Thank you for purchasing this Panasonic product. Please read these instructions carefully before operating this product and retain them for future reference. The images shown in this manual are for illustrative purposes only.
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Illustrations shown may be different between models and countries.

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## Safety Precautions

### Warning

**Handling the mains plug and lead**
- Insert the mains plug fully into the socket outlet. (If the mains plug is loose, it could generate heat and cause fire.)
- Ensure that the mains plug is easily accessible.
- 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 the lead.
  - Do not use a damaged mains plug or socket outlet.

---

**Power source / Installation**
- This TV is designed for:
  - AC 220-240 V, 50 / 60 Hz
  - Table-top use
  - Indoor use

**Do not remove covers and NEVER modify the TV yourself**
- Do not remove the rear cover as live parts are accessible when it is removed. There are no user serviceable parts inside. (High-voltage components may cause serious electrical shock.)
- Have the TV checked, adjusted, or repaired at your local Panasonic dealer.

**Do not expose to direct sunlight and other sources of heat**
- Avoid exposing the TV to direct sunlight and other sources of heat.

---

**Do not expose to rain or excessive moisture**
- To prevent damage which might result in electric shock or fire, do not expose this TV to rain or excessive moisture. This TV must not be exposed to dripping or splashing water and objects filled with liquid, such as vases, must not be placed on top of or above the TV.

---

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

---

**Do not place the TV on sloped or unstable surfaces, and ensure that the TV does not hang over the edge of the base**
- The TV may fall off or tip over.

---

**Use only the dedicated pedestals / mounting equipment**
- Using an unapproved pedestal or other fixtures may make the TV unstable, risking injury. Be sure to ask your local Panasonic dealer to perform setup.
- Use approved pedestals (p. 7) / wall-hanging brackets (p. 6).

---

**To prevent the spread of fire, keep candles or other open flames away from this product at all times**

---

**AC 220-240 V 50 / 60 Hz**
Important Installation Notices

Install the TV on a stable surface
If a television is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Using cabinets or stands recommended by the manufacturer of the television.
- Only using furniture that can safely support the television.
- Ensuring the television is not overhanging the edge of the supporting furniture.
- Not placing the televisions on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television to a suitable support.
- Not standing the televisions on cloth or other materials placed between the television and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the television or its controls.

When cleaning the TV, remove the mains plug
- Cleaning an energised TV may cause electric shock.

Remove the mains plug from the wall socket when the TV is not in use for a prolonged period of time
- This TV will still consume some power even in the Off mode, as long as the mains plug is still connected.

Do not apply strong force or impact to the display panel
- This may cause damage resulting in injury.

Do not block the rear air vents
- Adequate ventilation is essential to prevent failure of electronic components.
- Ventilation should not be impeded by covering the ventilation openings with items such as newspapers, table cloths and curtains.
- We recommend that a gap of at least 10 cm is left all around this TV even when placed inside a cabinet or between shelves.
- When using the pedestal, keep the space between the bottom of the TV and the surface where the TV is set.
- If pedestal is not used, ensure the vents in the bottom of the TV are not blocked.

Minimum distance

10 (cm)

10
10
10

10

10

10
**Accessories / Options**

**Standard accessories**

- **Remote Control**
  - N2QAYB000803

- **Batteries for the Remote Control (2)**
  - R6
  - (p. 8)

- **Pedestal**
  - (p. 7)

- **Mains Lead**
  - (p. 12)

- **Fall-prevention parts**
  - (p. 8)

- **Operating Instructions with Warranty statement**

**Optional accessories**

Please contact your local Panasonic dealer to purchase the recommended optional accessories. For additional details, please read the manual of the optional accessories.

**Wall-hanging bracket**

Choosing to wall mount the TV shall be done at the owner’s risk. Always use a qualified installer to perform a TV wall bracket installation. Incorrect fitting may cause equipment to fall, resulting in injury and product damage. Any such damage will void your warranty.

- TY-WK3L2RW
- Holes for wall-hanging bracket installation

**Warning**

- When optional accessories such as wall brackets etc. are used, always read and follow the manufactures installation and usage instructions.
- Do not mount the unit directly below ceiling lights (such as spotlights or halogen lights) which typically give off high heat. Doing so may warp or damage plastic cabinet parts.
- When installing wall brackets you must ensure the wall bracket is not electrically grounded to metal wall studs. Always ensure that there are no electrical cables, pipes etc. in the wall before you begin the wall bracket installation.
- To prevent fall and injury, remove the TV from its fixed wall position when it is no longer in use.
Attaching / removing the pedestal

Warning
Do not disassemble or modify the pedestal.
● Otherwise the TV may fall over and become damaged, and personal injury may result.

Caution
Do not use any pedestal other than the one provided with this TV.
● Otherwise the TV may fall over and become damaged, and personal injury may result.
Do not use the pedestal if it becomes warped or physically damaged.
● If you use the pedestal while it is physically damaged, personal injury may result. Contact your local Panasonic dealer immediately.
During set-up, make sure that all screws are securely tightened.
● If insufficient care is taken to ensure screws are properly tightened during assembly, the pedestal will not be strong enough to support the TV, and it might fall over and become damaged, and personal injury may result.
Ensure that the TV does not fall over.
● If the TV is knocked or children climb onto the pedestal with the TV installed, the TV may fall over and personal injury may result.
Two or more people are required to install and remove the TV.
● If two or more people are not present, the TV may be dropped, and personal injury may result.
When removing the pedestal from the TV, do not remove the pedestal by the methods other than the specified procedure. ⇒ (below)
● Otherwise the TV and / or pedestal may fall over and become damaged, and personal injury may result.

1 Assembling the pedestal
Use the assembly screws A to fasten the bracket C to the base D securely.
● Make sure that the screws are securely tightened.
● Forcing the assembly screws the wrong way will strip the threads.

2 Securing the TV
Use the assembly screws B to fasten securely.
● Tighten the four assembly screws loosely at first, then tighten them firmly to fix securely.
● Carry out the work on a horizontal and level surface.

Removing the pedestal from the TV
Be sure to remove the pedestal in the following way when using the wall-hanging bracket or repacking the TV.
1 Remove the assembly screws A from the TV.
2 Pull out the pedestal from the TV.
3 Remove the assembly screws B from the bracket.
Preventing the TV from falling over

This TV could fall over if it is pushed, pulled or knocked down. We therefore recommend the TV is secured to the furniture as illustrated.

- This measure is designed to reduce the risk of injury from a falling TV. However, it cannot guarantee protection in all cases.

![Band Securing to a furniture](image)

- Fix pedestal and furniture together with band.

![Screw and Wood screw](image)

- This image is for illustrative purposes only.

Installing / removing remote’s batteries

1. Pull open
   - Hook

   ![Pull open](image)

2. Close
   - Note the correct polarity (+ or -)

   ![Close](image)

   **Caution**
   - Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control.
   - Do not mix old and new batteries.
   - Replace only with same or equivalent type. Do not mix different battery types (such as alkaline and manganese batteries).
   - Do not use rechargeable (Ni-Cd) batteries.
   - Do not burn or break up batteries.
   - Do not expose batteries to excessive heat such as sunshine, fire or the like.
   - Make sure you dispose of batteries correctly.
   - Ensure batteries are replaced correctly, there is danger of explosion and fire if battery is reversed.
   - Do not disassemble or modify the remote control.
Identifying Controls

Remote Control

1 Standby / ON switch
   - Switches TV On or Standby.
2 OFF TIMER  (p. 17)
   - Turn the TV to Standby mode automatically after a fixed period.
3 Sound Selection
   - Changes the sound track in Digital TV (if available).
   - Changes multiplex sound mode in Analogue TV (if available).  (p. 42)
4 Picture Mode Selection
   - Selects picture mode.  (p. 17)
5 Information  (p. 16)
   - Displays channel and programme information.
6 [Main Menu]  (p. 24)
   - Press to access Picture, Sound and Setup Menus
7 USB PLAYBACK  (p. 36)
   - Switches to USB device viewing / listening mode
8 OK
   - Confirms selections and choices.
   - Press after selecting channel positions to quickly change channel.
   - Displays the Channel List.
9 [Option Menu]  (p. 17)
   - Easy optional setting for viewing, sound, etc.
10 Coloured buttons
   - Used for the selection, navigation and operation of various functions.
11 Teletext  (p. 21)
   - Switches to teletext mode.
12 Subtitles  (p. 16)
   - Displays subtitles.
13 Numeric buttons
   - Changes channel and teletext pages.
   - Sets characters.
14 Sound Mute
   - Switches sound mute on or off.
15 Volume Up / Down
16 Input mode selection
   - TV - switches AV input mode to TV input.
   - AV - switches to AV input mode from Input Selection list.  (p. 23)
17 Aspect  (p. 18)
   - Changes aspect ratio.
18 Surround  (p. 26)
   - Switches surround sound setting
19 Exit
   - Returns to the normal viewing screen.
20 TV Guide  (p. 20)
21 Cursor buttons
   - Makes selections and adjustments.
22 Return
   - Returns to the previous menu / page.
23 Hold
   - Freezes / unfreezes the picture.  (p. 16)
   - Holds the current teletext page (teletext mode).  (p. 21)
24 Index  (p. 21)
   - Returns to the teletext index page (teletext mode).
25 Last view  (p. 16)
   - Switches to previously viewed channel.
26 Channel Up / Down
Identifying Controls

1 Function select
- (p. 25, 26)
* [Music] or [Speech] mode in the Sound Menu

2 Channel Up / Down, Value change (when using the F button), Switching the TV on

3 Changes the input mode

4 Standby / ON switch
- Switches TV On or Standby
- To completely Off the TV, please switch off the wall socket or remove the mains plug from the wall socket.

