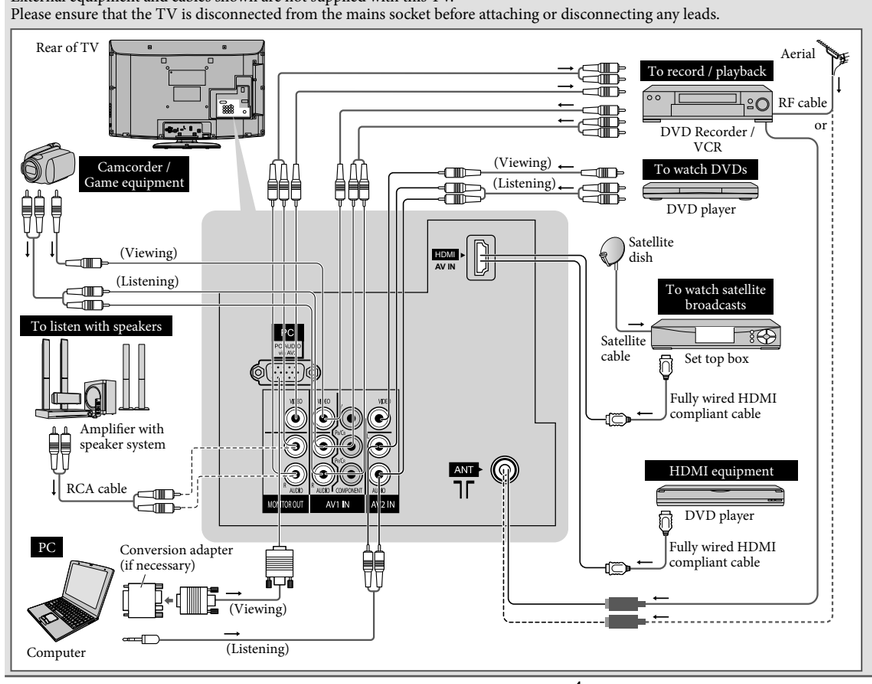
A2 Landscape - en.indd 1 5/25/2010 3:29:14 PM

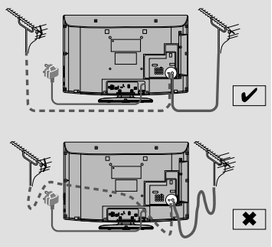
Connecting the Aerial & External Equipment

These diagrams show our recommendations for how to connect the TV to your various equipment. For other connections, please refer to the operating instructions of each equipment.
External equipment and cables shown are not supplied with this TV.
Please ensure that the TV is disconnected from the mains socket before attaching or disconnecting any leads.



NOTE

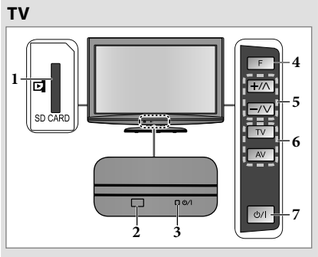
- If the aerial is placed in the wrong location, interference might happen.



- 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.

Identifying Controls

TV



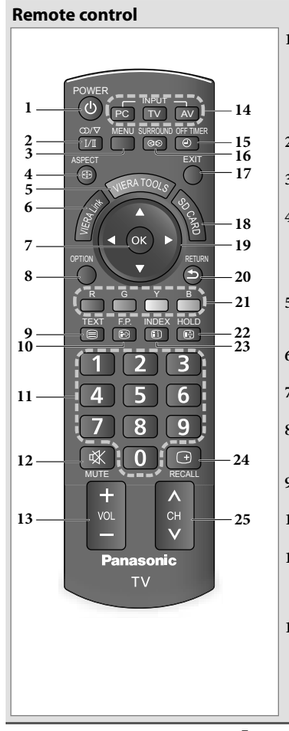
1 **SD card slot**
2 **Remote control signal receiver**
- Do not place any objects between the TV remote control signal receiver and remote control.

3 **Power LED**
- Standby: red
  On: green
- When using the remote control, indicates the TV has received a command.

4 **Function Select**
- Volume / Backlight / Contrast / Brightness / Colour / Sharpness / Tint (NTSC mode) / Bass / Treble / Balance / Auto Tuning (p. 8 - 9)

5 Increases or decreases the channel position by one. When a function is already displayed, press to increase or decrease the selected function. When in standby mode, switches TV on.
6 Changes the input mode
7 **Mains power On / Off switch**
- Switch On to turn on the TV or turn the TV to Standby mode by the remote control.

Remote control



1 **Standby On / Off switch**
- Switches TV On or Off standby
  ⓘ When the TV is switched to standby, there will be a clicking sound after a short delay. This is normal.

2 **Selects stereo/bilingual sound (p. 12)**
3 **Main Menu (p. 8)**
- Accesses the Main Menu

4 **Aspect (p. 6)**
- Displays the Aspect Selection list
- It is also possible to select the desired aspect by pressing this button repeatedly

5 **VIERA TOOLS (p. 13)**
- Displays some special feature icons for easy-access

6 **VIERA Link (p. 13)**
- Accesses VIERA Link Menu

7 **OK**
- Confirms selections

8 **Option Menu (p. 6)**
- Quick access to some viewing and listening options

9 **Teletext (p. 7)**
- Switches to teletext mode

10 **Switches to the favourite teletext page (p. 7)**
11 **Numeric buttons**
- Selects channel and teletext pages
- When in Standby mode, switches TV On

12 **Sound Mute**
- Switches sound mute On or Off

13 **Volume Up / Down**
14 **Input mode selection**
- PC: switches to PC input mode
- TV: switches to TV mode
- AV: displays Input Selection list

15 **Off Timer (p. 6)**
- Sets the TV to turn to standby automatically after a period of time

16 **Surround (p. 9)**
- Switches Surround effect On or Off

17 **Exit**
- Returns to the normal viewing screen

18 **SD Card**
- Switches to SD Card viewing mode (p. 14)

19 **Cursor buttons**
- Makes selections or adjustments

20 **Return**
- Returns to the previous menu / page

21 **Coloured buttons**
- Selects, navigates and operates various functions

22 **Hold (p. 7)**
- Holds the current teletext page (teletext mode)

23 **Index (p. 7)**
- Returns to the teletext index page (teletext mode)

24 **Programme Information**
25 **Channel Up / Down**
- Selects channel in sequence

Performing Initial Setup & Watching TV

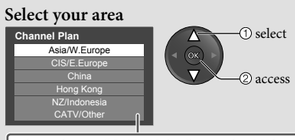
Search and store TV channels automatically.
These steps are not necessary if the setup has been completed by your local dealer.

