

Operating Instructions
Interactive Plasma Display



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

Contents

- Important Safety Notice2
- Safety Precautions3
- Accessories8
- Connections10
- Power On / Off13
- Basic Controls15
- Disposal of electronic pen17
- Specifications18



TQB4TC0374

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.

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.

Trademark Credits

- VGA is a trademark of International Business Machines Corporation.
- Macintosh is a registered trademark of Apple Inc., USA.
- 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.

Note:

Do not allow a still picture to be displayed for an extended period, as this can cause a permanent image retention to remain on the Plasma Display.

Examples of still pictures include logos, video games, computer images, teletext and images displayed in 4:3 mode.

Safety Precautions

WARNING

■ Setup

This Plasma 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 TH-50PB2W),
TY-ST65P20 (for TH-65PB2W)
- Mobile stand for Display TY-ST50PB2 (for TH-50PB2W),
TY-ST65PF1 (for TH-65PB2W),
TY-ST65PB2 (for TH-65PB2W)
- Mobile stand TY-ST58PF20 (for TH-50PB2W)
- Wall-hanging bracket (vertical) TY-WK42PV20 (for TH-50PB2W)
- Wall-hanging bracket (angled) TY-WK42PR20 (for TH-50PB2W),
TY-WK65PR20 (for TH-65PB2W)
- Ceiling-hanging bracket TY-CE42PS20 (for TH-50PB2W)
- Touch Panel TY-TP50P30K (for TH-50PB2W),
TY-TP65P30K (for TH-65PB2W)
- 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
- AV Terminal Box TY-TB10AV
- Electronic Pen for Interactive Plasma Display TY-TPEN2
- Electronic Pen Adapter for Interactive Plasma Display TY-TAD20
- Electronic Pen Charger for Interactive Plasma Display TY-TCG20
- Wireless Module ET-WM200E

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 Plasma Display on sloped or unstable surfaces, and ensure that the Plasma Display does not hang over the edge of the base.

- The Plasma Display may fall off or tip over.

Do not place any objects on top of the Plasma Display.

- If water is spills onto the Plasma 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 Plasma 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 10 cm or more at the top, left and right, and 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 10 cm or more at the top, bottom, left and right, and 7 cm or more at the rear.)

When installing the Plasma Display vertically;

Turn up the power switch for the upward direction when you install the Plasma Display vertically.
And set "Display orientation" to "Portrait" in Setup menu.

■ When using the Plasma Display

The Plasma Display is designed to operate on 220 - 240 V AC, 50/60 Hz.

Do not cover the ventilation holes.

- Doing so may cause the Plasma Display to overheat, which can cause fire or damage to the Plasma Display.

Do not stick any foreign objects into the Plasma Display.

- Do not insert any metal or flammable objects into the ventilations holes or drop them onto the Plasma 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 Plasma 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.

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

■ 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 Plasma Display, immediately unplug the power supply plug from the wall outlet.

- If you continue to use the Plasma 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 Plasma Display yourself is extremely dangerous, and shall never be done.

If water or foreign objects get inside the Plasma Display, if the Plasma Display is dropped, or if the cabinet becomes damaged, 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 Plasma Display

Do not bring your hands, face or objects close to the ventilation holes of the Plasma Display.

- Heated air comes out from the ventilation holes at the top of Plasma 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 Plasma Display.

- If the Plasma 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.

This Plasma Display radiates infrared rays, therefore it may affect other infrared communication equipment. Install your infrared sensor in a place away from direct or reflected light from your Plasma Display.

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 Plasma 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.

Electronic Pen Use

DANGER

About Prohibition of Heating

- **Do not put Electronic Pen in fire, heat it or leave it in places that can get hot.**
- **Batteries must not be exposed to excessive heat such as sunshine, fire or the like.**
Electronic Pen contains a lithium-ion polymer rechargeable battery, so heating may result in combustion or rupture that may cause burns or fire.

WARNING

About Prohibition of Disassembly

- **Do not disassemble or modify the Electronic Pen.**
When disposing this product, refer "Disposal of electronic pen" (page 17) and disassemble properly for removing the rechargeable battery.

About Charging

- **Use the included charger cable and charger for charging.**
Charging with other devices may result in battery leakage, heating or rupture.
- **Do not use the included charging cable and charger for uses other than charging Electronic Pen.**
Doing so may result in heating, combustion or damage.