5 Remote control signal receiver
- Do not place any objects between the TV remote control signal receiver and remote control.

6 C.A.T.S. (Contrast Automatic Tracking System) sensor
- Senses brightness to adjust picture quality when [Eco Mode] in the Picture Menu is set to [On].
- (p. 25)

7 Power LED
- Red: Standby
- Green: On
- The LED blinks when the TV receives a command from the remote control.

Using the On Screen Displays - Operation guide

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

■ Operation guide
Operation guide will help you to operate by using the remote control.
Example: [Sound Menu]

■ How to use remote control
- Open the main menu
- Move the cursor / select from a range of options / select the menu item (up and down only) / adjust levels (left and right only)
- 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

Auto power standby function

The TV will automatically go into Standby mode in the following conditions:
- No signal is received and no operation is performed for 30 minutes in Analogue TV mode.
- [Off Timer] is active in the Setup Menu. (p. 17)
- No operation is performed for the period selected in [Auto Standby] (p. 28).
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.

Terminals

1  HDMI 1 - 2  (p. 13, 40)  5  USB port  (p. 36, 40)
2  PC  (p. 41)  6  AV2 IN  (p. 40)
3  Antenna terminal  (p. 12)  7  AV1 IN  (p. 40, 41)
4  DIGITAL AUDIO OUT  (p. 41)

---

Basic Connection
Connections

Mains lead and aerial

Insert the mains plug (supplied) firmly into place.
- When disconnecting the mains lead, be absolutely sure to disconnect the mains plug at the socket outlet first.

Note
- Keep the space between the TV and RF cable to prevent distorted image.
- 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.
- To obtain optimum quality picture, select either an Aerial or a cable TV network.
**AV devices**

- **Player**
  - TV
  - **HDMI cable**
  - **Player**

- **DVD Recorder / VCR**
  - TV
  - **RF cable**
  - **Aerial**
  - **RF cable**
  - **DVD Recorder / VCR**

- **Set top box**
  - TV
  - **RF cable**
  - **Satellite dish**
  - **HDMI cable**
  - **Set top box**

**Note**

- Please also read the manual of the equipment being connected.
- Keep the TV away from electronic equipment (video equipment, etc.) or equipment with an infrared sensor. Otherwise, distortion of image / sound may occur or operation of other equipment may be interfered.
- When using a HDMI cable, use the fully wired one.
- Check the type of terminals and cable plugs are correct when connecting.
Auto Setup

Search and store TV channels automatically.
- These steps are not necessary if the setup has been completed by your local dealer.
- Please complete connections (p. 12 - 13) and settings (if necessary) of the connected equipment before starting Auto Setup. For details of settings for the connected equipment, read the manual of the equipment.

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

2. Select your area

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

Auto Tuning starts

Automatic Channel Search
- Searching channels...
  Analogue : 0
  Digital : 1

Scan 5%

- Auto Setup will start to search for TV channels and store them.
- The stored channels and sorted channel order vary depending on the area, broadcasting system and conditions of signal reception.

Auto Setup screen varies depending on the area you select.

3. Select [Home]

Select [Home] viewing environment to use in your home environment.

- [Shop] viewing environment (for shop display only)
  - [Shop] viewing environment is the demonstration mode to explain main features of this TV.

Select [Home] viewing environment to use in your home environment.
- You can return to viewing environment selection screen at the stage of Shop confirmation screen.

1. Return to viewing environment selection screen
2. Select [Home]

To change viewing environment later on, you will need to initialise all settings by accessing Shipping Condition. (p. 34)

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

- To check channel list at-a-glance ⇒ “Using TV Guide” (p. 20)
- To edit or hide (skip) channels ⇒ “Tuning and Editing Channels” (p. 30 - 32)
- To retune all channels ⇒ “Retuning from Setup Menu” (p. 29)
- To add the available TV mode later ⇒ [Scan] (p. 30)
- To initialise all settings ⇒ [Shipping Condition] (p. 34)
**Watching TV**

1. **Turn power on**
   - Press the POWER button.

2. **Select a channel**
   - Use the CH up or down button to select a channel.
   - To select a more than two-digit channel position number, e.g. 399, press 3, 9, 9.
   - To select from the Channel List:
     - Press CH up or down to select a channel.

<table>
<thead>
<tr>
<th>Channel List - All</th>
</tr>
</thead>
<tbody>
<tr>
<td>6      Cartoon Nwk</td>
</tr>
<tr>
<td>7      BBC Radio Wales</td>
</tr>
<tr>
<td>8      BBC Radio Cymru</td>
</tr>
<tr>
<td>1      BBC ONE Wales</td>
</tr>
<tr>
<td>2      BBC THREE</td>
</tr>
<tr>
<td>3      BBCi</td>
</tr>
<tr>
<td>4      CBBC Channel</td>
</tr>
</tbody>
</table>

- To view the complete channel list (all channels):
  - Press R
- To view the list of analogue channel only:
  - Press V
- To view the list of digital channel only:
  - Press G
- To view the favourite channel list:
  - Press B
Other useful functions

Display Information banner

Display Information banner
*Also appears when changing a channel

Example: DVB
1 Coronation Street
   (20:00 - 20:55)
   (20:55 - 23:00)
2 [Next programme]
3 1080i HD
1 Programme
2 Programme Start / Finish time (DVB)
Channel number, etc. (Analogue)
3 Signal input

Features available / Message meanings

Sound mute On
[Encrypted] Scrambled programme
[Dolby Digital] Dolby Digital audio track

Subtitle service available
Teletext service available
[Dolby Digital] Dolby Digital audio track
[Stereo], [Dual], [Mono] Audio mode

To hide
* Extra information (DVB)
To set display timeout
* To set display timeout
Press twice
(Press again to hide the banner)

Last view

Switch to previously viewed channel easily
*Press again to return to the present view.

Hold

Freeze / unfreeze picture

Display subtitles

Display / hide subtitles (if available)
**Change picture mode**

Select picture mode

Press the button repeatedly until you reach the desired mode.


**Display the selectable settings for the current status**

Check or change the current status instantly

- To change
  1. Select
  2. Change / Adjust

[Multi Audio] (DVB)
Selects between alternative language for sound tracks (if available)
- This setting is not memorised and it will return to the default setting once you exit the current programme.

[MPX] (Analogue mode)
Selects multiplex sound mode (if available) ➔ [Sound Menu] (p. 26)

[Volume Correction]
Adjusts volume of individual channel or input mode

**Off Timer**

Turn the TV to Standby mode automatically after a fixed period

Press the button repeatedly until you reach the desired time.

- To cancel, set to [0] or turn the TV off.
- To confirm the remaining time ➔ “Display Information banner” (p. 16)
- When the remaining time is within 3 minutes, the remaining time will flash on the screen.

You can also set the [Off Timer] via the [Setup] menu.

1. Display the menu

2. Select [Setup]

3. Select [Off Timer] and set the time in 15-minute increments
Aspect

Change the aspect ratio (image size)

Aspect Change the aspect ratio (image size)

■ If you would like to change the aspect ratio manually

1. Display Aspect Selection list
2. While the list is displayed, select the mode

- [16:9] Directly displays the image at 16:9 without distortion (anamorphic).
- [4:3 Full] Displays a 4:3 image enlarged horizontally to fit the screen.
  - HD signal only
- [14:9] Displays the image at the standard 14:9 without distortion.
- [Zoom1] Displays a 16:9 letterbox or 4:3 image without distortion.
- [Just] Displays a 4:3 image full-screen. Stretching is only noticeable at the left and right edges.
- [Zoom2] Displays a 16:9 letterbox (anamorphic) image full-screen without distortion.
- [4:3] Displays the image at the standard 4:3 without distortion.
- [Zoom3] Displays a 2.35:1 letterbox (anamorphic) image full-screen without distortion. At 16:9, displays the image at its maximum (with slight enlargement).

