Panasonic®

Operating Instructions
LCD Television

Model No.   **TX-37LZ8P**

VIErA

VIErA Link   Link

FULL HD 1920×1080p   HD ready 1080p   HDMI™ HIGH-DEFINITION MULTIMEDIA INTERFACE

Please read these instructions before operating your set and retain them for future reference.
The images shown in this manual are for illustrative purposes only.
Please refer to Pan European Guarantee Card if you need to contact your local Panasonic dealer for assistance.
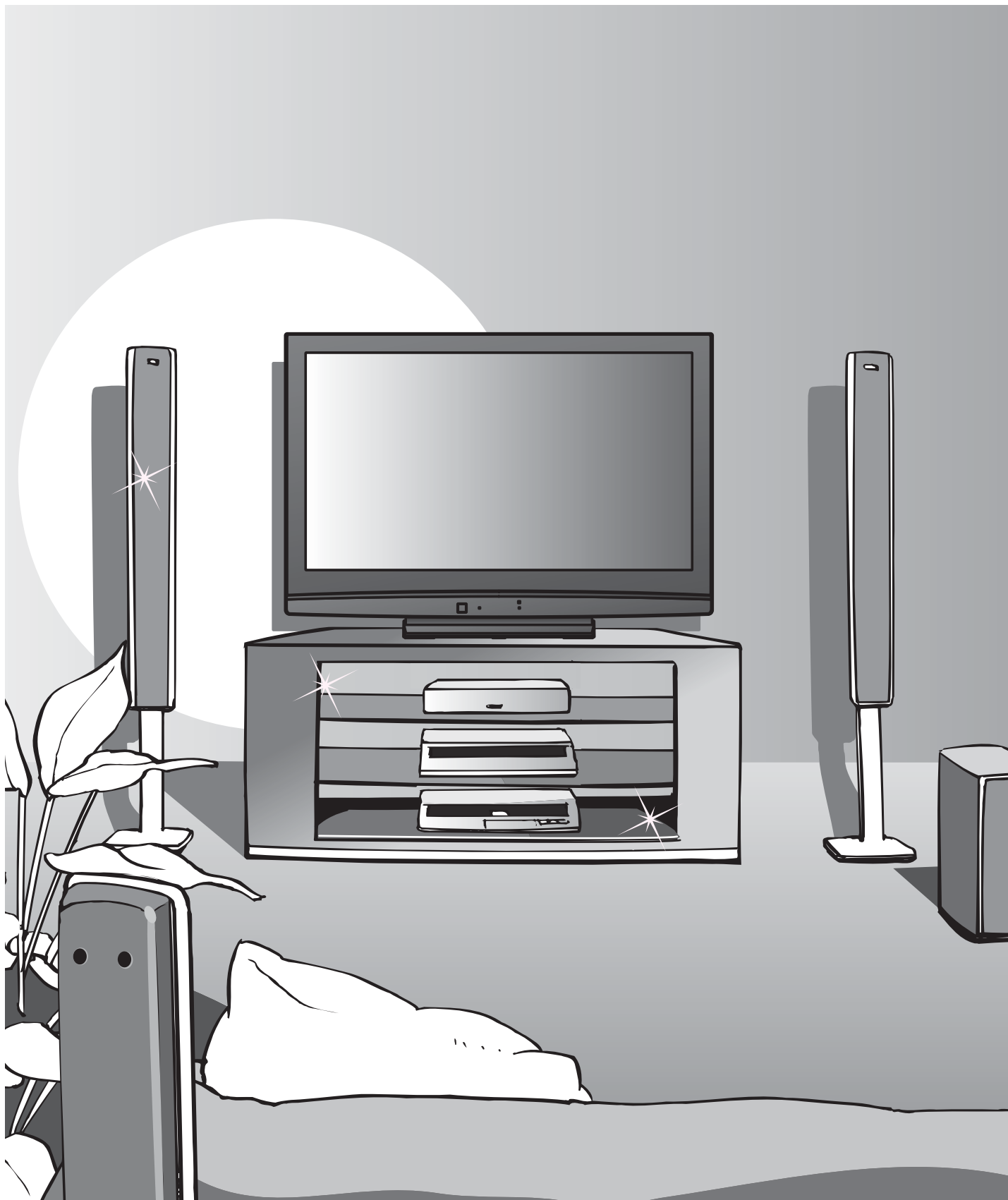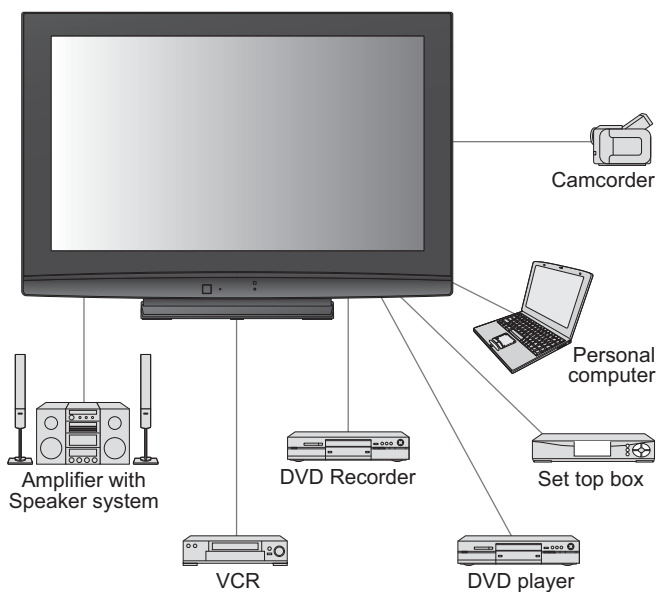
English

Turn your own living room into a movie theatre!

Experience an amazing level of multi-

media excitement

Enjoy rich multi-media

Camcorder

Personal computer

Amplifier with Speaker system

DVD Recorder

Set top box

VCR

DVD player

Contents

Be Sure to Read

Quick Start Guide

## Enjoy your TV!
Basic Features

Advanced Features

FAQs, etc.

Safety Precautions

Handling the mains plug and lead

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

If you find any abnormality, remove the mains plug immediately!
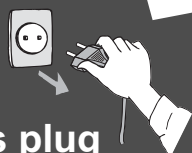
AC 220-240 V 50 Hz

Power source

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

Do not remove covers NEVER modify the TV yourself

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

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

Keep liquids away from the TV

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

Do not expose to direct sunlight and other sources of heat

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

Do not place foreign objects inside the TV

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

Do not place the TV on sloped or unstable surfaces

- The TV may fall off or tip over.

Use only the dedicated pedestals / mounting equipment

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

Notes

## Caution

■When cleaning the TV, remove the mains plug
● Cleaning an energized TV may cause electrical shock.

■When the TV is not going to be used for a long period of time, remove the mains plug
● This TV will still consume some power even in the Off mode, as long as the mains plug is still connected to a live socket outlet.

■Allow sufficient space around the TV for radiated heat

Minimum distance

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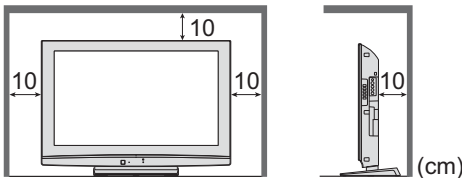
● When using the pedestal, keep the space between the bottom of the TV and the floor surface.
● In case of using Wall-hanging bracket, follow the manual of it.

■Do not block the rear air vents
● Blocked ventilation by newspapers, table cloths, curtains, etc. may cause overheating, fire or electrical shock.

■Do not expose your ears to excessive volume from the headphones
● Irreversible damage can be caused.

■Auto power standby function
● If no signal is received and no operation is performed in Analogue TV mode for 30 minutes, the TV will automatically go to standby mode.

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

■Transport only in upright position

Maintenance

First, remove the mains plug from the socket outlet.

Display panel

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

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

Cabinet, Pedestal

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

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

Mains plug

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

Accessories / Options

Standard accessories

Check that you have the accessories and items shown ☑
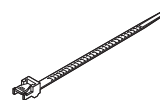
☐ Remote Control
  ● N2QAYB000223

☐ Batteries for the Remote Control (2)
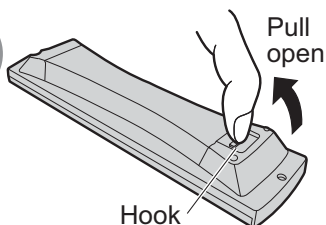 ● R6 (UM3)

☐ Clamper

☐ Cleaning cloth
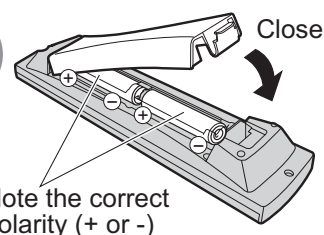
☐ Operating Instructions

☐ Pan European Guarantee Card

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

## Installing remote's batteries

1 Pull open

Hook

2 Close

Note the correct polarity (+ or -)

Caution

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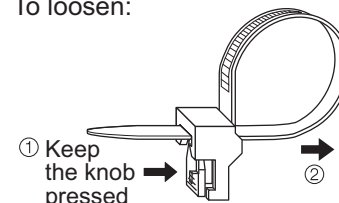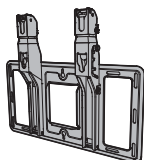
Using the clamper

Rear of the TV
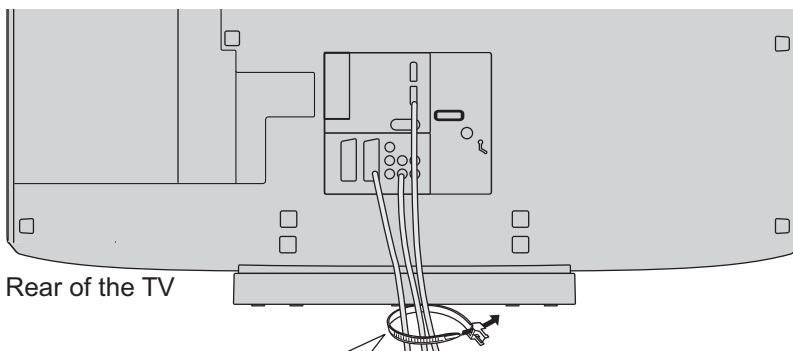
To tighten:

To loosen:

① Keep the knob pressed ②
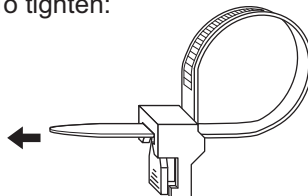
● Do not bundle the RF cable and mains lead together (could cause distorted image).
● Fix cables with clampers as necessary.
● When using the optional accessory, follow the option's assembly manual to fix cables.

Optional accessories

Wall-hanging bracket
● TY-WK32LR2W

Please contact your nearest Panasonic dealer to purchase the recommended wall-hanging bracket. For additional details, please refer to the wall-hanging bracket installation manual.

WARNING!

● Failure to use a Panasonic bracket or choosing to mount the unit yourself will be done at the risk of the consumer.
  Any damage resulting from not having a professional installer mount your unit will void your warranty.
● Always be sure to ask a qualified technician to carry out set-up. Incorrect fitting may cause equipment to fall, resulting in injury and product damage.
● Do not mount the unit directly below ceiling lights (such as spotlights, floodlights or halogen lights) which typically give off high heat. Doing so may warp or damage plastic cabinet parts.
● Take care when fixing wall brackets to the wall. Always ensure that there are no electrical cables or pipes in the wall before hanging bracket.

■ **How to remove the Pedestal**
Remove four screws.

Rear of the TV

Identifying Controls

TV

Function select
- Volume / Contrast / Brightness / Colour / Sharpness / Tint (NTSC mode) / Bass / Treble / Balance / Auto Setup (p. 25)

Headphones jack (p. 36)

Increases or decreases the programme position by one. When a function is already displayed, press to increase or decrease the selected function. When in Standby mode, switches TV On.

Remote control signal receiver

C.A.T.S. (Contrast Automatic Tracking System) sensor
- Senses brightness to adjust picture quality in "Eco" mode in Picture Menu (p. 20)

Changes the input mode

Power LED
- Standby: red
  On: green
- When using the remote control, indicates the TV has received a command.

