

# Panasonic®

## Operating Instructions Plasma Television

Model No. **TH-37PV70EYA**  
**TH-42PV70EYA**

# VIERA



**VIERA**  
Link



**HD**  
ready

**HDMI**  
HIGH-DEFINITION MULTIMEDIA INTERFACE

**English**

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.



TQB0E0536

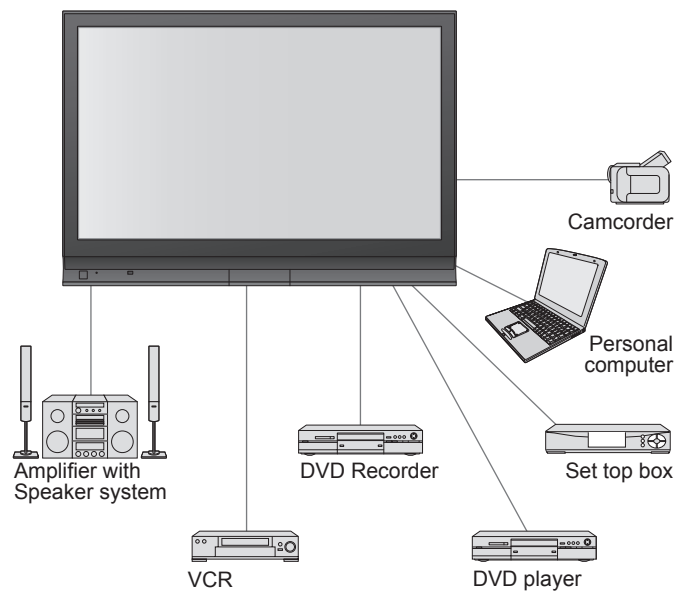
Turn your own living room into a movie theatre!

**Experience an amazing level of multi-**



# media excitement

## Enjoy rich multi-media



# Contents

## Be Sure to Read

- Safety Precautions ..... 4  
(Warning / Caution)
- Notes ..... 5
- Maintenance ..... 5

## Quick Start Guide

- Accessories / Options ..... 6
- Installation of the pedestal ... 7
- Identifying Controls ..... 9
- Basic Connection ..... 10
- Auto Setup ..... 12

## Enjoy your TV!

### Basic Features

- Watching TV ..... 14
- Watching Videos and DVDs ..... 16
- Viewing Teletext ..... 18

### Advanced Features

- How to Use Menu Functions ..... 20  
(picture, sound quality, etc.)
- Editing and Setting Channels ..... 24
- Control Channel Audience ..... 26
- Restore Settings ..... 27
- Input Labels ..... 28
- Displaying PC Screen on TV ..... 29
- Q-Link Functions ..... 30
- HDMI Functions ..... 31  
(HDMI terminal / VIERA Link)
- External Equipment ..... 34

### FAQs, etc.

- Technical Information ..... 36
- FAQs ..... 39
- Licence ..... 41
- Specifications ..... 42

# Safety Precautions

## Warning & Caution

### Handling the mains plug

- Ensure that the mains plug is easily accessible at all times. The On / Off switch on this model does not fully disconnect the TV from the mains supply. Remove the mains plug from the wall socket when the TV is not used for a prolonged period of time.
- Ensure the grounding pin on the mains plug is securely connected to prevent electrical shock.
  - An apparatus with CLASS I construction shall be connected to a mains socket outlet with a protective earthing connection.
- Do not use any mains lead other than that provided with this TV. (This may cause fire or electrical shock.)

### Power source

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

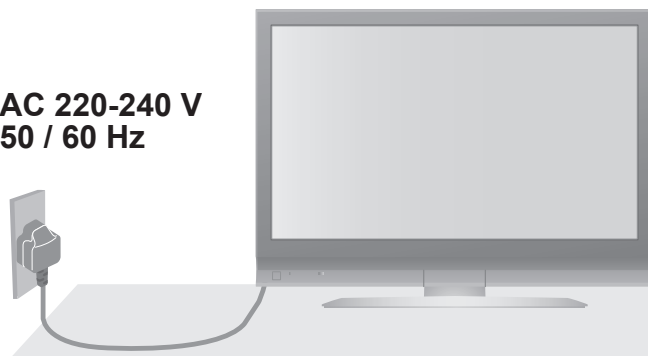
### Do not remove the cover

- Do not remove the rear cover as live parts are accessible when it is removed. There are no user serviceable parts inside.

### 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.

AC 220-240 V  
50 / 60 Hz





### Transport only in upright position

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

## IMPORTANT: THE MOULDED MAINS PLUG

FOR YOUR SAFETY, PLEASE READ THE FOLLOWING TEXT CAREFULLY.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 5 amp fuse is fitted in this mains plug. Shall the fuse need to be replaced, please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS1362.

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

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

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

A replacement fuse cover may be purchased from your local Panasonic Dealer.

**If the fitted moulded mains plug is unsuitable for the socket outlet in your home, then the fuse shall be removed and the mains plug cut off and disposed of safely. There is a danger of severe electrical shock if the cut off mains plug is inserted into any 13 amp socket.**


If a new mains plug is to be fitted, please observe the wiring code as shown below.

If in any doubt, please consult a qualified electrician.

**WARNING: – THIS APPARATUS MUST BE EARTHED.**

**IMPORTANT:** – The wires in this mains lead are coloured in accordance with the following code: –  
Green-and-Yellow: Earth Blue: Neutral Brown: Live

As the colours of the wire in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your mains plug, proceed as follows.

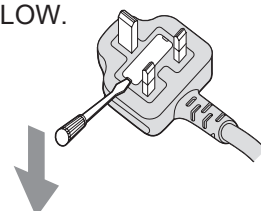
The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the mains plug which is marked with the letter E or by the Earth symbol  or coloured GREEN or GREEN-AND-YELLOW.

The wire which is coloured BLUE must be connected to the terminal in the mains plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the mains plug which is marked with the letter L or coloured RED.

**How to replace the fuse.**

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



# Notes

## Do not expose to rain or excessive moisture

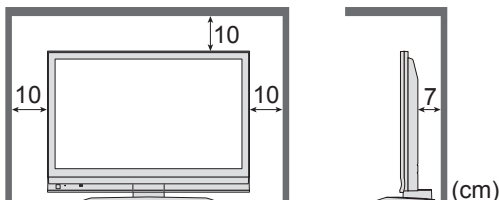
- To prevent damage which might result in electric shock or fire, do not expose this TV to rain or excessive moisture. This TV must not be exposed to dripping or splashing water and objects filled with liquid, such as vases, must not be placed on top of or above the TV.

## Do not block the rear ventilation openings

- Ventilation should not be impeded by covering the ventilation openings with items such as newspapers, tablecloths and curtains.

## Allow sufficient space around the TV for radiated heat

Minimum distance



## Do not place the TV on sloped or unstable surfaces

- The TV may fall off or tip over.

## Use only the dedicated stands / mounting equipment

- Using an unauthorized stand or other fixtures may make the TV shaky, risking injury. Be sure to ask your local Panasonic dealer to perform setup.
- Use optional stands / mounts (p. 6).

## 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

- Channel 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. 39)

## 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 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 by 100 times of 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.
- Use care not to subject the surface to insect repellent, solvent, thinner, or other volatile substances (this may degrade surface quality).

## Cabinet

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

- Use care not to subject the TV's surfaces to detergent. (A liquid inside the TV could lead to product failure.)
- Use 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 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

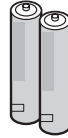
## Standard accessories

Check that you have the accessories and items shown ☒

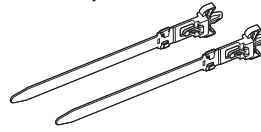
- ☐ Remote Control Transmitter
- EUR7737Z60



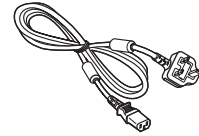
- ☐ Batteries for the Remote Control Transmitter (2)
- R6 (UM3)



- ☐ Clamper (2)



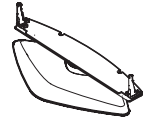
- ☐ Mains Lead



- ☐ Operating Instructions

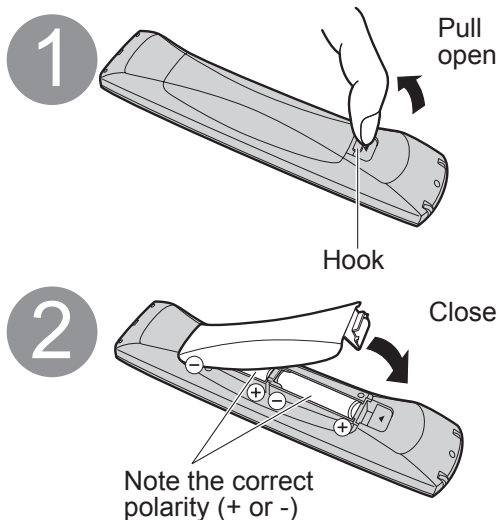
- ☐ Pan European Guarantee Card

- ☐ Pedestal (ST-42D2-WK)
- TBL0E0007



For installation → p. 7 and p. 8

## Installing remote's batteries

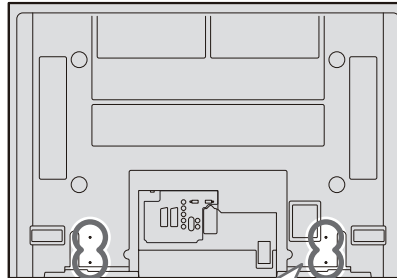


### Caution

- 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.

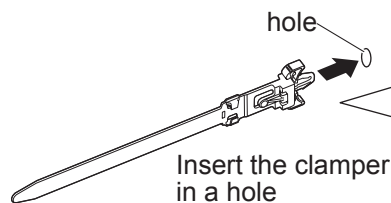
## Using the clamper

Rear of the TV

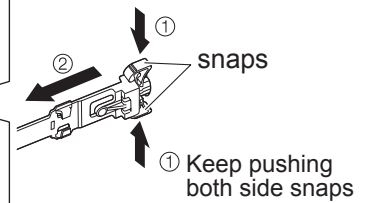


- Do not bundle the RF cable and mains lead together (could cause distorted image).
- Fix cables with clammers as necessary.
- When using the optional accessory, follow the option's assembly manual to fix cables.
- How to fix cables when using the pedestal (standard accessory) → "Attaching the bands for fixing cables" (p. 8)

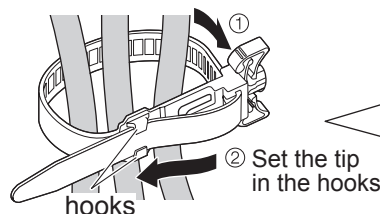
### 1. Attach the clamper



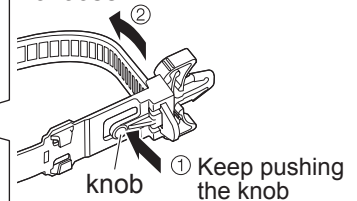
To remove from the TV:



### 2. Bundle the cables



To loosen:



## Optional accessories

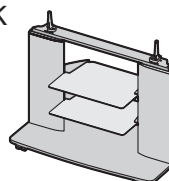
### Pedestal

- TY-ST42D1-WG
- TY-ST42D1-WK
- TY-ST42D2-WG



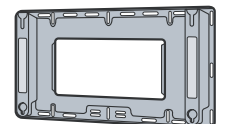
### Plasma TV stand

- TY-S37PX70WK (TH-37PV70EYA)
- TY-S42PX70WK (TH-42PV70EYA)



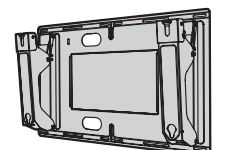
### Wall-hanging bracket (vertical)

- TY-WK42PV3W



### (angle)

- TY-WK42PR2W
- TY-WK42PR3W



### 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 plasma TV stand or 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.

# Installation of 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 sufficient care is not 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.

**Use the accessory fall-prevention brackets to secure the TV.**

- 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.

## Note

- Maintenance

Wipe the surfaces with a soft, dry cloth. If the pedestal is particularly dirty, clean it using a cloth soaked with water to which a small amount of neutral detergent has been added, and then wipe with a dry cloth.

Do not use products such as solvents, thinner or household wax for cleaning, as they can damage the surface coating. (If using a chemically-treated cloth, follow the instructions supplied with the cloth.)

- Do not attach sticky tape or labels, as they can make the surface of the pedestal dirty. Do not allow long-term contact with rubber, vinyl products or the like. (Doing so will cause deterioration.)

## Attaching the pedestal

Ⓐ Assembly screw (4)

Ⓑ Assembly screw (4)

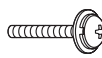
Ⓒ Pole (2)

Ⓓ Base

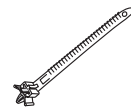
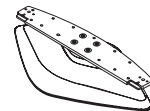
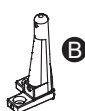
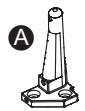
Ⓔ Band (2)



M5 × 16

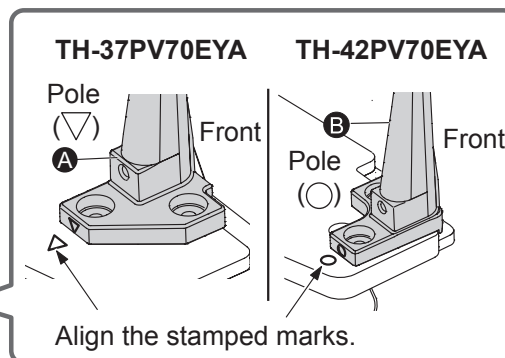
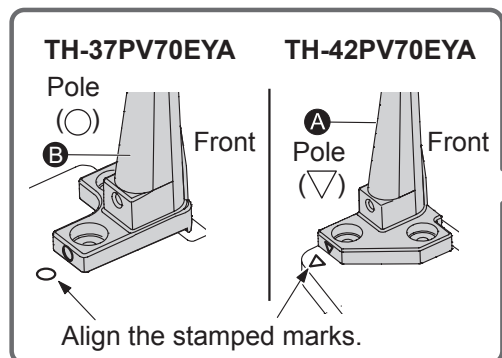


M5 × 30



## Assembling the pedestal

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



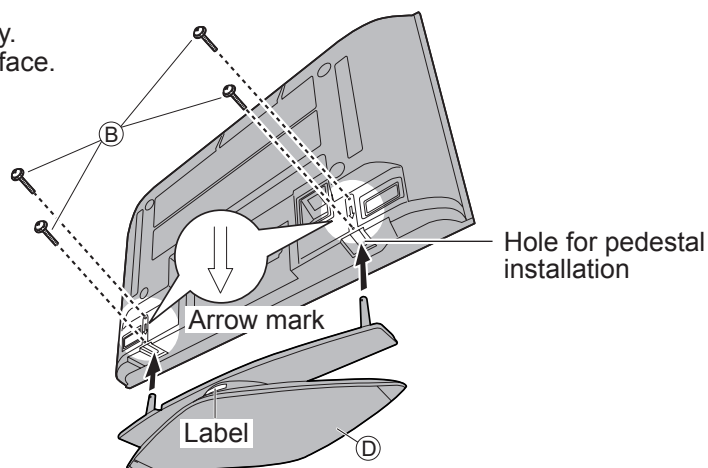
- Forcing the assembly screws the wrong way will strip the threads.

