SHARP

PN-E869
PN-E759
PN-E659
PN-E559
PN-E509
PN-E439
PN-E329

LCD MONITOR

OPERATION MANUAL

HDMI™

IMPORTANT:
To aid reporting in case of loss or theft, please record the product's model and serial numbers in the space provided. The numbers are located in the rear of the product.

Model No.:

Serial No.:

U.S.A. ONLY

Information on the Disposal of this Equipment and its Batteries

IF YOU WISH TO DISPOSE OF THIS EQUIPMENT OR ITS BATTERIES, DO NOT USE THE ORDINARY WASTE BIN, AND DO NOT PUT THEM INTO A FIREPLACE!

Used electrical and electronic equipment and batteries should always be collected and treated SEPARATELY in accordance with local law.

Separate collection promotes an environment-friendly treatment, recycling of materials, and minimizing final disposal of waste. IMPROPER DISPOSAL can be harmful to human health and the environment due to certain substances! Take USED EQUIPMENT to a local, usually municipal, collection facility, where available.

Remove USED BATTERIES from equipment, and take them to a battery collection facility; usually a place where new batteries are sold.

If in doubt about disposal, contact your local authorities or dealer and ask for the correct method of disposal.

ONLY FOR USERS IN THE EUROPEAN UNION, AND SOME OTHER COUNTRIES; FOR INSTANCE NORWAY AND SWITZERLAND: Your participation in separate collection is requested by law.

The symbol shown above appears on electrical and electronic equipment and batteries (or the packaging) to remind users of this. If 'Hg' or 'Pb' appears below the symbol, this means that the battery contains traces of mercury (Hg) or lead (Pb), respectively.

Users from PRIVATE HOUSEHOLDS are requested to use existing return facilities for used equipment and batteries. Batteries are collected at points of sale. Return is free of charge.

If the equipment has been used for BUSINESS PURPOSES, please contact your SHARP dealer who will inform you about take-back. You might be charged for the costs arising from take-back. Small equipment (and small quantities) might be taken back by your local collection facility. For Spain: Please contact the established collection system or your local authority for take-back of your used products.

FOR CUSTOMERS IN U.K.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

GREEN-AND-YELLOW:	**Earth**
BLUE:	**Neutral**
BROWN:	**Live**

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

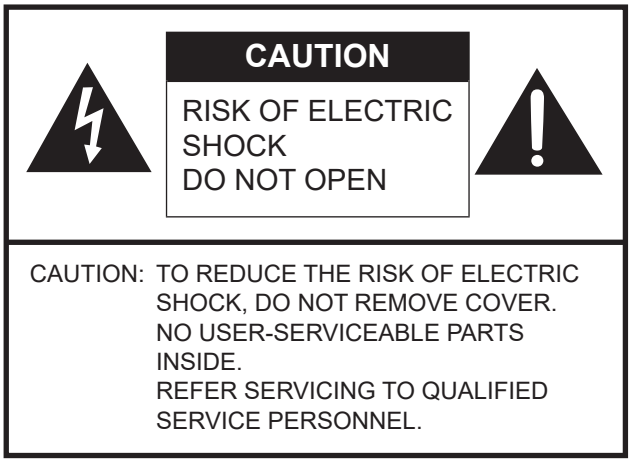
- The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter **E** or by the safety earth ⏚ or coloured green or green-and-yellow.
- The wire which is coloured BLUE must be connected to the terminal which is marked with the letter **N** or coloured black.
- The wire which is coloured BROWN must be connected to the terminal which is marked with the letter **L** or coloured red.

Ensure that your equipment is connected correctly. If you are in any doubt consult a qualified electrician.

"WARNING: THIS APPARATUS MUST BE EARTHED."

IMPORTANT INFORMATION

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.



The lightning flash with arrowhead symbol, within a triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within a triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

WARNING:
FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user’s authority to operate this equipment.

NOTE:
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.

U.S.A. ONLY

To maintain compliance with EMC regulations, use shielded cables to connect to the following terminals: HDMI input terminal, USB Type-C port and RS-232C input terminal.

DEAR SHARP CUSTOMER

Thank you for your purchase of a SHARP LCD product. To ensure safety and many years of trouble-free operation of your product, please read the Safety Precautions carefully before using this product.

SAFETY PRECAUTIONS

Electricity is used to perform many useful functions, but it can also cause personal injuries and property damage if improperly handled. This product has been engineered and manufactured with the highest priority on safety. However, improper use can result in electric shock and/or fire. In order to prevent potential danger, please observe the following instructions when installing, operating and cleaning the product. To ensure your safety and prolong the service life of your LCD product, please read the following precautions carefully before using the product.

1. Read instructions — All operating instructions must be read and understood before the product is operated.
2. Keep this manual in a safe place — These safety and operating instructions must be kept in a safe place for future reference.
3. Observe warnings — All warnings on the product and in the instructions must be observed closely.
4. Follow instructions — All operating instructions must be followed.
5. Cleaning — Unplug the power cord from the power outlet before cleaning the product. Use a dry cloth to clean the product. Do not use liquid cleaners or aerosol cleaners. Do not use dirty cloths. Doing so may damage the product.
6. Attachments — Do not use attachments not recommended by the manufacturer. Use of inadequate attachments can result in accidents.
7. Water and moisture — Do not use the product near water. Do not install the product in a place where water may splash onto it. Be careful of equipment which drains water such as an air-conditioner.
8. Ventilation — The vents and other openings in the cabinet are designed for ventilation.
   Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a sofa, rug or other similar surface, since they can block ventilation openings. Do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.
9. Power cord protection — The power cords must be routed properly to prevent people from stepping on them or objects from resting on them.
10. The screen used in this product is made of glass. Therefore, it can break when the product is dropped or applied with impact. Be careful not to be injured by broken glass pieces in case the screen breaks.
11. Overloading — Do not overload power outlets or extension cords. Overloading can cause fire or electric shock.
12. Entering of objects and liquids — Never insert an object into the product through vents or openings. High voltage flows in the product, and inserting an object can cause electric shock and/or short internal parts.
    For the same reason, do not spill water or liquid on the product.
13. Servicing — Do not attempt to service the product yourself. Removing covers can expose you to high voltage and other dangerous conditions. Request a qualified service person to perform servicing.
14. Repair — If any of the following conditions occurs, unplug the power cord from the power outlet, and request a qualified service person to perform repairs.
    a. When the power cord or plug is damaged.
    b. When a liquid was spilled on the product or when objects have fallen into the product.
    c. When the product has been exposed to rain or water.
    d. When the product does not operate properly as described in the operating instructions.
       Do not touch the controls other than those described in the operating instructions. Improper adjustment of controls not described in the instructions can cause damage, which often requires extensive adjustment work by a qualified technician.
    e. When the product has been dropped or damaged.
    f. When the product displays an abnormal condition. Any noticeable abnormality in the product indicates that the product needs servicing.
15. Replacement parts — In case the product needs replacement parts, make sure that the service person uses replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. Use of unauthorized parts can result in fire, electric shock and/or other danger.
16. Safety checks — Upon completion of service or repair work, request the service technician to perform safety checks to ensure that the product is in proper operating condition.
17. Wall mounting — When mounting the product on a wall, be sure to install the product according to the method recommended by the manufacturer.
18. Heat sources — Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).

SAFETY PRECAUTIONS (Continued)

19. Batteries — Incorrect use of batteries may cause the batteries to burst or ignite. A leaky battery may corrode the equipment, dirty your hands or spoil your clothing. In order to avoid these problems, make sure to observe the precautions below:
    • Use the specified batteries only.
    • Install the batteries with due attention to the plus (+) and minus (-) sides of the batteries according to the instructions in the compartment.
    • Do not mix old and new batteries.
    • Do not mix batteries of different types. Voltage specifications of batteries of the same shape may vary.
    • Replace an exhausted battery with a new one promptly.
    • If you will not use the remote control for a long time, remove the batteries.
    • If leaked battery fluid gets on your skin or clothing, rinse immediately and thoroughly. If it gets into your eye, bathe your eye well rather than rubbing and seek medical treatment immediately. Leaked battery fluid that gets into your eye or your clothing may cause a skin irritation or damage your eye.
    • Properly dispose of depleted batteries. Disposal of a battery into water, fire, or a hot oven, or mechanically crushing, cutting, or modifying a battery can result in an explosion.
    • Do not short-circuit the batteries.
20. Usage of the monitor must not be accompanied by fatal risks or dangers that, could lead directly to death, personal injury, severe physical damage or other loss, including nuclear reaction control in nuclear facility, medical life support system, and missile launch control in a weapon system.
21. Do not stay in contact with the parts of the product that become hot for long periods of time. Doing so may result in low-temperature burns.
22. Do not modify this product.

WARNING:
An apparatus with CLASS I construction shall be connected to a MAIN socket outlet with a protective earthing connection.

This product is designed for commercial application only and as such it falls outside the scope of Regulation (EU) 2023/826 laying down ecodesign requirements for off mode, standby mode, and networked standby energy consumption. Sharp do not recommend the product for domestic application and will not accept any liability for such use.

STABILITY HAZARD
If a monitor is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as:
• Using fixing devices like wall mount brackets recommended by the manufacturer.
• Only using furniture that can safely support the monitor.
• Ensuring the monitor is not overhanging the edge of the supporting furniture.
• Not placing the monitor on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the monitor to a suitable support.
• Not standing the monitors on cloth or other materials placed between the monitor and supporting furniture.
• Educating children about the dangers of climbing on furniture to reach the monitor or its controls.
• This equipment is not suitable for use in locations where children are likely to be present unsupervised.

Especially for child safety
- Don’t allow children to climb on or play with the monitor.
- Don’t place the monitor on furniture that can easily be used as steps, such as a chest of drawers.
- Remember that children can become excited while watching a program, especially on a “larger than life” monitor. Care should be taken to place or install the monitor where it cannot be pushed, pulled over, or knocked down.
- Care should be taken to route all cords and cables connected to the monitor so that they cannot be pulled or grabbed by curious children.

TIPS AND SAFETY INSTRUCTIONS

- The TFT color LCD panel used in this monitor is made with the application of high precision technology. However, there may be minute points on the screen where pixels never light or are permanently lit. Also, if the screen is viewed from an acute angle there may be uneven colors or brightness. Please note that these are not malfunctions but common phenomena of LCDs and will not affect the performance of the monitor.
- Do not display a still picture for a long period, as this could cause a residual image.
- Never rub or tap the monitor with hard objects.
- Please understand that our company bears no responsibility for errors made during use by the customer or a third party, nor for any other malfunctions or damage to this product arising during use, except where indemnity liability is recognized under law.
- This monitor and its accessories may be upgraded without advance notice.
- Do not use the monitor where there is a lot of dust, where humidity is high, or where the monitor may come into contact with oil or steam. Do not use in an environment where there are corrosive gases (sulfur dioxide, hydrogen sulfide, nitrogen dioxide, chlorine, ammonia, ozone, etc.). As this could lead to fire.
- Ensure that the monitor does not come into contact with water or other fluids. Ensure that no objects such as paper clips or pins enter the monitor as this could lead to fire or electric shock.
- Do not place the monitor on top of unstable objects or in unsafe places. Do not allow the monitor to receive strong shocks or to strongly vibrate. Causing the monitor to fall or topple over may damage it.
- Do not use the monitor near heating equipment or in places where there is likelihood of high temperature, as this may lead to generation of excessive heat and outbreak of fire.
- If the monitor is installed in a location exposed to sunlight such as next to a window, measures to reduce ultraviolet and infrared radiation and temperature measures are required. For details, consult your dealer.
- Images cannot be rotated on this monitor.
  When using in portrait orientation, you will need to prepare appropriately orientated content in advance.
- The power outlet shall be installed near the equipment and shall be easily accessible.
- Please be sure to constantly remove dust and garbage that has attached to the ventilation opening. If dust collects in the ventilation opening or the inside of the monitor, it may lead to excessive heat, outbreak of fire, or malfunction.
  Please request a cleaning of the inside of the monitor from an authorized servicing dealer or service center.
- Suitable for entertainment purposes at controlled luminous environments, to avoid disturbing reflections from the screen.
- Operating time and warranty.
  This product is designed for a maximum daily use of 16 hours. Use in excess of 16 hours per day is not covered by the warranty.

