

Model No. TH-L32EM5A

TH-L39EM5A

**Operating Instructions** LED TV





Thank you for purchasing this Panasonic product. Please read these instructions carefully before operating this product and retain them for future reference.

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English







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Illustrations shown may be different between models and countries.

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# Safety Precautio

# **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.

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



AC 220-240 V 50 / 60 Hz



#### 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.



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

# 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).





#### **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.

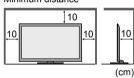
#### Do not apply strong force or impact to the display panel

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







# **Accessories / Options**

#### Standard accessories

#### Remote Control

N2QAYB000803



Accessories / Options

Batteries for the Remote Control (2)

R6











Fall-prevention parts ⇒ (p. 8)

Operating Instructions with Warranty statement

- Accessories may not be placed all together. Take care not to throw them away unintentionally.
- This product contains possibly dangerous parts (such as plastic bags), that can be breathed in or swallowed by young children accidentally. Keep these parts out of reach of young children.

#### 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.

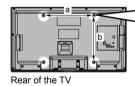
#### Wall-hanging bracket

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 (for 32" class only)

Holes for wall-hanging bracket installation







Depth of screw: 32" class 39" class minimum 13 mm 21 mm maximum 17 mm 23 mm

Type of screw: M6

Screw for fixing the TV onto the wall-hanging bracket (not supplied with the TV)

32" class a: 200 mm 39" class a: 400 mm

b: 200 mm

b: 400 mm

#### 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.

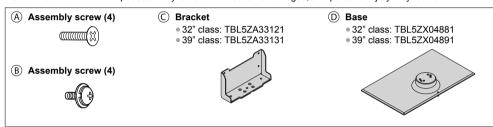
If the TV is knocked or children climb onto the pedestal with the TV installed, the TV may fall over and personal injury
may result.

#### 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)

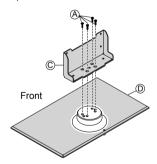
Otherwise the TV and / or pedestal may fall over and become damaged, and personal injury may result.



#### 1 Assembling the pedestal

Use the assembly screws (A) to fasten the bracket (C) to the base (D) securely.

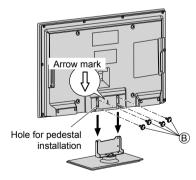
- Make sure that the screws are securely tightened.
- Forcing the assembly screws the wrong way will strip the threads.



#### 2 Securing the TV

Use the assembly screws ® 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 ® from the TV.
- 2 Pull out the pedestal from the TV.
- 3 Remove the assembly screws (A) from the bracket.





#### Preventing the TV from falling over

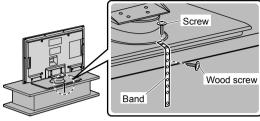
This TV could fall over if it is pushed, pulled or knocked down.

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.

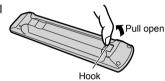


Securing to a furniture Fix pedestal and furniture together with band.



This image is for illustrative purposes only.

#### Installing / removing remote's batteries



# Note the correct polarity (+ or -)

#### Caution

- Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control.
- Do not mix old and new batteries.
- 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.



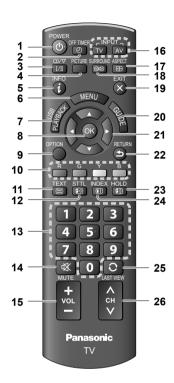
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# **Identifying Controls**

#### **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

#### 9 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.

#### 3 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).

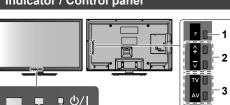
#### 25 Last view ⇒ (p. 16)

• Switches to previously viewed channel.

#### 26 Channel Up / Down



5 6 7



Rear side of the TV

#### **Function select**

- [Volume] / [Backlight] / [Contrast] / [Brightness] / [Colour] / [Sharpness] / [Tint] (NTSC signal) / [Bass]\* / [Treble]\* / [Balance] / [Auto Tuning] (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

#### 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].

#### 7 Power LED

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

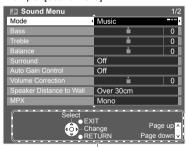
#### Using the On Screen Displays - Operation guide

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]



Operation guide

#### ■ 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).



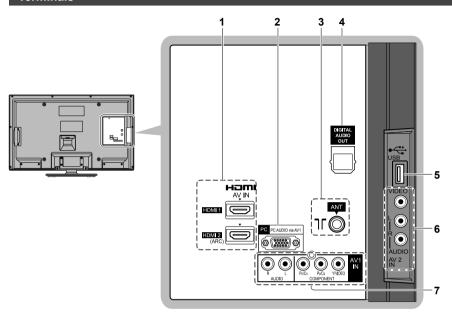


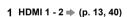
# **Basic Connection**

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**





2 PC - (p. 41)

3 Antenna terminal ⇒ (p. 12)

4 DIGITAL AUDIO OUT ⇒ (p. 41)

5 USB port ⇒ (p. 36, 40)

6 AV2 IN ⇒ (p. 40)

7 AV1 IN ⇒ (p. 40, 41)



#### Connections

# Mains lead and aerial Digital TV, Analogue TV RF cable Mains lead 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.

