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 it’s 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 voltage, incorrect installation, accident, misuse, neglect, build-up of dirt or dust, abuse, maladjustment of customer controls, mains supply problems, thunderstorm activity, ingestion 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:
   (a) Video or Audio Tapes
   (b) Video or Audio Heads and Styli resulting from normal use
   (c) Shaver Heads or Cutters from normal use
   (d) Cabinet Parts
   (e) User replaceable Batteries
   (f) Thermal Paper, Toner/Ink Cartridges, Drums, Developer, Film (ink/ribbon), Filter Cartridge, Printer Heads
   (g) Microwave Oven cook plates
   (h) Kneader mounting shaft and unit (bread bakery)

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 a proof of purchase date.
   • 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:
     (a) Picture tube (CRT) based Television Receivers (screen size greater than 66cm)
     (b) Convection/Combination Microwave Ovens
     (c) Whiteboard (except portable type)
     (d) LCD televisions / displays (screen size greater than 103 cm)

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 remounting of 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.

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/

© 2007 Matsushita Electric Industrial Co., Ltd. All Rights Reserved.

Printed in Japan

PRO-031-F01 Issue: 3.0  23-11-2005

Operating Instructions
Plasma Television

Model No. TH-50PX700A
Turn your own living room into a movie theatre!

Experience an amazing level of multi-media 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 your TV!

Basic Features
- Watching TV
- Using TV Guide
- Watching Videos and DVDs
- Viewing Teletext

Advanced Features
- How to Use Menu Functions
- DVB Settings (DVB)
- Editing and Setting Channels
- Restore Settings
- Input Labels
- Displaying PC Screen on TV
- HDMI Functions
- Viewing from card (Photos)
- VIERA Link "HDAVI Control"
- External Equipment

FAQs, etc.
- Technical Information
- FAQs
- Licence
- Specifications
- WARRANTY
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.

Warning

Notes

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 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.

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 use a hard, dry cloth to wipe the surface with your fingertip 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.)
Accessories / Options

Standard accessories
- Remote Control Transmitter: N2QAYB000122
- Batteries for the Remote Control Transmitter
- Clapper (2)
- Operating Instructions
- Pedestal (ST-50D2-WS) TBLX0020
- Mains Lead
- Guarantee

Check that you have the accessories and items shown.

Remote Control Transmitter

Remote Control Signal Receiver

Power LED
- Standby: red
- On: green

Installing remote’s batteries

1. Pull open
2. Snap open
3. Snap shut
4. Close

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 use rechargeable batteries.
- Do not mix different battery types (such as alkaline and manganese batteries).
- Do not use rechargeable batteries.
- Do not burn or breakup batteries.

Optional accessories
- Pedestal: TY-ST50P600W, TY-S50PX700W
- Plasma TV stand: TY-PW42PV3W, TY-WK42PR3W
- Wall-hanging bracket (vertical): TY-WK42PV3W
- Wall-hanging bracket (angle): TY-WK42PV3W

Caution
- In order to maintain the unit’s performance and safety, be absolutely sure to ask your dealer or a licensed 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.

Using the clamper

1. Pull open
2. Snap open
3. Snap shut
4. Close

Note the correct polarity (+ or -)

Push both side hooks and pull out

Removing the clamper

Rear of the TV

Caution
- 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.

Identifying Controls

Function select
- Volume / Contrast / Brightness / Colour / Sharpness / Tint (NTSC mode) / Bass / Treble / Balance / Auto Tuning

Changes aspect ratio (p. 11)

Changes the input mode
- TV - switches DVB (digital broadcasting) / Analogue mode (p. 10)
- AV - changes AV input mode (p. 14)

Changes the output mode
- Headphones jack
- AV4 terminals
- HDMI3 terminal

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)

Changes the input mode

Accessories / Options

Increase or decrease volume

Programme / service change buttons (0-9) and Teletext page buttons (p. 10 and p. 16)
When in Standby mode, switches TV On.

Teletext (p. 11)

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)

Teletext Hold (p. 17)

Teletext Index (p. 17)

Sound mute On / Off

Still picture

Option menu
- Sets the preferred settings of the current programme easily (p. 10)

Returns to the previous menu
- Colour buttons used for the selection, navigation and operation of various functions

Surround (p. 20)

Changes the sound track, if programme has multiple audio tracks (DVB)
- Stereo / Bilingual Sound Selection (p. 37)
- Analogue

VCR / DVD operations (p. 15)

Multi window (p. 11)

Selects services in sequence

Teletext Index (p. 17)

Still picture

Teletext Hold (p. 17)

Sound mute On / Off

Volume
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

Example 2
Connecting DVD Recorder / VCR

TV only

Rear of the TV

Fastener

To unfasten

Mains lead (supplied)

AC 220-240 V 50 / 60 Hz

Aerial

Rear of the TV

AC 220-240 V 50 / 60 Hz

Mains lead (supplied)

Aerial

TV, DVD Recorder or VCR

• If your recorder is not available for DVB ⇒ p. 41

Rear of the TV

RF cable

DVD Recorder or VCR

RF cable

Example 1
Connecting aerial

Example 2
Connecting DVD Recorder / VCR

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.