Note
- Aspect is fixed to [16:9] when [Viewing Mode] is set to [Game] in the Picture Menu.
- Not available in teletext service.
Standard Time / Summer Time

■ Region Selection - Adjust the standard time
Select the region where you live to adjust the standard time.
* The time contained in the broadcast signal is UTC (Universal Time coordinated) formally known as GMT (Greenwich Mean Time).

■ Day Light Saving - Adjust for Summer 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.

<table>
<thead>
<tr>
<th>Region</th>
<th>Standard time</th>
<th>Day Light Saving : Auto (During Summer Time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW / ACT</td>
<td>+10:00</td>
<td>+11:00</td>
</tr>
<tr>
<td>Victoria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Queensland</td>
<td>+9:30</td>
<td>+10:00</td>
</tr>
<tr>
<td>South Australia</td>
<td>+10:00</td>
<td>+10:30</td>
</tr>
<tr>
<td>Western Australia</td>
<td></td>
<td>+8:00</td>
</tr>
<tr>
<td>Northern Territory</td>
<td></td>
<td>+9:30</td>
</tr>
<tr>
<td>Tasmania</td>
<td>+10:00</td>
<td>+11:00</td>
</tr>
</tbody>
</table>

(Based on GMT)

* These items can be set from [Other Settings] in the Setup Menu. (p. 28)
Using TV Guide

TV Guide - Electronic Programme Guide (EPG) provides an on screen listing of the programmes currently broadcast and the forthcoming broadcasts over the next eight days (depending on the broadcasters).

- This function varies depending on the area you select (p. 14).
- DVB-T and Analogue channels are displayed on the same TV Guide screen. There will be no programme listings for Analogue channels.

![Select the mode](image)

Select the mode

**TV**

View TV Guide

Example:

| 1 | Current date and time |
| 2 | TV Guide date |
| 3 | TV Guide time |
| 4 | Programme |
| 5 | Channel position and name |

**Note**

- It may cause slow response when pressing the up/down cursor button for TV program guide. This is due to program data downloading.

- To return to TV

- To view the next program

- To view a channel list of the selected type filter

- To view the next day (DVB)

- To the previous day (DVB)

- To change pages

- Select

- Programme

- Add/Remove

- INFO (Press again to return to TV Guide.)

**Note**

- You can select the type of List to display.
- Type is multi-selectable.
- You can press the up or down cursor button to change the highlight bar to another "Type".
Viewing Teletext

Teletext services are the text information provided by the broadcasters. The features may vary depending on the broadcasters.

What is FLOF (FASTEXT) mode?
In FLOF mode, four differently coloured subjects are situated at the bottom of the screen. To access more information about one of these subjects, press the appropriate 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.)
- To return to TV

Switch to Teletext

Sub page number

Select the page

Reveal hidden data
Reveal hidden words e.g. quiz page answers

INDEX
Return to the main index page

HOLD
Stop automatic updating
(If you wish to hold the current page without updating)

Press again to resume.
FULL / TOP / BOTTOM

(TOP) (BOTTOM) Normal (FULL)

- Expand the TOP half
- Expand the BOTTOM half

View sub page

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

Appears at top of the screen
- 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.

To view specific sub page

Enter the 4-digit number
Example: P6

Watch TV while waiting for update

View the TV picture while searching for a teletext page

Changes to TV screen temporarily
- You cannot change the channel.

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

Connect the external equipment (VCRs, DVD equipment, etc.) and you can watch through the input.
- To connect the equipment ⇒ (p. 12 - 13, 40 - 41)

1. Turn the TV on

- If input mode is not switched automatically
  Perform 2 and 3
  ● Check the setup of the equipment.

2. Display the input selection menu

- To return to TV

3. Select the input mode connected to the equipment

   Input Selection
   AV1
   AV2
   HDMI1
   HDMI2
   PC
   USB

   ● You can also select the input using the AV button on the remote control or the TV.
   Press the button repeatedly until the desired input is selected.
   ● [USB] : Switches to Media Player ⇒ “Using Media Player” (p. 36)
   ● You can label or skip each input mode (except [USB]). ⇒ “Input Labels” (p. 28)
   Skipped inputs will not be displayed when the AV button is pressed.

4. View

   AV1
   480i SD

   Displays the selected mode

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

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

1 Display the menu
   ![Remote Control](image)
   - Displays the functions that can be set (varies according to the input signal)

2 Select the menu
   ![Menu Selection](image)
   - Select
   - Access

3 Select the item
   ![Menu Items](image)
   - Choose from among alternatives
     - Number and positions of alternatives
       - Colour Balance
       - Normal

   - Adjust using the slide bar
     - Sharpness
     - Moved

   - Go to the next screen
     - Child Lock
     - Access
     - Displays the next screen

   - To reset the settings
     - Picture or sound settings only
       - [Reset to Defaults] in the Picture Menu (p. 25) or Sound Menu (p. 27)
     - To initialise all settings
       - [Shipping Condition] (p. 34)
### Menu list

<table>
<thead>
<tr>
<th>Menu</th>
<th>Item</th>
<th>Adjustments / Configurations (alternatives)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewing Mode</td>
<td>Selects your favourite picture mode for each input</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[Dynamic]:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improves contrast and sharpness for viewing in a bright room.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[Normal]:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Normal use for viewing in a normal lighting condition.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[Cinema]:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improves the performance of contrast, black and colour reproduction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>for watching movies in a darkened room.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[True Cinema]:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reproduces the original image quality precisely without any revision.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[Game]:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provides suitable images for fast response signal when playing games.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Not valid on TV mode</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* To display a continuous record of time spent using Game mode</td>
<td>[Playing Time Display] (p. 28)</td>
</tr>
<tr>
<td></td>
<td>In each Viewing Mode, [Contrast], [Brightness], [Colour], [Sharpness], [Tint], [Colour Balance], [Eco Mode], [P-NR] and [3D-COMB] can be adjusted and stored for each input.</td>
<td></td>
</tr>
<tr>
<td>Picture</td>
<td>Backlight, Contrast, Brightness, Colour, Sharpness</td>
<td>Increases or decreases the levels of these options according to your personal preference</td>
</tr>
<tr>
<td>Tint</td>
<td>Adjusts the picture hue to suit your taste</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* For NTSC signal reception</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Not valid when Viewing Mode is set to [True Cinema]</td>
<td></td>
</tr>
<tr>
<td>Channel Colour Set</td>
<td>Adjusts the suitable colour density from 3 levels for each channel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Select the channel to adjust and set this function.</td>
<td></td>
</tr>
<tr>
<td>Eco Mode</td>
<td>Automatic Brightness Control function</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusts picture settings automatically depending on ambient lighting conditions [Off] / [On]</td>
<td></td>
</tr>
<tr>
<td>P-NR</td>
<td>Picture Noise Reduction</td>
<td></td>
</tr>
<tr>
<td>3D-COMB</td>
<td>Makes still or slow moving pictures more vivid [Off] / [On]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Occasionally, while viewing still or slow moving pictures, colour patterning may be seen. Set to [On] to display sharper and more accurate colours.</td>
<td>For PAL / NTSC signal reception in TV mode or from composite</td>
</tr>
<tr>
<td>Reset to Defaults</td>
<td>Press the OK button to reset the current Picture Viewing Mode of the selected input to the default settings</td>
<td></td>
</tr>
<tr>
<td>Sound</td>
<td>Selects your favourite sound mode [Music] / [Speech] / [User]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* The selected mode affects all input signals.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[Music]:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improves sound quality for watching music videos, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[Speech]:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improves sound quality for watching news, drama, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* In Music and Speech modes, you can adjust [Bass] and [Treble] settings, and those settings will be stored for each mode.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[User]:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusts the sounds manually by using the equaliser to suit your favourite sound quality.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* For the User mode, [Equaliser] will appear on the Sound Menu instead of [Bass] and [Treble]. Select [Equaliser] and adjust the frequency.</td>
<td>[Equaliser] (p. 26)</td>
</tr>
<tr>
<td>Menu</td>
<td>Item</td>
<td>Adjustments / Configurations (alternatives)</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Bass</td>
<td>Adjusts level to enhance or minimise lower, deeper sound output</td>
</tr>
<tr>
<td></td>
<td>Treble</td>
<td>Adjusts level to enhance or minimise sharper, higher sound output</td>
</tr>
</tbody>
</table>
|      | Equaliser | Adjusts the frequency level to suit your favourite sound quality  
|      |      | - This function is available when [Mode] is set to [User].  
|      |      | - Select the frequency and change the frequency level by using the cursor button.  
|      |      | - To enhance the bass sound, raise the level of the lower frequency. To enhance the treble sound, raise the level of the higher frequency.  
|      |      | - To reset the levels of each frequency to the default settings, select [Reset to Defaults] by using the cursor button, and then press the OK button. |
|      | Balance | Adjusts volume level of right and left speakers |
|      | Surround | Surround sound settings [Off] / [On]  
|      |      | - Switching is also possible by the SURROUND button on the remote control (p. 9). |
|      | Auto Gain Control | Automatically regulates large sound level differences between channels and inputs [Off] / [On] |
|      | Volume Correction | Adjusts the volume of individual channel or input mode |
|      | Speaker Distance to Wall | Compensates for the low frequency sound due to the distance between the speakers and the wall [Over 30cm] / [Up to 30cm]  
|      |      | - If the back space between the TV and wall is over 30 cm, [Over 30cm] is recommended.  
|      |      | - If the back space between the TV and wall is within 30 cm, [Up to 30cm] is recommended. |
|      | MPX | Selects multiplex sound mode (if available)  
|      |      | [Stereo] : Use this normally  
|      |      | [Mono] : When stereo signal cannot be received  
|      |      | [M1] / [M2] : Available while mono signal is transmitted  
|      |      | - For Analogue mode |
|      | SPDIF Selection | SPDIF : A standard audio transfer file format  
|      |      | Selects the initial setting for digital audio output signal from DIGITAL AUDIO OUT and HDMI2 (ARC function) terminals [Off] / [Dolby digital] / [PCM]  
|      |      | - [Dolby digital]: Dolby Digital and HE-AAC multi-channel are output as Dolby Digital Bitstream. MPEG is output as PCM.  
|      |      | - [PCM]: Digital output signal is fixed to PCM.  
|      |      | - ARC (Audio Return Channel) : A function of digital audio output using HDMI cable |
|      |      | - Normally, PCM sound is larger comparing with the other types of audio track. |
|      | HDMI 1 / 2 Input(HDMI) | Selects to fit the input signal [Digital] / [Analogue] (p. 44)  
|      |      | - [Digital]: When sound is carried via the HDMI cable connection  
|      |      | - [Analogue]: When sound is not carried via the HDMI-DVI adaptor cable connection  
|      |      | - For HDMI input |
|      | SPDIF Delay | Adjusts the delay time of the sound output from DIGITAL AUDIO OUT and HDMI2 (ARC function) terminals if the sound does not synchronise the image |
### How to Use Menu Functions