If the aerial is placed in the wrong location, interference might happen.

#### Note

**Basic Connection** 

- 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.
- ullet To obtain optimum quality picture and sound, an aerial, the correct cable (75  $\Omega$  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.





X

12



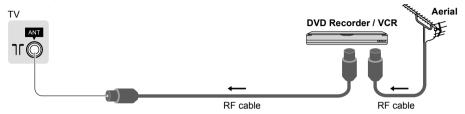
#### **AV** devices

#### ■ Player

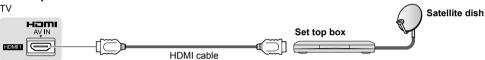
TV



#### ■ DVD Recorder / VCR



#### ■ 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.



Plug the TV into mains socket and switch On

• Takes a few seconds to be displayed

## Select your area





#### Auto Tuning starts



 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.





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



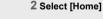


#### ■ [Shop] viewing environment (for shop display only)

[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











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

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

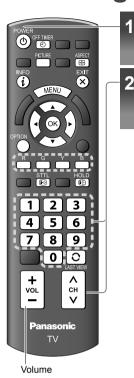
If tuning has failed, check the connection of the RF cable, and then, follow the on screen instructions.

- 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)

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# **Watching TV**



#### Turn power on



#### Select a channel



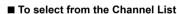




• To select a more than two-digit channel position number, e.g. 399

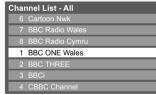














• To view the complete channel list (all channels)



To view the list of digital channel only



• To view the list of analogue channel only



To view the favourite channel list



#### Other useful functions

#### **Display Information banner**

#### **Display Information banner**

INFO *(i)* 

Also appears when changing a channel



Example : DVB - Coronation Street

20:00 - 20:55 Dolby Digital - 3/2, ST / [Audio mode] 20:55 - 23:00 [Next programme]

3 **◄** Now ▶ 1080i HD

- 1 Programme
- 2 Programme Start / Finish time (DVB) Channel number, etc. (Analogue)
- 3 Signal input

#### Features available / Message meanings

奴 Sound mute On STTL

1 - 90

Off Timer remaining time Subtitle service available For settings ⇒ (p. 17)

[Encrypted]

Scrambled programme

TTX Teletext service available

[Dolby Digital] [Stereo], [Dual], [Mono]

Dolby Digital audio track

To hide

Audio mode



 Extra information (DVB) INFO

(1) Press twice (Press again to hide the banner) To set display timeout

⇒ [Banner Display Timeout] (p. 28)



Watching



#### Switch to previously viewed channel easily



Press again to return to the present view.

#### Hold

Freeze / unfreeze picture

HOLD 

#### Display subtitles

Display / hide subtitles (if available)







#### Change picture mode

#### Select picture mode



Press the button repeatedly until you reach the desired mode.

([Dynamic] / [Normal] / [Cinema] / [True Cinema] / [Game])

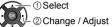
#### Display the selectable settings for the current status

#### Check or change the current status instantly



To change





#### [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

(1)

Press the button repeatedly until you reach the desired time.

([0] / [15] / [30] / [45] / [60] / [75] / [90] (minutes))

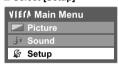
- To cancel, set to [0] or turn the TV off.
- To confirm the remaining time → "Display Information banner" (p. 16)
- When the remaining time is within 3 minutes, the remaining time will flash on the screen.

#### 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





#### Change the aspect ratio (image size)

Enjoy viewing the image at its optimum size and aspect.

#### ■ If you would like to change the aspect ratio manually

#### 1 Display Aspect Selection list





Aspect Selection list

2 While the list is displayed, select the mode



2 Change

You can also change the mode only using the ASPECT button.



Watching TV

(Press repeatedly until you reach the desired 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.

Region	Standard time	Day Light Saving : Auto (During Summer Time)	
NSW / ACT	+10:00	144.00	
Victoria	+10.00	+11:00	
Queensland	+10:00		
South Australia	+9:30	+10:30	
Western Australia	+8:00		
Northern Territory	+9:30		
Tasmania	+10:00	+11:00	

(Based on GMT)

• These items can be set from [Other Settings] in the Setup Menu. (p. 28)

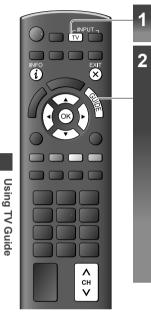




# **Using TV Guide**

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



#### View TV Guide





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

#### 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 view the next program



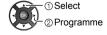
■ To the previous day (DVB)



■ To the next day (DVB)



#### ■ View details of the programme (DVB)





(Press again to return to TV Guide.)

