Gain Data	DFH	7FH	03H
19. TREBLE Gain Data	DFH	7FH	03H
20. BALANCE Gain Data	DFH	7FH	03H
21. SCREEN MODE Select	DFH	51H	01H
22. V. POSITION Gain Data	DFH	7FH	03H
23. H. POSITION Gain Data	DFH	7FH	03H
24. V-HEIGHT Gain Data	DFH	7FH	03H
25. H-WIDTH Gain Data	DFH	7FH	03H
26. AUTO PICTURE Select	DFH	7FH	03H
27. PHASE Gain Data	DFH	7FH	03H
28. CLOCK Gain Data	DFH	7FH	03H
29. OSM Select	DFH	58H	01H
30. OSM ADJ. Gain Data	DFH	1AH	02H
31. POWER MGT Select	DFH	1AH	02H
32. GRAY LEVEL Set	DFH	C6H	01H
33. CINEMA MODE Set	DFH	C1H	01H
34. RGB3 ADJ. Select	DFH	1AH	02H
35. LONG LIFE Set	DFH	6BH	03H
36. INVERSE Set	DFH	C7H	03H
37. SCREEN WIPER Set	DFH	C8H	04H
38. RESET	1FH	54H	00H
39. Audio Select Set	DFH	70H	02H
40. BNC SELECT	DFH	8CH	01H
41. RGB Select	DFH	8BH	01H
42. HD Select	DFH	8AH	01H
43. LANGUAGE Select	DFH	5BH	01H
44. COLOR SYSTEM Select	DFH	5CH	01H
45. FREQUENCY Request	1FH	26H	00H
46. Input MODE Request	1FH	41H	00H
47. VIDEO ADJ Request	1FH	45H	00H
48. Audio Select Request	1FH	6FH	00H
49. Failure Mode Request	1FH	3FH	00H
50. MODEL NAME Request	1FH	17H	00H

01. Power ON

Function

The external control equipment switches on the power of the plasma monitor.

Transmission Data

9FH	80H	60H	4EH	00H	CKS

ACK

The plasma monitor returns the following ACK when the power is switched on.

3FH	60H	80H	4EH	00H	CKS

NOTE: Do not set the Power ON or Power OFF command continuously.

02. Power OFF

Function

The external control equipment switches off the power of the plasma monitor.

Transmission Data

9FH	80H	60H	4FH	00H	CKS

ACK

The plasma monitor returns the following ACK when the power is switched off.

3FH	60H	80H	4FH	00H	CKS

NOTE: Do not set the Power ON or Power OFF command continuously.

03. Input Switch Change

Function

The external control equipment switches the input of the plasma monitor.

Transmission Data

DFH	80H	60H	47H	01H	DATA00	CKS

DATA00: Input Select

- 01H: Video1
- 02H: Video2
- 03H: Video3
- 05H: HD (HD1 or DTV or DTV1)
- 06H: HD2 (DTV2)
- 07H: RGB1/PC1
- 08H: RGB2/PC2
- 0CH: RGB3/PC3

ACK

The plasma monitor returns the following ACK when the input is switched.

3FH	60H	80H	47H	00H	CKS

04. VOLUME Gain Data

Function

The external control equipment changes the VOLUME gain data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER SOUND Gain Flag 05H

DATA01: VOLUME Gain Flag 01H

DATA02: VOLUME Gain 00H: Step 0
|
0AH: Step 10 (Default)
|
2AH: Step 42

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER SOUND Gain Flag 05H

DATA01: VOLUME Gain Flag 01H

05. AUDIO Mute On

Function

The external control equipment switches on AUDIO Mute of the plasma monitor.

Transmission Data

9FH	80H	60H	3EH	00H	CKS

ACK

3FH	60H	80H	3EH	00H	CKS

06. AUDIO Mute Off

Function

The external control equipment switches off AUDIO Mute of the plasma monitor.

Transmission Data

9FH	80H	60H	3FH	00H	CKS

ACK

3FH	60H	80H	3FH	00H	CKS

07. CONTRAST Gain Data

Function

The external control equipment changes the CONTRAST gain data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 01H

DATA01: CONTRAST Gain Flag 07H

DATA02: CONTRAST Gain CCH : -52
|
FFH: -01
00H: 0
01H: +01
|
14H: +20

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag 01H

DATA01: CONTRAST Gain Flag 07H

08. BRIGHT Gain Data

Function

The external control equipment changes the BRIGHT gain data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 01H

DATA01: BRIGHT Gain Flag 08H

DATA02: BRIGHT Gain E0H: -32
|
FFH: -01
00H: 0
01H: +01
|
20H: +32

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag 01H

DATA01: BRIGHT Gain Flag 08H

09. SHARPNESS Gain Data

Function

The external control equipment changes the SHARPNESS gain data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 01H