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.

• 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

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 to the previous menu

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
   - 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 front 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

Select a service using TV Guide
   - “Using TV Guide” (p. 12)

Other useful functions (Operate after 3)

Display programme information

- Programme
- Service
- Current time
- Current favourite list
- To change the Fav List
- To download new software to TV
- To set display timeout
- “Banner Display Timeout” (p. 21)
- To hide
- Appears also when changing service.
- Information banner operation

Change the aspect ratio

- To change the mode
- Display Aspect Selection list
- 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.

View in multi window

- To watch the programme listed in the banner
- Information banner operation

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

Operations in multi window

- To exit multi window (return to the single-screen view with main screen)
- To change the layout, images, first show the colour bar

- Remote control operations apply to the main screen.

Display subtitles

- Display / hide subtitles (if available)
  - This is the same as turning the teletext on and selecting P801.
  - Channel changing is not possible when this function is active.

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).
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)
- To next day (DVB mode)
- To view a programme list of the selected type (DVB mode)
- To return to TV
- To view a programme list of the selected favourites list
- Other useful functions (Operate after viewing TV Guide)

Other useful functions (Operate after viewing TV Guide)

- To return to the start page
- To list favourite services (p. 23)

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.

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.

• Using TV Guide

- To return to TV
- To list favourite services (p. 23)

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.

Display the Input select menu

Select the input mode connected to the equipment

View Displays the selected mode

To return to TV

Note

If the external equipment has an aspect adjustment function, set to “16:9”.
For details, see the manual of the equipment or ask your local dealer.

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

<table>
<thead>
<tr>
<th>VCR / DVD switch*</th>
<th>VCR / DVD switch*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select VCR to operate Panasonic VCR or DVD equipment</td>
<td></td>
</tr>
<tr>
<td>Select DVD to operate Panasonic DVD equipment or Player home theatre</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POWER</th>
<th>Standby</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set to Standby mode / Turn on</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDIA</th>
<th>Play</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playback videocassette / DVD</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDIA</th>
<th>Stop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop the operations</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDIA</th>
<th>Rewind / Skip / Search</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCR: Rewind, view the picture rapidly in reverse</td>
<td></td>
</tr>
<tr>
<td>DVD: Skip to the next track or title</td>
<td></td>
</tr>
<tr>
<td>Press and hold to search backward</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDIA</th>
<th>Fast-forward / Skip / Search</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCR: Fast-forward, view the picture rapidly forward</td>
<td></td>
</tr>
<tr>
<td>DVD: Skip to the next track or title</td>
<td></td>
</tr>
<tr>
<td>Press and hold to search forward</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDIA</th>
<th>Pause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pause / Restart</td>
<td></td>
</tr>
<tr>
<td>DVD: Press and hold to play at slow speed</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDIA</th>
<th>Programme Up / Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select programme</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDIA</th>
<th>Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start recording</td>
<td></td>
</tr>
</tbody>
</table>

Set 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 and enter the appropriate code for the equipment to be controlled, see table below

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

<table>
<thead>
<tr>
<th>“DVD” position</th>
<th>Equipment</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVD</td>
<td>70 (default)</td>
<td></td>
</tr>
<tr>
<td>Player home theatre</td>
<td>71</td>
<td></td>
</tr>
</tbody>
</table>

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
Available page up / down
To select among subject blocks
To select next subject within the subject block
(After the last subject, it moves to the next subject block.)

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

■ To change mode ➔ “Teletext” in Setup Menu (p. 21)

Switch to Teletext
■ Displays Index (content varies depending on the broadcasters)
■ To adjust contrast ➔
■ To return to TV ➔

Select the page
 finalized
As the blue bar is displayed

■ Using teletext conveniently
Reveal hidden words e.g. quiz page answers
Re-hide

FULL / TOP / BOTTOM

Viewing Teletext
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
   例: Picture Menu

3. Select the item
   例: Picture Menu

4. Adjust or select
   例: Picture Menu

   Number and positions of alternatives
   Colour Balance  Normal
   Changed

   Adjust using the slide bar
   Sharpness  Normal
   Moved

   Go to the next screen
   Tuning Menu  Access
   Displays the next screen

   To change menu pages
   up
   down

Note

To initialize all settings
"Shipping Condition" (p. 26)

