

English

Français

Español

Operating Instructions

Touch Screen LCD Display (for business use)



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

Contents

• Important Safety Instructions	2
• FCC STATEMENT	3
• Important Safety Notice	4
• Safety Precautions	5
• Accessories	9
• Connections	12
• Power On / Off	14
• Basic Controls	16
• Specifications	18
• Software License	20
• Panasonic Professional Flat Panel Display Limited Warranty	21
• LIMITED WARRANTY STATEMENT	22
• Customer Service	23

- 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.
- Descriptive illustrations in this Operating Instructions are created mainly based on the 50 inch model.

HDMI

TQB0AA0044



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 : 1) To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.
 2) Do not remove the grounding pin on the power plug. This apparatus is equipped with a three pin grounding-type power plug. This plug will only fit a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician.
 Do not defeat the purpose of the grounding plug.

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) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments / accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) To prevent electric shock, ensure the grounding pin on the AC cord power plug is securely connected.



FCC STATEMENT

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 technician for help.

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

FCC CAUTION:

To assure continued compliance, follow the attached installation instructions and use only shielded interface cables when connecting to computer or peripheral devices. Some recommended user provided interface cables may require usage of the attached ferrite core kit(s), refer to interface cable connection instructions for details. Any changes or modifications not expressly approved by Panasonic Corp. of North America could void the user's authority to operate this device.

FCC Declaration of Conformity

Model No. TH-50LFB70U, TH-65LFB70U

Responsible Party: Panasonic Corporation of North America
Two Riverfront Plaza, Newark, New Jersey 07102-5490
Contact Source: Panasonic System Communications Company of North America
1-877-655-2357

CANADIAN NOTICE:

This Class B digital apparatus complies with Canadian ICES-003.

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 after a while.

Trademark Credits

- VGA is a trademark of International Business Machines Corporation.
- Microsoft®, Windows®, Windows Vista®, and Internet Explorer® are the registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Macintosh, Mac, Mac OS, OS X and Safari are the trademarks of Apple Inc. registered in the United States and other countries.
- SVGA, XGA, SXGA and UXGA are registered trademarks of the Video Electronics Standard Association. Even if no special notation has been made of company or product trademarks, these trademarks have been fully respected.
- HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.
- RoomView, Crestron RoomView and Fusion RV are registered trademarks of Crestron Electronics, Inc. and Crestron Connected is the trademark of Crestron Electronics, Inc.
- Miracast is a trademark of Wi-Fi Alliance.
- Android is a registered trademark of Google Inc.
- iPad, iPhone, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

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.
- 3) Do not remove the earthing pin on the power plug. This apparatus is equipped with a three pin earthing-type power plug. This plug will only fit an earthing-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician.
Do not defeat the purpose of the earthing plug.
- 4) To prevent electric shock, ensure the earthing pin on the AC cord power plug is securely connected.

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.

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-ST42P50 (for 50 inch model)*,
TY-ST65P20 (for 65 inch model)
- Mobile stand for Display TY-ST50PB2 (for 50 inch model),
TY-ST65PB2 (for 65 inch model)
- Mobile stand TY-ST58PF20 (for 50 inch model)
- Wall-hanging bracket (vertical) TY-WK42PV20 (for 50 inch model)
- Wall-hanging bracket (angled) TY-WK42PR20 (for 50 inch model),
TY-WK65PR20 (for 65 inch model)
- Ceiling-hanging bracket TY-CE42PS20 (for 50 inch model)
- BNC Dual Video Terminal Board TY-FB9BD
- HD-SDI Terminal Board TY-FB9HD
- HD-SDI Terminal Board with audio TY-FB10HD
- Dual Link HD-SDI Terminal Board TY-FB11DHD
- Dual HDMI Terminal Board TY-FB10HMD
- DVI-D Terminal Board TY-FB11DD
- Digital Interface Box ET-YFB100G

***Precaution for use of TY-ST42P50 (for 50 inch model)**

Use a stand pole "for plasma display (long)" (part number: TBLA3679, TBLA3680).

We are not responsible for any product damage, etc. caused by use of the pedestal, wall-hanging bracket or ceiling-hanging bracket made by other companies, or by failures in the installation environment for the pedestal, wall-hanging bracket or ceiling-hanging bracket even during the warranty period.

Always be sure to ask a qualified technician to carry out set-up.

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.

Do not place any objects on top of the Display.

- If water is spills onto the Display or foreign objects get inside it, 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;

If using the pedestal (optional accessory), leave a space of 3 15/16" (10 cm) or more at the top, left and right, and 2 3/4" (7 cm) 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, follow the manual of it. (If there is no specific indication of installation dimension in the installation manual, leave a space of 3 15/16" (10 cm) or more at the top, bottom, left and right, and 2 3/4" (7 cm) or more at the rear.)

Cautions for Wall or ceiling Installation

- Wall or ceiling 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 specified accessories.
- If you terminate the use of the Display on the wall or ceiling, ask a professional to remove the Display as soon as possible.

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.

Safety Precautions

■ 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.

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

Do not use any power supply cord other than that provided with this unit.

- Doing so may cause fire or electric shocks.

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 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 Pen Stand fixing screw out of reach of children to prevent swallowing.

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

To prevent the spread of fire, keep candles or other open flames away from this product at all times.



■ If problems occur during use

If a problem occurs (such as no picture or no sound), or if smoke or an abnormal odour starts to come out from the Display, immediately unplug the power supply plug from the wall outlet.

- If you continue to use the Display in this condition, fire or electric shock could result. After checking that the smoke has stopped, contact your local Panasonic dealer so that the necessary repairs can be made. Repairing the Display yourself is extremely dangerous, and shall never be done.