DATA01: SHARPNESS Gain Flag 06H

DATA02: SHARPNESS Gain F0H: -16
|
FFH: -01
00H: 0
01H: +01
|
10H:+16

Only when a RGB signal is connected

DATA02: SHARPNESS Gain 01H: 1
02H: 2
03H: 3
04H: 4

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag 01H

DATA01: SHARPNESS Gain Flag 06H

10. COLOR Gain Data

Function

The external control equipment changes the COLOR gain data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 01H
DATA01: COLOR Gain Flag 04H
DATA02: COLOR Gain E0H: -32
* COLOR Gain is from -22 (EAH) to +22 (16H) only during video.
FFH: -01
00H: 0
01H: +01
20H: +32

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag 01H
DATA01: COLOR Gain Flag 04H

11.TINT Gain Data

Function

The external control equipment changes the TINT gain data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 01H
DATA01: TINT Gain Flag 05H
DATA02: TINT Gain E0H: -32
* TINT Gain is from -22 (EAH) to +22 (16H) only during video.
FFH: -01
00H: 0
01H: +01
20H: +32

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag 01H
DATA01: TINT Gain Flag 05H

12. PICTURE MODE Select

Function

The external control equipment sets the picture mode of the plasma monitor.

Transmission Data

DFH	80H	60H	0AH	01H	DATA00	CKS

DATA00: 01H: MEMORY
02H: THEATER
03H: NORMAL
04H: RESET

ACK

7FH	60H	80H	0AH	01H	DATA00	CKS

DATA00: 01H: MEMORY
02H: THEATER
03H: NORMAL
04H: RESET

13. COLOR TEMP SELECT

Function

The external control equipment changes the COLOR TEMP of the plasma monitor.

Transmission Data

DFH	80H	60H	00H	01H	DATA00	CKS

DATA00: 00H: 1
01H: 2
02H: 3
03H: PRO

ACK

7FH	60H	80H	00H	01H	DATA00	CKS

DATA00: 00H: 1
01H: 2
02H: 3
03H: PRO

NOTE: Set so that at the selection of 1, 2, or 3 of COLOR TEMP change of the following R/G/B GAIN data cannot be accepted.

14. RED Gain Data

Function

The external control equipment changes the RED Gain Data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	04H	DATA00 to DATA03	CKS

DATA00: USER PICTURE Gain Flag 01H
DATA01: RED Gain Flag 01H
DATA02: RED Gain 1 (Bias) D8H: -40
FFH: -1
00H: 0
IEH: +30
DATA03: RED Gain 2 (Drive) D8H: -40
FFH: -1
00H: 0
IEH: +30

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag 01H
DATA01: RED Gain Flag 01H

15. GREEN Gain Data

Function

The external control equipment changes the GREEN Gain Data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	04H	DATA00 to DATA03	CKS

DATA00: USER PICTURE Gain Flag — 01H
DATA01: GREEN Gain Flag — 02H
DATA02: GREEN Gain 1 (Bias) — D8H: -40 … FFH: -1 … 00H: 0 … IEH: +30
DATA03: GREEN Gain2 (Drive) — D8H: -40 … FFH: -1 … 00H: 0 … IEH: +30

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag — 01H
DATA01: GREEN Gain Flag — 02H

16. BLUE Gain Data

Function

The external control equipment changes the BLUE Gain Data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	04H	DATA00 to DATA03	CKS

DATA00: USER PICTURE Gain Flag — 01H
DATA01: BLUE Gain Flag — 03H
DATA02: BLUE Gain1(Bias) — D8H:-40 … FFH:-1 … 00H: 0 … IEH: +30
DATA03: BLUE Gain2(Drive) — D8H: -40 … FFH:-1 … 00H: 0 … IEH:+30

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag — 01H
DATA01: BLUE Gain Flag — 03H

17. NR MODE Set

Function

The external control equipment sets the NR (Noise Reduction) mode of the plasma monitor.

Transmission Data

DFH	80H	60H	C0H	01H	DATA00	CKS

DATA00: 01H: NR OFF
02H: NR-1
03H: NR-2
04H: NR-3

ACK

7FH	60H	80H	C0H	01H	DATA00	CKS

DATA00: 01H: NR OFF
02H: NR-1
03H: NR-2
04H: NR-3

18. BASS Gain Data

Function

The external control equipment changes the BASS gain data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag — 05H
DATA01: BASS Gain Flag — 03H
DATA02: BASS Gain — F3H: -13 … FFH: -01 … 00H: 0 … 01H: +01 … 0DH: +13

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag — 05H
DATA01: BASS Gain Flag — 03H

19. TREBLE Gain Data

Function

The external control equipment changes the TREBLE gain data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag — 05H
DATA01: TREBLE Gain Flag — 04H
DATA02: TREBLE Gain — F3H: -13 … FFH: -01 … 00H: 0 … 01H: +01 … 0DH: +13

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag — 05H
DATA01: TREBLE Gain Flag — 04H

20. BALANCE Gain Data

Function

The external control equipment changes the BALANCE gain data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 05H
DATA01: BALANCE Gain Flag 02H
DATA02: BALANCE Gain EAH: -22
FFH: -01
00H: 0
01H: +01
16H: +22

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag 05H
DATA01: BALANCE Gain Flag 02H

21. SCREEN MODE Select

Function

The external control equipment switches the screen mode of the plasma monitor.

