SHARP

PN-LA862
PN-LA752
PN-LA652

INTERACTIVE DISPLAY

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:

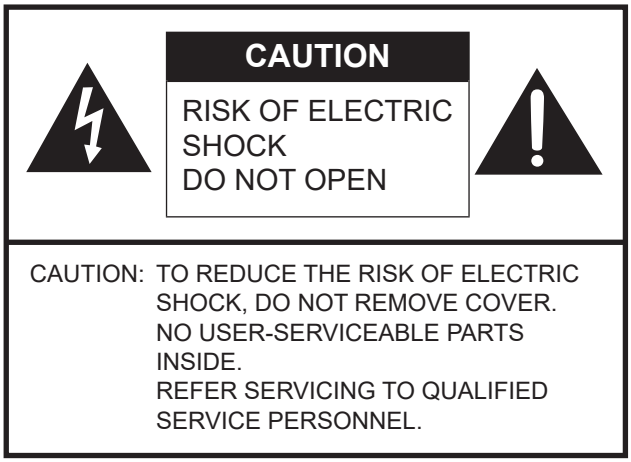
- The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter **E** or by the safety earth ⏚ or coloured green or green-and-yellow.
- The wire which is coloured BLUE must be connected to the terminal which is marked with the letter **N** or 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, DisplayPort input/output terminal, RS-232C input terminal, USB Type C port, TOUCH PANEL terminal, and USB port.

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.

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.
- Do not use the monitor in places where it may be exposed to direct sunlight. Risk of cabinet deformation and failure if the monitor is used in direct sunlight.
- 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.
- Do not touch the screen when turning on the monitor, it will lead to a malfunction. When this occurs, turn the monitor power off and then on.
- Do not operate the screen with a hard or pointed object such as a fingernail or pencil.
- Depending on the application used, the touch pen may not function.
- If another USB device is connected to the computer to which the touch panel is connected, do not operate the USB device during touch panel input. Input may not take place correctly.
- If you or a third party uses the product incorrectly, or if the product is subjected to the effects of static electricity or electrical noise, or if the product malfunctions or is repaired, there is a risk that saved data will be corrupted or lost.
- Suitable for entertainment purposes at controlled luminous environments, to avoid disturbing reflections from the screen.
- Always back up important data to a USB flash drive.
- We bear no responsibility for protection of internal memory recorded content or related damages.

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 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.

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.
- Do not connect to a LAN with excessive voltage.
  When using a LAN cable,do not connect to a peripheral device with wiring that might have excessive voltage. Excessive voltage on the LAN port may cause an electric shock.

Manual Scope

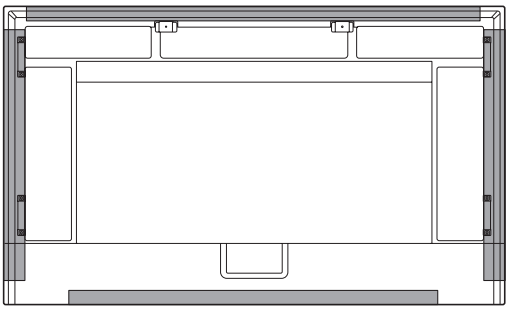
- Microsoft and Windows are trademarks of the Microsoft group of companies.
- Apple, Mac and macOS are trademarks of Apple Inc., registered in the U.S. and other countries.
- The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.
- DisplayPort is a registered trademark of Video Electronics Standards Association.
- Google, Google Chrome, Chrome OS and Android are trademarks or registered trademarks of Google LLC.
- Intel is a trademark of Intel Corporation or its subsidiaries.
- VESA is either registered trademark or trademark of Video Electronics Standards Association in the United States and/or other countries.
- FlatFrog and InGlass are trademarks of FlatFrog Laboratories AB registered in the United States and other regions.
- All other brand and product names are trademarks or registered trademarks of their respective holders.
- This product comes with RICOH Bitmap Fonts produced and sold by RICOH COMPANY, LTD.
- 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.

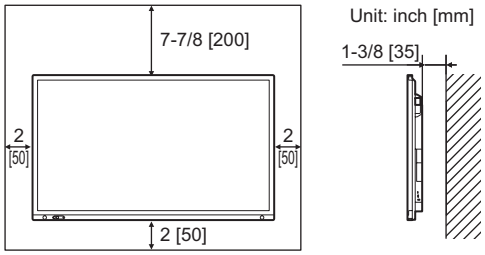
MOUNTING PRECAUTIONS

- For SHARP dealers or service engineers, please confirm “Mounting Precautions (For SHARP dealers and service engineers)”. (See page 54.)
- 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.
- When moving the monitor, be sure to hold the handles or the parts marked by ▭ below. Do not grasp the screen. This may cause product damage, failure, or injury.

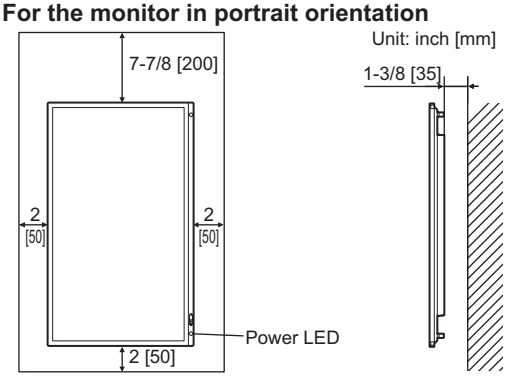


- This monitor should be used at an ambient temperature between 41°F (5°C) and 95°F (35°C). Provide enough space around the monitor to prevent heat from accumulating inside.

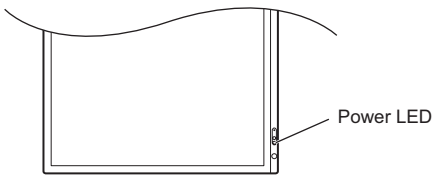
For the monitor in landscape orientation



For the monitor in portrait orientation



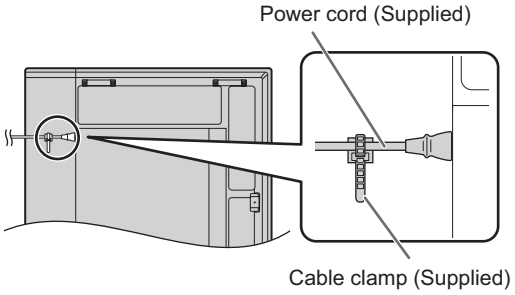
- Be careful of high temperatures in the surrounding area. If it is difficult to provide sufficient space for any reason such as the installation of the monitor inside a housing or of several units side-by-side, or if the ambient temperature may be outside of the range of 41°F (5°C) to 95°F (35°C), install 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.
- Do not use the product in locations where the unit is exposed to direct sunlight or other strong light. Since this product operates with infrared rays, such light may cause a malfunction.
- When using multiple monitors closely, be sure the infrared transmitter/receiver does not affect the other ones. (See page 35.)
- 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 bottom side.



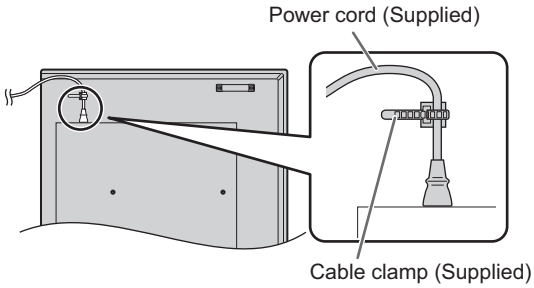
  - Set the “PORTRAIT/LANDSCAPE INSTALL” on the ADMIN menu to “PORTRAIT”. (See page 33.)

MOUNTING PRECAUTIONS (Continued)

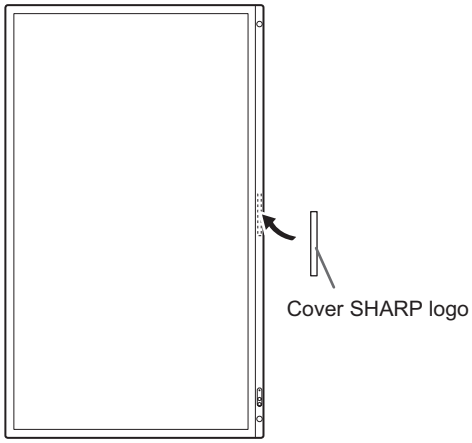
- Be sure to clamp the power cord (supplied) onto the cable clamp attachment using the supplied cable clamp. When clamping the power cord, take care not to stress the terminal of the power cord. Do not bend the power cord excessively.



PN-LA652

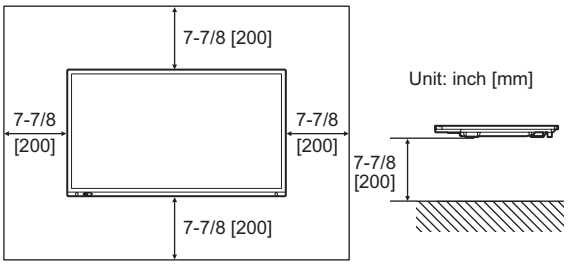


- Use the cover SHARP logo when you install the monitor in portrait orientation.



Flat installation

- When using the monitor laying flat on a surface (when the monitor is tilted more than 20 degrees upward from the perpendicular in relation to a level surface), consult an authorized dealer because there are some specific mounting conditions.
  Adhere to the following. Failing to adhere to the following may cause malfunctions.
  - Set “HORIZONTAL INSTALLATION” in the ADMIN menu to “FACE UP”. (See page 33.)
  - Use this monitor at the ambient temperature between 41°F (5°C) and 86°F (30°C). Provide 7-7/8 inch (200 mm) or more space between the monitor and the floor or other mounting surfaces and surrounding objects to prevent heat from accumulating inside. If it is difficult to provide sufficient space or if the ambient temperature may be outside of the range of 41°F (5°C) to 86°F (30°C), install a fan or take other measures to keep the ambient temperature within the required range.



  - Do not press hard on the LCD panel or otherwise subject it to impacts.

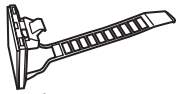
Contents

IMPORTANT INFORMATION....3
DEAR SHARP CUSTOMER....4
SAFETY PRECAUTIONS....4
TIPS AND SAFETY INSTRUCTIONS....6
MOUNTING PRECAUTIONS....7
Supplied Components....10
System Requirements....10
Part Names....11
Connecting Peripheral Equipment....13
Connecting the Power Cord....15
Binding Cables....15
Preparing the Remote Control Unit....16
Installing the batteries....16
Remote control operation range....16
Removing the Handles....17
Mounting a web camera....17
Turning Power On/Off....18
Turning on the main power....18
Turning power on....18
Turning power off....19
Touch Pen....20
Touch action....21
Touch action....21
Cautionary points....21
Basic Operation....22
Using the touch menu....22
Using the remote control unit....23
Menu Items....26
Displaying the menu screen....26
Configuring settings in the touch menu....27
Menu item details....28
Controlling the Monitor with a computer (LAN)....41
Settings to connect to a LAN....41
Controlling with a computer....42
Troubleshooting....47
Specifications....49
Intellectual Property Rights and Other Matters....53
Mounting Precautions
(For SHARP dealers and service engineers)....54

Supplied Components

If any components are missing, please contact your dealer.

- ☐ Interactive Display: 1
- ☐ Remote control unit: 1
- ☐ Cable clamp: 3



- ☐ Power cord
- ☐ Remote control unit battery: 2
- ☐ Setup Manual: 1
- ☐ Touch pen: 2
- ☐ Camera mount (small): 1
- ☐ Camera screw (inch thread): 1
- ☐ Camera mount (large): 1
- ☐ USB cable: 1
- ☐ Cover SHARP logo: 1
  Place this sticker onto the SHARP logo to cover the logo.
- ☐ Camera mount screw (M3x8): 2
- ☐ Camera mount screw (M3x12): 2

PN-LA862/PN-LA752 only
- ☐ Player mount: 1
- ☐ Player mount screw (M4x6): 2

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

System Requirements

Hardware	Must have a USB 2.0 compliant port.
Operating system	Windows 10, Windows 11
	macOS v11, v12, v13
	Google Chrome OS Version 108 or later

To use the touch panel with an HDMI / DisplayPort connection, connect the supplied USB cable to the computer.

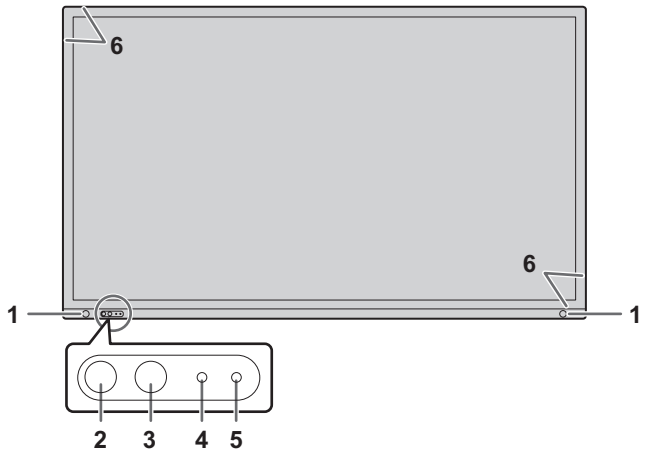
The touch panel and touch pen operate with the standard driver of each operating system. On the Mac, operation is only possible in mouse mode.

The Information Display Downloader can also be downloaded from the following website.
https://business.sharpusa.com/product-downloads (US)
https://www.sharp.eu/download-centre (Europe/Asia/Pacific)

When the Information Display Downloader is installed, you can check and download the most recent versions of the software programs and latest firmware.
Pen Software setup program and Touch Viewing Software/Touch Viewer setup program, latest firmware can be downloaded using Information Display Downloader.
To install the software, see the manual for each.

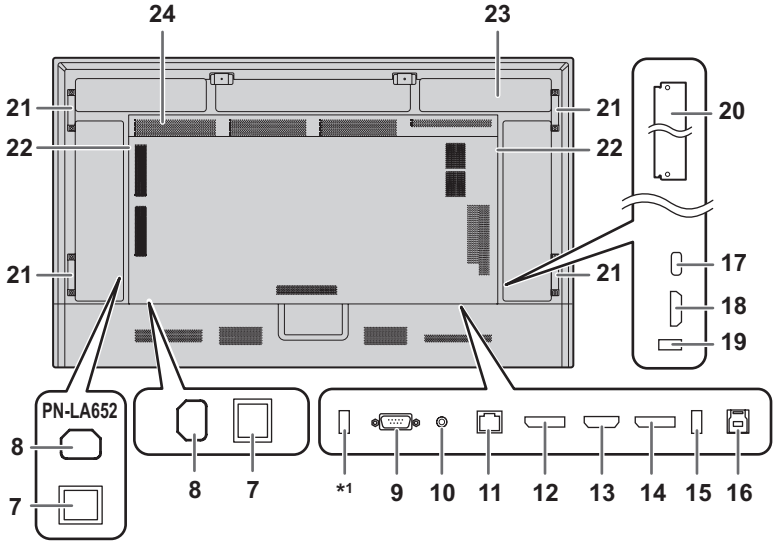
Part Names

■Front view



1. **Motion sensor** (See page 29.)
2. **POWER button / Power LED** (See page 18.)
3. **TOUCH MENU button** (See page 22.)
4. **Remote control sensor** (See page 16.)
5. **Ambient light sensor** (See page 29.)
6. **Infrared transmitter/receiver**

■Rear view



7. **Main power switch** (See page 18.)
8. **AC input terminal** (See page 15.)
9. **RS-232C input terminal** (See page 14.)
10. **Audio output terminal** (See page 14.)
11. **LAN terminal** (See page 14.)
12. **DisplayPort output terminal** (See page 14.)
13. **HDMI2 input terminal (support ARC)** (See page 13.)
14. **DisplayPort input terminal** (See page 13.)
15. **USB2 port (USB3.0 compliant, Type-A)** (See page 14.)
16. **TOUCH PANEL terminal*2 (for HDMI1/HDMI2/DisplayPort)** (See page 14.)
17. **USB Type C port*2** (See page 13.)
18. **HDMI1 input terminal** (See page 13.)
19. **USB1 port (USB3.0 compliant, Type-A)** (See page 14.)
20. **Option board slot** (See page 55.)
    Slot for installation of an Intel Smart Display Module (Intel SDM) specifications.

    TIPS

    • Please contact your supplier for a list of compatible option boards.
21. **Handles (2 on the PN-LA652)**
22. **Speakers**
23. **Optional controller attachment section**
24. **Vents**

TIPS

• It is convenient to use the terminals for separate purposes; for example, using the terminal on the bottom of the monitor to connect a fixed computer and using the terminal on the side of the monitor to connect a mobile computer.

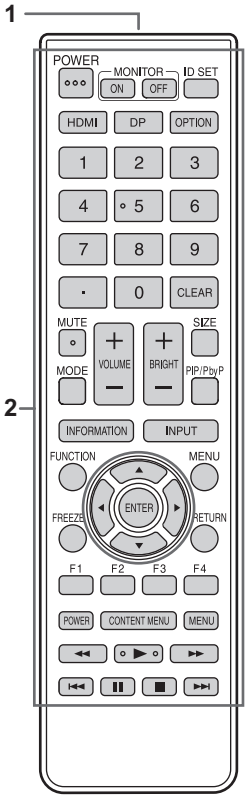
! Caution

• Consult your SHARP dealer for attachment/detachment of optional parts.

*1 This port is for “CLONE SETTING” and future software upgrades.
Imports or exports the monitor settings via the USB flash drive when selecting “CLONE SETTING”. (See page 36.)