AV3 terminals (p. 36)

Mains power On / Off switch
- Switch On to turn on the TV or turn the TV to standby mode by the remote control

Remote Control

Standby On / Off switch
- Switches TV On or Off standby

Aspect (p. 13)
- Changes aspect ratio from Aspect Selection list
- Also possible by pressing this button repeatedly until you reach the desired aspect

OK
- Confirms selections and choices
- Press after selecting programme positions to quickly change programme

Main Menu (p. 18)
- Press to access VIERA Link, Picture, Sound and Setup Menus

Surround (p. 20)
- Switches Surround On or Off

VIERA Link Menu (p. 33)
- Press to access VIERA Link Menu directly

Programme Information (p. 13)
- Displays programme information

Programme Up / Down
- Selects programme in sequence

Teletext (p. 14)
- Switches to teletext mode

Favourite Page (p. 15)
- Calls up the teletext page stored in blue button

VCR / DVD Panasonic equipment operations (p. 17)

Input mode selection
- TV - switches to TV mode (p. 16)
- AV - switches to AV input mode from Input Selection list (p. 16)

Exit
- Returns to the normal viewing screen

Cursor buttons
- Makes selections and adjustments

Return
- Returns to the previous menu

Coloured buttons
- Used for the selection, navigation and operation of various functions

Direct TV Recording (p. 31 and p. 33)
- Records programme immediately in DVD Recorder / VCR with Q-Link or VIERA Link connection

Option Menu (p. 12)
- Easy setting for viewing and sound options

Numeric buttons
- Changes programme and teletext pages
- When in Standby mode, switches TV On

Sound Mute
- Switches sound mute On or Off

Volume Up / Down

Hold
- Freeze / unfreeze picture (p. 12)
- Holds the current teletext page (teletext mode) (p. 15)

Index (p. 15)
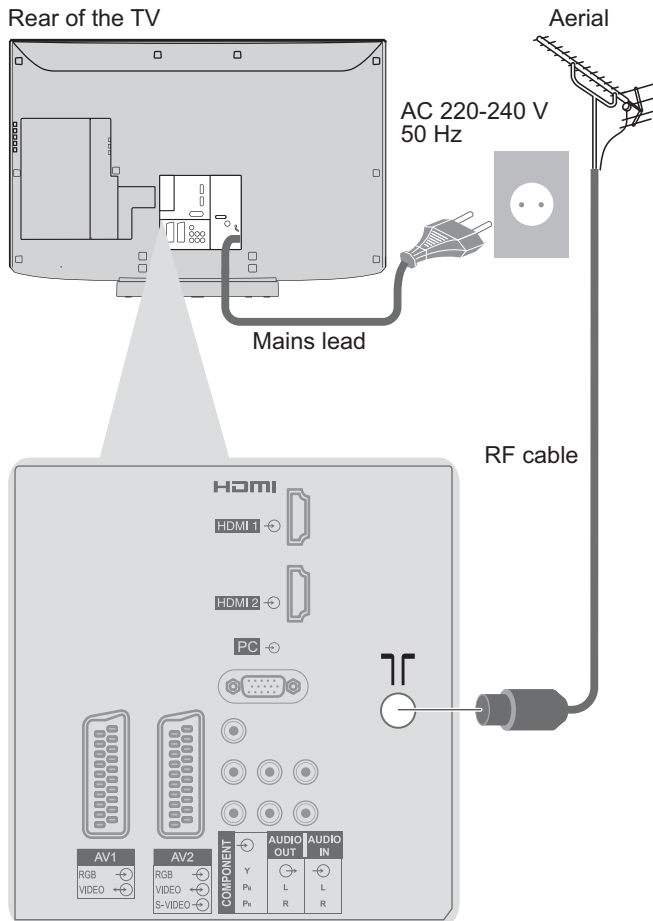- Returns to the teletext index page (teletext mode)

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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.
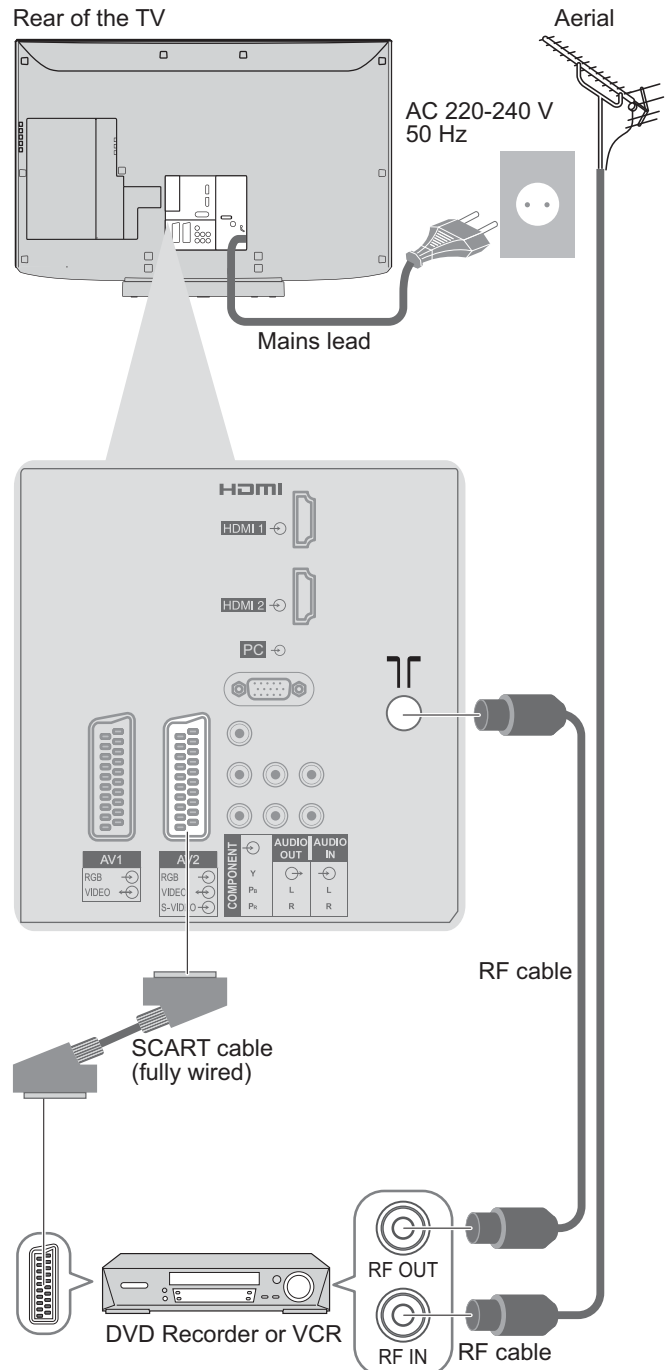
Example 1
Connecting aerial

TV only

Rear of the TV

Aerial

AC 220-240 V
50 Hz

Mains lead

RF cable

HDMI

HDMI 1

HDMI 2

PC

AV1
RGB
VIDEO

AV2
RGB
VIDEO
S-VIDEO

COMPONENT
Y
PB
PR

AUDIO
OUT
L
R

AUDIO
IN
L
R

Example 2
Connecting DVD Recorder / VCR

TV, DVD Recorder or VCR

Rear of the TV

Aerial

AC 220-240 V
50 Hz

Mains lead

HDMI

HDMI 1

HDMI 2

PC

AV1
RGB
VIDEO

AV2
RGB
VIDEO
S-VIDEO

COMPONENT
Y
PB
PR

AUDIO
OUT
L
R

AUDIO
IN
L
R

RF cable

SCART cable
(fully wired)

RF OUT

DVD Recorder or VCR

RF IN   RF cable

Note

● Connect to AV1 / AV2 for a DVD Recorder / VCR supporting Q-Link (p. 31).
● For HDMI-compatible equipment, possible to connect to HDMI terminals (HDMI1 / HDMI2) by using HDMI cable (p. 36).
● Q-Link connection ➡ p. 30
● VIERA Link connection ➡ p. 30
● Read the manual of the equipment too.

Example 3
Connecting DVD Recorder / VCR and Set top box

TV, DVD Recorder / VCR and Set top box

Rear of the TV

AC 220-240 V
50 Hz

Aerial

● Basic Connection

Mains lead

HƆMI

HDMI 1

HDMI 2

PC

RF cable

AV1
RGB
VIDEO

AV2
RGB
VIDEO
S-VIDEO

COMPONENT
Y
Pв
Pв

AUDIO OUT
L
R

AUDIO IN
L
R

SCART cable
(fully wired)

Fully wired HDMI
compliant cable

RF OUT

DVD Recorder
or VCR

RF IN

RF cable

SCART cable
(fully wired)

RF OUT

RF IN

RF cable

RF cable

Set top box

RF IN

RF cable

9
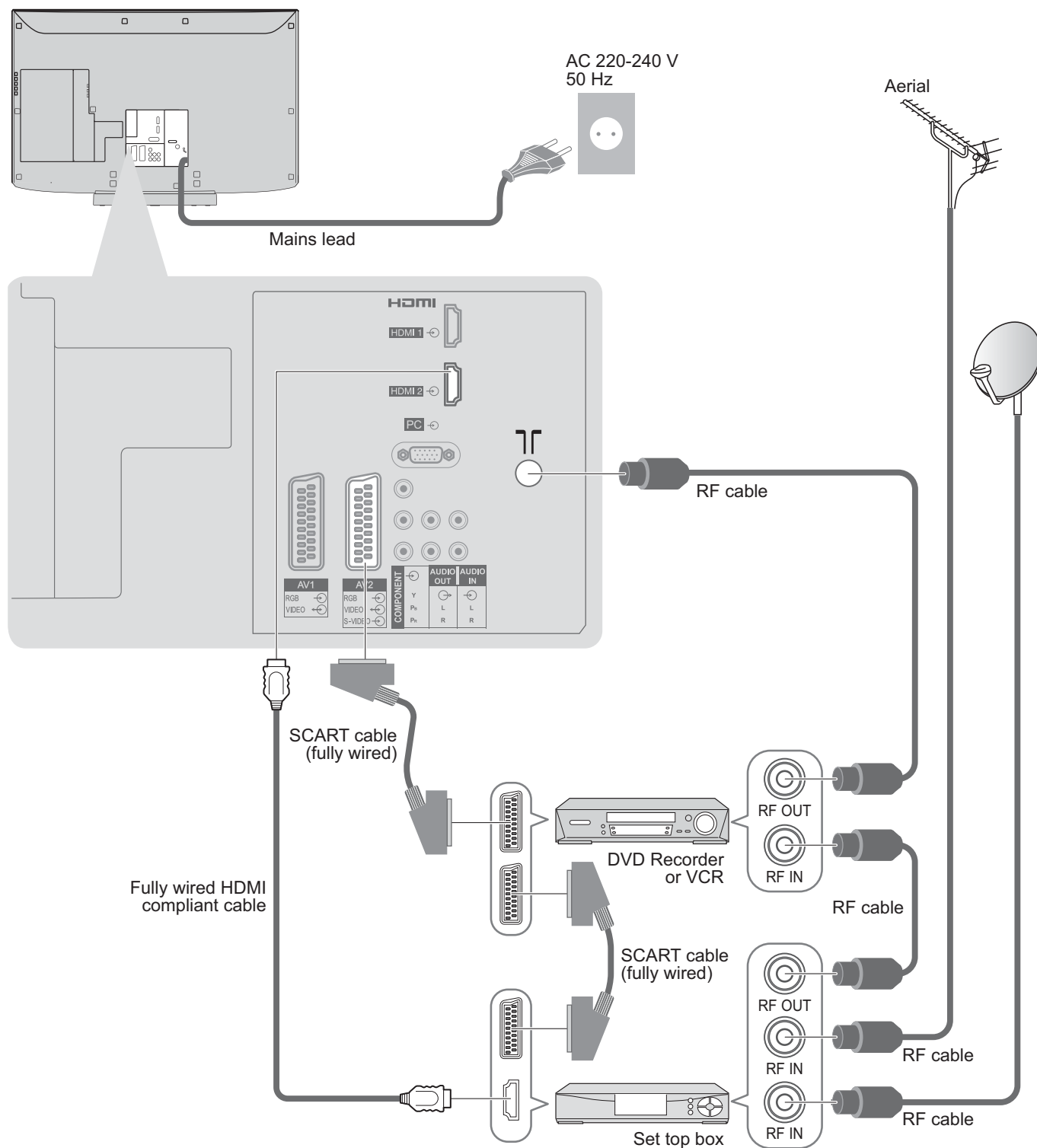
Auto Setup

Search and store TV programmes automatically.
These steps are not necessary if the setup has been completed by your local dealer.

