NEC

User's Manual

Uživatelská příručka

Bedienerhandbuch

Οδηγίες Χρήσης

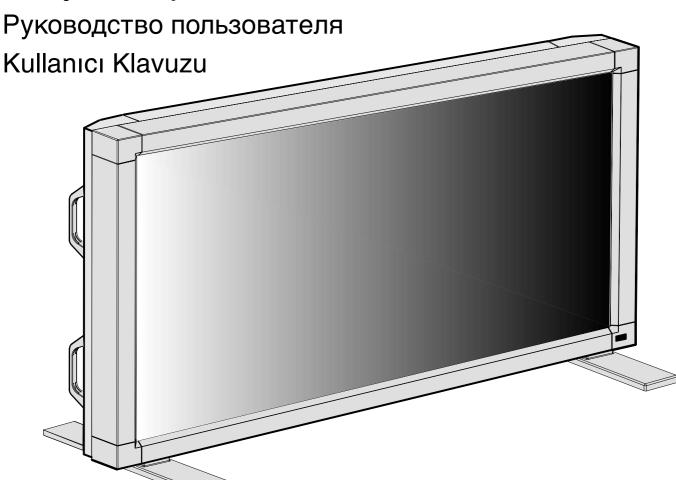
Manual del usuario

Manuel Utilisateur

Manuale utente

Gebruikershandleiding

Podręcznik użytkownika



MultiSync LCD5710 57" LCD Colour Monitor

This monitor is designed to operate in landscape orientation only. Do not use in portrait orientation.

Using the monitor in portrait position can cause damage to the display and will void the warranty of the product.

00_Cover_all 1 10/8/06, 11:12



DECLARATION OF CONFORMITY

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions. (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

 $\hbox{ U.S. Responsible Party:} \quad \hbox{NEC Display Solutions of America, Inc.}$

Address: 500 Park Boulevard, Suite 1100

Itasca, Illinois 60143

Tel. No.: (630) 467-3000

Type of Product: Computer Monitor

Equipment Classification: Class B Peripheral

Model: LCD5710 (L576RX)



We hereby declare that the equipment specified above conforms to the technical standards as specified in the FCC Rules.

Windows is a registered trademark of Microsoft Corporation. NEC is a registered trademark of NEC Corporation. OmniColor is a registered trademark of NEC Display Solutions Europe GmbH in the countries of EU and Switzerland. All other brands and product names are trademarks or registered trademarks of their respective owners.

Canadian Department of Communications Compliance Statement

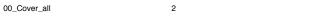
DOC: This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

C-UL: Bears the C-UL Mark and is in compliance with Canadian Safety Regulations according to CAN/CSA C22.2 No. 60950-1.

FCC Information

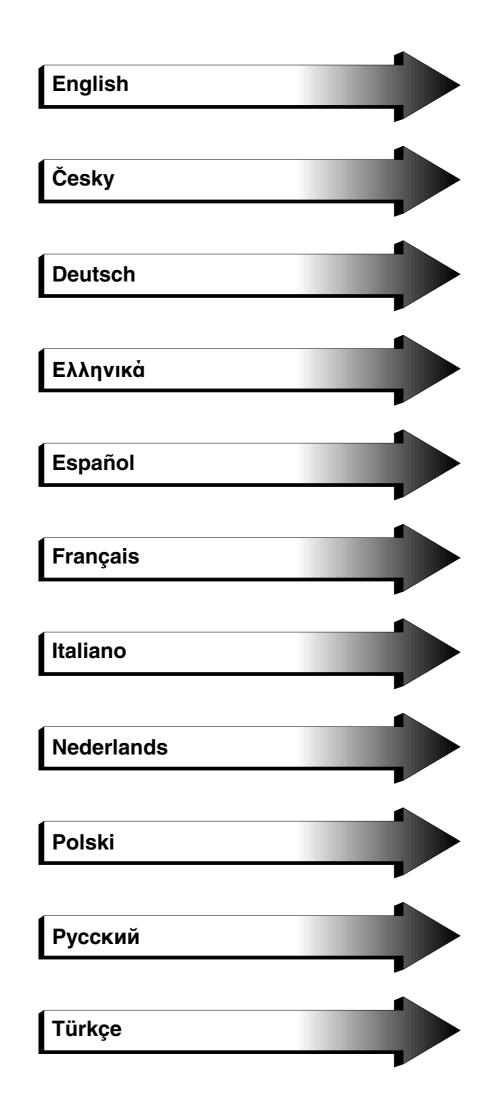
- 1. Use the attached specified cables with the MultiSync LCD5710 (L576RX) colour monitor so as not to interfere with radio and television reception.
 - (1) Please use the supplied power cord or equivalent to ensure FCC compliance.
 - (2) Please use the supplied shielded video signal cable, 15-pin mini D-SUB to 15-pin mini D-SUB.
 - (3) Please attach the ferrite cores on the Audio Cable. Please see page 11 of this manual.
- 2. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - · Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - · Consult your dealer or an experienced radio/TV technician for help.

If necessary, the user should contact the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet, prepared by the Federal Communications Commission, helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.











01b_XChapterOpener 2 10/8/06, 11:12

Index

Important Information	English-2
Warning, Caution	English-2
Declaration	
Safety Precautions, Maintenance & Recommended Use	English-3
Contents	
Parts Name and Functions	English-5
Control Panel	English-5
Terminal Panel	English-6
Wireless Remote Control	English-7
Operating Range for the Remote Control	English-7
Handling the remote control	English-7
Setup Procedure	
How to Mount and Attach Options to the LCD Monitor	English-10
Connections	English-11
Wiring Diagram	English-11
Connecting a Personal Computer	English-12
Connect the LCD Monitor to a Personal Computer	English-12
Connecting to a Macintosh Computer	English-13
Connect the LCD Monitor to Macintosh	English-13
Connecting with Digital Interface Equipment	English-14
Connect the LCD Monitor to a Computer with a Digital Output	English-14
Connecting a DVD Player with component out	English-15
Connect the LCD Monitor to a DVD Player	English-15
Connecting to a Stereo Amplifier	
Connect the LCD Monitor to a Stereo Amplifier	English-16
Basic Operation	
Power ON and OFF Modes	English-16
Power Indicator	English-17
Using Power Management	English-17
Selecting a video source	
Picture Size	English-17
Picture Mode	English-17
Information OSM	English-17
OSM (On-Screen-Manager) Controls	English-18
PICTURE	English-18
SCREEN	English-19
AUDIO	English-20
PICTURE IN PICTURE	English-21
CONFIGURATION 1	
CONFIGURATION 2	
ADVANCED OPTION	English-24
Troubleshooting	Enalish-28



01_English

Important Information



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.



CAUTION



CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, MAKE SURE POWER CORD IS UNPLUGGED FROM WALL SOCKET. TO FULLY DISENGAGE THE POWER TO THE UNIT, PLEASE DISCONNECT THE POWER CORD FROM THE AC OUTLET. DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol warns 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 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.

Declaration

Declaration of the Manufacturer

We hereby certify that the colour monitor MultiSync LCD5710 (L576RX) is in compliance with

Council Directive 73/23/EEC:

- EN 60950-1

Council Directive 89/336/EEC:

- EN 55022
- EN 61000-3-2
- EN 61000-3-3
- EN 55024

and marked with



NEC Display Solutions, Ltd. 4-13-23, Shibaura, Minato-Ku Tokyo 108-0023, Japan

Disposing of your old NEC product



Within the European Union

EU-wide legislation, as implemented in each Member State, requires that waste electrical and electronic products carrying the mark (left) must be disposed of separately from normal household waste. This includes monitors and electrical accessories, such as signal cables or power cords. When you need to dispose of your NEC display products, please follow the guidance of your local authority, or ask the shop where you purchased the product, or if applicable, follow any agreements made between yourself and NEC.



The mark on electrical and electronic products only applies to the current European Union Member States.

Outside the European Union

If you wish to dispose of used electrical and electronic products outside the European Union, please contact your local authority so as to comply with the correct disposal method.