To return to TV at any time
EXIT

To return to the previous screen
RETURN

Only available items can be selected.
## How to Use Menu Functions

### Menu list

<table>
<thead>
<tr>
<th>Menu</th>
<th>Item</th>
<th>Adjustments / Configurations (alternatives)</th>
</tr>
</thead>
</table>
| **VIERA Link Control** | Controls the connected Panasonic equipment.  
- **Easy control only with VIERA remote control** ([p. 33](#)).  
- **You can also access VIERA Link Menu directly using the VIERA Link button on the remote control.** |
| **Speaker Selection** | **Menu Item Adjustments / Configurations (alternatives)** |
| **Viewing Mode** | **Set for each input signal** |
| **Contrast, Brightness, Colour, Sharpness** | **For NTSC signal reception only** |
| **Colour Balance** | **Cool / Normal / Warm** |
| **Colour Management** | **Not valid on PC signal** |
| **P-NR** | **Off / Normal / Dynamic / Auto** |
| **MPEG NR** | **Off / PCM, PC signal or DVB** |
| **3D-COMB** | **Off / PAL or NTSC signal reception only** |
| **Reset Picture Defaults** | **Cannot be used with DVB** |
| **Mode** | **Basic picture mode ([Dynamic / Normal / Cinema / Auto](#))** |
| **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** | **Switching is also possible by the Surround button on the remote control ([p. 7](#)).** |
| **Volume Correction** | Adjusts volume of individual channel or input mode |
| **DVB Audio Preference** | Selects the initial setting for Audio tracks ([Dolby Digital / MPEG](#)).  
- **If programme has both Dolby Digital and MPEG audio tracks, priority is given to what you select.**  
- **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.**  
- **MPEG: An audio compression method that compresses audio to small size without any considerable loss of audio quality.**  
- **DVB mode only** |
| **SPDIF Selection** | Selects the initial setting for digital audio output signal from DIGITAL AUDIO OUT terminal ([Auto / PCM](#)).  
- **Auto: Dolby Digital is an output as Dolby Digital Bitstream. MPEG is output as PCM.**  
- **PCM: Dolby Digital is output as PCM. MPEG is output as PCM.**  
- **DVB mode only** |
| **MPEG Audio Level** | Selects the initial setting for digital audio output signal from DIGITAL AUDIO OUT terminal ([Auto / PCM](#)).  
- **Auto: Dolby Digital is an output as Dolby Digital Bitstream. MPEG is output as PCM.**  
- **PCM: Dolby Digital is output as PCM. MPEG is output as PCM.**  
- **DVB mode only** |
| **HDMI1 / 3 Input** | **Select to fit the input signal ([Auto / Digital / Analogue](#))** ([p. 29](#)).  
- **Auto: Automatic detection of digital or analogue sound source**  
- **Digital: HDMI cable connection**  
- **Analogue: HDMI-DVI adapter cable connection**  
- **HDMI input mode only**  
- **HDMI2 terminal is for digital signal only**  
- **Reset for HDMI2 available** |
| **Reset Sound Defaults** | Press the OK button to reset the present Sound Mode to the default settings |