The Power Cord

- Use only the power cord supplied with the monitor.
- Do not damage the power cord nor place heavy objects on it, stretch it or over bend it. Also, do not add extension cords. Damage to the cord may result in fire or electric shock.
- Do not bind the power cord and the USB cable. It may trap heat and cause a fire.
- Do not use the power cord with a power tap.
  Adding an extension cord may lead to fire as a result of overheating.
- Do not remove or insert the power plug with wet hands. Doing so could result in electric shock.
- Unplug the power cord if it is not used for a long time.
- Do not attempt to repair the power cord if it is broken or malfunctioning. Refer the servicing to the service representative.
- This monitor is designed to be used in the condition of the power cord connected to the earth. If the power cord is not connected to the earth, it may cause electric shock. Please make sure the power cord is connected to the wall outlet directly and earthed properly. Do not use a 2-pin plug converter adapter.
- Do not touch the power plug if you hear thunder. Doing so could result in electric shock.
- Do not exceed the product's specified power supply voltage where it is installed. Doing so could result in a fire or electric shock. Please refer to the power supply voltage information in the specification.
- Be sure to clamp the power cord (supplied) onto the cable clamp attachment using the supplied cable clamp.

Network

- When you use a network, your communication data is exposed to the risks of being stolen or illegally accessed. To avoid these risks, you need to use this monitor in a secure network environment.

Manual Scope

- Microsoft and Windows are trademarks of the Microsoft group of companies.
- The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.
- VESA is either registered trademark or trademark of Video Electronics Standards Association in the United States and/or other countries.
- All other brand and product names are trademarks or registered trademarks of their respective holders.
- Illustrations in this manual may not exactly represent the actual product or display.
- This manual assumes use in landscape orientation, except where specifically noted.

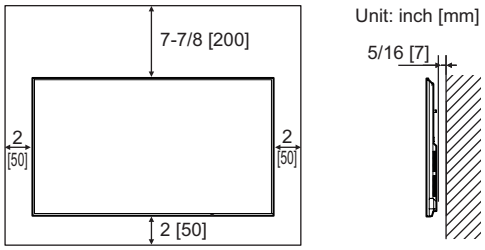
LED Backlight

- The LED backlight in this product has a limited lifetime.
  * If the screen gets dark or does not turn on, it may be necessary to replace the LED backlight.
  * This LED backlight is exclusive to this product and must be replaced by an authorized servicing dealer or service center. Please contact an authorized servicing dealer or service center for assistance.

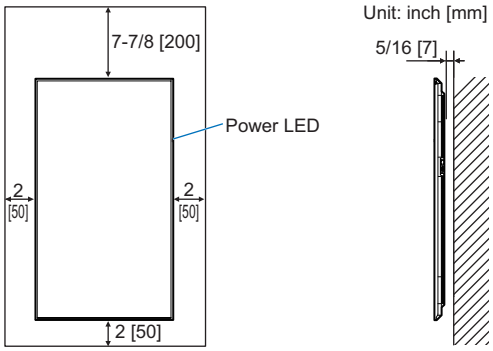
MOUNTING PRECAUTIONS

- For SHARP dealers or service engineers, please confirm “Mounting Precautions (For SHARP dealers and service engineers)”. (See page 38.)
- This product is for use indoors.
- A mounting bracket compliant with VESA specifications is required.
- Since the monitor is heavy, consult your dealer before installing, removing or moving the monitor.
- Mounting the monitor on the wall requires special expertise and the work must be performed by an authorized dealer. You should never attempt to perform any of this work yourself. Our company will bear no responsibility for accidents or injuries caused by improper mounting or mishandling.
- Use the monitor with the surface perpendicular to a level surface. If necessary, the monitor may be tilted up to 20 degrees upward or downward.
- This monitor should be used at an ambient temperature between 32°F (0°C) and 104°F (40°C). Provide enough space around the monitor to prevent heat from accumulating inside.

For the monitor in landscape orientation

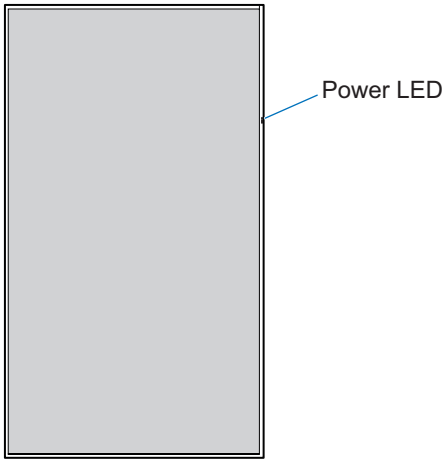


For the monitor in portrait orientation



[PN-E869/PN-E759] The handle must be removed.

- Be careful of high temperatures in the surrounding area. If it is difficult to provide sufficient space for any reason such as the installation of the monitor inside a housing or of several units side-by-side, or if the ambient temperature may be outside of the range of 32°F (0°C) and 104°F (40°C), install a fan or take other measures to keep the ambient temperature within the required range.
- When installing two or more monitor units side-by-side, provide space of at least 3/16 inch (5 mm) around them to prevent stress on the adjacent unit or structure due to thermal expansion.
- Temperature condition may change when using the monitor together with the optional equipments recommended by SHARP. In such cases, please check the temperature condition specified by the optional equipments.
- Do not block any ventilation openings. If the temperature inside the monitor rises, this could lead to a malfunction.
- Do not place the monitor on a device which generates heat.
- Adhere to the following when installing the monitor in its portrait orientation. Failing to adhere to the following may cause malfunctions.
  - Install the monitor such that the power LED is located on the right side.



  - Set the “THERMAL SENSOR SETTING” on the SYSTEM menu to “PORTRAIT”. (See page 24.)

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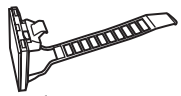
Supplied Components

If any components are missing, please contact your dealer.

- ☐ LCD Monitor: 1
- ☐ Remote control unit: 1
- ☐ Cable clamp: 3

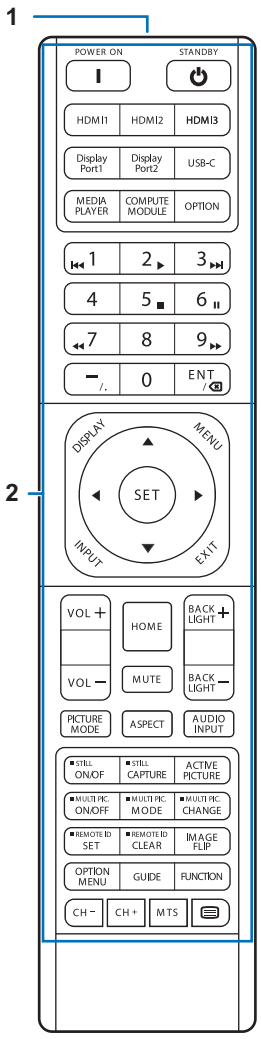


- ☐ Power cord
- ☐ Remote control unit battery: 2
- ☐ Setup Manual: 1
- ☐ USB flash drive cover: 1
- ☐ Logo sticker: 1
  Attach the sticker as necessary.

* **Please note**: do not dispose of batteries in household waste for environmental protection. Follow the disposal instructions for your area.

Part Names

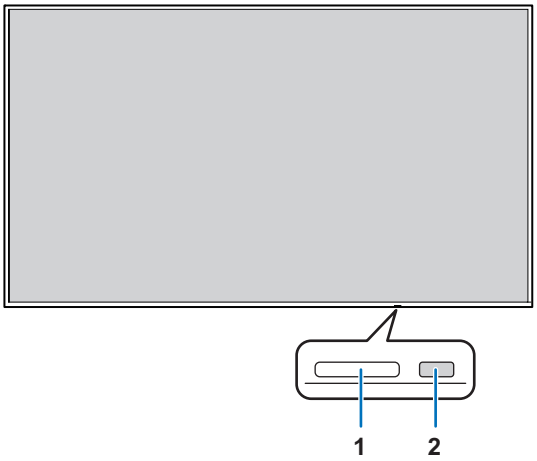
■Remote control unit



1. **Signal transmitter**
2. **Operation buttons (See page 16.)**

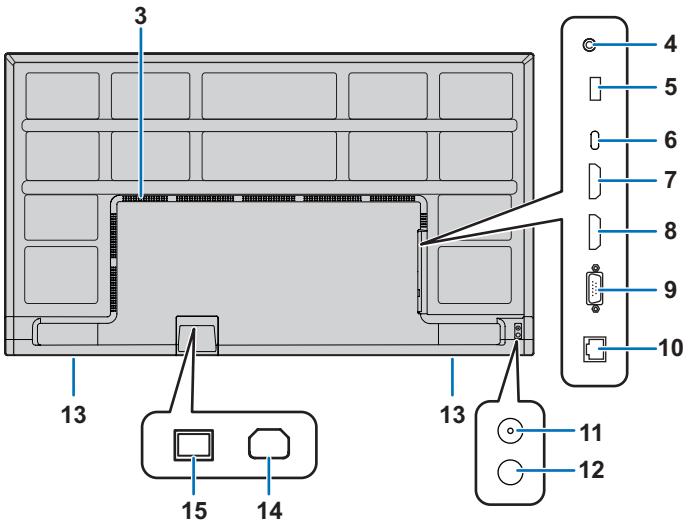
Part Names

■Front view



1. Remote control sensor (See page 13.)
2. Power LED (See page 15.)

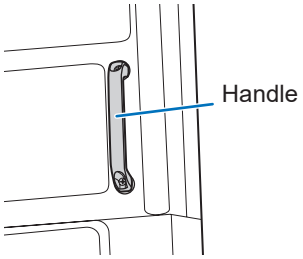
■Rear view



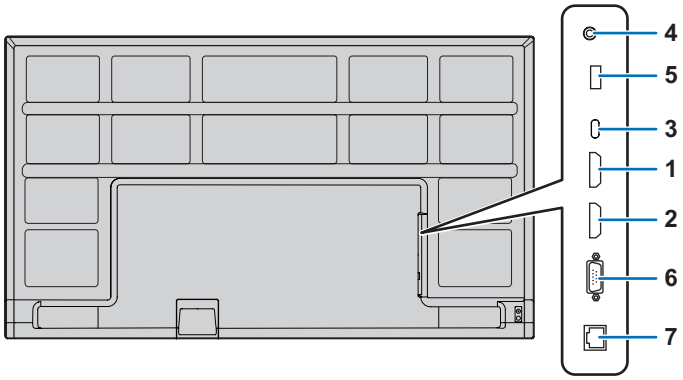
3. Vents
4. Audio output terminal (See page 11.)
5. USB port (USB2.0 compliant, Type-A) (See page 11.)
6. USB Type-C port (See page 11.)
7. HDMI1 input terminal (See page 11.)
8. HDMI2 input terminal (See page 11.)
9. RS-232C input terminal (See page 11.)
10. LAN terminal (See page 11.)
11. POWER button (See page 15.)
12. INPUT button
13. Speakers
14. AC input terminal (See page 12.)
15. Main power switch (See page 15.)

TIP

PN-E869/PN-E759 only



Connecting Peripheral Equipment



NOTE

- Be sure to turn off the main power switch and disconnect the plug from the power outlet before connecting/disconnecting cables. Also, read the manual of the equipment to be connected.
- Be careful not to confuse the input terminal with the output terminal when connecting cables. Accidentally reversing cables connected to the input and output terminals may cause malfunctions and the other problems.
- Do not use any cable that has a damaged or deformed terminal. Using such cables may cause malfunctions.

TIP

- Operation is not guaranteed for all connected devices.
- If the audio output from the playback device is connected directly to speakers or other devices, the video on the monitor may appear delayed from the audio portion.

