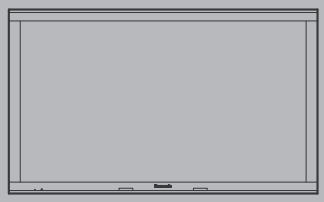
Panasonic

Model No.
TH-65VX300ER

Operating Instructions
High Definition Plasma Display



English

Please read these instructions before operating your set and retain them for future reference.

TQB0E2175U

Dear Panasonic Customer

Welcome to the Panasonic family of customers. We hope that you will have many years of enjoyment from your new Plasma Display.
To obtain maximum benefit from your set, please read these Instructions before making any adjustments, and retain them for future reference.
Retain your purchase receipt also, and note down the model number and serial number of your set in the space provided on the rear cover of these instructions.
Visit our Panasonic Web Site http://panasonic.net

Table of Contents

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: THE MOULDED PLUG

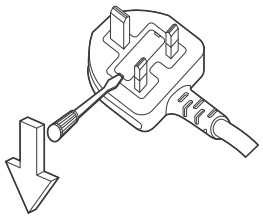
FOR YOUR SAFETY, PLEASE READ THE FOLLOWING TEXT CAREFULLY.

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 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 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.

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

<u>This Plasma Display is for use only with the following optional accessories.</u> 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.)

- Speakers TY-SP65P11WK
- Pedestal TY-ST65VX300
- Wall-hanging bracket (angled) TY-WK65PR20
- 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 HD-SDI Terminal Board for 3D TY-FB30DHD3D
- Dual HDMI Terminal Board TY-FB10HMD
- DVI-D Terminal Board TY-FB11DD
- Dual DVI-D Terminal Board for 3D TY-FB30DD3D
- AV Terminal Box TY-TB10AV
- 3D IR TRANSMITTER TY-3D30TRW

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 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.

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 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 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 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.

3D Safety Precautions

WARNING

■ Small Parts

3D Eyewear contains small parts (battery and specialised band, etc.) and must be kept out of reach of small children to avoid accidental ingestion.

■ Disassembly

Do not disassemble or modify the 3D Eyewear.

■ Lithium Battery

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

⚠ CAUTION

To enjoy 3D images safely and comfortably, please read these instructions fully.

■ Use for commercial applications and public viewing

Someone in authority should responsibly convey the precautions for use of the 3D Eyewear to the user.

■ 3D Eyewear

Do not drop, exert pressure on, or step on the 3D Eyewear.

Always store the 3D Eyewear in the case provided when not in use.

Be careful of the tips of the frame when putting on the 3D Eyewear.

Be careful not to trap a finger in the hinge section of the 3D Eyewear.

Pay special attention when children are using the 3D Eyewear.
3D Eyewear should not be used by children younger than 5 - 6 years old, as a guideline.
All children must be fully supervised by parents or guardians who must ensure their safety and health throughout the using 3D Eyewear.

■ Viewing 3D Content

Content for 3D viewing includes commercially available Blu-ray discs, 3D broadcasts, etc.
When preparing your own 3D content, ensure that it is properly produced.

Do not use the 3D Eyewear if you have a history of over-sensitivity to light, heart problems, or have any other existing medical conditions.

Please stop using the 3D Eyewear immediately, if you feel tired, are not feeling well or experience any other uncomfortable sensation.

Take an appropriate break after viewing a 3D movie.

Take a break of between 30 - 60 minutes after viewing 3D content on interactive devices such as 3D games or computers.

Be careful not to strike the screen or other people unintentionally. When using the 3D Eyewear the distance between the user and screen can be misjudged.

The 3D Eyewear must only be worn when viewing 3D content.

If you do not look toward the screen for a while when viewing 3D images, the 3D Eyewear may be turned off automatically.

If you suffer from any eyesight problems (short / far-sighted, astigmatism, eyesight differences in left and right), please ensure to correct your vision before using the 3D Eyewear.

Stop using the 3D Eyewear if you can clearly see double images when viewing 3D content.

When the multiple plasma displays are placed side by side, 3D images may be seen doubly due to interference among them. Place each display at an appropriate location to avoid it.

Do not use the 3D Eyewear at a distance less than the recommended distance.

View from at least the recommended distance (3 times the effective height of the screen).
Recommended distance
TH-65VX300ER: 2.4 m
When the top and bottom area of the screen is blackened, such as movies, view the screen at a distance 3 times further than the height of the actual image. (That makes the distance closer than above recommended figure.)

■ 3D Eyewear Use

Before using the 3D Eyewear, ensure no breakable objects surrounding the user to avoid any accidental damage or injury.

Remove the 3D Eyewear before moving around to avoid falling or accidental injury.

Always put the 3D Eyewear in the case (supplied) after use.

Use the 3D Eyewear only for the intended purpose and nothing else.

Do not use 3D Eyewear in the condition of high temperature.

Do not use if the 3D Eyewear is physically damaged.

Do not use any devices that emit the infrared signals near the 3D Eyewear, as this may cause the 3D Eyewear false operations.

Do not use devices (such as mobile phones or personal transceivers) that emit strong electromagnetic waves near the 3D Eyewear as this may cause the 3D Eyewear to malfunction.

Stop using the 3D Eyewear immediately if a malfunction or fault occurs.

Stop using the 3D Eyewear immediately if you experience any redness, pain, or skin irritation around the nose or temples.

In rare cases, the materials used in the 3D Eyewear may cause an allergic reaction.

■ Lithium Battery

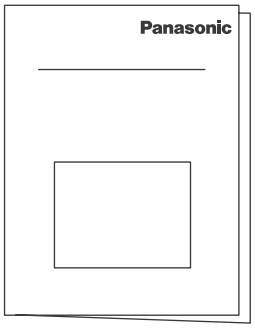
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

Accessories

Accessories Supply

Check that you have the accessories and items shown ☑

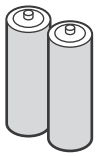
☐ Operating Instruction book



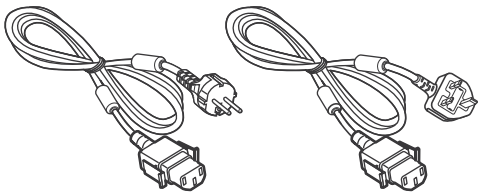
☐ CD-ROM (Operating instructions)

☐ Remote Control Transmitter N2QAYB000688

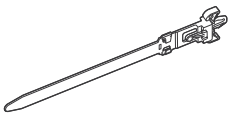
☐ Batteries for the Remote Control Transmitter (R6 (UM3) Size × 2)



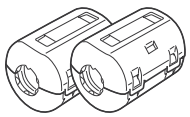
☐ Power supply cord



☐ Clamper × 1 TMME289



☐ Ferrite core × 2 J0KG00000014

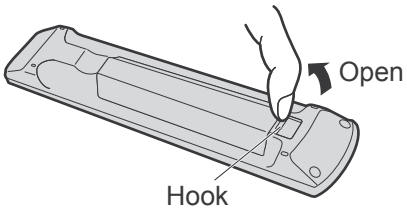


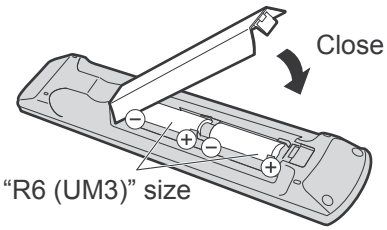
Use the Ferrite cores to comply with the EMC standard.
(see page 64)

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 -).





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.

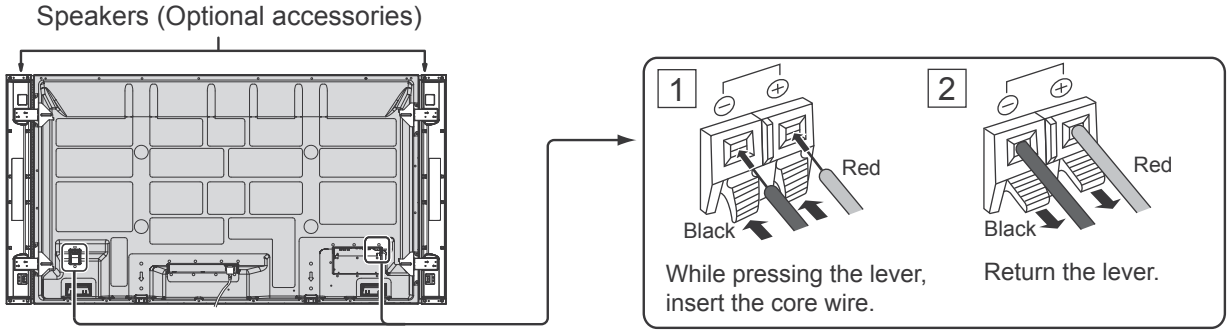
Observe the following precaution:

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

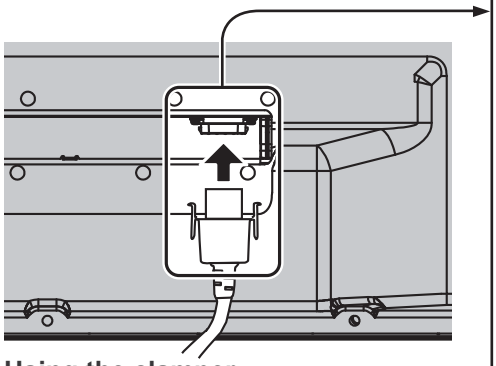
Connections

Speaker connection

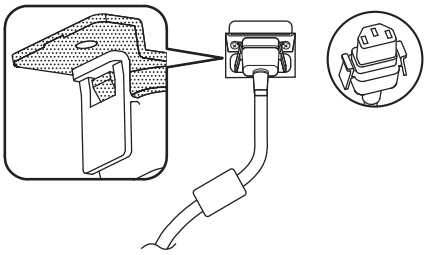
When connecting the speakers, be sure to use only the optional accessory speakers.
Refer to the speaker's Installation Manual for details on speaker installation.



AC cord connection and fixing, cable fixing

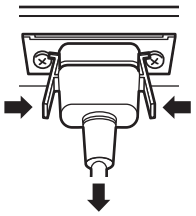


AC cord fixing



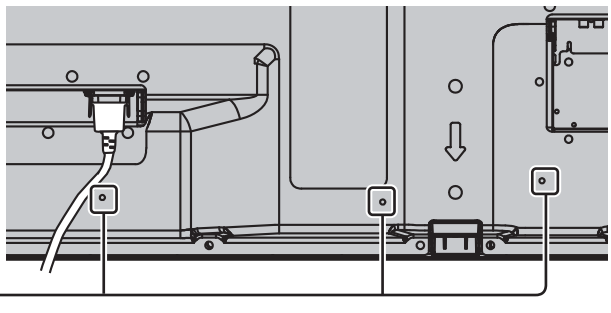
Plug the AC cord into the display unit.
Plug the AC cord until it clicks.
Note:
Make sure that the AC cord is locked on both the left and right sides.

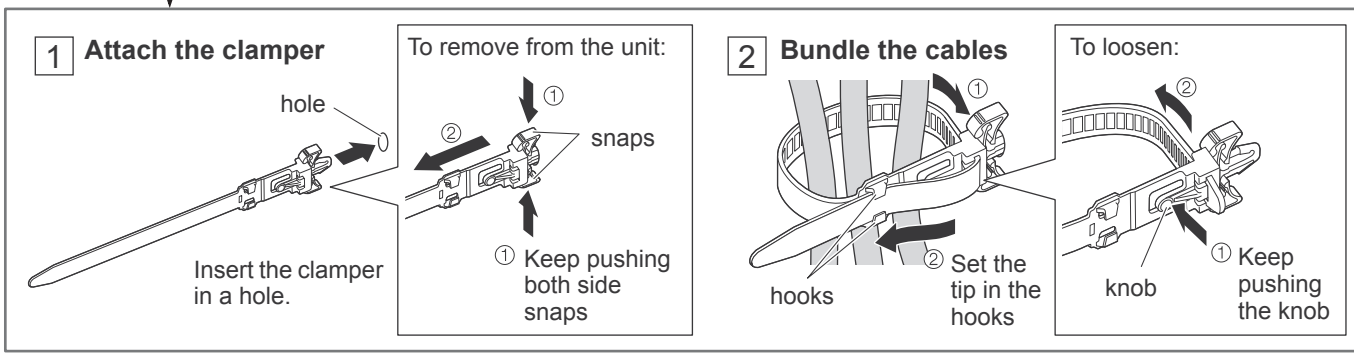
Unplug the AC cord



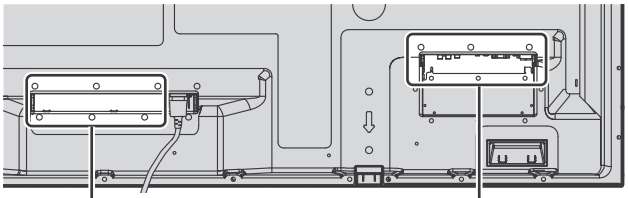
Unplug the AC cord pressing the two knobs.
Note:
When disconnecting the AC cord, be absolutely sure to disconnect the AC cord plug at the socket outlet first.

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.





Video equipment connection

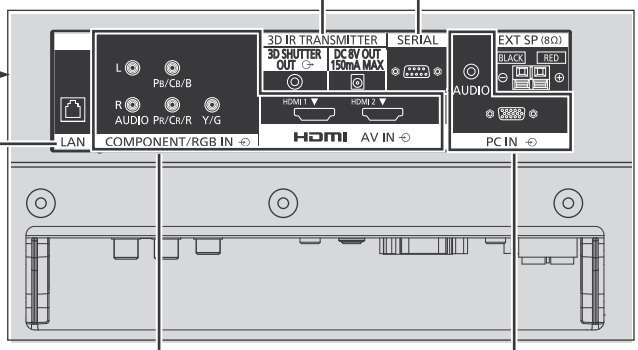


SLOT: Terminal board (optional accessories) insert slot (see page 4)

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

3D IR TRANSMITTER: Connect the 3D IR TRANSMITTER (optional accessory).

SERIAL: Control the Plasma Display by connecting to PC. (see page 14)



LAN: Connect to a network to control the unit. (see page 60)

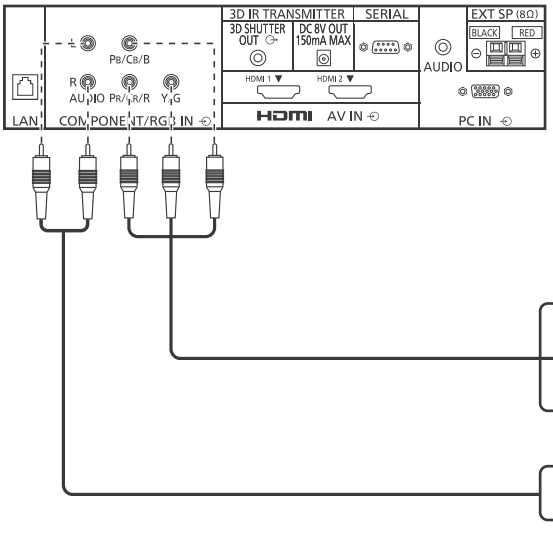
Terminals are on the bottom side of the Plasma Display.

COMPONENT/RGB IN: Component/RGB Video Input Terminal (see page 12)
AV IN (HDMI): HDMI Input Terminal (see page 12)
Connect to video equipment such as VCR or DVD player.

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 (see page 13).

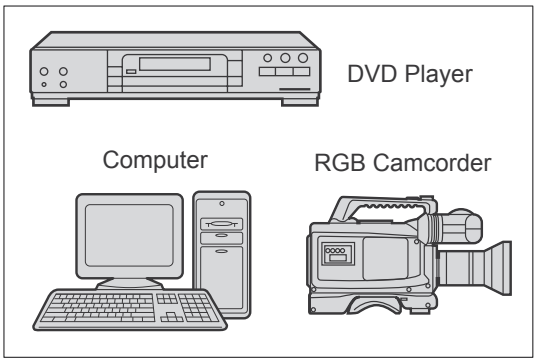
COMPONENT / RGB IN connection

Note:
Additional equipment, cables and adapter plugs shown are not supplied with this set.



Notes:

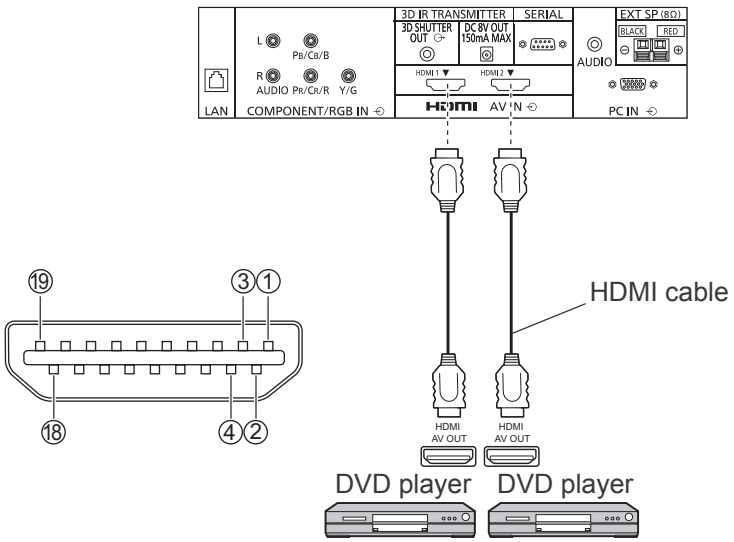
- Change the “Component/RGB-in select” setting in the “Setup” menu to “Component” (when Component signal connection) or “RGB” (when RGB signal connection). (see page 41)
- Signals input to COMPONENT/RGB IN terminals correspond to Sync on G or Sync on Y.



HDMI connection

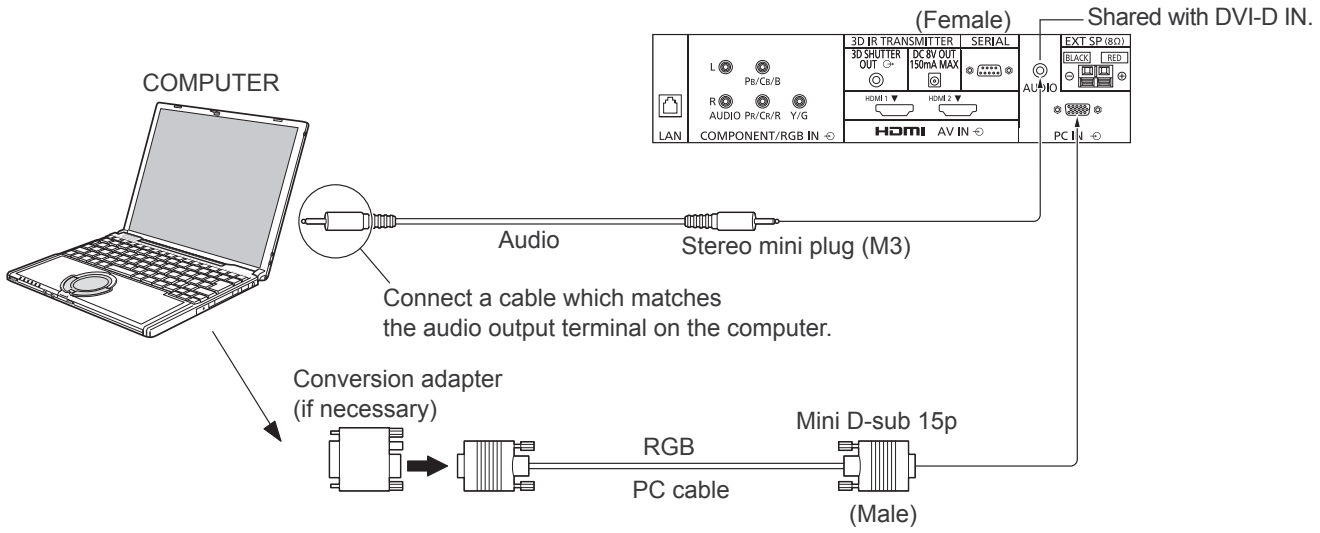
[Pin assignments and signal names]

Pin No.	Signal name	Pin No.	Signal name
①	T.M.D.S Data2+	⑪	T.M.D.S Clock Shield
②	T.M.D.S Data2 Shield	⑫	T.M.D.S Clock-
③	T.M.D.S Data2-	⑬	CEC
④	T.M.D.S Data1+	⑭	Reserved (N.C. on device)
⑤	T.M.D.S Data1 Shield		
⑥	T.M.D.S Data1-	⑮	SCL
⑦	T.M.D.S Data0+	⑯	SDA
⑧	T.M.D.S Data0 Shield	⑰	DDC/CEC Ground
⑨	T.M.D.S Data0-	⑱	+5V Power
⑩	T.M.D.S Clock+	⑲	Hot Plug Detect



Note:
Additional equipment and HDMI cable shown are not supplied with this set.

PC Input Terminals connection

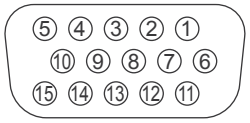


Notes:

- With regard to the typical PC input signals that are described in the applicable input signals list (see page 71), adjustment values such as for the standard picture positions and sizes have already been stored in this unit. You can add up to eight PC input signal types that are not included in the list.
- Computer signals which can be input are those with a horizontal scanning frequency of 15 to 110 kHz and vertical scanning frequency of 48 to 120 Hz. (However, the image will not be displayed properly if the signals exceed 1,200 lines.)
- The display resolution is a maximum of 1,440 × 1,080 dots when the aspect mode is set to “4:3”, and 1,920 × 1,080 dots when the aspect mode is set to “16:9”. If the display resolution exceeds these maximums, it may not be possible to show fine detail with sufficient clarity.
- The PC input terminals are DDC2B-compatible. If the computer being connected is not DDC2B-compatible, you will need to make setting changes to the computer at the time of connection.
- Some PC models cannot be connected to the set.
- There is no need to use an adapter for computers with DOS/V compatible Mini D-sub 15P terminal.
- The computer shown in the illustration is for example purposes only.
- Additional equipment and cables shown are not supplied with this set.
- Do not set the horizontal and vertical scanning frequencies for PC signals which are above or below the specified frequency range.
- Component Input is possible with the pin 1, 2, 3 of the Mini D-sub 15P Connector.
- To use sync input VBS signals, use the connector which incorporates a 75-ohm termination resistance and which is available on the market, for the connection of the HD connector where the VBS signals are to be input.
- Change the “Component/RGB-in select” setting in the “Setup” menu to “Component” (when Component signal connection) or “RGB” (when RGB signal connection). (see page 41)

Signal Names for Mini D-sub 15P Connector

Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
①	R (P_R/C_R)	⑥	GND (Ground)	⑪	NC (not connected)
②	G (Y)	⑦	GND (Ground)	⑫	SDA
③	B (P_B/C_B)	⑧	GND (Ground)	⑬	HD/SYNC
④	NC (not connected)	⑨	+5 V DC	⑭	VD
⑤	GND (Ground)	⑩	GND (Ground)	⑮	SCL

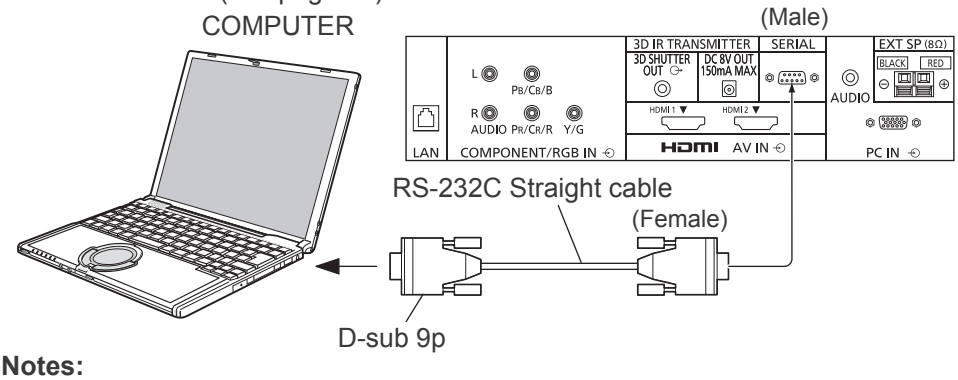


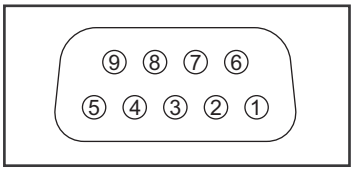
Pin Layout for PC Input Terminal

SERIAL Terminals connection

The SERIAL terminal is used when the Plasma Display is controlled by a computer.