<table>
<thead>
<tr>
<th>Menu</th>
<th>Item</th>
<th>Adjustments / Configurations (alternatives)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound</td>
<td>Downmix Mode</td>
<td>Selects the output mode for listening to compressed music [Surround] / [Stereo] / [Dual 1] / [Dual 2]</td>
</tr>
</tbody>
</table>
|            | Type                               | Narration settings for impaired users (only available in some countries) [Normal] / [Hearing Impaired] / [Visually Impaired]  
|            |                                    | - [Hearing Impaired] provides aids in understanding and enjoyment with DVB subtitles (depending on the broadcaster).  
|            |                                    | - Set to [Visually Impaired] to activate the narration sound track when available on the broadcast.  
|            |                                    | - [Visually Impaired] appears after you have selected this option ✗ (see below).  
|            |                                    | - For DVB mode                                                                                           |
|            | Speech                             | Narration sound track is output to the TV speakers [Off] / [On]                                           |
|            | Volume                             | Adjusts the volume of the narration sound track                                                           |
|            | Pan and Fade                       | Sets the audio pan and fade effect [Off] / [On]  
|            |                                    | [Off] : Main Audio program  
|            |                                    | [On] : Controls the level of the Main Audio Program and controls the pan of the Associated Audio Program |
| Reset to Defaults | Press the OK button to reset the current Sound Mode, [Balance], [Surround], [MPEG Optical Level] and [Type] to the default settings |
| Link Settings | CEC                                | When set to [On], the TV will automatically switch to the appropriate HDMI input whenever an HDMI connected equipment is initially turned on and the Play mode is selected. [Off] / [On] |
|            | Power off Link                     | When set to [On], all HDMI connected equipment will be turned off automatically by turning off the TV. [Off] / [On]  
|            |                                    | - A Panasonic DVD Recorder will not turn off if it is still in the Rec mode.  
<p>|            |                                    | - The TV remains on even if all the HDMI connected equipment are turned off.                            |
| Child Lock | Locks a channel / AV input to prevent access to it (p. 33) |
| Setup      | Automatic Channel Search           | Automatically searches for the receivable channels (p. 29)                                               |
|            | Scan                               | Adds newly found channels while keeping existing channels (p. 30)                                        |
|            | Analogue Manual Tuning             | Searches for the analogue channels manually (p. 31)                                                     |
|            | DVB-T Signal Condition             | Checks the DVB-T signal condition (p. 31)                                                                 |
|            | DVB-T Manual Tuning                | Searches for the DVB-T channels manually (p. 31)                                                         |
|            | Favourites Edit                    | Creates a list of favourite channels (p. 31)                                                              |
|            | Skip                               | Skips unwanted channels (p. 31)                                                                          |
|            | Sort                               | Sorts channels (p. 32)                                                                                    |
|            | Channel List Edit                  | Edits channels (p. 32)                                                                                    |
|            | Clear block                        | Clears the channel lists (p. 32)                                                                          |</p>
<table>
<thead>
<tr>
<th>Menu</th>
<th>Item</th>
<th>Adjustments / Configurations (alternatives)</th>
</tr>
</thead>
</table>
| Setup     | Input Labels          | Accesses the input labels list to select the label of each input mode or set to skip unconnected one for easier identification and selection in [Input Selection] (p. 23) or banner  
  * To skip the input mode, select [Skip].  
  |
| Display Settings | Banner Display Timeout | Sets how long the Information banner stays on screen (p. 16)  
  |
| Display Settings | Playing Time Display | Set to [On] to display a continuous record of time spent using Game mode in the top right of the screen every 30 minutes [Off] / [On]  
  * This function is available when [Viewing Mode] is set to [Game].  
  (p. 25)  
  |
  * The sound is active even if the screen turns off. This function is effective in reducing power consumption when listening to a radio channel.  
  * Press any buttons except Standby, Volume Up / Down and Sound Mute buttons to turn the screen on.  
  * Not valid on Analogue mode  
  |
| System Menu | Shipping Condition    | Resets all settings to the original condition (p. 34)  
  |
| System Menu | System Update         | Downloads new software to this TV (p. 35)  
  |
| System Menu | Software Licence      | Displays the software licence information  
  |
| System Menu | System Information    | Displays the system information of this TV  
  |
| Setup      | AV Colour System      | Selects optimum colour system based on video signals in AV mode  
  [Auto / PAL / SECAM / M.NTSC / NTSC]  
  |
| Setup      | Colour Matrix         | Adjusts suitable colour parameters for [SD] (standard definition) or [HD] (high definition)  
  [SD] : Input signal is a normal TV system  
  [HD] : Input signal is a high definition system  
  * Available only with 480p or 576p input on video signals in a natural colour from digital equipment connected to Component or HDMI terminal.  
  |
| Setup      | Auto Standby          | Sets the duration of time that the TV will remain on when no operation is performed [Off] / [2] / [4] (hours)  
  * Automatic input switching with the connected equipment affects this function and time-count will be reset.  
  * The notification message will appear 3 minutes before going into Standby mode.  
  |
| Other Settings | Power Save          | Reduces brightness of picture to economise on power consumption [Off] / [On]  
  |
| Other Settings | 16:9 Overscan       | Selects the screen area displaying the image [Off] / [On]  
  [On]:  
  Enlarges the image to hide the edge of the image.  
  [Off]:  
  Displays the image in the original size.  
  * Set to [On] if noise is generated on the edge of the screen.  
  * This function is available when aspect is set to [16:9].  
  * This function can be memorised separately for SD (Standard definition) and HD (High definition) signals.  
  |
| Other Settings | Region Selection     | Selects the region where you live to adjust the standard time  
  |
| Other Settings | Day Light Saving     | Selects time offset from the standard time for Summer Time  
  |

* A different menu will be displayed in the mode of Media Player. (p. 36 - 39)  
* Only available items can be selected.
Retuning from Setup Menu

Automatically retune the channels received in the area.
- This function is available if channel tuning is already performed.
- Only the selected mode is retuned. All the previous tuning settings are erased.
- If Child Lock PIN number (p. 33) has been set, the PIN number is required.
- If tuning has not been done completely ⇒ [Analogue Manual Tuning] (p. 31)

1. Select the mode

2. Display the menu and select [Setup]

3. Select [Tuning Menu]

4. Select [Automatic Channel Search]

Auto Tuning starts

When the operation is completed, the channel at the lowest position will be displayed.

Auto setup using the buttons on the TV

For Auto Setup, using the buttons on the TV (p. 10)
1. Press the F button repeatedly until [Auto Tuning] appears

2. Access [Auto Tuning]

3. Start [Auto Tuning]
Tuning and Editing Channels

You can retune channels or make your favourite channel lists, skip unwanted channels, etc.