About Electronic pen, Electronic pen adapter, Charger

- **Do not use near medical equipment.**
(Do not bring into a surgery room, intensive care unit, critical care unit, etc.)
Electromagnetic waves generated by this device can affect equipment, and can cause equipment to malfunction.
- **Do not use near automatic doors, smoke detectors and other automatically controlled equipment.**
Electromagnetic waves generated by this device can affect equipment, and can cause equipment to malfunction.
- **Use at least 22 cm away from pacemakers.**
Electromagnetic waves generated by this device can affect the operation of pacemakers.
- **Keep the pen tip, eraser tip, clammer, electronic pen adapter, optical attachment and screws out of reach of children to prevent swallowing.**
- **You must not aim the optical attachment lens at the Sun or an intense light source, or look at the Sun or an intense light source through the optical attachment lens. To do so may cause vision loss. Never look at the Sun or other intense light sources through the lens. Also, if you aim the lens at the Sun or an intense light source, the lens could focus light to a flammable item and cause a fire.**

CAUTION

- **Do not drop, exert pressure on, or step on the Electronic Pen.**
Doing so may damage the Electronic Pen, which may result in injury.
- **Be careful of the tips of the Electronic Pen.**
Accidentally inserting the tip of the Electronic Pen into the eye may cause injury.
- **Always keep the Electronic Pen in a cool, dry place.**
Failure to do so may cause fire or electric shock.
- **Do not bring magnetically susceptible objects (e.g. cash card, passbook) close to the charger**
The magnetic line from the charger may make magnetically susceptible objects unusable.

Precautions

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

Other Information

Usage Note

Operating the electronic pen and the electronic pen adapter near electrical appliances may cause interference. Move away from the electrical appliances such as TVs, radios, cordless phone, or wireless devices.

MEDICAL

Consult the manufacturer of any personal medical devices, such as pacemakers, to determine if they are adequately shielded from external RF (radio frequency) energy. (The unit operates in the frequency range of 2.405 GHz to 2.480 GHz, and the power output level is 1 milliwatts.) Do not use the unit in health care facilities if any regulations posted in the area instruct you not to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF (radio frequency) energy.

No responsibility will be taken by our company with respect to consequences resulting from the use, damage or both of the equipment.

Requests regarding handling

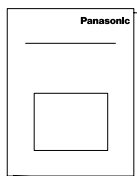
- **Do not press on the pen tip and eraser tip of the electronic pen more strongly than necessary.**
- **If there is surface contamination of the electronic pen, wipe it off with a soft cloth.**
For heavy contamination, wipe it off with a soft cloth dampened with a mild soap solution after squeezing water out of the cloth, and then dry the surface with a soft, dry cloth. Ingress of water droplets may cause a failure.
- **Do not drop the electronic pen or the optical attachment because it may get broken or malfunction.**
- **Do not use the pen tip or eraser tip if foreign material is adhering to it or if it is deformed or damaged.**
Doing so may dirty or scratch the screen.
- **Be careful not to hit or scratch with the pen tip of electronic pen because it is protruding. Also note that the electronic pen will not function correctly if the pen tip cannot receive the light from the display.**
- **Do not use the electronic pen for other purposes than operating the Interactive Plasma Display.**
- **Do not aim the optical attachment lens at the Sun or other intense light sources. To do so may cause a malfunction.**
- **When optical attachment, detached from the electronic pen, is not in use, keep it in such a manner as to prevent dust from entering inside.**
- **Do not use optical attachment for any electronic pen other than the supplied electronic pen.**
- **Do not put scissors, a screwdriver or any other metal object in the charger.**
Doing so may result in damage of the charger.
- **During inductive charging, please leave more than 20cm from the charger.**

Accessories

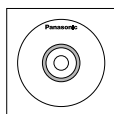
Accessories Supply

Check that you have the accessories and items shown

Operating
Instruction book



Software CD-ROM × 1

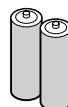


- Panasonic WhiteBoard Software
- Operating Instructions
 - Display Operations
 - Network Operations
 - Electronic Pen Operations
- Software license statements
 - GNU GENERAL PUBLIC LICENSE
 - GNU LESSER GENERAL PUBLIC LICENSE

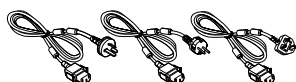
Remote Control
Transmitter
N2QAYB000691



Batteries for the Remote
Control Transmitter
(R6 (UM3) Size × 2)