Note: To use serial control for this unit, make sure to set the “Control I/F Select” in the “Network Setup” menu to “RS-232C”. (see page 59)





Pin layout for SERIAL Terminal

Notes:
- Use the RS-232C straight cable to connect the computer to the Plasma Display.
- The computer shown is for example purposes only.
- Additional equipment and cables shown are not supplied with this set.

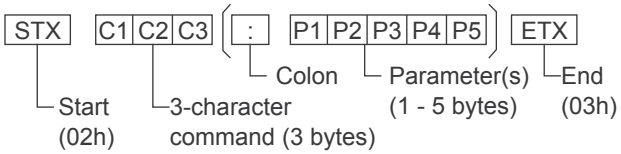
The SERIAL terminal conforms to the RS-232C interface specification, so that the Plasma Display can be controlled by a computer which is connected to this terminal.
The computer will require software which allows the sending and receiving of control data which satisfies the conditions given below. Use a computer application such as programming language software. Refer to the documentation for the computer application for details.

Communication parameters

Signal level	RS-232C compliant
Synchronization method	Asynchronous
Baud rate	9600 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
Flow control	-

Basic format for control data

The transmission of control data from the computer starts with a STX signal, followed by the command, the parameters, and lastly an ETX signal in that order. If there are no parameters, then the parameter signal does not need to be sent.



Notes:
- If multiple commands are transmitted, be sure to wait for the response for the first command to come from this unit before sending the next command.
- If an incorrect command is sent by mistake, this unit will send an “ER401” command back to the computer.
- S1A and S1B of Command IMS are available only when a dual input terminal board is attached.
- Consult your local Panasonic dealer for detail instructions on command usage.

Signal names for D-sub 9P connector

Pin No.	Details
②	R X D
③	T X D
⑤	GND
④ • ⑥	Non use
⑦ ⑧	(Shorted in this set)
① • ⑨	NC

These signal names are those of computer specifications.

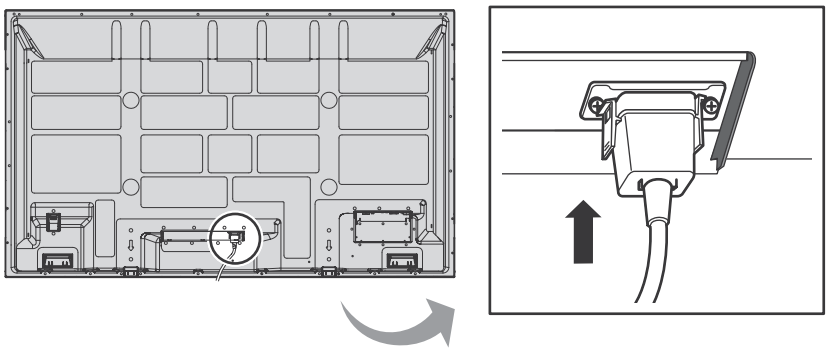
Command

Command	Parameter	Control details
PON	None	Power ON
POF	None	Power OFF
AVL	**	Volume 00 - 63
AMT	0	Audio MUTE OFF
	1	Audio MUTE ON
IMS	None	Input select (toggle)
	SL1	SLOT input (SLOT INPUT)
	S1A	SLOT input (SLOT INPUT A)
	S1B	SLOT input (SLOT INPUT B)
	YP1	COMPONENT/RGB IN input (COMPONENT)
	HM1	HDMI1 input (HDMI1)
	HM2	HDMI2 input (HDMI2)
	PC1	PC IN input (PC)
DAM	None	Screen mode select (toggle)
	ZOOM	Zoom, Zoom1
	FULL	16:9
	JUST	Just, Just1 (For Video/SD/HD signal)
	NORM	4:3, 4:3 (1)
	ZOM2	Zoom2 (For Video/SD/HD signal)
	ZOM3	Zoom3 (For Video/SD/HD signal)
	SJST	Just2 (For HD signal)
	SNOM	4:3 (2) (For HD signal)
	SFUL	4:3 Full (For HD signal)
	14:9	14:9 (For Video/SD/HD signal)

With the power off, this display responds to PON command only.

Power On / Off

Connecting the AC cord plug to the Plasma Display.

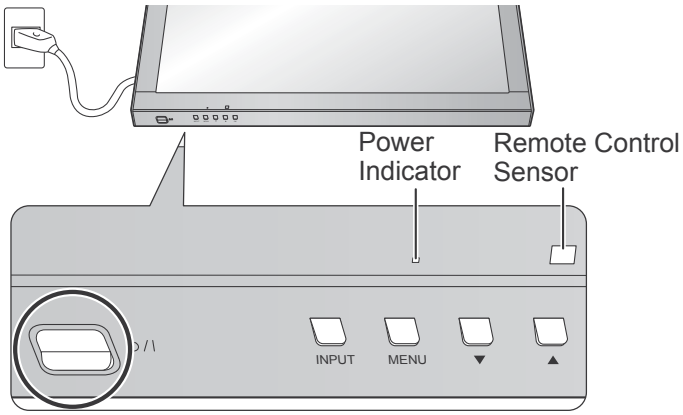


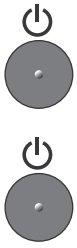
Connecting the plug to the Wall Outlet

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





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

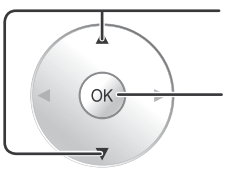
Turn the power to the Plasma Display off by pressing the ⏻/I switch on the unit, when the Plasma Display is on or in standby mode.

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.

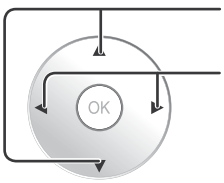
OSD Language



① Select the language.

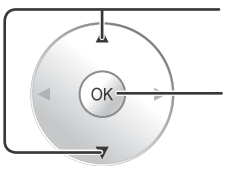
② Set.

Day/Time Setup



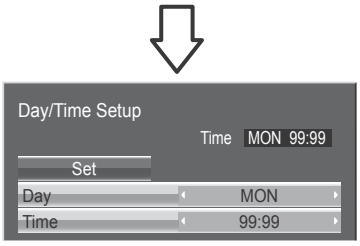
① Select “Day” or “Time”.

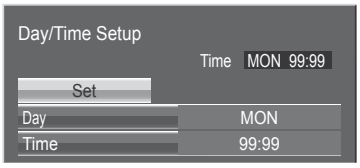
② Setup “Day” or “Time”.



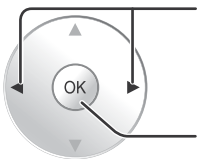
① Select “Set”.

② Set.



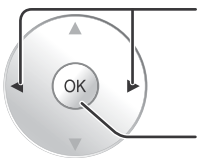


No activity power off



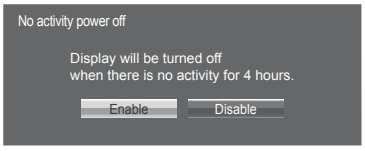
① To enable No activity power off, select “Enable”.

② Set.

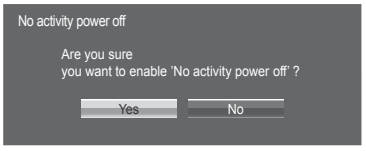


① Select “Yes” or “No”.

② Set.



If selecting “Enable”, a confirmation window appears.



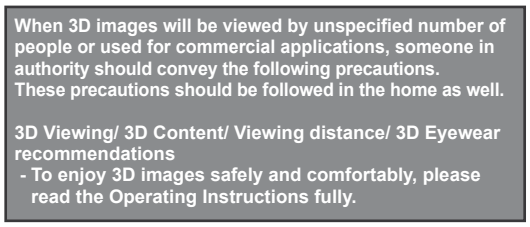
Notes:

- 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 (see page 44)
  Day/Time Setup (see page 58)
  No activity power off (see page 43)

Power ON warning message

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

3D Safety Precautions



Activate 3D Safety Precautions if you deliver 3D images to unspecified audiences for business or other purposes. If “3D Function” in “3D Settings” is set to “On”, a warning message is displayed every time the power is turned ON. (see page 45)

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. (see page 43)

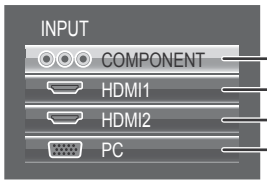
These message displays can be set with the following menu: Options menu

3D Safety Precautions (see page 61)

Power On Message (see page 61)

Selecting the input signal

Press to select the input signal to be played back from the equipment which has been connected to the Plasma Display.



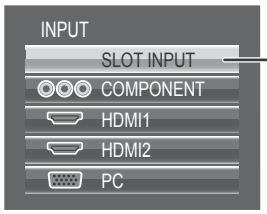
Component or RGB input terminal in COMPONENT/RGB IN.*

HDMI input terminals in HDMI 1 to HDMI 2.

PC input terminal in PC IN.

* “COMPONENT” may be displayed as “RGB” depending on the setting of “Component/RGB-in select”. (see page 41)

When an optional Terminal Board is installed:



Input terminal in Terminal Board
When a dual input Terminal Board is installed, “SLOT INPUT A” and “SLOT INPUT B” are displayed.

Using dedicated buttons for input selection

Press to select HDMI signal terminals in HDMI 1 or HDMI 2.

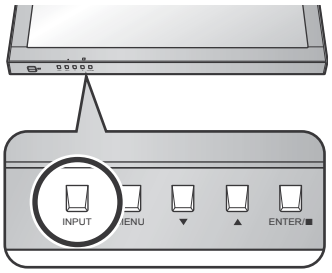
Press to select component or RGB signal terminal in COMPONENT/RGB IN.

Press to select PC signal terminal in PC IN.

Press to select Input terminal in Terminal Board.
For dual input Terminal Board, you can select either input terminal using A or B button.

Notes:

- Selecting is also possible by pressing the INPUT button on the unit.
- Select to match the signals from the source connected to the component/RGB input terminals. (see page 41)
- Image retention (image lag) may occur on the plasma display panel when a still picture is kept on the panel for an extended period. The function that darkens the screen slightly is activated to prevent image retention (see page 69), but this function is not the perfect solution to image retention.

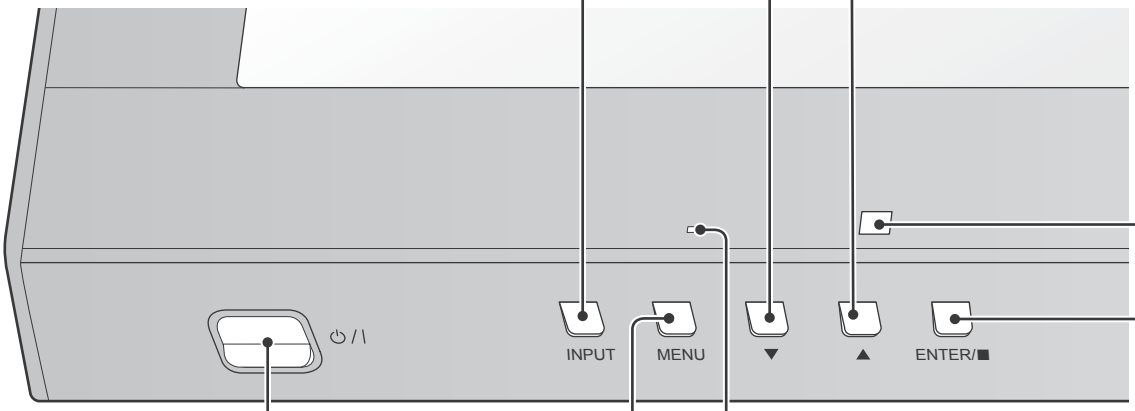


Basic Controls

Main Unit

INPUT button
(Input signal selection)
(see page 18)

When the menu screen is displayed:
"▲": press to move the cursor up
"▼": press to move the cursor down
(see page 24)



Remote control sensor

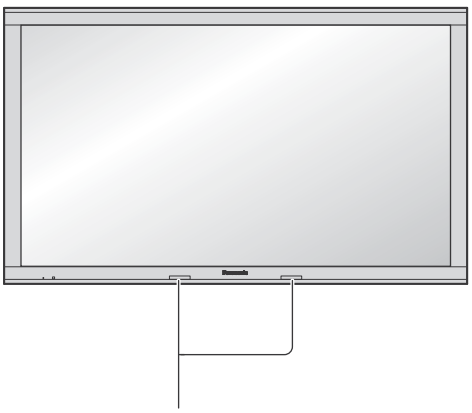
Enter / Aspect button
(see page 21, 24)

Main Power On / Off Switch

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 (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 "LAN". See page 59)
- Power-ON ..... Green
- PC Power management (DPMS)
  ..... Orange (With PC input signal. See page 43)

MENU Screen ON / OFF
Each time the MENU button is pressed, the menu screen will switch. (see page 24)

Normal Viewing → Picture → Setup → Pos./Size → Sound →



Infrared transmitter for 3D Eyewear
Note:
Do not place any objects between the transmitter and 3D Eyewear.

Remote Control Transmitter

Standby (ON / OFF) button
The Plasma Display must first be plugged into the wall outlet and turned on at the power switch (see page 15).
Press this button to turn the Plasma Display On, from Standby mode. Press it again to turn the Plasma Display Off to Standby mode.

LIGHT button
The remote control's buttons illuminate.

AUTO SETUP button
Automatically adjusts the position/ size of the screen. (see page 26)

HDMI buttons
Press to select HDMI 1 or HDMI 2 input. (see page 18)

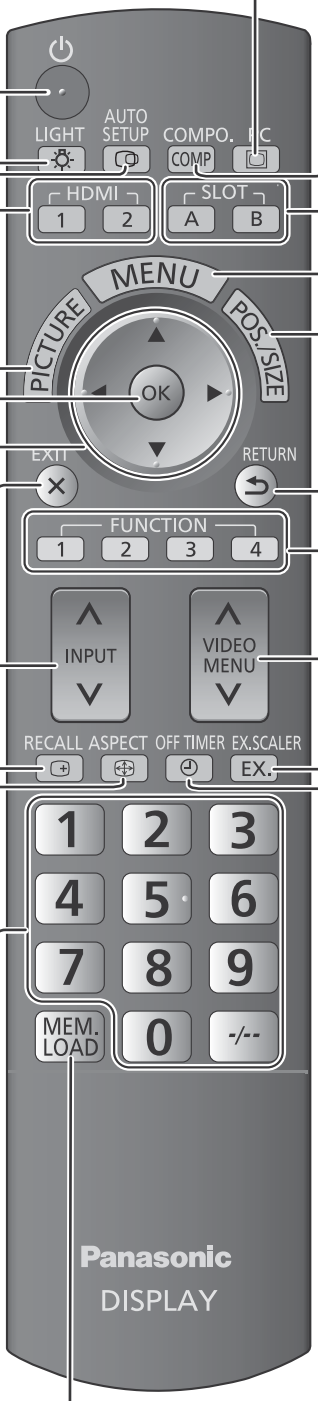
PICTURE button
(see page 28)

OK button
Press to make selections.

Cursor buttons

EXIT button
Exits from Menu screen.

INPUT button
Press to select input signal sequentially. (see page 18)



PC button
Press to select PC input. (see page 18)

COMPO. button
Press to select Component or RGB input. (see page 18)

SLOT buttons
Press to select SLOT Terminal Board. (see page 18)

MENU button
Displays menu screen. (see page 24)

POS. /SIZE button
(see page 25)

RETURN button (see page 24)
Press the RETURN button to return to previous menu screen.

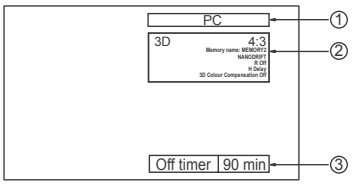
FUNCTION buttons
(see page 57, 62)

VIDEO MENU button
Press to select Picture Mode. (see page 29)

Normal ⟷ Dynamic
Monitor ⟷ Cinema

EX.SCALER button
(see page 42)

RECALL button
Press the "RECALL" button to display the current system status.
① Input label
② Aspect mode (see page 21)
During 3D images (see page 45)
Profile name (see page 36)
NANODRIFT Saver operating (see page 55)
Mode of RGB/MONO Settings (see page 51)
Mode of HV Delay (see page 27)
3D Colour Compensation: Off (see page 45)
③ Off timer
The off timer indicator is displayed only when the off timer has been set.



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.

30 min → 60 min → 90 min → 0 min

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

ASPECT button
Press to adjust the aspect. (see page 21)

Numeric buttons
(see page 36)

MEM. LOAD button
(see page 36)

ASPECT Controls

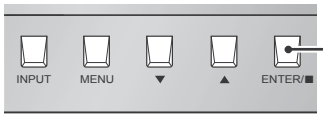
The Plasma Display will allow you to enjoy viewing the picture at its maximum size, including wide screen cinema format picture.

Note:
Be aware that if you put the display in a public place for commercial purposes or a public showing and then use the aspect mode select function to shrink or expand the picture, you may be violating the copyright under copyright law. It is prohibited to show or alter the copyrighted materials of other people for commercial purposes without the prior permission of the copyright holder.

ASPECT

Press repeatedly to move through the aspect options:
For details about the aspect mode, please see “List of Aspect Modes” (page 70).

[from the unit]



The aspect mode changes each time the ENTER button is pressed.

For VIDEO (S VIDEO) signal input:

→ 4:3 → Zoom1 → Zoom2 → Zoom3 → 16:9 → 14:9 → Just →

For PC signal input:

→ 4:3 → Zoom → 16:9 →

For SD signal input (525 (480) / 60i • 60p, 625 (575) / 50i • 50p):

→ 4:3 → Zoom1 → Zoom2 → Zoom3 → 16:9 → 14:9 → Just →

For HD signal input [1125 (1080) / 60i • 50i • 60p • 50p • 24p • 25p • 30p • 24sF, 1250 (1080) / 50i, 750 (720) / 60p • 50p]:

→ 4:3 → 4:3 Full → Zoom1 → Zoom2 →
Just ← 14:9 ← 16:9 ← Zoom3 ←

[For 3D images]
The aspect is fixed as “16:9” and you cannot switch.

Notes:
- The aspect mode is memorized separately for each input terminal.
- Do not allow the picture to be displayed in 4:3 mode for an extended period, as this can cause a permanent image retention to remain on the Plasma Display Panel.

All Aspect mode
Set “All Aspect” to “On” in Options menu to enable the extended aspect mode (page 61). When All Aspect mode, the aspect mode of pictures is switched as follows. For details about the aspect mode, please see “List of Aspect Modes”. (page 70)

For VIDEO (S VIDEO) signal input:

→ 4:3 → Zoom1 → Zoom2 → Zoom3 → 16:9 → 14:9 → Just →

For PC signal input:

→ 4:3 → Zoom → 16:9 →

For SD signal input (525 (480) / 60i • 60p, 625 (575) / 50i • 50p):

→ 4:3 → Zoom1 → Zoom2 → Zoom3 → 16:9 → 14:9 → Just →

For HD signal input [1125 (1080) / 60i • 50i • 60p • 50p • 24p • 25p • 30p • 24sF, 1250 (1080) / 50i, 750 (720) / 60p • 50p]:

→ 4:3 Full → Zoom1 → Zoom2 → Zoom3 → 16:9 → 14:9 → Just1 → Just2 → 4:3 (1) → 4:3 (2) →

Viewing 3D images

You can enjoy viewing 3D images with contents or programmes compatible with 3D effect by using the 3D eyewear (optional).

Note:

You need the 3D eyewear (optional) to view the 3D images on this display.

For further information, see the instruction manuals of the 3D eyewear.

This display supports “Frame Sequential*1”, “Side by Side*2”, “Top and Bottom*3” and “Simultaneous*4” 3D formats.

*1: The 3D format that the images for the left and right eyes are recorded with the high definition quality and alternately played back

*2, *3: See “Table of images that can be seen for each 3D Picture Format and the source image format” on page 23.

*4: To view “Simultaneous” 3D images, one of the following terminal boards should be installed:
Dual HD-SDI Terminal Board for 3D (TY-FB30DHD3D), Dual DVI-D Terminal Board for 3D (TY-FB30DD3D)

To view the 3D images

To view the contents of the Frame Sequential format (ex. 3D-compatible Blu-ray Disc, etc.) with 3D effect

Connect the 3D-compatible player via an HDMI cable (see page 12) and playback the contents.

- Use fully wired HDMI compliant cable.
- For the settings of the player, read the manual of the player.
- If you use the non 3D-compatible player, the images will be displayed without 3D effect.

To view the contents of 3D formats other than Frame Sequential with 3D effect.

Match the picture format in “3D Picture Format” (see page 45) before viewing.

- You can view “Side by Side” and “Top and Bottom” with 3D effect even if you use the non 3D-compatible player.
- Please consult the suppliers of contents or programmes for availability of this service.

① **Turn the 3D Eyewear on**
- See the instruction manual of 3D eyewear for handling.

② **Put on the 3D Eyewear**

③ **Watch the 3D images**

Notes:

- If the room is lit by fluorescent lights and light appears to flicker when using the 3D Eyewear, switch off the fluorescent light. Alternatively, please set “3D Refresh Rate” to “100Hz” or “120Hz” whichever reduces flicker. (see page 47)
- 3D content will not be correctly visible if the 3D Eyewear is worn upside down or back-to-front.
- Do not wear the 3D Eyewear when watching anything other than 3D images. Liquid crystal displays (such as computer screens, digital clocks or calculators, etc.) may be difficult to see while wearing the 3D Eyewear.
- Do not use the 3D Eyewear as sunglasses.
- 3D effects may be perceived differently depending on the person.

Troubleshooting for 3D Eyewear

Symptoms	Checks
Cannot see 3D images	• Has the 3D Eyewear been switched On? • Ensure that “3D Function” in “3D Settings” is set to “On”. (see page 45) • Some 3D image signals may not be automatically recognized as 3D images. Set “3D Picture Format” in “3D Settings” to match the picture format. (see page 45) • Check that there are no obstacles between the display (or 3D IR TRANSMITTER) and the 3D Eyewear. If the 3D Eyewear stops receiving the infrared signal for about 5 minutes, the 3D Eyewear will be turned off automatically. • Check the available area to use the 3D Eyewear. • Depending on the person, the 3D images may be difficult to see, or cannot be seen, especially in users that have a different level of eyesight between the left and right eyes. Take the necessary steps (wearing glasses etc.) to correct your eyesight before use.
3D Eyewear is turned off automatically	• Check that there are no obstacles between the Display (or 3D IR TRANSMITTER) and the 3D Eyewear or that the 3D Eyewear is placed inside the coverage area. If the 3D Eyewear stops receiving the infrared signal for about 5 minutes, the 3D Eyewear will be turned off automatically.
There is something wrong with the 3D images	• Switch “Reverse” and “Normal” under “3D Picture Sequence” in “3D Settings” (see page 45).
Indicator lamp will not light when the 3D glasses are turned ON.	• The battery may be running low or flat. Change the battery or charge the 3D glasses.