Safety Precautions, Maintenance & Recommended Use

FOR OPTIMUM PERFORMANCE, PLEASE NOTE THE FOLLOWING WHEN SETTING UP AND USING THE MULTISYNC LCD5710 LCD COLOUR MONITOR:

- DO NOT OPEN THE MONITOR. There are no user serviceable parts inside and opening or removing covers may expose you to dangerous shock hazards or other risks. Refer all servicing to qualified service personnel.
- Do not spill any liquids into the cabinet or use your monitor near water.
- Do not insert objects of any kind into the cabinet slots, as they may touch dangerous voltage points, which can be harmful or fatal or may cause electric shock, fire or equipment failure.
- Do not place any heavy objects on the power cord.
 Damage to the cord may cause shock or fire.
- Do not place this product on a sloping or unstable cart, stand or table, as the monitor may fall, causing serious damage to the monitor.
- When operating the MultiSync LCD5710 LCD monitor with its AC 220-240V power supply in Europe, use a power supply cord provided with the monitor.
- In UK, use a BS-approved power cord with molded plug having a black (13A) fuse installed for use with this monitor. If a power cord is not supplied with this monitor, please contact your supplier.
- When operating the MultiSync LCD5710 with a 220-240V AC power source in Australia, use the power cord provided with the monitor. If a power cord is not supplied with this equipment, please contact your supplier.
- For all other cases, use a power cord that matches the AC voltage of the power outlet and has been approved by and complies with the safety standard of your particular country.
- Do not place any objects onto the monitor and do not use the monitor outdoors.
- The inside of the fluorescent tube located within the LCD monitor contains mercury. Please follow the bylaws or rules of your municipality to dispose of the tube properly.
- Do not bend power cord.
- Do not use monitor in high temperature, humid, dusty, or oily areas.
- If monitor or glass is broken, do not come in contact with the liquid crystal and handle with care.
- Allow adequate ventilation around the monitor, so that heat can properly dissipate. Do not block ventilated openings or place the monitor near a radiator or other heat sources.
 Do not put anything on top of the monitor.
- The power cable connector is the primary means of detaching the system from the power supply. The monitor should be installed close to a power outlet, which is easily accessible.
- Handle with care when transporting. Save packaging for transporting.
- Please clean the holes of back cabinet to reject dirt and dust at least once a year because of set reliability.
- If using the cooling fan continuously, it's recommended to wipe holes a minimum of once a month.
- Do not use this monitor in portrait position. Doing so may cause failure and void the warranty.

Immediately unplug your monitor from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the monitor.
- If the monitor has been exposed to rain or water.
- If the monitor has been dropped or the cabinet damaged.
- If the monitor does not operate normally by following operating instructions.

Recommended Use

- For optimum performance, allow 20 minutes for warm-up.
- Rest your eyes periodically by focusing on an object at least 5 feet away. Blink often.
- Position the monitor at a 90° angle to windows and other light sources to minimize glare and reflections.
- Clean the LCD monitor surface with a lint-free, non-abrasive cloth. Avoid using any cleaning solution or glass cleaner!
- Adjust the monitor's brightness, contrast and sharpness controls to enhance readability.
- Avoid displaying fixed patterns on the monitor for long periods of time to avoid image persistence (after image effects).
- · Get regular eye checkups.

Ergonomics

To realize the maximum ergonomic benefits, we recommend the following:

- Use the preset Size and Position controls with standard signals.
- · Use the preset Colour Setting.
- Use non-interlaced signals.
- Do not use primary colour blue on a dark background, as it is difficult to see and may produce eye fatigue due to insufficient contrast.



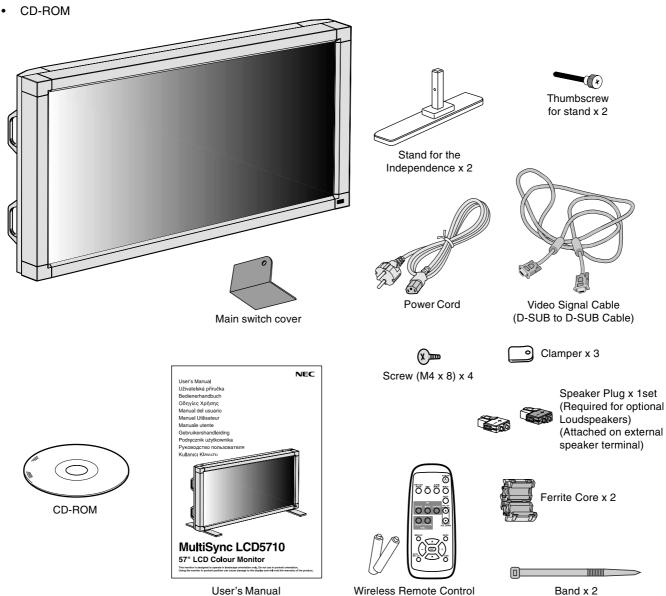
01_English 3 10/8/06, 11:12

Contents

Your new MultiSync LCD5710 monitor box* should contain the following:

- LCD monitor
- **Power Cord**
- Video Signal Cable
- User's Manual
- Wireless Remote Control and AA Batteries
- Clamper x 3
- Screw (M4 x 8) x 4

- Band x 2
- Ferrite Core x 2
- Speaker Plug x 1set (Required for optional Loudspeakers)
- Stand for the Independence x 2
- Thumbscrew for stand x 2
- Main switch cover



- Install the stands at the time of unpacking if the display will be used with the stand.
- Remember to save your original box and packing material to transport or ship the monitor.

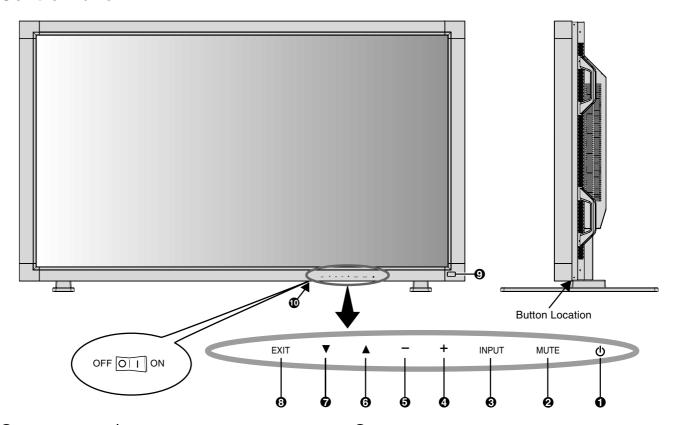
The following components are prepared as option.

External Speaker Unit

and AA Batteries

Parts Name and Functions

Control Panel



1 POWER button (🖒)

Switches the power on/off. See also page 16.

MUTE button

Switches the audio mute ON/OFF.

③ INPUT button

Acts as SET button within OSM menu. (Toggle switches between [RGB1], [RGB2], [RGB3], [DVD/HD], [VIDEO] or [VIDEO<S>]). [VIDEO<S>] is enabled by selecting the "SEPARATE" mode in the OSM or by having the "S-VIDEO" cable connected with the "S-VIDEO" signal present and selecting "PRIORITY" MODE. See page 24.

4 PLUS (+) button

Acts as (+) button to increase the adjustment with OSM menu. Increases the audio output level when the OSM menu is turned off.

6 MINUS (-) button

Acts as (-) button to decrease the adjustment with OSM menu. Decreases the audio output level when the OSM menu is turned off.

(UP (▲) button

Activates the OSM menu when the OSM menu is turned-off. Acts as ▲ button to move the highlighted area up to select the adjustment with OSM menu.

7 DOWN (▼) button

Activates the OSM menu when the OSM menu is turned-off. Acts as ▼ button to move the highlighted area down to select the adjustment with OSM menu.

EXIT button

Activates the OSM menu when the OSM menu is turned-off. Acts as EXIT button to move to previous menu with OSM menu.

Remote control sensor and Power Indicator

Receives the signal from the remote control (when using the wireless remote control). See also page 7. Glows green when the LCD monitor is in active and glows red when the LCD monitor is in POWER OFF mode. When the LCD monitor is in POWER SAVE mode, it will glow both green and red. When SCHEDULE is enabled, it will blink green and glow red. See page 17.

In the case of where a failure is detected, it will blink red.

Main Power Switch

On/off Switch to turn main power on/off.

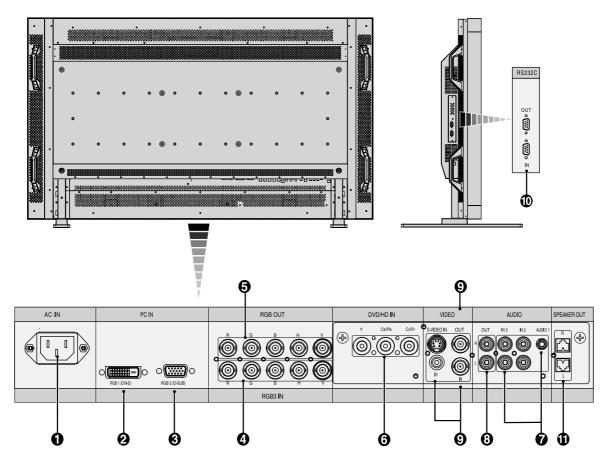
Control Key Lock Mode

This control completely locks out access to all Control Key functions. To activate the control key lock function, press both of "▼" and "▲" and hold down simultaneously for more than 3 seconds. To resume back to user mode, press both of "▼" and "A" and hold simultaneously for more than 3 seconds.





Terminal Panel



1 AC IN connector

Connects with the supplied power cord.

2 RGB 1 IN (DVI-D)

To input digital RGB signals from a computer or HDTV device having a digital RGB output.

* This connector does not support analog input.

RGB 2 IN (mini D-Sub 15 pin)

To input analog RGB signals from a personal computer or other RGB equipment.

4 RGB 3 [R, G, B, H, V] (BNC)

IN connector: To input analog RGB signals or signals from other RGB equipment.

This is also to connect equipment such as a DVD player and HDTV laser disk player. A Sync-on-Green signal can be connected to the G connector.

6 RGB OUT connector (BNC)

To output the signal from RGB 3.

