



Panasonic®

Operating Instructions Plasma Television

Model No. **TH-42PV8AZ**

VIERA

VIERA
Link

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

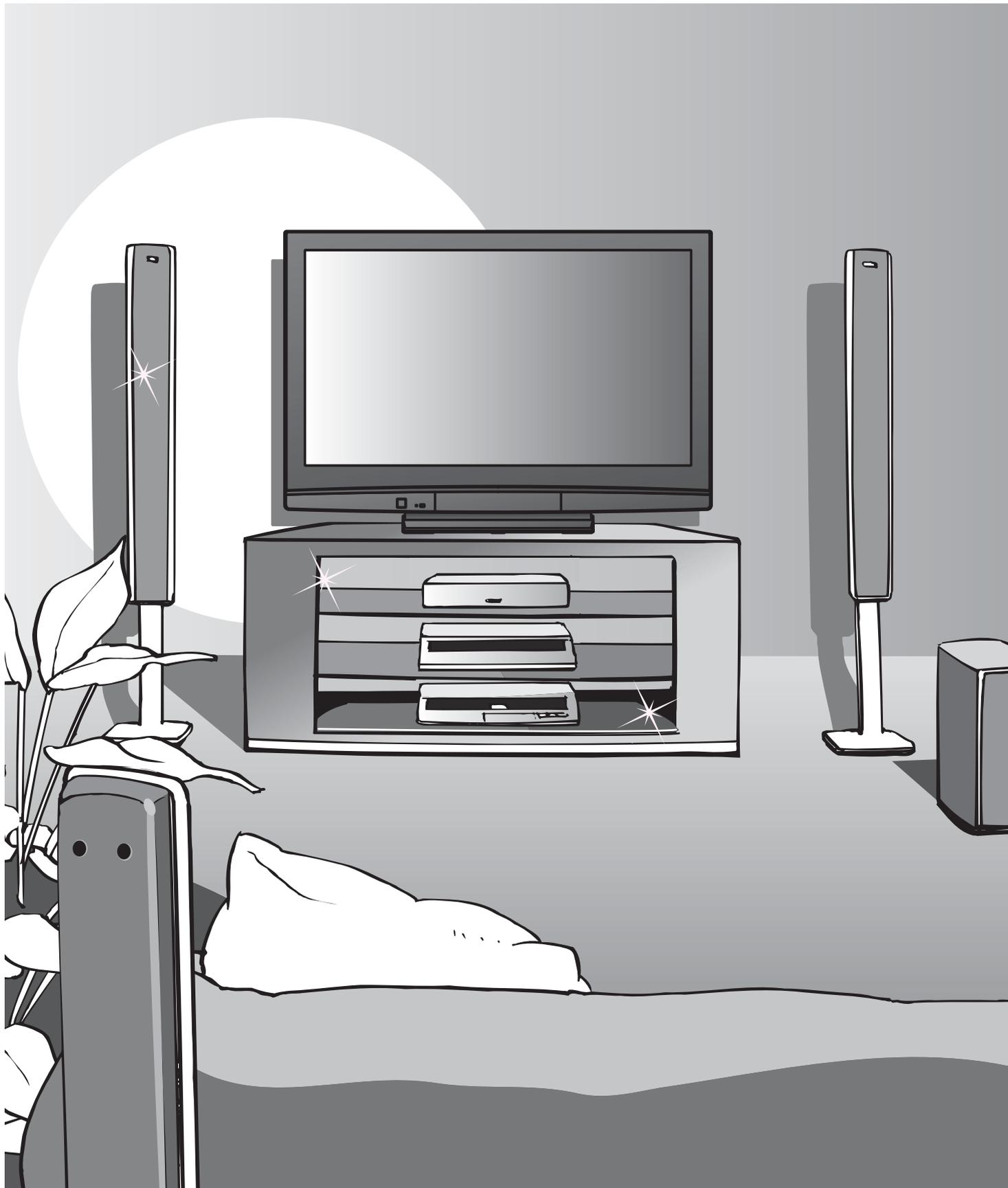
Please read these instructions before operating your set and retain them for future reference.
The images shown in this manual are for illustrative purposes only.

English

TQBC2280-1

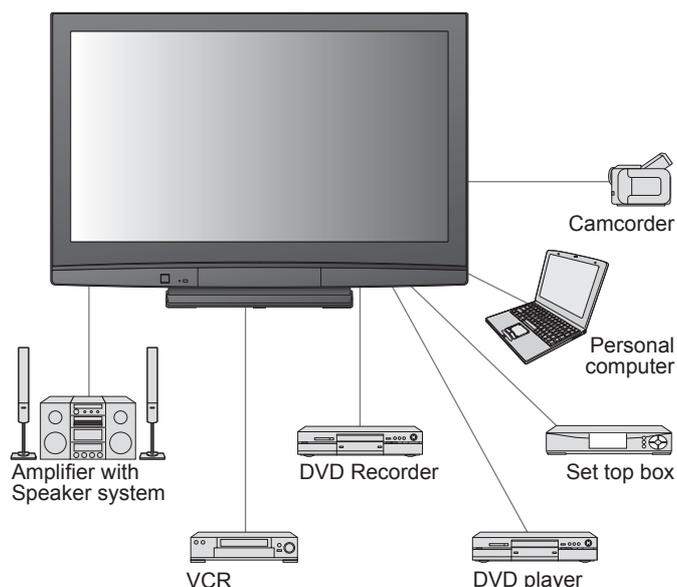
Turn your own living room into a movie theatre!

Experience an amazing level of multi-



media excitement

Enjoy rich multi-media



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Enjoy your TV!

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Safety Precautions

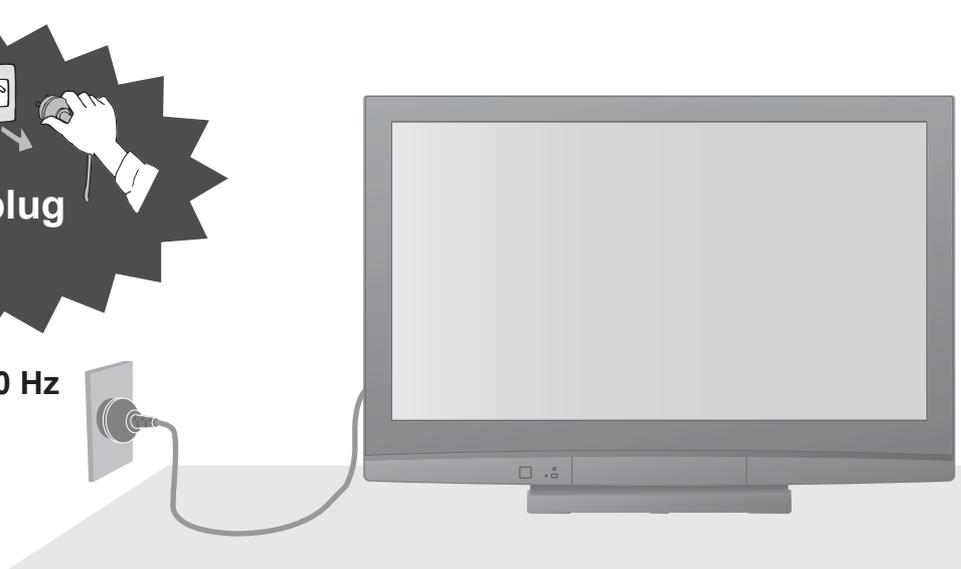
Warning

Handling the mains plug and lead

- Insert the mains plug fully into the socket outlet. (If the mains plug is loose, it could generate heat and cause fire.)
- Ensure that the mains plug is easily accessible.
- Ensure the earth pin on the mains plug is securely connected to prevent electrical shock.
- Do not touch the mains plug with a wet hand. (This may cause electrical shock.)
- Do not use any mains lead other than that provided with this TV. (This may cause fire or electrical shock.)
- Do not damage the mains lead. (A damaged lead may cause fire or electrical shock.)
 - Do not move the TV with the lead plugged in the socket outlet.
 - Do not place a heavy object on the lead or place the lead near a high-temperature object.
 - Do not twist the lead, bend it excessively, or stretch it.
 - Do not pull on the lead. Hold onto the mains plug body when disconnecting lead.
 - Do not use a damaged mains plug or socket outlet.

If you find any abnormality, remove the mains plug immediately!

AC 220-240 V, 50 / 60 Hz



Power source

- This TV is designed to operate on 220-240 V, 50 / 60 Hz AC.

Do not remove covers NEVER modify the TV yourself

(High-voltage components may cause serious electrical shock.)

- Have the TV checked, adjusted, or repaired at your local Panasonic dealer.

Keep liquids away from the TV

- 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 TV. (including on shelves above, etc.)

Do not expose to direct sunlight and other sources of heat

- Avoid exposing the TV to direct sunlight and other sources of heat. To prevent fire never place any type of candle or naked flame on top or near the TV.

Do not place foreign objects inside the TV

- Do not allow any objects to drop into the TV through the air vents (fire or electrical shock may result).

Do not place the TV on sloped or unstable surfaces

- The TV may fall off or tip over.

Use only the dedicated pedestals / mounting equipment

- Using an unapproved pedestal or other fixtures may make the TV unstable, risking injury. Be sure to ask your local Panasonic dealer to perform setup.
- Use approved pedestals / mounts (p. 6).

Notes

Caution

■ When cleaning the TV, remove the mains plug

- Cleaning an energized TV may cause electrical shock.

■ When the TV is not going to be used for a long period of time, remove the mains plug

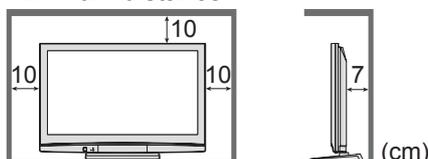
- This TV will still consume some power even in the Off mode, as long as the mains plug is still connected to a live socket outlet.

■ Transport only in upright position

- Transporting the TV with its display panel facing upright or downward may cause damage to the internal circuitry.

■ Allow sufficient space around the TV for radiated heat

Minimum distance



- When using the pedestal, keep the space between the bottom of the TV and the floor surface.
- In case of using Wall-hanging bracket, follow the manual of it.

■ Do not block the rear air vents

- Blocked ventilation by newspapers, table cloths, curtains, etc. may cause overheating, fire or electrical shock.

■ Do not expose your ears to excessive volume from the headphones

- Irreversible damage can be caused.

Do not display a still picture for a long time

This causes the image to remain on the plasma screen ("image retention").

This is not considered a malfunction and is not covered by the warranty.

Typical still images

- Programme number and other logos
- Image displayed in 4:3 mode
- Video game
- Computer image



To prevent image retention, contrast is lowered automatically after a few minutes if no signals are sent or no operations are performed. (p. 41)

■ Auto power standby function

- If no signal is received and no operation is performed in TV mode for 30 minutes, the TV will automatically go to standby mode.

■ Keep the TV away from these types of equipment

- Electronic equipment
In particular, do not place video equipment near the TV (electromagnetic interference may distort images / sound).
- Equipment with an infrared sensor
This TV also emits infrared rays (this may affect operation of other equipment).

Maintenance

First, remove the mains plug from the socket outlet.

Display panel

Regular care: Gently wipe the surface clean of dirt by using a soft cloth.

Major contamination: Wipe the surface clean using a soft cloth dampened with clean water or diluted neutral detergent (1 part detergent to 100 parts water). Then, using a soft dry cloth, evenly wipe the surface clean until it is dry.

Caution

- The surface of the display panel has been specially treated and may be easily damaged. Do not tap or scratch the surface with your fingernail or other hard object.
- Take care not to subject the surface to insect repellent, solvent, thinner, or other volatile substances (this may degrade surface quality).

Cabinet, Pedestal

Regular care: Wipe the surface clean using a soft dry cloth.

Major contamination: Dampen a soft cloth with clean water or water containing a small amount of neutral detergent. Then, wring the cloth and wipe the surface clean with it. Finally, wipe the surface clean with a dry cloth.

Caution

- Take care not to subject the TV's surfaces to detergent. (A liquid inside the TV could lead to product failure.)
- Take care not to subject surfaces to insect repellent, solvent, thinner, or other volatile substances (this may deteriorate the surface by peeling the paint).
- Do not allow the cabinet and pedestal to make contact with a rubber or PVC substance for a long time.

Mains plug

Wipe the mains plug with a dry cloth at regular intervals. (Moisture and dust may lead to fire or electrical shock.)

Accessories / Options

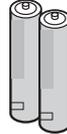
Standard accessories

Check that you have the accessories and items shown

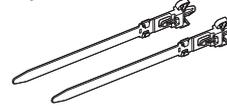
- Remote Control
 - N2QAYB000227



- Batteries for the Remote Control (2)
 - R6 (AA)



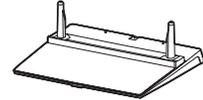
- Clamper (2)
 - ➔ p. 8



- Mains Lead
 - ➔ p. 8



- Pedestal (ST-42R4-WK)
 - TBLX0060
 - ➔ p. 7



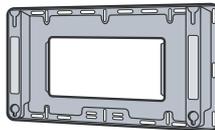
- Operating Instructions

- This product contains possibly dangerous parts (such as plastic bags), that can be breathed in or swallowed by young children accidentally. Keep these parts out of reach of young children.

Optional accessories

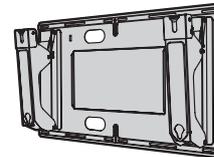
Wall-hanging bracket (vertical)

- TY-WK42PV3W
- TY-WK42PV4W



(angle)

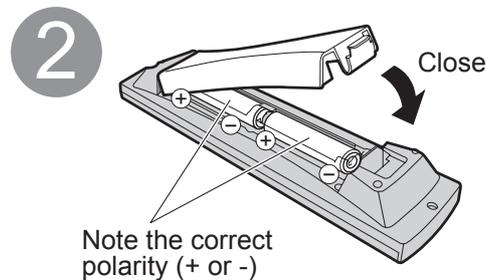
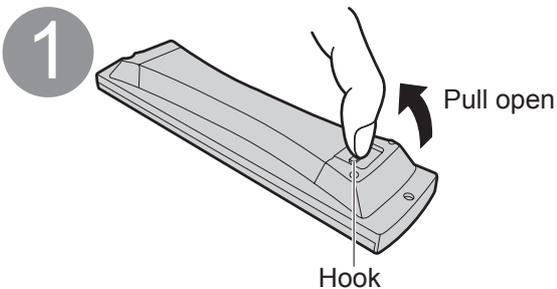
- TY-WK42PR3W
- TY-WK42PR4W



Caution

- In order to maintain the unit's performance and safety, be absolutely sure to ask your dealer or a licenced contractor to secure the wall-hanging brackets.
- Carefully read the instructions accompanying the pedestal, and be absolutely sure to take steps to prevent the TV from tipping over.
- Handle the TV carefully during installation since subjecting it to impact or other forces may cause product damage.

