

Panasonic®

Operating Instructions Plasma Television

Model No. **TH-65PY700H**
TH-65PY700M
TH-65PY700MR

VIERA



DOLBY
DIGITAL

AVCHD™

SRS
TruSurround XT

VIERA
Link

SD
CG

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

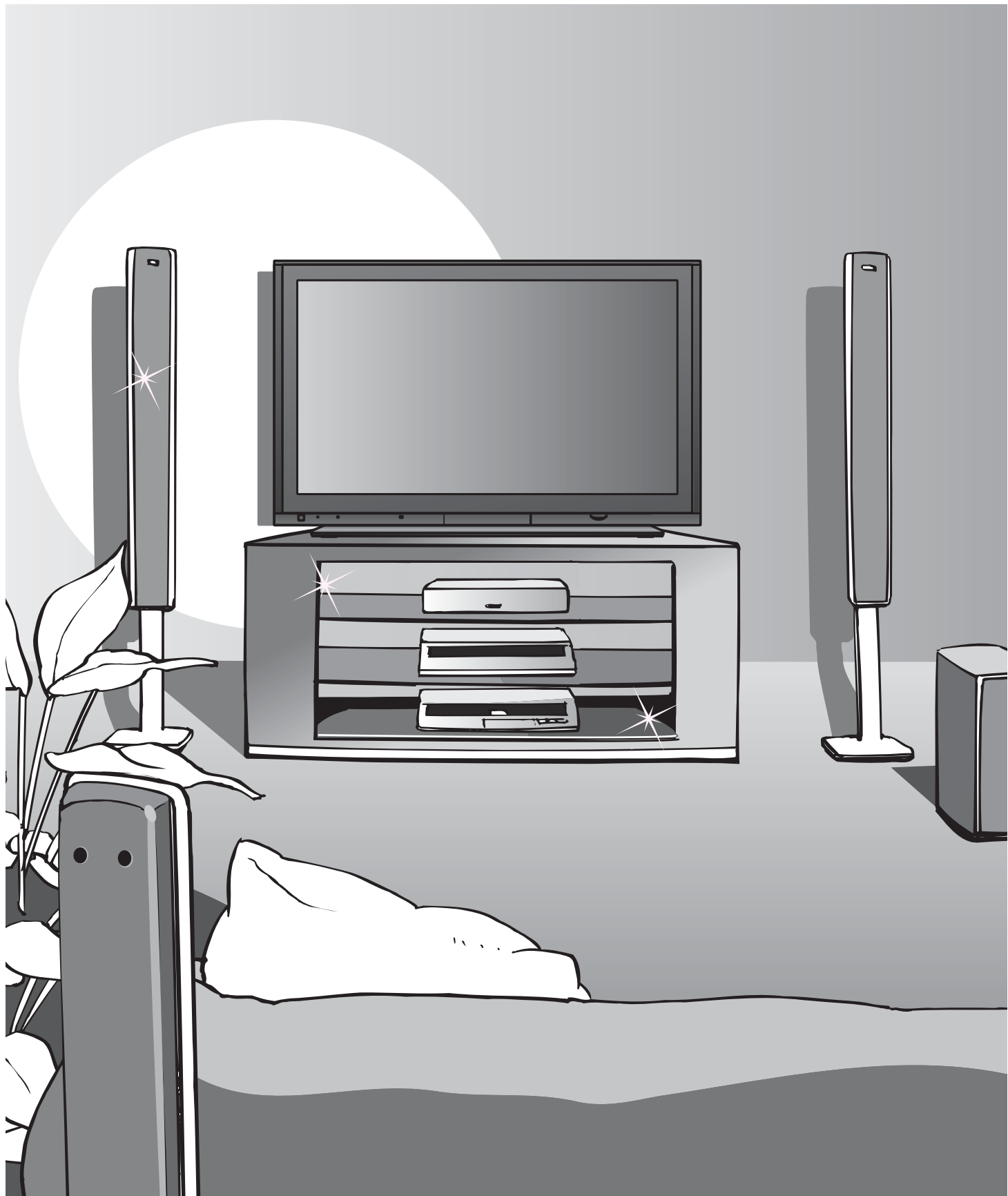
English

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.

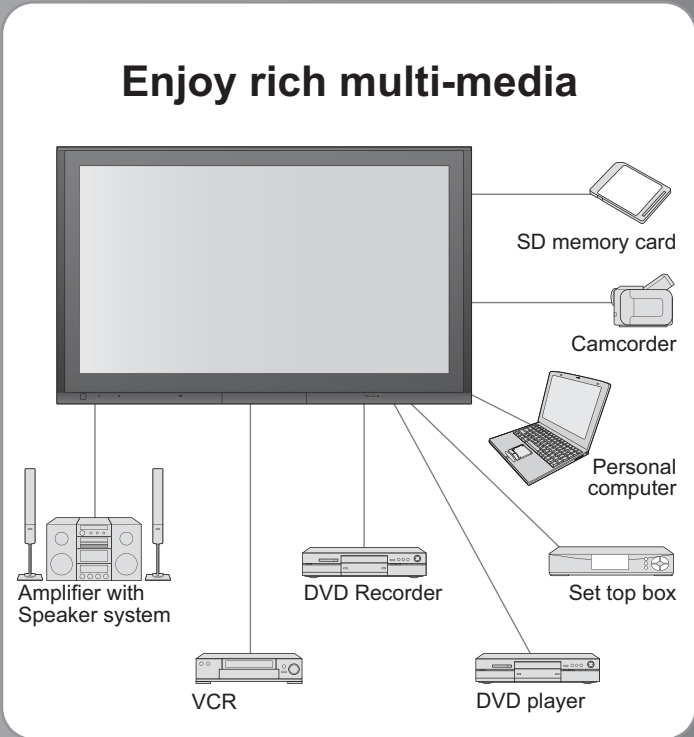
TQBC2222

Turn your own living room into a movie theatre!

Experience an amazing level of multi-



media excitement



Contents

Be Sure to Read

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

Quick Start Guide

- Accessories / Options 6
- Identifying Controls 7
- Basic Connection 8
- Auto Tuning 9
- Language Setting 10

Enjoy your TV!

Basic Features

- Watching TV 12
- Watching Videos and DVDs 14
- Viewing Teletext 16

Advanced Features

- How to Use Menu Functions 18
(picture, sound quality, etc.)
- Editing and Setting Channels 22
- Control Channel Audience 24
- Restore Settings 25
- Input Labels 26
- Displaying PC Screen on TV 27
- Viewing from SD Card (Photos and Movies) ... 28
- VIERA Link "HDAVI Control™" 30
- External Equipment 32

FAQs, etc.

- Technical Information 34
- FAQs 39
- Licence 41
- Specifications 42

Quick Start Guide

Viewing

Advanced

FAQs, etc.

Safety Precautions

Warning

Handling the mains plug and lead

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

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

AC 220-240 V
50 / 60 Hz

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 let metal or flammable objects 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 stands / mounting equipment

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

Do not allow children to handle SD card

- As with a small object, SD card can be swallowed by young children. Please remove SD card immediately after use.

Notes

Caution

■ This appliance is intended for use in tropical climates

■ When cleaning the TV, remove the mains plug

(Cleaning an energized TV may cause electrical shock.)

■ When TV will not be used for a long time, remove the mains plug

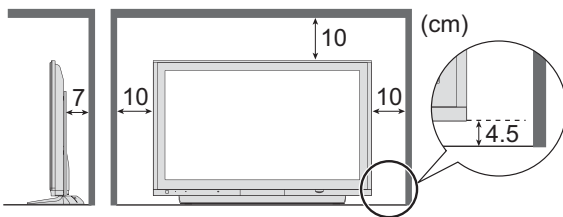
- This TV will still consume some power even in the Off mode, as long as the mains plug is still connected to a live socket outlet.

■ Transport only in upright position

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

■ Allow sufficient space around the TV for radiated heat

Minimum distance



■ Do not block the rear air vents

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



Do not display a still picture for a long time

This causes the image to remain on the plasma screen ("image retention"). This is not considered a malfunction and is not covered by the warranty.

Typical still images

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



To prevent image retention, contrast is lowered automatically after a few minutes if no signals are sent or no operations are performed. (p. 39)

■ Auto power standby function

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

■ Keep the TV away from these equipment

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

Maintenance

First, remove the mains plug from the socket outlet.

Display panel

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

Major contamination: Wipe the surface clean using a soft cloth dampened with clean water or diluted neutral detergent by 100 times of water. Then, using a soft dry cloth, evenly wipe the surface clean until it is dry.

Caution

- The surface of the display panel has been specially treated and may be easily damaged. Do not tap or scratch the surface with your fingernail or other hard object.
- Use care not to subject the surface to bug 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 bug repellent, solvent, thinner, or other volatile substances (this may deteriorate the surface by peeling the paint).
- Do not allow the cabinet to make contact with a rubber or PVC substance for a long time.

Mains plug

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

Accessories / Options

Standard accessories

Check that you have the accessories and items shown ☒

☐ Remote Control Transmitter
● N2QAYB000120



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



☐ Mains Lead

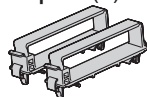


(TH-65PY700H, TH-65PY700M)



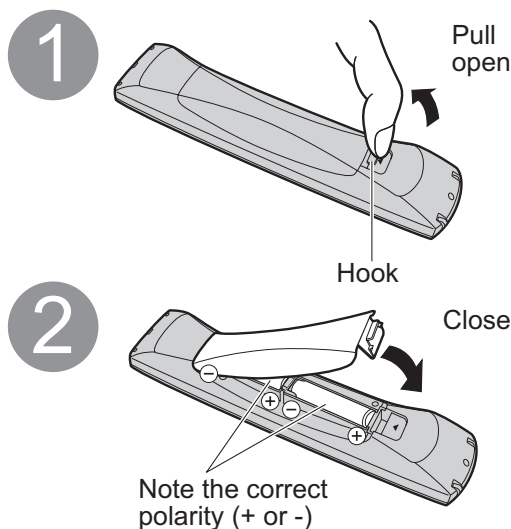
(TH-65PY700M, TH-65PY700MR)

☐ Clamper (2)



☐ Operating Instructions

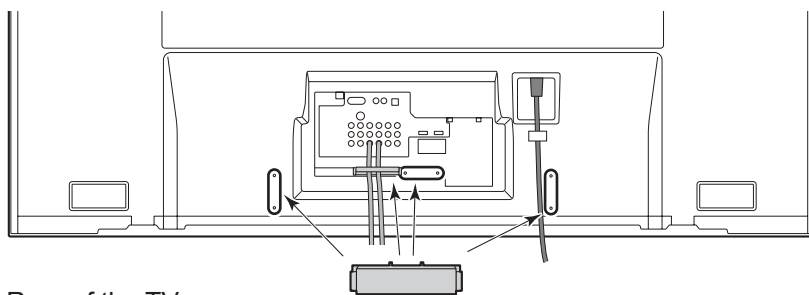
Installing remote's batteries



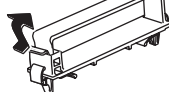
Caution

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

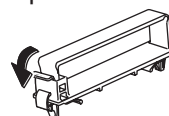
Using the clamper



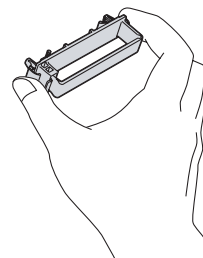
Snap open



Snap shut



Remove from the TV



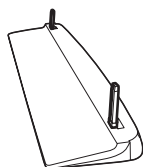
Push both side hooks and pull out

- 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

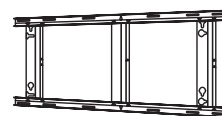
Pedestal

● TY-ST65R2-WG



Wall-hanging bracket (vertical)