6 DVD/HD connector (BNC)

Connecting equipment such as a DVD player, HDTV device, or Laser disc player.

7 AUDIO IN 1, 2, 3

To input audio signal from external equipment such as a computer, VCR or DVD player.

AUDIO OUT

To output the audio signal from the AUDIO IN 1, 2 and 3 jack.

9 VIDEO INPUT/OUTPUT Connector

VIDEO IN connector (BNC and RCA): To input a composite video signal. BNC and RCA connectors are not available at the same time. (Use only one input).

VIDEO OUT connector (BNC): To output the composite video signal from the VIDEO IN connector.

S-VIDEO IN connector (DIN 4 pin): To input the S-video (Y/C separate signal). See page 24, S-VIDEO MODE SETTING.

(mini D-Sub 9 pin)

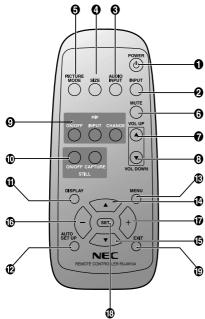
IN connector: Use when operating the LCD monitor from the RGB equipment like a computer.

Out connector: To connect multiple MultiSync LCD5710.

1 EXTERNAL SPEAKER TERMINAL

To output the audio signal from AUDIO 1, 2 or 3 jack.

Wireless Remote Control



POWER button

Switches the power on/off.

* If Power Indicator is not glowing, then no controls will work.

2 INPUT button

Selects from input signal, [RGB1], [RGB2], [RGB3], [DVD/HD], [VIDEO] or [VIDEO<S>].

[VIDEO<S>] is enabled by selecting the "SEPARATE" mode in the OSM or by having the "S-VIDEO" cable connected with the "S-VIDEO" signal present and selecting "PRIORITY" MODE. See page 24.

3 AUDIO INPUT button

Selects from input audio signal, [AUDIO1], [AUDIO2], [AUDIO3].

4 SIZE button

Selects picture size, [FULL], [NORMAL], [WIDE] and [ZOOM]. See page 17.

6 PICTURE MODE button

Selects from picture mode, [HIGHBRIGHT], [STANDARD], [sRGB], [CINEMA]. See page 17.

HIGHBRIGHT: for moving images such as DVD STANDARD: for images sRGB: for text based images CINEMA: for movies.

6 MUTE button

To switch the mute function on/off.

7 VOLUME UP button

Increases the audio output level.

3 VOLUME DOWN button

Decreases the audio output level.

PIP (Picture In Picture) button

ON/OFF button: Toggle switches between PIP, POP, side-by-side (aspect) and side-by-side (full). See page 21.

INPUT button: Selects the "picture in picture" input signal. CHANGE button: Replaces to the main picture and sub picture. NOTE: The PIP function does not support 1080i input signals. If a 1080i signal is used for PIP, then the sub picture on the screen will be blank. The PIP function will work with 1080p signals.

(I) STILL button

ON/OFF button: To switch the still picture mode on/off. CAPTURE button: Captures the new picture.

NOTE: Still does not work when pixel clock is greater than 108MHz and also not work for 1080i.

1 DISPLAY button

To switch the information OSM on/off. See page 17.

AUTO SETUP button

To enter the auto setup menu. See page 21.

(B) MENU button

To switch the menu mode on/off.

(I) UP button

Acts as \blacktriangle button to move the highlighted area up to select the adjustment with OSM menu.

Small screen which adjusted "PIP" mode moves up.

(b) DOWN button

Acts as ▼ button to move the highlighted area down to select the adjustment with OSM menu.

Small screen which adjusted "PIP" mode moves down.

MINUS button decrease

Acts as (-) button to decrease the adjustment with OSM menu. Small screen which adjusted "PIP" mode moves left.

PLUS button increase

Acts as (+) button to increase the adjustment with OSM menu. Small screen which adjusted "PIP" mode moves right.

(B) SET button

Acts as SET button with OSM menu.

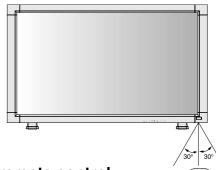
(E) EXIT button

Turn to previous menu with OSM menu.

Operating Range for the Remote Control

Point the top of the remote control toward the LCD monitor's remote sensor during button operation.

Use the remote control within a distance of about 7 m/23 ft. from the front of the LCD monitor's remote control sensor and at a horizontal and vertical angle of within 30° within a distance of about 3 m/10 ft.



Handling the remote control

- Do not subject to strong shock.
- * Do not allow water or other liquid to splash the remote control. If the remote control gets wet, wipe it dry immediately.
- * Avoid exposure to heat and steam.
- Other than to install the batteries, do not open the remote control.

Caution:

Important, the remote control system may not function when direct sunlight or strong illumination strikes the remote control sensor of the LCD monitor, or when there is an object in the path.









Setup Procedure

1. Determine the installation location

CAUTION: DO NOT ATTEMPT TO INSTALL THE LCD MONITOR BY YOURSELF.

Installing your LCD display must be done by a qualified technician. Contact your dealer for more information.

CAUTION: MOVING OR INSTALLING THE LCD MONITOR MUST BE DONE BY TWO OR MORE PEOPLE. It is recommended that 4 people move or install the LCD Monitor, due to its weight of almost 63.0kg.

Failure to follow this caution may result in injury if the LCD monitor falls.

CAUTION: Do not mount or operate the display upside down, face up, or face down.

Do NOT use this monitor in the portrait position.

Doing so may cause failure and void the Warranty.

CAUTION: This LCD has a temperature sensor and cooling fan. If the LCD becomes too hot, the cooling fan will turn on automatically. If the LCD becomes overheated and the cooling fan is running, the "Caution" menu will appear. If the "Caution" menu appears, discontinue use and allow the unit to cool. When the LCD monitor is used in an enclosure or with protection on LCD surface, please check the inside temperature of monitor by "HEAT STATUS" (See page 26). The temperature is too hot than normal condition, please set "cooling fan" to ON on SCREEN SAVER function (See page 22).

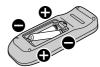
IMPORTANT: Lay the protective sheet, which was wrapped around the LCD monitor when it was packaged, beneath the LCD monitor so as not to scratch the panel.

2. Install the remote control batteries

The remote control is powered by 1.5V AA batteries. To install or replace batteries:

- 1. Press and slide to open the cover.
- 2. Align the batteries according to the (+) and (-) indications inside the case.
- 3. Replace the cover.







CAUTION: Incorrect use of batteries can result in leaks or bursting.

Be careful especially about the following points.

- Place "AA" size batteries matching the + and signs on each battery to the + and - signs of the battery compartment.
- Don't mix battery types.
- Don't combine new batteries with used ones.
 It causes shorter battery life or leakage of batteries.

 Remove dead batteries immediately to prevent battery liquid from leaking into the battery compartment.
 Don't touch exposed battery acid, it cause damage to your skin.

NOTE: If you do not intend to use the Remote Control for a long period, remove the batteries.

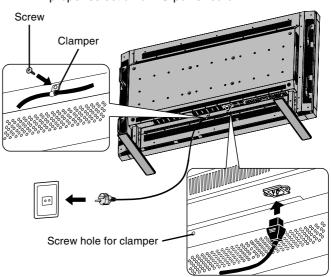
3. Connect external equipment (See pages 11-16)

- To protect the connected equipment, turn off the main power before making connections.
- · Refer to your equipment user manual.

4. Connect the supplied power cord

- The power outlet socket should be installed as near to the equipment as possible, and should be easily accessible.
- Fully insert the prongs into the power outlet socket.
 Loose connection may cause noise.
- Please fix the power cord by attaching the screw and clamper.

NOTE: Please refer to "Safety Precautions, Maintenance & Recommended Use" section of this manual for proper selection of AC power cord.



5. Switch on the power of all attached external equipment

When connected with a computer, switch on the power of the computer first.

6. Operate the attached external equipment

Display the signal on the external equipment you wish.

7. Adjust the sound

Make adjustments when adjustment of the volume is required.

8. Adjust the screen (See pages 18-26)

Make adjustments when adjustment of the screen display position or distortion is required.



Make adjustments when picture adjustment such as the brightness or contrast is required.

10. Recommended Adjustment

To reduce the risk of "image persistence", please adjust the following items based on the application being used.

"SCREEN SAVER" (See page 22), "SIDE BORDER COLOR" (See page 22), "DATE & TIME" (See page 26), "SCHEDULE" (See page 26).

11. Installing and removing stand

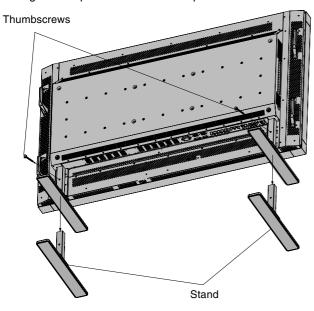
CAUTION: Installing and removing the stand must be done by two or more people. It is recommended that 4 people install and remove the stand, due to its weight of almost 63.0kg.

How to install stand

- 1. Please turn monitor off.
- 2. Place stand onto monitor with the long ends of the feet in front of the monitor.
- 3. After inserting stand in guide block, fasten thumbscrews on both sides of the monitor.