1 Plug the TV into the mains socket and switch On

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

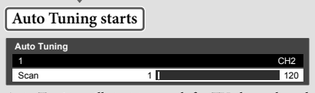
2 Select your language

3 Select your area



When selecting "CATV/Other", press the OK button, and then select the Channel Plan from "Indian CATV", "South Africa", "American System", "American CATV" or "Japan".

Auto Tuning starts



Auto Tuning will start to search for TV channels and store them. The sorted channel order depends upon the TV signal, the broadcasting system and reception conditions.

4 Select "Home"

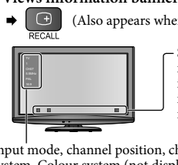
Auto Tuning is complete

*** Viewing environment mode**
Home: For viewing at home. Select "Home" for optimal picture. "Viewing Mode" is set as "Normal" (p. 8).
Shop: Demonstration mode (for in-store display). "Viewing Mode" is set as "Dynamic" (p. 8).
To return to viewing environment selection mode if you selected "Shop"

ⓘ To change the viewing environment mode later on, reset all settings by accessing Shipping Condition.
➡ "Shipping Condition" (p. 10)

Your TV is now ready for viewing. To select a channel ➡ Remote control in Identifying Controls (p. 5)
While watching the TV, you can do the following:

❑ **Views information banner**
➡ RECALL (Also appears when changing channel)



Sound mute, audio mode, teletext indication (if teletext is available), Off timer remaining time

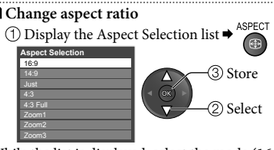
Input mode, channel position, channel number, Sound system, Colour system (not displayed if set to "Auto"), aspect ratio

❑ **Quick access to the selectable settings for the current programme**
➡ OPTION ② change ① select

Channel Colour Set
Sets colour density ➡ Picture Menu (p. 8)
Teletext Character Set
Sets the teletext language ➡ Setup Menu (p. 9)
MPX
Selects multiplex sound (if available)
➡ Sound Menu (p. 9)
Volume Correction
Adjusts volume of individual programme or input mode ➡ Sound Menu (p. 9)

❑ **Turns the TV to standby after a period of time (0 / 15 / 30 / 45 / 60 / 75 / 90 minutes)**
➡ OFF TIMER Press repeatedly until the desired time is reached
- To cancel ➡ Set to "0" or turn the TV off.
- When the remaining time is within 3 minutes, the remaining time will flash on screen.

❑ **Change aspect ratio**
① Display the Aspect Selection list ➡ ASPECT

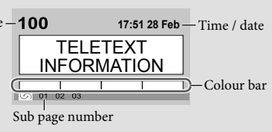


While the list is displayed, select the mode **(16:9 /14:9 / Just / 4:3 / 4:3 Full / Zoom1 / Zoom2 / Zoom3)**
ⓘ You can also change the aspect directly
➡ ASPECT Press repeatedly until the desired mode is reached
- Only "16:9" and "4:3" are available in PC input mode.
- Aspect is fixed to "16:9" when "Viewing Mode" is set to "Game" in the Picture Menu.
- Not available in teletext mode.
- Aspect mode can be memorized separately for each SD (Standard definition) and HD (High definition) signals and also for each input.

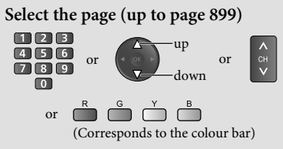
Viewing Teletext

In **FASTEXT** mode, four differently coloured subjects are situated at the bottom of the screen. To access more information about one of these subjects, press the corresponding coloured button.
In **List** mode, four differently coloured page numbers are situated at the bottom of the screen of which each can be altered and stored in the TV's memory ➡ "Store frequently viewed pages in the colour bar".
To change mode ➡ "Teletext" in Setup Menu (p. 9)

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



2 Select the page (up to page 899)



- To adjust contrast
  ➡ MENU (Press 3 times) ➡ As the blue bar is displayed
- To return to TV ➡ TEXT or EXIT

Teletext functions

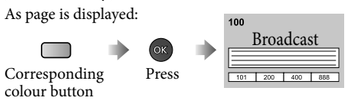
❑ **Reveal hidden data (e.g. quiz page answers)**
MENU ➡ R (Press again to hide)

❑ **Expand the teletext page**
MENU ➡ G Press repeatedly to expand the TOP half, BOTTOM half or show FULL page

❑ **Stop automatic updating**
HOLD If you wish to hold the current page without updating
(Press again to resume)

❑ **Return to the main index page**
INDEX

❑ **Store frequently viewed pages in the colour bar (List mode only)**
As page is displayed:



Corresponding colour button ➡ Press

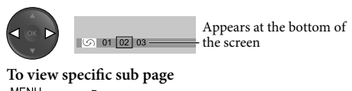
To change stored pages
Colour button you want to change ➡ Enter new page number ➡ Press

❑ **View a stored favourite page (List mode only)**
F.P.
- Call up the page stored in the blue button, even while you are watching TV
- Factory setting is "P103"

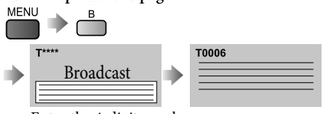
❑ **Watch TV and teletext in two windows at once**
- Operations can be made only in teletext screen

MENU (press twice) ➡ Select teletext only or picture / teletext

❑ **View sub page (only when teletext is more than one page)**



To view specific sub page
MENU ➡ B



Enter the 4-digit number
example: P6
➡ 0 0 0 6

The number of sub pages varies depending on the broadcasters. It may take some time for some, during which time you can watch TV.

❑ **View the TV picture while searching for a teletext page or waiting for automatic update**
MENU ➡ Y ➡

Appears when updating is completed

Changes to TV screen temporarily
(You cannot change the programme.)
➡ Y ➡ View the updated page

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

Safety Precautions

Warning

Power source / Installation
- This TV is designed for :
  – TH-L32C2S, TH-L32C20K/T/X, TH-L32C23K, TH-L32C26K, TH-L32C28K :
  AC AUTO 110-240 V, 50 / 60 Hz
  – TH-L32C20M :
  AC 110-240 V, 50 / 60 Hz
  – TH-L32C20R :
  AC Single 220-240 V, 50 / 60 Hz
  – Table-top use

If you find any abnormality, remove the mains plug immediately!
ⓘ Mains plug types vary between countries.