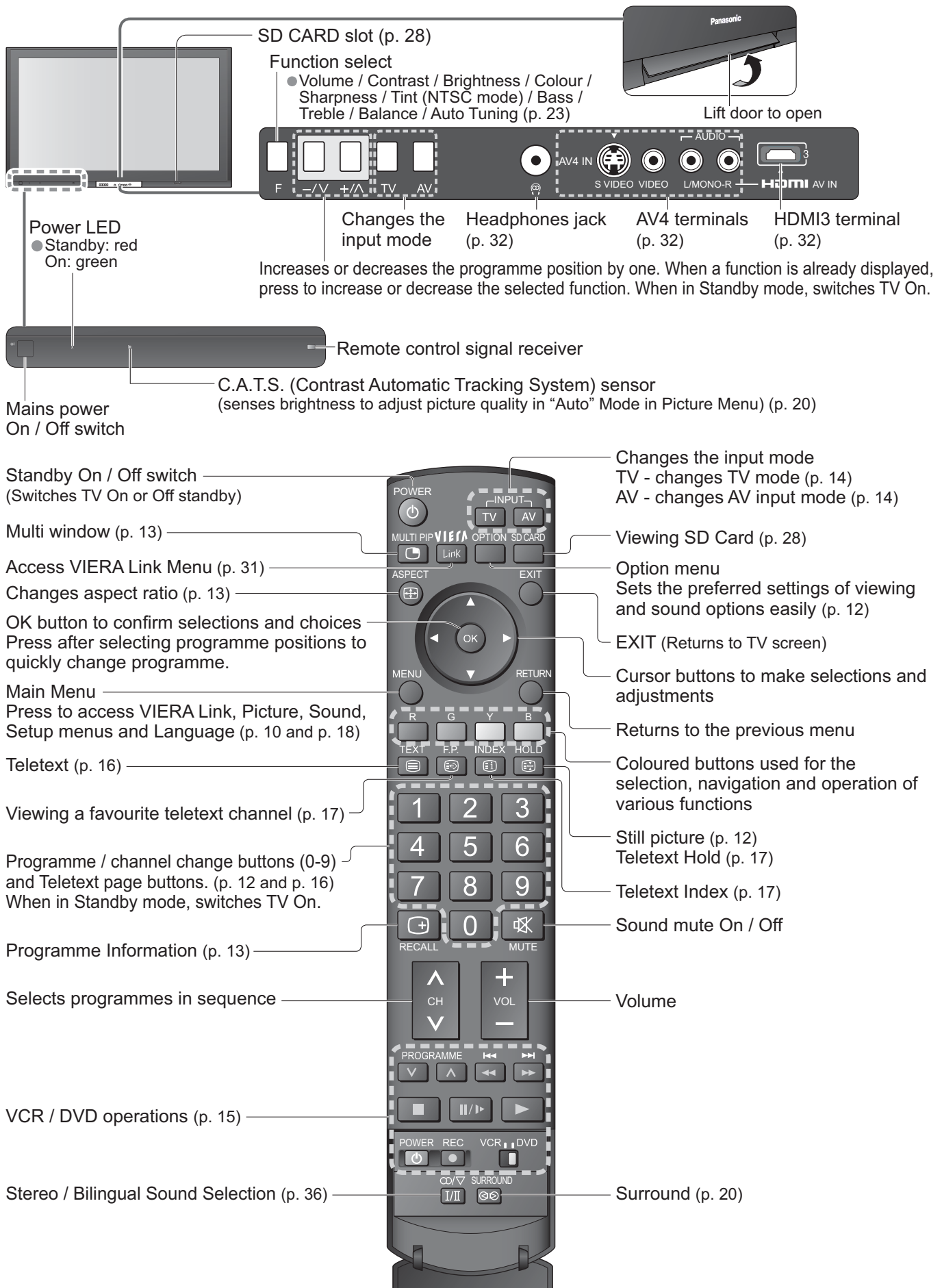
● TY-WK65PV7



Caution

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

Identifying Controls



Basic Connection

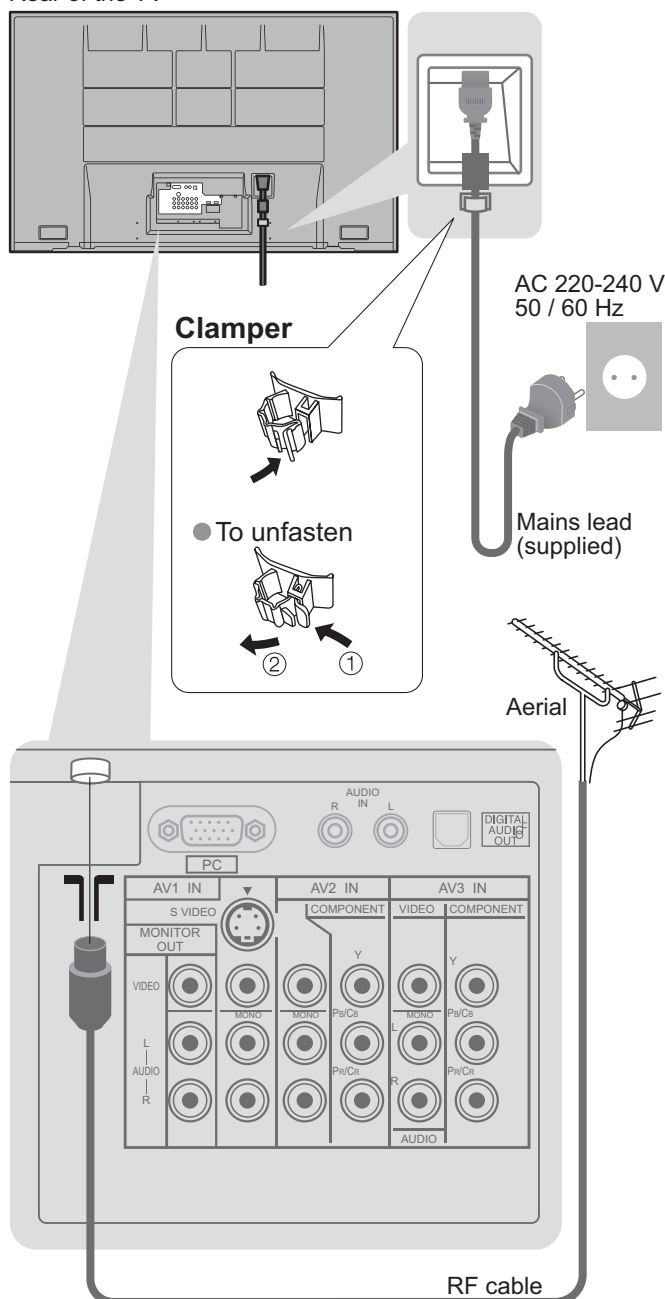
External equipment and cables shown are not supplied with this TV.

Please ensure that the unit is disconnected from the mains socket before attaching or disconnecting any leads. When disconnecting the mains lead, be absolutely sure to disconnect the mains plug at the socket outlet first.

Example 1 Connecting aerial

TV only

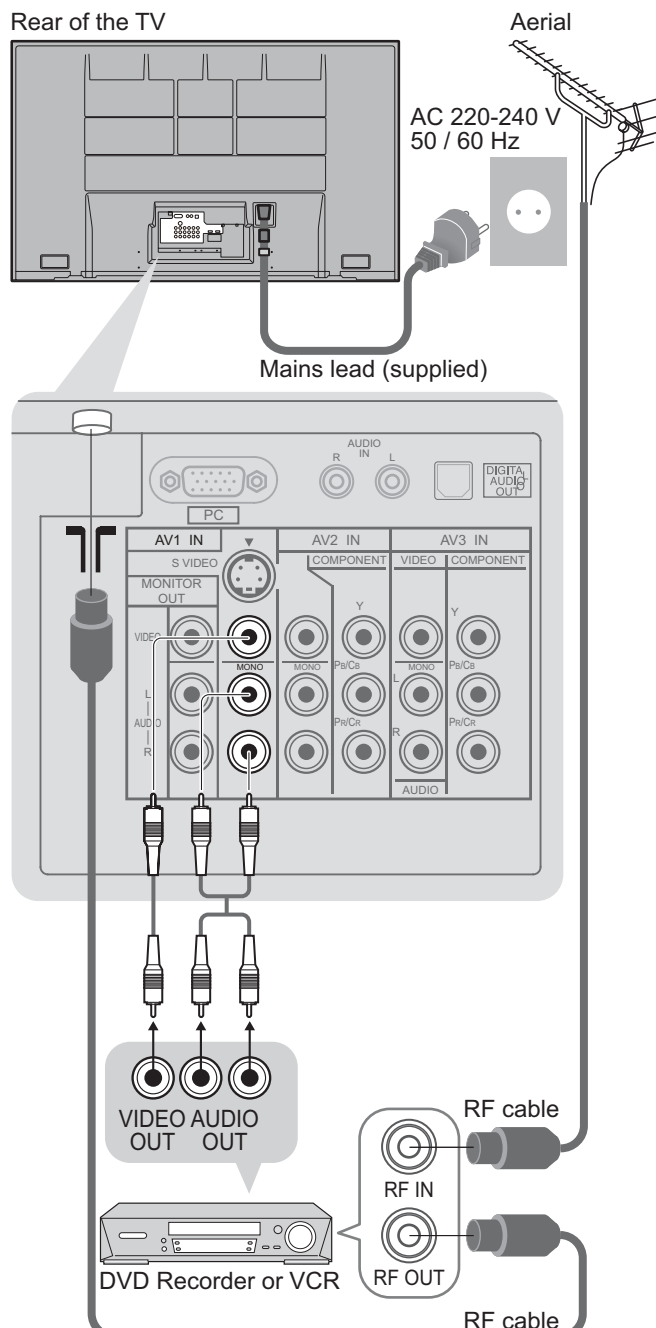
Rear of the TV



Example 2 Connecting DVD Recorder / VCR

TV, DVD Recorder or VCR

Rear of the TV



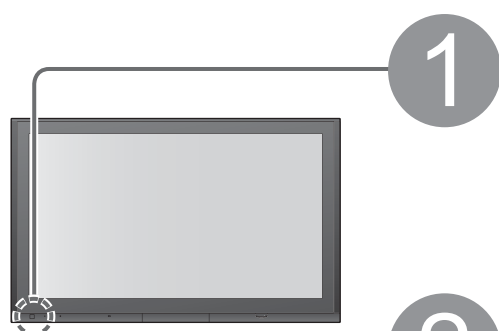
Note

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

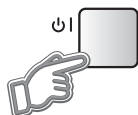
Auto Tuning

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)

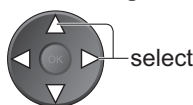


- You can now use the remote control to turn On the TV or turn the TV to standby mode.
(Power LED: On)



2

Select your system



System Selection	
China	E.Europe
HK/UK	SPECL Ver
Asia/M.East	America
NZ/INDONES	CATV
Australia	Japan

System Selection	REGION
China	China
HK/UK	Hong Kong, United Kingdom
Asia/M.East	Malaysia, Singapore, Thailand, Asia countries, Kuwait, Saudi Arabia, United Arab Emirates, Middle East countries, etc.
NZ/INDONES	New Zealand, Indonesia, etc.
Australia	Australia
E.Europe	CIS, Poland, etc.
SPECL Ver	South Africa
America	USA, Chile, Mexico, Panama, Peru, Philippines, Taiwan, Venezuela, etc.
CATV	USA CATV
Japan	Japan

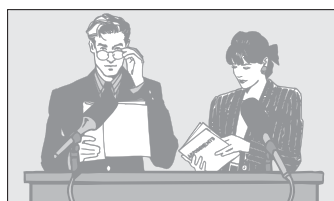
3

Start Auto Tuning



- Auto Tuning will start to search for TV channels and store them. The TV memorises the channels tuned in order from programme number 1. The sorted programme order depends upon the TV signal, the broadcasting system and reception conditions.