1. **HDMI1 input terminal (support ARC)**
2. **HDMI2 input terminal**
   - Use a commercially available HDMI cable (conforming to the HDMI standard) that supports 4K. When connecting to ARC-compatible devices, please use cable that support even more ARC.
3. **USB Type-C port**
   - Connect to the computer with a commercially available USB cable (Type-C, conforming to the USB standard).
   - You can connect a device that supports DisplayPort alternate mode.
   - Be sure to clamp the USB Type-C cable (commercially available) by using the supplied cable clamp (See page 12.). When clamping the USB Type-C cable, take care not to stress the USB Type-C cable. Do not bend the USB Type-C cable excessively.
   - When input mode is changed to USB-C, this monitor will be recognized by the connected computer.
   - The USB Type-C port supports 15W (5V/3A) Power Delivery. Its primary function is for video input, with limited power delivery compatibility.
   - To turn on this monitor from the input signal waiting state, press the POWER ON button on the remote control unit. When using the USB Type-C port, this monitor may not turn on even if a signal is input.
4. **Audio output terminal**
   - Audio that is input into the monitor is output.
   - The output sound varies depending on the input mode.
   - The volume of the output sound can be fixed by setting “LINE OUT” on the AUDIO menu.
   - “TREBLE”, “BASS” and “BALANCE” cannot be adjusted in the AUDIO menu.
   - This connector is not a headphone terminal.
5. **USB port (USB2.0 compliant, Type-A)**
   - Connect a USB flash drive to the USB port.
   - Do not connect a USB device other than a USB flash drive.
   - Turn off the power of the monitor when removing a USB flash drive.

   Supported USB flash drives

File System	FAT16/32, NTFS
Capacity	FAT16: 2GB FAT32: 32GB* NTFS: 2TB

   * Maximum file size 4 GB.

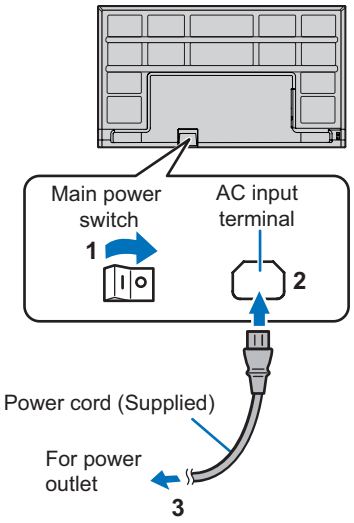
   - A USB flash drive that is encrypted or has a security function cannot be used.
   - Check the USB flash drive for viruses as necessary.
   - Use a USB flash drive with a shape that can be inserted in the USB port. Some USB flash drives with special shapes cannot be inserted. Do not forcibly insert a USB flash drive. This may damage the connector or cause failure.
6. **RS-232C input terminal**
   - You can control the monitor from a computer by connecting a commercially available RS-232 crossover cable between these terminals and the computer.
     For details, please refer to the manual on the following website.
     https://business.sharpusa.com/product-downloads (US)
     https://www.sharp.eu/download-centre (Europe/Asia/Pacific)
7. **LAN terminal**
   - You can connect to a network by using a commercially available LAN cable.
   - This monitor can be controlled via a network from a computer on the network.
     For details, please refer to the manual on the following website.
     https://business.sharpusa.com/product-downloads (US)
     https://www.sharp.eu/download-centre (Europe/Asia/Pacific)

Connecting the Power Cord

NOTE

- Use only the power cord supplied with the monitor.
- When connecting the power cord to the product's AC input terminal, make sure the connector is fully and firmly inserted.

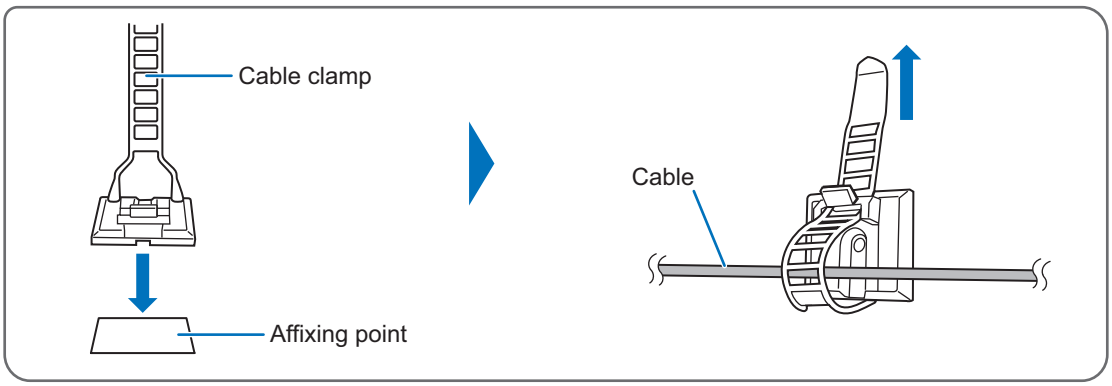
1. **Turn off the main power switch.**
2. **Plug the power cord (supplied) into the AC input terminal.**
3. **Plug the power cord (supplied) into the power outlet.**



Binding Cables

The supplied cable clamps can be used to clamp the power cord and cables connected to the back of the monitor.

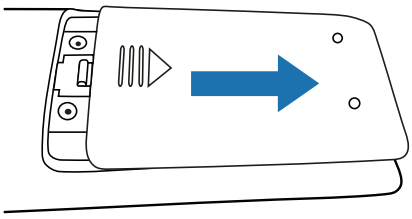
Attach the supplied cable clamps to a flat surface, removing any dust or dirt before attaching.
Do not attach over a vent.



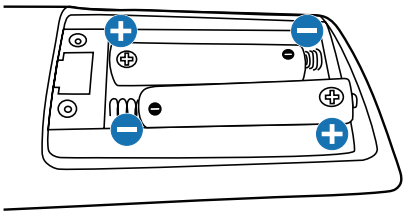
Preparing the Remote Control Unit

Installing the batteries

1. **Press the cover gently and slide it in the direction of the arrow.**



2. **See the instructions in the compartment and put in the batteries (R03 or LR03 (“AAA” size) x 2) with their plus (+) and minus (-) sides oriented correctly.**



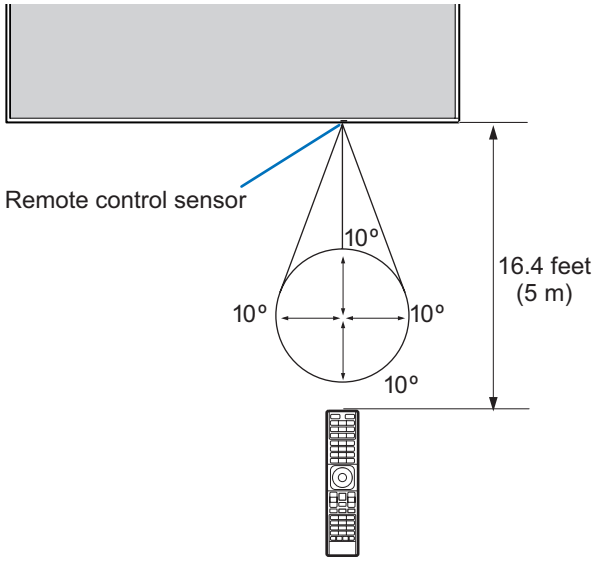
3. **Close the cover.**

TIP

- When the batteries become exhausted, replace them with new (commercially available) batteries.
- The supplied batteries may become exhausted quickly depending on how they are stored.
- If you will not be using the remote control for a long time, remove the batteries.
- Use manganese or alkaline batteries only.

Remote control operation range

The operation range of the remote control unit is approx. 16.4 feet (5 m) at an angle of approx 10° from the center to the top/bottom/right/left of the remote control sensor.

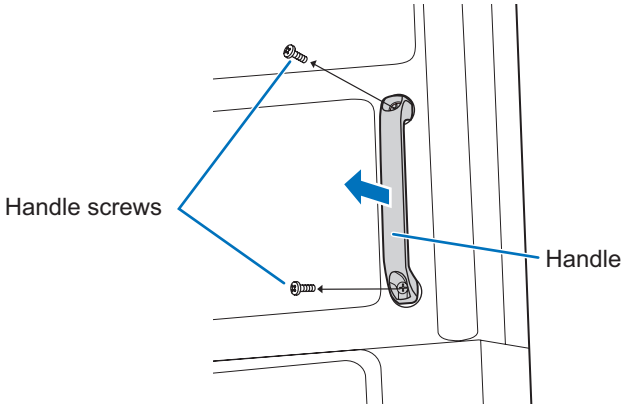


TIP

- Do not expose the remote control unit to shock by dropping or stepping on it. This could lead to a malfunction.
- Do not expose the remote control unit to liquids, and do not place it in an area with high humidity.
- The remote control unit may not work properly if the remote control sensor is under direct sunlight or strong lighting.
- Objects between the remote control unit and the remote control sensor may prevent proper operation.
- Replace the batteries when they run low as this may shorten the remote control’s operation range.
- If a fluorescent light is illuminated near the remote control unit, it may interfere with proper operation.
- Do not use it with the remote control of other equipment such as air conditioner, stereo components, etc.

Removing the Handles (PN-E869/PN-E759 only)

The handles can be removed.

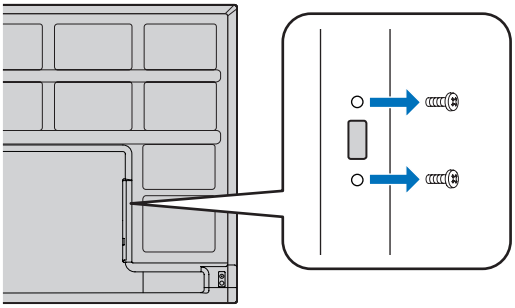


NOTE

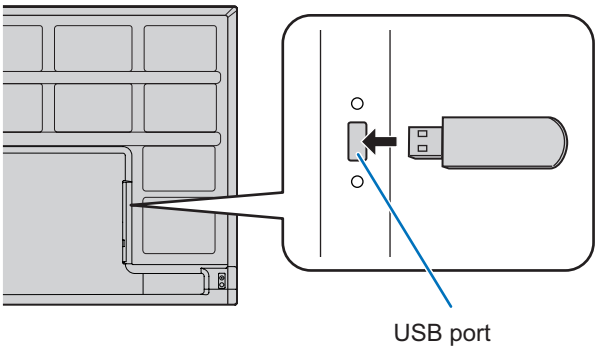
- The removable handles and handle screws are for use with this monitor. Do not use them for any other devices.
- Keep the removed handles and handle screws.
- To attach handles, be sure to use the handles and handle screws which were removed from this monitor.
- Be sure the handles are attached securely.

Attaching the USB flash drive cover

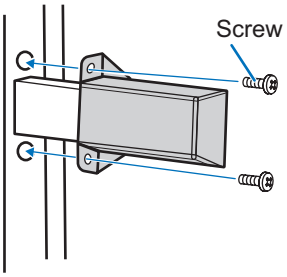
1. **Remove the screws on both sides of the USB port.**



2. **Insert the USB flash drive into the USB port.**



3. **Attach the USB flash drive cover and secure with the screws removed in step 1 (×2).**



TIP

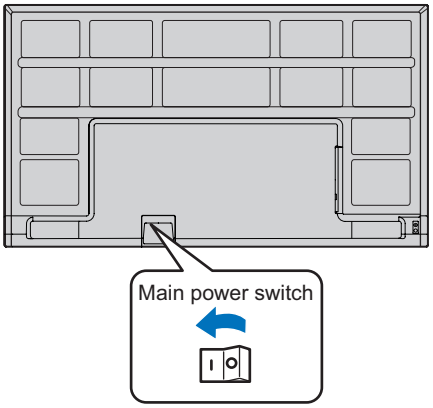
- If the USB flash drive cover will be attached, use a USB flash drive with dimensions no greater than 1-15/16 inch (50 mm) (L) (including the terminal) × 13/16 inch (20 mm) (W) × 1/2 inch (12 mm) (H).

Turning Power On/Off

NOTE

- Turn on the monitor first before turning on the computer or playback device.
- When switching the main power switch or the POWER button off and back on, always wait for at least 5 seconds. A short interval may result in a malfunction.

