**WARRANTY - Australia only**

1. The product is warranted for 12 months from the date of purchase. Subject to the conditions of this warranty Panasonic or its Authorised Service Centre will perform necessary service on the product without charge for parts or labour if, in the opinion of Panasonic, the product is found to be faulty within the warranty period.

2. This warranty only applies to Panasonic products purchased in Australia and sold by Panasonic Australia or its Authorised Distributors or Dealers and only where the products are used and serviced within Australia or its territories. Warranty cover only applies to service carried out by a Panasonic Authorised Service Centre and only if valid proof of purchase is presented when warranty service is requested.

3. This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care (in the opinion of Panasonic). The warranty covers normal domestic use only and does not cover damage, malfunction or failure resulting from use of incorrect voltages, incorrect installation, accident, misuse, neglect, build-up of dirt or dust, abuse, maladjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.

4. This warranty does not cover the following items unless the fault or defect existed at the time of purchase:
   - Video or Audio Tapes
   - Video or Audio Heads and Stylus resulting from wear and tear in normal use
   - User replaceable Batteries
   - Thermal Paper, Toner/Ink Cartridges, Drum, Developer, Film (Ink/Ribbon), Film Cartridge, Printer Heads

5. If warranty service is required you should:
   - Telephone Panasonic’s Customer Care Centre on 132600 or visit our website and use the Service Centre Locator for the name/address of the nearest Authorised Service Centre.
   - Send or bring the product to a Panasonic Authorised Service Centre together with your proof of purchase receipt as proof of purchase date.
   - Please note that freight and insurance to and/or from your nearest Authorised Service Centre must be arranged by you.
   - Note that home or pick-up/delivery service is available for the following products in the major metropolitan areas of Australia or the normal operating areas of the nearest Authorised Service Centres:
     - Picture tube (CRT) based Television Receivers (screen sizes greater than 103 cm)
     - Convection/Combination Microwave Ovens
     - Whiteboard (except portable type)

6. The warranties hereby conferred do not extend to, and exclude, any costs associated with the installation, de-installation or re-installation of a product, including costs related to the mounting, de-mounting or re-mounting or any screen, (and any other ancillary activities), delivery, handling, freighting, transportation or insurance of the product or any part thereof or replacement of and do not extend to, and exclude, any damage or loss occurring by reason of, during, associated with, or related to such installation, de-installation, re-installation or transit. Panasonic Authorised Service Centres are located in major metropolitan areas and most regional centres of Australia, however, coverage will vary dependant on product. For advice on exact Authorised Service Centre locations for your product, please telephone our Customer Care Centre on 132600 or visit our website and use the Service Centre Locator.

Unless otherwise specified to the customer the benefits conferred by this express warranty are additional to all other conditions, warranties, guarantees, rights and remedies expressed or implied by the Trade Practices Act 1974 and similar consumer protection provisions contained in legislation of the States and Territories and all other obligations and liabilities on the part of the manufacturer or supplier and nothing contained herein shall restrict or modify such rights, remedies, obligations or liabilities.
Turn your own living room into a movie theatre!

Experience an amazing level of multimedia excitement

- Receive digital terrestrial services using an integrated (Digital Video Broadcasting) tuner
- Sharp pictures with HDMI terminal
- Create home theatre and DVD recorder link-ups with “VIERA Link” without complicated settings!

Enjoy rich multi-media

Trade Mark of the DVB Digital Video Broadcasting Project (1991 to 1996)
TX-26LXD70A Declaration of Conformity No 4595, 28 February 2007
TX-32LXD70A Declaration of Conformity No 4594, 28 February 2007

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Safety Precautions

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

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

Warning

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.

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).

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).

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 place the TV on sloped or unstable surfaces
- The TV may fall off or tip over.

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 block the rear air vents
- Blocked ventilation by curtains, etc. may cause overheating, fire or electrical shock.

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.

Allow sufficient space around the TV for radiated heat

Minimum distance

Notes

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

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).

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).

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, wipe 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.)
Quick Start Guide

Identifying Controls

Accessories / Options

Standard accessories

- Remote Control Transmitter
- Batteries for the Remote Control Transmitter (2)
- Operating Instructions
- Guarantee

Check that you have the accessories and items shown.

Installing remote’s batteries

1. Pull open
2. Hook

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.

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

Remove four screws.

Rear of the TV

Batteries for the Remote Control Transmitter

EUR7651150

Remote Control Transmitter

2 (AA)

Remote control signal receiver

C.A.T.S. (Contrast Automatic Tracking System) sensor

(senses brightness to adjust picture quality in “Auto” Menu in Picture Menu) (p. 20)

Power LED

- Standby: red
- On: green

Function select

- Volume / Contrast / Brightness / Colour / Sharpness / Tint (NTSC mode) / Bass / Treble / Balance / Auto Tuning (p. 24)

Changes the input mode

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.

Standby On / Off switch

(Switches TV On or Off standby)

TV Guide (p. 12)

OK button to confirm selections and choices

Press after selecting programme positions to quickly change programme.

Main Menu

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

Changes aspect ratio (p. 11)

Access VIERA Link Menu (p. 31)

Programme / service change buttons (0-9) and Teletext page buttons.