### Menu list

<table>
<thead>
<tr>
<th>Menu</th>
<th>Item</th>
<th>Adjustments / Configurations (alternatives)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DVB Favourites Edit</strong></td>
<td>Creates list of favourite programmes (<a href="#">p. 23</a>).</td>
<td></td>
</tr>
<tr>
<td><strong>Auto Tuning</strong></td>
<td>Automatically sets the channels received in the area (<a href="#">p. 24</a>).</td>
<td></td>
</tr>
<tr>
<td><strong>Analogue Programme Edit</strong></td>
<td>Edits analogue channels (<a href="#">p. 25</a>).</td>
<td></td>
</tr>
<tr>
<td><strong>DVB Manual Tuning</strong></td>
<td>Sets the DVB channels manually (<a href="#">p. 25</a>).</td>
<td></td>
</tr>
<tr>
<td><strong>Analogue Manual Tuning</strong></td>
<td>Sets the analogue channels manually (<a href="#">p. 25</a>).</td>
<td></td>
</tr>
<tr>
<td><strong>Add New DVB Services</strong></td>
<td>Adds new DVB services (<a href="#">p. 25</a>).</td>
<td></td>
</tr>
<tr>
<td><strong>New Service Message</strong></td>
<td>Selects whether to give a notification message when a new DVB service is found (<a href="#">p. 25</a>).</td>
<td></td>
</tr>
<tr>
<td><strong>DVB Signal Display</strong></td>
<td>Checks the DVB signal condition (<a href="#">p. 25</a>).</td>
<td></td>
</tr>
<tr>
<td><strong>Off Timer</strong></td>
<td>Sets the time the TV automatically turns off (<a href="#">Off / 15 / 30 / 45 / 60 / 75 / 90 minutes</a>).</td>
<td></td>
</tr>
<tr>
<td><strong>Teletext</strong></td>
<td>Teletext display mode (<a href="#">TOP (FASTEXT) / List</a>) (<a href="#">p. 16</a>).</td>
<td></td>
</tr>
<tr>
<td><strong>Shipping Condition</strong></td>
<td>Resets all settings, for example, when moving house (<a href="#">p. 26</a>).</td>
<td></td>
</tr>
<tr>
<td><strong>System Update</strong></td>
<td>Downloads new software to TV (<a href="#">p. 23</a>).</td>
<td></td>
</tr>
<tr>
<td><strong>Power Save</strong></td>
<td>Reduces brightness of picture to economise on power consumption (<a href="#">Off / On</a>).</td>
<td></td>
</tr>
</tbody>
</table>
| **Side Panel** | Increases the brightness of the side panel ([Off / Low / Mid / High](#)).  
- **The recommended setting is “High” to prevent panel “image retention”** |
| **Input Labels** | Labels or skips each input terminals ([p. 27](#)). |
| **Banner Display Timeout** | Sets how long the information banner ([p. 11](#)) stays on screen ([Off / 10 sec. in 1-sec. increments](#)). |
| **VIERA Link** | **Sets to use VIERA Link functions ([Off / On](#))** ([p. 32](#)). |
| **Power off Link** | **Set to “Set” to use Power off Link function ([No / Set](#))** ([p. 33](#)). |
| **Power on Link** | **Set to “Set” to use Power on Link function ([No / Set](#))** ([p. 33](#)). |
| **SD Card LED** | **Lights blue LED while SD Card is inserted** ([Off / On](#)). |
| **Region Select** | Selects the region where you live to adjust the standard time ([NSW/ACT / Victoria / Queensland / South Australia / Western Australia / Northern Territory / Tasmania](#)) ([p. 23](#)). |
| **Daylight Saving Time** | Selects time offset from the standard time for Summer Time ([Auto / Off / +1/2 Hr / +1 Hr](#)) ([p. 23](#)).  
- **Set to “Auto” normally** |
| **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 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.

3. Select “Setup”.

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

5. Set.

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.

Note

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

Download new software to TV.

• For details (p. 37)

Select “System Update Search Now” and then set “On” or “Off”.

Select a service and add it to the list.

A service is added.

Select “Setup”.

To display another List

To move the service

To delete the service

Select the field of List to edit and:

• To name the List

• To move the service

• To delete the service

Note

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

Download may take for about 20 min.

Select “Region Select” to adjust the standard time.

The time contained in the broadcast signal is UTC (Universal time, coordinated).

Select the region where you live to adjust the standard 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.

Region | Standard Time | Daylight Saving Time: Auto (During Summer Time)
--------|---------------|-------------------------------------
New South Wales / ACT | +10:00 | +11:00
Victoria | +10:00 | +11:00
Queensland | +9:30 | +10:30
South Australia | +9:30 | +10:30
Western Australia | +8:00 | +9:00
Northern Territory | +8:00 | +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.

1. 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.

2. Display the menu

3. Select “Setup”

4. Select “Tuning Menu”

5. Select a function

6. 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 = “DVB Manual Tuning”, “Analogue Manual Tuning”

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

1. Press repeatedly until “Auto Tuning” appears
2. Access “Auto Tuning”
3. Start “Auto Tuning”

To return to TV

Edit the analogue programme position settings

- To change channel number
- “Analogue Manual Tuning”

Set the channel to edit

Programme 1 [CH33]

Manual Tuning

CH 29 Analogue –
CH 33 Analogue –

Set Analogue channel manually after Auto Tuning.

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

Add DVB channel automatically

Any new services found will be added automatically.

Selects whether to give a notification message when a new DVB service is found. (Off / On)

Select a service and checks the DVB signal condition.

Use for adjusting the direction of the aerial.

To change the service during the menu appears

Signal Quality:
- Green bar ⇒ Good
- Yellow bar ⇒ Poor
- Red bar ⇒ Bad (Check the aerial)
**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**
   - Press the MENU button.

2. **Select “Setup”**
   - Select “Setup” from the menu.

3. **Select “Shipping Condition”**
   - Select “Shipping Condition” from the menu.

4. **Set**
   - Select “Shipping Condition” and press the select button.
   - Select “Shipping Condition” and press the set button.

   - **Check the message and initialise**
     - **Shipping Condition**
       - Analogue & DVB tuning data will be erased
       - Are you sure? Are you sure?

   - **Follow the on-screen instructions**
     - “Auto Tuning” will automatically start.
     - To re-tune TV channels only, e.g. after moving house
     - “Auto Tuning” (p. 9)

   - **To return to TV**
     - EXIT

---

**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**
   - Press the MENU button.

2. **Select “Setup”**
   - Select “Setup” from the menu.

