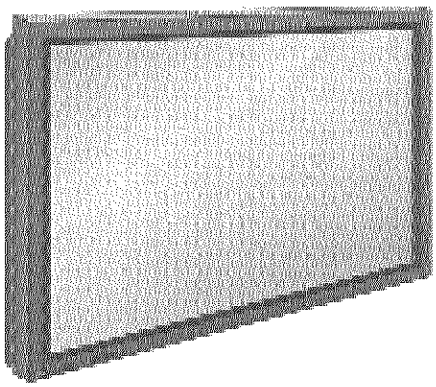
Panasonic

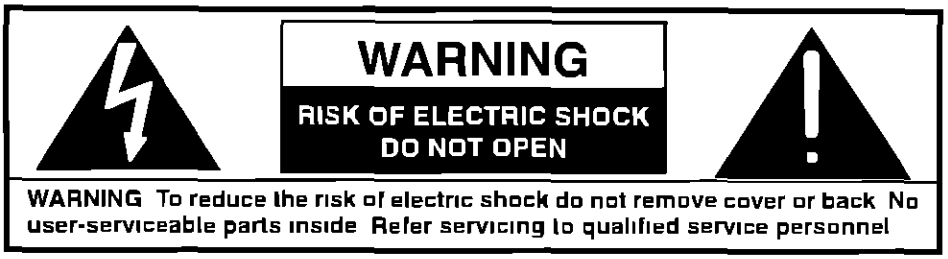


Wide Plasma Display
Operating Instructions

Model No. **TH-37PWD4**

Before connecting, operating or adjusting this product, please read these instructions completely. Please keep this manual for future reference.

English



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

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

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

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

Important Safety Instructions

1) Read these instructions
   All the safety and operating instructions should be read before the appliance is operated

2) Keep these instructions
   The safety and operating instructions should be retained for future reference

3) Heed all warnings
   All warnings on the appliance and in the operating instructions should be adhered to

4) Follow all instructions
   All operating and use instructions should be followed

5) Do not use this apparatus near water
   For example, near a bathtub, wash bowl, kitchen sink, or laundry tube, in a wet basement, or near a swimming pool, and the like

6) Clean only with dry cloth
   Do not use liquid cleaners or aerosol cleaners Use a dry cloth for cleaning

7) Do not block any ventilation openings Install in accordance with the manufacture's instructions
   Slots and Openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface

8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat
   This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to

9) Do not defeat the safety purpose of the polarized or grounding-type plug A polarized plug has two blades with one wider than the other A grounding type plug has two blades and a third grounding prong The wide blade or the third prong are provided for your safety If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet

10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus

11) Only use attachments / accessories specified by the Manufacturer

12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over
    Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn

13) Unplug this apparatus during lightning storms or when unused for long periods of time
    This will prevent damage to the product due to lightning and power-line surges

14) Refer all servicing to qualified service personnel Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped

15) To prevent electric shock, ensure the grounding pin on the AC cord power plug is securely connected

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

Note:
Do not allow a still picture to be displayed for an extended period, as this can cause a permanent after-image to remain on the Plasma Display
Examples of still pictures include logos, video games, computer images, teletext and images displayed in 4 3 mode

Trademark Credits
- VGA is a trademark of International Business Machines Corporation
- S-VGA is a registered trademark 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

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FCC STATEMENT

FCC STATEMENT

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

FCC CAUTION
Pursuant to 47CFR, Part 15 21 of the FCC rules, any changes or modifications to this monitor not expressly approved by Matsushita Electric Corporation of America could cause harmful interference and would void the user's authority to operate this device

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

FCC CAUTION:
To assure continued compliance and possible undesirable interference, the provided ferrite cores must be used when connecting this plasma display to video equipment, and maintain at least 40cm spacing to other peripheral devices Refer to instructions on pages 16, and 17.

Safety Precautions

WARNING

Set up

Do not place the Plasma Display on sloped or unstable surfaces

- The Plasma Display may fall off or tip over

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

- If water 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 an Authorized Service Center

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

If using the pedestal (optional accessory), leave a space of 3 15/16" (10 cm) or more at the top, left and right, 2 3/8" (6 cm) or more at the bottom, and 2 3/4" (7 cm) or more at the rear If using some other setting-up method, leave a space of 3 15/16" (10 cm) or more at the top, bottom, left and right, and 3/4" (1 9 cm) or more at the rear

Avoid installing this product near electronic equipment that generates electromagnetic waves

- It will cause interference in image, sound, etc In particular, keep video equipment away from this product

AC Power Supply Cord

The Plasma Display is designed to operate on 120 V AC, 50/60 Hz

Securely insert the power cord 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 plate is loose, they should not be used

Do not handle the power cord plug with wet hands.

- Doing so may cause electric shocks

Do not do anything that might damage the power cable When disconnecting the power cable, hold the plug, not the cable

- Do not make any modifications, place heavy objects on, place near hot objects, heat, bend, twist or forcefully pull the power cable Doing so may cause damages to the power cable which can cause fire or electric shock If damage to the cable is suspected, have it repaired at an Authorized Service Center

If the Plasma Display is not in use for a long period of time, unplug the power cord from the wall outlet

If problems occur during use

If a problem occurs (such as no picture or no sound), or if smoke or an abnormal odor is detected from the Plasma Display, unplug the power cord immediately

- Continuous use of the Display under these conditions might cause fire or permanent damage to the unit Have the Display evaluated at an Authorized Service Center Services to the Display by any unauthorized personnel are strongly discouraged due to its high voltage dangerous nature

If water or foreign objects get inside the Plasma Display, if the Plasma Display is dropped, or if the cabinet becomes damaged, disconnect the power cord plug immediately

- A short may occur, which could cause fire Contact an Authorized Service Center for any repairs that need to be made

⚠ CAUTION

This Plasma Display is for use only with the following optional accessories. Use with any other type of optional accessories may cause instability which could result in the possibility of injury

(All of the following accessories are manufactured by Matsushita Electric Industrial Co , Ltd)

• Speakers	TY-SP37P4W-K
• Pedestal	TY-ST42PT3-K
• Wall stand	TY-ST42PW1
• Wall-hanging bracket (vertical)	TY-WK37PV3
• Ceiling unit	TY-CE42PS1
• Terminal cover	TY-UPS200

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

When using the Plasma Display

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

- Top of the Plasma Display is usually very hot due to the high temperature of exhaust air being released through the ventilation holes Burns or personal injuries can happen if any body parts are brought too close Placing any object near the top of the display could also result in heat damages to the object as well as to the Display if its ventilation holes are blocked

Be sure to disconnect all cables before moving the Plasma Display

- Moving the Display with its cables attached might damage the cables which, in turn, can cause fire or electric shock

Disconnect the power plug from the wall outlet 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 from becoming dusty

- Built-up dust on the power cord plug can increase humidity which might damage the insulation and cause fire Unplug the cord from the wall outlet and clean it with a dry cloth

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, soak a soft, lint-free cloth in a weak detergent solution and then wring the cloth to remove excess liquid Use this cloth to wipe the surface of the display panel, 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 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 a weak detergent solution 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

Note:

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

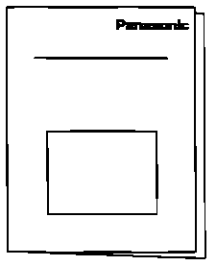
Examples of still pictures include logos, video games, computer images, teletext and images displayed in 4 3 mode

Accessories

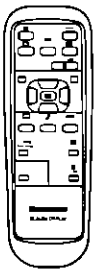
Accessories Supplied

Check that you have the Accessories and items shown ☑

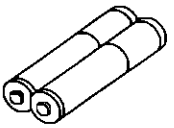
☐ Operating Instruction book



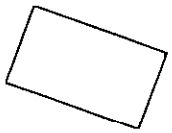
☐ Remote Control Transmitter
EUR646525



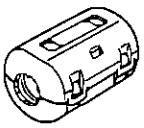
☐ Batteries for the Remote Control Transmitter
(AA(R6) Battery x 2)



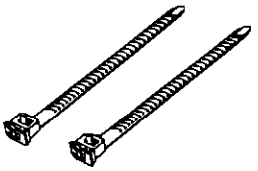
☐ Warranty



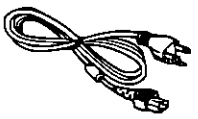
☐ Ferrite core
J0KF00000018 x 2



☐ Fixing bands
TMME187 x 2

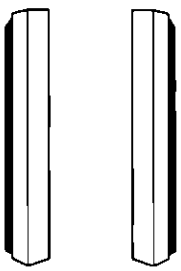


☐ AC cord



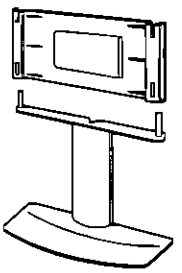
Optional Accessories

- Speakers
  TY-SP37P4W-K

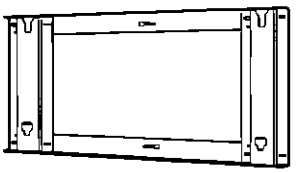


- Pedestal
  TY-ST42PT3-K

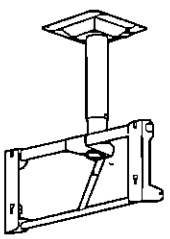
- Wall stand
  TY-ST42PW1



- Wall-hanging bracket (vertical)
  TY-WK37PV3



- Ceiling unit
  TY-CE42PS1



- Terminal cover
  TY-UPS200

For assembling
Full instructions are supplied with each optional accessories for use with this Plasma Display

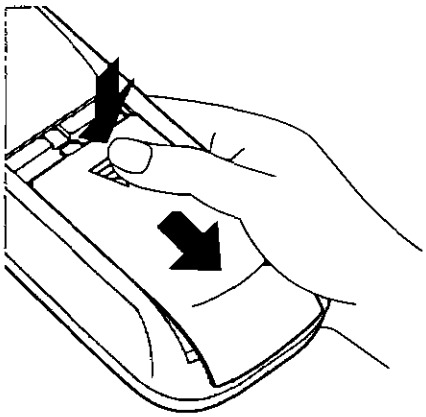
Remote Control Batteries

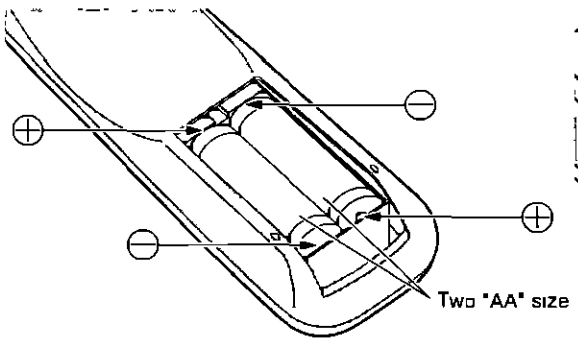
Requires two AA batteries

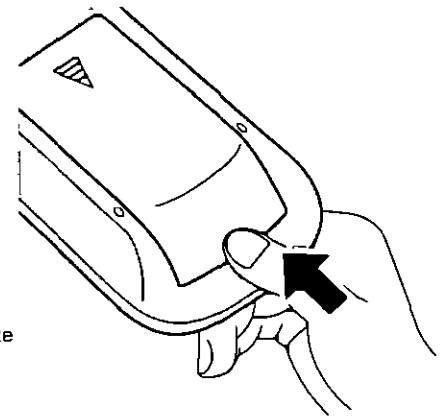
1 Turn the transmitter face down Press and slide off the battery cover

2 Install the batteries as shown in the battery compartment (Polarity + or – must match the markings in the compartment)

3 Replace the cove and slide in reverse until the lock snaps







Helpful Hint:
For frequent remote control users, replace old batteries with Alkaline batteries for longer life

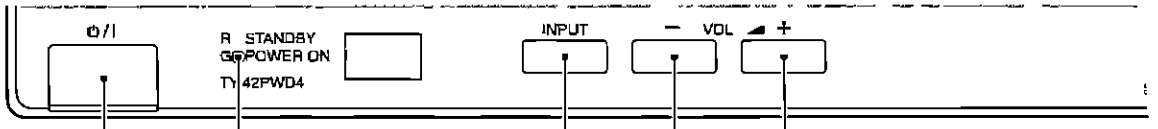
⚠ Precaution on battery use

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

Observe the following precautions.