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

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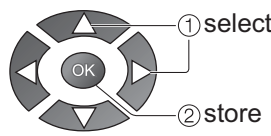
● You can now use the remote control to turn On the TV or turn the TV to standby mode.
(Power LED: On)

② Select the language
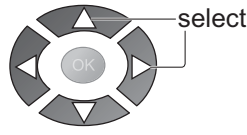
Menüsprache			
Deutsch	Dansk	Polski	Srpski
English	Svenska	čeština	Hrvatski
Français	Norsk	Magyar	Slovenščina
Italiano	Suomi	Slovenčina	Latviešu
Español	Türkçe	Български	eesti keel
Português	Ελληνικά	Română	Lietuvių
Nederlands			

① select
OK
② store

③ Select your country

Country		
Germany	Austria	France
Italy	Spain	Portugal
Switzerland	Denmark	Sweden
Norway	Finland	Belgium
Netherlands	Greece	Poland
Czech	Hungary	Ireland
Luxembourg	Malta	Slovakia
Turkey	Andorra	E.Eu

select
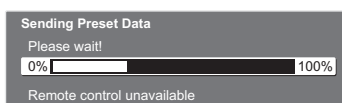OK

● Depending on the selected countries, you may also be required to select the region.

④ Start Auto Setup

OK

Auto Setup
Scan   2 ▢▢▢▢ 78 1   41
This will take about 3 minutes.
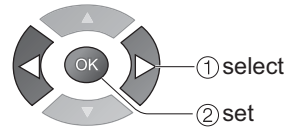Channel   Service Name
CH 29
CH 33

Analogue: 2
Searching

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

Sending Preset Data
Please wait!
0% ▢▢▢▢▢▢▢▢ 100%
Remote control unavailable

● If Q-Link, VIERA Link or similar technology (p. 30), compatible recorder is connected, programme, language, country / region settings are automatically downloaded to the recorder.

⑤ Select the picture setting

Please select your viewing environment.
Home   Shop

● "Shop" and "Home" are equal to "Dynamic" and "Normal" respectively - "Viewing Mode" in "Picture Menu" (p. 20)

① select
OK
② set

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

● To edit programmes
➡ "Editing Programmes" (p. 22)

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MENU   OK   RETURN
EXIT

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

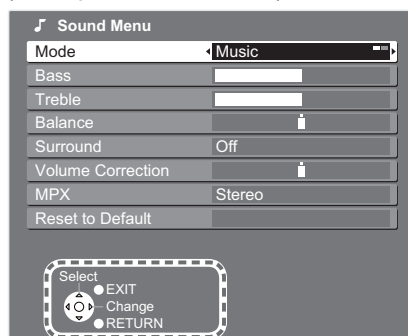OK — Access the menu / store settings after adjustments have been made or options have been set

RETURN — Return to the previous menu

EXIT — Exit the menu system and return to the normal viewing screen

Using the On Screen Displays

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

♪ Sound Menu	
Mode	◄ Music ►
Bass	
Treble	
Balance	
Surround	Off
Volume Correction	
MPX	Stereo
Reset to Default	

Select
● EXIT
Change
● RETURN

On-screen operation guide will help you.

Note

● If tuning has failed ➡ "Auto Setup" (p. 25)
● If downloading has failed ➡ "Download" (p. 21)
● To initialize all settings ➡ "Shipping Condition" (p. 27)
● 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.

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Watching TV

① Turn power on
(Press for about 1 second)

● Mains power On / Off switch should be On. (p. 7)

CH05

Information banner appears whenever you select a programme
● For details ➡ p. 13

② Select a programme

∧ — up
∨ — down

or

1	2	3
4	5	6
7	8	9
	0	
VCR

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

● To select from the Programme List
➡ OK

All Analogue Services
6 Cartoon Nwk
7 BBC Radio Wales
8 BBC Radio Cymru
1 BBC ONE Wales
2 BBC THREE
3 BBCi
4 CBBC Channel

Select
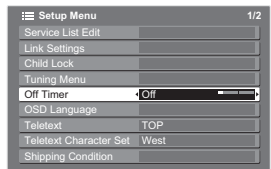Connect   EXIT   Page up
              RETURN   Page down

① select programme
② watch

■ **Select a programme using Information banner** (p. 13)
Possible to confirm the programme name before selecting programmes.

Display Information banner if it is not displayed

i

● Possible to set display timeout in "Banner Display Timeout" (p. 21).

While the banner is displayed, select the programme

① select programme
② watch

Volume

HOLD

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■ **Other useful functions**

Hold	Freeze / unfreeze picture	HOLD

Display the selectable settings for the current programme	**Check or change the current programme status instantly**	OPTION	● To change ② change ① select
	Teletext Character Sets the teletext language ➡ Setup Menu (p. 21) **MPX** ➡ Sound Menu (p. 20)	**Volume Correction** Adjusts volume of individual programme or input mode	
	Note ● Also possible to change the settings in Menu list (p. 20 and p. 21).		

Off Timer	**Turn the TV off automatically after a fixed period**		
	Display the menu MENU	Select "Setup" **Main Menu** VIERA Link Picture Sound Setup ② access ① select	Select "Off Timer" and set the time **Setup Menu** 1/2 Service List Edit Link Settings Child Lock Tuning Menu Off Timer Off OSD Language Teletext TOP Teletext Character Set West Shipping Condition ② set ① select
	● To cancel ➡ Set to "Off" or turn the TV off. ● To display the remaining time ➡ Information banner (p. 13) ● When the remaining time is within 3 minutes, the remaining time will flash on screen.		

Display Information banner

ⓘ

● Also appears when changing a programme

Example: Programme   Current time

1 CNN   **23:35**

CH05   SC1   PAL   CNN

🔇   ▤ **Stereo   45**

Sound System   Colour System
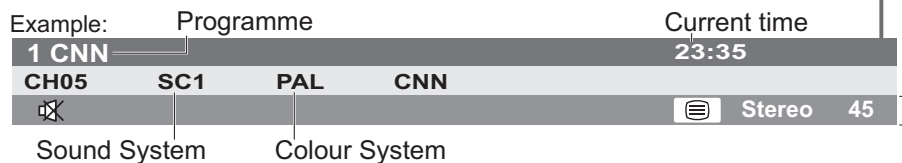
Features available / Message meanings

🔇 Sound mute On	**Stereo, Mono** Audio mode
▤ Teletext service available	**1 - 90** Off Timer remaining time ● For settings ➡ p. 12

● To confirm another tuned programme name ➡ △▽ select programme

● To watch the programme listed in the banner ➡ OK

● Event information is referred to teletext signal.

● To hide ➡ EXIT

Display Information banner

Change the aspect ratio

ASPECT ⊕

Enjoy viewing the picture at its optimum size and aspect.

Display Aspect Selection list   While the list is displayed, select the mode
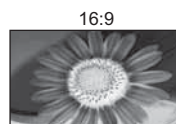
ASPECT ⊕   ➡   ② change / OK / ① select

Aspect selection
Auto
16:9
14:9
Just
4:3
4:3 Full
Zoom1
Zoom2
Zoom3
Change Select EXIT RETURN
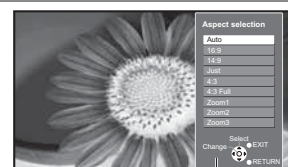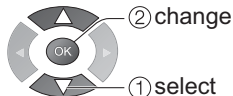
Aspect Selection list

● To change the mode using the ASPECT button only

➡ ASPECT ⊕ (Press repeatedly until you reach the desired mode)
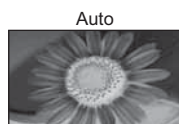
Auto
The best ratio is chosen and the picture expanded to fill the screen.
For details ➡ p. 38

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

14:9
Displays the image at the standard "14:9" without distortion.

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

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

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

Zoom1
Displays a "16:9" letterbox or "4:3" image without distortion.

Zoom2
Displays a "16:9" letterbox (anamorphic) image full-screen without distortion.

Zoom3
Displays a "2.35:1" letterbox (anamorphic) image full-screen without distortion. At "16:9", displays the image at its maximum (with slight enlargement).

Change aspect ratio

Note
● Only "16:9" and "4:3" are available in PC mode.
● Not available in teletext mode.
● Aspect mode can be memorized separately for SD (Standard definition), HD (High definition) signals and PC Input.

Viewing

● Watching TV

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Viewing Teletext

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

What is FLOF (FASTEXT) 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 TOP mode? (in case of TOP text broadcasting)
TOP is a particular improvement of the standard teletext service that results in an easier search and effective guide.
● Fast overview of the teletext information available
● Easy to use step-by-step selection of the topical subject
● Page status information at the bottom of the screen
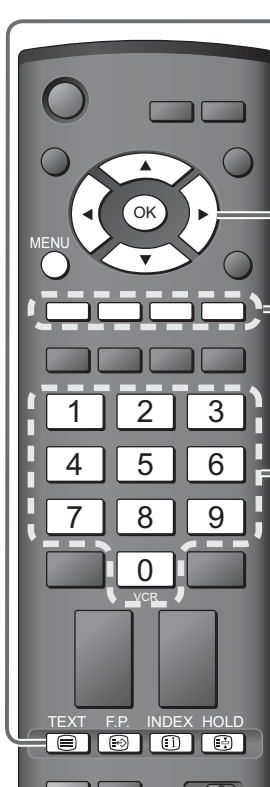
Available page up / down ➡ red green

To select among subject blocks ➡ blue

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

What is List mode?
In List mode, four differently coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory. ("Store frequently viewed pages", p. 15)

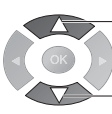■ **To change mode** ➡ "Teletext" in Setup Menu (p. 21)

① Switch to Teletext

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

Sub page number
<< 01 02 03 04 05 06 07   >>
Current page number — **P100**   **17:51 28 Feb** — Time / date
TELETEXT INFORMATION

Colour bar

② Select the page

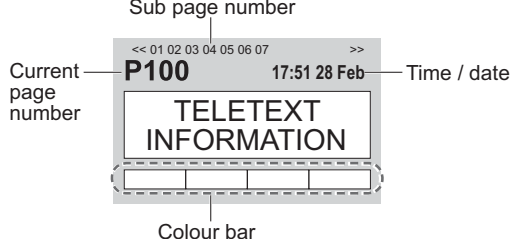| 1 | 2 | 3 |
4	5	6
7	8	9
0		
VCR

or

up / down

or

red green yellow blue
(Corresponds to the colour bar)
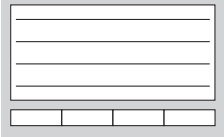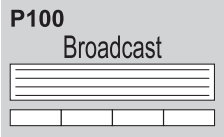
As the blue bar is displayed
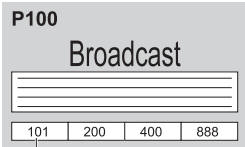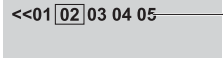
■ **To adjust contrast** ➡ MENU (Press three times) ➡

■ **To return to TV** ➡ TEXT or EXIT

TEXT F.P. INDEX HOLD

■ Using teletext conveniently

Reveal hidden data	Reveal hidden words e.g. quiz page answers
	MENU ➡ red ■ **Re-hide** ➡ red

FULL / TOP / BOTTOM	MENU ➡ green

(TOP) P100 Broadcast (Expand the TOP half) ➡ (BOTTOM) (Expand the BOTTOM half) ➡ Normal (FULL) P100 Broadcast

HOLD	**Stop automatic updating** (If you wish to hold the current page without updating) HOLD ▣ ■ **To resume** ➡ HOLD ▣	

INDEX

Return to the main index page

INDEX ▣

Call up a favourite page

View a favourite page stored

F.P. ▣
- 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) ➡ ◀ OK ▶ ▲▼
- 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 ➡ OK → press and hold

P100
Broadcast

| 101 | 200 | 400 | 888 |

The number changes to white.

