For more detailed instructions, refer to the Operating Instructions on the CD-ROM.

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- Please read these instructions before operating your set and retain them for future reference.
- Illustrations and screens in this Operating Instructions are images for illustration purposes, and may be different from the actual ones.
WARNING: RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING
To reduce the risk of electric shock,
do not remove cover or back.
No user-serviceable parts inside. Refer servicing
to qualified service personnel.

The lightning flash with arrow-head within a
triangle is intended to tell the user that parts
inside the product are a risk of electric shock
to persons.

The exclamation point within a triangle
is intended to tell the user that important
operating and servicing instructions are in the
papers with the appliance.

WARNING:
To prevent damage which may result in fire or
shock hazard, do not expose this apparatus to
rain or moisture.
Do not place containers with water (flower vase,
cups, cosmetics, etc.) above the set.
(including on shelves above, etc.)

WARNING:
To prevent electric shock, do not remove cover. No
user serviceable parts inside. Refer servicing to
qualified service personnel.

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in
accordance with the manufacturer’s instructions.
8) Do not install near any heat sources such as
radiators, heat registers, stoves, or other apparatus
(including amplifiers) that produce heat.
9) Protect the power cord from being walked on
or pinched particularly at plugs, convenience
receptacles, and the point where they exit from the
apparatus.
10) Only use attachments / accessories specified by the
manufacturer.
11) Use only with the cart, stand, tripod,
bracket, or table specified by the
manufacturer, or sold with the apparatus.
When a cart is used, use caution when
moving the cart / apparatus combination
to avoid injury from tip-over.
12) Unplug this apparatus during lightning storms or
when unused for long periods of time.
13) Refer all servicing to qualified service personnel.
Servicing is required when the apparatus has been
damaged in any way, such as power-supply cord or
plug is damaged, liquid has been spilled or objects
have fallen into the apparatus, the apparatus has
been exposed to rain or moisture, does not operate
normally, or has been dropped.
FCC STATEMENT

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC CAUTION:
To assure continued compliance, follow the attached installation instructions and use only the provided power supply cord. Any changes or modifications not expressly approved by Panasonic Corp. of North America could void the user’s authority to operate this device.

Declaration of Verification
Model No. TH-32EF1U
Responsible Party: Panasonic Corporation of North America
Two Riverfront Plaza, Newark, New Jersey
07102-5490
Contact Source: Panasonic System Solutions Company of North America
1-877-655-2357
General Contact: http://shop.panasonic.com/support

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

CANADIAN NOTICE:
This Class A digital apparatus complies with Canadian ICES-003.

WARNING:
• For permanently connected equipment, a readily accessible disconnect device shall be incorporated in the building installation wiring.
• For pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.

Note:
Image retention may occur. If you display a still picture for an extended period, the image might remain on the screen. However, it will disappear when a general moving picture is displayed for a while.

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• Java is a registered trademark or a trademark of Oracle Corporation and its subsidiary and associated companies in the United States and/or other countries.
• RoomView, Crestron RoomView and Fusion RV are registered trademarks of Crestron Electronics, Inc.
• Crestron Connected is the trademark of Crestron Electronics, Inc.

Even if no special notation has been made of company or product trademarks, these trademarks have been fully respected.
Important Safety Notice

**WARNING**
1) To prevent damage which may result in fire or shock hazard, do not expose this appliance to dripping or splashing.
   Do not place containers with water (flower vase, cups, cosmetics, etc.) above the set. (including on shelves above, etc.)
   No naked flame sources, such as lighted candles, should be placed on / above the set.
2) To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

**CAUTION**
This appliance is intended for use in environments which are relatively free of electromagnetic fields.
Using this appliance near sources of strong electromagnetic fields or where electrical noise may overlap with the input signals could cause the picture and sound to wobble or cause interference such as noise to appear.
To avoid the possibility of harm to this appliance, keep it away from sources of strong electromagnetic fields.

**WARNING:**
This equipment is compliant with Class A of CISPR32. In a residential environment this equipment may cause radio interference.

Safety Precautions

**WARNING**

**Setup**
This LCD Display is for use only with the following optional accessories.
Use with any other type of optional accessories may cause instability which could result in the possibility of injury.
(All of the following accessories are manufactured by Panasonic Corporation.)
- Pedestal
  TY-ST32PE1
- Early Warning Software
  ET-SWA100 series*

*: Suffix of the part number may differ depending on the license type.

**Note**
- The part number of the optional accessories are subject to change without notice.

When installing the pedestal, read the operating instructions supplied with it carefully and install properly. Also, always use the overturn prevention accessories. We are not responsible for any product damage, etc. caused by failures in the installation environment for the pedestal or wall-hanging bracket even during the warranty period.

Small parts can present choking hazard if accidentally swallowed. Keep small parts away from young children. Discard unneeded small parts and other objects, including packaging materials and plastic bags/sheets to prevent them from being played with by young children, creating the potential risk of suffocation.

Do not place the Display on sloped or unstable surfaces, and ensure that the Display does not hang over the edge of the base.
- The Display may fall off or tip over.

Install this unit at a location with minimal vibration and which can support the weight of the unit.
- Dropping or falling of the unit may cause injury or malfunction.