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



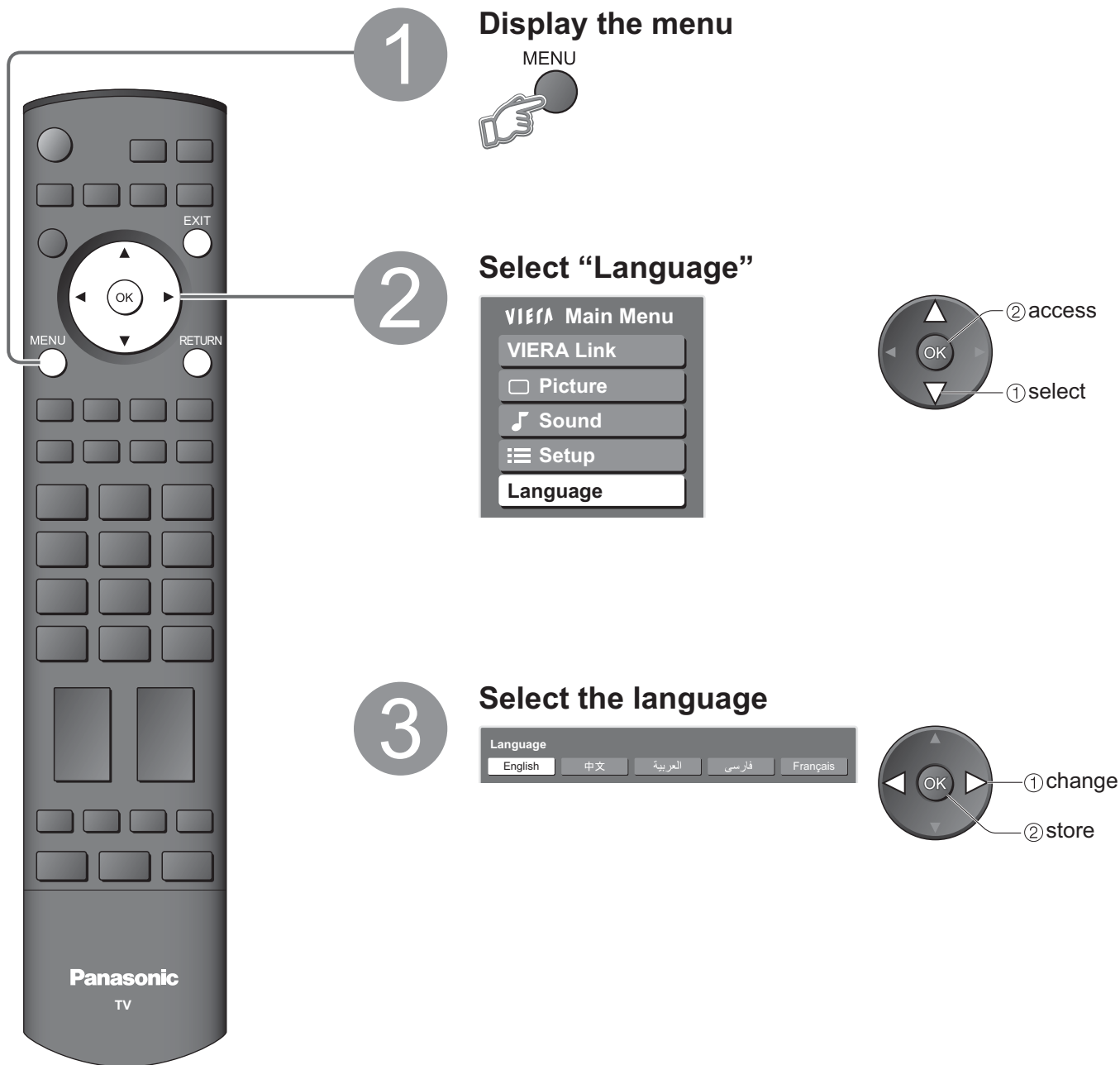
- To edit channels
➡ Editing and Setting Channels (p. 22)

Note

- If tuning have failed ➡ "Auto Tuning" (p. 23).
- If you turned the TV Off during Standby mode last time, the TV will be in Standby mode when you turn the TV On with Mains power On / Off switch.

Language Setting

You can change language for on-screen displays.



Using the On Screen Displays

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

■ How to use remote control

MENU



Open the main menu



Move the cursor / select the menu



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



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

RETURN



Return to the previous menu

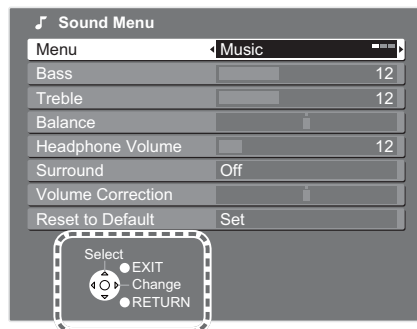
EXIT



Exit the menu system and return to the normal viewing screen

■ ON SCREEN HELP Instructions box

(example: Sound Menu)



On-screen operation guide will help you.

Watching TV

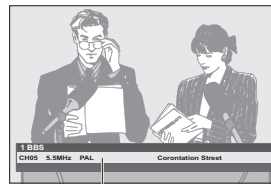
1

Turn power on

POWER



- Mains power On / Off switch should be On.



Information banner

2

Select a channel



up

CH

down

or



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

Volume

Other useful functions (Operate after ●)

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

Volume Correction

➔ Adjusts volume of individual channel or input mode

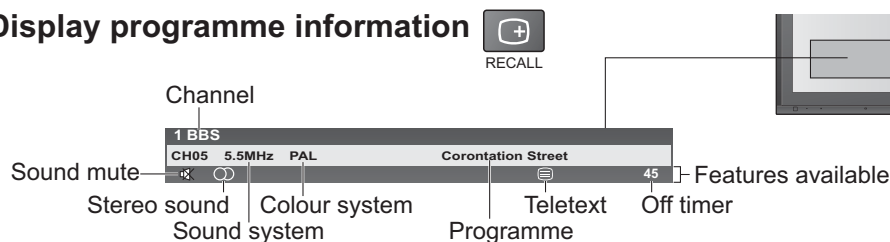
Note

- Also possible to change the settings in Menu list (p. 20 and p. 21).

Other useful functions (Operate after ●)

Display information banner

Display programme information



- To select another channel → [Up/Down Arrow] → 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

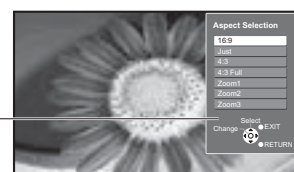
Change the aspect ratio (p. 35)

ASPECT

Enjoy viewing the picture at its optimum size and aspect.

Aspect Selection list

- To change the mode
 - ➔ Display Aspect Selection list → 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)



Watch TV, DVD, etc. in multi window

View in multi window (p. 36)

MULTI PIP

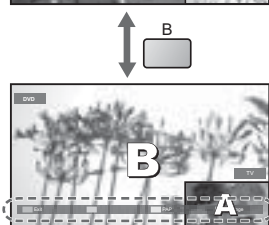
TH-65PY700MR (one tuner model)

Enjoy viewing two images at once, such as a TV programme and a DVD.

Other model (two tuners model)

Enjoy viewing two images at once, such as a TV program and a DVD, or one TV program and another TV program.

Picture-in-Picture mode (PIP)



Picture-and-Picture mode (PAP)



Main screen Sub screen

Exit: (TH-65PY700MR only)
Focus: (Other model)

- Remote control operations apply to the main screen.

Operations in multi window

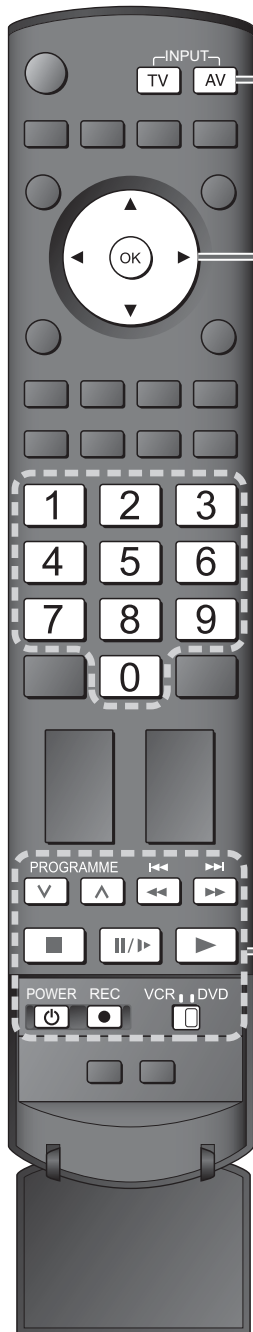
- To exit multi window (return to the single-screen view with main screen) → MULTI PIP
- To change the layout, images, first show the colour bar → RECALL
 - To change the layout → G Y
 - To swap → B
 - To exit multi window (TH-65PY700MR only) → R
 - To change the sub screen's channel (Other model) → R
 - To change the input mode or position of sub screen
 - ➔ Swap sub screen for main screen → B → Change the input mode or position by the remote control (p. 12 or p. 14) → Swap again → B

Watching Videos and DVDs

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

To connect the equipment (p. 8)

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



1 **Display the Input select menu**

AV

2 **Select the input mode connected to the equipment**

Input Selection

AV1
AV2
AV3
AV4
PC
HDMI1
HDMI2
HDMI3
TV

watch

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.
- You can label or skip each input modes ➔ "Input Labels" (p. 26)

3 **View**

Displays the selected mode

AV2










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.



To return to TV

TV

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

	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 Up / Down Select programme
	Record Start recording

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

- ① Set the VCR / DVD switch to the appropriate position → 
- 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.
- “DVD” means DVD player, DVD recorders and Recorder home theatre.
- Some operations may not be possible on some equipment models.

Viewing Teletext

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

What is FASTEXT mode?

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

What is 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)

1 Switch to Teletext

● Displays Index (content varies depending on the broadcasters)

TEXT

2 Select the page

1 2 3
4 5 6
7 8 9
0

or

up
down

or

R G Y B
(Corresponds to the colour bar)

■ **To adjust contrast** → MENU (Press twice) → [directional pad]

■ **To return to TV** → TEXT

Sub page number

Current page number

Time / date

TELETEXT INFORMATION

Colour bar

■ Using teletext conveniently

Reveal hidden data

FULL / TOP / BOTTOM

Reveal hidden words e.g. quiz page answers

MENU → R ● Re-hide → R

MENU → G

(TOP)

(Expand the TOP half)

→

(BOTTOM)

(Expand the BOTTOM half)

→

Normal (FULL)

HOLD

If you wish to hold the current page without updating

Stop or resume automatic updating

■ To resume

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

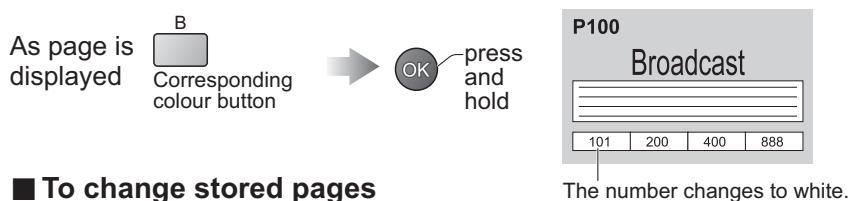
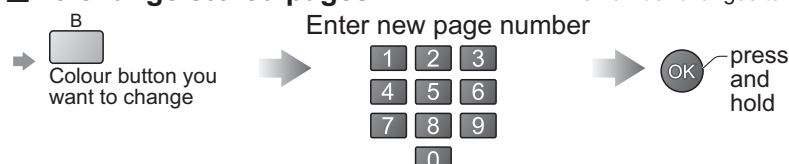
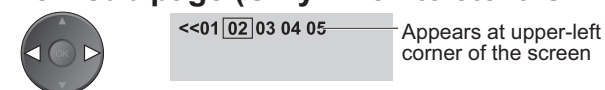
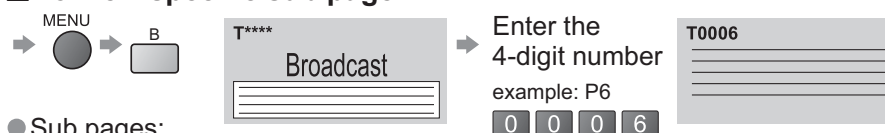
- Call up the page stored in “blue”.
- Factory setting is “P103”.

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

- Operations can be made only in Teletext screen.