#### ■ To change pages



#### ■ To view a channel list of the selected type filter

(Press again to return to TV Guide.)

(Type list)

	Type	
✓	MOVIE	
	NEWS	
	- :	



#### 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".

20



# **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





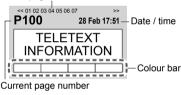
- To select next subject within the subject
- (After the last subject, it moves to the next subject block.)





#### Switch to Teletext

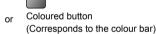
TEXT Sub page number  Displays the index page (content varies depending on the broadcasters)



#### Select the page







■ To return to TV

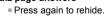


#### Reveal hidden data

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







#### **INDEX**

Return to the main index page



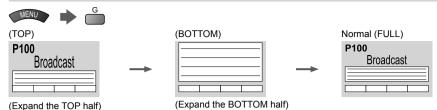
#### HOLD

#### Stop automatic updating

(If you wish to hold the current page without updating) HOLD Press again to resume.



#### **FULL / TOP / BOTTOM**



#### View sub page

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



- 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

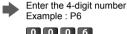


Viewing Teletex













#### Watch TV while waiting for update

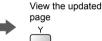
View the TV picture while searching for a teletext page

Teletext automatically updates itself when new information becomes available.





Appears when updating is completed







• 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)



# Turn the TV on



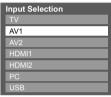
If input mode is not switched automatically

Perform 2 and 3

Check the setup of the equipment.

Display the input selection menu

Select the input mode connected to the equipment

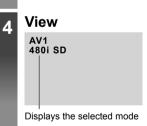




- You can also select the input using the AV button on the remote control or the TV. Press the button repeatedly until the desired input is selected.
- [USB] : Switches to Media Player → "Using Media Player" (p. 36)
- You can label or skip each input mode (except [USB]). → "Input Labels"

Skipped inputs will not be displayed when the AV button is pressed.

■ To return to TV



#### 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.



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

**How to Use Menu Functions** 

 $\otimes$ СН **Panasonic** TV

any time

■ To return to the

previous screen

■ To change menu

-Page up Page down

EXIT

RETURN

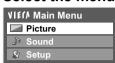
24

pages

Display the menu

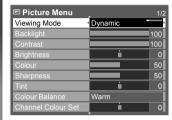
Displays the functions that can be set (varies according to the input

Select the menu





Select the item





■ Choose from among alternatives

Number and positions of alternatives Colour Balance

Changed

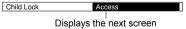


■ Adjust using the slide bar





■ Go to 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)

How to Use Menu Functions ■ To return to TV at



<del>( ( )</del>



#### Menu list

Menu	list	
Menu	Item	Adjustments / Configurations (alternatives)
Pic	Viewing Mode	Selects your favourite picture mode for each input [Dynamic] / [Normal] / [Cinema] / [True Cinema] / [Game] [Dynamic]: Improves contrast and sharpness for viewing in a bright room. [Normal]: Normal use for viewing in a normal lighting condition. [Cinema]: Improves the performance of contrast, black and colour reproduction for watching movies in a darkened room. [True Cinema]: Reproduces the original image quality precisely without any revision. [Game]: Provides suitable images for fast response signal when playing games. Not valid on TV mode To display a continuous record of time spent using Game mode [Playing Time Display] (p. 28)  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.
	Backlight, Contrast, Brightness, Colour, Sharpness	Increases or decreases the levels of these options according to your personal preference
Picture	Tint	Adjusts the picture hue to suit your taste • For NTSC signal reception
	Colour Balance	Sets the overall colour tone of the picture [Cool] / [Normal] / [Warm]  Not valid when [Viewing Mode] is set to [True Cinema]
	Channel Colour Set	Adjusts the suitable colour density from 3 levels for each channel  Select the channel to adjust and set this function.
	Eco Mode	Automatic Brightness Control function Adjusts picture settings automatically depending on ambient lighting conditions [Off] / [On]
	P-NR	Picture Noise Reduction Reduces unwanted picture noise and flicker noise in the contoured parts of a picture [Off] / [Min] / [Mid] / [Max]
	3D-COMB	Makes still or slow moving pictures more vivid [Off] / [On]  Occasionally, while viewing still or slow moving pictures, colour patterning may be seen. Set to [On] to display sharper and more accurate colours.  For PAL / NTSC signal reception in TV mode or from composite
	Reset to Defaults	Press the OK button to reset the current Picture Viewing Mode of the selected input to the default settings
Sound	Mode	Selects your favourite sound mode [Music] / [Speech] / [User]  The selected mode affects all input signals.  [Music]: Improves sound quality for watching music videos, etc. [Speech]: Improves sound quality for watching news, drama, etc.  In Music and Speech modes, you can adjust [Bass] and [Treble] settings, and those settings will be stored for each mode.  [User]: Adjusts the sounds manually by using the equaliser to suit your favourite sound quality.  For the User mode, [Equaliser] will appear on the Sound Menu instead of [Bass] and [Treble]. Select [Equaliser] and adjust the frequency.  [Equaliser] (p. 26)