Installing remote's batteries



Caution

- Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control.
- Do not mix old and new batteries.
- Do not mix different battery types (such as alkaline and manganese batteries).
- Do not use rechargeable (Ni-Cd) batteries.
- Do not burn or breakup batteries.
Batteries must not be exposed to excessive heat such as sunshine, fire or the like.

Attaching the pedestal

Warning

Do not disassemble or modify the pedestal.

- Otherwise the TV may fall over and become damaged, and personal injury may result.

Caution

Do not use any other TV and displays.

- Otherwise the TV may fall over and become damaged, and personal injury may result.

Do not use the pedestal if it becomes warped or physically damaged.

- If you use the pedestal while it is physically damaged, personal injury may result. Contact your nearest Panasonic dealer immediately.

During set-up, make sure that all screws are securely tightened.

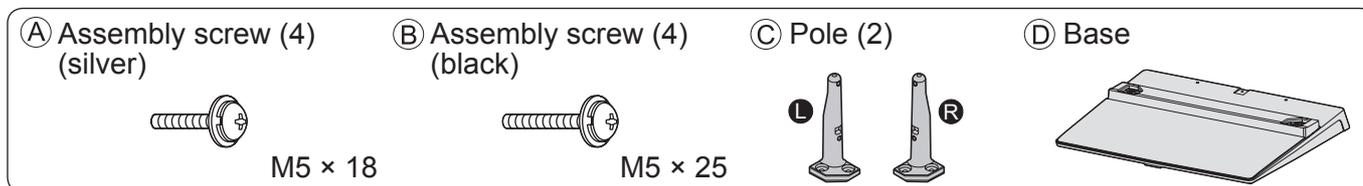
- If insufficient care is taken to ensure screws are properly tightened during assembly, the pedestal will not be strong enough to support the TV, and it might fall over and become damaged, and personal injury may result.

Ensure that the TV does not fall over.

- If the TV is knocked or children climb onto the pedestal with the TV installed, the TV may fall over and personal injury may result.

Two or more people are required to install and remove the TV.

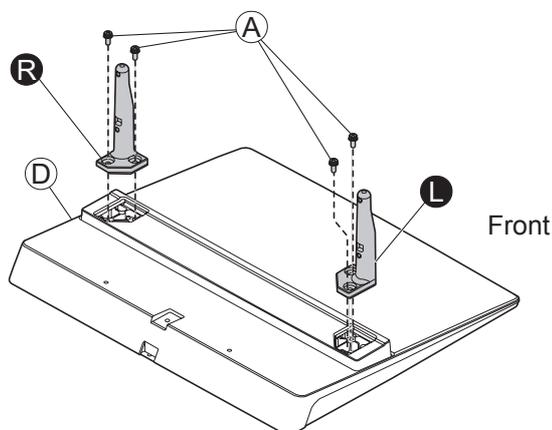
- If two or more people are not present, the TV may be dropped, and personal injury may result.



Assembling the pedestal

Use the four assembly screws **A** to fasten the left and right poles to the base securely.

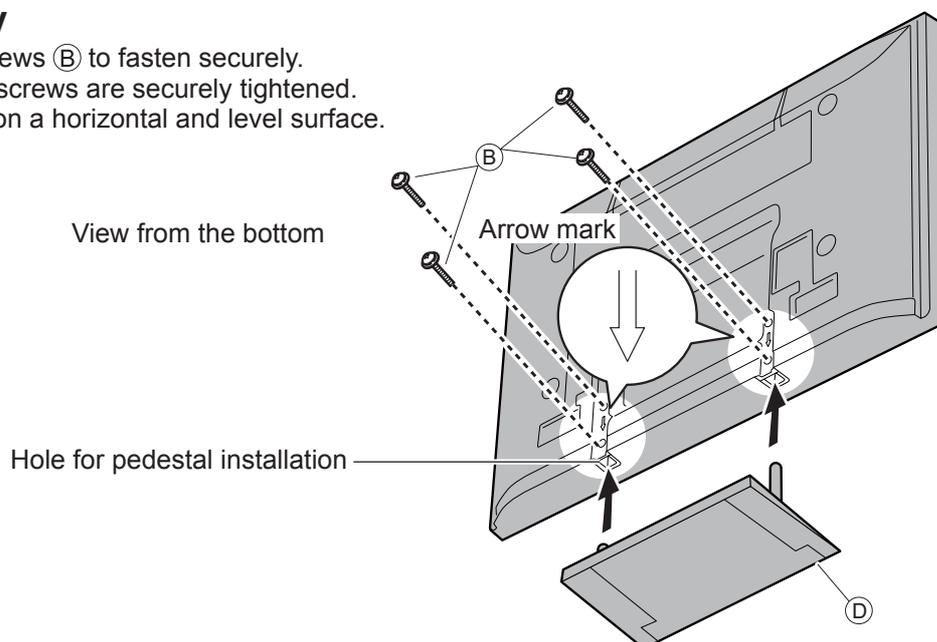
- Make sure that the screws are securely tightened.
- Forcing the assembly screws the wrong way will strip the threads.
- "L" or "R" mark is stamped on the bottom of the pole.



Securing the TV

Use the assembly screws **B** to fasten securely.

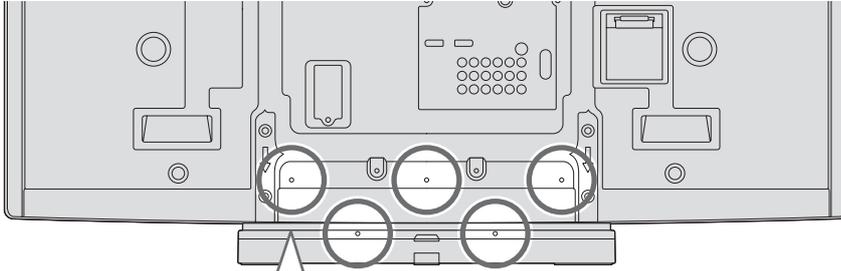
- Make sure that the screws are securely tightened.
- Carry out the work on a horizontal and level surface.



Accessories / Options

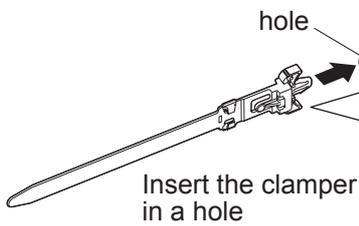
Using the clammer

Rear of the TV

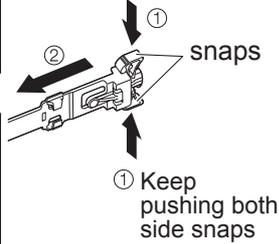


- Do not bundle the RF cable and mains lead together (could cause distorted image).
- Fix cables with clammers as necessary.
- When using the optional accessory, follow the option's assembly manual to fix cables.

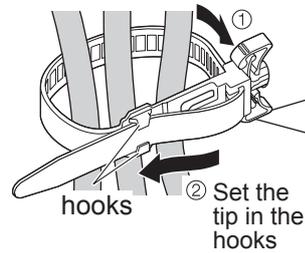
■ Attach the clammer



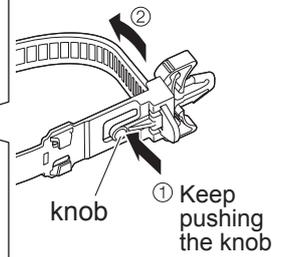
To remove from the TV:



■ Bundle the cables

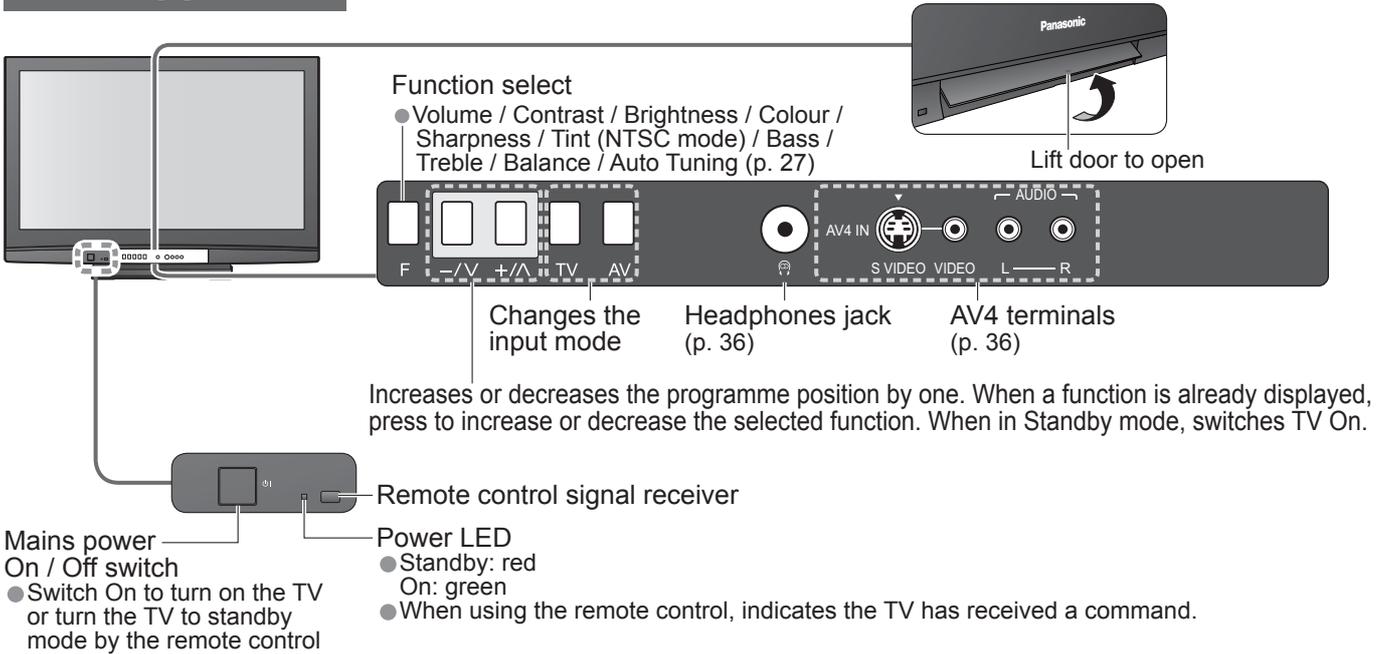


To loosen:

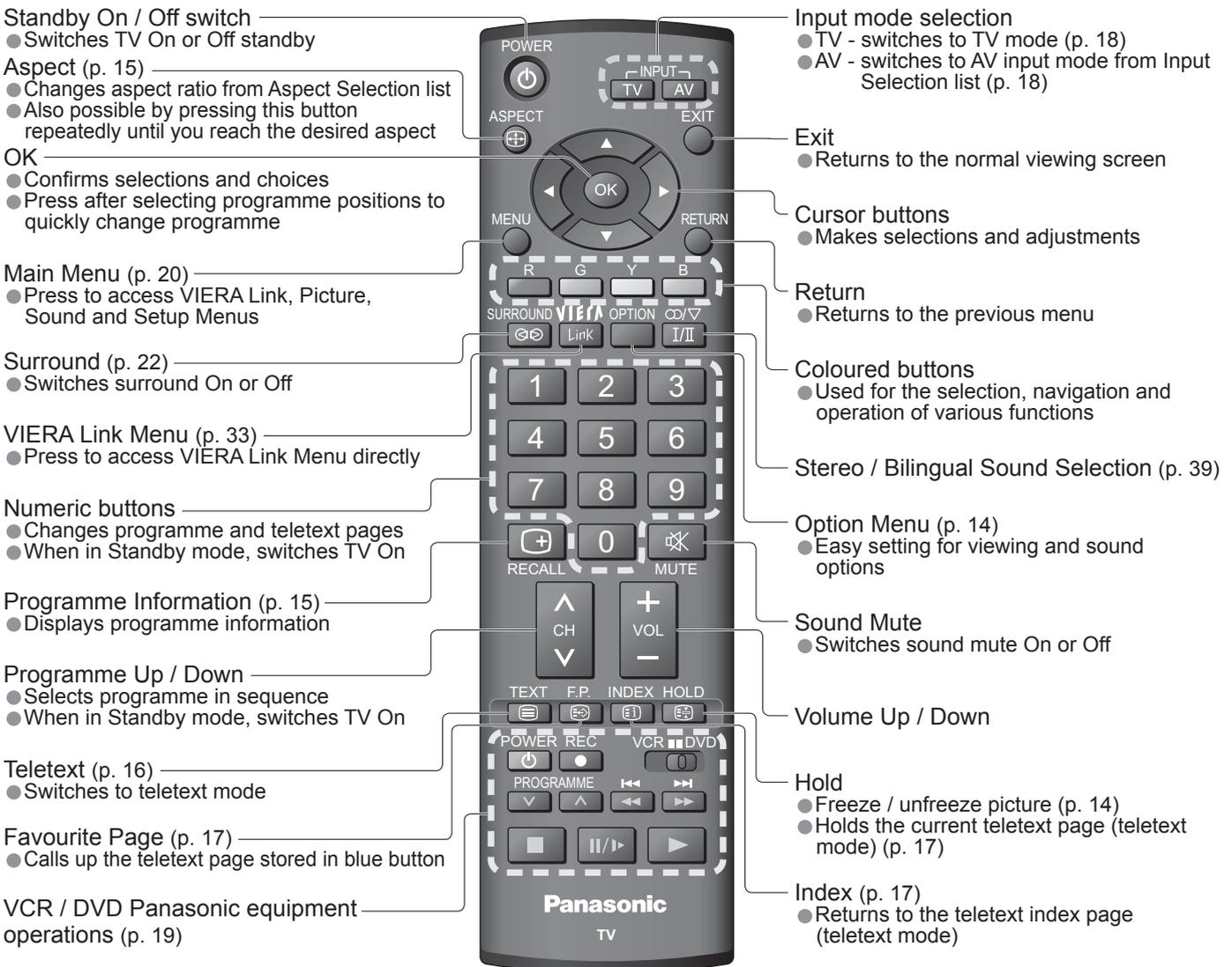


Identifying Controls

TV



Remote Control



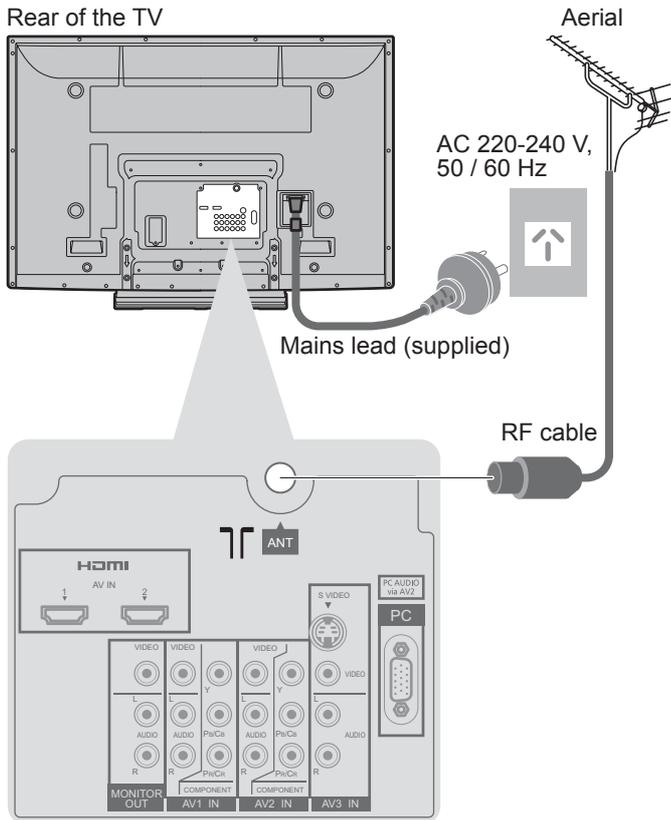
Basic Connection

External equipment and cables shown are not supplied with this TV.
Please ensure that the unit is disconnected from the mains socket before attaching or disconnecting any leads.
When disconnecting the mains lead, be absolutely sure to disconnect the mains plug at the socket outlet first.