1 Batteries should 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 the remote control acts sporadically or stops operating the Plasma Display

Basic Controls



Main Power On/Off Switch

Power Indicator

The Power Indicator will light

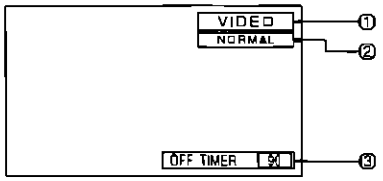
- Power-OFF Indicator not illuminated (The unit will still consume some power as long as the power cord is still inserted into the wall outlet)
- Stand-by ⏻ Red
- Power-ON Green

Input button (VIDEO (S VIDEO)/COMPONENT, RGB/PC Mode Selection)
Push the "INPUT" button to select VIDEO(S VIDEO)/COMPONENT or RGB/PC input signal modes sequentially

Volume Adjustment
Push the Volume Up "+" or Down "–" button to increase or decrease the sound volume level

Stand-by (ON/OFF) button
The Plasma Display must first be plugged into the wall outlet and turned on at the power switch (see page 18) Push this button to turn the Plasma Display ON, from STANDBY mode Push it again to turn the Plasma Display OFF to STANDBY mode

Status button
Push the "Status" button to display the current system status



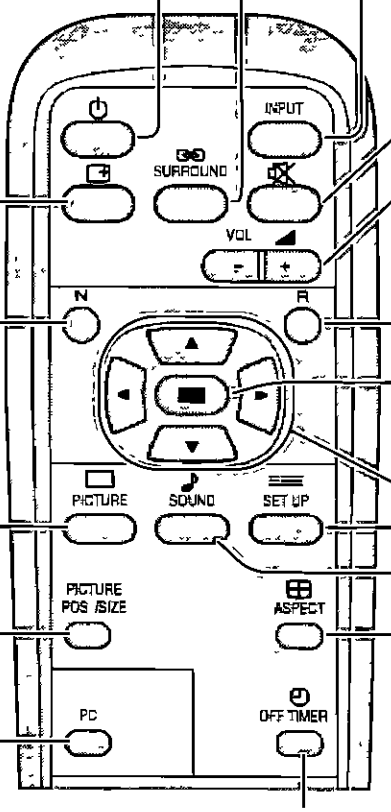
① VIDEO(S VIDEO)/COMPONENT, RGB/PC mode
② Aspect mode (see page 22)
③ Off timer
The off timer indicator is displayed only when the off timer has been set

N button
(see page 25, 26, 28, 29)

PICTURE button
(see page 28)

PICTURE POS./SIZE button
(see page 24)

PC button
Push the "PC" mode selection button to select the PC mode This button is used to switch directly to PC mode



SURROUND button
(see page 27)

Input button (VIDEO(S VIDEO)/COMPONENT, RGB/PC Mode Selection)
Press to select VIDEO(S VIDEO)/ COMPONENT or RGB/PC input signal modes sequentially (see page 19)

Sound mute On/Off (see page 26)

Volume Adjustment
Press the Volume Up "+" or Down "–" button to increase or decrease the sound volume level

R button (see page 21)

ACTION button
Press to make selections

POSITION buttons

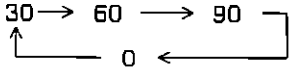
SET UP button (see page 20)

SOUND button (see page 26)

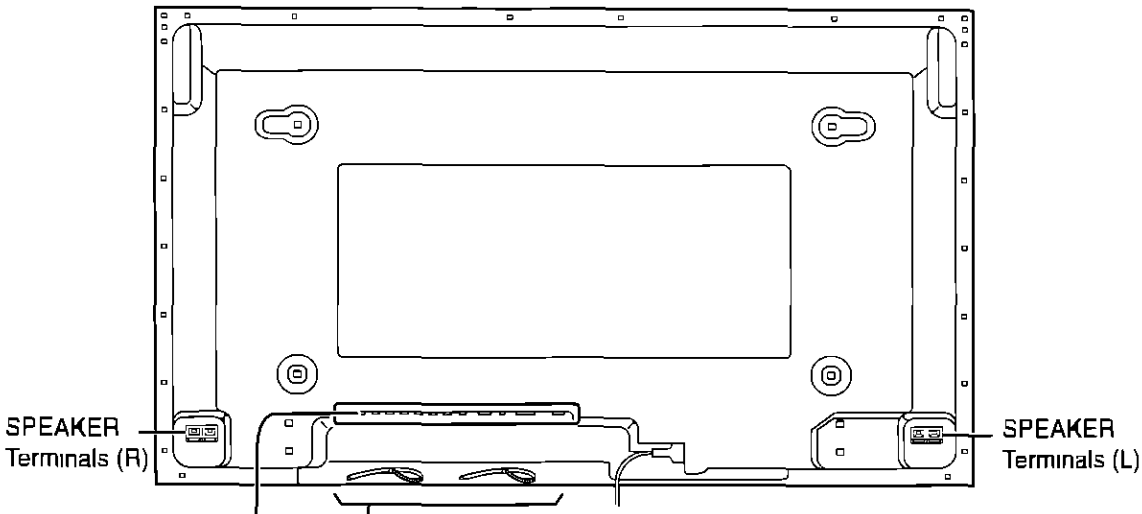
ASPECT button
Press to adjust the aspect (see page 22)

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

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



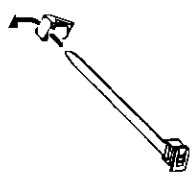
Connections



– Cable fixing bands

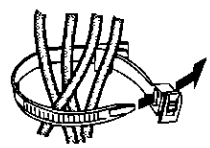
Secure any excess cables with bands, as required

Pass the attached cable fixing band through the clip as shown in the figure



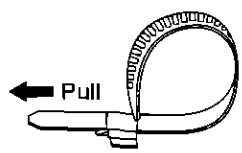
1

To secure cables connected to Terminals, wrap the cable fixing band around them then pass the pointed end through the locking block, as shown in the figure

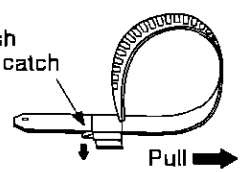


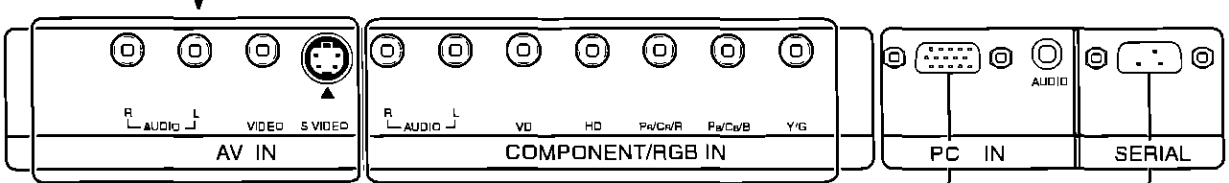
2

To tighten



To loosen





AV IN Terminals (see page 13, 14)

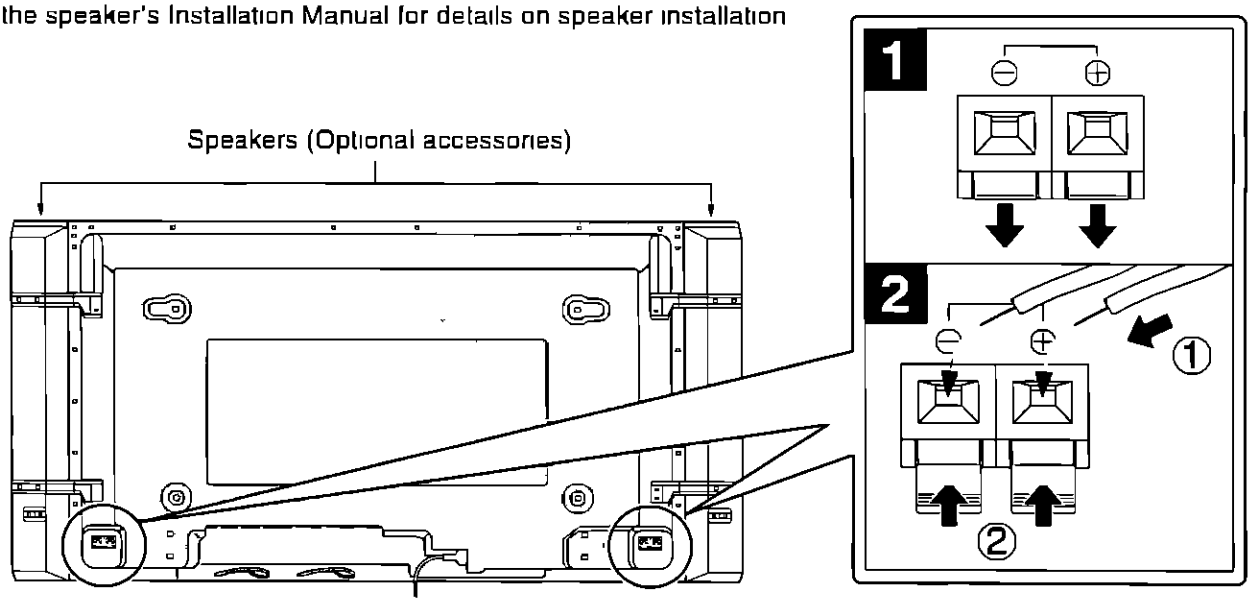
COMPONENT/RGB IN and Audio IN Terminals (see page 15)

From EXIT monitor Terminal on Computer (see page 16)

From SERIAL Terminal on Computer (see page 17)

Speakers connection

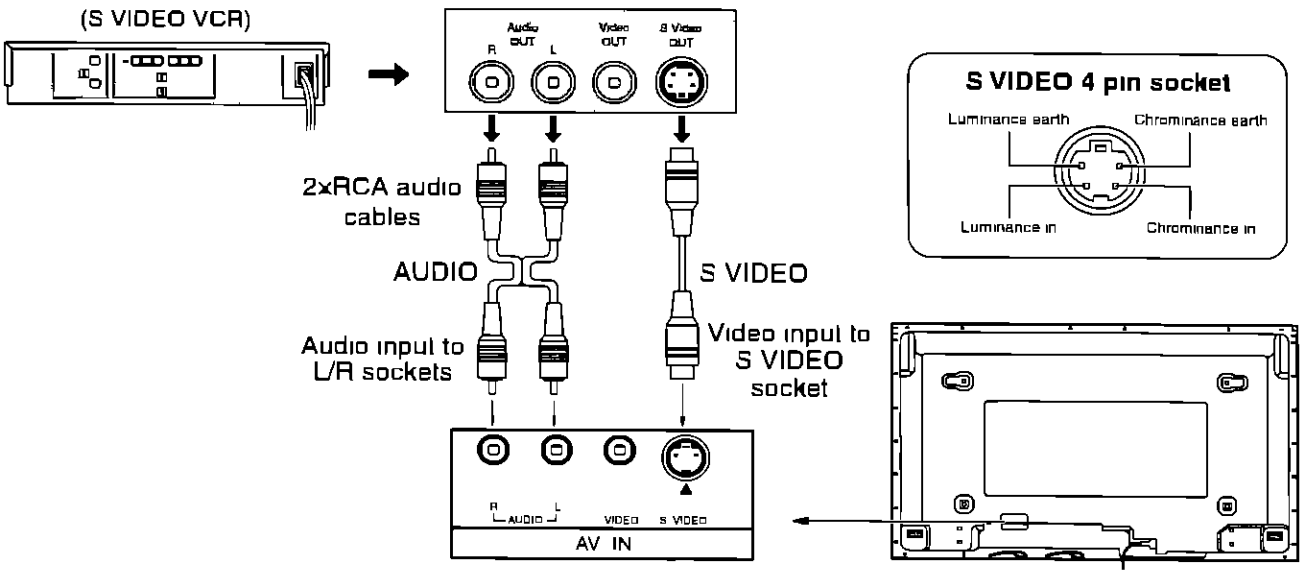
When connecting the speakers, be sure to use only the optional accessory speakers
Refer to the speaker's Installation Manual for details on speaker installation



AV Input Terminals connection

Connect the signal source equipment (see page 14 to 17)

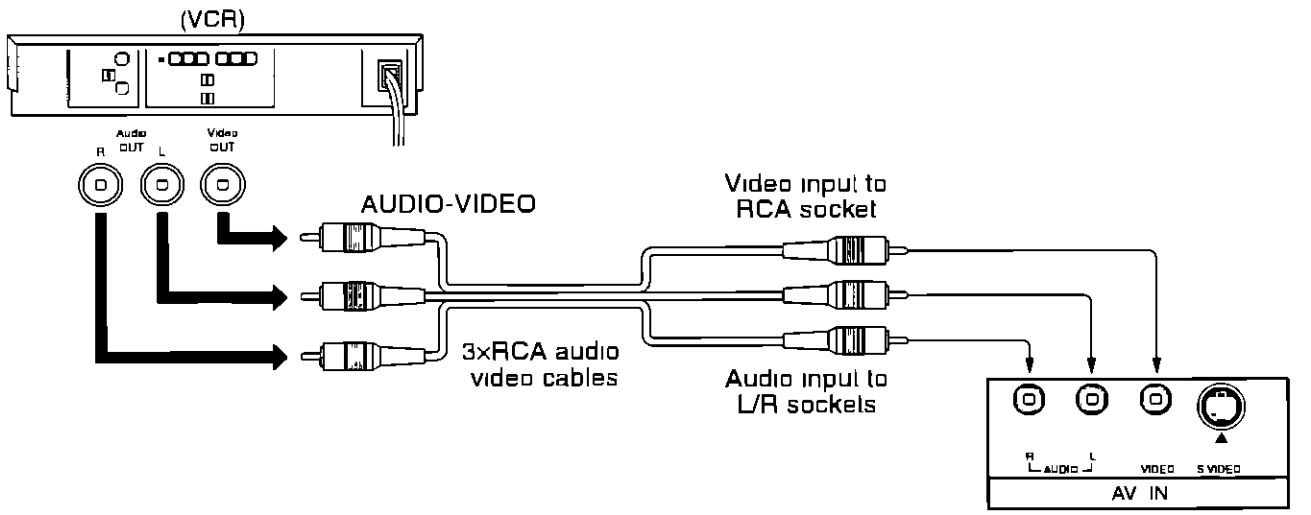
(Example) When connecting an S VIDEO VCR