3. **Select “Input Labels”**
   - Select “Input Labels” from the menu.

4. **Select a input terminal and set**
   - Select a input terminal and set.
   - The labels you set will be displayed in “Input Selection” menu (p. 14) or banner.

   - **User input**
     - You can name each input terminals freely.

   - **Set characters**
     - (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. 34)

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

To return to TV

PC menu setting (changed as desired)

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

Menu Item Adjustments / Configurations (options)

<table>
<thead>
<tr>
<th>Picture Settings</th>
<th>Appendix / Configurations (options)</th>
</tr>
</thead>
<tbody>
<tr>
<td>W/B High R</td>
<td>White balance of bright red area</td>
</tr>
<tr>
<td>W/B High B</td>
<td>White balance of bright blue area</td>
</tr>
<tr>
<td>W/B Low R</td>
<td>White balance of dark red area</td>
</tr>
<tr>
<td>W/B Low B</td>
<td>White balance of dark blue area</td>
</tr>
<tr>
<td>Gamma</td>
<td>(2.0 / 2.2 / 2.5 / S Curve)</td>
</tr>
<tr>
<td>Reset PC Settings</td>
<td>Press the OK button to reset to the default settings</td>
</tr>
</tbody>
</table>

Input Resolution

Switches to a wide view

- VGA (640 x 480 pixels), WVGA (852 x 480 pixels),
- XGA (1,024 x 768 pixels), WXGA (1,366 x 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
- 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. 34).

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 / 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, 720p, 1080i and 1080p. Match the output setting of the digital equipment.
- For details of the applicable HDMI signals, see p. 39.

DVI connection

If the external equipment has only a DVI output, connect to the HDMI1 / 3 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 audio 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

<table>
<thead>
<tr>
<th>Setup</th>
<th>Item</th>
<th>Adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVI Position Settings</td>
<td>Hi-pos</td>
<td>Adjusts horizontal position</td>
</tr>
<tr>
<td>DVI Position Settings</td>
<td>V-pos</td>
<td>Adjusts vertical position</td>
</tr>
</tbody>
</table>

Reset DVI Position Settings

Press the OK button to reset to the default settings

(+1): The HDMI logo is displayed on HDMI-compliant equipment.
(+2): Enquire at your local digital equipment retailer shop.
Viewing from card (Photos)

The still images recorded by the digital camera will be displayed.

1. Insert the SD Card
2. Enter SD mode (Photo View Mode)
3. Select the photo to be viewed
4. View

Important:
- 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.)

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.
- No valid file to play
- Cannot read file

On screen messages
- Is SD Card in?
- No valid file to play
- Cannot read file

Slide show
- Start Slide show (operate in step 3 or 4)
- Slide show settings (operate in step 3 or 4)

Viewing Setup
- Interval
- Repeat

Adjustments / Configurations (alternatives)
- Select slide show interval (5 / 10 / 15 / 30 / 60 / 90 / 120 seconds)
- Slide show repeat (Off / On)
VIERA Link “HDAVI Control™”*

*Enjoy additional HDMI Inter-Operability with Panasonic products which have “HDAVI Control” function. This TV supports “HDAVI Control 2” function. Connections to some Panasonic equipment (DVD Recorder DIGA, HD Video Camera, Player theatre, Amplifier, etc.) with HDMI cables allow you to interface them automatically.

The equipment with “HDAVI Control” function enables the following operations:

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

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

- Easy control only with VIERA remote control (p. 33)

These features are limited to models incorporating Panasonic’s “HDAVI Control” and “VIERA Link”. VIERA Link “HDAVI Control”, based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers’ equipment that supports HDMI CEC may not work.

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. 34). 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.

Display the menu

1. MENU
2. Select “Setup”
3. Select “VIERA Link Settings”
4. Select “VIERA Link” and set to “On”

You can control some functions of the connected Panasonic equipment with this TV remote control (point the remote control at the TV’s signal receiver).
If you cannot access the menu, check the settings and the equipment (p. 32).

Access the menu of the equipment

1. Display “VIERA Link Menu”
2. Select “VIERA Link Control”
3. Select the equipment you want to access
4. Operate the menu of the equipment
   - Example:
     - DVD Recorder DIGA
     - HD Video Camera
     - Player theatre

- Available VIERA remote control buttons: (depending on the connected equipment)
  - Move the cursor / select the menu
  - Power on Link
  - Return to the previous menu
  - Exit the menu
  - Store / Set / Access
  - 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.
- Easy playback (p. 33)
- Power on Link Set
- Power off Link

- Set to “Home Cinema” or “TV”
- The TV remains on even if the “VIERA Link” compatible equipment is turned off.