(p. 10 and p. 16)

Changes the sound track, if programme has multiple audio tracks (DVB)

Stereo / Bilingual Sound Selection (p. 35) (Analogue)

Selects services in sequence

Teletext (p. 16)

Subtitles

Showing subtitles (p. 11)

VCR / DVD operations (p. 15)

Selects programmes in sequence

Teletext Index (p. 17)

Changes the input mode

TV - switches DVB (digital broadcasting) / Analogue mode (p. 10)

AV - changes AV input mode (p. 14)

Changes the sound track, if programme has multiple audio tracks (DVB)

Stereo / Bilingual Sound Selection (p. 35) (Analogue)

Option menu

Sets the preferred settings of the current programme easily (p. 11)

Sound mute On / Off

Volume

Still picture (p. 11)

Teletext Hold (p. 17)

Teletext Index (p. 17)
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

Example 2
Connecting DVD Recorder / VCR

TV, DVD Recorder or VCR

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)

2. Select your state

3. Start Auto Tuning

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

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

How to use remote control

ON SCREEN HELP Instructions box

(example: Sound Menu)

Using the On Screen Displays

Mains lead
Rear of the TV
Rear of the TV
AC 220-240 V
50 / 60 Hz

Mains lead
Rear of the TV
Rear of the TV
AC 220-240 V
50 / 60 Hz

Note

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

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)

Select your state

Select State / Territory
Northern Territory
Queensland
Victoria
New South Wales / Australian Capital Territory
Tasmania
South Australia
Western Australia

Start Auto Tuning

Auto Tuning will start to search for TV services and store them in the numbered order as specified by the broadcasters.

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

To edit channels

Editing and Setting Channels (p. 24)

If tuning has failed

“Auto Tuning” (p. 24).

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.

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

How to use remote control

ON SCREEN HELP Instructions box

(example: Sound Menu)

Using the On Screen Displays

Mains lead
Rear of the TV
Rear of the TV
AC 220-240 V
50 / 60 Hz

Mains lead
Rear of the TV
Rear of the TV
AC 220-240 V
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Note

Do not put the RF cable close to the mains lead to avoid noise.
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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.
Watching TV

1. Turn power on

- Mains power On / Off switch should be On.

2. Select DVB (Digital Video Broadcasting) or Analogue

- You can also select the mode using the TV button on the top panel of the TV.

3. Select a service

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

  - (in a short time)

**Select a service using Information banner**

1. select service
2. watch

**Select a service using TV Guide**

- “Using TV Guide” (p. 12)

---

### Other useful functions (Operate after 3)

- **Hold**
  - Freeze / unfreeze picture

- **Display subtitles**
  - Display / hide subtitles (if available)

- **Display the current programme status**

- **Check or change the current programme status instantly**

  **Volume Correction**
  - Adjusts volume of individual channel or input mode

  **Note**
  - Also possible to change the settings in Menu list (p. 20).

- **Display programme information**

  - Programme
  - Service
  - Current time
  - Current favourite list

- **Display information banner**

  - Information of another channel
  - Information on next programme (DVB)
  - To watch the programme listed in the banner
  - Information banner operation

  1st press
  - Display banner
  2nd press
  - Banner + programme synopsis (DVB)
  3rd press
  - Exit

- **Change the aspect ratio**

  Enjoy viewing the picture at its optimum size and aspect.

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

  **Note**
  - In DVB mode, aspect ratio is fixed at 16:9.
Using TV Guide

TV Guide—Electronic Programme Guide (EPG) provides an on-screen listing of programmes currently broadcast and future broadcasts over the next seven days (depending on the broadcaster). Analogue broadcasts will be listed after DVB broadcasts. “D” means DVB channel and “A” means Analogue channel.

View TV Guide

- To previous day (DVB mode)
  ➤ R
- To next day (DVB mode)
  ➤ G
- To view a programme list of the selected type (DVB mode)
  ➤ Y
- To view a programme list of the selected favourites list
  ➤ B

View details of the programme (DVB mode)

Select the programme

View details

To return to the start page

Select the programme now on the air

(TV screen)

1 select
2 watch

Note

- When this TV is turned on for the first time, or the TV is switched off for more than a week, it may take some time before the TV Guide is completely shown.

Other useful functions (Operate after viewing TV Guide)

View TV Guide

Watch the programme

(Favourites list)

Only analogue TV services are listed

To list favourite services (p. 23)

(Favourites list)

To favourite list

Details

(DVBS mode)

To view a programme list of the selected type

(DVBS mode)

To return to TV

EXIT

Note

- When this TV is turned on for the first time, or the TV is switched off for more than a week, it may take some time before the TV Guide is completely shown.

Other useful functions (Operate after viewing TV Guide)

View TV Guide

Watch the programme

(Favourites list)

Only analogue TV services are listed

To list favourite services (p. 23)

(Favourites list)

To favourite list

Details

(DVBS mode)

To view a programme list of the selected type

(DVBS mode)

To return to TV

EXIT

Note

- When this TV is turned on for the first time, or the TV is switched off for more than a week, it may take some time before the TV Guide is completely shown.
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
2. Select the input mode connected to the equipment
3. View Displays the selected mode

To return to TV

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

| VCR / DVD switch | VCR / DVD switch
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select VCR to operate Panasonic VCR or DVD equipment</td>
<td>Select DVD to operate Panasonic DVD equipment or Player home theatre</td>
</tr>
</tbody>
</table>
| POWER | Standby
| Set to Standby mode / Turn on |
| Play | Playback videocassette / DVD |
| Stop | Stop the operations |
| Rewind / Skip / Search | 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 | 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 | Programme Up / Down |
| Select programme |
| Record | 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 POWER during the following operations
Enter the appropriate code for the equipment to be controlled, see table below

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCR</td>
<td>10 (default)</td>
</tr>
<tr>
<td>DVD</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>&quot;DVD&quot; position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
</tr>
<tr>
<td>DVD</td>
</tr>
<tr>
<td>Player home theatre</td>
</tr>
</tbody>
</table>

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.

