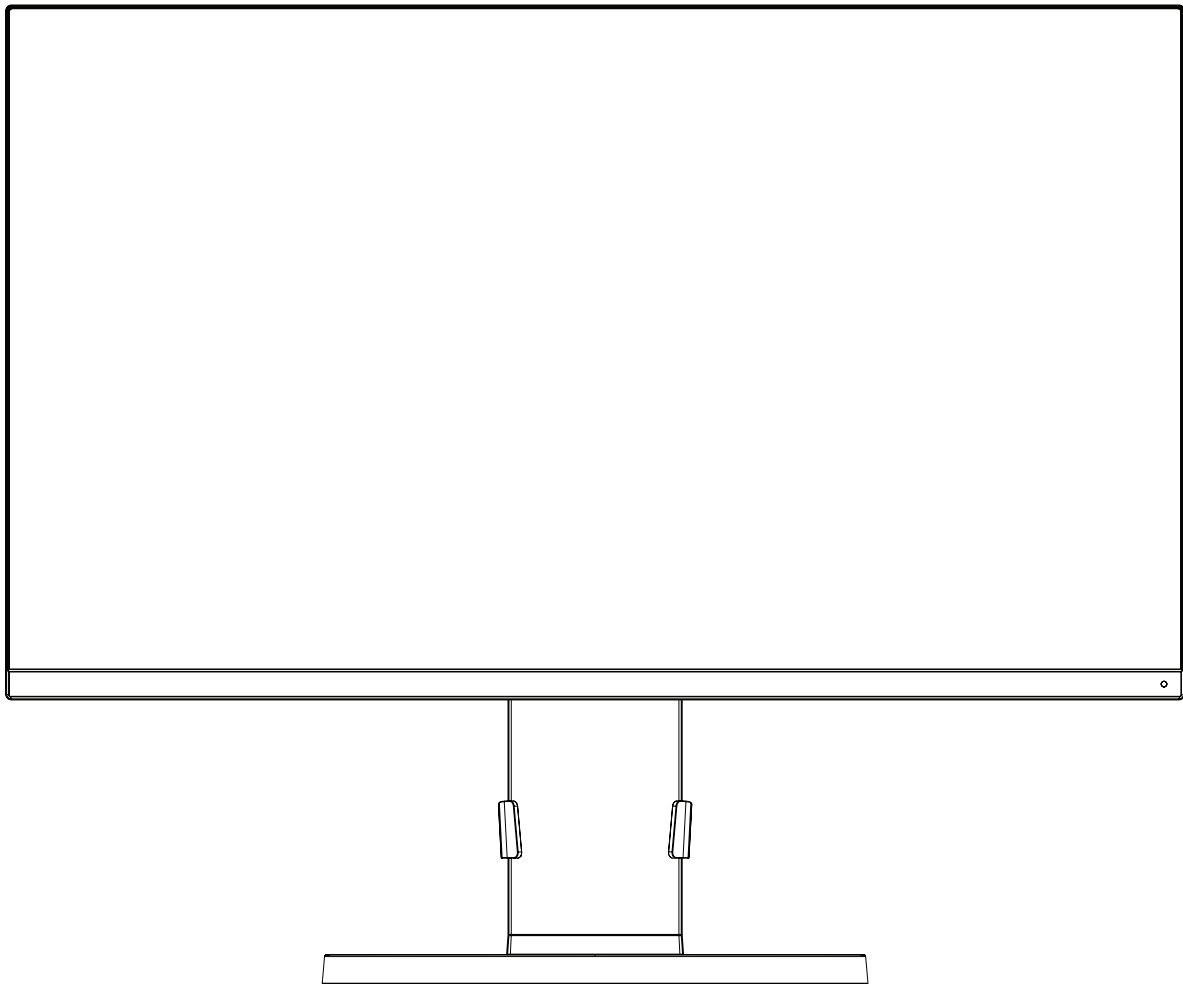


NEC

Desktop Monitor

MultiSync E271N

User's Manual



MODEL: M277D4

Please find your model name in the label on the rear side of the monitor.

Index

WARNING	English-1
CAUTION	English-1
Registration Information	English-2
Recommended use	English-3
Safety Precautions and Maintenance	English-3
Ergonomics	English-4
Cleaning the LCD Panel.....	English-4
Cleaning the Cabinet.....	English-4
Parts Name and Functions.....	English-5
Quick Start.....	English-6
Controls	English-11
Specifications	English-15
Features	English-17
Troubleshooting.....	English-18
Manufacturer's Recycling and Energy Information.....	English-19

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




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.



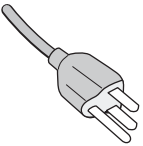
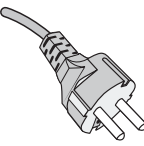
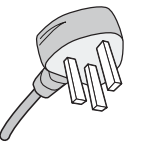
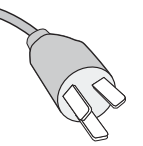
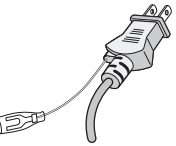
This symbol warns user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any part inside this unit.



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.

CAUTION: Please use the power cord provided with this display in accordance with the table below. If a power cord is not supplied with this equipment, please contact NEC. For all other cases, please use the power cord with the plug style that matches the power socket where the monitor is located. The compatible power cord corresponds to the AC voltage of the power outlet and has been approved by, and complies with, the safety standards in the country of purchase.

This equipment is designed to be used in the condition of the power cord connected to earth. If the power cord is not connected to the earth, it may cause electric shock. Please make sure the power cord is earthed properly.

Plug Type	North America	European Continental	U.K.	Chinese	Japanese
Plug Shape					
Country	U.S.A./Canada	EU	U.K.	China	Japan
Voltage	120*	230	230	220	100

*When operating the monitor with its AC 125-240V power supply, use a power supply cord that matches the power supply voltage of the AC power outlet being used.

NOTE: This product can only be serviced in the country where it was purchased.

Windows is a registered trademark of Microsoft Corporation. NEC is a registered trademark of NEC Corporation. ErgoDesign is a registered trademark of NEC Display Solutions, Ltd. in Austria, Benelux, Denmark, France, Germany, Italy, Norway, Spain, Sweden, U.K.

All other brands and product names are trademarks or registered trademarks of their respective owners.

ENERGY STAR is a U.S. registered trademark.

As an ENERGY STAR® Partner, NEC Display Solutions of America, Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency. The ENERGY STAR emblem does not represent EPA endorsement of any product or service.

DisplayPort and DisplayPort Compliance Logo are trademarks owned by Video Electronics Standards Association in the United States and other countries.



HDCP (High-bandwidth Digital Content Protection): HDCP is a system for preventing illegal copying of video data sent over a digital signal. If you are unable to view material via the digital signal input, this does not necessarily mean the display is not functioning properly. With the implementation of HDCP, there may be cases in which certain content is protected with HDCP and might not be displayed due to the decision/intention of the HDCP community (Digital Content Protection, LLC).

The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.



- The intended primary use of this product is as an Information Technical Equipment in an office or domestic environment.
- The product is intended to be connected to a computer and is not intended for the display of television broadcast signals.



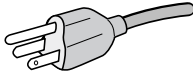
Registration Information

Cable information

- ⚠ CAUTION:** Use the attached specified cables with this monitor so as not to interfere with radio and television reception. For mini D-sub 15 pin, please use a signal cable with ferrite core. For HDMI and DisplayPort, please use a shielded signal cable. Use of other cables and adapters may cause interference with radio and television reception.