If water or foreign objects get inside the Display, if the Display is dropped, or if the cabinet becomes damages, disconnect the power supply plug immediately.

- A short circuit may occur, which could cause fire. Contact your local Panasonic dealer for any repairs that need to be made.



CAUTION

■ 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 burn or breakup batteries.

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

Cleaning and maintenance

The front of the display panel has been specially treated. Wipe the panel surface 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.

Wipe off dirt on the IR transmission part with soft cloth.

- Wipe off dirt on the IR transmission part with soft cloth once a day.
If malfunction is due to dirt on the IR transmission part, simply wiping it off lightly can recover the performance.
If dirt is sticky, wipe it off with cloth wrung out of neutral detergent diluted with water and then wipe the part with dry cloth.

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.

Ask your dealer to clean the inside at least once a year.

- Dust accumulated inside may interfere with the infrared beam for touch detection, resulting in poor performance. Ask your dealer to clean the inside at least once a year.

Touch panel

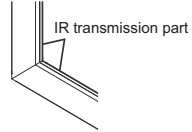
Carefully observe the following instructions as the display has an optical touch panel.

Do not expose the display to direct sunlight or strong light source during use.

- Otherwise malfunction may occur since the optical touch panel of the display uses infrared rays.

After turning on the power of the display, do not touch the IR transmission part and the screen until any image is displayed.

- Otherwise the touched part may be detected as defective elements, resulting in abnormal operation. If this occurred, turn the display off and then on.



Always use a finger or the supplied pen to operate the touch panel. Do not use a hard or sharp tip such as nail, ball-point pen, and pencil.

When using any other infrared device, keep a distance to prevent erroneous operation.

Wired LAN

When setting up the Display at a place, where electric statistic occurs often, take a sufficient anti-static measure before start using.

- When the Display is used at a location, where static electricity occurs often, such as on a carpet, communications of the DIGITAL LINK and the wired LAN are 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 DIGITAL LINK and 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. Connect the DIGITAL LINK and the LAN.

The Display may not work properly due to strong radiowave from the broadcast station or the radio.

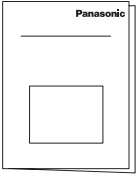
- If there is any facility or equipment, which outputs strong radiowave, near the installation location, set up the Display at a location sufficiently far from the source of the radiowave. Or, wrap the LAN cable connected to the DIGITAL LINK terminal by using a piece of metal foil or a metal pipe, of which is grounded at both ends.

Accessories

Accessories Supply

Check that you have the accessories and items shown

Operating
Instruction book



Software CD-ROM × 1



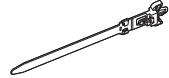
Remote Control
Transmitter
N2QAYB000691



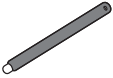
Batteries for the Remote
Control Transmitter
(AA Size × 2)



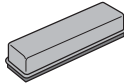
Clamper × 1
TMME289



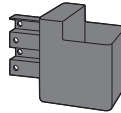
Pen × 2



Eraser × 1



Pen Stand × 1
(see page 11)



Screw × 2
(see page 11)



USB cable × 1



Ferrite core × 2
J0KG0000014

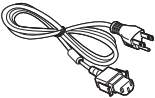


Use the Ferrite cores to
comply with the EMC
standard. (see page 10)

Cable tie × 2
TMM17499



Power supply cord



Attention

Store small parts in an appropriate manner, and keep them away from young children.

Contents in the CD-ROM

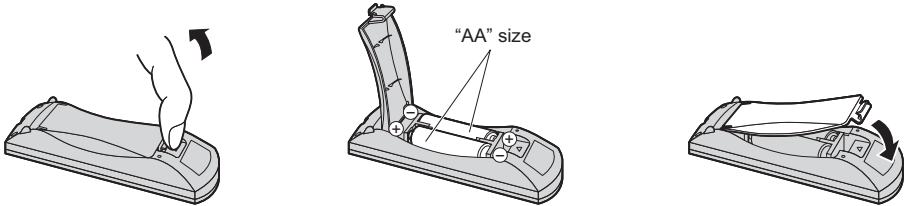
The contents below are included in the supplied CD-ROM.

Instruction (PDF)	Operating Instructions - Display Operations	
	Operating Instructions - Network Operations	
	Operating Instructions - Wireless Manager ME	
	Software license	GNU GENERAL PUBLIC LICENSE GNU LESSER GENERAL PUBLIC LICENSE
Software	WhiteBoard Software (Windows)	Allows the display to be used as whiteboard. You can run the software directly from external storage without installing it in your computer.
	Wireless Manager ME (Windows/Mac)	Allows the image on the computer screen to be sent wirelessly or via wired LAN. Switch the input to Panasonic APPLICATION before use. For more details, see the instruction manual of Wireless Manager ME.

Remote Control Batteries

Requires two AA batteries.

1. Pull and hold the hook, then open the battery cover.
2. Insert batteries - note correct polarity (+ and -).
3. Replace the cover.



Helpful Hint:

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

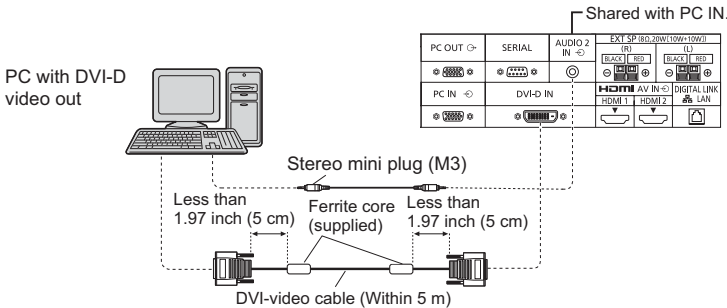
⚠️ Caution on battery use

Incorrect installation 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.

