Panasonic®

Operating Instructions
LCD Television

Model No. **TX-26LX70L**
TX-32LX70L

VIErΛ

VIErΛ 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.
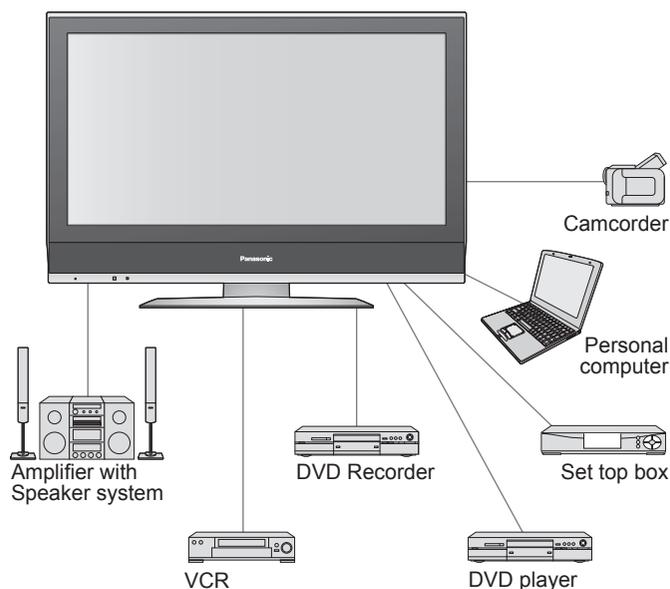
TQB0E0437-1

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.

Quick Start Guide

Viewing

Advanced

FAQs, etc.

3

Safety Precautions

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.

Power source
● This TV is designed to operate on 220-240V, 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
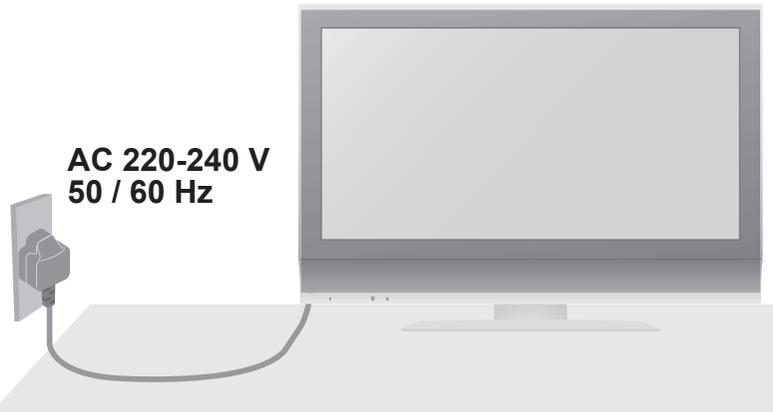
IMPORTANT: THE MOULDED MAINS PLUG

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 safety. 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.

<u>**IMPORTANT:**</u> – The wires in this mains lead are coloured in accordance with the following code: –
        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.

Example 1

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.
Under no circumstances should either of these wires be connected to the Earth terminal of the three pin mains plug, marked with the letter E or the earth symbol ⏚ .
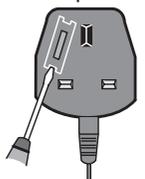<u>How to replace the fuse.</u>
For plug type shown in example 1:
Lift out the removable fuse compartment with a screwdriver and replace the fuse, then refit securely into the mains plug (see example 1).
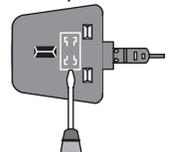**For plug type shown in example 2:**
Lift open the fuse compartment, in the mains plug, with a screwdriver, and replace the fuse, then press the fuse cover down securely (see example 2).

Example 2

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

TV Stand

(cm)
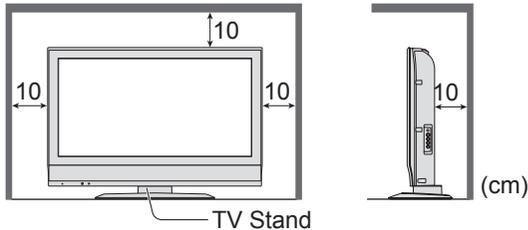
Do not place the TV on sloped or unstable surfaces

- 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).


■ 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).

■ Transport only in upright position

■ Adjust the LCD panel to your desired angle

(View from the top)

15°   15°
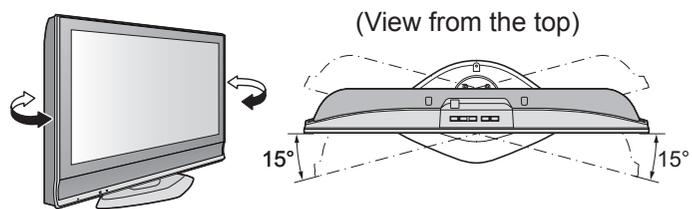
Maintenance

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.)
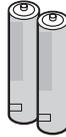
5

Accessories / Options

Standard accessories

Check that you have the accessories and items shown ☑

☐Remote Control Transmitter
- EUR7651120

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

☐Clamper

☐Bottom Sheet
Use when removing the TV Stand (see below)
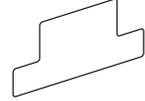
☐Operating Instructions   ☐Pan European Guarantee Card

Installing remote's batteries

1

Pull open

Hook

2

Close

Note the correct polarity (+ or -)
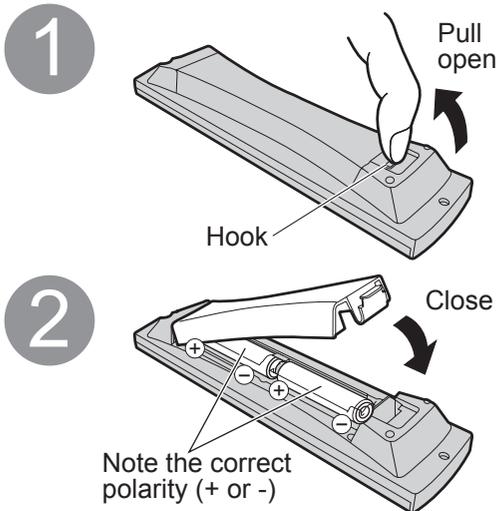
Caution

- 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.

Using the clamper
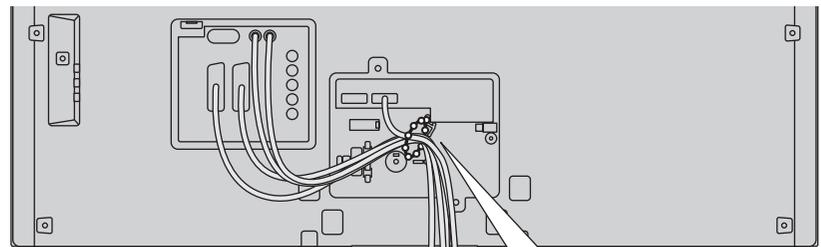
Rear of the TV

Clamper (Standard accessory)

Clamper that bundle mains lead

To tighten:

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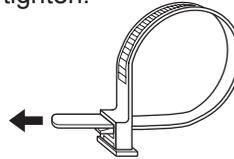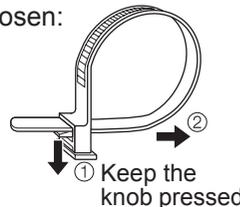
Bundle the cables:
② Lock
① Tight
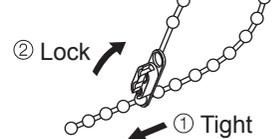
Hook the clamper:
① ②
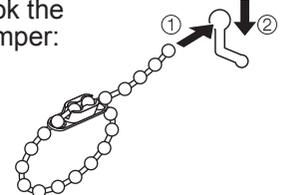
- Do not bundle the RF cable and mains lead together (could cause distorted image).
- Fix cables with clampers as necessary.
- When using the optional accessory, follow the option's assembly manual to fix cables.

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.
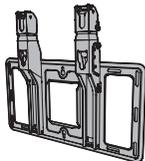
WARNING!

- 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.

■How to remove the TV Stand

① Remove four screws and take the TV Stand.

Rear of the TV
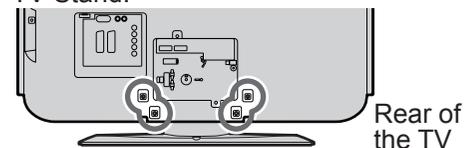
② Attach the Bottom Sheet.