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

(List mode only)

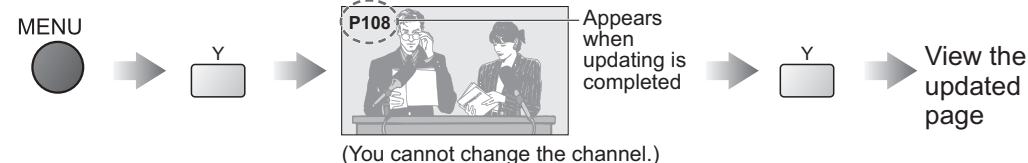
**■ To change stored pages****View sub page****View sub page (Only when teletext is more than one page)****■ To view specific sub page**

- 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



- 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

VIERA Main Menu
VIERA Link
☐ Picture
Sound
Setup
Language

(example: Picture Menu)

3 Select the item

☐ Picture Menu 1/2
Menu Auto
Contrast 30
Brightness 50
Colour 50
Sharpness 50
Tint
Colour Temperature Warm
CH Colour Set
Colour Management Off

(example: Picture Menu)

4 Adjust or select

☐ Picture Menu 1/2
Menu Auto
Contrast 30
Brightness 50
Colour 50
Sharpness 50
Tint
Colour Temperature Warm
CH Colour Set
Colour Management Off

(example: Picture Menu)

② access

① select

select

① change

② store or access (Required by some functions)

■ To return to TV at any time



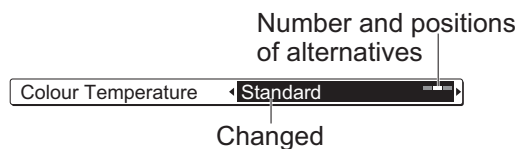
■ To return to the previous screen



Note

- To initialize all settings
→ "Shipping Condition" (p. 25)

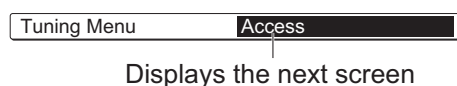
■ Choose from among alternatives



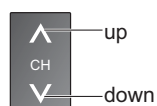
■ Adjust using the slide bar



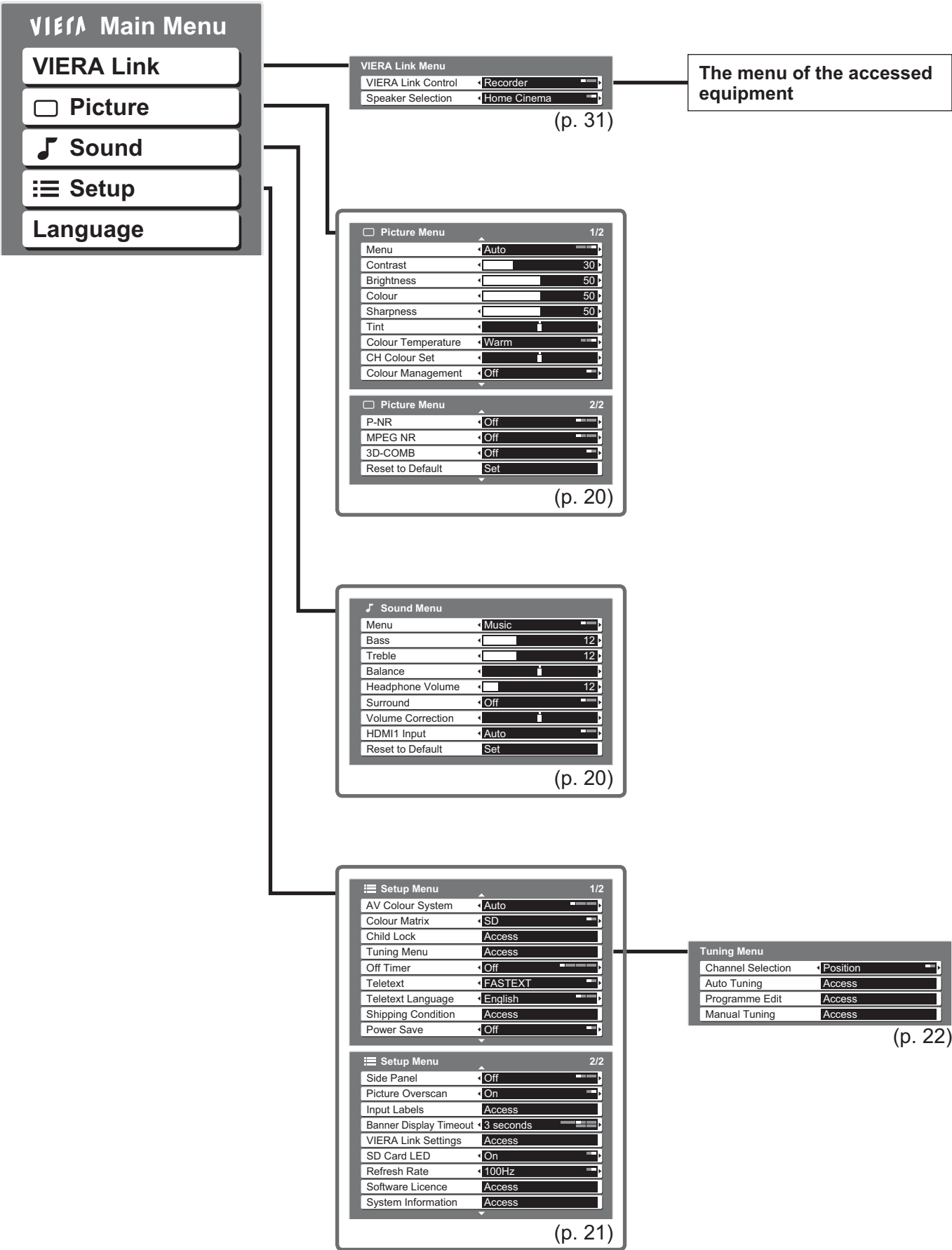
■ Go to the next screen



■ To change menu pages



Overview



● Only available items can be selected.

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

Advanced

How to Use Menu Functions

■ Menu list

Menu	Item	Adjustments / Configurations (alternatives)
VIERA Link	VIERA Link Control	Controls the connected Panasonic equipment “Easy control only with VIERA remote control” (p. 31) “Speaker control” (p. 31)
	Speaker Selection	● You can also access VIERA Link Menu directly using the VIERA Link button on the remote control.
Picture	Menu	Basic picture mode (Dynamic / Standard / Cinema / Auto) ● Set for each input signal
	Contrast, Brightness, Colour, Sharpness	Adjusts colour, brightness, etc. for each picture mode to suit your taste
	Tint	Adjusts tint of image ● For NTSC signal reception only
	Colour Temperature	Chooses the colour balance of the entire image (Cool / Standard / Warm)
	CH Colour Set	Colour density varying between broadcast channels can be adjusted to three levels for each reception channel ● Select the channel you want to adjust and set this function
	Colour Management	Automatically adjusts colours to vivid ones (Off / On) ● Not valid on PC signal
	P-NR	Picture Noise Reduction Automatically reduces unwanted picture noise (Off / Weak / Strong / Auto) ● Not valid on component, HDMI or PC signal
	MPEG NR	Automatically reduces picture noise of digital signals and flicker noise in the contoured parts of a picture (Off / Weak / Mid / Strong) ● Not valid on PC signal
	3D-COMB	Automatically makes still pictures and slow pictures look more vivid (Off / On) ● For PAL or NTSC signal reception only ● Not valid on S-Video, components, PC, HDMI and SD Card
	Reset to Default	Press the OK button to reset the present Picture Menu to the default settings
Sound	Menu	Basic sound mode (Music / News / Cinema) ● Set for each input signal
	Bass	Adjusts the output level of deep bass
	Treble	Adjusts the output level of high-pitch, shrill sound
	Balance	Adjusts volume level of right and left speakers
	Headphone Volume	Adjusts the volume of the headphones
	Surround	Surround sound settings (Off / Simulated Surround / SRS TruSurround XT) Simulated Surround: Provides a dynamic enhancer to simulate improved spatial effects SRS TruSurround XT: SRS TruSurround XT® creates a high quality surround sound effect using just two speakers from the source which can output surround encoded signals ● Switching is also possible by the Surround button on the remote control (p. 7)
	Volume Correction	Adjusts volume of individual channel or input mode
	HDMI1/3 Input	Select to fit the input signal (Auto / Digital / Analogue) (p. 37) Auto : Automatic detection of digital or analogue sound source Digital : HDMI cable connection Analogue : HDMI-DVI adapter cable connection ● HDMI input mode only ● HDMI2 terminal is for digital signal only ● No setting for HDMI2 available
	Reset to Default	Press the OK button to reset the present Sound Menu to the default settings

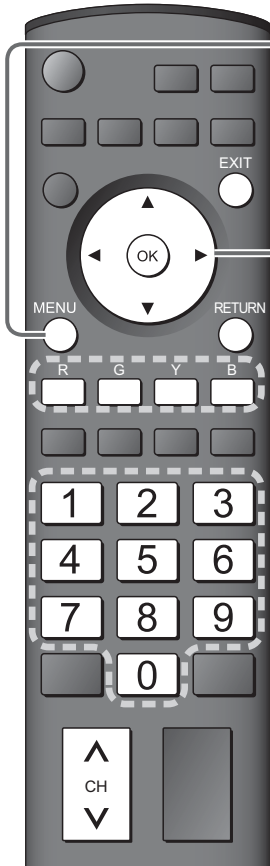

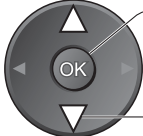
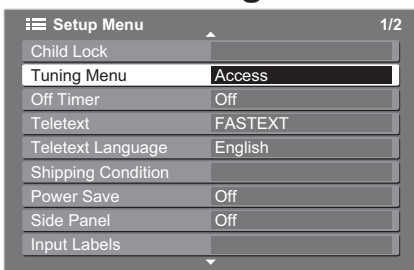

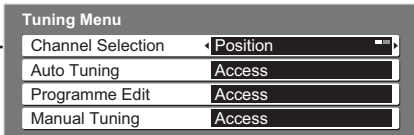

Menu list


Menu	Item	Adjustments / Configurations (alternatives)
Setup	AV Colour System	Selects optional colour system based on video signals in AV mode (Auto / PAL / SECAM / NTSC4.43 / NTSC3.58)
	Colour Matrix	Available only with 480p or 576p input signals in a natural colour from digital equipment connected to AV2 / AV3 Component or HDMI1 / HDMI2 terminals Select SD or HD to adjust suitable colour parameters for SD (standard definition) or HD (high definition) ● SD: Input signal is a normal TV system ● HD: Input signal is a High-Definition system
	Child Lock	Locks a programme channel to prevent access to it (p. 24)
	Tuning Menu	Channel Selection
		Auto Tuning
		Programme Edit
		Manual Tuning
	Off Timer	Sets the time the TV automatically turns Off (Off / 15 / 30 / 45 / 60 / 75 / 90 minutes)
	Teletext	Teletext display mode (FASTEXT / List) (p. 16)
	Teletext Language	Selects teletext language (English / CIS / E.Europe / Persian)
	Shipping Condition	Resets all settings, for example, when moving house (p. 25)
	Power Save	Reduces brightness of picture to economise on power consumption (Off / On)
	Side Panel	Increases the brightness of the side panel (Off / Low / Mid / High) ● The recommended setting is "High" to prevent panel "image retention"
	Picture Overscan	Selects the screen area displaying the image (Off / On) On : Enlarged the image to hide the edge of the image. Off : Displayed the image in the original size. ● Set to "On" if noise is generated on the edge of the screen. ● This function is available when aspect is set to 16:9. ● 1080i or 1080p signal only
	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 Settings	VIERA Link
		Power off Link
		Power on Link
	SD Card LED	Lights blue LED while SD Card is inserted (Off / On) (p. 29)
	Refresh Rate	Changes the image processing of the panel (depending on the input signal) (50Hz / 100Hz) ● Set to "100Hz" normally
	Software Licence	Displays the software licence information
	System Information	Displays the system information of this TV

- A different menu will be displayed while PC or SD Card is used. (p. 27 and p. 29)
- Only available items can be selected.