How to use the Ferrite core



Installing the Ferrite core

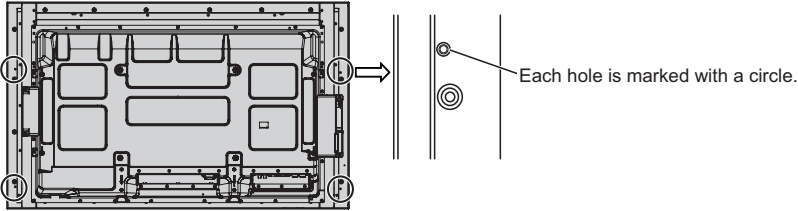
- Pull back the tabs (in two places)
- Open the Ferrite core
- Route the cable through and close
- Fix the Ferrite core with the cable tie

Mounting Pen Stand

Mounting position of the Pen Stand

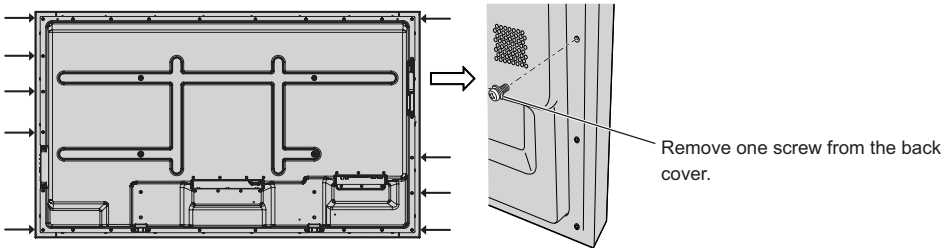
[For 50 inch model]

The supplied Pen Stand can be mounted in one of the four dedicated screw hole positions on the back of the Display.



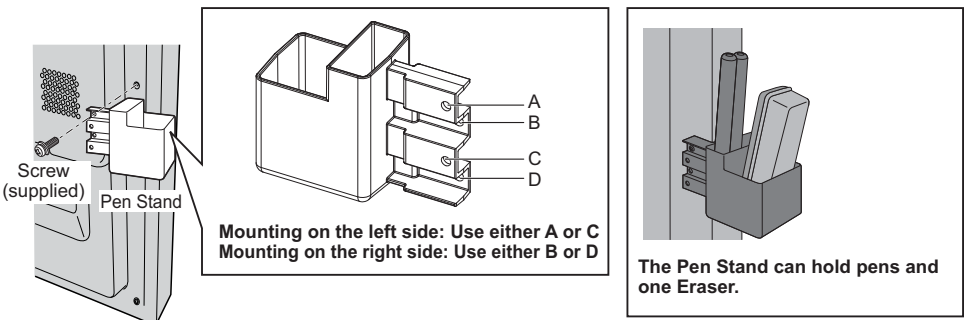
[For 65 inch model]

The supplied Pen Stand can be mounted in one of the nine positions on the back of the Display. Remove one screw fixing the back cover and mount the Pen Stand.



Mounting

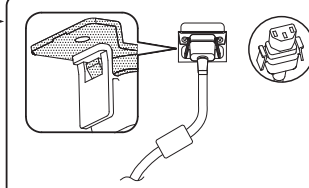
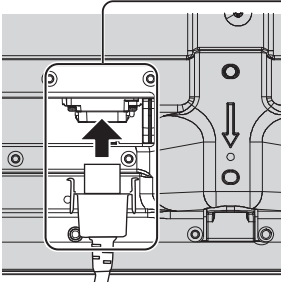
Mount the Pen Stand using one supplied screw.



Connections

AC cord connection and fixing, cable fixing

AC cord fixing



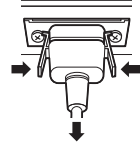
Plug the AC cord into the display unit.

Plug the AC cord until it clicks.

Note:

Make sure that the AC cord is locked on both the left and right sides.

Unplug the AC cord



Unplug the AC cord pressing the two knobs.

Note:

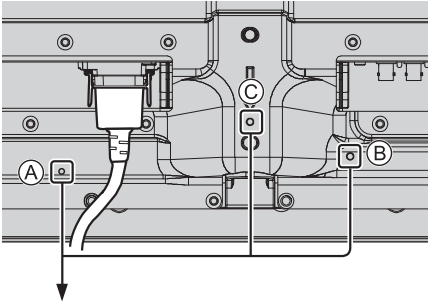
When disconnecting the AC cord, be absolutely sure to disconnect the AC cord plug at the socket outlet first.

When using the Wall-hanging bracket (vertical) (for 50 inch model)

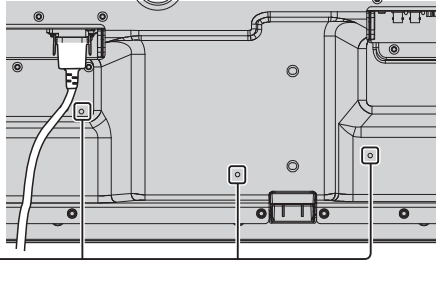
Note:

When using the Wall-hanging bracket (vertical)(TY-WK42PV20), use the holes (A) and (B) to secure the cables. If the clamper is used on the hole (C), the cables may be caught by the wall-hanging bracket.

50 inch model



65 inch model



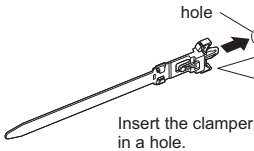
Using the clamper

Secure any excess cables with clamper as required.