Do not place any objects on top of the Display.
- If foreign objects or water get inside the Display, a short-circuit may occur which could result in fire or electric shock. If any foreign objects get inside the Display, please consult your local Panasonic dealer.

Transport only in upright position!
- Transporting the unit with its display panel facing upright or downward may cause damage to the internal circuitry.

Ventilation should not be impeded by covering the ventilation openings with items such as newspapers, table cloths and curtains.
For sufficient ventilation, see page 7.
Caution - For use only with UL Listed Wall Mount Bracket with minimum weight/load 5.3 kg (11.7 lbs).

When installing the Display vertically:
When installing the Display vertically, be sure that the Power Indicator comes to the downside. Heat is generated and it may cause fire or damage to the Display.

![Power indicator](image)

Cautions for Wall or Pedestal Installation
- The installation should be performed by an installation professional. Installing the Display incorrectly may lead to an accident that results in death or serious injury. Use the optional Pedestal. (see page 4)
- When installing on a wall, a wall hanging bracket that conforms to VESA standards must be used. (32-inch model) : VESA 100×100 (see page 7)
- Before installation, be sure to check if the mounting location has enough strength to support the weight of the LCD display and the wall hanging bracket for anti drop.
- If you terminate the use of the Display on the Wall or Pedestal, ask a professional to remove the Display as soon as possible.
- When mounting the Display on the wall, prevent the mounting screws and power cable from contacting metal objects inside the wall. An electric shock may occur if they contact metal objects inside the wall.

Do not install the product to a place where the product is exposed to direct sunlight.
- If the screen is exposed to direct sunlight, the liquid crystal panel may have adverse effect.

■ When using the LCD Display
The Display is designed to operate on 110 - 127 V AC, 50/60 Hz.

Do not cover the ventilation holes.
- Doing so may cause the Display to overheat, which can cause fire or damage to the Display.

Do not stick any foreign objects into the Display.
- Do not insert any metal or flammable objects into the ventilations holes or drop them onto the Display, as doing so can cause fire or electric shock.

Do not remove the cover or modify it in any way.
- High voltages which can cause severe electric shocks are present inside the Display. For any inspection, adjustment and repair work, please contact your local Panasonic dealer.

Ensure that the mains plug is easily accessible.

Do not use any power supply cord other than that provided with this unit.
- Doing so may cause short-circuit, generates heat, etc., which could cause electric shock or fire.

Do not use the supplied power supply cord with any other devices.
- Doing so could cause electric shock or fire.

Securely insert the power supply plug as far as it will go.
- If the plug is not fully inserted, heat may be generated which could cause fire. If the plug is damaged or the wall socket is loose, they shall not be used.

Do not handle the power supply plug with wet hands.
- Doing so may cause electric shocks.

Do not do anything that may damage the power cable. When disconnecting the power cable, pull on the plug body, not the cable.
- Do not damage the cable, make any modifications to it, place heavy objects on top of it, heat it, place it near any hot objects, twist it, bend it excessively or pull it. To do so may cause fire and electric shock. If the power cable is damaged, have it repaired at your local Panasonic dealer.

Do not touch the power supply cord or the plug directly by hand when they are damaged.

Electric shock could occur.

Do not remove covers and NEVER modify the Display yourself
- Do not remove the rear cover as live parts are accessible when it is removed. There are no user serviceable parts inside. (High-voltage components may cause serious electrical shock.)
- Have the Display checked, adjusted, or repaired at your local Panasonic dealer.

Keep the AAA/R03/UM4 batteries (supplied) out of reach of children. If accidentally swallowed, it will be harmful to the body.
- Please contact a doctor immediately in case you doubt that the child may have swallowed it.

If the Display is not going to be used for any prolonged length of time, unplug the power supply plug from the wall outlet.

Picture noise may occur if you connect / disconnect the cables connected to the input terminals you are currently not watching, or if you turn the power of the video equipment on / off, but it is not a malfunction.

To prevent the spread of fire, keep candles or other open flames away from this product at all times.
If problems or malfunction occur, stop using immediately.

If problems occur, unplug the power supply plug.
- Smoke or an abnormal odour come out from the unit.
- No picture appears or no sound is heard, occasionally.
- Liquid such as water or foreign objects got inside the unit.
- The unit has deformed or broken parts.

If you continue to use the unit in this condition, it could result in fire or electric shock.
- Turn the power off immediately, unplug the power supply plug from the wall outlet, and then contact the dealer for repairs.
- To cut off the power supply to this Display completely, you need to unplug the power supply plug from the wall outlet.
- Repairing the unit yourself is dangerous, and shall never be done.
- To enable to unplug the power supply plug immediately, use the wall outlet which you can reach easily.

Do not touch the unit directly by hand when it is damaged.
Electric shock could occur.

When using the LCD Display
Do not bring your hands, face or objects close to the ventilation holes of the Display.
- Heated air comes out from the ventilation holes at the top of Display will be hot. Do not bring your hands or face, or objects which cannot withstand heat, close to this port, otherwise burns or deformation could result.

Be sure to disconnect all cables before moving the Display.
- If the Display is moved while some of the cables are still connected, the cables may become damaged, and fire or electric shock could result.