How to remove the stand

- Spread the protective sheet on the flat surface, such as a desk.
- 2. Place monitor on the protective sheet.
- 3. Remove thumbscrews with a screwdriver or with your fingers and place them in a safe place for reuse.



CAUTION: Handle with care when mounting the display stand and avoid pinching your fingers.

NOTE: Place stand onto monitor so that the long end of the feet are in the front.

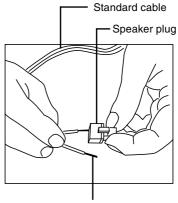
12. When using external speakers

We recommend to using the option speakers designed for the MultiSync LCD5710.

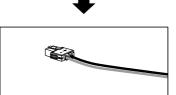
The external speaker terminals of the MultiSync LCD5710 may be connectable with the speaker plug of a mainframe sound speaker.

It this case, please exchange the lead connector of a mainframe sound speaker for an attached speaker plug.

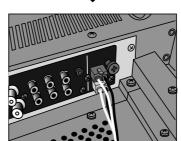
How to use the attached speaker plug



Insert the negative (-) side of a standard speaker cable into the negative (-) side of the speaker plug. The negative side of a standard speaker cable has a stripe running the length of the cable. Insert remaining wire into the positive (+) side of the speaker plug. Hold down on the small lever on the speaker plug to insert cable.



Fixed cable and speaker plug.



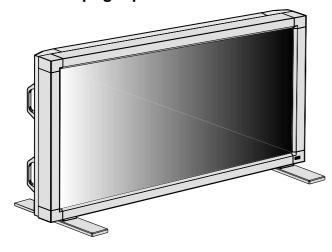
Insert the fixed cable and speaker plug to the speaker terminal.



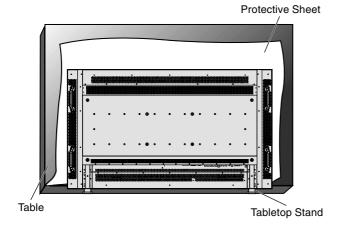
How to Mount and Attach Options to the LCD Monitor

You can attach mounting accessories to the LCD monitor in one of the following two ways:

1. In the upright position



2. Lay the screen face down



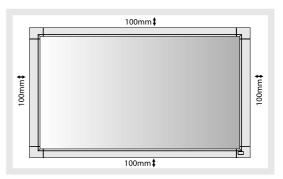
Lay the protective sheet on a table, which was wrapped around the monitor when it was packaged, beneath the screen surface so as not to scratch the screen face.

This device cannot be used or installed without the Tabletop Stand or other mounting accessory. Failure to follow correct mounting procedures could result in damage to the equipment or injury to the user or installer. Product warranty does not cover damage caused by improper installation. Failure to follow these recommendations could result in voiding your warranty.

Please refer to "Mounting on Wall or Ceiling" section when you mount your monitor on Wall or Ceiling. See page 35 of CD-ROM version.

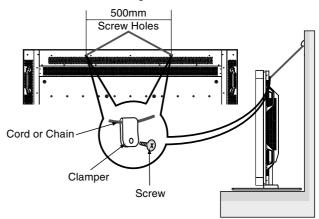
3. Ventilation Requirements for enclosure mounting

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



4. To avoid falling down

Fasten the LCD monitor to wall using a cord or chain, which is sufficient to support the weight of the LCD monitor (approx. 63.0kg). The wall must be strong enough to support the monitor and mounting accessories.

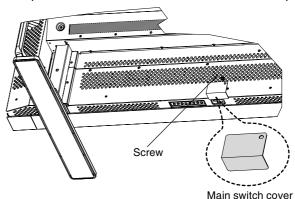


Before moving the LCD monitor, the cord or chain should be

5. To prevent the main power switch from being changed

To prevent the ability to use the main power switch, please attach the main switch, which is enclosed as an accessory.

NOTE: With the main power switch cover in place, the main power switch cannot be turned off. Remove main power switch cover in order to switch off the display.



English-10



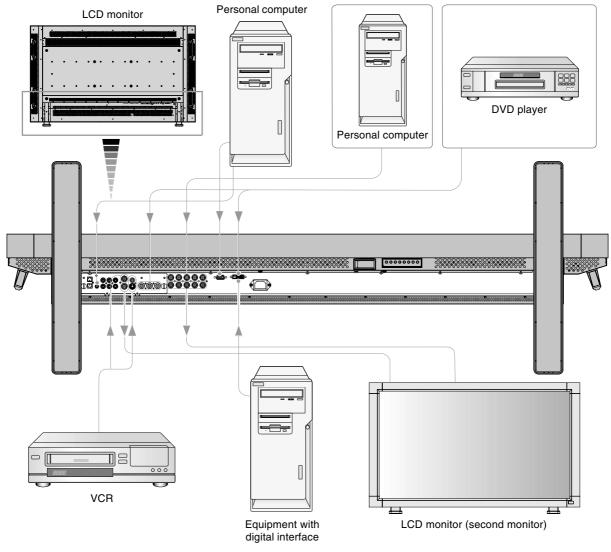


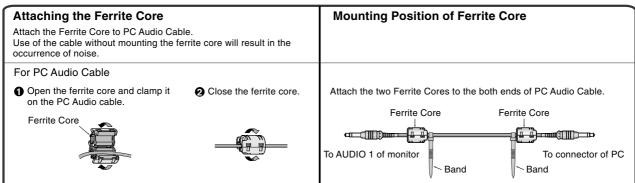
Connections

Before making connections:

- First turn off the power of all the attached equipment and make connections.
- Refer to the user manual included with each separate piece of equipment.

Wiring Diagram





English-11

11 10/8/06, 11:13



Connecting a Personal Computer

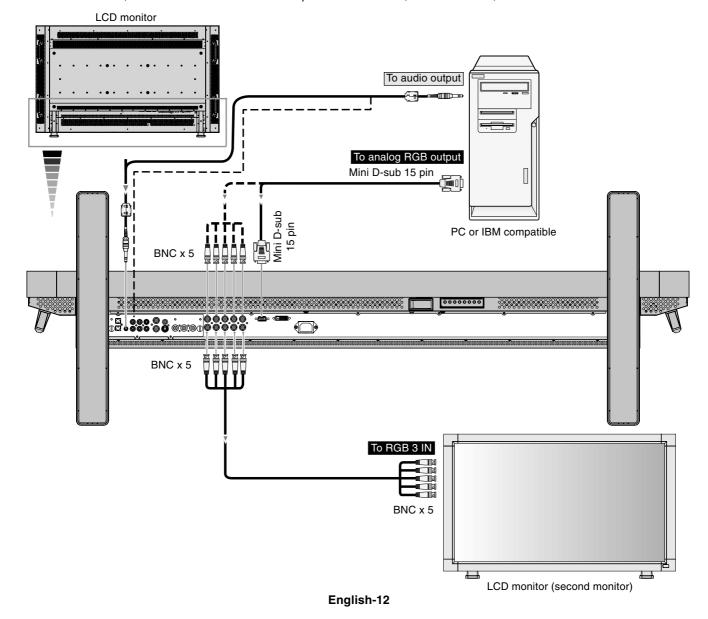
Connecting your computer to your LCD monitor will enable you to display your computer's screen image. Some video cards and pixel clock over 165MHz may not display an image correctly. Your LCD monitor displays proper image adjusting the factory preset timing signal automatically.

<Factory preset signal timing>

Decelution	Scanning frequency		Damanda
Resolution	Horizontal	Vertical	Remarks
640 x 480	31.5kHz	60Hz	
800 x 600	37.9kHz	60Hz	
1024 x 768	48.4kHz	60Hz	
1280 x 768	48kHz	60Hz	
1360 x 768	48kHz	60Hz	
1280 x 1024	64kHz	60Hz	
1600 x 1200	75kHz	60Hz	Compressed image
1920 x 1080	67.5kHz	60Hz	Recommended resolution

Connect the LCD Monitor to a Personal Computer

- To connect the RGB 2 IN connector (mini D-sub 15 pin) on the LCD monitor, use the supplied PC Video RGB signal cable (mini D-sub 15 pin to mini D-sub 15 pin).
- To connect the RGB 3 connector (BNC) on the LCD monitor, use a signal cable which is available separately (mini D-sub 15 pin to BNC x 5). Select RGB 3 from the INPUT button.
- When connecting one or more LCD monitors, use the RGB OUT connector (BNC).
- The AUDIO IN 1, 2 and 3 can be used for audio input. For connection, select AUDIO 1, 2 or 3 from the AUDIO INPUT button.