Handling the mains plug and lead
- Insert the mains plug fully into the socket outlet. (If the mains plug is loose, it could generate heat and cause fire.)
- Ensure that the mains plug is easily accessible.
- Do not touch the mains plug with a wet hand. (This may cause electrical shock.)
- Do not damage the mains lead. (A damaged lead may cause fire or electrical shock.)
  – Do not move the TV with the lead plugged into the socket outlet.
  – Do not place heavy objects on the lead nor place the lead near a high-temperature object.
  – Do not twist the lead, bend it excessively, or stretch it.
  – Do not pull on the lead. Hold onto the mains plug body when disconnecting lead.
  – Do not use a damaged mains plug or socket outlet.

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 by your local Panasonic dealer.

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 expose to direct sunlight and other sources of heat
- Avoid exposing the TV to direct sunlight and other sources of heat. To prevent fire never place any type of candle or naked flame on top or near the TV.

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

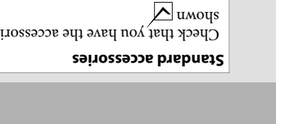
Do not place the TV on sloped or unstable surfaces
- The TV may fall off or tip over.

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. 3) / wall-hanging brackets (p. 3).

Do not allow children to handle SD Card
- As with any small object, SD Cards can be swallowed by young children. Please remove SD Card immediately after use and store out of reach of children.

Caution

- **This appliance is intended for use in tropical climates**
- **When cleaning the TV, remove the mains plug**
  – Cleaning an energized TV may cause electrical shock.
- **When the TV is not going to be used for a long period of time, remove the mains plug**
  – This TV will still consume some power even in the Off mode, as long as the mains plug is still connected to a live socket outlet.
- **Allow sufficient space around the TV for radiated heat**
  – When using the pedestal, keep a space between the bottom of the TV and the surface where the TV is set.
  – In case of using Wall-hanging bracket, follow the manual of it.
- **Do not block the rear air vents**
  – Blocked ventilation by newspapers, table cloths, curtains, etc. may cause overheating, fire or electrical shock.
- **Do not apply strong force or impact to the display panel**
  – This may cause damage resulting in injury.



Minimum distance (cm)

NOTE

- **Auto power standby function**
  – If no signal is received and no operation is performed for 30 minutes, the TV will automatically go to standby mode.
- **Keep the TV away from these types of equipment**
  – Electronic equipment
  In particular, do not place video equipment near the TV. Electromagnetic interference may distort images / sound.
  – Equipment with an infrared sensor
  This TV also emits infrared rays. This may affect operation of other equipment.
- **Transport only in upright position**

Attaching 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 the pedestal for any other TV or displays.
- Otherwise the TV or the display may fall over and become damaged, and personal injury may result.

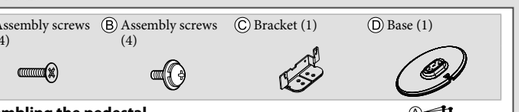
Do not use the pedestal if it becomes warped or physically damaged.
- If you use the pedestal while it is physically damaged, personal injury may result. Contact your nearest Panasonic dealer immediately.

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.

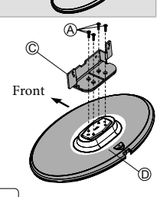
Two or more people are required to install and remove the TV.
- If two or more people are not present, the TV may be dropped, and personal injury may result.

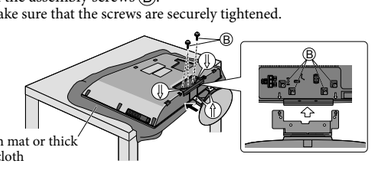
Ⓐ Assembly screws (4) Ⓑ Assembly screws (4) Ⓒ Bracket (1) Ⓓ Base (1)



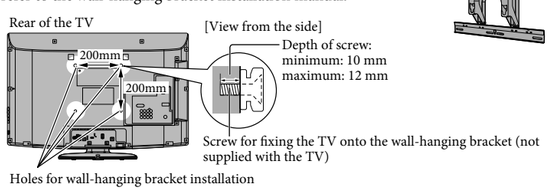
Assembling the pedestal
Use the assembly screws Ⓐ to fasten the bracket Ⓒ to the base Ⓓ securely.
- Make sure that the screws are securely tightened.

Securing the TV
Insert the bracket into the TV, and then fasten securely with the assembly screws Ⓑ.
- Make sure that the screws are securely tightened.



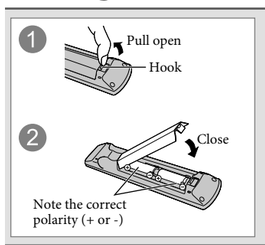


Wall-hanging bracket (Optional) TY-WK3L2RW
Please contact your nearest Panasonic dealer to purchase the recommended wall-hanging bracket. For additional details, please refer to the wall-hanging bracket installation manual.



WARNING
- Using other wall-hanging brackets, or installing a wall-hanging bracket by yourself have the risk of personal injury and product damage. In order to maintain the unit's performance and safety, be absolutely sure to ask your dealer or a licenced contractor to secure the wall-hanging brackets. Any damage caused by installing without a qualified installer will void your warranty.
- Do not mount the unit directly below ceiling lights (such as spotlights, floodlights or halogen lights) which typically give off high heat. Doing so may warp or damage plastic cabinet parts.
- Take care when fixing wall brackets to the wall. Always ensure that there are no electrical cables or pipes in the wall before hanging bracket.
- To prevent fall and injury, remove the TV from its fixed wall position when it is no longer in use.

Inserting and removing remote's batteries



CAUTION
- Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control.
- Do not mix old and new batteries.
- Do not mix different battery types (such as alkaline and manganese batteries).
- Do not use rechargeable (Ni-Cd) batteries.
- Do not burn or breakup batteries. Batteries must not be exposed to excessive heat such as sunshine, fire or the like.
- Do not disassemble or modify the remote control.