Note
- Confirm correct operation after the code changed.
- The codes will be reset to default values if batteries are replaced.
- "DVD" means DVD player, DVD recorders and Recorder home theatre.
- Some operations may not be possible on some equipment models.
**Viewing Teletext**

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

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

**What is TOP mode?** (in case of TOP text broadcasting)
TOP is a particular improvement of the standard teletext service that results in an easier search and effective guide.
- Fast overview of the teletext information available
- Easy to use step-by-step selection of the topical subject
- Page status information at the bottom of the screen

**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)

---

**Using teletext conveniently**

**Reveal hidden data**
- Reveal hidden words e.g. quiz page answers
  - Press [MENU] ⇒ [R] ⇒ “Re-hide” ⇒ [R]

**Store frequently viewed pages in the colour bar**
- (List mode only)
  - Press [MENU] (Press twice) ⇒ Select Picture and text ⇒ On or Off
- Operations can be made only in Teletext screen.
- As page is displayed
  - Corresponding colour button ⇒ press and hold
  - The number changes to white.
  - Enter new page number
    - Colour button you want to change
    - press and hold

**View sub page**
- (Only when teletext is more than one page)
  - Enter the 4-digit number example: P6
  - 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.
  - Press twice
  - Select Picture and text
  - On or Off

**Watch TV 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").

---

**Switch to Teletext**
- TEXT ◦ Displays Index (content varies depending on the broadcasters)

**Select the page**
- [G] or [B]
  - (Corresponds to the colour bar)
- Press [up] or [down]

**Watch TV and Teletext in two windows at once**
- (Press twice)
  - Select Picture and text
  - On or Off

**View in multi window**
- Watch TV and Teletext in two windows at once
- Operations can be made only in Teletext screen.
- As page is displayed
  - Corresponding colour button ⇒ press and hold
  - The number changes to white.
  - Enter new page number
    - Colour button you want to change
    - press and hold

---

**View sub page**
- (Only when teletext is more than one page)
  - Enter the 4-digit number example: P6
  - 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.
  - Press twice
  - Select Picture and text
  - On or Off

**Watch TV while waiting for update**
- (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.

Display the menu

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

Select the menu

(example: Picture Menu)

Select the item

(select)

Adjust or select

(example: Picture Menu)

Change

Store or access (Required by some functions)

Choose from among alternatives

Number and positions of alternatives

Adjust using the slide bar

Go to the next screen

Displays the next screen

To go to the previous screen

To return to the TV at any time

Note

Select menu

Select item

Adjust or select

Choose from among alternatives

Adjust using the slide bar

To go to the next screen

To change menu pages

The menu of the accessed equipment

Advanced

How to Use Menu Functions

(p. 20)

(p. 21)

(p. 20)

(p. 31)