■ **To change stored pages**

➡ Colour button you want to change ➡ Enter new page number

1	2	3
4	5	6
7	8	9
	0	
VCR

➡ OK → press and hold

View sub page

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

◀ OK ▶ ▲▼   `<<01 02 03 04 05` — Appears at top of the screen

■ **To view specific sub page**

➡ MENU ⬤ ➡ blue   T****
Broadcast ➡ Enter the 4-digit number
example: P6
| 0 | 0 | 0 | 6 | T0006

- 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

MENU ⬤ ➡ yellow ➡ **P108** — Appears when updating is completed ➡ yellow ➡ View the updated page

(You cannot change the programme.)

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

Watching Videos and DVDs

Connect the external equipment (VCRs, DVD equipment, etc.) and you can watch the input.
● To connect the equipment ➡ p. 8 and p. 9
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. 8 and p. 9)
  ➡ 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. 36).

■ **If input mode is not switched automatically**
  ➡ Perform **②** and **③**
  ● Dependant on the setup of the equipment

②

Display the Input select menu

AV

③

Select the input mode connected to the equipment

Input Selection
AV1
AV2/S
AV3/S
COMPONENT
PC
HDMI1
HDMI2
TV

② watch
① select

● 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.

④

View
Displays the selected mode

AV2

■ **To return to TV**
  ➡ TV

─────(**Note**)─────
● If the external equipment has an aspect adjustment function, set to "16:9".
● For details, see the manual of the equipment or ask your local dealer.

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

VCR ■■ DVD [0]	**VCR / DVD switch**∗ Select VCR to operate Panasonic VCR or DVD equipment Select DVD to operate Panasonic DVD equipment or Player home theatre
[⏻]	**Standby** Set to Standby mode / Turn on
[▶]	**Play** Playback videocassette / DVD
[■]	**Stop** Stop the operations
[◄◄]	**Rewind / Skip / Search** VCR: Rewind, view the picture rapidly in reverse DVD: Skip to the previous track or title Press and hold to search backward
[►►]	**Fast-forward / Skip / Search** VCR: Fast-forward, view the picture rapidly forward DVD: Skip to the next track or title Press and hold to search forward
[II/I►]	**Pause** Pause / Resume DVD: Press and hold to play at slow speed
PROGRAMME [∨] [∧]	**Programme Up / Down** Select programme
REC [●]	**Record** Start recording

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

① Set the VCR / DVD switch to the appropriate position ➡ VCR ■■ DVD [0]

② Press and hold [⏻] during the following operations

Enter the appropriate code for the equipment to be controlled, see table below [1][2][3] [4][5][6] [7][8][9] [0]VCR ➡ Press [■]

"VCR" position

Equipment	Code
VCR	10 (default)
DVD	11

"DVD" position

Equipment	Code
DVD	70 (default)
Player home theatre	71

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

● Watching Videos and DVDs

17

How to Use Menu Functions

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

1 Display the menu

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

2 Select the menu

VIEΓΛ Main Menu

VIERA Link
☐ Picture
♪ Sound
☰ Setup

(example: Picture Menu)

② access
① select

3 Select the item

☐ Picture Menu

Viewing Mode	◀ Dynamic ▶
Contrast	
Brightness	
Colour	
Sharpness	
Tint	
Colour Balance	Warm
P-NR	Off
3D-COMB	On
Reset to Default	

(example: Picture Menu)

select

4 Adjust or select

☐ Picture Menu

Viewing Mode	◀ Dynamic ▶
Contrast	◀ ▶
Brightness	◀ ▶
Colour	◀ ▶
Sharpness	◀ ▶
Tint	◀ ▶
Colour Balance	◀ Warm ▶
P-NR	◀ Off ▶
3D-COMB	◀ On ▶
Reset to Default	Set

(example: Picture Menu)

① change
② store or access (Required by some functions)

■ **To return to TV at any time**
➡ EXIT

■ **To return to the previous screen**
➡ RETURN

■ **To change menu pages**
➡ ∧ up
∨ down

■ **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 reset the settings**

● To reset the picture settings only
➡ "Reset to Default" in Picture Menu (p. 20)

● To reset the sound settings only
➡ "Reset to Default" in Sound Menu (p. 20)

● To initialize all settings
➡ "Shipping Condition" in Setup Menu (p. 27)

Panasonic
TV

■ **Overview**

VIERA Main Menu

VIERA Link

□ Picture

♪ Sound

≣ Setup

VIERA Link Menu

Pause Live TV	Access
Direct TV Rec	Start
VIERA Link Control	Recorder
Speaker Selection	Home Cinema

(p. 33)

The menu of the accessed equipment

□ Picture Menu

Viewing Mode	Dynamic
Contrast	
Brightness	
Colour	
Sharpness	
Tint	
Colour Balance	Warm
P-NR	Off
3D-COMB	On
Reset to Default	Set

(p. 20)

♪ Sound Menu

Mode	Music
Bass	
Treble	
Balance	
Surround	Off
Volume Correction	
MPX	Stereo
HDMI1 Input	Auto
Reset to Default	Set

(p. 20)

≣ Setup Menu 1/2

AV Colour System	Auto
Service List Edit	Access
Link Settings	Access
Child Lock	Access
Tuning Menu	Access
Off Timer	Off
OSD Language	Access
Teletext	TOP
Teletext Character Set	West
Shipping Condition	Access

≣ Setup Menu 2/2

Picture Overscan	Off
Input Labels	Access
Banner Display Timeout	3 seconds
System Information	Access

(p. 21)

Link Settings

VIERA Link	On
Q-Link	AV2
AV2 out	TV
Power off Link	Set
Power on Link	Set
Download	Access

(p. 21)

Tuning Menu

| Auto Setup | Access |
| Manual Tuning | Access |

(p. 24)

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

Advanced

● Only available items can be selected.

How to Use Menu Functions

■Menu list

Menu	Item	Adjustments / Configurations (alternatives)
VIERA Link	Pause Live TV	Controls the connected equipment with VIERA Link function, and enables various convenient recording, playback, etc. (p. 33 - 35) ● You can also access VIERA Link Menu directly using the VIERA Link button on the remote control.
VIERA Link	Direct TV Rec	
VIERA Link	VIERA Link Control	
VIERA Link	Speaker Selection	
Picture	Viewing Mode	Basic picture mode **(Dynamic / Normal / Cinema / Eco)** Dynamic : Provides enhanced picture contrast and sharpness when viewing in a bright room Normal : Recommended for viewing under normal ambient room lighting conditions Cinema : For watching movies in a darkened room producing a cinema-like picture Eco : Adjusts picture settings automatically dependent on ambient lighting conditions ● Set for each input signal
Picture	Contrast, Brightness, Colour, Sharpness	Increases or decreases the levels of these options according to your personal preference
Picture	Tint	With an NTSC signal source connected to the TV, the picture hue can be adjusted to suit your taste ● For NTSC signal reception only
Picture	Colour Balance	Allows you to set the overall colour tone of the picture **(Cool / Normal / Warm)**
Picture	P-NR	Picture Noise Reduction Automatically reduces unwanted picture noise and flicker noise in the contoured parts of a picture **(Off / Min / Mid / Max)** ● Not valid on PC signal
Picture	3D-COMB	Occasionally, whilst viewing still or slow moving pictures, colour patterning may be seen Set to "On" to display sharper and more accurate colours **(Off / On)** ● For PAL or NTSC signal reception only ● Not valid on RGB, S-Video, Component, PC and HDMI
Picture	Reset to Default	Press the OK button to reset the present Picture Mode to the default settings
Sound	Mode	Basic sound mode **(Music / Speech)**
Sound	Bass	Increases or decreases level to enhance or minimise lower, deeper sound output
Sound	Treble	Increases or decreases level to enhance or minimise sharper, higher sound output
Sound	Balance	Adjusts volume level of right and left speakers
Sound	Surround	Surround sound settings **(Off / On)** Provides a dynamic enhancer to simulate improved spatial effects ● Switching is also possible by the Surround button on the remote control (p. 7).
Sound	Volume Correction	Adjusts volume of individual programme or input mode
Sound	MPX	Select stereo / monaural **(Mono / Stereo)** ● Normally: Stereo ● Stereo signal cannot be received: Mono ● M1 / M2: Available while mono signal is transmitted
Sound	HDMI1 Input	Select to fit the input signal **(Auto / Digital / Analogue)** (p. 39) Auto : Automatic detection of digital or analogue sound source Digital : HDMI cable connection Analogue : HDMI-DVI adapter cable connection ● HDMI input mode only ● HDMI2 terminal is for digital signal only ● No setting for HDMI2 available
Sound	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		**AV Colour System**	Selects optional colour system based on video signals in AV mode **(Auto / PAL / SECAM / M.NTSC / NTSC)**
		Service List Edit	Skips the unwanted programmes or edits programmes (p. 23)
	Link Settings	**VIERA Link**	Sets to use VIERA Link functions **(Off / On)** (p. 32)
		Q-Link	Selects which AV terminal is to be used for data communication between this TV and a compatible recorder **(AV1 / AV2)** (p. 31) ● Select the connected terminal to the recorder even it is not compatible with Q-Link.
		AV1 / AV2 out	Chooses the signal to be transmitted from the TV to Q-Link **(TV / AV1 / AV2 / AV3 / Monitor)** ● Monitor: Image displayed on screen ● Component, HDMI signals and PC signal cannot be outputted.
		Power off Link	Sets to use Power off Link function **(No / Set)** (p. 31 and p. 32)
		Power on Link	Sets to use Power on Link function **(No / Set)** (p. 31 and p. 32)
		Download	Downloads programme, language, country / region settings to a Q-Link or VIERA Link compatible equipment connected to the TV
		Child Lock	Locks a programme / AV input to prevent access to it (p. 26)
	Tuning Menu	**Auto Setup**	Automatically sets the programmes received in the area (p. 25)
		Manual Tuning	Sets the programmes manually (p. 25)
		Off Timer	Sets the time the TV automatically turns Off **(Off / 15 / 30 / 45 / 60 / 75 / 90 minutes)**
		OSD Language	Changes language for on-screen displays
		Teletext	Teletext display mode **(TOP (FLOF) / List)** (p. 14)
		Teletext Character Set	Selects teletext language **(West / East1 / East2)** ● West: English, French, German, Greek, Italian, Spanish, Swedish, Turkish, etc. ● East1: Czech, English, Estonian, Lettish, Rumanian, Russian, Ukrainian, etc. ● East2: Czech, Hungarian, Lettish, Polish, Rumanian, etc.
		Shipping Condition	Resets all settings, for example, when moving house (p. 27)
		Picture Overscan	Selects the screen area displaying the image **(Off / On)** On : Enlarged the image to hide the edge of the image. Off : Displayed the image in the original size. ● Set to "On" if noise is generated on the edge of the screen. ● This function is available when aspect is set to Auto (16:9 signal only) or 16:9. ● This function can be memorized separately for SD (Standard definition) and HD (High definition) signals.
		Input Labels	Labels or skips each input terminal (p. 28)
		Banner Display Timeout	Sets how long the information banner (p. 12) stays on screen ● 0 (No display) to 10 sec. in 1-sec. increments
		System Information	Displays the system information of this TV

●Only available items can be selected.

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

Advanced

Editing Programmes

You can skip unwanted programmes or edit programmes.