Bottom of the TV

Identifying Controls

Mains power
On / Off switch

Changes the
input mode

Function select
● Volume / Contrast / Brightness /
Colour / Sharpness /
Tint (NTSC mode) / Bass / Treble /
Balance / Auto Setup (p. 22)

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 "Auto" Mode in Picture Menu) (p. 20)

Power LED
● Standby: red
On: green

●● Identifying Controls
Accessories / Options

Standby On / Off switch
(Switches TV On or Off standby)

Changes the input mode
TV - changes TV mode (p. 14)
AV - changes AV input mode (p. 14)

Changes aspect ratio (p. 13)

EXIT (Returns to TV screen)

OK button to confirm selections and choices
Press after selecting programme positions to
quickly change programme.

Cursor buttons to make selections and
adjustments

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

Returns to the previous menu

Surround (p. 20)

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

Access VIERA Link Menu (p. 31)

DIRECT TV Recording
To immediately record programme in VCR /
DVD recorder with Q-Link connection
(p. 28)

Programme / channel change buttons (0-9)
and Teletext page buttons. (p. 12 and p. 16)
When in Standby mode, switches TV On.

Option menu
Sets the preferred settings of viewing
and sound options easily (p. 13)

Programme Information (p. 13)

Sound mute On / Off

Selects programmes in sequence

Volume

Teletext (p. 16)

Still picture (p. 13)
Teletext Hold (p. 17)

Viewing a favourite teletext channel (p. 17)

Teletext Index (p. 17)

VCR / DVD operations (p. 15)

Panasonic
TV

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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 / 60 Hz

Mains lead

RF cable

PC

R L
AUDIO OUT

Y

P$_B$

P$_R$

L

R

COMPONENT

VIDEO

AUDIO

AV1

RGB
VIDEO

AV2

RGB
VIDEO
S-VIDEO

Example 2
Connecting DVD Recorder / VCR

TV, DVD Recorder or VCR

Rear of the TV

Aerial

AC 220-240 V
50 / 60 Hz

Mains lead

PC

R L
AUDIO OUT

Y

P$_B$

P$_R$

L

R

COMPONENT

VIDEO

AUDIO

AV1

RGB
VIDEO

AV2

RGB
VIDEO
S-VIDEO

SCART cable
(fully wired)

RF cable

RF IN

DVD Recorder or VCR

RF OUT

RF cable

Note

● Connect to AV1 / 2 for a DVD Recorder / VCR supporting Q-Link (p. 28).

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 / 60 Hz

Aerial

Mains lead

RF cable

PC

R L
AUDIO OUT

Y

V I D E O

P_B

P_R

C O M P O N E N T

L

A U D I O

R

RF cable

AV1
RGB
VIDEO

AV2
RGB
VIDEO
S-VIDEO

SCART cable
(fully wired)

SCART cable
(fully wired)

SCART cable
(fully wired)

Set top box

DVD Recorder
or VCR

RF IN   RF IN   RF OUT

RF cable

RF IN   RF OUT

RF cable

9
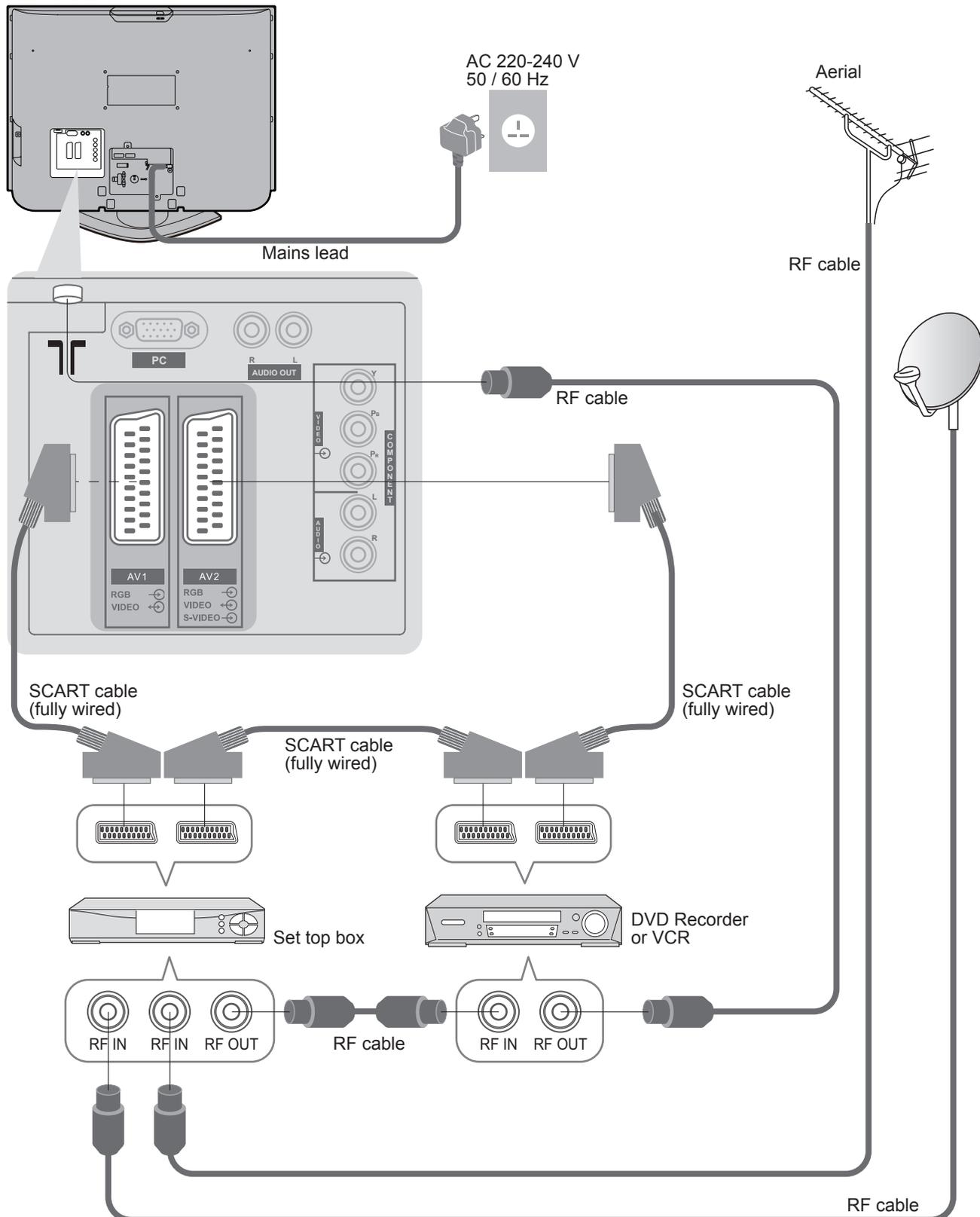
Auto Setup

Search and store TV channels automatically.
These steps are not necessary if the setup has been completed by your local dealer.
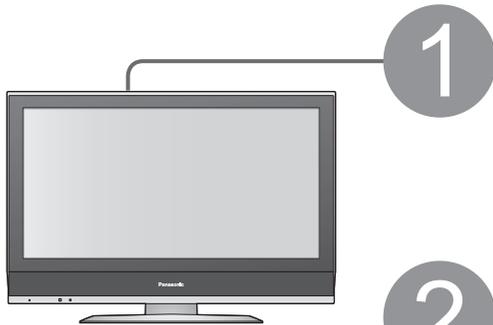
1 Plug the TV into mains socket and switch On
(Takes a few seconds to be displayed)

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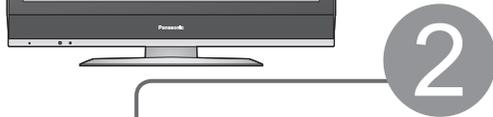
2 Select the language

Menüsprache

Deutsch	Español	Nederlands
English	Norsk	Suomi
Français	Dansk	Türkçe
Italiano	Svenska	Português
Ελληνικά	Magyar	Hrvatski
Čeština	Български	Română
Slovenčina	Slovenščina	Polski
Srpski		
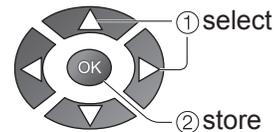
① select
② store

3 Select your country

Country

Germany	Denmark	Poland
Austria	Sweden	Czech
France	Norway	Hungary
Italy	Finland	Ireland
Spain	Belgium	E.Eu
Portugal	Switzerland	
Netherlands	Greece	

select
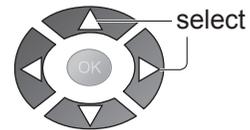
4 Start Auto Setup

Auto Setup

Scan 2 [78 1   41]

Channel	Service Name
CH 29	
CH 33	

This will take about 3 mins.

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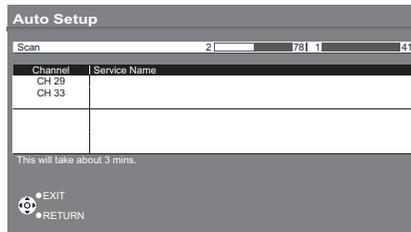
- Auto Setup will start to search for TV channels and store them. The sorted programme order depends upon the TV signal, the broadcasting system and reception conditions.