*2 Factory setting. You can set the terminal that connects the computer and touch panel in each input mode with “TOUCH INPUT SELECT”.

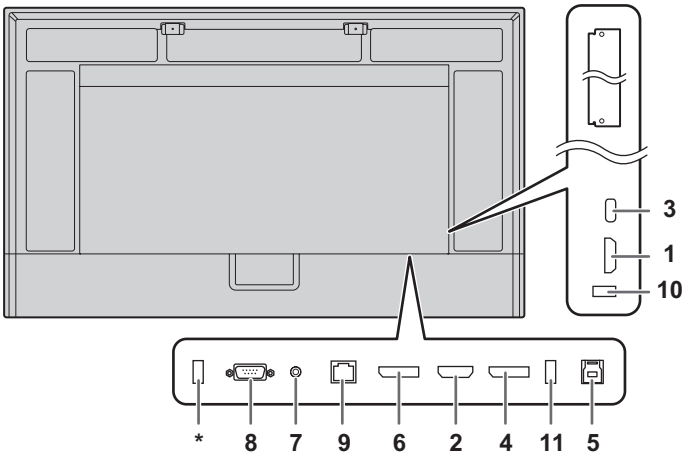
■Remote control unit



1. **Signal transmitter**
2. **Operation buttons** (See page 23.)

Connecting Peripheral Equipment

■Rear view



! Caution

- 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.

TIPS

- 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.

* This port is for “CLONE SETTING” and future software upgrades.
Imports or exports the monitor settings via the USB flash drive when selecting “CLONE SETTING”. (See page 36.)

Supported USB flash drives

File System	FAT32
Capacity	Up to 32 GB.*

* Maximum file size 4 GB.

TIPS

- A USB flash drive that is encrypted or has a security function cannot be used.
- Check the USB flash drive for viruses as necessary.

It is convenient to use the terminals for separate purposes; For example, using the terminal on the bottom of the monitor to connect a fixed computer and using the terminal on the side of the monitor to connect a mobile computer.

1. **HDMI1 input terminal**
2. **HDMI2 input terminal (support ARC)**
   - 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. In order to supply power to connected devices, it is necessary to support the Power delivery standard.
   - For USB Power Delivery 65W charging, please use a cable that supports a current rating of 5A. Charging is limited to 60W when using a cable that supports a current rating of 3A.
   - USB Power Delivery is limited to 15 W when using the option board (Intel SDM).
   - When the monitor is in the standby state with “POWER SAVE MODE” set to “ON”, power cannot be supplied to USB Type-C.
   - Be sure to clamp the USB Type C cable (commercially available) by using the supplied cable clamp (see page 15). 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.
   - There is no need to connect the USB cable to the TOUCH PANEL terminal. (Factory setting. You can set the terminal to be used in each input mode with “TOUCH INPUT SELECT”.)
   - When input mode is changed to USB-C, this monitor will be recognized by the connected computer.
4. **DisplayPort input terminal**
   - Use a commercially available DisplayPort cable (conforming to the DisplayPort standard) that supports 4K.

5. TOUCH PANEL terminal

- To use the touch panel with a computer connected to a DisplayPort input terminal, an HDMI1 input terminal, or an HDMI2 input terminal, connect the touch panel to the computer with a USB cable (USB3.0 Type B). (Factory setting. You can set the terminal to be used in each input mode with “TOUCH INPUT SELECT”.)

6. DisplayPort output terminal

- The screen displayed on this monitor and the audio output from this monitor can be output to an external device.
- Use a commercially available DisplayPort cable (conforming to the DisplayPort standard) that supports 4K.
- Outputting HDCP-encrypted video requires an external device which supports HDCP.
- Output of video may not be possible with some versions of HDCP.

7. 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 “AUDIO OUTPUT” of “AUDIO OPTION” on the AUDIO menu.
- “TREBLE”, “BASS”, “BALANCE”, and “MONAURAL AUDIO” cannot be adjusted in the AUDIO menu.

! Caution

- This connector is not a headphone terminal.

8. RS-232C input terminal

- You can control the monitor from a computer by connecting a commercially available RS-232 straight cable between these terminals and the computer. When you control this monitor by using commands via RS-232C, set “COMMAND(RS-232C)” to “ON” on the ADMIN menu. (See page 35.)
  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)

9. 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. (See page 41.)
  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)

10. USB1 port (USB3.0 compliant, Type-A)

11. USB2 port (USB3.0 compliant, Type-A)

- When the input mode is HDMI1, HDMI2, or DisplayPort, the USB port can be used for a computer connected to the TOUCH PANEL terminal.
  When the input mode is USB-C, the USB port can be used for a computer connected to the USB Type C port. Factory setting. You can set the terminal to be used in each input mode with “TOUCH INPUT SELECT”.
- When the input mode is “OPTION”, the USB port can be used as a USB port for a computer connected to the option slot.

! Caution

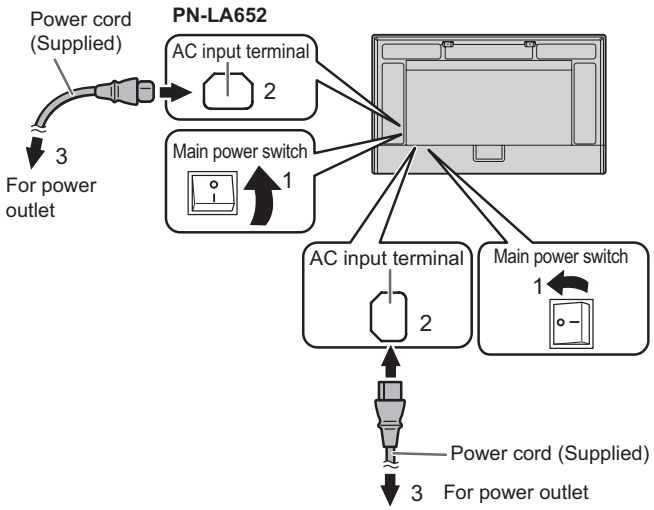
- Do not switch the input mode when a USB flash drive is connected. This could corrupt the data on the USB flash drive. Switch the input mode after removing the USB flash drive. To save data to the USB flash drive, connect the USB flash drive to the USB port (USB3.0 compliant, Type-A).
- Use a USB flash 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.

Connecting the Power Cord

! Caution

- 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.

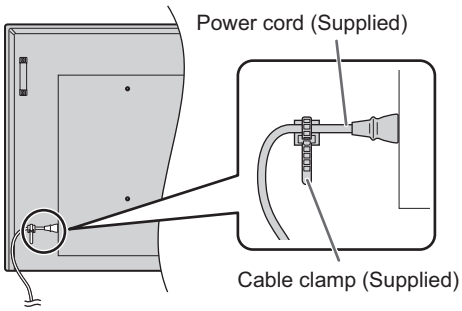
1. **Turn off the main power switch.**
2. **Plug the power cord (supplied) into the AC input terminal.**
3. **Plug the power cord (supplied) into the power outlet.**



TIPS

- Be sure to clamp the power cord (supplied) by using the supplied cable clamp. When clamping the power cord, take care not to stress the terminal of the power cord. Do not bend the power cord excessively.

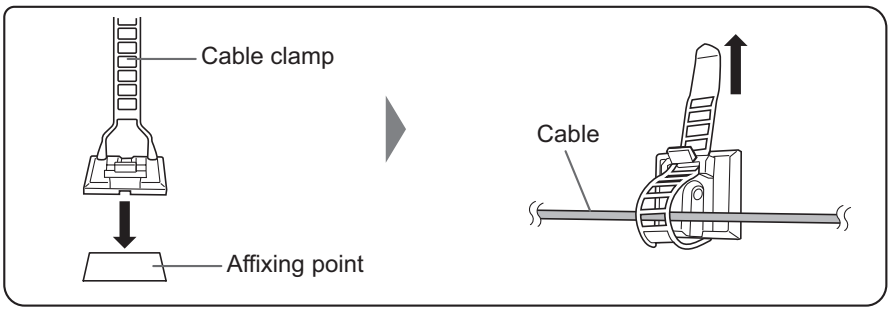
PN-LA652



Binding Cables

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

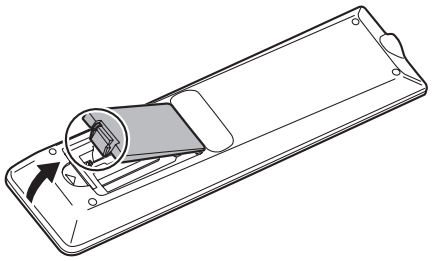
Attach the supplied cable clamps to a flat surface, removing any dust or dirt before attaching.
Do not attach over a vent.



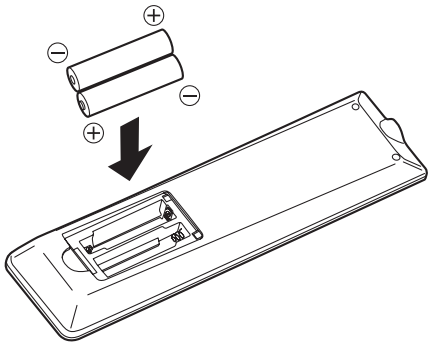
Preparing the Remote Control Unit

Installing the batteries

1. **Place your finger on the part marked with the ▲, and then pull the cover off.**



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



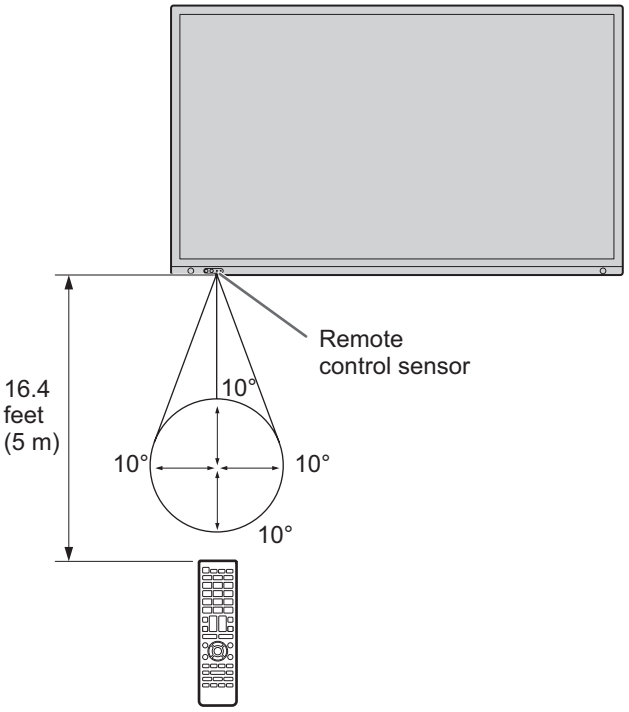
3. **Close the cover.**

TIPS

- 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.

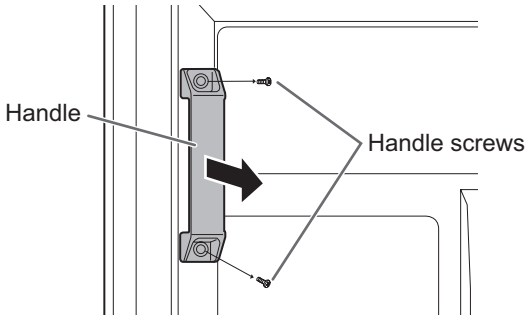


TIPS

- 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

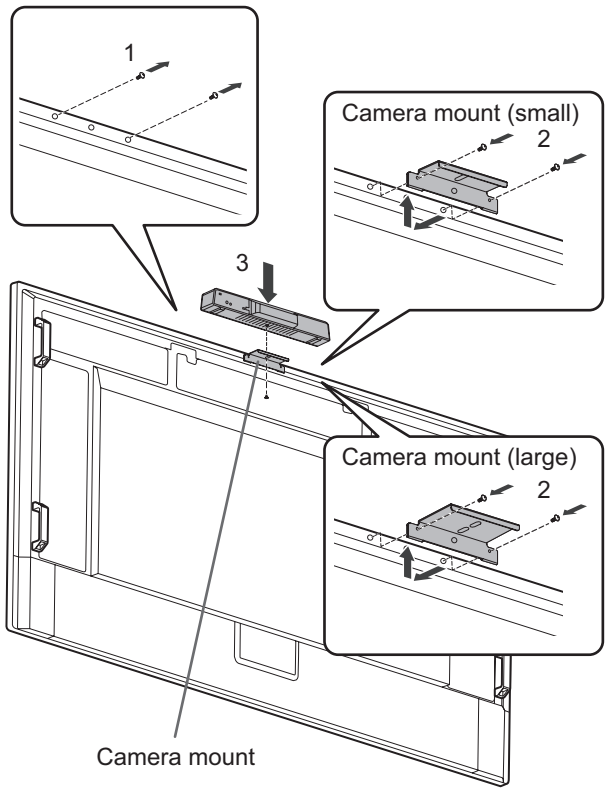
The handles can be removed.



Caution

- The removable handles and handle screws are for use with this monitor. Do not use them for any other devices.
- 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.

Mounting a web camera



It is possible to mount the PN-ZCMS1 Video-Conferencing Soundbar (optional) or a commercially available web camera (1.1 kg (2.4 lbs.) or less) with the camera mount (small) (supplied).

1. **Remove the screws from this monitor.**
2. **PN-LA862/PN-LA752:**
   Attach the camera mount (small) (supplied) with the camera mount screws (M3x12) (x2) (supplied).
   PN-LA652:
   Attach the camera mount (small) (supplied) with the camera mount screws (M3x8) (x2) (supplied).
   The camera mount screws are different depending on the monitor.
3. **Attach the PN-ZCMS1 (optional) on the camera mount with the camera screw (inch thread) (x1) (supplied).**

It is possible to mount our recommended web camera with the camera mount (large) (supplied). Contact your dealer for our recommended web camera.

1. **Remove the screws from this monitor.**
2. **PN-LA862/PN-LA752 :**
   Attach the camera mount (large) (supplied) with the camera mount screws (M3x12) (x2) (supplied).
   PN-LA652:
   Attach the camera mount (large) (supplied) with the camera mount screws (M3x8) (x2) (supplied).
   The camera mount screws are different depending on the monitor.

TIPS

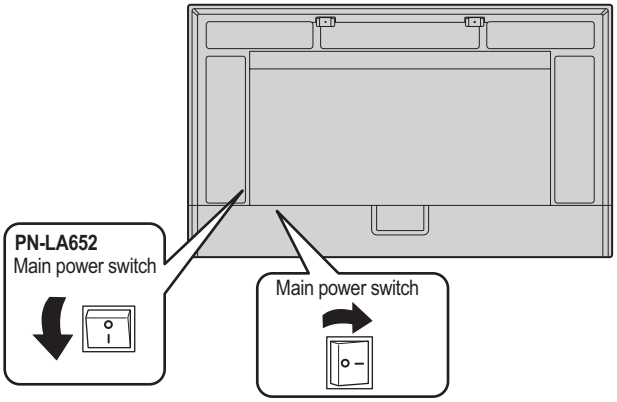
- For mounting instructions of web camera (optional), refer to the instruction manual for the web camera.

Turning Power On/Off

! Caution

- 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



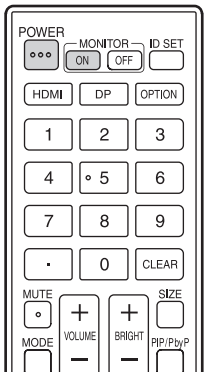
Off mode, when main power is off.

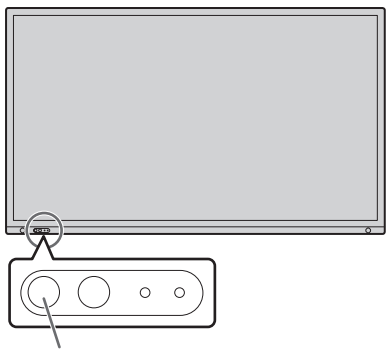
! Caution

- 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 button or MONITOR ON button to turn the power ON.





POWER button /Power LED

Status	Status of the monitor
Orange/Blue flashing	During power up
Blue lit	Power on
Orange lit	Power off (Standby state*1)
Blue flashing	Input signal waiting state*2

*1 Standby mode when “POWER SAVE MODE” is set to “ON” and “LAN PORT” and “MOTION SENSOR” is set to “OFF”. Networked standby mode when “POWER SAVE MODE” and “LAN PORT” is set to “ON” and “MOTION SENSOR” is set to “OFF”. Networked standby mode allows the monitor to be turned on via network (LAN, RS-232C, and HDMI CEC).

*2 When “POWER SAVE MODE” is set to “OFF” and “POWER MANAGEMENT” is set to “ON”, switching to input signal waiting state when no signal is detected.

TIPS

- 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 or MONITOR ON button, the monitor is turned on.
- When the monitor is in the input signal waiting state and press the MONITOR OFF button, the monitor is turned off.
- To disable the logo screen from displaying when turning the power ON, set “LOGO SCREEN” in “SYSTEM” to “OFF” on the ADMIN menu. (See page 33.)
- You can fix the input mode that appears after startup. Set “START INPUT MODE” in “INPUT” on the ADMIN menu.
- When starting the option board, change “INPUT MODE” to “OPTION”.
- When you use the option board for the first time, the option board setup is executed. Do not turn off the main power switch while the setup is running.

■Operations after first power-on

When you turn on the power for the first time, a setting screen for language, communication, date and time, etc. appears. Use the ▲, ▼, ◀, ▶ buttons on the remote control to set.

The “LANGUAGE” screen appears.

1. After setting “LANGUAGE”, select “NEXT” and press the ENTER button on the remote control.
The “COMMUNICATION SETTING” screen appears.