FCC Information

1. The power supply cord you use must have been approved by and comply with the safety standards of U.S.A., and meet the following condition.

Power supply cord Plug shape	Non shield type, 3-conductor  U.S.A
---------------------------------	--

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.

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.

U.S. Responsible Party:	NEC Display Solutions of America, Inc.
Address:	500 Park Boulevard, Suite 1100 Itasca, Illinois 60143
Tel. No.:	(630) 467-3000

Type of Product: Display Monitor
Equipment Classification: Class B Peripheral
Model: MultiSync E271N (M277D4)



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

To see a list of our TCO certified monitors and their TCO Certification (in English only), visit our website at

https://www.nec-display.com/global/about/legal_regulation/TCO_mn/index.html

Recommended use

Safety Precautions and Maintenance



WARNING

FOR OPTIMUM PERFORMANCE, PLEASE NOTE
THE FOLLOWING WHEN SETTING UP AND
USING THE LCD COLOR 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.
- The power supply cord you use must have been approved by and comply with the safety standards of your country. (e.g. Type H05VV-F 3G 0.75 mm² should be used in Europe).
- In the UK use a BS-approved power cord with a molded plug having a black (5A) fuse installed for use with this monitor.
- Do not use the monitor outdoors.
- Do not bend, crimp or otherwise damage the power cord.
- Do not use the monitor in high temperature, humid, dusty, or oily areas.
- Do not cover the vent on the monitor.
- Vibration can damage the backlight. Do not install in areas where the monitor will be exposed to continual vibration.
- If monitor or glass is broken, do not come in contact with the liquid crystal and handle with care.
- To prevent damage to the LCD monitor caused by tipping over due to earthquakes or other shocks, make sure to install the monitor in a stable location and take measures to prevent falling.
- Immediately turn off the power, unplug your monitor from the wall outlet and move to a safe location, then refer servicing to qualified service personnel under the following conditions. If the monitor is used in this condition, the monitor may cause fall, fire and electric shock:
 - If the monitor stand has been cracked or peeled.
 - If you notice any structural damage such as cracks or unnatural wobbling.
 - If the monitor has an unusual odor.
 - If the power supply cord or plug is damaged.
 - If liquid has 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 has been damaged.
 - If the monitor does not operate normally by following operating instructions.



CAUTION

- 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.
- Handle with care during installation and adjustment to prevent personal injury and damage to the monitor.
- Do not connect headphones to the monitor while you are wearing them. Depending on the volume level, it may damage your ears and cause loss of hearing.
- Please tighten all screws. A loose screw may cause the monitor to fall off the arm or stand.
- Do not touch the LCD panel surface while transporting, mounting and setting. Applying pressure on the LCD panel can cause serious damage.

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 a still image 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.

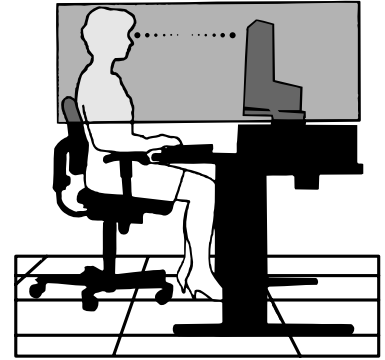
NOTE: As with all personal display devices, NEC DISPLAY SOLUTIONS recommends using a moving screen saver at regular intervals whenever the screen is idle, or turn off the monitor when not in use.

**CORRECT PLACEMENT AND ADJUSTMENT OF THE MONITOR CAN
REDUCE EYE, SHOULDER, AND NECK FATIGUE. CHECK THE
FOLLOWING WHEN YOU POSITION THE MONITOR:**

Ergonomics

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

- For optimum performance of the monitor, allow 20 minutes for warming up. Avoid reproduction of still patterns on the monitor for long periods of time to avoid image persistence (after image effects).
- Adjust the monitor height so that the top of the screen is at or slightly below eye level. Your eyes should look slightly downward when viewing the middle of the screen.
- Position your monitor no closer than 40 cm (15.75 inches) and no further away than 70 cm (27.56 inches) from your eyes. The optimal distance is 50 cm (19.69 inches).
- Rest your eyes periodically for 5 to 10 minutes for every 1 hour by focusing on an object at least 20 feet away.
- Position the monitor at a 90° angle to windows and other light sources to minimize glare and reflections. Adjust the monitor tilt so that ceiling lights do not reflect on your screen.
- If reflected light makes it hard for you to see your screen, use an anti-glare filter.
- Adjust the monitor's brightness and contrast controls to enhance readability.
- Use a document holder placed close to the screen.
- Position whatever you are looking at most of the time (the screen or reference material) directly in front of you to minimize turning your head while you are typing.
- Blink often. Eye exercise helps to reduce eye strain. Please contact your ophthalmologist. Get regular eye checkups.
- To avoid eye fatigue, adjust the brightness to a moderate setting. Place a sheet of white paper next to the LCD screen for luminance reference.
- Do not position the Contrast control to its maximum setting.
- Use the preset Size and Position controls with standard signals.
- Use the preset Color Setting.
- Use non-interlaced signals.
- Do not use primary color blue on a dark background, as it is difficult to see and may produce eye fatigue due to insufficient contrast.
- Suitable for entertainment purposes at controlled luminous environments, to avoid disturbing reflections from the screen.



Cleaning the LCD Panel

- When the LCD is dusty, please gently wipe with a soft cloth.
- Clean the LCD monitor surface with a lint-free, non-abrasive cloth. Avoid using any cleaning solution or glass cleaner!
- Please do not rub the LCD panel with hard or coarse material.
- Please do not apply pressure to the LCD surface.
- Please do not use OA cleaner as it will cause deterioration or discoloration on the LCD panel surface.

Cleaning the Cabinet

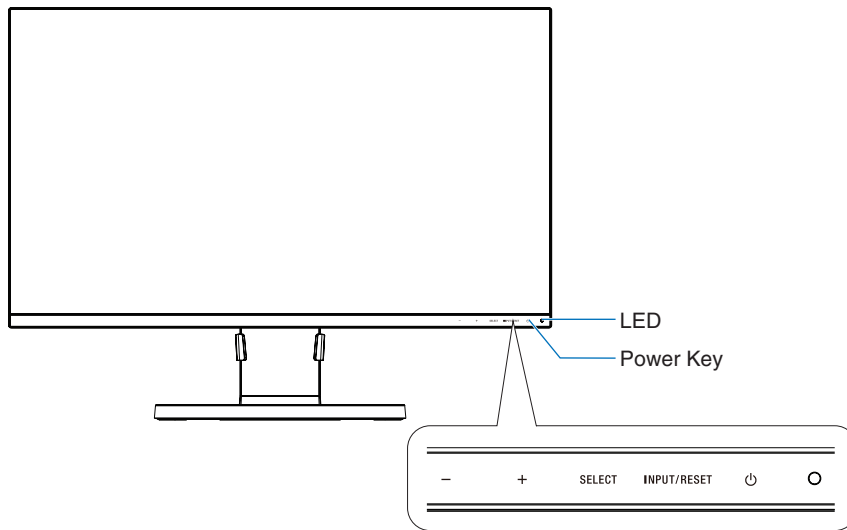
- Unplug the power supply
- Gently wipe the cabinet with a soft cloth
- To clean the cabinet, dampen the cloth with a neutral detergent and water, wipe the cabinet and follow with a dry cloth.