## Securing the TV

Use the assembly screws Ⓑ to fasten securely.

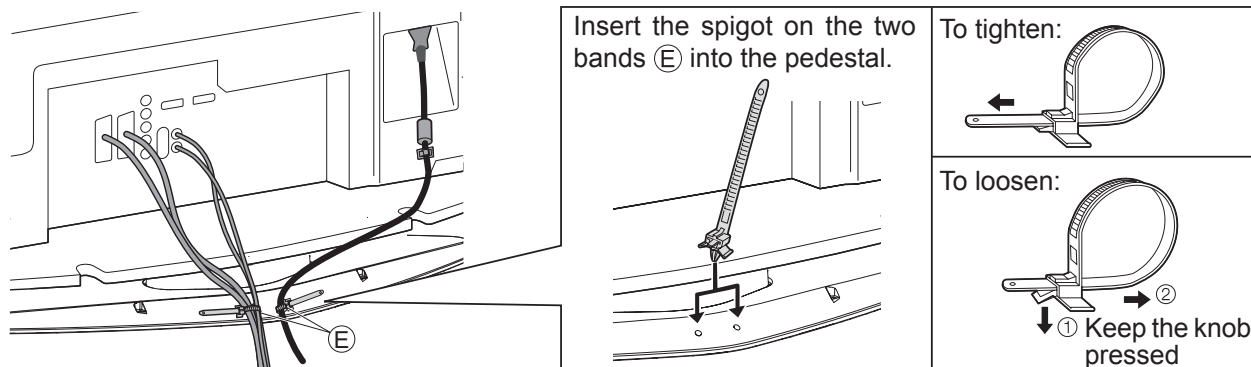
- Carry out work on a horizontal and level surface.

View from the bottom



# Installation of the pedestal

## ■ Attaching the bands for fixing cables



## Preventing the TV from falling over

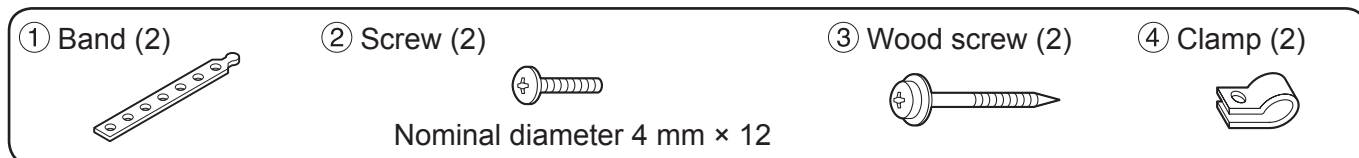
The TV could fall over during an earthquake, etc.

We recommend that measures are taken to prevent the TV from falling over in such an event.

- The information in this section is designed to reduce the risk of injuries caused by the TV falling over during an earthquake, etc.

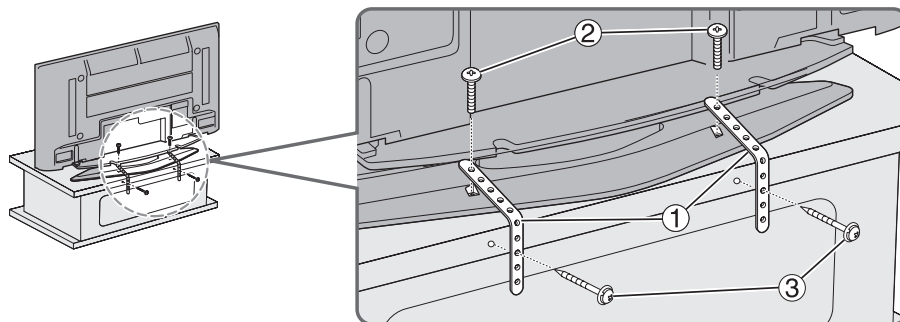
However, no measure can guarantee protection against all earthquakes.

- The precautions in this section are recommendations for providing more secure installation of your TV if you live in an earthquake prone area.



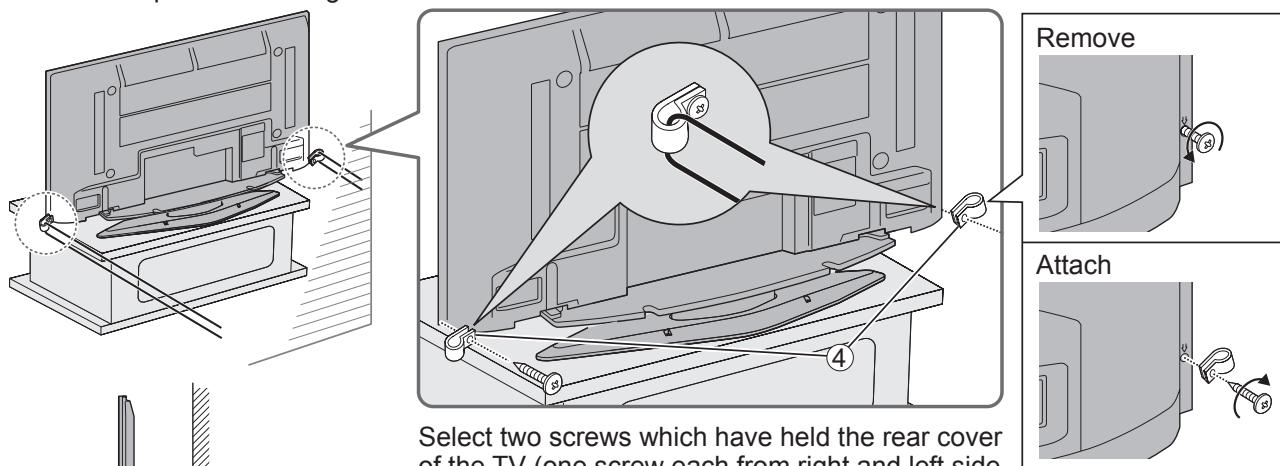
## ■ Securing to a base

Fix pedestal and base together with band.



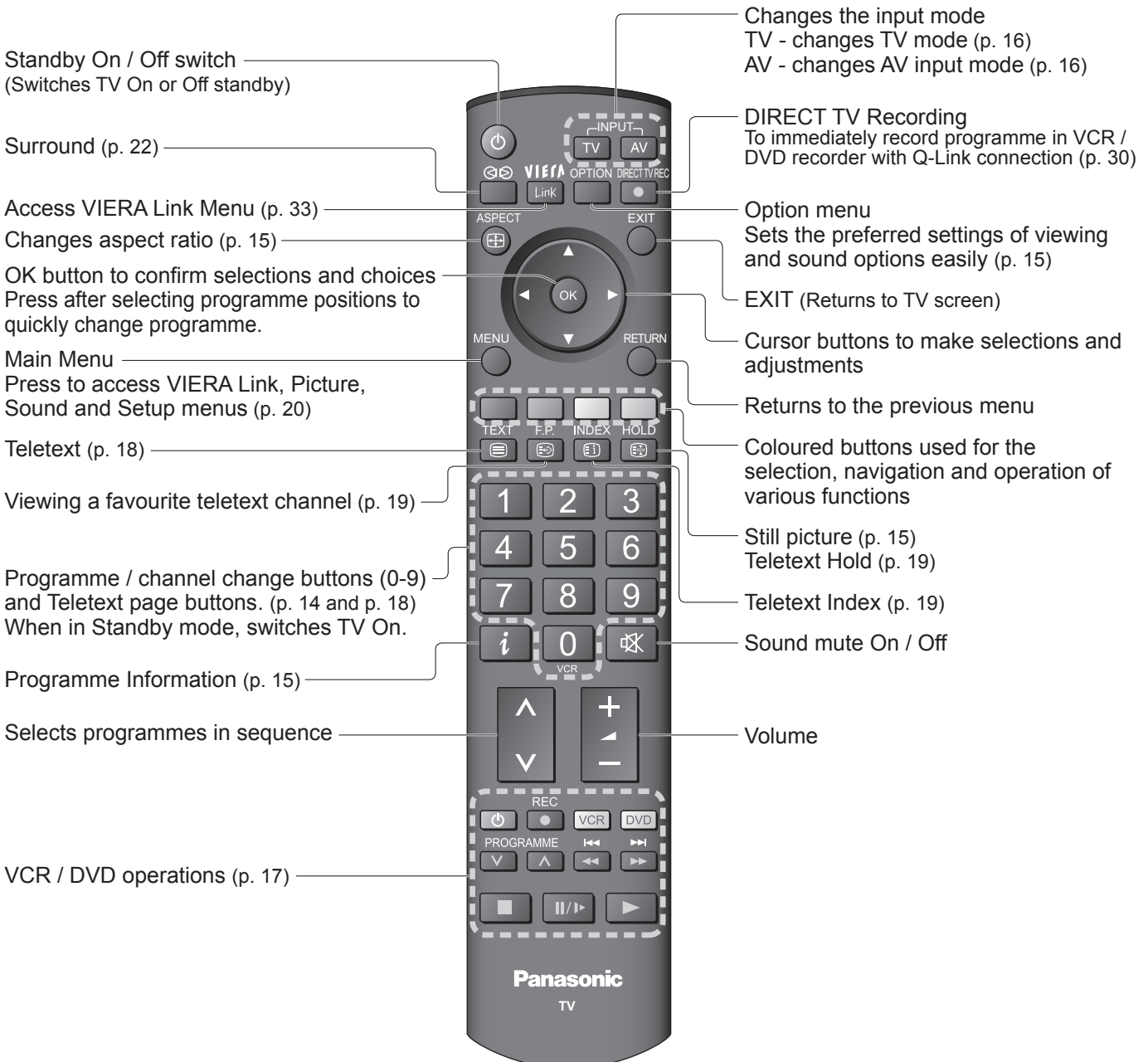
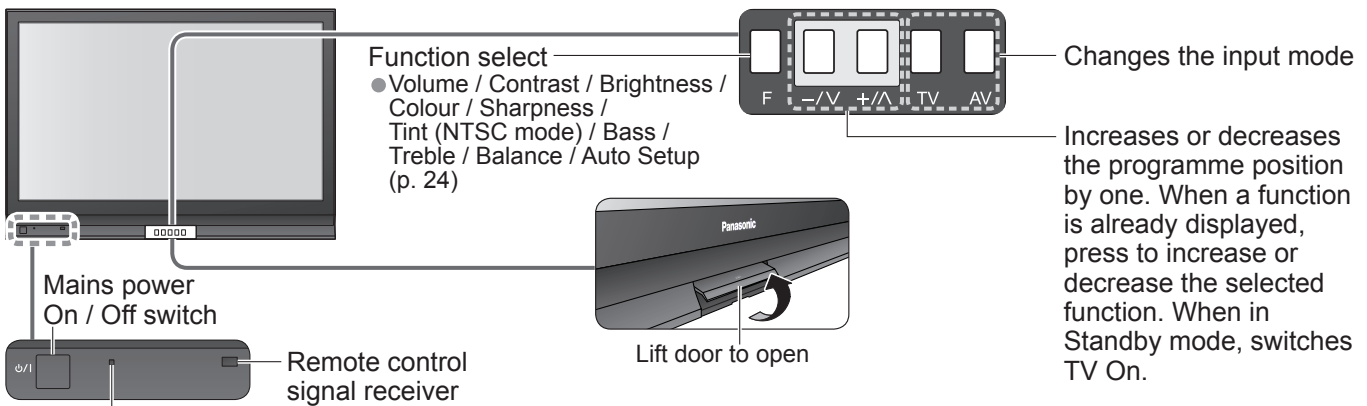
## ■ Securing to a wall

Fix to wall or post with strong commercial wire or chain.



Select two screws which have held the rear cover of the TV (one screw each from right and left side at the same height position). Remove the two screws you selected, and attach the clamps (4) to the TV using the removed screws.

# Identifying Controls



# Basic Connection

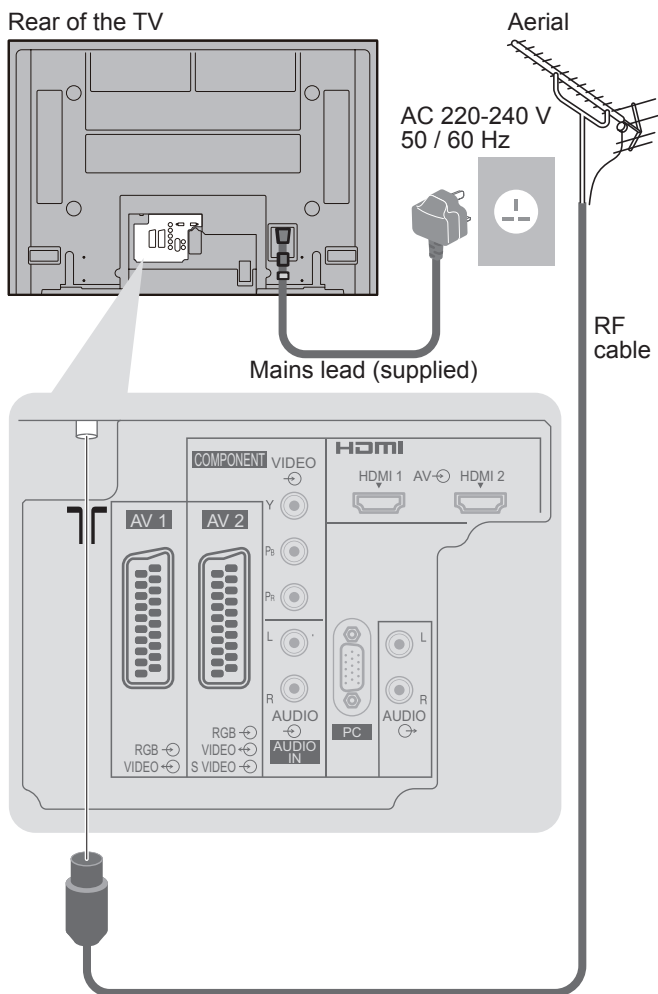
External equipment and cables shown are not supplied with this TV.