DOWNLOAD IN PROGRESS
PLEASE WAIT
Programme : 63
Remote control unavailable

- If a compatible recording equipment with Q-Link or similar technologies (p. 28) is connected, channel information is automatically downloaded to the equipment.

5 Select the picture setting

Viewing Mode

Dynamic	Normal	Cinema	Auto

- Also possible to change the setting in Picture Menu (p. 20)

① select
② set
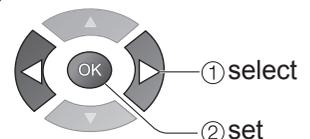
Auto Setup is now complete and your TV is ready for viewing.

- To edit channels
  → Editing and Setting Channels (p. 22)

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

■ ON SCREEN HELP Instructions box

(example: Sound Menu)

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

Select
EXIT
Change
RETURN
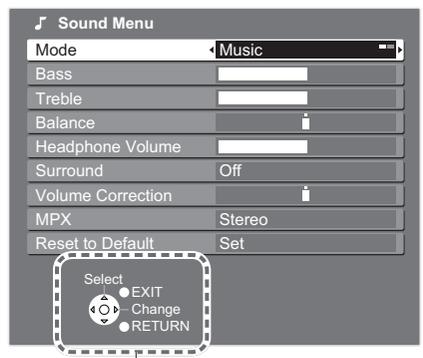
On-screen operation guide will help you.

Using the On Screen Displays

Note

● If tuning have failed ➡ "Auto Setup" (p. 22).
● If downloading have failed ➡ "Download" (p. 21).
● 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.

1 BBS
CH05 SC1 PAL   Coronation Street
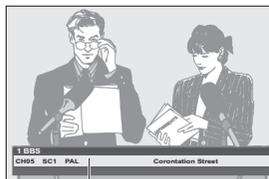
Information banner

2 **Select a channel**

∧ — up

or

1 2 3
4 5 6
7 8 9
0
VCR

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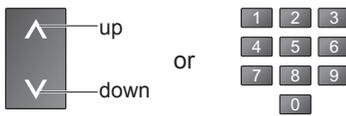
● To select the two-digit programme number, e.g. 39

➡ 3 ➡ 9 (in a short time)

ASPECT

EXIT

OK

OPTION

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

+ — Volume

HOLD

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TV

■ **Other useful functions** (Operate after ②)

Hold	**Freeze / unfreeze picture** HOLD
Display the current programme status	**Check or change the current programme status instantly** OPTION ● To change ➡ ② change / ① select **Teletext Language** ➡ Selects teletext language **MPX** ➡ Sound Menu (p. 20) **Volume Correction** ➡ Adjusts volume of individual channel or input mode **Note** ● Also possible to change the settings in Menu list (p. 20 and p. 21).

Display information banner	**Display programme information** *i*
	
	Channel
	1 BBS
	CH05 SC1 PAL Corontation Street
	                          Stereo 45 ⊢ Features available
	Sound mute Colour system Teletext Off timer
	    Sound system Programme Stereo sound
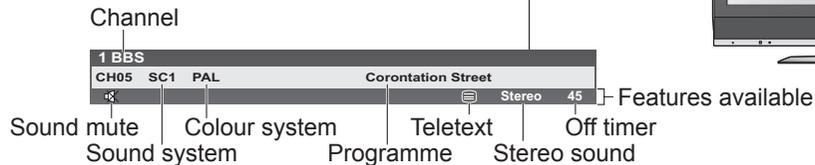	
	● To select another channel ➡ ➡ OK
	● To hide ➡ EXIT
	
	● To set display timeout
	  ➡ "Banner Display Timeout" (p. 21)
	● Appears also when changing channel.
	● Programme information is referred to teletext signal.

Change aspect ratio	**Change the aspect ratio** (p. 34) ASPECT
	
	Enjoy viewing the picture at its optimum size and aspect.
	
	Aspect Selection list
	Aspect Selection / Auto / 16:9 / 14:9 / Just / 4:3 / 4:3 Full / Zoom1 / Zoom2 / Zoom3
	
	● To change the mode
	  ➡ Display Aspect Selection list ASPECT ➡ During the list is displayed, select the mode ➡ Store OK
	● To change the mode using the ASPECT button only
	  ➡ ASPECT (Press repeatedly until you reach the desired mode)

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.
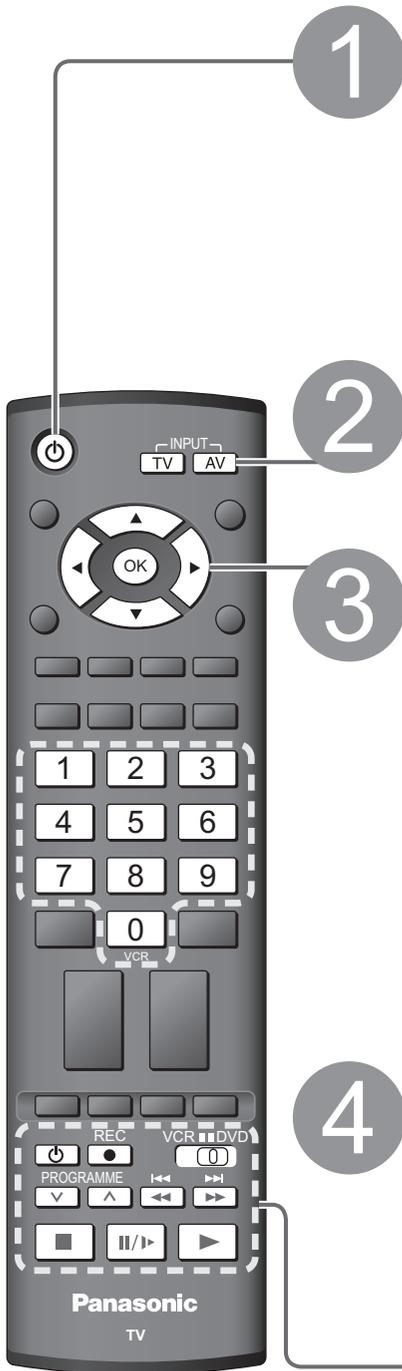
1

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. 31).

■ **If input mode is not switched automatically**
→ Perform ❷ and ❸
● 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/AV2S
AV3/AV3S
COMPONENT
PC
HDMI1
HDMI2
TV

②watch
OK
①select
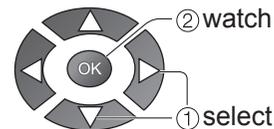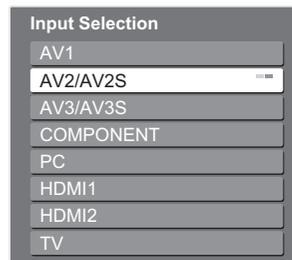
● You can also select the input using the AV button on the remote control or the top panel of the TV.
Press the button repeatedly until the desired input is selected.
● You can label or skip each input modes → "Input Labels" (p. 26)

4

View

Displays the selected mode

AV2
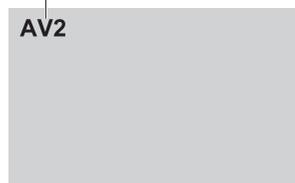
■ **To return to TV**
→ TV

● 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.

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

VCR ▮▮ DVD ◯	**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
❚❚/▶	**Pause** Pause / Restart 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 ◯

② Press and hold ⏻ during the following operations

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

"VCR" position

Equipment	Code
VCR	10 (default)
DVD	11

"DVD" position

Equipment	Code
DVD	70 (default)
Player home theatre	71

Note
● Confirm 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

● Watching Videos and DVDs

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

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

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
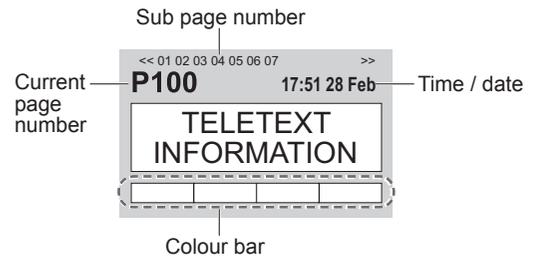
TELETEXT
INFORMATION

Colour bar

Select the page

or — up / down — or

red   green   yellow   blue

(Corresponds to the colour bar)