Disconnect the power supply plug from the wall socket as a safety precaution before carrying out any cleaning.
- Electric shocks can result if this is not done.

Clean the power cable regularly to prevent it becoming dusty.
- If dust built up on the power cord plug, the resultant humidity can damage the insulation, which could result in fire. Pull the power cord plug out from the wall outlet and wipe the mains lead with a dry cloth.

Do not step on, or hang from the display or the Pedestal.
- They might tip over, or might be broken and it may result in injury. Pay special attention to the children.

Do not reverse the polarity (+ and -) of the battery when inserting.
- Mishandling the battery may cause its explosion or leakage, resulting in fire, injury or damage to surrounding properties.
- Insert the battery correctly as instructed. (see page 9)

Remove the batteries from the remote control transmitter when not using for a long period of time.
- The battery may leak, heat, ignite or burst, resulting in fire or damage to surrounding properties.

Do not burn or breakup batteries.
- Batteries must not be exposed to excessive heat such as sunshine, fire or the like.

Do not turn the Display upside down.
Do not position the unit with its display panel facing upright.
Precautions for use

Cautions when installing

Do not set up the Display outdoors.
- The Display is designed for indoor use.

Environmental temperature to use this unit
- When using the unit where it is below 1,400 m (4,593 ft) above sea level: 0 °C to 40 °C (32 °F to 104 °F)
- When using the unit at high altitudes (1,400 m (4,593 ft) and higher and below 2,800 m (9,186 ft) above sea level): 0 °C to 35 °C (32 °F to 95 °F)

Do not install the unit where it is 2,800 m (9,186 ft) and higher above sea level.
- Failure to do so may shorten the life of the internal parts and result in malfunctions.

Required space for ventilation

When using the pedestal (optional accessory), leave a space of 10 cm (3 15/16") or more at the top, left and right, and 5 cm (1 31/32") or more at the rear, and also keep the space between the bottom of the display and the floor surface.

If using some other setting-up method (wall-hanging, etc.), follow the manual of it. (If there is no specific indication of installation dimension in the installation manual, leave a space of 10 cm (3 15/16") or more at the top, bottom, left and right, and 5 cm (1 31/32") or more at the rear.)

Minimum distance:

![Diagram showing minimum distances]

a: 10 cm (3 15/16")

b: 5 cm (1 31/32")

About the screws used when using a wall hanging bracket that conforms to VESA standards

<table>
<thead>
<tr>
<th>Inch model</th>
<th>Screw pitch for installation</th>
<th>Depth of screw hole</th>
<th>Screw (quantity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>100 mm × 100 mm</td>
<td>100 mm</td>
<td>M4 (4)</td>
</tr>
</tbody>
</table>

Be careful of the movable structure of the power indicator and remote control sensor.
- As factory default, the power indicator and remote control sensor are stored in the main unit. For normal use, pull out the remote control sensor from the edge side of the main unit by operating the lever on the rear panel. Depending on the setup condition such as when using the multi display, store the remote control sensor in the main unit. (see page 14)

Do not grab the liquid crystal panel.
- Do not forcibly press the liquid crystal panel, or push it with a pointed object. Applying a strong force to the liquid crystal panel will cause unevenness of the screen display, resulting in malfunction.

Depending on the temperature or humidity conditions, uneven brightness may be observed. This is not a malfunction.
- This unevenness will disappear while applying current continuously. If not, consult the distributor.

Request Regarding Security

When using this product, take safety measures against the following incidents.
- Personal information being leaked via this product
- Unauthorized operation of this product by a malicious third party
- Interfering or stopping of this product by a malicious third party

Take sufficient security measures.
- Set a password for the LAN control and restrict the users who can log in.
- Make your password difficult to guess as much as possible.
- Change your password periodically.
- Panasonic Corporation or its affiliate companies will never ask for your password directly. Do not divulge your password in case you receive such inquiries.
- The connecting network must be secured by a firewall, etc.
- When disposing the product, initialize the data before disposing. [Shipping]

Notes on Using Wired LAN

When setting up the Display at a place, where electric statistic occurs often, take a sufficient antistatic measure before start using.
- When the Display is used at a location, where static electricity occurs often, such as on a carpet, a wired LAN communication is disconnected more often. In that case, remove static electricity and the noise source that may cause problems with an antistatic mat, and re-connect the wired LAN.
- In rare cases, the LAN connection is disabled due to static electricity or noise. In that case, turn off the power of the Display and the connected devices once and then re-turn on the power.

The Display may not work properly due to strong radio wave from the broadcast station or the radio.
- If there is any facility or equipment, which outputs strong radio wave, near the installation location, set up the Display at a location sufficiently far from the source of the radio wave. Or, wrap the LAN cable connected to the LAN terminal by using a piece of metal foil or a metal pipe, of which is grounded at both ends.
Cleaning and maintenance

The front of the display panel has been specially treated. Wipe the surface of the display panel gently using only a cleaning cloth or a soft, lint-free cloth.

- If the surface is particularly dirty, wipe with a soft, lint-free cloth which has been soaked in pure water or water in which neutral detergent has been diluted 100 times, and then wipe it evenly with a dry cloth of the same type until the surface is dry.
- Do not scratch or hit the surface of the panel with fingernails or other hard objects, otherwise the surface may become damaged. Furthermore, avoid contact with volatile substances such as insect sprays, solvents and thinner, otherwise the quality of the surface may be adversely affected.