Note:
Additional equipment and cables shown are not supplied with this set

AV Input connection

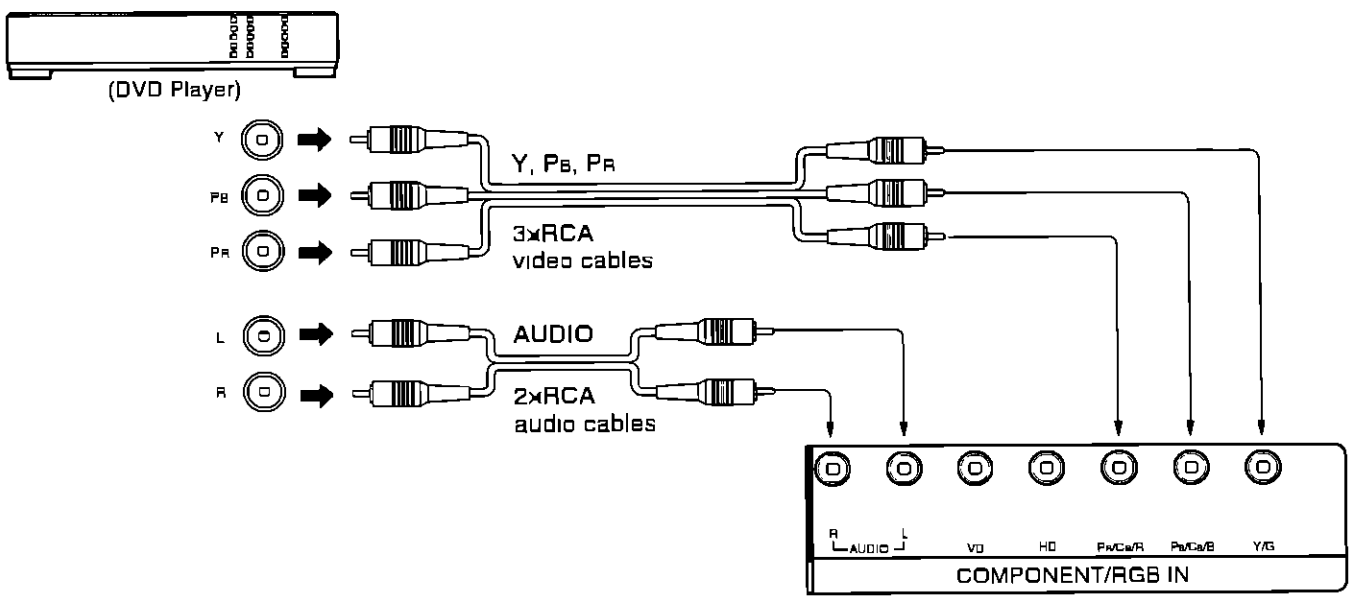
VIDEO signal connection



Note:
Additional equipment and cables shown are not supplied with this set

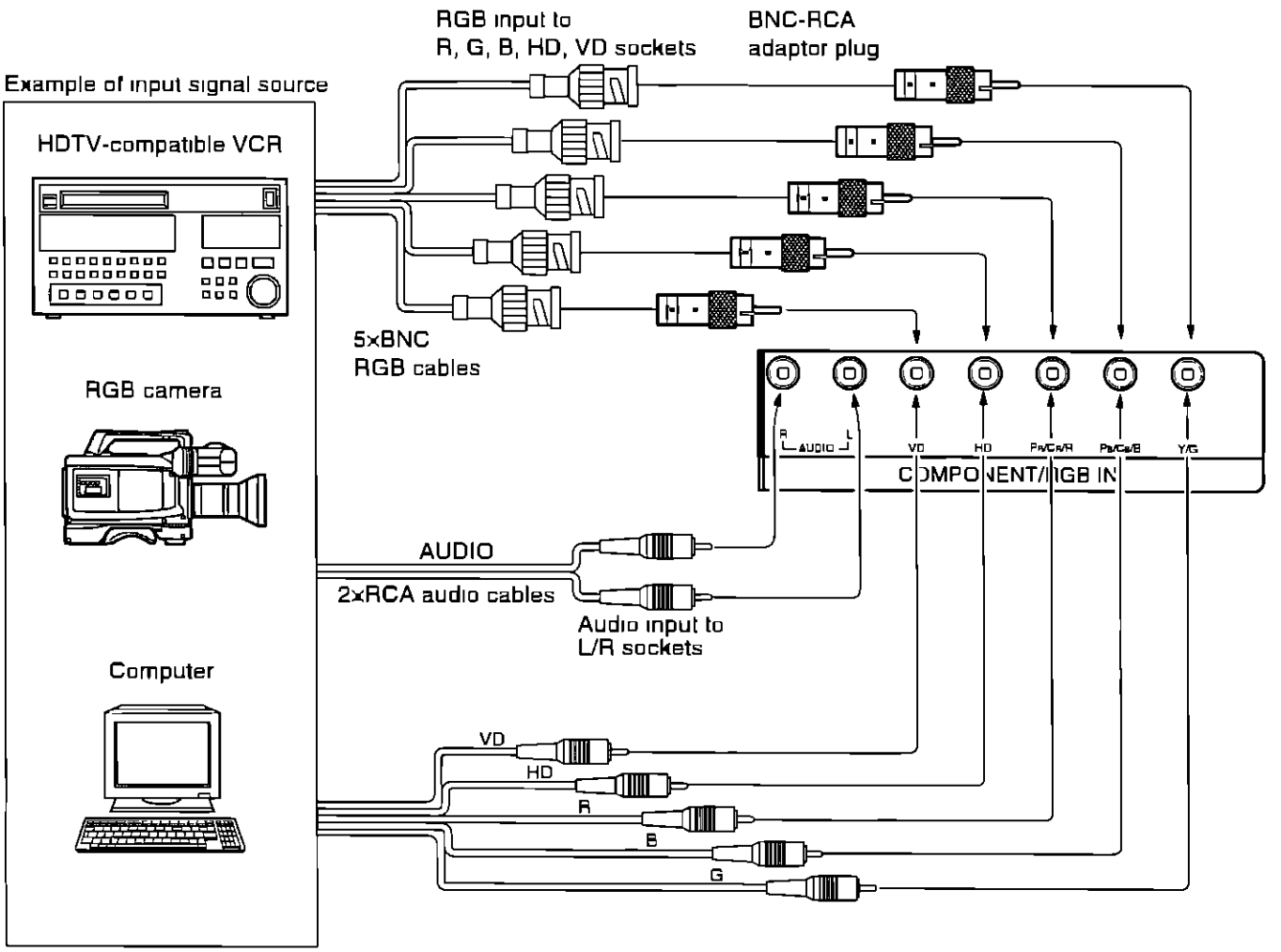
COMPONENT/RGB Input connection

Component signals (Y, P_B, P_R) connection



Notes.
(1) Change the "COMPONENT/RGB-IN" setting in the "SET UP" menu to "COMPONENT" (see page 37, 39)
(2) Additional equipment, cables and adaptor plugs shown are not supplied with this set

RGB signal (R, G, B, HD, VD) connection

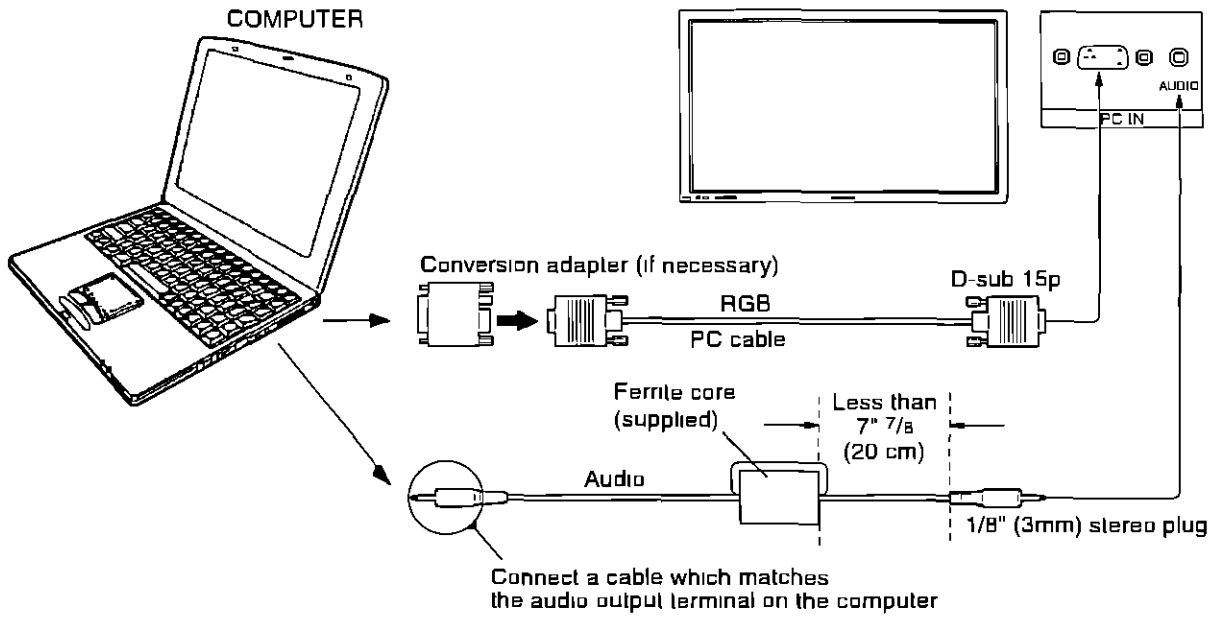


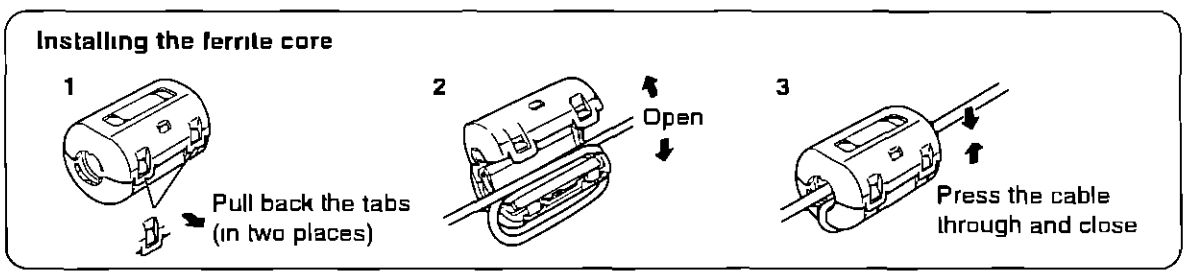
Notes

(1) Change the "COMPONENT/RGB-IN" setting in the "SET UP" menu to "RGB" (see page 37, 39)

(2) Additional equipment, cables and adaptor plugs shown are not supplied with this set

PC Input connection

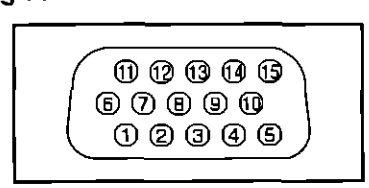




Notes

(1) Computer signals which can be input are those with a horizontal scanning frequency of 15 5 to 110 kHz and vertical scanning frequency of 48 to 120 Hz (However, signals cannot be displayed if signals exceeding 1200 lines will not be displayed properly)
(2) The display resolution is a maximum of 640 × 480 dots when the aspect mode is set to "NORMAL", and 852 × 480 dots when the aspect mode is set to "FULL" If the display resolution exceeds these maximums, it may not be possible to show fine detail with sufficient clarity
(3) The PC input terminals are DDC1/2B-compatible If the computer being connected is not DDC1/2B-compatible, you will need to make setting changes to the computer at the time of connection
(4) Some PC models cannot be connected to the set
(5) There is no need to use an adapter for computers with DOS/V compatible D-sub 15P terminal
(6) The computer shown in the illustration is for example purposes only
(7) Additional equipment and cables shown are not supplied with this set
(8) Do not set the horizontal and vertical scanning frequencies for PC signals which are above or below the specified frequency range

Signal Names for D-sub 15P Connector

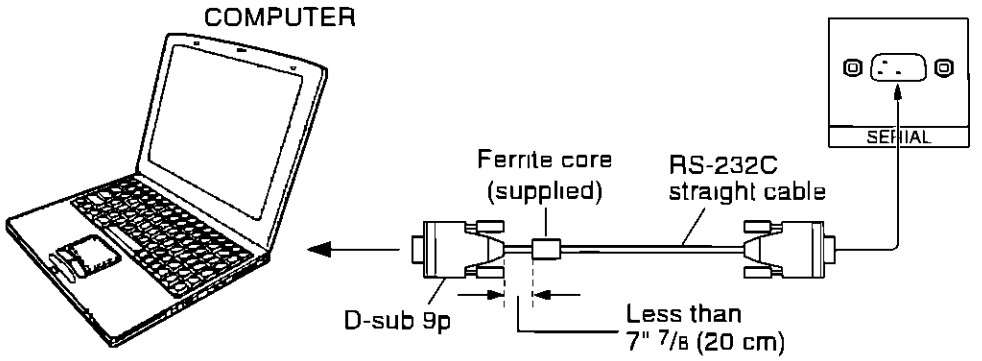


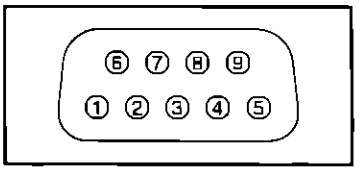
Pin layout for PC input terminal

Pin No	Signal Name	Pin No	Signal Name	Pin No	Signal Name
①	R	⑥	GND (Ground)	⑪	GND (Ground)
②	G	⑦	GND (Ground)	⑫	SDA
③	B	⑧	GND (Ground)	⑬	HD/SYNC
④	GND (Ground)	⑨	NC (not connected)	⑭	VD
⑤	GND (Ground)	⑩	GND (Ground)	⑮	SCL