Example 1 Connecting aerial

TV only

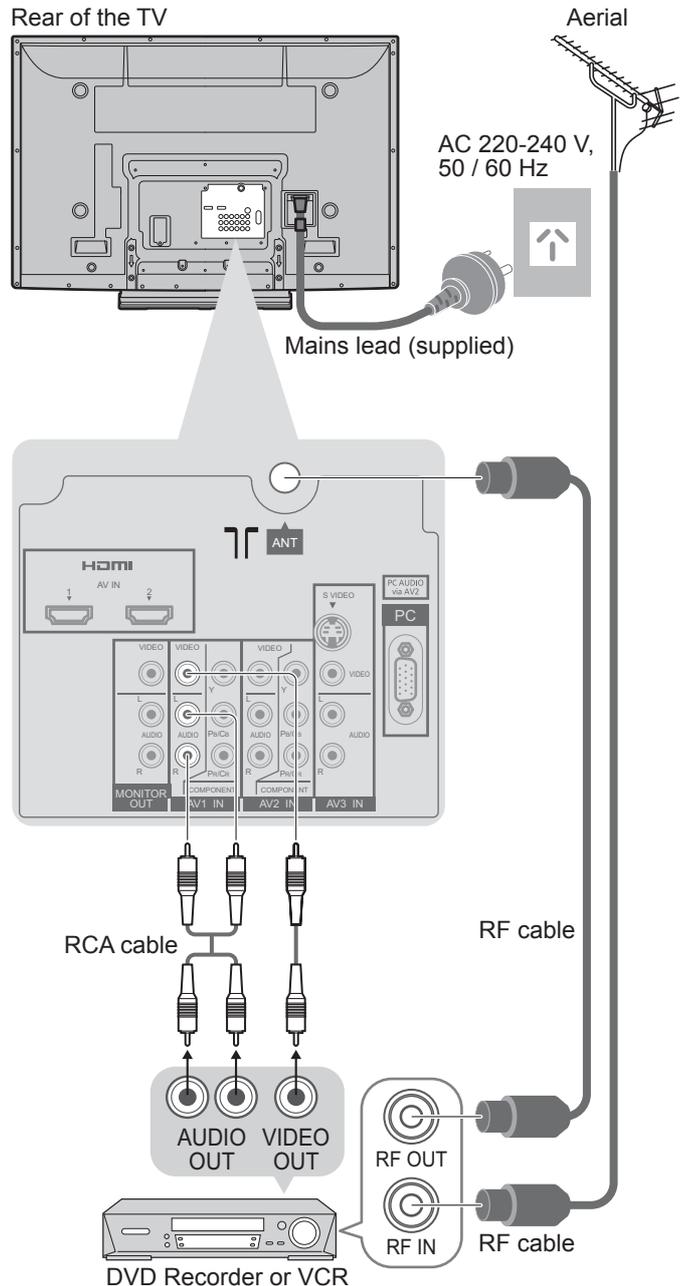
Rear of the TV



Example 2 Connecting DVD Recorder / VCR

TV, DVD Recorder or VCR

Rear of the TV



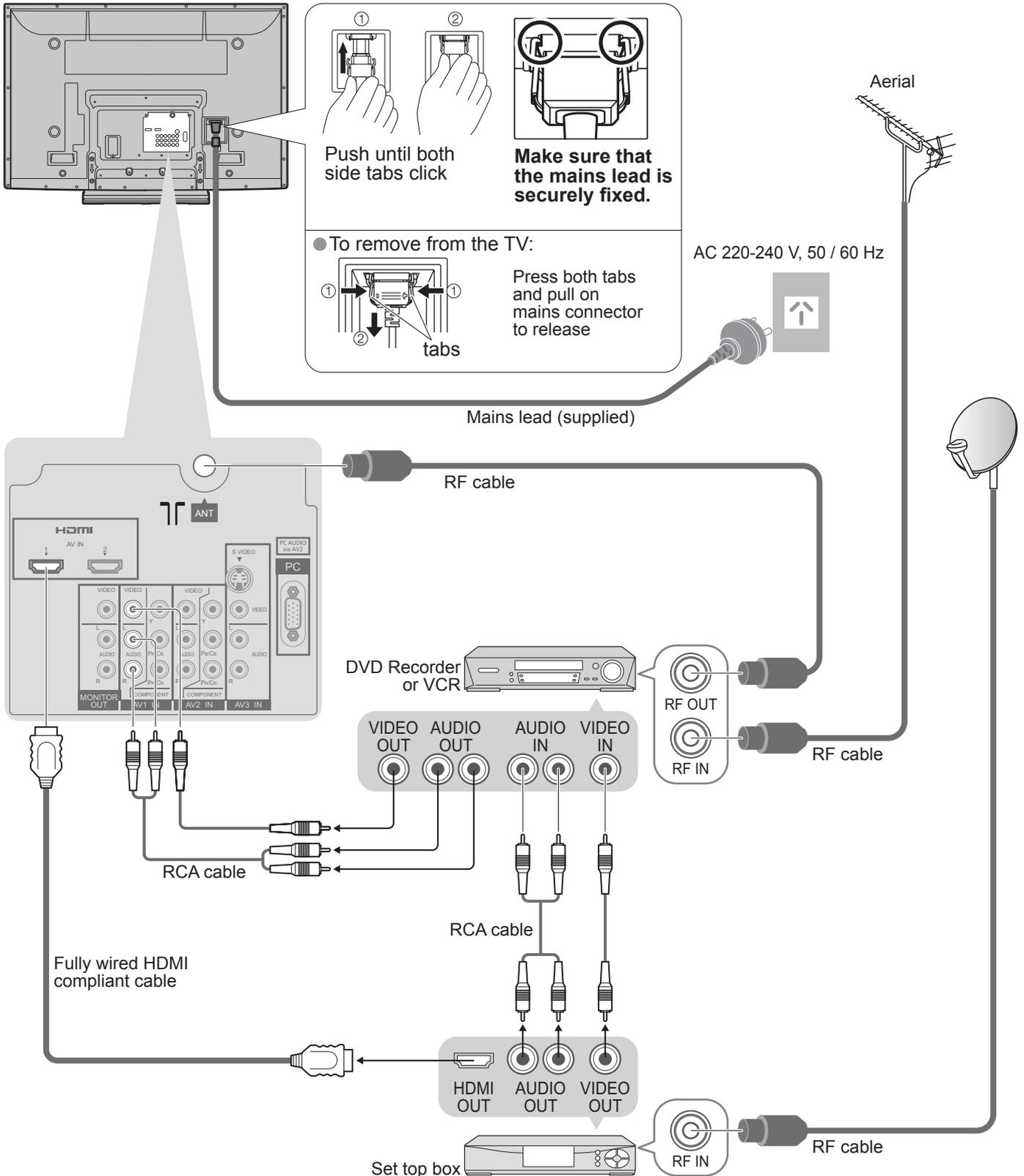
Note

- Mains plug types vary between countries.
- Do not put the RF cable close to the mains lead to avoid noise.
- Do not place the RF cable under the TV.
- To obtain optimum quality picture and sound, an Aerial, the correct cable (75 Ω coaxial) and the correct terminating plug are required.
- If a communal Aerial system is used, you may require the correct connection cable and plug between the wall Aerial socket and the TV.
- Your local Television Service Centre or dealer may be able to assist you in obtaining the correct Aerial system for your particular area and the accessories required.
- Any matters regarding Aerial installation, upgrading of existing systems or accessories required, and the costs incurred, are the responsibility of you, the Customer.
- VIERA Link connection \rightarrow p. 32
- Read the manual of the equipment too.

Example 3 Connecting DVD Recorder / VCR and Set top box

TV, DVD Recorder / VCR and Set top box

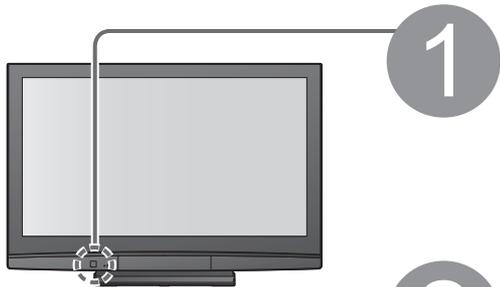
Rear of the TV



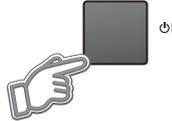
Auto Tuning

Search and store TV programmes automatically.

These steps are not necessary if the setup has been completed by your local dealer.



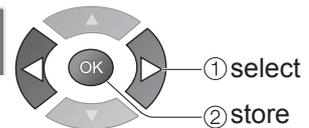
1 Plug the TV into mains socket and switch On
(Takes a few seconds to be displayed)



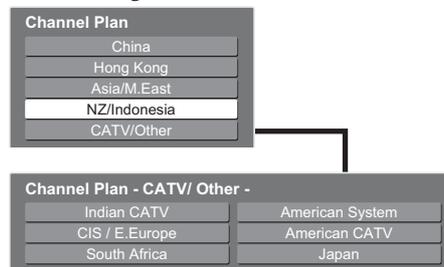
- You can now use the remote control to turn On the TV or turn the TV to standby mode. (Power LED: On)



2 Select your language



3 Select your area



- CATV/Other : Press **OK** → displayed sub menu

4 Start Auto Tuning

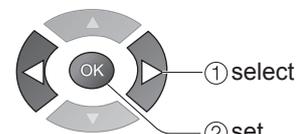


- Auto Tuning will start to search for TV programmes and store them. The sorted programme order depends upon the TV signal, the broadcasting system and reception conditions.

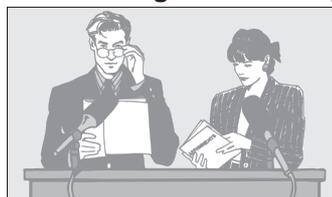
5 Select the picture setting



- “Home” is the recommended mode for viewing at home. Select “Home” for optimal picture / power consumption. “Shop” is for in-store display.
Home: “Viewing Mode” is set as “Standard”. (p. 22)
Shop: “Viewing Mode” is set as “Dynamic”. (p. 22)



Auto Tuning is now complete and your TV is ready for viewing.



- To edit programmes → “Editing Programmes” (p. 24)

Using the On Screen Displays

Many features available on this TV can be accessed via the On Screen Display menu.

■ How to use remote control



Open the main menu



Move the cursor / select the menu



Move the cursor / adjust levels / select from a range of options



Access the menu / store settings after adjustments have been made or options have been set

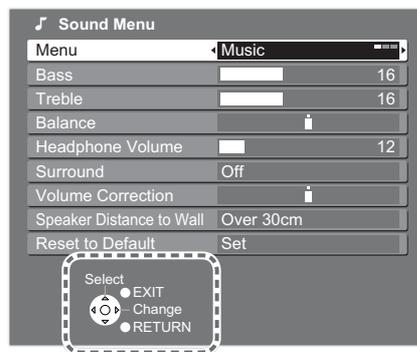


Return to the previous menu



Exit the menu system and return to the normal viewing screen

■ ON SCREEN HELP Instructions box (example: Sound Menu)



On-screen operation guide will help you.

Note

- If tuning has failed → “Auto Tuning” (p. 27)
- To initialize all settings → “Shipping Condition” (p. 29)
- If you turned the TV Off during Standby mode last time, the TV will be in Standby mode when you turn the TV On with Mains power On / Off switch.

Watching TV

1 Turn power on

POWER

- Mains power On / Off switch should be On. (p. 9)
- If "Shop" is displayed on the top right of the screen, reset settings in "Shipping condition" (p. 29), and select "Home" in "Auto Tuning" (p. 12).

Information banner appears whenever you select a programme

- For details → p. 15

2 Select a programme

▲ up

CH

▼ down

or

1	2	3
4	5	6
7	8	9
0		

- To select the two or three-digit programme number, e.g. 39
- ➔ 3 ➔ 9
- (in a short time)

■ **Select a programme using Information banner (p. 15)**

Possible to confirm the programme name before selecting programmes.

Display Information banner if it is not displayed

While the banner is displayed, select the programme

➔

- Possible to set display timeout in "Banner Display Timeout" (p. 23).

Other useful functions

Hold	<p>Freeze / unfreeze picture</p> <p>HOLD</p>
<p>Display the selectable settings for the current programme</p>	<p>Check or change the current programme status instantly</p> <p>OPTION</p> <ul style="list-style-type: none"> ● To change
<p>Off Timer</p>	<p>Turn the TV off automatically after a fixed period</p> <p>Display the menu</p> <p>Select "Setup"</p> <p>Select "Off Timer" and set the time</p> <div style="display: flex; align-items: center; justify-content: space-around;"> <div style="text-align: center;"> <p>MENU</p> </div> <div style="text-align: center;"> <p>② access</p> <p>① select</p> </div> <div style="text-align: center;"> <p>② set</p> <p>① select</p> </div> </div> <ul style="list-style-type: none"> ● To cancel ➔ Set to "Off" or turn the TV off. ● To display the remaining time ➔ Information banner (p. 15) ● When the remaining time is within 3 minutes, the remaining time will flash on screen.