(p. 24)
## How to Use Menu Functions

### Menu list

<table>
<thead>
<tr>
<th>Menu</th>
<th>Item</th>
<th>Adjustments / Configurations (alternatives)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIERA Link</td>
<td>VIERA Link Control</td>
<td>Controls the connected Panasonic equipment</td>
</tr>
<tr>
<td></td>
<td>Speaker Selection</td>
<td>“Easy control only with VIERA remote control” (p. 31)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• You can also access VIERA Link Menu directly using the VIERA Link button on the remote control.</td>
</tr>
<tr>
<td>Picture</td>
<td>Viewing Mode</td>
<td>Basic picture mode (Dynamic / Normal / Cinema / Auto)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Set for each input signal</td>
</tr>
<tr>
<td></td>
<td>Contrast, Brightness, Colour, Sharpness</td>
<td>Adjusts colour, brightness, etc. for each picture mode to suit your taste</td>
</tr>
<tr>
<td></td>
<td>Tint</td>
<td>Adjusts tint of image</td>
</tr>
<tr>
<td></td>
<td>Colour Balance</td>
<td>Chooses the colour balance of the entire image (Cool / Normal / Warm)</td>
</tr>
<tr>
<td></td>
<td>Colour Management</td>
<td>Automatically adjusts colours to vivid ones (Off / On)</td>
</tr>
<tr>
<td></td>
<td>P-NR</td>
<td>Picture Noise Reduction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Automatically reduces unwanted picture noise (Off / Normal / Dynamic / Auto)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Not valid on PC signal</td>
</tr>
<tr>
<td></td>
<td>MPEG NR</td>
<td>Automatically reduces noise for watching DTV, DVD and VCD (Off / Min / Mid / Max)</td>
</tr>
<tr>
<td></td>
<td>3D-COMB</td>
<td>Automatically makes still pictures and slow pictures look more vivid (Off / On)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Not valid on S-Video, components, PC and HDMI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cannot be used with DVB</td>
</tr>
<tr>
<td></td>
<td>Reset Picture Default</td>
<td>Press the OK button to reset the present Picture Mode to the default settings</td>
</tr>
<tr>
<td>Mode</td>
<td>Basic sound mode</td>
<td>Basic sound mode (Music / Speech)</td>
</tr>
<tr>
<td></td>
<td>Bass</td>
<td>Adjusts the output level of deep bass</td>
</tr>
<tr>
<td></td>
<td>Treble</td>
<td>Adjusts the output level of high-pitch, shrill sound</td>
</tr>
<tr>
<td></td>
<td>Balance</td>
<td>Adjusts volume level of right and left speakers</td>
</tr>
<tr>
<td></td>
<td>Headphone Volume</td>
<td>Adjusts the volume of the headphones</td>
</tr>
<tr>
<td></td>
<td>Surround</td>
<td>Surround sound settings (Off / On)</td>
</tr>
<tr>
<td></td>
<td>Volume Correction</td>
<td>Adjusts volume of individual channel or input mode</td>
</tr>
<tr>
<td>Audio Preference</td>
<td>Dolby Digital / MPEG</td>
<td>Selects the initial setting for Audio tracks (Dolby Digital / MPEG)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• For PAL or NTSC signal reception only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• For NTSC signal reception only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Not valid on PC signal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cannot be used with DVB</td>
</tr>
<tr>
<td></td>
<td>Audio Preference</td>
<td>Dolby Digital - A method of coding digital signals developed by Dolby Laboratories. Apart from stereo (2ch) audio, these signals can also be multi-channel audio.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MPEG : An audio compression method that compresses audio to small size without any considerable loss of audio quality.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• DVB mode only</td>
</tr>
<tr>
<td>SPDIF Selection</td>
<td>DOLITAL AUDIO OUT terminal (Auto / PCM)</td>
<td>Selects the initial setting for digital audio output signal from DIGITAL AUDIO OUT terminal (Auto / PCM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• DVB mode only</td>
</tr>
<tr>
<td>MPEG Audio Level</td>
<td>Normally</td>
<td>MPEG sound is larger than Dolby Digital one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>You can adjust the audio level of MPEG as the initial setting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 0dB to +15dB in -2dB reductions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• DVB mode only</td>
</tr>
<tr>
<td>HDMI1 Input</td>
<td>Select to fit the input signal (Auto / Digital / Analogue) (p. 29)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Auto</td>
<td>Automatic detection of digital or analogue sound source</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>HDMI cable connection</td>
</tr>
<tr>
<td></td>
<td>Analogue</td>
<td>HDMI-DVI adapter cable connection</td>
</tr>
<tr>
<td></td>
<td>HDMI input mode</td>
<td>HDMI input mode</td>
</tr>
<tr>
<td></td>
<td>HDMI2 terminal</td>
<td>HDMI2 terminal is for digital signal only</td>
</tr>
<tr>
<td></td>
<td>No setting for HDMI2 available</td>
<td>Press the OK button to reset the present Sound Mode to the default settings</td>
</tr>
<tr>
<td>Setup</td>
<td>Banner Display Timeout</td>
<td>Sets how long the information banner (p. 11) stays on screen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 0 (No display) to 10 sec. in 1-sec. increments</td>
</tr>
<tr>
<td>Audio Preference</td>
<td>Daylight Saving Time</td>
<td>Selects the region where you live to adjust the standard time (NSW/ACT / Victoria / Queensland / South Australia / Western Australia / Nothern Territory / Tasmania) (p. 23)</td>
</tr>
<tr>
<td></td>
<td>Power Link</td>
<td>Sets to “Set” to use Power Link function (No / Set) (p. 31)</td>
</tr>
<tr>
<td></td>
<td>Power on Link</td>
<td>Set to “Set” to use Power on Link function (No / Set) (p. 31)</td>
</tr>
<tr>
<td>Region Select</td>
<td>Region Select</td>
<td>Selects the region where you live to adjust the standard time (NSW/ACT / Victoria / Queensland / South Australia / Western Australia / Nothern Territory / Tasmania) (p. 23)</td>
</tr>
<tr>
<td>System Information</td>
<td>System Information</td>
<td>Displays the system information of this TV</td>
</tr>
<tr>
<td>Software Licence</td>
<td>Software Licence</td>
<td>Displays the software licence information</td>
</tr>
<tr>
<td>VIERA Link Settings</td>
<td>VIERA Link</td>
<td>Sets to use VIERA Link functions (Off / On) (p. 30)</td>
</tr>
<tr>
<td></td>
<td>SPDIF Selection</td>
<td>Selects the initial setting for digital audio output signal from DIGITAL AUDIO OUT terminal (Auto / PCM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• DVB mode only</td>
</tr>
<tr>
<td>Input Labels</td>
<td>Power off Link</td>
<td>Set to “Set” to use Power off Link function (No / Set) (p. 31)</td>
</tr>
<tr>
<td></td>
<td>Power on Link</td>
<td>Set to “Set” to use Power on Link function (No / Set) (p. 31)</td>
</tr>
<tr>
<td>Software Licence</td>
<td>Software Licence</td>
<td>Displays the software licence information</td>
</tr>
<tr>
<td>System Information</td>
<td>System Information</td>
<td>Displays the system information of this TV</td>
</tr>
</tbody>
</table>

### How to Use Menu Functions

- A different menu will be displayed while PC or DVI to HDMI adapter cable is used. (p. 28 and p. 29)
- Only available items can be selected.
DVB Settings (DVB mode)

DVB Settings provide access to various advanced features.