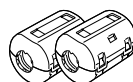
Power supply cord



Clamper × 1
TMME289



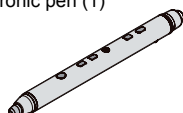
Ferrite core × 2
J0KG00000014



Use the Ferrite cores to comply with the EMC standard.
(see page 12)

Electronic Pen set

Electronic pen (1)



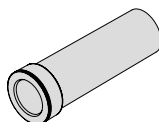
Model No. DKB-DP13
Parts No. N2FZ00000025
Eraser tip (1)



Electronic pen adapter (1)



Model No. SSR-RFNANO
Parts No. N5EDZ0000010
Optical attachment (1)

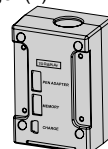


Pen tip (1)



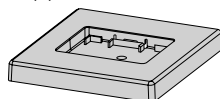
TKKL55591

Charger (1)



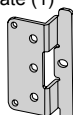
N0HZZY000003

Stand (1)



TKKL55601

Mounting plate (1)



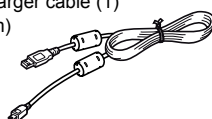
TGAD003

Clamper (1)



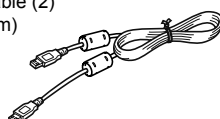
TMME190

Charger cable (1)
(2m)



K1HY05YY0098

Cable (2)
(2m)



K1HY05YY0099

Screw (2)



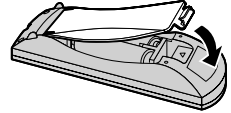
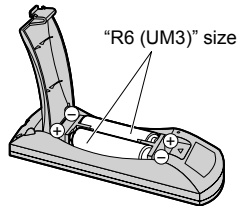
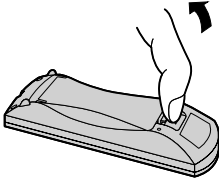
XTV3+12GFJK

Note: Store the extra pen tip and eraser tip along with this operating instructions.

Remote Control Batteries

Requires two R6 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.

Precaution on battery use

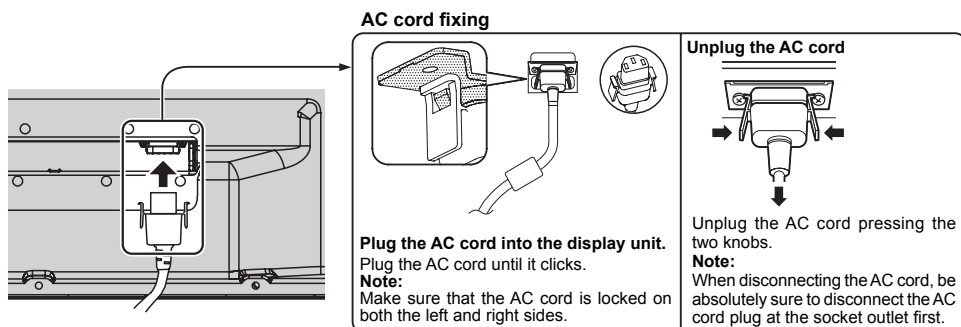
Incorrect installation can cause battery leakage and corrosion that will damage the remote control transmitter. Disposal of batteries should be in an environment-friendly manner.

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 Plasma 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.

Connections

AC cord connection and fixing, cable fixing

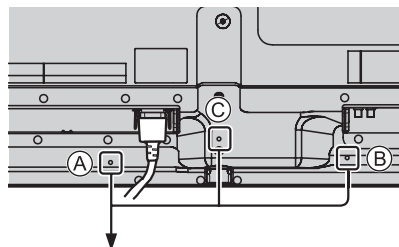


When using the Wall-hanging bracket (vertical) (for TH-50PB2W)

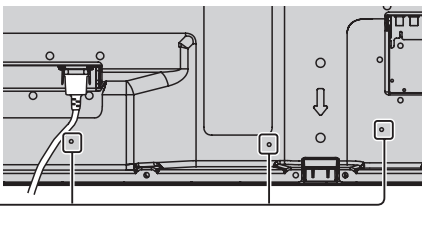
Note:

When using the Wall-hanging bracket (vertical) (TY-WK42PV20), use the holes ① and ② to secure the cables. If the clammer is used on the hole ③, the cables may be caught by the wall-hanging bracket.