Speaker control

1. Display “VIERA Link Menu”
2. Select “Speaker Selection”
3. Set to “Home Cinema” or “TV”

- TV
  - TV speakers are active.

- 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.

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.
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. 43).

**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 (Front 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>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To watch DVDs (DVD player)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To watch camcorder images (Video camera)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To watch satellite broadcasts (Set top box)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To play games (Game equipment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To use amplifier with speaker system</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIERA Link</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**: Recommended Connection

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

**Home Cinema**

Panasonic Amplifier

Panasonic DVD Recorder

Speaker system

**VIERA Link** (p. 32)

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

**About Connectors**

- 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.

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

**Home Cinema**

Panasonic Amplifier

Panasonic DVD Recorder

Speaker system

**VIERA Link** (p. 32)

- Use fully wired HDMI compliant cable.
- Read the manuals of the equipment too.
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>S 6</td>
<td>CH 10</td>
</tr>
<tr>
<td>O</td>
<td>i</td>
<td>1</td>
</tr>
<tr>
<td>S 5</td>
<td>CH 6</td>
<td>S 11</td>
</tr>
<tr>
<td>1</td>
<td>S 10</td>
<td>i</td>
</tr>
<tr>
<td>S 2</td>
<td>CH 9</td>
<td>S 44</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CH 5A</td>
<td>CH9A</td>
<td>CH 20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CH 75</td>
</tr>
</tbody>
</table>

Rating (DVB 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>

Rating Meaning (Analogue 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>

Updating the software system

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

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

If there is an update available, a notification banner is displayed when the channel has the update information.

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

If you choose not to download, press "EXIT".

To update automatically

* Set "Auto Update Search in Standby" to "On" (p. 23)

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" (p. 23)

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 download, 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. 32)

* This function may not work normally depending on the equipment condition.
* Image or sound may not be available for the first few seconds when the playback starts.
* Image or sound may not be available for the first few seconds when input mode is switched.
* Volume function will be displayed on the TV when you adjust the volume of the equipment.
* If you set the equipment to use "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)

Audio Signal STEREO MAIN SUB MONO

Mode Indicator ☐ ☐ ☒ ☒

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

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

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.

Aspect Ratio

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

<table>
<thead>
<tr>
<th>Signal name</th>
<th>Aspect modes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAL Standard</td>
<td>16:9</td>
</tr>
<tr>
<td>PAL 525/60i</td>
<td>O</td>
</tr>
<tr>
<td>DVB-T</td>
<td>O</td>
</tr>
<tr>
<td>NTSC</td>
<td>O</td>
</tr>
<tr>
<td>480i (60 Hz)</td>
<td>O</td>
</tr>
<tr>
<td>480p (50 Hz)</td>
<td>O</td>
</tr>
<tr>
<td>576i (50 Hz)</td>
<td>O</td>
</tr>
<tr>
<td>576p (50 Hz)</td>
<td>O</td>
</tr>
<tr>
<td>720p (50 Hz)</td>
<td>O</td>
</tr>
<tr>
<td>720p (60 Hz)</td>
<td>O</td>
</tr>
<tr>
<td>1080i (50 Hz)</td>
<td>O</td>
</tr>
<tr>
<td>1080i (60 Hz)</td>
<td>O</td>
</tr>
<tr>
<td>1080p (50 Hz)</td>
<td>O</td>
</tr>
<tr>
<td>1080p (60 Hz)</td>
<td>O</td>
</tr>
</tbody>
</table>

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)

- Directly displays the image at “16:9” without distortion (anamorphic).
- Displays the image at the standard “14:9” without enlargement.
- Displays a 4:3 image full-screen. Stretching is only noticeable at the left and right edges.
- Displays a “14:9” letterbox (anamorphic) image full-screen without distortion.
- Displays a “4:3” image enlarged horizontally to fit the screen.
- Displays a “2.35:1” letterbox (anamorphic) image full-screen without distortion.
## Technical Information

### Multi Window

You can watch two images at once. (p. 11)
- The same input mode cannot be displayed at once.
- The sound is active for main screen only in multi window.
- You cannot change the aspect ratio in multi window.
- 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).

### Data format for Card browsing

**Note**
- A JPEG image 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.
- Only “.JPG” extension can be read by this TV.
- 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.

**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

- 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).

