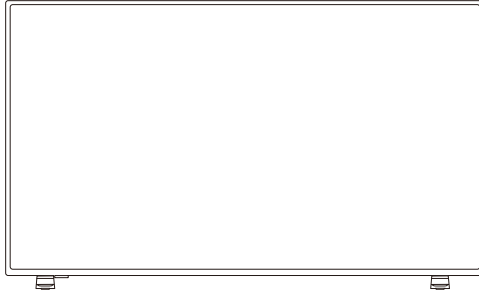


LCD TV

NEC

User's Manual

E657Q

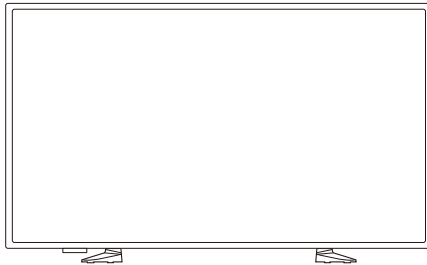


E557Q

E507Q

E437Q

E327



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

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Precautions And Reminders

Do not place the TV in confined spaces or in a box when in use. Maintain ample ventilation for the TV when in use.

Do not open the TV cabinet.

Call a NEC certified service personnel for any internal service needed for your TV.

Keep the TV away from direct sunlight, dust, humidity, smoke and oily areas.

Unplug immediately if the TV falls.

Unplug immediately if there is a TV malfunction such as a loss of audio / video, the presence of smoke, or a bad odor coming from the TV.

Unplug the AC cord from the AC outlet before cleaning. Do not use liquid cleaners or aerosol cleaners to clean the TV.

Do not place the TV near water such as a bathtub, washbasin, sink, laundry tub, swimming pool, or a damp basement. Unplug immediately if the TV has been exposed to rain or water.

Do not cover or block any vents or openings. Inadequate ventilation may shorten the life of the TV and cause overheating.

Place the unit on a sturdy, even surface.

Do not insert any foreign objects into the TV cabinet. Unplug immediately if objects have fallen into the monitor.

Unplug the power cord from the outlet when the TV is not in use for long periods of time (days).

Notice for Remote Controller

<p>Avoid Liquids</p>	<p>Avoid Aerosol Cleaners</p>	<p>Avoid Dropping</p>
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Important Safety Instructions

Read before operating equipment

Follow all warnings and instructions marked on this TV.

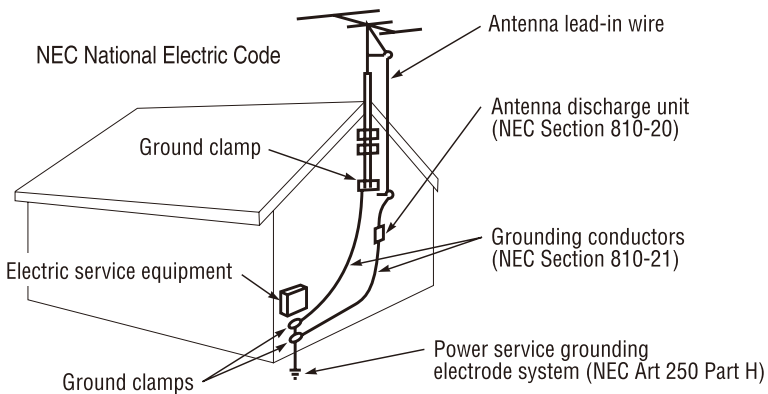
1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near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



13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped. Unplug immediately if the monitor faces above condition.
15. The TV complies with the recommended safety standards for stability. Do not put excessive force on the front or top of the cabinet. This could cause the product to tip over and cause damage and / or personal injury.
16. If monitor or glass is broken, do not come in contact with the liquid crystal and handle with care.

17. Follow instructions for wall, shelf or ceiling mounting as recommended by the manufacturer.
18. An outdoor antenna should not be located near overhead power lines or any electrical circuits.
19. If an outside antenna is connected to the receiver, confirm that the antenna system is grounded to protect against voltage surges and built up static charges. Section 810 of the National Electric Code, ANSI / NFPA No. 70-1984, provides information with respect to proper grounding for the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna discharge unit, connection to grounding electrodes and requirements for the grounding electrode.
The cable distribution system should be grounded (earthed) in accordance with ANSI/NFPA 70. the National Electrical Code (NEC), in particular Section 820.93, Grounding of Outer Conductive Shield of a Coaxial Cable.
20. Rest your eyes periodically by focusing on an object at least 5 feet away. Blink often.
21. Do not place any heavy objects on the power cord.
Damage to the cord may cause shock or fire.
22. Do not use monitor in high temperature, humid, dusty, or oily areas.
23. Do not bend, crimp or otherwise damage the power cord.
24. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

NOTE: To the TV system installer: This reminder is provided to call attention to Article 820-44 of the National Electric Code that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the facility, as reasonably close to the point of cable entry as possible





WARNING - Stability Hazard

A television set may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- ALWAYS use cabinets or stands or mounting methods recommended by the manufacturer of the television set.
- ALWAYS use furniture that can safely support the television set.
- ALWAYS ensure the television set is not overhanging the edge of the supporting furniture.
- ALWAYS educate children about the dangers of climbing on furniture to reach the television set or its controls.
- ALWAYS route cords and cables connected to your television so they cannot be tripped over, pulled or grabbed.
- NEVER place a television set in an unstable location.
- NEVER place the television set on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television set to a suitable support.
- NEVER place the television set on cloth or other materials that may be located between the television set and supporting furniture.
- NEVER place items that might tempt children to climb, such as toys and remote controls, on the top of the television or furniture on which the television is placed.

If the existing television set is going to be retained and relocated, the same considerations as above should be applied.



WARNING:

To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

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.



CAUTION:

Please use the power cord provided with this TV in accordance with the table below. If a power cord is not supplied with this equipment, please contact your supplier.

Plug Type	Plug Shape	Region	Voltage
North America		U.S.A./Canada	AC 120 V

Power source

This LCD TV operates on 120 volts 60 Hz, AC current. Insert the power cord into a 120 volts 60 Hz outlet. The mains plug is used as the disconnect device and shall remain readily operable.

To prevent electric shock from the TV, do not use with an extension cord, receptacle, or other outlet unless the blades and ground terminal can be fully inserted to prevent blade exposure.

Never connect the LCD TV to 50 Hz, direct current, or anything other than the specified voltage.



CAUTION:

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

Adjust only those controls that are covered in the instructions, as improper changes or modifications not expressly approved by NEC could void the user's warranty.

Batteries installed warning



CAUTION:

Incorrect usage of batteries can result in leaks or bursting.

NEC recommends the following battery use:

- Do not mix battery brands.
- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
- Do not combine new and old batteries. This can shorten the battery life or cause liquid leakage of the batteries.
- Remove dead batteries immediately to prevent battery acid from leaking into the battery compartment.
- Do not touch exposed battery acid as it may injure skin.
- Remove the batteries if you do not intend to use the remote control for a long period of time.
- The batteries shall not be exposed to excessive heat such as sunshine, fire or the like.

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.



CAUTION:

These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

License Notice and Trademark Acknowledgement

Windows is a registered trademark of Microsoft Corporation.
NEC is a registered trademark of NEC Corporation.
All other brands and product names are trademarks or registered trademarks of their respective owners.



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.



Manufactured under license from Dolby Laboratories. Dolby, Dolby Audio and the double-D symbol are trademarks of Dolby Laboratories.

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 input, this does not necessarily mean that the monitor is not functioning properly. With the implementation of HDCP, there may be cases in which certain content is protected by HDCP and might not be displayed due to the decision/intention of the HDCP community (Digital Content Protection, LLC).

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Adobe and the Adobe logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Supplier's 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:	3250 Lacey Rd, Ste 500 Downers Grove, IL 60515
Tel. No.:	(630) 467-3000

Type of Product:	LCD TV	
Equipment Classification:	Class B Peripheral	
Model:	E657Q	E437Q
	E557Q	E327
	E507Q	



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 CSA C22.2 No. 62368-1-14.

FCC Information:



WARNING:

The Federal Communications Commission does not allow any modifications or changes to the unit EXCEPT those specified by NEC Display Solutions of America, Inc. in this manual. Failure to comply with this government regulation could void your right to operate this equipment.

1. Use the attached specified cables with the E657Q / E557Q / E507Q / E437Q / E327 color monitor so as not to interfere with radio and television reception. Use of other cables and adapters may cause interference with radio and television reception.
 - (1) Please use the supplied power cord or equivalent to ensure FCC compliance.
 - (2) Please use the supplied shielded HDMI signal cable.
 - (3) For mini D-Sub 15-pin and USB , please use a shielded signal cable with ferrite core.
 - (4) For D-sub 9-pin and Coaxial , please use a shielded signal cable.
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 the 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.



FCC CAUTION

To assure continued compliance and possible undesirable interference, ferrite cores may be used when connecting this LCD TV to video equipment; and maintain at least 400mm spacing to other peripheral device.

Cables

Connections to this device must be made with shielded cables with metallic RF / EMI connector hoods to maintain compliance with FCC Rules and Regulations.

Canadian notice

CAN ICES-3 (B) / NMB-3(B)

Analog and Digital Television Receiving Apparatus — Appareil de réception de télévision analogique et numérique, Canada BETS-7 / NTMR-7

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-display Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.

Contents

Your new NEC monitor box*1 should contain the following:

- Monitor (1)
- Remote control (1)
- 1.5 V AAA batteries (2)
- Power cord (1)
- HDMI cable (1)
- Setup manual (1)

E657Q / E557Q / E507Q / E437Q / E327



Wireless Remote Control
and AAA Batteries



Power Cord



HDMI Cable

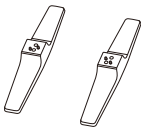


Setup Manual

NOTE:

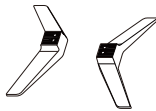
*1: Remember to save your original box and packing material to transport or ship the monitor.

*2: The following stand base and screw are option parts.



(E657Q)

Stand Base



(E557Q/E507Q/E437Q/E327)



E657Q: M6 (25mm) x 4
E557Q / E507Q / E437Q: M4 (20mm) x 4
E327: M4 (20mm) x 4

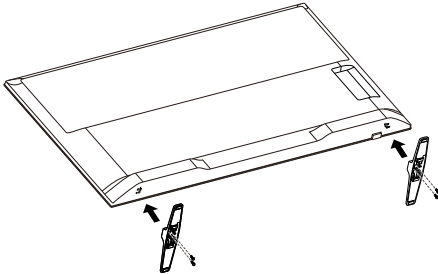
Stand Screw

Installation for using the Stand Base

IMPORTANT: Do not apply pressure to the TV screen display area which may compromise the integrity of the display. The manufacturer's warranty does not cover user abuse or improper installations.

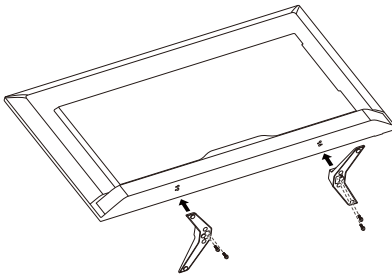
Attaching the Stand Base

E657Q



Stand Screw x 4
M6 (25mm)

E557Q / E507Q / E437Q / E327



Stand Screw x 4
M4 (20mm)

1. Place the TV face down on a soft and flat surface to prevent scratching and damage.
2. Carefully align the stand base to the button of the display and fasten the screws with a cross-head screwdriver.



CAUTION:

The stand base is very heavy. Install with care to avoid injury such as dropping the stand base onto one's foot.

Ventilation

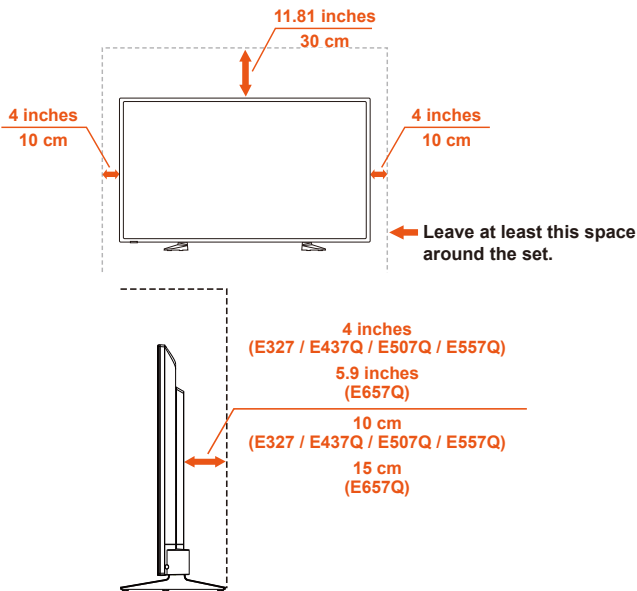
The slots and openings in the TV are provided for necessary ventilation. To ensure reliable operation of the TV and to protect it from overheating, these slots and openings must never be blocked or covered.