Specifications

		TH-L32C2S, TH-L32C20K/T/X, TH-L32C23K, TH-L32C26K, TH-L32C28K	TH-L32C20M	TH-L32C20R
Power Source		AC AUTO 110-240 V, 50 / 60 Hz	AC 110-240 V, 50 / 60 Hz	AC Single 220-240 V, 50 / 60 Hz
Power Consumption	Average use	93 W		
	Standby condition	0.3 W		
Display panel	Aspect Ratio	16:9		
	Visible screen size	80 cm (diagonal) 698 mm (W) × 393 mm (H)		
	Number of pixels	1,049,088 (1,366 (W) × 768 (H))		
Sound	Speaker	160 mm × 40 mm × 2 pcs, 8 Ω		
	Audio Output	20 W (10 W + 10 W), 10% THD		
PC signals		VGA, SVGA, WVGA, XGA SXGA, WXGA ..... (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz		
Receiving Channels (Regular TV)		PAL B/G 2-12 (PAL/SECAM B, K1) 0-12 (PAL B AUST.) 1-12 (PAL/SECAM D) 1-9 (PAL B N.Z.) 2-13 (NTSC M USA) UHF BAND 21-69 (PAL G, H, I/ SECAM G, K, K1) 28-69 (PAL B AUST.) 13-57 (PAL D, K) 13-62 (NTSC M Japan) 14-69 (NTSC M USA) CATV S1-S20 (OSCAR) U1-U25 (USA CATV) C13-C49 (JAPAN) S21-S41 (HYPER) Z1-Z37 (CHINA) 5A, 9A (AUST.)		
Aerial - Rear		VHF / UHF		
Operating Conditions		Temperature : 0 °C - 40 °C Humidity : 20 % - 80 % RH (non-condensing)		
Connection Terminals	AV1 input	AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
		COMPONENT	Y	1.0 V[p-p] (including synchronization)
			PB/CB, PR/CR	±0.35 V[p-p]
	AV2 input	AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
	Monitor Output	AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
	Others	PC Input	D-SUB 15PIN	HIGH-DENSITY HD, VD/TTL Level 2.0 - 5.0 V[p-p] (high impedance)
		HDMI Input	TYPE A Connectors	This TV supports "HDAVI Control 5" function.
		Card slot	SD Card slot × 1	
Dimensions (W × H × D)		798 mm × 551 mm × 217 mm (With Pedestal) 798 mm × 511 mm × 93 mm (TV only)		
Mass		10.0 kg Net (With Pedestal) 9.0 kg Net (TV only)		

Panasonic Corporation

Web Site: http://panasonic.net/
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Printed in Malaysia

Receiving Systems / Band name					
1	PAL B, G, H	Reception of broadcast transmissions and Playback from Video Cassette Tape Recorders	8	NTSC 4.43/5.5 MHz	Playback from Special VCRs or DVD
2	PAL I		9	NTSC 4.43/6.0 MHz	
3	PAL D, K		10	NTSC 4.43/6.5 MHz	
4	SECAM B, G		11	NTSC 3.58/5.5 MHz	
5	SECAM D, K		12	NTSC 3.58/6.0 MHz	
6	SECAM K1		13	NTSC 3.58/6.5 MHz	
7	NTSC M (NTSC 3.58/4.5 MHz)		14	SECAM I	
			15	PAL 60 H/5.5 MHz	Playback from Special Disc Players and Special VCRs or DVD
			16	PAL 60 H/6.0 MHz	
			17	PAL 60 H/6.5 MHz	

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Contact Information
cdrequest@am-linux.jp
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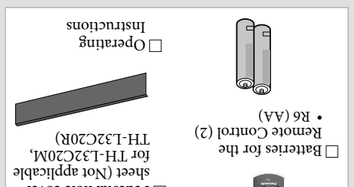
http://www.am-linux.jp/dl/DTV10AT/

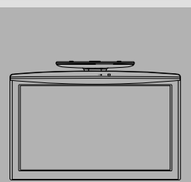
Standard accessories
Check that you have the accessories and items shown ✓



□ Remote Control N2QAYB000543
□ Pedestal
□ Batteries for the Remote Control (2) • R6 (AA)
□ Pedestal hole cover sheet (Not applicable for TH-L32C20M, TH-L32C20R)
□ Operating Instructions

Operating Instructions
LCD TV

VIERA



Panasonic

Model No.
TH-L32C2S TH-L32C20T
TH-L32C20K TH-L32C20X
TH-L32C20M TH-L32C23K
TH-L32C20R TH-L32C26K
TH-L32C28K

VIERA Link
VIERA IMAGE VIEWER
SD
HDMI

English
TQB4GC0478-1
BBN

Contents

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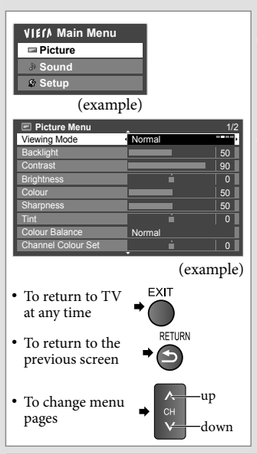
This product contains possibly dangerous parts (such as plastic bags), that can be breathed in or swallowed by young children accidentally. Keep these parts out of reach of young children.
The images shown in this manual are for illustrative purposes only.
CAUTION: This product contains possibly dangerous parts (such as plastic bags), that can be breathed
Please read these instructions before operating your set and retain them for future reference.
Thank you for purchasing this Panasonic product.

Using Menu Functions

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

1 Display the menu

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



- To return to TV at any time ➡ EXIT
- To return to the previous screen ➡ RETURN
- To change menu pages ➡ CH ∧ ∨ up / down

2 Select the menu

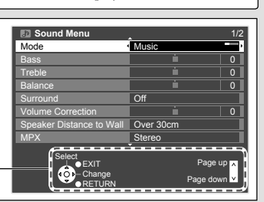
② access
① select

3 Select the item and change the setting

③ store or access (required by some functions)
② change setting
① select item

- **Choose from among alternatives**
  Number and positions of alternatives
  Colour Balance Normal
  Changed
- **Adjust using the slide bar**
  Sharpness 50
  Moved
- **Go to the next screen**
  Tuning Menu Access
  Displays the next screen

ⓘ When you are not sure how to operate, refer to the on-screen operation guides for help.



On-screen operation guide

Menu List & Functions

Picture Menu - Settings for picture

Viewing Mode ➡ Basic picture mode **(Dynamic / Normal / Cinema / Game)**
- In each Viewing Mode; Backlight, Contrast, Brightness, Colour, Sharpness, Tint, Colour Balance and 3D-COMB can be adjusted and stored to your preference
- Set for each input signal

Dynamic : Provides enhanced picture contrast and sharpness when viewing in a bright room
Normal : Recommended for viewing under normal lighting conditions
Cinema : For watching movies in a darkened room with improved performance of contrast, black and colour reproduction
Game : Fast response signal specifically to provide suitable images for playing games
– Not valid on TV mode.
– A continuous record of time spent in Game mode can be displayed in the top right of the screen ➡ "Playing Time Display" (p. 9).
- When SD Photo input is selected, the picture mode options will be **(Dynamic / Normal / Photo)**

Backlight **Contrast** **Brightness** **Colour** **Sharpness** ➡ Increases or decreases the levels of these options according to your personal preference

Tint ➡ With an NTSC signal source connected to the TV, the picture hue can be adjusted to suit your taste
- For NTSC or Component / HDMI input signal reception only.