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

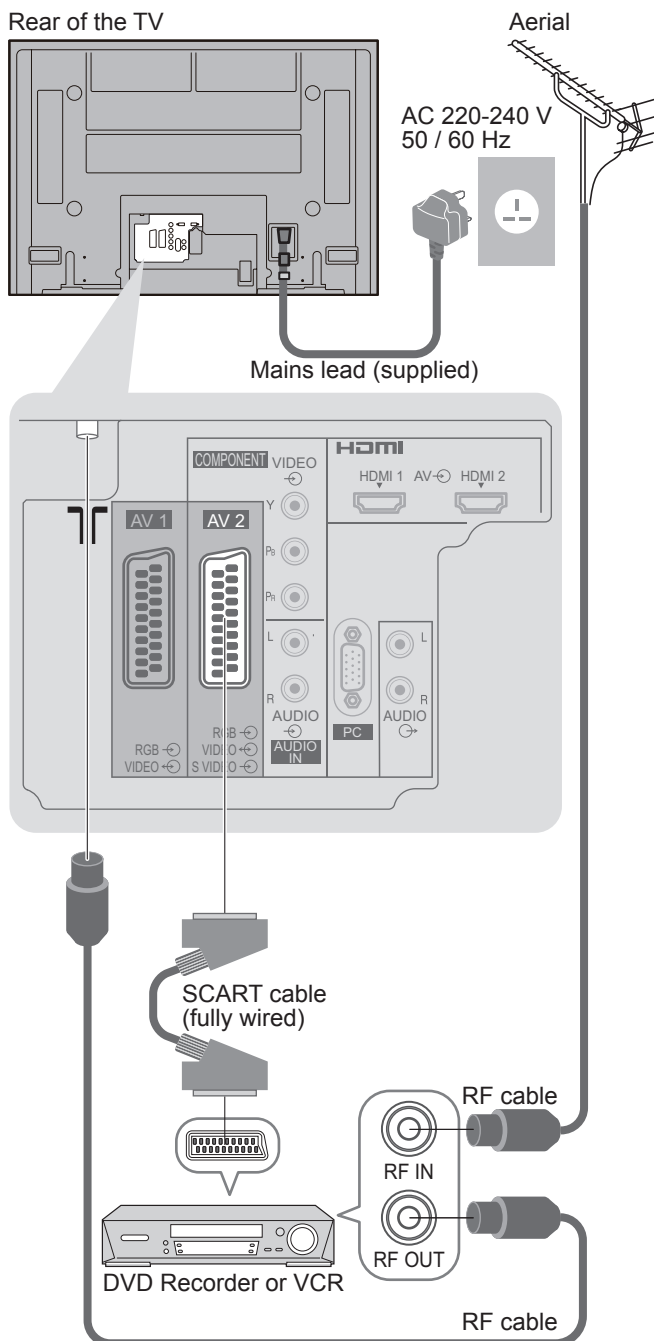
Rear of the TV



## Example 2 Connecting DVD Recorder / VCR

### TV, DVD Recorder or VCR

Rear of the TV



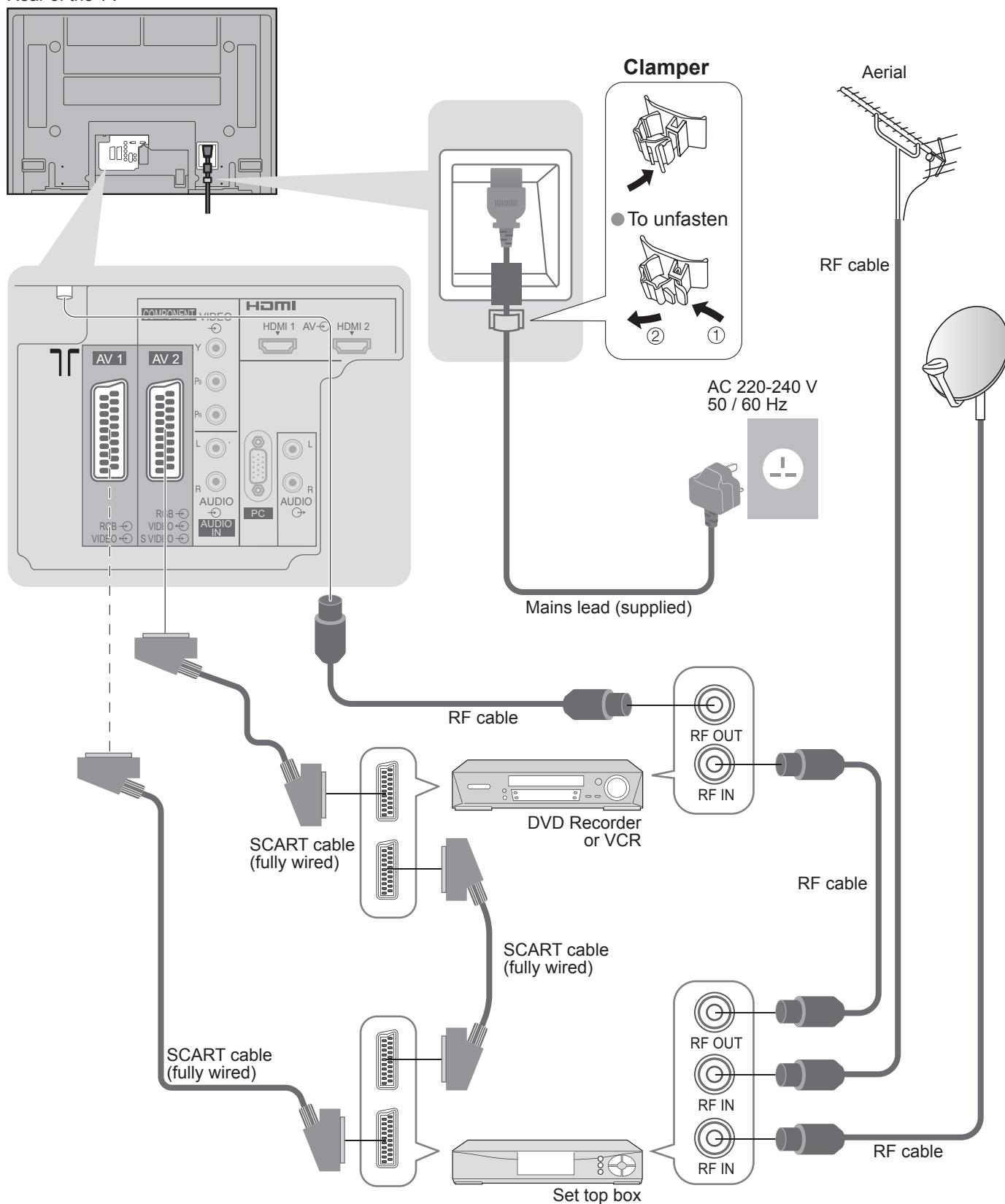
### Note

- Connect to AV1 / 2 for a DVD Recorder / VCR supporting Q-Link (p. 30).

## Example 3 Connecting DVD Recorder / VCR and Set top box

### TV, DVD Recorder / VCR and Set top box

Rear of the TV



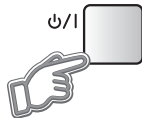
# Auto Setup

Search and store TV channels automatically.

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

1

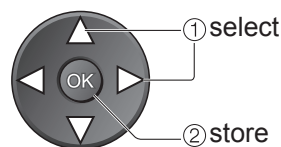
**Plug the TV into mains socket and switch On**  
(Takes a few seconds to be displayed)



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

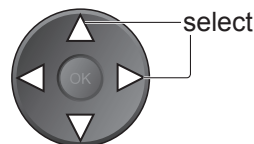
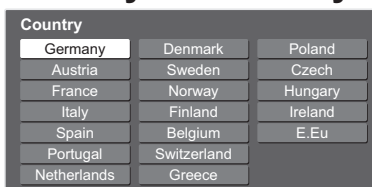
2

**Select the language**



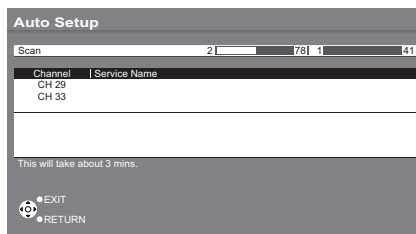
3

**Select your country**

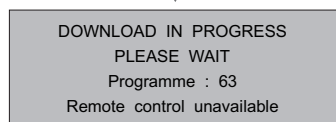


4

**Start Auto Setup**



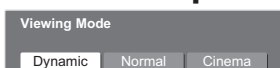
- Auto Setup will start to search for TV channels and store them. The sorted programme order depends upon the TV signal, the broadcasting system and reception conditions.



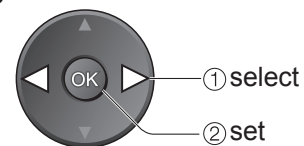
- If a compatible recording equipment with Q-Link or similar technologies (p. 30) is connected, channel information is automatically downloaded to the equipment.

5

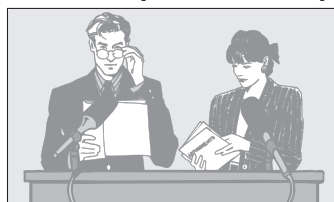
**Select the picture setting**



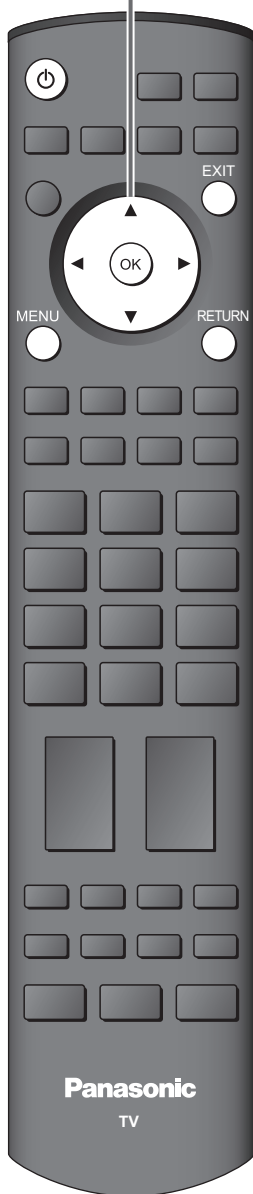
- Also possible to change the setting in Picture Menu (p. 22)



**Auto Setup is now complete and your TV is ready for viewing.**



- To edit channels  
➔ Editing and Setting Channels (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

MENU



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



Return to the previous menu

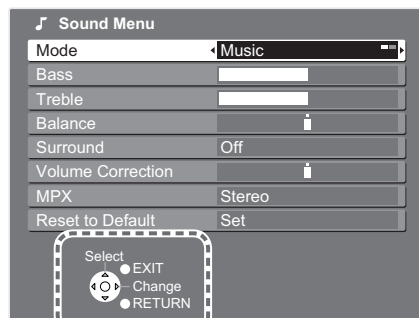
EXIT



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 Setup” (p. 24).
- If downloading has failed ➡ “Download” (p. 23).
- 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

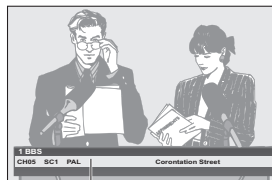
1

## Turn power on



(Press for about 1 second)

● Mains power On / Off switch should be On.



Information banner

2

## Select a channel



up

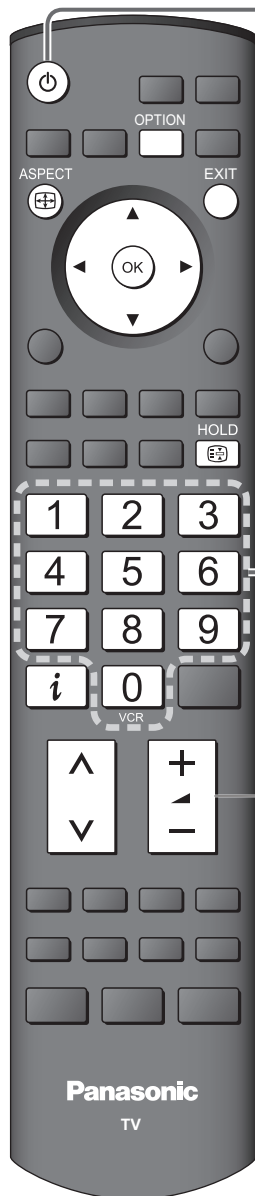
down

or



● To select the two-digit programme number, e.g. 39

➔ **3** ➔ **9** (in a short time)



Volume

■ Other useful functions (Operate after ②)

## Hold

### Freeze / unfreeze picture



## Display the current programme status

### Check or change the current programme status instantly



- To change → ② change  
① select

#### Teletext Language

→ Selects teletext language

#### MPX

→ Sound Menu (p. 22)

#### Volume Correction

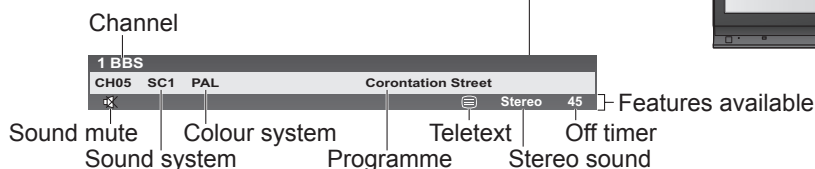
→ Adjusts volume of individual channel or input mode

#### Note

- Also possible to change the settings in Menu list (p. 22 and p. 23).