Turning on the main power



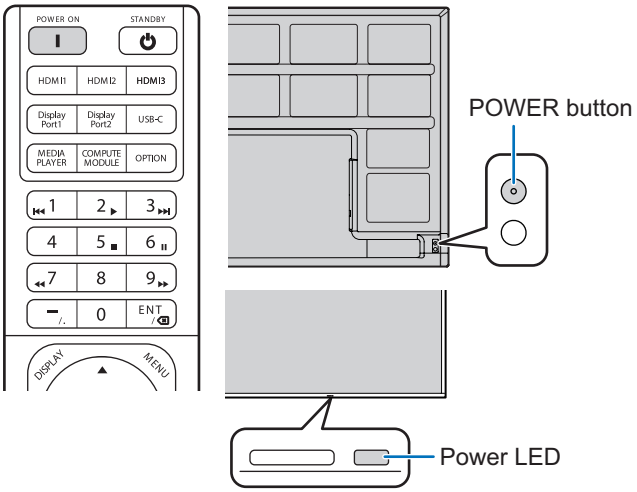
Off mode, when main power is off.

NOTE

- The main power must be turned on/off with the main power switch. Do not connect/disconnect the power cord or turn the breaker on/off while the main power switch is on.
- For a complete electrical disconnection, pull out the main plug.

Turning power on

1. Press the POWER ON button on the remote control unit. Or, press the POWER button on the monitor.



Status	Status of the monitor
Blue lit	Power on
Orange lit	Power off (Standby state*)
Blue flashing	Input signal waiting state

* Networked standby mode when the LAN cable is connected to the LAN terminal.
Networked standby mode allows the monitor to be turned on via network (LAN, RS-232C, and HDMI CEC).
Standby mode when the LAN cable is not connected to the LAN terminal.

TIP

- When the main power switch is off, the monitor cannot be turned on.
- When the monitor is in the input signal waiting state and press the POWER button on the monitor or POWER ON button on the remote control unit, the monitor is turned on.

■Date/time setting

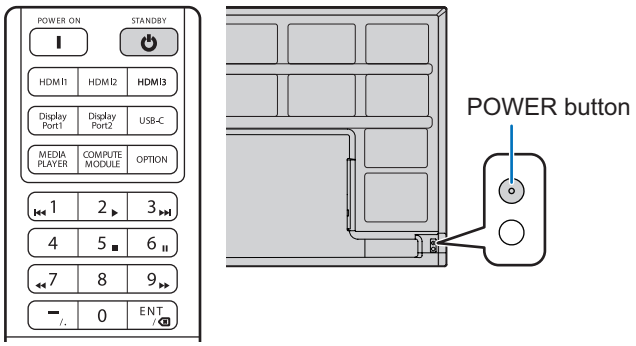
- If the time has yet to be set when the monitor is first turned on, the date/time setting screen appears. Set the date and time.
- Be sure to set the date and time.

TIP

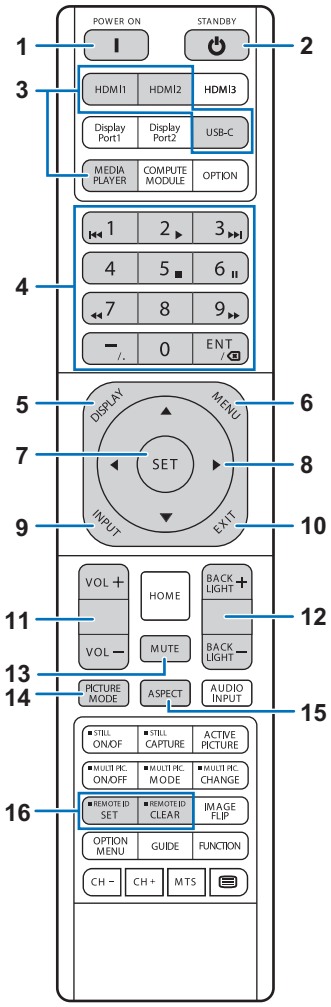
- The clock initialises if the mains power remains off for about 1 week.*
(*Approximate time. The actual time varies depending on the state of the monitor.)

Turning power off

1. Press the STANDBY button on the remote control unit. Or, press the POWER button on the monitor.



Basic Operation



The buttons with no explanation are not used with your monitor model.

1. POWER ON
Turn on the power.

2. STANDBY
Puts this monitor into standby state.

3. DIRECT INPUT Buttons
Immediately changes the input to the one named on the button.

4. Numeric input buttons
Press the buttons to set and change IP address and set the remote control number. (See page 27.)
Some buttons are used for the CEC function.
The – (hyphen) button is the same means as ". (dot)". The ENT button works as backspace.
The following buttons are used to play files in Media Player.
"1(⏮)", "2(▶)", "3(⏭)", "5(■)", "6(⏸)", "7(◀◀)", "9(▶▶)"

5. DISPLAY
Displays monitor information.

INFORMATION1	
INPUT	HDMI1
ASPECT	FULL
PICTURE MODE	STANDARD
BACKLIGHT	80
VOLUME	10
MODEL	PN-EXXX
MAIN	VX.XX
LAN	VX.XX
S/N	XXXXXXXX

INFORMATION2	
SIGNAL	3840x2160@60Hz
DATE/TIME	2025/01/01 WED 00:00
STATUS	0000-000000-00-0000
CONTROL INTERFACE	RS-232C
IP SETTING	AUTO
IP ADDRESS	xxx.xxx.xxx.xxx
SUBNET MASK	xxx.xxx.xxx.xxx
DEFAULT GATEWAY	xxx.xxx.xxx.xxx
MAC ADDRESS	xx:xx:xx:xx:xx:xx

The display changes from "INFORMATION1" → "INFORMATION2" → disappears the display, and so on every time you press this button.
Pressing the EXIT button disappears the display.
- The display disappears automatically after about 15 seconds.

Displays file information when playing a file on Media Player.

6. MENU
Displays and turns off the menu screen. (See page 20.)

7. SET
Confirms the setting.
Changes the alphabet upper/lower case when entering characters such as "USER NAME" and "PASSWORD".

8. Cursor
These buttons are used to perform operations such as selecting items, changing adjustment values, and moving the cursor.

9. INPUT (Input mode selection)
The menu is displayed.

10. EXIT
Returns to the previous screen.

11. VOLUME +/- (Volume adjustment)
Press + or - to adjust the volume.

12. BACKLIGHT +/- (Brightness adjustment)
Press + or - to adjust the brightness.

13. MUTE
Turns off the volume temporarily.
Press the MUTE button again to turn the sound back to the previous level.

14. PICTURE MODE
Select picture mode.

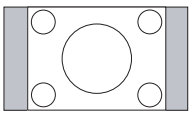
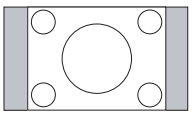
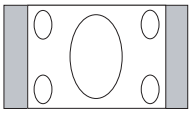
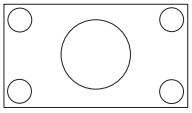
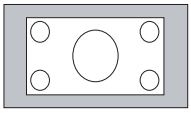
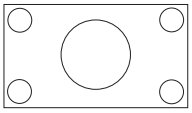
PICTURE MODE	PURPOSE
STANDARD	Standard setting.
RETAIL	Bright, vivid colors ideal for advertising and branding.
CONFERENCING	Lower color temperature and optimized for natural human complexions.
HIGHBRIGHT	Maximum backlight brightness with higher color temperature for brighter ambient environments.
TRANSPORTATION	Maximum backlight brightness with high contrast to read text under all conditions.
CUSTOM	Custom setting.

15. ASPECT
Select the image aspect ratio. (See below.)

16. REMOTE ID
If there is another monitor nearby, you can change the remote control number to prevent the other monitor from being operated by the remote control unit. (See page 27.)

■ Setting the Aspect Ratio

Select the image aspect ratio in “ASPECT” of “ADVANCED” on the PICTURE menu.
The aspect ratio changes from “FULL” → “WIDE” → “NORMAL” → “1:1” → “FULL”, and so on every time the ASPECT button on the remote control unit.

Aspect ratio of image	Unchanged view*1	Recommended selection for picture aspect		Description
4:3		NORMAL		Reproduces the aspect ratio that is sent from the source.
Squeeze		FULL		Fills the entire screen.
Letterbox		WIDE		Expands a 16:9 letter box signal to fill the entire screen.

*1 Gray areas indicate unused portions of the screen.

“1:1”: Shows the image in a 1 by 1 pixel format.
“WIDE”: The zoom function increases the image size, which expands the image beyond the active screen area. The parts of the image outside the active screen area are not shown.

TIP

- When used with a screen aspect ratio different from that of the original signal, distortion will occur on the screen.
  Example: When the input signal is 4:3 and this function is set to “FULL”, the screen will be horizontally wide.

NOTE

- Using this function to compress or expand the screen for commercial or public viewing in establishments like cafes or hotels may infringe on the rights of the creators, as protected by Copyright Law, so please be careful.

Using Media Player

You can play photo, music, and video files in a USB flash drive connected to the monitor.
You can also play Music file during Photo file display.
For information on USB flash drive, see page 11.

■ Supported formats

The types of files that can be played are as follows.
(Not all files are guaranteed to be played back.)

Photo files

Extension	Max. resolution
.jpg (.jpeg)	15360 x 8640

- Progressive JPEG files are not supported.
- Only YUV (YCbCr) color format images are supported. RGB and CMYK format images are not supported.
- For slideshows, please use YUV (YCbCr) 4:2:0 format images.

Music files

Extension	Audio coding	Sample rate
*.mp3	MPEG 1/2 layer3	32, 44.1, 48 kHz

Video files

Extension	Video coding	Audio coding	Max. resolution
*.mp4	H.264 (Main Profile @ Level5.0)	MP3, LPCM, AAC	3840x2160 @60fps
	H.265 (Main @ Level5.0)		
*.ts	mpeg2 (MP @HL)	MP3, LPCM, AAC	1920x1080 @30fps
	H.264 (Main Profile @ Level5.0)		3840x2160 @60fps
	H.265 (Main @ Level5.0)		

- In some cases it may not be possible to play the above files.
- A maximum of 32 alphanumeric characters can be used for folder name and file name.
- Do not use a file that is over 4 GB.
- When using the monitor in portrait orientation, use content that is created portrait-oriented and rotated 90 degrees to the right.

Playing files

TIP

- Files are displayed/played according to the order numerical and alphabetical filename.
- You can have photo or video files play automatically when a USB flash drive is connected or the power is turned on. (See page 19.)

■ Select the type of file to be played

1. **Insert the USB flash drive into the monitor. (See page 11.)**
2. **Change an input mode to [USB]. (See page 16.)**
3. **Select the type of file to be played with the ◀ or ▶ button, and press the SET button.**

■ Playing files

1. **Displays the file to be played.**
   Select the folder with the ◀, ▶, ▲ or ▼ button and press the SET button to show the files in the folder.
2. **Select the file you want to play, and press the SET button.**
   The file is selected.
   Multiple files can be selected. You can also select files in different folders.
3. **Press the ▶ (Play) button.**
   The selected files are played.

TIP

- “ASPECT” during playback is “NORMAL”.
- If you press the ▶ (Play) button without selecting a file, all the files in the folder will be played.
- Select “TOP” to return to the root folder, select “UP FOLDER” to return to the next higher folder.
- The volume can be adjusted with the VOLUME button and MUTE button on the remote control.
- For operations during play, see page 19.

■ To stop play

1. **Press the ■ (Stop) button.**

Operations during play

When playback starts, you can display the operation bar in the bottom of the screen by pressing the SET button.
You can perform the actions below while the operation bar is displayed.

Play / Pause	Play the current file./ Pause the playing file.
FB	Fast backward playing the file. (MUSIC and VIDEO only)
FF	Fast forward playing the file. (MUSIC and VIDEO only)
Prev.	Go to the previous file.
Next	Go to the next file.
Stop	Stop the playing file.
RepeatNone / Repeat1file / RepeatALL	RepeatNone: Play files in the playlist only once. Repeat1file: Play and repeat the current file. RepeatALL: Play and Repeat files in the playlist.
Set A / Set B / None	Play and repeat set interval. SetA: Set the interval of the start point. SetB: Set the interval of the end point. (MUSIC and VIDEO only)
Random On / Random Off	Random On: Play and repeat files of the playlist in random. Random Off: Play files of the playlist in order.
Music On / Music Off	Setting to “Music On”, the photo and music files in the same folder are played at the same time. (PHOTO only)
Playlist	Show Playlist.
Info	Show Playing file information.
Rotate (Clockwise)	Rotate the current file 90 degrees clockwise temporarily. (PHOTO only)
Rotate (Anti-Clockwise)	Rotate the current file 90 degrees Anti-clockwise temporarily. (PHOTO only)
Zoom In	The file zooms in. (PHOTO only)
Zoom Out	The file zooms out. (PHOTO only)
Move View	Select view area in zoomed. (PHOTO only)
Slideshow Time	Select Slideshow time. This setting is also applied to auto play and schedule play. The times below are general guidelines, and will vary by file. Short.....About 5 seconds Medium....About 10 seconds Long.....About 15 seconds (PHOTO only)

Auto playback

The photo files (in .jpg (.jpeg)) or video files (in .mp4 format) in a USB flash drive can be played automatically.