Colour Balance ➡ Allows you to set the overall colour tone of the picture **(Cool / Normal / Warm)**

Channel Colour Set ➡ Colour density varying between broadcast channels can be adjusted to three levels for each reception channel
- Select the channel you want to adjust and set this function.

P-NR ➡ A picture noise reduction function which automatically reduces unwanted picture and flicker noise in the contoured parts of a picture **(Off / Min / Mid / Max)**
- Not valid on PC signal.

3D-COMB ➡ Makes still or slow moving pictures look 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 or NTSC signal reception only.
- Not valid on Component, PC, HDMI and SD card.

Advanced PC Settings
R-Gain, G-Gain, B-Gain ➡ Adjusts each gain
Gamma ➡ Changes the gamma curve **(2.0 / 2.2 / 2.5)**
Reset to Defaults ➡ Press the OK button to reset the present Advanced PC Settings to the default.

Reset to Defaults ➡ Press the OK button to reset the present Picture Menu settings to the default.

Sound Menu - Settings for sound

Mode ➡ Basic sound mode **(Music / Speech / User)**
- The selected mode affects all input signals.

Music : Improves sound quality for watching music video, etc.
Speech : Improves sound quality for watching news, drama, etc.
- In Music and Speech mode, you can adjust the "Bass" and "Treble" settings, and those settings will be stored for each mode.

User : In this mode, "Equalizer" will appear in the Sound Menu instead of "Bass" and "Treble". Adjust the "Equalizer" to your preference ➡ "Equalizer" (below)

Bass ➡ Adjusts the bass level

Treble ➡ Adjusts the treble level

Equalizer ➡ Adjusts the frequency level to suit your favourite sound quality
- With ◀/▶ button, select a frequency band, then with ▲/▼, adjust its level.
- If you want to enhance the bass sound, raise the level of the lower frequency. If you want to enhance the treble sound, raise the level of the higher frequency.
- To reset the level of each frequency to the default settings, select "Reset to Defaults" with the cursor button, then press the OK button.

Balance ➡ Adjusts the volume level of right and left speakers

Surround ➡ Surround sound settings **(Off / V-Audio)**
V-Audio: Provides a dynamic enhancer to simulate improved spatial effects
- Switching is also possible by the Surround button on the remote control (p. 5).

Volume Correction ➡ Adjusts the volume of individual channel or input mode

Speaker Distance to Wall ➡ Adjusts the low frequency sound **(Over 30cm / Up to 30cm)**
- If the back space between the TV and wall is over 30 cm, select "Over 30cm".
- If the back space between the TV and wall is within 30 cm, select "Up to 30cm".

MPX ➡ Selects multiplex sound mode (if available) (p. 12)
- Normally : Stereo
- Stereo signal cannot be received : Mono
- M1 / M2 : Available while mono signal is transmitted

HDMI Input ➡ Select to fit the input signal **(Digital / Analogue)**
Digital : HDMI cable connection
Analogue : HDMI-DVI adapter cable connection
- HDMI input mode only.

Reset to Defaults ➡ Press the OK button to reset the present settings of Mode, Balance and Surround in Sound Menu to the default.

Setup Menu - Settings for TV

PC Setup
Input Resolution ➡ Switches to wide view
– VGA (640 × 400 pixels, 640 × 480 pixels), WVGA (852 × 400 pixels, 852 × 480 pixels), XGA (1,024 × 768 pixels), WXGA (1,280 × 768 pixels, 1,366 × 768 pixels)
– Options change depending on signals
Clock ➡ Set to the minimum level if noise occurs
H-pos ➡ Adjusts screen horizontal position with ◀/▶ button
V-pos ➡ Adjusts screen vertical position with ◀/▶ button
Clock Phase ➡ Eliminates flicker and distortion. Adjust after Clock adjustment and set to the minimum level if noise occurs.
Sync ➡ PC sync signal type **(H & V / On Green)**
– H & V : by the horizontal and vertical signals from your PC
– On Green : by green signal from your PC
Reset to Defaults ➡ Press the OK button to reset the present PC Setup settings to the default.

Off Timer ➡ Sets the time the TV automatically goes to Standby mode **(Off / 15 / 30 / 45 / 60 / 75 / 90 minutes)**

Child Lock ➡ Locks a channel / AV input to prevent access to it (p. 10)

Tuning Menu
Channel List Edit ➡ Skips the unwanted channels or edits channels (p. 11)
Auto Tuning ➡ Sets TV channels automatically (p. 11)
Manual Tuning ➡ Sets TV channels manually (p. 11)

OSD Language ➡ Changes language for on-screen displays **(English / 中文 / العربية / فارسى / ภาษาไทย / Tiếng Việt / Indonesia / Français)**

Display Settings
Teletext ➡ Teletext display mode **(FASTEXT / List)** (p. 7)
Teletext Character Set ➡ Selects teletext language **(English / CIS / E.Europe / Persian)**
Input Labels ➡ Labels or skips each input terminal (p. 10)
Playing Time Display ➡ Set to "On" to display a continuous record of time spent in Game mode every 30 mins **(Off / On)**
– This function is available when "Game" is selected in "Viewing Mode".

Continued ➡ p. 10

VIERA Link Settings
VIERA Link ➡ Sets to use VIERA Link functions **(Off / On)**
Power on Link ➡ When the connected equipment starts playback or direct navigator / function menu for the equipment is activated, the TV is automatically turned on. (Only when the TV is in Standby mode.) **(Off / On)**
Power off Link ➡ When the TV is set to Standby mode, the connected equipment is also automatically set to Standby. This function will work even if the TV enters standby mode automatically by Off Timer function or auto power standby function. **(Off / On)**
Standby Power Save[†1] ➡ This function is available when "VIERA Link" and "Power off Link" are set to "On". It controls the power consumption in Standby mode of the connected equipment to reduce the power consumption **(Off / On)**
Intelligent Auto Standby[†1] ➡ This function is available when "VIERA Link" is set to "On" . It makes non-used connected equipment go into Standby mode to reduce the power consumption **(Off / On (With reminder) / On (No reminder))**
[†1] Only effective if the connected equipment supports this function.

