

# **Operating Instructions**

FULL HD LCD Display For business use

English

Madal No TH-421 F8W	42-inch model
	49-inch model
TH-551 F8W	55-inch model
TH-421 F80W	42-inch model
TH-49LF80W	49-inch model
TH-55LF80W	55-inch model



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.
- Descriptive illustrations in this Operating Instructions are created mainly based on the 55-inch model.



#### 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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# Important Safety Notice

#### WARNING

 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.

- 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.

 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.

#### IMPORTANT INFORMATION

If a display is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Using cabinets or stands recommended by the manufacturer of the display.
- Only using furniture that can safely support the display.
- Ensuring the display is not overhanging the edge of the supporting furniture.
- Not placing the display on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the display to a suitable support.
- Not standing the displays on cloth or other materials placed between the display and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the display or its controls.

#### IMPORTANT: THE MOULDED PLUG FOR YOUR SAFETY, PLEASE READ THE FOLLOWING TEXT CAREFULLY.

This display is supplied with a moulded three pin mains plug for your safety and convenience. A 10 amp fuse is fitted in this plug. Shall the fuse need to be replaced, please ensure that the replacement fuse has a rating of 10 amps and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark or the BSI mark  $\bigvee$  on the body of the fuse.

If the plug contains a removable fuse cover, you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic dealer. Do not cut off the mains plug.

Do not cut on the mains plug.

Do not use any other type of mains lead except the one supplied with this display.

The supplied mains lead and moulded plug are designed to be used with this display to avoid interference and for your safety.

If the socket outlet in your home is not suitable, get it changed by a qualified electrician.

If the plug or mains lead becomes damaged, purchase a replacement from an authorized dealer.

#### WARNING : - THIS DISPLAY MUST BE EARTHED.

#### How to replace the fuse.

Open the fuse compartment with a screwdriver and replace the fuse.



# **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-ST43PE8

- Digital Interface Box ET-YFB100G
- DIGITAL LINK Switcher
  - ET-YFB200G
- Early Warning Software ET-SWA100 series<sup>\*1</sup>
- Video Wall Manager TY-VUK10\*2
- \*1: Suffix of the part number may differ depending on the license type.
- \*2: Supports Ver1.1 or later.

#### Note

• The part number of the optional accessories are subject to change without notice.

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.

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.

#### 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 6.

#### 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.



#### Cautions for Wall or Pedestal Installation

- Wall or Pedestal 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.
- When installing on a wall, a wall hanging bracket that conforms to VESA standards must be used.

42-inch model : VESA 200×200

49-inch model 55-inch model : VESA 400×400 (see page 6)

- 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 220 - 240 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.

#### The mains plug 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 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 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 supplied AAA/R03/UM4 batteries 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 connection cables of 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.



## A CAUTION

# 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.

### 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.

# At least 2 people are required to carry or unpack this unit.

 If this is not observed, the unit may drop, resulting in injury.

# 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 10)

## 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  $(3 \, _{15/16^{\circ}})$  or more at the top, left and right, and 5 cm  $(1 \, _{31/32^{\circ}})$  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:



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

Inch model	Screw pitch for installation	Depth of screw hole	Screw (quantity)
42	200 mm × 200 mm	10 mm	M6 (4)
49	400 mm × 400 mm	10 mm	M6 (4)
55	400 mm × 400 mm	10 mm	M6 (4)

When installing, do not use the screw holes (situated at the bottom of the display's back) as shown in the following figures.

It may damage the LCD panel.

42-inch model







# 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.

### ■ Note 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.

- 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.
- Set a password for the web control and restrict the users who can log in.

## 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.

## 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, communications of the wired LAN or DIGITAL LINK 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 wired LAN or DIGITAL LINK.
- 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 DIGITAL LINK / LAN terminal by using a piece of metal foil or a metal pipe, of which is grounded at both ends.

### 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

Operating Instructions (Book)



#### Operating Instructions (CD-ROM)



#### Remote Control Transmitter

N2QAYA000099



#### Batteries for the Remote Control Transmitter

(AAA/R03/UM4 type × 2)



Clamper × 3



Power supply cord (Approx. 2 m)







### Attention

- Store small parts in an appropriate manner, and keep them away from young children.
- In case you lost accessories, please consult your dealer.
- Dispose the packaging materials appropriately after taking out the items.