TH-50PB2W



TH-65PB2W

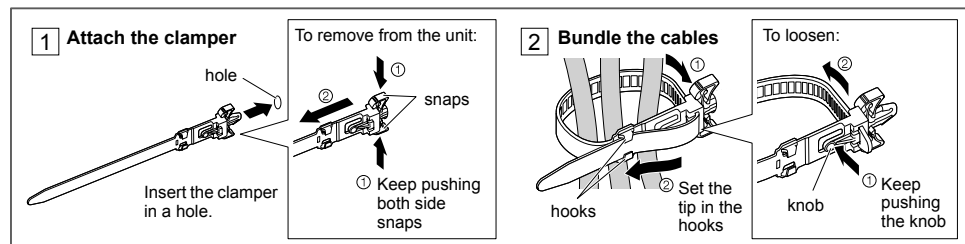


Using the clammer

Secure any excess cables with clammer as required.

Note:

One clammer is supplied with this unit. In case of securing cables at three positions, please purchase it separately.



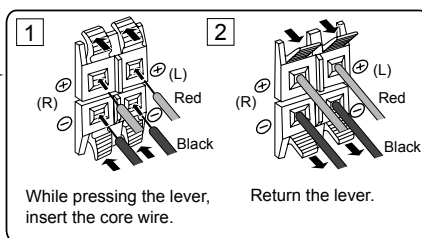
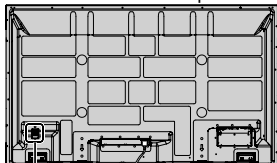
Speaker connection

For TH-50PB2W

Please use 6 Ω /8 W speaker.

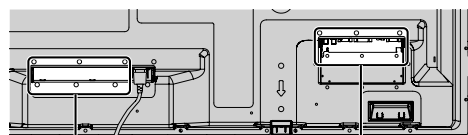
For TH-65PB2W

Please use 8 Ω /10 W speaker.



Video equipment connection

Ex. TH-65PB2W



SLOT: Terminal board (optional accessories) insert slot (see page 3)

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.

AUDIO 1 IN:

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

AV IN (VIDEO): Composite Video Input Terminal

COMPONENT/RGB IN: Component/RGB Video Input Terminal

AUDIO 2 IN:

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

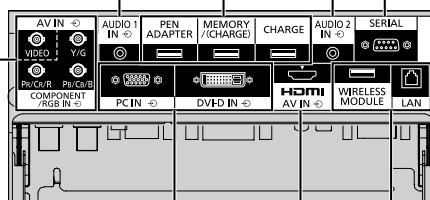
PEN ADAPTER, MEMORY/(CHARGE), CHARGE:

Refer to "Operating Instructions, Electronic Pen Operations".

SERIAL:

Control the Plasma Display by connecting to PC.

Terminals are on the bottom side of the Plasma Display.



DVI-D IN: DVI-D Input Terminal

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.

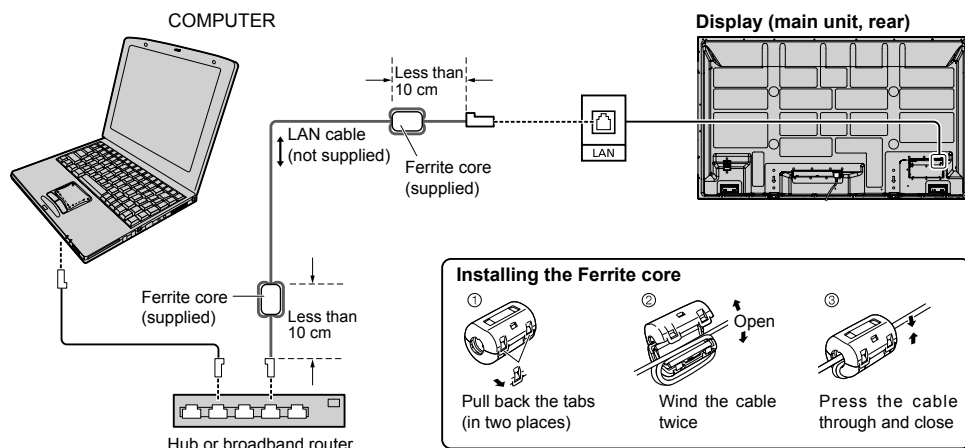
AV IN (HDMI): HDMI Input Terminal

Connect to video equipment such as VCR or DVD player.