System Menu
Shipping Condition ➡ Resets all settings to the original condition. After performing this function, "Initial Setup" (p. 6) will automatically start when Mains power On / Off switch is next turned On.
Software Licence ➡ Displays the software licence information
System Information ➡ Displays the system information of this TV

Other Settings
AV Colour System ➡ Selects optimum colour system based on video signals in AV mode **(Auto / PAL / SECAM / M.NTSC / NTSC)**
Colour Matrix ➡ Available only with 480p or 576p input on video signals in a natural colour from digital equipment connected to AV1 component or HDMI terminal. Select SD or HD to adjust suitable colour parameters for SD (standard definition) or HD (high definition)
– SD : Input signal is a normal TV system
– HD : Input signal is a high definition system
Auto Standby ➡ Sets the TV to automatically goes to Standby mode when no operation is performed within the selected period **(Off / 2 hours / 4 hours)**
Automatic input switching with the connected equipment affects this function and time-count will be reset. A notification message will appear 3 minutes before going into Standby mode.
Power Save ➡ Reduces picture brightness to reduce power consumption **(Off / On)**
16:9 Overscan ➡ Selects the screen area for 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 edges of the screen.
– This function is available when aspect is set to "16:9".
– This function can be memorized separately for SD (Standard Definition) and HD (High Definition) signals.

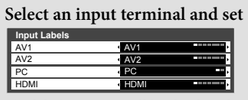
- Only available items can be selected.
- A different menu will be displayed in the mode of SD Card (p. 14).

Input Labels

For your convenience, you can label each input terminal or skip any unused terminal.

1 VIERA Main Menu ➡ Setup ➡ Display Settings ➡ Input Labels

2 Select an input terminal and set



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

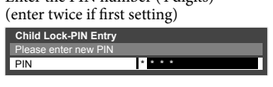
Control channel audience (Child Lock)

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

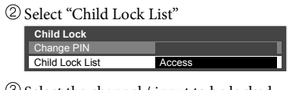
1 VIERA Main Menu ➡ Setup ➡ Child Lock

2 Set

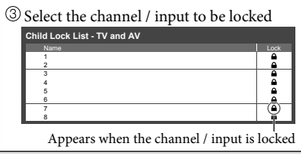
① Enter the PIN number (4 digits) (enter twice if first setting)



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
  ➡ OK
- **To lock all** ➡ G
- **To cancel all locks** ➡ Y
- **To change the PIN number**
  ➡ Select "Change PIN" in "Child Lock" and enter a new PIN number twice

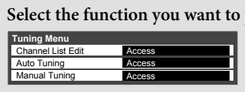
NOTE
Performing "Shipping Condition" erases the PIN number and all settings.

Tuning and Editing Channels

You can skip unwanted channels and retune the TV channels when necessary.

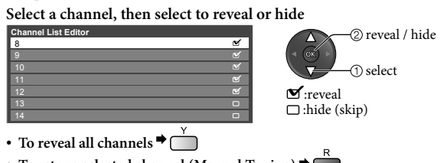
1 VIERA Main Menu ➡ Setup ➡ Tuning Menu

2 Select the function you want to perform



Channel List Edit
You can hide (skip) unwanted channels. The hidden channels cannot be displayed except in this function.

Select a channel, then select to reveal or hide



- **To reveal all channels** ➡ Y
- **To retune selected channel (Manual Tuning)** ➡ R

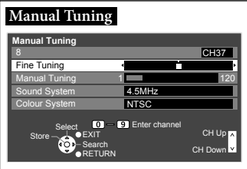
Auto Tuning
You can set all TV channels automatically.

Start Auto Tuning

Settings are made automatically

- All the previous tuning settings are erased.
- When the operation is completed, the channel at channel position "1" will be displayed.
- Search begins in the order from the lower channels to the higher channels. Channels received during this process are added to the list (see above).
- If tuning has not been done completely ➡ "Manual Tuning" (see right)

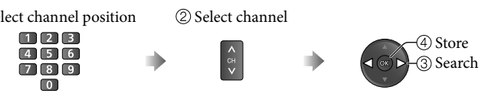
Manual Tuning



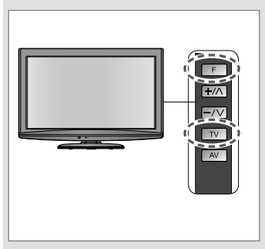
Fine Tuning
Use to make small adjustments to the tuning of an individual channel (affected by weather conditions, etc.)

Manual Tuning
Set channel manually after Auto Tuning.
- Before performing this function, you need to set the "Sound System" and "Colour System".
  ⓘ Set Colour System "Auto" normally.
- If a VCR is connected only with the RF cable, select channel position "0".

① Select channel position ② Select channel



Auto tuning using the buttons on the TV



① Press repeatedly until "Auto Tuning" appears ➡ F
② Access "Auto Tuning" ➡ TV
③ Start "Auto Tuning" ➡ TV
- To return to TV ➡ F

Stereo / Bilingual Sound Selection

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

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

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

Type of broadcast	Regular broadcast (Standard Audio)	Regular + NICAM MONO I (MAIN I)	NICAM STEREO	NICAM DUAL MONO (MAIN I / SUB II)
Mode Indicator	No Indicator ⟷ ▽	I ⟷ ▽	⧉ ⟷ ▽	I ⟷ II ⟷ ▽

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

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

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

VIERA Link "HDAVI Control™"

Enjoy additional HDMI interoperability with Panasonic products which have "HDAVI Control" function. This TV supports "HDAVI Control 5" function. Connections to the equipment (DIGA Recorder, HD Video Camera, Player theatre, Amplifier, etc.) with HDMI cable allow you to interface them automatically. These features are limited to models incorporating "HDAVI Control" and "VIERA Link".
- Some functions are not available depending on the equipment's version of HDAVI Control. Please confirm the connected equipment's version of HDAVI Control.
- VIERA Link "HDAVI Control", based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers' equipment that supports HDMI CEC cannot be guaranteed.
- Please refer to individual manuals for the equipment. About applicable Panasonic equipment, consult your local Panasonic dealer.