If the cabinet becomes dirty, wipe it with a soft, dry cloth.

- If the cabinet is particularly dirty, soak the cloth in water to which a small amount of neutral detergent has been added and then wring the cloth dry. Use this cloth to wipe the cabinet, and then wipe it dry with a dry cloth.
- Do not allow any detergent to come into direct contact with the surface of the Display. If water droplets get inside the unit, operating problems may result.
- Avoid contact with volatile substances such as insect sprays, solvents and thinner, otherwise the quality of the cabinet surface may be adversely affected or the coating may peel off. Furthermore, do not leave it for long periods in contact with articles made from rubber or PVC.

Usage of a chemical cloth

- Do not use a chemical cloth for the panel surface.
- Follow the instructions for the chemical cloth to use it for the cabinet.

Disposal

When disposing the product, ask your local authority or dealer about the correct methods of disposal.
Accessories

Accessories Supply

Check that you have the accessories and items shown in the Operating Instructions (CD-ROM × 1)

Remote Control Transmitter × 1
  ● N2QAYA000099

Batteries for the Remote Control Transmitter × 2
  (AAA/R03/UM4 type)

Clamper × 3
  ● TZZ00000694A

Power supply cord
  (Approx. 1.8 m)
  ● TZSH03042

Attention

● Store small parts in an appropriate manner, and keep them away from young children.
● The part numbers of accessories are subject to change without notice. (The actual part number may differ from the ones shown above.)
● In case you lost accessories, please purchase them from your dealer. (Available from the customer service)
● Dispose the packaging materials appropriately after taking out the items.

Remote Control Batteries

1. Pull and hold the hook, then open the battery cover.

![Remote Control Battery](image)

2. Insert batteries - note correct polarity (+ and -).

![Remote Control Batteries](image)

3. Replace the cover.

Helpful Hint

● For frequent remote control users, replace old batteries with Alkaline batteries for longer life.

Precaution on battery use

Incorrect installation of the batteries can cause battery leakage and corrosion that will damage the remote control transmitter.

Disposal of batteries should be in an environment-friendly manner.

Observe the following precaution:

1. Batteries shall always be replaced as a pair. Always use new batteries when replacing the old set.
2. Do not combine a used battery with a new one.
3. Do not mix battery types (example: “Zinc Carbon” with “Alkaline”).
4. Do not attempt to charge, short-circuit, disassemble, heat or burn used batteries.
5. Battery replacement is necessary when remote control acts sporadically or stops operating the Display set.
6. Do not burn or breakup batteries.
7. Batteries must not be exposed to excessive heat such as sunshine, fire or the like.
Kensington security

The security slot of this unit is compatible with the Kensington security slot.
Connections

AC cord connection and fixing

Back of the unit

Insert the AC cord securely all the way seated on the back side of the unit.

AC cord (supplied)

Insert the plug until the line is hidden.

Class II equipment

Note

- When disconnecting the AC cord, be absolutely sure to disconnect the AC cord plug at the socket outlet first.
- The supplied AC cord is for this unit exclusive use. Do not use this for other purposes.

Cable fixing

Note

- 3 clampers are supplied with this unit. Fix the cables at 3 locations using the holes for clampers as shown below.
  If you need more clampers, purchase them from your dealer. (Available from the customer service)

1. Attach the clamper

   Insert the clamper in a hole.

   To remove from the unit:

   ① snaps
   Keep pushing both side snaps and pull out the clamper.

2. Bundle the cables

   Set the tip in the hooks and tighten.

   To loosen:

   ① knob
   Keep pushing the knob and pull out the tip.
Video equipment connection

1 AV IN (VIDEO): Composite Video / Audio Input Terminal
   Connect to video equipment with Composite signal output.

2 PC IN: PC Input Terminal
   Connect to video terminal of PC, video equipment with “YPsPr / YCbCr” or “RGB” output.

3 AV IN (HDMI 1, HDMI 2): HDMI Input Terminal
   Connect to video equipment such as VCR or DVD player, etc.

4 DVI-D IN: DVI-D Input Terminal
   Connect to video equipment with DVI-D output.

5 SERIAL IN: SERIAL Input Terminal
   Control the Display by connecting to PC.

6 LAN: LAN Terminal
   Control the Display by connecting to Network.

7 USB: USB Terminal
   Connect the USB memory to use [USB media player]. Also, this can be used to supply power of up to 5V/1A to an external device when the picture is displayed.

8 IR IN, IR OUT: Infrared Signal Input / Output Terminal
   Use this when operating more than one display with one remote control.

9 AUDIO IN: Audio input terminal shared with DVI-D IN and PC IN

10 AUDIO OUT: Analogue Audio Output Terminal
   Connect to audio equipment with analogue audio input terminal.
Before connecting

Before connecting cables, carefully read the operating instructions for the external device to be connected.

Turn off the power of all devices before connecting cables.

Take note of the following points before connecting the cables. Failure to do so may result in malfunctions.