Transmission Data

DFH	80H	60H	51H	01H	DATA00	CKS

DATA00: 02H: STADIUM
03H: ZOOM
04H: NORMAL
05H: FULL

ACK

7FH	60H	80H	51H	01H	DATA00	CKS

DATA00: 02H: STADIUM
03H: ZOOM
04H: NORMAL
05H: FULL

22. V. POSITION Gain Data

Function

The external control equipment changes the V. POSITION gain data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: V. POSITION Gain Flag 01H
DATA02: V. POSITION Gain C0H: -64
FFH: -01
00H: 0
01H: +01
40H: +64

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: V. POSITION Gain Flag 01H

23. H. POSITION Gain Data

Function

The external control equipment changes the H. POSITION gain data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: H. POSITION Gain Flag 02H
DATA02: H. POSITION Gain 80H: -128
FFH: -01
00H: 0
01H: +01
7FH: +127

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: H. POSITION Gain Flag 02H

24. V-HEIGHT Gain Data

Function

The external control equipment changes the V-HEIGHT gain data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: V-HEIGHT Gain Flag 07H
DATA02: V-HEIGHT Gain 00H: 0
40H: +64

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: V-HEIGHT Gain Flag 07H

25. H-WIDTH Gain Data

Function

The external control equipment changes the H-WIDTH gain data of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: H-WIDTH Gain Flag 08H
DATA02: H-WIDTH Gain 00H: 0
40H: +64

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: H-WIDTH Gain Flag 08H

26. AUTO PICTURE Select

Function

The external control equipment switches on or off the AUTO PICTURE of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: AUTO PICTURE Select Flag 09H
DATA02: 00H: ON
01H: OFF

ACK

7FH	60H	80H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: AUTO PICTURE Select Flag 09H
DATA02: 00H: ON
01H: OFF

27. PHASE Gain Data

Function

The external control equipment changes the PHASE gain data (Phase) of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: PHASE Gain Flag 03H
DATA02: PHASE Gain 00H: 0
|
2CH: +44

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: PHASE Gain Flag 03H

28. CLOCK Gain Data

Function

The external control equipment changes the CLOCK gain data (ratio of frequency division) of the plasma monitor.

Transmission Data

DFH	80H	60H	7FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: CLOCK Gain Flag 04H
DATA02: CLOCK Gain C0H: -64
|
FFH: -01
00H: 0
01H: +01
|
40H: +64

ACK

7FH	60H	80H	7FH	02H	DATA00	DATA01	CKS

DATA00: USER PICTURE Gain Flag 03H
DATA01: CLOCK Gain Flag 04H

29. OSM Select

Function

The external control equipment switches on or off the on-screen menu (OSM) of the plasma monitor.

Transmission Data

DFH	80H	60H	58H	01H	DATA00	CKS

DATA00: 01H: On-Screen menu On
02H: On-Screen menu Off

ACK

7FH	60H	80H	58H	01H	DATA00	CKS

DATA00: 01H: On-Screen menu On
02H: On-Screen menu Off

On-Screen menu On/Off is equivalent to the OSM menu item under the FUNCTION menu.

*Operation is as described in the table below.

Operation	On-Screen Menu (OSM)			
	Display of items and adjustments on the menu		Volume display, input display, and screen size display	
	When screen menu is ON	When screen menu is OFF	When screen menu is ON	When screen menu is OFF
Remote control operation	Yes	Yes	Yes	No
Personal computer control operation	No	No	Yes	No

30. OSM ADJ. Gain Data

Function

The external control equipment sets the position of the OSM menu of the plasma monitor.

Transmission Data

DFH	80H	60H	1AH	02H	DATA00	DATA01	CKS

DATA00: OSM ADJ. Gain Flag 02H
DATA01: 01H: 1
|
06H: 6

ACK

7FH	60H	80H	1AH	01H	DATA00	CKS

DATA00: OSM ADJ. Gain Flag 02H

31. POWER MGT Select

Function

The external control equipment switches on or off the POWER MANAGEMENT of the plasma monitor.

Transmission Data

DFH	80H	60H	1AH	02H	DATA00	DATA01	CKS

DATA00: POWER MGT Select 03H
DATA01: 01H: ON
02H: OFF

ACK

7FH	60H	80H	1AH	02H	DATA00	DATA01	CKS

DATA00: POWER MGT Select 03H
DATA01: 01H: ON
02H: OFF

32. GRAY LEVEL Set

Function

The external control equipment sets the GRAY LEVEL of the plasma monitor.

Transmission Data

DFH	80H	60H	C6H	01H	DATA00	CKS

DATA00: GRAY LEVEL 00H: 0
|
0FH: 15

ACK

7FH	60H	80H	C6H	01H	DATA00	CKS

DATA00: GRAY LEVEL 00H: 0
|
0FH: 15

33. CINEMA MODE Set

Function

The external control equipment switches on or off the CINEMA MODE of the plasma monitor.

Transmission Data

DFH	80H	60H	C1H	01H	DATA00	CKS

DATA00: CINEMA MODE Set 01H: ON
02H: OFF

ACK

7FH	60H	80H	C1H	01H	DATA00	CKS

DATA00: CINEMA MODE Set 01H: ON
02H: OFF

34. RGB3 ADJ. Select

Function

The external control equipment sets the RGB3 ADJUST of the plasma monitor.