## Display information banner

### Display programme information



- To select another channel → → OK
- To hide →
- To set display timeout → "Banner Display Timeout" (p. 23)
- Appears also when changing channel.
- Programme information is referred to teletext signal.

## Change aspect ratio

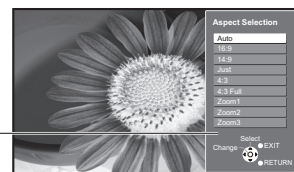
### Change the aspect ratio (p. 36)



Enjoy viewing the picture at its optimum size and aspect.

- To change the mode
  - Display Aspect Selection list → During the list is displayed, select the mode → Store
- To change the mode using the ASPECT button only
  - (Press repeatedly until you reach the desired mode)

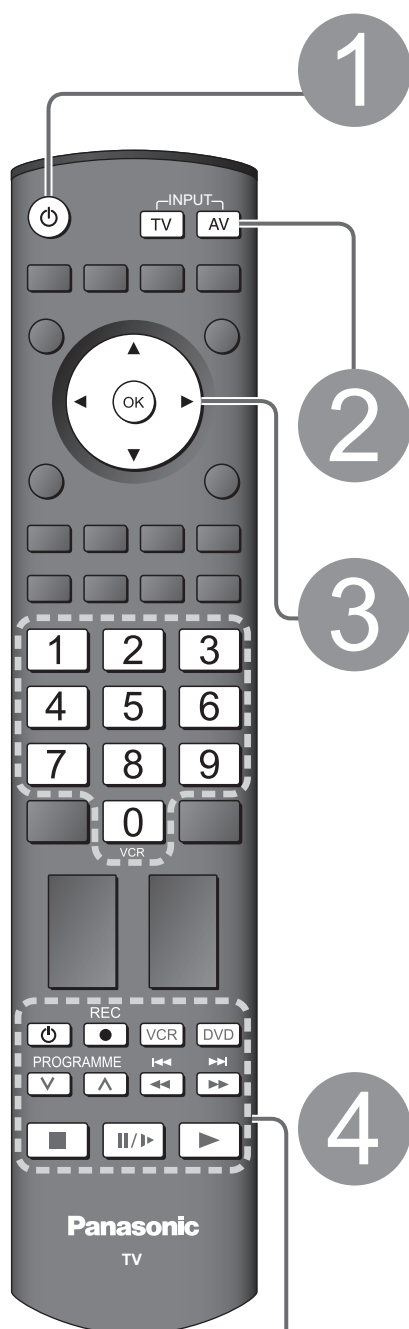
Aspect Selection list



# 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 Turn the TV on

### ■ When connecting with SCART as example 2 or 3 (p. 10 and p. 11)

- ➔ Receives input signals automatically when playback starts
- Input signals are automatically identified by the SCART (pin 8) terminal.
- This function is also available for HDMI connections (p. 33).

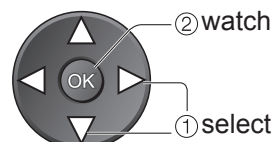
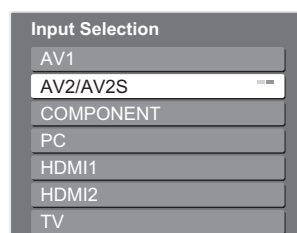
### ■ If input mode is not switched automatically

- ➔ Perform 2 and 3
- Dependant on the setup of the equipment

## 2 Display the Input select menu



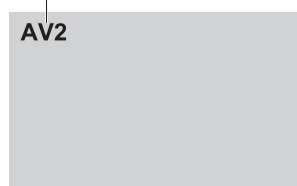
## 3 Select the input mode connected to the equipment



- 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. 28)

## 4 View

Displays the selected mode












### ■ To return to 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.

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

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

① Select the VCR or DVD button you want to set ➡  

② Press and hold  during the following operations

Enter the appropriate code for the equipment to be controlled, see table below



➡ Press 

“VCR” button

Equipment	Code
VCR	10 (default)
DVD	11

“DVD” button

Equipment	Code
DVD	70 (default)
Player home theatre	71

### Note

- Confirm correct operation after the code changed.
- 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.

# Viewing Teletext

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


## What is FLOF (FASTTEXT) mode?

In FLOF 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 List mode?

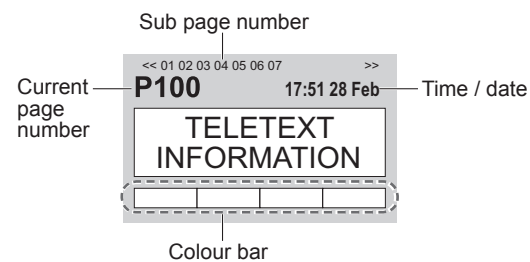
In List mode, four differently coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory. ("Store frequently viewed pages", p. 19)

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

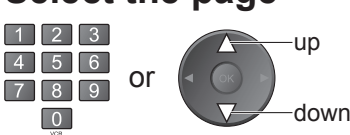


### 1 Switch to Teletext


**TEXT** ● Displays Index (content varies depending on the broadcasters)




### 2 Select the page




or




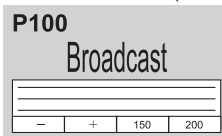
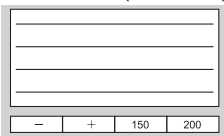
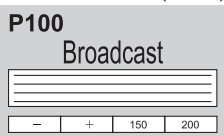


(Corresponds to the colour bar)

■ **To adjust contrast** → **MENU** → 

■ **To return to TV** → **TEXT** → 

## ■ Using teletext conveniently

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

**HOLD**

If you wish to hold the current page without updating

**Stop or resume automatic updating**

■ To resume

**INDEX****Return to the main index page****Call up a favourite pages**

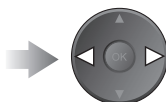
- Call up the page stored in “blue”.
- Factory setting is “P103”.

**View in multi window****Watch TV and Teletext in two windows at once**

MENU



(Press twice)



- Select Picture and text On or Off



- Operations can be made only in Teletext screen.

**Store frequently viewed pages****Store frequently viewed pages in the colour bar**

(List mode only)

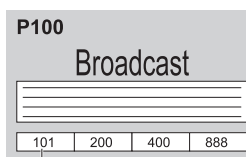
As page is displayed



Corresponding colour button



press and hold



The number changes to white.

**■ To change stored pages**

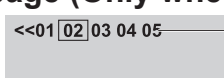
Colour button you want to change



Enter new page number



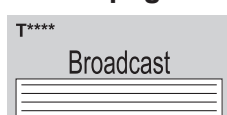
press and hold

**View sub page****View sub page (Only when teletext is more than one page)**

Appears at upper-left corner of the screen

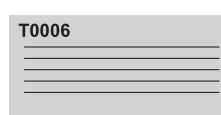
**■ To view specific sub page**

blue



Enter the 4-digit number

example: P6



- 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.

**Watch TV while waiting for update****View the TV picture while searching for a teletext page**

Teletext automatically updates itself when new information becomes available.

Changes to TV screen temporarily



yellow



Appears when updating is completed



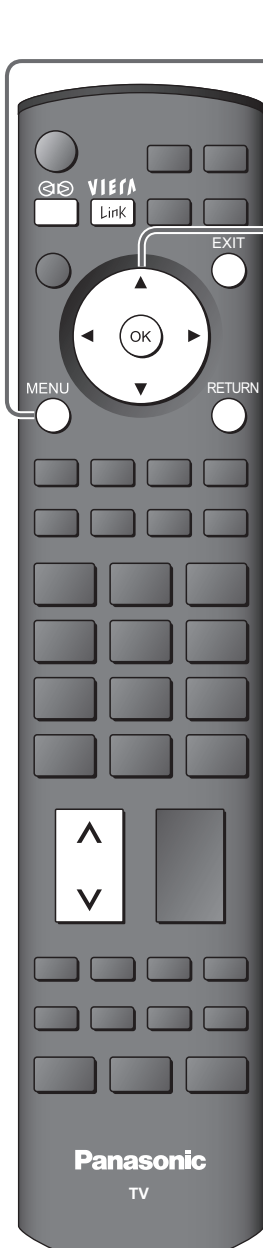
View the updated page

(You cannot change the channel.)

- The news page provides a function that indicates arrival of latest news (“News Flash”).

# How to Use Menu Functions

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



**1** MENU

**2** EXIT

**3** OK

**4** UP/DOWN

Panasonic TV

## Display the menu

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

## Select the menu

(example: Picture Menu)

VIERA Main Menu	
VIERA Link	
<input type="checkbox"/> Picture	
<input type="checkbox"/> Sound	
<input type="checkbox"/> Setup	

② access

① select

## Select the item

(example: Picture Menu)

Picture Menu 1/2	
Viewing Mode	Dynamic
Contrast	
Brightness	
Colour	
Sharpness	
Tint	
Colour Balance	Warm
Colour Management	Off
P-NR	Off

select

## Adjust or select

(example: Picture Menu)

Picture Menu 1/2	
Viewing Mode	Dynamic
Contrast	
Brightness	
Colour	
Sharpness	
Tint	
Colour Balance	Warm
Colour Management	Off
P-NR	Off

① change

② store or access (Required by some functions)

## Choose from among alternatives

Number and positions of alternatives

Colour Balance Normal

Changed

## Adjust using the slide bar

Sharpness

Moved

## Go to the next screen

Tuning Menu Access

Displays the next screen

## To change menu pages

up

down

■ **To return to TV at any time**

EXIT

→

■ **To return to the previous screen**

RETURN

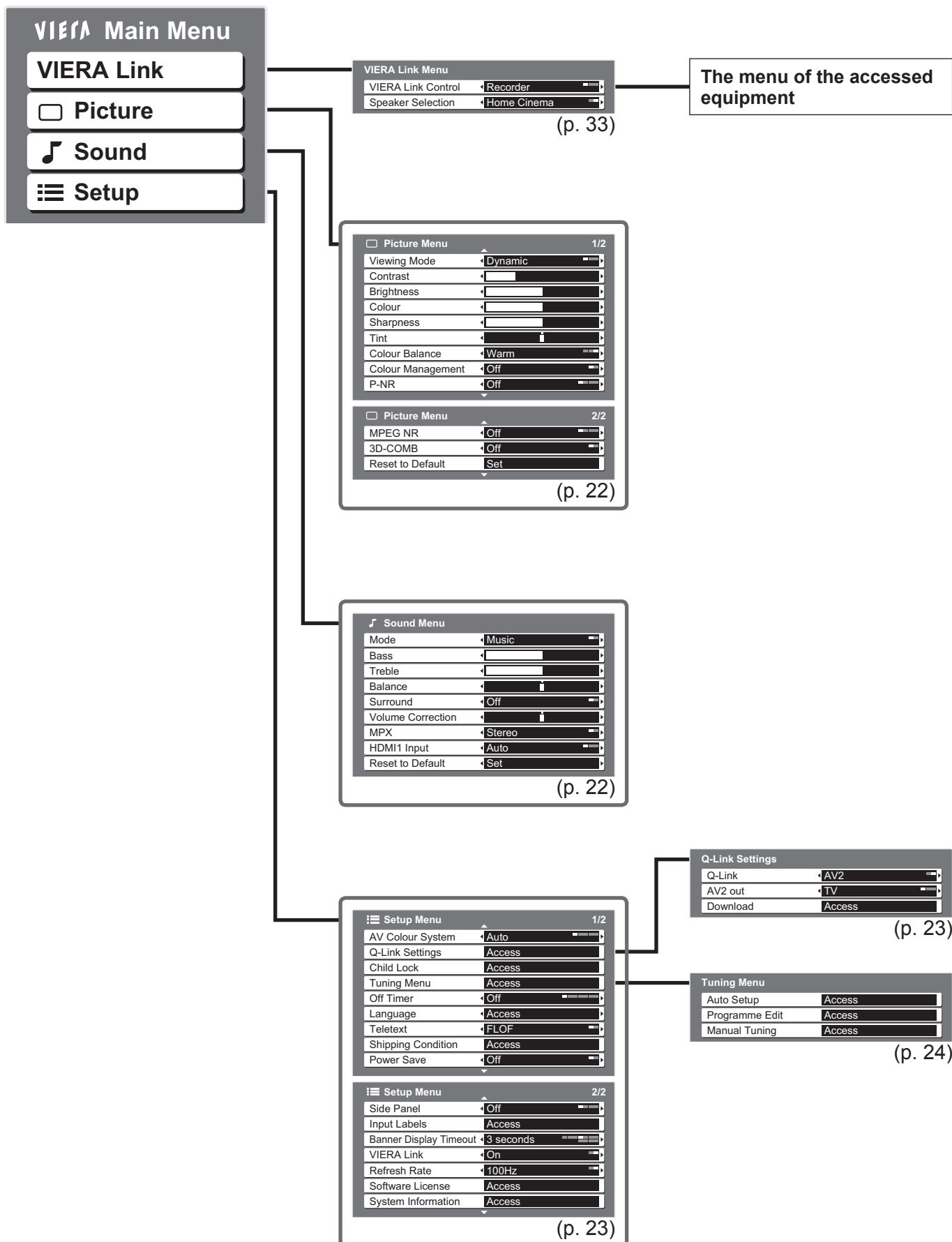
→

**Note**

● To initialize all settings

→ "Shipping Condition" (p. 27)

## Overview



● Only available items can be selected.

● How to Use Menu Functions  
(picture, sound quality, etc.)