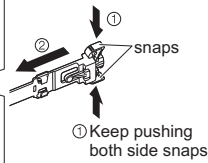
Note:

One clamper is supplied with this unit. In case of securing cables at three positions, please purchase it separately. If you need more clampers, purchase them from your dealer. (Available from the customer service)

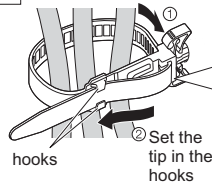
1 Attach the clamper



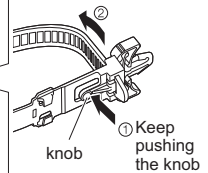
To remove from the unit:



2 Bundle the cables

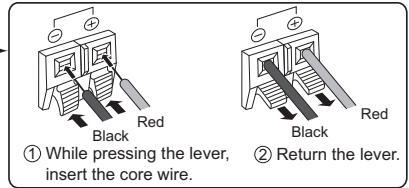
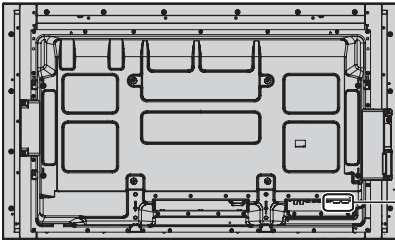


To loosen:

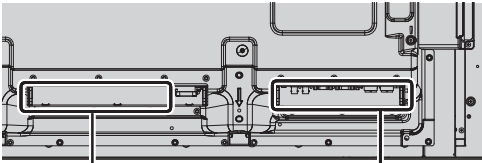


Speaker connection

Please use 8 Ω/10 W speaker.



Video equipment connection



SLOT: Terminal board (optional accessories) insert slot (see page 5)

Note:
The right side slot is for terminal board with 2-slot width. The terminal board with 1-slot width does not function when installed in the right side slot.

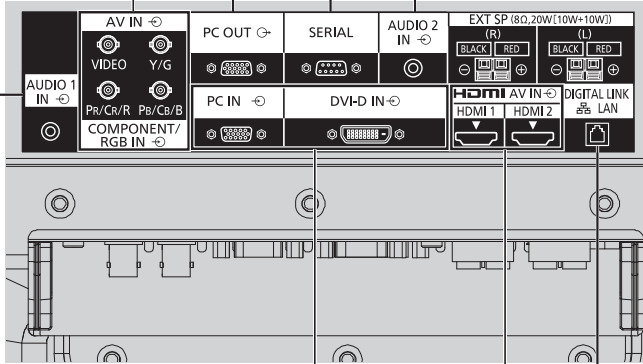
AV IN (VIDEO): Composite Video Input Terminal
COMPONENT/RGB IN: Component/RGB Video Input Terminal

PC OUT: Monitor Out Terminal. Video signals being reproduced on the display are output to another sub monitor as PC video signals.

SERIAL: Serial Control Terminal. Control the Display by connecting to PC.

AUDIO 2 IN: Audio input terminal shared with DVI-D IN and PC IN.

AUDIO 1 IN: Audio input terminal shared with VIDEO and COMPONENT/RGB IN.



PC IN: PC Input Terminal
Connect to video terminal of PC or equipment with Y, P_B(C_B) and P_R(C_R) output.
DVI-D IN: DVI-D Input Terminal

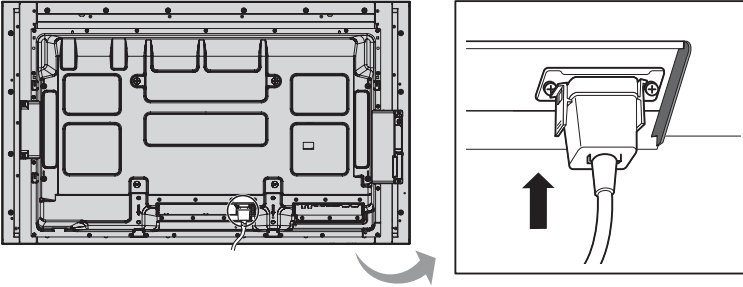
AV IN (HDMI 1, HDMI 2): HDMI Input Terminal
Connect to video equipment such as VCR or DVD player.

LAN, DIGITAL LINK*
Connect to a DIGITAL LINK input terminal network to control the Display. Alternatively, connect to a device that sends video and audio signals via the DIGITAL LINK terminal.

* DIGITAL LINK is technology that enables signals such as audio and video to be transmitted using twisted pair cables. For details, see the Operating Instructions - "Network Operations".

Power On / Off

Connecting the AC cord plug to the Display.



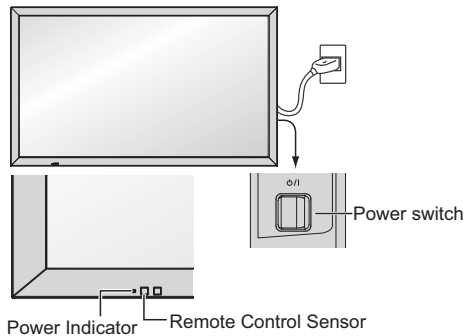
Connecting the plug to the Wall Outlet

Notes:

- Main plug types vary between countries. The power plug shown at right may, therefore, not be the type fitted to your set.
- When disconnecting the AC cord, be absolutely sure to disconnect the AC cord plug at the socket outlet first.

Press the Power switch on the Display to turn the set on: Power-On.

Power Indicator: Green



[Starting up the touch screen and network]

It takes some time for the touch screen and network to start up just after the power is turned on. During that time, "Touch Screen Settings", "Network Settings" in the "Setup" menu is grayed out and cannot be set.




Press the  button on the remote control to turn the Display off.