Table of images that can be seen for each 3D Picture Format and the source image format

If the picture appears to be abnormal, refer to the table below to choose the correct 3D picture format setting.

3D Picture Format / Source image format	Auto	Side by Side	Top and Bottom	Native
Side by side	 *1	 Normal*2		
Top and bottom	 *1		 Normal*2	
Normal format (2D)	 Normal			 Normal

*1 When the source image is not recognized correctly

*2 When “3D Function” is set to “On”, the images will be displayed with 3D effect. When set to “Off”, displayed without 3D effect.

• Depending on the player or contents, the image may be different from the above illustrations.

On-Screen Menu Displays

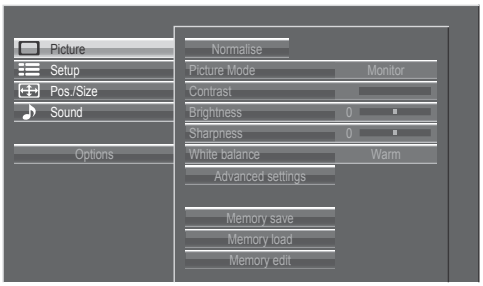
Remote Control **Unit**

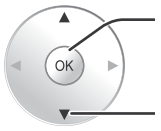
1 Display the menu screen.

Each time the MENU button is pressed, the menu screen will switch.

→ Normal Viewing → Picture →
Sound ← Pos. /Size ← Setup ←

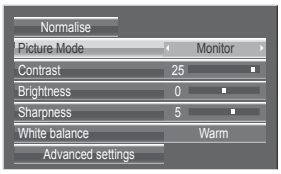
2 Select the menu.





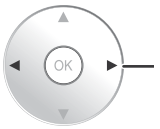
The menu can be displayed directly by pressing these buttons. (see page 25, 28)

3 Select the item.

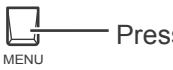


(Example: Picture menu)

4 Set.



5 Exit the menu.

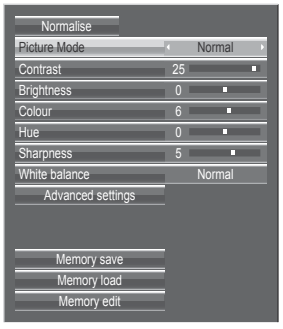


Press RETURN to return to the previous menu.

Menu display list

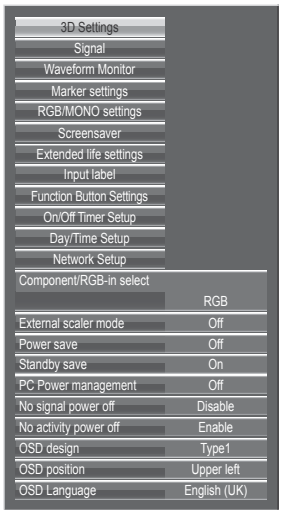
Note: Menu that cannot be adjusted is grayout. Adjustable menu changes depending on signal, input and menu setting.

Picture menu



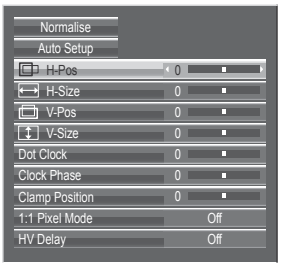
see page 28-39

Setup menu



see page 41-59

Pos. /Size menu



see page 25-27

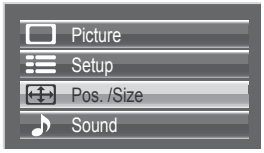
Sound menu

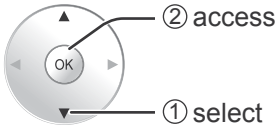
see page 40

Adjusting Pos. /Size

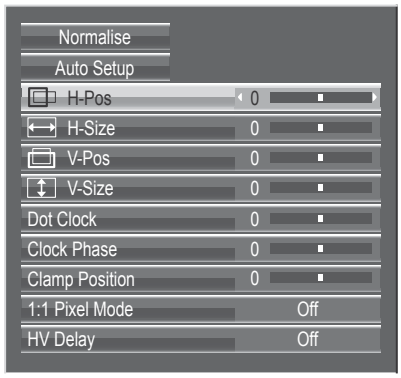
1 **Display the menu screen.**

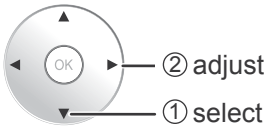
2 **Select “Pos. /Size”.**





3 **Select the item and set.**

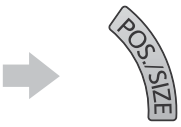


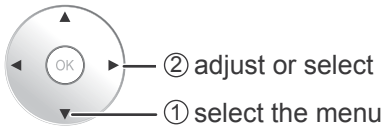


Note:
Unadjustable items are grayed out.
Adjustable items differ depending on the input signal and the display mode.

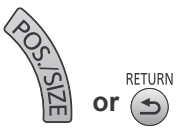
4 **Exit the menu.**

To display a menu for adjustment of the Pos. /Size menu on the bottom of the screen





To hide the menu



Notes:

- Adjustment details are memorized separately for different input signal formats (Adjustments for component signals are memorized for 525 (480) / 60i · 60p, 625 (575) / 50i · 50p, 1125 (1080) / 60i · 50i · 60p · 50p · 24p · 25p · 30p · 24sF, 1250 (1080) / 50i, 750 (720) / 60p · 50p each, and RGB/PC/Digital signals are memorized for each frequency.)
- If a “Cue” or “Rew” signal from a VCR or DVD player is received, the picture position will shift up or down. This picture position movement cannot be controlled by the Picture Pos./Size function.

Helpful Hint (Normalise Normalisation)

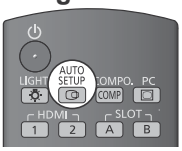
While the Pos. /Size display is active, if the OK button is pressed during “Normalise”, then all adjustment values are returned to the factory settings.

Adjusting Pos./Size

● Auto Setup

When inputting a PC signal as an example, “H-Pos/V-Pos”, “H-Size/V-Size”, “Dot Clock” and “Clock Phase” are automatically corrected.
This setting is enabled under the following conditions:
• When inputting an analog signal (Component/PC):
This setting is enabled if “Component/RGB-in select” (see page 41) in Setup menu is “RGB”.
• When inputting a digital signal (HDMI/DVI):
A PC format signal enables this setting.
When the signal is not PC format, this setting is enabled only if “Over Scan” (see page 27) is “Off” or “1:1 Pixel Mode” (see page 27) is “On”. “H-Size/V-Size” is not automatically adjusted.
This setting will be invalid and will not work under the following conditions:
• When VIDEO signal input
• Aspect is set to “Just”
• “Display size” in the Options menu (see page 61) is set to “On”

Using Remote Control



When AUTO SETUP on the remote control is pressed, “Auto Setup” will be executed.

When Auto Setup does not work, “Invalid” is displayed.

Auto mode

When the “Auto Setup“ is set to “Auto” in the Options menu (see page 61), automatic position adjustment starts:
• When the display power is turned ON.
• When the input signal is switched.

Notes:

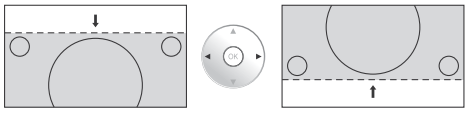
- If the dot clock frequency of an analog signal is 162 MHz or higher, “Dot Clock” and “Clock Phase” cannot be automatically corrected.
- When digital signal input, Dot Clock and Clock Phase cannot be made.
- Auto Setup may not work when a cropped or dark image is input. In such case, switch to a bright image with borders and other objects are clearly shown, and then try auto setup again.
- Depending on the signal, out of alignment may occur after Auto Setup. Carry out fine tuning for the position/size as required.
- If Auto Setup cannot set properly for vertical frequency 60Hz XGA signal (1024×768@60Hz, 1280×768@60Hz, and 1366×768@60Hz), pre-selecting the individual signal in “XGA Mode” (see page 46) may results in correct Auto Setup.
- Auto Setup does not work well when a signal such as additional information is superimposed out of valid image period or intervals between synchronizing and image signals are short, or for image signal with tri-level synchronizing signal added.
- If Auto Setup cannot adjust correctly, select “Normalise” once and press OK button, then adjust Pos. /Size manually.

● H-Pos

Adjust the horizontal position.

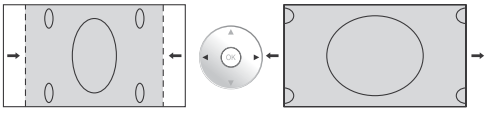
● V-Pos

Adjust the vertical position.



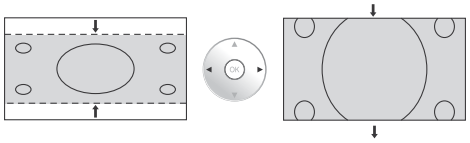
● H-Size

Adjust the horizontal size.



● V-Size

Adjust the vertical size.



● Dot Clock

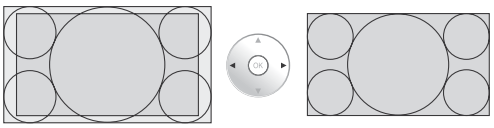
(During Component/PC input signal)
Periodic striped pattern interference (noise) may occur when a striped pattern is displayed. If this happens, adjust so that any such noise is minimized.

● Clock Phase

(During Component/PC input signal)
Eliminate the flickering and distortion.

● Over scan

Turn image over scan On/Off.
Configurable signals are as follows:
525i, 525p, 625i, 625p, 750/60p, 750/50p (Component Video, RGB, DVI, SDI, HDMI)



On Off

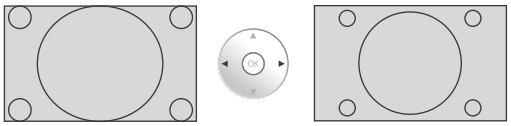
Notes:
- When “Off” is set, “H-Size” and “V-Size” cannot be adjusted.
- When the “Display size” is set to “On” in the Options menu, this setting will be invalid.

● Clamp Position

(During Component/PC input signal)
Adjusts the clamp position when black parts of the image have no detail due to underexposure or are tinged with green.
Optimum value for Clamp Position adjustment
When black parts have no detail due to underexposure (blackout)
→ Value that causes least blackout is the optimum.
When black parts are tinged with green
→ Value that cancels the greenishness without causing blackout is the optimum.

● 1:1 Pixel Mode

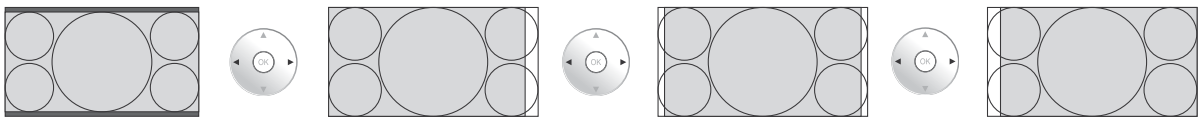
Adjusts the display size when 1125i, 1125p or 1250i signal is input.
Notes:
- Select On when you would like to replay 1920 × 1080 input signal.
- Applicable input signal;
  1125 (1080) / 50i · 60i · 24sF · 24p · 25p · 30p · 50p · 60p, 1250 (1080) / 50i
- Select Off when flickering is shown around the image.
- H-Size and V-Size cannot be adjusted when On is selected.



Off On

● 1:1 Pixel Mode (2k1k) (For 2k1k signals)

When the input signal is a 2k1k signal (2048 × 1080 / 24p, 2048 × 1080 / 24sF), the display size is adjusted as follows.



Off On (Left) On (Centre) On (Right)

Note:
2k1k signals can only be received when the Dual Link HD-SDI Terminal Board (TY-FB11DHD) or the Dual HD-SDI Terminal Board for 3D (TY-FB30DHD3D) is installed.

● HV Delay

(During Component [video format] / SDI input signal)
Video blanking period is displayed.

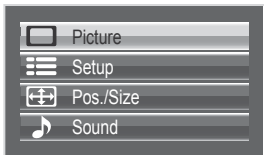
Off H Delay V Delay HV Delay

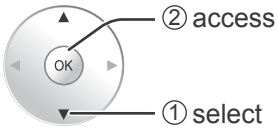
Notes:
- This function is enabled when “Studio mode” in Options menu is set to “On” during 2D viewing.
- This function can also be used with the FUNCTION button on the remote control (see page 63).

Picture Adjustments

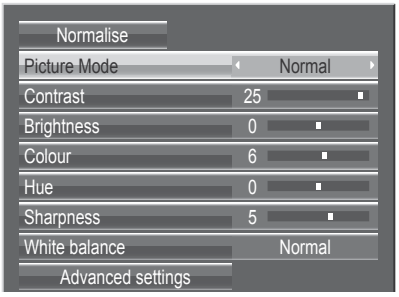
1 **Display the menu screen.**

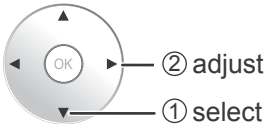
2 **Select “Picture”.**





3 **Select the item and set.**

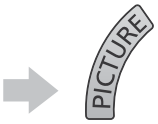


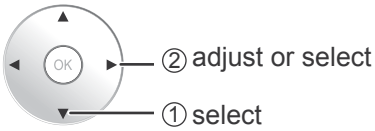


Note:
Menu that cannot be adjusted is grayout. Adjustable menu changes depending on signal, input and menu setting.

4 **Exit the menu.**

To display a menu for adjustment of the Picture menu on the bottom of the screen,





To display a menu for Advanced settings adjustment, press PICTURE button again.

To hide the menu

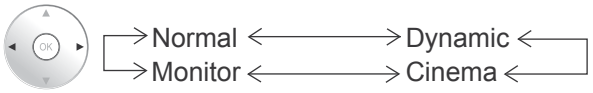
or

Helpful Hint (Normalise Normalisation)

While the “Picture” menu is displayed, if the OK button is pressed during “Normalise”, then all adjustment values are returned to the factory settings.

● Picture Mode

You can switch to the optimal picture mode for the video source and viewing environment.



Normal:
For viewing in standard (evening lighting) environments. This menu selects the normal levels of Brightness and Contrast.

Dynamic:
For viewing in brighter environments.
This menu selects higher than normal levels of Brightness and Contrast.

Cinema:
For use in viewing tone-focused pictures with brightness reduced.

Monitor:
For use when creating broadcast or movie content. With this picture, even if the overall average picture level (APL) changes, the brightness of areas with the same signal level does not change.

Notes:
- When “Monitor” is selected in Picture Mode, the following menu items cannot be set.
  Picture menu: Contrast
  Extended life settings: Peak limit (see page 55)
  Setup menu: Power save (see page 43)
- If you would like to change the picture and colour of the selected Picture menu to something else, adjust using the items in the Picture menu. (see below)

● Contrast

Adjusts the proper picture contrast.

● Brightness

Adjusts for easier viewing of dark pictures such as night scenes and black hair.

● Colour

Adjusts colour saturation.

● Hue

Adjusts for nice skin colour.

● Sharpness

Adjusts picture sharpness.

● White balance

Switches to various screen colour tones.

Normal: Intermediate colour temperature (9300K).
Warm: Colour with a reddish tinge (6500K).
Warm2: Colour with a reddish tinge (6100K).
Warm3: Colour with a reddish tinge (5600K).
Studio: Optimal colour temperature for studio viewing (3200K).
Cool: Colour with a bluish tinge (11500K).

* “Studio” can be modified when “Studio mode” in the Options menu is “On”. (see page 60)

Notes:
- You can change the level of each function (Contrast, Brightness, Colour, Hue, Sharpness) for each Picture Mode.
- The setting details for Normal, Dynamic, Cinema and Monitor respectively are memorized separately for each input terminal.
- In Contrast, there is not a noticeable change even when contrast is increased with a bright picture or reduced with a dark picture.

Advanced settings

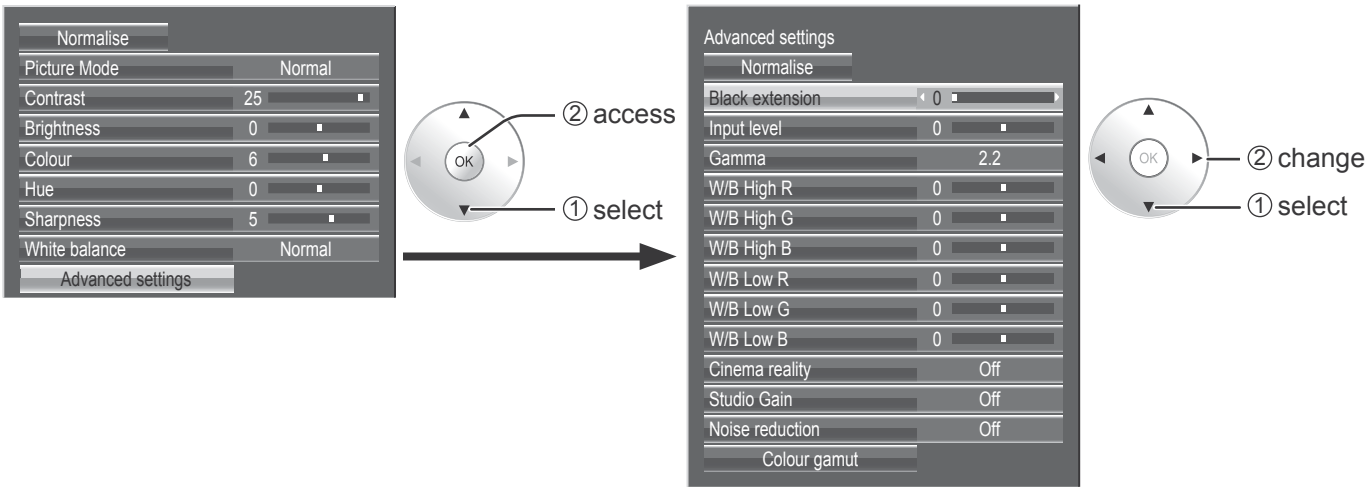
Enables fine picture adjustment at a professional level.

Notes:

• The adjustment values are memorized separately for each input terminal.

• The adjustment range values should be used as an adjustment reference.

Select the item and set.



- **Black extension** — Adjusts the dark shades of the image in gradation.

  Less ⟷ More

- **Input level** — Adjustment of parts which are extremely bright and hard to see.

  Less ⟷ More

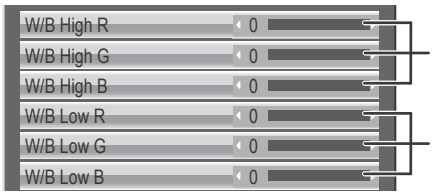
- **Gamma**

  1.0* ⟷ 2.2 ⟷ 2.35 ⟷ 2.4 ⟷ 2.6

  Down ⟷ Up

  * When 2k1k signals are received with the Dual Link HD-SDI Terminal Board (TY-FB11DHD) or the Dual DH-SDI Terminal Board for 3D (TY-FB30DHD3D), Gamma “1.0” cannot be selected.

- **“W/B” adjustment**



Adjusts the white balance for light red, light green or light blue areas.

Adjusts the white balance for dark red, dark green or dark blue areas.

Less ⟷ More

Carry out “W/B” adjustment as follows.

1. Adjust the white balance of the bright sections using the “W/B High R” , “W/B High G” and “W/B High B” settings.

2. Adjust the white balance of the dark sections using the “W/B Low R” , “W/B Low G” and “W/B Low B” settings.

3. Repeat steps **1** and **2** to adjust.

Steps **1** and **2** affect each other’s settings, so repeat each step in turn to make the adjustment.

● **Cinema reality** When “On”, the display attempts to reproduce a more natural interpretation of sources such as movie pictures, which are recorded at 24 frames per second. If the picture is not stable, turn the setting to “Off”.

Off  On

Note:
When “On”, this setting only affects the following signal input:
• NTSC / PAL signal input during Video (S Video) input signal.
• 525i (480i), 625i (575i), 1125 (1080) / 60i signal input during “Component” input signal.

● **Studio Gain** Sharpens the contrast for a better view when a part of the image is too light to see.

Off  On

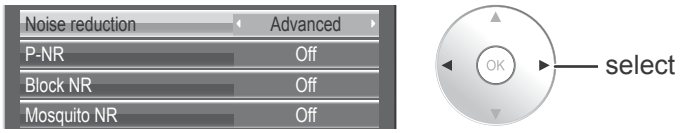
Off: Disables “Studio Gain”.
On: Enables “Studio Gain”.

Notes:
• “Studio Gain” can be modified when “Studio mode” in the Options menu is “On”. When “Studio mode” is “Off”, this setting is “Off” and cannot be changed. (see page 60)
• This setting is valid only when the input signals are as follows:
Component Video, RGB (analog), SDI, HDMI

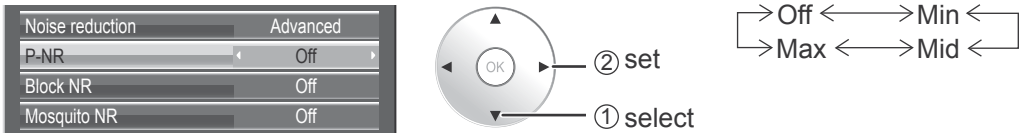
● **Noise reduction** Sets the following three NR (Noise Reduction) functions together.
P-NR, Block NR, Mosquito NR

[Advanced NR]
Sets the three NR functions separately.

1 Select “Advanced”.



2 Select the item and set.



P-NR: Automatically reduces unwanted picture noise.
Block NR: Reduces block noise when playing MPEG videos.
Mosquito NR: Reduces mosquito noise around subtitles on MPEG videos.

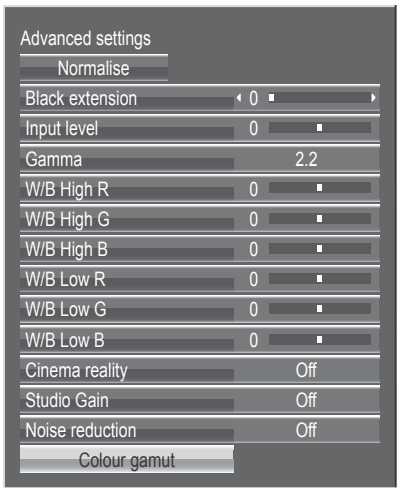
Note:
“Noise reduction” cannot be adjusted while a PC signal is being applied.

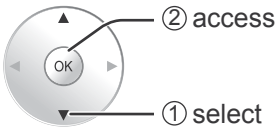
Helpful Hint (Normalise Normalisation)

On the remote control unit, while the “Advanced settings” menu is displayed, if the OK button is pressed during “Normalise”, then all adjustment values are returned to the factory settings.

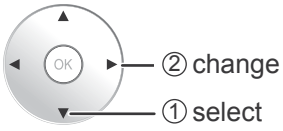
Colour space adjustment (Colour gamut)

Changes the colour space to BT.709 signal standard chromaticity point and fine-tunes it.