Editing and Setting Channels

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

- 1 Display the menu**

- 2 Select "Setup"**


- 3 Select "Tuning Menu"**


- 4 Select a function**


- 5 Set**

To return to TV


Channel Selection

Position

Example

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

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

Direct

Example

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

When Channel Selection is on Direct, and Auto Tuning is performed, the TV memorises the Programme Number which is the same as the channel tuned. The Channel Display numbers for the broadcast stations in each region are listed on p. 34.

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 Tuning.

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



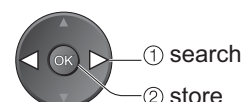
Select the programme position



Select the channel



Search and store



Set channels automatically

Auto Tuning

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

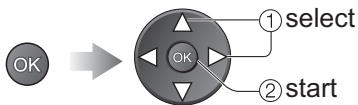
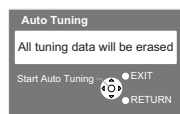
① Select the channel selection method (Position / Direct)

➔ "Channel Selection" (p. 22)

② Start Auto Tuning

Access "Auto Tuning" Select your system

Settings are made automatically



System Selection	REGION
China	China
HK/UK	Hong Kong, United Kingdom
Asia/M.East	Malaysia, Singapore, Thailand, Asia countries, Kuwait, Saudi Arabia, United Arab Emirates, Middle East countries, etc.
NZ/INDONES	New Zealand, Indonesia, etc.
Australia	Australia
E.Europe	CIS, Poland, etc.
SPECL Ver	South Africa
America	USA, Chile, Mexico, Panama, Peru, Philippines, Taiwan, Venezuela, etc.
CATV	USA CATV
Japan	Japan

- All previous settings are erased.
- When the operation is completed, the broadcast of programme number "1" will appear.
- If tuning has not done completely ➔ "Manual Tuning" (p. 22)

For Auto Tuning, using the buttons on the front of the TV

① Press repeatedly until "Auto Tuning" appears ➔

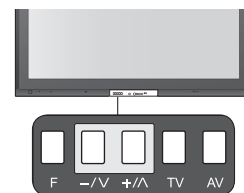
② Access "Auto Tuning" ➔ (twice)

③ Select your system ➔ or

④ Start "Auto Tuning" ➔

■ To return to TV ➔

- Not available when Child Lock is set (p. 24)



Edit the programme position settings

① Select the channel to edit

Prog.	Chan.	Name	Sound Sys.	Colour Sys.	Skip
1	CH33	1 2 3	5.5MHz	Auto	Off
2	CH21	X Y Z	5.5MHz	Auto	Off
3	CH21	F T P	5.5MHz	Auto	Off
4	CH60	*****	5.5MHz	Auto	Off
5	CH21	4 5 6	5.5MHz	Auto	Off

Cursor



Name
Channel

3 FTP	CH05	5.5MHz	PAL	Coronation Street
-------	------	--------	-----	-------------------

② Edit

■ To delete ➔
➔ After confirming, press

■ To add ➔
➔ After confirming, press

■ To move ➔
➔ Select new position ➔

■ To change sound system based on signals

- If the sound is weak or distorted, change the sound system used for a programme channel.

Prog.	Chan.	Name	Sound Sys.	Colour Sys.	Skip
1	CH33	1 2 3	5.5MHz	Auto	Off
2	CH21	X Y Z	5.5MHz	Auto	Off
3	CH21	F T P	5.5MHz	Auto	Off
4	CH60	*****	5.5MHz	Auto	Off
5	CH21	4 5 6	5.5MHz	Auto	Off

Select the "Sound Sys." field

Select sound system

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

Prog.	Chan.	Name	Sound Sys.	Colour Sys.	Skip
1	CH33	1 2 3	5.5MHz	Auto	Off
2	CH21	X Y Z	5.5MHz	Auto	Off
3	CH21	F T P	5.5MHz	Auto	Off
4	CH60	*****	5.5MHz	Auto	Off
5	CH21	4 5 6	5.5MHz	Auto	Off

(Maximum: five characters)

- Select the "Name" field
- Enter the "User Input" mode
- Select the character
- Set
- Store

■ To change colour system based on signal

- Normally, select "Auto"

Prog.	Chan.	Name	Sound Sys.	Colour Sys.	Skip
1	CH33	1 2 3	5.5MHz	Auto	Off
2	CH21	X Y Z	5.5MHz	Auto	Off
3	CH21	F T P	5.5MHz	Auto	Off
4	CH60	*****	5.5MHz	Auto	Off
5	CH21	4 5 6	5.5MHz	Auto	Off

- Select the "Colour Sys." field
- Select colour system

■ To skip the channel

- This function is only effective when pressing the Programme Up / Down button on the TV or the remote control.

Prog.	Chan.	Name	Sound Sys.	Colour Sys.	Skip
1	CH33	1 2 3	5.5MHz	Auto	Off
2	CH21	X Y Z	5.5MHz	Auto	Off
3	CH21	F T P	5.5MHz	Auto	Off
4	CH60	*****	5.5MHz	Auto	Off
5	CH21	4 5 6	5.5MHz	Auto	Off

- Select the "Skip" field
- Select "On"

Edit channels

Programme Edit

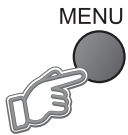
- Delete
- Add
- Move
- Change name
- Change sound system
- Change colour system
- Skip

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.)

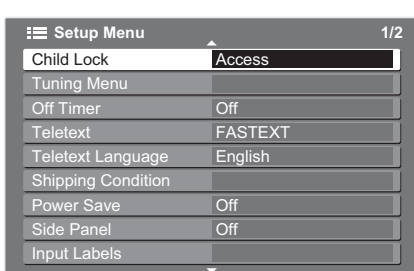
1

Display the menu



2

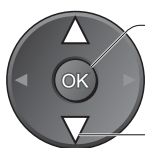
Select "Setup"


3

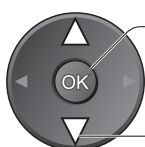
Select "Child Lock"


4

Set




② access
① select



② access
① select

■ To return to TV



Control
channel
audience
Child Lock

① Enter the PIN number (4 digits)

Child Lock-PIN Entry

Please enter new PIN

PIN

1

2

3

4

5

6

7

8

9

0

● Enter the PIN number twice at first setting.

● Make a note of the PIN number in case you forget it.

② Select "Service List"

Child Lock

Change PIN

Service List Access

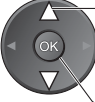


② access
① select

③ Select the channel to be locked

Child Lock Service List

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



① select
② set

Appears when the channel is locked

● To cancel

➡ Select the locked channel



● To lock all channels ➡

● To cancel all channel locks ➡

■ To change the PIN number

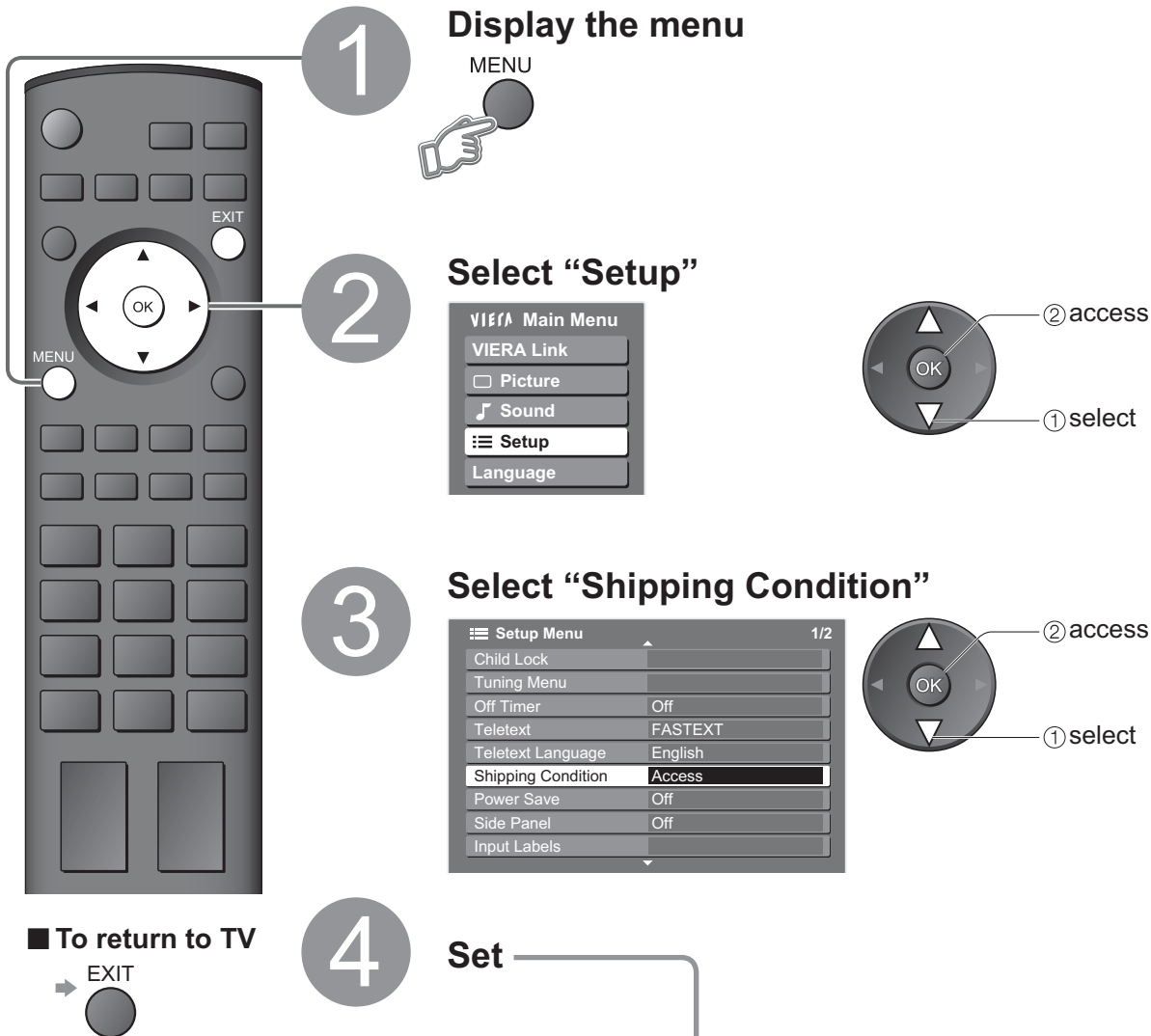
Select "Change PIN" in ② and enter a new PIN number twice.

Note

● Setting "Shipping Condition" (p. 25) erases the PIN number and all settings.

Restore Settings

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



Restore Settings

Shipping Condition

① Check the message and initialise

Shipping Condition

All tuning data will be erased
Are you sure?
Are you sure?

Confirm: **EXIT**
RETURN

② Follow the on-screen instructions

- "Auto Tuning" will automatically start. (p. 9)

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

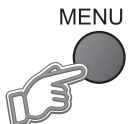
➔ "Auto Tuning" (p. 23)

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)


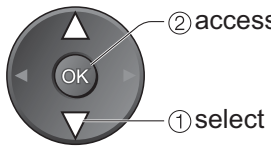
1

Display the menu



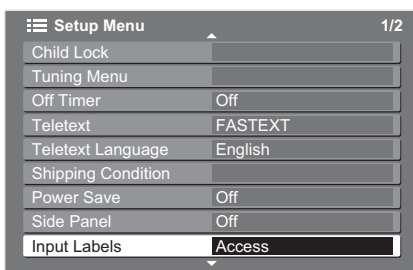
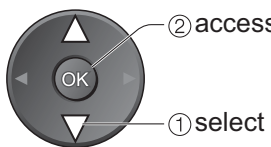
2

Select "Setup"

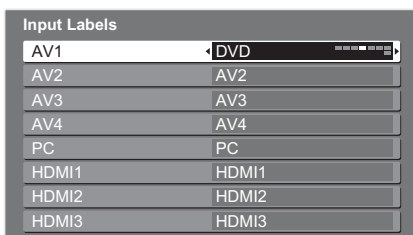
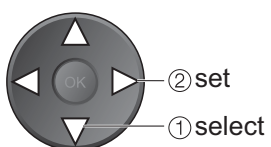
3

Select "Input Labels"


4

Select an input terminal and set

■ To return to TV

➔ EXIT



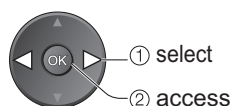
The labels you set will be displayed in "Input Selection" menu (p. 14) or banner.