SERIAL Terminals connection

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





Pin layout for RS-232C

Notes

(1) Use the RS-232C cable to connect the computer to the Plasma Display
(2) The computers shown is for example purposes only
(3) 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 a programming language to software Refer to the documentation for the computer application for details

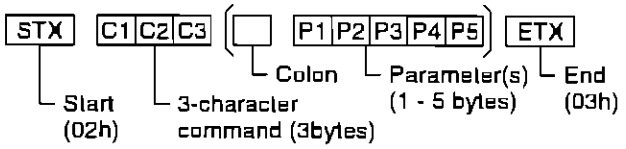
Communication parameters

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

RS-232C Conversion cable	
D-sub 9-pin female	Details
②	R X D
③	T X D
⑤	GND
④ - ⑥	Non use
⑦ ⑧	Shorted
① - ⑨	NC

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



Note

(1) 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
(2) If an incorrect command is sent by mistake, this unit will send an "ER401" command back to the computer

Command

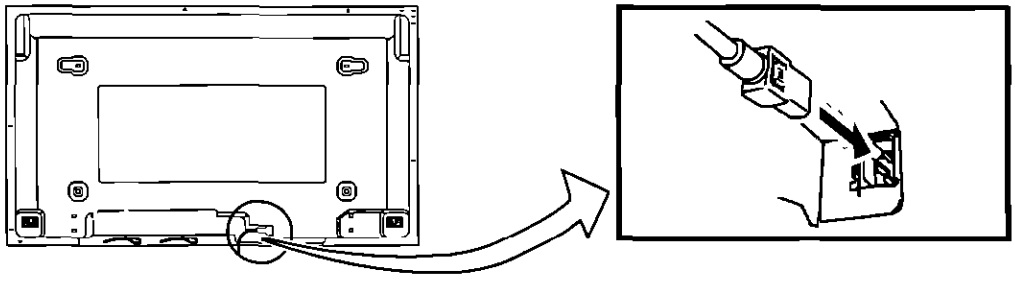
Command	Parameter	Control details
PON	None	Power ON
POF	None	Power OFF
AVL	**	Volume 00 – 63
AMT	0	Audio MUTE OFF
	1	Audio MUTE ON
IIS	None	Input select (toggle)
	VID	AV Mode
	YP1	Component / RGB mode (processed as a Y/PB/PR or RGB signals as set by this unit)
	RG1	PC mode
DAM	None	Screen mode select (toggle)
	NORM	NORMAL (4 3)
	ZOOM	ZOOM
	FULL	FULL
	JUST	JUST
	SELF	Panasonic AUTO

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

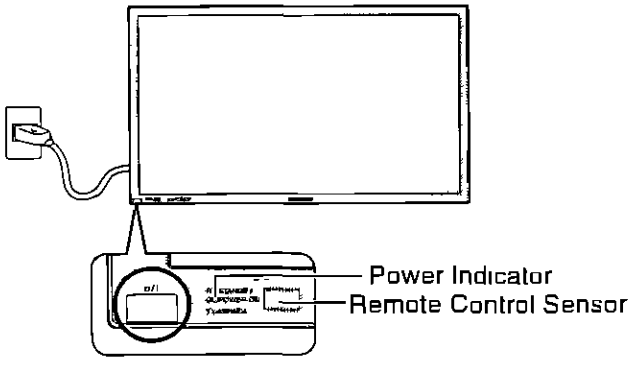
Power ON/OFF and Input Signal Selection

AC cord connection

Connecting the AC cord plug to the Plasma Display



Power ON/OFF



Connecting the plug to the Wall Outlet

Push the POWER switch on the Plasma Display to turn the set on POWER-ON

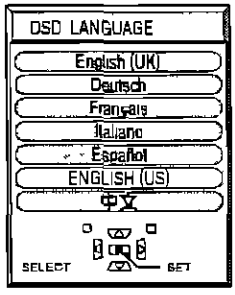
Power Indicator Green

Example The screen below is displayed for a while after the Plasma Display is turned on (setting condition is an example)

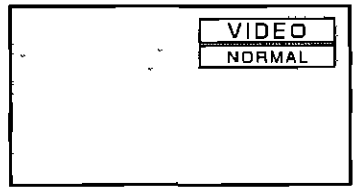
When the POWER is turned on for the first time, the LANGUAGE selection screen is displayed

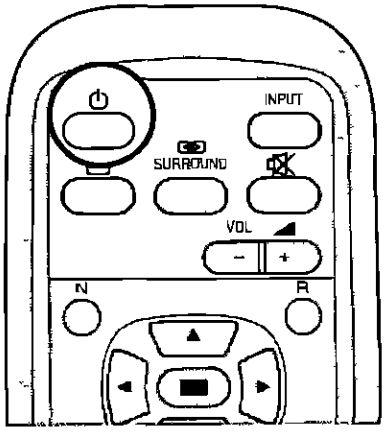
From the second time on, language selection can be done from the setup menu (see page 19)

Select the desired language using the ▲ and ▼ keys and press the ACTION ⊜ button



From the second time on, the screen shown below is displayed for a while (setting condition is an example)





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

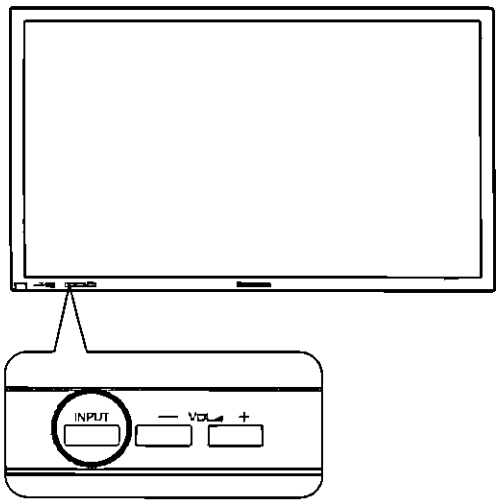
Power Indicator Red (standby)

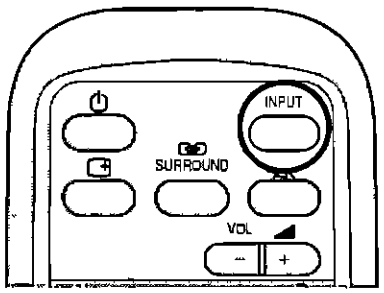
Press the ⏻ button on the remote control to turn the Plasma Display on

Power Indicator Green

To turn the power for the Plasma Display off, press the ⏻ switch on the Plasma Display, when the Plasma Display is on or in standby mode

Select the Input Signal





Press the INPUT button to select the input video signal desired from equipment such as a VCR which has been connected to the Plasma Display

Input signals will change as follows

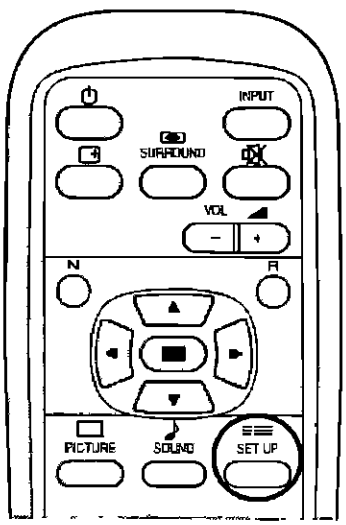
For COMPONENT INPUT (see page 37)

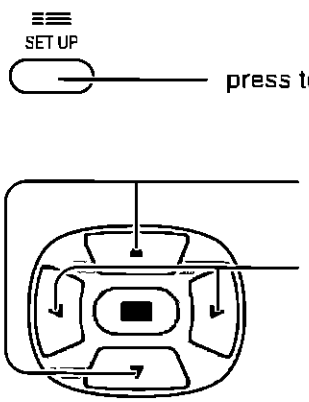
→ VIDEO ⟶ COMPONENT ⟶ PC →

For RGB INPUT (see page 37)

→ VIDEO ⟶ RGB ⟶ PC →

Selecting the On-Screen Menu Language





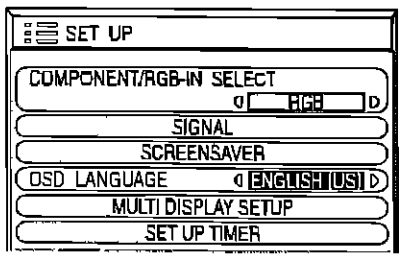
press to display the SET UP menu

press to select OSD LANGUAGE

press to select your preferred language

selectable languages

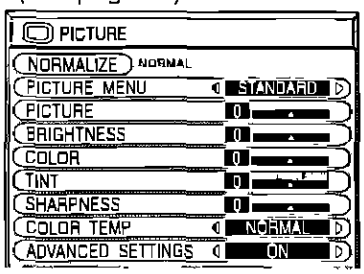
English(UK)
Deutsch
Français
Italiano
Español
ENGLISH(US)
中文



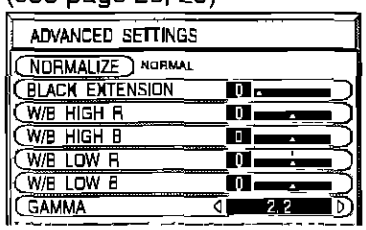
(Chinese)

On-Screen Menu Display from Remote Control

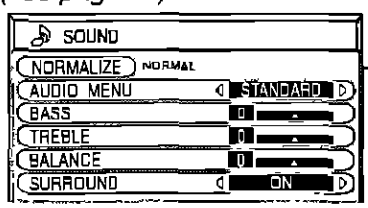
To PICTURE adjust menu
(see page 28)



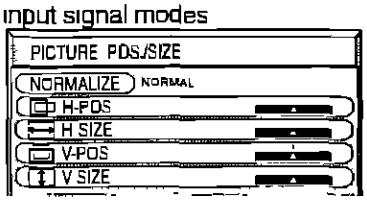
To ADVANCED SETTINGS
(see page 28, 29)



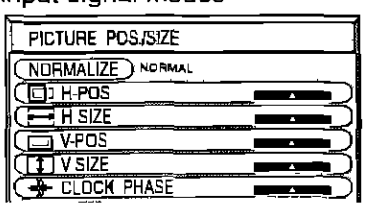
To SOUND adjust menu
(see page 26)

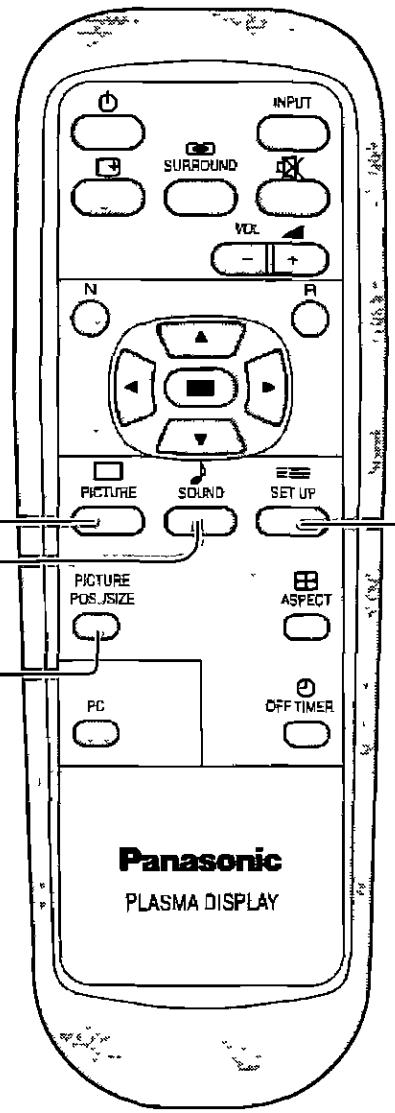


To PICTURE POS /SIZE adjust menu (see page 24)
During "VIDEO" and "COMPONENT" input signal modes

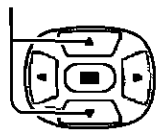


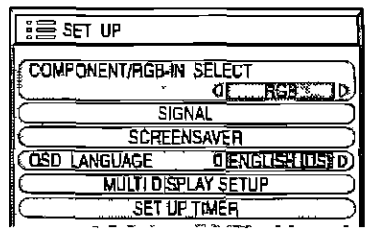
During "RGB" and "PC" input signal modes

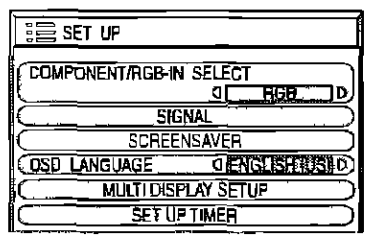


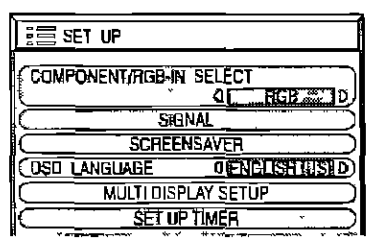


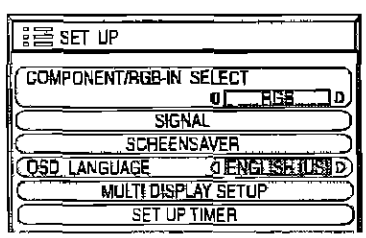
Press to select each item

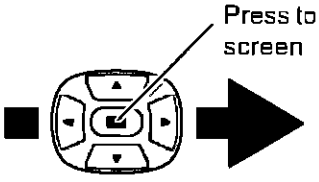


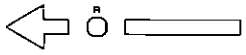






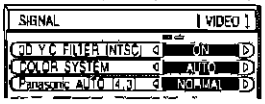




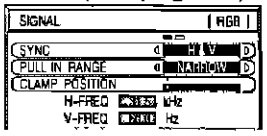


Press the R buttun to return to "SET UP" menu

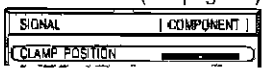
To SIGNAL screen for VIDEO (see page 38)