- When connecting a cable to the unit or a device connected to the unit itself, touch any nearby metallic objects to eliminate static electricity from your body before performing work.
- Do not use unnecessarily long cables to connect a device to the unit or to the unit body. The longer the cable, the more susceptible to noise it becomes. Since using a cable while it is wound makes it act like an antenna, it is more susceptible to noise.
- When connecting cables, connect GND first, then insert the connecting terminal of the connecting device in a straight manner.

Acquire any cable necessary to connect the external device to the system that is neither supplied with the device nor available as an option.

If the outer shape of the plug of a connection cable is large, it may come in contact with the periphery such as a back cover or the plug of an adjacent connection cable. Use a connection cable with the suitable plug size for the terminal alignment.

If video signals from video equipment contain too much jitter, the images on the screen may wobble. In this case, a time base corrector (TBC) must be connected.

When the sync signals output from PC or video equipment are disturbed, for example, when changing settings of video output, the colour of the video may be disturbed temporarily.

The unit accepts Composite video signals, YCbcCr/YPbPr signals, analogue RGB signals and digital signals.

Some PC models are not compatible with the unit.

Use cable compensator when you connect devices to the unit using long cables. Otherwise the image may not display properly.
Identifying Controls

Main unit

- To take out/store the power indicator and remote control sensor, operate the lever on the rear panel. It is also possible to press the remote control sensor directly to store.

**Note**

- For normal use, pull out the power indicator and remote control sensor from the edge side of the main unit by operating the lever on the rear panel. Depending on the setup condition such as when using the multi display, store them in the main unit.

1 **Power Indicator / Remote control sensor**

   The Power Indicator will light.

   **When the power of the unit is ON (Main Power On / Off button: ON)**
   - Picture is displayed: Green
   - Power OFF (standby) with remote control:
     - When [Network control] is set to [Off]: Red
     - When [Network control] is set to [On]: Orange (Red/Green)
   - Power OFF with “Power management” function: Orange (Red/Green)

   **When the power of the unit is OFF (Main Power On / Off button: OFF): No light**

   **Note**
   - Even if the display unit is turned off with the power indicator off, some of the circuits are in power-on status.
   - When the power indicator is orange, power consumption during standby is generally larger than that of when the power indicator is red.

---

1 **External Input Terminal**

   Connects to video equipment, PC, etc. (see page 12)

2 **<Main Power On / Off button>**

   Turns the power On / Off.

3 **<INPUT (Unit)>**

   Selects the connected device.

4 **<MENU (Unit)>**

   Displays the menu screen.

5 **<+ (Unit)> / <- (Unit)>**

   Adjusts the volume.
   On the main screen, switches settings or adjusts settings level.

6 **<▲ (Unit)> / <▼ (Unit)>**

   Selects the setting item on menu screen.

7 **<ENTER (Unit)>**

   Configures the item on menu screen.
   Switches aspect mode.

8 **Built-in speakers**

   **Note**
   - To output sound from the built-in speakers of the unit, be sure to set [Output select] in the [Sound] menu to [SPEAKERS].
Remote Control Transmitter

1 Standby (ON/OFF) button (\%/)
   ● Turns the power on or off when the Display is turned on at the <Main Power On / Off button>. (see page 16)

2 POSITION

3 SETUP

4 ENTER / Cursor buttons (▲▼◄►)
   ● Used to operate the menu screens.

5 ZOOM
   Enters the digital zoom mode.

6 DEFAULT
   ● Resets the settings of picture, sound, etc., to defaults.

7 MUTE
   ● Sound mute on / off.

8 ASPECT
   ● Adjusts the aspect.

9 VOL + / VOL -
   ● Adjusts sound volume level.

10 AUTO SETUP
   ● Automatically adjusts the position/size of the screen.

11 INPUT
   ● Switches input to display on the screen.

12 PICTURE

13 SOUND

14 RECALL
   ● Displays the current setting status of Input mode, Aspect mode, etc.

15 RETURN
   ● Used to return to the previous menu.

16 FUNCTION
   ● Displays [Function button guide].

17 OFF TIMER
   ● Switches to stand-by after a fixed period.

18 Numeric buttons (1 - 6)
   ● Used as shortcut buttons by assigning frequently used operations.

19 Signal emission

   (Note)
   ● In this manual, buttons of the remote control and the unit are indicated as < >. (Example: <INPUT>.)
   The operation is mainly explained indicating the remote control buttons but you can also operate with the buttons on the unit when there are the same buttons.
1 Connect the AC cord plug to the Display.  
(see page 11)

2 Connect the plug to the socket outlet.

Note
- When disconnecting the AC cord, be absolutely sure to disconnect the AC cord plug at the socket outlet first.
- The settings may not be saved if the power plug is disconnected immediately after changing settings with on-screen menu. Disconnect the power plug after a enough period of time. Or, disconnect the power plug after turning the power off with the remote control, RS-232C control or LAN control.

3 Press the <Main Power On / Off button> on the unit to turn the set on: Power-On.
   - Power Indicator: Green (Picture is displayed.)
   - When the power of the unit is ON, remote control operation is possible.

To turn the power ON/OFF with the remote control
Press the <Standby (ON/OFF) button> to turn the Display on.
   - Power Indicator: Green (Picture is displayed.)
Press the <Standby (ON/OFF) button> to turn the Display off.
   - Power Indicator: Red (standby)
Press the <Main Power On / Off button> on the unit to turn the unit off, when the power of the unit is turned on or in standby mode.