Unless proper ventilation is provided, the TV may gather dust and get dirty. For proper ventilation, observe the following:

- Do not install the TV face up, down or sideways.
- Do not install the TV turned over or upside down.
- Never cover the slots and openings with a cloth or other materials.
- Never block the slots and openings by placing the TV on a bed, sofa, rug or other similar surface.
- Never place the TV in a confined space, such as a bookcase or built-in cabinet, unless proper ventilation is provided.

Leave some space around the TV set as shown below. Otherwise, air-circulation may be inadequate and will cause overheating, which may cause a fire or damage to the TV set.

Install with the Stand base

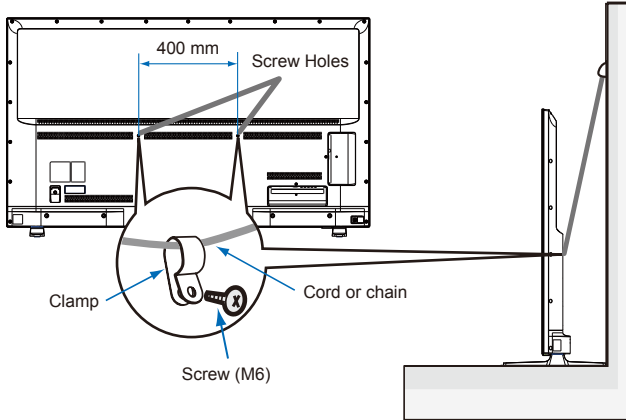


Never install the TV set where air-circulation is blocked.

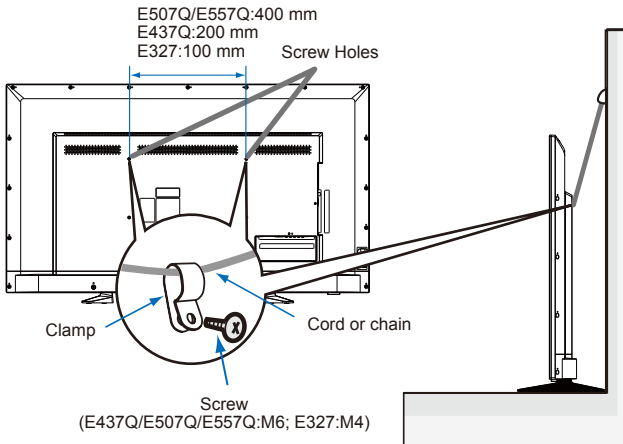
Prevent Tipping

When using the display with the optional table top stand, fasten the monitor to a wall using a cord or chain that can support the weight of the monitor in order to prevent the monitor from falling.

E657Q



E557Q / E507Q / E437Q / E327



Before attaching the monitor to the wall, make sure that the wall can support the weight of the monitor.



CAUTION:

Be sure to remove the cord or chain from the wall before moving the monitor.

Objects and ventilation holes

Never push objects of any kind into the display through the cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or an electric shock. Do not place any objects on the display.

Installation for Wall Mounting (Optional)

For customer:



CAUTION:

DO NOT mount the monitor yourself. For proper installation it is strongly recommended to use a trained, qualified technician. Please contact your supplier as they may be able to provide a list of qualified installation professionals. Mounting on a wall or ceiling and hiring a technician is the customer's responsibility.

Maintenance

- Periodically check for loose screws, gaps, distortions, or other problems that may occur with the mounting equipment. If a problem is detected, please refer to qualified personnel for service.
- Regularly check the mounting location for signs of damage or weakness that may occur over time.

DO NOT block ventilated openings with mounting accessories or other accessories.

For NEC Qualified Personnel:

Stability Hazard.

The device may fall, causing serious personal injury or death. To prevent injury, this device must be securely attached to the floor/wall in accordance with the installation instructions.

Carefully inspect the location where the unit is to be mounted. Not all walls or ceilings are capable of supporting the weight of the unit. Weight of this monitor is mentioned in Specification (Please refer to the page of Specification). Product warranty does not cover damage caused by improper installation, re-modeling, or natural disasters. Failure to comply with these recommendations could result in voiding the warranty.

To ensure safe installation, use two or more brackets to mount the unit. Mount the unit to at least two points on the installation location.

We suggest that you keep your display at least 2.36 inches (60 mm) from the wall to prevent cable interference. Before mounting your display on the wall, you need to remove the stand base. For your safety, only mount with a UL listed wall mount bracket that supports the weight of the display. (Please refer to the page of Specification.) To attach a wall mount bracket to your display:

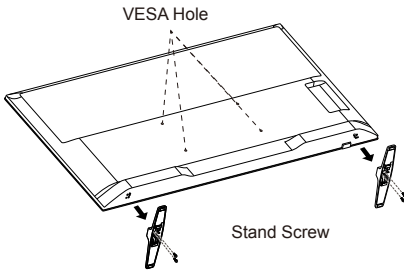
Preparing Your LCD TV For Wall Mounting (optional)

We suggest that you keep your TV at least 2.36 inches (60 mm) from the wall to prevent cable interference. Before mounting your TV on the wall, you need to remove the base. For your safety, only mount with a UL listed wall mount bracket that supports the weight of the TV. (Please see page 19 to page 55)

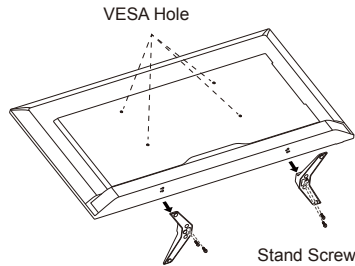
To attach a wall mount bracket to your TV:

Removing the Stand base

E657Q



E557Q / E507Q / E437Q / E327



1. Loosen the screws on the button of the stand base, and remove the stand base.
2. Secure the wall mount bracket to the back of your TV using four M4 screws (for 32" only) or M6 screws (for 43"/50"/55"/65").

screen size (inches)	required pitch (mm)	VESA Hole depth
65	400 × 200	4 × M6 (17 mm)
55	400 × 200	4 × M6 (17 mm)
50	400 × 200	4 × M6 (17.5 mm)
43	200 × 200	4 × M6 (14.5 mm)
32	100 × 100	4 × M4 (16 mm)

NOTE:

Wall mounting solution is not included with the unit and is sold separately. Contact your NEC representative for details. It is necessary to provide screw of appropriate length (Wall mount bracket thickness + VESA Hole depth).

Ventilation

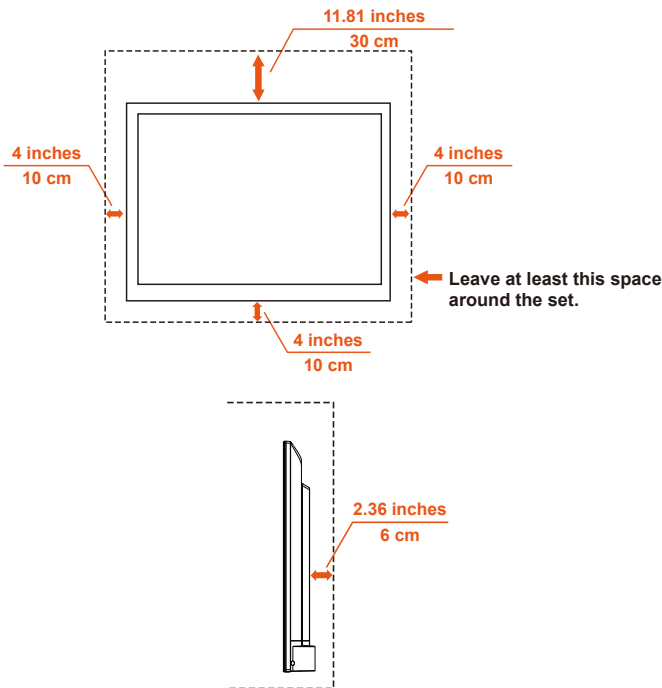
The slots and openings in the TV are provided for necessary ventilation. To ensure reliable operation of the TV and to protect it from overheating, these slots and openings must never be blocked or covered.

Unless proper ventilation is provided, the TV may gather dust and get dirty. For proper ventilation, observe the following:

- Do not install the TV face up, down or sideways.
- Do not install the TV turned over or upside down.
- Never cover the slots and openings with a cloth or other materials.
- Never block the slots and openings by placing the TV on a bed, sofa, rug or other similar surface.
- Never place the TV in a confined space, such as a bookcase or built-in cabinet, unless proper ventilation is provided.

Leave some space around the TV set as shown below. Otherwise, air-circulation may be inadequate and will cause overheating, which may cause a fire or damage to the TV set.

Install on the wall

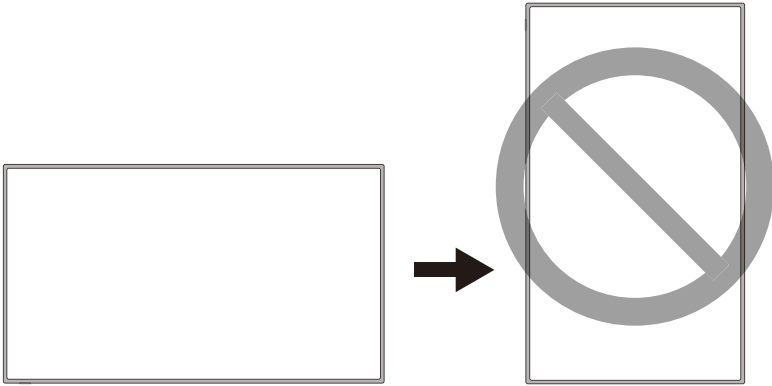


For use only with UL Listed Wall Mount Bracket with minimum weight/load:
Please refer to the page of Specification.

Unit without base weight: The equipment and its associated mounting means
still remain secure during the test.

Used wall mounting kit, VESA-compatible wall bracket distance, diameter of
Screw dimension: Please refer to the page of Specification.

Prohibit Portrait Condition Use



CAUTION:

Do not rotate the monitor from landscape to portrait.

Preparation

Place The TV On A Solid Surface

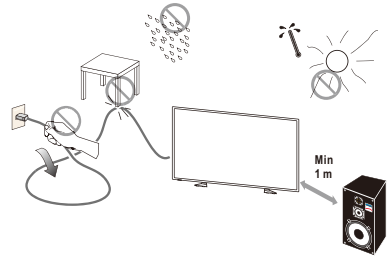
Ensure that the LCD TV is placed in a position to allow free flow of air.

Do not cover the ventilation openings on the back cover.

Do not place the TV near any open flames.

Do not allow the TV to be placed in an environment where it can be exposed to heat, direct sunlight, or rain and water.

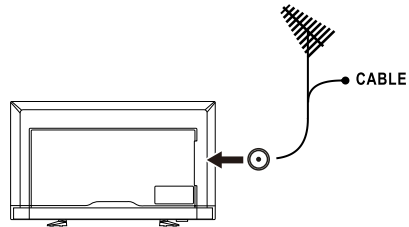
Do not expose the equipment to any liquid.



Antenna Connection

Unless your LCD TV is connected to a cable TV system or to a centralized antenna system, a good outdoor color TV antenna is recommended for best television performance. However, if you are located in an exceptionally good signal area that is free from interference and multiple image ghosts, an indoor antenna may be sufficient.

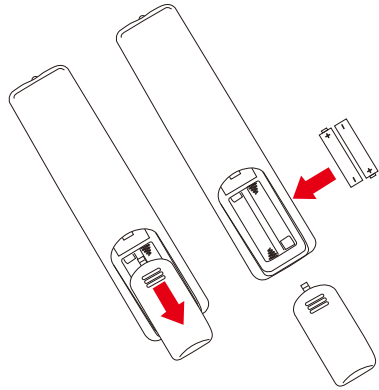
When using a 75-Ohm coaxial cable system, connect the CATV coaxial cable to the AIR/CABLE (75-Ohm) terminal. Or if you have an antenna, connect the coaxial cable to the same AIR/CABLE terminal.