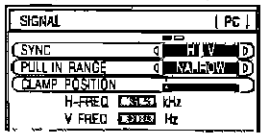
To SIGNAL screen for RGB (see page 39)



To SIGNAL screen for COMPONENT (see page 39)



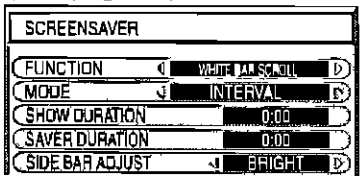
To SIGNAL screen for PC (see page 39)

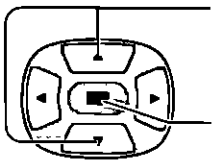


Note

"SIGNAL" setup menu displays different setting condition for each input signals (see page 19)

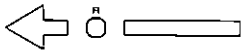
To setup SCREENSAVER (See page 34)



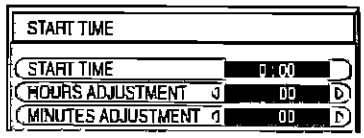


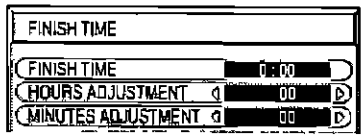
Press to select each TIME adjust screen

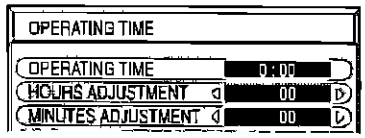
Press to display each adjust screen



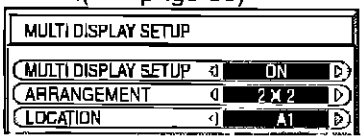
Press the R buttun to return to "SCREENSAVER" menu

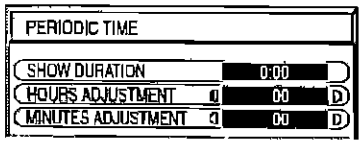




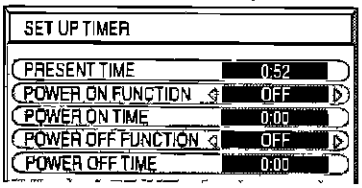


To setup MULTIDISPLAY screen(see page 30)

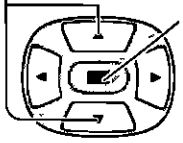




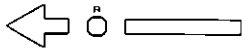
To SET UP TIMER selection screen (see page 32)



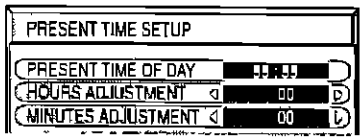
Press to select each TIMER adjustment items

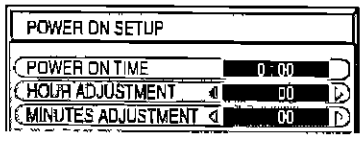


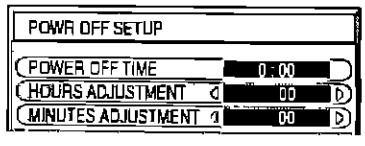
When select TIMER adjustment item, press this button to SET UP TIMER screen



Press the R buttun to return to "SET UP" menu

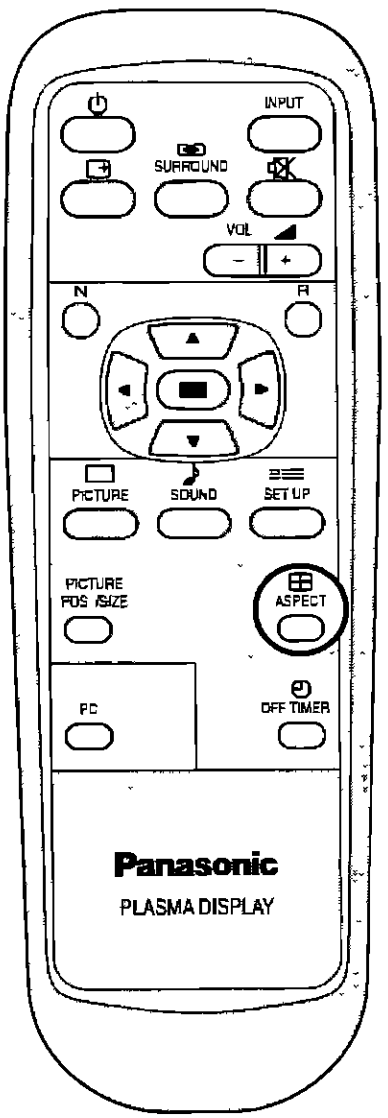




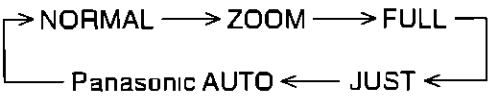


ASPECT Controls

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

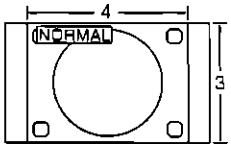
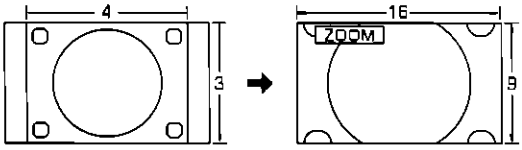
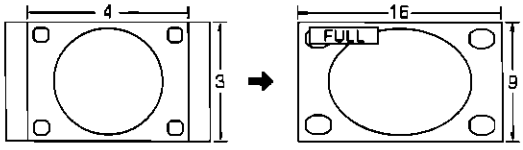
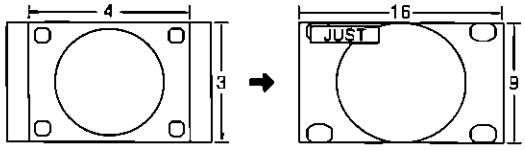
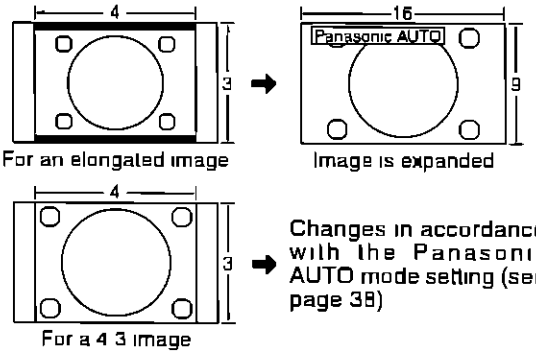


ASPECT button
The aspect mode changes each time the ASPECT button is pressed



Notes

(1) During RGB and PC input signal modes, the mode switches between "NORMAL", "ZOOM" and "FULL" only
(2) For a 525p (480p) signal input during "COMPONENT" input signal mode, the mode switches between "ZOOM" and "FULL" only
(3) For a 1125i (1080i), 750p (720p) signal input during "COMPONENT" input signal mode, the mode is set to "FULL" mode, and switching is not possible
For a 525i (480i), 625i (576i) signal input during "Component" input signal mode, "Panasonic Auto" can not be selected
(4) The aspect mode is memorized separately for each input terminal (VIDEO, COMPONENT, RGB and PC)

Mode	Picture	Explanation
NORMAL		NORMAL will display a 4 3 picture at its standard 4 3 size
ZOOM		ZOOM mode magnifies the central section of the picture
FULL		FULL will display the picture at its maximum size but with sight elongation
JUST		JUST mode will display a 4 3 picture at its maximum size but with aspect correction applied to the center of the screen so that elongation is only apparent at the left and right edges of the screen The size of the picture will depend on the original signal
Panasonic AUTO	 Changes in accordance with the Panasonic AUTO mode setting (see page 38)	The display will automatically become enlarged (depending on the picture source), allowing you to view the picture at its maximum size **Note** Panasonic AUTO mode is designed to automatically adjust the aspect ratio to handle a mix of 16 9 and 4 3 program material Certain 4 3 program material, such as stock market data screens, may occasionally cause the image size to change unexpectedly When viewing such programs, it is recommended that the ASPECT be set to NORMAL

Notes

(1) Do not allow 4 3 mode to be displayed for an extended period, as this can cause a permanent after-image to remain on the Plasma Display Panel

(2) The S VIDEO terminal on this set can detect specially encoded signals that are compatible with a wide screen monitor When a full image from the S VIDEO terminal of specially encoded video is detected by the set, the screen size is automatically set to FULL mode

Adjusting PICTURE POS./SIZE

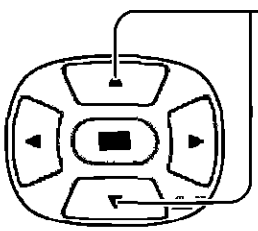
Adjusting screen

1 ASPECT

Press to select the screen mode to adjust

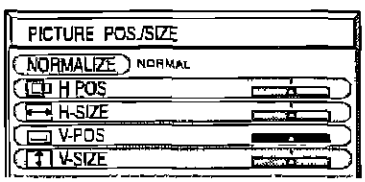
2 PICTURE POS /SIZE

Press to display the PICTURE POS / SIZE menu

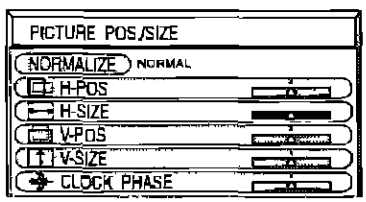


Press to select H-POS/H-SIZE/V-POS/ V-SIZE/CLOCK PHASE

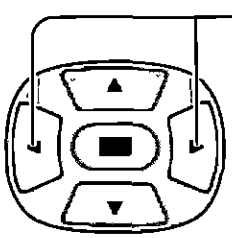
During "VIDEO" and "COMPONENT" input signal modes



During "RGB" and "PC" input signal modes



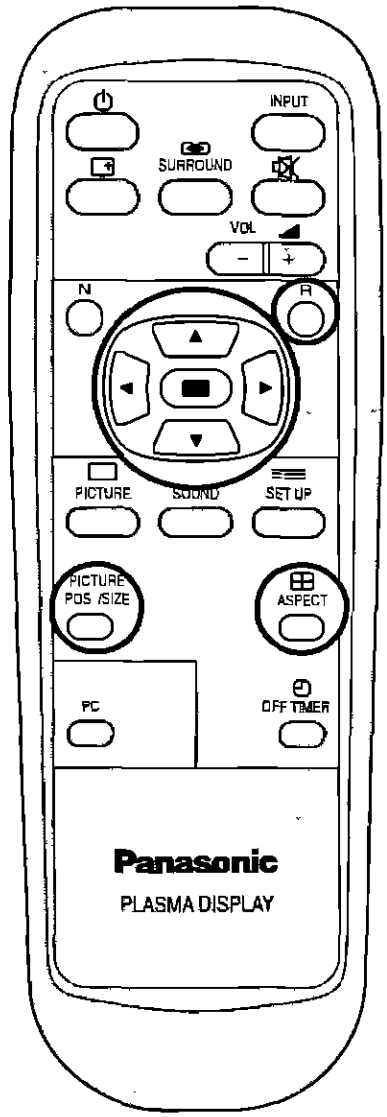
3



Press to adjust screen/position

R

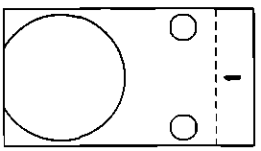
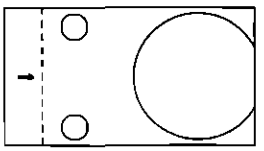
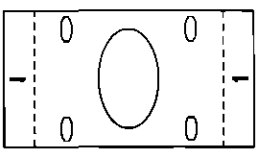
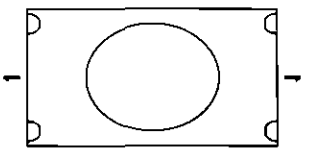
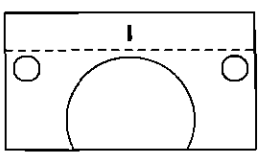
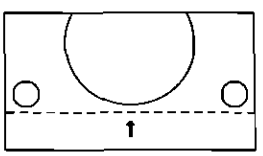
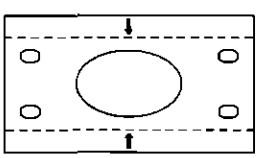
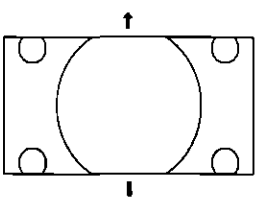
Press to exit from adjust mode



Notes

(1) Adjustment details are memorized separately for different input signal formats (Adjustments for component signals are memorized for 525i (480i), 625i (576i), 525p (480p), 1125i (1080i) and 625p (576p), 750p (720p) each, and RGB/PC signals are memorized for each frequency)

(2) 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

H-POS	When the Position Left "◄" button is pressed 	When the Position Right "►" button is pressed 
H-SIZE	When the Position Left "◄" button is pressed 	When the Position Right "►" button is pressed 
V-POS	When the Position Left "◄" button is pressed 	When the Position Right "►" button is pressed 
V-SIZE	When the Position Left "◄" button is pressed 	When the Position Right "►" button is pressed 
CLOCK PHASE (RGB/PC in Mode)	Flickering and distortion can be eliminated by using the Position Left "◄" or Right "►" button to carry out adjustment	

Helpful Hint (N / NORMALIZE Normalization)