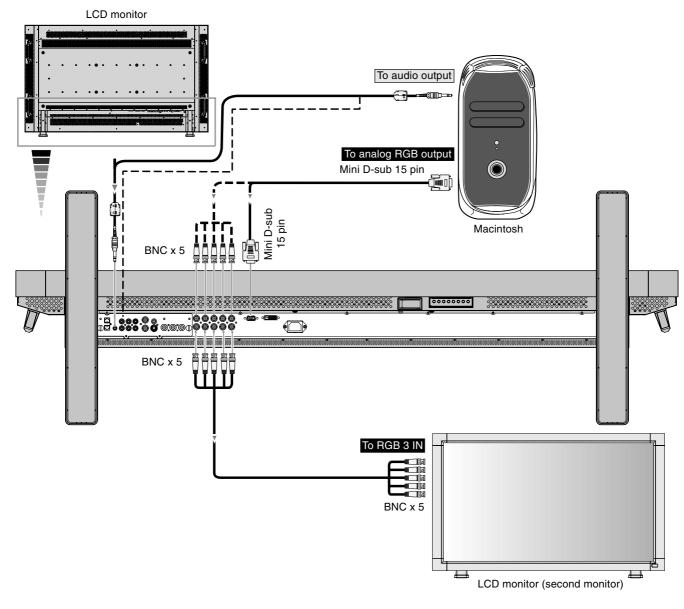


Connecting to a Macintosh Computer

Connecting your Macintosh computer to your LCD monitor will enable you to display your computer's screen image. Some video cards or drivers may not display images correctly.

Connect the LCD Monitor to Macintosh

- To connect the RGB 2 IN connector (mini D-sub 15 pin) on the LCD monitor, use the supplied PC Video RGB signal cable (mini D-sub 15 pin to mini D-sub 15 pin).
- To connect the RGB 3 IN connector (BNC) on the LCD monitor, use the signal cable available separately (mini D-sub 15 pin to BNC x 5).
- If you use with a Macintosh PowerBook, set "Mirroring" to Off.
 Refer to your Macintosh's owner's manual for more information about your computer's video output requirements and any special identification or configuring your monitor's image and monitor may require.
- The AUDIO IN 1, 2 and 3 can be used for audio input. For connection, select AUDIO 1, 2 or 3 from the AUDIO INPUT button.



English-13

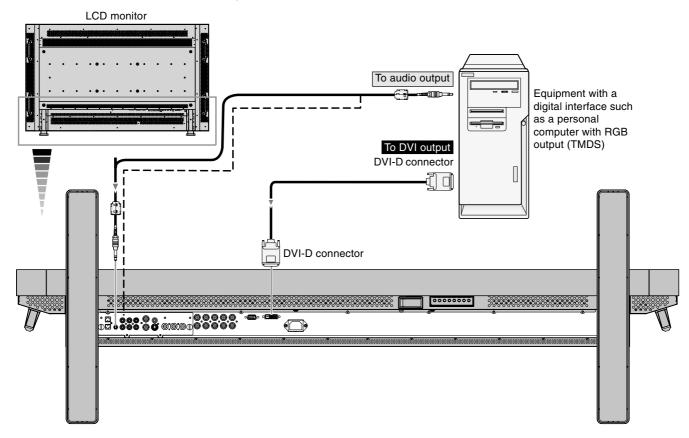


Connecting with Digital Interface Equipment

Connections can be made with equipment that is equipped with a digital interface compliant with the DVI (Digital Visual Interface) standard.

Connect the LCD Monitor to a Computer with a Digital Output

- The RGB 1 IN connector also accepts a DVI-D cable.
- Input TMDS signals conforming to DVI standards.
- To maintain display quality, use a cable with a quality prescribed by DVI standards.
- The AUDIO IN 1, 2 and 3 can be used for audio input. For connection, select AUDIO 1, 2 or 3 from the AUDIO INPUT button.
- Mode selection, see "DVI MODE" of page 23.



Connecting a DVD Player with component out

Connecting your DVD player to your LCD monitor will enable you to display DVD video.

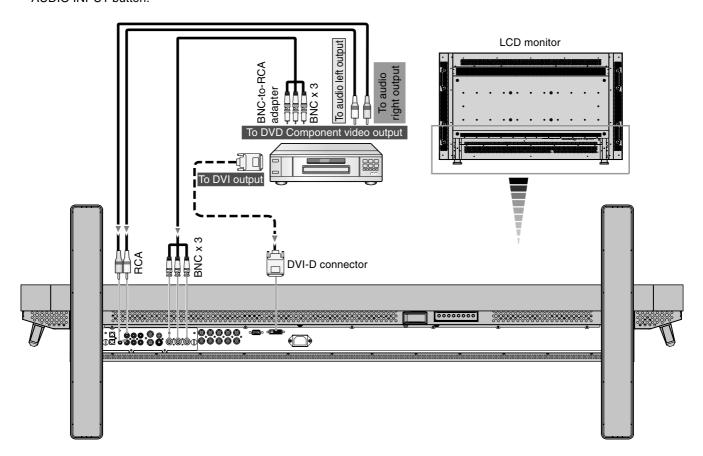
Refer to your DVD player user's manual for more information.

Connect the LCD Monitor to a DVD Player

To connect the DVD/HD IN connector (BNC) on the LCD monitor, use a separately available BNC connector cable. You will
need a BNC-to-RCA adapter to connect a DVD player with an RCA pin jack to the BNC connector cable (not provided).
 Some DVD players may have different connectors such as DVI-D connector.

Select [DVI/HD] mode from the "DVI MODE" menu when you connect a DVI-D connector. Mode selection, see "DVI MODE" of page 23.

The AUDIO IN 2 and 3 (both RCA) can be used for audio input. For connection, select [AUDIO 2] or [AUDIO 3] from the AUDIO INPUT button.







Connecting to a Stereo Amplifier

You can connect your stereo amplifier to your LCD monitor. Refer to your amplifier owner's manual for more information.

Connect the LCD Monitor to a Stereo Amplifier

- Turn on the LCD monitor and the amplifier only after all connections have been made.
- Use an RCA cable to connect the AUDIO OUT connector (RCA) on the LCD monitor and the audio input on the amplifier.
- · Do not reverse the audio left and right jacks.
- · The AUDIO IN is used for audio input.
- To audio right output

 VCR or
 Laser disc player

 RCA

 Amplifier

 To audio left output

 To audio left output

 To audio left output

 To audio left output

 Amplifier

 To audio left output

 To audio left output

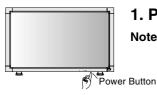
External

speaker



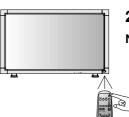
Power ON and OFF Modes

The LCD monitor power indicator will turn green while powered on, or red when in off mode. The monitor can be powered on or off using the following three options:



1. Pressing the power button.

Note: Before pressing the power button, be sure to turn on the Main Power Switch on the LCD monitor.

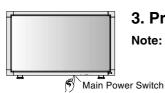


2. Using the remote control.

Before operating the remote control, be sure to turn on the Main Power Switch on the LCD monitor.

External

speaker



3. Pressing the Main Power Switch.

When the Main Power Switch is used to power off the LCD, the remote control and the power button will not activate the on mode and both green and red power indicator turn off. Be sure to turn the Main Power Switch to the on mode before using these two options.

Power Indicator

	Status
Power ON	Green
Power OFF	Red
Power Standby when	Red On
"SCHEDULE" is enable	Green Blinking
Power Standby	Red, Green
Diagnosis (Detecting failure)	Red Blinking
	* See troubleshooting on page 28

Using Power Management

The LCD monitor follows the VESA approved DPM Power Management function.

The power management function is an energy saving function that automatically reduces the power consumption of the display when the keyboard or the mouse has not been used for a fixed period.

The power management feature on your new display has been set to the "ON" mode. This allows your display to enter a Power Saving Mode when no signal is applied. This could potentially increase the life and decrease the power consumption of the display.

Selecting a video source

To view a video source:

Use the input button to set [VIDEO].

Use the COLOR SYSTEM menu to set [AUTO], [NTSC], [PAL], [SECAM], [PAL60], [4.43NTSC], according to your video format.

Picture Size

RGB 1, 2, 3 FULL \rightarrow ZOOM \rightarrow NORMAL DVD/HD, VIDEO FULL \rightarrow WIDE \rightarrow ZOOM \rightarrow NORMAL

Signal Type	NORMAL SIZE	Reco	mmended Size
10		NORMAL	
4:3		ZOOM (DYNAMIC)	
Squeeze		FULL	
Letter box		WIDE	

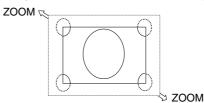
NORMAL: Display by the inputed signal aspect ratio by PC signal, or display in 4:3 aspect ratio at DVD/HD or VIDEO signal. FULL: Display in entire screen.

WIDE: Expand 16:9 letter box signal to entire screen.

ZOOM (DYNAMIC): Expand 4:3 pictures to the entire screen with non-linearity. (Some around image will be cut by expansion.)

ZOOM

Image can be expanded beyond the active display area. The image which is outside of active diaplay area is not displayed.