1. **Select the mode**

2. **Display the menu and select [Setup]**

3. **Select [Tuning Menu]**

4. **Select one of the following functions**

   - **Add TV channels [Scan]**
     - You can add new channels automatically to the channel list.
     - **Example: Antenna**

     ```
     Scan
     Searching channels...
     Analogue: 0
     Digital: 0
     ```
Set Analogue channel manually [Analogue Manual Tuning]

Set Analogue channel manually after Automatic Channel Search.

Example: Antenna

<table>
<thead>
<tr>
<th>Analogue Manual Tuning</th>
<th>Searching Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Frequency (MHz)</td>
<td>48.00</td>
</tr>
</tbody>
</table>

1. Enter the frequency to start scanning
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - 8
   - 9
   - 0

[Scan up]: Scans ascendingly from the entered frequency to higher frequencies

[Scan down]: Scans descendingly from the entered frequency to lower frequencies

Check DVB-T signal condition [DVB-T Signal Condition]

Example:

<table>
<thead>
<tr>
<th>DVB-T Signal Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Channel</td>
</tr>
<tr>
<td>Signal Level</td>
</tr>
<tr>
<td>Signal Condition</td>
</tr>
<tr>
<td>Bit Error Rate</td>
</tr>
<tr>
<td>96</td>
</tr>
<tr>
<td>91</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>0.00E-06</td>
</tr>
</tbody>
</table>

These bars show the maximum signal value of the selected channel.

Set DVB channel manually [DVB-T Manual Tuning]

Normally use [Automatic Channel Search] or [Scan] to retune DVB channels. If tuning has not been done completely or for adjusting the direction of the aerial, use this function.

* All channels found will be added to the Channel List.

<table>
<thead>
<tr>
<th>DVB-T Manual Tuning</th>
<th>Antenna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scan</td>
<td></td>
</tr>
<tr>
<td>Channel</td>
<td></td>
</tr>
<tr>
<td>Signal Level</td>
<td></td>
</tr>
<tr>
<td>Signal Condition</td>
<td></td>
</tr>
<tr>
<td>Bit Error Rate</td>
<td></td>
</tr>
</tbody>
</table>

List favourite DVB channels [Favourites Edit], Skip unwanted channels [Skip]

Create your favourite channel lists from various broadcasters.

1. Select a channel to list (locked: Encrypted channel)

<table>
<thead>
<tr>
<th>Favourites Edit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Analogue</td>
</tr>
<tr>
<td>2 Analogue</td>
</tr>
<tr>
<td>3 Digital</td>
</tr>
<tr>
<td>4 Digital</td>
</tr>
</tbody>
</table>

   Add / Remove:
   - Add: : Add
   - Remove: : Remove

Skip unwanted channels [Skip]

You can hide unwanted channels. The hidden channels cannot be displayed except in this function. Use this function to skip unwanted channels.

Select a channel and reveal / hide

<table>
<thead>
<tr>
<th>Skip</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Analogue</td>
</tr>
<tr>
<td>2 Analogue</td>
</tr>
<tr>
<td>3 Digital</td>
</tr>
<tr>
<td>4 Digital</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To change page (page up)</th>
<th>To change page (page down)</th>
<th>To select</th>
<th>To exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>G</td>
<td>Y</td>
<td>B</td>
</tr>
</tbody>
</table>
Sort channels [Sort]

You can sort channels.

1 To swap the channel position (if available)

<table>
<thead>
<tr>
<th>Sort</th>
<th>1 Analogue</th>
<th>2 Analogue</th>
<th>3 Digital</th>
<th>4 Digital</th>
</tr>
</thead>
</table>

2 Swap

| ① Select | ✅: selected | ② Access | ❌: unselected |

- To change page (page up)
- To change page (page down)
- To select
- To exit

Edit channel settings [Channel List Edit]

You can edit channel settings.

1 Select a channel to edit

<table>
<thead>
<tr>
<th>Channel List Edit</th>
<th>1 Analogue</th>
<th>3 Digital</th>
</tr>
</thead>
</table>

2 Edit the channel settings

<table>
<thead>
<tr>
<th>Network Name</th>
<th>Teracom Mux 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Channel Name</td>
<td>Aftonbladet TV</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Name</th>
<th>Teracom Mux 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Channel</td>
<td>1</td>
</tr>
<tr>
<td>Channel Name</td>
<td>901</td>
</tr>
<tr>
<td>Frequency (MHz)</td>
<td>48.25</td>
</tr>
<tr>
<td>Colour System</td>
<td>B/G</td>
</tr>
<tr>
<td>Sound System</td>
<td>Auto</td>
</tr>
</tbody>
</table>

■ To change [Channel], [Channel Name] and [Frequency]

Select the item you want to change

Enter the new settings

1 2 3
4 5 6
7 8 9
0

■ To change [Colour System] and [Sound System]

Select the item you want to change

Change

You cannot change the Network Name.

* [Frequency], [Colour System] and [Sound System] edit is valid for analogue channels only.

You can set characters by using numeric buttons (When you select [Channel name]).

0 + - 0 5 M N O 5
1 A B C 1 6 P Q R 6
2 D E F 2 7 S T U 7
3 G H I 3 8 V W X 8
4 5 K L 4 9 Y Z 9

Clear channel list [Clear block]

You can clear the entire channel list.

Select [OK] to confirm.
Child Lock

You can lock specific channels / AV input terminals and control who watches them. When the locked channel / input is selected, a message appears. Enter the PIN number to watch.

1 Display the menu and select [Setup]

2 Select [Child Lock]

Control channel audience [Child Lock]

1 Enter the PIN number (4 digits)

2 Select [Child Lock List]

3 Select the channel / input to be locked

■ To change the PIN number

1. Select [Change PIN]

■ To set Parental Rating

To watch the DVB programme that has the rating information over the selected age, enter the PIN number to watch (depending on the broadcaster).

Select [Parental Rating] and set an age for the restriction of programmes.

Note

- Setting [Shipping Condition] (p. 34) erases the PIN number and all settings.
- If you have forgotten your changed PIN, input “9999” as the PIN number.
Shipping Condition

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

To retune TV channels only, e.g. after moving house ⇒ "Retuning from Setup Menu" (p. 29)

1. Display the menu and select [Setup]

2. Select [System Menu]

3. Select [Shipping Condition]

Restore Settings [Shipping Condition]

1. Check the message and initialise

2. Follow the on-screen instructions

Reset to Factory Shipping Condition
Completed.
TV will automatically restart. Do not turn off

Auto Setup will automatically start. (p. 14)
Updating the TV Software

A new version of software may be released for download to enhance the performance or operations of the TV. If there is an update available, a notification message is displayed when the channel has the update information.

To download

(Press the EXIT button not to download)

You can update new software automatically or update manually.

1 Display the menu and select [Setup]

2 Select [System Menu]

3 Select [System Update]

Update TV’s software system [System Update]

■ To update automatically
Set [Auto Download] and [Auto Install] to [Yes]

- Every time you set, the TV automatically performs a search in Standby and downloads an update, if any software updates are available.
- The automatic updating is performed under the following condition:
  - Standby (TV turned off with the remote control)

If System Update is performed, the software will be updated (it may change TV functions). If you do not want to do so, set [Auto Install] to [No].

■ To update immediately

1 Select [Manual OAD Download]

2 Searches for an update (for several minutes) and displays a corresponding message if any

3 Download

Note:
- Download may take more than 10 minutes.
- During software download and update, DO NOT switch off the TV.
- The notification message might be a reminder. In this case, the schedule information (the date that the new version can be used) will appear. You can set the reservation for update. The update will not start when the TV is off.
Using Media Player

Media Player allows you to enjoy photo or music recorded on a USB Flash Memory.

Photo mode:

- Still pictures recorded by digital cameras will be displayed.

Music mode:

- Digital music data will be played back.
  - During the operation, audio signal is output from DIGITAL AUDIO OUT and HDMI2 (ARC function) terminals. To use HDMI2 with ARC function, connect an amplifier that has ARC function.
  - [Date] shows the date on which the recording was made by the recording equipment. The file without record of the date is shown "**/**/****".
  - The picture may not appear correctly on this TV depending on the recording equipment used.
  - Display may take some time when there are many files and folders.
  - Partly degraded files might be displayed at a reduced resolution.
  - Picture setting may not work depending on the conditions.
  - The folder and file names may be different depending on the digital camera or digital video camera used.

To insert or remove the USB Flash Memory

- Insert or remove straightly and completely.