2. After setting “COMMUNICATION SETTING”, select “NEXT” and press the ENTER button on the remote control.
The “DATE/TIME SETTING” screen appears.

3. After setting “DATE/TIME SETTING”, select “NEXT” and press the ENTER button on the remote control.
The “CONTROL FUNCTION” screen appears.

4. After setting “CONTROL FUNCTION”, select “NEXT” and press the ENTER button on the remote control.
The “VC ROOM SETTING” screen appears.

5. After setting “VC ROOM SETTING”, select “FINISH” and press the ENTER button on the remote control.

The settings below are recommended settings and conforms to the “Normal Configuration” as defined in the EcoDesign Regulation (2019/2021).

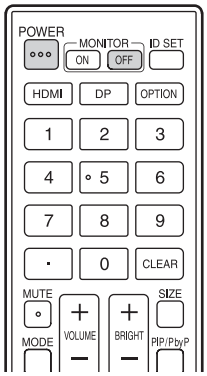
- POWER SAVE MODE: ON
- LAN PORT: OFF
- MOTION SENSOR: OFF

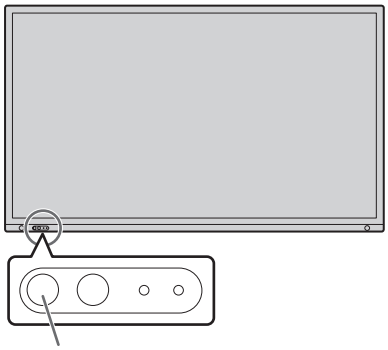
TIPS

- The clock stops if the main power remains off for about 2 weeks.*
  (*Approximate time. The actual time varies depending on the state of the monitor.)

Turning power off

1. **Press the POWER button or MONITOR OFF button.**
   The power is turned off. (Standby state)



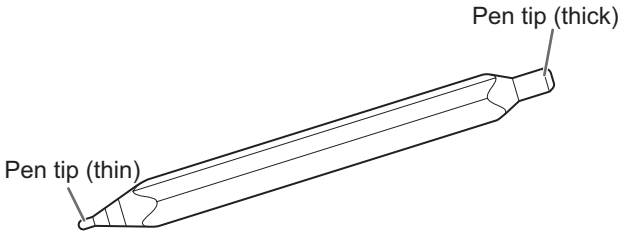


POWER button /Power LED

When the option board has started up and “AUTO SHUTDOWN” is set to “ON” in “POWER SETTING” of “OPTION SLOT”, the option board is also turned off. (See page 36.)
When the option board has started up and the “POWER SAVE MODE” is set to “ON” under “ADVANCED” on the ADMIN menu, the option board is also turned off. (See page 35.)
A message is displayed, so press the POWER button again while the message is displayed.

The option board can also be turned off and on via the “POWER BUTTON” under “POWER OPERATION” in the “OPTION SLOT”. (See page 36.)

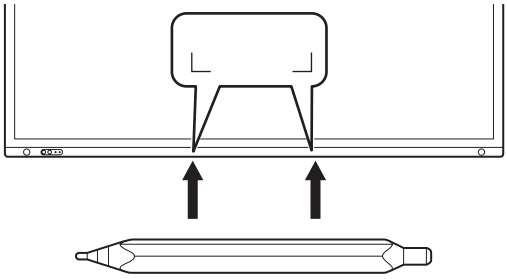
Touch Pen



TIPS

- Incorrect operation may result if your finger is too close to the tip of the pen.
- When multiple touch pens are used, touch positions and touch pen information (color, thickness, etc.) may become interchanged, and lines may break.
  - When touched simultaneously.
  - When touch pens are moved near each other.
- Do not press the pen tip on other than the screen. This may cause malfunctioning.
- If the pen tip becomes worn or damaged, replace the touch pen. To purchase a new touch pen, consult your dealer.

The supplied touch pen is attached to the marked positions on this monitor.



TIPS

- Do not attach anything other than the supplied touch pen.
- Magnet is used to attach the supplied touch pen. Do not place a watch or magnetic card close to this monitor.
- Please place or remove the pen from the holder area without sliding it along the bezel.

Touch action

Touch action

Touch actions that can be used with this monitor differ according to operating system and application. The functions of touch actions are also different. For details, check operating system Help and the application's support documentation.

TIPS

- On the Mac, the actions are the equivalent mouse actions.
- For the procedures for using the touch pen in the Pen Software, see the Pen Software Operation Manual.
- The screen may not respond correctly in the following cases:
  - Touch gesture is too quick.
  - The distance between the two points is too short.
  - The two points intersect.
- In Windows 10/11, input panel functions can be used. For details, see Windows Help.
  Input panel: A software keyboard and an input panel with handwriting recognition appear on the screen.
- In Windows 10/11, the ink function of Microsoft Office can be used. Handwritten comments can be written, and handwriting can be recognized.
  For details, see Microsoft Office Help.

Cautionary points

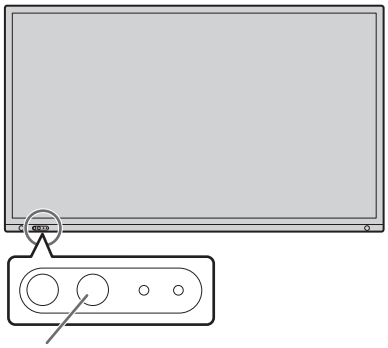
- Do not use the touch pen for any purpose other than touch panel operation.
- Do not press hard on the pen tip.
- Operation will not take place correctly if there is an obstacle between the infrared transmitter/receiver and the touch pen or your finger. Operation will not take place correctly if your fingers or your sleeve is near the screen.
- If the touch pen is held too flat against the screen, the touch position may not be correctly detected.
- If the touch pen does not work at the edge of the screen, move it slowly.
- This may not operate correctly if there is an inverter fluorescent light nearby.
- If there is dirt or foreign matter on the tip of the touch pen, remove it. Foreign matter may damage the screen.
- The touch pen position may occasionally deviate in the login screen. In this case, use the keyboard or mouse.
- If the USB cable becomes disconnected, the touch panel may not operate correctly after the USB cable is reconnected. In this case, restart the computer.
- When lifting the pen tip or your finger, ensure to place ample distance from the screen. Inadequate spacing could lead to unintended touch detection, even when the screen is not physically contacted.

Basic Operation

Using the touch menu

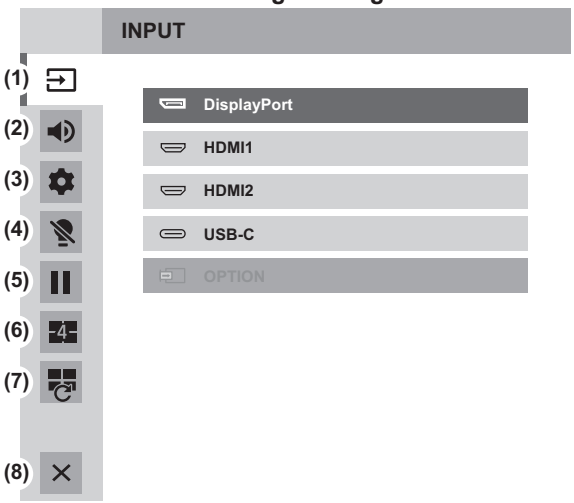
You can touch the screen to change input mode, volume, and other settings.

1. Touch the TOUCH MENU button.



TOUCH MENU button

2. Touch the screen to change settings.



(1) Input mode selection

Changes the input mode.

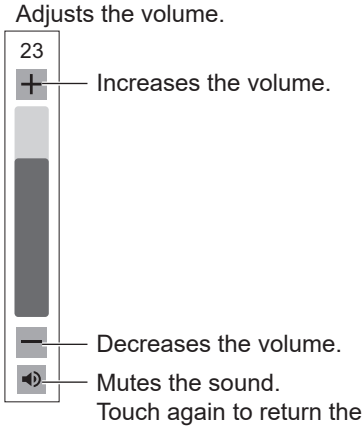
Input mode	Video
DisplayPort	DisplayPort input terminal
HDMI1	HDMI1 input terminal
HDMI2	HDMI2 input terminal
USB-C	USB Type C port
OPTION*1	Option board slot

- When the input mode is changed, the touch panel connection also changes.

*1 This is displayed when you have used the option board slot.

(2) Volume adjustment

Adjusts the volume.



Touch again to return the sound to the original volume.

(3) Settings

Adjust “AUDIO” and “PICTURE”, configure setting for “CONFIGURE QUAD-SCREEN”. (See page 27.)

(4) Backlight off

Turn off the backlight.
The backlight will turn on when you operate the remote control unit.

(5) FREEZE

Freezes the video shown on the monitor.
To cancel, press any button other than the POWER button, MUTE button or VOLUME button.
Freeze is also canceled when the input signal changes (switching to no signal, changing the resolution, etc.).
In some cases a residual image may occur. Do not freeze the video for a long time.

(6) QUAD-SCREEN ON

You can display 4 screens at once. (See page 38.)
When quad-screen is displayed, the icon changes to the QUAD-SCREEN OFF icon ( ).

(7) RECONFIGURE QUAD-SCREEN

The 4 screens set in “SETTING INITIAL SCREEN” (see page 31) are displayed.

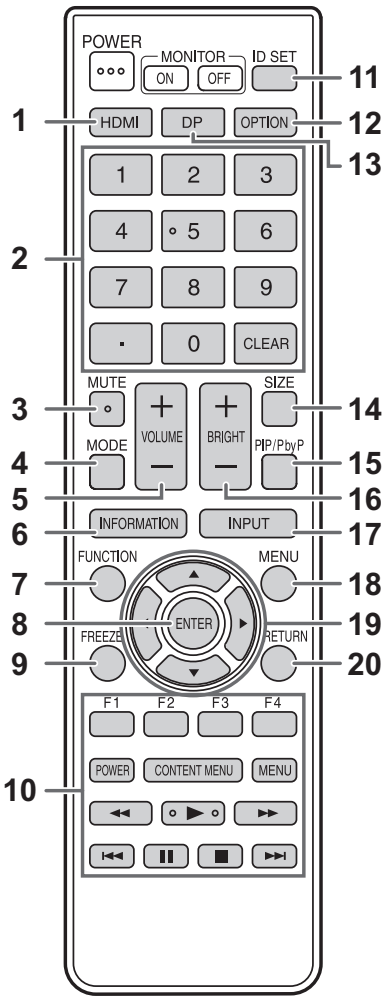
(8) Exit touch menu

Closes the touch menu.

TIPS

- The touch menu can also be used with the remote control unit.
  (1) Hold down the INFORMATION button at least 5 seconds.
  The touch menu appears.
  (2) Select the setting item with the ▲ or ▼ button.
  (3) Set with the ▲ or ▼ button, and press the ENTER button.
  - The setting is entered.
  - Press the RETURN button to exit the touch menu.

Using the remote control unit



1. HDMI
Switch the input mode to HDMI1 or HDMI2.

2. Numeric input buttons
Use for the following tasks. (0 to 9)
- To set the remote control number.
- To set the IP ADDRESS, SUBNET MASK, DEFAULT GATEWAY, and DNS.

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

4. MODE (Picture mode selection)
Each time you press this button, the picture mode changes in the following order:

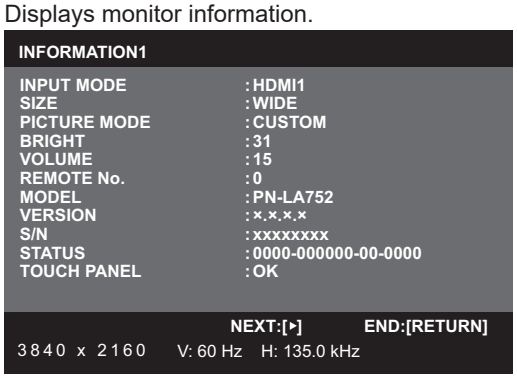
STD (Standard) → VIVID → sRGB →
HIGH BRIGHT → CONFERENCING → SIGNAGE →
CUSTOM → STD...

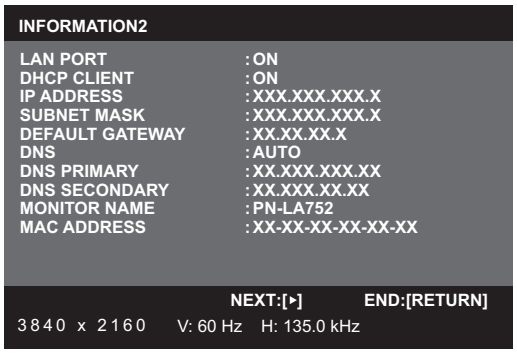
- “HIGH BRIGHT” is a display with colors suited to bright locations.

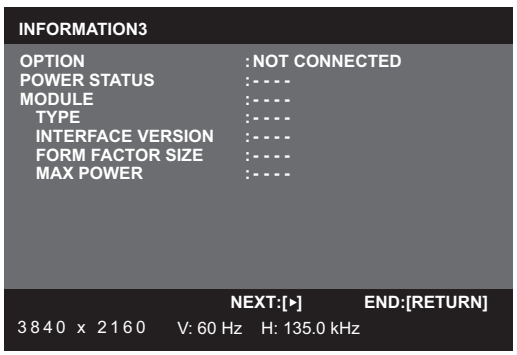
5. VOLUME +/- (Volume adjustment)
Pressing + or - displays the VOLUME menu.

Press + or - to adjust the volume.
* If you do not press any buttons for about 4 seconds, the VOLUME menu automatically disappears.

6. INFORMATION
Displays monitor information.







The display changes from “INFORMATION1” → “INFORMATION2” → “INFORMATION3” → disappears the display, and so on every time you press this button.
When displaying “INFORMATION”, the display changes from “INFORMATION1” → “INFORMATION2” → “INFORMATION3” → “INFORMATION1”, and so on every time you press the ▶ button. Pressing the RETURN button disappears the display.

- “INFORMATION3” shows the information when you have used the option board slot to expand the functions.
- The display disappears automatically after about 15 seconds.

7. FUNCTION
The ADMIN menu can also be displayed by pressing the FUNCTION button and then the MENU button. (See page 33.)

8. ENTER
Confirms the setting.

9. FREEZE
Freezes the video shown on the monitor.
To cancel, press any button other than the POWER button, MUTE button or VOLUME button.
Freeze is also canceled when the input signal changes (switching to no signal, changing the resolution, etc.).
In some cases a residual image may occur. Do not freeze the video for a long time.

10. Buttons for operating the HDMI-connected device
When “HDMI CEC LINK” is set to “AUTO”, use these buttons to operate the device connected through the HDMI interface.

11. ID SET
Set a number on the remote control unit. (See page 40.)

12. OPTION
Switch the input mode to OPTION when you have used the option board slot to expand the functions.

13. DP
Each press of the DP button alternates the input mode between DisplayPort and USB-C.

14. SIZE (Screen size selection)
The menu is displayed.
Press the ▲ or ▼ button to select the screen size. (See page 25.)

15. PIP/PbyP
The menu is displayed.
Press the ▲ or ▼ button to select PIP MODES/ QUAD-SCREEN MODE. (See page 38.)

16. BRIGHT +/- (Brightness adjustment)
Pressing + or - displays the BRIGHT menu.

Press + or - to adjust the brightness.

* If you do not press any buttons for about 4 seconds, the BRIGHT menu automatically disappears.
* When “AMBIENT LIGHT SENSING” is set to “ON”, “AMBIENT LIGHT SENSING” is displayed even if you press + or -, and the brightness cannot be adjusted.

17. INPUT (Input mode selection)
The menu is displayed.
Press the ▲ or ▼ button to select the input mode, and press the ENTER button to enter.

* For the input modes that can be selected, see “Using the touch menu” (see page 22).

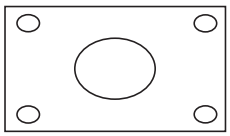
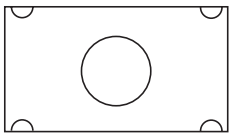
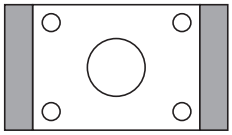
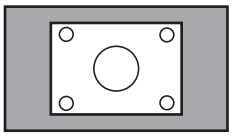
18. MENU
Displays and turns off the menu screen. (See page 26.)

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

20. RETURN
Returns to the previous screen.

■Switching the screen size

Even when the screen size is changed, the display may remain the same depending on the input signal.

WIDE		Displays image so it fills the entire screen.
ZOOM		The image is enlarged to fill the entire screen without changing the aspect ratio. The edges of the image may be cut off.
NORMAL		Displays the image so it fills the screen without changing the aspect ratio.
Dot by Dot		Displays the dots of the input signals as the corresponding dots on the screen.

TIPS

- Using this monitor's screen-size switching or dual-screen display functions 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.
- When dual-screen or quad-screen display is selected, the screen size cannot be changed.
- The appearance of the original video may change if you select a screen size with a different aspect ratio than the original image (e.g. TV broadcast or video input from external equipment).
- When 4:3 video is viewed with the whole screen using the screen-size switching function of this monitor, the edge of the video may be lost or appear distorted. If you wish to respect the creator's intentions, set the screen size to NORMAL.
- When playing commercial software, parts of the image (like subtitles) may be cropped. In this case select the optimal screen size using the screen-size switching function of this monitor. With some software, there may be noise or distortion at the edges of the screen. This is due to the characteristics of the software, and is not a malfunction.
- Depending on the original image size, black bands may remain at the edges of the screen.

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 28 for details of each menu items.