As the blue bar is displayed

■ **To adjust contrast** ➡ MENU ➡

■ **To return to TV** ➡ TEXT

■ Using teletext conveniently

Reveal hidden data	Reveal hidden words e.g. quiz page answers MENU ➡ red ● Re-hide ➡ red		
FULL / TOP / BOTTOM	MENU ➡ green	**P100** Broadcast (TOP) − + 150 200 (Expand the TOP half)	(BOTTOM) − + 150 200 (Expand the BOTTOM half)	Normal (FULL) **P100** Broadcast − + 150 200

Panasonic
TV

TEXT   F.P.   INDEX   HOLD

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HOLD	If you wish to hold the current page without updating **Stop or resume automatic updating** HOLD ■ **To resume** → HOLD
INDEX	**Return to the main index page** INDEX ● FLOF mode only
Call up a favourite pages	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) → ● 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)** <<01 02 03 04 05 — Appears at upper-left corner 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 channel.) ● The news page provides a function that indicates arrival of latest news ("News Flash").
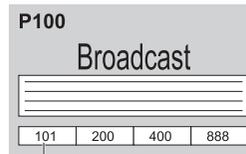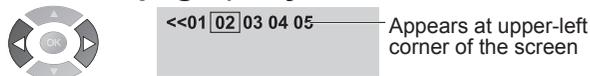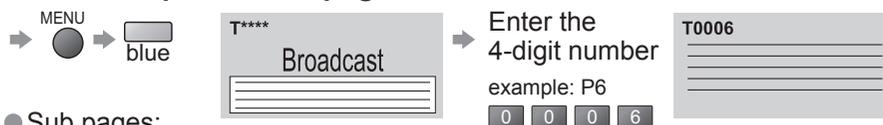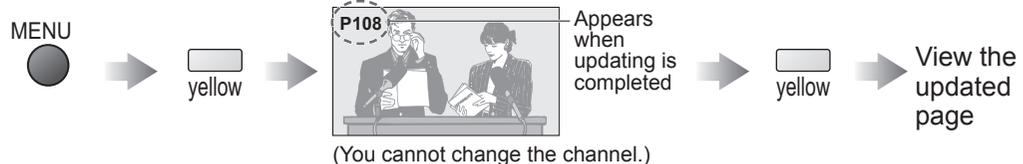
How to Use Menu Functions

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

① Display the menu

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

② Select the menu

VIE∩ Main Menu
- VIERA Link
- ☐ Picture
- ♪ Sound
- ☰ Setup

(example: Picture Menu)

② access
① select

③ Select the item

☐ Picture Menu	1/2
Viewing Mode	‹ Auto ›
Contrast	
Brightness	
Colour	
Sharpness	
Tint	
Colour Balance	Warm
Colour Management	Off
P-NR	Off

(example: Picture Menu)

select

④ Adjust or select

☐ Picture Menu	1/2
Viewing Mode	‹ Auto ›
Contrast	‹ ›
Brightness	‹ ›
Colour	‹ ›
Sharpness	‹ ›
Tint	‹ ›
Colour Balance	‹ Warm ›
Colour Management	‹ Off ›
P-NR	‹ Off ›

(example: Picture Menu)

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

■ Choose from among alternatives

Number and positions of alternatives

Colour Balance   ‹ Normal ›
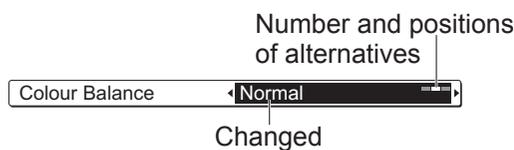
Changed

■ 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. 25)

Panasonic
TV

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■ Overview

VIErA Main Menu

VIERA Link

▢ **Picture**

♪ **Sound**

☰ **Setup**

VIERA Link Menu

| VIERA Link Control | ◄ Recorder ▶ |
| Speaker Selection | ◄ Home Cinema ▶ |

(p. 31)

The menu of the accessed equipment

▢ **Picture Menu**	**1/2** ▲
Viewing Mode	◄ Auto ▶
Contrast	◄ ▶
Brightness	◄ ▶
Colour	◄ ▶
Sharpness	◄ ▶
Tint	◄ ▶
Colour Balance	◄ Warm ▶
Colour Management	◄ Off ▶
P-NR	◄ Off ▶

▢ **Picture Menu**	**2/2** ▲
MPEG NR	◄ Off ▶
3D-COMB	◄ Off ▶
Reset to Default	Set

(p. 20)

♪ **Sound Menu**	**1/2** ▲
Mode	◄ Music ▶
Bass	◄ ▶
Treble	◄ ▶
Balance	◄ ▶
Headphone Volume	◄ ▶
Surround	◄ Off ▶
Volume Correction	◄ ▶
MPX	◄ Stereo ▶
HDMI1 Input	◄ Auto ▶

♪ **Sound Menu**	**2/2** ▲
Reset to Default	Set

(p. 20)

Q-Link Settings

Q-Link	◄ AV2 ▶
AV2 out	◄ TV ▶
Download	Access

(p. 21)

☰ **Setup Menu**	**1/2** ▲
AV Colour System	◄ Auto ▶
Q-Link Settings	Access
Child Lock	Access
Tuning Menu	Access
Off Timer	◄ Off ▶
Language	◄ Access ▶
Teletext	◄ FLOF ▶
Shipping Condition	Access
Input Labels	Access

☰ **Setup Menu**	**2/2** ▲
Banner Display Timeout	◄ 3 seconds ▶
VIERA Link	◄ On ▶
Software License	Access
System Information	Access

(p. 21)

Tuning Menu

Auto Setup	Access
Programme Edit	Access
Manual Tuning	Access

(p. 22)

● 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	VIERA Link Control	Controls the connected Panasonic equipment "Easy control only with VIERA remote control" (p. 31) "Speaker control" (p. 31) ● You can also access VIERA Link Menu directly using the VIERA Link button on the remote control.
VIERA Link	Speaker Selection	
Picture	Viewing Mode	Basic picture mode **(Dynamic / Normal / Cinema / Auto)** ● Set for each input signal
Picture	Contrast, Brightness, Colour, Sharpness	Adjusts colour, brightness, etc. for each picture mode to suit your taste
Picture	Tint	Adjusts tint of image ● For NTSC signal reception only
Picture	Colour Balance	Chooses the colour balance of the entire image **(Cool / Normal / Warm)**
Picture	Colour Management	Automatically adjusts colours to vivid ones **(Off / On)** ● Not valid on PC signal
Picture	P-NR	Picture Noise Reduction Automatically reduces unwanted picture noise **(Off / Normal / Dynamic / Auto)** ● Not valid on HDMI or PC signal
Picture	MPEG NR	Automatically reduces noise for watching DTV, DVD and VCD **(Off / Min /Mid / Max)**
Picture	3D-COMB	Automatically makes still pictures and slow pictures look more vivid **(Off / On)** ● For PAL or NTSC signal reception only ● Not valid on RGB, S-Video, components, 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	Adjusts the output level of deep bass
Sound	Treble	Adjusts the output level of high-pitch, shrill sound
Sound	Balance	Adjusts volume level of right and left speakers
Sound	Headphone Volume	Adjusts the volume of the headphones
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 channel 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. 29) 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)**
	Q-Link Settings	**Q-Link**	Selects which AV terminal is to be used for data communication between this TV and a compatible recording equipment **(AV1 / AV2)** (p. 28)
		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, PC and HDMI signals cannot be outputted
		Download	Downloads channel information to a Q-Link compatible equipment connected to the TV
	Child Lock		Locks a programme channel to prevent access to it (p. 24)
	Tuning Menu	**Auto Setup**	Automatically sets the channels received in the area (p. 22)
		Programme Edit	Edits channels (p. 23)
		Manual Tuning	Sets the channels manually (p. 23)
	Off Timer		Sets the time the TV automatically turns Off **(Off / 15 / 30 / 45 / 60 / 75 / 90 minutes)**
	Language	**OSD Language**	Changes language for on-screen displays
		Teletext Language	Selects teletext language **(West / East1 / East2)** ● West: English, French, German, Greek, Italian, Spanish, Swedish, Turkish ● East1: Czech, English, Estonian, Lettish, Rumanian, Russian, Ukrainian ● East2: Czech, Hungarian, Lettish, Polish, Rumanian
	Teletext		Teletext display mode **(FLOF / List)** (p. 16)
	Shipping Condition		Resets all settings, for example, when moving house (p. 25)
	Input Labels		Labels or skips each input terminals (p. 26)
	Banner Display Timeout		Sets how long the information banner (p. 13) stays on screen ● 0 (No display) to 10 sec. in 1-sec. increments
	VIERA Link		Sets to use VIERA Link functions **(Off / On)** (p. 30)
	Software License		Displays the software licence information
	System Information		Displays the system information of this TV

● A different menu will be displayed while PC is used. (p. 27)
● Only available items can be selected.