■ Preparations

Prepare the files. Name the file to be played “001-030” such as “001.jpg” - “030.jpg”.

1. **Create a folder named “autoplay” in the root folder of a USB flash drive and copy the files to be automatically played to the folder.**

Select the type of file.

1. **Press the MENU button, and select “SYSTEM” with the ◀ or ▶ button, select “AUTO PLAY” with the ▲ or ▼ button.**
2. **Select the type of file with the ◀ or ▶ button.**

■ Auto playback of files

1. **Connect a USB flash drive (see page 11) and turn on the monitor power.**
   Auto play starts.

   You can connect a USB flash drive (see page 11) after turning on the monitor power.
   Auto play starts.

TIP

- Photos and video cannot be played automatically at the same time.
- Auto play repeatedly plays all photo or video files in the “autoplay” folder.

■ To stop auto play

1. **Press the ■ (Stop) button.**

Playing files using the SCHEDULE function

The photo files (in .jpg (.jpeg)) or video files (in .mp4 format) in a USB flash drive can be automatically played using the SCHEDULE function.
Set “INPUT” in “SCHEDULE” to “MEDIA PLAYER”, “AUTO PLAY1” or “AUTO PLAY2”. (See page 27.)
The photo or video files in the folders below will be played.
MEDIA PLAYER:\autoplay
AUTO PLAY1:\autoplay1
AUTO PLAY2:\autoplay2

Menu Items

Displaying the menu screen

Video and audio adjustment and settings of various functions are enabled. This section describes how to use the menu items. See page 21 for details of each menu items.

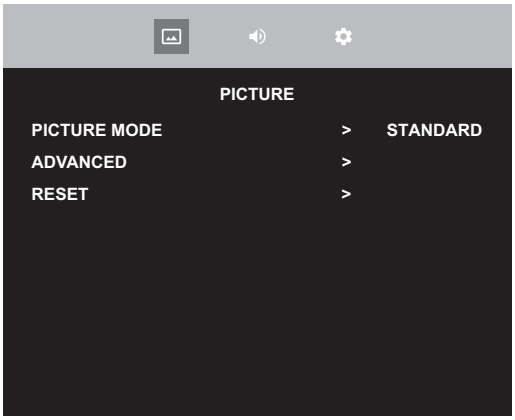
NOTE

- Do not turn the main power switch off while the menu items are being displayed. Doing so may initialize the settings.

■Example of operation

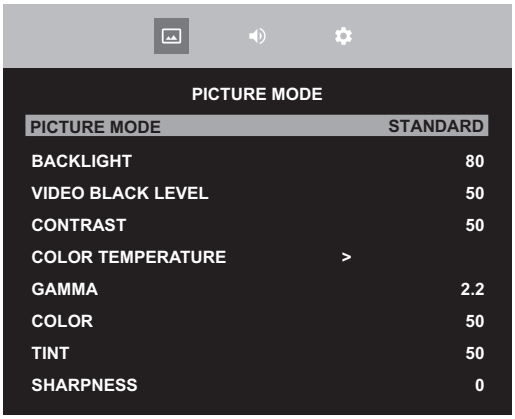
(Adjusting “CONTRAST” in the PICTURE menu)

1. Press the MENU button to display the menu screen.

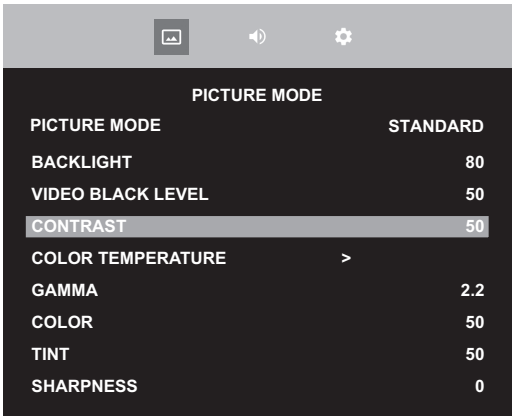


2. Press the ◀ or ▶ button to select “PICTURE”, and press the SET button.

3. Press the ◀ or ▶ button to select picture mode.



4. Press the ▲ or ▼ button to select “CONTRAST”.



5. Press the ◀ or ▶ button to adjust the setting.

For items that have >, press the SET button, make settings and then press the EXIT button.

6. Press the MENU button to close the menu screen.

TIP

- The menu will differ depending on the input mode.
- The menu screen will close automatically if no operation is performed for about 15 seconds.
- Items that cannot be selected appear in gray. (e.g. Function not supported by the current input signal)

Menu item details

The menu will differ depending on the input mode.
The settings below are recommended settings and conforms to the “Normal Configuration” as defined in the EcoDesign Regulation (2019/2021).

- REFRESH MODE: OFF

■ PICTURE

PICTURE MODE

Changes the picture mode on the screen. The picture mode on the screen can also be changed using a remote control unit. This setting will be set to “CUSTOM” when changing other settings in “PICTURE MODE”.

BACKLIGHT
Adjusts the backlight brightness.

VIDEO BLACK LEVEL
Adjusts the entire brightness of the video signals.

CONTRAST
Adjusts the difference between the bright and dark portions of the image.

COLOR TEMPERATURE
Selects the color temperature.
The setting values are shown for reference. The color temperature of the screen varies over time. This function is not intended to keep the color temperature constant.
NATIVE: Displays the input signal level as is.
CUSTOM: Adjusts R/G/B GAIN respectively.
R GAIN ..... Adjusts bright-toned red component.
G GAIN ..... Adjusts bright-toned green component.
B GAIN..... Adjusts bright-toned blue component.

GAMMA
Selects the gamma.

COLOR
Adjusts the color intensity.

TINT
Adjusts the hue. Selecting + changes the color towards green, and selecting - changes it towards magenta.

SHARPNESS
Adjusts the sharpness of the image.

ADVANCED

ASPECT
Select the image aspect ratio.

NOISE REDUCTION
Reduce the image noise.
Setting a higher level reduces more noise. However, it may cause blurring on an image.

VIDEO RANGE
Sets the RGB input signal range.
Use “AUTO” normally.
If the RGB input signal range cannot be set appropriately even when using “AUTO”, set according to the image. When the setting is different, images will be displayed with washed out blacks and compressed gradients.

RESET

Resets the values of the PICTURE menu items to the factory default settings.
Press the ◀ button to perform RESET.

■ AUDIO

TREBLE

Adjusts the volume of treble-level sound.

BASS

Adjusts the volume of bass-level sound.

BALANCE

Adjusts the balance of the audio sound between right and left.

INTERNAL SPEAKER

Enables or disables sound output from the internal speakers.

LINE OUT

Sets the volume of sound output from the audio output terminals.
FIXED ..... Fixes the sounds.
VARIABLE .... You can adjust the volume using “volume adjustment”.

RESET

Resets the values of the AUDIO menu items to the factory default settings.
Press the ◀ button to perform RESET.

■ SYSTEM

LANGUAGE

Sets the display language for the menu screen.

DATE & TIME

YEAR/MONTH/DAY/TIME

Set the date and time.

AM/PM

This setting is configured when “TIME FORMAT” is set to “12-HOUR TIME”.

DATE FORMAT

Sets the date display format.

TIME FORMAT

Select 12- or 24-hour time.

SCHEDULE (See page 27.)

You can turn the power on/off at a specified time.

CEC

CEC

OFF .....HDMI CEC function is not used.

ON.....Use the HDMI CEC function.

If the device connected to the HDMI input terminal supports CEC, the input mode of the monitor changes to HDMI when playback starts on the device.

POWER CONTROL LINK

Sets whether an external device connected via HDMI-CEC is turned off when the monitor is switched to Power off (Standby state).

Sets whether the monitor is switched to Power off (Standby state) when an external device connected to HDMI-CEC is switched off.

Set whether the monitor is turned on when an external device connected to HDMI-CEC is turned on.

The connected HDMI-CEC compatible device may not go into standby if it is recording.

AUDIO RECEIVER

DISABLE ... Audio is output from this monitor’s internal speaker.

ENABLE .... Audio is output from the ARC-compatible device connected to the HDMI1 input terminal.

Audio is not output from the internal speaker or audio output terminal.

AUTO INPUT CHANGE

Specify whether to change inputs automatically. When “ON” is selected and no signal is present in the selected input mode, the monitor automatically changes the selected mode to another mode where a video signal is present.

When video signals exist in multiple input modes, the switching is as follows:

USB (when a USB flash drive is connected), HDMI1, HDMI2, USB-C

(Input mode switching may take 15 seconds or more, depending on the connected equipment. When there are no signals at any of the input terminals, switching is continued until an input signal is detected and the monitor does not enter input signal waiting state.)

HDMI MODE

HDMI MODE settings change how the content displayed is processed and decoded using the HDMI input terminal.

MODE 1...Normally used. This will support most common color spaces and other encoding signals.

MODE 2...Use this when input signal does not display correctly in “MODE 1”. Up to 4K30p can be displayed.

CONTROL SETTINGS

CONTROL INTERFACE

Selects the method with which to control the monitor from the computer.

NETWORK SETTINGS

Configures the settings to control the monitor from the computer via LAN.

IP SETTING ..... If your LAN has a DHCP server and you wish to obtain an address automatically, change this setting to “AUTO”.
To set the address manually, set this to “MANUAL”.

IP ADDRESS..... If the “IP SETTING” is set to “MANUAL”, specify an IP address.

SUBNET MASK ..... If the “IP SETTING” is set to “MANUAL”, specify the subnet mask.

DEFAULT GATEWAY..... If the “IP SETTING” is set to “MANUAL”, specify the default gateway.
If you are not using a default gateway, specify “000.000.000.000”.

PC CONTROL

PC CONTROL.....Sets whether or not to control this monitor via network.
USER NAME.....Sets an account name when connecting to this monitor.
Press the SET button to change the alphabet upper/lower case.
PASSWORD .....Sets a password when connecting to this monitor.
Press the SET button to change the alphabet upper/lower case.
AUTO LOGOUT ....Sets whether or not to log out automatically when there is no communication for approx. 15 minutes.

RESET

Initialize the “CONTROL SETTINGS” settings.

POWER SAVE SETTINGS

POWER SAVE

“POWER SAVE” determines whether or not to switch modes from no signal to the input signal waiting state.

TIME SETTING

Set the time to switch to input signal waiting state when there is no signal.

AUTO PLAY

Set the type of file to be automatically played from a USB flash drive. (See page 19.)

KEY LOCK SETTINGS

You can disable the monitor buttons.
To disable the lock, press the DISPLAY button for 5 seconds or more.
UNLOCKED.. Enables operation.
LOCK ALL..... Locks all button operations.

IR LOCK SETTINGS

You can disable the remote control buttons.
To disable the lock, press the DISPLAY button for 5 seconds or more.
UNLOCKED.....Enables operation.
LOCK ALL.....Locks all button operations.
LOCK EXCEPT VOLUME ...Locks operations other than VOLUME +/-.
LOCK EXCEPT POWER.....Locks operations other than power operation.

MONITOR ID

Sets the number of the remote control unit. (See page 27.)

THERMAL SENSOR SETTING

Select the installation direction of the monitor.
LANDSCAPE.....Landscape orientation
PORTRAIT .....Portrait orientation

OSD

INFORMATION OSD

Displays or hides the Information OSD.

Information OSD contains the messages that are displayed on the screen when the input is switched or when the state of the input signal changes.

CAUTION WINDOW

Sets whether to display a caution window (ON) or not (OFF) when a file with a format or a codec not supported by the monitor is played.