Battery Installation and Replacement

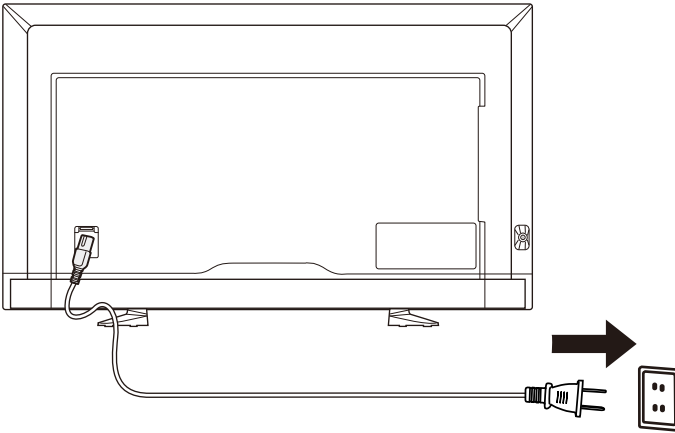
The remote control is powered by two 1.5V AAA batteries. To install or replace batteries:

1. Open the battery cover of the remote control by pushing and pulling it in the direction of the arrow.
2. Insert two new "AAA" size batteries for the remote control. When replacing old batteries, push them towards the springs and lift them out.
3. Match the batteries to the (+) and (-) marks in the battery compartment.
4. Insert the bottom of the battery, the (-) side, into the battery compartment first, push towards the springs and insert the top of the battery, the (+) side, into place. Do not force the battery into the battery compartment.
5. Close the battery cover making sure the tabs rest in the corresponding holes and push down the cover until it clicks shut.



Connect To The Power Source

The TV should be installed close to an easily accessible power outlet. Fully insert the prongs into the power outlet socket. A loose connection may cause image degradation.



When the power cord is connected, the display turns on and the front LED at the bottom of the display lights up in red or is off.

Cable information



CAUTION:

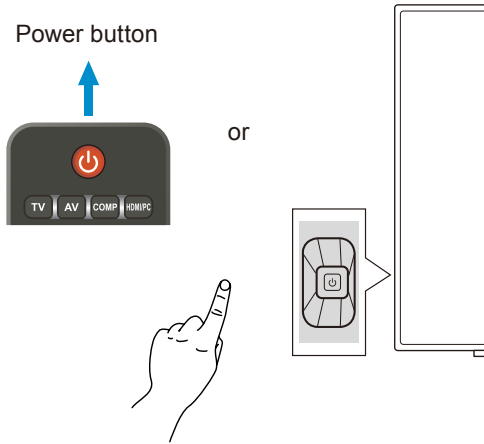
Use the attached specified cables with the E657Q / E557Q / E507Q / E437Q / E327 color monitor so as not to interfere with radio and television reception.

Use of other cables and adapters may cause interference with radio and television reception.

- (1) Please use the supplied power cord or equivalent to ensure FCC compliance.
- (2) Please use the supplied shielded HDMI signal cable.
- (3) For mini D-Sub 15-pin and USB , please use a shielded signal cable with ferrite core.
- (4) For D-sub 9-pin and Coaxial , please use a shielded signal cable.

Power On/Off Your New LCD TV

Press the power button on the remote control or press the power button located on the side of the TV. The TV will power on.



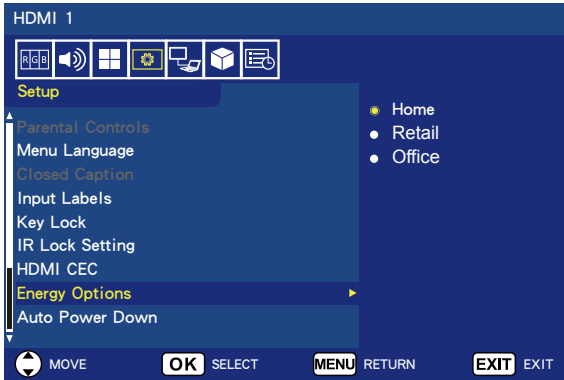
Power Mode Status

When in ON mode, the Monitor operates as follows if no external signal is input.

Mode	ON	Auto Power save	Auto Standby
LED Status	None	Blinking Red	Red

Energy Options

The three following modes are available on the Monitor.



LAN and RS-232C can be selected for the Monitor control. The operation of the energy options mode varies depending on the control selection.

When RS-232C is selected for control

Home mode / Office mode

- When there is no signal, NO SIGNAL is displayed and the Monitor switches to Auto Standby mode after a fixed period of time has passed.
- When a signal enters into the selected input terminal, the Monitor switches to ON mode.

Retail mode

When there is no signal, NO SIGNAL is displayed but the Monitor does not switch to an energy options mode (it remains in ON mode).

When LAN is selected for control

Home mode

- When there is no signal, NO SIGNAL is displayed and the Monitor switches to Auto Power save mode after a fixed period of time has passed.
In Auto Power save mode, if no LAN signal is received, the Monitor switches to Auto Standby mode after 3 minutes.
- When a signal enters into the selected input terminal, the Monitor switches to ON mode.

Retail mode

When there is no signal, NO SIGNAL is displayed but the Monitor does not switch to an energy options mode (it remains in ON mode).

Office mode

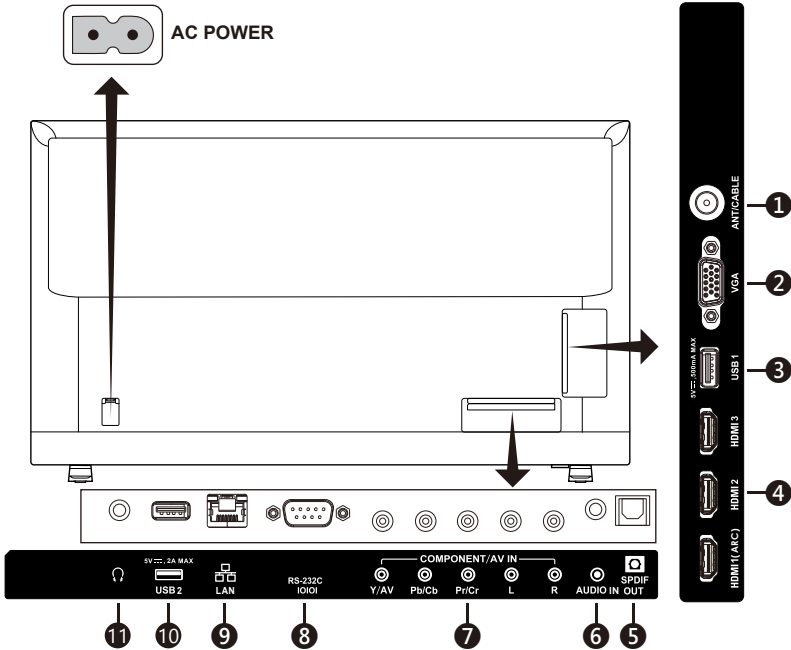
- When there is no signal, NO SIGNAL is displayed and the Monitor switches to Auto Power save mode after a fixed period of time has passed.
The Monitor remains in Auto Power save mode regardless of a LAN signal being input or not.
- When a signal enters into the selected input terminal, the Monitor switches to ON mode.

CAUTION:

- If the power cord is disconnected in Auto Power save mode or Auto Standby mode, the Monitor will be in Auto Standby mode the next time the power cord is connected.
- When the energy options mode is switched to Home, Retail or Office, the Video Menu settings return to their default values.
- When Retail is selected for the energy options, the Video Menu settings return to their default values if the power cord is disconnected and reconnected or if the Monitor is turned off and on using the remote control or the button on the Monitor.

Source Connection Guide

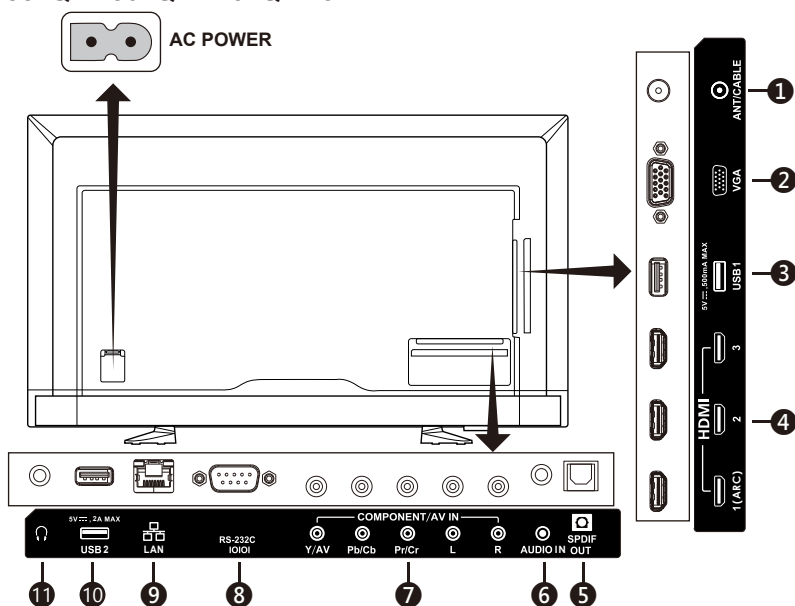
E657Q



1. **ANT / CABLE** – Connect to an RF antenna or Analog Cable system.
2. **VGA** – Connect to your PC video.
3. **USB1 port** – Used for accessing photo, music, and movie files. Please make sure the connector shape and orientation is correctly aligned when connecting the USB device or cable.
4. **HDMI (HDMI-1, HDMI-2, HDMI-3)** – Connect to your HDMI devices. HDMI-1 terminal can support ARC (Audio Return Channel) function. ARC output does not work sound effect (Sound mode, Balance, Bass, Treble on OSD).
5. **SPDIF OUT**- Use a digital audio cable to connect to stereo home theater system. SPDIF output does not work sound effect (Sound mode, Balance, Bass, Treble on OSD). SPDIF output does not work Auto function of Internal Speakers on OSD.
6. **AUDIO IN** – Connect to your PC audio.
7. **COMPONENT / AV IN** –
 - Component: Connect to digital video equipment to the Video Green (Y), Blue (Pb), Red (Pr) jacks, and matching Audio White (L) and Red (R) jacks.
 - Composite: Connect to digital video equipment to the Video Green (AV), jacks, and matching Audio White (L) and Red (R) jacks.

8. **RS-232C** – Connect to your PC, and receive the control commands from the PC.
9. **LAN port (RJ-45)**– LAN connection.
10. **USB2 port** – Power supply port 5V/2A (maximum)
Please make sure the connector shape and orientation is correctly aligned when connecting the USB device or cable. When you use the USB (2A) port for power supply, please use a USB cable that supports 2A.
Do not bind the USB cable. It may cause heat or fire.
11. **Headphone** – Connect to your headphones.

E557Q / E507Q / E437Q / E327



1. **ANT / CABLE** – Connect to an RF antenna or Analog Cable system.
2. **VGA** – Connect to your PC video.
3. **USB1 port** – Used for accessing photo, music, and movie files.
Please make sure the connector shape and orientation is correctly aligned when connecting the USB device or cable.
4. **HDMI (HDMI-1, HDMI-2, HDMI-3)** – Connect to your HDMI devices.
HDMI-1 terminal can support ARC (Audio Return Channel) function.
ARC output does not work sound effect (Sound mode, Balance, Bass, Treble on OSD).
5. **SPDIF OUT**- Use a digital audio cable to connect to stereo home theater system. SPDIF output does not work sound effect (Sound mode, Balance, Bass, Treble on OSD). SPDIF output does not work Auto function of Internal Speakers on OSD.

6. **AUDIO IN** – Connect to your PC audio.
7. **COMPONENT / AV IN** –
 - Component: Connect to digital video equipment to the Video Green (Y), Blue (Pb), Red (Pr) jacks, and matching Audio White (L) and Red (R) jacks.
 - Composite: Connect to digital video equipment to the Video Green (AV), jacks, and matching Audio White (L) and Red (R) jacks.
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10. **USB2 port** – Power supply port 5V/2A (maximum)
Please make sure the connector shape and orientation is correctly aligned when connecting the USB device or cable. When you use the USB (2A) port for power supply, please use a USB cable that supports 2A.
Do not bind the USB cable. It may cause heat or fire.
11. **Headphone** – Connect to your headphones.

Using The Remote Control

(Power)

Press to turn On/Off (standby) the power. (NOTE: To completely turn off the power, unplug the power cord from the power outlet.)

TV

Press to choose ATSC/NTSC tuner source mode.

AV

Press to choose Composite source mode.

COMP

Press to choose Component source mode.

HDMI/PC

Press repeatedly to choose PC IN or HDMI source mode.

0 ~ 9 / —

Press to select channel (Press "—" to choose the sub-channel).

PRE CH

Press to display the previous channel.