Menu	Item	Adjustments / Configurations (alternatives)
	Bass	Adjusts level to enhance or minimise lower, deeper sound output
	Treble	Adjusts level to enhance or minimise sharper, higher sound output
	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
Sound	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.
īd	МРХ	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
	MPEG Optical Level	Adjusts the audio level output from DIGITAL AUDIO OUT terminal as the initial setting [-12] / [-10] / [-8] / [-6] / [-4] / [-2] / [0] (dB)  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







Menu		Item	Adjustments / Configurations (alternatives)
Sc	Downmix Mode		Selects the output mode for listening to compressed music [Surround] / [Stereo] / [Dual 1] / [ Dual 2]
	Туре		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
Sound	۷is	Speaker	Narration sound track is output to the TV speakers [Off] / [On]
	ually	Volume	Adjusts the volume of the narration sound track
	Visually Impaired	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
	Off Timer		Sets the time until the TV automatically goes to Standby mode [Off] / [15] / [30] / [45] / [60] / [75] / [90] (minutes) (p. 17)
	Link	CEC  When set to [On], the TV will automatically switch to the appropriate HDN whenever an HDMI connected equipment is initially turned on and the Plais selected. [Off] / [On]	
	Link Settings	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.  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)
		Automatic Channel Search	Automatically searches for the receivable channels (p. 29)
Se		Scan	Adds newly found channels while keeping existing channels (p. 30)
Setup	Tuning Men	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)
	ב	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 lis		Clears the channel lists (p. 32)

How to Use Menu Functions



Menu	enu Item		Adjustments / Configurations (alternatives)	
	Display Settings	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].	
		Banner Display Timeout	Sets how long the Information banner stays on screen (p. 16) [0 (No display)] / [1] / [2] / [3] / [4] / [5] / [6] / [7] / [8] / [9] / [10] (seconds)	
		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)	
		Radio Mode	Sets the timer for turning off the screen automatically when a radio channel is selected [Off] / [5] / [10] / [15] / [20] (seconds)  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	
	<b>"</b>	Shipping Condition	Resets all settings to the original condition (p. 34)	
	System Menu	System Update	Downloads new software to this TV (p. 35)	
	m Me	Software Licence	Displays the software licence information	
	Ž	System Information	Displays the system information of this TV	
တ္	Ott	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.	
		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.	
	er Se	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.	
		Region Selection	Selects the region where you live to adjust the standard time [NSW / ACT] / [Victoria] / [Queensland] / [South Australia] / [Western Australia] / [Northern Territory] / [Tasmania] (p. 19)	
		Day Light Saving	Selects time offset from the standard time for Summer Time [Auto] / [Off] / [+ 1/2 hour] / [+ 1 hour] (p. 19)	

<sup>A different menu will be displayed in the mode of Media Player. (p. 36 - 39)
Only available items can be selected.</sup> 





# **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)
- Select the mode TV
- Display the menu and select [Setup]





Select [Tuning Menu]





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)

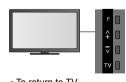
1 Press the F button repeatedly until [Auto Tuning] appears

2 Access [Auto Tuning]

TV

3 Start [Auto Tuning]

TV 📗



To return to TV

 Control panel OSD appears when pressing the control panel button.





# **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]



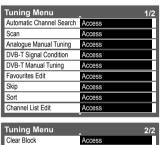


3 Select [Tuning Menu]





Select one of the following functions





- The function items vary depending on the area you select (p. 14).
- [Automatic Channel Search] → "Retuning from Setup Menu" (p. 29)
- Only available items can be selected.

Add TV channels [Scan]

You can add new channels automatically to the channel list.

Example: Antenna





**Tuning and Editing Channels** 



#### Set Analogue channel manually [Analogue Manual Tuning]

Set Analogue channel manually after Automatic Channel Search.

Example: Antenna



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

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

#### 1 Enter the frequency to start scanning

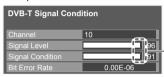


#### 2 Select the scanning method



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

Example:



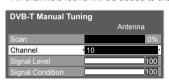
These bars show the maximum signal value of the selected channel.

#### 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.

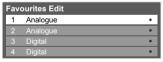




#### List favourite DVB channels [Favourites Edit], Skip unwanted channels [Skip]

Create your favourite channel lists from various broadcasters.