Power Indicator: Red (standby)

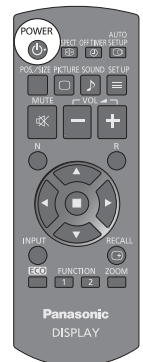
Press the  button on the remote control to turn the Display on.

Power Indicator: Green

Turn the power to the Display off by pressing the  switch on the unit, when the Display is on or in standby mode.

Note:

During operation of the power management function, the power indicator turns orange in the power off state.

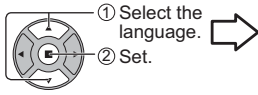


When first switching on the unit

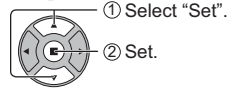
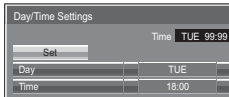
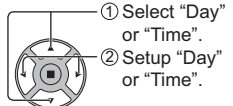
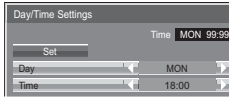
Following screen will be displayed when the unit is turned on for the first time.

Use the remote control to make the settings. Pressing the buttons on the main unit or multi-touch operation will not work.

OSD Language



Day/Time Settings



Notes:

- Once the items are set, the screens won't be displayed when switching on the unit next time.
- After the setting, the items can be changed in the following menus.

- OSD Language
- Day/Time Settings

Power ON message

The following message may be displayed when turning the unit power ON:

WhiteBoard Startup screen



When the power is turned ON with the Input switch of the WHITEBOARD, the built-in WhiteBoard starts up.

Touch screen connection status display

When not connected to a computer via USB



Touch operation of the display is possible after this message appears.

When connected to a computer via USB



No activity power off Precautions



If "No activity power off" in Setup menu is set to "Enable", a warning message is displayed every time the power is turned ON.

Power Management Information



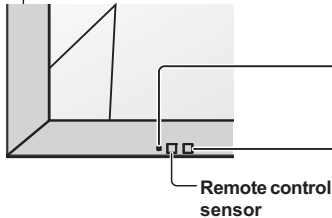
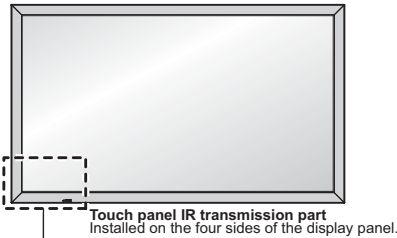
If "Power management" is functioned, an information message is displayed every time the power is turned ON.

These message displays can be set with the following menu: Options menu

- Power On Message (No activity power off)
- Power On Message (Power Management)

Basic Controls

Main Unit



Power Indicator

The Power Indicator will light.

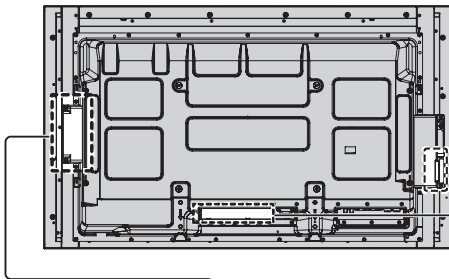
- Power-OFF Indicator not illuminated (The unit will still consume some power as long as the power cord is still inserted into the wall outlet.)
- Standby Red
 - Orange (When "Slot power" is set to "On" and Terminal Board is installed.)
 - Orange (Depending on the type of the function board installed, when the power is supplied to the slot)
 - Orange (When "Control I/F Select" is set to "DIGITAL LINK/LAN" or "Wireless Network Standby" is set to "On". Refer to "Operating Instructions, Network Operations".)
 - Orange (When "Quick Launch" is set to "On".)
- Power-ON Green
- HDMI1 Power management
- HDMI2 Power management
- Orange (With HDMI1 or HDMI2 input signal.)
- PC Power management (DPMS)
- Orange (With PC input signal.)
- DVI-D Power management
- Orange (With DVI input signal.)

Note:

If the power indicator is orange, power consumption during standby is generally larger than that of when the power indicator is red.

Brightness Sensor

Detects the brightness in the viewing environment.

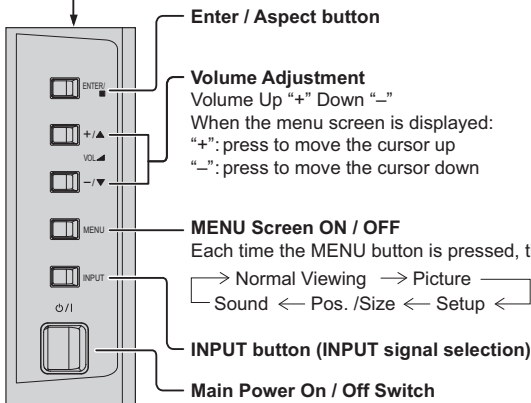


- **USB (VIEWER):** Connect to USB memory.
- **USB (TOUCH):** When using the "WhiteBoard Software" from the supplied CD-ROM, connect the computer via USB cable.

- **SLOT:** Terminal board (optional accessories) insert slot (see page 5)

Note:

The right side slot is for terminal board with 2-slot width. The terminal board with 1-slot width does not function when installed in the right side slot.



Remote Control Transmitter

ACTION button
Press to make selections.

ASPECT button
Press to adjust the aspect.

Standby (ON / OFF) button
The Display must first be plugged into the wall outlet and turned on at the power switch (see page 14). Press this button to turn the Display On, from Standby mode. Press it again to turn the Display Off to Standby mode.

POS./SIZE button

PICTURE button

Sound mute On / Off
Press this button to mute the sound.
Press again to reactivate sound. Sound is also reactivated when power is turned off or volume level is changed.