Source

Press repeatedly to choose the various input sources.

Mute

Switch the sound On / Off.

VOL + / VOL —

Press + or — to adjust the volume.

CH + / CH —

Press + or — to browse through the channels.

Exit

Press to exit the OSD menu.

Display

Press to show the information about the input source and tuner channel.



FAV

Press to display the Favorite List.

Menu

Press to open the OSD menu.

Navigation Keys (▲, ▼, ◀, ▶, OK)

Press to select or confirm the various function items on the menu.

Navigation Keys (◀◀, ■, ▶▶, II, ▶▶)

Use in the USB menu and HDMI CEC function.

MTS

Press to activate the NTSC tuner sounds such as Stereo, SAP, Mono-tone, and languages of the digital tuner.

Wide

Press to choose the display aspect ratio:

Normal / Zoom / Wide / Cinema / Auto (Ratio availability varies by video inputs.)

Picture

Press to choose the picture mode:

Dynamic / Standard / Energy Savings / Theater / Game / Custom

Audio

Press to choose sound mode: Standard / Movie / Music / News / Custom

CH-List

Press to display the Channel List.

C C

Press to activate the Closed Caption.

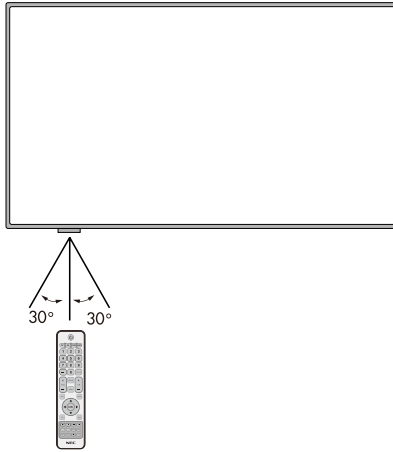
Once your AV device is connected, press the **Source** button on the remote control to select the relevant source to view. (ex: Press **COMP** button to select "Component" if you have connected a source to the Component input.)



Operating Range for the Remote Control

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

Use the remote control within a distance of about 7 m (23 ft.) from remote control sensor or at a horizontal and vertical angle of within 30° within a distance of about 3.5 m (11.5 ft).



CAUTION:

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

Timing Table

Resolution	Refresh rate (Hz)	Component	HDMI Video				
			E327	E437Q	E507Q	E557Q	E657Q
640 x 480p	60	-			•		
720 x 480i	60	•			•		
720 x 480p	60	•			•		
720 x 576i	50	•			•		
720 x 576p	50	•			•		
1280 x 720p	50	•			•		
1280 x 720p	60	•			•		
1920 x 1080i	50	•			•		
	60						
1920 x 1080p	24	•			•		
	25						
	30						
	50						
	60						
3840 x 2160p	24	-	-	•	•	•	•
	25	-	-	•	•	•	•
	30	-	-	•	•	•	•
	50	-	-	•	•	•	•
	60	-	-	•	•	•	•
4096 x 2160p	24	-	-	•	•	•	•
	25	-	-	•	•	•	•
	30	-	-	•	•	•	•
	50	-	-	•	•	•	•
	60	-	-	•	•	•	•

Resolution	Refresh rate (Hz)	VGA					HDMI PC				
		E327	E437Q	E507Q	E557Q	E657Q	E327	E437Q	E507Q	E557Q	E657Q
720 x 400	70			•					•		
640 x 480	60			•					•		
800 x 600	56			•					•		
	60			•					•		
1024 x 768	60			•					•		
1280 x 720	60			•					•		
1280 x 800	60			•					•		
1280 x 960	60			•					•		
1280 x 1024	60			•					•		
	75			•					•		
1400 x 1050	60 (RB)			•					•		
1440 x 900	60			•					•		
1600 x 1200	60			•					•		
1680 x 1050	60			•					•		
1920 x 1080	60			•					•		
848 x 480	60	•	-	-	-	-	•	-	-	-	-
2048 x 1152	60	-	•	•	•	•	-	•	•	•	•
	30	-	-	-	-	-	-	•	•	•	•
3840 x 2160	60	-	-	-	-	-	-	•	•	•	•
	60	-	-	-	-	-	-	•	•	•	•
1280 x 768	60	-	-	-	-	-	•	-	-	-	-
1360 x 768	60	-	-	-	-	-	•	-	-	-	-
1366 x 768	60	-	-	-	-	-	•	•	•	•	•
1920 x 1200	60	-	-	-	-	-	-	•	•	•	•
1920 x 1440	60	-	-	-	-	-	-	•	•	•	•
2560 x 1600	60	-	-	-	-	-	-	•	•	•	•

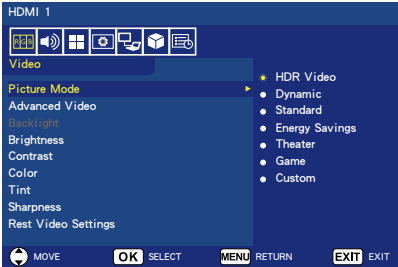
Navigating The On-Screen Menu

Press the **Menu** button to display and Exit button to close the main menu. Use the Navigation Keys to navigate, select, adjust or confirm an item on the OSD (On-Screen Display) menu.

NOTE: Some features may only be available in a particular conditions.

Video Menu

Video Menu adjusts video items.



1. Picture Mode

Enter this menu to select from preset picture settings to optimize your TV's performance.

Dynamic / Standard / Energy Savings / Theater / Game / Custom

HDR Video (Dynamic)

(Except for E327)

(depends on input content format)

2. Advanced Video

Select advanced video settings.

[Aspect Ratio]

Adjust how the picture fills the screen.

Normal / Zoom / Wide / Cinema / Auto

[Backlight Dimming]

Optimize the backlight brightness to enhance contrast and reduce total power consumption.

Off / Low / High

[Color Temperature]

Select white tone of the picture.

Cool / Normal / Warm / Native

[Noise Reduction]

Set to reduce the video noise.

Off / Low / Mid / High

[Adaptive Contrast]

Enhance the contrasts between darkness and brightness to optimization the picture.

Off / On

[Gamma]

Adjust the middle-rangeluminance of the picture.

Low / Mid / High

[Room Light Sensing]

When enabled, the ambient light will be taking into consideration to determine the final picture viewing quality.

On / Off

[MEMC] *(Only for E557Q / E657Q)*

Select smooth levels of fast motion scenes.

Off / Smooth / Ultra Smooth / 24p Film Mode

[Color Enhance]

Change the Color and saturation of the picture to make the image more colorful and lively.

Off / Vivid / Wide

[HDR Mode] *(Except for E327)*

Select the different luminance experience of HDR contents.

Auto / Low / Mid / High

3. Backlight

Set the backlight brightness from 0 – 100.

If Room Light Sensing is enable, Backlight setting is disable.

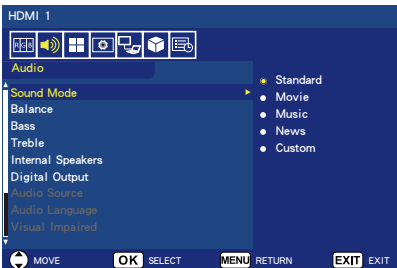
4. Brightness

Adjust picture brightness from 0 – 100.

5. **Contrast**
Adjust picture contrast from 0 – 100.
6. **Color**
Adjust picture color from 0 – 100.
7. **Tint**
Adjust the color tone (Red, Green, Blue) of the picture from R50 – G50.
8. **Sharpness**
Adjust object edges to optimize picture detail from 0 – 100.
9. **Reset Video Settings**
Reset all Video settings to the factory values.

Audio Menu

Audio Menu provides an audio adjustment for user to modify the audio setting.

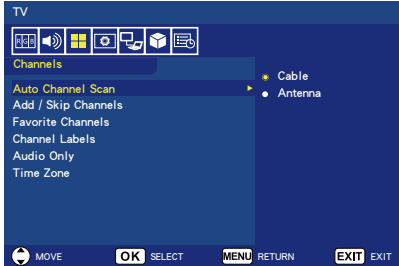


1. **Sound Mode**
Select preset audio modes.
Standard / Movie / Music / News / Custom
2. **Balance**
Adjust the audio balance for the TV's internal left and right speakers from L50 – R50.
3. **Bass**
Enhance the low frequencies.
0 – 100
4. **Treble**
Enhance the high frequencies.
0 – 100

5. **Internal Speakers**
Set the audio output to the internal speakers.
Auto: The sound is not output to the speakers if a cable is connected to the headphone terminal.
On: The sound is always output to the speakers.
Off: The sound is not output to the speakers.
6. **Digital Output**
Select the SPDIF (optical output) digital audio format.
RAW: Output in the RAW format.
PCM: Output in the PCM format.
7. **Audio Source**
Select audio sources in analog channels.
8. **Audio Language**
Select language options in digital channels. (Only available for digital TV programs)
9. **Visual Impaired**
Select to turn On/Off support methods for visual impaired. (Only available for digital channels)
10. **Menu Speech**
Enable speech function for OSD menu and certain operations.
11. **PC Audio Input**
Select whether or not to use the audio signal from the AUDIO IN terminal when the HDMI signal does not contain an audio signal (DVI signal, etc.).
Off: Do not use the AUDIO IN terminal.
On: Use the AUDIO IN terminal.
12. **Reset Audio Settings**
Reset all Audio settings to the factory values.

Channels Menu

Channel Menu allows you to set your signal source options. According to various requirements in different source modes, certain features could be hidden (disabled) on the menu.



1. **Auto Channel Scan**
Automatically search the available channels.
2. **Add/Skip Channels**
Manually add or skip channels to the channel list.
3. **Favorite Channels**
Add channels to your favorite channel list.
4. **Channel Labels**
Create labels to any channel.
5. **Audio Only**
When activated, the TV screen will be turned off right away whereas the audio keeps playing. This is particular useful for power saving while viewing the audio broadcast programs on the TV. Any press of the button except the **Power** button on the remote control will turn on the screen.
6. **Time Zone**
Select the time zone area where your TV is installed. For NAFTA TV models only.

Setup Menu

Setup Menu in TV mode is shown below. According to various requirements in different source modes, certain features could be hidden (disabled) on the menu.



1. **Parental Controls**
Set TV parental controls. This function blocks out the picture and sound of the selected rating levels.

The factory preset password to enter **Parental Controls** feature is a 4-digit number **0000**.
[Block Unrated TV]
Block or unblock the unrated programs.
[US]
Set the parental control level using **Movie** memu or **US TV ratings lock** memu.
[Canadian]
Set the parental control level using **Canadian English** memu or **Canadian French** memu.

[Change Password]

Change the 4-digit password. You will have to enter the new password first, then enter again the new password to confirm. Make sure to keep your new password.

[RRT5]

Use Region 5 to block various types of movies and television programs based on ratings systems used in the USA that you feel may be inappropriate due to its content.

The Region 5 option will operate for Digital Channels (ATSC) only.

[Reset RRT5]

Clear the downloaded RRT5 rating information and restore to the factory default settings.

2. Menu Language

Select the menu display language.

English / Español / Français

3. Closed Caption

Adjust the Closed Caption settings.

Caption Display / Analog Captions / Digital Captions / Digital CC Settings

4. Input Labels

Switch between the labels of the input terminal and create labels of your choosing.

5. Key Lock

Lock (disable) the power button on the display.

On / Off

6. IR Lock Setting

Select **On** to lock your remote control, and the remote control will disable to control the TV. Press **Display** button for 5 seconds to unlock it.

7. HDMI CEC

This function enables you to control the HDMI CEC compliant device connected via the HDMI connector.

[Enable CEC]

Select **On** to enable HDMI CEC.

[Audio Receiver]

Select **On** to enable ARC (Audio Return Channel) function.

ARC is an audio link which can replace other cables between the Monitor and the receiver or speaker system. HDMI-1 terminal can support ARC function.

[Device List]

Show the device list.

8. Energy Options

When RS-232C is selected for control

Home mode / Office mode

- When there is no signal, NO SIGNAL is displayed and the Monitor switches to Auto Standby mode after a fixed period of time has passed.
- When a signal enters into the selected input terminal, the Monitor switches to ON mode.

Retail mode

When there is no signal, NO SIGNAL is displayed but the Monitor does not switch to an energy options mode (it remains in ON mode).

When LAN is selected for control

Home mode

- When there is no signal, NO SIGNAL is displayed and the Monitor switches to Auto Power save mode after a fixed period of time has passed.
In Auto Power save mode, if no LAN signal is received, the Monitor switches to Auto Standby mode after 3 minutes.
- When a signal enters into the selected input terminal, the Monitor switches to ON mode.