### **Remote Control Batteries**

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



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



AAA/R03/UM4 type

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 can cause battery leakage and corrosion that will damage the remote control transmitter.

Disposal of batteries should be in an environmentfriendly 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.
- Do not mix battery types (example: "Zinc Carbon" with "Alkaline").
- 4. Do not attempt to charge, short-circuit, disassemble, heat or burn used batteries.
- Battery replacement is necessary when remote control acts sporadically or stops operating the Display set.
- 6. Do not burn or breakup batteries.
- Batteries must not be exposed to excessive heat such as sunshine, fire or the like.

# **Kensington security**

This security slot is compatible with the Kensington security cables.

42-inch model



49-inch model



55-inch model



# Connections

## AC cord connection and fixing

### Back of the unit



### Plug the connector 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 connector pressing the two knobs.

#### Note

- When disconnecting the AC cord, be absolutely sure to disconnect the AC cord plug at the socket outlet first.
- The supplied AC cord set 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 of clampers as shown below.

If you need more clampers, purchase them from your dealer. (Available from the customer service)



• The position of the holes are the same for 42-inch and 49-inch models.

#### 1. Attach the clamper



2. Bundle the cables



### Video equipment connection



1	PC IN: PC Input Terminal Connect to video te video equipment wi YCBCR" or "RGB" o	PC Input Terminal	al 7 terminal of PC, with "YP <sub>B</sub> P <sub>R</sub> / output.	DVI-D IN, DVI-D OUT:	DVI-D Input / Output Terminal	
		Connect to video terminal of PC, video equipment with "YPBPR / YCBCR" or "RGB" output.			Connect to video equipment with DVI-D output. Also, when displaying the picture by daisy	
2	AUDIO1 IN:	Audio input terminal shared with DVI-D IN and PC IN	_		connect to the other displays,	
3	COMPONENT / RGB / VIDEO IN:	COMPONENT / RGB Video Input Terminal (R/PR/CR, B/PB/ CB, G/Y) Connect to video equipment with "YPBPR / YCBCR" or "RGB" output.	8	USB:	USB Memory Terminal Connect the USB memory to use the USB media player function. Also, this can be used to supply power of up to 5V/1A to an external device when receiving images.	
	Composite V Terminal (VIE	Composite Video Input Terminal (VIDEO)	9	LAN:	LAN Terminal (LF8 series only)	
		Connect to video equipment with Composite signal output.			Control the Display by connecting to Network.	
4	AUDIO2 IN: Audio Input Terminal shared with COMPONENT/RGB IN and VIDEO IN	Audio Input Terminal shared with COMPONENT/RGB IN and		DIGITAL LINK / LAN:	DIGITAL LINK Input Terminal (LF80 series only)	
				Control the Display by connecting to Network.		
5	AUDIO OUT:	Analogue Audio Output Terminal		Alternatively, connect to a device		
	Connec analogu	Connect to audio equipment with analogue audio input terminal.			signals via the DIGITAL LINK terminal.	
6	AV IN	HDMI Input Terminal	-			
	(HDMI 1, HDMI 2):	Connect to video equipment such as VCR or DVD player, etc.				

11 IR IN, IR OUT: Infrared Signal Input / Output		Before connecting		
	Use this when operating more than one display with one remote control.	<ul> <li>Before connecting cables, carefully read the operating instructions for the external device to be connected.</li> <li>Turn off the power of all devices before connecting cables.</li> </ul>		
12 SERIAL IN, SERIAL OUT:	SERIAL Input / Output Terminal Control the Display by connecting to PC.	<ul> <li>Take note of the following points before connecting the cables. Failure to do so may result in malfunctions.</li> </ul>		
		<ul> <li>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.</li> </ul>		
		<ul> <li>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.</li> </ul>		
		<ul> <li>When connecting cables, connect GND first, then insert the connecting terminal of the connecting device in a straight manner.</li> </ul>		
		<ul> <li>Acquire any connection cable necessary to connect the external device to the system that is neither supplied with the device nor available as an option.</li> </ul>		
		<ul> <li>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.</li> </ul>		
		<ul> <li>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.</li> </ul>		
		<ul> <li>When the sync signals output form PC or video equipment are disturbed, for example, when changing settings of video output, the colour of the video may be disturbed temporarily.</li> </ul>		
		<ul> <li>The unit accepts Composite video signals, YC<sub>B</sub>C<sub>R</sub>/ YP<sub>B</sub>P<sub>R</sub> signals, analogue RGB signals and digital signals.</li> </ul>		
		<ul> <li>Some PC models are not compatible with the unit.</li> <li>Use cable compensator when you connect devices to the unit using long cables. Otherwise the image may not display properly.</li> </ul>		