Features \ Connected equipment with VIERA Link function	DIGA Recorder*1	DVD Player / Blu-ray Disc Player*1	HD Video Camera / LUMIX Camera*1	Player theatre*2	Blu-ray Disc theatre*2	Amplifier*2
Easy playback	○	○	○	○*5	○*5	–
Power on link	○	○	○	○	○	–
Power off link	○	○	○	○	○	○
Reduce unnecessary power consumption in standby	○*4	○*4	–	–	○*4	–
Auto standby for unnecessary equipment	○*3	○*3	–	○*3 *6	○*3 *6	○*3
Control the menu of the connected equipment by VIERA remote control	○*3	○*3	○*3	○*3	○*3	–
Speaker control	–	–	–	○	○	○

*1: HDMI Connection only
*2: HDMI and Audio out connections
*3: available with the equipment which has "HDAVI Control 2 or later" function
*4: available with the equipment which has "HDAVI Control 4 or later" function
*5: while playingback a disc
*6: except for watching a disc

Connection
- For DIGA Recorder / DVD Player / Blu-ray Disc Player / HD Video Camera / LUMIX Camera with VIERA Link function, connect to HDMI terminal via an HDMI cable.
- For Player theatre / Blu-ray Disc theatre / Amplifier, connect to HDMI terminal via an HDMI cable and/or RCA cable for audio output from the TV.
- Use fully wired HDMI compliant cable. Non-HDMI-compliant cables cannot be utilized. Recommended Panasonic's HDMI cable part number:
  • RP-CDHS15 (1.5 m) • RP-CDHS30 (3.0 m) • RP-CDHS50 (5.0 m)

Preparations
- Connect the equipment supporting VIERA Link.
- Set up the connected equipment. Read the manual of the equipment.
- Set VIERA Link On in Setup Menu ➡ "VIERA Link" (p. 10)
- Set up the TV ➡ After connection, turn the equipment on and then switch the TV on. Set the input mode to HDMI (p. 14), and make sure that an image is displayed correctly. This setup should be done each time when the following conditions occur:
  • for the first time • when adding or reconnecting equipment • when changing setup

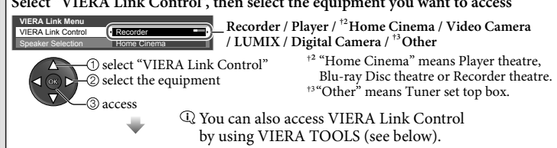
Using VIERA Link Menu

1 Display "VIERA Link Menu"

2 Select the function you want to perform

ⓘ If you cannot operate, check the settings and the equipment ➡ "Summary of features", "Connection", "Preparations" (p. 12)

VIERA Link Control
You can control some functions of the connected equipment with this TV remote control by pointing at the TV's signal receiver.
Select "VIERA Link Control", then select the equipment you want to access



Recorder / Player / †2 Home Cinema / Video Camera / LUMIX / Digital Camera / †3 Other
†2 "Home Cinema" means Player theatre, Blu-ray Disc theatre or Recorder theatre.
†3 "Other" means Tuner set top box.

ⓘ You can also access VIERA Link Control by using VIERA TOOLS (see below).

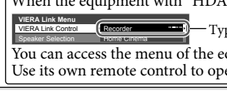
The menu of the accessed equipment is displayed. The displayed item may vary depending on the connected equipment. (Input mode will be changed automatically.)

④ Operate the connected equipment
Follow the operation guide.

To display the operation guide	➡ OPTION	Store / set / access	➡ OK
Move the cursor / select the menu	➡ ∧ ∨ ◀ ▶	Return to the previous menu	➡ RETURN
Move the cursor / access / adjust	➡ ∧ ∨ ◀ ▶	Exit the menu	➡ EXIT

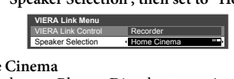
When the key words are displayed on colour bar ➡ R G Y B
Some operations may not be available depending on the equipment. If so, use its own remote control.

If you access non-VIERA Link equipment
When the equipment with "HDAVI Control" function is connected



Type of the connected equipment is displayed.
You can access the menu of the equipment but you cannot operate it.
Use its own remote control to operate the equipment.

Speaker Selection
You can control the theatre speaker with this TV remote control by pointing at the TV's signal receiver.
Select "Speaker Selection", then set to "Home Cinema" or "TV"



Home Cinema
Player theatre, Blu-ray Disc theatre or Amplifier in Standby mode will be automatically turned on and the TV sound will be output from the speakers connected to the equipment.
- Volume up / down ➡ + VOL − Volume slide bar will be displayed when adjusting the volume of the equipment.
- Mute ➡ MUTE
- The sound of TV speakers is mute.
- When the equipment is turned off, TV speakers will be active.

TV
TV speakers are active.

ⓘ If you wish to enjoy multi-channel sound (e.g. Dolby Digital 5.1ch) via an Amplifier, connect with HDMI and RCA cable, and then select "Home Cinema". To enjoy the sound from the DIGA Recorder in multi-channel sound, connect an HDMI cable from the DIGA Recorder to the Amplifier.

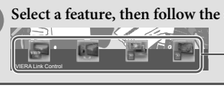
- These functions may not work properly depending on the connected equipment.
- Image or sound may not be available for the first few seconds when input mode is switched.
- Easy playback may be available by using the remote control for Player theatre, Blu-ray Disc theatre or Amplifier. Read the manual of the equipment.
- "HDAVI Control 5" is the newest standard (current as of December, 2009) for HDAVI Control compatible equipment. This standard is compatible with conventional HDAVI equipment.
- To confirm this TV's version of HDAVI Control ➡ "System Information" (p. 10)

VIERA TOOLS

Directly accesses to some special features.

1 Display icon of the features VIERA TOOLS

2 Select a feature, then follow the operation of each feature



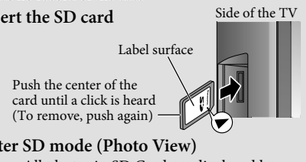
VIERA Link Control / Speaker Selection / Slideshow / Photos

① select
② access

Viewing from SD Card (VIERA IMAGE VIEWER)

Photo View: View still pictures recorded on a digital camera.
- During the operation, no signals are output from any of the AV terminals.
- "Date" shows the date on which the recording was made by the digital camera. It is shown with asterisks when the file has no record of the date.

1 Insert the SD card

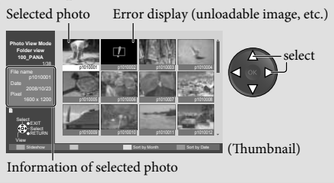


2 Enter SD mode (Photo View)
OK All photos in SD Card are displayed by thumbnail.

3 Select the folder you want to view

(Folder view)
- The files which are not in a folder will be collected to the folder named "/".
- To display all the photos ➡ G

4 Select a photo



(Thumbnail)

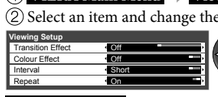
❑ **To view a single photo (Single view)** ➡ OK

To previous photo
Rotate 90° (anti-clockwise)
To next photo
Rotate 90° (clockwise)
Start Slideshow

- To display / hide the operation guide ➡ RECALL
- To return to thumbnail (List) ➡ RETURN

❑ **To start Slideshow within the thumbnail** ➡ R
- To pause ➡ cursor up button (press again to resume)
- To return to Single view ➡ OK

Slideshow settings
① VIERA Main Menu ➡ Viewing Setup
② Select an item and change the setting



Transition Effect ➡ Selects the transition effect for slideshow **(Off / Wipe↓ / Wipe↑ / Wipe→ / Wipe← / Comb↑↓ / Comb→← / Dissolve / Checker Wipe / Random / Multi / Collage)**
- When you select "Random", all effects are performed randomly except "Multi" and "Collage".