180°ROTATE

You can rotate the video 180 degrees.

POWER INDICATOR

Specifies whether to light the power LED.

TILE MATRIX

TILE MATRIX

Sets whether or not to use the TILE MATRIX function.

H MONITORS/V MONITORS

Sets the number of screen splits (number of monitors) in the horizontal/vertical direction used for the TILE MATRIX function.

POSITION

Specify the split screen to be displayed when the TILE MATRIX function is used.

BEZEL ADJUST

Sets whether or not to use the frame correction function when “TILE MATRIX” is set to “ON”.

When the input signal is as below, the image will be displayed by correcting the bezel width of the adjacent monitor.

3840x2160, 1920x1080, 1280x720

SCREEN SAVER

MOTION

Residual images are reduced by moving the screen.

INTERVAL

Sets the operation interval (seconds) for “MOTION”.

REFRESH MODE

Sets whether or not to perform Panel Refresh when this monitor is in the input signal waiting state or standby state.

Residual images are reduced by performing Panel Refresh. (In this case, power consumption will increase.)

OFF……Panel Refresh will not be performed.

MODE 1…Panel Refresh will be performed when this monitor is in the input signal waiting state or standby state.

MODE 2…Panel Refresh will be performed when this monitor is in the standby state.

MONITOR INFORMATION

Displays the information of this monitor.

UPDATE FIRMWARE

Updates the firmware.

If you connect the USB flash drive containing the firmware to this monitor and then press the ◀ button, the firmware will be updated.

FACTORY RESET

Resets the settings to the factory default settings.

Press the ◀ button to perform FACTORY RESET.

■ TILE MATRIX

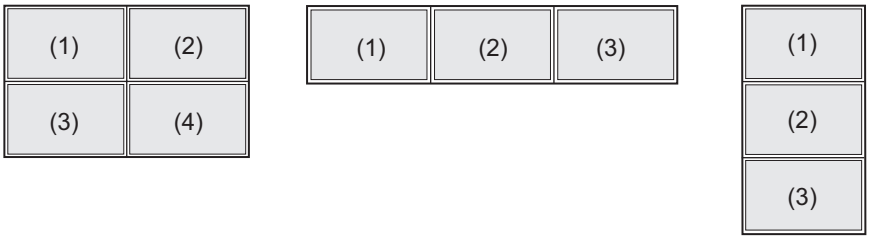
- You can align several monitors and integrate them into a single large screen to display. (Maximum 4 monitors. However, maximum 3 monitors per side.)
- Each monitor displays enlarged views of separated images.

Setting procedure

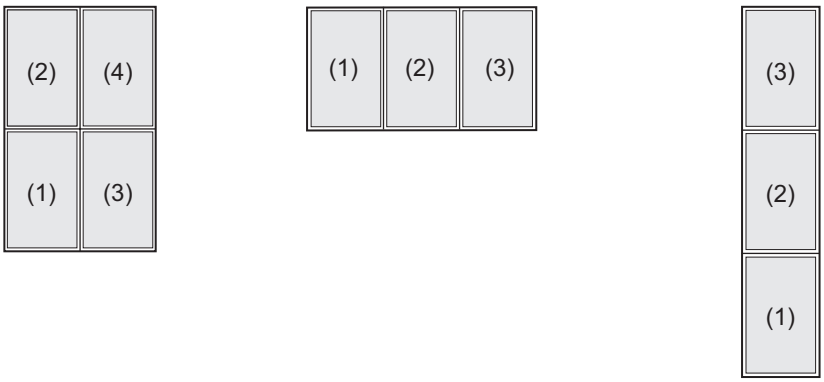
1. **Select “TILE MATRIX” on the SYSTEM menu.**
2. **Set “TILE MATRIX” to “ON”.**
3. **Set the number of monitors aligned in the horizontal direction in “H MONITORS”.**
4. **Set the number of monitors aligned in the vertical direction in “V MONITORS”.**
5. **Set the section of the separated image to be displayed on each monitor in “POSITION”.**

POSITION

For the monitor in landscape orientation



For the monitor in portrait orientation



■SCHEDULE

You can set the time to switch the monitor on and off.
An auto play file in a USB flash drive can also be played at a specified time. (See page 19.)
Set this function with “SCHEDULE” in the SYSTEM menu. (See page 23.)

1. **Insert the USB flash drive to be played into USB port on the monitor when playing files. (See page 11.)**
2. **Press the ▲ or ▼ button to select the SCHEDULE number, and press the ▶ button.**
3. **Set the “SCHEDULE”.** (See the description below.)
4. **Press the EXIT button.**

ON/OFF

OFF: “SCHEDULE” not effective.
ON: “SCHEDULE” effective.

MODE

ON AND OFF....This monitor will be turned on at the specified time and turned off at the specified time. (This monitor will be in standby state.)
Set the “ON TIME” and “OFF TIME”.

ON ONLY.....This monitor will be turned on at the specified time.
Set the “ON TIME”.

OFF ONLY.....This monitor will be turned off at the specified time. (This monitor will be in standby state.)
Set the “OFF TIME”.

ON TIME

Specify the time to turn on this monitor.

OFF TIME

Specify the time to turn off this monitor.

REPEAT MODES

Specifies the day of the week to execute the “SCHEDULE”. When select “ONLY ONCE”, executes the “SCHEDULE” once on the specified day.

INPUT

Specifies the input mode at power-on.

AUTO PLAY1/AUTO PLAY2

Set the type of file to be automatically played from a USB flash drive. Photos and video cannot be played automatically at the same time.

RESET

Initialize the “SCHEDULE” settings.

NOTE

- Do not switch off the main power after setting the “SCHEDULE”.
- Specify the correct date and time. (See page 23.) “SCHEDULE” does not function unless the date and time are specified.
- Check regularly that the set date and time are correct.

TIP

- Up to 7 SCHEDULE items can be registered.
- Setting the SCHEDULE flashes the power LED in orange in standby state.
- A SCHEDULE that has a large number has precedence over that of a small number when schedules overlap.

■About remote control numbers

If there is another monitor nearby, you can change the remote control number to prevent the other monitor from being operated by the remote control unit.
Set the same number in the monitor and in the remote control unit.

TIP

- You can set remote control numbers to values from 0 to 25.
- When the remote control unit batteries become exhausted and when you replace the batteries, the number on the remote control unit may be reset to 0.

Changing the remote control number on the monitor

Use “MONITOR ID” on the SYSTEM menu to set the number. (See page 24.)

Enable the remote control number on the remote control unit.

1. **Press and hold the REMOTE ID SET button on the remote control unit for 2 seconds or more.**
   The remote control number will be the one previously set. (Initial value: 1)

Changing the remote control number on the remote control unit

1. **While holding down the REMOTE ID SET button, press the number that corresponds to the remote control number.**
   - You can set remote control numbers to values from 0 to 25. Please enter the number without leaving any time.
   - When the remote control number is set to “0”, all monitors can be operated regardless of the remote control number on this monitor.
2. **Release the REMOTE ID SET button.**
   The remote control number is set on the remote control unit.

Checking the remote controller number

1. **Press the REMOTE ID SET button on the remote control unit.**
   The remote control number will appear on this monitor.
   If it appears in red, the remote control numbers on this monitor and remote control unit match.
   If it appears in white, the remote control numbers do not match.

TIP

- To disable the remote control number on the remote control unit, press and hold the REMOTE ID CLEAR button for more than 2 seconds.

Troubleshooting

If you are experiencing any problem with your display, before calling for service, please review the following troubleshooting tips.

There is no picture or sound.
- The power LED is off.
  - Is power supplied to this monitor?
  - Is the power cord disconnected? (See page 12.)
  - Is the main power switch off? (See page 15.)
- The power LED lights orange.
  - This monitor is in standby state. Turn on the power. (See page 15.)
- The power LED flashes blue (1 second interval).
  - There is no input signal.
  - Is an input mode selected that is appropriate for the input terminal to which the cable is connected? (See page 16.)
  - If any external equipment is connected, make sure the equipment is operating (playing back).

Remote control does not work.
- Are the batteries inserted with polarity (+,-) aligned? (See page 13.)
- Are the batteries exhausted?
- Point the remote control unit toward the monitor's remote control sensor. (See page 13.)
- Is operation disabled? (See page 24.)
- Do the remote control numbers on the remote control unit and on the monitor match? (See page 27.)

There is a picture but no sound.
- Is the sound muted?
- Make sure the volume is not set to minimum.
- Are audio cables connected properly?

Unstable video.
- The signal may be incompatible.

The video from the HDMI input terminal does not appear properly.
- Does the HDMI cable support 4K, and is it HDMI standard compliant? The monitor will not work with cables that are not standard compliant.
- Is the input signal compatible with this monitor? (See page 35 and page 36.)
- If the connected device does not support 4K, set "HDMI MODE" to "MODE 2".

The video from the USB Type-C does not appear properly.
- Is the input signal compatible with this monitor? (See page 35 and page 36.)

Control buttons do not work.
There is no picture.
- Load noises from outside may be interfering with normal operation. Turn off the main power and turn it on after waiting at least 5 seconds, and then check the operation.

The input mode changes automatically.
- When the "AUTO INPUT CHANGE" is "ON" and no signal is present in a selected input mode, the monitor automatically changes the selected mode to a mode where a video signal is present.
  The input mode may change in the following cases:
  - When a computer is in standby mode.
  - When video play is stopped with a playback device.

When "AUTO DIMMING" is displayed.
- When the internal temperature of the monitor rises excessively, the brightness of the backlight automatically decreases in order to prevent a further temperature rise. If you attempt to adjust the brightness while the monitor is in this state, "AUTO DIMMING" is displayed and you cannot change the brightness.
- Remove the cause of the excessive temperature rise.

The monitor makes a cracking sound.
- You may occasionally hear a cracking sound from the monitor. This happens when the cabinet slightly expands and contracts according to change in temperature. This does not affect the monitor's performance.

The Power LED is flashing in orange and blue alternately.
- When the internal temperature of the monitor rises excessively, the brightness of the backlight decreases automatically in order to prevent high-temperature-related problems. When this occurs, the Power LED flashes orange and blue alternately.
- If the internal temperature rises further, the monitor automatically enters standby state. (The Power LED continues flashing orange and blue alternately.)
- Remove the cause of the excessive temperature rise.
  - If the monitor enters standby state due to a rise in temperature, to return to normal display, turn the power switch off and then back on again. The monitor, however, will enter standby state again if the cause of the temperature rise is not eliminated. (See page 7.)
  - Check whether the monitor is placed at a location where a quick rise in temperature is likely. Internal temperature rises quickly if the vents on the monitor are blocked.
  - Internal temperature rises quickly if dust accumulates inside the monitor or around the vents. Remove dust if possible. Ask SHARP dealer about removing internal dust.

Specifications

■Product Specifications

Model		PN-E869	PN-E759
LCD component		86” Class [85-5/8 inch (217.43 cm) diagonal] TFT LCD	75” Class [74-9/16 inch (189.34 cm) diagonal] TFT LCD
Max. resolution (pixels)		3840 × 2160	
Max. colors		Approx. 1.07 billion colors	
Pixel pitch		0.4935 mm (H) × 0.4935 mm (V)	0.430 mm (H) × 0.430 mm (V)
Brightness (typical) *1		350 cd/m^2	
Contrast ratio (typical)		1200: 1	
Viewing angle		178° right/left/up/down (contrast ratio ≥ 10)	
Screen active area inch (mm)		74-5/8 (W) × 41-15/16 (H) (1895.0 × 1066.0)	64-15/16 (W) × 36-9/16 (H) (1650.2 × 928.3)
Response speed		8ms (Gray to Gray, Ave.)	
Plug and play		VESA DDC2B	
Input terminals	Video/Audio	HDMI × 2 USB Type-C × 1	
	Serial (RS-232C)	D-sub 9 pin × 1	
Output terminals	Audio	3.5 mm mini stereo jack × 1	
USB port		USB 2.0 compliant × 1	
LAN terminal		10 BASE-T/100 BASE-TX	
Speaker output		10 W + 10 W	
Power requirement		AC 100 V - 240 V, 3.6 A - 1.4 A, 50/60 Hz	AC 100 V - 240 V, 2.5 A - 1.0 A, 50/60 Hz
Operating temperature*2		32°F to 104°F (0°C to 40°C)	
Operating humidity		20% to 80% (no condensation)	
Storage temperature		-4°F to 140°F (-20°C to 60°C)	
Storage humidity		10% to 80% (no condensation)	
Power consumption*3 (Max / networked standby mode*4 / standby mode*4 / off mode)		245W (320W / 2.0W / 0.5W / 0.0W)	170W (220W / 2.0W / 0.5W / 0.0W)
Dimensions inch (mm) (excluding protrusions)		Approx. 75-7/8 (W) × 3-7/16 (D) × 43-1/4 (H) (1927 × 87.8 × 1098)	Approx. 66-1/8 (W) × 3-3/8 (D) × 37-3/4 (H) (1680 × 86.3 × 959)
Weight lbs. (kg)		Approx. 71.6 (32.5)	Approx. 52.9 (24.0)

*1 Brightness will depend on input mode and other picture settings. Brightness level will decrease over time. Due to the nature of the equipment, it is not possible to precisely maintain a constant level of brightness. This is the brightness of the LCD panel, not the brightness of the product.