### 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
  - 1,024 × 768 pixels

#### Input signal that can be displayed

**COMPONENT (Y, P<sub>s</sub>C<sub>s</sub>, P<sub>v</sub>C<sub>v</sub>), HDMI**

* Mark: Applicable input signal

<table>
<thead>
<tr>
<th>Signal name</th>
<th>COMPONENT</th>
<th>HDMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>480i (60 Hz)</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>480p (60 Hz)</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>576i (50 Hz)</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>576p (60 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>
</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 @70 Hz</td>
<td>31.47</td>
<td>70.07</td>
</tr>
<tr>
<td>640 × 480 @60 Hz</td>
<td>31.47</td>
<td>60.32</td>
</tr>
<tr>
<td>640 × 480 @56 Hz</td>
<td>37.50</td>
<td>56.48</td>
</tr>
<tr>
<td>640 × 480 @50 Hz</td>
<td>37.50</td>
<td>50.00</td>
</tr>
<tr>
<td>640 × 480 @48 Hz</td>
<td>46.88</td>
<td>46.88</td>
</tr>
<tr>
<td>640 × 480 @45 Hz</td>
<td>53.67</td>
<td>53.67</td>
</tr>
<tr>
<td>640 × 480 @44 Hz</td>
<td>63.98</td>
<td>63.98</td>
</tr>
<tr>
<td>1,024 × 768 @50 Hz</td>
<td>48.36</td>
<td>50.00</td>
</tr>
<tr>
<td>1,024 × 768 @60 Hz</td>
<td>56.72</td>
<td>60.00</td>
</tr>
<tr>
<td>1,024 × 768 @75 Hz</td>
<td>76.96</td>
<td>75.00</td>
</tr>
<tr>
<td>1,024 × 768 @85 Hz</td>
<td>85.00</td>
<td>85.00</td>
</tr>
<tr>
<td>1,024 × 768 @89 Hz</td>
<td>89.00</td>
<td>89.00</td>
</tr>
<tr>
<td>1,024 × 768 @95 Hz</td>
<td>95.00</td>
<td>95.00</td>
</tr>
<tr>
<td>1,366 × 768 @60 Hz</td>
<td>59.89</td>
<td>66.67</td>
</tr>
<tr>
<td>Macintosh13” (640 × 480)</td>
<td>35.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Macintosh16” (932 × 624)</td>
<td>49.73</td>
<td>52.55</td>
</tr>
<tr>
<td>Macintosh21” (1,152 × 870)</td>
<td>68.68</td>
<td>68.68</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 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?
- 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.

Problem Actions

- 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.

DVB

Aerial connection when using DTV and VCR / DVD Recorder

- Check to ensure your area is covered by DVB transmissions. (www.dbca.org.au)
- Check that the aerial and antenna cable are designed for DVB.
- Check that the TV is in "AV mode".
- Check "Signal Display". (p. 25)
- 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.

After DVB Auto Tuning only some or no DVB channels are found

- Check "Signal Display". (p. 25)
- If "Signal Quality" or "Signal Strength" are displayed in red or constantly changing, check aerial.
- Is the volume set to the minimum?
- Is the TV in Teletext mode? (p. 16)
- Sound signal reception may be deteriorated.

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

- Electrical atmospheric interference caused by local or distant lighting storms or heavy rain with wind in "leaky" locations may cause pictures to break up and auto to mute or distort momentarily.
- Impulse noise interference from an infrequently used electrical appliance, or a passing vehicle or lawn mower with a "noisy" ignition system.
- The channel cannot be changed

- Is the TV in Teletext mode? (p. 16)
- Is the channel locked? (p. 25)

TV goes into "Standby mode"

- Off Timer function is activated.
- The TV enters "Standby mode" about 30 min. after broadcasting ends.

The remote control does not work

- Are the batteries installed correctly? (p. 6)
- Has the TV been switched On?

Other

DVB

DVB

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

Check to ensure your area is covered by DVB transmissions. (www.dbca.org.au)
- Check that the aerial and antenna cable are designed for DVB.
- Check that the aerial and antenna cable are designed for DVB.
- Is the sound setting of the connected equipment to "2ch L.PCM".
- If digital sound connection has a problem, select analogue sound connection. (p. 29)

Sound level is low or sound is distorted

- Is "Sound mute" active? (p. 7)
- Is the volume set to the minimum?
- Is the channel locked? (p. 25)
- The TV enters "Standby mode" about 30 min. after broadcasting ends.

Sound is unusual

- Sound signal reception may be deteriorated.
- Is the channel locked? (p. 25)
- The TV enters "Standby mode" about 30 min. after broadcasting ends.

Sound is unusual

- Is the HDMI cable connected properly? (p. 34)
- Turn Off the TV and equipment, then turn them On again.
- Check an input signal from the equipment. (p. 39)
- Use an equipment compliant with EIA/CEA-861/861B.

Screen

Chaotic image, noisy

- Set "P-NR" in the Picture Menu (to remove noise). (p. 20)
- Check nearby electrical products (car, motorcycle, fluorescent lamp).
- Electrical atmospheric interference caused by local or distant lighting storms or heavy rain with wind in "leaky" locations may cause pictures to break up and auto to mute or distort momentarily.
- Impulse noise interference from an infrequently used electrical appliance, or a passing vehicle or lawn mower with a "noisy" ignition system.