WIRELESS MODULE, LAN:

See page 12

Example of Network Connection (Wired LAN)



Notes:

- Make sure the broadband router or hub supports 10BASE-T/100BASE-TX.
- To connect a device using 100BASE-TX, use "category 5" LAN cable.
- Touching the LAN terminal with a statically charged hand (body) may cause damage due to its discharge. Do not touch the LAN terminal or a metal part of the LAN cable.
- For instructions on how to connect, consult your network administrator.

Connecting Wireless Module (Wireless LAN)

To use the wireless function, the wireless module (ET-WM200E) (sold separately) is necessary.

When connecting the wireless module to the display, remove the protective film and cap.



Connecting procedure

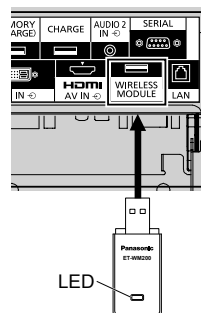
Hold the wireless module with its LED on the near side and connect it to the wireless module connection terminal.

Note:

Do not connect any other device than the wireless module (ET-WM200E).

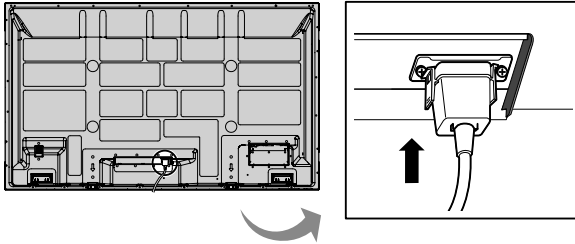
■ When using the electronic pen

Using the electronic pen with the wireless module (ET-WM200E) connected may result in malfunction of the electronic pen due to radio wave interference as an example. In that case, set "Wireless Lan" to "Off" before using the electronic pen. (refer to "Operating Instructions, Network Operations")



Power On / Off

Connecting the AC cord plug to the Plasma 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.

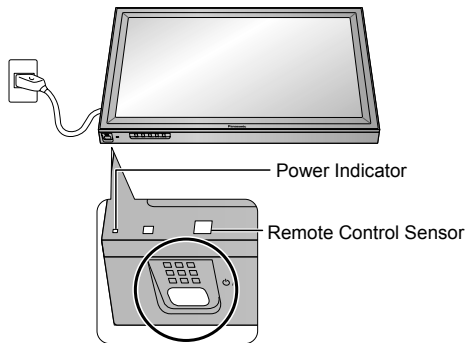
Press the Power switch on the Plasma Display to turn the set on: Power-On.

Power Indicator: Green

[Starting up the network]

It takes some time for the network to start up just after the power is turned on.

During that time, "Network Setup" in the "Setup" menu is grayed out and cannot be set.



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

Power Indicator: Red (standby)

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

Power Indicator: Green

Turn the power to the Plasma Display off by pressing the  switch on the unit, when the Plasma 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.



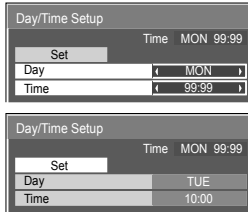
When first switching on the unit

Following screen will be displayed when the unit is turned on for the first time.
Select the items with the remote control. Unit buttons are invalid.

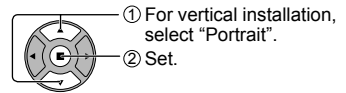
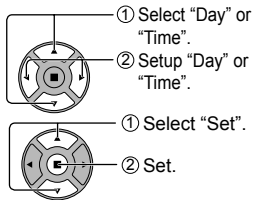
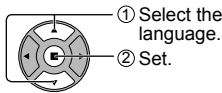
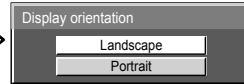
OSD Language