Note
- During operation of the “Power management” function, the power indicator turns orange in the power off state.
- After the power plug is disconnected, the power indicator may remain lit for a while. This is not a malfunction.

Note
- For normal use, pull out the remote control sensor from the edge side of the main unit by operating the lever on the rear panel. (see page 14)
- Do not put an obstacle between the remote control sensor of the main unit and the remote control.
- Operate the remote control in front of the remote control sensor or from the area where the sensor can be seen.
- When directly aiming the remote control at the remote control sensor of the main unit, the distance from the front of remote control sensor should be approx. 7 m or less. Depending on the angle, the operation distance may be shorter.
- Do not subject the remote control sensor of the main unit to the direct sunlight or strong fluorescent light.
When the Unit is turned on for the first time
Following screen will be displayed.

1 Select the language with ▲▼ and press <ENTER>.


3 Select [Set] with ▲▼ and press <ENTER>.

4 For vertical installation, select [Portrait] with ▲▼ and press <ENTER>.

Note
● Once the items are set, the screens won’t be displayed when switching on the unit next time.
Each item can be reset in the following menus.
[OSD language]
[Date and time]
[Display orientation]
Specifications

Model No.

32-inch model: TH-32EF1U

Power Consumption

65 W

Power off condition
0.3 W

Stand-by condition
0.5 W

LCD Display panel

32-inch IPS panel (Direct LED backlight), 16:9 aspect ratio

Screen size

698 mm (W) × 392 mm (H) × 801 mm (diagonal) / 27.4” (W) × 15.4” (H) × 31.5” (diagonal)

Number of pixels

2,073,600 (1,920 (W) × 1,080 (H))

Dimensions (W × H × D)

727 mm × 426 mm × 64 mm / 28.7” × 16.8” × 2.6”

Mass

approx. 5.3 kg / 11.7 lbs net

Power source

110 – 127 V ~ (110 – 127 V alternating current), 50/60Hz

Operating condition

Temperature
0 °C – 40 °C (32 °F – 104 °F)*

Humidity
20 % – 80 % (no condensation)

Storing condition

Temperature
-20 °C – 60 °C (-4 °F – 140 °F)

Humidity
20 % – 80 % (no condensation)

Operating Time

16 hours/day

Connection terminals

HDMI 1

TYPE A Connector*2 × 2

Audio signal:
Linear PCM (sampling frequencies - 48 kHz, 44.1 kHz, 32 kHz)

HDMI 2

DVI-D 24 Pin × 1:

Compliance with DVI Revision 1.0

Content Protection:
Compatible with HDCP 1.1

DVI-D IN

DVI-D 24 Pin × 1:

Compliance with DVI Revision 1.0

Content Protection:
Compatible with HDCP 1.1

VIDEO

Audio/Video 4-pole mini jack (M3) × 1

Video: 1.0 Vp-p (75 Ω)

Audio: 0.5 Vrms

PC IN

High-Density Mini D-sub 15 Pin × 1:

Compatible with DDC2B

Y/G:

1.0 Vp-p (75 Ω) (with sync signal)

0.7 Vp-p (75 Ω) (without sync signal)

Pb/Cb/B:

0.7 Vp-p (75 Ω) (without sync signal)

Cr/Br/R:

0.7 Vp-p (75 Ω) (without sync signal)

HD/VD:

1.0 – 5.0 Vp-p (high impedance)

AUDIO IN

Stereo mini jack (M3) × 1, 0.5 Vrms

Shared with DVI-D IN and PC IN

AUDIO OUT

Stereo mini jack (M3) × 1, 0.5 Vrms

Output: Variable (-∞ – 0 dB)

(1 kHz 0 dB input, 10 kΩ load)

SERIAL IN

External Control Terminal

D-sub 9 Pin × 1:

RS-232C compatible
LAN
RJ45 × 1:
For RJ45 network connections, compatible with PJLink
Communication method:
RJ45 10BASE-T/100BASE-TX

IR IN
Stereo mini jack (M3) × 1

IR OUT
Stereo mini jack (M3) × 1

USB
TYPE A USB connector × 1
DC 5V / 1A (USB 3.0 is not supported.)

Sound
Speakers
80 mm × 30 mm × 2 pcs
Audio Output
20 W [10 W + 10 W] (10 % THD)

Remote Control Transmitter
Power source
DC 3 V (battery (AAA/R03/UM4 type) × 2)
Operating range
Approx. 7 m (22.9 ft)
(when operated directly in front of remote control sensor)
Mass
Approx. 63 g / 2.22 oz (including batteries)
Dimensions (W × H × D)
44 mm × 105 mm × 20.5 mm / 1.74” × 4.14” × 0.81”

*1: Environmental temperature to use this unit at high altitudes (1 400 m (4 593 ft) and higher and below 2 800 m (9 186 ft) above sea level): 0 °C to 35 °C (32 °F to 95 °F)
*2: VIERA LINK is not supported.