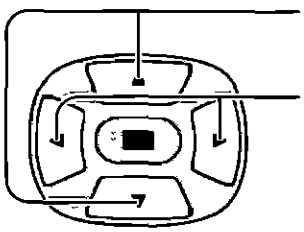
While the PICTURE POS /SIZE display is active, if either the N button on the remote control is pressed at any time or the ⊜ (ACTION button) is pressed during "NORMALIZE", then all adjustment values are returned to the factory settings

SOUND Adjustment

1 SOUND

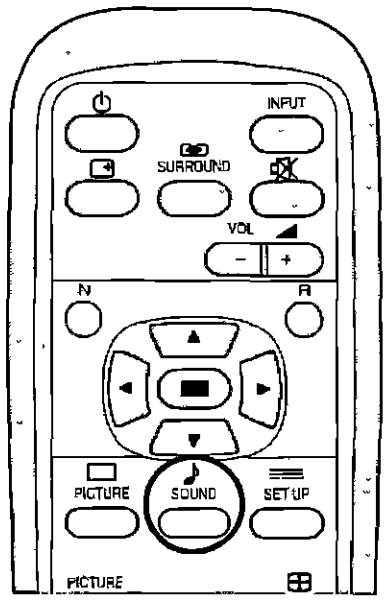
Press to display the Sound menu

2 Select to adjust each item



Press to select the desired adjustment menu

Select the desired level by listening to the sound

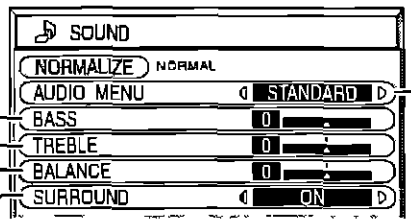


BASS
Adjusts low sounds

TREBLE
Adjusts high sounds

BALANCE
Adjusts left and right volumes

SURROUND (see next page)
Select ON or OFF



STANDARD — Emits the original sound

AUTO — Automatically controls proper volume level

- To end adjustments

R

Press the R button

Note
Press the SURROUND button to directly turn the surround effect ON and OFF (see next page)

Helpful Hint (N / NORMALIZE Normalization)

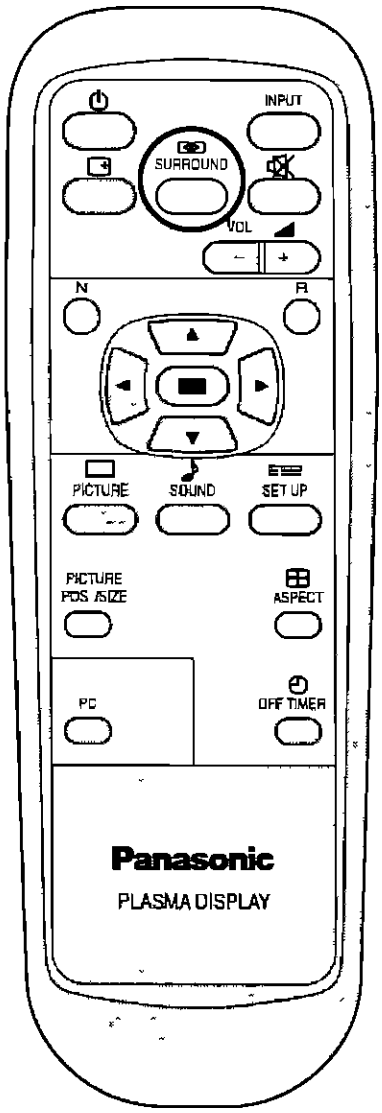
While the "SOUND" menu is displayed, if either the N button on the remote control is pressed at any time or the ⊡ (ACTION button) is pressed during "NORMALIZE", then all adjustment values are returned to the factory settings

Mute

Useful when answering the phone or receiving unexpected visitors

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

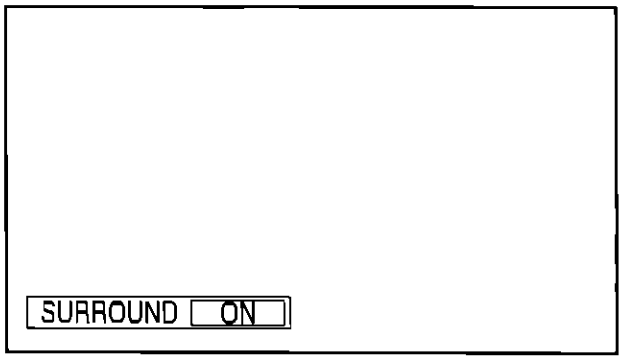
SURROUND Controls



SURROUND Button
The benefits of surround sound are enormous You can be completely enveloped in sound, just as if you were at a concert hall or cinema

The surround setting switches on and off each time the SURROUND button is pressed

ON ⟷ OFF

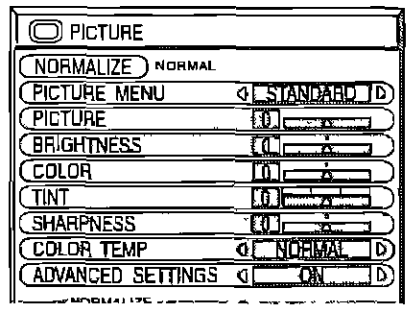


Note
The surround settings are memorized separately for each SOUND mode (AUTO, STANDARD)

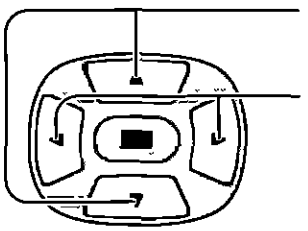
PICTURE Adjustments

1 PICTURE

Press the PICTURE button on the Remote Control to display the PICTURE menu

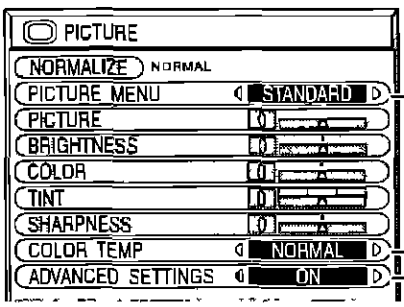


2 Select to adjust each item



Press to select the menu to adjust

Select the desired level by looking at the picture behind the menu



Press the left ◄ or right ► button to switch between modes

→ STANDARD ⟷ DYNAMIC ←
→ CINEMA ←

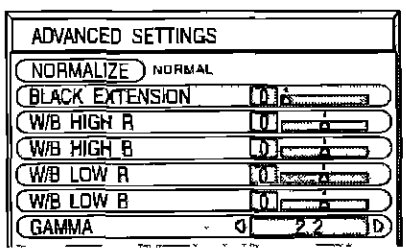
STANDARD
For viewing in standard (evening lighting) environments
This menu selects the normal levels of BRIGHTNESS and PICTURE

DYNAMIC
For viewing in brighter environments
This menu selects higher than normal levels of BRIGHTNESS and PICTURE

CINEMA
Ideal for movies
• Can be selected for VIDEO/COMPONENT

Note:
If you would like to change the picture and color of the selected PICTURE menu to something else, adjust using the items in the PICTURE menu (see page 29)

Press the left ◄ or right ► button to select "ON" Press the down ▼ button to enter ADVANCED SETTINGS mode
ADVANCED SETTINGS ON
Enables fine picture adjustment at a professional level (see next page)



ADVANCED SETTINGS OFF
Displays images with settings of the PICTURE menu

Press the left ◄ or right ► button to switch between modes

→ NORMAL ⟷ COOL ⟷ WARM ←

Helpful Hint (N / NORMALIZE Normalization)

While the "PICTURE" menu is displayed, if either the N button on the remote control is pressed at any time or the ⊜ (ACTION button) is pressed during "NORMALIZE", then all adjustment values are returned to the factory settings

Item	Effect		Adjustments
PICTURE	◀ Less	▶ More	Selects the proper brightness and density for the room
BRIGHTNESS	◀ Darker	▶ Brighter	Adjusts for easier viewing of dark pictures such as night scenes and black hair
COLOR	◀ Less	▶ More	Adjusts slightly to a lighter color
TINT (NTSC only)	◀ Reddish	▶ Greenish	Adjust for nice skin color
SHARPNESS	◀ Less	▶ More	Displays a sharp image

Notes

(1) "COLOR" , "TINT" and "SHARPNESS" settings cannot be adjusted for "RGB" and "PC" input signal modes

(2) You can change the level of each function (PICTURE, BRIGHTNESS, COLOR, TINT, SHARPNESS) for each PICTURE menu

(3) The setting details for normal, dynamic and cinema respectively are memorized separately for each input mode (VIDEO, COMPONENT, RGB)

(4) The "TINT" setting can be adjusted for NTSC signal only

Note

There is little change when PICTURE is increased with a bright picture or reduced with a dark picture

ADVANCED SETTINGS

Item	Effect		Details
BLACK EXTENSION	◀ Less	▶ More	Adjusts the dark shades of the image in gradation
W/B HIGH R	◀ Less	▶ More	Adjusts the white balance for light red areas
W/B HIGH B	◀ Less	▶ More	Adjusts the white balance for light blue areas
W/B LOW R	◀ Less	▶ More	Adjusts the white balance for dark red areas
W/B LOW B	◀ Less	▶ More	Adjusts the white balance for dark blue areas
GAMMA	◀ Down	▶ Up	2 0 ⟷ 2 2 ⟷ 2 5

Notes

(1) Carry out "W/B" adjustment as follows

Ⓐ Adjust the white balance of the bright sections using the "W/B HIGH R" and "W/B HIGH B" settings

Ⓑ Adjust the white balance of the dark sections using the "W/B LOW R" and "W/B LOW B" settings

Ⓒ Repeat steps Ⓐ and Ⓑ to adjust

Steps Ⓐ and Ⓑ affect each other's settings, so repeat each step in turn to make the adjustment

(2) The adjustment values are memorized separately for each input mode (VIDEO, COMPONENT, RGB and PC)

(3) The adjustment range values should be used as an adjustment reference

Helpful Hint (N / NORMALIZE Normalization)

On the remote control unit, while the "Advanced settings" menu is displayed, if either the N button is pressed at any time or the ⊟ (Access button) is pressed during "Normalise", then all adjustment values are returned to the factory settings

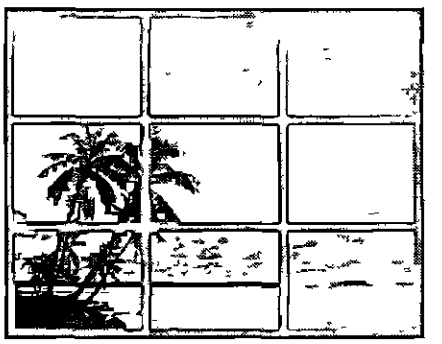
Setup for MULTI DISPLAY

① By lining up Plasma Displays in groups of 4 or 9 as illustrated below, an enlarged picture may be displayed across all screens

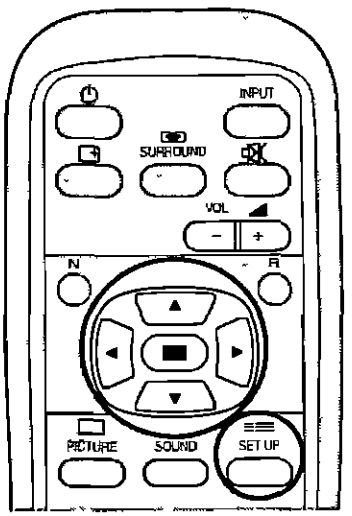
② For this mode of operation, each plasma display has to be set up with a DISPLAY number to determine its location

group of 4 (2×2)

group of 9 (3×3)



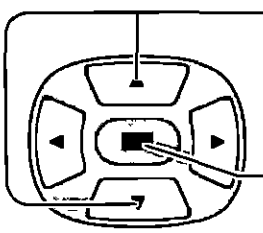
How to setup MULTI DISPLAY



1 SET UP

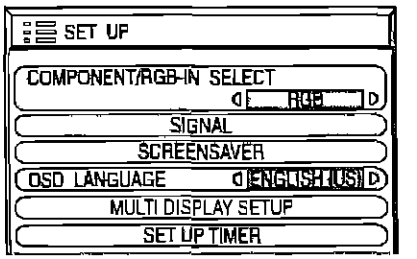
Press to display the SETUP menu screen

2

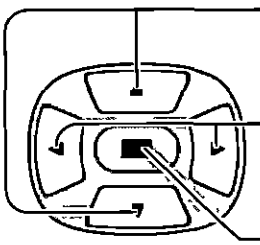


Press to select the MULTI DISPLAY SETUP

Press to the "MULTI DISPLAY SETUP" menu

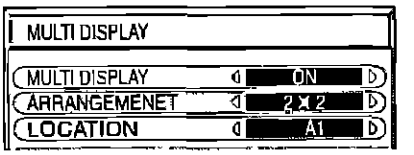


3



Press to select the MULTI DISPLAY SETUP

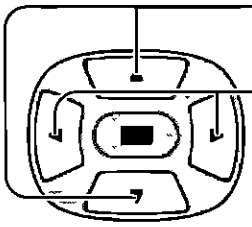
Press to "ON" or "OFF"



Press to store the above setup

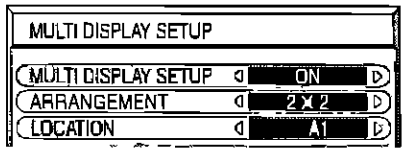
How to set the Display location number for each Plasma Display

4

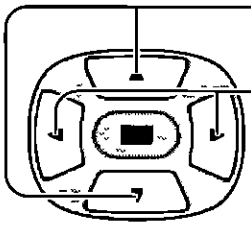


Press to select ARRANGEMENT (2nd step)