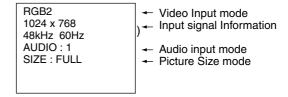


Picture Mode

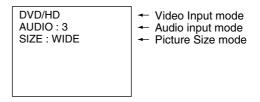
RGB 1, 2, 3 $HIGHBRIGHT \rightarrow STANDARD \rightarrow sRGB$ DVD/HD, VIDEO $HIGHBRIGHT \rightarrow STANDARD \rightarrow CINEMA$

Information OSM

RGB1, 2, 3



DVD/HD

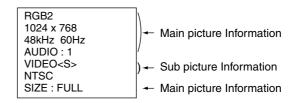


VIDEO

VIDEO <s> NTSC AUDIO: 3 SIZE: NORMAL</s>	 ✓ Video Input mode ✓ Input Signal Colour System mode ✓ Audio input mode ✓ Picture Size mode

PIP or POP

Main:RGB2 Sub:VIDEO<S>

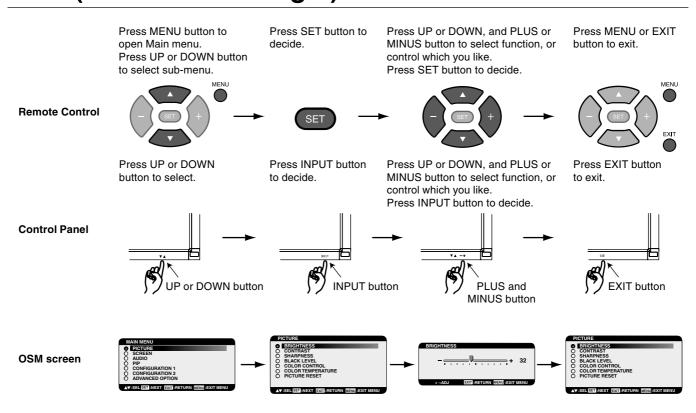


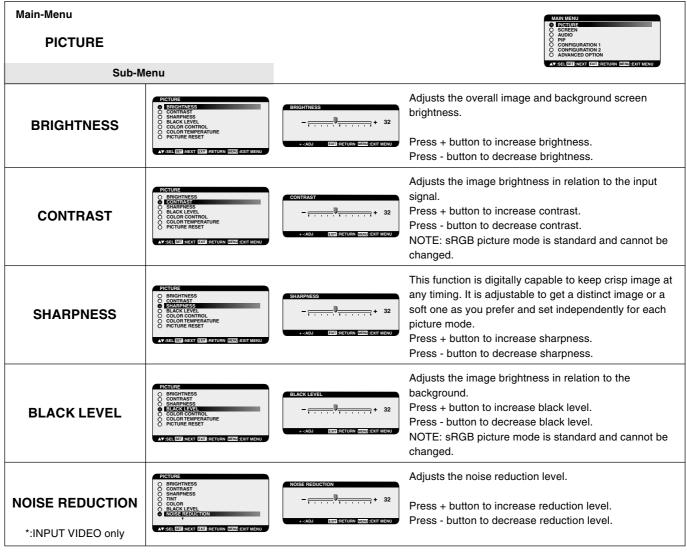
English-17



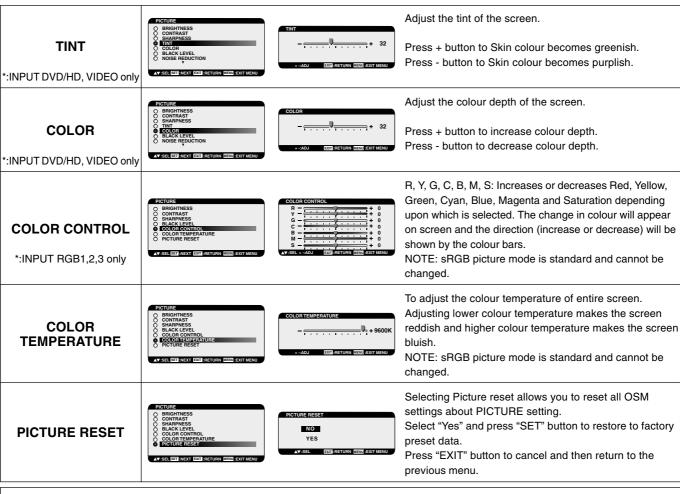


OSM (On-Screen-Manager) Controls





English-18



Main-Menu



SCREEN Sub-Menu Controls Horizontal Image position within the display area of the LCD. **H POSITION** Press + button to move screen to right. Press - button to move screen to left. Controls Vertical Image position within the display area of the LCD. **V POSITION** Press + button to move screen to UP. Press - button to move screen to DOWN. Press + button to expand the width of the image on the screen to the right. **CLOCK** Press - button to narrow the width of the image on the screen to the left. *: INPUT RGB2/3 only

CLOCK PHASE

*: INPUT RGB2/3 only





To change the snow noise of the image.

H RESOLUTION

*: INPUT RGB1/2/3 only





Adjusts the horizontal size by increasing or decreasing

Press + button to expand the width of the image on the screen.

Press - button to narrow the width of the image on the screen.

English-19





Adjusts the vertical size by increasing or decreasing the setting. Press + button to expand the height of the image on the **V RESOLUTION** screen. Press - button to narrow the height of the image on *: INPUT RGB1/2/3 only the screen. Selects the screen zoom mode. Zoom mode will be selected when you select the "ZOOM" by pushing the "SIZE" button on remote controller. When you select the "CUSTOM", you will be able to AV:SEL SET :NEXT EXIT :RETURN MENU :EXIT M adjust optional horizontal and vertical size. *:INPUT RGB1/2/3 only You can also select 16:9, 14:9 and DYNAMIC. (INPUT DVD/HD, VIDEO only) Press "SET" button to show a control menu as follows: Increase or decrease "ZOOM" slider to adjust the whole **ZOOM MODE** size and then adjust horizontal and vertical size by *: INPUT DVD/HD, VIDEO only H ZOOM and V ZOOM. Increase or decrease "H POS" and "V POS" to adjust the picture position. Selecting "DYNAMIC" will expand 4:3 pictures to the entire screen with non-linearity. (Some around image will be cut by expansion.) Dynamic image is the same as FULL size image when HDTV 1080i signal is input. Selecting "OFF" image will be displayed 1 by 1 pixel. (If you input over 1366x768 resolution signal, it will be displayed as shrank image.) Selecting Screen reset allows you to reset all OSM settings from SCREEN setting (except H POSITION, V POSITION, CLOCK, CLOCK PHASE, H RESOLUTION, V RESOLUTION). **SCREEN RESET** YES Select "Yes" and press "SET" button to restore the factory preset data. Press "EXIT" button to cancel and then return to the previous menu.

Main-Menu **AUDIO** Sub-Menu Adjust the balance of L/R volume. Press + button to move the stereo sound image to right. **BALANCE** Sound of the left side will be small. Press - button to move the stereo sound image to left. To accentuate or reduce the high frequency sound. **TREBLE** Press + button to increase TREBLE sound. Press - button to decrease TREBLE sound. To accentuate or reduce the low frequency sound. **BASS** Press + button to increase BASS sound. Press - button to decrease BASS sound. Selecting Audio reset allows you to reset all OSM settings from AUDIO setting. Select "Yes" and press "SET" button to restore the **AUDIO RESET** factory preset. Press "EXIT" button to cancel and then return to the AV:SEL SET :NEXT EXIT :RETURN MENU :EXIT MENU

English-20

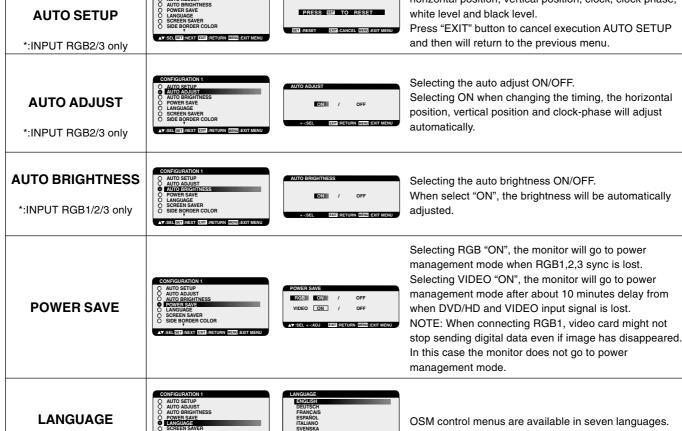
previous menu.

Main-Menu **PICTURE IN PICTURE** Sub-Menu Selecting the size of picture inserted at the "Picture-in-Picture" (PIP) mode. **PIP SIZE** "Large", "Middle" and "Small" are available. Selecting the sound source in PIP mode. When selecting "MAIN AUDIO", you will get the sound for the main picture and when selecting "PIP AUDIO", **PIP AUDIO** you will get the sound for the picture instead. When side-by-side mode, MAIN AUDIO is the sound source of the left side screen and PIP AUDIO is the right side. Selecting PIP Reset allows you to reset all OSM settings from PIP setting. Select "Yes" and press "SET" button to restore the factory **PIP RESET** preset data.

Press "EXIT" button to cancel and then return to the

previous menu.