Other useful functions

Display Information banner

Display Information banner

- Also appears when changing a programme



Example:

Programme			Event	
1 BBS				
CH05	5.5MHz	PAL	Coronation Street	
🔇	🔊		☰	45
Sound System		Colour System		

Features available / Message meanings

🔇 Sound mute On	☰ Teletext service available
🔊, I, II, ▽ Audio mode (p. 39)	1 - 90 Off Timer remaining time ● For settings → p. 14

- To confirm another tuned programme name →
- To watch the programme listed in the banner →
- To hide →
- To set display timeout → "Banner Display Timeout" (p. 23)
- Event information is referred to teletext signal.

Change aspect ratio

Change the aspect ratio

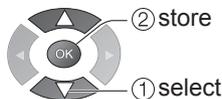
ASPECT



Enjoy viewing the picture at its optimum size and aspect.

Display Aspect Selection list

While the list is displayed, select the mode



Aspect Selection list

- To change the mode using the ASPECT button only → (Press repeatedly until you reach the desired mode)

16:9

Directly displays the image at "16:9" without distortion (anamorphic).

Just

Displays a "4:3" image full-screen. Stretching is only noticeable at the left and right edges.

4:3

Displays the image at the standard "4:3" without distortion.

4:3 Full

Displays a "4:3" image enlarged horizontally to fit the screen.
● HD signal only

Zoom1

Displays a "16:9" letterbox or "4:3" image without distortion.

Zoom2

Displays a "16:9" letterbox (anamorphic) image full-screen without distortion.

Zoom3

Displays a "2.35:1" letterbox (anamorphic) image full-screen without distortion. At "16:9", displays the image at its maximum (with slight enlargement).

Note

- Only "16:9" and "4:3" are available in PC mode.
- Not available in teletext mode.
- TV input: Aspect mode can be memorized separately for SD (Standard definition) and HD (High definition) signals.
- External input: Aspect mode can be memorized separately for each input mode.

Viewing Teletext

You can enjoy teletext broadcasting, including news, weather forecasts and subtitles, if this service is provided by the broadcasters.

What is FASTEXT mode?

In FASTEXT mode, four differently coloured subjects are situated at the bottom of the screen. To access more information about one of these subjects, press the appropriately coloured button. This facility enables fast access to information on the subjects shown.

What is TOP mode? (in case of TOP text broadcasting)

TOP is a particular improvement of the standard teletext service that results in an easier search and effective guide.

- Fast overview of the teletext information available
- Easy to use step-by-step selection of the topical subject
- Page status information at the bottom of the screen

Available page up / down →  

To select among subject blocks → 

To select next subject within the subject block
(After the last subject, it moves to the next subject block.) → 

What is List mode?

In List mode, four differently coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory. ("Store frequently viewed pages", p. 17)

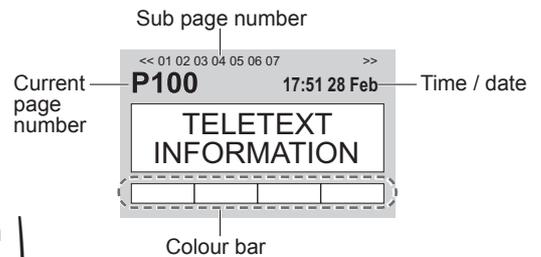
■ To change mode → "Teletext" in Setup Menu (p. 23)



Switch to Teletext

 ● Displays Index (content varies depending on the broadcasters)

 ● Pressing this button while watching TV programme directly accesses to the favorite page stored in "blue".



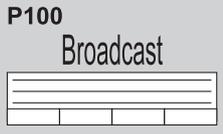
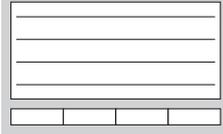
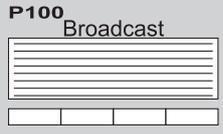
Select the page (up to page 899)

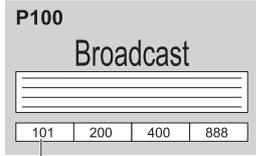
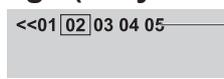
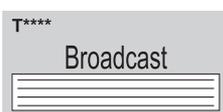
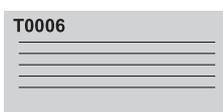


■ To adjust contrast →  (Press three times) →  As the blue bar is displayed

■ To return to TV →  or 

Using teletext conveniently

Reveal hidden data	<p>Reveal hidden words e.g. quiz page answers</p> <p>MENU →  ■ Re-hide → </p>
FULL / TOP / BOTTOM	<p>MENU → </p> <p>(TOP)  → (BOTTOM)  → Normal (FULL) </p> <p>(Expand the TOP half) (Expand the BOTTOM half)</p>

<p>HOLD</p>	<p>Stop automatic updating (If you wish to hold the current page without updating)</p> <p>HOLD  To resume → HOLD </p>
<p>INDEX</p>	<p>Return to the main index page</p> <p>INDEX </p>
<p>Call up a favourite page</p>	<p>View a favourite page stored</p> <p>F.P.  ● Call up the page stored in "blue". ● Factory setting is "P103".</p>
<p>View in multi window</p>	<p>Watch TV and Teletext in two windows at once</p> <p>MENU  (Press twice) →  ● Select Picture and text On or Off</p> <p>● Operations can be made only in Teletext screen.</p> 
<p>Store frequently viewed pages</p>	<p>Store frequently viewed pages in the colour bar (List mode only)</p> <p>As page is displayed  Corresponding colour button → OK  press and hold</p>  <p>The number changes to white.</p> <p>● To change stored pages</p> <p>→  Colour button you want to change →  Enter new page number → OK  press and hold</p>
<p>View sub page</p>	<p>View sub page (Only when teletext is more than one page)</p> <p>  Appears at top of the screen</p> <p>● To view specific sub page</p> <p>→ MENU  → B  →  → Enter the 4-digit number example: P6  </p> <p>● Sub pages: The number of sub pages varies depending on the broadcasters (up to 79 pages). It may take some time for searching, during which time you can watch TV.</p>
<p>Watch TV while waiting for update</p>	<p>View the TV picture while searching for a teletext page Teletext automatically updates itself when new information becomes available. Changes to TV screen temporarily</p> <p>MENU  → Y  →  Appears when updating is completed → Y  → View the updated page</p> <p>(You cannot change the programme.)</p> <p>● The news page provides a function that indicates arrival of latest news ("News Flash").</p>

Watching Videos and DVDs

Connect the external equipment (VCRs, DVD equipment, etc.) and you can watch the input.

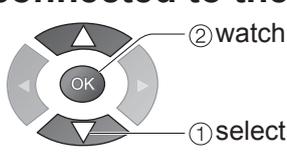
● To connect the equipment → p. 10 and p. 11

The Remote Control is capable of operating some functions of selected Panasonic external equipment.

1 Display the Input select menu



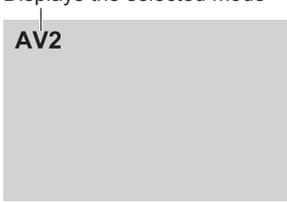
2 Select the input mode connected to the equipment



Input Selection
AV1
AV2
AV3
AV4
PC
HDMI1
HDMI2
TV

- You can also select the input using the AV button on the remote control or the front panel of the TV.
Press the button repeatedly until the desired input is selected.
- You can label or skip each input modes → “Input Labels” (p. 30)

3 View
Displays the selected mode



■ To return to TV
→ TV



Note

- If the external equipment has an aspect adjustment function, set to “16:9”.
- For details, see the manual of the equipment or ask your local dealer.

Panasonic equipment connected to the TV can be directly operated with the remote control.

	<p>VCR / DVD switch* Select VCR to operate Panasonic VCR or DVD equipment Select DVD to operate Panasonic DVD equipment or Player home theatre</p>
	<p>Standby Set to Standby mode / Turn on</p>
	<p>Play Playback videocassette / DVD</p>
	<p>Stop Stop the operations</p>
	<p>Rewind / Skip / Search VCR: Rewind, view the picture rapidly in reverse DVD: Skip to the previous track or title Press and hold to search backward</p>
	<p>Fast-forward / Skip / Search VCR: Fast-forward, view the picture rapidly forward DVD: Skip to the next track or title Press and hold to search forward</p>
	<p>Pause Pause / Resume DVD: Press and hold to play at slow speed</p>
	<p>Programme Up / Down Select programme</p>
	<p>Record Start recording</p>

***Setting your remote control to operate Panasonic VCR, DVD, etc.**

- Set the VCR / DVD switch to the appropriate position → 
- Press and hold  during the following operations
 Enter the appropriate code for the equipment to be controlled, see table below
 → Press 

“VCR” position

Equipment	Code
VCR	10 (default)
DVD	11

“DVD” position

Equipment	Code
DVD	70 (default)
Player home theatre	71

Note

- Confirm if the remote control works correctly after changing the code.
- The codes will be reset to default values if batteries are replaced.
- “DVD” means DVD player, DVD recorders and Recorder home theatre.
- Some operations may not be possible on some equipment models.

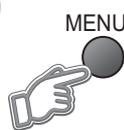
How to Use Menu Functions

Various menus allow you to make settings for the picture, sound, and other functions.



1

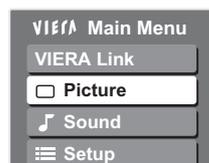
Display the menu



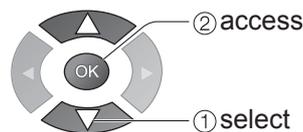
● Displays the functions that can be set (varies according to the input signal)

2

Select the menu

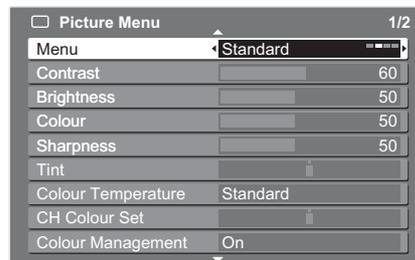


(example: Picture Menu)

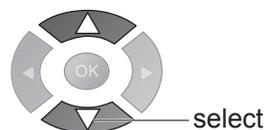


3

Select the item

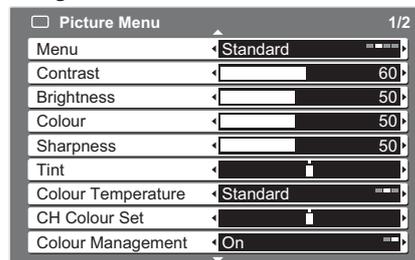


(example: Picture Menu)

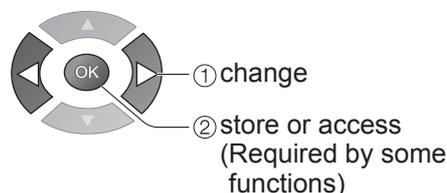


4

Adjust or select



(example: Picture Menu)



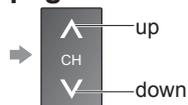
■ To return to TV at any time



■ To return to the previous screen



■ To change menu pages



■ Choose from among alternatives

Number and positions of alternatives



Changed

■ Adjust using the slide bar



Moved

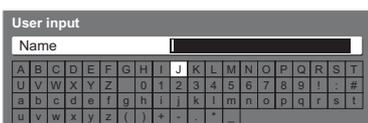
■ Go to the next screen



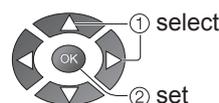
Displays the next screen

■ Enter characters by free input menu

You can enter names or numbers freely for some items.



Set characters

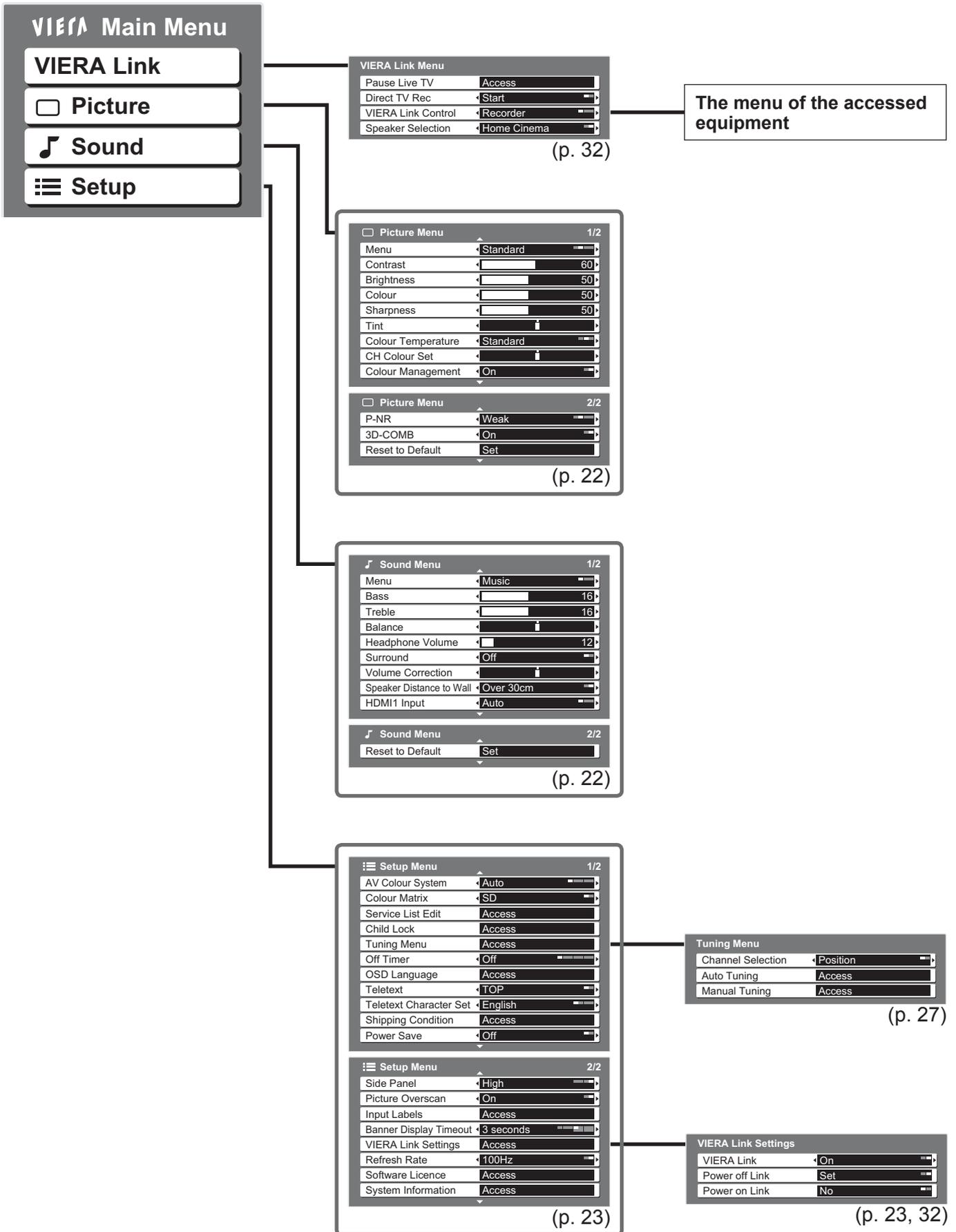


Store

RETURN



■ Overview



● Depending on the received signals, available items are varied.