● If "Skip" is selected, you cannot select the mode.

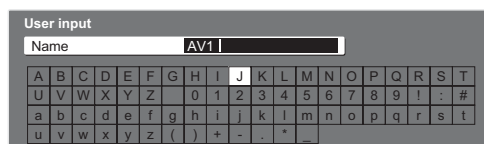
■ User input

You can name each input terminals freely.

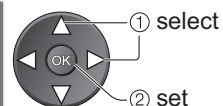
Select "User input"



Set characters



(maximum: ten characters)




Store
RETURN



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



2

Select "PC"

Input Selection

AV1

AV2

AV3

AV4


PC

HDMI1

HDMI2

HDMI3

TV



② access

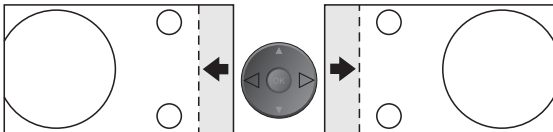
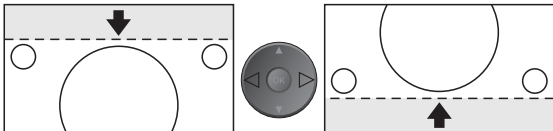
① select

● Corresponding signals (p. 38)

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

■ To return to TV
→ 

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

Menu	Item		Adjustments / Configurations (options)	
Picture	Advanced PC Settings	W/B High R	White balance of bright red area	<div><div></div>①</div> <div><div></div>②</div> <div>① and ② repeatedly adjusted</div>
		W/B High B	White balance of bright blue area	
		W/B Low R	White balance of dark red area	
		W/B Low B	White balance of dark blue area	
		Gamma	(2.0 / 2.2 / 2.5 / S Curve)	
		Reset to Default	Press the OK button to reset to the default 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 settings	

● Other items → p. 20 and p. 21

Viewing from SD Card

Photo View: The still images recorded by the digital camera can be displayed.

Movie View: The moving pictures recorded by the digital video camera can be played back.



1

Insert the SD Card

2

Select "Photo View" or "Movie View"



3

Select the file to be viewed

Photo View

Selected photo (images that could not be loaded, etc.)

Selected photo information is displayed (Thumbnail screen)

● Slide show → **R** (p. 29)

Movie View

Recording format Selected movie

(List screen)

4

View

Photo View

Display one at a time
To display / hide the operation guide

→ **RECALL** or **OPTION**

Operation guide

● To return to thumbnail screen → **RETURN**

Movie View

Playback will start
To display the operation guide

→ **R** **G** **Y** **B** or **OPTION**

● To hide the operation guide → **RETURN**

Operation guide

● To previous movie → **R**

● To next movie → **G**

● To return to list screen → **OPTION** (stop)

● To display information banner → **RECALL**

● To change aspect ratio (only for the 4:3 movie content) → **ASPECT**

To return to TV



Caution

- Signal output from all AV terminals will be disabled during SD Card operations. But the sound in Movie View can be output from AUDIO out and DIGITAL AUDIO OUT terminals.
- "Date" shows the date on which the recording was made by the digital camera or digital video camera. It shows "****/**/****" when recordings are made without date signal.

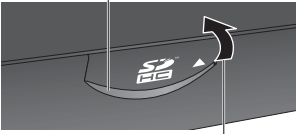
(Photos and Movies)

SD Card

● For details on SD Cards (p. 37)


■ To open

Blue LED



Open the cover


■ To insert



Label surface

Push until a click is heard

■ To remove



Press the centre of the card


● Blue LED lights while SD Card is inserted if set "SD Card LED" to "On" in Setup Menu (p. 21).


Slide show (Photo View)

■ Start Slide show (operate in step ● or ●)

① Select the photo for the first view

② Start Slide show



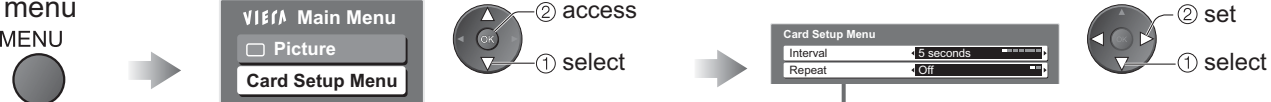
● To pause → 

■ Slide show settings (operate in step ● or ●)

① Display the menu

② Select "Card Setup Menu"

③ Select the functions and set



● "Picture Menu" (p. 20)

Menu	Item	Adjustments / Configurations (alternatives)
Card Setup Menu	Interval	Select slide show interval (5 / 10 / 15 / 30 / 60 / 90 / 120 seconds)
	Repeat	Slide show repeat (Off / On)

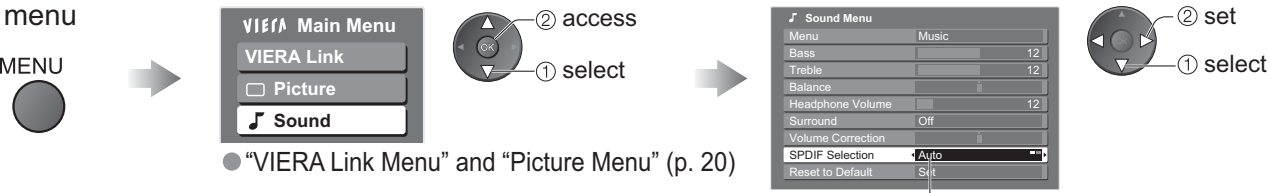
Audio Settings (Movie View)

■ Audio output settings (operate in step ● or ●)

① Display the menu

② Select "Sound"

③ Select "SPDIF Selection" and set



● "VIERA Link Menu" and "Picture Menu" (p. 20)

SPDIF : A standard audio transfer file format
Selects the initial setting for digital audio output signal from DIGITAL AUDIO OUT terminal (Auto / PCM)
Auto: Dolby Digital is output as Dolby Digital Bitstream. MPEG is output as PCM.
PCM: Dolby Digital is output as PCM. MPEG is output as PCM.

On screen messages

Message	Meaning / Action
Is SD Card in?	● Insert a SD card.
No valid file to play	● The card has no data.
Cannot read file	● The file is broken or unreadable. ● The TV does not support the format. (For the applicable formats and data, see p. 37.)
This operation is not possible	● Your operation is not available.
Confirm SD card	● The inserted SD card has a problem.

VIERA Link “HDAVI Control™”*

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

Connections to some Panasonic equipment (DVD Recorder DIGA, HD Video Camera, Player theatre, 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.

■ 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

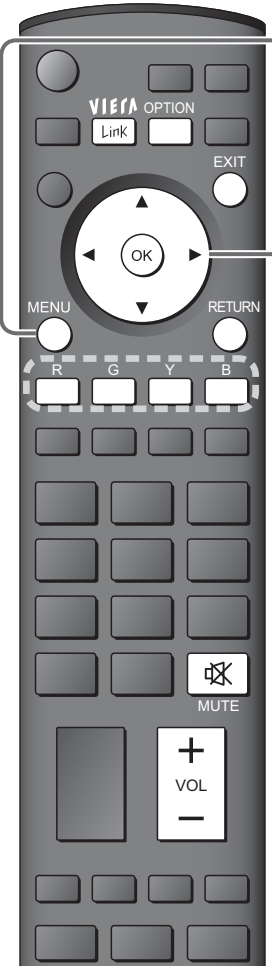
Setup the equipment to enable this function. Read the manuals of the equipment.

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, HDMI2 or HDMI3 (p. 14), and make sure that an image is displayed correctly.


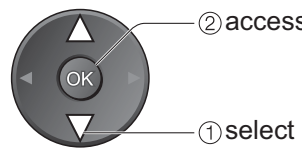


1 Display the menu

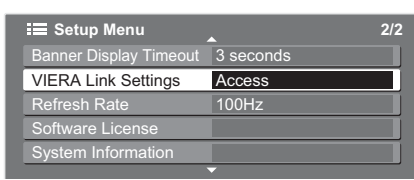
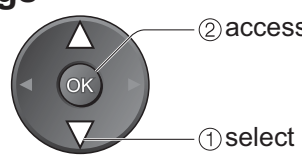
MENU



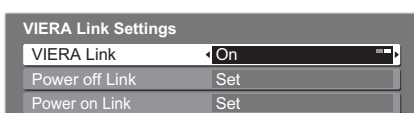
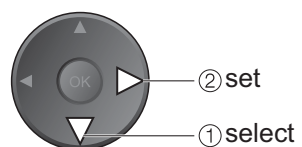
2 Select “Setup”

3 Select “VIERA Link Settings”

4 Select “VIERA Link” and set to “On”

Easy control only with VIERA remote control

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 the menu of the equipment

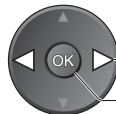
- ① Display "VIERA Link Menu" → 

- ② Select "VIERA Link Control"



select

- ③ Select the equipment you want to access


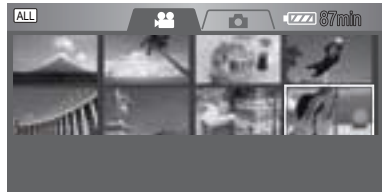
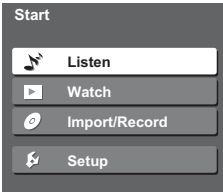


① select

② access








- ④ Operate the menu of the equipment

- Example:

DVD Recorder DIGA	HD Video Camera	Player theatre
		

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

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

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

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 not returned.

Speaker control

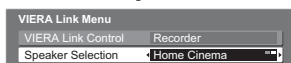
You can control the theatre speaker with TV's remote control.

This function is available when Panasonic Player theatre is connected.

- If you cannot access the menu, check the settings and the equipment (p. 30).

- ① Display "VIERA Link Menu" → 

- ② Select "Speaker Selection"



select


- ③ Set to "Home Cinema" or "TV"



set

■ Home Cinema

Adjustment for equipment (automatically turned on if it is in Standby mode).

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.

Power on Link

Set to "Set"

- ➔ 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

Set to "Set"

- ➔ 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.

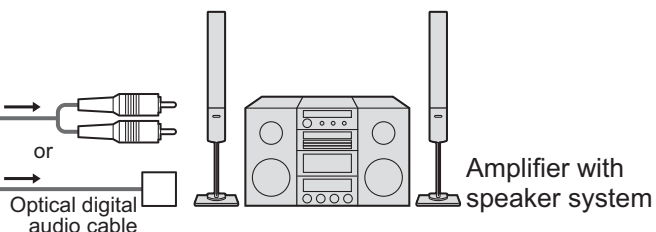
- The TV remains on even if the "VIERA Link" compatible equipment is turned off.