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

Advanced

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Editing and Setting Channels

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

1 **Display the menu**

MENU

2 **Select "Setup"**

VIErA **Main Menu**

VIERA Link

☐ Picture

♪ Sound

≡ Setup

②access
①select

3 **Select "Tuning Menu"**

≡ Setup Menu	1/2
Q-Link Settings	
Child Lock	
Tuning Menu	Access
Off Timer	Off
Language	
Teletext	FLOF
Shipping Condition	
Input Labels	
Banner Display Timeout	3 seconds

②access
①select

4 **Select a function**

Tuning Menu	
Auto Setup	Access
Programme Edit	Access
Manual Tuning	Access

②access
①select

■ **To return to TV**
→ EXIT

5 **Set**

Automatically set the channels received in the area.
If a Child Lock PIN number (p. 24) has been set, it must be entered.

Start Auto Setup   **Settings are made automatically**

Auto Setup
All tuning data will be erased
Start Auto Setup ◉EXIT ◉RETURN

OK →

Auto Setup
Scan 2▭ 78▭ 1 ▭ 41
Channel Service Name
CH 29
CH 33
This will take about 3 mins.
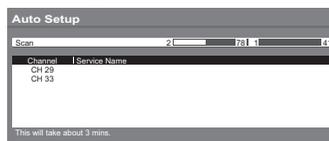
● All previous settings are erased.
● The settings are downloaded to a Q-Link compatible equipment connected to the TV.
● When the operation is completed, the broadcast of programme number "1" will appear.
● If tuning has not done completely ➡ "Manual Tuning"

Set channels automatically

Auto Setup

For Auto Setup, using the buttons on the top of the TV

F   −/∨ +/∧   TV   AV

① Press repeatedly until "Auto Setup" appears
F

② Access "Auto Setup"
TV

③ Start "Auto Setup"
TV

■ **To return to TV** ➡ F
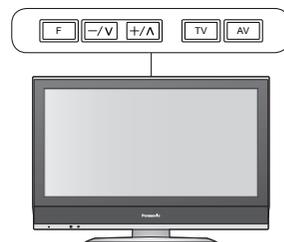
Edit channels

Programme Edit

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

Edit the programme position settings

● To change channel number
➡ "Manual Tuning"

① Select the channel to edit

Programme 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

Name

Channel

3 FTP

CH05   SC1   PAL   Corontation 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**

Programme 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	CH6		SC1	Auto
5	CH2	4 5 6	SC1	Auto

Select the "Name" field

red Enter the "User Input" mode

Select the character

OK Set

(Maximum: five characters)

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

Programme 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

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"

Programme 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

Select the "Colour Sys." field

Select colour system

Set channels manually

Manual Tuning

■ **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

1 2 3
4 5 6
7 8 9
0
VCR

Select the channel

∧
∨

Search and store

OK
① search
② store

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 Display the menu

MENU

2 Select "Setup"

VIERA Main Menu

| VIERA Link |
| Picture |
| Sound |
| Setup |

② access
① select

3 Select "Child Lock"

Setup Menu 1/2

Q-Link Settings	
Child Lock	Access
Tuning Menu	
Off Timer	Off
Language	
Teletext	FLOF
Shipping Condition	
Input Labels	
Banner Display Timeout	3 seconds

② access
① select

■ To return to TV

EXIT

4 Set

Control channel 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 "Service List"**

Child Lock
Change PIN
Service List Access

② access
① select

③ **Select the channel to be locked**

Child Lock Service List

Service Name	Lock
1 BBC One Wales	🔒
7 BBC THREE	🔒
14 E4	
70 CBBC Channel	
72 Cartoon Nwk	
80 BBCi	🔒
85 BBC Radio Wales	
90 BBC Radio Cymru	

① select
② set

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. 25) erases the PIN number and all settings.

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Restore Settings

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

1 Display the menu

MENU

2 Select "Setup"

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

②access

①select

3 Select "Shipping Condition"

☰ Setup Menu	1/2
Q-Link Settings	
Child Lock	
Tuning Menu	
Off Timer	Off
Language	
Teletext	FLOF
Shipping Condition	Access
Input Labels	
Banner Display Timeout	3 seconds

②access

①select

■ **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 — set

② **Follow the on-screen instructions**

● "Auto Setup" will automatically start. (p. 10)

■ **To re-tune TV channels only, e.g. after moving house**
➡ "Auto Setup" (p. 22)

● Restore Settings
● Control Channel Audience

Advanced

25

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. 14)

1 Display the menu

MENU

2 Select "Setup"

VIErA Main Menu
VIERA Link
☐ Picture
♪ Sound
☰ Setup

② access
① select

3 Select "Input Labels"

☰ Setup Menu	1/2
Q-Link Settings	
Child Lock	
Tuning Menu	
Off Timer	Off
Language	
Teletext	FLOF
Shipping Condition	
Input Labels	Access
Banner Display Timeout	3 seconds

② access
① select

■ **To return to TV**

➡ EXIT

4 Select a input terminal and set

Input Labels	
AV1	◀ DVD ▶
AV2/AV2S	AV2/AV2S
AV3/AV3S	AV3/AV3S
COMPONENT	COMPONENT
PC	PC
HDMI1	HDMI1
HDMI2	HDMI2

② set
① select

The labels you set will be displayed in "Input Selection" menu (p. 14) or banner.
● If "Skip" is selected, you cannot select the mode.

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

Select "User Input"

① select
② access

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	(	)	+	-	.	*	_							
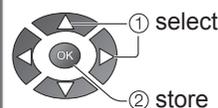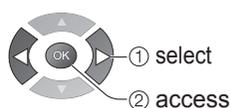
(maximum: ten characters)

① select
② store

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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. 32)

1 Select the external input

AV

2 Select "PC"

Input Selection

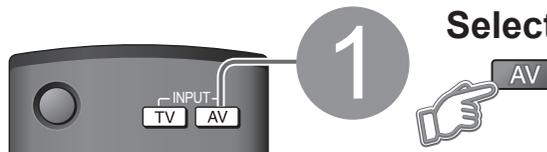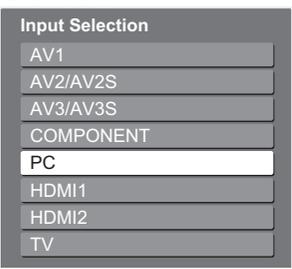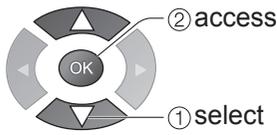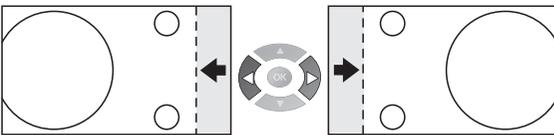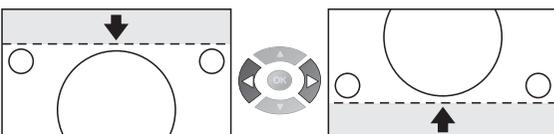| |
|---|
| AV1 |
| AV2/AV2S |
| AV3/AV3S |
| COMPONENT |
| PC |
| HDMI1 |
| HDMI2 |
| TV |

② access

① select

● Corresponding signals (p. 36)
● 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" ❶ to ❹ (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)**
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. 20 and p. 21

Q-Link Functions

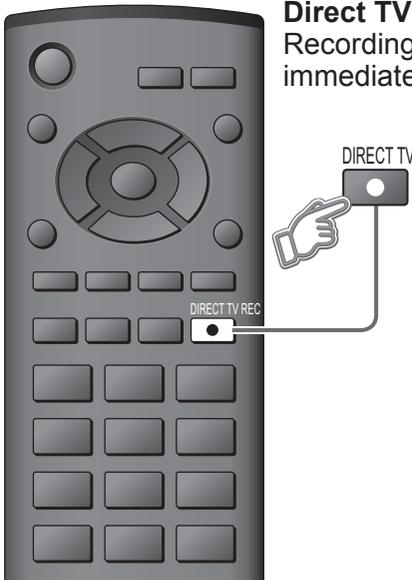Q-Link connects the TV and VCR / DVD recorder, enables easy recording and playback.

■ **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. 32)
- Q-Link terminal setup in Setup menu (Q-Link, AV1 / AV2 out). (p. 21)

■ **Download channel settings**
- Perform Auto Setup. (p. 22)
  When first using this TV, see "Auto Setup". (p. 10)
- Perform download to the equipment. (p. 21)

■ **Features available**
Some recording equipments are not applicable. Read the manuals of the equipment.