Main-Menu **CONFIGURATION 1** Sub-Menu Press "SET" button to automatically adjust screen size, horizontal position, vertical position, clock, clock phase, white level and black level. **AUTO SETUP** and then will return to the previous menu. *: INPUT RGB2/3 only Selecting the auto adjust ON/OFF. **AUTO ADJUST** automatically. *: INPUT RGB2/3 only

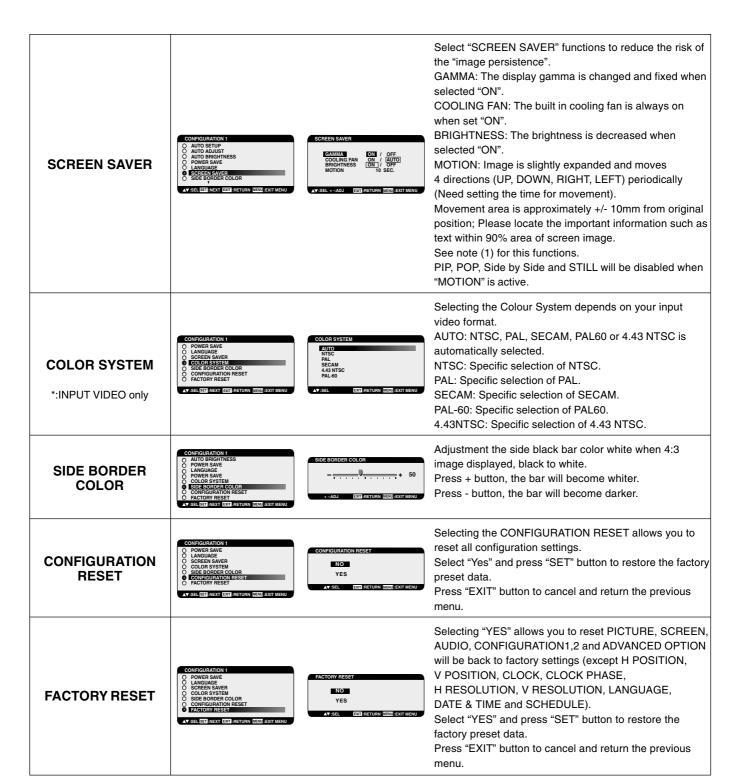


English-21









Main-Menu

CONFIGURATION 2

Sub-Menu

LONG CABLE ON/OFF

*:INPUT RGB2/3 only





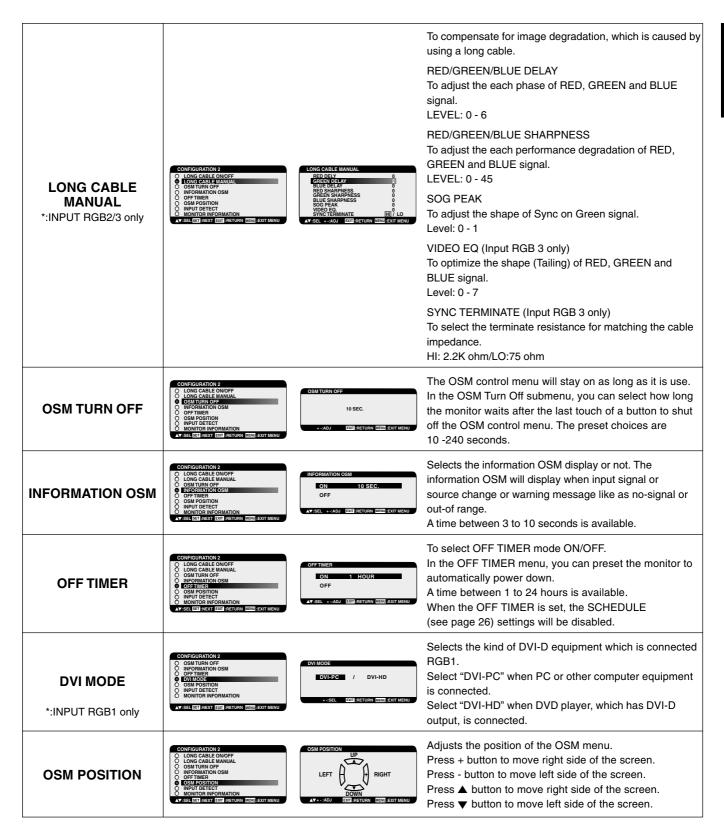


A set up ON/OFF of long cable alteration can be performed. In ON, enforcement of an AUTO Set Up performed alteration.

Please refer to the CD-ROM included for alteration.











Selects the method of input detection when more than two computers are connected.

FIRST DETECT: When the current video input signal is not present, then the monitor searches for a video signal from the other video input port. If the video signal is present in the other port, then the monitor switches the video source input port to the new found video source automatically. The monitor will not look for other video signals while the current video source is present.

This function is available at input RGB 1/2/3.

INPUT DETECT



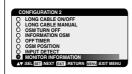
LAST DETECT: When the monitor is displaying a signal from the current source and a new secondary source is supplied to the monitor, the monitor will automatically switch to the new video source. When current video input signal is not present, the monitor searches for a video signal from the other video input port. If the video signal is present in the other port, then the monitor switches the video source input port to the new found video source automatically.

This function is available at input RGB 1/2/3.

VIDEO DETECT: DVD/HD or VIDEO inputs will have priority over RGB1/2/3. When DVD/HD or VIDEO input signal is present the monitor will change and keep to the DVD/DH or VIDEO input.

NONE: The Monitor will not search the other video input

MONITOR INFORMATION





Indicates the model and serial number of your monitor.

Main-Menu

ADVANCED OPTION

Sub-Menu



Selects the S-Video input port function. PRIORITY:

If cable is connected to the S-Video input, it will have priority the composite input port.

SEPARATE:

S-Video port and Composite port are selectable as independent input port.

INPUT RESOLUTION

*: INPUT RGB2/3 only





Selects to decision of input signal about below timings, 1024x768, 1280x768 and 1360x768. AUTO: Determines the resolution automatically.

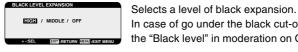
1024x768: Determines the resolution as 1024x768 1280x768: Determines the resolution as 1280x768

1360x768: Determines the resolution as 1360x768

BLACK LEVEL EXPANSION

*: INPUT VIDEO only





In case of go under the black cut-off level, please adjust the "Black level" in moderation on OSM menu.

GAMMA SELECTION





Selects a display gamma.

2.2

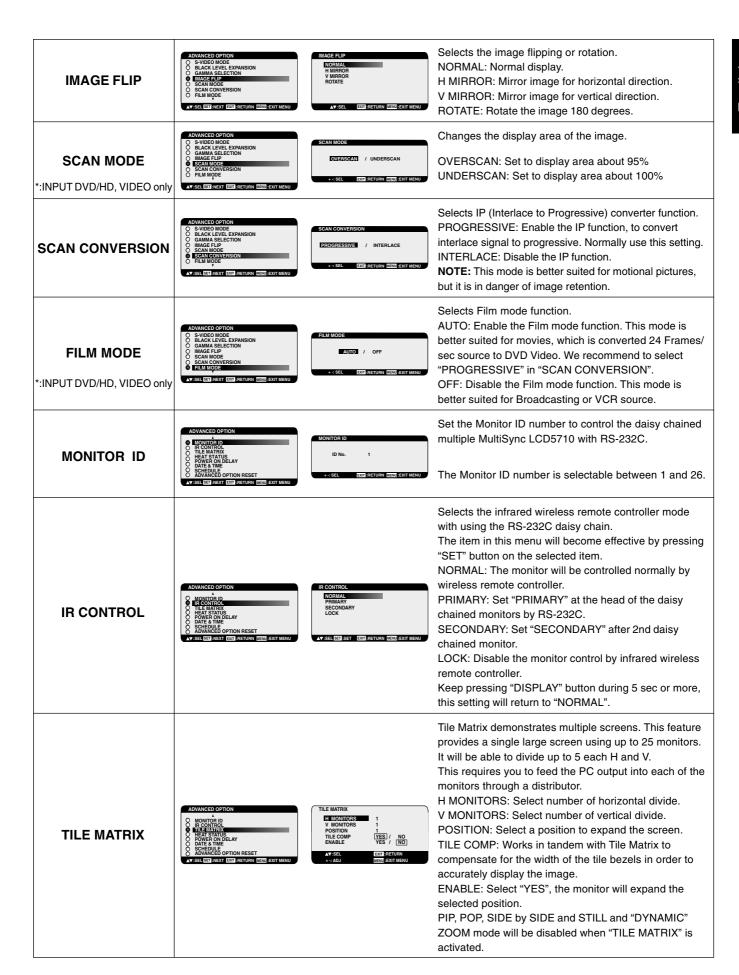
2.4

S gamma

Native

NOTE: sRGB picture mode is standard and cannot be changed.