Advanced

# How to Use Menu Functions

## ■ Menu list

Menu	Item	Adjustments / Configurations (alternatives)
VIERA Link	VIERA Link Control	Controls the connected Panasonic equipment “Access and control the connected equipment by VIERA remote control” (p. 33) “Speaker control” (p. 33)
	Speaker Selection	● You can also access VIERA Link Menu directly using the VIERA Link button on the remote control.
Picture	Viewing Mode	Basic picture mode ( <b>Dynamic / Normal / Cinema</b> ) ● Set for each input signal
	Contrast, Brightness, Colour, Sharpness	Adjusts colour, brightness, etc. for each picture mode to suit your taste
	Tint	Adjusts tint of image ● For NTSC signal reception only
	Colour Balance	Chooses the colour balance of the entire image ( <b>Cool / Normal / Warm</b> )
	Colour Management	Automatically adjusts colours to vivid ones ( <b>Off / On</b> ) ● Not valid on PC signal
	P-NR	Picture Noise Reduction Automatically reduces unwanted picture noise ( <b>Off / Normal / Dynamic / Auto</b> ) ● Not valid on HDMI or PC signal
	MPEG NR	Automatically reduces noise for watching DTV, DVD and VCD ( <b>Off / Min / Mid / Max</b> )
	3D-COMB	Automatically makes still pictures and slow pictures look more vivid ( <b>Off / On</b> ) ● For PAL or NTSC signal reception only ● Not valid on RGB, S-Video, components, PC and HDMI
	Reset to Default	Press the OK button to reset the present Picture Mode to the default settings
Sound	Mode	Basic sound mode ( <b>Music / Speech</b> )
	Bass	Adjusts the output level of deep bass
	Treble	Adjusts the output level of high-pitch, shrill sound
	Balance	Adjusts volume level of right and left speakers
	Surround	Surround sound settings ( <b>Off / On</b> ) Provides a dynamic enhancer to simulate improved spatial effects ● Switching is also possible by the Surround button on the remote control (p. 9)
	Volume Correction	Adjusts volume of individual channel or input mode
	MPX	Select stereo / monaural ( <b>Mono / Stereo</b> ) ● Normally: Stereo ● Stereo signal cannot be received: Mono ● M1 / M2: Available while mono signal is transmitted
	HDMI1 Input	Select to fit the input signal ( <b>Auto / Digital / Analogue</b> ) (p. 31) 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 Mode to the default settings

## Menu list

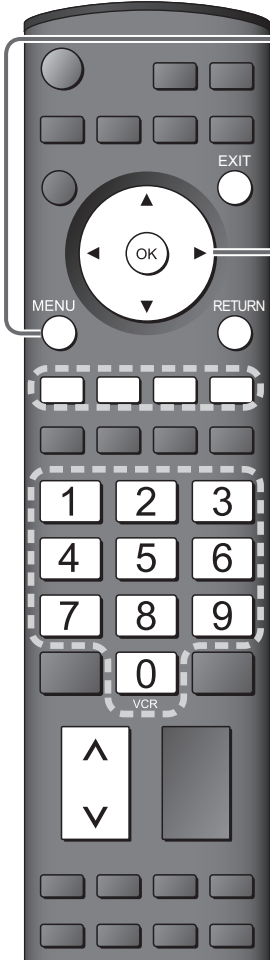
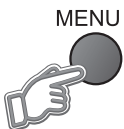

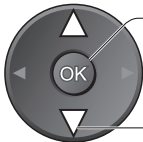
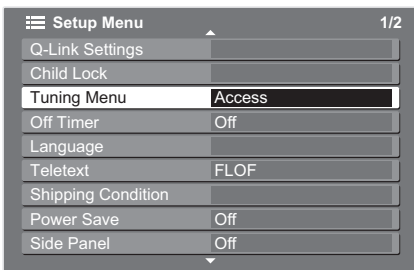
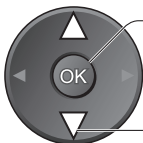
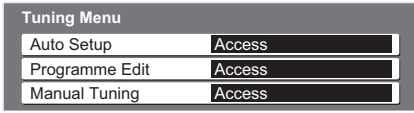
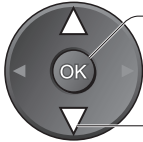

Menu	Item	Adjustments / Configurations (alternatives)
Setup	<b>AV Colour System</b>	Selects optional colour system based on video signals in AV mode ( <b>Auto / PAL / SECAM / M.NTSC / NTSC</b> )
	<b>Q-Link Settings</b>	<b>Q-Link</b> Selects which AV terminal is to be used for data communication between this TV and a compatible recording equipment ( <b>AV1 / AV2</b> ) (p. 30) ● Select the connected terminal to the recording equipment even it is not compatible with Q-Link.
		<b>AV1 / AV2 out</b> Chooses the signal to be transmitted from the TV to Q-Link ( <b>TV / AV1 / AV2 / Monitor</b> ) ● Monitor: Image displayed on screen ● Component, PC and HDMI signals cannot be outputted
		<b>Download</b> Downloads channel information to a Q-Link compatible equipment connected to the TV
	<b>Child Lock</b>	Locks a programme channel to prevent access to it (p. 26)
	<b>Tuning Menu</b>	<b>Auto Setup</b> Automatically sets the channels received in the area (p. 24)
		<b>Programme Edit</b> Edits channels (p. 25)
		<b>Manual Tuning</b> Sets the channels manually (p. 25)
	<b>Off Timer</b>	Sets the time the TV automatically turns Off ( <b>Off / 15 / 30 / 45 / 60 / 75 / 90 minutes</b> )
	<b>Language</b>	<b>OSD Language</b> Changes language for on-screen displays
		<b>Teletext Language</b> Selects teletext language ( <b>West / East1 / East2</b> ) ● West: English, French, German, Greek, Italian, Spanish, Swedish, Turkish ● East1: Czech, English, Estonian, Lettish, Rumanian, Russian, Ukrainian ● East2: Czech, Hungarian, Lettish, Polish, Rumanian
	<b>Teletext</b>	Teletext display mode ( <b>FLOF / List</b> ) (p. 18)
	<b>Shipping Condition</b>	Resets all settings, for example, when moving house (p. 27)
	<b>Power Save</b>	Reduces brightness of picture to economise on power consumption ( <b>Off / On</b> )
	<b>Side Panel</b>	Increases the brightness of the side panel ( <b>Off / Low / Mid / High</b> ) ● The recommended setting is "High" to prevent panel "image retention"
	<b>Input Labels</b>	Labels or skips each input terminals (p. 28)
	<b>Banner Display Timeout</b>	Sets how long the information banner (p. 15) stays on screen ● 0 (No display) to 10 sec. in 1-sec. increments
	<b>VIERA Link</b>	Sets to use VIERA Link functions ( <b>Off / On</b> ) (p. 32)
	<b>Refresh Rate</b>	Changes the image processing of the panel (depending on the input signal) ( <b>50Hz / 100Hz</b> ) ● Set to "100Hz" normally
	<b>Software License</b>	Displays the software licence information
	<b>System Information</b>	Displays the system information of this TV

● A different menu will be displayed while PC is used. (p. 29)

● Only available items can be selected.

# Editing and Setting Channels

The current channel settings can be changed according to your needs and reception conditions.

- 1 Display the menu**  


- 2 Select "Setup"**  


- 3 Select "Tuning Menu"**  


- 4 Select a function**  


- 5 Set**  


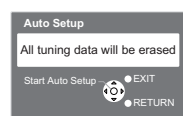
■ To return to TV

Set channels automatically

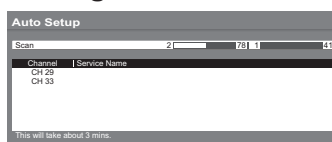
## Auto Setup

Automatically set the channels received in the area.  
If a Child Lock PIN number (p. 26) has been set, it must be entered.

### Start Auto Setup



### Settings are made automatically



- All previous settings are erased.
- The settings are downloaded to a Q-Link compatible equipment connected to the TV.
- When the operation is completed, the broadcast of programme number "1" will appear.
- If tuning has not done completely → "Manual Tuning"

### For Auto Setup, using the buttons on the front of the TV

- ① Press repeatedly until "Auto Setup" appears



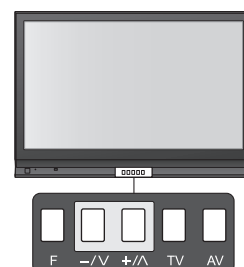
- ② Access "Auto Setup"



- ③ Start "Auto Setup"



■ To return to TV →



## Edit channels

### Programme Edit

- Delete
- Add
- Move
- Change name
- Change sound system
- Change colour system

Edit the programme position settings

#### ① Select the channel to edit

Prog.	Chan.	Name	Sound Sys.	Colour Sys.
1	CH33	1 2 3	SC1	Auto
2	CH21	X Y Z	SC1	Auto
3	CH21	F T P	SC1	Auto
4	CH60		SC1	Auto
5	CH21	4 5 6	SC1	Auto

Cursor



select

- To change channel number  
➔ "Manual Tuning"

Name

Channel

3	FTP			
CH05	SC1	PAL		Coronation Street

#### ② Edit

- To delete ➔ red  
➔ After confirming, press red
- To add ➔ green  
➔ After confirming, press green
- To move ➔ yellow  
➔ Select new position ➔ yellow

#### ■ To change the name of the broadcaster displayed when selecting channels

Prog.	Chan.	Name	Sound Sys.	Colour Sys.
1	CH33	1 2 3	SC1	Auto
2	CH21	X Y Z	SC1	Auto
3	CH21	F T P	SC1	Auto
4	CH60		SC1	Auto
5	CH21	4 5 6	SC1	Auto



Select the "Name" field



Enter the "User input" mode



Select the character



Set (Maximum: five characters)



Store

#### ■ To change sound system based on signals

Prog.	Chan.	Name	Sound Sys.	Colour Sys.
1	CH33	1 2 3	SC1	Auto
2	CH21	X Y Z	SC1	Auto
3	CH21	F T P	SC1	Auto
4	CH60		SC1	Auto
5	CH21	4 5 6	SC1	Auto



Select the "Sound Sys." field



Select sound system

SC1 :	PAL B, G, H / SECAM B, G
SC2 :	PAL I
SC3 :	PAL D, K / SECAM D, K
F :	SECAM L / L'

#### ■ To change colour system based on signal

- Normally, select "Auto"

Prog.	Chan.	Name	Sound Sys.	Colour Sys.
1	CH33	1 2 3	SC1	Auto
2	CH21	X Y Z	SC1	Auto
3	CH21	F T P	SC1	Auto
4	CH60		SC1	Auto
5	CH21	4 5 6	SC1	Auto



Select the "Colour Sys." field



Select colour system

#### ■ Fine Tuning

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

#### ■ Manual Tuning

Set channel manually after Auto Setup.

If a VCR is connected with only the RF cable, select programme position "0".

Manual Tuning				
Programme	1			[CH33]
Fine Tuning				
Manual Tuning	2	78	1	41

Select the programme position



Select the channel



Search and store



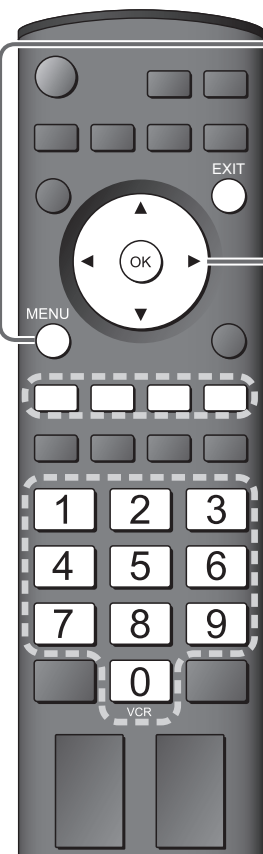
- ① search
- ② store

## Set channels manually

### Manual Tuning

# Control Channel Audience

You can lock specific channels and control who watches them.  
(When a channel is selected, a message appears; by entering the PIN number, you can watch the channel.)



**1** MENU

**2** OK

**3** 0

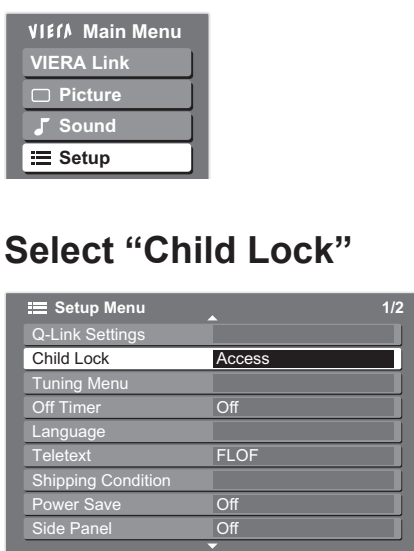
**4** EXIT

**Display the menu**

**Select "Setup"**

**Select "Child Lock"**

**Set**



**2** access

**1** select

**2** access

**1** select

■ To return to TV

## Control channel audience

### Child Lock

#### ① Enter the PIN number (4 digits)

Child Lock-PIN Entry	1	2	3
Please enter new PIN	4	5	6
PIN	7	8	9
	0		

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

#### ② Select "Service List"

Child Lock	2
Change PIN	1
Service List	Access

#### ③ Select the channel to be locked

Service Name	Lock
1 BBC	
7 THREE	
14 E4	
70 CBBC	
72 New	
80 BBCi	
85 Radio	
90 Cymru	

Appears when the channel is locked

- To cancel
  - ➔ Select the locked channel
  - ➔ OK
- To lock all channels ➔ yellow
- To cancel all channel locks ➔ blue