# **Identifying Controls**

### Main Unit



 The power indicator and remote control sensor can be pulled out by sliding the lever on the rear panel. To store the part, press it directly.

#### (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: 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
- The unit will still consume some power as long as the power cord is still inserted into the wall outlet.
- 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)> (INPUT signal selection)
  - Selects the connected device.
- 4 <MENU (Unit)>
  - Each time the <MENU (Unit)> button is pressed, the menu screen will switch.
- 5 <+ (Unit)> / <- (Unit)>
  - Adjusts the volume.
  - On the main screen, switches settings or adjusts settings level.
- 6 < ▲ (Unit)> / < ▼ (Unit)>
  - Selects the setting item.

#### 7 <ENTER (Unit)>

- · Configures the item on menu screen.
- Switches aspect mode.

### Remote Control Transmitter



#### 1 Standby (ON/OFF) button (小)

- 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

#### 13SOUND

#### 14RECALL

• Displays the current setting status of Input mode, Aspect mode, etc.

#### 15 RETURN

• Used to return to the previous menu.

## 16FUNCTION

## 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.

# **Basic Controls**



Operate pointing the remote control directly at the unit's Remote Control Sensor.



#### 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.
- Do not subject the remote control sensor of the main unit to the direct sunlight or strong fluorescent light.

### 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.

### When the Unit is turned on for the first time

Following screen will be displayed.

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



2 Select [Year] / [Month] / [Day] / [Hour] / [Minute] with ▲ ▼ and set with ◀►.

Date and time		
		:
Set		
Year		 Þ
Month		
Day		
Hour		
Minute		

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

Date and time			
	 //		:
Set			
Year			
Month			
Day			
Hour			
Minute		20	

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.
 After the setting, the items can be changed in the following menus.
 [OSD language]

[Date and time]

[Display orientation]

#### Power ON message

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

#### No activity power off Precautions

'No activity power off' is enabled.

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

#### "Power management" Information

Last turn off due to 'Power management'.

When "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)

# **Specifications**

#### Model No.

42-inch model	): TH-42LF8W
49-inch model	): TH-49LF8W
55-inch model	): TH-55LF8W
42-inch model	): TH-42LF80W
49-inch model	): TH-49LF80W
55-inch model	): TH-55LF80W

#### **Power Consumption**

42-inch model 145 W (LF8) 155 W (LF80) 49-inch model 160 W (LF8) 175 W (LF80) 55-inch model 185 W (LF8)

190 W (LF80)

#### - -

Power off condition 0.3 W

Stand-by condition

0.5 W

#### LCD Display panel

42-inch model

42-inch IPS panel (Edge LED backlight), 16:9 aspect ratio

#### 49-inch model

49-inch IPS panel (Edge LED backlight), 16:9 aspect ratio

55-inch model

55-inch IPS panel (Edge LED backlight), 16:9 aspect ratio

#### Screen size

(42-inch mode) 927 mm (W) × 521 mm (H) × 1 064 mm (diagonal) / 36.5" (W) × 20.5" (H) × 41.9" (diagonal) (49-inch mode) 1 073 mm (W) × 604 mm (H) × 1 232 mm (diagonal) / 42.2" (W) × 23.7" (H) × 48.5" (diagonal) (55-inch mode)

1 209 mm (W) × 680 mm (H) × 1 387 mm (diagonal) / 47.6" (W) × 26.7" (H) × 54.6" (diagonal)

(No. of pixels)

2 073 600 (1 920 (W) × 1 080 (H))