No image can be displayed

- Is “Colour” or “Contrast” in the Picture Menu set to the minimum? (p. 20)

Blurry or distorted image (no sound or low volume)

- Reset channels. (p. 24)

Unusual image is displayed

- Turn off the TV with Mains power On / Off switch, then turn it on again.

No sound is produced

- Is “Sound mute” active? (p. 7)
- Is the volume set to the minimum?
- Is the channel locked? (p. 25)

Sound level is low

- Sound level is low or sound is distorted
- Is the TV in AV mode?
- Is the channel locked? (p. 25)

Sound is unusual

- Is the TV in AV mode?
- Is the channel locked? (p. 25)

Pictures from external equipment are unusual when the equipment is connected via HDMI

- Set the sound setting of the connected equipment to “2ch L.PCM”.
- Check the “HDMI 1 / 3 Input” setting in the Sound Menu. (p. 20)
- If digital sound connection has a problem, select analogue sound connection. (p. 29)

Screen

Chaotic image, noisy

- Set "P-NR" in the Picture Menu (to remove noise). (p. 20)
- Check nearby electrical products (car, motorcycle, fluorescent lamp).

No image can be displayed

- Is “Colour” or “Contrast” in the Picture Menu set to the minimum? (p. 20)

Blurry or distorted image (no sound or low volume)

- Reset channels. (p. 24)
**Specifications**

<table>
<thead>
<tr>
<th><strong>Power Source</strong></th>
<th>AC 220-240 V, 50 / 60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average use</strong></td>
<td>529 W</td>
</tr>
<tr>
<td><strong>Standby condition</strong></td>
<td>0.5 W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Visible screen size</strong></th>
<th>127 cm (diagonal)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of pixels</strong></td>
<td>1,049,088 (1,366 (W) × 768 (H)) [4,098 × 768 dots]</td>
</tr>
<tr>
<td><strong>Speaker</strong></td>
<td>Woofer (80 mm) × 2 pcs, Tweeter (23 mm × 100 mm) × 2 pcs</td>
</tr>
<tr>
<td><strong>Audio Output</strong></td>
<td>31 W (15.5 W + 15.5 W), 10 % THD</td>
</tr>
<tr>
<td><strong>Headphones</strong></td>
<td>M3 (3.5 mm) stereo mini jack × 1</td>
</tr>
</tbody>
</table>

| **PC signals**          | VGA, SVGA, XGA, SKGA (compressed) |
|                        | Horizontal scanning frequency 31 - 69 kHz |
|                        | Vertical scanning frequency 59 - 86 Hz |

<table>
<thead>
<tr>
<th><strong>Receiving Systems / Band name</strong></th>
<th>DVB-T 7 MHz VHF / UHF (Australia) free-to-air TV broadcast reception</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PAL 60 Hz M. NTSC Playground of NTSC tape from some PAL Video recorders (VCR)</td>
</tr>
<tr>
<td></td>
<td>NTSC Playground from M. NTSC Video recorders (VCR)</td>
</tr>
</tbody>
</table>

| **Aerial - Rear**              | Standard Belling & Lee connector |

| **Operating Conditions**       | Temperature : 0 °C - 35 °C |
|                                | Humidity : 20 % - 80 % RH (non-condensing) |

| **AV1 Input**                  | AUDIO L - R |
|                                | RCA PIN Type × 2 0.5 V[ms] |
| **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[ms] |
| **Video**                      | RCA PIN Type × 1 1.0 V[p-p] (75 Ω) |
| **Component**                  | Y Pa/Cs, Pa/Cs |

| **AV3 Input**                  | AUDIO L - R |
|                                | RCA PIN Type × 2 0.5 V[ms] |
| **Video**                      | RCA PIN Type × 1 1.0 V[p-p] (75 Ω) |
| **Component**                  | Y Pa/Cs, Pa/Cs |

| **AV4 Input**                  | AUDIO L - R |
|                                | RCA PIN Type × 2 0.5 V[ms] |
| **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[ms] (high impedance) |
| **Video**                      | RCA PIN Type × 1 1.0 V[p-p] (75 Ω) |

| **Others**                     | HDMI1 / 2 / 3 Input TYPE A Connectors |
|                                | SD Card slot × 1 |

| **Dimensions (W × H × D)**     | 1,266 mm × 850 mm × 369 mm (With Pedestal) |
|                                | 1,266 mm × 802 mm × 137 mm (TV only) |
| **Mass**                       | 50.0 kg Net (With Pedestal) |
|                                | 42.0 kg Net (TV only) |

**Note**

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