*2 Temperature condition may change when using the monitor together with the optional equipments recommended by SHARP. In such cases, please check the temperature condition specified by the optional equipments.

*3 Factory setting. (When no optional part is attached.)

*4 When no optional part is attached.

As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

Specifications

Model		PN-E659	PN-E559
LCD component		65” Class [64-1/2 inch (163.90 cm) diagonal] TFT LCD	55” Class [54-5/8 inch (138.78 cm) diagonal] TFT LCD
Max. resolution (pixels)		3840 × 2160	
Max. colors		Approx. 1.07 billion colors	
Pixel pitch		0.372 mm (H) × 0.372 mm (V)	0.315 mm (H) × 0.315 mm (V)
Brightness (typical) *1		350 cd/m^2	
Contrast ratio (typical)		1200: 1	
Viewing angle		178° right/left/up/down (contrast ratio ≥ 10)	
Screen active area inch (mm)		56-1/4 (W) × 31-5/8 (H) (1428.5 × 803.5)	47-5/8 (W) × 26-13/16 (H) (1209.6 × 680.4)
Response speed		8ms (Gray to Gray, Ave.)	
Plug and play		VESA DDC2B	
Input terminals	Video/Audio	HDMI × 2 USB Type-C × 1	
	Serial (RS-232C)	D-sub 9 pin × 1	
Output terminals	Audio	3.5 mm mini stereo jack × 1	
USB port		USB 2.0 compliant × 1	
LAN terminal		10 BASE-T/100 BASE-TX	
Speaker output		10 W + 10 W	
Power requirement		AC 100 V - 240 V, 1.9 A - 0.8 A, 50/60 Hz	AC 100 V - 240 V, 1.6 A - 0.6 A, 50/60 Hz
Operating temperature*2		32°F to 104°F (0°C to 40°C)	
Operating humidity		20% to 80% (no condensation)	
Storage temperature		-4°F to 140°F (-20°C to 60°C)	
Storage humidity		10% to 80% (no condensation)	
Power consumption*3 (Max / networked standby mode*4 / standby mode*4 / off mode)		125W (170W / 2.0W / 0.5W / 0.0W)	100W (140W / 2.0W / 0.5W / 0.0W)
Dimensions inch (mm) (excluding protrusions)		Approx. 57-3/16 (W) × 2-3/8 (D) × 32-5/8 (H) (1453 x 59.7 × 829)	Approx. 48-9/16 (W) × 2-5/16 (D) × 27-13/16 (H) (1234 × 58.9 × 707)
Weight lbs. (kg)		Approx. 36.4 (16.5)	Approx. 26.5 (12.0)

*1 Brightness will depend on input mode and other picture settings. Brightness level will decrease over time. Due to the nature of the equipment, it is not possible to precisely maintain a constant level of brightness. This is the brightness of the LCD panel, not the brightness of the product.

*2 Temperature condition may change when using the monitor together with the optional equipments recommended by SHARP. In such cases, please check the temperature condition specified by the optional equipments.

*3 Factory setting. (When no optional part is attached.)

*4 When no optional part is attached.

As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

Model		PN-E509	PN-E439	PN-E329
LCD component		50” Class [49-1/2 inch (125.73 cm) diagonal] TFT LCD	43” Class [42-1/2 inch (107.99 cm) diagonal] TFT LCD	32” Class [31-9/16 inch (80.13 cm) diagonal] TFT LCD
Max. resolution (pixels)		3840 × 2160		1920 × 1080
Max. colors		Approx. 1.07 billion colors		Approx. 16.7 million colors
Pixel pitch		0.285 mm (H) × 0.285 mm (V)	0.245 mm (H) × 0.245 mm (V)	0.364 mm (H) × 0.364 mm (V)
Brightness (typical) *1		350 cd/m^2		
Contrast ratio (typical)		4000: 1	1200: 1	
Viewing angle		178° right/left/up/down (contrast ratio ≥ 10)		
Screen active area inch (mm)		43-1/8 (W) × 24-1/4 (H) (1095.8 × 616.4)	37-1/16 (W) × 20-13/16 (H) (941.2 × 529.4)	27-1/2 (W) × 15-7/16 (H) (698.4 × 392.9)
Response speed		8ms (Gray to Gray, Ave.)		
Plug and play		VESA DDC2B		
Input terminals	Video/Audio	HDMI × 2 USB Type-C × 1		
	Serial (RS-232C)	D-sub 9 pin × 1		
Output terminals	Audio	3.5 mm mini stereo jack × 1		
USB port		USB 2.0 compliant × 1		
LAN terminal		10 BASE-T/100 BASE-TX		
Speaker output		10 W + 10 W		5 W + 5 W
Power requirement		AC 100 V - 240 V, 1.6 A - 0.6 A, 50/60 Hz	AC 100 V - 240 V, 1.4 A - 0.6 A, 50/60 Hz	AC 100 V - 240 V, 0.8 A - 0.4 A, 50/60 Hz
Operating temperature*2		32°F to 104°F (0°C to 40°C)		
Operating humidity		20% to 80% (no condensation)		
Storage temperature		-4°F to 140°F (-20°C to 60°C)		
Storage humidity		10% to 80% (no condensation)		
Power consumption*3 (Max / networked standby mode*4 / standby mode*4 / off mode)		99W (135W / 2.0W / 0.5W / 0.0W)	85W (120W / 2.0W / 0.5W / 0.0W)	43W (70W / 2.0W / 0.5W / 0.0W)
Dimensions inch (mm) (excluding protrusions)		Approx. 44-1/8 (W) × 2-3/8 (D) × 25-1/4 (H) (1120 × 59.9 × 641)	Approx. 38 (W) × 2-5/16 (D) × 21-7/8 (H) (965 × 59.1 × 555)	Approx. 28-1/2 (W) × 2-5/16 (D) × 16-7/16 (H) (724 × 59.0 × 418)
Weight lbs. (kg)		Approx. 20.3 (9.2)	Approx. 16.5 (7.5)	Approx. 10.4 (4.7)

*1 Brightness will depend on input mode and other picture settings. Brightness level will decrease over time. Due to the nature of the equipment, it is not possible to precisely maintain a constant level of brightness. This is the brightness of the LCD panel, not the brightness of the product.

*2 Temperature condition may change when using the monitor together with the optional equipments recommended by SHARP. In such cases, please check the temperature condition specified by the optional equipments.

*3 Factory setting. (When no optional part is attached.)

*4 When no optional part is attached.

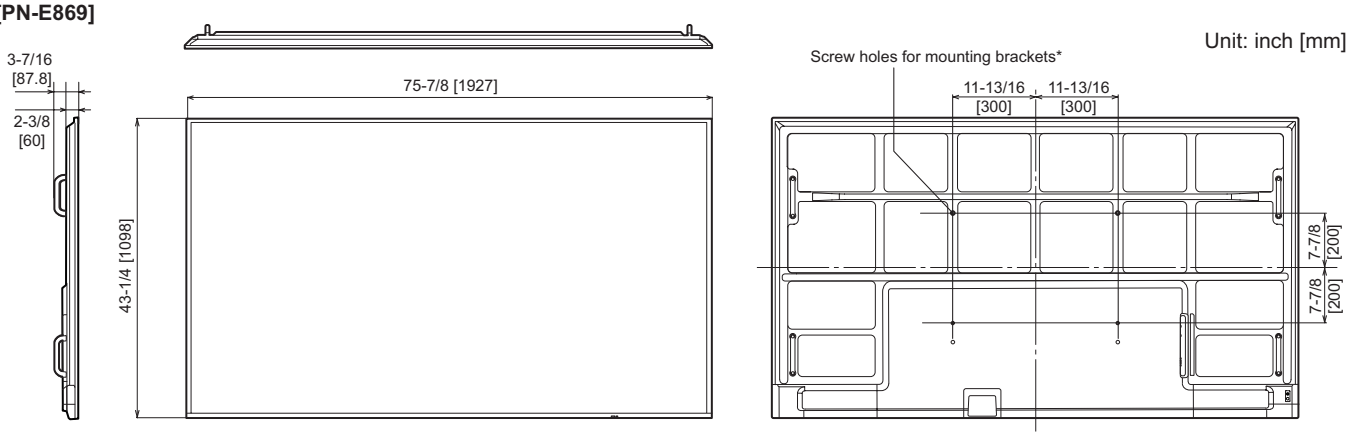
As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

■Dimensional Drawings

Note that the values shown are approximate values.

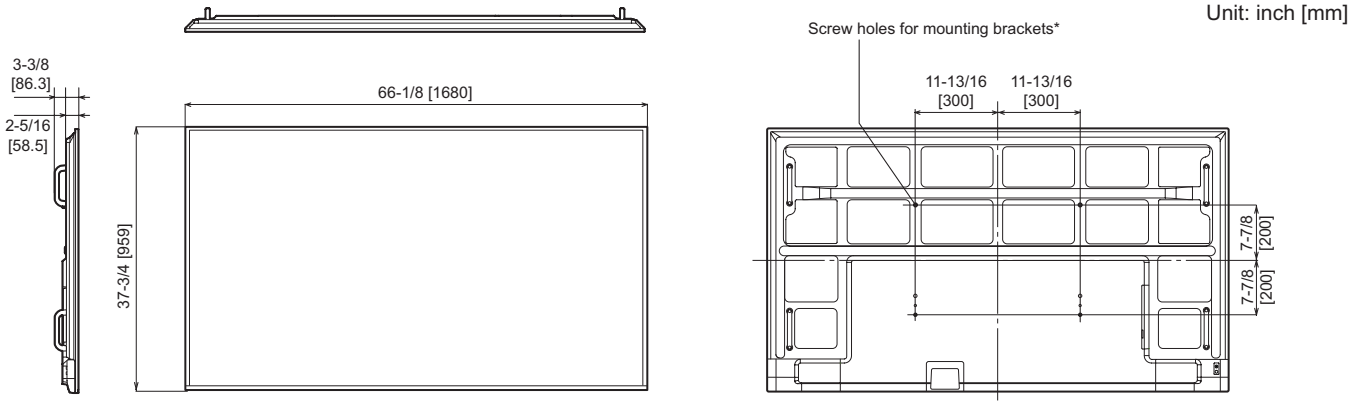
[PN-E869]

Unit: inch [mm]



[PN-E759]

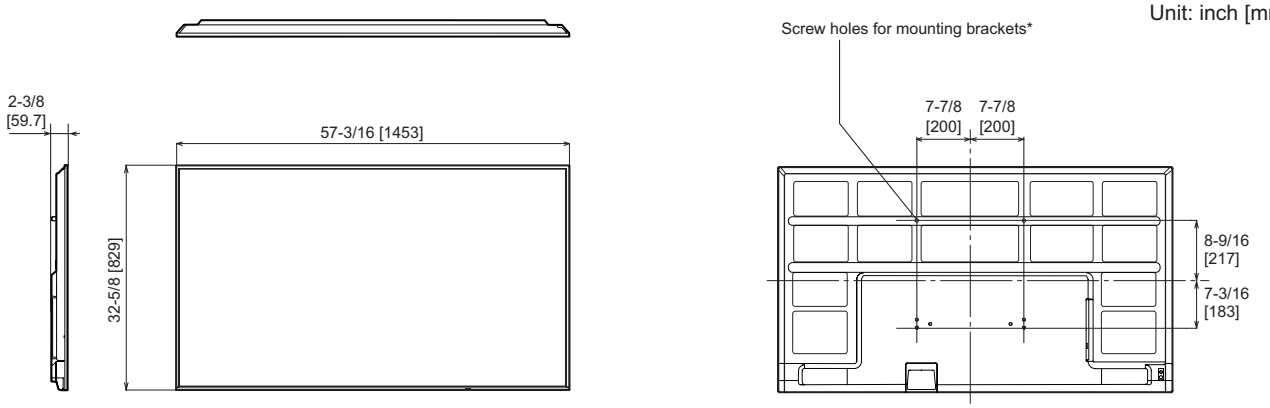
Unit: inch [mm]



* When mounting the monitor, be sure to use a wall-mount bracket that complies with the VESA-compatible mounting method. SHARP recommends using M8 screws and tighten the screws.
Note that screw hole depth of the monitor is 9/16 inch (15 mm). Loose mounting may cause the product to fall, resulting in serious personal injuries as well as damage to the product. The screw and hole should come together with over 3/8 inch (10 mm) length of thread. Use a bracket which has been approved for UL1678 standard, and which can endure at least 4 times or more the weight of the monitor.