Colour Effect ➡ Selects the colour effect for slideshow **(Off / Sepia / Gray scale)**

Interval ➡ Selects slideshow interval **(Short / Normal / Long)**

Repeat ➡ Slideshow repeat **(Off / On)**

❑ **To sort into folders**
- To sort by month ➡ Y
- To sort by date ➡ B
- To return to unsorted thumbnail ➡ G

① select sorted folder
② view thumbnail

SD card on screen messages

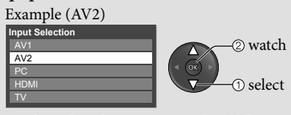
Message	Meaning / Action
Cannot read file	The file is broken or unreadable. The TV does not support the format.
No SD card inserted	Confirm SD Card is inserted correctly.
No valid file to play	The card has no data.
Over 9999 pictures found (max. is 9999)	Maximum valid number of photos is 9,999.

Watching External Inputs

1 Display the input selection menu AV

2 Select the input mode of the connected equipment to watch

Example (AV2)



ⓘ You can also select the input using the AV button on the side panel of the TV (p. 5) ➡ Press the button repeatedly until the desired input is selected.
ⓘ You can label or skip each input mode ➡ "Input Labels" (p. 10)
Skipped inputs will not be displayed when the AV button is pressed.

NOTE
- If the external equipment has an aspect adjustment function, set it to "16:9".
- It is also possible to switch to PC input directly from TV mode by pressing the PC button.
- You can also listen to the PC sound by connecting an audio cable.
- You can set up some functions; Advanced PC Settings (p. 8) in Picture Menu and PC Setup (p. 9) in Setup Menu.
- For HDMI-compatible PC, it is possible to connect to HDMI terminal by using HDMI cable.

Input signals that can be displayed

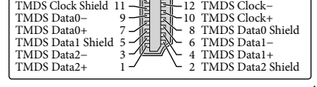
Input	Signal name	COMPONENT	HDMI
COMPONENT (Y, PB/CB, PR/CR), HDMI	525 (480) / 60i	*	*
	525 (480) / 60p	*	*
	625 (576) / 50i	*	*
	625 (576) / 50p	*	*
	750 (720) / 60p	*	*
	750 (720) / 50p	*	*
	1,125 (1,080) / 60i	*	*
	1,125 (1,080) / 50i	*	*
	1,125 (1,080) / 60p		*
	1,125 (1,080) / 50p		*
	1,125 (1,080) / 24p		*

* Mark: Applicable input signal

Input	Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)
PC (from D-sub 15P) Applicable input signal for PC is basically compatible to VESA standard timing.	640 × 400 @70 Hz	31.47	70.07
	640 × 480 @60 Hz	31.47	59.94
	640 × 480 @75 Hz	37.50	75.00
	800 × 600 @60 Hz	37.88	60.32
	800 × 600 @75 Hz	46.88	75.00
	800 × 600 @85 Hz	53.67	85.06
	852 × 480 @60 Hz	31.44	59.89
	1,024 × 768 @60 Hz	48.36	60.00
	1,024 × 768 @70 Hz	56.48	70.07
	1,024 × 768 @75 Hz	60.02	75.03
	1,024 × 768 @85 Hz	68.68	85.00
	1,280 × 1,024 @60 Hz	63.98	60.02
	1,280 × 768 @60 Hz	47.70	60.00
	1,366 × 768 @60 Hz	48.39	60.04
	Macintosh13" (640 × 480)	35.00	66.67
	Macintosh16" (832 × 624)	49.73	74.55
	Macintosh21" (1,152 × 870)	68.68	75.06
PC (from HDMI terminal) Applicable input signal for PC is basically compatible to HDMI standard timing	640 × 480 @60 Hz	31.47	60.00
	750 (720) / 60p	45.00	60.00
	1,125 (1,080) / 60p	67.50	60.00

NOTE
- 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.

HDMI terminal



FAQs

Before requesting service or assistance, please follow these simple guides to resolve the problem. If problem still persists, please contact your local Panasonic dealer.

White spots or shadow images (noise)
- Check the position, direction, and connection of the aerial.

Neither image nor sound is produced
- Is the TV in "AV mode"?
- Is the mains lead plugged into the socket outlet?
- Is the TV turned On?
- Check "Picture Menu" and volume.
- Check all required cables and connections are firmly in place.

An error message appears
- Follow the message's instructions.
- If the problem persists, contact your local Panasonic dealer.

There may be red spots, blue spots, green spots 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 and it is not a quality problem.

"VIERA Link" function does not work and an error message appears
- Confirm the connection.
- Turn the connected equipment on and then switch the TV on.

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

Clattered sound might be heard
- There are some looseness 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.

TV goes into "Standby mode"
- Auto power standby function is activated.
- The TV enters Standby mode about 30 minutes after broadcasting ends.

No sound is produced
- Is "Sound Mute" active?
- Is the volume set to the minimum?

The remote control does not work or is intermittent
- Are the batteries installed correctly?
- Has the TV been switched On?
- Point the remote control directly at the front of the TV (within a 30 degree angle of the front of the TV).
- Situate the TV away from sunshine or other sources of bright light not to shine on the TV's remote control signal receiver.

Sound is unusual
- Set the sound setting of the connected equipment to "2ch L.PCM".
- Check the "HDMI Input" setting in the Sound Menu.
- If digital sound connection has a problem, select analogue sound connection.

Sound level is low or sound is distorted
- Sound signal reception may be deteriorated.
- Set "MPX" in the Sound Menu to "Mono".

Pictures from external equipment are unusual when the equipment is connected via HDMI
- Is the HDMI cable connected properly?
- Turn Off the TV and equipment, then turn them On again.
- Check an input signal from the equipment.
- Use an equipment compliant with EIA/CEA-861/861B.

No image can be displayed
- Is "Colour" or "Contrast" in the Picture Menu set to the minimum?

Blurry or distorted image
(no sound or low volume)
- Reset channel.

Chaotic image, noisy
- Change the setting of "P-NR" in the Picture Menu (to remove noise).
- Check nearby electrical products (car, motorcycle, fluorescent lamp).

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

A2 Landscape - en.indd 2 5/25/2010 3:29:18 PM