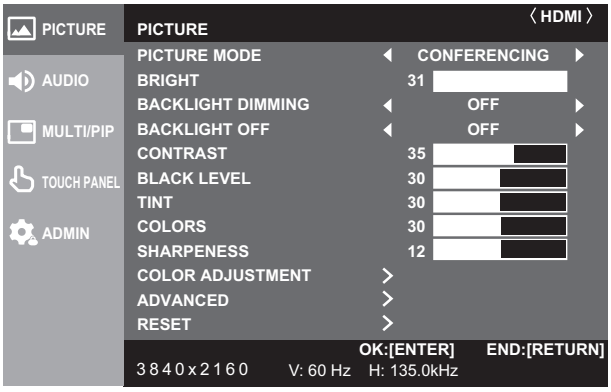
!Caution

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

■Example of operation

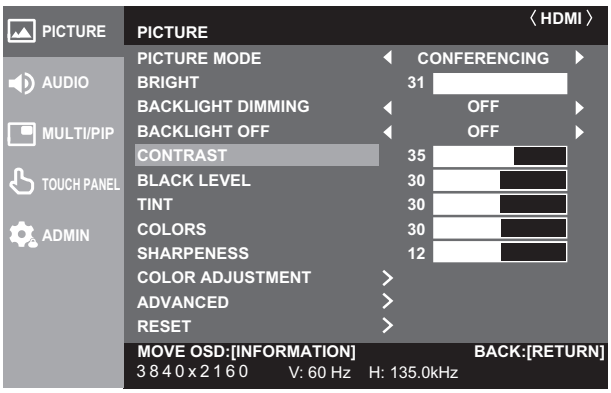
(Adjusting CONTRAST in the PICTURE menu)

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

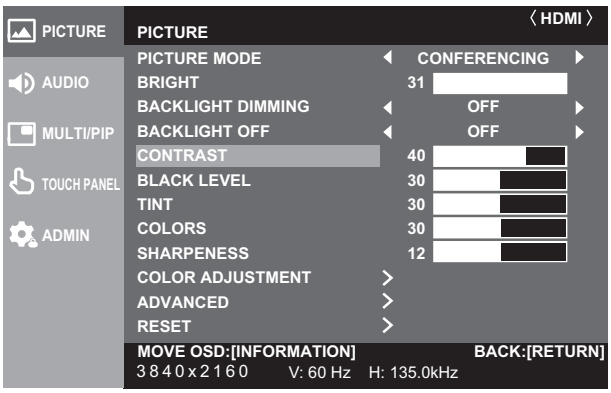


2. Press the ▲ or ▼ button to select PICTURE, and press the ENTER button.

3. Press the ▲ or ▼ button to select CONTRAST.



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



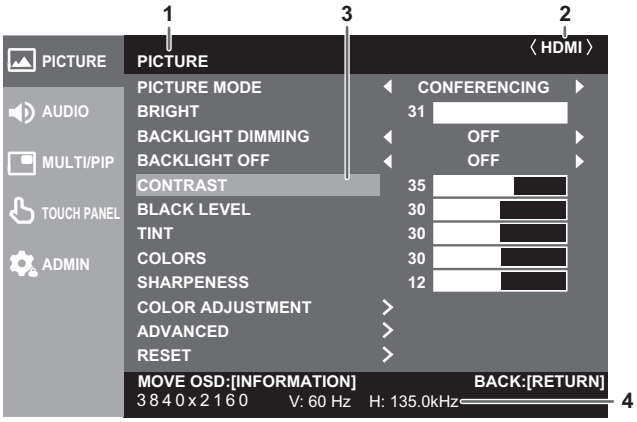
For items that have >, press the ENTER button, make settings and then press the RETURN button.

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

TIPS

- The menu will differ depending on the input mode.
- The menu screen will close automatically if no operation is performed for about 15 seconds. (DATE/TIME SETTING, SCHEDULE and LAN SETUP screens will close in about 4 minutes.)

■Menu screen display



1 Name of the menu
2 Input mode
3 An item being selected (highlighted)
4 Screen resolution of input signal, and other data.

TIPS

- Items that cannot be selected appear in gray.
  (e.g. Function not supported by the current input signal)

Configuring settings in the touch menu

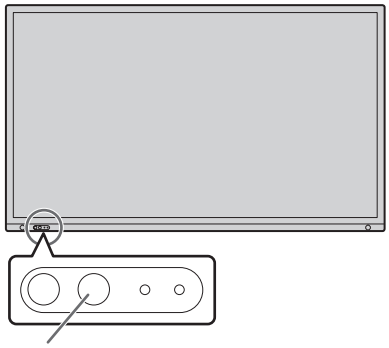
You can configure the following settings from the touch menu. You can configure the settings by touch operation.

AUDIO	AUDIO MODE	page 30
	TREBLE	
	BASS	
	BALANCE	
PICTURE	PICTURE MODE	page 28
	BRIGHT	
	CONTRAST	
	BLACK LEVEL	
	USB-C SETTING	
CONFIGURE QUAD-SCREEN	SETTING INITIAL SCREEN	page 31
	PRIORITY: AUTO INPUT SEL.	
	SAVE LAST INPUT CONFIG.	
	TARGET: SOUND / INPUT SEL.	

■Example of operation

(Adjusting “CONTRAST” in the PICTURE menu)

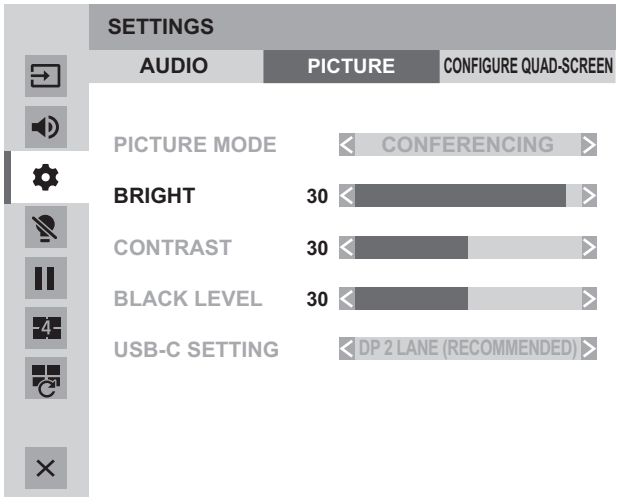
1. Touch the TOUCH MENU button.



TOUCH MENU button

2. Touch the Settings icon (⚙).

3. Touch the PICTURE tab.



4. Touch the ◄► icon in “CONTRAST” to adjust the setting.
For items that show the >> icon, configure the setting in the menu that appears after you touch the >> icon, and then touch the BACK icon.

5. Touch the Exit touch menu icon (✕).

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).

- POWER SAVE MODE: ON
- LAN PORT: OFF
- MOTION SENSOR: OFF

■PICTURE

In PICTURE menu, you can move the menu screen display position each time the INFORMATION button is pressed.

PICTURE MODE

Changes the picture mode on the screen. The picture mode on the screen can also be changed using a remote control unit. PICTURE menu settings other than “BACKLIGHT OFF” and “ADVANCED” are saved for each “PICTURE MODE”.

BRIGHT

Adjusts the backlight brightness. (In PIP mode, the main side setting is reflected in the image.)

BACKLIGHT DIMMING

When set to “ON”, gain compensation and backlight dimming are performed.

BACKLIGHT OFF

Turn off the backlight. The backlight will turn on when you operate the remote control unit. (See page 22.)

CONTRAST

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

BLACK LEVEL

Adjusts the entire brightness of the video signals.

TINT

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

COLORS

Adjusts the color intensity.

SHARPNESS

Adjusts the sharpness of the image.

COLOR ADJUSTMENT

COLOR TEMPERATURE

THRU ..... Displays the input signal level as is.
PRESET..... Selects the color temperature using “PRESET”.
USER ..... Adjusts R-/G-/B-CONTRAST and R-/G-/B-OFFSET respectively using “USER”.

PRESET

Selects the color temperature when the “COLOR TEMPERATURE” is set to “PRESET”.
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.

USER

Adjusts each item when the “COLOR TEMPERATURE” is set to “USER”.
R-CONTRAST.... Adjusts bright-toned red component.
G-CONTRAST ... Adjusts bright-toned green component.
B-CONTRAST.... Adjusts bright-toned blue component.
R-OFFSET ..... Adjusts dark-toned red component.
G-OFFSET ..... Adjusts dark-toned green component.
B-OFFSET ..... Adjusts dark-toned blue component.

COPY TO USER

Copies the value of “PRESET” to the “USER” setting.
Select “ON” and then press the ENTER button.
(In the case other than white, color tone may differ from the “PRESET”.)

GAMMA

Selects the gamma.

COLOR CONTROL-TINT

Adjusts color tone with 6 colors of R (red), Y (yellow), G (green), C (cyan), B (blue), and M (magenta).

COLOR CONTROL-COLORS

Adjusts color vividness with 6 colors of R (red), Y (yellow), G (green), C (cyan), B (blue), and M (magenta).

ADVANCED

NR

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

RGB INPUT 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.

DisplayPort STREAM (DisplayPort/OPTION)

Set how DisplayPort is used.
If a device that do not support DisplayPort1.2 is connected, set to SST1.
SST1 .....Use as single stream (DisplayPort1.1).
SST2 .....Use as single stream (DisplayPort1.2).

HDMI MODES (HDMI/OPTION)

Use “MODE1” normally.
If video is not displayed correctly such as when a device that do not support 4K is connected, set to “MODE2”.

HDR (HDMI/OPTION)

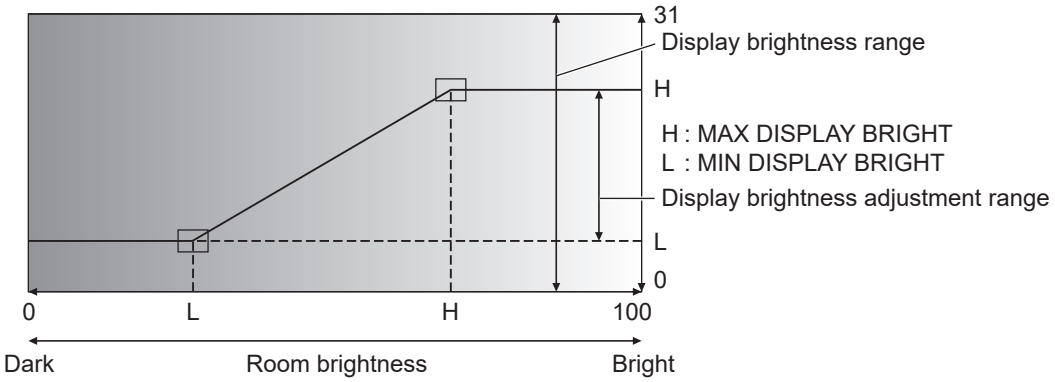
HDR ..... Select “ON” when displaying contents which support HDR.

PQ LUMINANCE..... Adjusts the gamma when a PQ HDR signal is input.
You can set the degree of priority for absolute PQ luminance.

AUTO DIMMING

AMBIENT LIGHT SENSING

MODE: When set to “ON”, the brightness of the monitor is automatically adjusted in response to changes in room brightness.
MAX AMBIENT LIGHT: Sets the upper limit of room brightness.
MAX DISPLAY BRIGHT: Sets the brightness of the monitor when the room brightness is at its upper limit.
MIN AMBIENT LIGHT: Sets the lower limit of room brightness.
MIN DISPLAY BRIGHT: Sets the brightness of the monitor when the room brightness is at its lower limit.
STATUS AMBIENT LIGHT/STATUS DISPLAY BRIGHT: Displays the current illuminance and brightness.



H : MAX AMBIENT LIGHT
L : MIN AMBIENT LIGHT

MOTION SENSOR

MODE: When set to “ON”, this monitor will automatically turn off when someone is approximately 3.5 m or more away from this monitor.
Set the time to turn off in “AUTO OFF”.
When automatically turned off, the monitor will automatically turn on when someone approaches. *
* If the power is turned off by other ways such as pressing the POWER button, the power will not turn on even if someone approaches.
* When “MOTION SENSOR” is set to “ON”, the “POWER MANAGEMENT” and “AUTO DISPLAY OFF” (OPTION connection) are greyed out. The status does not change even if no signal is detected.

AUTO OFF: Sets the time from when a person leaves this monitor until the power turns off.

DISPLAY COLOR PATTERN

Displays a color pattern. Can be displayed while the menu screen is displayed, so you can refer to the pattern while adjusting the image. When “WHITE”, “RED”, “GREEN”, or “BLUE” is displayed, you can set the level in the range of 0 to 255.
OFF .....No pattern display.
WHITE.....White single color pattern display.
RED.....Red single color pattern display.
GREEN .....Green single color pattern display.
BLUE.....Blue single color pattern display.
USER .....Red/green/blue mixed color pattern display. When USER is selected, set each color’s level.

ADVANCED (Continued)

USB-C SETTING

DP 2 LANE(RECOMMENDED) .... Priority is given to USB 3.0 high-speed communication; DP video is fixed at 2 lanes.
DP 4 LANE / USB2.0 ..... The lanes are used with priority on video. USB 2.0 can be used, but USB 3.0 cannot be used.

RESET

Resets the values of the PICTURE menu items to the factory default settings.
For the settings saved for each “PICTURE MODE”, the settings saved for the currently selected “PICTURE MODE” are initialised.
Select “ON” and then press the ENTER button.

■AUDIO

AUDIO MODE

Preset values for “VOLUME”, “TREBLE,” “BASS,” and “BALANCE” can be set for each audio mode.

VOLUME

Adjusts the volume.

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.

MUTE

Can temporarily turn off the volume.

AUDIO OPTION

AUDIO OUTPUT

Sets the volume of sound output from the audio output terminals.
When set to “VARIABLE 2”, sound will not be output from the built-in speaker.
VARIABLE1..... You can adjust the volume using “VOLUME”.
VARIABLE2..... You can adjust the volume using “VOLUME”.
FIXED..... Fixes the sounds.

MONAURAL AUDIO

Outputs audio signals as monaural.

MUTE WITH FREEZE

Set whether or not audio turns off during freeze.

RESET

Resets the values of the AUDIO menu items to the factory default settings.
For the settings saved for each ”AUDIO MODE”, the settings saved for the currently selected ”AUDIO MODE” are initialised.
Select “ON” and then press the ENTER button.

■MULTI/PIP

PIP/PbyP

PIP MODES
Sets the display method.
OFF ..... Displays one screen.
PIP ..... Displays a sub screen inside a main screen.
PbyP..... Displays a main screen and a sub screen in a line.
PbyP2..... Displays a main screen which measures 2560 pixels in the longest direction and a sub screen in a line.

PIP SIZE
Sets the size of the sub screen in PIP mode.

PIP H-POS
Adjusts the horizontal position of the sub screen in PIP mode.

PIP V-POS
Adjusts the vertical position of the sub screen in PIP mode.

PIP BLEND
In PIP mode, use this menu item to display the sub screen transparently.

PIP SOURCE
Selects the input signal of the sub screen in PIP, PbyP or PbyP2 mode.

SOUND CHANGE
Sets the sound which is output in PIP, PbyP or PbyP2 mode.

MAIN POS
Sets the position of the main screen in PbyP or PbyP2 mode.

PbyP2 POS
Sets the position of the sub screen in PbyP2 mode.

CONFIGURE QUAD-SCREEN

QUAD-SCREEN MODE
Set how the screens are displayed.
OFF ..... Display single screen.
ON..... Display 4 screens simultaneously.

SETTING INITIAL SCREEN
Set the input mode displayed in each of the 4 screens.
When “AUTO” is selected, input modes that have input signals are displayed in the order set in “PRIORITY: AUTO INPUT SEL.”.

PRIORITY: AUTO INPUT SEL.
Set the order of priority for the input mode that is displayed when “AUTO” is selected for “SETTING INITIAL SCREEN”.
The lower the number, the higher the priority.

SAVE LAST INPUT CONFIG.
OFF ..... When quad-screen display is started, the 4 screens set in “SETTING INITIAL SCREEN” always appear.
ON..... When quad-screen display is started, the previously displayed 4 screens appear.

TARGET: SOUND / INPUT SEL.
When quad-screen is displayed, you set the screen whose audio is output, and the screen whose input is changed.
When you return to single screen display, the input mode will return to the input mode set here.

RECONFIGURE QUAD-SCREEN
Displays 4 screens again according to “SETTING INITIAL SCREEN” setting.
This can be set when “QUAD-SCREEN MODE” is set to “ON”.

INPUT SIGNAL INFO.
This shows the input mode, resolution, and frequency of the displayed screens.

■TOUCH PANEL

TOUCH INPUT SELECT

Set the terminal that connects the computer and touch panel in each input mode.
When “-” is selected, the touch panel cannot be used.

TOUCH OUTPUT INVALID DISP.

TOUCH OUTPUT INVALID ICON ..... When “TOUCH OUTPUT INVALID ICON” is set to “ON” and touch action is disabled, the TOUCH OUTPUT INVALID icon appears in the screen.
You can touch the TOUCH OUTPUT INVALID icon in the screen to enable touch action.
CHANGE DISPLAY POSITION ..... Sets the display position of the TOUCH OUTPUT INVALID icon.

TOUCH OPERATION MODE

Select the touch mode.
The touch panel must be connected in order to configure this setting.
When “AUTO” is selected, automatically switches between “TOUCH SCREEN MODE” and “MOUSE MODE” according to operating system.

TOUCH PANEL MODE

When the Vsync of the input signal is 60 Hz, setting this to “ON” improves touch panel tracking.
When two screens are displayed, the screen may become distorted.
Some input signals may also cause screen distortion.
If the screen becomes distorted, set to “OFF”.