Select the item and set.



● Colour gamut

DIGITAL CINEMA COLOUR: Sets colour gamut to reproduce the original colour of movies.
Custom: Enables the colour space adjustment, the colour space adjustment set in the “EDIT” is reflected.
Native: Disables the colour space adjustment, images are displayed in the original colour gamut of the panel.
BT.709: Changes the colour space to BT.709 signal standard chromaticity point.
EBU: Changes the colour space to EBU signal standard chromaticity point.
SMPTE-C: Changes the colour space to SMPTE-C signal standard chromaticity point.
Notes:

- This setting is memorized separately for each input terminal and “Picture Mode”.
- For 3D images, this setting becomes “Native” and no setting is available.

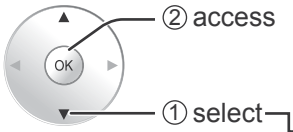
● Edit

Colour space is fine-tuned.

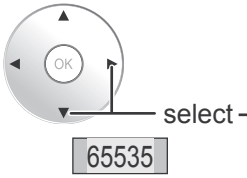
Notes:

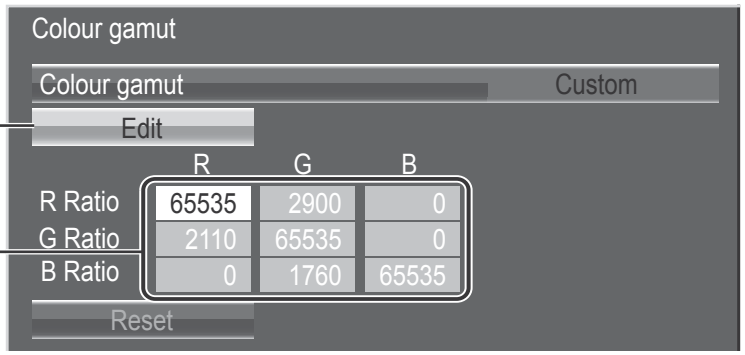
- This setting is valid when “Colour gamut” is “Custom”.
- This setting is memorized separately for each input terminal and “Picture Mode”.

1 Select “Edit”.



2 Select an adjustment item.



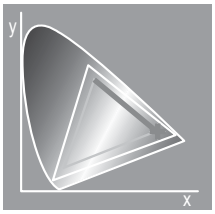


3 Change the numerical value.

[To adjust with the ▲▼ button]
① Press the OK button.
② Change the numerical value with the ▲▼ button.
③ Press the OK button.

[To input the numerical value directly]
① Input the numerical value from 0 to 9
Pressing the RETURN will cancel the value change.
② Press the OK button.

4 Press the RETURN button.
Adjustment is ended.



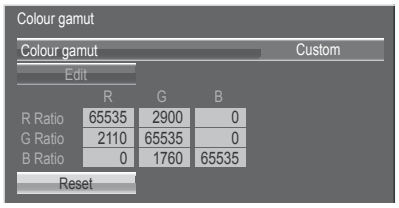
Chromaticity diagram displays in gray the dot and line to be adjusted.

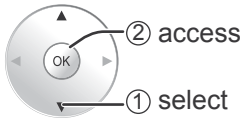
● **Reset** Resets the adjustment value of colour space.

Note:

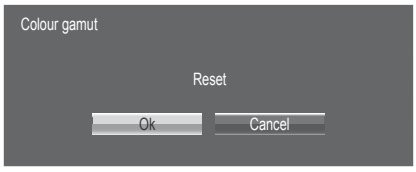
This setting is reflected only for the selected input terminal and the “Picture Mode”.

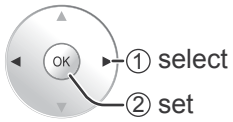
1 Select “Reset”.





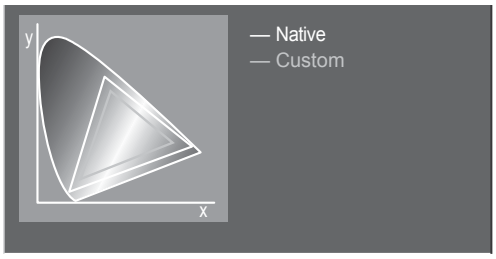
2 Select “Ok”.





● **Chromaticity diagram** The RGB triangle representing current colour space is shown.

Colour gamut: Custom



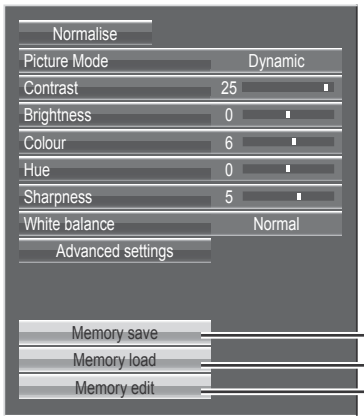
White line: Colour gamut with “Native” setting (original colour gamut.)
Yellow line: Colour gamut with “Custom” setting (current colour gamut.)

Picture Profiles

Up to 16 combinations of picture adjustment values (in the Picture menu and Advanced settings) can be stored in the display memory as profiles and applied as needed, for a convenient way to enjoy your preferred picture settings.

Note:

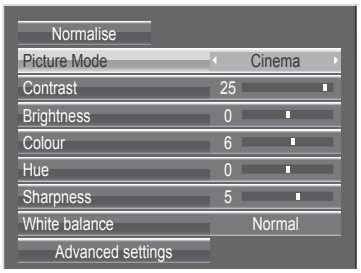
If setting items (Picture menu and Advanced settings) are set differently between Memory save and Memory load, they may not reflect for Memory load.

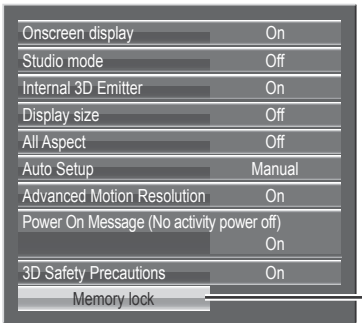


Save profiles(page 35)

Load profiles(page 36)

Edit profiles(page 37)



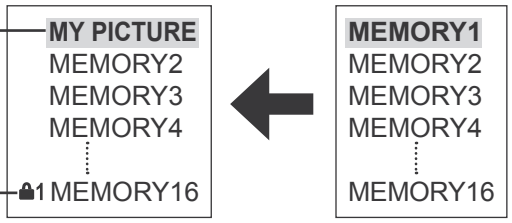


Lock profiles(page 38, 39)

Save profiles → Save the picture adjustment values in the MEMORY1 profile

Edit the profile Delete or rename the profile

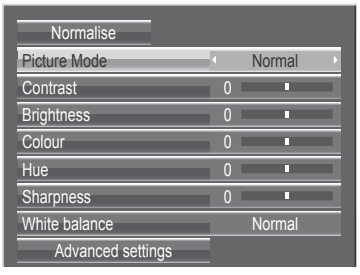
Locked profile

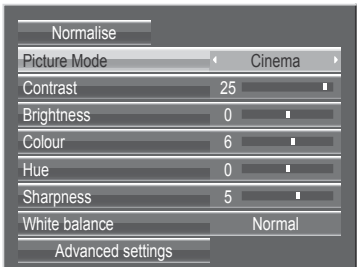


Load the profile → Apply the MEMORY1 profile

Original picture

Custom picture





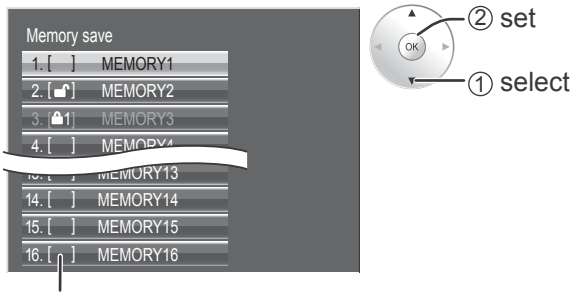
Saving profiles

Follow these steps to save picture adjustment values as profiles.
Note:
When the settings are locked in “Extended life settings”, profiles cannot be saved.

1 Specify the picture quality in the Picture menu and Advanced settings. (see page 28-33)

2 In the Picture menu, select “Memory save”.

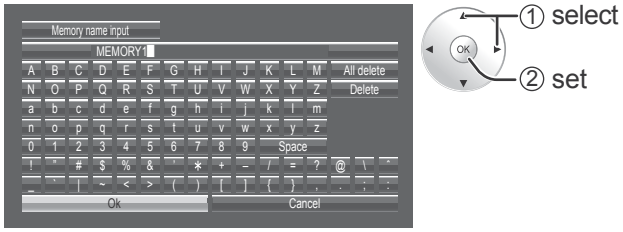
3 Select a profile name for saving the picture adjustment values.



Profiles are labeled with these icons to indicate their locked status. (see page 38)
[ ], [🔓]:Settings can be saved in this profile.
[🔒1], [🔒2]:Settings cannot be saved in this profile.

4 Select “Ok”.

5 Enter a name for the profile.
[Entering profile names]
Profile names can be up to 40 characters.
To enter text, select characters in the on-screen keyboard.
Edit the default profile name in the text box as desired.



Example: Specifying “MY PICTURE”

① Select “All delete”.

All text is deleted.
To delete individual characters, select “Delete”.

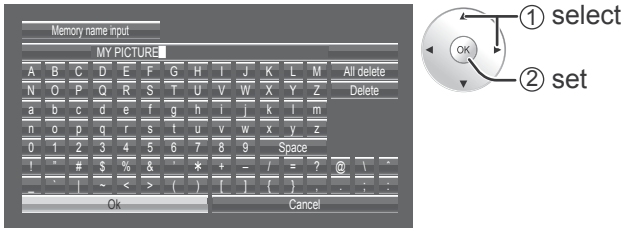
② Select “M”.

Repeat this process to enter the next character.

③ Select “Y”.

④ Select “Space”.

6 When you finished entering the profile name, select “Ok”.
To cancel saving the profile, select “Cancel”.



Loading profiles

Load profiles and apply the picture adjustment values to the display as follows.

Notes:

- Loaded profiles are stored in memory according to the selected input terminal (see page 18).
- When the settings are locked in “Extended life settings”, profiles cannot be loaded.

<Loading profiles from the Picture menu>

1 In the Picture menu, select “Memory load”.

2 Select the profile to load.

Profiles are labeled with these icons to indicate their locked status. (see below)

<Loading profiles from MEM. LOAD on the remote control>

1 Press MEM. LOAD to list the profiles.

2 Select the profile to load.

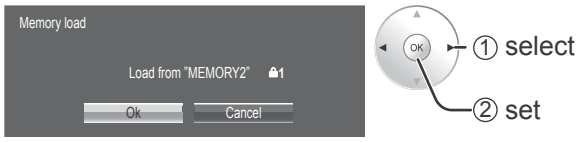
Profiles are labeled with these icons to indicate their locked status. (see below)

<Loading profiles directly from the remote control>

To load profiles 1–9

1 Press a button in the range 1 – 9.

2 Select “Ok”.



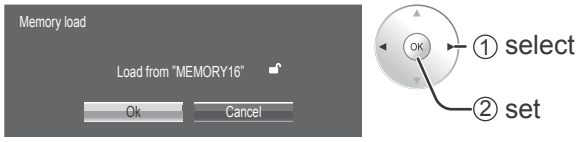
To load profiles 10–16

Example: To load profile 16

1 Press -/-- 1 6.

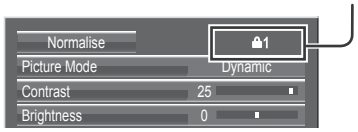
The profile number is displayed in the upper-right corner of the screen.

2 Select “Ok”.



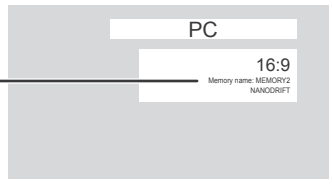
Loading locked profiles…

In the Picture menu, profiles are labeled with these icons to indicate their locked status.



🔒1:Lock1
🔒2:Lock2

When profile is being loaded, profile name is displayed.

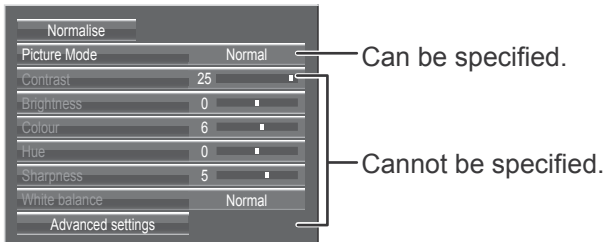


Operations with locked profiles are restricted. (see page 38)

Picture adjustment values in the Picture menu cannot be changed, except for the “Picture Mode”. Once you edit the “Picture Mode” setting, you can edit “Contrast”, “Brightness”, and other picture adjustment values.

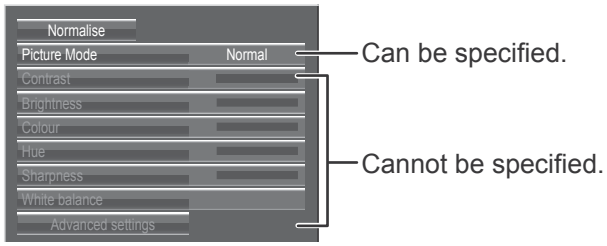
🔒1 Lock1

Picture adjustment values are shown.



🔒2 Lock2

Picture adjustment values are hidden.



Editing profiles

Delete or rename profiles as follows.

<Deleting profiles>

Note:
Locked profiles and profiles currently in use cannot be deleted.

1 In the Picture menu, select “Memory edit”.

2 Select “Memory delete”.

3 Select the profile to delete.
To delete all profiles, select “All delete”.

4 Select “Ok”.

<Renaming profiles>

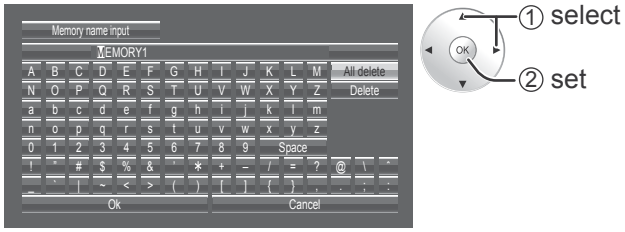
Note:
Locked profiles cannot be renamed.

1 In the Picture menu, select “Memory edit”.

2 Select “Memory name change”.

3 Select the profile to rename.

4 Enter a name for the profile.
Entering profile names ➡ page 35



5 When you finished entering the profile name, select “Ok”.
To cancel renaming the profile, select “Cancel”.

Locking profiles

You can lock saved profiles to restrict operations when the profiles are loaded. You can also set passwords.

Notes:

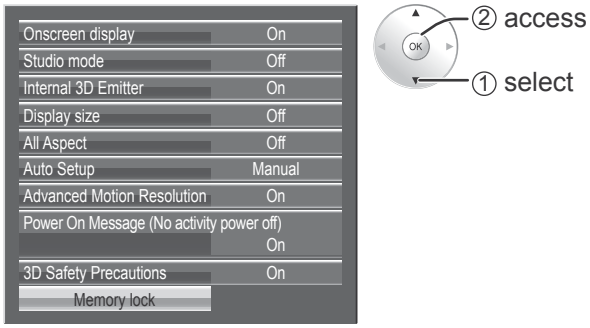
- When the lock is set in “Extended life settings”, profile cannot be locked.
- If profile is locked, the menu operations of “Extended life settings” are restricted. (see page 55)

<Locking and unlocking profiles>

1 Display the menu screen.

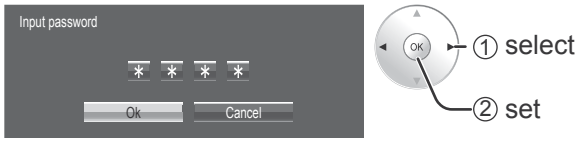
2 Select “Options” and hold OK for 3 seconds or more.

3 Select “Memory lock”.

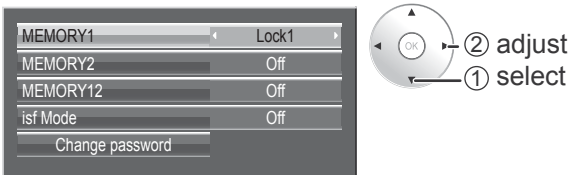


4 Enter a 4-digit password. The default password is “0123”.

5 Select “Ok”.



6 Select the profile and specify the desired lock setting.



7 Exit the menu.

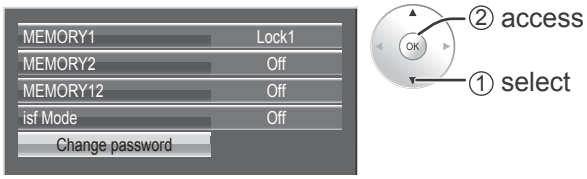
Once a profile is locked, the following operations are restricted when the profile is loaded.

Setting	Editing the Profile (Memory edit)	Editing Picture Adjustment Values via the Menu (Picture menu, Advanced settings)	Saving Picture Adjustment Values (Memory save)
Off (unlocked)	Allowed	Allowed	Allowed
Lock1	Prohibited	Prohibited (picture adjustment values are shown)	Allowed
Lock2	Prohibited	Prohibited (picture adjustment values are hidden)	Prohibited

<Changing passwords>

1 Follow steps 1–5 in the previous procedure, <Locking and unlocking profiles>.

2 Select “Change password”.



3 Enter a new 4-digit password.

4 Select “Ok”.

5 Exit the menu.

Note:

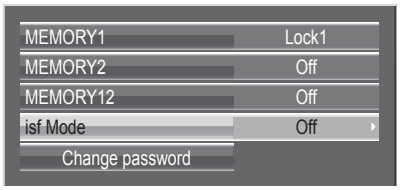
Make a note of the new password to remember it.

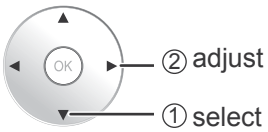
<isf Mode Setting>

Switches to “Picture Mode” mode display.

1 Follow steps 1–5 in the previous procedure, <Locking and unlocking profiles>.

2 Select “isf Mode”.



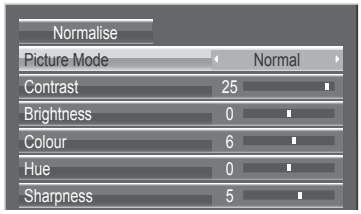


3 Specify “On” or “Off”.

4 Exit the menu.

Specifying “On” for isf Mode changes the “Picture Mode” mode display as follows.

“Picture Mode” mode display



isf Mode: Off	isf Mode: On
Normal	Normal
Dynamic	isf Mode Day
Cinema	isf Mode Night
Monitor	Monitor

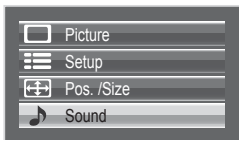
Mode display when  **is selected**

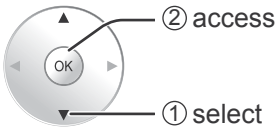
isf Mode: Off	isf Mode: On
Picture Mode Normal Dynamic Cinema Monitor	Picture Mode Normal isf Mode Day isf Mode Night Monitor

Sound Adjustment

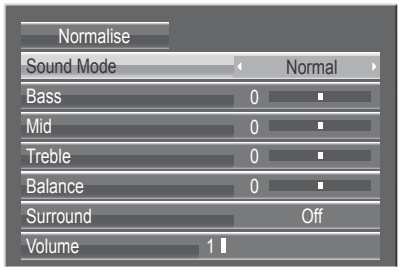
1 **Display the menu screen.**

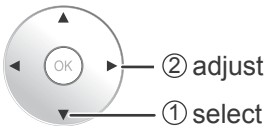
2 **Select “Sound”.**





3 **Select the item and set.**





4 **Exit the menu.**

Item	Details
Sound Mode	**Normal:** Emits the original sound. **Dynamic:** Accentuates sharp sound. **Clear:** Attenuates human voice.
Bass	Adjusts low pitch sounds.
Mid	Adjusts normal sounds.
Treble	Adjusts high pitch sounds.
Balance	Adjusts left and right volumes.
Surround	Select On or Off.
Volume	Adjusts the sound volume level.

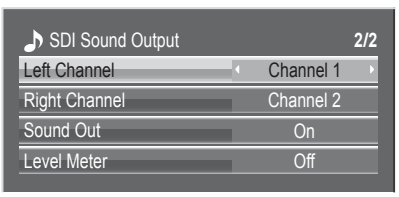
Note: Bass, Mid, Treble and Surround settings are memorized separately for each Sound Mode.

Helpful Hint (Normalise Normalisation)

While the “Sound” menu is displayed, if the OK button is pressed during “Normalise”, then all adjustment values are returned to the factory settings.

SDI Sound Output

This menu is available only when selecting a slot that any of the following terminal boards is installed:
HD-SDI Terminal Board with audio (TY-FB10HD), Dual Link HD-SDI Terminal Board (TY-FB11DHD), or Dual HD-SDI Terminal Board for 3D (TY-FB30DHD3D)

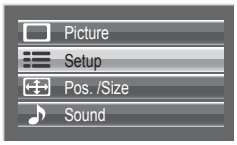


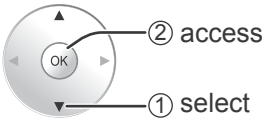
Item	Details
Left Channel	**Channel 1 to Channel 16** Selects left audio channel.
Right Channel	**Channel 1 to Channel 16** Selects right audio channel.
Sound Out	**On ⟷ Off** **On:** Enables audio output. **Off:** Disables audio output.
Level Meter	**Off ⟷ 1-8ch ⟷ 9-16ch** Sets audio channels to show in the audio level meter. 8 channels are displayed in the audio level meter; 4 channels each on both right and left sides of the display. **Off:** Hides the audio level meter. **1-8ch**: Displays the audio level meter (1-8ch) **9-16ch:** Displays the audio level meter (9-16ch)

Setup menu

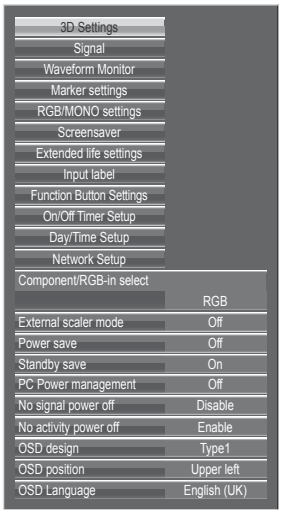
1 **Display the menu screen.**

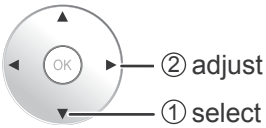
2 **Select “Setup”.**





3 **Select the item and set.**





4 **Exit the menu.**

Component / RGB-in select

Component ⟷ RGB

Select to match the signals from the source connected to the Component / RGB or PC input terminals.
Y, P_B, P_R signals ⇨ “Component”
RGB signals ⇨ “RGB”

Note:
Make setting of the selected input terminal (COMPONENT RGB IN or PC IN).

YUV / RGB-in select

YUV ⟷ RGB

Select to match the signals from the source connected to the DVI input terminals.
YUV signals ⇨ “YUV”
RGB signals ⇨ “RGB”

Notes:
- Selection may not be possible, depending on which optional board is installed.
- Make setting of the selected input terminal (SLOT).