NOTE: DO NOT clean with benzene thinner, alkaline detergent, alcoholic system detergent, glass cleaner, wax, polish cleaner, soap powder, or insecticide. Rubber or vinyl should not be in contact with the cabinet for an extended period of time. These types of fluids and materials can cause the paint to deteriorate, crack or peel.

For more detailed information on setting up a healthy work environment, write to the American National Standard for Human Factors Engineering of Computer Workstations - ANSI/HFES 100-2007 - The Human Factors Society, Inc. P.O. Box 1369, Santa Monica, California 90406.

Parts Name and Functions

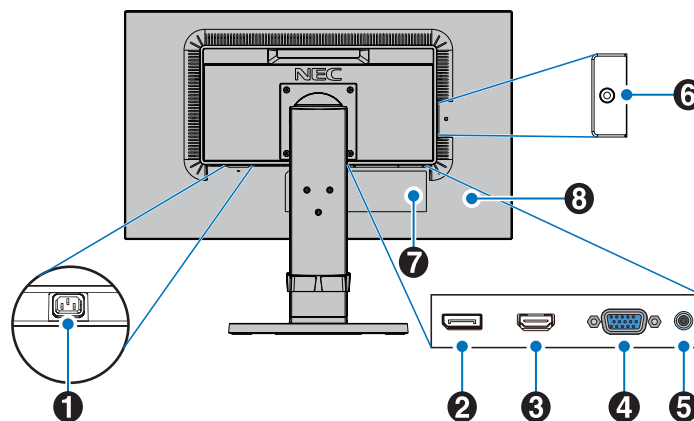
Control Panel



Control buttons

Refer to the **Controls** section. See [page 11](#).

Terminal Panel



1 AC IN Connector

Connects with the supplied power cord.

2 DisplayPort IN

DisplayPort signals input.

3 HDMI IN

Digital HDMI signals input.

4 VGA IN (mini D-Sub 15 pin)

Analog RGB signals input.

5 Audio IN

Audio signal input from external equipment such as a computer or player.

6 Headphone Jack

Connects with headphones.

⚠ CAUTION: Do not connect headphones to the monitor while you are wearing them. Depending on the volume level, it may damage to your ears.

7 Rating Label

8 Security Slot

Security and theft protection lock compatible with Kensington security cables/equipment. For products visit Kensington's website, <http://www.kensington.com/>

Quick Start

For box contents, please refer the printed contents sheet provided in the box.

To attach the base and cable holder to the LCD stand:

1. Place monitor face down on a non-abrasive surface (**Figure 1**).
2. Please rotate the stand 90 degrees as shown in **Figure 1**.

CAUTION: Handle with care when pulling the stand. It may pinch your fingers.

3. Attach the base to the stand, then tighten the screw at the base's bottom (**Figure 2**).

NOTE: Reverse this procedure if you need to re-pack the monitor.

4. Place the cable holder onto the stand (**Figure 3**).

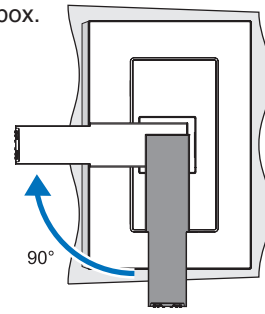


Figure 1

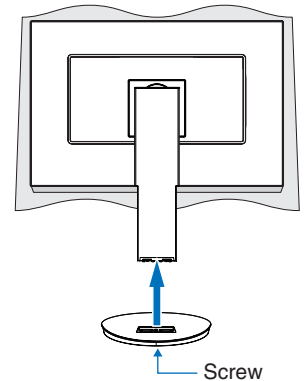


Figure 2

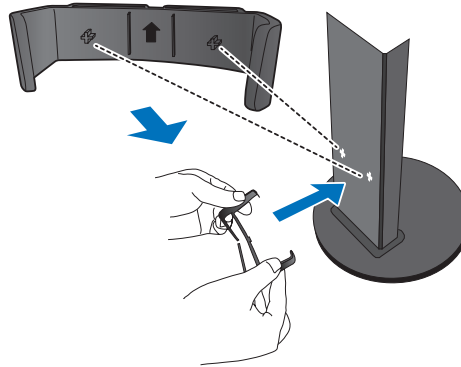


Figure 3

To connect the LCD monitor to your system, follow these instructions:

NOTE: Make sure to read "Recommended Use" ([page 3](#)) before installation.

CAUTION: Please tighten all screws.

NOTE: The accessories included will depend on the location where the LCD monitor was shipped.

1. Turn off the power for your computer.
2. **For a PC with DisplayPort output:** Connect the DisplayPort cable to the connector of the display card in your system (**Figure A.1**).

For a PC with HDMI output: Connect the HDMI cable to the connector of the display card in your system (**Figure A.2**).

For a PC with Analog output: Connect a 15-pin mini D-SUB signal cable to the connector of the display card in your system (**Figure A.3**).

For a Mac or PC with Thunderbolt or Mini DisplayPort output: Connect a Mini DisplayPort to DisplayPort cable to the video output connector on your system (**Figure A.4**).

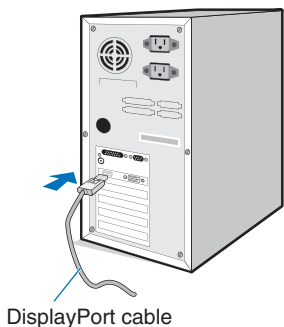


Figure A.1

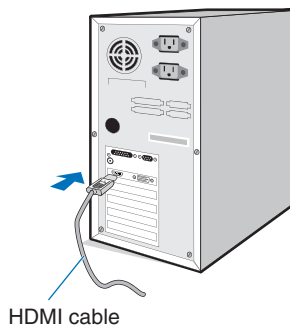


Figure A.2

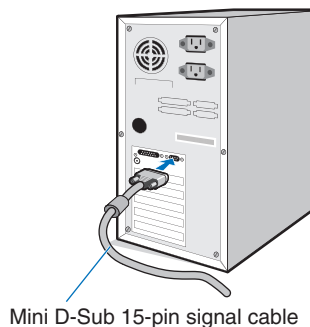


Figure A.3

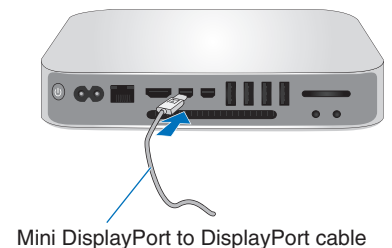


Figure A.4

- NOTE:**
- When removing the DisplayPort cable, hold down the top button to release the lock.
 - Please use a High Speed HDMI cable with HDMI logo.
 - Please use a Certified DisplayPort cable.

3. Place hands on each side of the monitor to tilt the LCD panel to a maximum tilt angle and lift up to the highest position.
4. Connect all cables to the appropriate connectors (**Figure C.1**).