Transmission Data

DFH	80H	60H	1AH	02H	DATA00	DATA01	CKS

DATA00: RGB3 ADJ. Select 06H
DATA01: 01H: 1
02H: 2
03H: 3

ACK

7FH	60H	80H	1AH	02H	DATA00	DATA01	CKS

DATA00: RGB3 ADJ. Select 06H
DATA01: 01H: 1
02H: 2
03H: 3

35. LONG LIFE Set

Function

The external control equipment sets the PLE, ORBITER, and INVERSE (inverse of image brightness) of the plasma monitor.

Transmission Data

DFH	80H	60H	6BH	03H	DATA00	DATA01	DATA02	CKS

DATA00: PLE 01H: AUTO
02H: LOCK
DATA01: INVERSE 01H: ON
02H: OFF
03H: WHITE
DATA02: ORBITER (PICTURE SHIFT) 01H: ON
02H: OFF

ACK

The plasma monitor returns the following ACK when setting the PLE, ORBITER, and INVERSE (inverse of image brightness):

3FH	60H	80H	6BH	00H	CKS

36. INVERSE Set

Function

The external control equipment sets the INVERSE (inverse of image brightness) and the WHITE of the plasma monitor.

Transmission Data

DFH	80H	60H	C7H	03H	DATA00	DATA01	DATA02	CKS

DATA00 : INVERSE/WHITE
- 00H: No operation
- 01H: ON(INVERSE)
- 02H: OFF
- 03H: WHITE

DATA01 : WORKING TIME
- 00H: ON
- 01H: 03M (minutes)
- 02H: 06M (minutes)
- |
- FFH: 12H (hours) and 45M (minutes)

DATA02 : WAITING TIME
- 01H: 03M (minutes)
- 02H: 06M (minutes)
- |
- FFH: 12H (hours) and 45M (minutes)

ACK

3FH	60H	80H	C7H	00H	CKS

NOTE: The WORKING TIME and the WAITING TIME can be set in units of 3 minutes.
Example: 03H=9 minutes
1EH=1 hour and 30 minutes

37. SCREEN WIPER Set

Function

The external control equipment sets the SCREEN WIPER of the plasma monitor.

Transmission Data

DFH	80H	60H	C8H	04H	DATA00 to	DATA03	CKS

DATA00 : SCREEN WIPER
- 00H: No operation
- 01H: ON
- 02H: OFF

DATA01 : WORKING TIME
- 00H: ON
- 01H: 03M (minutes)
- 02H: 06M (minutes)
- |
- FFH: 12H (hours) and 45M (minutes)

DATA02 : WAITING TIME
- 01H: 03M (minutes)
- 02H: 06M (minutes)
- |
- FFH: 12H (hours) and 45M (minutes)

DATA03 : SPEED
- 01H: 1
- |
- 05H: 5

ACK

3FH	60H	80H	C8H	00H	CKS

NOTE: The WORKING TIME and the WAITING TIME can be set in units of 3 minutes.
Example: 03H=9 minutes
1EH=1 hour and 30 minutes

38. RESET

Function

The external control equipment resets the user adjustment of the plasma monitor.

Transmission Data

1FH	80H	60H	54H	00H	CKS

ACK

3FH	60H	80H	54H	00H	CKS

39. Audio Select Set

Function

The external control equipment sets combinations of audio and video inputs for the plasma monitor.

Transmission Data

DFH	80H	60H	70H	02H	DATA00	DATA01	CKS

DATA00: AUDIO INPUT
- 01H: AUDIO 1
- 02H: AUDIO 2
- 03H: AUDIO 3

DATA01: VISUAL INPUT
- 01H: Video 1
- 02H: Video 2
- 03H: Video 3
- 05H:HD (HD1 or DTV or DTV1)
- 06H: HD2 (DTV2)
- 07H: RGB 1/ PC 1
- 08H: RGB 2/ PC 2
- 0CH: RGB 3/ PC 3

ACK

The plasma monitor returns the following ACK when the input is switched.

3FH	60H	80H	70H	00H	CKS

* The plasma monitor returns “Not Available” when selecting the video input same as the one set at one of the AUDIO 1 to 3.

Example:

The plasma monitor returns “Not Available” when selecting the VIDEO1 for AUDIO2 or VIDEO3 after VIDEO1 has been set to AUDIO1.

40. BNC SELECT

Function

The external control equipment sets the BNC SELECT of the plasma monitor.

Transmission Data

DFH	80H	60H	8CH	01H	DATA00	CKS

DATA00 : BNC SELECT
- 01H: RGB
- 02H: Component
- 03H: Video

ACK

The plasma monitor returns the following ACK when setting the BNC SELECT:

7FH	60H	80H	8CH	01H	DATA00	CKS

DATA00 : BNC SELECT
- 01H: RGB
- 02H: Component
- 03H: Video

41. RGB Select

Function

The external control equipment sets the RGB SELECT of the plasma monitor.