To watch satellite broadcasts

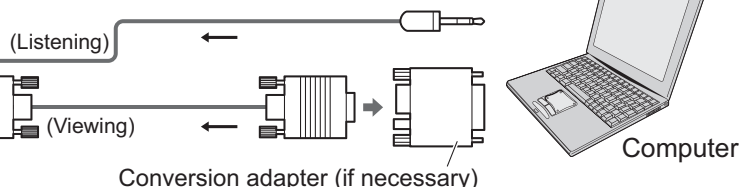
Set top box

Fully wired HDMI compliant cable

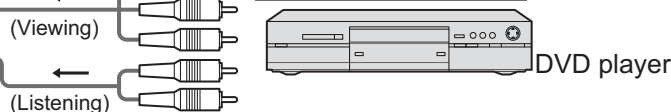
To listen with speakers



PC

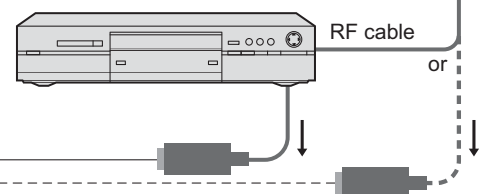


To watch DVDs



To record / playback

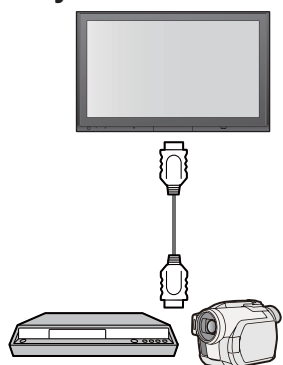
DVD Recorder / VCR



VIERA Link (p. 30)

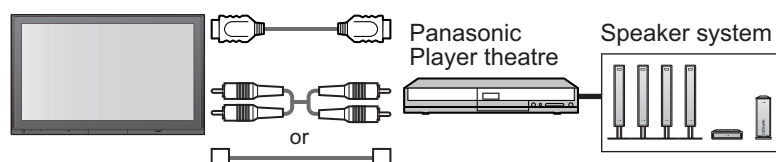
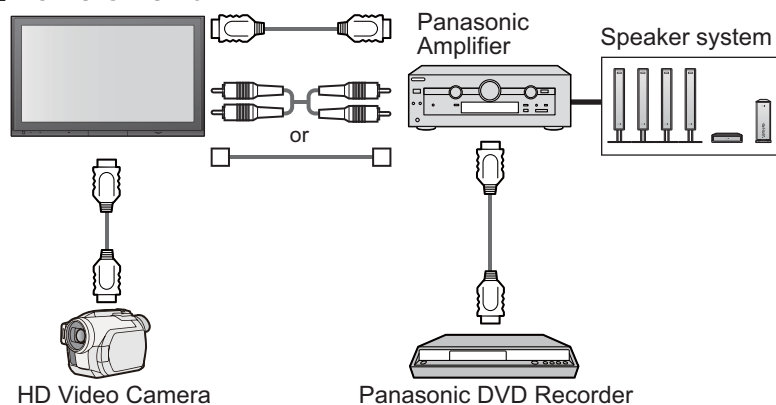
- Use fully wired HDMI compliant cable.
- Read the manuals of the equipment too.

Easy playback, Easy control only with VIERA remote control

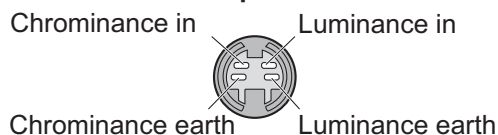


Panasonic DVD Recorder, HD Video Camera, etc.

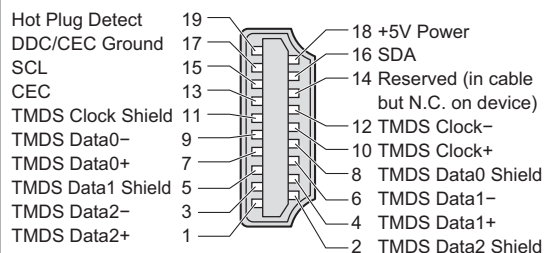
Home Cinema



S VIDEO 4 pin terminal



HDMI terminal



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

Technical Information

Channel Allocation

System Selection	China	HK/UK	Asia/M.East	NZ/INDONES	Australia	E.Europe	SPECL Ver	America	CATV	Japan
CH DISPLAY	RECEIVE CHANNEL									
0	—	—	—	—	—	—	—	—	—	—
1	1	—	—	1	0	1	1	—	1	1
2	2	—	2	2	1	2	2	2	2	2
3	⋮	—	⋮	⋮	2	⋮	⋮	⋮	⋮	⋮
4	⋮	—	⋮	⋮	3	⋮	⋮	⋮	⋮	⋮
5	⋮	—	⋮	⋮	4	⋮	⋮	⋮	⋮	⋮
6	⋮	—	⋮	⋮	5	⋮	⋮	⋮	⋮	⋮
7	⋮	—	⋮	⋮	S2	⋮	⋮	⋮	⋮	⋮
⋮	⋮	—	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
11	⋮	—	11	11	⋮	11	11	⋮	⋮	⋮
12	12	—	12	—	⋮	12	12	⋮	⋮	12
13	13	—	—	—	⋮	—	13	13	⋮	13
14	⋮	—	—	—	⋮	—	—	⋮	⋮	⋮
15	⋮	—	—	—	S10	—	—	⋮	⋮	⋮
16	⋮	—	—	—	6	—	—	⋮	⋮	⋮
⋮	⋮	—	—	—	⋮	—	—	⋮	⋮	⋮
19	⋮	—	—	—	9	—	—	⋮	⋮	⋮
20	⋮	—	—	—	9A	—	—	⋮	⋮	⋮
21	⋮	21	21	21	10	21	21	⋮	⋮	⋮
22	⋮	⋮	⋮	⋮	11	⋮	⋮	⋮	⋮	⋮
23	⋮	⋮	⋮	⋮	12	⋮	⋮	⋮	⋮	⋮
24	⋮	⋮	⋮	⋮	S11	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
28	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
57	57	⋮	⋮	⋮	S44	⋮	⋮	⋮	⋮	⋮
58	—	⋮	⋮	⋮	20	⋮	⋮	⋮	⋮	⋮
59	—	⋮	⋮	⋮	21	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
62	—	62	62	62	⋮	62	62	62	62	62
63	—	63	63	63	⋮	63	63	63	63	C13
⋮	—	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
69	—	69	69	69	⋮	69	69	69	⋮	⋮
70	—	—	—	—	⋮	—	—	—	⋮	⋮
⋮	—	—	—	—	⋮	—	—	—	⋮	⋮
73	—	—	—	—	⋮	—	—	—	⋮	⋮
74	—	S'1	S'1	S'1	⋮	S'1	S'1	—	⋮	⋮
75	—	S'2	S'2	S'2	⋮	—	S'2	—	⋮	⋮
76	—	S'3	S'3	S'3	⋮	—	S'3	—	⋮	⋮
77	—	—	—	—	⋮	—	—	—	⋮	⋮
78	—	—	—	—	⋮	—	—	—	⋮	⋮
79	—	—	—	—	⋮	—	—	—	⋮	⋮
80	—	S1	S1	S1	⋮	S1	S1	—	⋮	⋮
81	Z1	S2	S2	S2	⋮	S2	S2	—	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
89	Z9	S10	S10	S10	⋮	S10	S10	—	⋮	⋮
90	Z10	S11	S11	S11	⋮	S11	—	—	⋮	⋮
91	Z11	S12	S12	S12	⋮	S12	—	—	⋮	⋮
92	Z12	S13	S13	S13	⋮	S13	—	—	⋮	⋮
93	Z13	S14	S14	S14	⋮	S14	S14	—	⋮	⋮
94	Z14	S15	S15	S15	⋮	S15	S15	—	⋮	⋮
95	Z15	S16	S16	S16	⋮	S16	S16	—	⋮	⋮
96	Z16	S17	S17	S17	⋮	S17	S17	—	⋮	⋮
97	Z17	S18	S18	S18	⋮	S18	S18	—	⋮	⋮
98	Z18	S19	S19	S19	⋮	S19	S19	—	⋮	⋮
99	Z19	S20	S20	S20	⋮	S20	S20	—	99	C49
100	Z20	S21	S21	S21	⋮	S21	S21	—	100	—
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
107	⋮	⋮	⋮	⋮	69	⋮	⋮	—	⋮	—
⋮	⋮	⋮	⋮	⋮	—	⋮	⋮	—	⋮	—
117	Z37	⋮	⋮	⋮	—	⋮	⋮	—	⋮	—
118	—	⋮	⋮	⋮	—	⋮	⋮	—	⋮	—
⋮	—	⋮	⋮	⋮	—	⋮	⋮	—	⋮	—
120	—	S41	S41	S41	—	S41	S41	—	⋮	—
⋮	—	—	—	—	—	—	—	—	⋮	—
125	—	—	—	—	—	—	—	—	125	—

Aspect Ratio

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

Signal name		Aspect modes						
		16:9	Just	4:3	4:3 Full	Zoom1	Zoom2	Zoom3
TV/AV1/AV2/AV3/AV4	PAL	○	○	○	—	○	○	○
	PAL 525/60	○	○	○	—	○	○	○
	NTSC 3.58	○	○	○	—	○	○	○
	NTSC 4.43	○	○	○	—	○	○	○
Component/HDMI	525(480)/60i	○	○	○	—	○	○	○
	525(480)/60p	○	○	○	—	○	○	○
	625(576)/50i	○	○	○	—	○	○	○
	625(576)/50p	○	○	○	—	○	○	○
	750(720)/50p	○	○	○	○	○	○	○
	750(720)/60p	○	○	○	○	○	○	○
	1125(1080)/50i	○	○	○	○	○	○	○
	1125(1080)/60i	○	○	○	○	○	○	○
	1125(1080)/50p	○	○	○	○	○	○	○
	1125(1080)/60p	○	○	○	○	○	○	○
PC input		○	—	○	—	—	—	—

Note

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

16:9



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

Just



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

4:3



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

4:3 Full



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

Zoom1



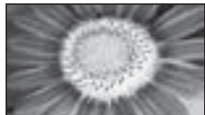
Displays a “16:9” letterbox or “4:3” image without distortion.

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).

Technical Information

Multi Window

You can watch two images at once. (p. 13)

- The same input mode cannot be displayed at once. (TH-65PY700MR only)
- The sound is active for main screen only in multi window.
- You cannot change the aspect ratio in multi window.
- Multi window cannot be used with PC, SD card, HDMI (available for main screen only) or 1080p signal from Component (Y, Pb/Cb, Pr/Cr).
- Some signals are reformatted for suitable viewing on your display.
- The display timeout for the input mode or programme position can be adjusted by "Banner Display Timeout" in Setup Menu (p. 21).

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.
- If you connect the equipment that has "HDAVI Control 2" function to the TV with HDMI cable, the sound from DIGITAL AUDIO OUT terminal can be output as multi channel surround.
- 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.

Stereo / Bilingual Sound Selection

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

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

NICAMUsed in New Zealand, Singapore, Hong Kong etc.

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

A2(German)Used in Australia, Malaysia etc.

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

Note

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

Cautions in handling SD Card

- Do not remove the card while the TV is accessing data (this can damage card or TV).
- Do not touch the pins on the back of the card.
- Do not subject the card to a high pressure or impact.
- Insert the card in the correct direction (otherwise, card may be damaged).
- Electrical interference, static electricity, or erroneous operation may damage the data or card.
- Back up the recorded data at regular intervals in case of deteriorated or damaged data or erratic operation of the TV. (Panasonic is not liable for any deterioration or damage of recorded data.)

Data format for Card browsing

Photo : Still images recorded with digital still cameras compatible with JPEG files of DCF* and EXIF standards

Data format - Baseline JPEG (Sub-sampling 4:4:4, 4:2:2 or 4:2:0)

Max. number of files - 9,999

Image resolution - 160 × 120 to 10,000,000

Movie : SD-Video Standard Ver. 1.2 [MPEG-2 (PS format)] and AVCHD Standard compatible files with an audio format that is either MPEG-1/Layer-2 format or Dolby Digital format
(A modified data with a PC may not be displayed correctly.)

- Compliant card type (maximum capacity): SDHC Card (4 GB), SD Card (2 GB), Multi Media Card (128 MB), miniSD Card (1 GB) (requiring miniSD adapter)
- If miniSD Card is used, insert / remove it together with the adapter.
- Check the latest information on the card type at the following website. (English only)
<http://panasonic.co.jp/pavc/global/cs/>

*DCF (Design rule for camera file system): Unified standard established by Japan Electronics and Information Technology Industries Association (JEITA).

Note

- Format the card with the recording equipment.
- The picture may not appear correctly on this TV depending on the recording equipment used.
- Display may take some time when there are many files and folders.
- This function cannot display Motion JPEG and still image not DCF formatted (i.e. TIFF, BMP).
- A data modified with a PC may not be displayed.
- Images imported from a PC must be compatible with EXIF (Exchangeable Image File) 2.0, 2.1, and 2.2.
- Partly degraded files might be displayed at a reduced resolution.
- All ".JPG" extension data in the card will be read in Photo View Mode.
- The folder and file names may be different depending on the digital camera used.
- Do not use two-byte characters or other special codes.
- The card may become unusable with this TV if file or folder names are changed.

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. 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 AUDIO IN terminals / HDMI3: use AV4 IN AUDIO terminals).
- Audio settings can be made on the "HDMI1 / 3 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. 38.

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

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

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.