1 Select a channel to list (-0 : Encrypted channel)







#### ■ 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







To change page (page up)To change page (page down)









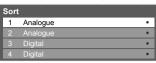




#### Sort channels [Sort]

You can sort channels.

#### 1 To swap the channel position (if available)









To change page (page up)To change page (page down)





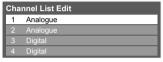




#### Edit channel settings [Channel List Edit]

You can edit channel settings.

#### 1 Select a channel to edit

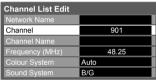




#### 2 Edit the channel settings



- You cannot change the Network Name.
- [Frequency], [Colour System] and [Sound System] edit is valid for analogue channels only.





Select the item you want to change



32





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

Select the item you want to change

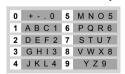








• You can set characters by using numeric buttons (When you select [Channel name]).





#### Clear channel list [Clear block]

You can clear the entire channel list.

#### Select [OK] to confirm.







**Tuning and Editing Channels** 



## **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.

#### Display the menu and select [Setup]





2 Select [Child Lock]





#### Control channel audience [Child Lock]

#### 1 Enter the PIN number (4 digits)





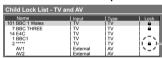
- Enter the PIN number twice at first setting.
- Make a note of the PIN number in case you forget it.

#### 2 Select [Child Lock List]





#### 3 Select the channel / input to be locked





Appears when the channel / input is locked

 To cancel Select the locked channel / input













#### ■ To change the PIN number

#### 1. Select [Change PIN]





#### 2. Enter a new PIN number twice



#### ■ 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.





 The availability of this function depends on the area you select (p. 14).

#### 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)

Display the menu and select [Setup]







Select [System Menu]





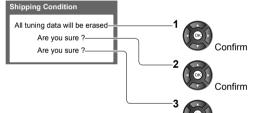
**Select [Shipping Condition]** 





#### **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)



**Shipping Condition** 

34



(Start [Shipping Condition])



# **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.



(Press the EXIT button not to download)

You can update new software automatically or update manually.

#### Display the menu and select [Setup]





Select [System Menu]





Select [System Update]





#### Update TV's software system [System Update]

#### ■ To update automatically

Set [Auto Download] and [Auto Install] to [Yes]





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].

- 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)

#### ■ To update immediately

#### 1 Select [Manual OAD Download]





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



#### 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:

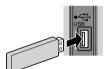
Still pictures recorded by digital cameras will be displayed.

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)

Start Media Player



You can also start by pressing the following button.

AV ⇒ "Watching External Inputs" (p. 23)

#### 3 Select the content





[Photo] **⇒**(p. 37) [Music] **⇒**(p. 39)

#### 4 Enjoy Media Player

Example: Thumbnail - [All photos]



• To display the information of the highlighted content



Selected device name

Using



37



#### 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







#### 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]



: Error display

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

Select the file from the thumbnail of photos to be viewed



Operation guide

Example:



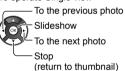
To display / hide the operation guide



 To return to thumbnail RETURN



To operate Single view



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

2 Start Slideshow



. To display / hide the operation guide



INFO 1

To pause (return to Single view)

 To return to thumbnail RETURN



To change the back ground music ⇒ "Photo Settings" (p. 38)



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

#### 1 Display the view selection





Folder view



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

#### 2 Select a folder to view its contents



• 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]

Option Menu Slideshow Settings



#### 3 Select the items and set

Slideshow Settings			
Transition Effect	4	None	
Screen Mode	4	Normal	•
Interval	4	5 seconds	·
Repeat	4	Off	-,
Back Ground Music	4	Type1	



#### Note

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

Menu	Item	Adjustments / Configurations (alternatives)	
Slidesho	Transition Effect	Selects the transition effect for switching the photo during the slideshow  [None] / [Dissolve] / [Wipe right] / [Wipe left] / [Wipe up] / [Wipe down] /  [Box in] / [Box out] / [Random]  [Dissolve]: Each photo is dissolved when switching to the next photo.  [Wipe right]: The next photo slides over the preceding clip from left to right.  [Wipe left]: The next photo slides over the preceding clip from right to left.  [Wipe up]: The next photo slides over the preceding clip from bottom to top.  [Wipe down]: The next photo slides over the preceding clip from top to bottom.  [Box in]: A box shape expands from each of the four corners toward the center.  [Box out]: A box shape expands from the center of each quadrant toward the corners of each quadrant.  [Random]: Each transition is selected at random.	
Slideshow Settings	Screen Mode	Selects enlarged or normal viewing on Single view and Slideshow  [Normal] / [Zoom]  • Depending on the photo size, it may not be fully enlarged to fill the screen, e.g. portrait style picture.	
S	Interval	Selects slideshow interval [5] / [10] / [15] / [30] / [60] / [90] / [120] (seconds)	
	Repeat	Slideshow repeat [Off] / [On]	
	Back Ground Music	Selects the background music during Photo mode [Off] / [Type1] / [Type2] / [Type3]  • [Type1], [Type2] and [Type3] are the fixed music each installed in this TV.	