Transmission Data

DFH	80H	60H	8BH	01H	DATA00	CKS

DATA00:
- 01H: AUTO
- 02H: STILL
- 03H: MOTION
- 04H: WIDE1
- 05H: WIDE2
- 06H: DTV

ACK

7FH	60H	80H	8BH	01H	DATA00	CKS

DATA00:
- 01H: AUTO
- 02H: STILL
- 03H: MOTION
- 04H: WIDE1
- 05H: WIDE2
- 06H: DTV

42. HD Select

Function

The external control equipment sets the HD SELECT of the plasma monitor.

Transmission Data

DFH	80H	60H	8AH	01H	DATA00	CKS

DATA00:
- 01H: 1035I
- 02H: 1080A
- 03H: 1080B

ACK

7FH	60H	80H	8AH	01H	DATA00	CKS

DATA00:
- 01H: 1035I
- 02H: 1080A
- 03H: 1080B

43. LANGUAGE Select

Function

The external control equipment sets the LANGUAGE SELECT of the plasma monitor.

Transmission Data

DFH	80H	60H	5BH	01H	DATA00	CKS

DATA00:
- 01H: ENGLISH
- 02H: GERMAN
- 03H: FRENCH
- 04H: SPANISH
- 05H: ITALIAN
- 06H: SWEDISH
- 07H: JAPANESE

ACK

7FH	60H	80H	5BH	01H	DATA00	CKS

DATA00:
- 01H: ENGLISH
- 02H: GERMAN
- 03H: FRENCH
- 04H: SPANISH
- 05H: ITALIAN
- 06H: SWEDISH
- 07H: JAPANESE

44. COLOR SYSTEM Select

Function

The external control equipment sets the COLOR SYSTEM of the plasma monitor.

Transmission Data

DFH	80H	60H	5CH	01H	DATA00	CKS

DATA00:
- 01H: 3.58NTSC
- 02H: 4.43NTSC
- 03H: PAL
- 04H: SECAM
- 0AH: AUTO1
- 0BH: PAL60
- 0CH: AUTO2
- 0DH: PAL- M
- 0EH: PAL- N

ACK

7FH	60H	80H	5CH	01H	DATA00	CKS

DATA00:
- 01H: 3.58NTSC
- 02H: 4.43NTSC
- 03H: PAL
- 04H: SECAM
- 0AH: AUTO1
- 0BH: PAL60
- 0CH: AUTO2
- 0DH: PAL- M
- 0EH: PAL- N

45. FREQUENCY Request

Function

The external control equipment inquires the Horizontal frequency, Vertical frequency, Horizontal sync polarity, Vertical sync polarity, Mode, and Resolution of the plasma monitor.

Transmission Data

1FH	80H	60H	26H	00H	CKS

ACK

7FH	60H	80H	26H	0BH	DATA00 to	DATA10	CKS

Horizontal frequency

DATA00: Integer part
00H: 0 (No signal: 00H)
|
FFH: 256

DATA01: One decimal place
00H: 0 (No signal: 00H)
|
09H: 9

Vertical frequency

DATA02: Integer part
00H: 0 (No signal: 00H)
|
FFH: 256

DATA03: One decimal place
00H: 0 (No signal: 00H)
|
09H: 9

Horizontal sync polarity

DATA04: 00H: –
01H: Positive
02H: Negative

Vertical sync polarity

DATA05: 00H: –
01H: Positive
02H: Negative

MODE

DATA06:	00H:	No signal	–
	01H to 80H:	RGB signal	Identification number of PC mode
	81H:	Video signal	3.58NTSC
	82H:		4.43NTSC
	83H:		PAL
	84H:		PAL- M
	85H:		PAL- N
	86H:		PAL60
	87H:		SECAM
	88H:		B/W60
	89H:		B/W50
	A0H:	HD/DVD/DTV signal	480I
	A1H:		480P
	A2H:		576I
	A3H:		576P
	A4H:		720P
	A5H:		1035I
	A6H:		1080I

RESOLUTION

DATA07: Dots (Low-order byte)
00H: 0 (No signal: 00H)
|
FFH: 256

DATA08: Dots (High-order byte)
00H: 257 (No signal: 00H)
|
FFH

DATA09: Lines (Low-order byte)
00H: 0 (No signal: 00H)
|
FFH: 256

DATA10: Lines (High-order byte)
00H: 257 (No signal: 00H)
|
FFH

46. Input MODE Request

Function

The display returns the current input information by the external control equipment' s request.

Transmission Data

1FH	80H	60H	41H	00H	CKS

ACK

7FH	60H	80H	41H	01H	DATA00	CKS

DATA00: Input Select

01H: Video1	02H: Video2
03H: Video3	04H: HD (HD1 or DTV or DTV1)
05H: RGB1/PC1	06H: RGB2/PC2
0AH: DVD (DVD1)	0CH: HD2 (DTV2)
0DH: DVD2	0EH: RGB3/PC3

47. VIDEO ADJ Request

Function

The display returns the video adjustments information by the external control equipment's request.