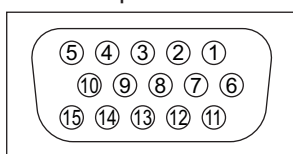
- PC signals that can be inputted: Horizontal scanning frequency 31 to 69 kHz; vertical scanning frequency 59 to 86 Hz (more than 1,024 signal lines could result in incorrect display of the image).
- A PC adapter is not necessary for the DOS/V-compliant D-sub 15-pin connector.

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	1,440 × 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/C_B, P_R/C_R), HDMI

* Mark: Applicable input signal

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

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

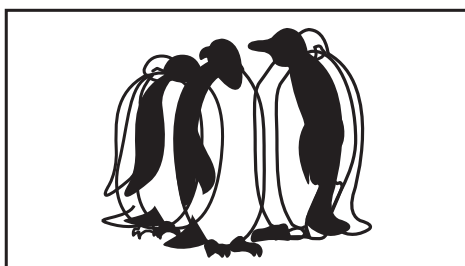
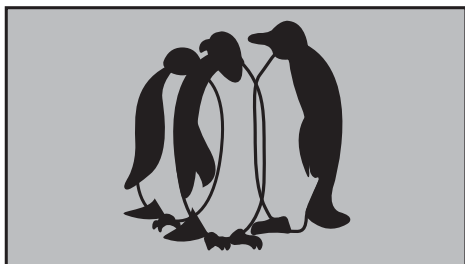
Note

- 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)



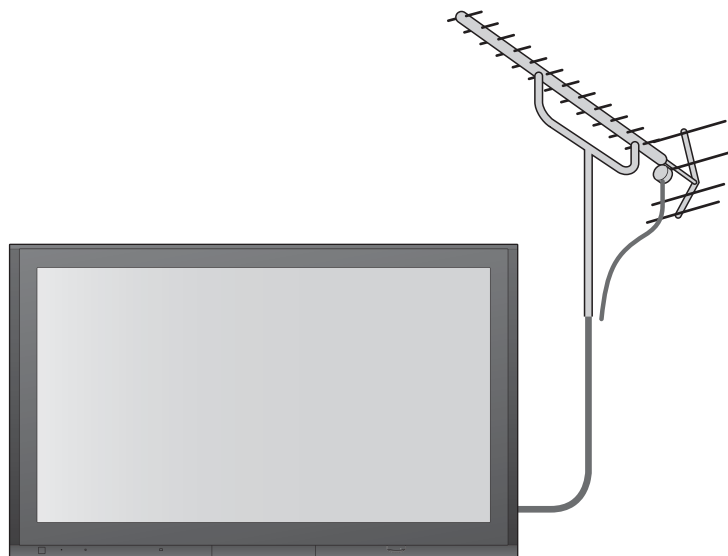
- Check the position, direction, and connection of the aerial.

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.

An error message appears

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



Permanently lit spots on screen

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

Contrast is reduced

- Contrast is lowered when the following conditions without any user operation for a few minutes:
 - no signal in AV mode
 - selected locked channel
 - selected invalid channel
 - selected radio channel
 - displayed menu
 - Thumbnail, list or still picture in SD Card mode

FAQs

	Problem	Actions
Screen	Chaotic image, noisy	<ul style="list-style-type: none"> ● 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	<ul style="list-style-type: none"> ● 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)	<ul style="list-style-type: none"> ● Reset channels. (p. 23)
	Unusual image is displayed	<ul style="list-style-type: none"> ● Turn off the TV with Mains power On / Off switch, then turn it on again.
Sound	No sound is produced	<ul style="list-style-type: none"> ● Is "Sound mute" active? (p. 7) ● Is the volume set to the minimum?
	Sound level is low or sound is distorted	<ul style="list-style-type: none"> ● Sound signal reception may be deteriorated. ● Check Sound system. (p. 23)
	Whirling sound is heard	<ul style="list-style-type: none"> ● The sound is from built-in cooling fan (not a sign of faulty operation).
HDMI	Sound is unusual	<ul style="list-style-type: none"> ● Set the sound setting of the connected equipment to "2ch L.PCM". ● Check the "HDMI1 / 3 Input" setting in the Sound Menu. (p. 20) ● If digital sound connection has a problem, select analogue sound connection. (p. 37)
	Pictures from external equipment are unusual when the equipment is connected via HDMI	<ul style="list-style-type: none"> ● Is the HDMI cable connected properly? (p. 32) ● Turn Off the TV and equipment, then turn them On again. ● Check an input signal from the equipment. (p. 38) ● Use an equipment compliant with EIA/CEA-861/861B.
Other	TV goes into "Standby mode"	<ul style="list-style-type: none"> ● Off Timer function is activated. ● The TV enters "Standby mode" about 30 min. after broadcasting ends.
	The remote control does not work	<ul style="list-style-type: none"> ● Are the batteries installed correctly? (p. 6) ● Has the TV been switched On?

Licence

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Specifications

Power Source			AC 220-240 V, 50 / 60 Hz																																																						
Power Consumption	Average use		770 W																																																						
	Standby condition		0.4 W																																																						
Display panel	Aspect Ratio		16:9																																																						
	Visible screen size		165 cm (diagonal) 1,434 mm (W) × 807 mm (H)																																																						
	Number of pixels		2,073,600 (1,920 (W) × 1,080 (H)) [5,760 × 1,080 dots]																																																						
Sound	Speaker		Woofer (Φ 100 mm) × 2 pcs, Tweeter (23 mm × 100 mm) × 2 pcs																																																						
	Audio Output		31 W (15.5 W + 15.5 W), 10% THD																																																						
	Headphones		M3 (3.5 mm) stereo mini Jack × 1																																																						
PC signals			VGA, SVGA, XGA SXGA (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz																																																						
Receiving Systems / Band name			<table><tr><td colspan="2">17 Systems</td><td>Function</td><td colspan="2">17 Systems</td><td>Function</td></tr><tr><td>1</td><td>PAL B, G, H</td><td rowspan="7">Reception of broadcast transmissions and Playback from Video Cassette Tape Recorders</td><td>8</td><td>NTSC 4.43/5.5 MHz</td><td rowspan="7">Playback from Special VCR's or DVD</td></tr><tr><td>2</td><td>PAL I</td><td>9</td><td>NTSC 4.43/6.0 MHz</td></tr><tr><td>3</td><td>PAL D, K</td><td>10</td><td>NTSC 4.43/6.5 MHz</td></tr><tr><td>4</td><td>SECAM B, G</td><td>11</td><td>NTSC 3.58/5.5 MHz</td></tr><tr><td>5</td><td>SECAM D, K</td><td>12</td><td>NTSC 3.58/6.0 MHz</td></tr><tr><td>6</td><td>SECAM K1</td><td>13</td><td>NTSC 3.58/6.5 MHz</td></tr><tr><td>7</td><td>NTSC M (NTSC 3.58/4.5 MHz)</td><td>14</td><td>SECAM I</td></tr><tr><td></td><td></td><td></td><td>15</td><td>PAL 60 Hz/5.5 MHz</td><td rowspan="3">Playback from Special Disc Players and Special VCR's or DVD</td></tr><tr><td></td><td></td><td></td><td>16</td><td>PAL 60 Hz/6.0 MHz</td></tr><tr><td></td><td></td><td></td><td>17</td><td>PAL 60 Hz/6.5 MHz</td></tr></table>			17 Systems		Function	17 Systems		Function	1	PAL B, G, H	Reception of broadcast transmissions and Playback from Video Cassette Tape Recorders	8	NTSC 4.43/5.5 MHz	Playback from Special VCR's or DVD	2	PAL I	9	NTSC 4.43/6.0 MHz	3	PAL D, K	10	NTSC 4.43/6.5 MHz	4	SECAM B, G	11	NTSC 3.58/5.5 MHz	5	SECAM D, K	12	NTSC 3.58/6.0 MHz	6	SECAM K1	13	NTSC 3.58/6.5 MHz	7	NTSC M (NTSC 3.58/4.5 MHz)	14	SECAM I				15	PAL 60 Hz/5.5 MHz	Playback from Special Disc Players and Special VCR's or DVD				16	PAL 60 Hz/6.0 MHz				17	PAL 60 Hz/6.5 MHz
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Receiving Channels (Regular TV)			<table><tr><td>VHF BAND 2-12 (PAL/SECAM B, K1) 0-12 (PAL B AUST.) 1-9 (PAL B N.Z.) 1-12 (PAL/SECAM D) 1-12 (NTSC M Japan) 2-13 (NTSC M USA)</td><td>UHF BAND 21-69 (PAL G, H, I/SECAM G, K, K1) 28-69 (PAL B AUST.) 13-57 (PAL D, K) 13-62 (NTSC M Japan) 14-69 (NTSC M USA)</td><td>CATV S1-S20 (OSCAR) 1-125 (USA CATV) C13-C49 (JAPAN) S21-S41 (HYPER) Z1-Z37 (CHINA) 5A, 9A (AUST.)</td></tr></table>			VHF BAND 2-12 (PAL/SECAM B, K1) 0-12 (PAL B AUST.) 1-9 (PAL B N.Z.) 1-12 (PAL/SECAM D) 1-12 (NTSC M Japan) 2-13 (NTSC M USA)	UHF BAND 21-69 (PAL G, H, I/SECAM G, K, K1) 28-69 (PAL B AUST.) 13-57 (PAL D, K) 13-62 (NTSC M Japan) 14-69 (NTSC M USA)	CATV S1-S20 (OSCAR) 1-125 (USA CATV) C13-C49 (JAPAN) S21-S41 (HYPER) Z1-Z37 (CHINA) 5A, 9A (AUST.)																																																	
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Aerial - Rear			VHF / UHF																																																						
Operating Conditions			Temperature : 0 °C - 40 °C Humidity : 20 % - 80 % RH (non-condensing)																																																						
Connection Terminals	AV1 Input	AUDIO L - R	RCA PIN Type × 2 0.5 V[rms]																																																						
		VIDEO	RCA PIN Type × 1 1.0 V[p-p] (75 Ω)																																																						
		S VIDEO	Mini DIN 4-pin Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)																																																						
	AV2 Input	AUDIO L - R	RCA PIN Type × 2 0.5 V[rms]																																																						
		VIDEO	RCA PIN Type × 1 1.0 V[p-p] (75 Ω)																																																						
		COMPONENT	Y PB/CB, PR/CR 1.0 V[p-p] (including synchronization) ±0.35 V[p-p]																																																						
	AV3 Input	AUDIO L - R	RCA PIN Type × 2 0.5 V[rms]																																																						
		VIDEO	RCA PIN Type × 1 1.0 V[p-p] (75 Ω)																																																						
		COMPONENT	Y PB/CB, PR/CR 1.0 V[p-p] (including synchronization) ±0.35 V[p-p]																																																						
	AV4 Input	AUDIO L - R	RCA PIN Type × 2 0.5 V[rms]																																																						
		VIDEO	RCA PIN Type × 1 1.0 V[p-p] (75 Ω)																																																						
		S VIDEO	Mini DIN 4-pin Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)																																																						
	Monitor Output	AUDIO L - R	RCA PIN Type × 2 0.5 V[rms] (high impedance)																																																						
		VIDEO	RCA PIN Type × 1 1.0 V[p-p] (75 Ω)																																																						
	Others	HDMI 1 / 2 / 3 Input	TYPE A Connectors ● This TV supports “HDAVI Control 2” function.																																																						
		PC Input	HIGH-DENSITY D-SUB 15PIN R, G, B/0.7 V[p-p] (75 Ω) HD, VD/TTL Level 2.0 - 5.0 V[p-p] (high impedance)																																																						
		Audio Input	RCA PIN Type × 2 0.5 V[rms]																																																						
DIGITAL AUDIO OUT		PCM/Dolby Digital, Fiber optic																																																							
Card slot		SD CARD slot × 1																																																							
Dimensions (W × H × D)			1,609 mm × 998 mm × 142 mm																																																						
Mass			82.0 kg Net																																																						

Note

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

MEMO



Customer's Record

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

Model Number _____

Serial Number _____

Matsushita Electric Industrial Co., Ltd.

Web Site : <http://panasonic.net/>

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