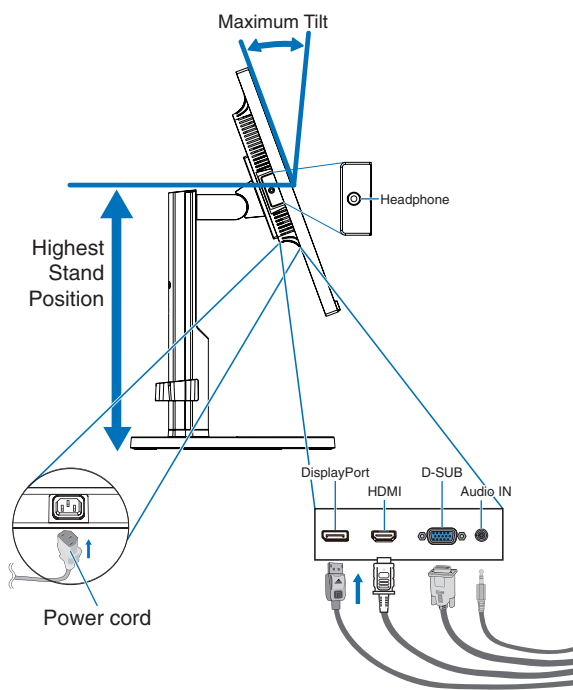


Figure C.1

NOTE: Incorrect cable connections may cause abnormal operation, damage display quality/components of the LCD module and/or shorten the module's life.

NOTE: Use an audio cable without a built-in resistor. Using an audio cable with a built-in resistor lowers the sound.

NOTE: Adjustment of the volume control as well as the equalizer to settings other than the center position may increase the ear-/headphones output voltage and therefore the sound pressure level.

5. Place the cables in the cable holder firmly and evenly (**Figure C.2** and **Figure C.3**).
6. Please check that you can still rotate, raise and lower the monitor screen after you have installed the cables.

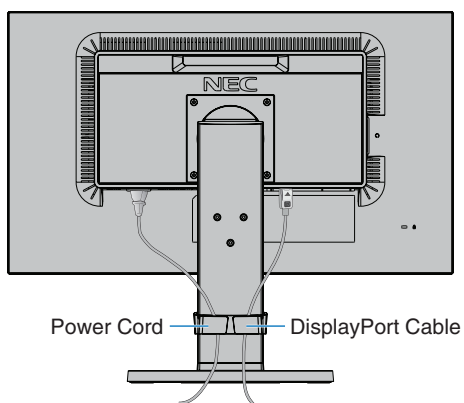


Figure C.2

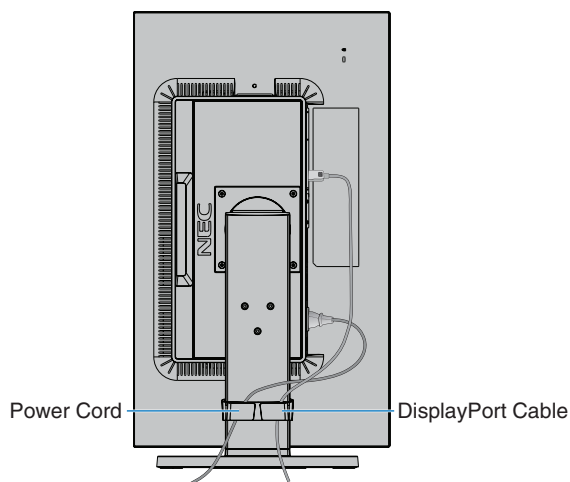


Figure C.3

7. Connect the power cord to the power outlet.

NOTE: Please refer to the **Caution** section of this manual for proper selection of the AC power cord.

8. Turn on the monitor by touching the power key and then the computer (**Figure E.1**).
9. No Touch Auto Adjust automatically adjusts the monitor to optimal settings upon initial setup. For further adjustments, use the following OSD controls:
 - AUTO CONTRAST (Analog input only)
 - AUTO ADJUST (Analog input only)

Refer to the **Controls** section of this User's Manual for a full description of these OSD controls.

NOTE: If you have any problems, please refer to the **Troubleshooting** section of this User's Manual.

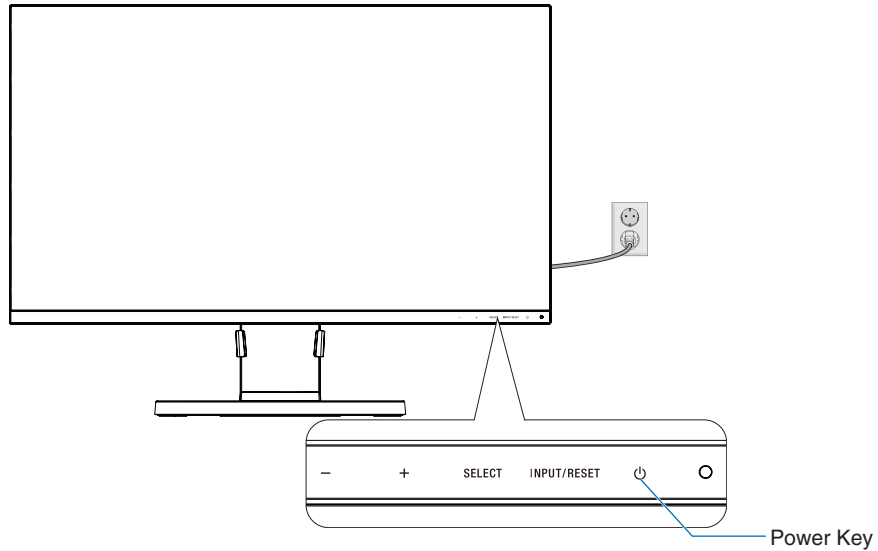


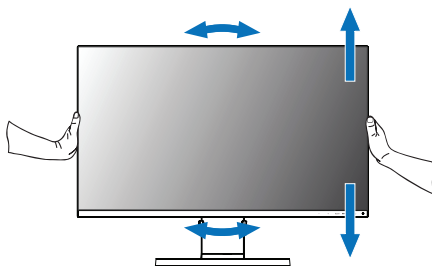
Figure E.1

Adjustable stand with pivot capability

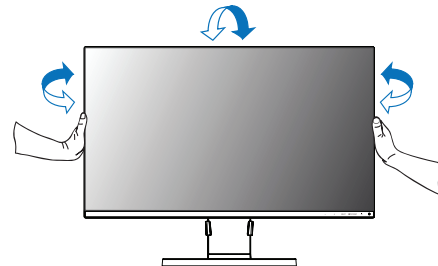
Raise and Lower: Hold the monitor on each side and lift or lower to the desired height.

Tilt and Swivel: Hold the top and bottom sides of the monitor screen with your hands and adjust the tilt and swivel as desired.

Screen Rotation (Pivot): Hold the monitor on each side and turn it from landscape to portrait.



Rotation, Raise and Lower



Tilt and Swivel

⚠ CAUTION: Handle with care when adjusting the monitor screen. Do not apply pressure to the LCD when adjusting the height and rotating the monitor screen. Before rotating, disconnect the power cord and all cables from the display. The screen must be raised to the highest level and tilt to avoid knocking the screen on the desk or pinching your fingers.

Flexible Arm Installation

This LCD monitor is designed for use with a flexible arm. Contact NEC for more information.

To prepare the monitor for alternate mounting purposes:

- Follow the instructions provided by the manufacturer of the display mount.
- CAUTION:** To meet the safety requirements, the monitor must be mounted to an arm that supports the weight of the monitor. See [page 15](#) for details. Remove the monitor stand before mounting.

1. Remove the Monitor Stand for Mounting

To prepare the monitor for alternate mounting purposes:

- Disconnect all cables.
- Place hands on each side of the monitor and lift up to the highest position.
- Place the monitor face down on a non-abrasive surface (**Figure S.1**).

NOTE: Handle with care when the monitor is facing down.