1. If in Analogue mode
   Select DVB

2. Display the menu
   MENU

3. Select “Setup”
   Access

4. Select “DVB Favourites Edit”, “System Update”, “Region Select” or “Daylight Saving Time”
   Access

5. Set

To return to TV
EXIT

Create your favourite service List from various broadcasters (up to 4: FavList1 / FavList2 / FavList3 / FavList4). The list is displayed in information banner (p. 11), TV Guide (p. 12) and then easily accessed.

Select a service and add it to the list
A service is added

List favourite services

DVB Favourites Edit
To edit Profile
Select the field of Profile to edit and:
• To name the Profile
• To move the channel
• To delete the channel

Note
• Channel numbers cannot be changed, due to broadcast restrictions.

Download new software to TV.
• For details (p. 35)

If System Update is performed, the software will be updated (it may change TV functions). If you do not wish to do so, set “Auto Update Search in Standby” to Off.

Select “Auto Update Search in Standby” and then set “On” or “Off”

• On: Automatically performs a search in standby and downloads an update, if any software updates are available
• Off: Do not automatically perform a search in standby

Select “System Update Search Now” Searches for an update (for several min.) and displays a corresponding message if any software updates are available

Download may take about 20 min.

Adjust the standard time
Region Select
Select the region where you live to adjust the standard time.
• The time contained in the broadcast signal is UTC (Universal time, coordinated).

Adjust for Summer Time
Daylight Saving Time
Select time offset from the standard time for Summer Time.
• Normally select “Auto”.
• If there is a gap between displayed time and actual time, set this function.

(Daylight Saving Time: Auto (During Summer Time))

Regional Standard time Daylight Saving Time: Auto
NSW / ACT +10:00 +11:00
Victoria +10:30 +11:00
Queensland +9:30 +10:30
South Australia +9:30 +10:00
Western Australia +8:00 +9:00
Northern Territory +8:30 +9:00
Tasmania +10:00 +11:00

(Based on GMT)
Editing and Setting Channels

The current channel settings can be changed according to your needs and reception conditions. You can re-tune all TV channels when moving house or search for new services which may have recently started broadcasting.

Select DVB or Analogue

- "DVB Manual Tuning", "Add New DVB Services", "New Service Message" and "DVB Signal Display" are available in DVB mode only.
- "Analogue Programme Edit" and "Analogue Manual Tuning" are available in Analogue mode only.

Display the menu

Select “Setup”

Select “Tuning Menu”

Select a function

Set

Automatically set the DVB and Analogue channels received in the area.

Access “Auto Tuning”

Settings are made automatically

- All previous settings are erased.
- When the operation is completed, the digital service at programme position "1" will be displayed.
- If no DVB services are found, the first analogue service will be displayed.
- If tuning has not done completely, the digital service at programme position "1" will be displayed.
- If tuning has not done completely, "DVB Manual Tuning", "Analogue Manual Tuning"

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

- Press repeatedly until "Auto Tuning" appears
- Access “Auto Tuning”
- Start “Auto Tuning”
- To return to TV
**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**
2. **Select “Setup”**
3. **Select “Shipping Condition”**
4. **Set**

**Check the message and initialise**
- **Shipping Condition**
  - All tuning data will be erased
  - Are you sure?
  - Are you sure?
- **Confirm**

**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. 24)

**Input Labels**

For easier identification and selection of the input mode, you can label each input terminals or skip terminal that is not connected to any equipment. (To select the input mode ⇒ p. 14)

1. **Display the menu**
2. **Select “Setup”**
3. **Select “Input Labels”**
4. **Set a input terminal and set**

**To return to TV**
- **EXIT**

**User input**
- You can name each input terminals freely.
- **Select “User input”**
- **Set characters**

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

(maximum: ten characters)
Displaying PC Screen on TV

The screen of the PC connected to the TV can be displayed on the TV. You can also listen to PC sound with the audio cable connected. To connect PC (p. 32)

1. Select the external input
2. Select “PC”

To return to TV ➔ ST/T
to menu setting (changed as desired)
To make settings ➔ “How to Use Menu Functions” (p. 18)

Menu Item Adjustments / Configurations (options)

<table>
<thead>
<tr>
<th>Advanced PC Settings</th>
<th>R-Gain</th>
<th>Adjusts the white balance for red areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G-Gain</td>
<td>Adjusts the white balance for green areas</td>
</tr>
<tr>
<td></td>
<td>B-Gain</td>
<td>Adjusts the white balance for blue areas</td>
</tr>
<tr>
<td></td>
<td>Gamma</td>
<td>(2.0 / 2.2 / 2.5)</td>
</tr>
<tr>
<td>Reset PC Settings</td>
<td>Press the OK button to reset to the default settings</td>
<td></td>
</tr>
</tbody>
</table>

| Input Resolution     | Switches to a wide view |
|                      | • VGA (640 × 480 pixels), WVGA (852 × 480 pixels), XGA (1,024 × 768 pixels), WXGA (1,366 × 768 pixels) |
|                      | • Options change depending on signals |
| Clock                | Set to the minimum level if noise occurs |

| H-pos                | Adjusts horizontal position |
| V-pos                | Adjusts vertical position |
| Clock Phase          | Eliminates flicker and distortion |
|                      | • Adjust after Clock adjustment |
|                      | • Set to the minimum level if noise occurs |
| Sync                 | PC sync signal type (H & V / On G) |
|                      | • H & V : Horizontal and Vertical sync from your PC (Most common sync format) |
|                      | • On G : Sync on Green sync from your PC |
| Reset PC Settings    | Press the OK button to reset to the default settings |

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.
* 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.