Retail mode

When there is no signal, NO SIGNAL is displayed but the Monitor does not switch to an energy options mode (it remains in ON mode).

Office mode

- When there is no signal, NO SIGNAL is displayed and the Monitor switches to Auto Power save mode after a fixed period of time has passed.
The display remains in Auto Power save mode regardless of a LAN signal being input or not.
- When a signal enters into the selected input terminal, the Monitor switches to ON mode.

9. Auto Power Down

Select **On** to enable your TV to turn off automatically when you do not press any buttons in 4 hours.

10. Sleep Timer

Select how long the TV will take to automatically turn itself off.

Off / 5 / 10 / 15 / 30 / 60 / 90 / 120 / 180 / 240 (minutes)

11. No Signal Menu

Set the time until the Monitor switches to standby when the No Signal message is displayed.

Off / 10 seconds / 30 seconds / 1 minutes / 5 minutes / 10 minutes / 15 minutes

12. USB2 Standby Power

Select **On** to keep supply power to USB2 port during Auto Power save or Auto Standby mode.

On / Off

13. RGB Options

(Only available for VGA input, and when there is VGA signal input)

[Auto Adjust]

Automatically adjust the image settings such as position.

[H. Position]

Adjust horizontal position.

[V. Position]

Adjust vertical position.

[Clock]

Set to the minimum level if noise occurs.

[Phase]

Eliminate flicker and distortion.

[Reset RGB Options]

Reset RGB options to factory default settings.

14. Input Detection

When there are multiple input sources, automatically switches to the terminal receiving an input signal.

Press the **Display** button on the remote control to display the selected input terminal on the information window.

None : The input terminals are switched manually.

First : When the signal input to the currently displayed terminal ends, the Monitor searches for and automatically switches to another terminal with an input signal.

The Monitor does not switch when a new signal is input to a terminal different from the currently displayed terminal.

Custom : Only the input signals that have been set are detected.

15. HDMI Signal Option (Except for E327)

Select EDID option according your own source devices.

If screen popup no audio message or no image display, please change this option to standard.

Standard Display regular quality HDMI format such as 4K 30Hz or FHD HDMI contents from source devices with HDCP 1.4.

Professional Display high quality HDMI format such as 4K 60Hz and HDR contents from source devices with HDCP 2.2.

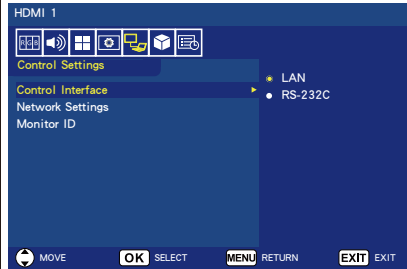
16. System Info

Indicate the display information.

17. Reset AV & Setup

Reset all **Audio**, **Video**, and **Setup** settings to the factory values settings.
(Except for Network Settings)

Control Settings Menu



1. Control Interface

Select the control terminal.

LAN: Control is performed via the network (LAN) terminal.

RS-232C: Control is performed via RS-232C.

LAN and RS-232 cannot be used at the same time.

2. Network Settings

Configure the network settings of the monitor.

[DHCP]

ON: The network settings are obtained from the DHCP server on the network.

Manual DNS: The network settings are obtained from the DHCP server on the network, but the DNS is set manually.

OFF: Configure fixed network settings.

[IP ADDRESS] Set the IP address for the monitor connected to the network.

[SUBNET MASK] Set the subnet mask for the monitor connected to the network.

[DEFAULT GATEWAY] Set the default gateway for the monitor connected to the network.

[DNS PRIMARY] Set the address of the primary DNS server.

[DNS SECONDARY] Set the address of the secondary DNS server.

[MAC ADDRESS] Displays the MAC ADDRESS for the monitor connected to the network. You cannot change it.

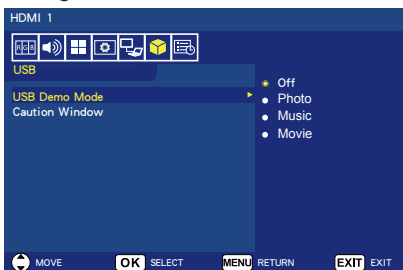
[SAVE] Save the settings.

3. **Monitor ID**

Set the ID of the monitor in the range of **1** to **100**.

USB Demo Mode

The monitor can automatically play image, music, and video files stored in the NDS_DEMO folder in the USB storage device.



Enable USB Demo Mode

To enable the USB demo mode, it is necessary to set the Retail mode under Energy Options in the Setup menu.

- Select which file type will be played with USB Demo Mode.

Start USB Demo Mode

Demo mode will start automatically when:

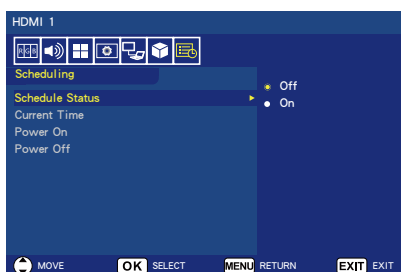
- USB Demo Mode is turned on.
- A demo folder named with "NDS_DEMO" is stored on USB storage device.
- The input sources is not set to USB.
- No OSD display on screen except for No signal found.
- No user action more than 8 seconds.

Play files in USB Demo Mode

During demo mode:

- The **Power**, **Volume** and **Mute** buttons on remote control are functional. But all other buttons will interrupt demo play and then return to previous source.
- Removing USB storage device also stops demo play.
- If the Monitor is turned off during demo mode, it will continue demo play when the Monitor is turned on next time (if USB storage device is still plugged).

Scheduling Menu



1. **Schedule Status**

This function enables your TV to turn on and off automatically.

Select **On** to enable Time Schedule.

2. **Current Time**

Set the current time before using this function.

3. **Power On**

Set the time for your TV to turn on.

4. **Power Off**

Set the time for your TV to turn off.

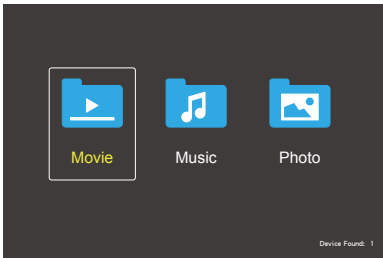
Navigating The USB (Media player) Menu

USB Menu

You can browse image, music, or video files stored in the USB storage device.

Note: The USB storage device containing the files must be connected to the USB port 1.

- To enter in the USB menu
Press the **Source** button on the remote control to display the input terminal menu, and then select **USB** and press the **OK** button.
- To exit the USB menu
Press the **Source** button on the remote control, select a different input terminal, and then press the **OK** button. You may also press the **Exit** button on the remote control.



Select the type of file you want to play between movie, music, and photo.






File Selection

- (1) Playing a file
Select a file using the ▲, ▼, ◀, ▶ buttons on the remote control, and then press the ►/|| button.
- (2) Playing a selection of files
 - Select multiple files and then press the **OK** button to add a check mark to the files.
 - The checked files are saved in the USB storage device as a playlist.
 - The files are played in the order the check marks have been added.

Operation Buttons



- Press the **Menu** button while playing a file to display the operation menu on the screen.
- Press ◀, ▶ buttons to select an item in the operation menu and then press the **OK** button.
- Press the **Display** button while playing a file to display the information window on the screen.
- Press the **EXIT** button to hide the operation menu.

Picture Operation

- Select files using the ▲, ▼, ◀, ▶ buttons and press the ►/|| button to start a slideshow. Press the ►/|| button again to pause the slideshow.
- To pause the slideshow using the on-screen operation menu, select . Select  to resume the slideshow.
- Select  or press the ◀◀ button to return to the previous image.
- Select  or press the ▶▶ button to go to the next image.
- Select  or press the ■ button to stop the slideshow.

Repeat Play

You can choose to play files repeatedly. The following modes are available.

-  All the files in the same folder are played in order until the last one.
- If you check and play several files, these files are played once.
-  One file in the folder is played repeatedly.
- The file that has been checked first is played repeatedly.



- All the files in the same folder are played repeatedly.
- If you check and play several files, these files are played repeatedly in the order they have been checked.



- All the files in the same folder are played repeatedly and randomly.
- If you check and play several files, these files are played repeatedly and randomly.

Other Functions

- Select to view the playlist of files.
You can also select the files to play from the list.
- While a file is being played, select or press the **Display** button to show information on the file being played.
- Select or to rotate an image being displayed.

Zoom Function

- Select or to switch the image size.
8, 4, 2, 1, 1/2, 1/4, 1/8.
- Select to scroll the enlarged image.

Video and Music Operations

- Select files using the **▲, ▼, ◀, ▶** buttons and press the **▶/II** button to start the playback.
Press the **▶/II** button again to pause the playback.
- To pause the playback using the on-screen operation menu, select .
- Select to resume the playback.
- Select to play fast forward.
FF2X, FF4X, FF8X, FF16X, FF32X
(The sound is not output.)

- Select to play fast backward.
FF2X, FF4X, FF8X, FF16X, FF32X
(The sound is not output.)
- Select or press the **◀◀** button to return to the previous file.
- Select or press the **▶▶** button to go to the next file.
- Select or press the **■** button to stop the playback.

Repeat Play

You can choose to play files repeatedly. The following modes are available.



- All the files in the same folder are played in order until the last one.
- If you check and play several files, these files are played once.



- One file in the folder is played repeatedly.
- The file that has been checked first is played repeatedly.



- All the files in the same folder are played repeatedly.
- If you check and play several files, these files are played repeatedly in the order they have been checked.





- All the files in the same folder are played repeatedly and randomly.
- If you check and play several files, these files are played repeatedly and randomly.



- *(Only for video)*
You can play a section of a video in a loop.

Other Functions

- Select to view the playlist of files.
You can also select the files to play from the list.

- While a file is being played, select  or press the **Display** button to show information on the file being played.
- Select  or press the **Wide** button to choose the display aspect ratio while playing a video file.
4:3 / 16:9 / Auto

**CAUTION:**

- There is no guarantee other than USB Mass storage class devices.
- Not guaranteed to support all USB devices.
- Do not use a USB Hub.
- Do not support multi-partition USB.

NOTE:

- Support USB Type A connector (DC5V, max. 500mA). For USB device over 500mA, we suggest to use adaptor or external power.
- We recommend using a USB device formatted to NTFS (New Technology File System) with this display.
- When connecting a USB device used with this display and formatted to FAT16 or FAT32 to a computer, a message prompting you to scan the USB device may appear. In this case, scan the USB device.

Data Format for USB

Supported file system	FAT16/32, NTFS
Max. folder layer	9
PHOTO mode	
Data format	JPEG, JPG, JPE
Max. number of photos	997
Min. image resolution	75 × 75 pixels
Max. image resolution (Progressive DCT)	1,024 × 768 pixels
Max. image resolution (Baseline Sequential DCT)	15,360 × 8,640 pixels
MUSIC mode	
Data format	MP3
Bit rate	32Kbps ~ 320Kbps
MOVIE mode	
Container format	MPG, MPEG, MPEG2-TS, MPEG2-PS, MP4, MKV, AVI, Motion JPEG
Video codec	MPEG1, MPEG2, H.263, H.264, H.265, WMV
Audio codec	LPCM, MP3, AC-3, AAC, WMA standard, WMA 9 Professional

**CAUTION:**

- Sometimes, it may not be possible to play a video file even when the conditions above are met.
The file may not be played properly depending on the bit rate.
Video files made with a codec not supported by the Display cannot be played.

Maintenance and Recycling

Care Of The Screen

Do not rub or strike the screen with anything hard as this may scratch, mar, or even damage the screen permanently. Unplug the power cord before cleaning the screen. Dust the TV by wiping the screen and the cabinet with a soft, clean cloth. If the screen requires additional cleaning, use a clean, damp cloth. Do not use liquid cleaners, aerosol cleaners, or solvents of any kind.

Mobile Telephone Warning

Keep your mobile telephone away from your TV to avoid disturbances in the picture or sound, possibly causing permanent damage to your TV.

End Of Life Directives

In an effort to produce environmentally friendly products, your new TV contains materials that can be recycled and reused. At the end of your TV's life, specialized companies can minimize display waste by separating the reusable materials from non-reusable materials. Please ensure you dispose of your TV according to local regulations.

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:

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

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

<https://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. This display enters into two types of Energy Saving mode during Energy options function sets Home mode. When select LAN mode (refer to page 58), this display will automatically enter into Auto Power save mode (networked Standby mode); and if select RS-232C mode (refer to page 56), this display will automatically enter into Auto Standby mode (general Standby mode).