#### ■ To change the PIN number

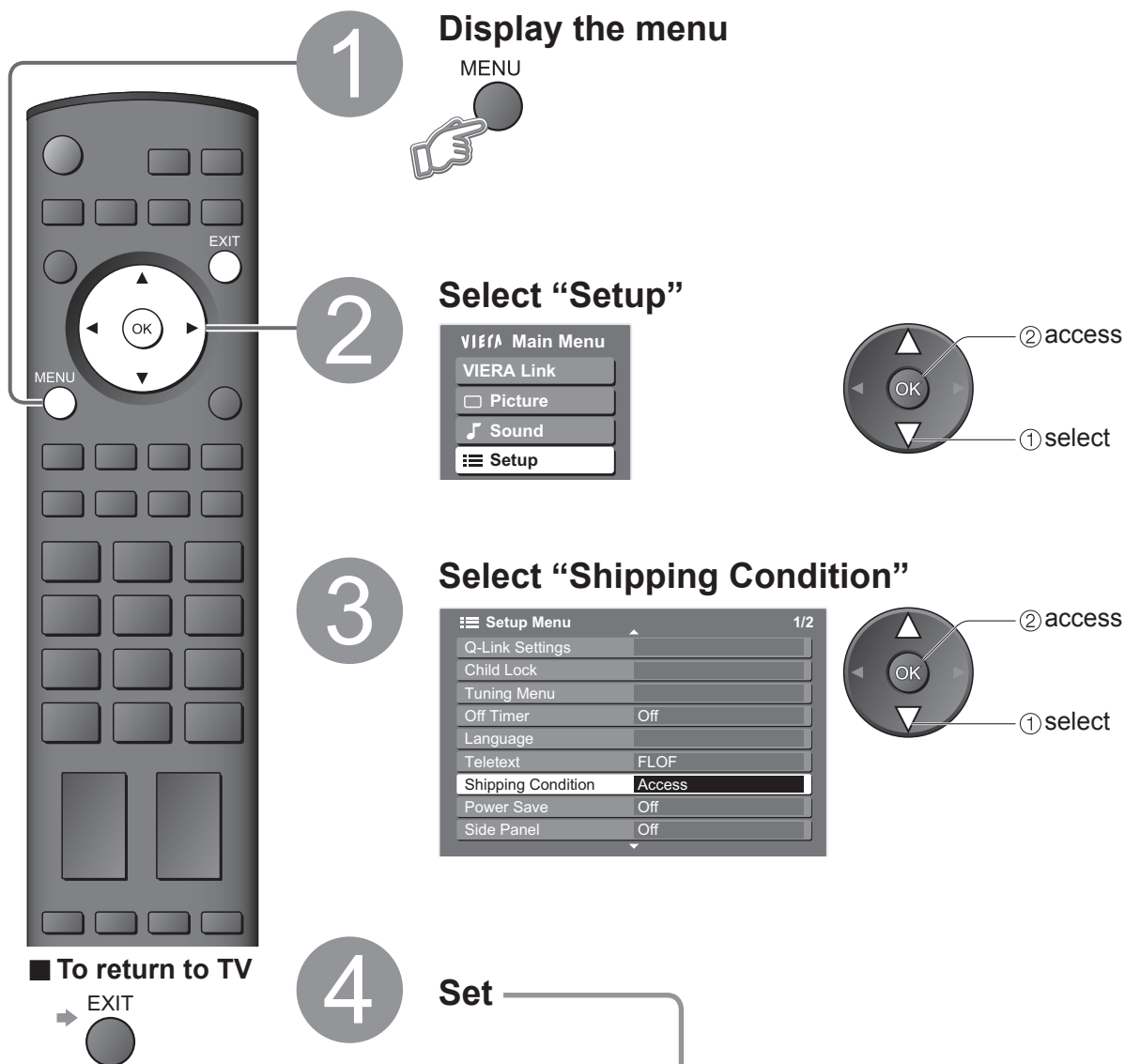
Select "Change PIN" in ② and enter a new PIN number twice.

#### Note

- Setting "Shipping Condition" (p. 27) erases the PIN number and all settings.

# Restore Settings

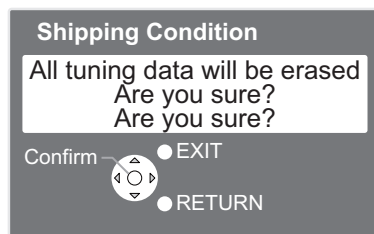
Resets the TV to its original condition, i.e. no channels tuned in.  
All settings (channels, picture, sound quality, etc.) are reset.



Restore  
Settings

Shipping  
Condition

## ① Check the message and initialise



OK set

## ② Follow the on-screen instructions

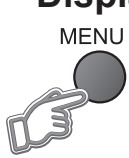

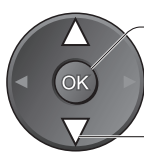
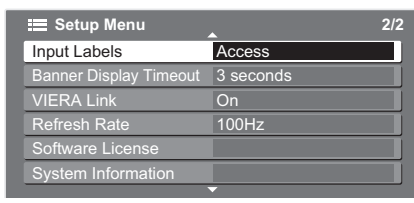
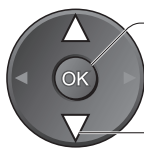
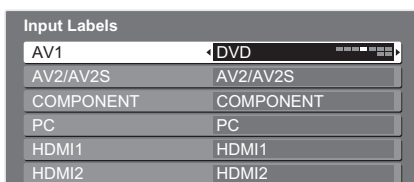
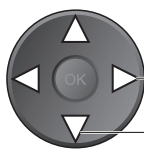
- "Auto Setup" will automatically start. (p. 12)

### ■ To re-tune TV channels only, e.g. after moving house

- ➔ "Auto Setup" (p. 24)

# 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. 16)

- 1 Display the menu**  

- 2 Select "Setup"**  


- 3 Select "Input Labels"**  


- 4 Select a input terminal and set**  



## ■ To return to TV

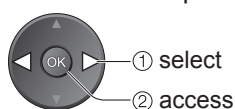


The labels you set will be displayed in "Input Selection" menu (p. 16) or banner.  
● If "Skip" is selected, you cannot select the mode.

## ■ User input

You can name each input terminals freely.

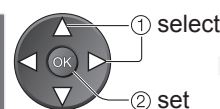
Select "User input"



Set characters

User Input																									
Name																									
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T						
U	V	W	X	Y	Z	0	1	2	3	4	5	6	7	8	9	:	#								
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t						
u	v	w	x	y	z	(	)	+	-	*	/														

(maximum: ten characters)




Store



# 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. 34)

1



2

AV

Input Selection

AV1

AV2/AV2S

COMPONENT

PC

HDMI1

HDMI2

TV

② access

OK

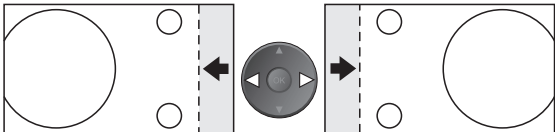
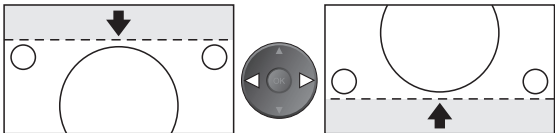
① select

● Corresponding signals (p. 38)

● If "H-freq." or "V-freq." is shown in red, the signals may not be supported.

■ To return to TV  
→ 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	Advanced PC Settings	W/B High R	White balance of bright red area	<div><div>①</div><div>① and ② repeatedly adjusted</div><div>②</div></div>	
		W/B High B	White balance of bright blue area		
		W/B Low R	White balance of dark red area		
		W/B Low B	White balance of dark blue area		
		Gamma	(2.0 / 2.2 / 2.5 / S Curve)		
Setup	PC 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	Chooses another synchronous signal if the image is distorted (H & V / On G) ● H & V : by the horizontal and vertical signals from your PC On G : by the green signal from your PC (if available)		

● Other items → p. 22 and p. 23

# Q-Link Functions

Q-Link connects the TV and VCR / DVD recorder, enables easy recording and playback.

## ■ Condition


- Use the VCR / DVD recorder with the following logos:  
“Q-Link”, “NEXTVIEWLINK”, “DATA LOGIC”, “Easy Link”, “Megalogic”, or “SMARTLINK”
- Connect the equipment to this TV’s AV1 or AV2 terminal via a “fully-wired” SCART cable. (p. 34)
- Q-Link terminal setup in Setup Menu (Q-Link, AV1 / AV2 out). (p. 23)

## ■ Download channel settings

- Perform Auto Setup. (p. 24)  
When first using this TV, see “Auto Setup”. (p. 12)
- Perform download to the equipment. (p. 23)

## ■ Features available

Some recording equipments are not applicable. Read the manuals of the equipment.

<p><b>What you see is What you record</b></p>	<div data-bbox="381 770 638 1355">  </div> <div data-bbox="663 730 962 766"> <p><b>Direct TV Recording:</b></p> </div> <div data-bbox="663 761 1420 828"> <p>Recording the current programme in VCR / DVD recorder immediately.</p> </div> <div data-bbox="837 857 1465 1066"> <ul style="list-style-type: none"> <li>● When Direct TV Recording is performed, the recording equipment is automatically turned on if it is in Standby mode.</li> <li>● The recording equipment is recording from its own tuner. You can turn the TV off during recording.</li> <li>● If you turn the TV off during recording from an AV source, the recording will be stopped.</li> </ul> </div>
<p><b>Information / Message</b></p>	<p>Recording information or if recording is not possible, a message is displayed. (Only when the programme number is “0” or “AV mode” for some equipment.)</p>
<p><b>Power on link and Easy playback</b></p>	<p>When VCR or DVD recorder starts playback or direct navigator / function menu for the equipment are activated, the TV is turned on and input mode is switched automatically so that you can view the content. (Only when TV is in Standby mode.)</p>
<p><b>Power off link</b></p>	<p>When TV is set to Standby mode, the recording equipment is also automatically set to Standby. (Only when the videocassette or DVD is not active.)</p>

- “DATA LOGIC” (a trademark of Metz Corporation)
- “Easy Link” (a trademark of Philips Corporation)

- “Megalogic” (a trademark of Grundig Corporation)
- “SMARTLINK” (a trademark of Sony Corporation)

Read the manuals of the equipment too.

# HDMI Functions

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. 34).

## Note

- 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 COMPONENT-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. 38.

(\*1): The HDMI logo is displayed on HDMI-compliant equipment.

(\*2): Enquire at your local digital equipment retailer shop.

## Summary of Control functions

Connecting with an HDMI cable to Panasonic equipment with VIERA Link function, you can control the equipment (p. 32). You can use VIERA Link and Q-Link functions together.

Function	Connection	VIERA Link and Q-Link (HDMI)	VIERA Link only (HDMI)	Q-Link only (SCART)
Easy playback		○	○	○
Power on link		○	○	○
Power off link		○	○	○
Speaker control		○ (not via SCART)	○	—
Access and control the connected equipment by VIERA remote control		○ (not via SCART)	○	—
Direct TV Recording		○ (not via HDMI)	—	○
Channel download		○ (not via HDMI)	—	○

# HDMI Functions

## VIERA Link "HDAVI Control"™\*

\*Enjoy additional HDMI Inter-Operability with Panasonic products which have "HDAVI Control" function. This TV supports "HDAVI Control 2" function.

Connections to some Panasonic equipment (DVD Recorder DIGA, HD Video Camera, Player theatre, Amplifier, etc.) with HDMI cables allow you to interface them automatically.

The equipment with "HDAVI Control" function enables the following operations:

- Easy playback (p. 33)
- Power on link (p. 33)
- Power off link (p. 33)
- Speaker control (p. 33)

In addition, the equipment with "HDAVI Control 2" function enables the following operation:

- Access and control the connected equipment by VIERA remote control (p. 33)

These features are limited to models incorporating Panasonic's "HDAVI Control" and "VIERA Link". 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.

Refer to individual manuals for compatibility information. About applicable equipment, consult your local Panasonic dealer or refer to the URL: [www.panasonic.co.uk](http://www.panasonic.co.uk)

### HDMI cable

This function needs an HDMI compliant (fully wired) cable. Non-HDMI-compliant cables cannot be utilized. It is recommended that you use Panasonic's HDMI cable. Recommended part number:

- RP-CDHG15 (1.5 m)
- RP-CDHG30 (3.0 m)
- RP-CDHG50 (5.0 m)

### Preparations

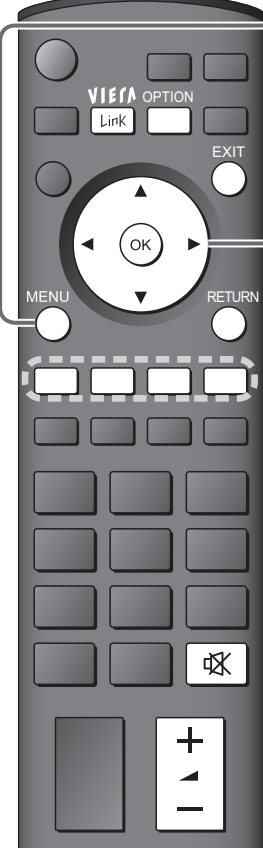
Setup the equipment to enable this function. Read the manuals of the equipment.

About connections, see "External Equipment" (p. 35). Read the manuals of the equipment too.

### For the first time / When adding new equipment, reconnecting equipment or changing setup

After connection turn the equipment on and then switch the TV on.

Select the input mode to HDMI1 or HDMI2 (p. 16), and make sure that an image is displayed correctly.



**1** Display the menu

MENU

**2** Select "Setup"

VIERA Main Menu

- VIERA Link
- Picture
- Sound
- Setup

**3** Select "VIERA Link"

Setup Menu 2/2

- Input Labels
- Banner Display Timeout 3 seconds
- VIERA Link On
- Refresh Rate 100Hz
- Software License
- System Information

**4** Set to "On"

(default is On)

② access

① select

select

set

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

- If you cannot access the menu, check the settings and the equipment (p. 32).

### Access and operate the menu of the equipment

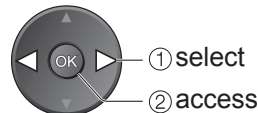
- ① Display "VIERA Link Menu" → 

- ② Select "VIERA Link Control"

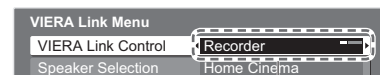


- ③ Select the equipment you want to access

- "Home Cinema" means Player theatre, Recorder theatre and Amplifier.

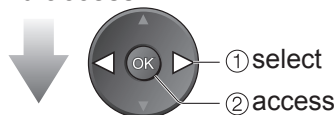


#### ■ When the equipment with "HDAVI Control 2" function is connected



##### Recorder / Player / Home Cinema / Video Camera

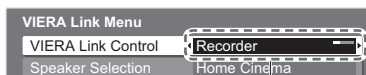
Displayed the type of the connected equipment.  
Select the type of the equipment and access.



##### The menu of the accessed equipment

(Input mode will be changed automatically)

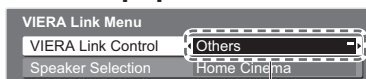
#### ■ When the equipment with "HDAVI Control" function is connected



##### Recorder / Player / Home Cinema / Video Camera

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

#### ■ When other type or other manufacturer of the equipment is connected










##### Others

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

- ④ Operate the menu of the equipment

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

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

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

### Easy playback

Automatic Input switching-When the connected Panasonic equipment is operated, input mode is switched automatically. When it is stopped operating, input mode is returned.