How to Use Menu Functions

■ Menu list

Menu	Item	Adjustments / Configurations (alternatives)
VIERA Link	Pause Live TV	Controls the connected equipment with VIERA Link function, and enables various convenient recording, playback, etc. (p. 33 - 35) ● You can also access VIERA Link Menu directly using the VIERA Link button on the remote control.
	Direct TV Rec	
	VIERA Link Control	
	Speaker Selection	
Picture	Menu	Basic picture mode (Dynamic / Standard / Cinema) Dynamic : Provides enhanced picture contrast and sharpness when viewing in a bright room Normal : Recommended for viewing under normal ambient room lighting conditions Cinema : For watching movies in a darkened room producing a cinema-like picture ● Set for each input signal
	Contrast, Brightness, Colour, Sharpness	Increases or decreases the levels of these options according to your personal preference
	Tint	With an NTSC signal source connected to the TV, the picture hue can be adjusted to suit your taste ● For NTSC or 60Hz (Component / HDMI) input signal reception only
	Colour Temperature	Allows you to set the overall colour tone of the picture (Cool / Standard / Warm)
	CH Colour Set	Colour density varying between broadcast programmes can be adjusted to three levels for each reception programme ● Select the programme you want to adjust and set this function
	Colour Management	Automatically adjusts colours to vivid ones (Off / On) ● Not valid on PC signal
	P-NR	Picture Noise Reduction Automatically reduces unwanted picture noise and flicker noise in the contoured parts of a picture (Off / Weak / Mid / Strong) ● Not valid on PC signal
	3D-COMB	Occasionally, whilst viewing still or slow moving pictures, colour patterning may be seen Set to "On" to display sharper and more accurate colours (Off / On) ● For PAL or NTSC signal reception only ● Not valid on S-Video, Component, PC and HDMI
	Reset to Default	Press the OK button to reset the present Picture Menu on all inputs to default settings
Sound	Menu	Basic sound mode (Music / News / Cinema) ● Set for each input signal
	Bass	Increases or decreases level to enhance or minimise lower, deeper sound output
	Treble	Increases or decreases level to enhance or minimise sharper, higher sound output
	Balance	Adjusts volume level of right and left speakers
	Headphone Volume	Adjusts the volume of the headphones
	Surround	Surround sound settings (Off / On) Provides a dynamic enhancer to simulate improved spatial effects
	Volume Correction	Adjusts volume of individual programme or input mode
	Speaker Distance to Wall	Adjusts the low frequency sound (Over 30cm / Up to 30cm) ● If the back space between the TV and wall is over 30 cm, "Over 30cm" is recommended. ● If the back space between the TV and wall is within 30 cm, "Up to 30cm" is recommended.
	HDMI1 Input	Select to fit the input signal (Auto / Digital / Analogue) (p. 39) Auto: Automatic detection of digital or analogue sound source Digital: HDMI cable connection Analogue: HDMI-DVI adapter cable connection ● HDMI input mode only ● HDMI2 terminal is for digital signal only ● No setting for HDMI2 available
	Reset to Default	Press the OK button to reset the present Sound Menu to the default settings

■ Menu list

Menu	Item	Adjustments / Configurations (alternatives)	
Setup	AV Colour System	Selects optional colour system based on video signals in AV mode (Auto / PAL / SECAM / NTSC4.43 / NTSC3.58)	
	Colour Matrix	Available only with 480p or 576p input signals in a natural colour from digital equipment connected to AV1 / AV2 Component or HDMI1 / HDMI2 terminals Select SD or HD to adjust suitable colour parameters for SD (standard definition) or HD (high definition) ● SD: Input signal is a normal TV system ● HD: Input signal is a High-Definition system	
	Service List Edit	Skips the unwanted programmes or edits programmes (p. 25)	
	Child Lock	Locks a programme / AV input to prevent access to it (p. 28)	
	Tuning Menu	Channel Selection	Selects the most easily viewed programme selection method (Position / Direct) (p. 27)
		Auto Tuning	Automatically sets the programmes received in the area (p. 27)
		Manual Tuning	Sets the programmes manually (p. 27)
	Off Timer	Sets the time the TV automatically turns Off (Off / 15 / 30 / 45 / 60 / 75 / 90 minutes)	
	OSD Language	Changes language for on-screen displays	
	Teletext	Teletext display mode (TOP (FASTEXT) / List) (p. 16)	
	Teletext Character Set	Select teletext language (English / CIS / E.Europe / Persian)	
	Shipping Condition	Resets all settings, for example, when moving house (p. 29)	
	Power Save	Reduces brightness of picture to economise on power consumption (Off / On)	
	Side Panel	Increases the brightness of the side panel (Off / Low / Mid / High) ● The recommended setting is "High" to prevent panel "image retention"	
	Picture Overscan	Selects the screen area displaying the image (Off / On) On : Enlarged the image to hide the edge of the image. Off : Displayed the image in the original size. ● Set to "On" if noise is generated on the edge of the screen. ● This function is available when aspect is set to 16:9. ● This function can be memorized separately for SD (Standard definition) and HD (High definition) signals.	
	Input Labels	Labels or skips each input terminals (p. 30)	
	Banner Display Timeout	Sets how long the information banner (p. 15) stays on screen ● 0 (No display) to 10 sec. in 1-sec. increments	
	VIERA Link Settings	VIERA Link	Sets to use VIERA Link functions (Off / On) (p. 32)
		Power off Link	Sets to use Power off Link function (No / Set) (p. 32)
		Power on Link	Sets to use Power on Link function (No / Set) (p. 32)
Refresh Rate	Changes the image processing of the panel (depending on the input signal) (50Hz / 100Hz) ● Set to "100Hz" normally		
Software Licence	Displays the software licence information		
System Information	Displays the system information of this TV		

- A different menu will be displayed while PC is used. (p. 31)
- Only available items can be selected.

Editing Programmes

You can skip unwanted programmes or edit programmes.



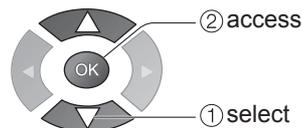
1

Display the menu



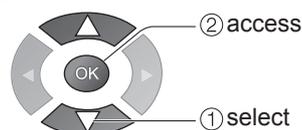
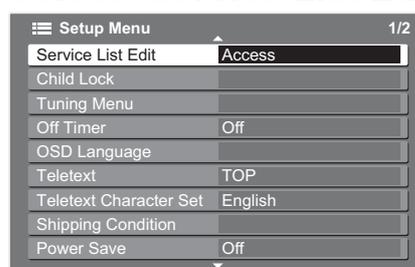
2

Select "Setup"



3

Select "Service List Edit"



To return to TV



4

Set

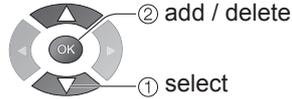
Skip unwanted programmes

Edit programmes (Change name, Move)

Service List Edit

You can hide unwanted services. The deleted services cannot be displayed except in this function. Use this function to skip unwanted programmes.

Select a service and add / delete



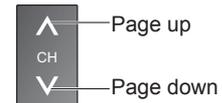
- :add
- :delete (skip)

- To retune each programme (Manual Tuning)
 - ➔ R (p. 27)

You can change the programme name and programme position.

- If a VCR is connected only with the RF cable, edit "VCR".

① Select the programme to edit



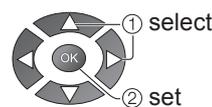
② Edit

■ To change the name displayed when selecting programmes

Select "Rename"



Set characters



(maximum: five characters)

Store

RETURN



■ To move the programme position

Select new position



Store



Tuning Programmes

You can retune all the TV programmes when moving house or search for new services which may have recently started broadcasting.

1 Display the menu

MENU

2 Select "Setup"

VIERA Main Menu
VIERA Link
Picture
Sound
Setup

3 Select "Tuning Menu"

Setup Menu	1/2
Service List Edit	
Child Lock	
Tuning Menu	Access
Off Timer	Off
OSD Language	
Teletext	TOP
Teletext Character Set	English
Shipping Condition	
Power Save	Off

4 Select a function

Tuning Menu	
Channel Selection	Position
Auto Tuning	Access
Manual Tuning	Access

5 Set _____

■ To return to TV
EXIT

Set all programmes automatically

Channel Selection

Auto Tuning

Automatically retune all programmes received in the area.

- If a Child Lock PIN number (p. 28) has been set, it must be entered.

① **Select the Channel Selection method (Position / Direct)**

■ **Position**

Example

Programme Number	Channel Display	Received Programme
1	2	2
2	4	4
3	6	6
4	8	8
5	10	10
6	12	12
7	14	14
8	16	16
9	18	18
10	20	20

When Channel Selection is on Position, and Auto Tuning is performed, the TV memorises the programmes tuned in order from Programme Number 1. During Position mode various reception programmes can be viewed.

■ **Direct**

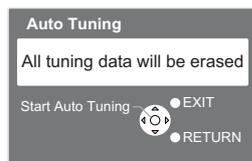
Example

Programme Number	Channel Display	Received Programme
1	—	—
2	2	2
3	—	—
4	4	4
5	—	—
6	6	6
7	—	—
8	8	8
9	—	—
10	10	10

When Channel Selection is on Direct, and Auto Tuning is performed, the TV memorises the Programme Number which is the same as the programme tuned. The Channel Display numbers for the broadcast stations in each region are listed on p. 38.

② **Start Auto Tuning**

Access "Auto Tuning"



Settings are made automatically



- All the previous tuning settings are erased.
- When the operation is completed, the programme at programme position "1" will be displayed.
- If tuning has not been done completely → "Manual Tuning"

■ **For Auto Tuning, using the buttons on the front of the TV (p. 9)**

① Press repeatedly until "Auto Tuning" appears



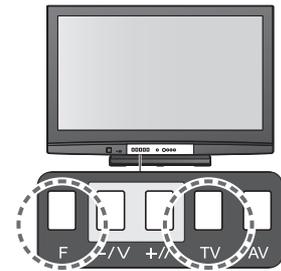
② Access "Auto Tuning"



③ Start "Auto Tuning"



● To return to TV →



Set programme manually

Manual Tuning

■ **Fine Tuning**

Use to make small adjustments to the tuning of an individual programme (affected by weather conditions, etc.)

■ **Manual Tuning**

Set programme manually after Auto Tuning.

- Set Sound System and Colour System, and then perform this function. Normally set Colour System "Auto".
- If a VCR is connected only with the RF cable, select programme position "0".



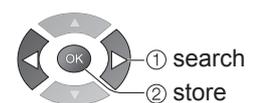
Select the programme position



Select the programme



Search and store



Control Programme Audience

You can lock specific programmes / AV input terminals and control who watches them. (When the locked programme / input is selected, a message appears; by entering the PIN number, you can watch it.)

1 Display the menu
MENU

2 Select "Setup"

 VIERA Main Menu
 VIERA Link
 Picture
 Sound
 Setup

3 Select "Child Lock"

 Setup Menu 1/2
 Service List Edit
 Child Lock Access
 Tuning Menu
 Off Timer Off
 OSD Language
 Teletext TOP
 Teletext Character Set English
 Shipping Condition
 Power Save Off

4 Set

■ To return to TV
EXIT

Control programme audience

Child Lock

① Enter the PIN number (4 digits)

Child Lock-PIN Entry
Please enter new PIN
PIN

- Enter the PIN number twice at first setting.
- Make a note of the PIN number in case you forget it.

② Select "Child Lock List"

Child Lock
Change PIN
Child Lock List Access

③ Select the programme / input to be locked

Child Lock List - Services and AV

Name	Type	Lock
1 BBC	TV	🔒
7 THREE	TV	🔒
14 E4	TV	🔒
19 CBBC	TV	🔒
72 Nwk	TV	🔒
80 BBCi	TV	🔒
AV1	AV	🔒
AV2	AV	🔒

Appears when the programme / input is locked

- To cancel
➔ Select the locked programme / input
➔ OK
- To lock all ➔ Y
- To cancel all locks ➔ B

■ To change the PIN number
Select "Change PIN" in ② and enter a new PIN number twice.

Note

- Setting "Shipping Condition" (p. 29) erases the PIN number and all settings.

Restore Settings

Resets the TV to its original condition, i.e. no programmes tuned in. All settings (programmes, picture, sound quality, etc.) are reset.

1 Display the menu

MENU

2 Select "Setup"

VIERA Main Menu
VIERA Link
Picture
Sound
Setup

② access
① select

3 Select "Shipping Condition"

Setup Menu	1/2
Service List Edit	
Child Lock	
Tuning Menu	
Off Timer	Off
OSD Language	
Teletext	TOP
Teletext Character Set	English
Shipping Condition	Access
Power Save	Off

② access
① select

4 Set

EXIT

■ To return to TV



Restore Settings

Shipping Condition

① Check the message and initialise

Shipping Condition
All tuning data will be erased Are you sure? Are you sure?
Confirm
● EXIT
● RETURN

OK

② Follow the on-screen instructions

- "Auto Tuning" will automatically start when Mains power On / Off switch is next turned On. (p. 12)

■ To retune TV programmes only, e.g. after moving house

➔ "Auto Tuning" (p. 27)

Input Labels

For easier identification and selection of the input mode, you can label each input terminals or skip terminal that is not connected to any equipment.

- To select the input mode → p. 18

1 Display the menu
 MENU

2 Select "Setup"
 VIERA Main Menu
 VIERA Link
 Picture
 Sound
 Setup

3 Select "Input Labels"
 Setup Menu 2/2
 Side Panel Off
 Picture Overscan On
 Input Labels Access
 Banner Display Timeout 3 seconds
 VIERA Link Settings
 Refresh Rate 100Hz
 Software Licence
 System Information

4 Select a input terminal and set
 Input Labels
 AV1 DVD
 AV2 AV2
 AV3 AV3
 AV4 AV4
 PC PC
 HDMI1 HDMI1
 HDMI2 HDMI2

■ To return to TV
 EXIT

The labels you set will be displayed in "Input Selection" menu (p. 18) or banner.
 ● If "Skip" is selected, you cannot select the mode.