For additional information visit:

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

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

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



Mode	Power consumption	Power Indicator
ON Mode (All function work)	Approx. 170 W (E657Q) Approx. 160 W (E557Q) Approx. 145 W (E507Q) Approx. 130 W (E437Q) Approx. 70 W (E327)	None
Energy Saving mode (Auto Power save)	Less than 2.00 W	Blinking Red
Energy Saving mode (Auto Standby)	Less than 0.50 W	Red

Product Specification

This model complies with the specifications listed below.

Designs and specifications are subject to change without notice.

This model may not be compatible with features and/or specifications that may be added in the future.

E657Q

LCD Module:		65"/ 1639.0 mm diagonal
	Resolution:	3,840 x 2,160
	Color:	Over 1.07 billion colors (depending on video card used)
	Brightness:	350cd/m ² (Typ.) @ 25°C
Frequency	Horizontal:	31 – 83 KHz (Analog input) 15.625/15.734 KHz, 31 – 136 KHz (Digital input)
	Vertical:	60 Hz, 70 Hz, 75 Hz (Analog input) 24 Hz, 30 Hz, 50 Hz, 60 Hz, 70 Hz (Digital input)
Pixel Clock		Analog: 13.5 MHz, 25.0 MHz – 156.0 MHz Digital: 25.0 MHz – 600.0 MHz
Viewable Size		1428.48 (H) x 803.52 (V) mm
Television System		NTSC Standard, ATSC Standard (8-VSB, Clear-QAM)
Channel Coverage		VHF: 2 through 13 UHF: 14 through 69 Cable TV: Mild band (A - 8 through A - 1, A through I), Super band (J through W), Hyper band (AA through ZZ, AAA, BBB), Ultra band (65 through 94, 100 through 125)
Input Signal		
COMPONENT	Component	RCA Y: 1.0 V p-p / 75 ohm, Pb/Pr (Cb/Cr): 0.7 V p-p / 75 ohm
AV IN	Composite	RCA 1.0 V p-p / 75 ohm
VGA	Analog RGB	Mini D-sub 15 pin 0.7 V p-p / 75 ohm
HDMI	Digital YUV Digital RGB	Type A Connectors HDMI (HDCP 1.4 / 2.2)
AUDIO		
AUDIO IN	Analog Audio Input	Stereo mini jack Stereo L/R 0.5 Vrms
AUDIO L / R	Analog Audio Input	RCA 0.5 Vrms / 75 ohm
HDMI	Digital Audio Input	Type A Connectors PCM 32, 44.1, 48 KHz (16 / 20 / 24 bit)
SPDIF OUT	Digital Audio Output	PCM 32, 44.1, 48 KHz (16 / 20 / 24 bit), Fibre optic

Headphone	Analog Audio Output	Stereo mini jack Stereo L/R 0.5 Vrms
Speaker Output	Internal Speaker	10 W + 10 W (6 ohm)
Control	RS-232C IN: LAN	9 Pin D-sub RJ-45 10BASE-T/100BASE-TX
USB1 USB2	USB Power supply port	Type A Connectors, DC 5 V / 500 mA Type A Connectors, DC 5 V / 2 A
Power Supply	Auto Power save mode: Auto Standby mode: Power consumption:	1.7 A @ 120 V AC, 60 Hz < 2.00 W < 0.50 W 170 W
Operational Environment	Temperature: Humidity: Altitude:	0°C – 40°C / 32°F – 104°F 10% – 80% 0 – 5,000 m
Storage Environment	Temperature: Humidity: Absolute Air Humidity: Max. Change of Temp.: Air Pressure: Radiation Solar Heat:	-10°C – 60°C / 14°F – 140°F 5% – 85% 1-25 g/m ³ 0.5°C/min (max. 10°C / 30 min) 795 – 1,060 mbar (79.5–106 Kpa) 700 W/m ²
Dimension	with Stand and Base:	1462.2 (W) x 881.3 (H) x 350 (D) mm, 57.6 (W) x 34.7 (H) x 13.8 (D) inch
	without Stand and Base:	1462.2 (W) x 842.3 (H) x 96.7 (D) mm 57.6 (W) x 33.2 (H) x 3.8 (D) inch
Weight	with Stand and Base:	24.6 kg (54.3 lbs)
	without Stand and Base:	23.8 kg (52.5 lbs)
VESA compatible mounting interface		400 mm x 200 mm (M6, VESA hole depth 17 mm)
Plug & Play		VESA DDC2B
Accessories		Remote control (1), 1.5 V AAA batteries (2) Power cord (1) (3.0 m), HDMI cable (1) (2.0m), Setup Manual (1)

NOTE:

- All specifications, weights, and dimensions are subject to change without prior notice. Please access www.necdisplay.com for detailed specifications and dimensions for custom installations.
- This model may not be compatible with features and/or specifications that may be added in the future.

E557Q

LCD Module:		55"/ 1387.8 mm diagonal
	Resolution:	3,840 x 2,160
	Color:	Over 1.07 billion colors (depending on video card used)
	Brightness:	350cd/m ² (Typ.) @ 25°C
Frequency	Horizontal:	31 – 83 KHz (Analog input) 15.625/15.734 KHz, 31 – 136 KHz (Digital input)
	Vertical:	60 Hz, 70 Hz, 75 Hz (Analog input) 24 Hz, 30 Hz, 50 Hz, 60 Hz, 70 Hz (Digital input)
Pixel Clock		Analog: 13.5 MHz, 25.0 MHz – 156.0 MHz Digital: 25.0 MHz – 600.0 MHz
Viewable Size		1209.6 (H) × 680.4(V) mm
Television System		NTSC Standard, ATSC Standard (8-VSB, Clear-QAM)
Channel Coverage		VHF: 2 through 13 UHF: 14 through 69 Cable TV: Mild band (A - 8 through A - 1, A through I), Super band (J through W), Hyper band (AA through ZZ, AAA, BBB), Ultra band (65 through 94, 100 through 125)
Input Signal		
COMPONENT	Component	RCA Y: 1.0 V p-p / 75 ohm, Pb/Pr (Cb/Cr): 0.7 V p-p / 75 ohm
AV IN	Composite	RCA 1.0 V p-p / 75 ohm
VGA	Analog RGB	Mini D-sub 15 pin 0.7 V p-p / 75 ohm
HDMI	Digital YUV Digital RGB	Type A Connectors HDMI (HDCP 1.4 / 2.2)
AUDIO		
AUDIO IN	Analog Audio Input	Stereo mini jack Stereo L/R 0.5 Vrms
AUDIO L / R	Analog Audio Input	RCA 0.5 Vrms / 75 ohm
HDMI	Digital Audio Input	Type A Connectors PCM 32, 44.1, 48 KHz (16 / 20 / 24 bit)
SPDIF OUT	Digital Audio Output	PCM 32, 44.1, 48 KHz (16 / 20 / 24 bit), Fibre optic
Headphone	Analog Audio Output	Stereo mini jack Stereo L/R 0.5 Vrms
Speaker Output	Internal Speaker	10 W + 10 W (6 ohm)
Control	RS-232C IN: LAN	9 Pin D-sub RJ-45 10 BASE-T/100 BASE-TX

USB1 USB2	USB Power supply port	Type A Connectors, DC 5 V / 500 mA Type A Connectors, DC 5 V / 2 A
Power Supply	Auto Power save mode: Auto Standby mode: Power consumption:	1.6 A @ 120 V AC, 60 Hz < 2.00 W < 0.50 W 160 W
Operational Environment	Temperature: Humidity: Altitude:	0°C – 40°C / 32°F – 104°F 10% – 80% 0 – 5,000 m
Storage Environment	Temperature: Humidity: Absolute Air Humidity: Max. Change of Temp.: Air Pressure: Radiation Solar Heat:	-10°C – 60°C / 14°F – 140°F 5% – 85% 1-25 g/m ³ 0.5°C/min (max. 10°C / 30 min) 795 – 1,060 mbar (79.5–106 Kpa) 700 W/m ²
Dimension	with Stand and Base:	1239.2 (W) x 749.6 (H) x 255 (D) mm, 48.8 (W) x 29.5 (H) x 10.0 (D) inch
	without Stand and Base:	1239.2 (W) x 711.6 (H) x 79.2 (D) mm, 48.8 (W) x 28.0 (H) x 3.1 (D) inch
Weight	with Stand and Base:	15.5 kg (34.2 lbs)
	without Stand and Base:	15.0 kg (33.1 lbs)
VESA compatible mounting interface		400 mm x 200 mm (M6, VESA hole depth 17 mm)
Plug & Play		VESA DDC2B
Accessories		Remote control (1), 1.5 V AAA batteries (2) Power cord (1) (3.0 m), HDMI cable (1) (2.0m), Setup Manual (1)

NOTE:

- All specifications, weights, and dimensions are subject to change without prior notice. Please access www.necdisplay.com for detailed specifications and dimensions for custom installations.
- This model may not be compatible with features and/or specifications that may be added in the future.

E507Q

LCD Module:		50"/ 1257.3 mm diagonal
	Resolution:	3,840 x 2,160
	Color:	Over 1.07 billion colors (depending on video card used)
	Brightness:	350cd/m ² (Typ.) @ 25°C
Frequency	Horizontal:	31 – 83 KHz (Analog input) 15.625/15.734 KHz, 31 – 136 KHz (Digital input)
	Vertical:	60 Hz, 70 Hz, 75 Hz (Analog input) 24 Hz, 30 Hz, 50 Hz, 60 Hz, 70 Hz (Digital input)
Pixel Clock		Analog: 13.5 MHz, 25.0 MHz – 156.0 MHz Digital: 25.0 MHz – 600.0 MHz
Viewable Size		1095.8 (H) × 616.4(V) mm
Television System		NTSC Standard, ATSC Standard (8-VSB, Clear-QAM)
Channel Coverage		VHF: 2 through 13 UHF: 14 through 69 Cable TV: Mild band (A - 8 through A - 1, A through I), Super band (J through W), Hyper band (AA through ZZ, AAA, BBB), Ultra band (65 through 94, 100 through 125)
Input Signal		
COMPONENT	Component	RCA Y: 1.0 V p-p / 75 ohm, Pb/Pr (Cb/Cr): 0.7 V p-p / 75 ohm
AV IN	Composite	RCA 1.0 V p-p / 75 ohm
VGA	Analog RGB	Mini D-sub 15 pin 0.7 V p-p / 75 ohm
HDMI	Digital YUV Digital RGB	Type A Connectors HDMI (HDCP 1.4 / 2.2)
AUDIO		
AUDIO IN	Analog Audio Input	Stereo mini jack Stereo L/R 0.5 Vrms
AUDIO L / R	Analog Audio Input	RCA 0.5 Vrms / 75 ohm
HDMI	Digital Audio Input	Type A Connectors PCM 32, 44.1, 48 KHz (16 / 20 / 24 bit)
SPDIF OUT	Digital Audio Output	PCM 32, 44.1, 48 KHz (16 / 20 / 24 bit), Fibre optic
Headphone	Analog Audio Output	Stereo mini jack Stereo L/R 0.5 Vrms
Speaker Output	Internal Speaker	10 W + 10 W (6 ohm)
Control	RS-232C IN: LAN	9 Pin D-sub RJ-45 10BASE-T/100BASE-TX

USB1 USB2	USB Power supply port	Type A Connectors, DC 5 V / 500 mA Type A Connectors, DC 5 V / 2 A
Power Supply	Auto Power save mode: Auto Standby mode: Power consumption:	1.5 A @ 120 V AC, 60 Hz < 2.00 W < 0.50 W 145 W
Operational Environment	Temperature: Humidity: Altitude:	0°C – 40°C / 32°F – 104°F 10% – 80% 0 – 5,000 m
Storage Environment	Temperature: Humidity: Absolute Air Humidity: Max. Change of Temp.: Air Pressure: Radiation Solar Heat:	-10°C – 60°C / 14°F – 140°F 5% – 85% 1-25 g/m ³ 0.5°C/min (max. 10°C / 30 min) 795 – 1,060 mbar (79.5–106 Kpa) 700 W/m ³
Dimension	with Stand and Base:	1123.6 (W) x 683.7 (H) x 255 (D) mm, 44.2 (W) x 26.9 (H) x 10.0 (D) inch
	without Stand and Base:	1123.6 (W) x 646.7 (H) x 77 (D) mm, 44.2 (W) x 25.5 (H) x 3.0 (D) inch
Weight	with Stand and Base:	12.9 kg (28.4 lbs)
	without Stand and Base:	12.4 kg (27.3 lbs)
VESA compatible mounting interface		400 mm x 200 mm (M6, VESA hole depth 17.5 mm)
Plug & Play		VESA DDC2B
Accessories		Remote control (1), 1.5 V AAA batteries (2) Power cord (1) (3.0 m), HDMI cable (1) (2.0m), Setup Manual (1)

NOTE:

- All specifications, weights, and dimensions are subject to change without prior notice. Please access www.necdisplay.com for detailed specifications and dimensions for custom installations.
- This model may not be compatible with features and/or specifications that may be added in the future.