What you see is What you record	**Direct TV Recording:** Recording the current programme in VCR / DVD recorder immediately. DIRECT TV REC DIRECT TV REC ● When Direct TV Recording is performed, the recording equipment is automatically turned on if it is in Standby mode. ● The recording equipment is recording from its own tuner. You can turn the TV off during recording. ● If you turn the TV off during recording from an AV source, the recording will be stopped.
Information / Message	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.)
Power on link and Easy playback	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.)
Power off link	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.)

• "DATA LOGIC" (a trademark of Metz Corporation)   • "Megalogic" (a trademark of Grundig Corporation)
• "Easy Link" (a trademark of Philips 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. 32).

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. 36.

(∗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. 30). You can use VIERA Link and Q-Link functions together.

Function	VIERA Link and Q-Link (HDMI) (SCART)	VIERA Link only (HDMI)	Q-Link only (SCART)
Easy playback	O	O	O
Power on link	O	O	O
Power off link	O	O	O
Speaker control	O (not via SCART)	O	–
Easy control only with VIERA remote control	O (not via SCART)	O	–
Direct TV Recording	O (not via HDMI)	–	O
Channel download	O (not via HDMI)	–	O

●● HDMI Functions
Q-Link Functions

Advanced

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HDMI Functions

∗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. 31)
- Power on link (p. 31)
- Power off link (p. 31)
- Speaker control (p. 31)

In addition, the equipment with "HDAVI Control 2" function enables the following operation:
- Easy control only with VIERA remote control (p. 31)

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

■ 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. 33). 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. 14), and make sure that an image is displayed correctly.

1 Display the menu

MENU

2 Select "Setup"

VIEΓA **Main Menu**
VIERA Link
☐ **Picture**
♪ **Sound**
≔ **Setup**

② access
① select

3 Select "VIERA Link"

≔ Setup Menu	2/2
VIERA Link	◄ On ►
Software License	
System Information	

select

4 Set to "On"
(default is On)

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. 30).
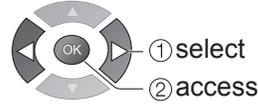
Access and operate the menu of the equipment

① **Display "VIERA Link Menu"** ➡ VIErA Link

② **Select "VIERA Link Control"**

VIERA Link Menu	
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.

① select
② access

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

VIERA Link Menu	
VIERA Link Control	Recorder
Speaker Selection	Home Cinema

Recorder / Player / Home Cinema / Video Camera
Displayed the kind of the connected equipment.
Select the kind of the equipment and access.

① select
② access
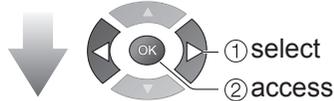
The menu of the accessed equipment
(Input mode will be changed automatically)

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

VIERA Link Menu	
VIERA Link Control	Recorder
Speaker Selection	Home Cinema

Recorder / Player / Home Cinema / Video Camera
Displayed the kind of the connected equipment. But you cannot access it. Use its own remote control to operate the equipment.

■ When other kind or other manufacturer of the equipment is connected

VIERA Link Menu	
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):

OK (cursor)	Move the cursor / select the menu	EXIT	Exit the menu
OK (cursor)	Move the cursor / access / adjust	OPTION	Display the operation guide for the equipment. The same functions with the OPTION button of the equipment
OK	Store / Set / Access		
RETURN	Return to the previous menu	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.

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. 30).

① **Display "VIERA Link Menu"** ➡ VIErA Link

② **Select "Speaker Selection"**

VIERA Link Menu	
VIERA Link Control	Recorder
Speaker Selection	Home Cinema

select

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.
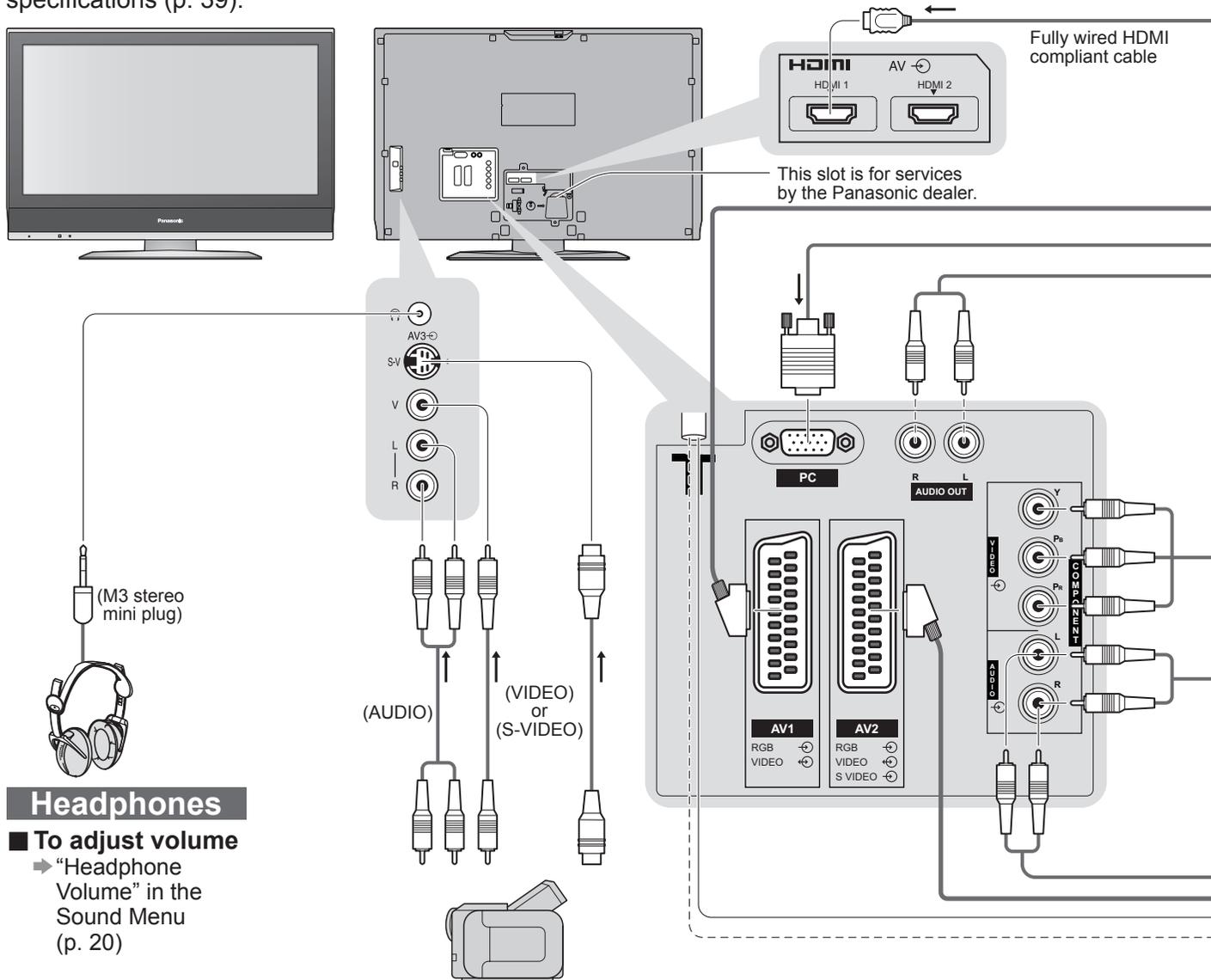
Volume up / down ➡ + / −

Mute ➡ 🔇

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

■ TV
TV speakers are active.

● HDMI Functions

Advanced

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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. 39).

Fully wired HDMI compliant cable

HƏMI   AV ⊕
HDMI 1   HDMI 2

This slot is for services by the Panasonic dealer.