Note
* Design and specifications are subject to change without notice. Mass and dimensions shown are approximate.
Software License

This product incorporates the following software:
(1) the software developed independently by or for Panasonic Corporation,
(2) the software owned by third party and licensed to Panasonic Corporation,
(3) the software licensed under the GNU General Public License, Version 2.0 (GPL V2.0),
(4) the software licensed under the GNU LESSER General Public License, Version 2.1 (LGPL V2.1), and/or
(5) open source software other than the software licensed under the GPL V2.0 and/or LGPL V2.1.
The software categorized as (3) - (5) are distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. For details, see the license conditions displayed by selecting [Software licenses], following the specified operation from the [Settings] menu of this product.

At least three (3) years from delivery of this product, Panasonic will give to any third party who contacts us at the contact information provided below, for a charge no more than our cost of physically performing source code distribution, a complete machine-readable copy of the corresponding source code covered under GPL V2.0, LGPL V2.1 or the other licenses with the obligation to do so, as well as the respective copyright notice thereof.

Contact Information:
oss-cd-request@gg.jp.panasonic.com

Notice about AVC/VC-1/MPEG-4

This product is licensed under the AVC Patent Portfolio License, VC-1 Patent Portfolio License and MPEG-4 Visual Patent Portfolio License for the personal use of a consumer or other uses in which it does not receive remuneration to (i) encode video in compliance with the AVC Standard, VC-1 Standard and MPEG-4 Visual Standard ("AVC/VC-1/MPEG-4 Video") and/or (ii) decode AVC/VC-1/MPEG-4 Video that was encoded by a consumer engaged in a personal activity and/or was obtained from a video provider licensed to provide AVC/VC-1/MPEG-4 Video. No license is granted or shall be implied for any other use. Additional information may be obtained from MPEG LA, LLC. See http://www.mpegla.com.
PANASONIC PROFESSIONAL DISPLAY
Limited Warranty

Panasonic System Solutions Company of North America (referred to as “the Panasonic”) will repair the Professional Video product (the “Product”) and its accessories as defined in the attached table, with new or refurbished parts, free of charge in the continental USA, during the applicable warranty coverage period from the original date of purchase in the event of a defect in materials or workmanship as follows: On-Site, carry-in, or mail-in service within the continental USA may be obtained during the warranty period by contacting Panasonic’s Technical Support Center at the following toll free number 855-772-8324 or via e-mail; ProDisplaySupport@us.panasonic.com. In case of mail-in service the customer is responsible for the cost of delivering the Product to Panasonic’s facility, while Panasonic will pay for the return transportation of the repaired Product to the customer. For out of warranty Product units submitted for repairs or for in warranty units submitted by customers outside of the continental USA, shipping arrangements and cost (both ways) are the customer’s responsibility. Panasonic will also not be responsible for any costs associated with determining the source of system problems or for removing and installing the faulty Product.

This warranty is extended only to the original purchaser and is nontransferable. A purchase receipt or other proof of date of original purchase will be required before warranty service is rendered. Whenever the date of original purchase cannot be satisfactorily determined, the date of manufacture of the unit will be deemed to be the effective date of the warranty. Panasonic reserves the right to audit and reject any warranty claim that cannot be substantiated. This warranty only covers failures due to defects in materials or workmanship which occur during normal use of the Product.

The warranty DOES NOT cover damage to the display and its components which occur in shipping; failures which are caused by products not supplied by Panasonic; failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, faulty installation, setup adjustments, improper antenna, inadequate signal pickup, maladjustment of user controls, improper operation, power line surge, improper voltage supply, lightning damage, smoke or chemical vapors contamination, air conditioning, humidity control or other environmental conditions; failure to maintain the product in accordance with the applicable Operating Instructions; service by anyone other than an authorized repair facility; damage that is attributable to acts of violence, war, acts of God or force majeure.

The warranty does not cover damage which occurs to the display or its components caused by excessive continual usage which goes beyond the operational time described in the Operating Instructions. The warranty does not cover units of which the model and serial number label has been defaced, modified, tampered with or removed. The warranty does not cover consumable parts.

LIMITS AND EXCLUSIONS

PANASONIC SHALL NOT BE LIABLE FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF DATA, LOSS OF PROFIT, LOSS OF REVENUE, OR LOSS OF BUSINESS OR GOODWILL, SUFFERED BY ANY PERSON, AND RESULTING FROM THE USE OF THIS PANASONIC PROFESSIONAL DISPLAY PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS WARRANTIES SPECIFIED ABOVE ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you.

If you have a problem with this product that is not handled to your satisfaction, then write the Consumer Affairs Department at the Panasonic’s address indicated above.
## Panasonic Limited Warranty Statement

Panasonic Canada Inc. warrants this product to be free of defects in material and workmanship under normal use during the applicable warranty coverage period described below. Panasonic Canada Inc. shall have no responsibility for products which have been subjected to misuse, accidental or otherwise, alterations, modifications, damage during shipping, or installation errors. For products requiring routine preventive maintenance, such maintenance must be performed in order to maintain warranty coverage.