DVI connection

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).

DVI Position Settings

If the picture position is not fit to the screen during the DVI connection, adjust the position on “DVI Position Settings” in Setup Menu. The settings are memorized for each HDMI terminals and input signals.

To make settings ➔ “How to Use Menu Functions” (p. 18)

Menu Item Adjustments

| DVI Position Settings | H-pos | Adjusts horizontal position |
|                      | V-pos | Adjusts vertical position |
|                      | Press the OK button to reset to the default settings |

(+) The HDMI logo is displayed on HDMI-compliant equipment.
(+2) Enquire at your local digital equipment retailer shop.
VIERA Link “HDAVI Control™”

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

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

The equipment with “HDAVI Control” function enables the following operations:
- Easy playback (p. 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.
- 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. 32). 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.

Easy playback
- 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
- Select “VIERA Link Control”
- Display “VIERA Link Menu”
- Select the equipment you want to access
- Operate the menu of the equipment
- Example:
  - About the operations for the equipment, read the manual of the equipment.

Easy control only with VIERA remote control
- Power on Link (p. 31)
- Power off Link (p. 31)
- Volume up / down
- MUTE

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.

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.

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

- **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 adjust volume**
  - **Headphones**
  - **Camcorder / Game equipment**
- **To use amplifier with speaker system**
- **VIERA Link**
  - **Home Cinema**
  - **Easy playback, Easy control only with VIERA remote control**

### Types of connectable equipment to each connector

<table>
<thead>
<tr>
<th>Connector</th>
<th>AV1 IN</th>
<th>AV2 IN</th>
<th>AV3 IN</th>
<th>AV4 IN (Side of TV)</th>
<th>MONITOR OUT</th>
<th>DIGITAL AUDIO OUT</th>
<th>HDMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recording / Playback (equipment)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>To record / playback videocassettes / DVDs (VCR / DVD recorder)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>To listen with speakers</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

- **Fully wired HDMI compliant cable**
- **Optical digital audio cable**
- **Conversion adapter (if necessary)**
- **Headphones**
  - **(VIDEO)** or **(S-VIDEO)**
  - **(AUDIO)**
- **Camcorder / Game equipment**
  - **(Video)** or **(S-Video)**
  - **(Audio)**
- **To watch satellite broadcasts**
  - **Set top box**
  - **Fully wired HDMI compliant cable**
- **To watch DVDs**
  - **DVD player**
- **To record / playback**
  - **DVD Recorder / VCR**
  - **RF cable**
- **VIERA Link**
  - **(p. 30)**
  - **Use fully wired HDMI compliant cable.**
  - **Read the manuals of the equipment too.**
- **Home Cinema**
  - **Panasonic DVD Recorder**
  - **HD Video Camera**
  - **Panasonic Amplifier**
  - **Speaker system**
- **Easy playback, Easy control only with VIERA remote control**
- **Computer**
  - **HDMI terminal**
  - **(Viewing)** or **(Listening)**
- **Headphones**
  - **(M3 stereo mini plug)**

---

**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 adjust volume**
  - **Headphone Volume** in the Sound Menu (p. 20)

---

**To listen with speakers**

- **Amplifier with speaker system**
- **PC**

---

**VIERA Link**

- **(p. 30)**
  - **Use fully wired HDMI compliant cable.**
  - **Read the manuals of the equipment too.**

---

**Home Cinema**

- **Panasonic DVD Recorder**
- **HD Video Camera**
- **Panasonic Amplifier**
- **Speaker system**

---

**Easy playback, Easy control only with VIERA remote control**

- **Computer**
  - **HDMI terminal**
  - **(Viewing)** or **(Listening)**
- **Headphones**
  - **(M3 stereo mini plug)**

---

**Panasonic TV**

- **Speaker system**
- **Conversion adapter (if necessary)**
- **Computer**
- **HDMI terminal**
- **(Viewing)** or **(Listening)**
- **Headphones**
  - **(M3 stereo mini plug)**
- **Camcorder / Game equipment**
  - **(Video)** or **(S-Video)**
  - **(Audio)**
- **To watch satellite broadcasts**
  - **Set top box**
  - **Fully wired HDMI compliant cable**
- **To watch DVDs**
  - **DVD player**
- **To record / playback**
  - **DVD Recorder / VCR**
  - **RF cable**
- **VIERA Link**
  - **(p. 30)**
  - **Use fully wired HDMI compliant cable.**
  - **Read the manuals of the equipment too.**
- **Home Cinema**
  - **Panasonic DVD Recorder**
  - **HD Video Camera**
  - **Panasonic Amplifier**
  - **Speaker system**
- **Easy playback, Easy control only with VIERA remote control**