AV3⊕
S-V
V
L
R

(M3 stereo mini plug)

PC

R   L
AUDIO OUT

Y
PB
PR
COMPONENT
VIDEO ⊕
L
R
AUDIO ⊕

AV1
RGB ⊕
VIDEO ⊕

AV2
RGB ⊕
VIDEO ⊕
S VIDEO ⊕

(AUDIO)   (VIDEO) or (S-VIDEO)

Headphones

■ **To adjust volume**
➡ "Headphone Volume" in the Sound Menu (p. 20)

Camcorder / Game equipment

■Types of connectable equipment to each connector

Connector Recording / Playback (equipment)	AV1	AV2	AV3 (Side of TV)	COMPONENT Y PB PR L R	AUDIO OUT	HƏMI 1	HƏMI 2
■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

To watch satellite broadcasts

Set top box

SCART cable

SCART cable

PC

(Viewing)

Conversion adapter
(if necessary)

Computer

(Listening)

To listen with speakers

Amplifier with speaker system

(Viewing)

To watch DVDs

DVD player

(Listening)

To record / playback

DVD Recorder / VCR

RF cable

or

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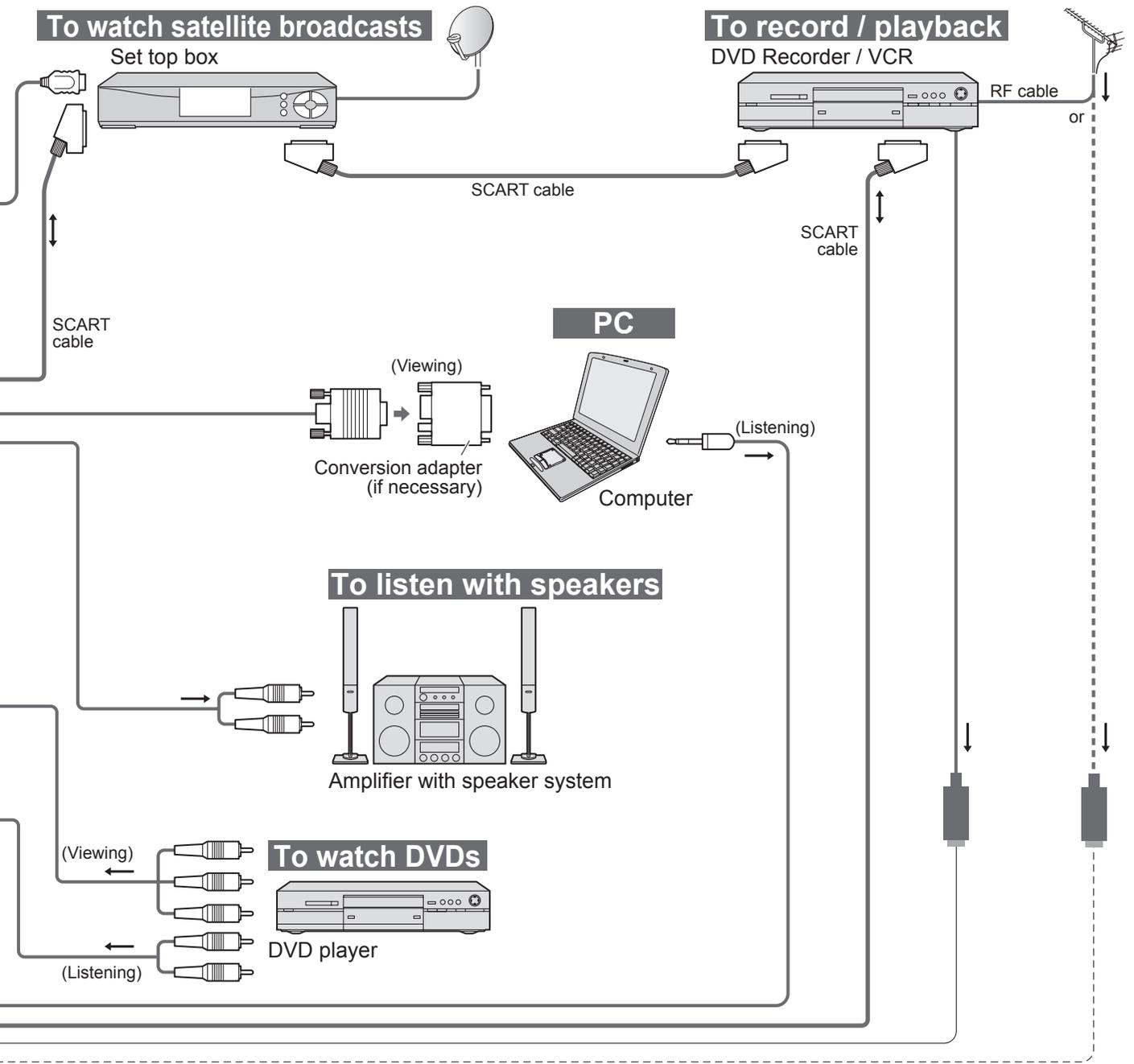
- Use fully wired HDMI compliant cable.
- Read the manuals of the equipment too.

■ **Easy playback, Easy control only with VIERA remote control**
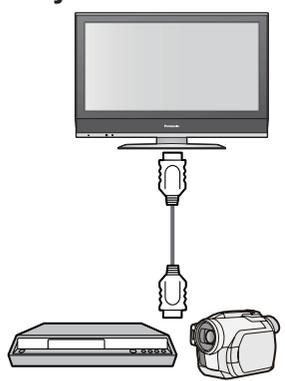
Panasonic DVD Recorder,
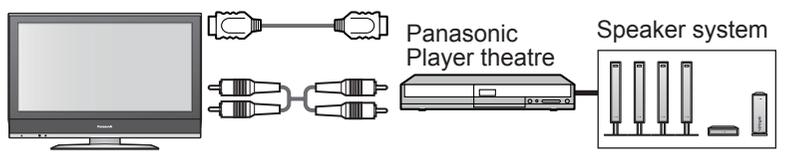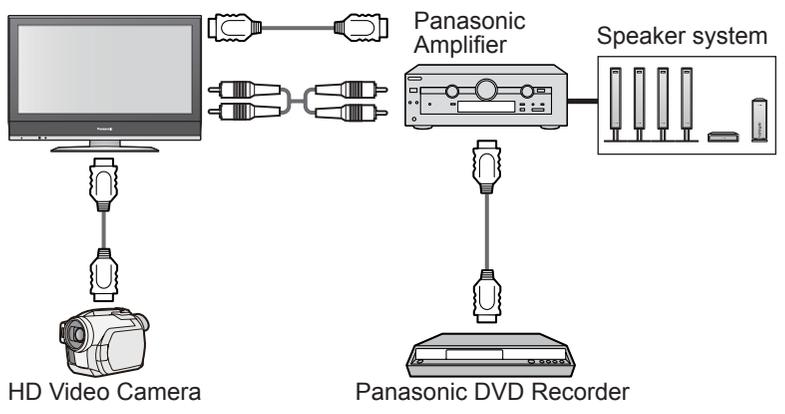HD Video Camera, etc.

■ **Home Cinema**

Panasonic Amplifier

Speaker system

HD Video Camera

Panasonic DVD Recorder

Panasonic Player theatre

Speaker system

● External Equipment

Advanced

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Aspect Ratio

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 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	AV3	Component	AV1	AV2	HDMI 1	HDMI 2
TV/AV1/AV2/AV3	PAL	O	O	O	O	O	–	O	O	O	O	O	O	O	–	O	O	–	–
	PAL 525/60	O	O	O	O	O	–	O	O	O	–	–	–	–	–	O	O	–	–
	M.NTSC	O	O	O	O	O	–	O	O	O	–	–	–	–	–	O	O	–	–
	NTSC(AV input only)	O	O	O	O	O	–	O	O	O	–	–	–	–	–	O	O	–	–
Component/HDMI — SD	525(480)/60i	O	O	O	O	O	–	O	O	O	–	–	–	–	–	–	–	O	O
	525(480)/60p	O	O	O	O	O	–	O	O	O	–	–	–	–	–	–	–	O	O
	625(576)/50i	O	O	O	O	O	–	O	O	O	–	–	–	–	O	–	–	O	O
	625(576)/50p	O	O	O	O	O	–	O	O	O	–	–	–	–	O	–	–	O	O
Component/HDMI — HD	750(720)/50p	O	O	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
	750(720)/60p	O	O	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
	1125(1080)/50i	O	O	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
	1125(1080)/60i	O	O	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
	1125(1080)/50p	O	O	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
	1125(1080)/60p	O	O	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
PC input		–	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.)
● 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.
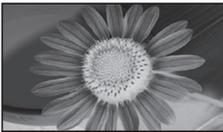
Just
Displays a 4:3 image full-screen. Stretching is only noticeable at the left and right edges.

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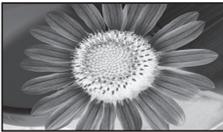
Zoom1
Displays a "16:9" letterbox or "4:3" image without distortion.

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).
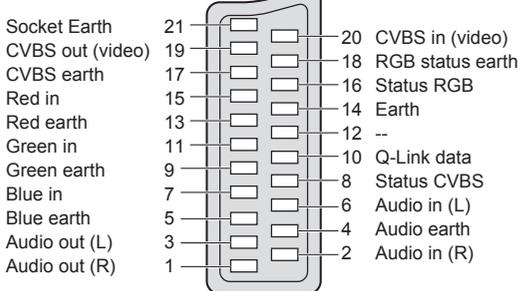
VIERA Link "HDAVI Control™"

HDMI connections to some Panasonic equipment allow you to interface them automatically. (p. 30)

- 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 you connect the same kind of equipment at once (for example: one DIGA to HDMI1 / another DIGA to HDMI2), VIERA Link is available for the terminal with the smaller number.
- "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, S-VIDEO and HDMI terminal 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			
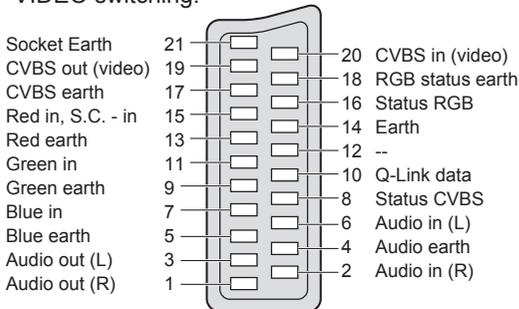
■ AV3 S-VIDEO 4 pin terminal

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			

● Technical Information

FAQs, etc.