1 **Display the menu**

MENU

2 **Select "Setup"**

VIE⌐A **Main Menu**

VIERA Link

▢ **Picture**

♪ **Sound**

≔ **Setup**

② access

OK
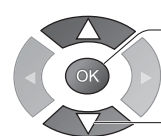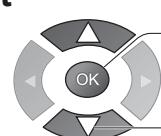
① select

3 **Select "Service List Edit"**

≔ Setup Menu	1/2
Service List Edit	Access
Link Settings	
Child Lock	
Tuning Menu	
Off Timer	Off
OSD Language	
Teletext	TOP
Teletext Character Set	West
Shipping Condition	

② access

OK

① select

■ **To return to TV**

➜ EXIT

4 **Set**

Panasonic

TV

22

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

Select a service and add / delete

```
Service List Editor
1  BBC1                    ☑
2  *****                   ☐
3  *****                   ☐
4                          ☑
5                          ☑
6                          ☑
7                          ☑
```

② add / delete
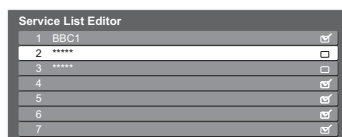
① select

☑ :add
☐ :delete (skip)

● To retune each programme (Manual Tuning)
➡ red (p. 25)

You can change the programme name and programme position.
● If a VCR is connected only with the RF cable, edit "VCR".

① **Select the programme to edit**

```
Service List Editor
1  BBC1                    ☑
2  *****                   ☐
3  *****                   ☐
4                          ☑
5                          ☑
6                          ☑
7                          ☑
```
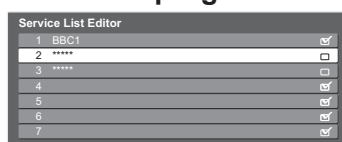
select

Programme position

Name

```
1 FTP
CH05   SC1   PAL
```

② **Edit**

■ **To change the name displayed when selecting programmes**

Select "Rename"
green

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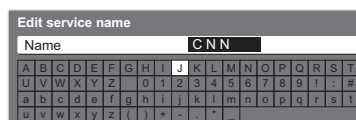
```
Edit service name
Name              C N N
A B C D E F G H I J K L M N O P Q R S T
U V W X Y Z   0 1 2 3 4 5 6 7 8 9 ! : #
a b c d e f g h i j k l m n o p q r s t
u v w x y z ( )   + - . * _
```
(maximum: five characters)

Store
RETURN

■ **To move the programme position**

yellow

Select new position
select

Store
yellow

● Editing Programmes

Advanced

23
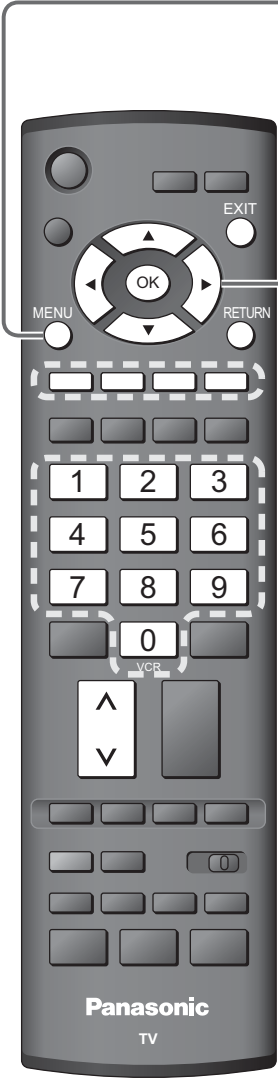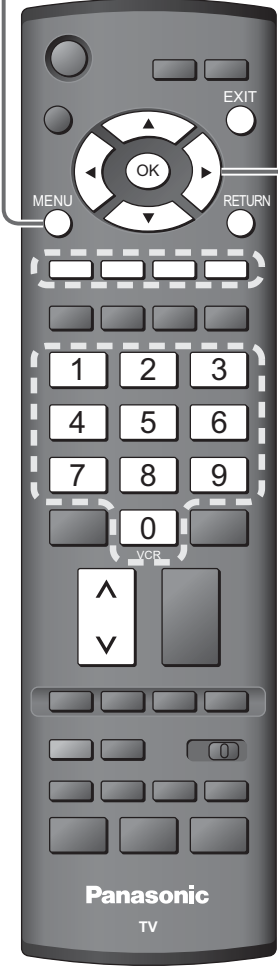
Tuning Programmes

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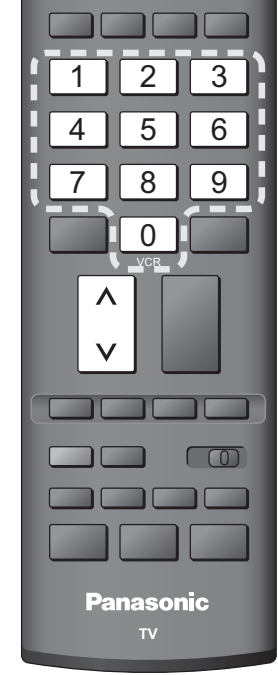
1 Display the menu

MENU
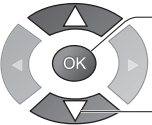
2 Select "Setup"

VIERA Main Menu
VIERA Link
☐ Picture
♪ Sound
☰ Setup

② access
OK
① select

3 Select "Tuning Menu"

☰ Setup Menu	1/2
Service List Edit	
Link Settings	
Child Lock	
Tuning Menu	Access
Off Timer	Off
OSD Language	
Teletext	TOP
Teletext Character Set	West
Shipping Condition	

② access
OK
① select

4 Select a function

Tuning Menu	
Auto Setup	Access
Manual Tuning	Access

② access
OK
① select

■ **To return to TV**

EXIT
➡

5 Set ——————————————

Panasonic
TV

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

Start Auto Setup

Auto Setup

All tuning data will be erased

OK

Start Auto Setup ● EXIT

● RETURN
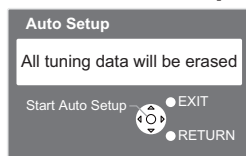
Settings are made automatically

Auto Setup
Scan   2 [   ]   78 | 1   41
This will take about 3 minutes.
Channel   Service Name
CH 29
CH 33

Analogue: 2
Searching
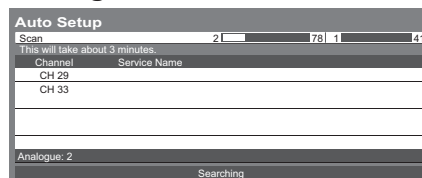
● All the previous tuning settings are erased.
● The programme, language, country / region settings are downloaded to a Q-Link or VIERA Link compatible equipment connected to the TV.
● When the operation is completed, the programme at programme position "1" will be displayed.
● If tuning has not been done completely ➡ "Manual Tuning"

Set all programmes automatically

Auto Setup

■ **For Auto Setup, using the buttons on the side of the TV** (p. 7)
① Press repeatedly until "Auto Setup" appears

| F |

② Access "Auto Setup"

| TV |

③ Start "Auto Setup"

| TV | ● To return to TV ➡ | F |

F
+/∧
−/∨
TV
AV
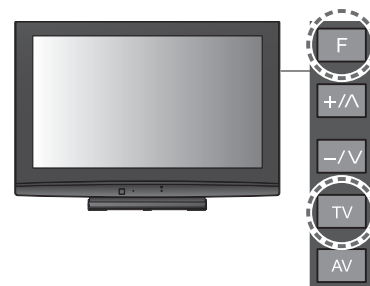
Set programme manually

Manual Tuning

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

■ **Manual Tuning**
Set programme manually after Auto Setup.
● Set Sound System and Colour System, and then perform this function.
Normally set Colour System "Auto".
● If a VCR is connected only with the RF cable, select programme position "0".

Manual Tuning
1   BBC1   CH33
Fine Tuning   ■
Manual Tuning 2 [   ]   78 | 1   41
Sound System   SC1
Colour System   Auto
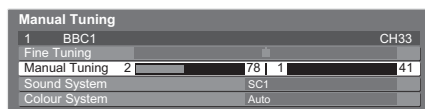
SC1: PAL B, G, H / SECAM B, G
SC2: PAL I
SC3: PAL D, K / SECAM D, K
F: SECAM L / L'

Select the programme position

1	2	3
4	5	6
7	8	9
	0	
VCR

Select the programme

∧
∨

Search and store

OK
① search
② store
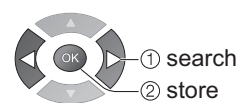
Control Programme Audience

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

1 Display the menu

MENU

2 Select "Setup"

Main Menu
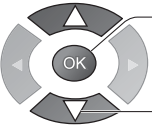- VIERA Link
- Picture
- Sound
- **Setup**

② access
① select

3 Select "Child Lock"

Setup Menu	1/2
Service List Edit	
Link Settings	
Child Lock	Access
Tuning Menu	
Off Timer	Off
OSD Language	
Teletext	TOP
Teletext Character Set	West
Shipping Condition	

② access
① select

■ **To return to TV**
→ EXIT

4 Set

Control programme audience

Child Lock

① **Enter the PIN number (4 digits)**

Child Lock-PIN Entry
Please enter new PIN
PIN ✱ ✱ ✱ ✱

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

② **Select "Child Lock List"**

Child Lock
- Change PIN
- Child Lock List Access

② access
① select

③ **Select the programme / input to be locked**

Child Lock List - Services and AV

Name	Lock
VCR	
1 BBC1	🔒
2 ✱✱✱✱✱	
3 ✱✱✱✱✱	
4	
AV1	
AV2/S	🔒

② set
① select

Appears when the programme / input is locked

- ●To cancel
  → Select the locked programme / input
  → OK
- ●To lock all → yellow
- ●To cancel all 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.

26

Restore Settings

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

1 Display the menu

MENU

2 Select "Setup"

VIErA **Main Menu**
VIERA Link
☐ **Picture**
♪ **Sound**
☰ **Setup**

② access
① select

3 Select "Shipping Condition"

☰ Setup Menu	1/2
Service List Edit	
Link Settings	
Child Lock	
Tuning Menu	
Off Timer	Off
OSD Language	
Teletext	TOP
Teletext Character Set	West
Shipping Condition	Access

② access
① select

■ **To return to TV**
➡ EXIT

4 Set

Restore Settings

Shipping Condition

① **Check the message and initialise**

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

OK

② **Follow the on-screen instructions**
● "Auto Setup" will automatically start when Mains power On / Off switch is next turned On. (p. 10)

■ **To retune TV programmes only, e.g. after moving house**
➡ "Auto Setup" (p. 25)

Advanced

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

MENU

② Select "Setup"

VIE∩ Main Menu
VIERA Link
☐ Picture
♪ Sound
☰ Setup
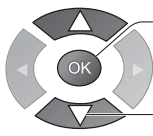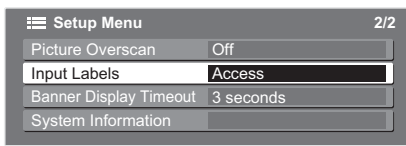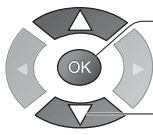
②access
①select

③ Select "Input Labels"

☰ Setup Menu	2/2
Picture Overscan	Off
Input Labels	Access
Banner Display Timeout	3 seconds
System Information	
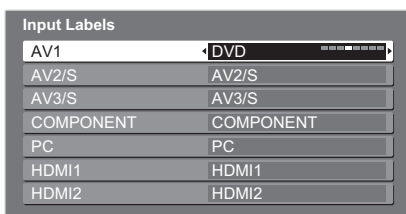
②access
①select

④ Select a input terminal and set

Input Labels	
AV1	◄ DVD ▶ ▬▬▬▬▬
AV2/S	AV2/S
AV3/S	AV3/S
COMPONENT	COMPONENT
PC	PC
HDMI1	HDMI1
HDMI2	HDMI2

②set
①select

■ **To return to TV**
➡ EXIT

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

Panasonic
TV

Displaying PC Screen on TV

The screen of the PC connected to the TV can be displayed on the TV.
You can also listen to PC sound with the audio cable connected.
● To connect PC ➡ p. 36

① Select the external input

`AV`

② Select "PC"