External scaler mode

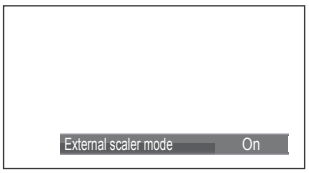
Off ⟷ On
This menu can be used to specify whether the built-in scaler or an external scaler is used for scaler functions such as resizing and picture quality adjustment.
The setting is valid with the following input signals.
1125 (1080) / 24p•25p•30p•50p•60p

Off: Use the built-in scaler.
On: Use an external scaler.

Note:
If “On” is set when other than corresponding signal is input, “Input signal must be 1125p(1080p)”message is displayed.

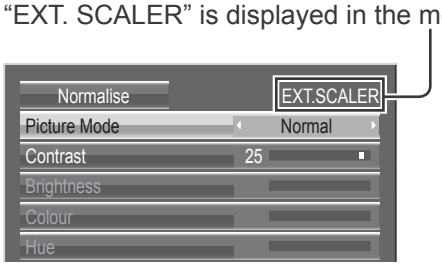
Using Remote Control

Each time you press EX.SCALER (EX.), an external scaler is activated or deactivated.



Note:
Selecting “On” in this setting deactivates the following settings and disables these operations.
Pos. /Size menu: H-Size, V-Size, 1:1 Pixel Mode (see page 26, 27)
Picture menu: Brightness, Colour, Hue, Sharpness, Memory save, Memory load (see page 29, 35, 36)
Advanced settings: Cinema reality, Noise reduction (see page 31)
Signal menu: XGA Mode (see page 46)
Options menu: Display size, All Aspect (see page 61)
ASPECT Controls (see page 21)

“EXT. SCALER” is displayed in the menu screen to indicate that an external scaler is in use.



Power save

Off ⟷ On
When this function is turned On, luminous level of the Plasma Display is suppressed, so power consumption is reduced.

Standby save

Off ⟷ On
When this function is turned On, power consumption of the microcomputer is reduced during power supply standby (see page 15, 17, 19), so standby power of the set is reduced.

PC Power management

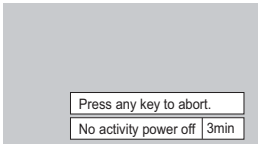
Off ⟷ On
When this function is set to On, it operates under the following conditions to turn the power on or off automatically.
When no pictures (HD/VD sync signals) are detected for 30 or so seconds during PC signal input:
→ Power is turned off (standby); the power indicator lights up orange.
When pictures (HD/VD sync signals) are subsequently detected:
→ Power is turned on; the power indicator lights up green.
Notes:
• This function operates only during PC signal input.
• This function is effective when “Sync” is set to “Auto”, “Component / RGB-in select” is set to “RGB”.

No signal power off

Disable ⟷ Enable
Equipment power supply is turned Off when there is no signal.
When this is set to “Enable”, the power supply of the unit goes Off 10 minutes after the input signals stop.

No activity power off

Enable ⟷ Disable
When this function is set to “Enable”, the power is turned off (standby) automatically when there is no operation of the Plasma Display for 4 hours.
Starting from 3 minutes before the turn off, the remaining time will be displayed.



When the power is turned off due to this function, a message “Last turn off due to ’No activity power off’.” is displayed next time the power is turned on.
Note:
During the screensaver is running, this function is disabled.

OSD design

Choose the background colour (transparency).

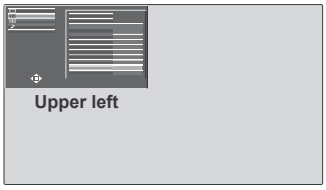
→ Type1 ⟷ Type2 ⟷ Type3 ←

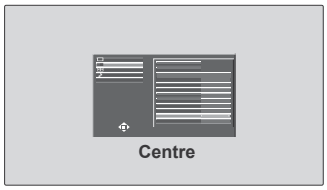
OSD position

Choose the display position.

Each time you press ◀ or ▶, the on-screen menu display position changes.

Display example





OSD Language

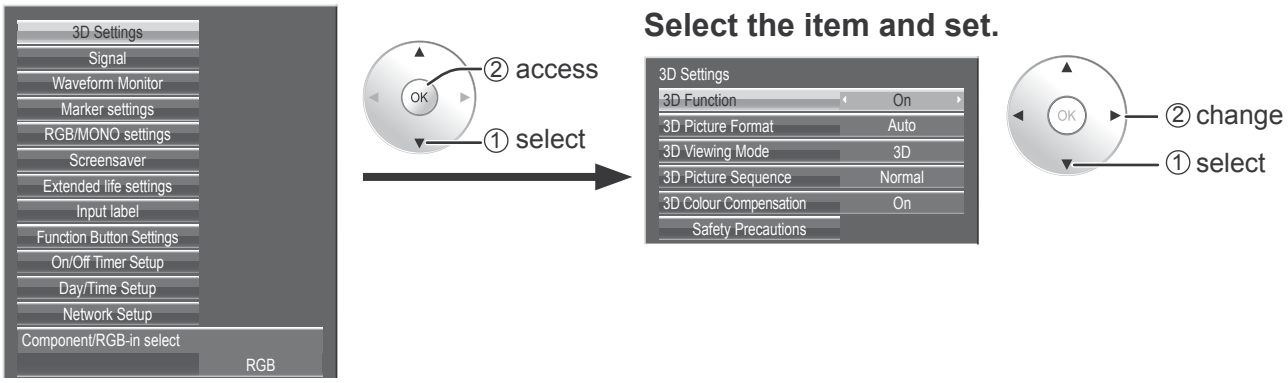
Select your preferred language.

■ Selectable languages

English(UK)
Deutsch
Français
Italiano
Español
ENGLISH(US)
中文.....(Chinese)
日本語.....(Japanese)
Русский.....(Russian)

3D Settings

To view the 3D images, please adjust and setup the 3D settings.
Note:
Set these settings for each input terminals.



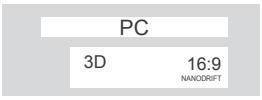
• 3D Function

On ⟷ OFF

On: To view the 3D images, please set it to “On”. You can see 3D images for 3D image signal and 2D images for 2D image signal.

Off: You can see 2D images instead of 3D images.

When set to “On”, “3D” is displayed during 3D images.



• 3D Picture Format

3D images method is set.

Auto: 3D images are automatically displayed according to the signal.

Simultaneous: Set this format when selecting a slot that one of the following terminal boards is installed: Dual HD-SDI Terminal Board for 3D (TY-FB30DHD3D), Dual DVI-D Terminal Board for 3D (TY-FB30DD3D)

Side by Side/Top and Bottom: One of the formats of the 3D standard. Select these formats as necessary.

Native: Displays the input signal as it is. Use to identify the format type of the input signal.

• 3D Viewing Mode

The 3D images are separated and displayed as right and left images.

3D: Normal 3D images display (initial setting)

Comparison: Left image (L) and right image (R) are placed side by side. If the 3D system is “Top and Bottom”, the images are displayed, being set one above the other.

Left: Only the left image (L) is displayed.

Right: Only the right image (R) is displayed.

3D Comparison Left Right

Notes:

• This function is disabled during 2D images.

• The factory default setting is “3D”. To view the 3D images, please use “3D”.

• 3D Picture Sequence

Reverse ⟷ Normal

This function calibrates the timing to switch the right and left images as well as the timing to switch the shutter of right and left 3D Eyewear.

Select “Reverse” if you feel that the sense of depth is unusual.

• 3D Colour Compensation

On ⟷ Off

The colour adjustment during the 3D images is set.

On: The colour when using the 3D Eyewear is adjusted. (initial setting)

Off: The colour when using the 3D Eyewear is not adjusted. The 2D image setting is used.

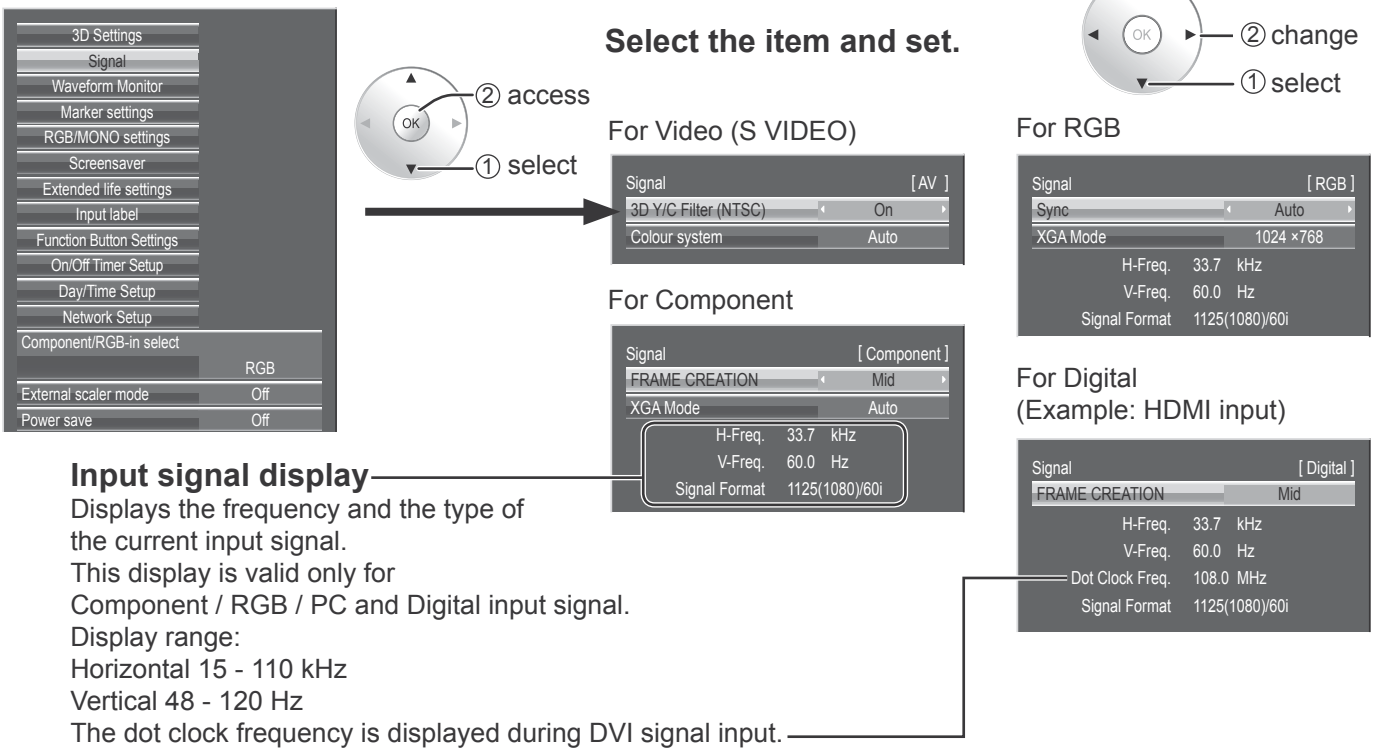
Note: The factory default setting is “On”. To view the 3D images, please set it to “On”.

• Safety Precautions

Displays the precautions for viewing 3D images.

Signal menu

Note:
"Signal" setup menu displays a different setting condition for each input signal.



Input signal display
Displays the frequency and the type of the current input signal.
This display is valid only for Component / RGB / PC and Digital input signal.
Display range:
Horizontal 15 - 110 kHz
Vertical 48 - 120 Hz
The dot clock frequency is displayed during DVI signal input.

• 3D Y/C Filter (NTSC)

This menu is displayed when BNC Dual Video Terminal Board (TY-FB9BD) is installed to the unit.
Set this menu when the moving image looks unnatural during Video (S Video) input signal.
On ⟷ Off
Note:
When On, this setting only affects NTSC input signals.

• Colour system

This menu is displayed when BNC Dual Video Terminal Board (TY-FB9BD) is installed to the unit.

→ Auto ⟷ PAL ⟷ SECAM ⟷ M.NTSC ⟷ NTSC ←

Set the colour system to match the input signal. When "Auto" is set, Colour system will be automatically selected from NTSC/PAL/SECAM /M.NTSC.
To display PAL60 signal, select "Auto" or "PAL".
If the picture image becomes unstable:
With the system set on Auto, under conditions of low level or noisy input signals the image may in rare cases become unstable. Should this occur, set the system to match the format of the input signal.

• XGA Mode

This menu is displayed when the input signal is analog (Component/PC). This unit supports three types of XGA signals with 60Hz vertical frequency having different aspect ratios and sampling rates (1,024 × 768 @ 60Hz, 1,280 × 768 @ 60Hz and 1,366 × 768 @ 60Hz).
Auto ⟷ 1024×768 ⟷ 1280×768 ⟷ 1366×768
Auto: Automatically selected from 1024×768/1280×768/1366×768.
Switch the setting to suit the input signal for better display depends on the angle of view or display resolution condition.
Note:
After making this setting, be sure to make each adjustment (such as "Auto Setup") on the "Pos. /Size" menu as necessary. (see page 25)

• Sync

This function operates only during input from PC IN terminal.

Setting RGB sync signal

Confirm that the input is set to RGB input (this setting is valid only for RGB input signal).

Auto: The H and V sync or synchronized signal is automatically selected. If both input, it is selected the H and V sync.

↕

on G: Uses a synchronized signal on the Video G signal, which is input from the G connector.

↕

VBS: Uses a synchronized signal of Composite Sync input, which is input from the HD connector.

Setting Component sync signal

Confirm that the input is set to Component input (this setting is valid only for Component input signal).

Auto: The H and V sync or synchronized signal is automatically selected. If both input, it is selected the H and V sync.

↕

on Y: Uses a synchronized signal on the Video Y signal, which is input from the Y connector.

Note:

Signals input to COMPONENT/RGB IN terminals correspond to Sync on G or Sync on Y.

• SDI Through

Set the active through function of the Dual Link HD-SDI Terminal Board (TY-FB11DHD).

Off ⟷ **On**

On: Enables active through.

Off: Disables active through.

Note:

Settings can only be performed for this menu when a slot mounted with a Dual Link HD-SDI Terminal Board (TY-FB11DHD) is selected.

• FRAME CREATION

Automatically compensates the picture frame rate and removes juddering movements to make the images smooth.

Off ⟷ **Mid** ⟷ **Max**

Note:

Depending on the contents, images may be noisy. To prevent the noise, change the setting.

• 3D Refresh Rate

Reduces juddering or flicker of image due to lighting interference during 3D viewing.

100Hz ⟷ **120Hz**

Note:

This setting is disabled when “FRAME CREATION” is set to “Off”.

• HDMI Range

Switches the dynamic range according to the input signal from HDMI 1 or HDMI 2 terminals.

Video(16-235) ⟷ **Full(0-255)** ⟷ **Auto**

Video(16-235): If the input signal is the video range, Example: HDMI terminal output for DVD player

Full(0-255): If the input signal is full range, Example: HDMI terminal output for personal computer

Auto: Switches the dynamic range automatically between “Video(16-235)” and “Full(0-255)” according to the input signal.

Note:

This function can be set only for HDMI 1 or HDMI 2 terminal input.

• SDI Signal Format

This menu is available only when selecting a slot that the Dual HD-SDI Terminal Board for 3D (TY-FB30DHD3D) is installed and set the input signal format for the board.

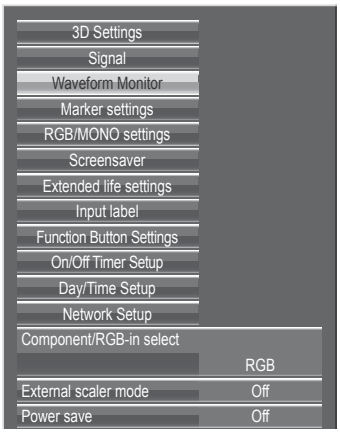
Auto ⟷ YCbCr(4:2:2) 10bit ⟷ YCbCr(4:2:2) 10bit 60p/50p ⟷ YCbCr(4:4:4) 10bit ⟷ RGB(4:4:4) 10bit ⟷ YCbCr(4:2:2) 12bit ⟷ YCbCr(4:4:4) 12bit ⟷ RGB(4:4:4) 12bit ⟷ XYZ(4:4:4) 12bit

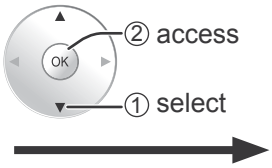
Auto: Automatically selects the signal format according to the input signal.

Waveform Monitor

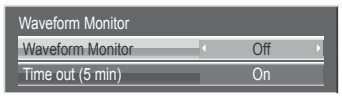
The input signal from video equipment is displayed as waveforms so that the signal level can be checked.

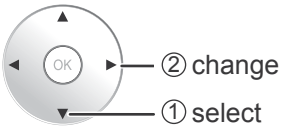
Notes:
- This function is enabled when “Studio mode” in Options menu is set to “On”.
- This function is disabled during 3D images.
- Applicable input signal; HDMI, DVI, SDI





Select the item and set.





- **Waveform Monitor**
  On: The waveform monitor is displayed.
  Off: The waveform monitor is not displayed.
- **Time out (5 min)**
  The waveform monitor display time-out is set.
  On: The display of the waveform monitor disappears in 5 minutes.
  Off: The waveform monitor display time-out does not occur.

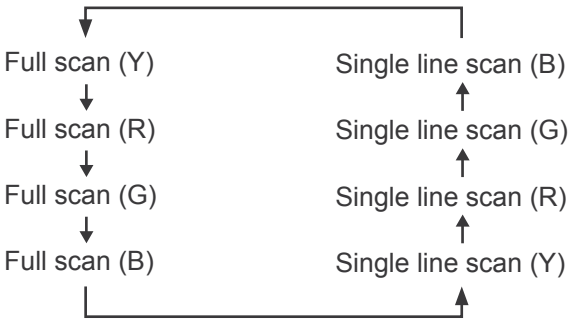
Display of the waveform monitor

1 **Set “Waveform Monitor” to “On”.**
The waveform monitor can also be displayed using the FUNCTION button on the remote control (see page 63).

2 EXIT **Exit the menu.**

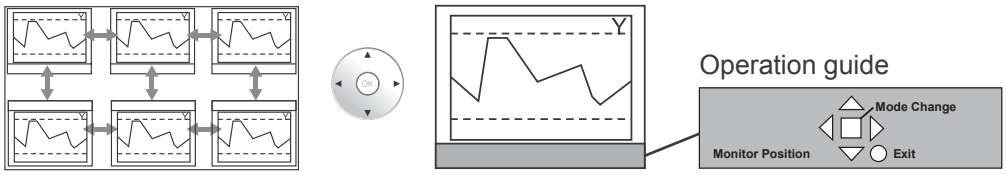
3 **Press OK to switch the display mode.**

Notes:
- The display mode and display position of the waveform monitor are stored.
- The aspect is fixed as “16:9” during the waveform monitor display.



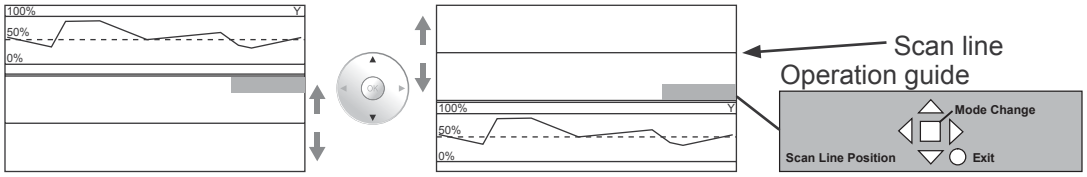
Full scan mode

The display position of the waveform monitor can be changed with the cursor button.



Single line scan mode

Scan line can be changed with the cursor button.



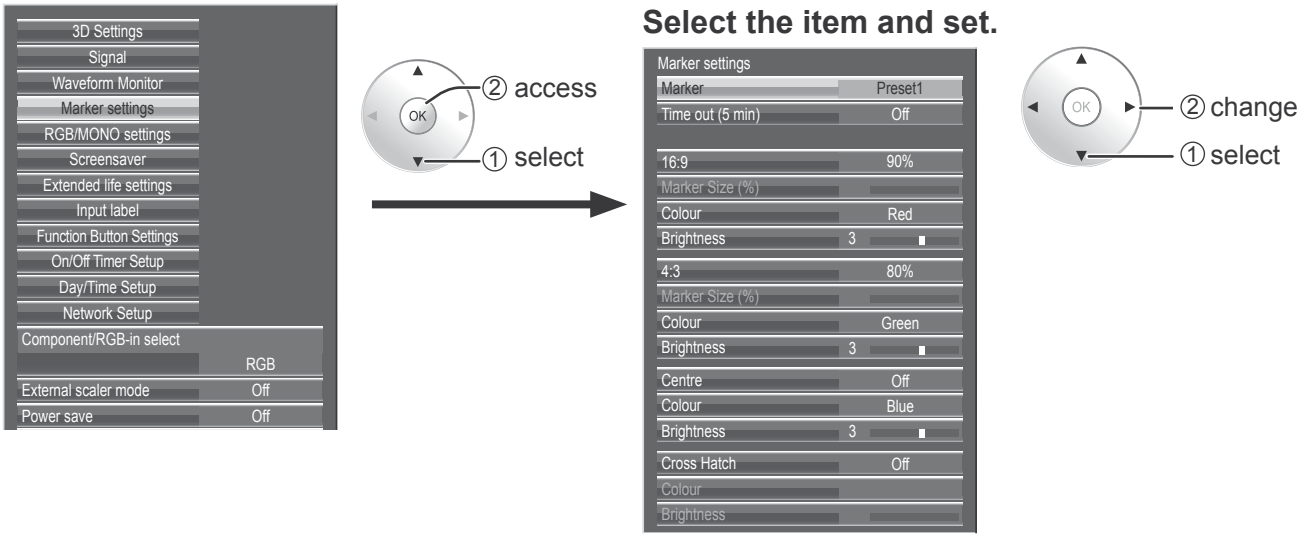
4 RETURN **Press to exit the waveform monitor.**
The waveform monitor ends after 5 minute time-out or by setting “Waveform Monitor” to “Off”.

Marker settings

Various markers for editing image are displayed.

Notes:

- This function is available when “Studio mode” in Options menu is set to “On”
- This function is disabled during 3D images.
- An aspect of “4:3” or “16:9” is valid for this function. Only an aspect of “16:9” is valid at the input of HD signal.



Marker display settings

• Marker

Set show/hide of the marker.

Off: The marker is not displayed.

Preset1 / Preset2: The marker is displayed by Preset1 or 2 setting. You can configure the display setting of Preset1/2.

- You can also display the marker with the FUNCTION button on the remote control (see page 63).

• Time out (5 min)

Set the marker display time-out.

On: The marker display disappears in 5 minutes (time out).

Off: The marker display time-out does not occur.

Marker advanced settings

• 16 : 9

Select 16:9 marker display and the marker type.

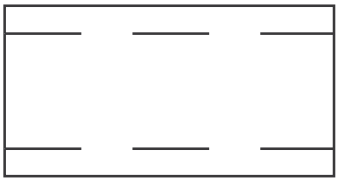
Off ⟷ 4:3(1.33) ⟷ 13:9(1.44) ⟷ 14:9(1.55) ⟷ CNSCO(2.39) ⟷ VISTA(1.85) ⟷ 95% ⟷ 93% ⟷ 90% ⟷ 88% ⟷ 80% ⟷ User

- This setting is valid only if an aspect of “16:9” is used.