- Remove the 4 screws connecting the stand to the monitor (**Figure S.1**).

NOTE: Please securely hold the stand while removing the screws to prevent the stand from falling.

- Remove the stand (**Figure S.2**).

NOTE: Use only VESA-compatible alternative mounting method. Handle with care when removing the monitor stand.

- The monitor is now ready for mounting in an alternate manner.

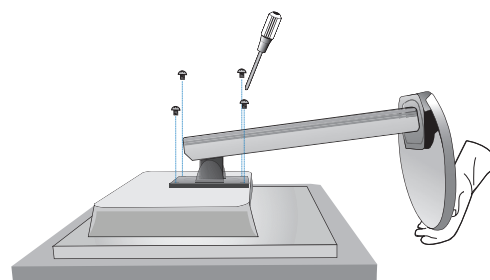


Figure S.1

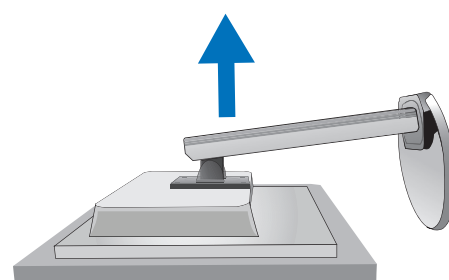


Figure S.2

2. Mount Flexible Arm

This LCD monitor is designed for use with a flexible arm.

- Follow the instructions on how to Remove the Monitor Stand for Mounting.
- Using 4 screws that meet the specifications listed below, attach the arm to the monitor (**Figure F.1**).

- CAUTION:**
 - Only use the screws (4 pcs) that were removed from the stand or the specified screws (**Figure F.1**) to avoid damage to the monitor or stand.
 - To meet the safety requirements, the monitor must be mounted to an arm which guarantees the necessary stability under consideration for the weight of the monitor. The LCD monitor should only be used with an approved arm (e.g. TUEV GS mark).
 - Tighten all screws (recommended Fasten Force: 98 - 137N•cm). A loose screw may cause the monitor to fall off the arm.
 - Attaching the flexible arm should be done by two or more people if the monitor cannot be placed face down on a flat surface for installation.

- Connect the cables to the rear side of the monitor.

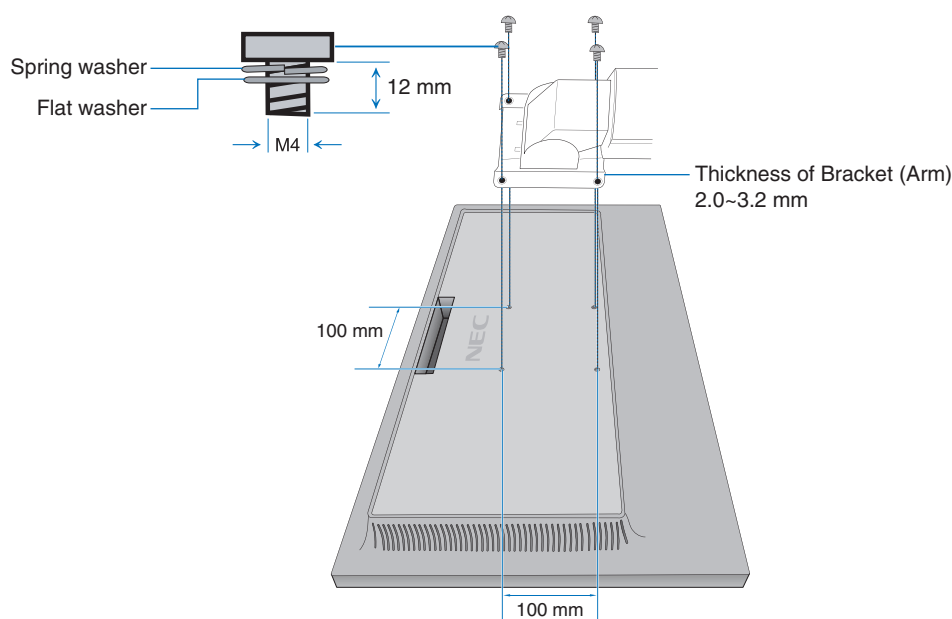
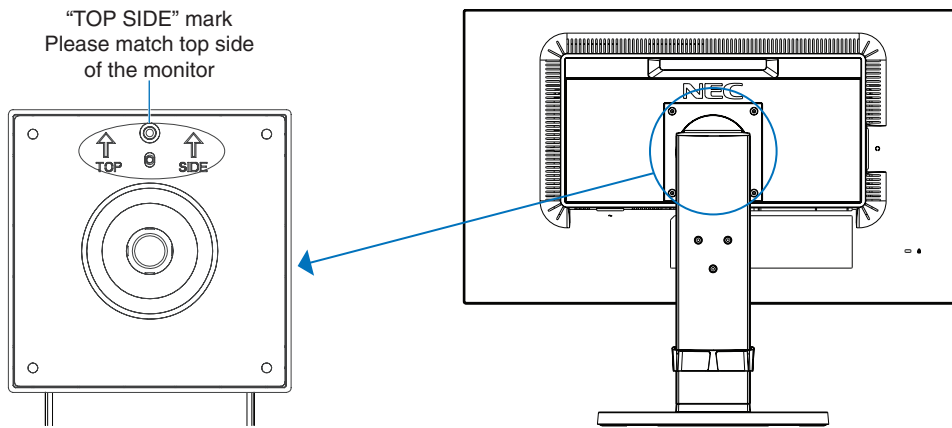


Figure F.1

Re-attaching the original stand

Reverse the process in the previous section to re-attach stand.

NOTE: Match "TOP SIDE" mark on stand to top side of the monitor when re-attaching stand.



Attaching VESA Plate for Thin Client Computer

This LCD monitor is designed for mounting a thin client computer by using a VESA plate and screws.

When attaching the VESA plate, use all included screws and fully tighten them.

For mounting a thin client computer, please refer to the computer's manual.

- NOTE:**
- Make sure the monitor does not fall after attaching a thin client computer.
 - Do not mount a flexible arm on the VESA plate.
 - Please make sure a thin client computer does not cover ventilation holes on the monitor.
 - Mounting on a thin client computer is the customer's responsibility.
 - Only use the screws that were attached the monitor or the specified screws (**Figure V.1**).

Specifications of a thin client computer with bracket for mounting:

Maximum size: 184 (W) x 184 (H) x 63 (D) mm

Maximum weight: 2.5 Kg

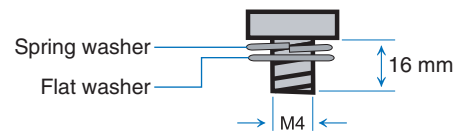
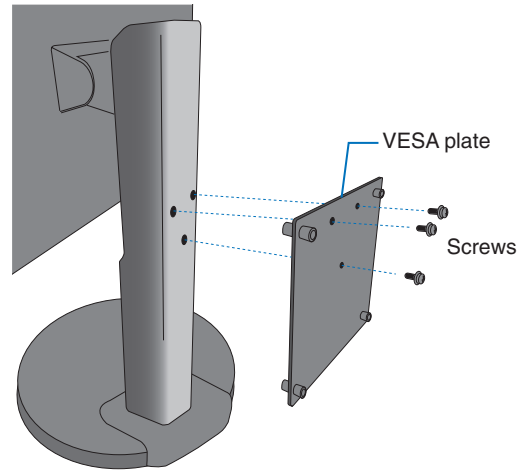