**Using Media Player** 





#### Music mode

Supported file format ⇒ (p. 45)

Music folders in the USB Flash Memory will be displayed.

Example: [Folder view]



• To play back the selected folder Select the folder

Selected device name



Start playback



### ■ Playback from File view

Selected file will be played back.

#### 1 Select the folder



#### 2 Select the file



#### 3 Start playback



#### ■ How to operate in the playback

Example: Playback



Operation guide

• To display / hide the operation guide



To operate the playback



To the previous track



To the next track



 To return to thumbnail RETURN



#### **Music Setup**

Setup the setting for Music mode

#### 1 Display the option menu



#### 2 Select [Music Setup]





#### 3 Set





[One]: Playback repeat of the selected one file

[Folder]: Playback repeat within the selected folder

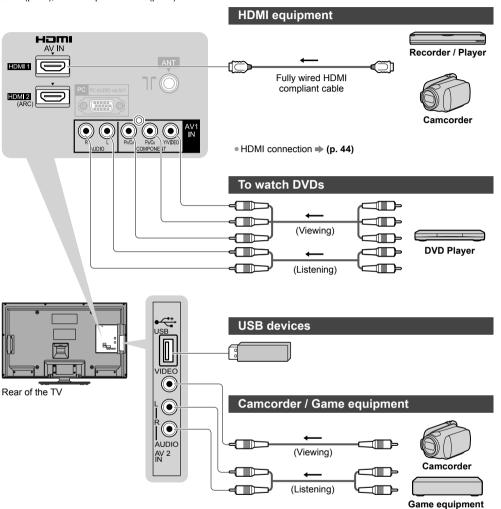


7/27/2012 5:28:47 PM



## **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).

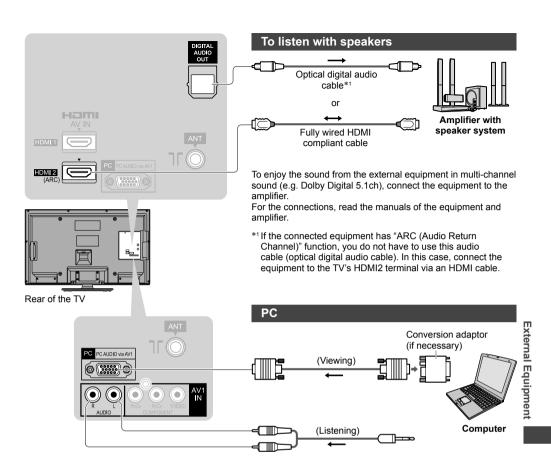




**External Equipment** 







#### Types of connectable equipment to each terminal

Types of connectable equipment to each terminal						
	Terminal					
	A	/1	DIGITAL	HDMI 1 - 2	AV2	
	COMPONENT	VIDEO	AUDIO OUT	HDIVII I - Z	AVZ	
Features					VIDEO	
	RUCIO PAGE TODEO	RACEIO VYACEO			L O R O AUDIO	
To record / playback videocassettes / DVDs (VCR / DVD Recorder)	0	0		0	0	
To watch satellite broadcasts (Set top box)		0		<u></u> *2	0	
To watch DVDs (DVD Player)	0	0		0	0	
To watch camcorder images (Video camera)	0	0		0	0	
To play games (Game equipment)	0	0		0	0	
To use amplifier with speaker system			0	○*3		

<sup>:</sup> Recommended Connection



<sup>\*2:</sup> Use HDMI1 for automatic input switching.

<sup>\*3:</sup> 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) CH Display / Receive Channel CH 0 - CH 5 S 2 - S 10 CH 5A CH 6 - CH 9 CH 9A CH 10 - CH 12 S 11 - S 44 CH 20 - CH 75

Rating (Digital TV)					
Rating	Meaning	Rating	Meaning		
- (No Block)	Not classified	M	Mature		
Р	Pre school	MA 15+	Mature Adult 15+		
С	Children	AV 15+	Adult strong Violence 15+		
G	General	R	Restricted 18+		
PG	Parental Guidance recommended		-		

#### 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.

Audio Signal	STEREO	MAIN I	SUB II	MONO
Mode Indicator	0	I	п	$\nabla$

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

THO AIM OSCU III NEW Zedianu, Oingapore, Hong Rong, etc.						
Type of broadcast	Regular broadcast (Standard Audio)	Regular + NICAM MONO I (MAIN I)	NICAM STEREO	NICAM DUAL MONO (MAIN I / SUB II)		
Mode Indicator	No Indicator → ▽	I → ▽	∞ ▽	ĭ → Ⅱ		