■ **User input**
 You can name each input terminals freely.

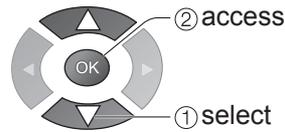
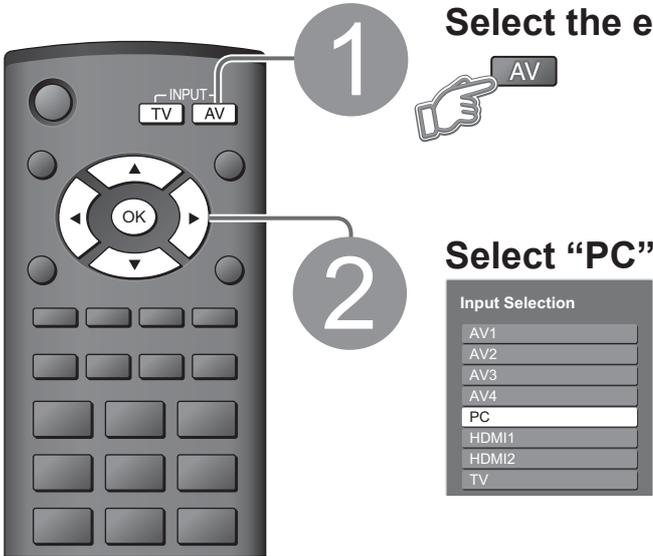
Select "User input" Set characters Store

(maximum: ten characters)

Displaying PC Screen on TV

The screen of the PC connected to the TV can be displayed on the TV.
You can also listen to PC sound with the audio cable connected.

- To connect PC → p. 36



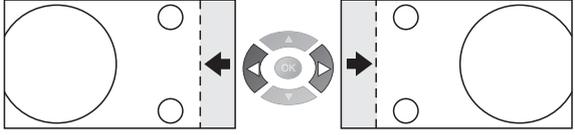
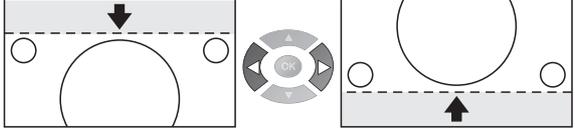
- Corresponding signals → p. 40
- If "H-freq." or "V-freq." is shown in red, the signals may not be supported.

■ To return to TV



■ PC menu setting (changed as desired)

- To make settings → "How to Use Menu Functions" ① to ④ (p. 20)

Menu	Item	Adjustments / Configurations (options)
Picture	W/B High R	White balance of bright red area <input type="checkbox"/> ①
	W/B High B	White balance of bright blue area
	W/B Low R	White balance of dark red area <input type="checkbox"/> ②
	W/B Low B	White balance of dark blue area
	Gamma	(S Curve / 2.0 / 2.2 / 2.5)
	Reset to Default	Press the OK button to reset to the default Picture settings
Setup	Input Resolution	Switches to a wide view ● VGA (640 × 480 pixels), WVGA (852 × 480 pixels), XGA (1,024 × 768 pixels), WXGA (1,366 × 768 pixels) ● Options change depending on signals
	Clock	Set to the minimum level if noise occurs
	H-pos	Adjusts horizontal position 
	V-pos	Adjusts vertical position 
	Clock Phase	Eliminates flicker and distortion ● Adjust after Clock adjustment ● Set to the minimum level if noise occurs
	Sync	PC sync signal type (H & V / On G) ● H & V : Horizontal and Vertical sync from your PC (Most common sync format) On G : Sync on Green sync from your PC
	Reset to Default	Press the OK button to reset to the default Setup settings

- Other items → p. 22 and p. 23

VIERA Link “HDAVI Control™”*

*Enjoy additional HDMI Inter-Operability with Panasonic products which have “HDAVI Control” function. This TV supports “HDAVI Control 3” function.

Connections to the equipment (DIGA Recorder, HD Video Camera, Player theatre, Amplifier, etc.) with HDMI cable allow you to interface them automatically.

These features are limited to models incorporating “HDAVI Control” and “VIERA Link”.

- Some functions are not available depending on the equipment’s version of HDAVI Control. Please confirm the connected equipment’s version of HDAVI Control.
- VIERA Link “HDAVI Control”, based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers’ equipment that supports HDMI CEC cannot be guaranteed.

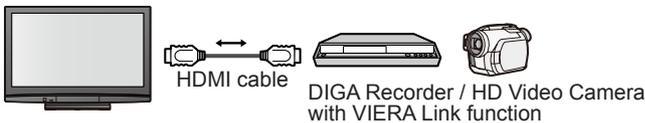
Please refer to individual manuals for other manufacturers’ equipment supporting VIERA Link function. About applicable Panasonic equipment, consult your local Panasonic dealer.

Summary of VIERA Link functions

● Easy playback	● Power on link	● Power off link	● Speaker control
● Control the menu of the connected equipment by VIERA remote control (Available with the equipment which has “HDAVI Control 2” or “HDAVI Control 3” function.)			
● Pause Live TV programme (Available with the equipment which has “HDAVI Control 3” function.)		● Direct TV Recording	

Connections

Read the manual of the equipment, too.

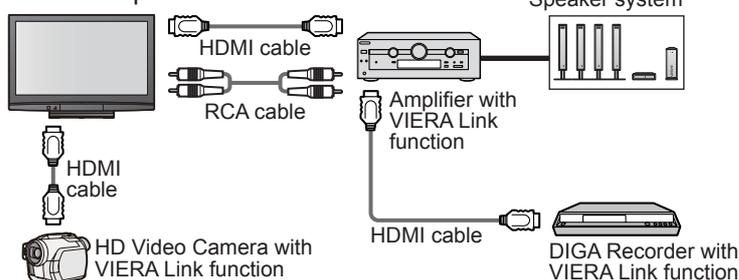


- HDMI cable
Use fully wired HDMI compliant cable. Non-HDMI-compliant cables cannot be utilized. Recommended Panasonic’s HDMI cable part number:
 - RP-CDHG10 (1.0 m)
 - RP-CDHG15 (1.5 m)
 - RP-CDHG20 (2.0 m)
 - RP-CDHG30 (3.0 m)
 - RP-CDHG50 (5.0 m)

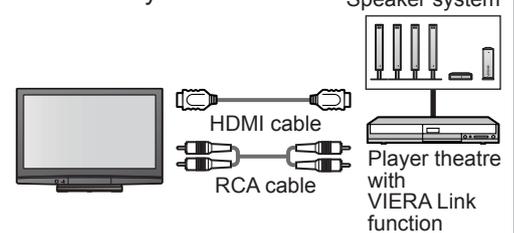
- Connect the equipment supporting VIERA Link to the TV’s HDMI1 or HDMI2 terminals via fully wired HDMI cables.

For Speaker control (Home Cinema)

- To use Amplifier



- To use Player theatre



Preparations

- Connect the equipment supporting VIERA Link.
- Set up the connected equipment. Read the manual of the equipment.
- For optimal recording, the settings of the recorder might be required. For details, read the manual of the recorder.
- Set VIERA Link On in Setup Menu → “VIERA Link” (p. 20-21, 23)
- Set up the TV → **After connection, turn the equipment on and then switch the TV on. Select the input mode to HDMI1 or HDMI2 (p. 18), and make sure that an image is displayed correctly.**
This setup should be done each time when the following conditions occur:
 - for the first time / • when adding or reconnecting equipment / • when changing setup

Features available

Easy playback	Automatic Input switching - When the connected equipment is operated, input mode is switched automatically. When it is stopped operating, input mode is not returned.
Power on link	Set Power on Link “Set” in Setup Menu to use this function → “Power on Link” (p. 20-21, 23) When the connected equipment starts playback or direct navigator / function menu for the equipment are activated, the TV is automatically turned on. (Only when TV is in Standby mode.)
Power off link	Set Power off Link “Set” in Setup Menu to use this function → “Power off Link” (p. 20-21, 23) When TV is set to Standby mode, the connected equipment is also automatically set to Standby. <ul style="list-style-type: none"> ● This function will work even if the TV enters standby mode automatically by Off Timer function or auto power standby function.

- The TV remains on even if the “VIERA Link” compatible equipment is turned off.

■ Features available (Using VIERA Link Menu)

You can pause the live TV programme and resume later.

- This function is available with DIGA Recorder which has HDD and "HDAVI Control 3" function.
- If you cannot operate, check the settings and the equipment → "Preparations" (p. 32)
- Available conditions:
 - when watching TV programme
 - when watching the input from DIGA Recorder

Access and pause the live TV programme

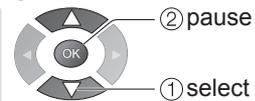
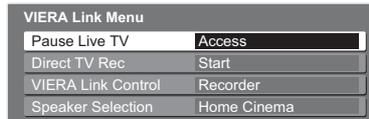
Pause Live TV programme
(HDAVI Control 3 and Recorder with HDD)
Pause Live TV



① Display "VIERA Link Menu"



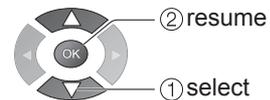
② Select "Pause Live TV" and pause



- Live TV programme is recorded on HDD from where it was paused.

■ **To resume (stop pause)**
Select "Pause Live TV" and access

- About the operations after resuming, read the manual of the equipment.



■ **To return to Live TV**
(cancel pause or resumed playback)

→ (change the input mode) or



(change the programme)

- If you cancel pause or resumed playback, the recorded programme will be deleted from HDD.

Recording the current programme in DIGA Recorder immediately.

- This function is available with DIGA Recorder which has "HDAVI Control 3" function.
- If you cannot operate, check the settings and the equipment → "Preparations" (p. 32)
- Available conditions:
 - when watching TV programme
- The recording is performed by using the tuner of DIGA Recorder.
Changing programme, input mode or turning off the TV is available during the recording.

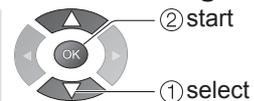
Direct TV Recording -
What you see is What you record
(HDAVI Control 3)
Direct TV Rec



① Display "VIERA Link Menu"

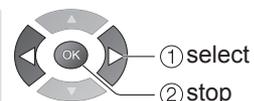


② Select "Direct TV Rec" and start recording



■ **To stop recording**

Select "Stop" in "Direct TV Rec" and access



VIERA Link “HDAVI Control™”

■ Features available (Using VIERA Link Menu)

You can control some functions of the connected equipment with this TV remote control (point the remote control at the TV’s signal receiver).

- This function is available with the equipment which has “HDAVI Control 2” or “HDAVI Control 3” function.
- If you cannot operate, check the settings and the equipment → “Preparations” (p. 32)

Access and operate the menu of the equipment



① Display “VIERA Link Menu”



② Select “VIERA Link Control”



③ Select the equipment you want to access

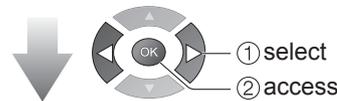
- “Home Cinema” means Player theatre, Recorder theatre and Amplifier.



Recorder / Player / Home Cinema / Video Camera

The type of the connected equipment is displayed.

Select the type of the equipment and access.



The menu of the accessed equipment
(Input mode will be changed automatically)

④ Operate the menu of the equipment

- Available VIERA remote control buttons (depending on the connected equipment):

	Move the cursor / select the menu
	Move the cursor / access / adjust
	Store / set / access
	Return to the previous menu
	Exit the menu
	Display the operation guide for the equipment / The same functions with the OPTION button of the equipment
	Access when the key words are displayed on colour bar

- About the operations for the equipment, read the manual of the equipment.

Control the menu of the connected equipment by VIERA remote control

(HDAVI Control 2)
(HDAVI Control 3)

VIERA Link Control

■ If you access the invalid equipment

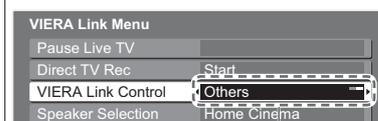
When the equipment with “HDAVI Control” function is connected



Recorder / Player / Home Cinema / Video Camera

The type of the connected equipment is displayed. But you cannot access it. Use its own remote control to operate the equipment.

When the equipment of other types or manufacturers is connected



Others

“Others” is displayed. You cannot access it. Use its own remote control to operate the equipment.

■ Features available (Using VIERA Link Menu)

You can control the theatre speaker with this TV remote control (point the remote control at the TV's signal receiver).

- This function is available with the Amplifier or Player theatre which has "HDAVI Control" function.
- If you cannot operate, check the settings and the equipment → "Preparations" (p. 32)

Access and control the speaker volume

Speaker control

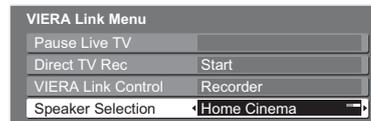
Speaker Selection



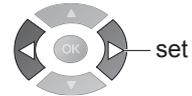
① Display "VIERA Link Menu"



② Select "Speaker Selection"



③ Set to "Home Cinema" or "TV"



■ Home Cinema

Amplifier or Player theatre will be automatically turned on if it is in Standby mode and the sound is from theatre speakers connected to the equipment.

- Volume up / down →
- Mute →
- The sound of TV speakers is mute.
- When the equipment is turned off, TV speakers will be active.

■ TV

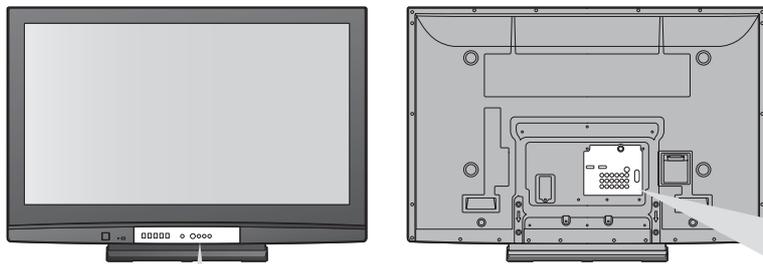
TV speakers are active.