Day/Time Setup



Display orientation



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 Setup
Display orientation

Power ON message

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

Easy WhiteBoard Startup screen



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

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



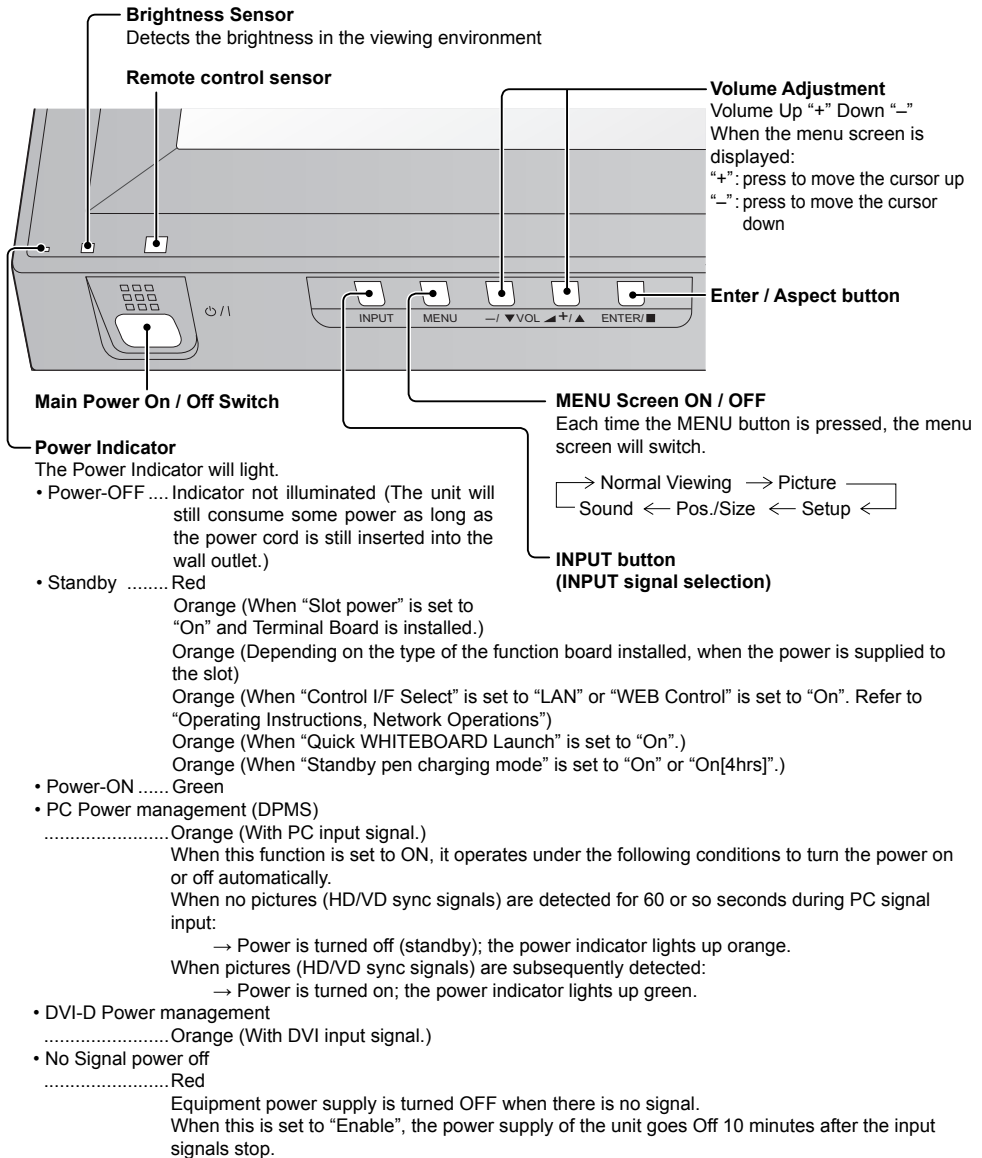
If "PC Power management" or "DVI-D Power management" is functioned, an information message is displayed every time the power is turned ON.

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



Remote Control Transmitter

ACTION button

Press to make selections.

ASPECT button

Press to adjust the aspect.

Standby (ON / OFF) button

The Plasma Display must first be plugged into the wall outlet and turned on at the power switch (see page 13). Press this button to turn the Plasma Display On, from Standby mode. Press it again to turn the Plasma 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.

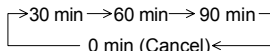
ECO MODE (ECO)

Press to change the ECO MODE setup status.

FUNCTION buttons (FUNCTION)

OFF TIMER button

The Plasma 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.

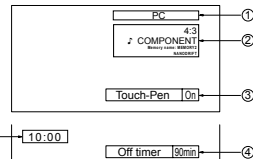
R button

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
- NANODRIFT Saver operating
- ③ Touch Pen mode On/Off
- ④ Off timer
- The off timer indicator is displayed only when the off timer has been set.
- ⑤ Clock display



Digital Zoom

Disposal of electronic pen

A lithium-ion polymer rechargeable battery is built in to the electronic pen. Please discard according to local regulations.