A2 (German) Lised in Australia Malaysia etc

AL (German)Goed in Additional, Malaysia, etc.					
Type of broadcast	Regular broadcast (Standard Audio)	BILINGUAL or DUAL MONO: MAIN I / SUB II	STEREO		
Mode Indicator	No Indicator → ▽	I II	$\bigcirc$ $\rightarrow$ $\lor$		

- 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

Asnost	4:3	1,440 × 1,080 pixels
Aspect	16:9	1,920 × 1,080 pixels

D-sub 15-pin connector signal



Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1	R	6	GND (Ground)	11)	NC (not connected)
2	G	7	GND (Ground)	12	NC (not connected)
3	В	8	GND (Ground)	13	HD
4	NC (not connected)	9	NC (not connected)	14)	VD
5	GND (Ground)	10	GND (Ground)	15	NC (not connected)

#### **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) http://panasonic.jp/support/global/cs/tv/





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)

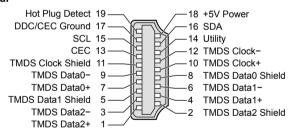
#### ■ DVI connection

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



#### **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.



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#### Supported file format in Media Player

#### ■ Photo

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

#### ■ Music

Codec	File extension	Restrictions
MP3	.mp3	-

#### 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

Signal name	COMPONENT	HDMI
525 (480) / 60i, 60p	0	0
625 (576) / 50i, 50p	0	0
750 (720) / 60p, 50p	0	0
1,125 (1,080) / 60i, 50i	0	0
1,125 (1,080) / 60p, 50p, 24p		0

O Mark: Applicable input signal

#### ■ PC (from D-sub 15P)

(				
Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)		
640 × 480 @60 Hz	31.47	59.94		
800 × 600 @60 Hz	37.88	60.32		
852 × 480 @60 Hz	31.44	59.89		
1,024 × 768 @60 Hz	48.36	60.00		
1,280 × 1,024 @60 Hz	63.98	60.02		
1,280 × 768 @60 Hz	47.70	60.00		
1,366 × 768 @60 Hz	48.39	60.04		

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

#### ■ PC (from HDMI terminal)

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)			
640 × 480 @60 Hz	31.47	60.00			
1,280 × 720 @60 Hz	45.00	60.00			
1,920 × 1,080 @60 Hz	67.50	60.00			

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

- Signals other than above may not be displayed properly.
- The above signals are reformatted 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.

**Technical Information** 



## **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 i 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.









	Problem	Causes / Actions	
Screen	Chaotic image, noisy	<ul> <li>Set [P-NR] in the Picture Menu to remove noise. ⇒ (p. 25)</li> <li>Check nearby electrical products (car, motorcycle, fluorescent lamp).</li> </ul>	
	No image can be displayed	• Is [Contrast], [Brightness] or [Colour] in the Picture Menu set to the minimum?  → (p. 25)	
	Blurry or distorted image (no sound or low volume)	Reset channels.      (p. 29, 31)	
	Unusual image is displayed	<ul> <li>Turn the TV to standby mode with Standby On / Off switch, then turn it on again.</li> <li>If the problem persists, initialise all settings. ➤ [Shipping Condition] (p. 34)</li> </ul>	
Sound HDMI	No sound is produced	<ul><li>Is "Sound mute" active? ⇒ (p. 9)</li><li>Is the volume set to the minimum?</li></ul>	
	Sound level is low or sound is distorted	<ul> <li>Sound signal reception may be deteriorated.</li> <li>Set [MPX] (p. 26) in the Sound Menu to [Mono]. (Analogue)</li> </ul>	
	Sound is unusual	<ul> <li>Set the sound setting of the connected equipment to "2ch L.PCM".</li> <li>Check the [HDM11 / 2 Input] setting in the Sound Menu. → (p. 26)</li> <li>If digital sound connection has a problem, select analogue sound connection.</li> <li>→ (p. 44)</li> </ul>	
	Pictures from external equipment are unusual when the equipment is connected via HDMI	<ul> <li>Check the HDMI cable is connected properly. → (p. 40)</li> <li>Turn the TV and equipment off, then turn them on again.</li> <li>Check an input signal from the equipment. → (p. 45)</li> <li>Use equipment compliant with EIA/CEA-861/861D.</li> </ul>	
	The TV does not switch on	Check the mains lead is plugged into the TV and the socket outlet.	
Other	The TV goes into Standby mode	<ul> <li>Auto power standby function is activated. ⇒ (p. 10)</li> <li>The TV enters Standby mode about 30 minutes after analogue broadcasting ends.</li> </ul>	
	The remote control does not work or is intermittent	<ul> <li>Are the batteries installed correctly? → (p. 8)</li> <li>Has the TV been switched on?</li> <li>The batteries may be running low. Replace them.</li> <li>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).</li> <li>Situate the TV away from sunshine or other sources of bright light not to shine on the TV's remote control signal receiver.</li> </ul>	
	Parts of the TV become hot	<ul> <li>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.</li> </ul>	
	The LCD panel moves slightly when it is pushed with a finger Clattered sound might be heard	There is some flexibility around the panel to prevent damage to the panel. The panel might move slightly when it is pushed with a finger, and clattered sound might be heard. This is not a malfunction.	
	Overcurrent error message appears	<ul> <li>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.</li> <li>Check foreign objects are not inside the USB port.</li> </ul>	
	An error message appears	<ul> <li>Follow the message's instructions.</li> <li>If the problem persists, contact your local Panasonic dealer or the authorised service centre.</li> </ul>	