### Power on link

When the connected Panasonic 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


When TV is set to Standby mode, the connected Panasonic equipment is also automatically set to Standby.  
● This function will work even if the TV enters standby mode automatically by Off Timer function or auto power standby function.

### Speaker control

You can control the theatre speaker with TV's remote control.

This function is available when Panasonic Amplifier or Player theatre is connected.

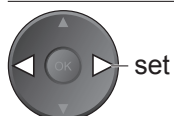
- If you cannot access the menu, check the settings and the equipment (p. 32).

- 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 → 

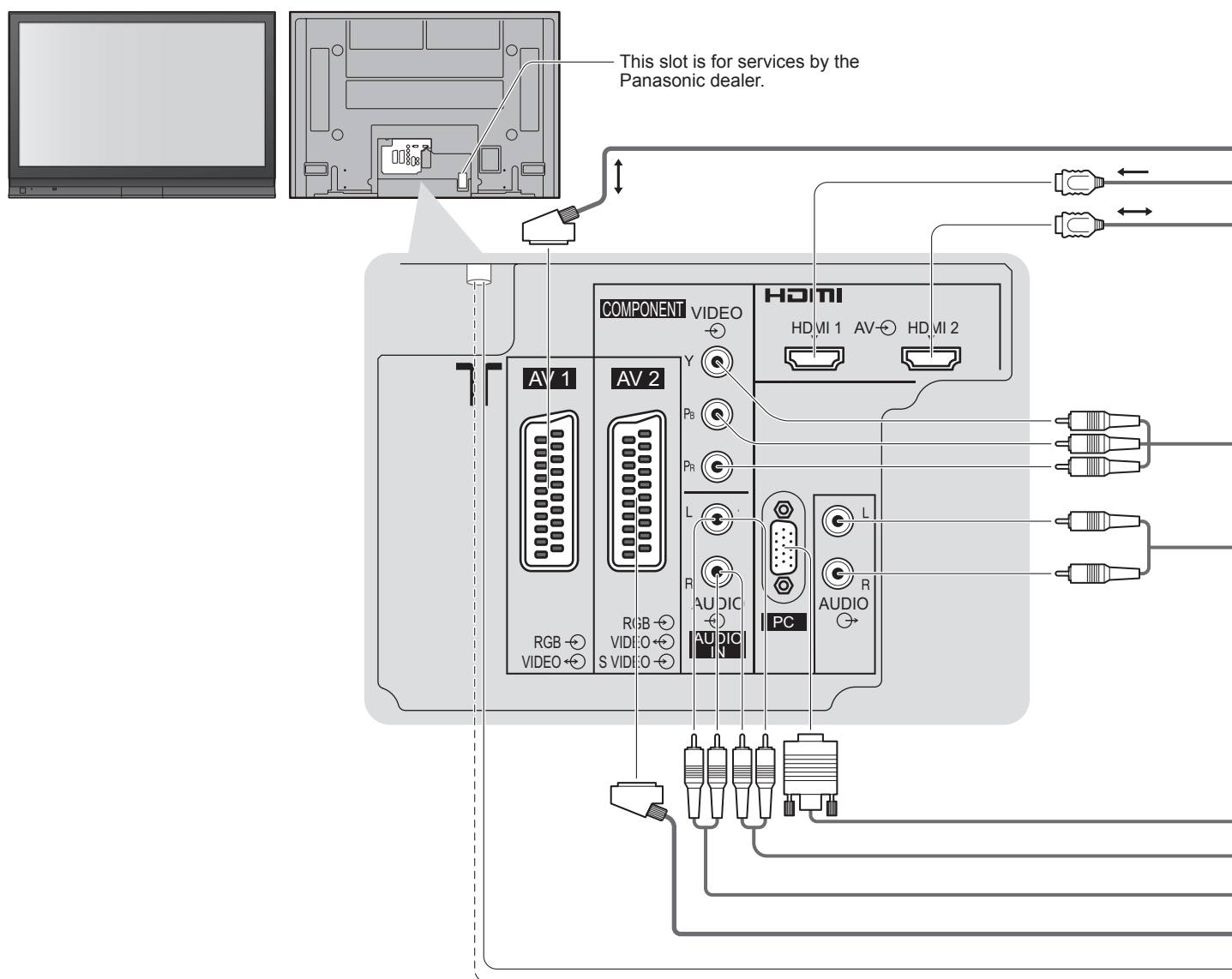
- The sound of TV speakers is mute.
- When the equipment is turned off, TV speakers will be active.

#### ■ TV

TV speakers are active.

# External Equipment

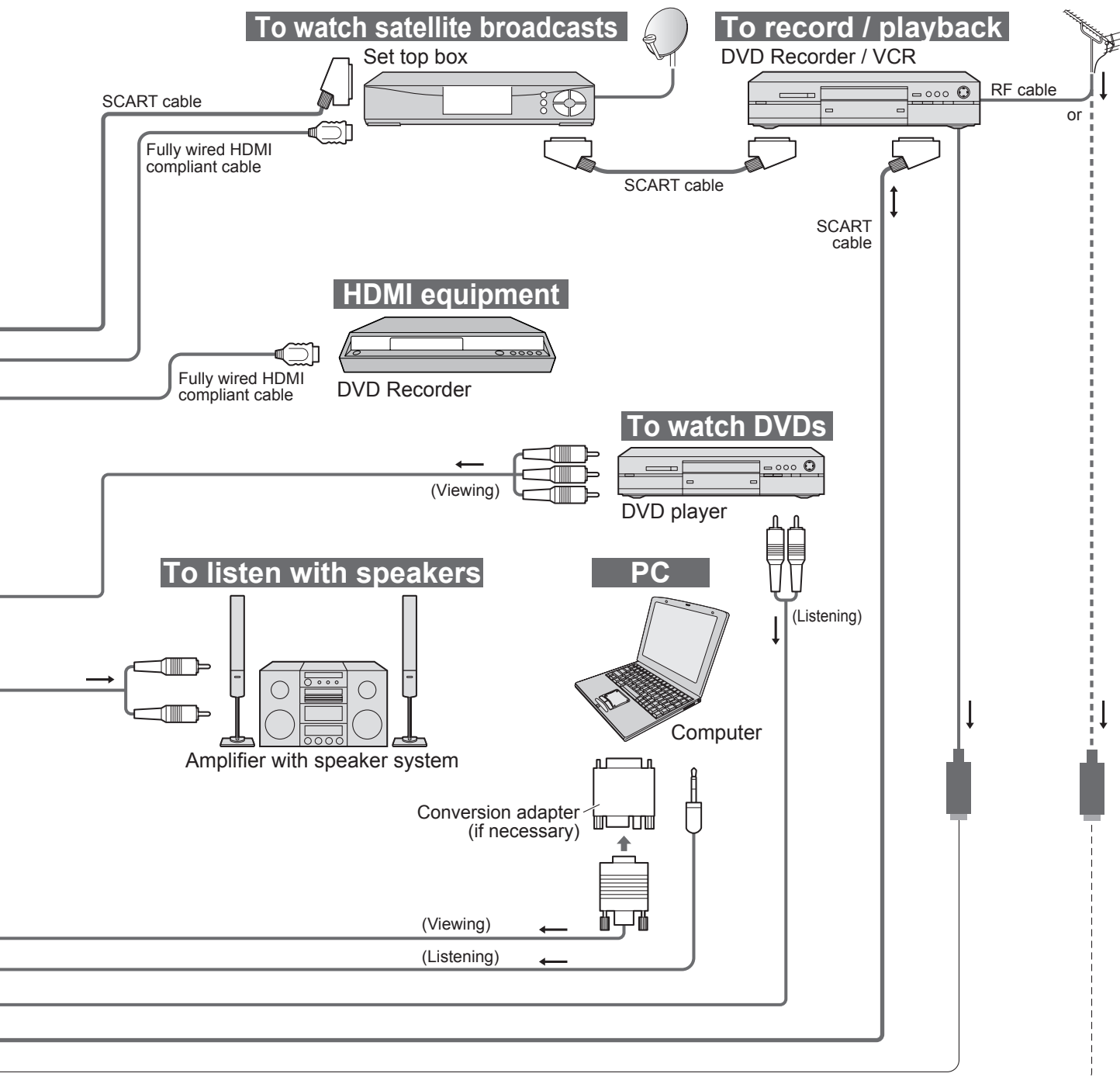
These diagrams show our recommendations for how to connect the TV to your various equipment. For other connections, consult the instructions for each piece of equipment, the table below, and the specifications (p. 42).



■ Types of connectable equipment to each connector

Connector	AV1	AV2	COMPONENT Y Pb Pr L R	AUDIO OUT L R	HDMI	
					1	2
Recording / Playback (equipment)						
■ 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				○		
■ Q-Link	○	○				
■ Direct TV Recording	○	○				
■ VIERA Link					○	○

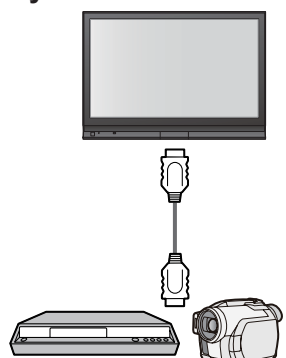
○: Recommended Connection



## VIERA Link (p. 32)

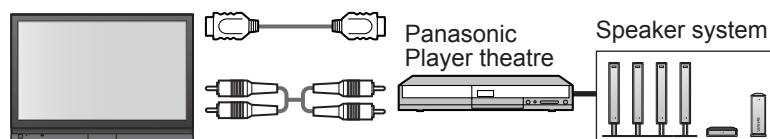
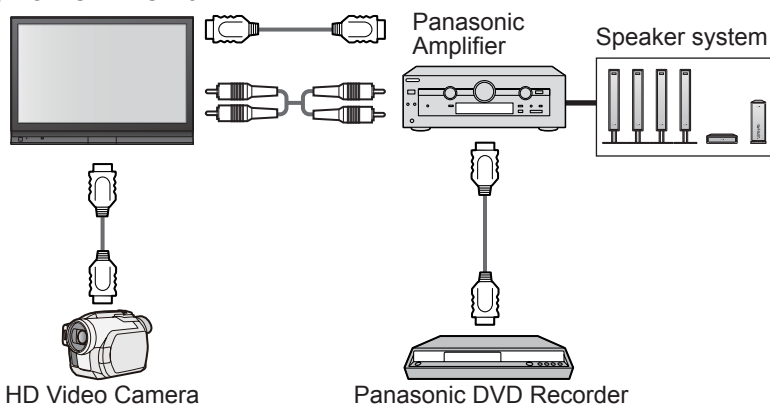
- Use fully wired HDMI compliant cable.
- Read the manuals of the equipment too.

### Easy playback, Access and control the connected equipment by VIERA remote control



Panasonic DVD Recorder, HD Video Camera, etc.

### Home Cinema



# Technical Information

## Aspect Ratio

The optimum size and aspect can be chosen, and you can enjoy finer images. (p. 15)

■ **Auto:** Auto aspect determines the best aspect ratio to use to fill your screen. It does this using a four step process to determine if the picture being viewed is a widescreen picture.

If Auto aspect detects a widescreen signal it switches into the appropriate 16:9 or 14:9 widescreen mode. If Auto aspect does not detect a widescreen signal then this advanced TV enhances the picture for optimum viewing pleasure.

The text shown on the screen indicates how Auto aspect determined which ratio to use:

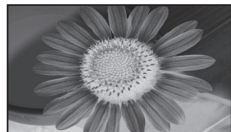
“WIDE” appears in the top left of the screen if a widescreen identification signal (WSS) is found or a signal found through a SCART terminal. Auto aspect switches to the appropriate 16:9 or 14:9 widescreen ratio. This function will also work in any aspect mode. “Auto” appears in the top left of the screen if black stripes above and below the picture are detected. Auto aspect chooses the best ratio and expands the picture to fill the screen. This process can take several minutes, depending on the darkness of the picture.

Signal name		Aspect modes									Aspect Control Signal							
											Widescreen signal (WSS)				Control signal through SCART (pin 8) or HDMI terminal			
		Auto	16:9	14:9	Just	4:3	4:3 Full	Zoom1	Zoom2	Zoom3	TV	AV1	AV2	Component	AV1	AV2	HDMI 1	HDMI 2
TV/AV1/AV2	PAL	○	○	○	○	○	—	○	○	○	○	○	○	—	○	○	—	—
	PAL 525/60	○	○	○	○	○	—	○	○	○	—	—	—	—	○	○	—	—
	M. NTSC	○	○	○	○	○	—	○	○	○	—	—	—	—	○	○	—	—
	NTSC(AV input only)	○	○	○	○	○	—	○	○	○	—	—	—	—	○	○	—	—
Component/HDMI	SD	525(480)/60i	○	○	○	○	○	—	○	○	○	—	—	—	—	—	○	○
		525(480)/60p	○	○	○	○	○	—	○	○	○	—	—	—	—	—	○	○
		625(576)/50i	○	○	○	○	○	—	○	○	○	—	—	—	○	—	○	○
		625(576)/50p	○	○	○	○	○	—	○	○	○	—	—	—	○	—	○	○
		750(720)/50p	○	○	○	○	○	○	○	○	○	—	—	—	—	—	○	○
	HD	750(720)/60p	○	○	○	○	○	○	○	○	○	—	—	—	—	—	○	○
		1125(1080)/50i	○	○	○	○	○	○	○	○	○	—	—	—	—	—	○	○
		1125(1080)/60i	○	○	○	○	○	○	○	○	○	—	—	—	—	—	○	○
		1125(1080)/50p	○	○	○	○	○	○	○	○	○	—	—	—	—	—	○	○
		1125(1080)/60p	○	○	○	○	○	○	○	○	○	—	—	—	—	—	○	○
PC input		—	○	—	—	○	—	—	—	—	—	—	—	—	—	—	—	

### Note

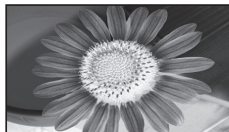
- The ratio varies depending on the programme, etc. If the ratio is greater than the standard “16:9”, black bands may appear at the top and bottom of the screen.
- If the screen size looks unusual when a widescreen-recorded programme is played back on a VCR, adjust the tracking of the VCR. (See the VCR manual.)
- Aspect mode can be memorized for SD (Standard definition) and HD (High definition) signals separately.
- To select the ratio manually: (Only “16:9” or “4:3” in PC mode)

Auto



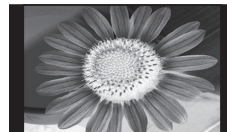
The best ratio is chosen and the picture expanded to fill the screen.