Input Selection

AV1
AV2/S
AV3/S
COMPONENT
PC
HDMI1
HDMI2
TV

② access
① select

● Corresponding signals ➡ p. 41
● If "H-freq." or "V-freq." is shown in red, the signals may not be supported.
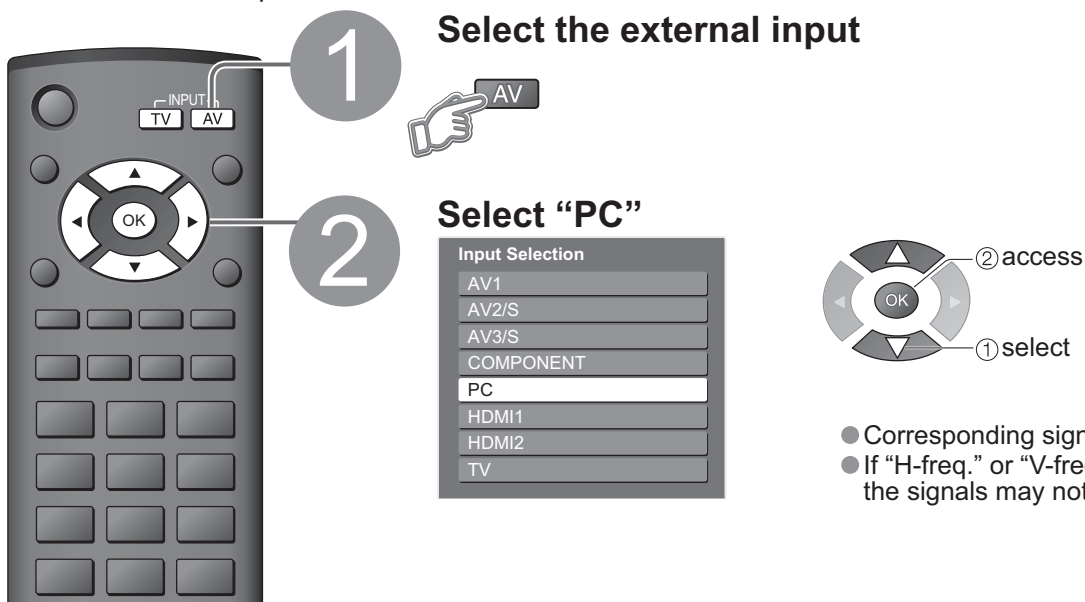
■ **To return to TV**
➡ `TV`

■ **PC menu setting** (changed as desired)
● To make settings ➡ "How to Use Menu Functions" ① to ④ (p. 18)

Menu	Item		Adjustments / Configurations (options)
Picture	**Advanced PC Settings**	R-Gain	Adjusts the white balance for red areas
		G-Gain	Adjusts the white balance for green areas
		B-Gain	Adjusts the white balance for blue areas
		Gamma	**(2.0 / 2.2 / 2.5)**
		Reset to Default	Press the OK button to reset to the default Picture settings
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)
		Reset to Default	Press the OK button to reset to the default Setup settings

● Other items ➡ p. 20 and p. 21

Link Functions (Q-Link / VIERA Link)

Q-Link connects the TV and DVD Recorder / VCR, and enables easy recording, playback, etc. (p. 31)
VIERA Link (HDAVI Control™) connects the TV and the equipment with VIERA Link function, and enables easy control, convenient recording, playback, etc. (p. 32 - 34)
You can use Q-Link and VIERA Link functions together.

■ Summary of Q-Link and VIERA Link functions

Features / Connection	Q-Link (SCART connection)	VIERA Link (HDMI connection only)	VIERA Link (SCART and HDMI connection)
Preset download	○	○**	○
Easy playback	○	○	○
Power on link	○	○	○
Power off link	○	○	○
Speaker control	–	○	○
Control the menu of the connected equipment by VIERA remote control	–	○*	○*
Direct TV Recording	○	–	○**
Pause Live TV programme	–	–	○**

∗ :Available with the equipment which has "HDAVI Control 2" or "HDAVI Control 3" function.
∗∗ :Available with the equipment which has "HDAVI Control 3" function.

Connections

Read the manual of the equipment, too.

■ Q-Link

SCART cable — DVD Recorder / VCR with Q-Link function
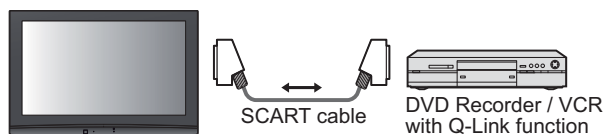
● Connect the DVD Recorder / VCR supporting Q-Link to the TV's AV1 or AV2 terminal via a fully wired SCART cable.

■ VIERA Link

HDMI cable
SCART cable — DIGA Recorder / HD Video Camera with VIERA Link function
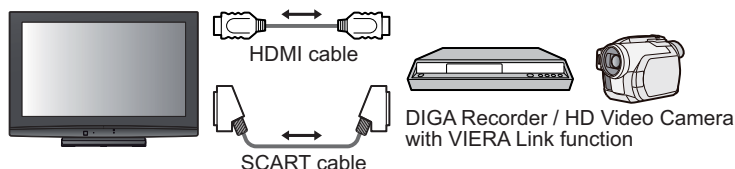
● Connect the equipment supporting VIERA Link to the TV's AV1, AV2, HDMI1 or HDMI2 terminals via fully wired SCART and HDMI cables together.
● Some functions are available only with HDMI cable connection. But use both HDMI and SCART cables to support many features normally.

● SCART cable
Use fully wired SCART cable.

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

For Speaker control (Home Cinema)

● To use Amplifier

Speaker system
HDMI cable
RCA cable
Amplifier with VIERA Link function
HDMI cable
HDMI cable
SCART cable
HD Video Camera with VIERA Link function
DIGA Recorder with VIERA Link function

● To use Player theatre

Speaker system
HDMI cable
RCA cable
Player theatre with VIERA Link function
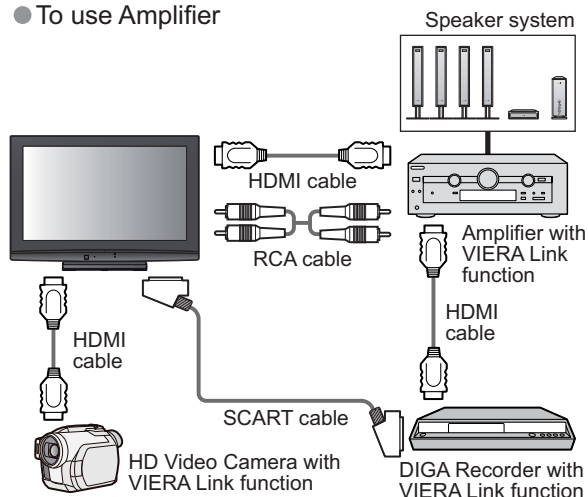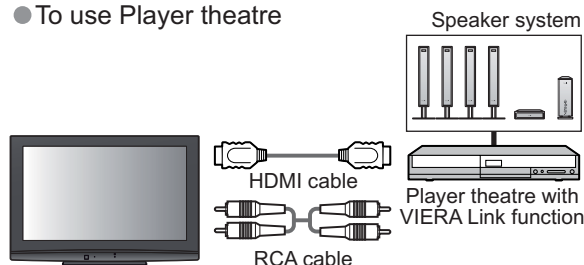
Q-Link

■ **Preparations**
● Connect the DVD Recorder / VCR with the following logos:
  "Q-Link", "NEXTVIEWLINK", "DATA LOGIC", "Easy Link", "Megalogic" or "SMARTLINK"
● Q-Link connection ➡ p. 30
● Set up the DVD Recorder / VCR. Read the manual of the equipment.
● Q-Link terminal setup in Setup Menu ➡ "Q-Link" (p. 21), "AV1 / AV2 out" (p. 21)
● Download preset - programme, language, country / region setting (Preset download)
  ➡ "Download" (p. 21) or "Auto Setup" (p. 25) or "Auto Setup" - when first using the TV (p. 10)

■ **Features available**
Some recorders are not applicable. Read the manual of the recorder.

Direct TV Recording -
What you see is What you record

Recording the current programme in DVD Recorder / VCR immediately.

DIRECT TV REC

DIRECT TV REC
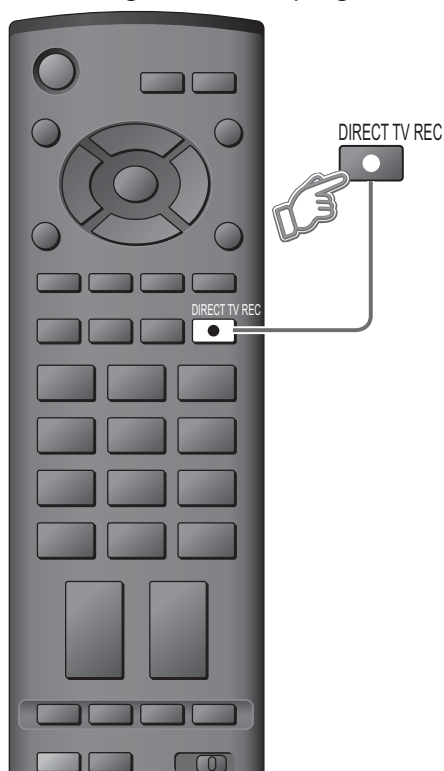
● Available conditions:

Current mode	Using tuner	How to record
TV	TV	TV monitor out
	Recorder	Recorder's tuner
AV (watching recorder's tuner)	Recorder	Recorder's tuner
AV (watching recorder's external input)	–	Recorder's external input
AV (watching TV's external input)	–	TV monitor out

● When Direct TV Recording is performed, the recorder is automatically turned on if it is in Standby mode.
● Changing programme or turning off the TV is available while the recorder is recording from its own tuner.
● Changing programme is not available while the recorder is recording from the TV tuner.
● Turning off the TV will stop the recording if the recording from an AV source connected to the TV.

Information / Message

Recording information or if recording is not possible, a message is displayed.

Power on link and Easy playback

Set Power on Link "Set" in Setup Menu to use this function
➡ "Power on Link" (p. 21)
When DVD Recorder / VCR 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.)

Power off link

Set Power off Link "Set" in Setup Menu to use this function
➡ "Power off Link" (p. 21)
When TV is set to Standby mode, the recorder is also automatically set to Standby. (Only when the videocassette or DVD is not active.)

• "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)

● Link Functions (Q-Link / VIERA Link)

Advanced

31

Link Functions (Q-Link / VIERA Link)

VIERA Link "HDAVI Control™" *

∗Enjoy additional HDMI Inter-Operability with Panasonic products which have "HDAVI Control" function. This TV supports "HDAVI Control 3" function.

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

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

● Some functions are not available depending on the equipment's version of HDAVI Control. Please confirm the connected equipment's version of HDAVI Control.

● VIERA Link "HDAVI Control", based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers' equipment that supports HDMI CEC cannot be guaranteed.

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

■ Preparations

● Connect the equipment supporting VIERA Link.
● VIERA Link connection ➡ p. 30
● Set up the connected equipment. Read the manual of the equipment.
● For optimal recording, the settings of the recorder might be required. For details, read the manual of the recorder.
● Download preset - programme, language, country / region setting (Preset download)
➡ "Download" (p. 21) or "Auto Setup" (p. 25) or "Auto Setup" - when first using the TV (p. 10)
● Set VIERA Link On in Setup Menu ➡ "VIERA Link" (p. 21)
● Set up the TV
➡ **After connection, turn the equipment on and then switch the TV on.**
Select the input mode to HDMI1 or HDMI2 (p. 16), and make sure that an image is displayed correctly.
This setup should be done each time when the following conditions occur:
• for the first time
• when adding or reconnecting equipment
• when changing setup

■ Features available

Easy playback	Automatic Input switching - When the connected equipment is operated, input mode is switched automatically. When it is stopped operating, input mode is returned.
Power on link	**Set Power on Link "Set" in Setup Menu to use this function** ➡ "Power on Link" (p. 21) When the connected equipment starts playback or direct navigator / function menu for the equipment are activated, the TV is automatically turned on. (Only when TV is in Standby mode.)
Power off link	**Set Power off Link "Set" in Setup Menu to use this function** ➡ "Power off Link" (p. 21) When TV is set to Standby mode, the connected 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.