TOUCH OPERATION

Use this setting to enable or disable touch action.
When the input mode is changed, “TOUCH OPEATION” is canceled.

TIPS

- The position of the TOUCH OUTPUT INVALID icon can be changed.
- The TOUCH OUTPUT INVALID icon appears even when a USB cable is not connected.
- In quad-screen display or when a color pattern is displayed,the TOUCH OUTPUT INVALID icon does not appear.

■ADMIN

To change the settings on ADMIN menu, it is necessary to enter your password.
Please enter the following password when you turn on the power for the first time.
ADMIN PASSWORD : ADMIN

ADMIN PASSWORD

Changes a password. Up to 8 characters can be used.
When a user does not enter any characters when changing the password, the admin password screen will not be displayed.

SYSTEM

LANGUAGE

Sets the display language for the menu screen.

DATE/TIME

DATE/TIME SETTING..... Set the date and time.
TIME ZONE..... Set the time difference between the region where the monitor is used and the UTC (Universal Time, Coordinated).
INTERNET TIME SERVER..... Sets the current date and time. When this setting is set to “ON”, the time is adjusted periodically using an internet time server.
When the information obtained from the DHCP server includes information from an Internet time server, the “INTERNET TIME SERVER” function will cause the time synchronisation process to work even if the “INTERNET TIME SERVER” setting is “OFF”.
DATE/TIME FORMAT ..... Sets the date/time display format.
DATE..... MM/DD/YYYY, DD/MM/YYYY, YYYY/MM/DD
(YYYY: Year, MM: Month, DD: Day)
TIME..... Select 12- or 24-hour time.
DAYLIGHT SAVING ..... Set the start/end date and time for daylight saving.
The settings should be manually updated each year. If the settings are not changed, the same settings will apply the following year.

SCHEDULE (See page 39.)

You can turn the power on/off and change the screen brightness at a specified time.

PORTRAIT/LANDSCAPE INSTALL

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

HORIZONTAL INSTALLATION

OFF .....Portrait/landscape installation.
FACE UP.....The display screen faces up.
* When using the monitor laying flat on a surface (when the monitor is tilted more than 20 degrees upward from the perpendicular in relation to a level surface), consult an authorized dealer because there are some specific mounting conditions.

OSD DISPLAY

Shows/hides the menu, modes and messages.
ON 1.....Shows all menus, modes and messages.
ON 2.....Hides messages automatically displayed by the display. Shows messages during operation.
OFF .....Hides all menus, modes and messages.
* To cancel the “OSD DISPLAY” after it has been set to “OFF”, press the FUNCTION button and then the MENU button on the remote control to display the ADMIN menu and change the setting. (See page 24.)

OSD H-POSITION

Adjusts the horizontal display position of menu screen.

OSD V-POSITION

Adjusts the vertical display position of menu screen.

POWER INDICATOR

Specifies whether to light the power LED.

LOGO SCREEN

Sets whether or not to display the logo screen.

REMOTE No.

Sets the number of the remote control unit. (See page 40.)

INPUT

INPUT MODE NAME

For each terminal, you can change the input mode name that is displayed during input mode selection or display.
The names of INPUT1 to INPUT6* can be changed. (*Factory default.)

(1) Select the input mode name (INPUT1 to INPUT6) that you want to change, and press the ENTER button.
If the input mode name can be changed, “EDIT: [ENTER]” will appear.

(2) Move the cursor to the character that you want to change with the ◀ or ▶ button, and change the character with the ▲ or ▼ button.
Change the character type with the MODE button (upper case alphabet, lower case alphabet, numbers, symbols).

(3) When you have finished the change, press the ENTER button.

Up to 18 characters can be used.

AUTO INPUT CHANGE

CONNECT AUTO INPUT SELECT.....Sets whether the input into the input terminal automatically changes when a video signal is input into that terminal.
(With some input signals, the input may not change.)

NO SIGNAL AUTO INPUT SEL. .....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 there are video signals in multiple input modes, switching takes place according to the order of priority set in “AUTO INPUT SELECT PRIORITY”.

AUTO INPUT SELECT PRIORITY.....Sets the order of input terminal priority for “NO SIGNAL AUTO INPUT SEL.”.
When an option that supports this function is connected to the option board slot, you can set the order in OPTION.
(If the option does not support this function, OPTION will not appear.)
Input does not change automatically for terminals without a priority setting.
The lower the number, the higher the priority.

CEC SETTINGS

HDMI CEC LINK

AUTO .....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.

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

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 .....This can be set when “HDMI CEC LINK” is set to “AUTO”.
If the device connected to the HDMI2 input terminal supports ARC, audio is output from the terminal.

START INPUT MODE

You can set the input mode that will be in effect when the power is turned on.
When this is set to “LAST INPUT MODE”, the input mode when the power was last turned off will appear.

* When “NO SIGNAL AUTO INPUT SEL.” is “ON” and there is no input signal in the set input mode, the input mode will change to the input mode that has an input signal.

USB-C SETTING

Sets the lane for video output.

LOCK USB-C SETTING

OFF .....Enable “USB-C SETTING” in the PICTURE menu.

ON.....Disable and grey out “USB-C SETTING” in the PICTURE menu.

USB-C SETTING

DP 2 LANE(RECOMMENDED)....Priority is given to USB 3.0 high-speed communication; DP video is fixed at 2 lanes.

DP 4 LANE / USB2.0 .....The lanes are used with priority on video. USB 2.0 can be used, but USB 3.0 cannot be used.

COMMUNICATION SETTING

LAN PORT

Sets whether to enable LAN.

LAN SETUP

Configures the settings to control the monitor from the computer via LAN. (See page 41.)

CONTROL FUNCTION

COMMAND(LAN)*

Sets whether to enable LAN commands. For detailed settings, configure them in the web browser.

COMMAND(RS-232C)*

Sets whether to enable RS-232C commands.

HTTP SERVER

Sets whether to enable the control form web server.

* For details of each command, see the manual on the following website.
https://business.sharpusa.com/product-downloads (US)
https://www.sharp.eu/download-centre (Europe/Asia/Pacific)

ADVANCED

POWER MANAGEMENT

"POWER MANAGEMENT" determines whether or not to switch modes from no signal to the input signal waiting state.
When "POWER MANAGEMENT" is set to "ON", the monitor enters the "Input signal waiting state" when there is no signal.
(See page 18.)

POWER SAVE MODE

When set to "OFF", startup time from standby state is reduced. Note, however, that more power will be consumed in standby state.
When set to "ON", current consumption is reduced while the monitor is in standby state. Note, however, that the startup time from standby state becomes longer.
When set to "ON", the "POWER MANAGEMENT" cannot be used.

QUICK START

When set to "ON", this monitor turns on in a short time.
Note, however that, more power will be consumed in standby state or input signal waiting state.
When "POWER SAVE MODE" is set to "ON", this setting cannot be set.

POWER ON DELAY

When "ON" is selected, you can delay the screen display after the monitor is turned on. When "ON" is selected, set the delay time with INTERVAL (interval can be set up to 60 seconds in units of 1 second).
When this function is activated, the power LED flashes (at approx. 0.5 second interval) in blue.

ADJUSTMENT LOCK

You can disable operations on the monitor and the remote control unit that use buttons.
OFF .....Enables operation.
ON 1.....Disables all operations other than turning power on/off.
ON 2.....Disables all operations including power on/off.
To cancel "ADJUSTMENT LOCK" after setting it to "ON1" or "ON2", press the FUNCTION button and then the MENU button on the remote control key to display the ADMIN menu and change the setting.

ADJUSTMENT LOCK TARGET

Sets the target to prohibit operation of with "ADJUSTMENT LOCK".
REMOTE CONTROL .....Prohibits remote control operation
MONITOR BUTTONS ....Prohibits monitor button operation
BOTH .....Prohibits remote control and monitor button operation

TEMPERATURE ALERT

Selects the notification method for an abnormal temperature.
OFF .....Do not notify about an abnormal temperature.
OSD & LED .....When an abnormal temperature is detected, the power LED flashes in orange and blue alternately and the screen displays a message: TEMPERATURE.
LED .....When an abnormal temperature is detected, the power LED flashes in orange and blue alternately.

STATUS ALERT

Selects the notification method for a hardware error.
OFF .....Do not notify about the error.
OSD & LED .....When a hardware error is detected, the power LED illuminates in blue and orange alternately and the screen displays a message: STATUS [xxxx].
LED .....When a hardware error is detected, the power LED illuminates in blue and orange alternately.

USB PORT FOR SERVICE

Sets whether to enable the USB port for service. Enable this setting when firmware updates and "CLONE SETTING"are to be performed.

SIGNAL TOLERANCE LEVEL

Normally, you do not need to change this setting. Use this option to set the level of response to signal changes.

VC ROOM SETTING (See page 37.)

Executing "VC ROOM SETTING" will change the settings to those recommended for use in conference rooms.

MULTIPLE DISPLAY MODE

OFF .....Normally set to "OFF" when using a single monitor. (Factory setting)
ON.....Set to "ON" when two or more monitors are used in close proximity.

OPTION SLOT (with optional board installed)

POWER OPERATION (OPTION)

POWER BUTTON..... Turns the option board (intel SDM) power on/off.
FORCE SHUTDOWN ..... The option board (intel SDM) will be forced to power off.
RESET ..... The option board (intel SDM) will be reset.

POWER SETTING

Sets whether or not to link the power supply between this monitor and the option board (intel SDM). When “POWER SAVE MODE” is set to “OFF”, this setting can be set.

AUTO SHUTDOWN ..... If set to “ON”, the option board (intel SDM) will also turn off when this monitor is turned off (shifted to power standby state). (See page 18.)
AUTO DISPLAY OFF ..... If set to “ON”, this monitor will be sleep state regardless of the “POWER MANAGEMENT” setting when the option board (intel SDM) is turned off or sleep state. When “MOTION SENSOR” is set to “ON”, this setting cannot be set and is greyed out.

ADVANCED SETTING

SIGNAL SELECT ..... Sets whether to output DisplayPort or TMDS video signals.
INTERFACE CAPABILITY ... Displays the video signals available on the connected option board.

SPECIAL FUNCTION

ALL RESET

Resets the settings to the factory default settings.
Press the ENTER button, select the resetting method, and then press the ENTER button.

ALL RESET 1.....Resets all the settings to the factory default settings.
ALL RESET 2.....Resets all the settings to the factory default settings except for the following items: “REMOTE No.”, “COMMUNICATION SETTING”, “CONTROL FUNCTION”, “NETWORK”. (See pages 43 to 46.)

CLONE SETTING

CLONE SETTING.....Download the current settings of this monitor to a USB flash drive, and reflect the settings on another monitor.
USB EXPORT ..... Exports the current settings as a file to a USB flash drive.
USB IMPORT ..... Reads a file from the USB flash drive and reflects the settings in the range specified by “TARGET”.
TARGET.....Set the data to be imported when importing settings.
“PICTURE” ONLY..... When importing settings, only PICTURE settings are imported.
ALL ..... When importing settings, all settings are imported.

TIPS

- When “COLOR TEMPERATURE” is set to “THRU”, “BLACK LEVEL”, “CONTRAST”, “TINT”, “COLORS”, “GAMMA” and “COPY TO USER” cannot be set.
- If “PICTURE MODE” is set to “sRGB”, the following items cannot be set.
  “PRESET”, “USER”, “COPY TO USER”, and “GAMMA”
- When the “PICTURE MODE” is set to “VIVID” or “HIGH BRIGHT”, “GAMMA” can not be adjusted.
- When displaying the color pattern, it is possible to adjust certain items of the PICTURE menu.
  Non-adjustable items cannot be selected.
- When both abnormal temperature and hardware error are detected, the hardware error notification overrides.
- If “TEMPERATURE ALERT” or “STATUS ALERT” is set to “OSD & LED”, alert messages will appear even if the “OSD DISPLAY” is set to “ON 2” or “OFF”.
- If “TEMPERATURE ALERT” or “STATUS ALERT ”is set to “LED” or “OSD & LED”, the power LED lights even if the LED function is set to “OFF”.
- Even if you perform an “ALL RESET” on this monitor , the option board (intel SDM) installed on the option board slot will not be reset.

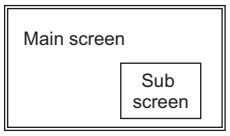
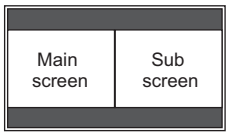
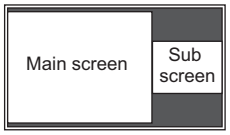
■VC ROOM SETTING

The items that are changed in “VC ROOM SETTING” are as follows.

ITEM		SETTING VALUE
POWER SAVE MODE		OFF
POWER MANAGEMENT		OFF
PICTURE MODE		CONFERENCING
AUDIO MODE		CONFERENCING
INPUT MODE		Input selected when “VC ROOM SETTING” is executed.
START INPUT MODE		Input selected when “VC ROOM SETTING” is executed.
CEC SETTING	HDMI CEC LINK	AUTO
	POWER CONTROL LINK	ENABLE
QUICK START		ON
MOTION SENSOR	MODE	ON
AUTO INPUT CHANGE	NO SIGNAL AUTO INPUT SEL.	ON
	AUTO INPUT SELECT PRIORITY	The highest priority is given to the input selected when “VC ROOM SETTINGS” is executed.

■Dual-screen display

You can display two screens simultaneously.
Set this function with “PIP MODES” of “PIP/PbyP” in the MULTI/PIP menu.
Or, press the PIP/PbyP button, and select the mode.

PIP		A sub screen is displayed inside a main screen.
PbyP		A main screen and a sub screen are displayed in a line.
PbyP2		Displays a main screen which measures 2560 pixels in the longest direction and a sub screen in a line.

* The currently selected input signal is displayed on the main screen.
* The dual screen display cannot be used with the following combinations:
USB-C - OPTION

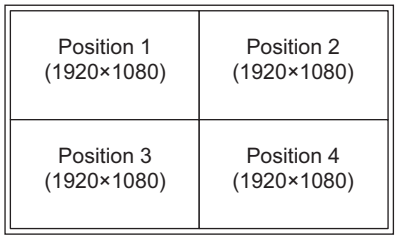
TIPS

- You might infringe on a copyright of the author which is protected by copyright law when you display the images of the computer screen and television/VCR simultaneously for profit-making or to show the image to the public.
- The screen size for dual-screen display is the same as the screen size for single-screen display. The Dot by Dot screen is displayed in NORMAL size except when it is set as the PIP main screen.
- When dual-screen display is selected, the “CONNECT AUTO INPUT SELECT” function and “NO SIGNAL AUTO INPUT SEL.” function are disabled.
- When dual-screen display is selected, the AUDIO menu cannot be set.
- When dual-screen display is selected, the “DISPLAY COLOR PATTERN” cannot be set.
- When an interlaced signal (1080i, 480i, video) is input to the sub screen, horizontal lines may flicker. If this happens, display the image on the main screen.
- Touch operation cannot be used in the sub screen.
- When “HDMI CEC LINK” is set to “AUTO”, “SOUND CHANGE” on the “PIP/PbyP” may be changed to “MAIN” due to the switching of the monitor’s input or due to the operation of the HDMI-connected device.
- The sub-screen does not support HDR signals.

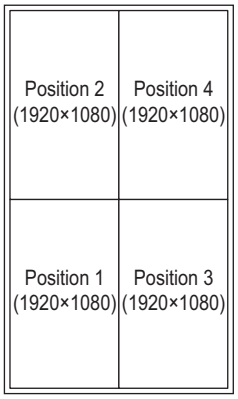
■Quad-screen display

You can display 4 screens simultaneously.

Landscape orientation



Portrait orientation



* The quad screen display cannot be used with the following combinations:
USB-C - OPTION

Displaying 4 screens

1. Touch the TOUCH MENU button, and touch the QUAD-SCREEN ON icon ( ).
Or, set “CONFIGURE QUAD-SCREEN” – “QUAD-SCREEN MODE” to “ON” in the MULTI/PIP menu.
Or, press the PIP/PbyP button, and select the “QUAD-SCREEN”.

- The 4 screens set in “SETTING INITIAL SCREEN” appear.
- When “SAVE LAST INPUT CONFIG.” is “ON”, the previously displayed 4 screens appear.
- You can return to the 4 screens set in “SETTING INITIAL SCREEN” using the RECONFIGURE QUAD-SCREEN icon ( ) in the touch menu, or “CONFIGURE QUAD-SCREEN” – “RECONFIGURE QUAD-SCREEN” in the MULTI/PIP menu.

Deciding the screen that will be the audio output/input mode selection target

Set the screen whose audio is output, and the screen whose input is changed.

1. Double-tap the screen you want to be the target.
Or, set in “CONFIGURE QUAD-SCREEN” – “TARGET: SOUND / INPUT SEL.” in the MULTI/PIP menu.

Returning to single screen

1. Touch the TOUCH MENU button, and touch the QUAD-SCREEN OFF icon ( ).
Or, set “CONFIGURE QUAD-SCREEN” – “QUAD-SCREEN MODE” to “OFF” in the MULTI/PIP menu.
Or, press the PIP/PbyP button, and select the “OFF”.