### Warranty Coverage Period

<table>
<thead>
<tr>
<th>Item</th>
<th>Parts</th>
<th>Labour</th>
</tr>
</thead>
<tbody>
<tr>
<td>视频带</td>
<td>3年</td>
<td>N/A</td>
</tr>
<tr>
<td>SD卡</td>
<td>3年</td>
<td>N/A</td>
</tr>
<tr>
<td>Video Heads</td>
<td>1年</td>
<td>2,000 hrs</td>
</tr>
<tr>
<td>D5 Video Heads</td>
<td>1年</td>
<td>1,000 hrs</td>
</tr>
<tr>
<td>Maintenance Items</td>
<td>2年</td>
<td>900 days</td>
</tr>
<tr>
<td>Colour Camera CCD</td>
<td>1年</td>
<td>N/A</td>
</tr>
<tr>
<td>Imaging Block</td>
<td>1年</td>
<td>N/A</td>
</tr>
<tr>
<td>All LCD Monitors*</td>
<td>3年</td>
<td>N/A</td>
</tr>
<tr>
<td>DLP™Projectors</td>
<td>3年</td>
<td>N/A</td>
</tr>
<tr>
<td>LCD Projectors above 2,500 ANSI Lumens</td>
<td>2年</td>
<td>900 days</td>
</tr>
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<td>N/A</td>
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<tr>
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<td>1年</td>
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</tr>
<tr>
<td>103 inch Plasma displays</td>
<td>2年</td>
<td>900 days</td>
</tr>
<tr>
<td>Hard Drive Disk Unit</td>
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<td>N/A</td>
</tr>
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### Warranty Coverage Period Exceptions

- All Plasma displays: 2年 (burn-in not covered)
- 103 inch Plasma displays: 2年
- 设备移除或更换：1年
- 环境条件（如：污染、烟雾、租金/舞台环境和24/7操作）大大缩短了常规预防性维护的间隔，从而影响了保修的覆盖范围。

### Warranty Coverage

- **Product:** This warranty applies to Panasonic products purchased and serviced in Canada.
- **Proof of Purchase:** The owner must produce the purchase receipt or other satisfactory evidence of date of original purchase.
- **Home Use:** This warranty covers only normal household use. It does not cover commercial use, rental or other use of this product.
- **For Products Requiring Routine Preventive Maintenance:** That maintenance must be performed in order to maintain warranty coverage.
- **Serial Numbers:** Serial numbers that have been altered, defaced or removed void this warranty.
- **Warranty Exclusions:** This warranty does not cover replacements or repairs necessitated by loss or damage resulting from any cause beyond the control of Panasonic Canada Inc.
- **Marking or Retained Images:** Marking or retained images (sometimes called "burn-in") resulting from the display of fixed images on video display products are not defects and are not covered under this warranty.

### Warranty Service

- **For Products Requiring Routine Preventive Maintenance:** That maintenance must be performed in order to maintain warranty coverage.

### Any Special Inquiries or Problems

- 请与Panasonic Technical Support and Product Services Department联系。

### Limited Warranty Statement

Panasonic Canada Inc.
5770 Ambler Drive, Mississauga, Ontario L4W 2T3

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Panasonic Canada Inc.
5770 Ambler Drive, Mississauga, Ontario L4W 2T3

Panasonic Canada Inc.
5770 Ambler Drive, Mississauga, Ontario L4W 2T3

For further information, please call Panasonic Technical Support and Product Services Department.
Customer Service

Customer Service Directory

Obtain products information and operative assistant; localize the closer distributor or Service Center; buy spare parts and accessories by our web site to Latin American:

http://www.lar.panasonic.com

Also you may contact us directly by our Contact Center:

<table>
<thead>
<tr>
<th>Country</th>
<th>Contact Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panama</td>
<td>800-PANA (800-7262)</td>
</tr>
<tr>
<td>Colombia</td>
<td>01-8000-94PANA (01-8000-947262)</td>
</tr>
<tr>
<td>Ecuador</td>
<td>1800-PANASONIC (1800-726276)</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>800-PANA737 (800-7262737)</td>
</tr>
<tr>
<td>El Salvador</td>
<td>800-PANA (800-7262)</td>
</tr>
<tr>
<td>Guatemala</td>
<td>1-801-811-PANA (1-801-811-7262)</td>
</tr>
<tr>
<td>Chile</td>
<td>800-390-602</td>
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<tr>
<td></td>
<td>From a cell phone: 797-5000</td>
</tr>
<tr>
<td>Venezuela</td>
<td>800-PANA-800 (800-7262-800)</td>
</tr>
<tr>
<td>Uruguay</td>
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</tr>
<tr>
<td>Dominican Republic</td>
<td>809-200-8000</td>
</tr>
</tbody>
</table>

Mexico Service

To obtain information in the Republic of Mexico contact us at:

email: atencionclientes@mx.panasonic.com

http://www.panasonic.com.mx

Or you may contact us in the next following phones numbers:

01800-VIP-PANA (01800-847-7262) - Interior
(55) 5000-1200 - Mexico D.F. and Metropolitan Area
Notice (U.S.A. only)
Disposal may be regulated in your community due to environmental considerations. For disposal or recycling information, please visit Panasonic website: http://www.panasonic.com/environmental or call 1-888-769-0149.

Customer’s Record
The model number and serial number of this product may be found on its rear panel. You should note this serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Serial Number</th>
</tr>
</thead>
</table>

Panasonic System Solutions Company of North America
Unit of Panasonic Corporation of North America

Executive Office:
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