For the information of the devices ⇒ "Devices for playing back" (p. 44)
For the supported file format ⇒ "Supported file format in Media Player" (p. 45)

Starting Media Player

1. Insert the USB Flash Memory to the TV ⇒ (above)

2. Start Media Player

- You can also start by pressing the following button.
  "Watching External Inputs" (p. 23)

3. Select the content

4. Enjoy Media Player

Example: Thumbnail - [All photos]

- To display the information of the highlighted content

Selected device name

File number / Total file number

File name: p1010001.JPG
Date: 23/10/2011
Pixel: 1600x1200

TH-L32XM5A_EN.indb   36
7/27/2012   5:18:12 PM
### Change the contents

You can switch to the other mode of Media Player from the thumbnail view.

- The mode can be switched in the current device.

1. While the thumbnail is displayed, display the contents selection

2. Select the contents

   ![Thumbnail View]

   - 1 Select
   - 2 Access

---

### Photo mode

Photo mode will read all ".jpg" extension files in the USB Flash Memory.

The thumbnail of all the photos in the USB Flash Memory will be displayed.

Example: Thumbnail - [All photos]

![Thumbnail of Photos]

- Error display

---

### [Single view]
- Photos are displayed one at a time.

Select the file from the thumbnail of photos to be viewed

![Single View]

- To display / hide the operation guide
- To return to thumbnail

Example:

- To operate Single view
  - To the previous photo
  - Slideshow
  - To the next photo
  - Stop (return to thumbnail)
  - To rotate 90°

---

### [Slideshow]
- Slideshow completes when all photos are viewed within the current thumbnail.

1. Select the file from the thumbnail of photos for the first view

   ![Slideshow View]

   - Slideshow
   - Stop

   - To display / hide the operation guide
   - To pause (return to Single view)
   - To return to thumbnail

   - To change the background music → "Photo Settings" (p. 38)
Using Media Player

[View Select] - Change from thumbnail view to folder view

1 Display the view selection

- Set thumbnail view
- Set folder view

The thumbnail of folders in the USB Flash Memory will be displayed.

2 Select a folder to view its contents

- Select the folder
- Access the folder

- To return to the thumbnail of all photos

All photos

Photo Settings

Setup the settings for Photo mode.

1 Display the option menu

2 Select [Slideshow Settings]

3 Select the items and set

- Transition Effect
- Screen Mode
- Interval
- Repeat
- Back Ground Music

Note
- Picture quality may become lower depending on the slideshow settings.
- Picture setting may not work depending on the slideshow settings.

<table>
<thead>
<tr>
<th>Menu</th>
<th>Item</th>
<th>Adjustments / Configurations (alternatives)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen Mode</td>
<td>Selects enlarged or normal viewing on Single view and Slideshow [Normal] / [Zoom]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depending on the photo size, it may not be fully enlarged to fill the screen, e.g. portrait style picture.</td>
<td></td>
</tr>
<tr>
<td>Repeat</td>
<td>Selects slideshow repeat [Off] / [On]</td>
<td></td>
</tr>
<tr>
<td>Back Ground Music</td>
<td>Selects the background music during Photo mode [Off] / [Type1] / [Type2] / [Type3]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* [Type1], [Type2] and [Type3] are the fixed music each installed in this TV.</td>
<td></td>
</tr>
</tbody>
</table>
**Music mode**

* Supported file format *(p. 45)*

Music folders in the USB Flash Memory will be displayed.

Example: [Folder view]

![Folder view diagram]

- To play back the selected folder
  - Select the folder
  - Start playback

Selected device name

**Playback from File view**

Selected file will be played back.

1 Select the folder
   - Select
   - Access

2 Select the file
   - Select

3 Start playback

**How to operate in the playback**

Example: Playback

- To display / hide the operation guide
- To operate the playback
  - Rewind
  - Pause / Playback
  - Fast forward
  - Stop

- To the previous track
- To the next track
- To return to thumbnail

**Music Setup**

Setup the setting for Music mode

1 Display the option menu
   - OPTION

2 Select [Music Setup]

   ![Option Menu]

   - Music Setup
   - Repeat
   - Folder

3 Set
   - Change

   - [One]: Playback repeat of the selected one file
   - [Folder]: Playback repeat within the selected folder
External Equipment

These diagrams show our recommendations for connection of your TV to various pieces of equipment. For other connections, consult the instructions for each piece of equipment, the basic connection (p. 12 - 13), the table (p. 41), and the specifications (p. 49).

**HDMI equipment**

- Fully wired HDMI compliant cable

**To watch DVDs**

- (Viewing)
- (Listening)

**USB devices**

**Camcorder / Game equipment**

- (Viewing)
- (Listening)
To listen with speakers

Optical digital audio cable*1

or

Fully wired HDMI compliant cable

Amplifier with speaker system

To enjoy the sound from the external equipment in multi-channel sound (e.g. Dolby Digital 5.1ch), connect the equipment to the amplifier. For the connections, read the manuals of the equipment and amplifier.

*1 If the connected equipment has “ARC (Audio Return Channel)” function, you do not have to use this audio cable (optical digital audio cable). In this case, connect the equipment to the TV’s HDMI2 terminal via an HDMI cable.

PC

Conversion adaptor
(if necessary)

Computer

Types of connectable equipment to each terminal

<table>
<thead>
<tr>
<th>Features</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>To record / playback videocassettes / DVDs (VCR / DVD Recorder)</td>
<td>AV1 COMPONENT Vide o AV2 DIGITAL AUDIO OUT HDMI 1 - 2</td>
</tr>
<tr>
<td>To watch satellite broadcasts (Set top box)</td>
<td></td>
</tr>
<tr>
<td>To watch DVDs (DVD Player)</td>
<td></td>
</tr>
<tr>
<td>To watch camcorder images (Video camera)</td>
<td></td>
</tr>
<tr>
<td>To play games (Game equipment)</td>
<td></td>
</tr>
<tr>
<td>To use amplifier with speaker system</td>
<td></td>
</tr>
</tbody>
</table>

*: Recommended Connection

*2: Use HDMI1 for automatic input switching.

*3: Use HDMI2 for connecting an amplifier. This connection is applicable when using an amplifier that has ARC (Audio Return Channel) function.
Technical Information

Channel Allocation (Analogue TV)

<table>
<thead>
<tr>
<th>CH Display / Receive Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH 0 - CH 5</td>
</tr>
<tr>
<td>CH 9A</td>
</tr>
</tbody>
</table>

Rating (Digital TV)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Meaning</th>
<th>Rating</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>- (No Block)</td>
<td>Not classified</td>
<td>M</td>
<td>Mature</td>
</tr>
<tr>
<td>P</td>
<td>Pre school</td>
<td>MA 15+</td>
<td>Mature Adult 15+</td>
</tr>
<tr>
<td>C</td>
<td>Children</td>
<td>AV 15+</td>
<td>Adult strong Violence 15+</td>
</tr>
<tr>
<td>G</td>
<td>General</td>
<td>R</td>
<td>Restricted 18+</td>
</tr>
<tr>
<td>PG</td>
<td>Parental Guidance recommended</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Stereo / Bilingual Sound Selection (Analogue TV)

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

<table>
<thead>
<tr>
<th>Audio Signal</th>
<th>STEREO</th>
<th>MAIN I</th>
<th>SUB II</th>
<th>MONO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode Indicator</td>
<td>☊</td>
<td>I</td>
<td>☻</td>
<td>◀</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Type of broadcast</th>
<th>Regular broadcast</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>I</td>
<td>☊</td>
<td>◀ I</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>I</td>
<td>☊ ◀</td>
</tr>
</tbody>
</table>

● 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 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 adaptor 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, “Input signal that can be displayed” (p. 45)
- Maximum display resolution

<table>
<thead>
<tr>
<th>Aspect</th>
<th>4:3</th>
<th>1,440 × 1,080 pixels</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:9</td>
<td>1,920 × 1,080 pixels</td>
<td></td>
</tr>
</tbody>
</table>

- D-sub 15-pin connector signal

<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>11</td>
<td>NC (not connected)</td>
</tr>
<tr>
<td>2</td>
<td>G</td>
<td>7</td>
<td>GND (Ground)</td>
<td>12</td>
<td>NC (not connected)</td>
</tr>
<tr>
<td>3</td>
<td>B</td>
<td>8</td>
<td>GND (Ground)</td>
<td>13</td>
<td>HD</td>
</tr>
<tr>
<td>4</td>
<td>NC (not connected)</td>
<td>9</td>
<td>NC (not connected)</td>
<td>14</td>
<td>VD</td>
</tr>
<tr>
<td>5</td>
<td>GND (Ground)</td>
<td>10</td>
<td>GND (Ground)</td>
<td>15</td>
<td>NC (not connected)</td>
</tr>
</tbody>
</table>

**USB connection**

- It is recommended to connect the USB Flash Memory directly to the TV’s USB port.
- Some USB devices or USB HUB may not be used with this TV.
- You cannot connect any devices by using USB card reader.
- Additional information for USB devices may be on the following website. (English only)
HDMI connection

HDMI (high-definition multimedia interface) is the world's first complete digital consumer AV interface complying with a non-compression standard. HDMI 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 DVD player, a set top box or game equipment, can be connected to the HDMI terminal using an HDMI compliant (fully wired) cable.