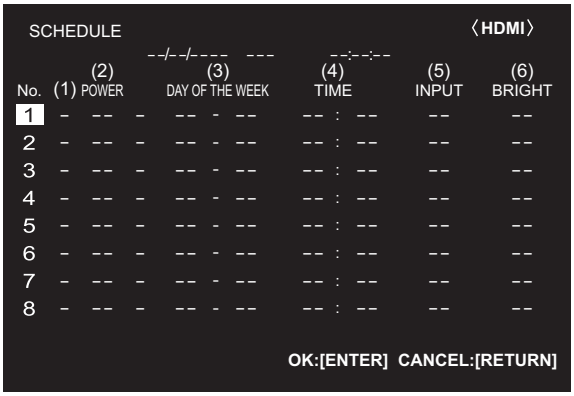
- The screen set in the audio output/input mode selection target is displayed on 1 screen.

TIPS

- You might infringe on a copyright of the author which is protected by copyright law when you display the images of the computer screen and television/VCR simultaneously for profit-making or to show the image to the public.
- When quad-screen display is selected, screen size cannot be changed.
  The screen size for quad-screen display is the same as the screen size for single-screen display. The Dot by Dot screen is displayed in NORMAL size.
- When quad-screen display is selected, the “CONNECT AUTO INPUT SELECT” function and “NO SIGNAL AUTO INPUT SEL.” function are disabled.
- When quad-screen display is selected, AUDIO menu cannot be set.
- When quad-screen display is selected, the “DISPLAY COLOR PATTERN” cannot be set.
- When quad-screen display is selected, the monitor will not enter the input signal waiting state when “POWER MANAGEMENT” is set to “ON”.
- When quad-screen display is selected, “HDMI CEC LINK” does not operate.
- When quad-screen display is selected, the FREEZE, DP (DisplayPort), HDMI, and OPTION buttons cannot be used.
- When quad-screen display is selected, the position 1 screen is output from the DisplayPort output terminal.
- When quad-screen display is selected, the connected computer cannot be operated by touch.
- Position 2, position 3 and position 4 do not support HDR signals.

■SCHEDULE

You can set the time to switch the monitor on and off.
Set this function with “SCHEDULE” in the ADMIN menu. (See page 33.)



1. **Press the ▲ or ▼ button to select the SCHEDULE number, and press the ▶ button.**
2. **Set the “SCHEDULE”.** (See the description below.)
   Press the ◀ or ▶ button to select items, and press the ▲ or ▼ button to change the setting.
3. **Press the ENTER button.**
   “SCHEDULE” becomes effective.

(1)

●: “SCHEDULE” effective
–: “SCHEDULE” not effective

(2) POWER

ON : Switches the monitor on at the specified time.
OFF : Switches the monitor off at the specified time and puts the monitor in standby state.

(3) DAY OF THE WEEK

Specifies the day of the week to execute the “SCHEDULE”.
0:ONLY ONCE
Executes the “SCHEDULE” once on the specified day. Specify the day of the week to execute the “SCHEDULE”.
1:EVERY WEEK
Executes the “SCHEDULE” on the specified day of the week every week. Specify the day of the week to execute the “SCHEDULE.
Periodic setting such as “Monday through Friday” is also possible.
2:EVERY DAY
Executes the “SCHEDULE” every day regardless of the day of the week.

(4) TIME

Specifies the time to execute the “SCHEDULE”.

(5) INPUT

Specifies the input mode at power-on. If not specified, the “START INPUT MODE” setting will apply. By factory default, the input that was active when the power was last turned off will appear.

(6) BRIGHT

Sets the brightness when changing the screen brightness at a specified time. When “AMBIENT LIGHT SENSING” is enabled, “AMBIENT LIGHT SENSING” has priority. (See page 29.)

! Caution

- Do not switch off the main power after setting the “SCHEDULE”.
- Specify the correct date and time. (See page 33.) “SCHEDULE” does not function unless the date and time are specified.
- Check regularly that the set date and time are correct.
- When a temperature abnormality occurs and the backlight brightness is reduced, the brightness is not changed even if a schedule set to “BRIGHT” is executed.

TIPS

- Up to 8 SCHEDULE items can be registered.
- 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.

TIPS

- You can set remote control numbers to values from 0 to 9.
- 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 “REMOTE No.” on the ADMIN menu to set the number. (See page 33.)

1. **Use the ◄ or ► button to select the remote control number.**
2. **Select ON and press the ENTER button.**
   The remote control number is set on the monitor.

Changing the remote control number on the remote control unit

1. **While holding down the ID SET button, hold down the number that corresponds to the remote control number set on the monitor for 5 seconds or more, and then release these buttons.**
   The remote control number is set on the remote control unit.

Checking the remote controller number

* Perform these steps on the remote control unit.

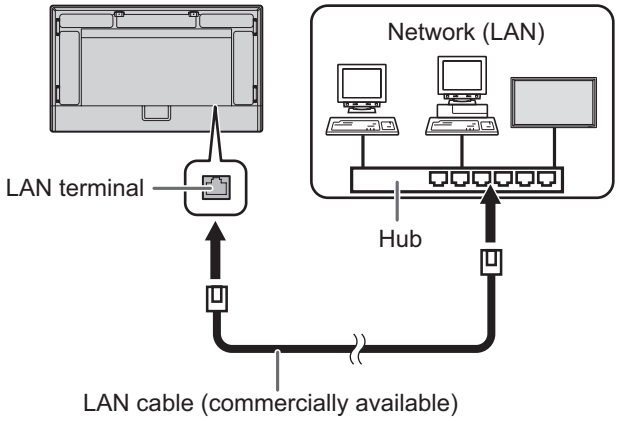
1. **Press the INFORMATION button to display “INFORMATION1”.**
2. **Check that “REMOTE No.” is the remote control number that you have set in the above procedure.**
3. **Press the RETURN button to close the monitor “INFORMATION” screen.**

TIPS

- If the remote control numbers on the monitor and remote control unit are different, they will both be displayed on “INFORMATION1”. On this screen, you can press the ENTER button to match the number on the monitor with the number on the remote control unit.
- Even if the remote control numbers are different, you can use the remote control unit to display the “INFORMATION” screen.

Controlling the Monitor with a computer (LAN)

Your monitor can be connected to a LAN allowing you to control it from a computer on the LAN.



Initializing personal information

- Personal information can be registered in the monitor. Before transferring or disposing of the monitor, initialize all settings by selecting “ALL RESET 1”. (See page 36.) Note that “ALL RESET 2” will not initialize “LAN SETUP” and other settings.

Settings to connect to a LAN

The settings depend on the configuration of your LAN. Ask your LAN administrator for details.

Set “LAN PORT” of “COMMUNICATION SETTING” on the ADMIN menu to “ON”, and then set the “LAN SETUP” options. (See page 34.)
After setting each item, select “SET” and press the ENTER button.

DHCP CLIENT

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

IP ADDRESS

If the “DHCP CLIENT” is set to “OFF”, specify an IP address.
Press the ◀ or ▶ button to select the items, and enter the values with the numeric input buttons (0 to 9).
You can also change the values with the ▲ or ▼ button.

SUBNET MASK

If the “DHCP CLIENT” is set to “OFF,” specify the subnet mask.
Press the ◀ or ▶ button to select the items, and enter the values with the numeric input buttons (0 to 9).
You can also change the values with the ▲ or ▼ button.

DEFAULT GATEWAY

If the “DHCP CLIENT” is set to “OFF”, specify the default gateway.
If you are not using a default gateway, specify “000.000.000.000”.
Press the ◀ or ▶ button to select the items, and enter the values with the numeric input buttons (0 to 9).
You can also change the values with the ▲ or ▼ button.

DNS

If you wish to obtain an IP address of DNS server automatically, change this setting to “AUTO”.To set the address manually, set this to “MANUAL”.

DNS PRIMARY

If the DNS is set to “MANUAL”, specify the “DNS PRIMARY”.
If you are not using a “DNS PRIMARY”, specify “0.0.0.0”.
Press the ◀ or ▶ button to select the items, and enter the values with the numeric input buttons (0 to 9).
You can also change the values with the ▲ or ▼ button.

DNS SECONDARY

If the DNS is set to “MANUAL”, specify the “DNS SECONDARY”.
If you are not using a “DNS SECONDARY”, specify “0.0.0.0”.
Press the ◀ or ▶ button to select the items, and enter the values with the numeric input buttons (0 to 9).
You can also change the values with the ▲ or ▼ button.

RESET

Resets the values of the LAN settings to the factory preset values.
Select “ON” and then press the ENTER button.

Controlling with a computer

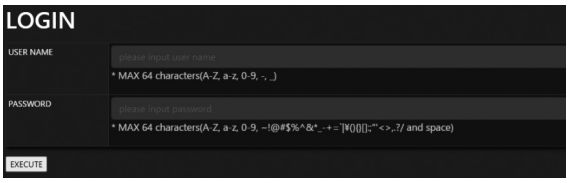
You control this monitor by using the browser of a computer on the network.
When you control this monitor by using the browser, set “LAN PORT” and “HTTP SERVER” to “ON” on the ADMIN menu. (See page 34 and 35.)

■Basic operation

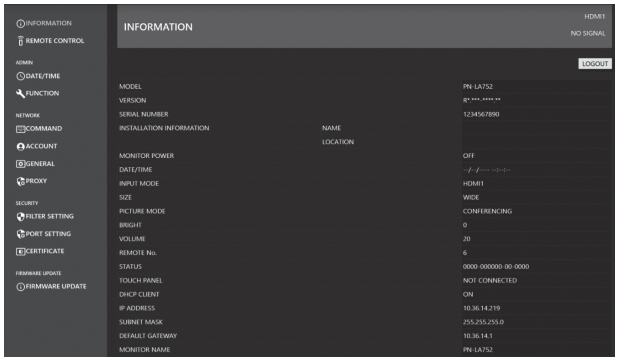
1. Launch the web browser on the computer.
2. In the “Address” box, type “http://” followed by your monitor’s IP address followed by “/”, then press the Enter key.
   You can confirm the IP address with the INFORMATION function. (See page 24.)

   On the LOGIN screen, enter a USER NAME and PASSWORD for ADMIN or USER and click the [EXECUTE] button to log in. (See page 44.)

   The following values are set in the initial settings.
   ADMIN
   USER NAME: admin, PASSWORD: admin
   USER
   USER NAME: user, PASSWORD: user



   When you log in for the first time, you will be redirected to the USER NAME and PASSWORD change screen page. Set a new USER NAME and PASSWORD and click the [APPLY] button to update them.
   You cannot go to other settings pages without updating your USER NAME and PASSWORD.
3. You can check, control, and change the monitor’s status and settings by clicking the menu items on the left side of the screen.



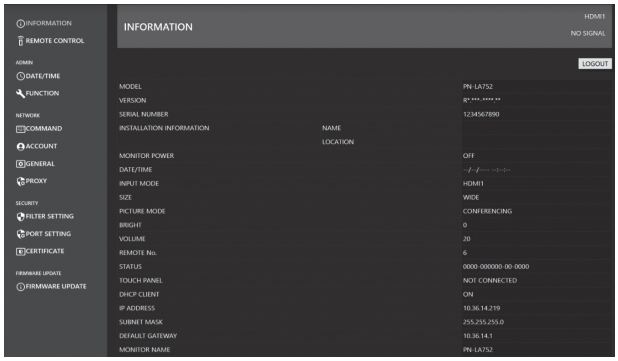
- After the setting, use the [APPLY] button / [REFRESH] button to update the settings.

TIPS

- The web browser screen is basically explained on the screen when logged in with ADMIN.
- See pages 43 to 46 for details on each setting.
- The web browser is not accessible over a period of time after logging in. Reload the browser if an error occurs when executing [REFRESH] or the settings. After returning to the login page, perform the login again.
- You cannot operate the monitor while it is warming up.
- You can perform the following operations with USER authority.
  - INFORMATION
  - REMOTE CONTROL
  - Change a USER NAME and PASSWORD for USER authority.

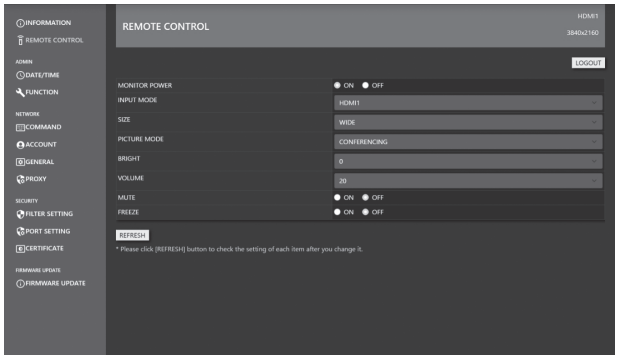
■INFORMATION

Information about this monitor appears.



■REMOTE CONTROL

You can control the operations corresponding to the buttons (POWER button, INPUT button, SIZE button, etc.) on the remote control unit. (See page 23.)

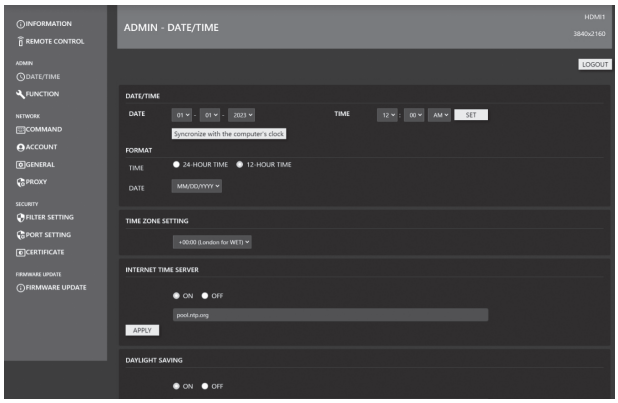


TIPS

- In standby state, Power ON is the operation available.
- When neither ON nor OFF is marked, this monitor is in the input signal waiting state. At this time, both Power ON/OFF is the operation available.

■ADMIN-DATE/TIME

Set the date and time.



DATE/TIME

Set the date and time.

FORMAT

Sets the date/time display format.

TIME ZONE SETTING

Set the time difference between the region where the monitor is used and the UTC (Universal Time, Coordinated).

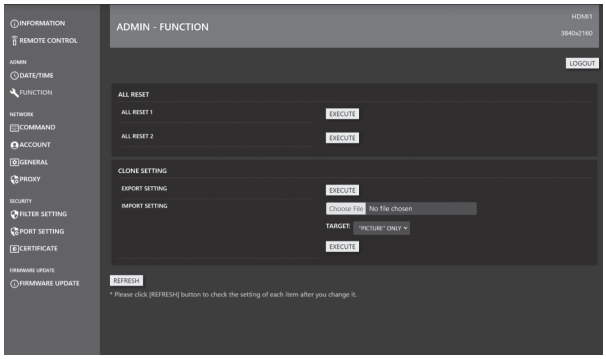
INTERNET TIME SERVER

Sets the current date and time.
When this setting is set to “ON”, the time is adjusted periodically using an internet time server. Set the server address.

DAYLIGHT SAVING

Set the start/end date and time for daylight saving.
The settings should be manually updated each year. If the settings are not changed, the same settings will apply the following year.

■ADMIN-FUNCTION



ALL RESET

Resets the settings to the factory default settings.

ALL RESET 1:

Resets all the settings to the factory default settings.

ALL RESET 2:

Resets all the settings to the factory default settings except for the following items:
“REMOTE No.” , “COMMUNICATION SETTING” , “CONTROL FUNCTION” , “NETWORK”.

CLONE SETTING

Download the current settings of this monitor from a web browser, and reflect the settings on another monitor.

EXPORT SETTING:

Exports the current settings as a file to your computer.

IMPORT SETTING:

Reads a file from a web browser and reflects the settings in the range specified by “TARGET”.

TARGET:

Set the data to be imported when importing settings.

“PICTURE” ONLY:

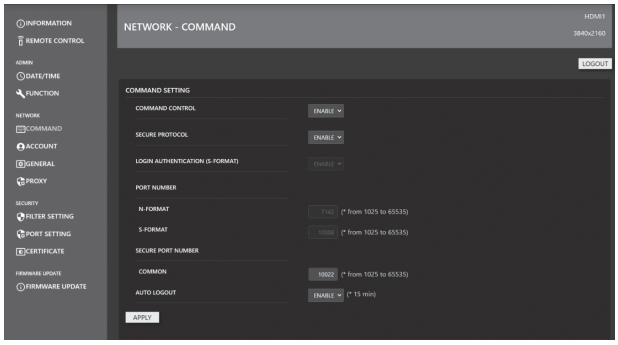
When importing settings, only PICTURE settings are imported.

ALL:

When importing settings, all settings are imported.

■NETWORK-COMMAND

This screen allows you to specify the command-related settings.



COMMAND SETTING

Sets the command control-related settings.

COMMAND CONTROL:

Sets wether or not to use control commands over a LAN. This setting is synchronised with the “COMMAND(LAN)” setting under “CONTROL FUNCTION” on the OSD menu.

SECURE PROTOCOL:

Sets whether user authentication and encrypted communication is carried out using public key cryptography.

LOGIN AUTHENTICATION (S-FORMAT):

Sets whether login authentication is used when using the S-FORMAT command.
When login authentication is used, the value set in “USER NAME/PASSWORD” is used for user authentication.

PORT NUMBER N-FORMAT:

Sets the port number to be used by the N-FORMAT command when using normal communication control.

PORT NUMBER S-FORMAT:

Sets the port number to be used by the S-FORMAT command when using normal communication control.

SECURE PORT NUMBER:

Set the port number to be used by the N-FORMAT/ S-FORMAT commands when using communication control by SECURE PROTOCOL.

AUTO LOGOUT:

Sets whether the connection is disconnected when no control commands are received for a period of 15 minutes after connecting.

USER NAME / PASSWORD

USER NAME:

Sets the user name used for user authentication.

PASSWORD:

Sets the password used for user authentication.

PUBLIC KEY

Manages public keys for the use of “SECURE PROTOCOL”.