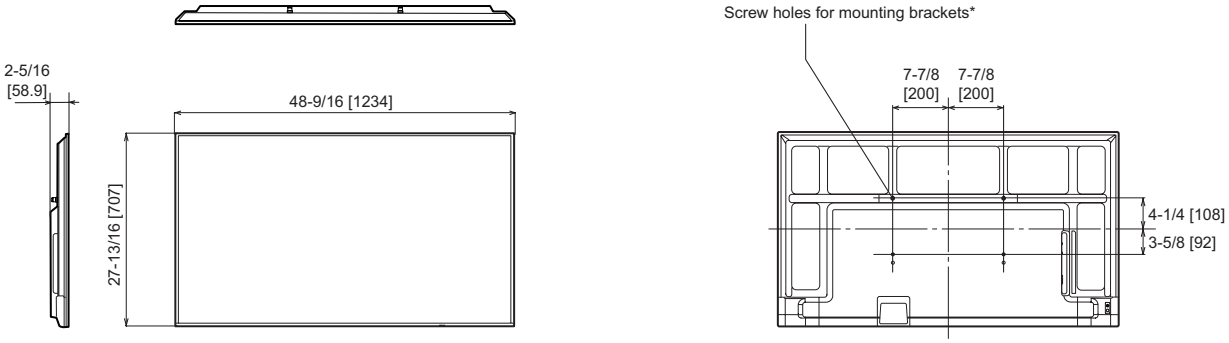
[PN-E659]

Unit: inch [mm]



[PN-E559]

Unit: inch [mm]

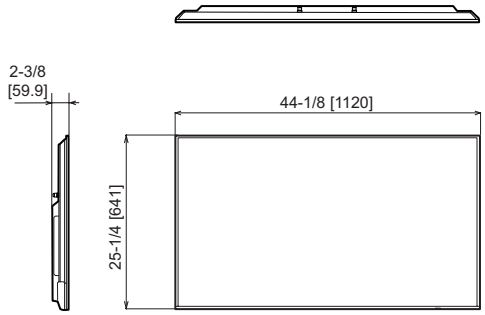


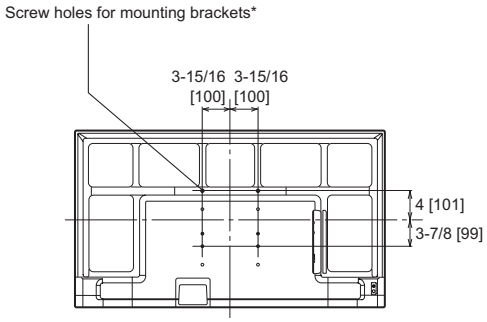
* When mounting the monitor, be sure to use a wall-mount bracket that complies with the VESA-compatible mounting method. SHARP recommends using M6 screws and tighten the screws.
Note that screw hole depth of the monitor is 3/8 inch (10 mm). Loose mounting may cause the product to fall, resulting in serious personal injuries as well as damage to the product. The screw and hole should come together with over 5/16 inch (8 mm) length of thread. Use a bracket which has been approved for UL1678 standard, and which can endure at least 4 times or more the weight of the monitor.

Specifications

[PN-E509]

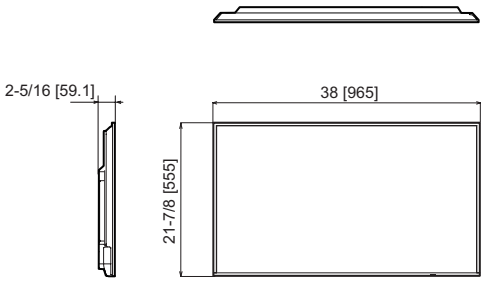
Unit: inch [mm]

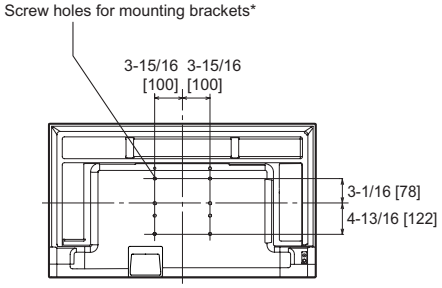




[PN-E439]

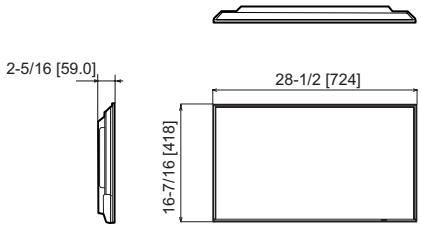
Unit: inch [mm]

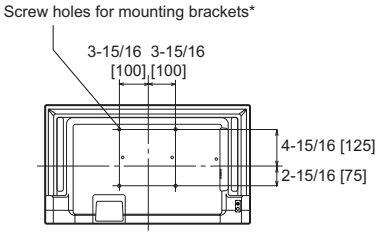




[PN-E329]

Unit: inch [mm]





* When mounting the monitor, be sure to use a wall-mount bracket that complies with the VESA-compatible mounting method. SHARP recommends using M6 screws and tighten the screws.
Note that screw hole depth of the monitor is 3/8 inch (10 mm). Loose mounting may cause the product to fall, resulting in serious personal injuries as well as damage to the product. The screw and hole should come together with over 5/16 inch (8 mm) length of thread. Use a bracket which has been approved for UL1678 standard, and which can endure at least 4 times or more the weight of the monitor.

■DDC (plug and play)

The monitor supports the VESA DDC (Display Data Channel) standard.
DDC is a signal standard for plug and play between monitors and computers. Information about resolution and other parameters is exchanged between the two. This function can be used if the computer supports DDC and it has been configured to detect plug-and-play monitors.
There are several types of DDC, depending on the communication method used. This monitor supports DDC2B.

■Compatible signal timing (PC)

Screen resolution		Vsync	HDMI		USB-C
			MODE 1*1	MODE 2*1	
VESA	640 × 480	60Hz	Yes	Yes	Yes
	800 × 600	60Hz	Yes	Yes	Yes
	1024 × 768	60Hz	Yes	Yes	Yes
	1280 × 800	60Hz	Yes	Yes	Yes
	1280 × 960	60Hz	Yes	Yes	Yes
	1280 × 1024	60Hz	Yes	Yes	Yes
		75Hz	Yes	Yes	Yes
	1360 × 768	60Hz	Yes	Yes	Yes
	1400 × 1050	60Hz	Yes	Yes	Yes
	1440 × 900	60Hz	Yes	Yes	Yes
	1680 × 1050	60Hz	Yes	Yes	Yes
Wide	1280 × 720	60Hz	Yes	Yes	Yes
	1920 × 1080	60Hz	Yes	Yes	Yes
	3840 × 2160*3	24Hz	Yes	Yes	Yes
		25Hz	Yes	Yes	Yes
		30Hz	Yes	Yes	Yes
		50Hz	Yes	-	Yes
		60Hz	Yes	-	Yes
	4096 × 2160*2	24Hz	Yes	Yes	Yes
		25Hz	Yes	-	Yes
		30Hz	Yes	-	Yes
		50Hz	Yes	-	Yes
		60Hz	Yes	-	Yes
US TEXT	720 × 400	70Hz	Yes	Yes	Yes

*1 “HDMI MODE” setting.
*2 Displays a reduced image, except when “ASPECT” setting is “1:1”. In “1:1”, the image will be cut down to panel size then displayed.
*3 Displays a reduced image, except when “ASPECT” setting is “1:1”. In “1:1”, the image will be cut down to panel size then displayed. (PN-E329 only)

- Depending on the connected computer, images may not be displayed properly even if the compatible signal described above is input.

■Compatible signal timing (AV)

Screen resolution	Frequency	HDMI	
		MODE 1*1	MODE 2*1
4096 × 2160p	24Hz	Yes	Yes
	25Hz	Yes	-
	30Hz	Yes	-
	50Hz	Yes	-
	59.94Hz	Yes	-
	60Hz	Yes	-
3840 × 2160p	24Hz	Yes	Yes
	25Hz	Yes	Yes
	30Hz	Yes	Yes
	50Hz	Yes	-
	59.94Hz	Yes	-
	60Hz	Yes	-
1920 × 1080p	24Hz	Yes	Yes
	50Hz	Yes	Yes
	59.94Hz	Yes	Yes
	60Hz	Yes	Yes
1920 × 1080i	50Hz	Yes	Yes
	59.94Hz	Yes	Yes
	60Hz	Yes	Yes
1280 x 720p	50Hz	Yes	Yes
	59.94Hz	Yes	Yes
	60Hz	Yes	Yes
720 × 576p	50Hz	Yes	Yes
720 × 480p	59.94Hz	Yes	Yes
	60Hz	Yes	Yes
640 × 480p (VGA)	59.94Hz	Yes	Yes
	60Hz	Yes	Yes
720 (1440) × 576i	50Hz	Yes	Yes
720 (1440) × 480i	59.94Hz	Yes	Yes
	60Hz	Yes	Yes

*1 “HDMI MODE” setting.

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Obtaining source code

For license agreement information, visit the following website:
https://jp.sharp/business/lcd-display/support/download/source_e.html
We are unable to answer any questions about the source code for the open source software.

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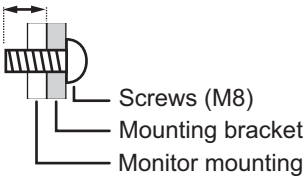
Mounting Precautions (For SHARP dealers and service engineers)

- When installing, removing or moving the monitor, ensure that this is carried out by at least 2 people.
- Be sure to use a wall-mount bracket designed or designated for mounting the monitor.
- This monitor is designed to be installed on a concrete wall or pillar. Reinforced work might be necessary for some materials such as plaster / thin plastic board / wood before starting installation.
- This monitor and bracket must be installed on a wall which can endure at least 4 times or more the weight of the monitor. Install by the most suitable method for the material and the structure.
- To attach a VESA-compliant mounting bracket, use following screws.

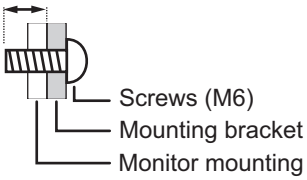
[PN-E869/PN-E759]

3/8 - 9/16 inch (10-15 mm)



[PN-E659/PN-E559/PN-E509/PN-E439/PN-E329]

5/16 - 3/8 inch (8-10 mm)



- Do not use an impact driver.
- When moving the monitor, be sure to hold the handles (PN-E869/PN-E759 only) or it around the periphery. Do not grasp the screen or operation buttons. This may cause product damage, failure, or injury.
- After mounting, please carefully ensure the monitor is secure, and not able to come loose from the wall or mount.
- Do not use any screw holes other than those for mounting brackets, located on the rear of the monitor, for installation.

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PN-E869-E759-E659-E559-E509-E439-E329 M EN25B(1)