For more information about connections ☞ (p. 13, 40, 41)

■ Applicable HDMI features

* Input audio signal:
  2ch Linear PCM (sampling frequencies - 48 kHz, 44.1 kHz, 32 kHz)
* Input video signal:
  ⇒ “Input signal that can be displayed” (p. 45)
  Match the output setting of the digital equipment.
* Input PC signal:
  ⇒ “Input signal that can be displayed” (p. 45)
  Match the output setting of the PC.
* Audio Return Channel*2
  (HDMI2 terminal only)

■ DVI connection

If the external equipment has only a DVI output, connect to the HDMI terminal via a DVI to HDMI adaptor cable*3.

When the DVI to HDMI adaptor cable is used, connect the audio cable to the audio input terminal (use AV1 audio terminals).

( Note )

* Audio settings can be made on [HDMI1 / 2 Input] in the Sound Menu. (p. 26)
* 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.
* Equipment having no digital output terminal may be connected to the input terminal of component or video to receive analogue signals.
* This TV incorporates HDMI™ technology.

*1: The HDMI logo is displayed on HDMI-compliant equipment.
*2: Audio Return Channel (ARC) is a function to send digital sound signals via an HDMI cable.
*3: Enquire at your local digital equipment retailer shop.

■ HDMI terminal

![HDMI terminal diagram]

Devices for playing back

■ USB Flash Memory (for playing back in Media Player)

USB Flash Memory format:
FAT16, FAT32

USB Flash Memory compliance:
Supports only USB1.1 or USB2.0 standard
Maximum USB capacity supported is 16GB
USB Hub or card adapter is not supported

( Note )

* Data modified with a PC may not be displayed.
* Do not remove the device while the TV is accessing data. Otherwise this can damage device or TV.
* Do not touch the pins on the device.
* Do not subject the device to a high pressure or impact.
* Insert the device in the correct direction. Otherwise this can damage device or TV.
* Electrical interference, static electricity, or erroneous operation may damage the data or device.
* 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.
### Supported file format in Media Player

#### Photo

<table>
<thead>
<tr>
<th>Format</th>
<th>File extension</th>
<th>Image resolution (pixel)</th>
<th>Details / Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPEG</td>
<td>.jpg</td>
<td>8 × 8 to 30,719 × 17,279</td>
<td>DCF and EXIF standards</td>
</tr>
<tr>
<td></td>
<td>.jpeg</td>
<td></td>
<td>Sub-sampling: 4:4:4, 4:2:2, 4:2:0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* Progressive JPEG is not supported.</td>
</tr>
</tbody>
</table>

#### Music

<table>
<thead>
<tr>
<th>Codec</th>
<th>File extension</th>
<th>Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP3</td>
<td>.mp3</td>
<td>–</td>
</tr>
</tbody>
</table>

**Note**

- Some files may not be played back even if they fulfill these conditions.
- Do not use two-byte characters or other special codes for data.
- The device may become unusable with this TV if the file or folder names are changed.

### Input signal that can be displayed

#### COMPONENT (Y, Pb, Pr), HDMI

<table>
<thead>
<tr>
<th>Signal name</th>
<th>COMPONENT</th>
<th>HDMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>525 (480) / 60i, 60p</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>625 (576) / 50i, 50p</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>750 (720) / 60p, 50p</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>1,125 (1,080) / 60i, 50i</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>1,125 (1,080) / 60p, 50p, 24p</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Mark : Applicable input signal

#### PC (from 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 @60 Hz</td>
<td>31.47</td>
<td>59.94</td>
</tr>
<tr>
<td>800 × 600 @60 Hz</td>
<td>37.88</td>
<td>60.32</td>
</tr>
<tr>
<td>852 × 480 @60 Hz</td>
<td>31.44</td>
<td>59.89</td>
</tr>
<tr>
<td>1,024 × 720 @60 Hz</td>
<td>48.36</td>
<td>60.00</td>
</tr>
<tr>
<td>1,280 × 1,024 @60 Hz</td>
<td>63.98</td>
<td>60.02</td>
</tr>
<tr>
<td>1,280 × 720 @60 Hz</td>
<td>47.70</td>
<td>60.00</td>
</tr>
<tr>
<td>1,366 × 728 @60 Hz</td>
<td>48.39</td>
<td>60.04</td>
</tr>
</tbody>
</table>

Applicable input signal for PC is basically compatible to HDMI standard timing.

#### PC (from HDMI terminal)

<table>
<thead>
<tr>
<th>Signal name</th>
<th>Horizontal frequency (kHz)</th>
<th>Vertical frequency (Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>640 × 480 @60 Hz</td>
<td>31.47</td>
<td>60.00</td>
</tr>
<tr>
<td>1,280 × 720 @60 Hz</td>
<td>45.00</td>
<td>60.00</td>
</tr>
<tr>
<td>1,920 × 1,080 @60 Hz</td>
<td>67.50</td>
<td>60.00</td>
</tr>
</tbody>
</table>

Applicable input signal for PC is basically compatible to HDMI standard timing.

**Note**

- Signals other than above may not be displayed properly.
- The above signals are reformat ted for optimal viewing on your display.
- 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 the problem still persists, please contact your local Panasonic dealer for assistance.

Block noise, frozen or disappearing image occurs in DVB mode / White spots or shadow image (ghosting) occurs in Analogue mode / Some channels cannot be tuned
● Check the position, direction and connection of the aerial.
● Weather conditions will affect signal reception (heavy rain, snow, etc.), in particular in poor reception areas. Even during good weather, the high pressure can cause poor reception of some channels.
● Due to the digital reception technologies involved, quality of the digital signals may be relatively low in some cases, despite good reception of analogue channels.
● Turn the TV to standby mode with Standby On / Off switch, then turn it on again.
● If problem persists, consult your local dealer or service provider for the availability of services.

No programmes shown on TV Guide
● Check the digital transmitter.
● Adjust the direction of the aerial to another transmitter installed nearby.
● Check the analogue broadcast. If the image quality is poor, check the aerial and consult your local dealer.

Neither image nor sound is produced
● Check the TV is turned on.
● Check the mains lead is plugged into the TV and the socket outlet.
● Check the TV is in AV mode.
● Check the correct input mode is selected.
● Check the Picture Menu (p. 25) and volume.
● Check all required cables and connections are firmly in place.

Black and white picture
● Check that the output of the external equipment matches the input of the TV.

Input mode, i.e. AV1 remains on the screen
● Press the button to clear it.
Press again to redisplay.

There may be red, blue, green and black spots on the screen
● This is a characteristic of liquid crystal panels and is not a problem. The liquid crystal panel is built with very high precision technology giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of red, green, blue or black. Please note this does not affect the performance of your LCD.
<table>
<thead>
<tr>
<th>Problem</th>
<th>Causes / Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaotic image, noisy</td>
<td>* Set [P-NR] in the Picture Menu to remove noise. (p. 25)  &lt;br&gt; * Check nearby electrical products (car, motorcycle, fluorescent lamp).</td>
</tr>
<tr>
<td>No image can be displayed</td>
<td>* Is [Contrast], [Brightness] or [Colour] in the Picture Menu set to the minimum? (p. 25)</td>
</tr>
<tr>
<td>Blurry or distorted image (no sound or low volume)</td>
<td>* Reset channels. (p. 29, 31)</td>
</tr>
<tr>
<td>Unusual image is displayed</td>
<td>* Turn the TV to standby mode with Standby On / Off switch, then turn it on again.  &lt;br&gt; * If the problem persists, initialise all settings. [Shipping Condition] (p. 34)</td>
</tr>
<tr>
<td>No sound is produced</td>
<td>* Is “Sound mute” active? (p. 9)  &lt;br&gt; * Is the volume set to the minimum?</td>
</tr>
<tr>
<td>Sound level is low or sound is distorted</td>
<td>* Sound signal reception may be deteriorated.  &lt;br&gt; * Set [MPX] (p. 26) in the Sound Menu to [Mono]. (Analogue)</td>
</tr>
<tr>
<td>Sound is unusual</td>
<td>* Set the sound setting of the connected equipment to “2ch L.PCM”.  &lt;br&gt; * Check the [HDMI1 / 2 Input] setting in the Sound Menu. (p. 26)  &lt;br&gt; * If digital sound connection has a problem, select analogue sound connection. (p. 44)</td>
</tr>
<tr>
<td>Pictures from external equipment are unusual when the equipment is connected via HDMI</td>
<td>* Check the HDMI cable is connected properly. (p. 40)  &lt;br&gt; * Turn the TV and equipment off, then turn them on again.  &lt;br&gt; * Check an input signal from the equipment. (p. 45)  &lt;br&gt; * Use equipment compliant with EIA/CEA-861/861D.</td>
</tr>
<tr>
<td>The TV does not switch on</td>
<td>* Check the mains lead is plugged into the TV and the socket outlet.</td>
</tr>
<tr>
<td>The TV goes into Standby mode</td>
<td>* Auto power standby function is activated. (p. 10)  &lt;br&gt; * The TV enters Standby mode about 30 minutes after analogue broadcasting ends.</td>
</tr>
<tr>
<td>The remote control does not work or is intermittent</td>
<td>* Are the batteries installed correctly? (p. 8)  &lt;br&gt; * Has the TV been switched on?  &lt;br&gt; * The batteries may be running low. Replace them.  &lt;br&gt; * Point the remote control directly at the front of the TV (within about 7 m and a 30 degree angle of the front of the TV).  &lt;br&gt; * Situate the TV away from sunshine or other sources of bright light not to shine on the TV’s remote control signal receiver.</td>
</tr>
<tr>
<td>Parts of the TV become hot</td>
<td>* Even when the temperature of parts of the front, top and rear panels has risen, these temperature rises do not cause any problems in terms of performance or quality.</td>
</tr>
<tr>
<td>The LCD panel moves slightly when it is pushed with a finger</td>
<td>* There is some flexibility around the panel to prevent damage to the panel.  &lt;br&gt; * The panel might move slightly when it is pushed with a finger, and clattered sound might be heard. This is not a malfunction.</td>
</tr>
<tr>
<td>Clattered sound might be heard</td>
<td>* The connected USB device might cause this error. Remove the device and turn the TV to standby mode with Standby On / Off switch, then turn it on again.  &lt;br&gt; * Check foreign objects are not inside the USB port.</td>
</tr>
<tr>
<td>Overcurrent error message appears</td>
<td>* Follow the message’s instructions.  &lt;br&gt; * If the problem persists, contact your local Panasonic dealer or the authorised service centre.</td>
</tr>
</tbody>
</table>
Maintenance