Transmission Data

1FH	80H	60H	45H	00H	CKS

ACK

7FH	60H	80H	45H	0CH	DATA00 to DATA11	CKS

DATA00: RED Gain(Bias)
D8H: -40
|
FFH: -1
00H: 0
|
IEH: +30

DATA01: GREEN Gain(Bias)
D8H: -40
|
FFH: -1
00H: 0
|
IEH: +30

DATA02: BLUE Gain(Bias)
D8H: -40
|
FFH: -1
00H: 0
|
IEH: +30

DATA03: COLOR Gain
E0H: -32
|
FFH: -01
00H: 0
01H: +01
|
20H: +32

* COLOR Gain is from -22 (EAH) to +22 (16H) only during video.

DATA04: TINT Gain
E0H: -32
|
FFH: -01
00H: 0
01H: +01
|
20H: +32

* TINT Gain is from -22 (EAH) to +22 (16H) only during video.

DATA05: SHARPNESS Gain
F0H: -16
|
FFH: -01
00H: 0
01H: +01
|
10H: +16

DATA06: CONTRAST Gain
CCH: -52
|
FFH: -01
00H: 0
01H: +01
|
14H: +20

DATA07: BRIGHT Gain
E0H: -32
|
FFH: -01
00H: 0
01H: +01
|
20H: +32

DATA08: RED Gain(Drive)
D8H: -40
|
FFH: -1
00H: 0
|
IEH: +30

DATA09: GREEN Gain(Drive)
D8H: -40
|
FFH: -1
00H: 0
|
IEH: +30

DATA10: BLUE Gain(Drive)
D8H: -40
|
FFH: -1
00H: 0
|
IEH: +30

DATA11: COLOR TEMP
00H: 1
01H: 2
02H: 3
03H: PRO

48. Audio Select Request

Function

The external control equipment inquires the current combinations of audio and video inputs for the plasma monitor.

Transmission Data

1FH	80H	60H	6FH	00H	CKS

ACK

The plasma monitor returns the following ACK:

7FH	60H	80H	6FH	03H	DATA00	DATA01	DATA02	CKS

DATA00: AUDIO 1
01H – 0CH: VISUAL INPUT DATA
DATA01: AUDIO 2
01H – 0CH: VISUAL INPUT DATA
DATA02: AUDIO 3
01H – 0CH: VISUAL INPUT DATA

VISUAL INPUT DATA
01H: Video 1
02H: Video 2
03H: Video 3
05H: HD (HD1 or DTV or DTV 1)
06H: HD2 (DTV2)
07H: RGB 1 /PC 1
08H: RGB 2 /PC 2
0CH: RGB 3 /PC 3

49. Failure Mode Request

Function

The external control equipment inquires the detection of failures of the plasma monitor.

Transmission Data

1FH	80H	60H	3FH	00H	CKS

ACK

The plasma monitor returns the following ACK:

7FH	60H	80H	3FH	02H	DATA00	DATA01	CKS

DATA00: FAILURE MODE 1
Bit 0 : PDP MODULE
0: Abnormal
1: Normal
Bit 1 : 1: fixed (backup)
Bit 2 : TEMPERATURE
0: Abnormal
1: Normal
Bit 3 : 1: fixed (backup)
Bit 4 : TEMPERATURE SENSOR
0: Abnormal
1: Normal
Bit 5 : 1: fixed (backup)
Bit 6 : 1: fixed (backup)
Bit 7 : 1: fixed (backup)
DATA01: FAILURE MODE 2
Bit 0–7 : 1: fixed (backup)

50. MODEL NAME Request

Function

The external control equipment inquires the product code of the plasma monitor.

Transmission Data

1FH	80H	60H	17H	00H	CKS

ACK

The plasma monitor returns the following ACK:

7FH	60H	80H	17H	0CH	DATA00 to	DATA11	CKS

DATA00 : 1st character of the product code
DATA01 : 2nd character of the product code
|
DATA11 : 12th character of the product code

NOTE:

Received data (Hex)	Corresponding character
00H	0
01H	1
|	|
08H	8
09H	9
10H	A
11H	B
12H	C
|	|
28H	Y
29H	Z
80H	- (Hyphen)
96H	(Blank)

If there are fewer than 12 characters in the product code, product code would be padded right with blanks.

Example: If the product code of your plasma monitor is “PX-42VM3A”, the returned codes would be as follows.

DATA00: 1FH
DATA01: 27H
DATA02: 80H
DATA03: 04H
DATA04: 02H
DATA05: 25H
DATA06: 1CH
DATA07: 03H
DATA08: 16H
DATA09: 96H
DATA10: 96H
DATA11: 96H

Table of Signals Supported

Supported resolution

• When the screen mode is NORMAL, each signal is converted to a 640 dots × 480 lines signal. (Except for *2, *4)

• When the screen mode is FULL, each signal is converted to a 853 dots × 480 lines signal. (Except for *3)