When disposing this product, disassemble properly by following the procedure on "Operating Instructions, Electronic Pen Operations", and remove the internal rechargeable battery.

Do not disassemble this product except when disposing of it.

DANGER

■ **As the rechargeable battery is specifically for this product, do not use it for any other device.**

Do not charge the removed battery.

- Do not throw the battery in a fire, or apply heat to it.
 - Do not pierce the battery with a nail, subject it to an impact, or dismantle or modify it.
 - Do not let the wires touch any other metal or each other.
 - Do not carry or store the battery with a necklace, hair pin, or the like.
 - Do not charge, use, or leave the battery in a hot location such as near a fire or under the hot sun.
- Doing so may cause the battery to generate heat, ignite, or rupture.

WARNING

■ **Do not place the removed battery, screws, and other items within reach of infants.**

Accidental swallowing of such an item may have an adverse effect on the body.

- In the event that you think such an item has been swallowed, consult a doctor immediately.

■ **In the event of fluid leaking from the rechargeable battery, take the following measure, and do not touch the fluid with bare hands.**

- Fluid entering into an eye may cause loss of eyesight.
Wash the eye with water immediately without rubbing it, and then consult a doctor.
- Fluid getting on your body or clothes may cause inflammation of the skin or injury.
Sufficiently rinse with clean water, and then consult a doctor.

Specifications

		TH-50PB2W	TH-65PB2W
Power Source		220 - 240 V AC, 50/60 Hz	
Power Consumption			
Power on		375 W	515 W
Stand-by condition		0.5 W	0.5 W
Power off condition		0.3 W	0.3 W
Plasma Display panel		Drive method : AC type 50-inch, 16:9 aspect ratio	Drive method : AC type 65-inch, 16:9 aspect ratio
Screen size		1,105 mm (W) × 622 mm (H) × 1,268 mm (diagonal)	1,434 mm (W) × 806 mm (H) × 1,645 mm (diagonal)
(No.of pixels)		2,073,600 (1,920 (W) × 1,080 (H)) [5,760 × 1,080 dots]	
Operating condition			
Temperature		0 °C - 40 °C	
Humidity		20 % - 80 %	
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 · 24sF, 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	TYPE A Connector	
COMPONENT/RGB IN			
DVI-D 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
AUDIO 2 IN	DVI-D 24 Pin	Compliance with DVI Revision 1.0	
	Content Protection	Compatible with HDCP 1.1	
PC IN	AUDIO 2 IN	Stereo mini jack (M3) × 1	0.5 Vrms, Shared with 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	
SERIAL		External Control Terminal D-sub 9 Pin	RS-232C compatible
PEN ADAPTER		For electronic pen adapter	
MEMORY/(CHARGE)		For USB memory/electronic pen charging	
CHARGE		For electronic pen charging	
WIRELESS MODULE		for Wireless module (ET-WM200E)	
LAN		RJ45 10BASE-T/100BASE-TX, compatible with PLink™	
EXP SP		6 Ω, 16 W [8 W + 8 W] (10 % THD)	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)		1,210 mm × 724 mm × 89 mm	1,554 mm × 925 mm × 99 mm
Mass (weight)		approx. 34.0 kg net	approx. 58.0 kg net

Note:

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

Electronic Pen

Type	Electronic pen
Transmission system	2.4 GHz radio transmission
Usage temperature range	0 °C - 40 °C
External dimensions (L × H)	201.2 mm × 21.3 mm 239.2 mm × 25.4 mm (with optical attachment)
Weight	Approx. 43 g Approx. 55 g (with optical attachment)
Operable distance of remote pointer	In front: 5 m At an angle of 45°: 3 m
Battery	Lithium-ion polymer rechargeable battery DC 3.7 V, 200 mAh Operation time*1: Approx. 5 hours Charging time*1: Approx. 4 hours

*1 Operation time/charging time

- The battery deteriorates after repeated use, and the operation time eventually becomes short. The figures above are at shipping from the factory, and are not a guarantee of performance.
- Replacement / repair of the battery only is not supported.

Note: The charger complies with EN 55011 Group 2, Class B.

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 Corporation

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

© Panasonic Corporation 2013

Printed in Thailand
M0513-0