E437Q

LCD Module:		43"/ 1079.9 mm diagonal
	Resolution:	3,840 x 2,160
	Color:	Over 1.07 billion colors (depending on video card used)
	Brightness:	350cd/m ² (Typ.) @ 25°C
Frequency	Horizontal:	31 – 83 KHz (Analog input) 15.625/15.734 KHz, 31 – 136 KHz (Digital input)
	Vertical:	60 Hz, 70 Hz, 75 Hz (Analog input) 24 Hz, 30 Hz, 50 Hz, 60 Hz, 70 Hz (Digital input)
Pixel Clock		Analog: 13.5 MHz, 25.0 MHz – 156.0 MHz Digital: 25.0 MHz – 600.0 MHz
Viewable Size		941.18 (H) × 529.42 (V) mm
Television System		NTSC Standard, ATSC Standard (8-VSB, Clear-QAM)
Channel Coverage		VHF: 2 through 13 UHF: 14 through 69 Cable TV: Mild band (A - 8 through A - 1, A through I), Super band (J through W), Hyper band (AA through ZZ, AAA, BBB), Ultra band (65 through 94, 100 through 125)
Input Signal		
COMPONENT	Component	RCA Y: 1.0 V p-p / 75 ohm, Pb/Pr (Cb/Cr): 0.7 V p-p / 75 ohm
AV IN	Composite	RCA 1.0 V p-p / 75 ohm
VGA	Analog RGB	Mini D-sub 15 pin 0.7 V p-p / 75 ohm
HDMI	Digital YUV Digital RGB	Type A Connectors HDMI (HDCP 1.4 / 2.2)
AUDIO		
AUDIO IN	Analog Audio Input	Stereo mini jack Stereo L/R 0.5 Vrms
AUDIO L / R	Analog Audio Input	RCA 0.5 Vrms / 75 ohm
HDMI	Digital Audio Input	Type A Connectors PCM 32, 44.1, 48 KHz (16 / 20 / 24 bit)
SPDIF OUT	Digital Audio Output	PCM 32, 44.1, 48 KHz (16 / 20 / 24 bit), Fibre optic
Headphone	Analog Audio Output	Stereo mini jack Stereo L/R 0.5 Vrms
Speaker Output	Internal Speaker	10 W + 10 W (6 ohm)
Control	RS-232C IN: LAN	9 Pin D-sub RJ-45 10BASE-T/100BASE-TX

USB1 USB2	USB Power supply port	Type A Connectors, DC 5 V / 500 mA Type A Connectors, DC 5 V / 2 A
Power Supply	Auto Power save mode: Auto Standby mode: Power consumption:	1.3 A @ 120 V AC, 60 Hz < 2.00 W < 0.50 W 130 W
Operational Environment	Temperature: Humidity: Altitude:	0°C – 40°C / 32°F – 104°F 10% – 80% 0 – 5,000 m
Storage Environment	Temperature: Humidity: Absolute Air Humidity: Max. Change of Temp.: Air Pressure: Radiation Solar Heat:	-10°C – 60°C / 14°F – 140°F 5% – 85% 1-25 g/m ³ 0.5°C/min (max. 10°C / 30 min) 795 – 1,060 mbar (79.5–106 Kpa) 700 W/m ²
Dimension	with Stand and Base:	968.1 (W) x 596.3 (H) x 255 (D) mm, 38.1 (W) x 23.5 (H) x 10.0 (D) inch
	without Stand and Base:	968.1 (W) x 559.4 (H) x 76.8 (D) mm, 38.1 (W) x 22.0 (H) x 3.0 (D) inch
Weight	with Stand and Base:	9.4 kg (20.8 lbs)
	without Stand and Base:	8.9 kg (19.7 lbs)
VESA compatible mounting interface		200 mm x 200 mm (M6, VESA hole depth 14.5 mm)
Plug & Play		VESA DDC2B
Accessories		Remote control (1), 1.5 V AAA batteries (2) Power cord (1) (3.0 m), HDMI cable (1) (2.0m), Setup Manual (1)

NOTE:

- All specifications, weights, and dimensions are subject to change without prior notice. Please access www.necdisplay.com for detailed specifications and dimensions for custom installations.
- This model may not be compatible with features and/or specifications that may be added in the future.

E327

LCD Module:		32" / 801.3 mm diagonal
	Resolution:	1,920 x 1,080
	Color:	Over 16 million colors (depending on video card used)
	Brightness:	350cd/m ² (Typ.) @ 25°C
Frequency	Horizontal:	31 – 83 KHz (Analog input) 15.625/15.734 KHz, 31 – 83 KHz (Digital input)
	Vertical:	60 Hz, 70 Hz, 75 Hz (Analog input) 24 Hz, 30 Hz, 50 Hz, 60 Hz, 70 Hz (Digital input)
Pixel Clock		Analog: 13.5 MHz, 25.0 MHz – 156.0 MHz Digital: 25.0 MHz – 156.0 MHz
Viewable Size		698.4 (H) × 392.85 (V) mm
Television System		NTSC Standard, ATSC Standard (8-VSB, Clear-QAM)
Channel Coverage		VHF: 2 through 13 UHF: 14 through 69 Cable TV: Mild band (A - 8 through A - 1, A through I), Super band (J through W), Hyper band (AA through ZZ, AAA, BBB), Ultra band (65 through 94, 100 through 125)
Input Signal		
COMPONENT	Component	RCA Y: 1.0 V p-p / 75 ohm, Pb/Pr (Cb/Cr): 0.7 V p-p / 75 ohm
AV IN	Composite	RCA 1.0 V p-p / 75 ohm
VGA	Analog RGB	Mini D-sub 15 pin 0.7 V p-p / 75 ohm
HDMI	Digital YUV Digital RGB	Type A Connectors HDMI (HDCP 1.4)
AUDIO		
AUDIO IN	Analog Audio Input	Stereo mini jack Stereo L/R 0.5 Vrms
AUDIO L / R	Analog Audio Input	RCA 0.5 Vrms / 75 ohm
HDMI	Digital Audio Input	Type A Connectors PCM 32, 44.1, 48 KHz (16 / 20 / 24 bit)
SPDIF OUT	Digital Audio Output	PCM 32, 44.1, 48 KHz (16 / 20 / 24 bit), Fibre optic
Headphone	Analog Audio Output	Stereo mini jack Stereo L/R 0.5 Vrms
Speaker Output	Internal Speaker	5 W + 5 W (6 ohm)
Control	RS-232C IN: LAN	9 Pin D-sub RJ-45 10BASE-T/100BASE-TX
USB1 USB2	USB Power supply port	Type A Connectors, DC 5 V / 500 mA Type A Connectors, DC 5 V / 2 A

Power Supply	Auto Power save mode: Auto Standby mode: Power consumption:	0.7 A @ 120 V AC, 60 Hz < 2.00 W < 0.50 W 70 W
Operational Environment	Temperature: Humidity: Altitude:	0°C – 40°C / 32°F – 104°F 10% – 80% 0 – 5,000 m
Storage Environment	Temperature: Humidity: Absolute Air Humidity: Max. Change of Temp.: Air Pressure: Radiation Solar Heat:	-10°C – 60°C / 14°F – 140°F 5% – 85% 1-25 g/m ³ 0.5°C/min (max. 10°C / 30 min) 795 – 1,060 mbar (79.5–106 Kpa) 700 W/m ²
Dimension	with Stand and Base:	726.7 (W) x 461.1 (H) x 255 (D) mm, 28.6 (W) x 18.2 (H) x 10.0 (D) inch
	without Stand and Base:	726.7 (W) x 424.3 (H) x 79.8 (D) mm, 28.6 (W) x 16.7 (H) x 3.1 (D) inch
Weight	with Stand and Base:	5.8 kg (12.7 lbs)
	without Stand and Base:	5.3 kg (11.6 lbs)
VESA compatible mounting interface		100 mm x 100 mm (M4, VESA hole depth 16 mm)
Plug & Play		VESA DDC2B
Accessories		Remote control (1), 1.5 V AAA batteries (2) Power cord (1) (3.0 m), HDMI cable (1) (2.0m), Setup Manual (1)

NOTE:

- All specifications, weights, and dimensions are subject to change without prior notice. Please access www.necdisplay.com for detailed specifications and dimensions for custom installations.
- This model may not be compatible with features and/or specifications that may be added in the future.

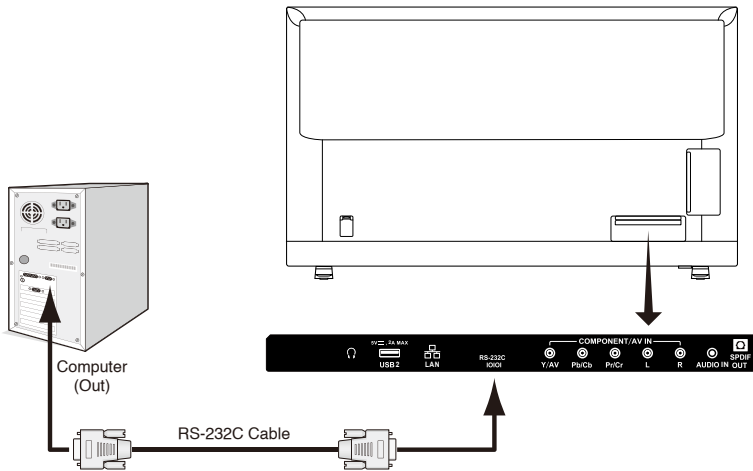
Controlling the LCD TV via RS-232C Remote Control

This LCD TV can be controlled by connecting a personal computer with an RS-232C (reverse type) terminal.

Connection

LCD TV + computer.

- Please turn off the monitor's main power when connecting a computer to the monitor.
- Please turn on the connecting computer first then turn on the monitor's main power.
If you turn on the computer and monitor in reverse order, the com port may not work.



NOTE: If your computer is equipped only with a 25-pin serial port connector, a 25-pin serial port adapter is required.

Contact your supplier for details.

For the pin assignment, please see "2) RS-232C input/output" on page 57.

Communication procedure

Send the control commands from the PC via the RS-232C connector.

The TV operates according to the received command and sends a response message to the PC.

Do not send multiple commands at the same time. Wait until the PC receives the response before sending the next command.

1) Interface

Protocol	RS-232C
Baud rate	9,600 bps
Data length	8 bits

Parity bit	None
Stop bit	1 bit
Communication code	ASCII

This LCD TV uses RXD, TXD and GND lines for RS-232C control. The reverse type cable (null modem cable) (not included) should be used for RS-232C control.

2) PIN ASSIGNMENT

RS-232C input/output

Pin No	RS-232C
1	NC
2	RXD
3	TXD
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

D-Sub 9-pin (Monitor side)

This LCD TV uses RXD, TXD and GND lines for RS-232C control.