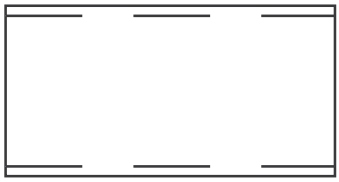
Aspect marker:

4:3, 13:9, 14:9, CNSCO, VISTA

4:3 marker



CNSCO marker (2.39:1)



VISTA marker (1.85:1)

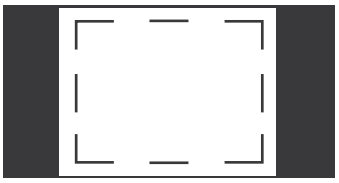
Safe area marker:

95%, 93%, 90%, 88%, 80%, User

90% Area marker

- Selecting User allows the marker area set in 1% increments in “Marker Size (%)” to be reflected in the configuration of safe area marker.

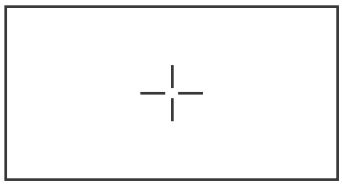
- **4 : 3**
  Select 4:3 marker display and the safe area marker type.
  Off ⟷ 95% ⟷ 93% ⟷ 90% ⟷ 88% ⟷ 80% ⟷ User



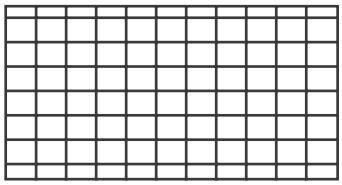
90% Area marker

- Selecting User allows the marker area set in 1% increments in “Marker Size (%)” to be reflected in the configuration of safe area marker.

- **Centre**
  The centre marker is displayed.
  Off ⟷ On



- **Cross Hatch**
  The markers at regular vertical and horizontal intervals are displayed.
  Off ⟷ On



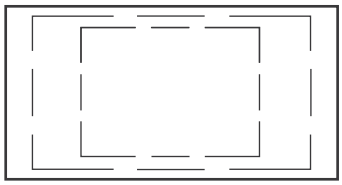
- **Marker Size (%)**
  User setting for the marker area can be configured.
  80% - 100%
  This setting is valid for the selection of “User” in “16:9” or “4:3.”

- **Brightness**
  Brightness is set for each marker.
  1 – 5

- **Colour**
  Colour is set for each marker.
  Red ⟷ Green ⟷ Blue ⟷ Yellow ⟷ Cyan ⟷ Magenta ⟷ Gray

Note:
Several markers can be displayed at once.

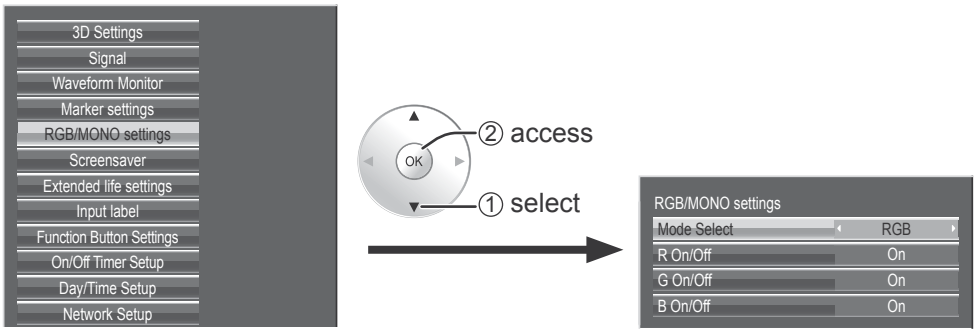
(Example)



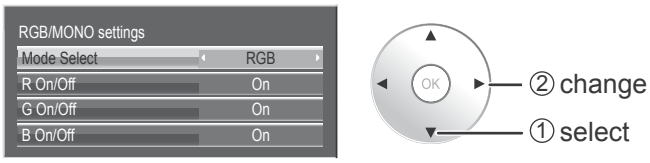
16:9 marker: 95% safe area marker
4:3marker: 80% safe area marker

RGB/MONO settings

Turn off R, G, B signals to adjust the image.



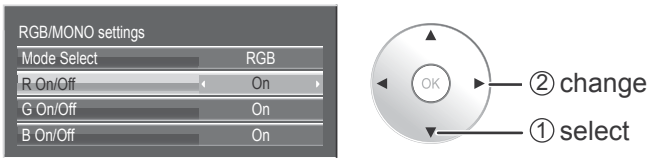
1 Select mode by “Mode Select”.



RGB: Displays with one of red, green and blue signals cut.
Blue only: Displays in solid blue.
MONO: Only Y signal is used for black and white displays.

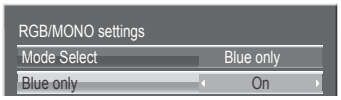
2 Configure each mode setting.

For RGB mode



- **R On/Off, G On/Off, B On/Off**
  Off ⟷ On
  On: The red (for “R On/Off”), green (for “G On/Off”) or blue (for “B On/Off”) signal is on.
  Off: The red (for “R On/Off”), green (for “G On/Off”) or blue (for “B On/Off”) signal is cut.

For Blue only mode

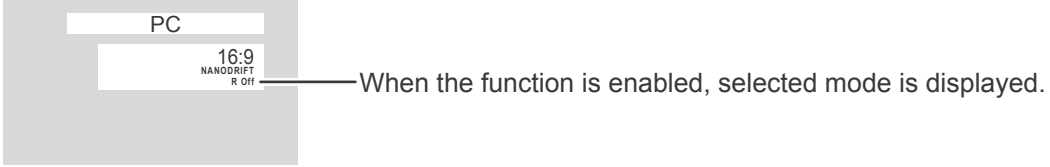


- **Blue only**
  Off ⟷ On
  On: The Blue only mode is enabled.
  Off: The Blue only mode is disabled

For MONO mode

- **MONO**
  Off ⟷ On
  On: The MONO mode is enabled.
  Off: The MONO mode is disabled

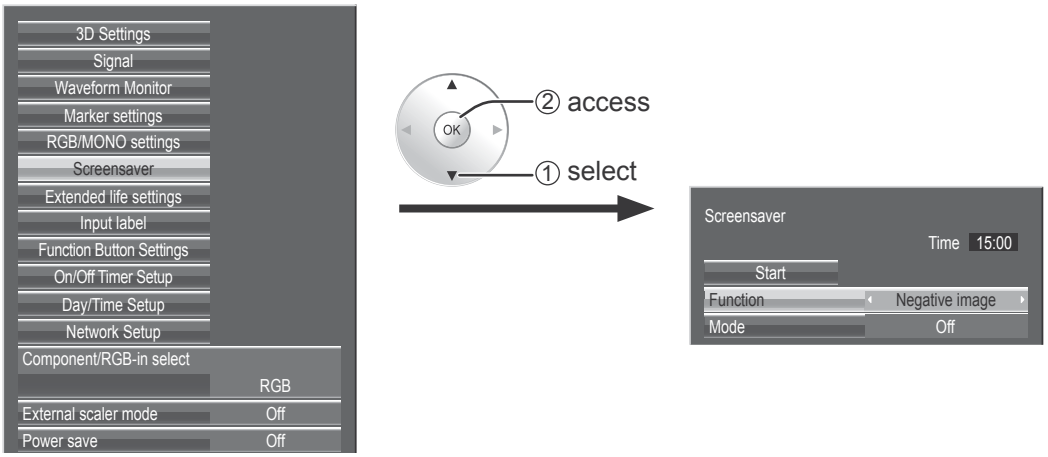
The RGB/MONO settings function is also enabled/disabled with the FUNCTION button on the remote control (see page 63).



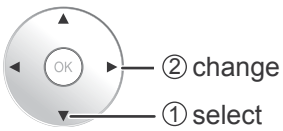
Note:
With MONO set, the colour adjustment in the Picture menu is not available.
When the setting of each item is enabled, the item being currently set to ‘Enable’ becomes disabled.

Screensaver

Do not display a still picture, especially in 4:3 mode, for any length of time.
If the display must remain on, a Screensaver should be used.

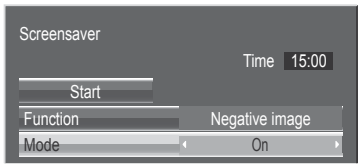


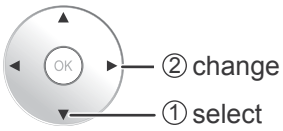
1 Function selection



Negative image : Negative image will be displayed on the screen.
Scrolling bar only : A white bar will scroll from left to right. The image won't be displayed.
Overlay scrolling bar : The brightness of the image will be decreased and a white bar will scroll on it.
White screen : The whole screen will be white.

2 Mode selection

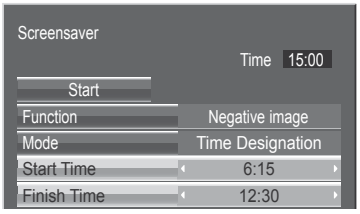


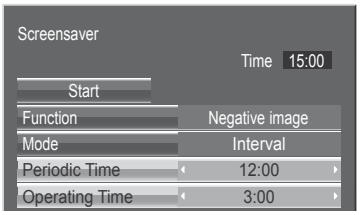


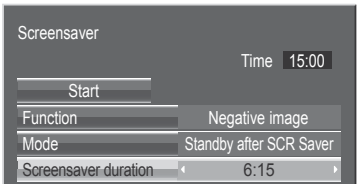
Off
Interval: Operates when Periodic Time and Operating Time are setup and those times arrive.
Time Designation: Operates when Start Time and Finish Time are setup and those times arrive.
Standby after SCR Saver: Operates while Screensaver duration, and display enters standby mode.
On: Operates when Start is selected and the OK button is pressed.

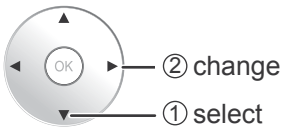
3 Setup of Screensaver Time

After selecting Time Designation, Interval or Standby after SCR Saver, the relevant Time Setup will become available for selection and the Operating Time may be set. (Time cannot be set when “Mode” is “On” or “Off”.)









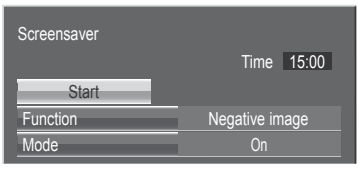
Notes:

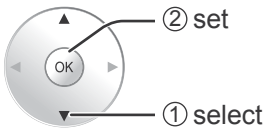
- Pressing “◄” or “►” button once changes the Time 1 minute. [However, switching occurs every 15 minutes when Periodic Time is selected.]
- Pressing “◄” or “►” button continuously changes the Time by 15 minutes.
- “Screensaver duration” of the “Standby after SCR Saver” can be set from 0:00 to 23:59. When this is set to “0:00”, “ Standby after SCR Saver” will not be activated.

Note: Timer function will not work unless “Day/Time Setup” is set.

4 Start setting

Select “Start”.





The menu screen will disappear and the Screensaver will be activated. **To stop the Screensaver under On, press the R button or any buttons on the main unit.**

Note: When the display is turned off, the Scrensaver will be deactivated.

Extended life settings

The following settings are setup to reduce image retention:

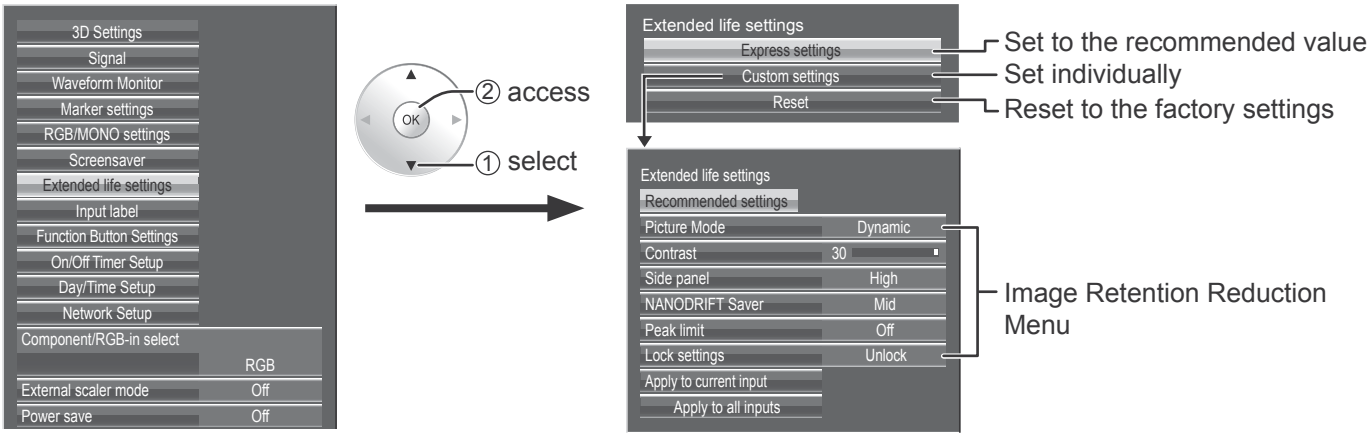
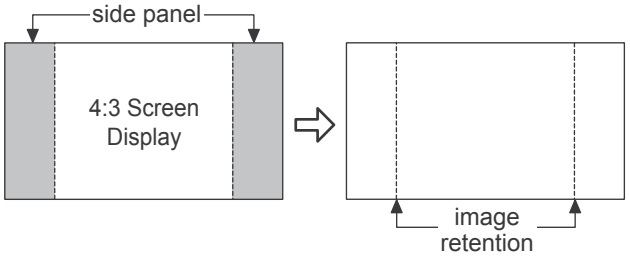


Image Retention Reduction Menu

"Extended life settings" enables you to set the following 5 menus (Image Retention Reduction Menu) as recommended values or set them individually.

Picture Mode
Contrast
"Picture Mode" and "Contrast" are same as "Picture" menu items (see page 29). The settings of this menu will be reflected to the "Picture" menu.

Side panel
Do not display a picture in 4:3 mode for an extended period, as this can cause an image retention to remain on the side panels on either side of the display field.
To reduce the risk of such an image retention, illuminate the side panels.



This function may be applicable to the non-picture area.

Off: Darken both ends.
Low: Make it dark gray.
Mid: Make it gray.
High: Make it light gray.

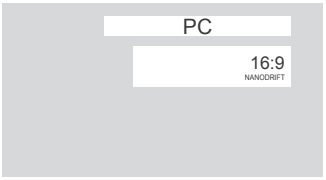
Notes:
- To reduce the occurrence of image retention, set the Side panel to High.
- The side panel may flash (alternate black/white) depending on the picture being shown on the screen. Using Cinema mode will reduce such flashing.

NANODRIFT Saver

Moves the display position of the screen slightly to reduce image retention on the display panel.

Low–High: NANODRIFT Saver operates. The display position of the screen moves at set time intervals. You can set the screen movement range. Some of the screen may appear to be missing as a result of this operation. If you change the value, a mask is displayed in the range where the picture is missing as a result of position movement.

When “NANODRIFT” Image Retention Reduction is operating, “NANODRIFT” is displayed.



Peak limit

On: Suppresses image contrast (peak brightness).

Note: When a still picture is viewed for an extended time, the screen may become slightly darker. (see page 69)

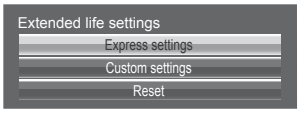
> **Extended life settings when profile is locked**
> If profile is locked with “Memory lock” of the Options menu, the operations of this settings menu are restricted as shown below. “Locking profiles” ➡ page 38
> Express settings: Cannot be set.
> Custom settings: “Picture Mode”, “Contrast” and “Lock settings” cannot be set.
> Reset: “Picture Mode” and “Contrast” are not reset.

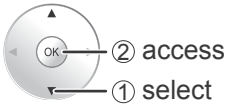
Express settings

Set the “Image Retention Reduction” menu to the recommended settings.
All menus will be locked.

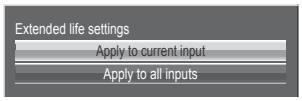
Picture Mode: Normal
Contrast: Recommended setting for each model
Side panel: High
NANODRIFT Saver: Mid
Peak limit: On

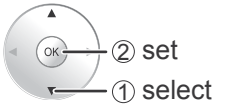
1 Select “Express settings”.



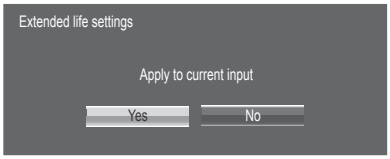


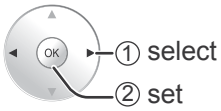
2 Select the input to apply the settings.





3 Select “Yes”.

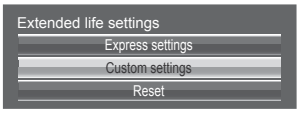


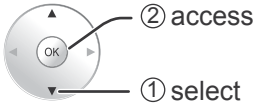


Custom settings

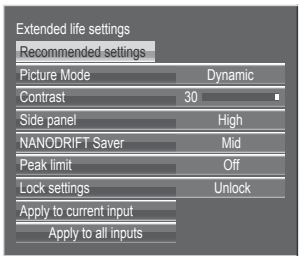
Set the individual “Image Retention Reduction” menu.

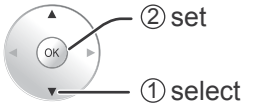
1 Select “Custom settings”.





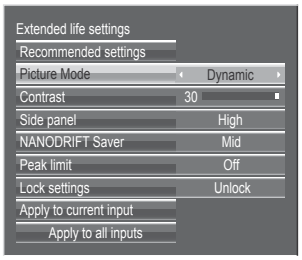
2 To set each menu to the recommended setting:
Select “Recommended settings”.

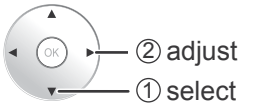




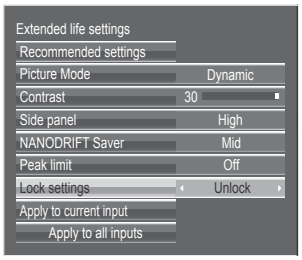
Each menu will be set as same as the “Express settings”.

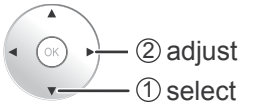
3 Set each menu.



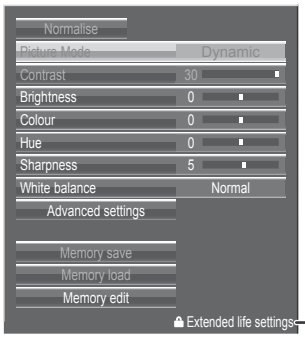


4 To lock each menu setting:
Set the “Lock settings” to “Lock”.

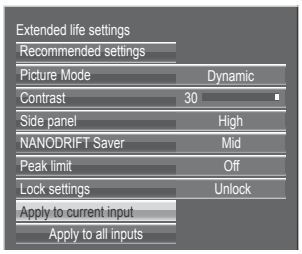


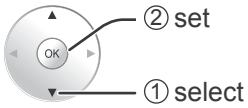


When a menu is locked, it is grayed out and cannot be set.
“Picture Mode” and “Contrast” will no longer be able to set in the “Picture” menu, and they are labeled with icon to indicate their locked status.
Also, “Normalise”, “Memory save” and “Memory load” are not available.

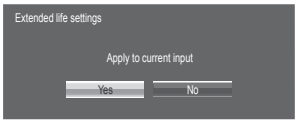


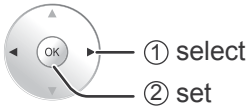
5 Select the input to apply the settings.





6 Select “Yes”.

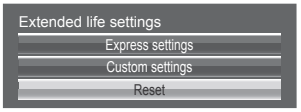


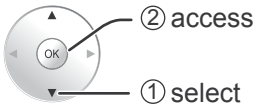


Reset

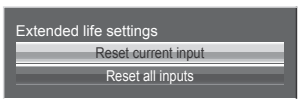
Reset the “Image Retention Reduction” menu to the factory settings. Each menu will be unlocked.

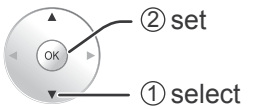
1 Select “Reset”.



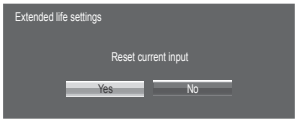


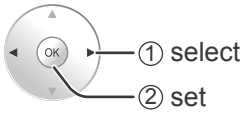
2 Select the input to reset the settings.





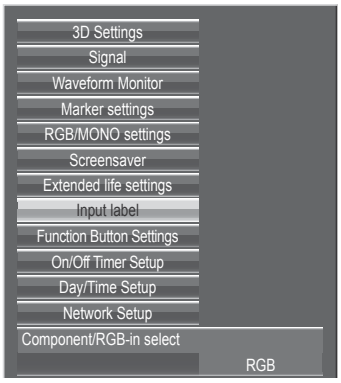
3 Select “Yes”.

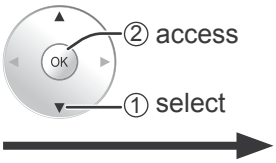




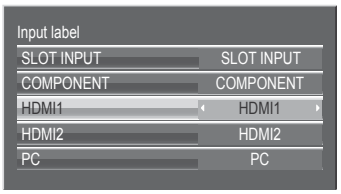
Customizing the Input labels

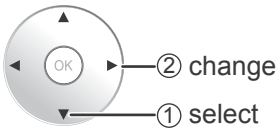
This function can change the label of the Input signal to be displayed. (see page 18)





Select an input terminal and set.





Note:
The setting items are the same as the input terminal list of "Selecting the input signal" (page 18).

The input label changes as follows each time the ◄ or ► button is pressed.

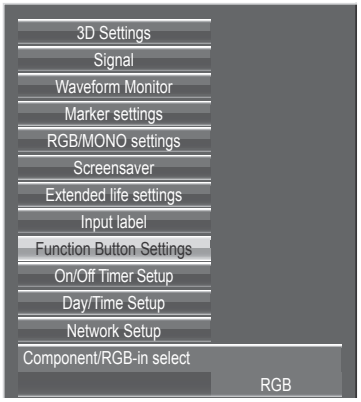
Original ⟷ DVD1 ⟷ DVD2 ⟷ DVD3 ⟷ DVD4 ⟷ Blu-ray1 ⟷ Blu-ray2

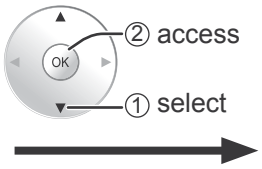
(Skip) ⟷ STB ⟷ VCR ⟷ CATV ⟷ Blu-ray4 ⟷ Blu-ray3

(Skip) : The INPUT button press will skip its input.

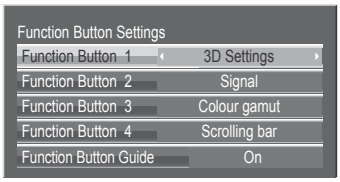
Function Button Settings

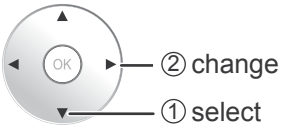
Set the function to operate when the FUNCTION button 1 to 4 on the remote control is pressed.
Using FUNCTION button ➡ page 62





Select the item and set.





Note:
The button functions are configured in two ways depending on the setting (On/Off) of "Studio mode" in the Options menu.

- **Function Button 1 - Function Button 4**

  The following functions are set to the FUNCTION button.

Waveform Monitor*	**R On/Off**
Marker settings*	**G On/Off**
HV Delay*	**B On/Off**
Blue only	**MONO**
3D Settings	**Test Patterns**
Signal	**Volume +**
Colour gamut	**Volume -**
Scrolling bar	**Mute**

* "Waveform Monitor", "Marker settings" and "HV Delay" can be set when "Studio mode" in Options menu is "On".