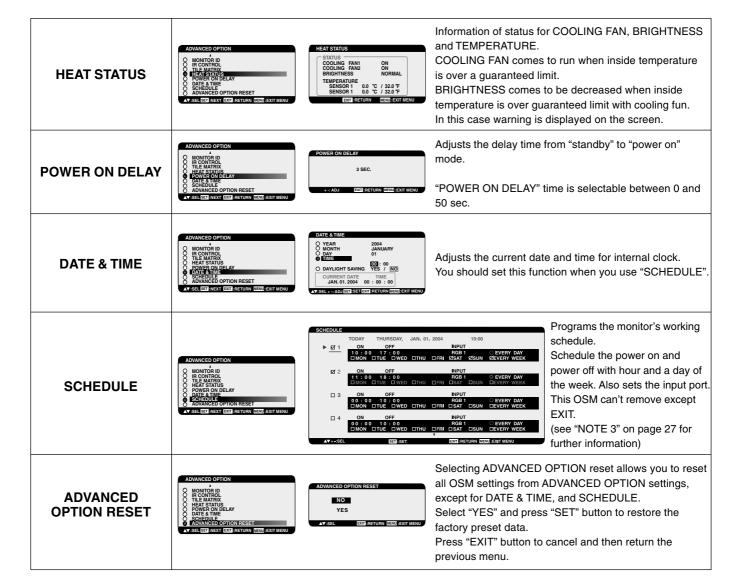
English-24











NOTE 1: IMAGE PERSISTENCE

Please be aware that LCD Technology may experience a phenomena known as Image Persistence. Image Persistence occurs when a residual or "ghost" image of a previous image remains visible on the screen. Unlike CRT monitors, LCD monitors' image persistence is not permanent, but constant images being displayed for a long period of time should be avoided.

To alleviate image persistence, turn off the monitor for as long as the previous image was displayed. For example, if an image was on the monitor for one hour and a residual image remains, the monitor should be turned off for one hour to erase the image.

As with all personal display devices, NEC DISPLAY SOLUTIONS recommends displaying moving images and using a moving screen saver at regular intervals whenever the screen is idle or turning off the monitor when not in use.

Please set "SCREEN SAVER", "DATE &TIME" and "SCHEDULE" functions to further reduce the risk of Image persistence.

For long life use of Public Display

< Image Sticking of LCD Panel >

When LCD panel is operated continuously for long hours, a trace of electric charge remains near the electrode inside LCD, and residual or "ghost" image of previous image may be observed. (Image Persistence)

Image Persistence is not permanent, but when fixed image is displayed for long period, ionic impurities inside LCD are accumulated along the displayed image, and it is observed permanently. (Image Sticking)

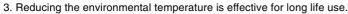
< Recommendations >

For preventing the fast transition to Image Sticking, and for longer life usage of LCD, following are recommended.

- 1. Fixed image should not be displayed for long period, and changed to another images with short cycle.
- 2. When no use, please turn off the monitor by remote control, or use Power Management Function of monitor or use Schedule Function of monitor.







When Protection board (glass, acryl) is installed over the LCD surface, enclosed into the box / wall, or stack the monitor, please utilize the temperature sensors inside monitor.

To reduce the environmental temperature, the monitor should be set Low Brightness or Cooling Fan "ON" by using Screen sever Function.

4. Please use "Screen Saver Mode" of monitor.

NOTE 2: MONITOR ID and IR CONTROL

Using the one PC or one infra-red wireless controller, you can control up to 26 MultiSync LCD5710 that are connected by daisy chained BS-232C.

1. Connect a PC and MultiSync LCD5710.

Connect a PC's RS-232C control output to the MultiSync LCD5710's RS-232C input.

You can connect other MultiSync LCD5710; Connect MultiSync LCD5710's RS-232C output to other MultiSync LCD5710's RS-232C input. (Refer to page 30 of Online Version).

2. Set Monitor ID.

Set "MONITOR ID" in the "ADVANCED OPTION" menu.

"MONITOR ID" should be set to a unique number on all daisy chained MultiSync LCD5710 from 1 to 26.

We recommend numbering continuously from 1 in a sequential number.

Set "PRIMARY" to "IR CONTROL" in the "ADVANCED OPTION" menu on the first of the daisy chained monitors. Set "SECONDERY" to "IR CONTROL" on other monitors.

3. Press "DISPLAY" button aiming at the "PRIMARY" monitor then ID select OSM will be shown at top left side of the screen.

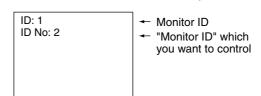
ID: 1 <- ID number itself.

ID No.: 1 <- ID number of the controllable monitor.

Press "+" button to increase this "ID No.".

Press "-" button to decrease it.

If you control all the daisy-chained monitors at the same time, please select "ID No." "ALL".



4. Operate wireless remote controller with aiming at the "PRIMARY" monitor.

The "MENU OSM" will appear on the selected ID No.'s monitor.

NOTE: If "ID No." select OSM is showing at the "PRIMARY" monitor, press "DISPLAY" button to clear this OSM.

HINT: If you lost control by a reason of wrong setting "IR CONTROL", keep pressing during 5 sec or more the "DISPLAY" button.

The monitor will reset "IR CONTROL" to "NORMAL".

NOTE 3: HOW TO SETUP SCHEDULE

Using the "SCHEDULE" function allows you to set up to seven different scheduled time intervals when the LCD Monitor will be activated. You can select the time the monitor turns on and turns off, the day of week the monitor is activated, and which input source the monitor will use for each scheduled activation period. A check mark in the box next to the number of the schedule indicates that the selected schedule is in effect.

To select which schedule to set, use the up/down arrows to move the red bar vertically under the number (1 to 7) of the schedule.

Use the (+) and (-) buttons to move the red bar horizontally within the particular schedule. The "SET" button is used to make a selection.

If you create a schedule but do not want to use a power on time, select "--" in the "ON" time slot.

If you do not want to use a power off time select "--" in the OFF time slot.

If there is no input selected ("--" showing in the input spot) the input from the previous schedule will be used.

The selection of EVERY DAY within a schedule takes priority over other schedules that are set up to operate weekly.

When schedules are overlapping, scheduled Power ON time has priority over scheduled Power OFF time.

If there are two schedules programmed for the same time, then the highest numbered schedule has priority.

When the "OFF TIMER" (see page 23) is set, the "SCHEDULE" function is disabled.







No picture

- The signal cable should be completely connected to the display card/computer.
- The display card should be completely seated in its slot.
- Front Power Switch and computer power switch should be in the ON position.
- Check to make sure that a supported mode has been selected on the display card or system being used.
 (Please consult display card or system manual to change graphics mode.)
- · Check the monitor and your display card with respect to compatibility and recommended settings.
- · Check the signal cable connector for bent or pushed-in pins.

Power Button does not respond

· Unplug the power cord of the monitor from the AC outlet to turn off and reset the monitor.

Image persistence

Please be aware that LCD Technology may experience a phenomenon known as Image Persistence. Image Persistence occurs
when a residual or "ghost" image of a previous image remains visible on the screen. Unlike CRT monitors, LCD monitors' image
persistence is not permanent, but constant images being displayed for a long period of time should be avoided. To alleviate
image persistence, turn off the monitor for as long as the previous image was displayed. For example, if an image was on the
monitor for one hour and a residual image remains, the monitor should be turned off for one hour to erase the image.

NOTE: As with all personal display devices, NEC DISPLAY SOLUTIONS recommends displaying moving images and using a moving screen saver at regular intervals whenever the screen is idle or turning off the monitor when not in use.

Image is unstable, unfocused or swimming is apparent

- Signal cable should be completely attached to the computer.
- Use the OSM Image Adjust controls to focus and adjust display by increasing or decreasing the fine adjustment.
 When the display mode is changed, the OSM Image Adjust settings may need to be re-adjusted.
- · Check the monitor and your display card with respect to compatibility and recommended signal timings.
- If your text is garbled, change the video mode to non-interlace and use 60Hz refresh rate.

Image of component signal is greenish

Check to see if the DVD/HD input connector is selected.

LED on monitor is not lit (no green or red colour can be seen)

- · Power Switch should be in the ON position and power cord should be connected.
- Make certain the computer is not in a power-saving mode (touch the keyboard or mouse).

RED LED on monitor is blinking

· A certain failure might have occurred, please contact your nearest authorized NEC DISPLAY SOLUTIONS service facility.

Display image is not sized properly

- Use the OSM Image Adjust controls to increase or decrease the coarse adjustment.
- Check to make sure that a supported mode has been selected on the display card or system being used.
 (Please consult display card or system manual to change graphics mode.)

Selected resolution is not displayed properly

• Use OSM Display Mode to enter Information menu and confirm that the appropriate resolution has been selected. If not, select corresponding option.

No Sound

- Check to see if speaker cable is properly connected.
- Check to see if mute is activated.
- Check to see if volume is set at minimum.

Remote Control is not available

- · Check the Remote Control's batteries status.
- · Check if batteries are inserted correctly.
- Check if the Remote Control is pointing at the monitor's remote sensor.
- The remote control system may not function when direct sunlight or strong illumination strikes the remote control sensor of the LCD monitor, or when there is an object in the path.

"SCHEDULE"/"OFF TIMER" function is not working properly

- The "SCHEDULE" function will be disabled when the "OFF TIMER" is set.
- If the "OFF TIMER" function is enable and the power to the LCD monitor is turned off if the power supply is interrupted unexpectedly, then the "OFF TIMER" will be reset.

Either light vertical or horizontal stripes may appear, depending on the specific display pattern. This is no product fault or degradation.

PIP (Picture In Picture) does not work

 Check the resolution of the input signal. PIP does not work with all types of "1080i" input signals. The PIP function will work with 1080p signals.