35
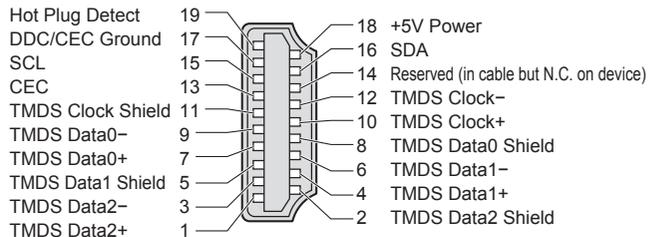
Technical Information

PC connection

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

Note

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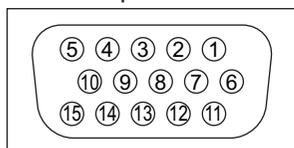- Max. display resolution

Aspect	4:3	1,024 × 768 pixels
	16:9	1,366 × 768 pixels

- D-sub 15-pin connector signal

⑤ ④ ③ ② ①
⑩ ⑨ ⑧ ⑦ ⑥
⑮ ⑭ ⑬ ⑫ ⑪

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		*

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. 20) and volume.
- Check all required SCART cables and connections are firmly in place.
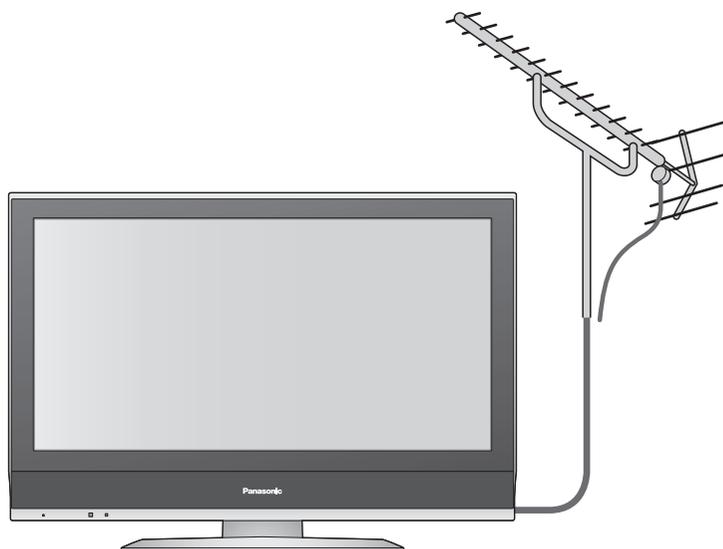
Auto aspect

- Auto aspect is designed to provide you with the best aspect ratio to use to fill your screen. For user control please see p. 34.

S-Video / black and white picture

- Using AV button please confirm your selection is S-Video I.e. AV2/AV2S (p. 14).

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. 21).

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.

- Frequently Asked Questions
- Technical Information

FAQs, etc.

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FAQs

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. 23)
Blurry or distorted image (no sound or low volume)	● Reset channels. (p. 22)
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". ● Check Sound system. (p. 23)
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. 29)
Pictures from external equipment are unusual when the equipment is connected via HDMI	● Is the HDMI cable connected properly? (p. 32) ● Turn Off the TV and equipment, then turn them On again. ● Check an input signal from the equipment. (p. 36) ● 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 min. after broadcasting ends.
The remote control does not work	● Are the batteries installed correctly? (p. 6) ● Has the TV been switched On?
An error message appears	● Follow the message's instructions. ● If the problem persists, contact the authorized Service Centre.

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

<table>
<tr><td colspan="3"></td><th>TX-26LX70L</th><th>TX-32LX70L</th></tr>
<tr><td colspan="3">Power Source</td><td colspan="2">AC 220-240 V, 50 / 60 Hz</td></tr>
<tr><td rowspan="3">Power Consumption</td><td colspan="2">Average use</td><td>100 W</td><td>134 W</td></tr>
<tr><td colspan="2">Standby condition</td><td colspan="2">0.4 W</td></tr>
<tr><td colspan="2">Aspect Ratio</td><td colspan="2">16:9</td></tr>
<tr><td rowspan="2">Display panel</td><td colspan="2">Visible screen size</td><td>66 cm (diagonal)
575 mm (W) × 323 mm (H)</td><td>80 cm (diagonal)
697 mm (W) × 392 mm (H)</td></tr>
<tr><td colspan="2">Number of pixels</td><td colspan="2">1,049,088 (1,366 (W) × 768 (H))</td></tr>
<tr><td rowspan="3">Sound</td><td colspan="2">Speaker</td><td colspan="2">120 mm × 60 mm × 2 pcs</td></tr>
<tr><td colspan="2">Audio Output</td><td colspan="2">20 W (10 W + 10 W)</td></tr>
<tr><td colspan="2">Headphones</td><td colspan="2">M3 (3.5 mm) stereo mini Jack × 1</td></tr>
<tr><td colspan="3">PC signals</td><td colspan="2">VGA, SVGA, XGA
SXGA ······ (compressed)
Horizontal scanning frequency 31 - 69 kHz
Vertical scanning frequency 59 - 86 Hz</td></tr>
<tr><td colspan="3">Receiving Systems / Band name</td><td colspan="2">PAL I   UHF E21-68 / VHF Ireland channel
PAL 525/60   Playback of NTSC tape from some PAL Video recorders (VCR) or NTSC disc playback from DVD player and recorder.
M.NTSC   Playback from M. NTSC Video recorders (VCR).
NTSC (AV input only)Playback from NTSC Video recorders (VCR).</td></tr>
<tr><td colspan="3">Aerial - Rear</td><td colspan="2">VHF / UHF</td></tr>
<tr><td colspan="3">Operating Conditions</td><td colspan="2">Temperature : 0 °C - 35 °C
Humidity   : 20 % - 80 % RH (non-condensing)</td></tr>
<tr><td rowspan="10">Connection Terminals</td><td colspan="2">AV1 (Scart terminal)</td><td colspan="2">21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, Q-Link)</td></tr>
<tr><td colspan="2">AV2 (Scart terminal)</td><td colspan="2">21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, S-Video in, Q-Link)</td></tr>
<tr><td rowspan="3">AV3</td><td>VIDEO</td><td colspan="2">RCA PIN Type × 1   1.0 V[p-p] (75 Ω)</td></tr>
<tr><td>S-VIDEO</td><td colspan="2">Mini DIN 4-pin   Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)</td></tr>
<tr><td>AUDIO L - R</td><td colspan="2">RCA PIN Type × 2   0.5 V[rms]</td></tr>
<tr><td rowspan="2">COMPONENT</td><td>VIDEO</td><td colspan="2">Y   1.0 V[p-p] (including synchronization)
P_B, P_R   ±0.35 V[p-p]</td></tr>
<tr><td>AUDIO L - R</td><td colspan="2">RCA PIN Type × 2   0.5 V[rms]</td></tr>
<tr><td rowspan="2">Others</td><td>HDMI1 / 2</td><td colspan="2">TYPE A Connectors   ●This TV supports "HDAVI Control 2" function.</td></tr>
<tr><td>PC</td><td colspan="2">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)</td></tr>
<tr><td>Output</td><td>AUDIO L - R</td><td colspan="2">RCA PIN Type × 2   0.5 V[rms] (high impedance)</td></tr>
<tr><td colspan="3">Dimensions (W × H × D)</td><td>657 mm × 525 mm × 216 mm (With TV Stand)
657 mm × 473 mm × 117 mm (TV only)</td><td>791 mm × 615 mm × 248 mm (With TV Stand)
791 mm × 563 mm × 117 mm (TV only)</td></tr>
<tr><td colspan="3">Mass</td><td>14.0 kg Net</td><td>17.5 kg Net</td></tr>
</table>

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.

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 : **08705 357357**
- For customers within the Republic of Ireland: **01 289 8333**
- Visit our website for product information   **www.panasonic.co.uk**
- E-mail: **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**.
- 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**.*

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 _____

Panasonic (U. K.) Ltd.

Willoughby Road, Bracknell, Berks RG12 8FP   Web Site : http://www.panasonic-europe.com

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