N button

POSITION buttons

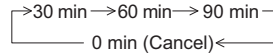
INPUT button
Press to select Input signal sequentially.

ECO MODE (ECO)
Press to change the ECO MODE setup status.

FUNCTION buttons (FUNCTION)

OFF TIMER button

The Display can be preset to switch to stand-by after a fixed period. The setting changes to 30 minutes, 60 minutes, 90 minutes and 0 minutes (off timer cancelled) each time the button is pressed.



When three minutes remain, "Off timer 3 min" will flash.
The off timer is cancelled if a power interruption occurs.

AUTO SETUP button

Automatically adjusts the position/size of the screen.

SET UP button

SOUND button

Volume Adjustment

Press the Volume Up "+" or Down "-" button to increase or decrease the sound volume level.

R button

Press the R button to return to previous menu screen.

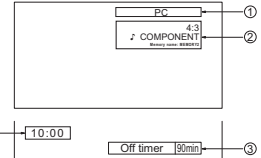
RECALL button

Press the "RECALL" button to display the current system status.

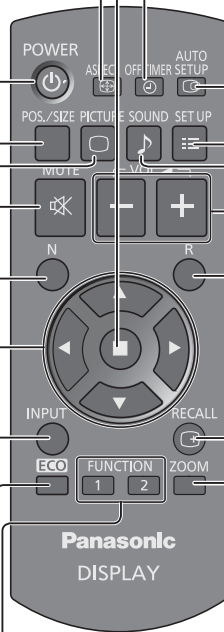
- ① Input label
- ② Aspect mode
Audio input
Profile name
- ③ Off timer

The off timer indicator is displayed only when the off timer has been set.

- ④ Clock display



Digital Zoom



Specifications

		TH-50LFB70U	
Power Source		110 - 127 V AC, 50/60 Hz	
Power Consumption			
	Power on	140 W	
	Stand-by condition	0.5 W	
	Power off condition	0.3 W	
LCD Display panel		50-inch VA panel (LED backlight), 16:9 aspect ratio	
Screen size		43.1" (W) × 24.2" (H) × 49.5" (diagonal) / 1,095 mm (W) × 616 mm (H) × 1,257 mm (diagonal)	
	(No. of pixels)	2,073,600 (1,920 (W) × 1,080 (H)) [5,760 × 1,080 dots]	
Operating condition			
	Temperature	32 °F - 104 °F (0 °C - 40 °C)	
	Humidity	20 % - 80 % (no condensation)	
Applicable signals			
	Colour System	NTSC, PAL, PAL60, SECAM, Modified NTSC	
	Scanning format	525 (480) / 60i · 60p, 625 (575) / 50i · 50p, 750 (720) / 60p · 50p, 1125 (1080) / 60i · 60p · 50i · 50p · 24p · 25p · 30p · 24psF, 1250 (1080) / 50i	
	PC signals	VGA, SVGA, XGA, SXGA UXGA (compressed) Horizontal scanning frequency 15 - 110 kHz Vertical scanning frequency 48 - 120 Hz	
Connection terminals			
AV IN	VIDEO	BNC	1.0 Vp-p (75 Ω)
	AUDIO 1 IN	Stereo mini jack (M3) × 1	0.5 Vrms, Shared with COMPONENT/RGB IN
	HDMI 1 HDMI 2	TYPE A Connector × 2	
COMPONENT/RGB IN			
	Y/G	BNC	with sync 1.0 Vp-p (75 Ω)
	Pb/Cb/B	BNC	0.7 Vp-p (75 Ω)
	Pr/Cr/R	BNC	0.7 Vp-p (75 Ω)
	AUDIO 1 IN	Stereo mini jack (M3) × 1	0.5 Vrms, Shared with VIDEO
DVI-D IN		DVI-D 24 Pin Content Protection	Compliance with DVI Revision 1.0 Compatible with HDCP 1.1
	AUDIO 2 IN	Stereo mini jack (M3) × 1	0.5 Vrms, Shared with PC IN
PC IN		High-Density Mini D-sub 15 Pin	Y or G with sync 1.0 Vp-p (75 Ω) Y or G without sync 0.7 Vp-p (75 Ω) Pb/Cb/B: 0.7 Vp-p (75 Ω) Pr/Cr/R: 0.7 Vp-p (75 Ω) HD/VD: 1.0 - 5.0 Vp-p (high impedance)
	AUDIO 2 IN	Stereo mini jack (M3) × 1	0.5 Vrms, Shared with DVI-D IN
SERIAL		External Control Terminal D-sub 9 Pin	RS-232C compatible
PC OUT		R: 0.7 Vp-p (75 Ω) G: 0.7 Vp-p (75 Ω) B: 0.7 Vp-p (75 Ω) HD/VD: 1.0 - 5.0 Vp-p	
USB (VIEWER)		TYPE A USB connector	
USB (TOUCH)		TYPE B USB connector	
DIGITAL LINK / LAN		For RJ45 network and DIGITAL LINK connections, compatible with PLink™ Communication method: RJ45 100BASE-TX	
EXT SP		8 Ω, 20 W [10 W + 10 W] (10 % THD)	
Sound			
	Speakers	120 mm × 40 mm × 2 pcs	
	Audio Output	20 W [10 W + 10 W] (10 % THD)	
Dimensions (W × H × D)		46.7" × 27.8" × 4.1" / 1,185 mm × 705 mm × 103 mm	
Mass (weight)		approx. 72.8 lbs / 33.0 kg net	