---

**To adjust volume**

- **Headphone Volume** in the Sound Menu (p. 20)
Technical Information

Channel Allocation (Analogue mode)

<table>
<thead>
<tr>
<th>CH Display / Receive Channel</th>
<th>CH Display / Receive Channel</th>
<th>CH Display / Receive Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH 0</td>
<td>CH 6</td>
<td>S 11</td>
</tr>
<tr>
<td>CH 5</td>
<td>CH 9</td>
<td>S 44</td>
</tr>
<tr>
<td>S 2</td>
<td>CH 9A</td>
<td>CH 20</td>
</tr>
<tr>
<td>S 10</td>
<td>CH 10</td>
<td>CH 75</td>
</tr>
<tr>
<td>CH 12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rating (DBV mode)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Not classified</td>
</tr>
<tr>
<td>P</td>
<td>Pre school</td>
</tr>
<tr>
<td>C</td>
<td>Children</td>
</tr>
<tr>
<td>G</td>
<td>General</td>
</tr>
<tr>
<td>PG</td>
<td>Parental Guidance recommended</td>
</tr>
</tbody>
</table>

The optimum size and aspect can be chosen, and you can enjoy finer images. (p. 11)

Aspect Ratio

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)

- Displays the image at "16:9" without distortion (anamorphic).
- Displays the image at the standard "16:9" without distortion.
- Displays a 4:3 image enlarged horizontally to fit the screen.
- Displays a "16:9" letterbox or "4:3" image without distortion.
- Displays a 4:3 image enlarged horizontally to fit the screen.
- Displays a "4:3" image enlarged horizontally to fit the screen.

Update system software regularly to ensure that you have latest version software.

To download new software, press "OK". Downloading (approx. 20 min.)

If you choose not to do this, press "EXIT".

To update automatically

Set "Auto Update Search in Standby" to "On". If there is a new version software being broadcast, the TV will download this automatically.

The automatic updating sequence is carried out at 3:00 AM and 5:00 AM every night under the following conditions.

- Standby (TV turned off with the remote control)
- Recording is not in progress.

To update manually

Perform "System Update Search Now". If there is an update available, a notification banner is displayed.

To download new software, press "OK". Downloading (approx. 20 min.)

If you choose not to do this, press "EXIT".

Note

During downloading, do not turn off the TV or touch any button.
(The TV is automatically activated after downloading is completed.)

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 disabled 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 (Analogue mode)

When you receive the stereo / bilingual sound system, sound output modes can be selected by pressing the [TV] / [Stereo] / [Bilingual Sound Selection] button.

Audio Signal STEREO MAIN I SUB II MONO

- When receiving NICAM ...

NICAM ........ Used in New Zealand, Singapore, Hong Kong etc.

<table>
<thead>
<tr>
<th>Type of broadcast</th>
<th>Regular broadcast (Standard Audio)</th>
<th>Regular + NICAM MONO I (MAIN I)</th>
<th>NICAM STEREO</th>
<th>NICAM DUAL MONO (MAIN I / SUB II)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode Indicator</td>
<td>No Indicator</td>
<td><img src="33" alt="Image" /></td>
<td><img src="34" alt="Image" /></td>
<td><img src="35" alt="Image" /></td>
</tr>
</tbody>
</table>

A2/German) .......... Used in Australia, Malaysia etc.

<table>
<thead>
<tr>
<th>Type of broadcast</th>
<th>Regular broadcast (Standard Audio)</th>
<th>BILINGUAL or DUAL MONO: MAIN I / SUB II</th>
<th>STEREO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode Indicator</td>
<td>No Indicator</td>
<td><img src="33" alt="Image" /></td>
<td><img src="34" alt="Image" /></td>
</tr>
</tbody>
</table>

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.
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 a PC, set the colour display quality of the PC to the highest position.
- For details of the applicable PC signals, see below.
- Max. display resolution

#### Input signal that can be displayed

**COMPONENT (Y, Pb/Cb, Pr/CR), HDMI**

<table>
<thead>
<tr>
<th>Signal name</th>
<th>COMPONENT</th>
<th>HDMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>342 (60 Hz)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>480p (60 Hz)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>576 (60 Hz)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>576p (50 Hz)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>720p (50 Hz)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>720p (60 Hz)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>1,080i (50 Hz)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>1,080i (60 Hz)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>1,080p (60 Hz)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>1,080p (60 Hz)</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