Computer input signals supported by this system

Model / Signal Type	Dots × lines	Vertical frequency (Hz)	Horizontal frequency (kHz)	Sync Polarity		Presence		Screen mode		RGB select*5	DVI	Memory
				Horizontal	Vertical	Horizontal	Vertical	NORMAL (4:3)	FULL (16:9)			
	640×400	70.1	31.5	NEG	NEG	YES	YES	YES*2*3	YES	– –	NO	4
*IBM PC/AT compatible computers	640×480	59.9	31.5	NEG	NEG	YES	YES	YES*3	YES	STILL	YES	5
		72.8	37.9	NEG	NEG	YES	YES	YES*3	YES	– –	YES	7
		75.0	37.5	NEG	NEG	YES	YES	YES*3	YES	STILL	YES	8
		85.0	43.3	NEG	NEG	YES	YES	YES*3	YES	– –	YES	9
		100.4	51.1	NEG	NEG	YES	YES	YES*3	YES	– –	YES	41
		120.4	61.3	NEG	NEG	YES	YES	YES*3	YES	– –	YES	42
	848×480	60.0	31.0	POS	POS	YES	YES	– –	YES*3	WIDE2	YES	19
	852×480*1	60.0	31.7	NEG	NEG	YES	YES	– –	YES*3	WIDE1	YES	17
	800×600	56.3	35.2	POS	POS	YES	YES	YES	YES	STILL	YES	11
		60.3	37.9	POS	POS	YES	YES	YES	YES	STILL	YES	12
		72.2	48.1	POS	POS	YES	YES	YES	YES	– –	YES	13
		75.0	46.9	POS	POS	YES	YES	YES	YES	– –	YES	14
		85.1	53.7	POS	POS	YES	YES	YES	YES	– –	YES	15
		99.8	63.0	POS	POS	YES	YES	YES	YES	– –	YES	43
		120.0	75.7	POS	POS	YES	YES	YES	YES	– –	YES	44
	1024×768	60.0	48.4	NEG	NEG	YES	YES	YES	YES	STILL	YES	24
		70.1	56.5	NEG	NEG	YES	YES	YES	YES	– –	YES	25
		75.0	60.0	POS	POS	YES	YES	YES	YES	STILL	YES	26
		85.0	68.7	POS	POS	YES	YES	YES	YES	– –	YES	27
		100.6	80.5	NEG	NEG	YES	YES	YES	YES	– –	NO	45
	1152×864	75.0	67.5	POS	POS	YES	YES	YES	YES	STILL	YES	51
	1280×768	56.2	45.1	POS	POS	YES	YES	– –	YES	WIDE1	NO	52
		59.8	48.0	POS	NEG	YES	YES	– –	YES	WIDE3	YES	80
	1360×765	60.0	47.7	POS	POS	YES	YES	– –	YES	WIDE1	NO	22
	1360×768	60.0	47.7	POS	POS	YES	YES	– –	YES	WIDE1	YES	22
	1376×768	59.9	48.3	NEG	POS	YES	YES	– –	YES	WIDE2	YES	53
	1280×1024	60.0	64.0	POS	POS	YES	YES	YES*4	YES	STILL	YES	29
		75.0	80.0	POS	POS	YES	YES	YES*4	YES	– –	NO	30
		85.0	91.1	POS	POS	YES	YES	YES*4	YES	– –	NO	40
		100.1	108.5	POS	POS	YES	YES	YES*4	YES	– –	NO	47
	1600×1200	60.0	75.0	POS	POS	YES	YES	YES	YES	– –	NO	54
		65.0	81.3	POS	POS	YES	YES	YES	YES	– –	NO	55
		70.0	87.5	POS	POS	YES	YES	YES	YES	– –	NO	56
		75.0	93.8	POS	POS	YES	YES	YES	YES	– –	NO	57
		85.0	106.3	POS	POS	YES	YES	YES	YES	– –	NO	58
*Apple Macintosh*6	640×480	66.7	35.0	Sync on G	Sync on G	– –	– –	YES*3	YES	– –	NO	6
	832×624	74.6	49.7	Sync on G	Sync on G	– –	– –	YES	YES	– –	NO	16
	1024×768	74.9	60.2	Sync on G	Sync on G	– –	– –	YES	YES	WIDE1	NO	28
	1152×870	75.1	68.7	Sync on G	Sync on G	– –	– –	YES	YES	WIDE1	NO	39
Work Station (EWS4800)	1280×1024	60.0	64.6	NEG	NEG	YES	YES	YES*4	YES	– –	YES	29
		71.2	75.1	NEG	NEG	YES	YES	YES*4	YES	– –	NO	48
Work Station (HP)	1280×1024	72.0	78.1	– –	– –	– –	– –	YES*4	YES	– –	NO	59
Work Station (SUN)	1152×900	66.0	61.8	C Sync	C Sync	– –	– –	YES	YES	– –	NO	60
		76.0	71.7	C Sync	C Sync	– –	– –	YES	YES	– –	NO	61
	1280×1024	76.1	81.1	C Sync	C Sync	– –	– –	YES*4	YES	– –	NO	30
Work Station (SGI)	1024×768	60.0	49.7	– –	– –	– –	– –	YES	YES	– –	YES	62
	1280×1024	60.0	63.9	– –	– –	– –	– –	YES*4	YES	– –	YES	29
IDC-3000G												
PAL625P	768×576	50.0	31.4	NEG	NEG	YES	YES	YES*7	YES*7	– –	NO	31
NTSC525P	640×480	59.9	31.5	NEG	NEG	YES	YES	YES*7	YES*7	MOTION	NO	32