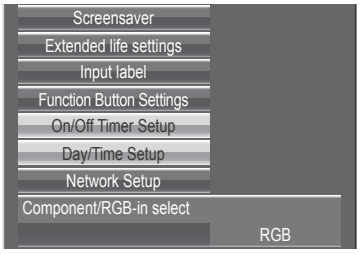
- **Function Button Guide**

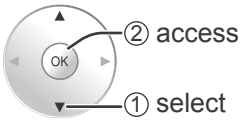
  The function display setting for the FUNCTION button is configured.

  On: Press the FUNCTION button to display the function list of the button.

  Off: The function list is not displayed.

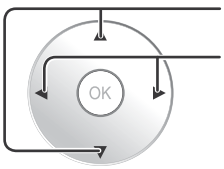
Day/Time Setup / On/Off Timer Setup





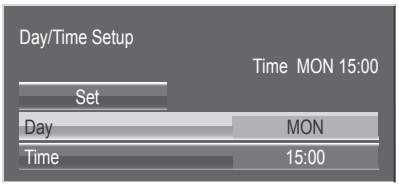
Day/Time Setup

1



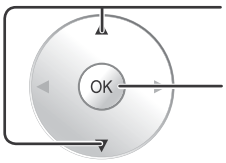
Press to select Day or Time.

Press to set up Day or Time.
► button: Forward
◄ button: Back



Notes:
- Pressing "◄" or "►" button once changes Time 1 minute.
- Pressing "◄" or "►" button continuously changes Time by 15 minutes.

2



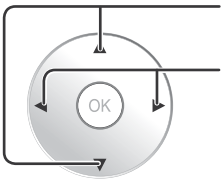
Press to select Set.

Press to store Day/Time Setup.

Notes:
- Set cannot be selected unless Time is set.
- Unless setting the present time other than "99:99", "Day" and "Time" cannot be set.
- The settings of "Day" and "Time" are reset when leaving the display turned off for about 7 days for the following reasons:
  Pressing ⏻/| switch of the unit to turn off the display.
  Disconnecting the AC cord.
  Interruption of power supply.

On/Off Timer Setup

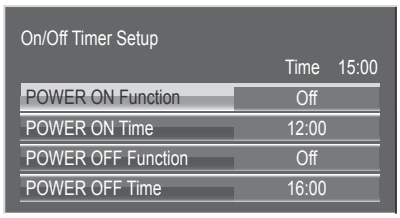
1



Press to select POWER ON Time / POWER OFF Time.

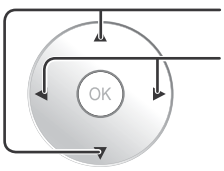
Press to setup
POWER ON Time / POWER OFF Time.

► button: Forward
◄ button: Back



Notes:
- Pressing "◄" or "►" button once changes POWER ON Time / POWER OFF Time 1 minute.
- Pressing "◄" or "►" button continuously changes POWER ON Time / POWER OFF Time by 15 minutes.

2



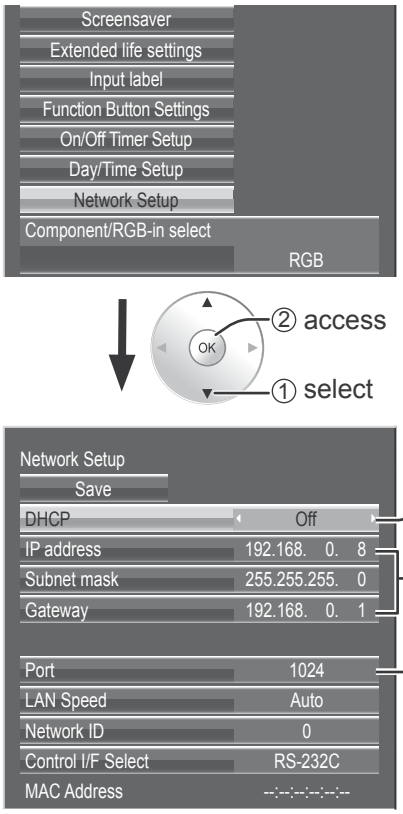
Press to select POWER ON Function/POWER OFF Function.

Press to select On.

Note: Timer function will not work unless "Time" is set.

Network Setup

Make the various settings to use the network function.

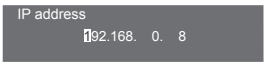


DHCP, IP address, Subnet mask and Gateway settings

1 Set DHCP.
When “Off” is selected, IP address and other settings can be set manually.

2 Select the item and press OK.

3 Enter an address.



① Use ◀▶ to select a digit.
② Use ▲▼ to change a number or input the numerical value from 0 to 9.
③ Press OK.
Pressing RETURN will cancel the address change.

4 Select “Save” and press OK.

Port setting

1 Select “Port” and press OK.

2 Enter a port number.

① Use ◀▶ to select a digit.
② Use ▲▼ to change a number or input the numerical value from 0 to 9.
③ Press OK.
Pressing RETURN will cancel the port number change.

Save
Save the current network Setup. Each value set for DHCP, IP address, Subnet mask, and Gateway will be saved. If “NG” is displayed, check the same IP address is not used within the same network.

DHCP (DHCP client function)
To obtain an IP address automatically using a DHCP server, set this to “On”. If DHCP server is not used, set this to “Off”.

IP address (IP address display and setting)
Enter an IP address if DHCP server is not used.

Subnet mask (Subnet mask display and setting)
Enter a subnet mask if DHCP server is not used.

Gateway (Gateway address display and setting)
Enter a gateway address if DHCP server is not used.

Port
Set the port number used for command control.
The available setting range is 1024 – 65535.
When the PJLink™ protocol is used, the port setting is not necessary.

LAN Speed
Set the connection speed of the LAN environment.
Select the value from Auto, 10 Half, 10 Full, 100 Half or 100 Full.

Network ID
Set the ID to identify this unit.
The available setting range is 0 – 99.

Control I/F Select
Set whether to control with RS-232C (serial) or LAN.
When “LAN” is set, power is supplied to LAN circuit, and power indicator is lit orange under the condition of power “Off” with remote control (stand-by state).

MAC Address
Display the MAC address of this unit. However, the MAC address is not displayed when the “Control I/F Select” is set to “RS-232C”.

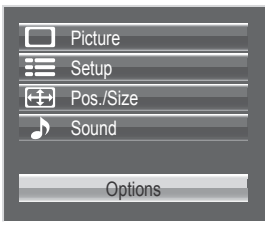
Notes:
- To use a DHCP server, make sure the DHCP server is started.
- Contact your network administrator for details on settings.

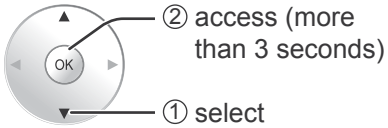
Options Adjustments

1 **Display the menu screen.** MENU

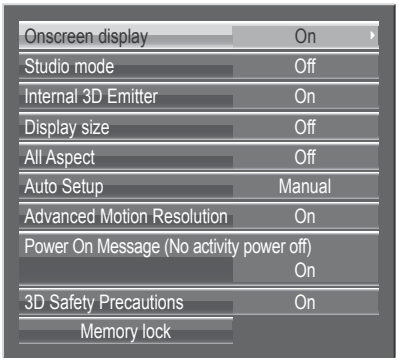
2 **Select “Options”.**

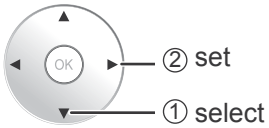
3 **Press OK for more than 3 seconds.**





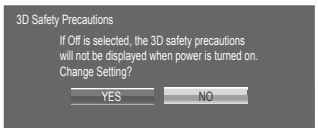
4 **Select the item and set.**





5 **Exit the menu.** EXIT

<table>
<tr><th>Item</th><th>Adjustments</th></tr>
<tr><td>Onscreen display</td><td>On: Displays all the following on screen.
• Power on display
• Input signal switch display
• No signal display
• Remainig time of off-timer after RECALL was pressed.
Off: Hides all the items above from view.</td></tr>
<tr><td>Studio mode</td><td>For switching functions in setting menus used for television studio applications.
<table>
<tr><th colspan="2">Setting menu</th><th>Studio mode: On</th><th>Studio mode: Off</th></tr>
<tr><td>Picture</td><td>White balance</td><td>“Studio” can be selected.</td><td>“Studio” not available.</td></tr>
<tr><td>Advanced</td><td>Studio Gain</td><td>Available.</td><td>Unavailable (set to “Off” and cannot be changed).</td></tr>
<tr><td rowspan="5">Setup</td><td>Waveform Monitor</td><td>Available</td><td>Unavailable</td></tr>
<tr><td>Marker settings</td><td>Available</td><td>Unavailable</td></tr>
<tr><td>3D colour compensation</td><td>Available</td><td>Unavailable</td></tr>
<tr><td>Function Button Settings</td><td colspan="2">The button functions are separately configured in “On” and “Off”.</td></tr>
<tr><td>Waveform Monitor
Marker settings
HV Delay</td><td>Configurable.</td><td>Not configurable.</td></tr>
<tr><td>Pos./Size</td><td>HV Delay</td><td>Available</td><td>Unavailable</td></tr>
</table></td></tr>
<tr><td>Internal 3D Emitter</td><td>Set the infrared transmitter for the 3D Eyewear.
On: Use the infrared transmitter of the unit and the external 3D IR TRANSMITTER (available separately.)
Off: Use the external 3D IR TRANSMITTER (available separately.)</td></tr>
</table>

Item	Adjustments
Display size	Adjusts the image display size on screen. **Off:** Sets the normal image display size on screen. **On:** Sets the image display size approximately 95 % of the normal image display. **Off** **On**  **Notes:** • This setting is valid only when the input signals are as follows; NTSC, PAL, SECAM, M.NTSC, PAL60, PAL-M, PAL-N (Video) 525i, 525p, 625i, 625p, 750/60p, 750/50p, 1125/60i, 1125/50i, 1125/24sF, 1125/25p, 1125/24p, 1125/30p, 1125/60p, 1125/50p, 1250/50i (Component Video, RGB, DVI, SDI, HDMI) • When “Display size” is set to “On”, “H-Pos” and “V-Pos” in “Pos./Size” can be adjusted. • Refer to each board’s operating instruction for DVI, SDI, HDMI’s corresponding signals.
All Aspect	Sets All Aspect mode (advanced aspect setting) or default aspect mode. With each press of ASPECT button, the aspect changes in the selected mode. **Off:** Default aspect mode **On:** All Aspect mode Aspect mode of each setting is as follows: (Example: HD signal) **Off** 4:3→4:3 Full→Zoom1→Zoom2→Zoom3→16:9→14:9→Just **On** 4:3 (1)→4:3 (2)→4:3 Full→Zoom1→Zoom2→Zoom3→16:9→14:9→Just1→Just2
Auto Setup	Sets the operational mode of the automatic position adjustment in the Pos./Size menu. **Manual:** Automatic position adjustment starts when AUTO SETUP is pressed on the remote control or automatic position adjustment is executed from the Pos./Size menu. **Auto:** Other than remote control or menu operation, automatic position adjustment starts: When the display power is turned ON. When the input signal is switched.
Advanced Motion Resolution	Displays motion picture images at higher resolution. **On** ⟷ **Off** **Notes:** • Please set to “Off” if images look unnatural. • This function is disabled during 3D images.
Power On Message (No activity power off)	Whether to show/hide No activity power off Precautions at the time of power ON is set. **On:** The warning precautions are shown at the time of power ON. **Off:** The warning precautions are not shown at the time of power ON. **Note:** This setting is enabled only if “No activity power off” is “Enable” (see page 43).
3D Safety Precautions	3D Safety Precautions show/hide is set during power ON. **On:** 3D Safety Precaution is shown every time when the power is ON. **Off:** 3D Safety Precaution is not shown when the power is ON. When the setting changes from “On” to “Off”, the confirmation screen is displayed as below. Pressing “YES” switches the setting. 
Memory lock	Locks or unlocks saved profiles. Also for setting passwords. (see page 38)

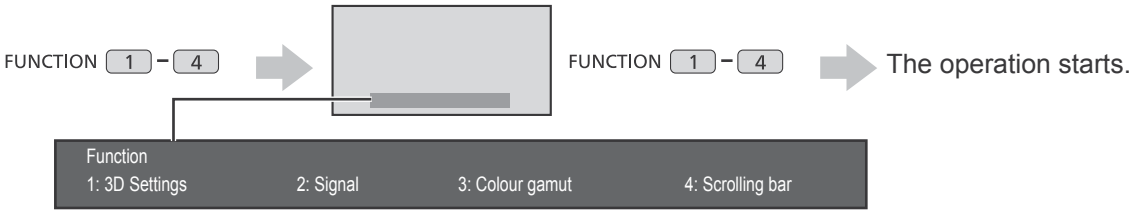
Using FUNCTION button

Assigning functions to the FUNCTION button on the remote control enables a user to switch between show/hide and modes with just a single touch of a button. The function settings are configured by using “Function Button Settings” in the Setup menu (see page 57). The button functions are configured in two ways depending on the setting (On/Off) of “Studio mode” in the Options menu.

The factory preset functions are as described below.
Function Button 1: 3D Settings
Function Button 2: Signal
Function Button 3: Colour gamut
Function Button 4: Scrolling bar

Display of the FUNCTION button guide

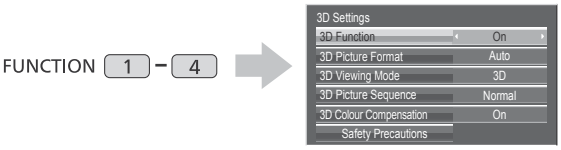
Pressing the FUNCTION button can display the FUNCTION button guide to refer for the function of each button.



If the guide display is not needed, set “Function Button Guide” in “Function Button Settings” to “Off” (see page 57).

3D Settings / Signal / Colour gamut

The menu screen is displayed.
(Example: 3D Settings)



Pressing the FUNCTION button clears the menu.

Scrolling bar / Test Patterns

Confirmation screen (Example: Scrolling bar)

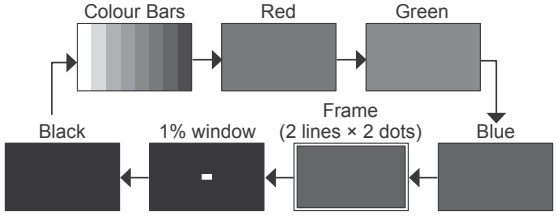
Scrolling bar

Activates the “Scrolling bar only” screensaver. After 15 minutes, the display enters standby mode.

To exit this mode, press any button.

Test Patterns

Each time you press OK, a different test pattern is displayed (seven in all).



To exit this mode, press any button other than OK.

Note:
“PC Power management” and “No signal power off” are deactivated during “Scrolling bar” or “Test Patterns” operation. (see page 43)

Waveform Monitor
The waveform monitor displays (see page 48).
To exit this mode, press the FUNCTION button.

Marker settings
The marker displays (see page 49).
Each time the FUNCTION button is pressed, the screen is switched in the following order; Preset 1 → Preset 2 → Off.

HV Delay
The video blanking period displays (see page 27).
Each time the FUNCTION button is pressed, the screen is switched in the following order; H Delay → V Delay → HV Delay→ Off.

Blue only
The screen displays only blue colour for image adjustment.
To exit this mode, press FUNCTION button.

MONO
The screen is displayed in black and white by the Y signal alone (see page 51).
To cancel, press the FUNCTION button.

R On/Off / G On/Off / B On/Off
R / G / B signals are turned off (see page 51).
Each time the FUNCTION button is pressed, each signal switches between On/Off.

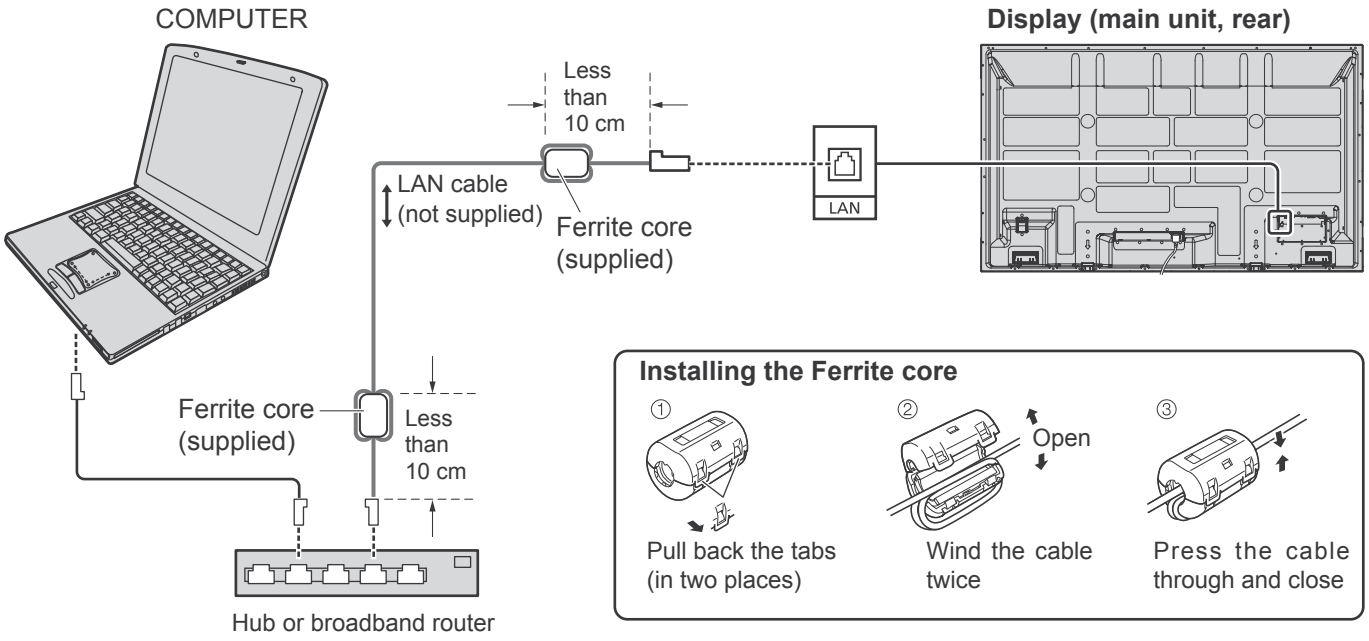
Volume + / Volume –
The volume is adjusted.
Press the FUNCTION button to turn the volume UP/DOWN.

Mute
The sound is temporarily muted.
Press the FUNCTION button again to cancel.

Using Network Function

This unit has a network function to control the network connected display with your computer.
Note:
To use the network function, set each “Network Setup” setting and make sure to set the “Control I/F Select” to “LAN”. (see page 59)
When “LAN” is set, power is supplied to LAN circuit, and power indicator is lit orange under the condition of power “Off” with remote control (stand-by state).

Example of Network Connection



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.

Command Control

Network function of the unit can control the unit in the same way as serial control from a network.

Supported commands
Commands used in the serial control are supported. (see page 14)

Note:
Consult your local Panasonic dealer for detail instructions on command usage.

PJLink™ Protocol

The network function of the unit conforms with PJLink™ class 1 and you can operate the following actions from your computer using PJLink™ protocol.
• Display setup
• Display status query

Supported commands
Commands to control the unit with PJLink™ protocol are shown in the table below.

Command	Control	Remark
POWR	Power control	Parameter 0 = Standby 1 = Power “On”
POWR?	Power status query	Parameter 0 = Standby 1 = Power “On”
INPT	Input switch	Parameter See the parameter for command INST?
INPT?	Input switch query	
AVMT	Shutter control	Parameter 10 = Picture On (picture mute deactivated), 11 = Picture Off (picture on mute) 20 = Audio On (audio mute deactivated), 21 = Audio Off (audio on mute) 30 = Shutter mode Off (picture and audio mute deactivated) 31 = Shutter mode On (picture and audio on mute)
AVMT?	Shutter control query	Parameter 11 = Picture Off (picture on mute) 21 = Audio Off (audio on mute) 30 = Shutter mode Off (picture and audio mute deactivated) 31 = Shutter mode On (picture and audio on mute)
ERST?	Error status query	Parameter First byte: Means fan error. 0 or 2. Second byte: 0 Third byte: 0 Fourth byte: 0 Fifth byte: 0 Sixth byte: Means other error. 0 or 2. Meaning of the 0 – 2 settings: 0 = Error is not detected, 2 = Error
LAMP?	Lamp status query	Not supported
INST?	Input switch list query	Parameter Numbers 11 to 13 are depending on the slot installation condition 11: PC IN input (PC) When a single input terminal board is attached 11: SLOT input (SLOT INPUT) 12: PC IN input (PC) 21: COMPONENT/RGB IN input (COMPONENT) 31: HDMI input (HDMI1) When a dual input terminal board is attached 11: SLOT input (SLOT INPUT A) 12: SLOT input (SLOT INPUT B) 13: PC IN input (PC) 32: HDMI input (HDMI2)
NAME?	Projector name query	Returns empty character (no name information)
INF1?	Manufacturer name query	Returns “Panasonic”
INF2?	Model name query	Returns “TH-65VX300”
INFO?	Other information query	Returns version number
CLSS?	Class information query	Returns “1”

PJLink™ security authentication
Set “Panasonic” for the PJLink™ password.

• PJLink™ is a pending trademark in Japan, the United States, and other countries or areas.

Using Web Browser Control

You can use a Web browser to control the unit and set up a network and password.

Before Using Web Browser Control

To use the Web browser control, the unit and computer setups are required.

Unit Setup

Set each “Network Setup” setting and make sure to set the “Control I/F Select” to “LAN”. (see page 59)

Computer Setup

Disable the proxy server settings and enable JavaScript.

(Windows)

Disable proxy server settings

1 Display [Internet Properties] window.
Click [Start] – [Control Panel] – [Network and Internet Connections] – [Internet Options].
2 Click the [Connections] tab and then [LAN Settings].
3 Deselect the [Use automatic configuration script] and [Use a proxy server for your LAN] boxes.
4 Click [OK].

Enable JavaScript

1 Display [Internet Properties] window.
Click [Start] – [Control Panel] – [Network and Internet Connections] – [Internet Options].
2 Set the security level on the [Security] tab to [Default Level]. Alternatively enable [Active scripting] from the [Custom Level] button.

(Macintosh)

Disable proxy server settings

1 From the [Safari] menu, click [Preferences].
General screen is displayed.
2 From the [Advanced] tab, click the [Change Settings…] button next to [Proxies]. Click [Proxies] and set up a proxy server.
3 Deselect the [Web Proxy] and [Automatic Proxy Configuration] boxes.
4 Click [Apply Now].

Enable JavaScript

1 Display [Security] of Safari.
2 Select [Enable JavaScript] under [Web content].

Access from Web Browser

Access to the TOP screen of the Web browser control using a Web browser.