**PC (D-sub 15P)**

<table>
<thead>
<tr>
<th>Signal name</th>
<th>Horizontal frequency (kHz)</th>
<th>Vertical frequency (Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>640 × 480 60Hz</td>
<td>31.44</td>
<td>70.07</td>
</tr>
<tr>
<td>640 × 576 60Hz</td>
<td>31.47</td>
<td>69.94</td>
</tr>
<tr>
<td>640 × 480 50Hz</td>
<td>31.44</td>
<td>75.00</td>
</tr>
<tr>
<td>640 × 576 50Hz</td>
<td>32.47</td>
<td>69.94</td>
</tr>
<tr>
<td>800 × 600 60Hz</td>
<td>46.88</td>
<td>75.00</td>
</tr>
<tr>
<td>800 × 600 50Hz</td>
<td>46.88</td>
<td>85.06</td>
</tr>
<tr>
<td>852 × 480 60Hz</td>
<td>31.44</td>
<td>67.99</td>
</tr>
<tr>
<td>1,024 × 768 60Hz</td>
<td>48.36</td>
<td>66.00</td>
</tr>
<tr>
<td>1,024 × 768 50Hz</td>
<td>50.48</td>
<td>66.00</td>
</tr>
<tr>
<td>1,024 × 768 576Hz</td>
<td>60.02</td>
<td>75.03</td>
</tr>
<tr>
<td>1,024 × 768 625Hz</td>
<td>69.68</td>
<td>35.00</td>
</tr>
<tr>
<td>1,024 × 1,024 60Hz</td>
<td>63.98</td>
<td>60.02</td>
</tr>
<tr>
<td>1,366 × 768 60Hz</td>
<td>48.39</td>
<td>60.04</td>
</tr>
<tr>
<td>Macintosh13&quot; (640 × 480)</td>
<td>35.00</td>
<td>66.67</td>
</tr>
<tr>
<td>Macintosh16&quot; (832 × 624)</td>
<td>49.73</td>
<td>74.55</td>
</tr>
<tr>
<td>Macintosh21&quot; (1,152 × 870)</td>
<td>68.68</td>
<td>75.06</td>
</tr>
</tbody>
</table>

**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 signals are 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 the “HDMI1 Input” setting in the Sound Menu (p. 20).

#### An error message appears

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

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

- 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.

#### Clattered sound might be heard

- There are some looseness around the panel to prevent the damage to the panel.
- There may be red spots, blue spots, green spots and black spots on the screen.

#### Technical Information

**Input signal that can be displayed**

**COMPONENT (Y, Pb/Cb, Pr/CR), HDMI**

* Mark: Applicable input signal

### Signal name

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Signal Name</th>
<th>Pin No.</th>
<th>Signal Name</th>
<th>Pin No.</th>
<th>Signal Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R</td>
<td>6</td>
<td>GND (Ground)</td>
<td>5</td>
<td>NC (not connected)</td>
</tr>
<tr>
<td>2</td>
<td>G</td>
<td>7</td>
<td>GND (Ground)</td>
<td>6</td>
<td>NC (not connected)</td>
</tr>
<tr>
<td>3</td>
<td>B</td>
<td>8</td>
<td>GND (Ground)</td>
<td>7</td>
<td>NC (not connected)</td>
</tr>
<tr>
<td>4</td>
<td>NC (not connected)</td>
<td>9</td>
<td>NC (not connected)</td>
<td>10</td>
<td>NC (not connected)</td>
</tr>
<tr>
<td>5</td>
<td>GND (Ground)</td>
<td>11</td>
<td>HD</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>NC (not connected)</td>
<td>13</td>
<td></td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>NC (not connected)</td>
<td>15</td>
<td></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

**Note**

- 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

Problem

Actions

Digital TV reception technology requires high quality, robust DTV signals which in some domestic aerial installations, may be relatively poor despite good analogue reception.

To maintain optimum signal quality from TV aerial, use a TV aerial splitter (as illustrated) when connecting two or more equipments to the same aerial.

Check to ensure your area is covered by DVB transmissions. (www.dba.org.au)

Check that the aerial and antenna cable are designed for DVB.

Check that the aerial and antenna cable should be inspected / installed by a licenced installer that should comply with Australian Standard AS1417.1.

Check “Signal Display”. (p. 25)

If “Signal Quality” or “Signal Strength” are displayed in red or constantly changing, check aerial.

If problem persists consult your local TV aerial installer.

Picture regularly breaks up on some channels, or “No Signal” message

Check “Signal Display”. (p. 25)

If “Signal Quality” or “Signal Strength” are displayed in red or constantly changing, check aerial.

If problem persists consult your local TV aerial installer.

Picture very infrequently breaks up on some or all channels

Interference (known as impulse noise) from household appliances such as light switches, fridges etc may cause picture break up and / or audio distortion. Use high quality quad shielded coaxial cable feed lead between TV and antenna wall socket to minimise impulse noise pickup. If problem persists consult your local TV aerial installer.

When “No Signal” message is displayed check TV aerial connection.

The received signal may be too weak to allow the TV to reliably lock to the desired “No Signal” channel to generate a stable picture. Repeat the tuning procedure (p. 24). If problem persists consult your local TV aerial installer.

TV takes so long to turn on

Like your computer, the TV has to run a number of diagnostic and software checks before it can display any broadcast channels.

The channel cannot be changed

TV goes into “Standby mode”

The remote control does not work

Are the batteries installed correctly? (p. 6)

Are the batteries installed correctly? (p. 6)

Have the TV been switched On?

Other

Connection Terminals

Power Source

AC 220-240 V, 50 / 60 Hz

Average use

98 W

134 W

Standby condition

0.4 W

Specifications

Power Consumption

After DVB Auto Tuning only

PAL: BIG Transmission Power

PAL: BIG Transmission Power

50 cm (diagonal) 64 cm (diagonal)

Visible screen size

757 mm (W) × 429 mm (H)

575 mm (W) × 323 mm (H)

697 mm (W) × 392 mm (H)

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Note

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