16:9



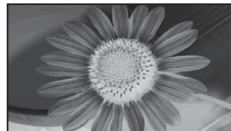
Directly displays the image at “16:9” without distortion (anamorphic).

14:9



Displays the image at the standard “14:9” without enlargement.

Just



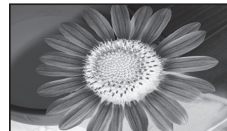
Displays a 4:3 image full-screen. Stretching is only noticeable at the left and right edges.

4:3



Displays the image at the standard “4:3” without distortion.

4:3 Full



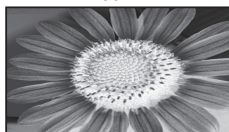
Displays a “4:3” image enlarged horizontally to fit the screen.

Zoom1



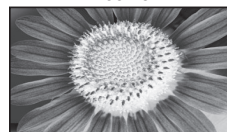
Displays a “16:9” letterbox or “4:3” image without distortion.

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).

## VIERA Link “HDAVI Control™”

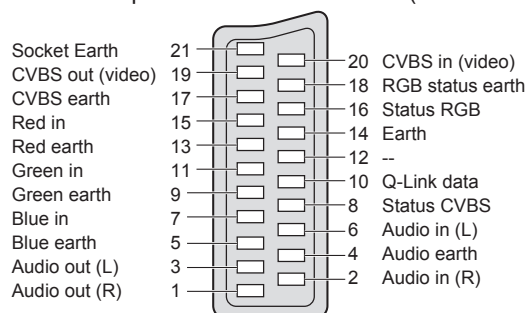
HDMI connections to some Panasonic equipment allow you to interface them automatically. (p. 32)

- This function may not work normally depending on the equipment condition.
- 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 manuals of the equipment.
- If more than one equipments of the same type are connected to the TV by HDMI cables, for example two DIGA DVD recorders to HDMI1 and 2, VIERA Link will only be available for the lower terminal number, in this case HDMI1.
- “HDAVI Control 2” is the newest standard (current as of February, 2007) for Panasonic’s HDAVI Control compatible equipment. This standard is compatible with Panasonic’s conventional HDAVI equipment.

## SCART and HDMI terminal information

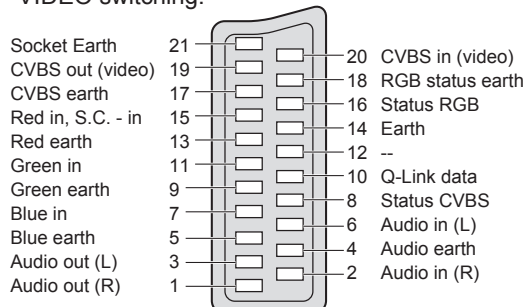
### ■ AV1 SCART terminal (RGB, VIDEO, Q-Link)

Suitable inputs for AV1 include RGB (Red / Green / Blue).

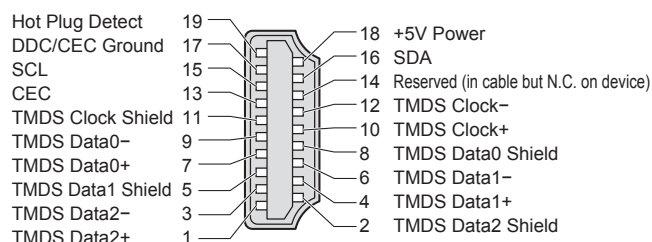


### ■ AV2 SCART terminal (RGB, VIDEO, S-VIDEO, Q-Link)

AV2 - Pins 15 and 20 are dependent on AV2 S-VHS / VIDEO switching.



### ■ HDMI terminal



# 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.

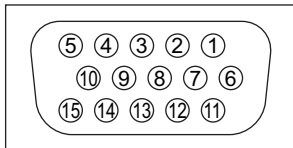
- PC signals that can be inputted: Horizontal scanning frequency 31 to 69 kHz; vertical scanning frequency 59 to 86 Hz (more than 1,024 signal lines could result in incorrect display of the image).
- A PC adapter is not necessary for the DOS/V-compliant D-sub 15-pin connector.

### 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	Model No.	TH-37PV70EYA	TH-42PV70EYA
4:3		768 × 720 pixels	768 × 768 pixels
16:9		1,024 × 720 pixels	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<sub>B</sub>, P<sub>R</sub>), 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		*

### 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

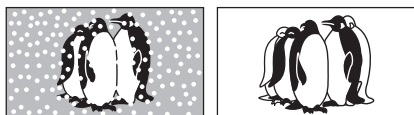
### Note

- 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 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.
- Check all required SCART cables and connections are firmly in place.

## Auto aspect

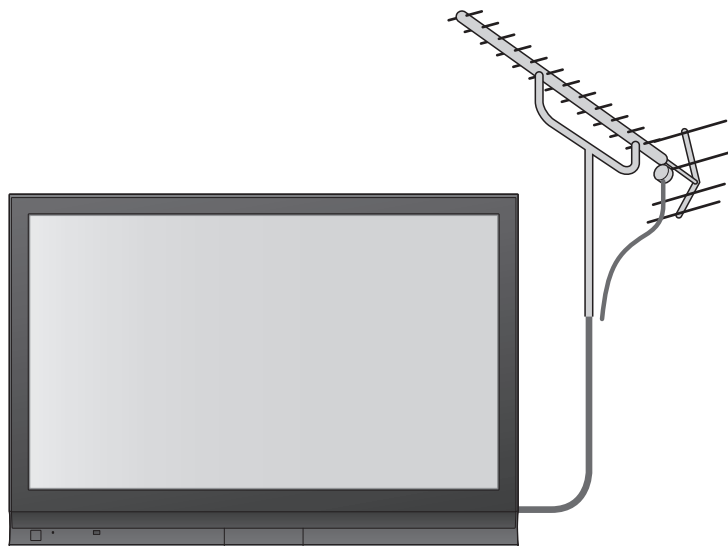
- Auto aspect is designed to provide you with the best aspect ratio to use to fill your screen. For user control please see p. 36.

## S-Video / black and white picture

- Using AV button please confirm your selection is S-Video i.e. AV2/AV2S (p. 16).

## On Screen messages - i.e. EC/AV1

- You can simply clear these by pressing the **i** button. Press again to redisplay.



## Direct TV record / Q-Link functions not recording

- Please confirm SCART cable and connection. Also please set "AV1 / AV2 out" in the Setup Menu (p. 23).

## 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 when the following conditions without any user operation for a few minutes:
  - no signal in AV mode
  - selected locked channel
  - selected invalid channel
  - displayed menu

# FAQs

	Problem	Actions
Screen	Chaotic image, noisy	<ul style="list-style-type: none"> <li>● Set "P-NR" in the Picture Menu (to remove noise). (p. 22)</li> <li>● Check nearby electrical products (car, motorcycle, fluorescent lamp).</li> </ul>
	No image can be displayed	<ul style="list-style-type: none"> <li>● Is "Colour" or "Contrast" in the Picture Menu set to the minimum? (p. 22)</li> <li>● Check Colour system. (p. 25)</li> </ul>
	Blurry or distorted image (no sound or low volume)	<ul style="list-style-type: none"> <li>● Reset channels. (p. 24)</li> </ul>
	Unusual image is displayed	<ul style="list-style-type: none"> <li>● Turn off the TV with Mains power On / Off switch, then turn it on again.</li> </ul>
Sound	No sound is produced	<ul style="list-style-type: none"> <li>● Is "Sound mute" active? (p. 9)</li> <li>● Is the volume set to the minimum?</li> </ul>
	Sound level is low or sound is distorted	<ul style="list-style-type: none"> <li>● Sound signal reception may be deteriorated.</li> <li>● Set "MPX" (p. 22) in the Sound Menu to "Mono".</li> <li>● Check Sound system. (p. 25)</li> </ul>
HDMI	Sound is unusual	<ul style="list-style-type: none"> <li>● Set the sound setting of the connected equipment to "2ch L.PCM".</li> <li>● Check the "HDMI1 Input" setting in the Sound Menu. (p. 22)</li> <li>● If digital sound connection has a problem, select analogue sound connection. (p. 31)</li> </ul>
	Pictures from external equipment are unusual when the equipment is connected via HDMI	<ul style="list-style-type: none"> <li>● Is the HDMI cable connected properly? (p. 34)</li> <li>● Turn Off the TV and equipment, then turn them On again.</li> <li>● Check an input signal from the equipment. (p. 38)</li> <li>● Use an equipment compliant with EIA/CEA-861/861B.</li> </ul>
	"VIERA Link" function does not work and an error message appears	<ul style="list-style-type: none"> <li>● Confirm the connection.</li> <li>● Turn the connected equipment on and then switch the TV on. (p. 32)</li> </ul>
Other	TV goes into "Standby mode"	<ul style="list-style-type: none"> <li>● Off Timer function is activated.</li> <li>● The TV enters "Standby mode" about 30 min. after broadcasting ends.</li> </ul>
	The remote control does not work	<ul style="list-style-type: none"> <li>● Are the batteries installed correctly? (p. 6)</li> <li>● Has the TV been switched On?</li> </ul>
	An error message appears	<ul style="list-style-type: none"> <li>● Follow the message's instructions.</li> <li>● If the problem persists, contact the authorized Service Centre.</li> </ul>

# Licence

## Trademark Credits

- VGA is a trademark of International Business Machines Corporation.
- Macintosh is a registered trademark of Apple Computer, USA.
- S-VGA is a registered trademark of the Video Electronics Standard Association.  
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- HDMI, the HDMI Logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
- HDAVI Control™ is a trademark of Matsushita Electric Industrial Co., Ltd.

# Specifications

		TH-37PV70EYA	TH-42PV70EYA
<b>Power Source</b>		AC 220-240 V, 50 / 60 Hz	
<b>Power Consumption</b>	<b>Average use</b>	241 W	261 W
	<b>Standby condition</b>	0.7 W	
<b>Display panel</b>	<b>Aspect Ratio</b>	16:9	
	<b>Visible screen size</b>	94 cm (diagonal) 819 mm (W) × 457 mm (H)	106 cm (diagonal) 922 mm (W) × 518 mm (H)
	<b>Number of pixels</b>	737,280 (1,024 (W) × 720 (H)) [3,072 × 720 dots]	786,432 (1,024 (W) × 768 (H)) [3,072 × 768 dots]
<b>Sound</b>	<b>Speaker</b>	160 mm × 42 mm × 2 pcs, 8 Ω	
	<b>Audio Output</b>	20 W (10 W + 10 W), 10% THD	
<b>PC signals</b>		VGA, SVGA, XGA SXGA ..... (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz	
<b>Receiving Systems / Band name</b>		<b>PAL I</b> UHF E21-68 / VHF Ireland channel <b>PAL 525/60</b> Playback of NTSC tape from some PAL Video recorders (VCR) or NTSC disc playback from DVD player and recorder. <b>M. NTSC</b> Playback from M. NTSC Video recorders (VCR). <b>NTSC (AV input only)</b> Playback from NTSC Video recorders (VCR).	
<b>Aerial - Rear</b>		VHF / UHF	
<b>Operating Conditions</b>		<b>Temperature</b> : 0 °C - 35 °C <b>Humidity</b> : 20 % - 80 % RH (non-condensing)	
<b>Connection Terminals</b>	<b>AV1 (Scart terminal)</b>		21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, Q-Link)
	<b>AV2 (Scart terminal)</b>		21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, S-Video in, Q-Link)
	<b>COMPONENT</b>	<b>VIDEO</b>	Y 1.0 V[p-p] (including synchronization) P <sub>B</sub> , P <sub>R</sub> ±0.35 V[p-p]
		<b>AUDIO L - R</b>	RCA PIN Type × 2 0.5 V[rms]
	<b>Others</b>	<b>HDMI1 / 2</b>	TYPE A Connectors ● This TV supports "HDAVI Control 2" function.
		<b>PC</b>	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)
	<b>Output</b>	<b>AUDIO L - R</b>	RCA PIN Type × 2 0.5 V[rms] (high impedance)
<b>Dimensions ( W × H × D )</b>		917 mm × 667 mm × 330 mm (With Pedestal) 917 mm × 620 mm × 97 mm (TV only)	1,020 mm × 727 mm × 330 mm (With Pedestal) 1,020 mm × 680 mm × 97 mm (TV only)
<b>Mass</b>		30.0 kg Net (With Pedestal) 23.0 kg Net (TV only)	34.0 kg Net (With Pedestal) 27.0 kg Net (TV only)

## Note

- Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.
- This equipment complies with the EMC standards listed below.  
EN55013, EN61000-3-2, EN61000-3-3, EN55020, EN55022, EN55024.

# MEMO

## Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)



This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

### For business users in the European Union

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

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

This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

## Sales and Support Information

### Customer Care Centre

- For customers within the UK : **0844 844 3852**
- For customers within the Republic of Ireland: **01 289 8333**
- Visit our website for product information **[www.panasonic.co.uk](http://www.panasonic.co.uk)**
- E-mail: **[customer.care@panasonic.co.uk](mailto:customer.care@panasonic.co.uk)**

### Direct Sales at Panasonic UK

- Order accessory and consumable items for your product with ease and confidence by phoning our Customer Care Centre Monday – Thursday 9:00am – 5:30pm, Friday 9:30am – 5:30pm (Excluding public holidays).
- Or go on line through our Internet Accessory ordering application at **[www.panasonic.co.uk](http://www.panasonic.co.uk)**.
- Most major credit and debit cards accepted.
- All enquiries transactions and distribution facilities are provided directly by Panasonic UK Ltd.
- It couldn't be simpler!
- Also available through our Internet is direct shopping for a wide range of finished products, take a browse on our website for further details.

*Interested in purchasing an extended guarantee?*

*Please call 0870 240 6284 or visit [www.panasonic.co.uk/guarantee](http://www.panasonic.co.uk/guarantee).*

## 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 \_\_\_\_\_

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