Figure V.1

Controls

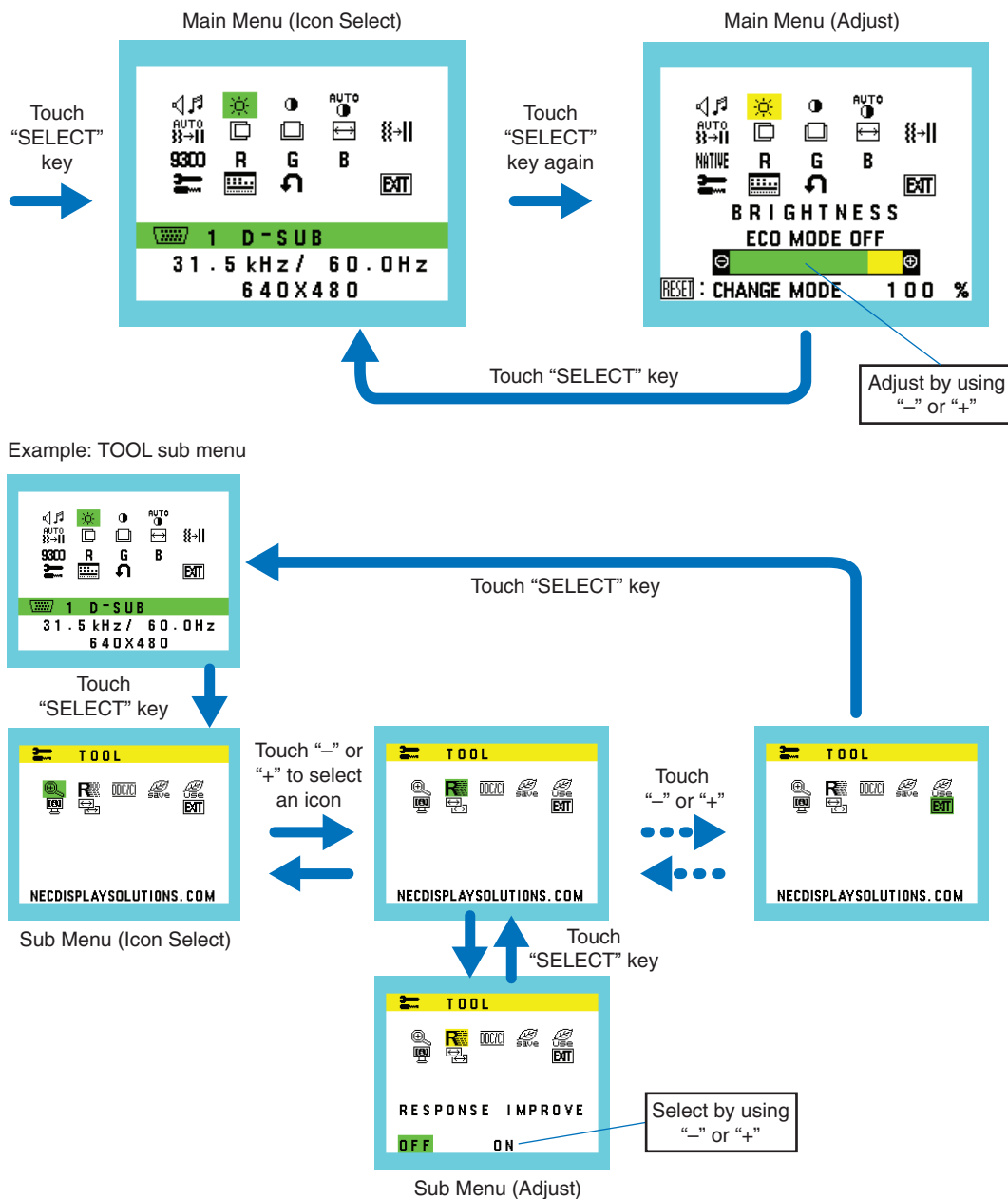
OSD (On-Screen Display) Control Functions

1. Basic functions of the touch keys on the front of the monitor

OSD Menu	-	+	SELECT	INPUT/RESET
Not displaying on screen	Shortcut to Brightness.	Shortcut to Volume.	Displays OSD.	Selects input signal.
Displaying on screen Icon Select	Moves leftward.	Moves rightward.	Displays OSD menu and selects function icon.	
Displaying on screen Function Adjustment	Adjusts down.	Adjusts up.	Adjusts the function of the selected icon.	Resets the function.

NOTE: You can directly change to LOW BLUE LIGHT MODE by touching the SELECT key for 3 seconds or more.

2. OSD structure





VOLUME

Controls the volume of the speakers or headphones.

To mute the speaker output select Audio icon and touch "INPUT/RESET" key.



BRIGHTNESS

Adjusts the overall image and background screen brightness.

Touch "INPUT/RESET" key to enter ECO MODE.

ECO MODE OFF: Sets brightness variable from 0% to 100%.

ECO MODE1: Sets brightness 70%.

ECO MODE2: Sets brightness 30%.

NOTE: When DV MODE is ON, ECO MODE is set to OFF and cannot be changed.



CONTRAST

Adjusts the image brightness in relation to the background.

To enter the DV MODE setting, touch the "INPUT/RESET" key.

DV MODE: Setting that adjusts the brightness by detecting the screen's black areas and optimizes it.

NOTE: "OFF" is used for TCO Certificate compliance.



AUTO CONTRAST (Analog input only)

Automatically adjusts the image displayed for non-standard video inputs.



AUTO ADJUST (Analog input only)

Automatically adjusts the Image Position, the H. Size and Fine settings.



LEFT/RIGHT (Analog input only)

Controls Horizontal Image Position within the display area of the LCD.



DOWN/UP (Analog input only)

Controls Vertical Image Position within the display area of the LCD.



H. SIZE (Analog input only)

Adjusts the horizontal size by increasing or decreasing this setting.



FINE (Analog input only)

Improves focus, clarity and image stability by increasing or decreasing this setting.



COLOR CONTROL SYSTEMS

Six color presets (9300 / 7500 / sRGB / USER / NATIVE / L/B) select the desired color setting.

NOTE: You can directly change to LOW BLUE LIGHT MODE by touching the SELECT key for 3 seconds or more.

For changing to other settings from L/B mode, touch the SELECT key to show OSD menu and enter COLOR control.

When L/B is selected in COLOR control, CONTRAST and DV MODE are disabled.



RED

Increases or decreases Red. The change will appear on screen.



GREEN

Increases or decreases Green. The change will appear on screen.



BLUE

Increases or decreases Blue. The change will appear on screen.



TOOL

Selecting TOOL allows you to get into the sub menu. See [page 13](#).



OSD TOOL

Selecting OSD TOOL allows you to get into the sub menu. See [page 14](#).



FACTORY PRESET

Selecting Factory Preset allows you to reset all OSD control settings back to the factory settings except MUTE, CARBON SAVINGS, CARBON USAGE, and SIGNAL INFORMATION. Individual settings can be reset by highlighting the control to be reset and touching the INPUT/RESET key.



EXIT

Selecting EXIT allows you to exit OSD menu/sub menu.

TOOL



EXPANSION

Selects the zoom mode.

This function works when the input signal timing is under native resolution.

FULL: The image is expanded to full screen, regardless of the resolution.

ASPECT: The image is expanded without changing the aspect ratio.



RESPONSE IMPROVE

Turns the Response Improve function ON or OFF.