### Dimensions (W × H × D)

42-inch model

947 mm × 541 mm × 72 mm (57 mm: without handles) / 37.3" × 21.3" × 2.8" (2.3": without handles) (49-inch model) 1 093 mm × 623 mm × 72 mm (57 mm: without handles) /

43.1" × 24.6" × 2.8" (2.3": without handles)

55-inch model

1 229 mm × 699 mm × 72 mm (57 mm: without handles) / 48.4" × 27.6" × 2.8" (2.3": without handles)

#### Mass

```
42-inch model
```

approx. 15.3 kg / 33.8 lbs net

49-inch model

approx. 19 kg / 41.9 lbs net

55-inch model

approx. 24.7 kg / 54.5 lbs net

#### Power source

220 - 240 V AC, 50/60 Hz

#### **Operating condition**

Temperature 0 °C to 40 °C (32 °F to 104 °F)\*1 Humidity 20 % to 80 % (no condensation)

#### Storing condition

Temperature -20 °C to 60 °C (-4 °F to 140 °F) Humidity

20 % to 80 % (no condensation)

#### **Connection terminals**

```
HDMI 1
HDMI 2
```

TYPE A Connector\*2 × 2 Audio signal: Linear PCM (sampling frequencies - 48 kHz, 44.1 kHz, 32 kHz)

DVI-D IN

DVI-D 24 Pin: Compliance with DVI Revision 1.0 Content Protection: Compatible with HDCP 1.1

------

DVI-D OUT DVI-D 24 Pin: Compliance with DVI Revision 1.0 Content Protection: Compatible with HDCP 1.1

#### COMPONENT/RGB IN

Y/G BNC terminal 1.0 Vp-p (75  $\Omega$  ) (with sync) Pb/Cb/B BNC terminal 0.7 Vp-p (75  $\Omega$  ) (without sync) PR/CR/R BNC terminal 0.7 Vp-p (75  $\Omega$  ) (without sync)

#### VIDEO IN

VIDEO BNC terminal 1.0 V [p-p] (75 Ω ) Also used as Y/G terminal

#### PC IN

High-Density Mini D-sub 15 Pin: Compatible with DDC2B Y/G: 1.0 Vp-p (75  $\Omega$ ) (with sync) 0.7 Vp-p (75  $\Omega$ ) (without sync) PB/CB/B: 0.7 Vp-p (75  $\Omega$ ) (without sync) PR/CR/R: 0.7 Vp-p (75  $\Omega$ ) (without sync) HD/VD: 1.0 - 5.0 Vp-p (high impedance)

#### AUDIO1 IN

Stereo mini jack (M3) 0.5 Vrms Shared with DVI-D IN and PC IN

#### AUDIO2 IN

Stereo mini jack (M3) 0.5 Vrms Shared with COMPONENT/RGB IN and VIDEO IN

#### AUDIO OUT

Stereo mini jack (M3) 0.5 Vrms Output: Variable (-∞ to 0 dB) (1 kHz 0 dB input, 10 kΩ load)

#### SERIAL IN

External Control Terminal D-sub 9 Pin: RS-232C compatible SERIAL OUT External Control Terminal D-sub 9 Pin: RS-232C compatible LAN (LF8 series) For RJ45 network connections, compatible with PJLink Communication method: RJ45 10BASE-T/100BASE-TX

#### DIGITAL LINK/LAN (LF80 series)

For RJ45 network connections, compatible with PJLink Communication method: RJ45 100BASE-TX

#### IR IN

```
Stereo mini jack (M3)
```

IR OUT

Stereo mini jack (M3)

#### USB

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

#### Sound

Speakers 96 mm × 27 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.
- This equipment complies with the EMC standards listed below.

EN55022, EN55024, EN61000-3-2, EN61000-3-3.

This product incorporates the following software:

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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.

# Information for Users on Collection and Disposal of Old Equipment and used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

### For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

### [Information on Disposal in other Countries outside the European Union]

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

#### Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

### **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.

Model Number

Serial Number

Pursuant to the directive 2004/108/EC, article 9(2) Panasonic Testing Centre Panasonic Service Europe, a division of Panasonic Marketing Europe GmbH Winsbergring 15, 22525 Hamburg, F.R. Germany

## Panasonic Corporation

Web Site: http://panasonic.com

TP0915TS0 -PB Printed in China

English