■ **Features available** (Using VIERA Link Menu)

You can pause the live TV programme and resume later.
- ●This function is available with DIGA Recorder which has HDD and "HDAVI Control 3" function.
- ●Connect DIGA Recorder with both HDMI and SCART cables to use this function.
- ●If you cannot operate, check the settings and the equipment ➡ "Preparations" (p. 32)

Access and pause the live TV programme

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

| **Pause Live TV** |

① **Display "VIERA Link Menu"**

② **Select "Pause Live TV" and pause**

VIERA Link Menu
Pause Live TV	Access
Direct TV Rec	Start
VIERA Link Control	Recorder
Speaker Selection	Home Cinema
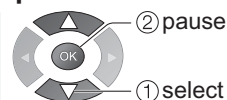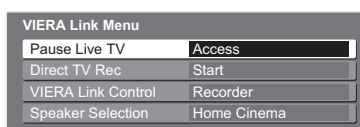
②pause
①select

- ●Live TV programme is recorded on HDD from where it was paused.
- ●If the paused TV picture disappears after a few minutes
  ➡ OPTION (the paused picture will be restored)

■ **To resume** (stop pause)
Select "Pause Live TV" and access
- ●About the operations after resuming, read the manual of the equipment.

②resume
①select

■ **To return to Live TV**
(cancel pause or resumed playback)
➡ TV (change the input mode)
- ●If you cancel pause or resumed playback, the recorded programme will be deleted from HDD.

Recording the current programme in DIGA Recorder immediately.
- ●This function is available with DIGA Recorder which has "HDAVI Control 3" function.
- ●Connect DIGA Recorder with both HDMI and SCART cables to use this function.
- ●If you cannot operate, check the settings and the equipment ➡ "Preparations" (p. 32)
- ●Changing programme or turning off the TV is available while the recorder is recording from its own tuner.
- ●Changing programme is not available while the recorder is recording from the TV tuner.
- ●Turning off the TV will stop the recording if the recording from an AV source connected to the TV.

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

| **Direct TV Rec** |

① **Display "VIERA Link Menu"**

② **Select "Direct TV Rec" and start recording**

VIERA Link Menu
Pause Live TV	
Direct TV Rec	Start
VIERA Link Control	Recorder
Speaker Selection	Home Cinema
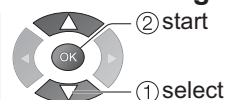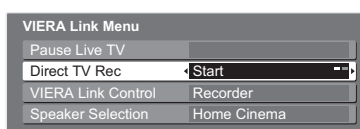
②start
①select

- ●You can also start recording directly ➡ DIRECT TV REC

■ **To stop recording**
Select "Stop" in "Direct TV Rec" and access

VIERA Link Menu
Pause Live TV	
Direct TV Rec	Stop
VIERA Link Control	Recorder
Speaker Selection	Home Cinema

①select
②stop

●Link Functions
(Q-Link / VIERA Link)

Advanced
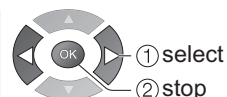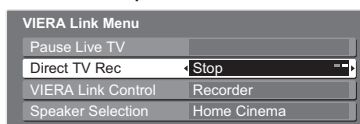
Link Functions (Q-Link / VIERA Link)

■ **Features available** (Using VIERA Link Menu)

Control the menu of the connected equipment by VIERA remote control
(HDAVI Control 2)
(HDAVI Control 3)

VIERA Link Control

You can control some functions of the connected equipment with this TV remote control (point the remote control at the TV's signal receiver).
● This function is available with the equipment which has "HDAVI Control 2" or "HDAVI Control 3" function.
● If you cannot operate, check the settings and the equipment ➡ "Preparations" (p. 32)

Access and operate the menu of the equipment

① **Display "VIERA Link Menu"**

② **Select "VIERA Link Control"**

VIERA Link Menu	
Pause Live TV	
Direct TV Rec	Start
VIERA Link Control	◄ Recorder ▬▬▬
Speaker Selection	Home Cinema

select

③ **Select the equipment you want to access**
● "Home Cinema" means Player theatre, Recorder theatre and Amplifier.
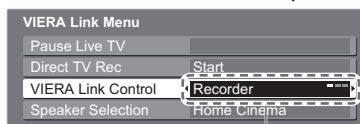
VIERA Link Menu	
Pause Live TV	
Direct TV Rec	Start
VIERA Link Control	Recorder ▬▬▬
Speaker Selection	Home Cinema

Recorder / Player / Home Cinema / Video Camera

The type of the connected equipment is displayed.
Select the type of the equipment and access.

① select
② access

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

■ **If you access the invalid equipment**

When the equipment with "HDAVI Control" function is connected

VIERA Link Menu	
Pause Live TV	
Direct TV Rec	Start
VIERA Link Control	Recorder ▬▬▬
Speaker Selection	Home Cinema

Recorder / Player / Home Cinema / Video Camera

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

When the equipment of other types or manufacturers is connected

VIERA Link Menu	
Pause Live TV	
Direct TV Rec	Start
VIERA Link Control	Others ▬
Speaker Selection	Home Cinema
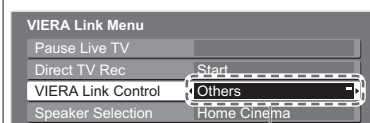
Others

"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
	Move the cursor / access / adjust
OK	Store / set / access
RETURN	Return to the previous menu
EXIT	Exit the menu
OPTION	Display the operation guide for the equipment / The same functions with the OPTION button of the equipment
red green yellow blue	Access when the key words are displayed on colour bar

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

■ **Features available** (Using VIERA Link Menu)

You can control the theatre speaker with this TV remote control (point the remote control at the TV's signal receiver).
● This function is available with the Amplifier or Player theatre which has "HDAVI Control" function.
● If you cannot operate, check the settings and the equipment ➡ "Preparations" (p. 32)

Access and control the speaker volume
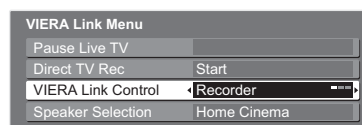
① **Display "VIERA Link Menu"**

VIErA
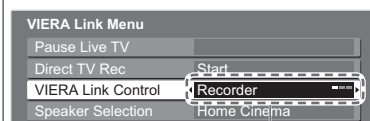Link

② **Select "Speaker Selection"**

VIERA Link Menu	
Pause Live TV	
Direct TV Rec	Start
VIERA Link Control	Recorder
Speaker Selection	◄ Home Cinema ▬▬

select

Speaker control

Speaker Selection

③ **Set to "Home Cinema" or "TV"**

set

■ **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.

Panasonic
TV

Note

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

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. 45).

Camcorder / Game equipment

AV 3

S-V — (S-VIDEO) or (VIDEO)

V

L

R — (AUDIO)

Fully wired HDMI compliant cable

(M3 stereo mini plug)

Headphones

To watch DVDs

(Listening)

(Viewing)

DVD player
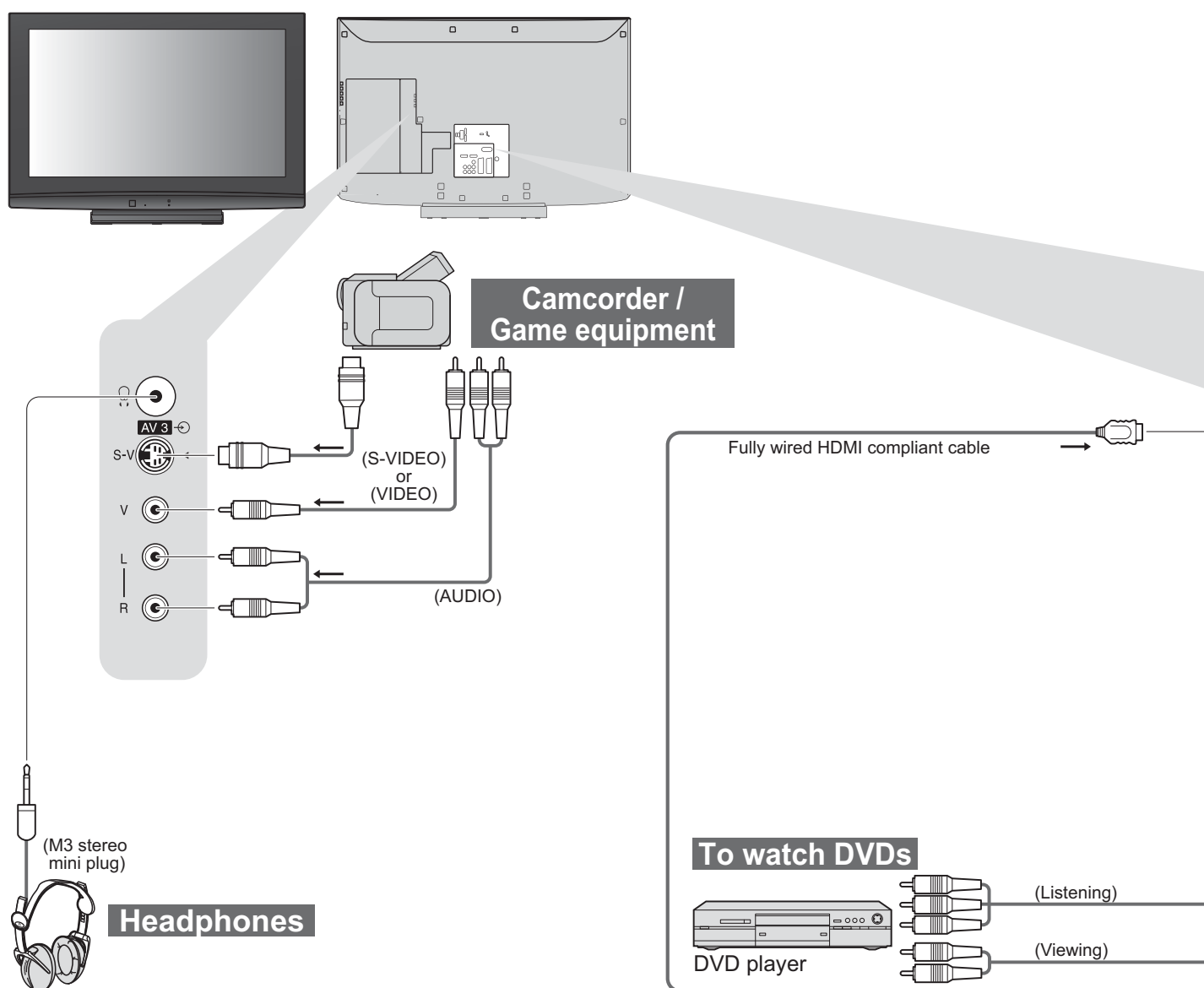
■Types of connectable equipment to each terminal

Terminal Recording / Playback (equipment)	AV1	AV2	AV3 (Side of TV)
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	○	○	
VIERA Link	○ (with HDMI)	○ (with HDMI)	
Direct TV Recording	○	○	

HDMI equipment

DVD Recorder

Fully wired HDMI compliant cable

PC

Computer

Conversion adapter (if necessary)

(Listening)   (Viewing)

RCA cable

To listen with speakers

Amplifier with speaker system

RF cable

or

HDMI 1

HDMI 2

PC

AV1
RGB
VIDEO

AV2
RGB
VIDEO
S-VIDEO

COMPONENT
Y
PB
PR

AUDIO OUT
L
R

AUDIO IN
L
R

To record / playback

DVD Recorder / VCR

SCART cable

To watch satellite broadcasts

SCART cable

Set top box

● External Equipment

Advanced

COMPONENT Y PB PR L R	AUDIO OUT L R	HDMI	
		1	2
○		○	○
		○	○
		○	○
	○		
		○	○
		○	○

○: Recommended Connection

Technical Information

Auto Aspect

The optimum size and aspect can be chosen, and you can enjoy finer images. (p. 13)

■ 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 or HDMI 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 Control Signal								
	Widescreen signal (WSS)					Control signal through SCART (pin 8) or HDMI terminal			
	TV	AV1	AV2	AV3	COMPONENT	AV1	AV2	HDMI1	HDMI2
PAL	O	O	O	O		O	O		
PAL 525/60	–	–	–	–		O	O		
M.NTSC	–	–	–	–		O	O		
NTSC (AV input only)	–	–	–	–		O	O		
SD 525(480)/60i					–			O	O
SD 525(480)/60p					–			O	O
SD 625(576)/50i					O			O	O
SD 625(576)/50p					O			O	O
HD 750(720)/50p					–			O	O
HD 750(720)/60p					–			O	O
HD 1125(1080)/50i					–			O	O
HD 1125(1080)/60i					–			O	O
HD 1125(1080)/50p					–			O	O
HD 1125(1080)/60p					–			O	O
HD 1125(1080)/24p					–			O	O

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.)