KEY FILE:

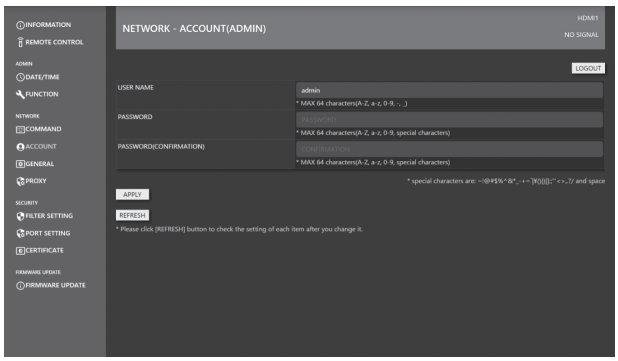
Set the public key to be registered with this monitor.

KEY NAME:

Set a nickname for the public key to be registered.
Up to 3 public keys can be registered for each user.
To delete a registered public key, select it from the list and then delete it.

■NETWORK-ACCOUNT

This screen allows you to configure USER NAME and PASSWORD.



USER NAME / PASSWORD

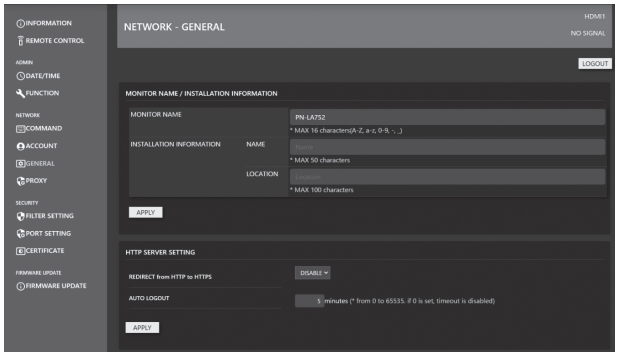
Sets up a user name and password to restrict access to this monitor.
There are two login accounts: ADMIN and USER.
When logging in with ADMIN, set the USER NAME and PASSWORD of ADMIN.
When logging in with USER, set the USER NAME and PASSWORD of USER.

TIPS

- After the configuration, the status may have changed. To get the latest status, press the [REFRESH] button to update the status.

■NETWORK-GENERAL

This screen allows you to specify the MONITOR NAME, INSTALLATION INFORMATION (NAME/LOCATION), “REDIRECT from HTTP to HTTPS” and AUTO LOGOUT time.



MONITOR NAME

Specify a name for this monitor as it should appear on the web browser screen.

INSTALLATION INFORMATION (NAME/LOCATION)

Specify the information to display for this monitor in the web browser window.

REDIRECT from HTTP to HTTPS

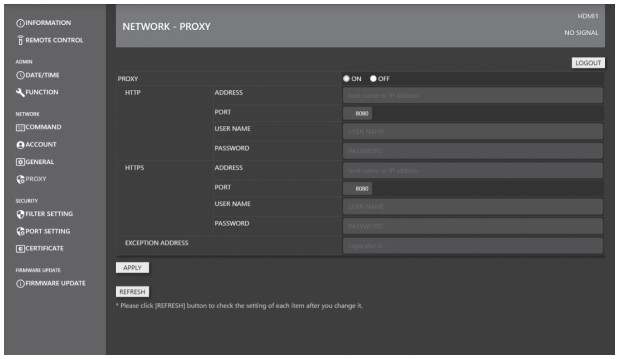
If this function is enabled, access from the computer will automatically be to the encryption support for addresses starting with “HTTPS://”.

AUTO LOGOUT

Specify the time (in minutes) to elapse before automatically disconnecting this monitor from the network.
Specify in minutes from 1 to 65535. A value of ‘0’ will disable this function.

■NETWORK-PROXY

This screen allows you to specify the PROXY-related settings.



PROXY

Set this setting if the PROXY needs to be authorised when connecting to the Internet. When connected to the Internet, the firmware network update function is available.

HTTP

Configure the HTTP proxy server settings required to access the Internet.

HTTPS

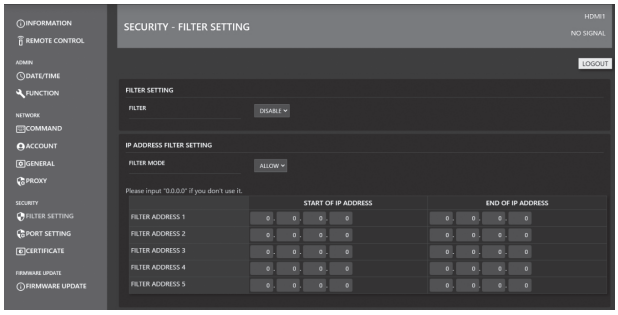
Configure the HTTPS proxy server settings required to access the Internet.

EXCEPTION ADDRESS

Set the addresses for which no proxy server is used. When entering multiple addresses, separate them with “,”.

■SECURITY-FILTER SETTING

This screen allows you to configure the FILTER SETTING, IP ADDRESS FILTER SETTING, etc.



FILTER SETTING

Toggles whether the entire address filter is enabled or disabled.

IP ADDRESS FILTER SETTING

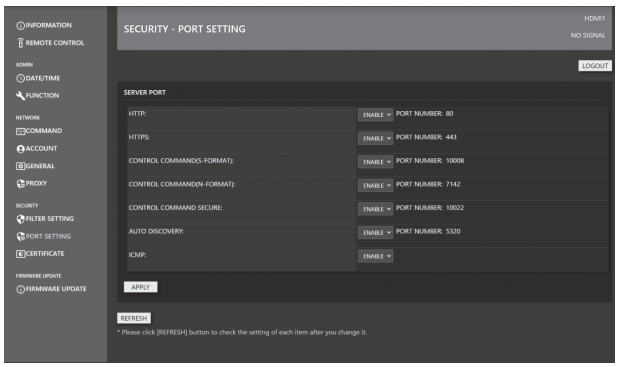
Allows or denies IP addresses between the starting address and the ending address. 5 types of settings are available. The mode “ALLOW” specifies the addresses to be allowed and “DENY” specifies the addresses to be denied.

MAC ADDRESS FILTER SETTING

In “MAC ADDRESS FILTER SETTING”, 5 MAC ADDRESSES can be set to be permitted.” Access is permitted regardless of the “ALLOW”/”DENY” setting in “IP ADDRESS FILTER SETTING”.

■SECURITY-PORT SETTING

This screen allows you to configure the SERVER PORT setting.

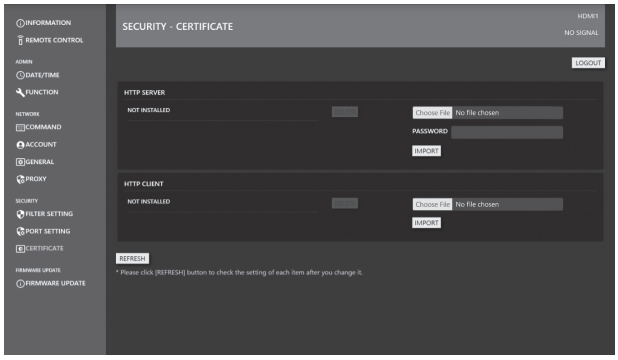


SERVER PORT

Enables or disables the services (port numbers) to which the product can be accessed.
When both “HTTP” and “HTTPS” are disabled in “SERVER PORT”, access/setting via the web is no longer possible. To enable them again, perform ALL RESET using the remote control of the unit.

■SECURITY-CERTIFICATE

Install “certificates” for HTTP SERVER and HTTP CLIENT.



HTTP SERVER

When the product is shipped, the HTTP server uses a dummy server certificate and a security warning is issued. The certificate can be installed when the user has obtained the certificate. The format is a PKCS#12 (pfx extension) file.

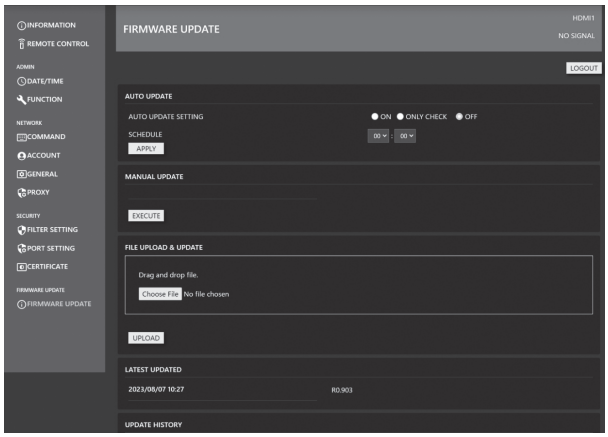
HTTP CLIENT

Install a CA certificate when a CA server certificate is used for the internet connection environment. The format is PEM format (pem extension).

TIPS

- Software updates may be required.

■FIRMWARE UPDATE



AUTO UPDATE

Set to perform updates at specified times via the Internet.
When set to “ON”, the monitor will be updated if new firmware is detected.
When set to “ONLY CHECK”, new firmware is detected and the new firmware is displayed in “MANUAL UPDATE”, but no update is performed.

MANUAL UPDATE

Connect to the internet, check for the presence of an updateable firmware, and perform the update when the update is present.

FILE UPLOAD & UPDATE

Upload the file for the firmware update and perform the update. The latest FIRMWARE can be obtained by downloading it from the Information Display Downloader.
(See page 10.)

LATEST UPDATED

Displays the date and version of the last update.

UPDATE HISTORY

Displays the success/failure and date of the last three updates.

■Command-based control

You can control the monitor using commands via terminal software and other appropriate applications.
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)

When you control this monitor from a browser, set “LAN PORT” and “HTTP SERVER” to “ON” on the ADMIN menu.
(See page 34 and 35.)

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.
- Is the power cord disconnected? (See page 15.)
- Is the main power switch off? (See page 18.)
- Is the monitor in standby state (the power LED illuminating in orange)? (See page 18.)
- Is an input mode selected that is appropriate for the input terminal to which the cable is connected? (See pages 22 and 24.)
- If any external equipment is connected, make sure the equipment is operating (playing back).
- For USB-C, is the “USB-C SETTING” correctly configured for the specification of the cable and computer being used?

Remote control does not work.
- Are the batteries inserted with polarity (+,-) aligned? (See page 16.)
- Are the batteries exhausted?
- Point the remote control unit toward the monitor’s remote control sensor. (See page 16.)
- Is the menu display hidden or is operation disabled? (See page 33.)
- Do the remote control numbers on the remote control unit and on the monitor match?
  Check the numbers on “INFORMATION”. (See page 24.)

The remote control unit’s buttons for operating the HDMI-connected device do not work.
- Is “HDMI CEC LINK” set to “AUTO” under “INPUT” on the ADMIN menu?
- Switch to a different input mode, and then try switching the input mode back to HDMI.

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.
- If the top and bottom of the image are not horizontally aligned, set “TOUCH PANEL MODE” on the TOUCH PANEL menu to “OFF”.

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 pages 51 and 52.)
- If the connected device does not support 4K, set “HDMI MODES” to “MODE2”.

The video from DisplayPort input terminal does not appear correctly.
- Is the input signal compatible with this monitor? (See pages 51 and 52.)
- Does the DisplayPort cable support 4K, and is it DisplayPort standard compliant? The monitor will not work with cables that are not standard compliant.
- Is it not connected to the DisplayPort output terminal?
- Restart the monitor and your computer.
- Does the video card support DisplayPort1.2?
  If it does not support DisplayPort1.2, set “DisplayPort STREAM” to “SST1”.

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 “CONNECT AUTO INPUT SELECT” is “ON”, the input mode automatically changes to that terminal when a video signal is input into the input terminal.
  For this reason, the input mode may change when the computer wakes up from system standby.
- When the “NO SIGNAL AUTO INPUT SEL.” 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.
- Is “HDMI CEC LINK” set to “AUTO” under “INPUT” on the ADMIN menu? The input mode of the monitor is switched in conjunction with it when menu display or content playback is performed on a CEC supported device connected to the monitor via HDMI. (See page 34.)

Can not be controlled via LAN or RS-232C.
- Is the “LAN PORT” set to “ON”?
- Is “LAN SETUP” set correctly?
- Is “COMMAND(LAN)” / “COMMAND(RS-232C)” / “HTTP SERVER” etc. in “CONTROL FUNCTION” set to “ON”?

The touch panel does not respond.
- Is the USB cable connected properly?
- Is the setting of “TOUCH INPUT SELECT” on the TOUCH PANEL menu correct? (See page 32.)
- Are touch pens that are supplied touch pens?
- Is there anything attached to the screen? Something attached to the screen may prevent correct operation.

The response of the touch panel is slow.
Some parts of the screen do not respond.
A different place is touched.
- Is the screen exposed to direct sunlight or other strong light? The touch panel uses infrared rays and thus may not operate correctly.
- Is there an obstacle between the infrared transmitter/receiver and the touch pen or your finger? An obstacle will prevent correct operation. If your fingers or a sleeve are too close to the screen, correct operation will not be possible.
- Is the infrared transmitter/receiver dirty? Gently wipe off any dirt with a soft cloth.
- If the touch panel is touched with a small tip less than about 1/16 inch (2 mm) x 1/16 inch (2 mm), the touch may not be detected by infrared and correct operation will not take place.
- Do not touch the touch panel when turning on the monitor. If you touch the touch panel, this may be detected as an element failure in the infrared transmitter/receiver and incorrect operation will result.
- Set the screen size to “Wide”. (See page 25.)

The screen is dark.
- When the internal temperature of the monitor rises excessively, the brightness of the backlight automatically decreases in order to prevent a further temperature rise.
- Remove the cause of the excessive temperature rise.

Incorrect touch.
- If the display resolution and desktop resolution are different (e.g., this monitor receives a 16:9 signal, but the desktop shows a 4:3 aspect ratio with black bars on the left and right), then the touch function may not work correctly. If changing the screen size by SIZE function doesn’t resolve the issue, try using a 16:9 desktop resolution on the connected device.

Power LED illuminates in blue and orange alternately.
“STATUS [xxxx]” appears in the corner of the screen.
- Hardware has a problem. Turn off the monitor and request repair from your SHARP dealer.
  (When “STATUS ALERT” is set to “OSD & LED”. This varies depending on the setting.)

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 “TEMPERATURE” is displayed in the corner of the screen.
- 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, “TEMPERATURE” is displayed on the screen and the Power LED flashes orange and blue alternately. (When “TEMPERATURE ALERT” is set to “OSD & LED”. This varies depending on the setting.)
- 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-LA862	PN-LA752	PN-LA652
LCD component		86" Class [85-9/16 inch (217.4 cm) diagonal] TFT LCD	75" Class [74-1/2 inch (189.3 cm) diagonal] TFT LCD	65" Class [64-1/2 inch (163.9 cm) diagonal] TFT LCD
Max. resolution (pixels)		3840 x 2160		
Max. colors		Approx. 1.07 billion colors		
Pixel pitch		0.494 mm (H) × 0.494 mm (V)	0.430 mm (H) × 0.430 mm (V)	0.372 mm (H) × 0.372 mm (V)
Brightness (typical)		500 cd/m^2 *1		450 cd/m^2 *1
Contrast ratio (typical)		1200: 1		
Viewing angle		178° right/left/up/down (contrast ratio ≥ 10)		
Screen active area inch (mm)		74-5/8 (W) x 41-15/16 (H) (1895.04 x 1065.96)	64-15/16 (W) x 36-9/16 (H) (1649.66 x 927.94)	56-1/4 (W) x 31-5/8 (H) (1428.48 x 803.52)
Plug and play		VESA DDC2B		
Input terminals	Video	HDMI x 2 DisplayPort x 1 USB Type-C x 1		
	Serial (RS-232C)	D-sub 9 pin x 1		
Output terminals	Video	DisplayPort x 1		
	Audio	3.5 mm mini stereo jack x 1		
USB port		USB 2.0 compliant x 1, USB 3.0 compliant x 2		
LAN terminal		10 BASE-T/100 BASE-TX		
Speaker output		10 W + 10 W		
Touch Panel	Detection method	InGlass (Infrared blocking detection method)		
	Computer connector	USB (3.0 compliant) (Type B) x 1		
Option board slot		12 V, 5.5 A (power supplied when expanding the functions with an optional part)		
Power requirement		AC 100 V - 240 V, 4.9 A - 1.9 A, 50/60 Hz	AC 100 V - 240 V, 4.1 A - 1.6 A, 50/60 Hz	AC 100 V - 240 V, 3.9 A - 1.5 A, 50/60 Hz
Operating temperature*2*3		41°F to 95°F (5°C to 35°C)		
Operating humidity*3		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*4 (Max / networked standby mode*5 / standby mode*5 / off mode)		275 W (440 W/2.0 W/0.5 W/0.0 W)	205 W (360 W/2.0 W/0.5 W/0.0 W)	190 W (350 W/2.0 W/0.5 W/0.0 W)
Dimensions inch (mm) (excluding protrusions)		Approx. 77-3/8 (W) x 3-3/8 (D) x 45-13/16 (H) (1965.4 x 86.5 x 1163.9)	Approx. 67-3/4 (W) x 3-3/8 (D) x 40-3/8 (H) (1720.1 x 86.5 x 1025.9)	Approx. 58-13/16 (W) x 3-9/16 (D) x 35-1/4 (H) (1493.5 x 90.7 x 896.1)
Weight lbs. (kg)		Approx. 157.7 (71.5)	Approx. 124.6 (56.5)	Approx. 108.1 (49)

*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.
Brightness of product: 450 cd/m^2 (PN-LA862, PN-LA752), 400 cd/m^2 (PN-LA652)

*2 When using the monitor laying flat on a surface (when the monitor is tilted more than 20 degrees upward from the perpendicular in relation to a level surface), use the monitor at the ambient temperature between 41°F (5°C) and 86°F (30°C).
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 In addition, check the requirements of the computer and other devices to be connected, and make sure that all requirements are satisfied.