Press to select "2×2", "3×3"

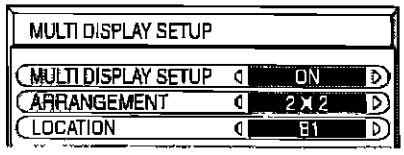


5



Press to select LOCATION

Press to select the required arrangement number (A1-C3 Refer to the following)



DISPLAY NUMBER locations for each arrangement

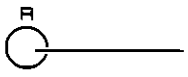
(2×2)

A1	A2
B1	B2

(3×3)

A1	A2	A3
B1	B2	B3
C1	C2	C3

6



Press twice to exit from SETUP

Notes

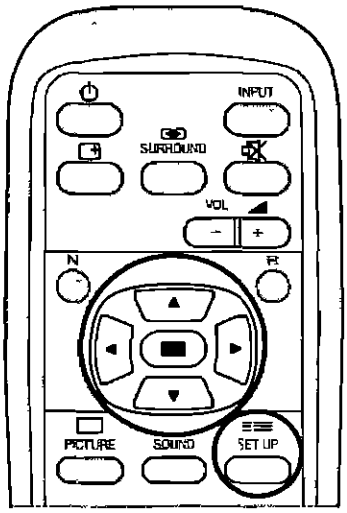
- For PC or RGB input signals, normal multi-display magnification is only available at the VGA resolution
- The multi-display capability is not functional for component signals

SET UP TIMER

The timer can switch the Plasma Display ON or OFF

Before attempting Timer Set, confirm the PRESENT TIME OF DAY and adjust if necessary Then set POWER ON TIME/POWER OFF TIME

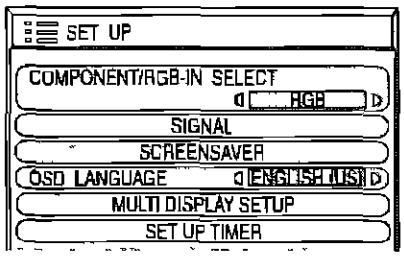
Display the SET UP TIMER screen

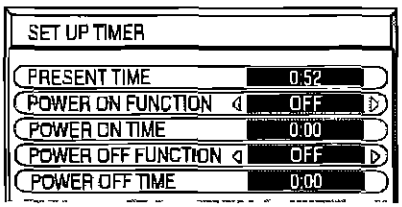


1 SET UP — Press to display the SETUP menu screen

2 Press to select SET UP TIMER

Press to display the SET UP TIMER screen

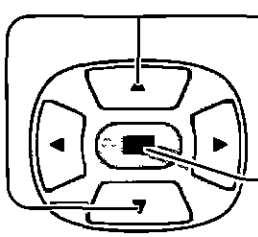




PRESENT TIME OF DAY Set

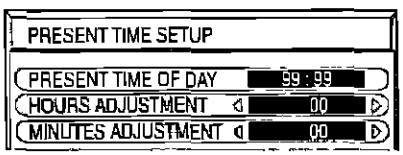
To set up PRESENT TIME, follow the procedure described below

1

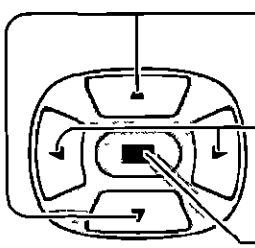


Press to select PRESENT TIME OF DAY

Press to display the PRESENT TIME OF DAY SETTING screen



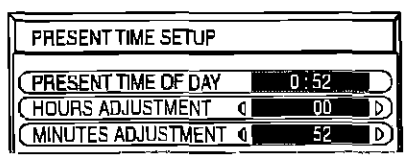
2



Press to select HOURS ADJUSTMENT/ MINUTES ADJUSTMENT

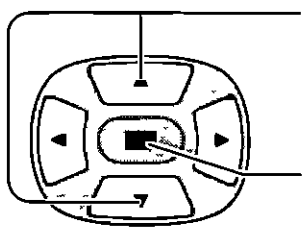
Press to set up Hours or Minutes
▶ button Forward
◀ button Back

Press to complete PRESENT TIME OF DAY setup



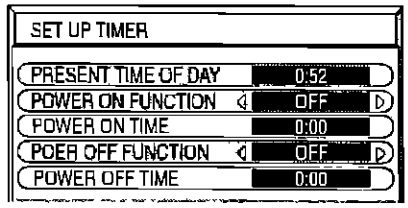
TIMER Set

1

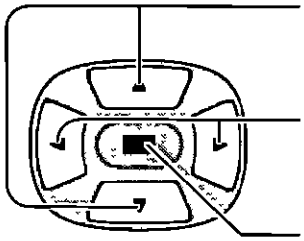


Press to select
POWER ON TIME/
POWER OFF TIME

Press to display the POWER ON SET UP / POWER OFF SET UP screen



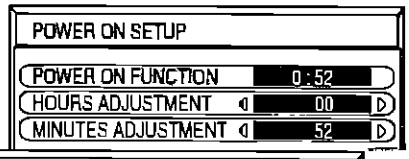
2

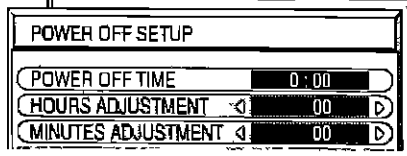


Press to select HOURS ADJUSTMENT/
MINUTES ADJUSTMENT

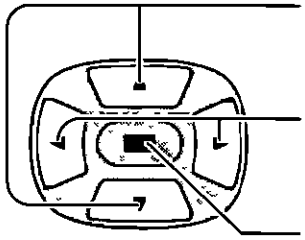
Press to adjust each time

Press to complete POWER ON TIME/
POWER OFF TIME, and return to the
SET UP TIMER screen





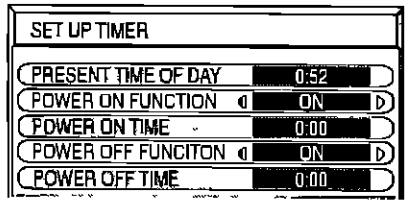
3



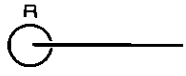
Press to select POWER ON FUNCTION/
POWER OFF FUNCTION

Press to select ON

Press to store setting



4



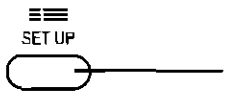
Press twice to exit from SETUP

Note :
Timer function will not work unless "PRESENT TIME OF DAY ADJUSTMENT" is set

SCREENSAVER (For preventing after-images)

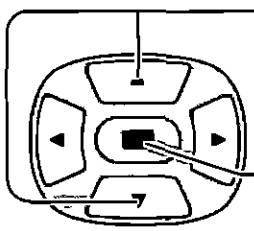
Do not display a still picture, especially in 4:3 mode, for any length of time.
If the display must remain on, a SCREENSAVER should be used.

1



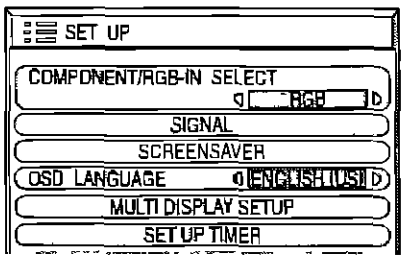
Press to display the SETUP menu screen

2



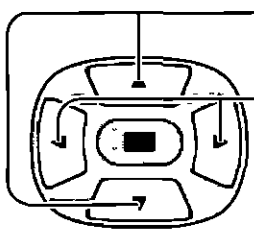
Press to select the SCREENSAVER

Press to select the SCREENSAVER screen



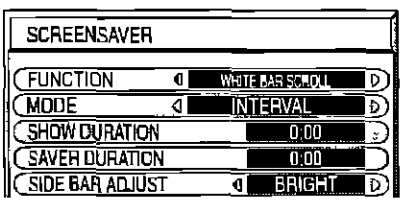
NEGATIVE / SCROLL selection

3



Press to select the FUNCTION

Press to select the desired function

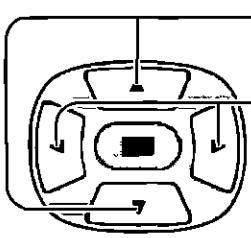


NEGATIVE ⟷ WHITE BAR SCROLL

NEGATIVE	Negative image will be displayed on the screen
WHITE BAR SCROLL	The white bar will scroll from left to right

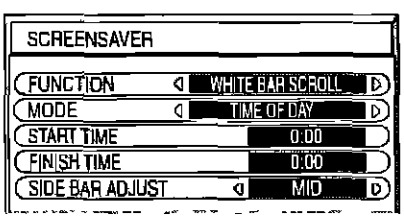
MODE selection

4



Press to select the MODE

Press to select each mode items

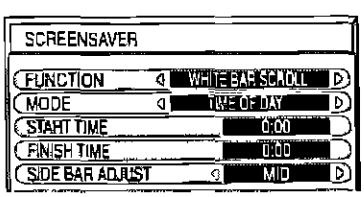


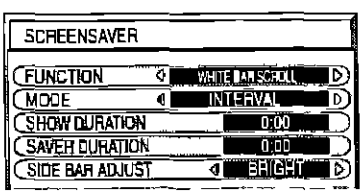
→ OFF
↕
INTERVAL Operates when SHOW DURATION and SAVER DURATIONE are set up and those times arrive
↕
TIME OF DAY Operates when START TIME and FINISH TIME are set up and those times arrive
↕
→ ON Operates when the ⊙ (ACTION) is pressed

To stop the SCREENSAVER under ON, press the ⊙ button.

If the MODE is at ON, the menu screen will disappear and the SCREENSAVER will be activated.

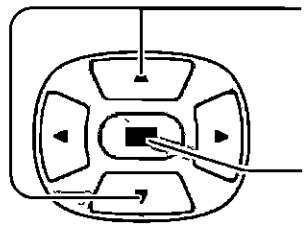
After selecting TIME OF DAY or INTERVAL, the relevant SET UP TIME will become available for selection and the OPERATING TIME may be set.





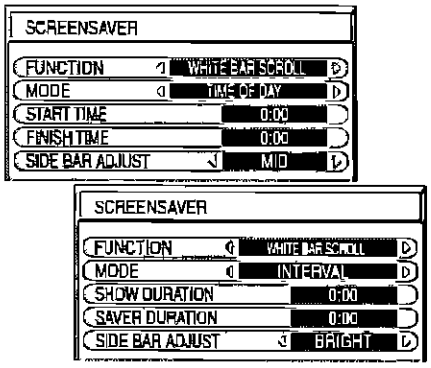
Setup of SCREENSAVER Time

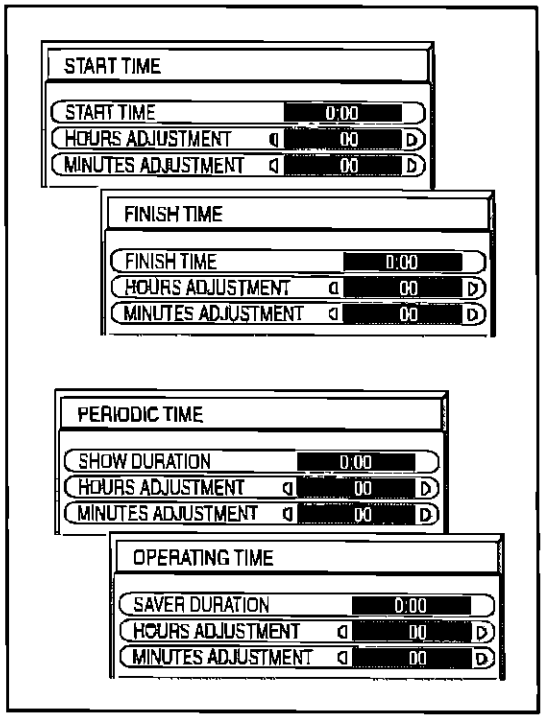
5



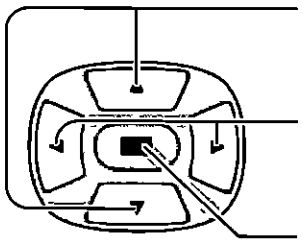
Press to select START TIME/ FINISH TIME (When TIME OF DAY is selected)
Press to select SHOW DURATION/ SAVER DURATION (When INTERVAL is selected)

Press to select each time adjustment screen





6



Press to select HOURS ADJUSTMENT/ MINUTES ADJUSTMENT

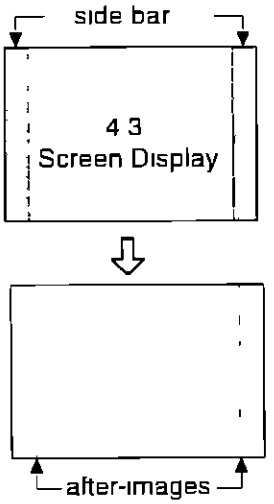
Press to set up HOURS or MINUTES
► button Forward
◄ button Back

Press to store settings

Note
Timer function will not work unless "PRESENT TIME OF DAY ADJUSTMENT" is set

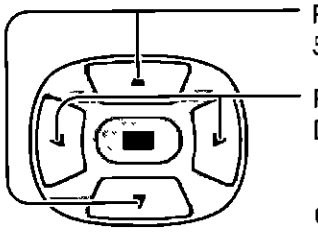
SIDE BAR ADJUST

Do not display a picture in 4 3 mode for an extended period, as this can cause an after-image to remain on the side bars either side of the display field
To prevent the appearance of such an after-image, illuminate the side bars