		TH-65LFB70U	
Power Source		110 - 127 V AC, 50/60 Hz	
Power Consumption			
	Power on	215 W	
	Stand-by condition	0.5 W	
	Power off condition	0.3 W	
LCD Display panel		65-inch VA panel (LED backlight), 16:9 aspect ratio	
Screen size		56.2" (W) × 31.6" (H) × 64.5" (diagonal) / 1,428 mm (W) × 803 mm (H) × 1,638 mm (diagonal)	
	(No. of pixels)	2,073,600 (1,920 (W) × 1,080 (H)) [5,760 × 1,080 dots]	
Operating condition			
	Temperature	32 °F - 104 °F (0 °C - 40 °C)	
	Humidity	20 % - 80 % (no condensation)	
Applicable signals			
	Colour System	NTSC, PAL, PAL60, SECAM, Modified NTSC	
	Scanning format	525 (480) / 60i · 60p, 625 (575) / 50i · 50p, 750 (720) / 60p · 50p, 1125 (1080) / 60i · 60p · 50i · 50p · 24p · 25p · 30p · 24psF, 1250 (1080) / 50i	
	PC signals	VGA, SVGA, XGA, SXGA UXGA (compressed) Horizontal scanning frequency 15 - 110 kHz Vertical scanning frequency 48 - 120 Hz	
Connection terminals			
AV IN	VIDEO	BNC	1.0 Vp-p (75 Ω)
	AUDIO 1 IN	Stereo mini jack (M3) × 1	0.5 Vrms, Shared with COMPONENT/RGB IN
	HDMI 1 HDMI 2	TYPE A Connector × 2	
COMPONENT/RGB IN			
	Y/G	BNC	with sync 1.0 Vp-p (75 Ω)
	Pb/Cb/B	BNC	0.7 Vp-p (75 Ω)
	Pr/Cr/R	BNC	0.7 Vp-p (75 Ω)
	AUDIO 1 IN	Stereo mini jack (M3) × 1	0.5 Vrms, Shared with VIDEO
DVI-D IN		DVI-D 24 Pin	Compliance with DVI Revision 1.0
	AUDIO 2 IN	Content Protection Stereo mini jack (M3) × 1	Compatible with HDCP 1.1 0.5 Vrms, Shared with PC IN
PC IN		High-Density Mini D-sub 15 Pin	Y or G with sync 1.0 Vp-p (75 Ω) Y or G without sync 0.7 Vp-p (75 Ω) Pb/Cb/B: 0.7 Vp-p (75 Ω) Pr/Cr/R: 0.7 Vp-p (75 Ω) HD/VD: 1.0 - 5.0 Vp-p (high impedance) 0.5 Vrms, Shared with DVI-D IN
	AUDIO 2 IN	Stereo mini jack (M3) × 1	
SERIAL		External Control Terminal D-sub 9 Pin	RS-232C compatible
PC OUT		R: 0.7 Vp-p (75 Ω) G: 0.7 Vp-p (75 Ω) B: 0.7 Vp-p (75 Ω) HD/VD: 1.0 - 5.0 Vp-p	
USB (VIEWER)		TYPE A USB connector	
USB (TOUCH)		TYPE B USB connector	
DIGITAL LINK / LAN		For RJ45 network and DIGITAL LINK connections, compatible with PLink™ Communication method: RJ45 100BASE-TX	
EXT SP		8 Ω, 20 W [10 W + 10 W] (10 % THD)	
Sound			
	Speakers	120 mm × 40 mm × 2 pcs	
	Audio Output	20 W [10 W + 10 W] (10 % THD)	
Dimensions (W × H × D)		59.8" × 35.2" × 4.2" / 1,517 mm × 892 mm × 106 mm	
Mass (weight)		approx. 127.9 lbs / 58.0 kg net	

Note:

Design and specifications are subject to change without notice. Mass and dimensions shown are approximate.

Software License

Software information regarding this product

© Panasonic Corporation 2013

This product incorporates the following software:

- (1) the software which is developed independently by or for Panasonic Corporation
- (2) the software which is licensed under the GNU GENERAL PUBLIC LICENSE
- (3) the software which is licensed under the GNU LESSER GENERAL PUBLIC LICENSE
- (4) the software owned by third party and licensed to Panasonic Corporation
- (5) open source software

For the software categorized as (2) and (3), the license is available in accordance with GNU GENERAL PUBLIC LICENSE and GNU LESSER GENERAL PUBLIC LICENSE respectively. As for the terms and conditions, please refer to the software licence of the supplied CD-ROM. If you wish to ask any questions as to the software, please contact (oss-cd-request@gg.jp.panasonic.com) by email.

The software categorized as (5) is 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. Please refer to the detailed terms and conditions thereof shown below.

zlib License

Copyright © 2002-2013 MediaArea.net SARL. All rights reserved.

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

MediaInfo(Lib) License

Copyright © 2002-2013 MediaArea.net SARL. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(for the U.S.A and Puerto Rico)

Panasonic Solutions Company
Unit of Panasonic Corporation of
North America
Two Riverfront Plaza, Newark,
New Jersey 07102-5490

**Panasonic Professional Flat Panel Display
Limited Warranty**

Panasonic Solutions Company. (referred to as “the Warrantor”) will repair this product and all included accessories with new or refurbished parts, free of charge in the USA or Puerto Rico, of the original purchase in the event of a defect in materials or workmanship as follows:

Models or Parts	Part Warranty	Labor Warranty
Professional Flat Panel Display	2 Years	2 Years

On-site or carry-in service in the **USA and Puerto Rico** may be obtained during the warranty period by contacting Panasonic Solutions Company Service toll free at 1-877-655-2357.

This warranty is extended only to the original purchaser and is non transferable. A purchase receipt or other proof of date of original purchase will be required before warranty service is rendered.