Response Improve may reduce blurring that occurs in some moving images.



DDC/CI

This function turns the DDC/CI function ON or OFF.



CARBON SAVINGS

Displays the estimated carbon saving information in kg.

The carbon footprint factor in the carbon saving calculation is based on the OECD (2008 Edition).

The carbon saving information can be reset by touching the INPUT/RESET key.



CARBON USAGE

Displays the estimated carbon usages information in kg.

This is the arithmetic estimation, not actual measurement value.

The carbon footprint factor in the carbon usage calculation is based on the OECD (2008 Edition).

The carbon usage information can be reset by touching the INPUT/RESET key.



MONITOR INFO

Indicates the model and serial numbers of your monitor.



SOUND INPUT (HDMI, DisplayPort inputs only)

This function selects AUDIO IN, HDMI or DP.



INPUT RESOLUTION (Analog input only)

This function works when the user selects one of the special input signal timings below.

Select one of the following pair of resolutions as the input signal priority:

1280 x 768 or 1360 x 768 or 1366 x 768 (vertical resolution 768),

1600 x 900 or 1280 x 960 (horizontal frequency 60 kHz, vertical frequency 60 Hz),

1400 x 1050 or 1680 x 1050 (vertical resolution 1050).

OSD TOOL



LANGUAGE

Selects the language used by the OSD.



OSD TURN OFF

The OSD menu will stay on as long as it is in use. You can select how long the monitor waits after the last key touch to shut off the OSD menu. The preset choices are 10-120 seconds by 5-second increments.



OSD LOCK OUT

This control completely locks out the access to all OSD control functions except for VOLUME, BRIGHTNESS and CONTRAST.

To activate the OSD LOCK OUT function, enter the OSD TOOL sub menu, select "OSD LOCK OUT", touch and hold the "INPUT/RESET" key and "+" simultaneously until "OSD LOCKED OUT" indicator appears.

To deactivate, touch the SELECT key, then repeat the same steps until the OSD main menu displays on screen.



SIGNAL INFORMATION

If you select "ON", the monitor displays "VIDEO INPUT MENU" after changing the input.

If you select "OFF", the monitor doesn't display "VIDEO INPUT MENU" after changing the input.

OSD Warning

OSD Warning menus disappear by touching the SELECT key.

NO SIGNAL: This function gives a warning when there is no signal present. After power is turned on or when there is a change of input signal or video is inactive, the **NO SIGNAL** window will appear.

OUT OF RANGE: This function gives a recommendation of the optimized resolution and refresh rate. After the power is turned on or there is a change of input signal or the video signal doesn't have proper timing, the **OUT OF RANGE** menu will appear.

Specifications

Monitor Specifications	MultiSync E271N Monitor	Notes
LCD Module	Diagonal: 68.6 cm/27.0 inches Viewable Image Size: 68.6 cm/27.0 inches Native Resolution (Pixel Count): 1920 x 1080	Active matrix; thin film transistor (TFT) liquid crystal display (LCD); 0.311 mm dot pitch; 250 cd/m ² white luminance; 1000:1 contrast ratio (typical), (5000:1 Contrast ratio, DV MODE ON).
Input Signal		
DisplayPort:	DisplayPort Connector: Digital RGB	DisplayPort V1.1a (HDCP 1.3)
VGA:	15pin Mini D-sub: Analog RGB Sync	0.7 Vp-p/75 ohm Separate sync.TTL level Positive/Negative
HDMI:	HDMI Connector: Digital YUV Digital RGB	HDMI (HDCP 1.4)
Display Colors	16,777,216	Depends on display card used.
Synchronization Range	Horizontal: 31.5 kHz to 81.1 kHz Vertical: 50 Hz to 75 Hz	Automatically Automatically
Response Time	6 ms (Gray to gray Typ.)	
Viewing Angle	Left/Right: ±89° (CR > 10) Up/Down: ±89° (CR > 10)	
Active Display Area	Landscape: Horiz.: 597.9 mm/23.5 inches Vert.: 336.3 mm/13.2 inches Portrait: Horiz.: 336.3 mm/13.2 inches Vert.: 597.9 mm/23.5 inches	
AUDIO		
AUDIO Input:	STEREO Mini Jack: Analog Audio DisplayPort Connector: Digital Audio HDMI Connector: Digital Audio	Stereo L/R 0.5 Vrms 20 Kohm PCM 2ch 32, 44.1, 48 kHz (16/20/24bit) PCM 2ch 32, 44.1, 48 kHz (16/20/24bit)
Headphone Output:	STEREO Mini Jack:	Headphone Impedance 32 Ohm
Speakers	Practical Audio Output: 1.0 W + 1.0 W	
Power Supply	100 - 240 V ~ 50/60 Hz	
Current Rating	0.55 - 0.35 A	
Dimensions	Landscape: 610.4 mm (W) x 376.9 - 506.9 mm (H) x 282.6 mm (D) 24.0 inches (W) x 14.8 - 20.0 inches (H) x 11.1 inches (D) Portrait: 359.9 mm (W) x 625.5 - 637.7 mm (H) x 282.6 mm (D) 14.2 inches (W) x 24.6 - 25.1 inches (H) x 11.1 inches (D)	
Stand adjustable range	Height Adjustment: 130 mm/5.1 inches (Landscape orientation) 12.2 mm/0.5 inches (Portrait orientation) Tilt / Pivot / Swivel: Up 35° Down 5° / ± 90° / 340°	
Weight	8.2 kg (18.1 lbs) (with stand)/5.1 kg (11.2 lbs.) (without stand)	
Environmental Considerations	Operating Temperature: 5°C to 35°C/41°F to 95°F Humidity: 20% to 80% Altitude: 0 to 6,562 Feet/0 to 2,000 m Storage Temperature: -10°C to 60°C/14°F to 140°F Humidity: 10% to 85% Altitude: 0 to 40,000 Feet/0 to 12,192 m	

NOTE: Technical specifications are subject to change without notice.

Major supported timings

Resolution		Vertical Frequency	Notes
H	V		
640	x 480	60/72/75 Hz	
720	x 350	70 Hz	
720	x 400	70 Hz	
720	x 480	60 Hz	
720	x 576	50 Hz	
800	x 600	56/60/72/75 Hz	SVGA
1024	x 768	60/70/75 Hz	XGA
1280	x 720	50/60 Hz	HD 720
1280	x 960	60/75 Hz	Quad-VGA
1280	x 1024	60/75 Hz	SXGA
1440	x 900	60 Hz	WXGA+
1680	x 1050	60 Hz	WSXGA+
1920	x 1080	50 Hz	FHD
1920	x 1080	60 Hz	FHD Recommend

NOTE: When the selected monitor resolution is not a native panel resolution, the text contents appearance in the monitor screen is expanded in a horizontal or vertical direction to show the non-native resolution to full screen. This expansion is done by interpolated resolution technologies, which are normal and widely used in flat panel devices.

Features

3-side Narrow Bezel: Stylish appearance and less distance between adjacent screens in a multi-monitor setup.

Fully Ergonomic Stand: Provides viewing flexibility with 130 mm height adjustment, -5 ~ 35-degree tilt, 170-degree swivel to both right/left directions, with cable management and a small footprint. The bottom of the monitor cabinet can touch the stand base for lower positioning requirements.

ErgoDesign Features: Enhance human ergonomics to improve the working environment, protect the health of the user and save money. The ergonomic features include a fully articulating stand, OSD controls for quick and easy image adjustment, and lower emissions.