HDMI connection

HDMI (high-definition multimedia interface) allows you to enjoy high-definition digital images and high-quality sound by connecting the TV and the equipment.
HDMI-compatible equipment (∗1) with an HDMI or DVI output terminal, such as a set top box or a DVD player, can be connected to the HDMI terminal using an HDMI compliant (fully wired) cable.
About connections, see "External Equipment" (p. 36).

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. 20)
● 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. 41.

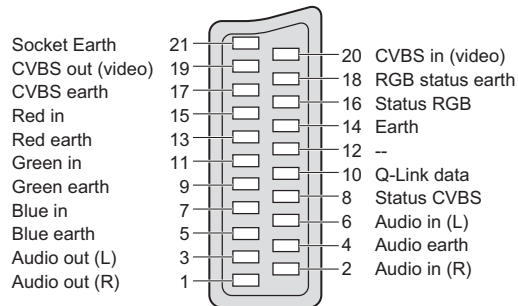(∗1): The HDMI logo is displayed on HDMI-compliant equipment.
(∗2): Enquire at your local digital equipment retailer shop.

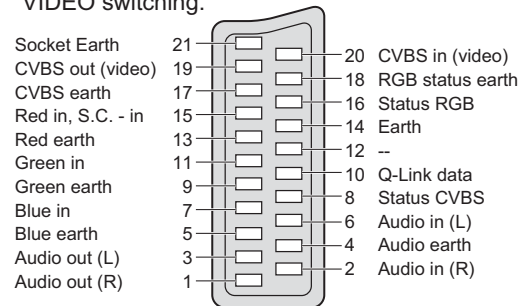● Technical Information

FAQs, etc.

Technical Information

■ **AV1** SCART terminal
(RGB, VIDEO, Q-Link)
Suitable inputs for AV1 include RGB (Red / Green / Blue).

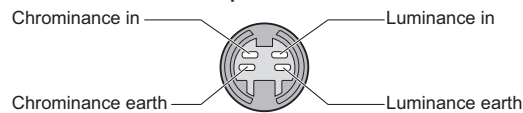|				
Socket Earth	21		20	CVBS in (video)
CVBS out (video)	19		18	RGB status earth
CVBS earth	17		16	Status RGB
Red in	15		14	Earth
Red earth	13		12	--
Green in	11		10	Q-Link data
Green earth	9		8	Status CVBS
Blue in	7		6	Audio in (L)
Blue earth	5		4	Audio earth
Audio out (L)	3		2	Audio in (R)
Audio out (R)	1			

■ **AV2** SCART terminal
(RGB, VIDEO, S-VIDEO, Q-Link)
AV2 - Pins 15 and 20 are dependent on AV2 S-VHS / VIDEO switching.

Socket Earth	21		20	CVBS in (video)
CVBS out (video)	19		18	RGB status earth
CVBS earth	17		16	Status RGB
Red in, S.C. - in	15		14	Earth
Red earth	13		12	--
Green in	11		10	Q-Link data
Green earth	9		8	Status CVBS
Blue in	7		6	Audio in (L)
Blue earth	5		4	Audio earth
Audio out (L)	3		2	Audio in (R)
Audio out (R)	1			

■ **AV3** S-VIDEO 4 pin terminal

Chrominance in — Luminance in

Chrominance earth — Luminance earth

■ **HDMI** terminal

Hot Plug Detect	19		18	+5V Power
DDC/CEC Ground	17		16	SDA
SCL	15		14	Reserved (in cable but N.C. on device)
CEC	13		12	TMDS Clock−
TMDS Clock Shield	11		10	TMDS Clock+
TMDS Data0−	9		8	TMDS Data0 Shield
TMDS Data0+	7		6	TMDS Data1−
TMDS Data1 Shield	5		4	TMDS Data1+
TMDS Data2−	3		2	TMDS Data2 Shield
TMDS Data2+	1			
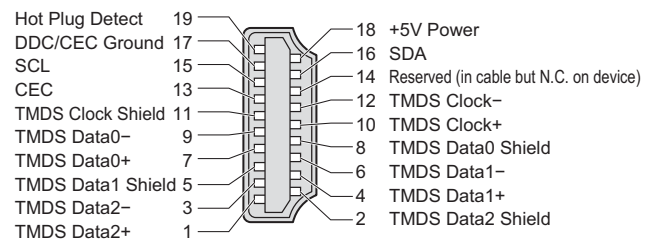
PC connection

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 60, 70, 75, 85 Hz (more than 1 024 signal lines could result in incorrect display of the image).
● A PC adapter is not necessary for the DOS/V-compliant D-sub 15-pin connector.

Note

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

Aspect	4:3	1 440 × 1 080 pixels
	16:9	1 920 × 1 080 pixels

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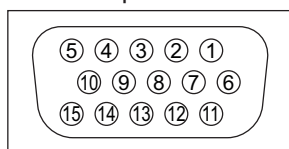
Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
①	R	⑥	GND (Ground)	⑪	NC (not connected)
②	G	⑦	GND (Ground)	⑫	NC (not connected)
③	B	⑧	GND (Ground)	⑬	HD
④	NC (not connected)	⑨	NC (not connected)	⑭	VD
⑤	GND (Ground)	⑩	GND (Ground)	⑮	NC (not connected)

Input signal that can be displayed

COMPONENT (Y, P_B, P_R), HDMI

∗ Mark: Applicable input signal

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

PC (D-sub 15P)

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

Note

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

● Technical Information

FAQs, etc.

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FAQs

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

White spots or shadow images (noise)
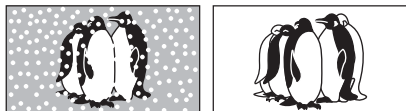
- Check the position, direction, and connection of the aerial.

Neither image nor sound is produced

- Is the TV in "AV mode"?
- Is the mains lead plugged into the socket outlet?
- Is the TV turned On?
- Check Picture Menu (p. 20) 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. 38.

S-Video / black and white picture

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

On Screen messages - I.e. EC/AV1

- You can simply clear these ➡ 🛈 Press again to redisplay.

An error message appears

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

Q-Link function does not work

- Please confirm SCART cable, connection and Q-Link settings. Also please set "AV1 / AV2 out" in the Setup Menu (p. 21).

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

- Confirm the connection.
- Turn the connected equipment on and then switch the TV on. (p. 32)
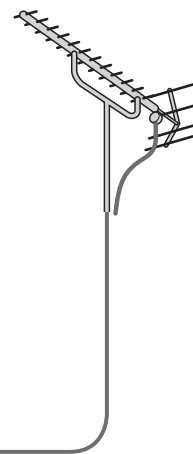
Recording does not start immediately

- Check the settings of the recorder. For details, read the manual of the recorder.

There may be red spots, blue spots, green spots and black spots on the screen

- This is a characteristic of liquid crystal panels and is not a problem. The liquid crystal panel is built with very high precision technology giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of red, green, blue or black. Please note this does not affect the performance of your LCD.

The LCD panel moves slightly when it is pushed with a finger

Clattered sound might be heard

- There are some looseness around the panel to prevent the damage to the panel.
  The panel might move slightly when it is pushed with a finger, and clattered sound might be heard. This is not a malfunction.

Problem	Actions
Screen	
Chaotic image, noisy	● Set "P-NR" in the Picture Menu (to remove noise). (p. 20) ● Check nearby electrical products (car, motorcycle, fluorescent lamp).
No image can be displayed	● Is "Colour" or "Contrast" in the Picture Menu set to the minimum? (p. 20) ● Check Colour System. (p. 25)
Blurry or distorted image (no sound or low volume)	● Reset programme. (p. 23)
Unusual image is displayed	● Turn off the TV with Mains power On / Off switch, then turn it On again.
Sound	
No sound is produced	● Is "Sound mute" active? (p. 7) ● Is the volume set to the minimum?
Sound level is low or sound is distorted	● Sound signal reception may be deteriorated. ● Set "MPX" (p. 20) in the Sound Menu to "Mono".
HDMI	
Sound is unusual	● Set the sound setting of the connected equipment to "2ch L.PCM". ● Check the "HDMI1 Input" setting in the Sound Menu. (p. 20) ● If digital sound connection has a problem, select analogue sound connection. (p. 39)
Pictures from external equipment are unusual when the equipment is connected via HDMI	● Is the HDMI cable connected properly? (p. 36) ● Turn Off the TV and equipment, then turn them On again. ● Check an input signal from the equipment. (p. 41) ● Use an equipment compliant with EIA/CEA-861/861B.
Other	
TV goes into "Standby mode"	● Off Timer function is activated. ● The TV enters "Standby mode" about 30 mins. after analogue broadcasting ends.
The remote control does not work	● Are the batteries installed correctly? (p. 6) ● Has the TV been switched On?

● Frequently Asked Questions

FAQs, etc.

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Licence

- VGA is a trademark of International Business Machines Corporation.
- S-VGA is a registered trademark of the Video Electronics Standard Association.
  Even if no special notation has been made of company or product trademarks, these trademarks have been fully respected.
- 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

		TX-37LZ8P
Power Consumption	**Power Source**	AC 220-240 V, 50 Hz
	Average use	162 W
	Standby condition	0,8 W
Display panel	**Aspect Ratio**	16:9
	Visible screen size	94 cm (diagonal) 819 mm (W) × 460 mm (H)
	Number of pixels	2 073 600 (1 920 (W) × 1 080 (H))
Sound	**Speaker**	189 mm × 42 mm × 2 pcs, 8 Ω
	Audio Output	20 W (10 W + 10 W), 10% THD
	Headphones	M3 (3.5 mm) stereo mini Jack × 1
PC signals		VGA, WVGA, SVGA, XGA, WXGA Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 60, 70, 75, 85 Hz

Receiving Systems / Band name		**PAL B, G, H, I, SECAM B, G, SECAM L / L'**
		  VHF E2 - E12 VHF H1 - H2 (ITALY)
		  VHF A - H (ITALY) UHF E21 - E69
		  CATV (S01 - S05) CATV S1 - S10 (M1 - M10)
		  CATV S11 - S20 (U1 - U10) CATV S21 - S41 (Hyperband)
		PAL D, K, SECAM D, K
		  VHF R1 - R2 VHF R3 - R5
		  VHF R6 - R12 UHF E21 - E69
		PAL 525/60 Playback of NTSC tape from some PAL Video recorders (VCR)
		M.NTSC Playback from M. NTSC Video recorders (VCR)
		NTSC (AV input only) Playback from NTSC Video recorders (VCR)

Aerial - Rear		VHF / UHF
Operating Conditions		**Temperature** : 0 °C - 35 °C **Humidity** : 20 % - 80 % RH (non-condensing)
Connection Terminals	**AV1 (Scart terminal)**	21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, Q-Link)
	AV2 (Scart terminal)	21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, S-Video in, Q-Link)
	AV3 — **VIDEO**	RCA PIN Type × 1 1.0 V[p-p] (75 Ω)
	AV3 — **S-VIDEO**	Mini DIN 4-pin Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)
	AV3 — **AUDIO L - R**	RCA PIN Type × 2 0.5 V[rms]
	COMPONENT — **VIDEO**	Y 1.0 V[p-p] (including synchronization) P_B, P_R ±0.35 V[p-p]
	COMPONENT — **AUDIO L - R**	RCA PIN Type × 2 0.5 V[rms]
	Others — **HDMI1 / 2**	TYPE A Connectors ● This TV supports "HDAVI Control 3" function.
	Others — **PC**	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)
	Output — **AUDIO L - R**	RCA PIN Type × 2 0.5 V[rms] (high impedance)
Dimensions (W × H × D)		940 mm × 645 mm × 290 mm (With Pedestal) 940 mm × 605 mm × 110 mm (TV only)
Mass		21,0 kg Net (With Pedestal) 17,5 kg Net (TV only)

Note

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

● Specifications
● Licence

FAQs, etc.

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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 _____