This warranty only covers failures due to defects in materials or workmanship, which occur during normal use. The warranty does not cover damage which occur in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from improper installation, set-up adjustments, improper

antenna, inadequate signal pickup, maladjustment of consumer controls, improper operation, power line surge, improper voltage supply, lighting damage, or service by anyone other than an authorized repair facility, or damage that is attributable to acts of God.

LIMITS AND EXCLUSIONS

There are no express warranties except as listed above.

THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGE TO DISCS) RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THE WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.

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 exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may have other rights, which vary from state to state.

If you have a problem with this product that is not handled to your satisfaction, then write the Consumer Affairs Department at the Company address indicated above.

In the USA and Puerto Rico
FOR SERVICE
CALL TOLL FREE
1-877-655-2357

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

Panasonic Canada Inc. (also known as PCI) warrants this product to be free of defects in material and workmanship under normal use during the applicable warranty coverage period described below. PCI agrees to repair, or at its option, exchange, any part that becomes defective. However, the product must be purchased and serviced in Canada. The product or part that shows evidence of defect must be delivered prepaid or carried in to an authorized Panasonic Broadcast Service Center. This warranty does not cover shipping costs.

The warranty coverage period is one year, for both parts and labour beginning with the date of original end user purchase, subject to the exceptions as stated below. Repaired or replacement parts supplied during the warranty coverage period carry the unexpired portion of the original warranty coverage period. Proof of product purchase is a condition of warranty service. The owner must produce the product purchase receipt or other satisfactory evidence of date of original purchase.

This warranty does not apply to external appearance items, such as handles, knobs, safety windows, etc. This warranty does not apply to any part, or parts, of the product; installed, altered, repaired or misused in any way that, in the opinion of PCI, affects the reliability of or detracts from the performance of the product.

For products requiring routine preventive maintenance, that maintenance must be performed in order to maintain warranty coverage.

Serial numbers that have been altered, defaced or removed void this warranty. This warranty does not cover replacements or repairs necessitated by loss or damage resulting from any cause beyond the control of PCI.

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.

THIS EXPRESS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND EXCLUDES ANY PARTICULAR WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT WILL PANASONIC CANADA INC. BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES.

In certain instances, some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or the exclusion of implied warranties, so the above limitations and exclusions may not be applicable.

WARRANTY COVERAGE PERIOD EXCEPTIONS

Item	Parts	Labour
Video Tape	30 days—Replacement only (content not covered)	N/A
P2/SD Cards	(Content not covered)	N/A
Video Heads	1 year or 2,000 hrs. (prelaid) Whichever comes first	1 year or 1,000 hrs. Whichever comes first
D5 Video heads	1 year or 1,000 hrs. Whichever comes first	1 year or 1,000 hrs. Whichever comes first
Maintenance Items	90 days	90 days
Colour Camera CCD Imaging Block	2 years	2 years
All LCD Monitors		
* DLP™ Projectors	2 years (burn-in not covered)	2 years
* LCD Projectors above	3 years or 17,000 hrs. Whichever comes first	3 years or 17,000 hrs. Whichever comes first
* 2,500 ANSI Lumens	3 years or 2,500 hrs. Whichever comes first	3 years or 2,500 hrs. Whichever comes first
* LCD Projectors below	3 years or 1,500 hrs. Whichever comes first	3 years or 1,500 hrs. Whichever comes first
* 2,500 ANSI Lumens	50% of the rated lamp life or 1 year. Whichever comes first	50% of the rated lamp life or 1 year. Whichever comes first
Projector Lamps	2 years	2 years
All Plasma displays	3 years (burn-in not covered)	3 years
103 inch Plasma displays	1 year plus balance (if any) of Limited Warranty.	1 year
Hard Drive Disk Unit	(Content not covered)	

* Dust, smoke, rental/staging environment and twenty-four/seven operation, dramatically decreases the interval between performances of routine preventive maintenance required to maintain this warranty coverage.

Warranty Service

If the product needs to be shipped for service, carefully pack (preferably in the original carton) and enclose a letter, detailing the complaint. Send prepaid and adequately insured to the local authorized Panasonic Service Centre in your area or to Panasonic Technical Support Product Services Department, 5770 Ambler Drive, Mississauga, Ontario L4W 2T3. Shipping to the latter location requires a return shipping label before shipment. No liability is assumed for loss or damage to the product while in transit.

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:

Panama	800-PANA (800-7262)
Colombia	01-8000-94PANA (01-8000-947262)
Ecuador	1800-PANASONIC (1800-726276)
Costa Rica	800-PANA737 (800-7262737)
El Salvador	800-PANA (800-7262)
Guatemala	1-801-811-PANA (1-801-811-7262)
Chile	800-390-602 From a cell phone: 797-5000
Venezuela	800-PANA-800 (800-7262-800)
Uruguay	0-800-PANA (0-800-7262)
Peru	0-800-00-PANA (0-800-00726)
Argentina	0800-333-PANA (0800-333-7262) 0810-321-PANA (0810-321-7262)
Paraguay	800-11-PANA (800-11-7262)
Dominican Republic	809-200-8000

Mexico Service

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

[email: atencion.clientes@mx.panasonic.com](mailto:atencion.clientes@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

USA 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 can 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.

Model Number _____ Serial Number _____

Panasonic System Communications Company of North America

Unit of Panasonic Corporation of North America

Executive Office :

Two Riverfront Plaza, Newark, New Jersey 07102-5490

Panasonic Canada Inc.

5770 Ambler Drive
Mississauga, Ontario
L4W 2T3

Panasonic Corporation

Web Site : <http://panasonic.net>

© Panasonic Corporation 2014

Printed in China