## **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**

		32"	class	39" class	
Mode	l No.		32EM5A	TH-L39EM5A	
	Power rating			AC 220-240 V, 50 / 60 Hz 0.43 A	
Power	Normal (Home) mode	·		56 W	
	Standby condition	0.3 W		0.25 W	
Display panel	Panel system	TFT LCD Module with LED Backlight			
	Visible screen size (diagonal)	80 cm / 32 inches 98 cm / 39 in		98 cm / 39 inches	
-<	Number of pixels	2,073,600 (1,920 (W) × 1,080 (H))			
Dimensions (W × H × D)				915 mm x 599 mm x 230 mm (With Pedestal)	
				915 mm x 554 mm x 70 mm (TV only)	
Mace		9.0 kg Net (With Pedestal) 13		13.0 kg Net (With Pedestal)	
Mass		8.0 kg Net (TV only)		11.5 kg Net (TV only)	
Sound	Speaker	(90 mm × 25 mm) ×	2, 8Ω	(100 mm × 30 mm) × 2, 8 Ω	
nd	Audio output	10 W (5 W + 5 W) 20 W (10 W + 1		20 W (10 W + 10 W)	
Rec	PAL B / G	Reception of Off air broadcasts			
ëi⊻i	Digital TV	7 MHz VHF / UHF (Australia) free-to-air TV broadcast reception			
eiving syste Band name	PAL 60 Hz	Playback of NTSC tape from some PAL Video recorders (VCR)			
Receiving systems Band name	M.NTSC	Playback from M.NTSC Video recorders (VCR)			
ns /	NTSC	Playback from NTSC Video recorders (VCR)			
Aerial - Rear		Standard Belling & Lee connector			
Operating Conditions		Temperature: 0 °C - 35 °C Humidity: 20 % - 80 % RH (non-condensing)			
	AV1 IN	AUDIO L - R	RCA PIN Type × 2	2 0.5 V[rms]	
		COMPONENT	Y	1.0 V[p-p] (including synchronisation)	
		\#DE0	PB/CB, PR/CR	±0.35 V[p-p]	
0		VIDEO	RCA PIN Type × 1	,	
òn	AV2 IN	AUDIO L - R VIDEO	RCA PIN Type × 2	· · ·	
nect	HDMI 1 / 2 input	-	- 71 11-11(-		
on On	HDMI 1 / 2 input	TYPE A Connectors			
Connection terminals	PC	HIGH-DENSITY D-SUB 15PIN R,G,B: 0.7 V[p-p] (75 Ω) HD, VD: TTL Level 2.0 – 5.0 V[p-p] (high impedance) • Applicable input signals: VGA, SVGA, WVGA, XGA SXGA, WXGA ······ (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 60 Hz			
	USB	USB 2.0 TYPE A Connectors DC 5 V, Max. 500 mA			
	DIGITAL AUDIO OUT	PCM / Dolby Digital / Fibre optic			

#### Note

ecilication



<sup>•</sup> Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.



#### **Panasonic** Warranty

- 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 it's 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)
  - (b) Video or Audio Tapes
  - (c) SD cards or USB devices
  - (d) User replaceable Batteries
- (e) DVD, Blu-ray, or Recordable Discs (f) Video / Audio Heads from wear and tear in normal use
- (g) Information stored on Hard Disk Drive, USB stick or SD card
- (h) DTV reception issues caused by TV Aerial / Cabling / Wall socket(s)
- 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 and ellary than 100 cm). 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

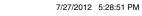
If you require assistance regarding warranty conditions or any other enquiries, please visit the Panasonic Australia website www.panasonic.com.au or contact by phone on 132 600 If phoning in, please ensure you have your operating instructions available.

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

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This symbol is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

#### **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** 

F0612-0712-2

**Panasonic Corporation** 

Web Site: http://panasonic.net

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