Note

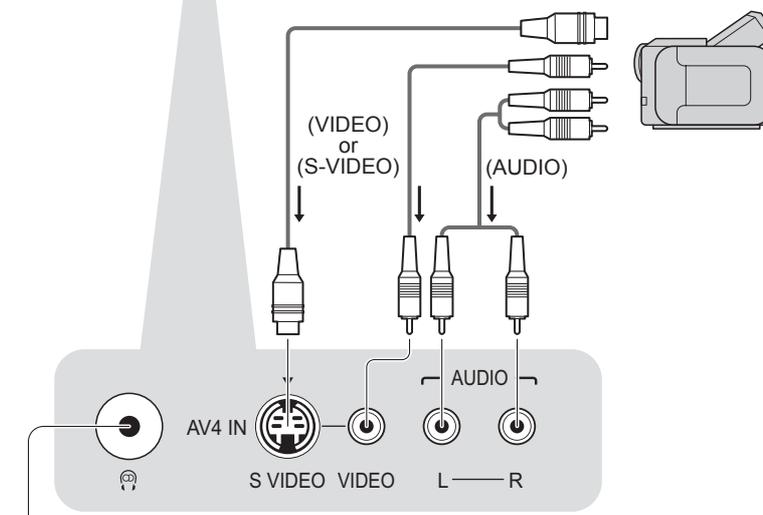
- This function may not work properly depending on the connected equipment.
- Image or sound may not be available for the first few seconds when the playback starts.
- Image or sound may not be available for the first few seconds when Input mode is switched.
- Volume function will be displayed when adjusting the volume of the equipment.
- Easy playback is also available by using the remote control for Amplifier or Player theatre. Read the manual of the equipment.
- About HDMI cable for connecting Panasonic HD Video Camera, read the manual of the equipment.
- If more than one equipment of the same type are connected to the TV by HDMI cables, for example two DIGA Recorders to HDMI1 and HDMI2, VIERA Link will only be available for the lower terminal number, in this case HDMI1.
- "HDAVI Control 3" is the newest standard (current as of December, 2007) for HDAVI Control compatible equipment. This standard is compatible with conventional HDAVI equipment.
- To confirm this TV's version of HDAVI Control → "System Information" (p. 23)

External Equipment

These diagrams show our recommendations for how to connect the TV to your various equipment. For other connections, consult the instructions for each piece of equipment, the table below, and the specifications (p. 43).



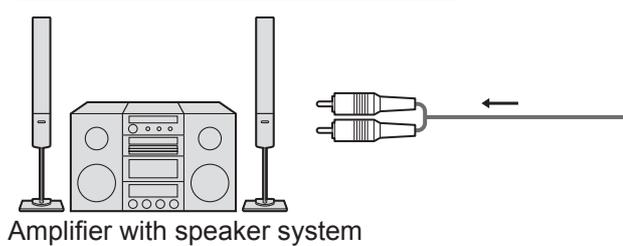
Camcorder / Game equipment



Headphones

- To adjust volume
 - ➔ "Headphone Volume" in the Sound Menu (p. 22)

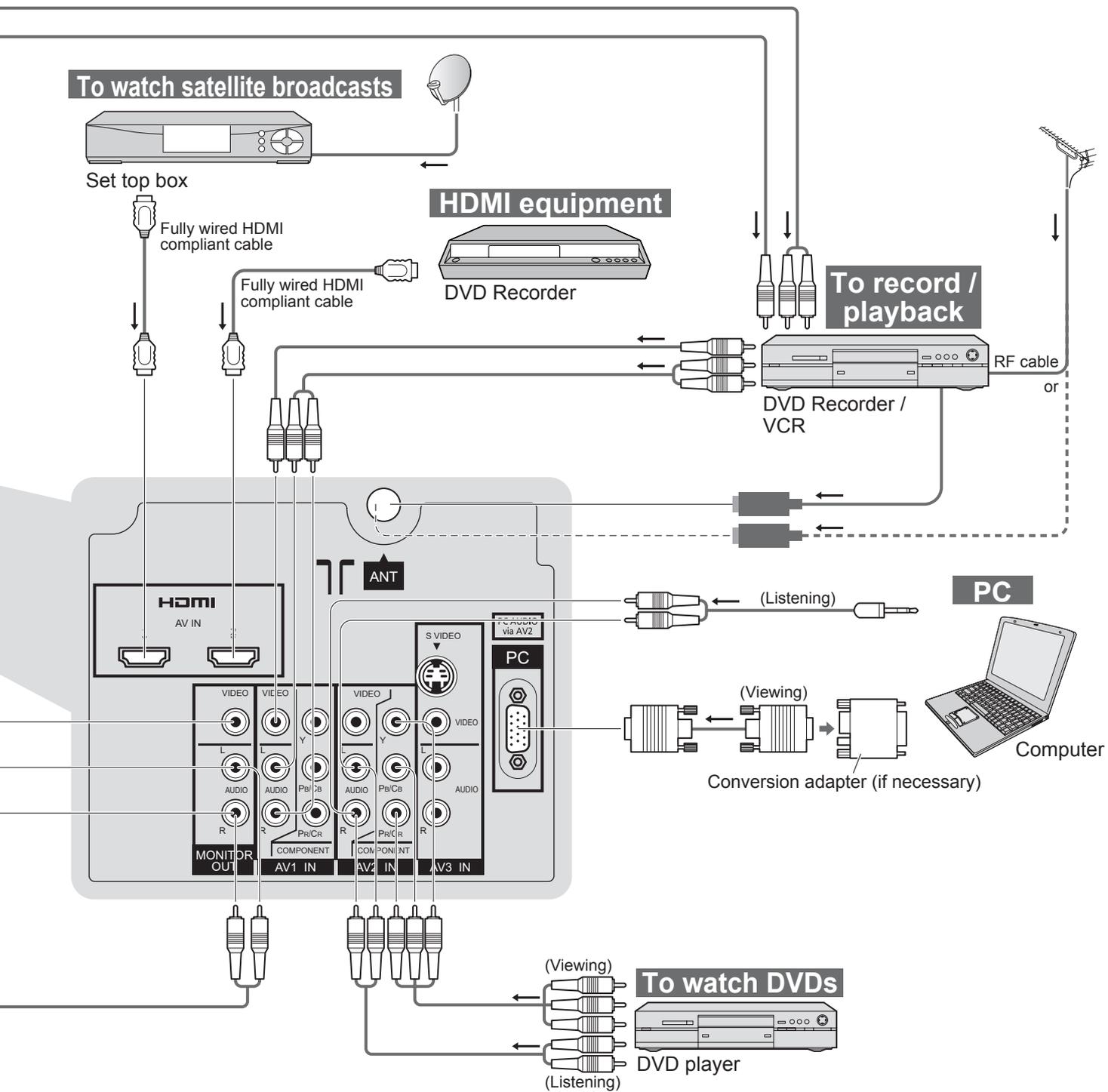
To listen with speakers



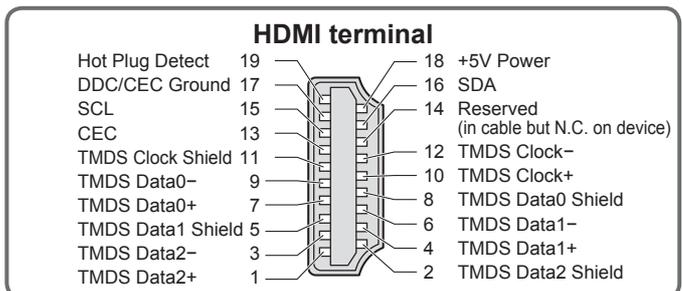
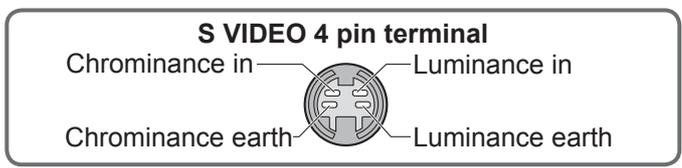
Types of connectable equipment to each terminal

Terminal	AV1 IN	AV2 IN	AV3 IN	AV4 IN (Front of TV)
Recording / Playback (equipment)	VIDEO, L, AUDIO, R	VIDEO, L, AUDIO, R	S VIDEO, VIDEO, L, R	S VIDEO, VIDEO, L, R
To record / playback videocassettes / DVDs (VCR / DVD recorder)	○	○	○	○
To watch DVDs (DVD player)	○	○	○	○
To watch camcorder images (Video camera)	○	○	○	○
To watch satellite broadcasts (Set top box)	○	○	○	○
To play games (Game equipment)	○	○	○	○
To use amplifier with speaker system				
VIERA Link				

○: Recommended Connection



MONITOR OUT	HDMI	
	1	2
VIDEO	○	○
L	○	○
R	○	○
AUDIO	○	○
L	○	○
R	○	○



- Connect the S VIDEO or VIDEO terminal when using AV3 / AV4 IN terminals.
- Connect the COMPONENT or VIDEO terminal when using AV1 / AV2 IN terminals.

Technical Information

Programme Allocation

Channel Plan	China	Hong Kong	Asia/M.East	NZ / Indonesia	Indian CATV	CIS / E.Europe	South Africa	American System	American CATV	Japan
CH DISPLAY	Receive programme									
0	—	—	—	—	—	—	—	—	—	—
1	1	—	—	1	1	1	1	—	1	1
2	2	—	2	2	2	2	2	2	2	2
3	~	—	~	~	3	~	~	~	~	~
4	~	—	~	~	4	~	~	~	~	~
5	~	—	~	~	S'1	~	~	~	~	~
6	~	—	~	~	S'2	~	~	~	~	~
7	~	—	~	~	S'3	~	~	~	~	~
~	~	—	~	~	S1	~	~	~	~	~
11	~	—	11	11	S2	11	11	~	~	~
12	12	—	12	—	S3	12	12	~	~	12
13	13	—	—	—	S4	—	13	13	~	13
14	~	—	—	—	~	—	—	14	~	~
15	~	—	—	—	~	—	—	~	~	~
16	~	—	—	—	~	—	—	~	~	~
~	~	—	—	—	~	—	—	~	~	~
19	~	—	—	—	S10	—	—	~	~	~
20	~	—	—	—	5	—	—	~	~	~
21	~	21	21	21	6	21	21	~	~	~
22	~	~	~	~	~	~	~	~	~	~
23	~	~	~	~	~	~	~	~	~	~
24	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	12	~	~	~	~	~
28	~	~	~	~	S11	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
57	57	~	~	~	S40	~	~	~	~	~
58	—	~	~	~	S41	~	~	~	~	~
59	—	~	~	~	21	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
62	—	62	62	62	24	62	62	62	62	62
63	—	63	63	63	25	63	63	63	63	C13
~	~	~	~	~	~	~	~	~	~	~
69	—	69	69	69	31	69	69	69	~	~
70	—	—	—	—	32	—	—	—	~	~
~	~	~	~	~	~	~	~	~	~	~
73	—	—	—	—	~	~	~	~	~	~
74	—	S'1	S'1	S'1	~	S'1	S'1	~	~	~
75	—	S'2	S'2	S'2	~	~	S'2	~	~	~
76	—	S'3	S'3	S'3	~	~	S'3	~	~	~
77	—	—	—	—	~	~	~	~	~	~
78	—	—	—	—	~	~	~	~	~	~
79	—	—	—	—	41	~	~	~	~	~
80	—	S1	S1	S1	42	S1	S1	~	~	~
81	Z1	S2	S2	S2	~	S2	S2	~	~	~
~	~	~	~	~	~	~	~	~	~	~
89	Z9	S10	S10	S10	51	S10	S10	~	~	~
90	Z10	S11	S11	S11	52	S11	—	~	~	~
91	Z11	S12	S12	S12	~	S12	—	~	~	~
92	Z12	S13	S13	S13	~	S13	—	~	~	~
93	Z13	S14	S14	S14	~	S14	S14	~	~	~
94	Z14	S15	S15	S15	~	S15	S15	~	~	~
95	Z15	S16	S16	S16	~	S16	S16	~	~	~
96	Z16	S17	S17	S17	~	S17	S17	~	~	~
97	Z17	S18	S18	S18	~	S18	S18	~	~	~
98	Z18	S19	S19	S19	~	S19	S19	~	~	~
99	Z19	S20	S20	S20	61	S20	S20	~	99	C49
100	Z20	S21	S21	S21	62	S21	S21	~	100	~
~	~	~	~	~	~	~	~	~	~	~
107	~	~	~	~	69	~	~	~	~	~
~	~	~	~	~	70	~	~	~	~	~
117	Z37	~	~	~	~	~	~	~	~	~
118	—	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
120	—	S41	S41	S41	~	S41	S41	~	~	~
~	~	~	~	~	~	~	~	~	~	~
125	—	~	~	~	~	~	~	~	125	~

HDMI connection

HDMI (high-definition multimedia interface) allows you to enjoy high-definition digital images and high-quality sound by connecting the TV and the equipment.

HDMI-compatible equipment (*1) with an HDMI or DVI output terminal, such as a set top box or a DVD player, can be connected to the HDMI terminal using an HDMI compliant (fully wired) cable.

About connections, see "External Equipment" (p. 36).

- HDMI is the world's first complete digital consumer AV interface complying with a non-compression standard.
- If the external equipment has only a DVI output, connect to the HDMI1 terminal via a DVI to HDMI adapter cable (*2).
- When the DVI to HDMI adapter cable is used, connect the audio cable to the audio input terminal (HDMI1: use AV2 IN AUDIO terminals).
- Audio settings can be made on the "HDMI1 Input" menu screen. (p. 22)
- Applicable audio signal sampling frequencies (2ch L.PCM): 48 kHz, 44.1 kHz, 32 kHz
- HDMI2 terminal is for digital audio signal only.
- Use with a PC is not assumed.
- If the connected equipment has an aspect adjustment function, set the aspect ratio to "16:9".
- These HDMI connectors are "type A".
- These HDMI connectors are compatible with HDCP (High-Bandwidth Digital Content Protection) copyright protection.
- An equipment having no digital output terminal may be connected to the input terminal of either "COMPONENT", "S-VIDEO", or "VIDEO" to receive analogue signals.
- The HDMI input terminal can be used with only the following image signals:
480i, 480p, 576i, 576p, 720p, 1080i and 1080p. Match the output setting of the digital equipment.
- For details of the applicable HDMI signals, see p. 40.

(*1): The HDMI logo is displayed on HDMI-compliant equipment.
(*2): Enquire at your local digital equipment retailer shop.

Stereo / Bilingual Sound Selection

∞/▽ When you receive the stereo / bilingual sound system, sound output modes can be selected by pressing the **I/II Stereo / Bilingual Sound Selection** button.

Audio Signal	STEREO	MAIN I	SUB II	MONO
Mode Indicator	∞	I	II	▽

NICAMUsed in New Zealand, Singapore, Hong Kong etc.

Type of broadcast	Regular broadcast (Standard Audio)	Regular + NICAM MONO I (MAIN I)	NICAM STEREO	NICAM DUAL MONO (MAIN I / SUB II)
Mode Indicator	No Indicator ↔ ▽	I ↔ ▽	∞ ↔ ▽	I → II ↙ ▽ ↘

A2(German)Used in Australia, Malaysia etc.