VESA Plate for Thin Client Computer: Provides the ability to mount a thin client computer on the monitor stand pole using the included VESA plate.

VESA Standard Mounting Interface: Connects the monitor to any VESA standard third party mounting arm or bracket.

Color Control Systems: Adjusts the colors on the screen and allows customization of the color accuracy of the monitor to a variety of standards.

OSD (On-Screen Display) Controls: Provides access for quick and easy adjustment to all elements of the screen image via simple to use on-screen menus.

NaViSet Administrator 2 Software: Offers an expanded and intuitive graphical interface, allowing adjustments of the OSD display settings from a network PC.

No Touch Auto Adjust (Analog input only): Automatically adjusts the monitor to optimal settings upon initial setup.

Plug and Play: The Microsoft® solution with the Windows® operating system facilitates setup and installation by allowing the monitor to send its capabilities (such as screen size and resolutions supported) directly to the computer, automatically optimizing display performance.

Intelligent Power Manager System: Provides innovative power-saving methods that allow the monitor to shift to a lower-power mode when on but not in use, reducing emissions and lowering the cost of operating the monitor by reducing its power consumption.

FullScan Capability: Allows use of the entire screen area in most resolutions, significantly expanding the image size.

Multiple signal interfaces: This model has three types of input signal interfaces: D-sub 15 pin, HDMI and DisplayPort.

Low Blue Light: Low Blue Light function substantially reduces blue light and helps to alleviate eye-strain (see [page 12](#)).

Flicker Free: Special backlight system reduces flicker for less eyestrain.

Environmental Impact: Annual typical maximum operating carbon footprint of this monitor (world-wide average) is approximately 24.0 kg (calculated by: rated wattage x 8 hours per day x 5 days a week x 45 weeks per year x Power-to-Carbon conversion factor - conversion factor is based on OECD publication of global CO2 emissions 2008 Edition).

This monitor has a manufacturing carbon footprint of approximately 75.3 kg.

Note: The manufacturing and operating carbon footprints are calculated by a unique algorithm developed exclusively by NEC for its monitors and are accurate at the time of printing. NEC reserves the right to publish updated carbon footprint values.

Troubleshooting

No picture

- Make sure the signal cable is fully connected to both the monitor and the computer.
- Make sure the computer's display card is fully seated in its slot.
- Do not use a DisplayPort converter adapter. This device is not supported.
- Make sure both the computer and monitor power switches are in the ON position.
- Make sure that a Major Supported Timings has been selected for the display card in the system being used. (Please consult the manual for the system or display card for supported resolution and changing the settings.)
- 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.
- Make sure the connected device outputs a signal to the monitor.

Power key does not respond

- Unplug the monitor power cable from the AC outlet to turn off and reset the monitor.

Image persistence

- Image persistence is 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 using a moving screen saver at regular intervals whenever the screen is idle or turning off the monitor when not in use.

Message "OUT OF RANGE" is displayed (screen is either blank or shows rough images only)

- OSD warning "OUT OF RANGE" is displayed on a rough image (pixels are missing): Either the signal clock or resolution is too high. Change the settings to a supported mode.
- OSD warning "OUT OF RANGE" is displayed on a blank screen: The signal frequency is out of range. Change the settings to a supported mode.

Image is unstable, unfocused or swimming is apparent

- Signal cable should be completely attached to the computer.
- Disconnect the DisplayPort cable and touch "SELECT" key, and then adjust the OSD value using the "-" or "+" key.
- Use the OSD Image Adjust controls to focus and adjust the display by increasing or decreasing the fine adjustment. When the display mode is changed, the OSD Image Adjust settings may need to be readjusted.
- 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 60 Hz refresh rate.

Picture is not bright

- Make sure ECO MODE is turned off.
- Signal cable should be completely attached.
- LCD brightness degradation occurs due to long-term usage or extreme cold conditions.
- If the brightness fluctuates, make sure DV MODE is set to OFF.

LED on monitor is not lit (no blue or amber color can be seen)

- Power Switch should be in the ON position and power cord should be connected.

Display image is not sized properly

- Use the OSD Image Adjust controls to increase or decrease the H.SIZE or select the INPUT RESOLUTION.
- Make sure that a Major Supported Timings has been selected for the display card in the system being used. (Please consult the manual for the system or display card for supported resolution and changing the settings).

No Video

- If no video is present on the screen, turn the Power key off and on again.
- Make sure the computer is not in a power-saving mode (touch the keyboard or mouse).
- When using DisplayPort, some display cards do not output video signal under low resolution modes when the monitor is turned OFF/ON or disconnected/connected from the AC power cord.

No Sound

- Check to see if speaker cable is properly connected.
- Check to see if mute is activated.
- Check the volume level in the OSD menu.
- If the input signal is DisplayPort or HDMI, make sure the SOUND INPUT in the OSD menu is set to DisplayPort or HDMI.

Brightness variations over time

- Change DV MODE to OFF and then adjust the brightness.

NOTE: When DV MODE is set to ON, the monitor automatically adjusts the brightness based on the video signal.

Manufacturer's Recycling and Energy Information

NEC DISPLAY SOLUTIONS is strongly committed to environmental protection and sees recycling as one of the company's top priorities in trying to minimize the burden placed on the environment. We are engaged in developing environmentally-friendly products, and always strive to help define and comply with the latest independent standards from agencies such as ISO (International Organisation for Standardization) and TCO (Swedish Trades Union).

Disposing of your old NEC product

The aim of recycling is to gain an environmental benefit by means of re-use, upgrading, reconditioning or reclamation of material. Dedicated recycling sites ensure that environmentally harmful components are properly handled and securely disposed. To ensure the best recycling of our products, **NEC DISPLAY SOLUTIONS offers a variety of recycling procedures** and gives advice on how to handle the product in an environmentally sensitive way, once it has reached the end of its life.

All required information concerning the disposal of the product and country-specific information on recycling facilities can be found on our following websites:

<http://www.nec-display-solutions.com/greencompany/> (in Europe),

<https://www.nec-display.com> (in Japan) or

<http://www.necdisplay.com> (in USA).

Energy Saving

This monitor features an advanced energy saving capability. When a Display Power Management signal is sent to the monitor, the Energy Saving mode is activated. The monitor enters a single Energy Saving mode.

Mode	Power consumption	LED color
Maximum Operation	26 W	Blue
Normal Operation	16 W Default setting	Blue
Energy Saving Mode	0.26 W	Amber
Off Mode	0.24 W	Unlit

For additional information visit:

<http://www.necdisplay.com/> (in USA)

<http://www.nec-display-solutions.com/> (in Europe)

<https://www.nec-display.com/global/index.html> (Global)

For Energy Saving information:

For ErP requirement:

Setting: None.

Power consumption: 0.5 W or less.

Time for power management function: Approx. 1 min.

For ErP (Network standby) requirement:

Setting: None.

Power consumption: 0.5 W or less (with 1 port activating) / 3.0 W or less (with all ports activating).

Time for power management function: Approx. 1 min.

WEEE Mark (European Directive 2012/19/EU and amendments)



Disposing of your used product: In the European Union

EU-wide legislation as implemented in each Member State requires that used 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 dispose of such products, please follow the guidance of your local authority or ask the shop where you purchased the product, or if applicable, follow applicable legislation or agreement you may have. The mark on electrical and electronic products may only apply 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 and ask for the correct method of disposal.