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

*5 When no optional part is attached.

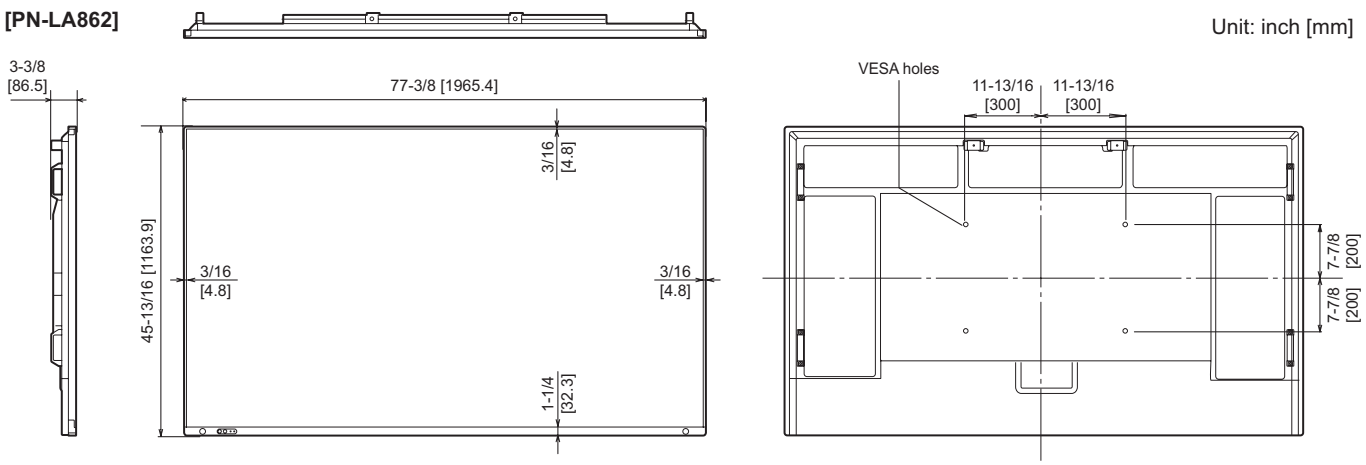
As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in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

■Dimensional Drawings

Note that the values shown are approximate values.

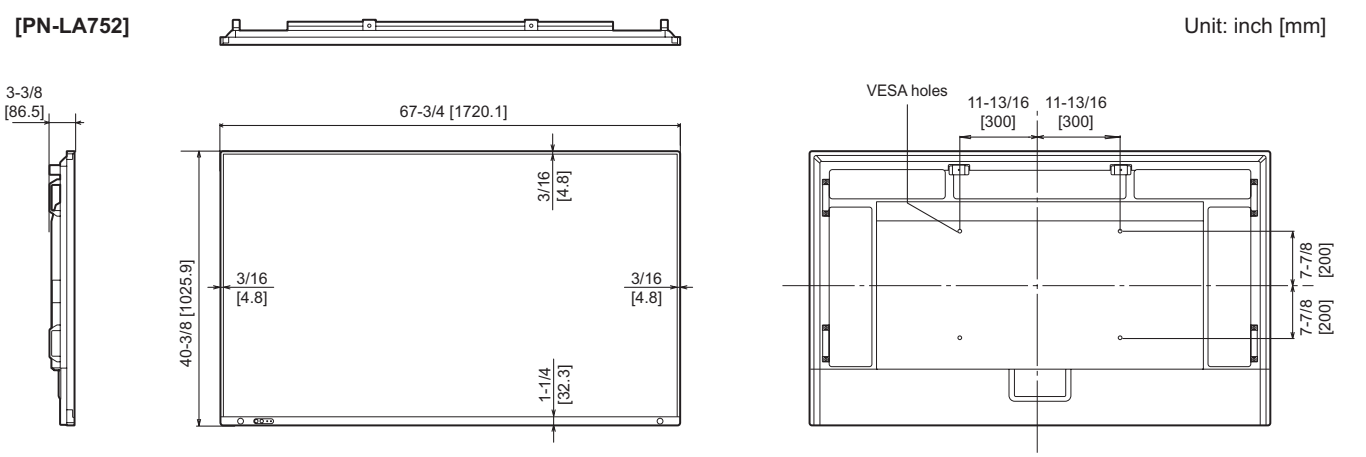
[PN-LA862]

Unit: inch [mm]



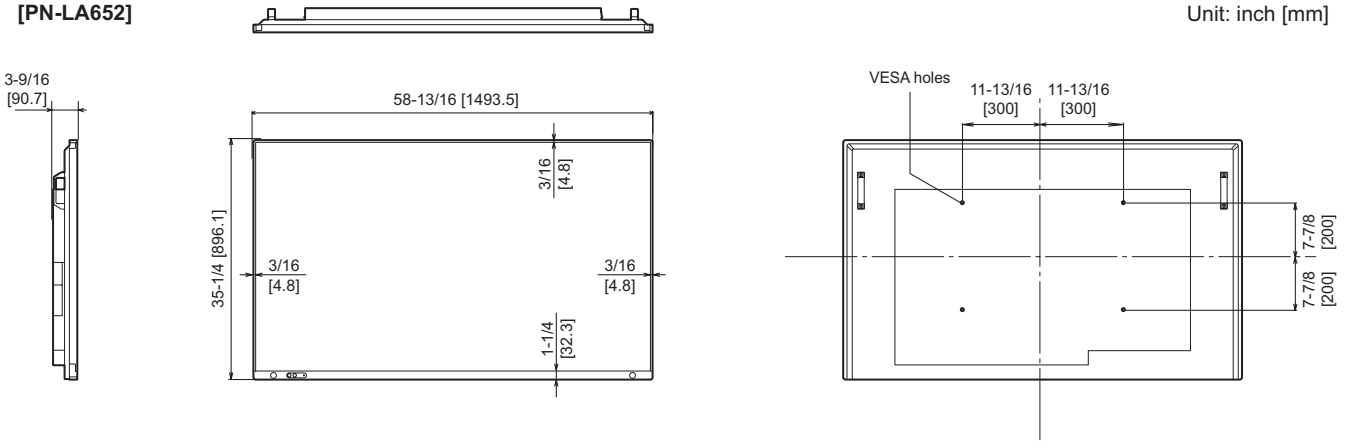
[PN-LA752]

Unit: inch [mm]



[PN-LA652]

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.

■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	DisplayPort	
			Mode1	Mode2		SST2	SST1
VESA	640 × 480	60Hz	Yes	Yes	Yes	Yes	Yes
		72Hz	Yes	Yes	Yes	Yes	Yes
		75Hz	Yes	Yes	Yes	Yes	Yes
	800 × 600	60Hz	Yes	Yes	Yes	Yes	Yes
		72Hz	Yes	Yes	Yes	Yes	Yes
		75Hz	Yes	Yes	Yes	Yes	Yes
	1024 × 768	60Hz	Yes	Yes	Yes	Yes	Yes
		70Hz	Yes	Yes	Yes	Yes	Yes
		75Hz	Yes	Yes	Yes	Yes	Yes
	1152 × 864	75Hz	Yes	Yes	Yes	Yes	Yes
	1280 × 768	60Hz	Yes	Yes	Yes	Yes	Yes
	1280 × 800	60Hz	Yes	Yes	Yes	Yes	Yes
	1280 × 960	60Hz	Yes	Yes	Yes	Yes	Yes
	1280 × 1024	60Hz	Yes	Yes	Yes	Yes	Yes
		75Hz	Yes	Yes	Yes	Yes	Yes
	1360 × 768	60Hz	Yes	Yes	Yes	Yes	Yes
	1400 × 1050	60Hz	Yes	Yes	Yes	Yes	Yes
	1440 × 900	60Hz	Yes	Yes	Yes	Yes	Yes
	1600 × 1200	60Hz	Yes	Yes	Yes	Yes	Yes
	1680 × 1050	60Hz	Yes	Yes	Yes	Yes	Yes
	1920 × 1200	60Hz	Yes	Yes	Yes	Yes	Yes
Wide	1280 × 720	60Hz	Yes	Yes	Yes	Yes	Yes
	1920 × 1080	60Hz	Yes	Yes	Yes	Yes	Yes
	3840 × 2160	24Hz	Yes	Yes	Yes	Yes	Yes
		25Hz	Yes	Yes	Yes	Yes	Yes
		30Hz	Yes	Yes	Yes	Yes	Yes
		50Hz	Yes	-	Yes	Yes	-
		60Hz	Yes	-	Yes	Yes	-
	4096 × 2160*1	24Hz	Yes	Yes	Yes	Yes	Yes
		25Hz	Yes	-	Yes	Yes	Yes
		30Hz	Yes	-	Yes	Yes	Yes
		50Hz	Yes	-	Yes	Yes	-
		60Hz	Yes	-	Yes	Yes	-
US TEXT	720 × 400	70Hz	Yes	Yes	Yes	Yes	Yes

*1 Displays a reduced image, except in “Dot by Dot”. In “Dot by Dot”, the image will be cut down to panel size then displayed.

- 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	
		Mode1	Mode2
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

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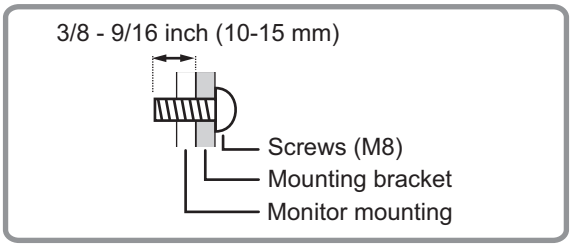
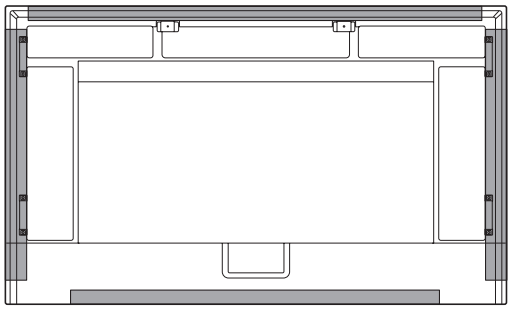
Mounting Precautions (For SHARP dealers and service engineers)

- When installing, removing or moving the monitor, ensure that this is carried out by at least 4 people. (PN-LA652: at least 3 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 M8 screws that are 3/8 inch (10 mm) to 9/16 inch (15 mm) longer than the thickness of the mounting bracket.



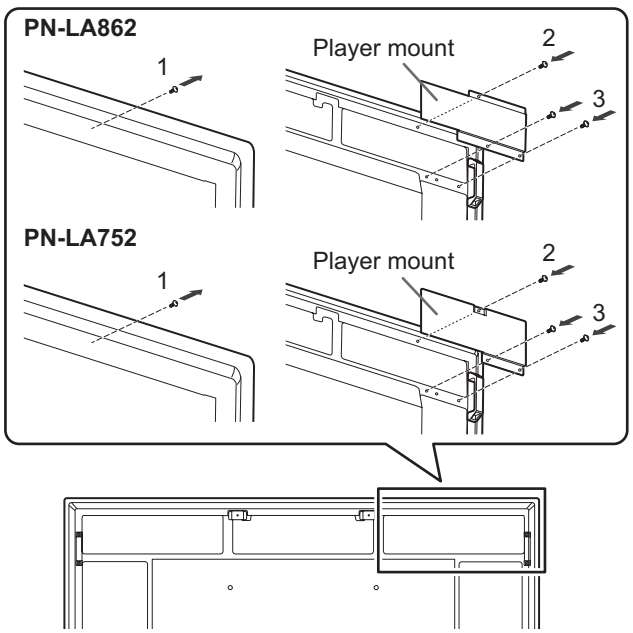
- Do not use an impact driver.
- When moving the monitor, be sure to hold the handles or the parts marked by ▭ below. Do not grasp the screen. This may cause product damage, failure, or injury.



- 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.
- If you need to temporarily place the monitor on a table or other surface during installation, spread a thick soft cloth on the table to prevent damage to the screen and table.
- When using the monitor laying flat on a surface (when the monitor is tilted more than 20 degrees upward from the perpendicular in relation to a level surface), consult an authorized dealer because there are some specific mounting conditions.

■Attaching player mount (PN-LA862/PN-LA752)

Attach the player mount when installing an optional controller.



1. **Remove the screws from this monitor.**
2. **Attach the player mount with the screws removed from this monitor.**
3. **Attach the player mount with the player mount screw (M4x6) (supplied) (x2).**

■Installing the option board

You can install the option board that is compatible with Intel Smart Display Module Small (Intel SDM-S) and Intel Smart Display Module Large (Intel SDM-L) specifications.

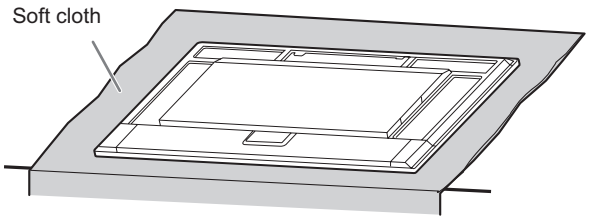
! Caution

- If there are cables already connected, disconnect them all.

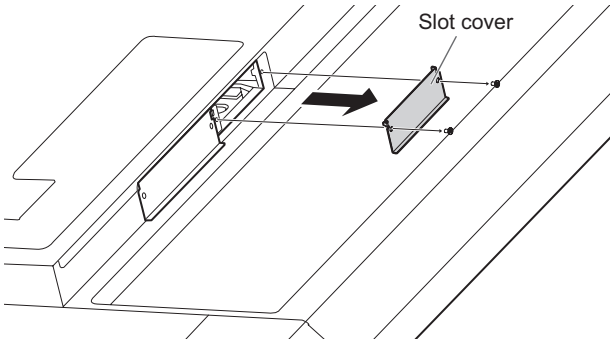
TIPS

- Contact your dealer for compatible optional boards.

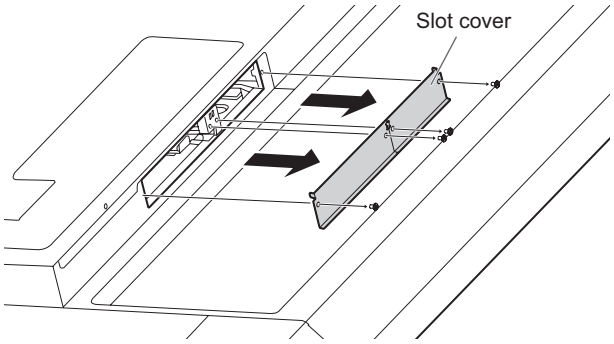
1. Spread a thick, soft cloth (blanket, etc.) that will prevent damage to the LCD panel on a stable flat surface where the entire monitor can be placed, and place the monitor with the LCD panel face down on the cloth.



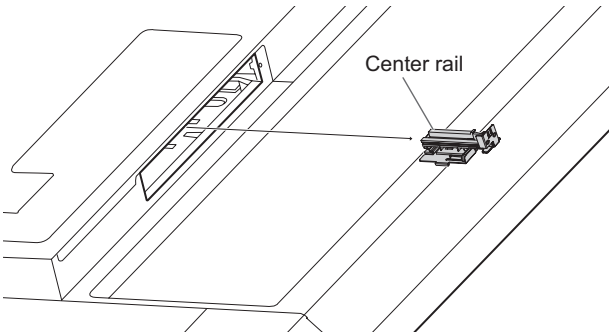
2. Remove the screws (x2), and then remove the slot cover.
Intel SDM-S:



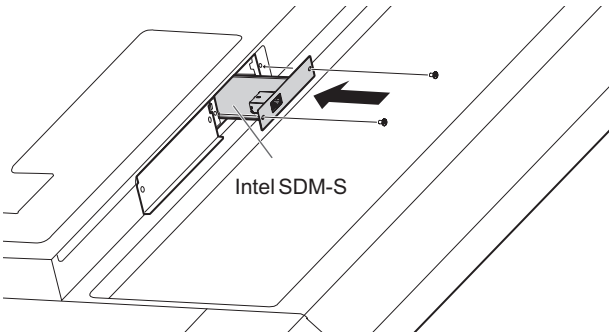
Intel SDM-L:



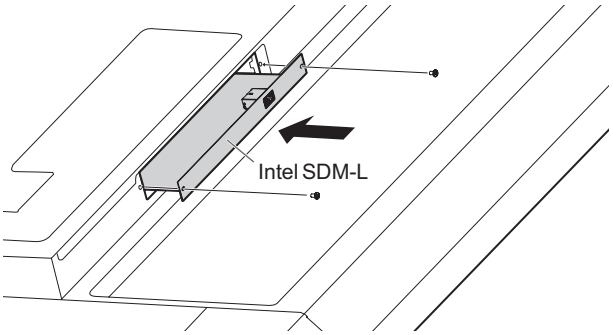
For Intel SDM-L, remove the center rail before attaching the option board.



3. Attach the option board with the screws removed in step 2. (Recommended fasten force: 50~80 N•cm)
Intel SDM-S:



Intel SDM-L:



■Removing the option board

Assemble in the opposite order of the installation.

! Caution

- Make sure the option board is inserted into the slot in the correct orientation.
- Do not apply excessive force to manipulate the option board before attaching it with screws.
- Ensure the option board is securely fastened using the original screws to prevent the option board from falling out the product. A falling option board may expose you to danger.

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