Control command diagram

Function (Monitor ID = 1)	Code Data
Power ON	01 30 41 30 41 30 43 02 43 32 30 33 44 36 30 30 30 31 03 73 0d
Power OFF	01 30 41 30 41 30 43 02 43 32 30 33 44 36 30 30 30 34 03 76 0d
Input Source Select VGA	01 30 41 30 45 30 41 02 30 30 36 30 30 30 31 03 73 0d
Input Source Select HDMI-1	01 30 41 30 45 30 41 02 30 30 36 30 30 30 31 31 03 72 0d
Input Source Select HDMI-2	01 30 41 30 45 30 41 02 30 30 36 30 30 30 31 32 03 71 0d
Input Source Select HDMI-3	01 30 41 30 45 30 41 02 30 30 36 30 30 30 38 32 03 78 0d
Input Source Select Component	01 30 41 30 45 30 41 02 30 30 36 30 30 30 30 43 03 01 0d
Input Source Select Composite	01 30 41 30 45 30 41 02 30 30 36 30 30 30 30 35 03 77 0d
Input Source USB	01 30 41 30 45 30 41 02 30 30 36 30 30 30 38 37 03 7D 0d
Sound Mute ON	01 30 41 30 45 30 41 02 30 30 38 44 30 30 30 31 03 09 0d
Sound Mute OFF	01 30 41 30 45 30 41 02 30 30 38 44 30 30 30 32 03 0a 0d

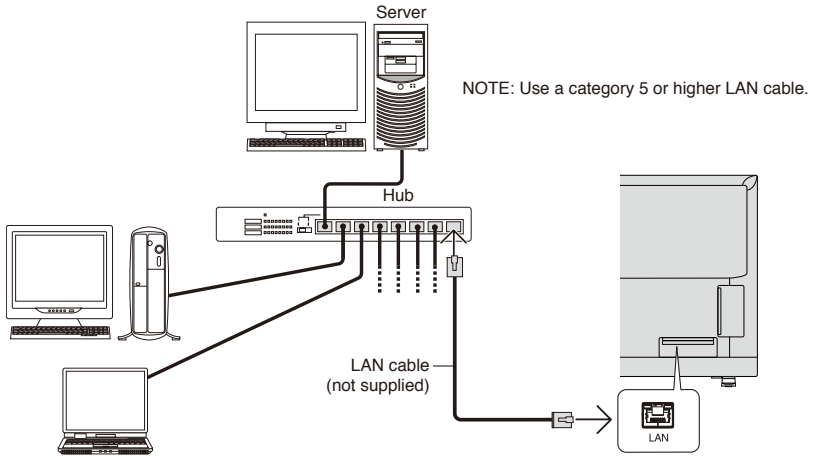
Controlling the LCD TV via LAN Control

Connecting to a Network

Using a LAN cable allows you to specify the Network Settings by using an HTTP server function.

To use a LAN connection you are required to assign an IP address.

Example of LAN connection:



Network Setting by Using an HTTP Browser

Overview

Connecting the monitor to a network allows for monitor control from a computer via the network.

The IP address and subnet mask of the monitor can be set on the Network Setting screen of the web browser by using an HTTP server. Please be sure to use "Microsoft Internet Explorer 10" or a higher version for the web browser.

(This device uses "JavaScript" and "Cookies" and the browser should be set to accept these functions. The setting method will vary depending on the version of the browser. Please refer to the help files and the other information provided in your software.)

Access is gained to the HTTP server function by starting the Web browser on the computer via the network connected to the monitor and entering the following URL as described below:

Network Setting

<http://<the Monitor's IP address>/index.html>

HINT: The default IP address is assigned automatically to the monitor. The exclusive application can be downloaded from our website.

NOTE: If the MONITOR NETWORK SETTINGS screen does not appear in the web browser, press the Ctrl+F5 keys to refresh your web browser (or clear the cache).

If the monitor appears to be slow in response to commands or clicks on buttons in the browser, or the general speed of operation is unacceptable, this may be due to network traffic or the settings on your network. Should this happen, consult your network administrator.

The monitor may not respond if the buttons shown on the browser are repeatedly pressed in rapid intervals. Should this happen, wait a moment and repeat. If you still can't get a response, turn the monitor off and then back on.

To control a monitor please use the control command. See "Control command diagram" (page 54)

Preparation Before Use

Connect the monitor to the network, using a commercially available LAN cable, before attempting to use browser operations.

Operation with a browser that uses a proxy server may not be possible depending on the type of proxy server and the setting method.

Although the type of proxy server will be a factor, it is possible that items that have been set will not be shown, depending on the effectiveness of the cache, and the contents set from the browser may not be reflected in operation. It is recommended that a proxy server is not used unless the network environment requires it.

Handling of the Address for Operation via a Browser

A host name can be used in the following cases (corresponding to the IP address of the monitor): The host name must be registered in the domain name server (DNS) by the network administrator. You can then access the network settings of the monitor via this registered host name by using a compatible browser. If the host name has been configured in the "HOSTS" file of the computer being used, you can then access the network settings of the monitor via this host name by using a compatible browser.

Example 1: When the host name of the monitor has been set to "pd.nec.co.jp", access is gained to the network setting by specifying <http://pd.nec.co.jp/index.html> for the address or the entry column of the URL.

Example 2: When the IP address of the monitor is "192.168.73.1", access is gained to the mail alert settings by specifying <http://192.168.73.1/index.html> for the address or the entry column of the URL.

Operation

Access the following address to show HOME.

http://<the Monitor's IP address>/index.html

Click each link on the left column below HOME.

NOTE: Function of buttons which are shown on setting pages.

[APPLY]: Save your settings.

[CANCEL]: Return to the previous settings.


NOTE: CANCEL is disabled after clicking APPLY.

[RELOAD]: Reload the settings.

[RESET]: Resets to the initial setting.

Network Settings

Click on "NETWORK" on the left column below HOME.



[HOME](#)

[NETWORK](#)

[AMX](#)

[CRESTRON](#)

[NAME](#)

NETWORK SETTINGS

DHCP	<input type="radio"/> On <input checked="" type="radio"/> Off <input type="radio"/> Manual DNS
IP ADDRESS	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="0"/> . <input type="text" value="10"/>
SUBNET MASK	<input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="0"/>
DEFAULT GATEWAY	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
DNS PRIMARY	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
DNS SECONDARY	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>

APPLY
CANCEL
RELOAD
RESET

DHCP	<p>Select an option for setting the IP ADDRESS.</p> <p>On: Automatically assign an IP address.</p> <p>Off: Manually set an IP address for the monitor connected to the network.</p> <p>Manual DNS: Manually set an DNS Primary and DNS Secondary address for the monitor connected to the network. The DNS server connected to the monitor will automatically assign its IP address.</p>
IP ADDRESS	Set your IP address for the monitor connected to the network when [Off] is selected for [DHCP].
SUBNET MASK	Set your subnet mask data for the monitor connected to the network when [Off] is selected for [DHCP].
DEFAULT GATEWAY	Set your default gateway for the monitor connected to the network when [Off] is selected for [DHCP]. NOTE: Set as [0.0.0.0] to delete the setting.

DNS PRIMARY	Enter the primary DNS server settings of the network connected with the monitor. NOTE: Enter [0.0.0.0] to delete the setting.
DNS SECONDARY	Enter the secondary DNS server settings of the network connected with the monitor. NOTE: Enter [0.0.0.0] to delete the setting.

AMX Settings

Click on "AMX" on the left column below HOME.

AMX BEACON	To turn on or off for the detection from AMX Device Discovery when connecting to a network supported by an AMX's NetLinx control system. HINT: When using a device that supports AMX Device Discovery, all AMX NetLinx control systems will recognize the device and download the appropriate Device Discovery Module from an AMX server. Selecting [ENABLE] AMX Device Discovery will detect the device. Selecting [DISABLE] AMX Device Discovery will not detect the device.
------------	--

CRESTRON Settings

Click on "CRESTRON" on the left column below HOME.

CRESTRON ROOMVIEW compatibility The monitor supports CRESTRON ROOMVIEW, allowing multiple devices connected in the network to be managed and controlled from a computer or a controller.

For further information visit <http://www.crestron.com>

ROOMVIEW	ROOMVIEW for managing from the computer. ENABLE: Enables ROOMVIEW. DISABLE: Disables ROOMVIEW.
CRESTRON CONTROL	CRESTRON CONTROL for managing from the controller. ENABLE: Enables CRESTRON CONTROL. DISABLE: Disables CRESTRON CONTROL.
CONTROLLER IP ADDRESS	Sets the IP address of the CRESTRON SERVER.
IP ID	Sets your CRESTRON SERVER IP ID.

HINT: The CRESTRON settings are required only for use with CRESTRON ROOMVIEW.
For further information visit <http://www.crestron.com>

Name Settings

Click on "NAME" on the left column below HOME.

HOST NAME	Type in the hostname of the monitor which is connected to the network. Up to 15 alphanumeric characters can be used.
DOMAIN NAME	Type in the domain name of the network which is connected with the monitor. Up to 60 alphanumeric characters can be used.

Supporting HDMI CEC command

HDMI CEC command name	Explanation
One Touch Play	If HDMI CEC supporting devices are turned on, the monitor connected to the devices by HDMI cable is also turned on automatically. After that, the input switches to HDMI from an input, which you selected. If the monitor is turned on when HDMI CEC devices are turned on, it changes the input from the original one to HDMI.
Remote Control Pass Through	The monitor's wireless remote control button operation is functioning to HDMI CEC supporting devices. For example, if turning on the monitor by wireless remote control and pressing the play button, HDMI CEC supporting devices will also be turned on and play.
Power Status	Connected HDMI CEC supporting devices obtains the monitor's power status, such as the monitor is in standby mode or on.
System Information	This function obtains the information of a connected HDMI CEC supported device (CEC version, Physical Address). In addition, this function copes with "Change Language function". If the language for the monitor is changed, the language for a connected HDMI CEC supported device is changed to the same language, which is selected for the monitor. For the "Change Language function", it is necessary that the connected HDMI CEC supported device be able to cope with multi-language.
System Standby	If the monitor is set to standby using the wireless remote control supplied with the monitor, HDMI CEC supported devices also go into standby at the same time. If the monitor goes into standby while an HDMI CEC supported device is recording, the device is kept on. Please refer to the user's manual supplied with the HDMI CEC supported device for further information.
System Audio Control	The function sends digital audio signal through the HDMI cable. Please set an HDMI CEC audio amplifier between the monitor and an HDMI CEC supported device with an HDMI cable. The Volume button on the wireless remote control supplied with the monitor is also controlling the volume of the connected HDMI CEC audio amplifier. While this function is active, the internal speaker is set to MUTE automatically.
Device OSD Name Transfer	This function obtains the connected HDMI CEC supported device's name.
Routing Control	By selecting a device name, the HDMI CEC supported device input switches to the input you selected. After selecting the device, wireless remote control operation is functioning for the selected device.

CEC is an abbreviation of Consumer Electronics Control.

NOTE:

- Depending on the connected device, sometimes the device does not work properly.

Before Calling Service

Please make these simple checks before calling service. These tips may save you time and money as charges for receiver installation and adjustments of customer controls are not covered under your warranty.

Symptoms	Items To Check And Actions To Follow
"Ghost " or double image when using the tuner	<ul style="list-style-type: none"> This may be caused by an obstruction to the antenna due to high rise buildings or hills. Using a highly directional antenna may improve the picture.
No power	<ul style="list-style-type: none"> Check to see if the TV's AC power cord is plugged into the outlet. Unplug the TV and after 60 seconds reinsert the plug into the outlet and power on the TV.
No picture	<ul style="list-style-type: none"> At the rear of the TV make sure the antenna connection is properly attached. Check to see if there is a station broadcast problem by trying multiple channels. Adjust the contrast and brightness settings. Check the Closed Caption settings as some text modes may block the visibility of the images on the TV. Change setting of HDMI Signal Option at OSD
Good picture but no sound	<ul style="list-style-type: none"> Increase the volume. Confirm that the TV is not muted by pressing the Mute button on the remote control. Change setting of HDMI Signal Option at OSD
Good sound but poor color	<ul style="list-style-type: none"> Adjust the contrast, color and brightness settings.
Poor picture	<ul style="list-style-type: none"> Change setting of MEMC at OSD (Only for E557Q / E657Q).
Snowy picture and noise when using the tuner	<ul style="list-style-type: none"> Check the antenna connection and signal.
Presence of a horizontal dotted line	<ul style="list-style-type: none"> This may be caused by electrical interference (e.g. hairdryer, nearby neon lights, etc.). Power cycle the equipment by turning off and then turning back on.
TV not responding via the remote control	<ul style="list-style-type: none"> Determine if the batteries are working and replace batteries if necessary. Clean the remote control sensor lens on the TV. If necessary, utilize the buttons located on the side of the TV. Select the TV mode to ensure your remote control is set in the TV mode.
RS-232C or LAN control is not available	<ul style="list-style-type: none"> Check RS-232C (reverse type) or the LAN cable. A category 5 or higher LAN cable is required for connection. Please use shielded cable.

Glossary

HDTV

HDTV displays are technically defined as being capable of displaying a minimum of 720p or 1080i active scan lines.

HDMI Inputs

High-Definition Multimedia Interface Audio / Video Inputs are located on the receiver. These connectors are used for the input of audio and video signals. Designed to receive higher picture resolution and offer sound connection options.

Menu

An on-screen listing of features shown on the TV screen is made available for user adjustments.

RF

Radio Frequency or modulated signal design used by the carrier for television broadcasts.

Second Audio Program (SAP)

Another or additional audio channel provided for in the Multichannel Television Sound (MTS) broadcast standard. A monaural soundtrack included within the recorded or video signal (usually containing a second language translation for the displayed program).

Sleep Timer

You can set a time period for which the TV will automatically turn off.

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