Type of broadcast	Regular broadcast (Standard Audio)	BILINGUAL or DUAL MONO: MAIN I / SUB II	STEREO
Mode Indicator	No Indicator ↔ ▽	I ↔ II	∞ ↔ ▽

- If the stereo signal is poor or the receiving conditions are not optimum or if STEREO:MONO automatic switching occurs, it is recommended you switch from STEREO to MONO.
- Even when the contents of the receiving signal undergo changes, selection mode is kept intact.
- When the receiving conditions deteriorate, listening will be easier if the mode is set to the MONO position, using the stereo / bilingual sound selection button.
- DUAL, also known as DUAL MONO or as BILINGUAL is not currently transmitted in some countries.

Technical Information

PC connection

A PC may be connected to this TV so that the PC screen is displayed and sound is heard from the TV.

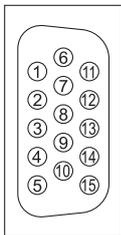
- PC signals that can be inputted: Horizontal scanning frequency 31 to 69 kHz; vertical scanning frequency 59 to 86 Hz (more than 1,024 signal lines could result in incorrect display of the image).
- A PC adapter is not necessary for the DOS/V-compliant D-sub 15-pin connector.

Note

- Some PC models cannot be connected to this TV.
- When using PC, set the colour display quality of PC to the highest position.
- For details of the applicable PC signals, see below.
- Max. display resolution

Aspect	4:3	768 × 768 pixels
	16:9	1,024 × 768 pixels

- D-sub 15-pin connector signal



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

Input signal that can be displayed

COMPONENT (Y, P_B/C_B, P_R/C_R), HDMI

* Mark: Applicable input signal

Signal name	COMPONENT	HDMI
525 (480) / 60i	*	*
525 (480) / 60p	*	*
625 (576) / 50i	*	*
625 (576) / 50p	*	*
750 (720) / 60p	*	*
750 (720) / 50p	*	*
1,125 (1,080) / 60i	*	*
1,125 (1,080) / 50i	*	*
1,125 (1,080) / 60p		*
1,125 (1,080) / 50p		*
1,125 (1,080) / 24p		*

PC (D-sub 15P)

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)
640 × 400 @70 Hz	31.47	70.07
640 × 480 @60 Hz	31.47	59.94
640 × 480 @75 Hz	37.50	75.00
800 × 600 @60 Hz	37.88	60.32
800 × 600 @75 Hz	46.88	75.00
800 × 600 @85 Hz	53.67	85.06
852 × 480 @60 Hz	31.44	59.89
1,024 × 768 @60 Hz	48.36	60.00
1,024 × 768 @70 Hz	56.48	70.07
1,024 × 768 @75 Hz	60.02	75.03
1,024 × 768 @85 Hz	68.68	85.00
1,280 × 1,024 @60 Hz	63.98	60.02
1,366 × 768 @60 Hz	48.39	60.04
Macintosh13" (640 × 480)	35.00	66.67
Macintosh16" (832 × 624)	49.73	74.55
Macintosh21" (1,152 × 870)	68.68	75.06

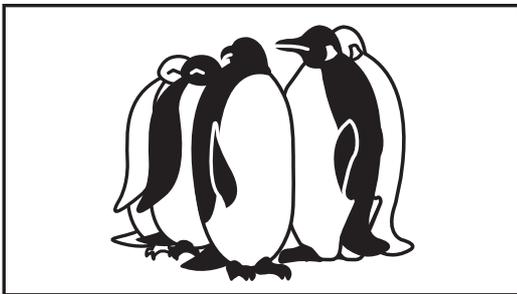
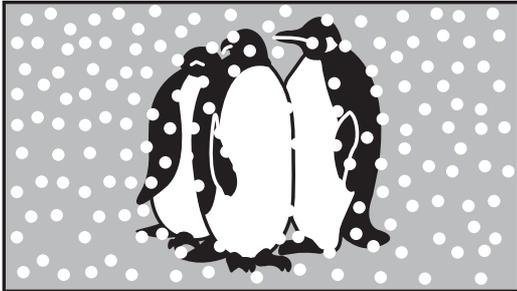
Note

- Signals other than above may not be displayed properly.
- The above signals are reformatted for optimal viewing on your display.
- Applicable input signal for PC is basically compatible to VESA standard timing.
- PC signal is magnified or compressed for display, so that it may not be possible to show fine detail with sufficient clarity.

FAQs

Before requesting service or assistance, please follow these simple guides to resolve the problem. If the problem still persists, please contact your local Panasonic dealer for assistance.

White spots or shadow images (noise)



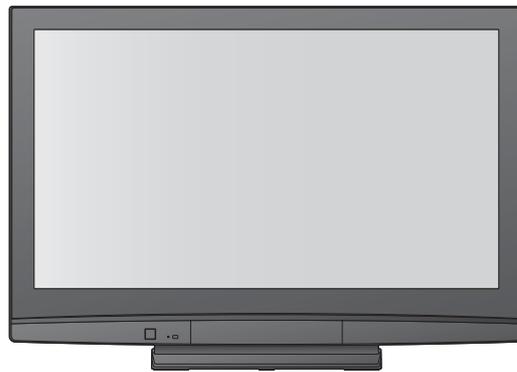
- Check the position, direction, and connection of the aerial.

Neither image nor sound is produced

- Is the TV in "AV mode"?
- Is the mains lead plugged into the socket outlet?
- Is the TV turned On?
- Check Picture Menu (p. 22) and volume.

An error message appears

- Follow the message's instructions.
- If the problem persists, contact the authorized Service Centre.



"VIERA Link" function does not work and an error message appears

- Confirm the connection.
- Turn the connected equipment on and then switch the TV on. (p. 32)

Permanently lit spots on screen

- Due to production process involved in this technology this may result in some pixels which are permanently lit or unlit. This is not a malfunction.

Contrast is reduced

- Contrast is lowered in the following conditions without any user operation for a few minutes:
 - no signal in AV mode
 - selected locked programme
 - selected invalid programme
 - displayed menu

FAQs

	Problem	Actions
Screen	Chaotic image, noisy	<ul style="list-style-type: none"> ● Set "P-NR" in the Picture Menu (to remove noise). (p. 22) ● Check nearby electrical products (car, motorcycle, fluorescent lamp).
	No image can be displayed	<ul style="list-style-type: none"> ● Is "Colour" or "Contrast" in the Picture Menu set to the minimum? (p. 22) ● Check Colour System. (p. 27) ● Check AV Colour System. (p. 23)
	Blurry or distorted image (no sound or low volume)	<ul style="list-style-type: none"> ● Reset programme. (p. 27)
	Unusual image is displayed	<ul style="list-style-type: none"> ● Turn off the TV with Mains power On / Off switch, then turn it on again.
Sound	No sound is produced	<ul style="list-style-type: none"> ● Is "Sound mute" active? (p. 9) ● Is the volume set to the minimum?
	Sound level is low or sound is distorted	<ul style="list-style-type: none"> ● Sound signal reception may be deteriorated. ● Check Sound system. (p. 27)
HDMI	Sound is unusual	<ul style="list-style-type: none"> ● Set the sound setting of the connected equipment to "2ch L.PCM". ● Check the "HDMI1 Input" setting in the Sound Menu. (p. 22) ● If digital sound connection has a problem, select analogue sound connection. (p. 39)
	Pictures from external equipment are unusual when the equipment is connected via HDMI	<ul style="list-style-type: none"> ● Is the HDMI cable connected properly? (p. 36) ● Turn Off the TV and equipment, then turn them On again. ● Check an input signal from the equipment. (p. 40) ● Use an equipment compliant with EIA/CEA-861/861B.
Other	TV goes into "Standby mode"	<ul style="list-style-type: none"> ● Off Timer function is activated. ● The TV enters "Standby mode" about 30 mins. after broadcasting ends.
	The remote control does not work	<ul style="list-style-type: none"> ● Are the batteries installed correctly? (p. 6) ● Has the TV been switched On?

Specifications

Power Source		AC 220-240 V, 50 / 60 Hz																														
Power Consumption	Power rating	335 W																														
	Standby condition	0.7 W																														
Display panel	Aspect Ratio	16:9																														
	Visible screen size	106 cm (diagonal)																														
		922 mm (W) × 518 mm (H)																														
Number of pixels	786,432 (1,024 (W) × 768 (H)) [3,072 × 768 dots]																															
Sound	Speaker	160 mm × 42 mm × 2 pcs, 8 Ω																														
	Audio Output	20 W (10 W + 10 W), 10% THD																														
	Headphones	M3 (3.5 mm) stereo mini Jack × 1																														
PC signals		VGA, SVGA, XGA SXGA (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz																														
Receiving Systems / Band name		<table border="1"> <thead> <tr> <th>17 Systems</th> <th>Function</th> <th>17 Systems</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>1 PAL B, G, H</td> <td rowspan="7">Reception of broadcast transmissions and Playback from Video Cassette Tape Recorders</td> <td>8 NTSC 4.43/5.5 MHz</td> <td rowspan="7">Playback from Special VCR's or DVD</td> </tr> <tr> <td>2 PAL I</td> <td>9 NTSC 4.43/6.0 MHz</td> </tr> <tr> <td>3 PAL D, K</td> <td>10 NTSC 4.43/6.5 MHz</td> </tr> <tr> <td>4 SECAM B, G</td> <td>11 NTSC 3.58/5.5 MHz</td> </tr> <tr> <td>5 SECAM D, K</td> <td>12 NTSC 3.58/6.0 MHz</td> </tr> <tr> <td>6 SECAM K1</td> <td>13 NTSC 3.58/6.5 MHz</td> </tr> <tr> <td>7 NTSC M (NTSC 3.58/4.5 MHz)</td> <td>14 SECAM I</td> </tr> <tr> <td></td> <td></td> <td>15 PAL 60 Hz/5.5 MHz</td> <td rowspan="3">Playback from Special Disc Players and Special VCR's or DVD</td> </tr> <tr> <td></td> <td></td> <td>16 PAL 60 Hz/6.0 MHz</td> </tr> <tr> <td></td> <td></td> <td>17 PAL 60 Hz/6.5 MHz</td> </tr> </tbody> </table>	17 Systems	Function	17 Systems	Function	1 PAL B, G, H	Reception of broadcast transmissions and Playback from Video Cassette Tape Recorders	8 NTSC 4.43/5.5 MHz	Playback from Special VCR's or DVD	2 PAL I	9 NTSC 4.43/6.0 MHz	3 PAL D, K	10 NTSC 4.43/6.5 MHz	4 SECAM B, G	11 NTSC 3.58/5.5 MHz	5 SECAM D, K	12 NTSC 3.58/6.0 MHz	6 SECAM K1	13 NTSC 3.58/6.5 MHz	7 NTSC M (NTSC 3.58/4.5 MHz)	14 SECAM I			15 PAL 60 Hz/5.5 MHz	Playback from Special Disc Players and Special VCR's or DVD			16 PAL 60 Hz/6.0 MHz			17 PAL 60 Hz/6.5 MHz
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Receiving Channels (Regular TV)		VHF BAND 2-12 (PAL/SECAM B, K1) 0-12 (PAL B AUST.) 1-9 (PAL B N.Z.) 1-12 (PAL/SECAM D) 1-12 (NTSC M Japan) 2-13 (NTSC M USA)	UHF BAND 21-69 (PAL G, H, I/SECAM G, K, K1) 28-69 (PAL B AUST.) 13-57 (PAL D, K) 13-62 (NTSC M Japan) 14-69 (NTSC M USA)	CATV S1-S20 (OSCAR) 1-125 (USA CATV) C13-C49 (JAPAN) S21-S41 (HYPER) Z1-Z37 (CHINA) 5A, 9A (AUST.)																												
Aerial - Rear		VHF / UHF																														
Operating Conditions		Temperature : 0 °C - 40 °C Humidity : 20 % - 80 % RH (non-condensing)																														
Connection Terminals	AV1 Input	AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]																												
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)																												
		COMPONENT	Y P _B /C _B , P _R /C _R	1.0 V[p-p] (including synchronization) ±0.35 V[p-p]																												
	AV2 Input	AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]																												
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)																												
		COMPONENT	Y P _B /C _B , P _R /C _R	1.0 V[p-p] (including synchronization) ±0.35 V[p-p]																												
	AV3 Input	AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]																												
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)																												
		S VIDEO	Mini DIN 4-pin	Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)																												
	AV4 Input	AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]																												
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)																												
		S VIDEO	Mini DIN 4-pin	Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)																												
	Monitor Output	AUDIO L - R	RCA PIN Type × 2	0.5 V[rms] (high impedance)																												
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)																												
Others	HDMI1 / 2 Input	TYPE A Connectors	● This TV supports "HDAVI Control 3" function.																													
	PC Input	HIGH-DENSITY D-SUB 15PIN	R, G, B/0.7 V[p-p] (75 Ω) HD, VD/TTL Level 2.0 - 5.0 V[p-p] (high impedance)																													
	Card slot	SD Card slot × 1 (Factory use)																														
Dimensions (W × H × D)		1,020 mm × 727 mm × 327 mm (With Pedestal) 1,020 mm × 679 mm × 92.5 mm (TV only)																														
Mass		27.5 kg Net (With Pedestal) 25.5 kg Net (TV only)																														

Note

- Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.

Licence

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WARRANTY - New Zealand only

WE WARRANT that the Panasonic Television that you have purchased is free from defects in material and workmanship under normal home use and service.

Accordingly, we undertake to repair, or at our option, replace without cost to the owner, either for material or labour, any part which within 12 months from the date of delivery is found to be defective, provided that the appliance has been used for domestic purposes only and in accordance with the instructions given in the Instruction Book and not been subjected to misuse, neglect or installed, dismantled, repaired or serviced by any other than an authorised Panasonic New Zealand Dealer or Panasonic New Zealand Authorised Service Centre.

NOTE

- Before reporting a fault, please ensure that you read the item "Troubleshooting" in the information section of your Panasonic Instruction Book.
- It is important to retain your proof of purchase as this will be required by the serviceman or retailer as proof of purchase date, should service be required.
- In the event of service being required, contact your Panasonic New Zealand retailer or Panasonic New Zealand Authorised Service Centre.

IMPORTANT

Any request for warranty service must be through an Authorised Panasonic New Zealand Service Centre who during the period of the warranty, undertakes to make any necessary adjustment and fit any replacement part supplied by the manufacturer, during normal working hours, or alternatively will arrange for such service to be provided by some other Panasonic New Zealand Authorised Service Centre.

NEW ZEALAND

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www.panasonic.co.nz

Customer's Record

The model number and serial number of this product may be found on its rear panel. You should note this serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

Model Number _____

Serial Number _____

Matsushita Electric Industrial Co., Ltd.

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