First, remove the mains plug from the socket outlet.

Display panel, Cabinet, Pedestal

Regular care:
Gently wipe the surface of the display panel, cabinet, or pedestal by using a soft cloth to clean the dirt or fingerprints.

For stubborn dirt:
First clean the dust on the surface. Dampen a soft cloth with clean water or diluted neutral detergent (1 part detergent to 100 parts water). Wring the cloth and wipe the surface. Finally, wipe away all the moisture.

Caution:
- Do not use a hard cloth or rub the surface too hard, otherwise this may cause scratches on the surface.
- Take care not to subject the TV’s surfaces to water or detergent. Liquid inside the TV could lead to product failure.
- Take care not to subject the surfaces to insect repellent, solvent, thinner or other volatile substances. This may degrade surface quality or cause peeling of the paint.
- The surface of the display panel is specially treated and may be easily damaged. Take care not to tap or scratch the surface with your fingernail or other hard objects.
- Do not allow the cabinet and pedestal to make contact with a rubber or PVC substance for a long time. This may degrade surface quality.

Mains plug

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

<table>
<thead>
<tr>
<th>Power Rating</th>
<th>AC 220-240 V, 50 / 60 Hz  0.45A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal (Home) mode</td>
<td>33 W</td>
</tr>
<tr>
<td>Standby condition</td>
<td>0.30 W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel System</th>
<th>TFT LCD Module with LED Backlight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visible Screen Size (Diagonal)</td>
<td>80 cm / 32 inches</td>
</tr>
<tr>
<td>Number of Pixels</td>
<td>1,049,088 (1,366 (W) × 768 (H))</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimensions (W × H × D)</th>
<th>766 mm x 519 mm x 196 mm (With Pedestal)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>766 mm x 466 mm x 61 mm (TV only)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mass</th>
<th>8.5 kg Net (With Pedestal)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7.5 kg Net (TV only)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speaker</th>
<th>(90 mm × 25 mm) × 2,  8 Ω</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Output</td>
<td>10 W (5 W + 5 W)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAL B / G</th>
<th>Reception of Off air broadcasts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital TV</td>
<td>7 MHz VHF / UHF (Australia) free-to-air TV broadcast reception</td>
</tr>
<tr>
<td>PAL 60 Hz</td>
<td>Playback of NTSC tape from some PAL Video recorders (VCR)</td>
</tr>
<tr>
<td>M.NTSC</td>
<td>Playback from M.NTSC Video recorders (VCR)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTSC</th>
<th>Playback from NTSC Video recorders (VCR)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Operating Conditions</th>
<th>Temperature: 0 °C - 35 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Humidity: 20 % - 80 % RH (non-condensing)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AV1 IN</th>
<th>AUDIO L - R</th>
<th>RCA PIN Type × 2</th>
<th>0.5 V[ms]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COMPONENT</td>
<td>Y</td>
<td>1.0 V[p-p]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(including synchronisation)</td>
<td>±0.35 V[p-p]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pn/Cb, Pr/Cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VIDEO</td>
<td>RCA PIN Type × 1</td>
<td>1.0 V[p-p] (75 Ω)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV2 IN</td>
<td>AUDIO L - R</td>
<td>RCA PIN Type × 2</td>
<td>0.5 V[ms]</td>
</tr>
<tr>
<td></td>
<td>VIDEO</td>
<td>RCA PIN Type × 1</td>
<td>1.0 V[p-p] (75 Ω)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HDMI 1 / 2 input</th>
<th>TYPE A Connectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>HIGH-DENSITY D-SUB 15PIN</td>
</tr>
<tr>
<td></td>
<td>R,G,B: 0.7 V[p-p] (75 Ω)</td>
</tr>
<tr>
<td></td>
<td>HD, VD: TTL Level 2.0 – 5.0 V[p-p] (high impedance)</td>
</tr>
<tr>
<td></td>
<td>* Applicable input signals:</td>
</tr>
<tr>
<td></td>
<td>VGA, SVGA, VWGA, XGA</td>
</tr>
<tr>
<td></td>
<td>SXGA, WXGA ····· (compressed)</td>
</tr>
<tr>
<td></td>
<td>Horizontal scanning frequency 31 - 69 kHz</td>
</tr>
<tr>
<td></td>
<td>Vertical scanning frequency 60 Hz</td>
</tr>
<tr>
<td>USB</td>
<td>USB 2.0 TYPE A Connectors DC 5 V, Max. 500 mA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.</td>
</tr>
</tbody>
</table>

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7/27/2012 5:18:18 PM
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), introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant or other business or rental use of the product, 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) Cabinet Part(s)  (e) DVD, Blu-ray, or Recordable Discs
   (b) Video or Audio Tapes  (f) Video / Audio Heads from wear and tear in normal use
   (c) SD cards or USB devices  (g) Information stored on Hard Disk Drive, USB stick or SD card
   (d) User replaceable Batteries  (h) DTV reception issues caused by TV Aerial / Cabling / Wall socket(s)
   etc.

5. Some products may be supplied with Ethernet connection hardware. The warranty is limited on such products and will not cover
   (a) Internet and or DLNA connection / setup related problems
   (b) Access fees and or charges incurred for internet connection
   (c) The use of incompatible software or software not specifically stipulated in the product operations manual; and
   (d) Any indirect or consequential costs associated with the incorrect use or misuse of the hardware, its connection to the internet or any other device.

6. To claim warranty service, when required, you should:
   • Telephone Panasonic’s Customer Care Centre on 132600 or visit our website referred to below and use the Service Centre Locator for the name/address of the nearest Authorised Service Centre.
   • Send or take the product to a Panasonic Authorised Service Centre together with your proof of purchase receipt as a 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:
     - Plasma/LCD televisions / displays (screen size greater than 103 cm)

7. 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.

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.

In addition to your rights under this warranty, Panasonic products come with consumer guarantees that cannot be excluded under the Australian Consumer Law. If there is a major failure with the product, you can reject the product and elect to have a refund or to have the product replaced or if you wish you may elect to keep the goods and be compensated for the drop in value of the goods. You are also entitled to have the product repaired or replaced if the product fails to be of acceptable quality and the failure does not amount to a major failure.

If there is a major failure in regard to the product which cannot be remedied then you must notify us within a reasonable period by contacting the Panasonic Customer Care Centre. If the failure in the product is not a major failure then Panasonic may choose to repair or replace the product and will do so in a reasonable period of time from receiving notice from you.

**THIS WARRANTY CARD AND THE PURCHASE DOCKET (OR SIMILAR PROOF OF PURCHASE) SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES**

If you require assistance regarding warranty conditions or any other enquiries, please visit the Panasonic Australia website www.panasonic.com.au or contact by phone on 132 600

If phoning in, please ensure you have your operating instructions available.

Panasonic Australia Pty. Limited
ACN 001 592 187  ABN 83 001 592 187
1 Innovation Road, Macquarie Park  NSW  2113

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Note
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 |