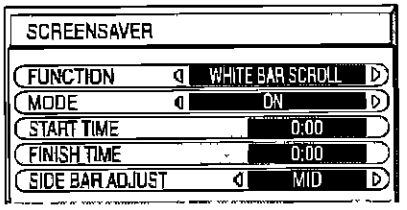
1 To display the SCREENSAVER screen
(Refer to page 34, operation guide steps 1 and 2)

2



Press to select the SIDE BAR ADJUST

Press to select DARK, MID, BRIGHT



OFF ⟷ DARK ⟷ MID ⟷ BRIGHT

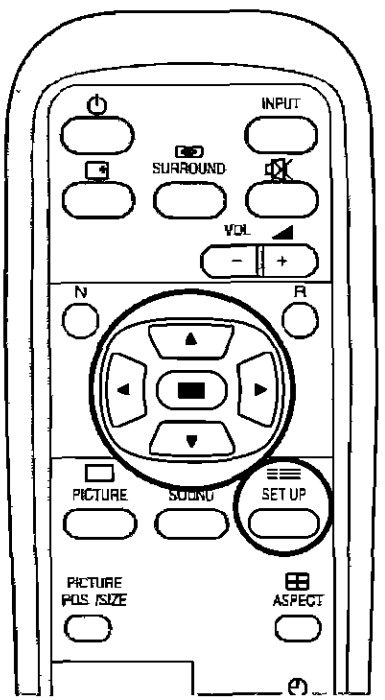
3 R — Press to exit from SCREENSAVER

Notes
- Setting the side bar to bright mode for an extended period may result in occurence of after-images
- The side bar may flash (alternate black/white) depending on the picture being shown on the screen In such an occurrence, use the Cinema mode

SET UP for Input Signals

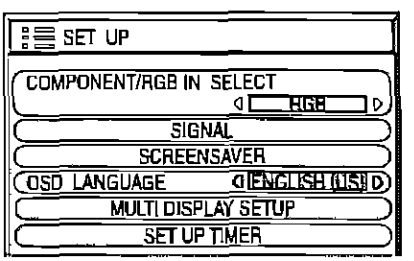
COMPONENT/RGB IN SELECT

Select to match the signals from the source connected to the COMPONENT/RGB input terminals
Y, P_B, P_R signals ⇨ "COMPONENT"
R, G, B, HD, VD signals ⇨ "RGB"



1 SET UP — Press to display the SET UP menu screen

2 Press to select the "COMPONENT/RGB IN SELECT"
Press to select the desired mode



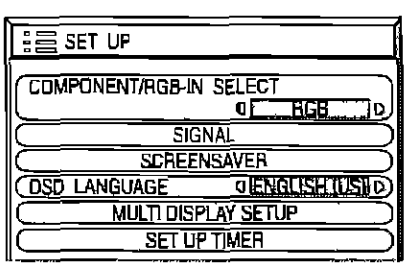
COMPONENT ⟷ RGB

R — Press to exit from adjust mode

3D Y/C FILTER – For NTSC Video images

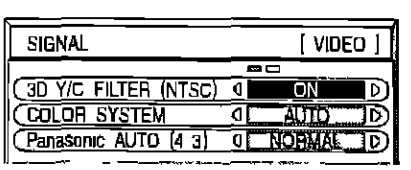
Select "SIGNAL" from the "SET UP" menu during VIDEO input signal mode ("SIGNAL [VIDEO]" menu is displayed)

Press to select the "3D Y/C FILTER (NTSC)"
Press to set ON/OFF



⇩ Press ⊙ (ACTION) button

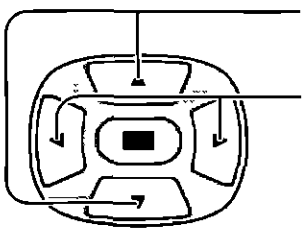
R — Press to exit from adjust mode



Note.
When on, this setting only affects NTSC input signals

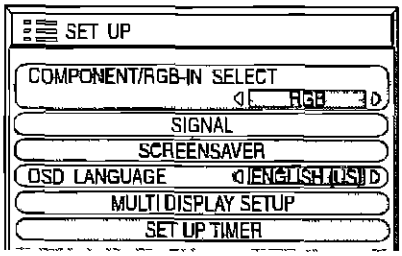
COLOR SYSTEM / Panasonic AUTO

Select SIGNAL from the "SET UP" menu during VIDEO (S VIDEO) input signal mode ("SIGNAL [VIDEO]" menu is displayed)



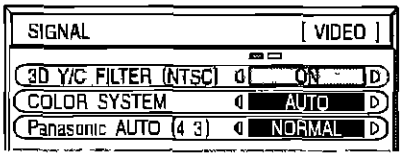
Press to select the "COLOR SYSTEM" or "Panasonic AUTO"

Press to select each functions



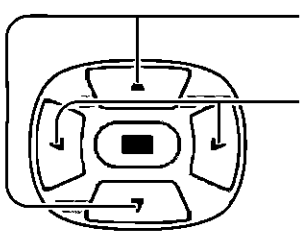
⇩ Press ⊙ (ACTION) button

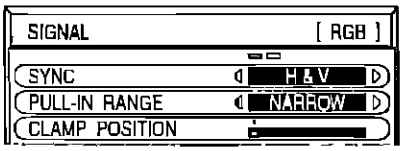
If the picture image becomes unstable
With the system set on Auto, under conditions of low level or noisy input signals the image may in rare cases become unstable Should this occur, set the system to match the format of the input signal

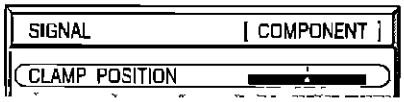


Mode	Function
Color system	Set the color system to match the input signal If set to "AUTO", the color system is determined automatically →AUTO↔PAL ↔ SECAM ↔M NTSC↔NTSC←
Pansonic AUTO (4 3)	Set to "NORMAL" to view 4 3 images in an unchanged format when Panasonic AUTO is selected If you would like to view 4 3 images in "Just" format, set to "JUST"

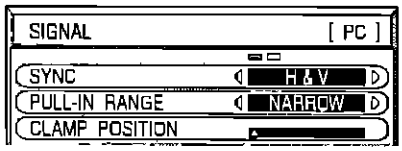
Select SIGNAL from the "SET UP" menu during RGB or PC input signal mode





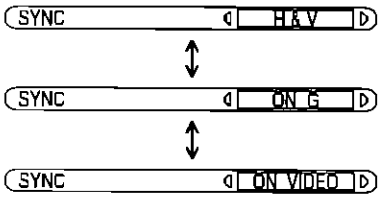


The following operation methods are the same for both the SIGNAL [RGB] and SIGNAL [PC]



SYNC

Setting RGB sync signal



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

H&V	The H and V sync signals are input from the HD/VD connector
ON G	Uses a synchronized signal on the Video G signal, which is input from the G connector
ON VIDEO	Compatible with the scart plug (Europe) The composite video signal input from the VIDEO input terminal is used by dividing the sync signals

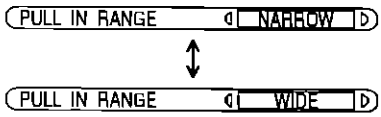
Setting PC sync signal

Confirm that the input is set to PC INPUT (this setting is valid only for PC INPUT)

H&V	The H and V sync signals are input from the HD/VD connector
ON G	Uses a synchronized signal on the Video G signal, which is input from the G connector

PULL IN RANGE

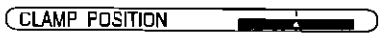
Sets the width for different frequencies.



(This setting is the same for both SIGNAL [RGB] and SIGNAL [PC])

CLAMP POSITION

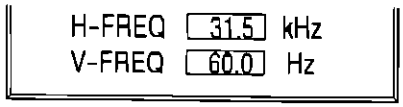
Adjusts the clamp position.



The following operation methods are the same for "SIGNAL" menu during COMPONENT, RGB and PC input signal mode
Normally, these adjustments are set to appropriate levels and, therefore, do not need to be altered

H-FREQ (kHz)/V-FREQ (Hz)

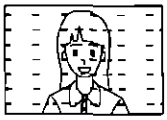
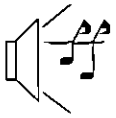
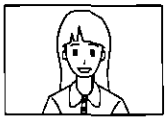
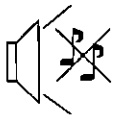
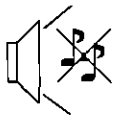
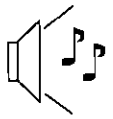
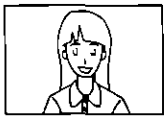
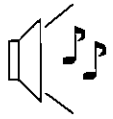
Displays the H (Horizontal)/V (Vertical) frequencies.



This display is valid only for RGB input and PC input
Display range
Horizontal 15 5 - 110 kHz
Vertical 48 - 120 Hz

Troubleshooting

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

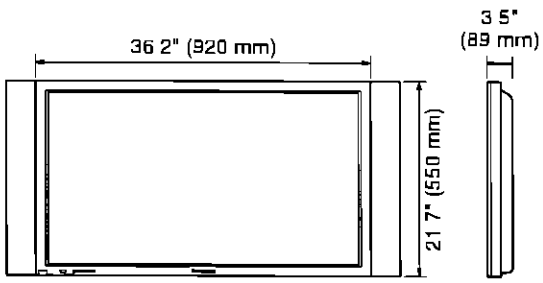
Symptoms		Checks
Picture	**Sound**	
 Interface	 Noisy Sound	Electrical Appliances Cars/Motorcycles Fluorescent light
 Normal Picture	 No Sound	Volume (Check whether the mute function has been activated on the remote control)
No Picture	 No Sound	Not plugged into AC outlet Not switched on PICTURE and BIGHTNESS/Volume setting (Check by pushing the power switch or stand-by button on the remote control)
No Picture	 Normal Sound	If a signal with a non-applicable color system format, or frequency is input, only the input terminal indication is displayed
 No Color	 Normal Sound	Color controls set at minimum level Color system (see page 28, 29)

Plasma Display panel

Symptoms	Check
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
After-images appear	Do not allow a still picture to be displayed for an extended period, as this can cause a permanent after-image 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 after-image 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

Specifications

	TH-37PWD4	
Power Source	120 V AC, 50/60 Hz	
Power Consumption		
Maximum	325 W	
Stand-by condition	1 2 W	
Power off condition	0 9 W	
Plasma Display panel	Drive method AC type 37-inch, 16 9 aspect ratio	
Contrast Ratio	3000 1	
Brightness Capability	(Panel only) 650 cd / m² (As a set) 330 cd / m²	
Screen size	818 mm (W) × 461 mm (H) × 939 mm (diagonal) No of pixels 408,960 (852 (W) × 480 (H)) [2,556 × 480 dots]	
Operating condition		
Temperature	34 °F - 104 °F (0 °C - 40 °C)	
Humidity	20 % - 80 %	
Applicable signals		
Color System	NTSC, PAL, PAL60, SECAM, Modified NTSC	
Scanning format	525i (480i), 625i (576i), 525p (480p), 625p (576p), 750p (720p), 1125/60i, 50i, 24p, 24SF (1080/60i, 50i, 24p, 24SF) SMPTE 274M	
PC signals	VGA display VGA SVGA, XGA, SXGA, UXGA (compressed) Horizontal scanning frequency 15 5 - 110 kHz Vertical scanning frequency 48 - 120 Hz	
Connection terminals		
AV	Video IN (RCA)	1 0 Vp-p (75-ohm)
	S VIDEO IN (MINI DIN 4PIN)	Y 1 Vp-p (75-ohm), C 0 286 Vp-p (75-ohm)
	AUDIO IN (RCA PIN JACK × 2)	0 5 Vrms (high impedance)
COMPONENT/RGB	Y/G (RCA)	1 0 Vp-p/composite (75-ohm)
		0 7 Vp-p/non-composite (75-ohm)
	PB/B (RCA)	0 7 Vp-p (75-ohm)
	PR/R (RCA)	0 7 Vp-p (75-ohm)
	HD (RCA)	1 0 - 5 0 Vp-p (high impedance)
	VD (RCA)	1 0 - 5 0 Vp-p (high impedance)
	AUDIO IN (RCA PIN JACK × 2)	0 5 Vrms (high impedance)
PC	(HIGH-DENSITY D-SUB 15PIN)	R,G,B/0 7 Vp-p (75-ohm)
		HD, VD/1 0 - 5 0 Vp-p (high impedance)
	AUDIO IN (M3 5 JACK)	0 5 Vrms (high impedance)
SERIAL	EXTERNAL CONTROL TERMINAL (D-SUB9PIN)	RS-232C COMPATIBLE
SPEAKERS (6 Ω)	16W [8 W + 8 W] (10 % THD) For TY-SP37P4W-K only	

		TH-37PWD4
Accessories Supplied		
	Remote Control Transmitter	EUR646525
	Batteries	2 × AA Size
	Ferrite core	2 × J0KF00000018
	Fixing bands	2 × TMME187
Optional Supplied		
	Speakers	TY-SP37P4W-K
	Pedestal	TY-ST42PT3-K
	Wall stand	TY-ST42PW1
	Wall-hanging bracket(vertical)	TY-WK37PV3
	Ceiling unit	TY-CE42PS1
	Terminal Cover	TY-UPS200
Dimensions (W × H × D)		36 2" (920 mm) × 21 7" (550 mm) × 3 5" (89 mm) 
Mass (Weight)		approx 55 1 lbs (main unit only) approx 64 4 lbs (with speakers)

Note

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

Customer' Record
The model number and serial number of this product can be found on its back cover 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 TH-37PWD4 Serial Number

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