1 Start your Web browser.
2 Enter the IP address set with the “Network Setup” of the unit. (see page 59)

3 Enter the user name and password when the Authentication screen is displayed.

Authentication screen

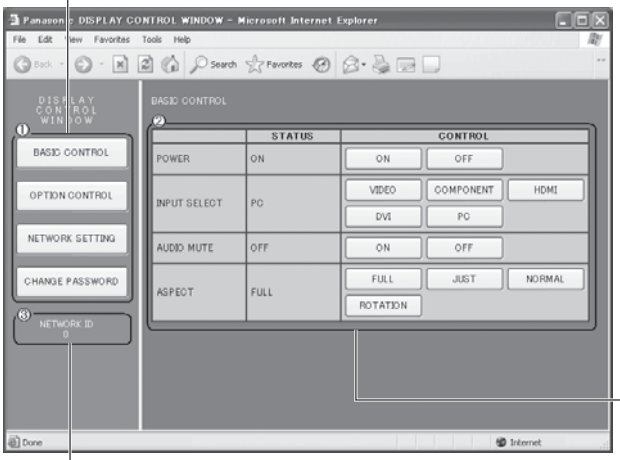
4 Click [OK].
After logged in, the TOP screen of the Web browser control is displayed. (see page 67)

Notes:

- The password used here is the same password used for command control and the PJLink™ security authentication.
- Default user name and password are as follows:
  User name: user1
  Password: Panasonic
- The password can be changed on the Password Setup screen after logging in (see page 64). The user name cannot be changed.
- Under no circumstances, Panasonic Corporation or it's associated companies will ask customers their password directly.
  Even if you are asked directly, please do not reveal your password.

TOP screen structure of the Web browser control

After logging in, the TOP screen of the Web browser control is displayed.



① **Menu**

Menu items are displayed. When a button is clicked, setup screen of each item is displayed.

Item	Details
BASIC CONTROL	BASIC CONTROL screen is displayed. (see below)
OPTION CONTROL	OPTION CONTROL screen is displayed. (see below)
NETWORK SETTING	Network Setup screen is displayed. (see page 68)
CHANGE PASSWORD	Password setup screen is displayed. (see page 68)

② According to the selected item from the main menu, setup status or set items are displayed.

③ **Network ID information**

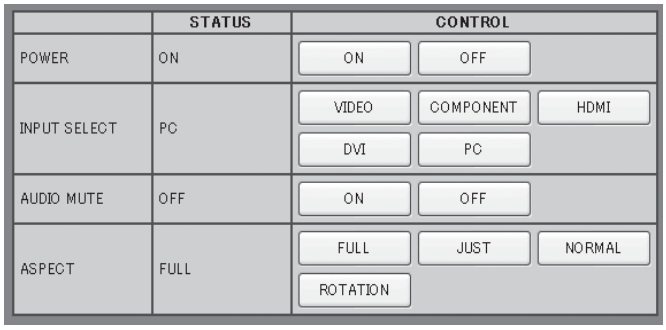
ID to identify the unit is displayed.

Display Control (BASIC CONTROL/OPTION CONTROL Screen)

Click BASIC CONTROL or OPTION CONTROL from the menu. Various controls of the unit can be set.

BASIC CONTROL screen

Click BASIC CONTROL from the menu. Unit status and buttons to change settings are displayed.



Item	Details
POWER	Switch ON/OFF of the unit power.
INPUT SELECT	Switch the input signals. Displayed buttons vary according to the connection status of the video device.
AUDIO MUTE	Switch ON/OFF of the sound mute.
ASPECT	Switch the screen modes

OPTION CONTROL screen

Click OPTION CONTROL from the menu. Command input field for command control of the unit is displayed.

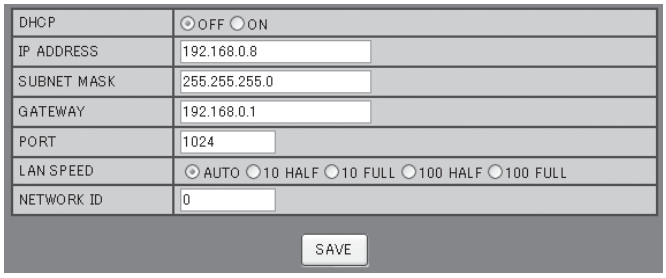
Item	Details
COMMAND	Enter a command. Use the same command used for the serial control. (see page 14)
RESPONSE	Response from the unit is displayed.
SEND	Command is sent and run.

Note:

After the settings are changed, it may take a while till the display status is displayed.

NETWORK SETTING (Network Setup Screen)

Click NETWORK SETTING from the menu. Various settings of a network can be set. For the details of the setting items, please check Network Setup under the Set up of the unit. (see page 59)



Notes:

- To use a DHCP server, make sure the DHCP server is started.
- During a DHCP server is used, IP ADDRESS, SUBNET MASK, and GATEWAY values cannot be entered.
- When the set values are changed properly, “NETWORK SETTING CHANGED.” message and the changed set items are displayed.

Item	Details
DHCP	Set to ON when a DHCP server is used, or OFF when it is not used.
IP ADDRESS	Enter an IP address.
SUBNET MASK	Enter a subnet mask.
GATEWAY	Enter a gateway address.
PORT	Enter the port number used for command control. The available setting range is 1024 - 65535.
LAN SPEED	Set the connection speed of the LAN environment.
NETWORK ID	Set the ID to identify this unit. The available setting range is 0 - 99.
SAVE	Save the each set value.

Password Setting (Password Setup Screen)

Click CHANGE PASSWORD from the menu. Password to access the Web browser control can be set. When the password is changed in this screen, the password used for command control and the PJLink™ security authentication is also changed.

Notes:

- The default password is “Panasonic”.
- Up to 32 alphanumeric characters can be used for a password.
- When the password is changed properly, “Password has changed.” message is displayed.

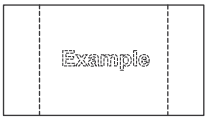
Item	Details
OLD PASSWORD	Enter the old password.
NEW PASSWORD	Enter the new password.
NEW PASSWORD (RETYPE)	Enter the password entered in “NEW PASSWORD” for confirmation.
SAVE	Save the new password. The confirmation screen is displayed. Click OK to change the password.

Troubleshooting

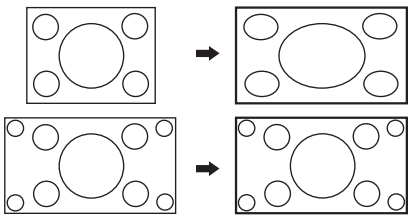
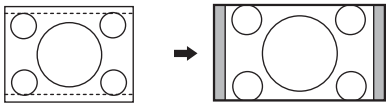
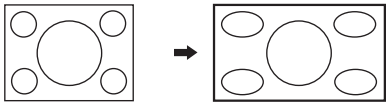
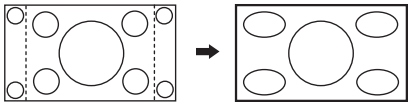
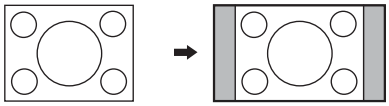
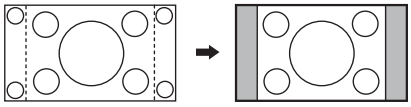
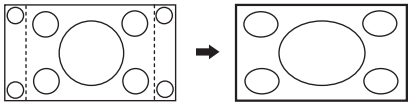
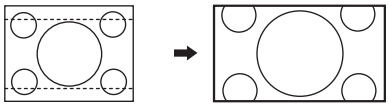
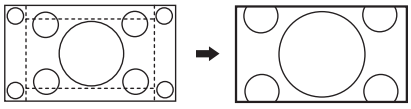
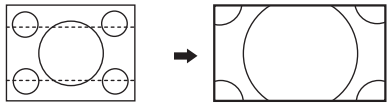
Before you call for service, determine the symptoms and make a few simple checks as shown below.

Symptoms		Checks
Picture	**Sound**	
 Interference	Noisy Sound	Electrical Appliances Cars / Motorcycles Fluorescent light
 Normal Picture	No Sound	Volume (Check whether the mute function has been activated on the remote control.) Check if speakers are corrected properly.
? No Picture	No Sound	Not plugged into AC outlet Not switched on Picture and Brightness/Volume setting (Check by pressing the power switch or stand-by button on the remote control.)
? No Picture	Normal Sound	If a signal with a non-applicable colour system format, or frequency is input, only the input terminal indication is displayed.
 No Colour	Normal Sound	Colour controls set at minimum level (see page 28-33) Colour system (see page 46)
No remote control operations can be performed.		Check whether the batteries have discharged completely and, if they have not, whether they were inserted properly. Check whether the remote control sensor is exposed to an outdoor light or a strong fluorescent light. Check whether the remote control designed specifically for use with the unit is being used. (The unit cannot be operated by any other remote control.)
A cracking sound is sometimes heard from the unit.		If there is nothing wrong with the picture or sound, this is the sound of the cabinet undergoing very slight contractions in response to changes in the room temperature. There are no adverse effects on the performance or other aspects.
The top or bottom of the picture on the screen is cut off when I use the zoom function.		Adjust the position of the picture on the screen.
Areas at the top and bottom of the screen where the image is missing appear when I use the zoom function.		When using a video software program (such as a cinema size program) with a screen wider than one in the 16:9 mode, blank areas separate from the images are formed at the top and bottom of the screen.
I can hear sounds coming from inside the unit.		When the power is turned on, a sound of the display panel being driven may be heard: This is normal and not indicative of malfunctioning.
Parts of the unit become hot.		Even when the temperature of parts of the front, top and rear panels has risen, these temperature rises will not pose any problems in terms of performance or quality.
Power automatically turns off unexpectedly.		Check the settings of “PC Power management”, “No signal power off” and “No activity power off” in the Setup menu. Any of them may be set to “On (Enable)”. (see page 43)
Power indicator is blinking in red.		There is possibility of malfunction. Please contact an Authorized Service Center.
This Plasma Display uses special image processing. Hence a slight time lag may occur between image and audio, depending on the type of input signal. However, this is not a malfunction.		

Plasma Display panel

Symptoms	Check
The screen darkens slightly when bright pictures with minimal movements are shown.	The screen will darken slightly when photos, still images of a computer or other pictures with minimal movements are shown for an extended period. This is done to reduce image retention on the screen and the shortening of the screen’s service life: It is normal and not indicative of malfunctioning.
It takes a while for the picture to appear.	The unit digitally processes the various signals in order to reproduce esthetically pleasing images. As such, it sometimes takes a few moments for the picture to appear when the power has been turned on, when the input has been switched.
The edges of the images flicker.	Due to the characteristics of the system used to drive the panel, the edges may appear to flicker in the fast-moving parts of the images: This is normal and not indicative of malfunctioning.
The brightness on both sides of images in the 4:3 mode changes.	When viewing the side panels at the “High” or “Mid” setting, the brightness on both sides may change depending on the kind of program shown: This is normal and not indicative of malfunctioning.
Some parts of the screen do not light up.	The plasma display panel is manufactured using an extremely high level of precision technology, however, sometimes some parts of the screen may be missing picture elements or have luminous spots. This is not a malfunction.
 Image retention appears	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. **Note:** The permanent image retention on the Plasma Display resulting from fixed image use is not an operating defect and as such is not covered by the Warranty. This product is not designed to display fixed images for extended periods of time.
Whirring sounds can be heard from the display unit.	The display unit is fitted with a cooling fan to dissipate heat generated during normal use. The whirring sound is caused by rotation of the fan and is not a malfunction.

List of Aspect Modes

Aspect mode		Picture ➡ Enlarged screen	Description
All Aspect: On	Factory setting All Aspect: Off		
16:9	16:9		The display of the pictures fills the screen. In the case of SD signals, pictures with a 4:3 aspect ratio are enlarged horizontally, and displayed. This mode is suited to displaying anamorphic pictures with a 16:9 aspect ratio.
14:9	14:9		Letterbox pictures with a 14:9 aspect ratio are enlarged vertically and horizontally so that their display fills the screen vertically and is slightly smaller than the screen horizontally. The top and bottom edges of the pictures are cut off. Side panels are displayed at the left and right edges of the screen.
Just Just1	Just		Pictures with a 4:3 aspect ratio are enlarged horizontally so that the picture distortion is minimized. The display of the areas around the left and right edges of the screen is slightly elongated.
Just2	–		The pictures with a 4:3 aspect ratio among the 16:9 aspect ratio signals are enlarged horizontally so that the picture distortion is minimized. The left and right edges of the pictures are cut off. The display of the areas around the left and right edges of the screen is slightly elongated.
4:3 4:3 (1)	4:3		Pictures with a 4:3 aspect ratio are displayed with their original aspect ratio. Side panels are displayed at the left and right edges of the screen.
4:3 (2)	–		The pictures with a 4:3 aspect ratio among the 16:9 aspect ratio signals are displayed with their original aspect ratio. The left and right edges of the pictures are masked with side panels.
4:3 Full	4:3 Full		The pictures with a 4:3 aspect ratio among the 16:9 aspect ratio signals are enlarged horizontally so that their display fills the screen. The left and right edges of the pictures are cut off.
Zoom Zoom1	Zoom1		Letterbox pictures with a 16:9 aspect ratio are enlarged vertically and horizontally so that their display fills the screen. The top and bottom edges of the pictures are cut off.
Zoom2	Zoom2		The letterbox pictures with a 2.35:1 aspect ratio among the 16:9 aspect ratio signals are enlarged vertically and horizontally so that their display fills the screen. The top and bottom edges as well as the left and right edges of the pictures are cut off.
Zoom3	Zoom3		Letterbox pictures with a 2.35:1 aspect ratio are enlarged vertically and horizontally so that their display fills the screen vertically and is slightly larger than the screen horizontally. The top and bottom edges as well as the left and right edges of the pictures are cut off.

Applicable Input Signals

*Mark: Applicable input signal

	Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)	COMPONENT / RGB IN / PC IN (Dot clock (MHz))	HDMI1-2
1	525 (480) / 60i	15.73	59.94	* (13.5)	*
2	525 (480) / 60p	31.47	59.94	* (27.0) *5	*
3	625 (575) / 50i	15.63	50.00	* (13.5)	
4	625 (576) / 50i	15.63	50.00		*
5	625 (575) / 50p	31.25	50.00	* (27.0)	
6	625 (576) / 50p	31.25	50.00		*
7	750 (720) / 60p	45.00	60.00	* (74.25)	*
8	750 (720) / 50p	37.50	50.00	* (74.25)	*
9	1,125 (1,080) / 60p	67.50	60.00	* (148.5) *1	*
10	1,125 (1,080) / 60i	33.75	60.00	* (74.25) *1	*
11	1,125 (1,080) / 50p	56.26	50.00	* (148.5) *1	*
12	1,125 (1,080) / 50i	28.13	50.00	* (74.25) *1	*
13	1,125 (1,080) / 24sF	27.00	48.00	* (74.25) *2	
14	1,125 (1,080) / 30p	33.75	30.00	* (74.25) *1	
15	1,125 (1,080) / 25p	28.13	25.00	* (74.25) *1	
16	1,125 (1,080) / 24p	27.00	24.00	* (74.25) *1	*
17	1,250 (1,080) / 50i	31.25	50.00	* (74.25) *3	
18	2,048 × 1,080 / 24sF *7	27.00	48.00		
19	2,048 × 1,080 / 24p *7	27.00	24.00		
20	640 × 400 @70 Hz	31.46	70.07	* (25.17)	
21	640 × 480 @60 Hz	31.47	59.94	* (25.18) *6	*
22	640 × 480 @72 Hz	37.86	72.81	* (31.5)	
23	640 × 480 @75 Hz	37.50	75.00	* (31.5)	
24	640 × 480 @85 Hz	43.27	85.01	* (36.0)	
25	800 × 600 @56 Hz	35.16	56.25	* (36.0)	
26	800 × 600 @60 Hz	37.88	60.32	* (40.0)	*
27	800 × 600 @72 Hz	48.08	72.19	* (50.0)	
28	800 × 600 @75 Hz	46.88	75.00	* (49.5)	
29	800 × 600 @85 Hz	53.67	85.06	* (56.25)	
30	852 × 480 @60 Hz	31.47	59.94	* (33.54) *6	*
31	1,024 × 768 @50 Hz	39.55	50.00		*
32	1,024 × 768 @60 Hz	48.36	60.00	* (65.0)	*
33	1,024 × 768 @70 Hz	56.48	70.07	* (75.0)	
34	1,024 × 768 @75 Hz	60.02	75.03	* (78.75)	
35	1,024 × 768 @85 Hz	68.68	85.00	* (94.5)	
36	1,066 × 600 @60 Hz	37.64	59.94	* (53.0)	*
37	1,152 × 864 @60 Hz	53.70	60.00		*
38	1,152 × 864 @75 Hz	67.50	75.00	* (108.0)	
39	1,280 × 768 @60 Hz	47.70	60.00	* (80.14)	
40	1,280 × 960 @60 Hz	60.00	60.00	* (108.0)	
41	1,280 × 960 @85 Hz	85.94	85.00	* (148.5)	
42	1,280 × 1,024 @60 Hz	63.98	60.02	* (108.0)	*
43	1,280 × 1,024 @75 Hz	79.98	75.03	* (135.0)	
44	1,280 × 1,024 @85 Hz	91.15	85.02	* (157.5)	
45	1,366 × 768 @50 Hz	39.55	50.00		*
46	1,366 × 768 @60 Hz	48.36	60.00	* (86.71)	*
47	1,400 × 1,050 @60 Hz	65.22	60.00		*
48	1,600 × 1,200 @60 Hz	75.00	60.00	* (162.0)	*
49	1,600 × 1,200 @65 Hz	81.25	65.00	* (175.5)	
50	1,920 × 1,080 @60 Hz	67.50	60.00	* (148.5) *4	*
51	1,920 × 1,200 @60 Hz	74.04	59.95		*
52	Macintosh13” (640 × 480)	35.00	66.67	* (30.24)	
53	Macintosh16” (832 × 624)	49.72	74.54	* (57.28)	
54	Macintosh21” (1,152 × 870)	68.68	75.06	* (100.0)	

*1: Based on SMPTE 274M standard.
*2: Based on SMPTE RP211 standard.
*3: Based on SMPTE 295M standard.
*4: The input signal is recognized as 1,125 (1,080) / 60p.
*5: When selected the RGB format and 525p signal input to the PC IN terminal, it is recognized as VGA 60Hz signal.
*6: When inputted VGA 60Hz format signal from the other than PC IN terminal, it is recognized as 525p signal.
*7: Based on SMPTE 292M and 372M standards. These signals can be received when the Dual Link HD-SDI Terminal Board (TY-FB11DHD) or the Dual HD-SDI Terminal Board for 3D (TY-FB30DHD3D) is installed.

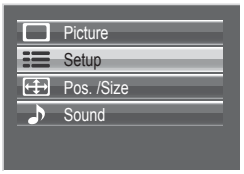
Note: Signals without above specification may not be displayed properly.

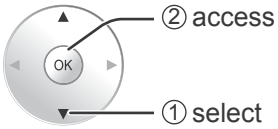
Shipping condition

This function allows you to reset the unit to the factory setting.

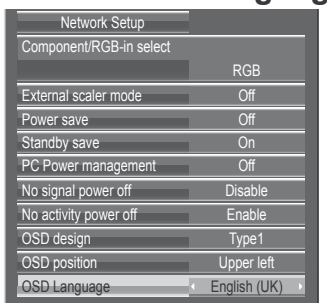
1 **Display the menu screen.**

2 **Select “Setup”.**



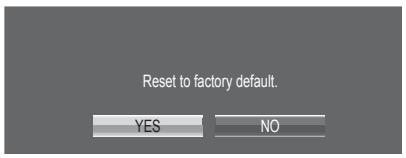


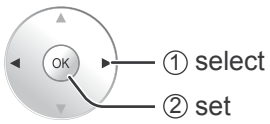
3 **Select “OSD Language”.**



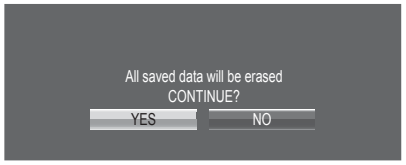
4 **Press (OK) for more than 5 seconds.**

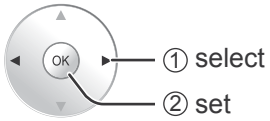
5 **Select “YES”.**



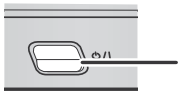


6 **Select “YES” and wait for 10 sec.**





7



Press the power switch (⏻/|) on main unit to turn the power off.

Note:
Press RETURN to return to Setup menu when confirmation screen is displayed.

[from the unit]
1 Press the MENU button till the Setup menu is displayed.
2 Press the ▲ or ▼ button to select “OSD Language”.
3 Press the ENTER button for more than 5 seconds.
4 Press the ▲ or ▼ button to select “YES”.
5 Press the ENTER button.
6 Press the ▲ or ▼ button to select “YES”.
7 Press the ENTER button and wait for 10 sec.
8 Press the power switch (⏻/|) on main unit to turn the power off.

Executing this function restores all settings and adjustment values in the following menus to the factory-set default values, as shipped.

On-screen menu: Picture, Advanced settings, Setup, Pos. /Size, Sound, Options
Unlocking profiles (Memory lock: Off, Password: 0123)

Specifications

Product Fiche				
	Manufacturer		Panasonic Corporation	
	Model No.		**TH-65VX300ER**	
	Energy efficiency class		D	
	Visible screen size (diagonal)		165 cm / 65 inches	
	On mode average power consumption		390 W	
	Annual energy consumption		569 kWh/year	
			Energy consumption XYZ kWh per year, based on the power consumption of the television operating 4 hours per day for 365 days. The actual energy consumption will depend on how the television is used.	
	Standby power consumption		0.50 W	
	Off mode power consumption		0.30 W	
	Display resolution		1,920 (W) × 1,080 (H)	
Power Source			220 - 240 V AC, 50/60 Hz	
Rated power consumption			450 W	
Standby power consumption			Save off 0.8 W, Save on 0.5 W	
Plasma Display panel			Drive method : AC type 65-inch, 16:9 aspect ratio	
	Screen size		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				
	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				
	LAN		RJ45 10BASE-T/100BASE-TX, compatible with PJLink™	
	AV IN	HDMI 1-2	TYPE A Connector × 2	
	COMPONENT/RGB IN			
		Y/G	RCA Pin jack	with sync 1.0 Vp-p (75 Ω)
		PB/CB/B	RCA Pin jack	0.7 Vp-p (75 Ω)
		PR/CR/R	RCA Pin jack	0.7 Vp-p (75 Ω)
		AUDIO L-R	RCA Pin jack × 2	0.5 Vrms
	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)
			VBS (use HD port)	with picture 1.0 Vp-p (high impedance) without picture 0.3 Vp-p (high impedance)
		AUDIO	Stereo mini jack (M3) × 1	0.5 Vrms
	SERIAL		External Control Terminal D-sub 9 Pin	RS-232C compatible
	3D IR TRANSMITTER		for 3D IR TRANSMITTER	
		3D SHUTTER OUT	M3 jack × 1	
		DC 8V OUT	Centre plus, for EIAJ 4mm plug	
	EXT SP		8 Ω, 20 W [10 W + 10 W] (10 % THD)	
Dimensions (W × H × D)			1,554 mm × 924 mm × 94 mm	
Mass (weight)				
	main unit only		approx. 60.0 kg net	
	with speakers		approx. 66.0 kg	

Notes:

- 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.
- Product fiche: Based on (EU) No.1062/2010 ANNEX III
- ENERGY LABEL attached on the back cover is only for European countries.

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.

<Software Information for This Product>

This product has software installed partially licensed under the Free BSD LICENSE.
Free BSD LICENSE regulations under the above specifications are as follows:
(These regulations are set by the third party; therefore the original (English) regulations are stated.)

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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

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