*1 Only when using a graphic accelerator board that is capable of displaying 852×480.
*2 Display only 400 lines with the screen center of the vertical orientation located at the center.
*3 The picture is displayed in the original resolution. The picture will be compressed for other signals.
*4 Aspect ratio is 5:4. This signal is converted to the following signal: 600 dots×480 lines).
*5 Normally the RGB select mode suite for the input signals is set automatically. If the picture is not displayed properly, set the RGB mode prepared for the input signals listed in the table above.
*6 To connect the monitor to Macintosh computer, use the monitor adapter (D-Sub 15-pin) to your computer's video port.
*7 Other screen modes (ZOOM and STADIUM) are available as well.

NOTE:

- *While the input signals comply with the resolution listed in the table above, you may have to adjust the position and size of the picture or the fine picture because of errors in synchronization of your computer.*
- *This monitor has a resolution of 853 dots×480 lines. It is recommended that the input signal be VGA, wide VGA or equivalent.*
- *With digital input some signals are not accepted.*
- *The sync may be disturbed when a nonstandard signal other than the aforementioned is input.*
- *If you are connecting a composite sync signal, use the HD terminal.*

Troubleshooting

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

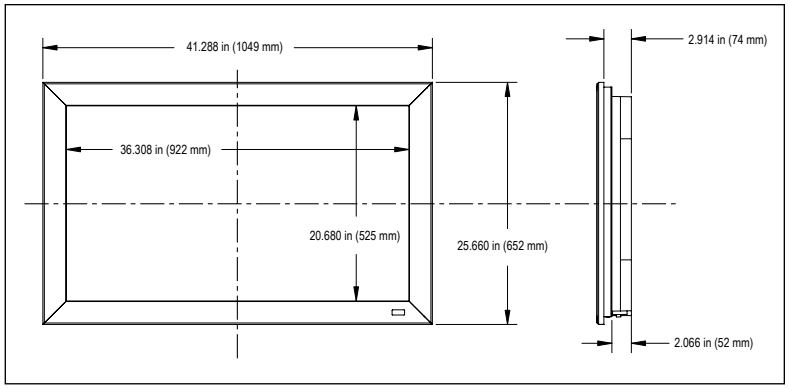
Symptom	Checks	Remedy
Picture is disturbed. Sound is noisy. Remote control operates erroneously.	• Is a connected component set directly in front or at the side of the display?	• Leave some space between the display and the connected components.
The remote control does not work.	• Are the remote control's 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.	• Is the monitor's power cord plugged into a power outlet?	• 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 ON?	• Set IR REMOTE OFF.
	• 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.	• Is the remote control pointed at the monitor, or is there an obstacle between the remote control and the monitor?	• Point the remote control at the monitor's remote control sensor when pressing buttons, or remove the obstacle.
	• 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.	• The front panel buttons do not function during Control Lock.	• Set the Control Lock to OFF.
No sound or picture is produced.	• Is the monitor's power cord plugged into a power outlet?	• 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.	• Adjust picture control as needed. Try another location for the monitor. Be sure all connections are secure.
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.
	• Is a source connected?	• Connect source to the monitor.
	• Is the power management function in the standby or off mode?	• Operate the computer (move the mouse, etc.).
	• 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.	• Horizontal and / or vertical sync signal is not present when the Intelligent Power Manager control is on.	• 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.	• Promptly switch off the power of the main unit and wait until the internal temperature drops. See*1.
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 Runco Authorized Dealer.

* 2 In the following case, power off the monitor immediately and contact your Runco Authorized Dealer or Runco 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 or temperature sensor have been damaged.

Specifications



Native Resolution: 853 x 480

Screen Size: 42 in. (diagonal)

Screen Aspect Ratio: 16:9

Available Aspect Ratios: 4:3, Letterbox
16:9 Anamorphic

Image Area (W x H): 36 1/3 in. x 20 7/16 in.
(921 mm) x (518 mm)

DTV Compatibility: 480p, 720p, 1080i

Contrast Ratio 1000:1

Data/Graphics Capability: 640 x 400 to 1600 x 1200

Inputs:
(2) Composite Video (1- BNC, 1- RCA)
(1) S-Video
(2) Component Video (1-BNC, 1-RCA)
(1) RGB (15-pin mini D-sub)
(1) RGB via BNC
(1) DVI w/HDCP
(1) RS-232C
(4) 1/8" Stereo mini din jacks

Outputs:
(1) RGB (15-pin mini D-sub)
(1) Composite BNC

Power Requirements: 120V AC, 50/60 Hz

Power Consumption: 270W

Operating Environment: 32°-104°F (0°-40°C),
20-80% Humidity (non-condensing)

Dimensions:
Width: 41 1/4 in. (1048 mm)
Depth: 3 7/8 in. (98.43 mm)
Height: 25 5/8 in. (651 mm)
Weight: 67.5 lbs. (30.62 kg)

Regulatory Approvals: FCC, CE, C-Tick

Specifications subject to change without notice.

RUMA-010400 10-03 rev 1

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